ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

LABORATORY NAME A4 SCIENTIFIC INC.
CITY/STATE THE WOODLANDS / TEXAS
CASE NO. 42562 SDG NO. F5WB4
SDG NOs. TO FOLLOW NA NA NA
MOD. REF. NO. NA
CONTRACT NO. EPW10018
SOW NO. S0M01.2

666725

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| 1. **Inventory Sheet** (Form DC-2) (Do not number) | | | ✓ | ✓ |
| 2. **SDG Case Narrative** | 1 | 4 | ✓ | ✓ |
| 3. **SDG Cover Sheet/Traffic Report** | 5 | 7 | ✓ | ✓ |
| 4. **Trace Volatiles Data** | | | | |
| a. QC Summary | | | | |
| Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2) | | | | |
| Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region) | | | | |
| Method Blank Summary (Form IV VOA) | | | | |
| GC/MS Instrument Performance Check (Form V VOA) | | | | |
| Internal Standard Area and RT Summary (Form VIII VOA) | | | | |
| b. Sample Data | | | | |
| TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2) | | | | |
| Tentatively Identified Compounds (Form I VOA-TIC) | | | | |
| Reconstructed total ion chromatograms (RIC) for each sample | | | | |
| For each sample: | | | | |
| Raw Spectra and background-subtracted mass spectra of target compounds identified | | | | |
| Quantitation reports | | | | |
| Mass Spectra of all reported TICs with three best library matches | | | | |
| c. Standards Data (All Instruments) | | | | |
| Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| d. Raw/Quality Control (QC) Data | | | | |
| BFB | | | | |
| Blank Data | | | | |

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

| CASE NO. 42562 | SDG NO. F5WB4 | SDG NOS. TO FOLLOW NA |
|---|---|---|
| NA | NA | MOD. REF. NO. NA |

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region) | NA | NA | NA | |
| e. Trace SIM Data (Place at the end of the Trace Volatiles Section) | NA | NA | NA | |
| [Form I VOA-SIM; Form II VOA-SIM1 and VOA-SIM2; Form IV-VOA-SIM; Form VI VOA-SIM; Form VII VOA-SIM; Form VIII VOA-SIM; and all raw data for QC, Samples, and Standards.] | | | | |
| 5. **Low/Med Volatiles Data** | | | | |
| a. QC Summary | | | | |
| Deuterated Monitoring Compound Recovery (Form II VOA-1, VOA-2, VOA-3, VOA-4) | 8 | 9 | ✔ | |
| Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (if requested by USEPA Region) | NA | NA | NA | |
| Method Blank Summary (Form IV VOA) | 10 | 10 | ✔ | |
| GC/MS Instrument Performance Check (Form V VOA) | 11 | 12 | ✔ | |
| Internal Standard Area and RT Summary (Form VIII VOA) | 13 | 14 | ✔ | |
| b. Sample Data | 15 | 97 | ✔ | |
| TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2) | | | | |
| Tentatively Identified Compounds (Form I VOA-TIC) | | | | |
| Reconstructed total ion chromatograms (RIC) for each sample | | | | |
| For each sample: | | | | |
| Raw Spectra and background-subtracted mass spectra of target compounds identified | | | | |
| Quantitation reports | | | | |
| Mass Spectra of all reported TICs with three best library matches | | | | |
| c. Standards Data (All Instruments) | 98 | 159 | ✔ | |
| Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| d. Raw/Quality Control (QC) Data | | | | |
| BFB | 160 | 163 | ✔ | |
| Blank Data | 164 | 185 | ✔ | |

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 42562 SDG NO. F5WB4 SDG NOS. TO FOLLOW NA
NA NA MOD. REF. NO. NA

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| Martix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region) | NA | NA | NA | |
| 6. **Semivolatiles Data** | | | | |
| a. QC Summary | | | | |
| Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4) | 186 | 187 | ✔ | |
| Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region) | NA | NA | NA | |
| Method Blank Summary (Form IV SV) | 188 | 188 | ✔ | |
| GC/MS Instrument Performance Check (Form V SV) | 189 | 190 | ✔ | |
| Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2) | 191 | 204 | ✔ | |
| b. Sample Data | 205 | 385 | ✔ | |
| TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2) | | | | |
| Tentatively Identified Compounds (Form I SV-TIC) | | | | |
| Reconstructed total ion chromatograms (RICs) for each sample | | | | |
| For each sample: | | | | |
| Raw Spectra and background-subtracted mass spectra of target compounds | | | | |
| Quantitation reports | | | | |
| Mass Spectra of TICs with three best library matches | | | | |
| GPC chromatograms (if GPC is required) | | | | |
| c. Standards Data (All Instruments) | 386 | 624 | ✔ | |
| Initial Calibration Data (Form VI SV-1, SV-2, SV-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| Continuing Calibration Data (Form VII SV-1, SV-2, SV-3) | | | | |
| RICs and Quantitation Reports for all Standards | | | | |
| d. Raw QC Data | | | | |
| DFTPP | 625 | 631 | ✔ | |
| Blank Data | 632 | 648 | ✔ | |
| MS/MSD Data (if requested by USEPA Region) | NA | NA | NA | |
| e. Raw GPC Data | 649 | 709 | ✔ | |

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

| CASE NO. 42562 | SDG NO. F5WB4 | SDG NOS. TO FOLLOW NA |
|---|---|---|
| NA | NA | MOD. REF. NO. NA |

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| f. Semivolatile SIM Data | NA | NA | N | |
| [Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III SV-SIM1 and SV-SIM2 (if required); Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.] | | | | |
| 7. **Pesticides Data** | | | | |
| a. QC Summary | | | | |
| Surrogate Recovery Summary (Form II PEST-1 and PEST-2) | | | | |
| Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2) | | | | |
| Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4) | | | | |
| Method Blank Summary (Form IV PEST) | | | | |
| b. Sample Data | | | | |
| TCL Results - Organics Analysis Data Sheet (Form I PEST) | | | | |
| Chromatograms (Primary Column) | | | | |
| Chromatograms from second GC column confirmation | | | | |
| GC Integration report or data system printout | | | | |
| Manual work sheets | | | | |
| For pesticides by GC/MS | | | | |
| Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards) | | | | |
| c. Standards Data | | | | |
| Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2) | | | | |
| Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4) | | | | |
| Analyte Resolution Summary (Form VI PEST-5, per column) | | | | |
| Performance Evaluation Mixture (Form VI PEST-6) | | | | |
| Individual Standard Mixture A (Form VI PEST-7) | | | | |
| Individual Standard Mixture B (Form VI PEST-8) | | | | |
| Individual Standard Mixture C (Form VI PEST-9 and PEST-10) | | | | |
| Calibration Verification Summary (Form VII PEST-1) | | | | |
| Calibration Verification Summary (Form VII PEST-2) | | | | |
| Calibration Verification Summary (Form VII PEST-3) | | | | |

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

| CASE NO. 42562 | SDG NO. F5WB4 | SDG NOS. TO FOLLOW NA |
|---|---|---|
| NA | NA | MOD. REF. NO. NA |

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| Calibration Verification Summary (Form VII PEST-4) | | | | |
| Analytical Sequence (Form VIII PEST) | | | | |
| Florisil Cartridge Check (Form IX PEST-1) | | | | |
| Pesticide GPC Calibration (Form IX PEST-2) | | | | |
| Identification Summary for Single Component Analytes (Form X PEST-1) | | | | |
| Identification Summary for Toxaphene (Form X PEST-2) | | | | |
| Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights | | | | |
| d. Raw QC Data | | | | |
| Blank Data | | | | |
| Matrix Spike/Matrix Spike Duplicate Data | | | | |
| Laboratory Control Sample Data | | | | |
| e. Raw GPC Data | | | | |
| f. Raw Florisil Data | | | | |
| 8. **Aroclor Data** | | | | |
| a. QC Summary | | | | |
| Surrogate Recovery Summary (Form II ARO-1 and ARO-2) | | | | |
| Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2) | | | | |
| Laboratory Control Sample Recovery(Form III ARO-3 and ARO-4) | | | | |
| Method Blank Summary (Form IV ARO) | | | | |
| b. Sample Data | | | | |
| TCL Results - Organics Analysis Data Sheet (Form I ARO) | | | | |
| Chromatograms (Primary Column) | | | | |
| Chromatograms from second GC column confirmation | | | | |
| GC Integration report or data system printout | | | | |
| Manual work sheets | | | | |
| For Aroclors by GC/MS | | | | |
| Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards) | | | | |

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

| CASE NO. 42562 | SDG NO. F5WB4 | SDG NOS. TO FOLLOW NA |
|---|---|---|
| NA | NA | MOD. REF. NO. NA |

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| c. Standards Data | | | | |
| Aroclors Initial Calibration (Form VI ARO-1, ARO-2, and ARO-3) | | | | |
| Calibration Verification Summary (Form VII ARO-1) | | | | |
| Analytical Sequence (Form VIII ARO) | | | | |
| Identification Summary for Multicomponent Analytes (Form X ARO) | | | | |
| Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights | | | | |
| d. Raw QC Data | | | | |
| Blank Data | | | | |
| Matrix Spike/Matrix Spike Duplicate Data | | | | |
| Laboratory Control Sample (LCS) Data | | | | |
| e. Raw GPC Data (if performed) | | | | |
| 9. **Miscellaneous Data** | | | | |
| Original preparation and analysis forms or copies of preparation and analysis logbook pages | ~~711~~ 710 | 734 | ✓ | ✓ |
| Internal sample and sample extract transfer chain-of-custody records | | | | |
| Screening records | | | | |
| All instrument output, including strip charts from screening activities (describe or list) | | | | |
| 10. **EPA Shipping/Receiving Documents** | | | | |
| Airbills (No. of shipments 1) | 735 | 736 | ✓ | ✓ |
| Chain of Custody Records | 737 | 738 | ✓ | ✓ |
| Sample Tags | 739 | 750 | ✓ | ✓ |
| Sample Log-in Sheet (Lab & DC-1) | 751 | 753 | ✓ | ✓ |
| Miscellaneous Shipping/Receiving Records (describe or list) | | | | |
| Custody Seals | 754 | 755 | ✓ | ✓ |
| | NA | NA | NA | |

07/03/12

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

| CASE NO. 42562 | SDG NO. F5WB4 | SDG NOS. TO FOLLOW NA |
|---|---|---|
| NA | NA | MOD. REF. NO. NA |

| | PAGE NOs FROM | PAGE NOs TO | CHECK LAB | CHECK USEPA |
|---|---|---|---|---|
| 11. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list) | | | | |
| Custody Log | 756 | 758 | ✔ | ✔ |
| | NA | NA | NA | |
| 12. **Other Records** (describe or list) | | | | |
| Telephone Communication Log | N | N | N | |
| E-mails | NA | NA | NA | |
| PE Instructions | NA | NA | N | |

13. **Comments** NA

| | | | |
|---|---|---|---|
| Completed by: (CLP Lab) | (Signature) | RAM KISHOR KOYYADA/QC SPECIALIST (Printed Name/Title) | 06/04/2012 (Date) |
| Verified by: (CLP Lab) | (Signature) | LAXMI.TEERUPALLI/QA OFFICER (Printed Name/Title) | 06/04/2012 (Date) |
| Audited by: ~~(USEPA)~~ ESAT | (Signature) | LINDA HOFFMAN / DATA REVIEWER (Printed Name/Title) | 07/03/12 (Date) |

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

| Contract #: EPW10018 | Case #: 42562 | SDG #: F5WB4 |
|---|---|---|

SDG NARRATIVE

**SAMPLE RECEIPT & LOGIN**

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

| *Client Sample* | *Lab Sample* | *Matrix* | *#Cont.* | *Received* | *Analysis* | *Comments* |
|---|---|---|---|---|---|---|
| F5WB4 | 0015977-01 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | 1st Sx |
| | | | | | SOM01.2 SVOA | |
| F5WB8 | 0015977-02 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | |
| | | | | | SOM01.2 SVOA | |
| F5WB9 | 0015977-03 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | |
| | | | | | SOM01.2 SVOA | |
| F5WC0 | 0015977-04 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | |
| | | | | | SOM01.2 SVOA | |
| F5WC1 | 0015977-05 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | |
| | | | | | SOM01.2 SVOA | |
| F5WC2 | 0015977-06 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | |
| | | | | | SOM01.2 SVOA | |
| F5WC3 | 0015977-07 | Soil | 5 | 05/18/12 10:20 | SOM01.2 VOA LOW | Last Sx |
| | | | | | SOM01.2 SVOA | |
| VHBLKQW | 0015977-08 | Soil | 2 | 05/18/12 10:20 | SOM01.2 VOA LOW | STORAGE BLANK |

The cooler temperatures are listed against the coolers.

| DATE RECEIVED | COOLER NO. | Temp (in °C) | Airbill No. |
|---|---|---|---|

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| Contract #: EPW10018 | Case #: 42562 | SDG #: F5WB4 |
|---|---|---|

| 05/18/2012 | COOLER # 1 | 4.0 | 898735386568 |
|---|---|---|---|

No discrepancies or issues were noted during sample receipt and login.

**VOLATILES LOW/MEDIUM**

Samples were analyzed using instrument **H-5975**.

Instrument H-5975 consisted of an Agilent 5975 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, Tekmar Purge and Trap Model LSC2000 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 258822) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Upon receipt of the soil encore samples, encores were transferred to closed loop vials and were frozen as per the SOW specifications.

Manual integrations were performed for the following samples for the compounds listed against them.

| Compound | EPA Sample ID |
|---|---|
| 1,4-Dioxane | VSTD0255F |

These manual integrations were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration, the scan ranges, and initials of the analyst or manager is included in the data package.

**SEMI-VOLATILES**

**1) Extractions**

Soil samples were extracted by sonication method. GPC cleanup was performed on soil samples and the associated Blank. No problems were encountered during the extraction.

**2) Analysis**

All samples were analyzed on an Agilent-5973 GC/MS using a 30-meter HP-5MS column (Agilent cat#19091S-433) having a 0.25mm ID and a 0.25µm film thickness. A 1µL injection was used.

Sample F5WC0 had high concentration of target compounds and /or TIC's. Sample was analyzed at 10X dilution instead of 1X and further dilutions were analyzed as needed.

The following samples were run at dilution, listed against them to get all the compounds within range.

| EPA SAMPLE ID | DILUTION |
|---|---|
| F5WC0 | 10x |

Manual integrations were performed for the following samples for the compounds listed against them.

| Compound | EPA Sample ID |
|---|---|
| 1,4-Dioxane | F5WB4, F5WB9,F5WC0, F5WC1, F5WC3, SSTD0209S, STD0109S, SSTD0409S, SSTD0809S, SSTD0059S, SSTD0409N, SSTD0209N, SSTD0109N, SSTD0809N, SSTD0059N, SSTD0209N, SSTD0209O, SSTD0209P, |

| | |
|---|---|
| | SSTD0209Q, SSTD0209R, SSTD0209S,SSTD0209T, SSTD0209U, SSTD0209V |
| Benzo (k) fluoranthene | F5WC2, F5WC3 |
| Benzo (b) fluoranthene | F5WC3 |
| 1,4-Dioxane-d8 | SSTD0209S, STD0109S, SSTD0059S, SSTD0409N, SSTD0209N, SSTD0109N, SSTD0059N, SSTD0209N, SSTD0209O, SSTD0209P, SSTD0209Q, SSTD0209S, SSTD0209T, SSTD0209U |
| 2,4-Dinitrophenol | SSTD0109S, SSTD0209N, SSTD0109N, SSTD0209N, SSTD0209O, SSTD0209P, SSTD0209Q, SSTD0209R, SSTD0209S, SSTD0209T, SSTD0209U, SSTD0209V |
| Caprolactam | SSTD0409S, SSTD0809S, SSTD0409N, SSTD0809N, SSTD0209O, SSTD0209P, SSTD0209R, SSTD0209T, SSTD0209U, SSTD0209V |

These manual integrations were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration, the scan ranges, and initials of the analyst or manager is included in the data package.

The following equations were used for calculation of the sample results from raw instrument output data:

**VOLATILES**

**Low Level Soil/Sediment:**

$$\text{Concentration } (\mu g/Kg) = \frac{(Ax)(Is)(DF)}{(Ais)(\overline{RRF})(Ws)(D)}$$

$A_x$ = Area of the characteristic ion (EICP) for the compound to be measured.
$A_{is}$ = Area of the characteristic ion (EICP) for the specific internal standard.
$I_s$ = Amount of internal standard added in nanograms (ng).

$\overline{RRF}$ = Mean relative response factor from the heated purge of the initial calibration.
$W_s$ = Weight of sample added to the purge tube, in grams (g).

$$D = \frac{100 - \%moisture}{100}$$

DF = Dilution Factor

**Semivolatiles:**

Water

$$\text{Concentration } (\mu g/L) = \frac{(Ax)(Is)(Vt)(Df)(GPC)}{(Ais)(\overline{RRF})(Vo)(Vi)}$$

$A_x$ = Area of the characteristic ion for the compound to be measured.
$A_{is}$ = Area of the characteristic ion for the internal standard.
$I_s$ = Amount of internal standard injected in nanograms (ng).

$\overline{RRF}$ = Mean relative response factor determined from the initial calibration.
$V_o$ = Volume of water extracted in milliliters (mL).
$V_i$ = Volume of extracted infected in microliters (µL).
$V_t$ = Volume of concentrated extract in microliters (µL). ($V_t$ = 1000µL).

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|---|---|---|

*Df* = Dilution Factor.

GPC = $\frac{Vin}{Vout}$ = GPC Factor. (If, no GPC is performed, GPC=1).

$V_{in}$ = Volume of extract loaded onto GPC column.

$V_{out}$ = Volume of extract collected after the GPC cleanup.

I certify that this Sample Data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy Sample Data Package and in the electronic data deliverable has been authorized by the laboratory Manager or Manager's designee, as verified by the following signature.

Ramkishor Koyyada / QC Specialist — Name and Title

06/02/2012 — Signature & Date

# SAMPLE DELIVERY GROUP (SDG)
# COVER SHEET

**SDG Number:** F5WB4

**Laboratory Name:** A4 SCIENTIFIC, INC. **Laboratory Code:** A4

**Contract No.:** EPW10018 **Case No.:** 42562

**Analysis Price:** $416.00 **SDG Turnaround:** 21 days

**Modified Analysis (if applicable):**

**Modification Reference No.:** NA

EPA Sample Numbers in SDG (Listed in Numerical Order)

| | | | |
|---|---|---|---|
| 1) F5WB4 | 7) F5WC3 | 13) | 19) |
| 2) F5WB8 | 8) | 14) | 20) |
| 3) F5WB9 | 9) | 15) | 21) |
| 4) F5WC0 | 10) | 16) | 22) |
| 5) F5WC1 | 11) | 17) | 23) |
| 6) F5WC2 | 12) | 18) | 24) |

| | |
|---|---|
| F5WB4 | F5WC3 |
| First Sample in SDG | Last Sample in SDG |
| 05/18/2012 | 05/18/2012 |
| First Sample Receipt Date | Last Sample Receipt Date |

***Note:*** *There are a maximum of 20* ***field*** *samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Signature

5/19/12

Date

**USEPA CLP Organics COC (LAB COPY)**

DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386568

**CHAIN OF CUSTODY RECORD**

Case #: 42562 Contract: EPW10018
Cooler #: 1 of 2 SDG: F5WB4

**No: 6-051712-104047-0007**

Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|
| F5WB4 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456790 (None), 6-456791 (None), 6-456792 (None), 6-456793 (None), 6-456794 (None) (5) | SO-15 | 05/17/2012 10:26 | MF5WB4 | 0015977-01 1st Sx in SDG |
| F5WB8 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456814 (None), 6-456815 (None), 6-456816 (None), 6-456817 (None), 6-456818 (None) (5) | SO-19 | 05/17/2012 09:20 | MF5WB8 | -02 |
| F5WB9 | Soil/ Gary Hazelwood | Composite | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456820 (None), 6-456821 (None), 6-456822 (None), 6-456823 (None), 6-456824 (None) (5) | SO-20 | 05/17/2012 09:40 | MF5WB9 | -03 |
| F5WC0 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456826 (None), 6-456827 (None), 6-456828 (None), 6-456829 (None), 6-456830 (None) (5) | SO-21 | 05/17/2012 11:37 | MF5WC0 | -04 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Special Instructions: F5WB9 VOA samples are grab samples. F5WB9 SVOA samples are composite.

**Shipment for Case Complete? Y**

**Samples Transferred From Chain of Custody #**

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Craig Watt | 5/17/12 | [illegible] | 05/18/12 | 10:20 | | | | | | |
| | | RD 05/18/12 | | | | | RD 05/18/12 | | | | |
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00006

**USEPA CLP Organics COC (LAB COPY)**

DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386579

**CHAIN OF CUSTODY RECORD**

Case #: 42562
Cooler #: 2 of 2

contract TEPW10018
SDG: F5WB4

**No: 6-051712-104738-0009**

Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|
| F5WC1 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456832 (None), 6-456833 (None), 6-456834 (None), 6-456835 (None), 6-456836 (None) (5) | SO-22 | 05/17/2012 11:06 | MF5WC1 | 0015977-05 |
| F5WC2 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456838 (None), 6-456839 (None), 6-456840 (None), 6-456841 (None), 6-456842 (None) (5) | SO-23 | 05/17/2012 12:04 | MF5WC2 | -06 |
| F5WC3 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456706 (None), 6-456707 (None), 6-456708 (None), 6-456709 (None), 6-456710 (None) (5) | SO-24 | 05/17/2012 12:30 | MF5WC3 | -07 |
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Final Sx in SDG#

Special Instructions:

**Shipment for Case Complete? Y**

**Samples Transferred From Chain of Custody #**

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | [signature] | 5/17/12 | [signature] | 05/18/12 | 10:20 | | | | | | |
| | | | | | | | | RD 05/18/12 | | | |
| | | | RD 05/18/12 | | | | | | | | |

00001

2C - FORM II VOA-3
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Level: (LOW/MED) LOW

| | EPA SAMPLE NO. | VDMC1 (VCL) # | VDMC2 (CLA) # | VDMC3 (DCE) # | VDMC4 (BUT) # | VDMC5 (CLF) # | VDMC6 (DCA) # | VDMC7 (BEN) # |
|---|---|---|---|---|---|---|---|---|
| 01 | F5WB4 | 78 | 99 | 66 | 108 | 82 | 99 | 91 |
| 02 | F5WB8 | 97 | 110 | 69 | 84 | 79 | 89 | 87 |
| 03 | F5WB9 | 97 | 96 | 62 | 81 | 81 | 92 | 87 |
| 04 | F5WC0 | 70 | 99 | 72 | 132 | 97 | 114 | 93 |
| 05 | F5WC1 | 91 | 104 | 66 | 69 | 73 | 77 * | 82 |
| 06 | F5WC2 | 90 | 107 | 68 | 65 | 77 | 82 | 85 |
| 07 | F5WC3 | 102 | 114 | 70 | 57 | 75 | 77 * | 89 |
| 08 | VBLK5F | 93 | 111 | 77 | 119 | 94 | 108 | 100 |
| 09 | VHBLKQW | 102 | 124 | 85 | 112 | 100 | 113 | 98 |
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| | | QC LIMITS |
|---|---|---|
| VDMC1 | (VCL) = Vinyl chloride-d3 | (68-122) |
| VDMC2 | (CLA) = Chloroethane-d5 | (61-130) |
| VDMC3 | (DCE) = 1,1-Dichloroethene-d2 | (45-132) |
| VDMC4 | (BUT) = 2-Butanone-d5 | (20-182) |
| VDMC5 | (CLF) = Chloroform-d | (72-123) |
| VDMC6 | (DCA) = 1,2-Dichloroethane-d4 | (79-122) |
| VDMC7 | (BEN) = Benzene-d6 | (80-121) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits

2D - FORM II VOA-4
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Level: (LOW/MED) LOW

| | EPA SAMPLE NO. | VDMC8 (DPA) # | VDMC9 (TOL) # | VDMC10 (TDP) # | VDMC11 (HEX) # | VDMC12 (DXE) # | VDMC13 (TCA) # | VDMC14 (DCZ) # | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|
| 01 | F5WB4 | 93 | 86 | 101 | 125 | 136 | 95 | 91 | 0 |
| 02 | F5WB8 | 88 | 86 | 85 | 92 | 87 | 80 | 86 | 0 |
| 03 | F5WB9 | 92 | 87 | 86 | 95 | 94 | 85 | 90 | 0 |
| 04 | F5WC0 | 95 | 97 | 102 | 135 | 104 | 109 | 105 | 0 |
| 05 | F5WC1 | 81 | 80 | 81 | 80 | 75 | 71 | 84 | 1 |
| 06 | F5WC2 | 84 | 85 | 75 | 73 | 77 | 72 | 84 | 0 |
| 07 | F5WC3 | 85 | 86 | 73 | 64 | 66 | 65 | 82 | 1 |
| 08 | VBLK5F | 99 | 98 | 108 | 124 | 94 | 101 | 99 | 0 |
| 09 | VHBLKQW | 97 | 98 | 101 | 110 | 90 | 98 | 108 | 0 |
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| | QC LIMITS |
|---|---|
| VDMC8 (DPA) = 1,2-Dichloropropane-d6 | (74-124) |
| VDMC9 (TOL) = Toluene-d8 | (78-121) |
| VDMC10 (TDP) = trans-1,3-Dichloropropene-d4 | (72-130) |
| VDMC11 (HEX) = 2-Hexanone-d5 | (17-184) |
| VDMC12 (DXE) = 1,4-Dioxane-d8 | (50-150) |
| VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2 | (56-161) |
| VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4 | (70-131) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK5F

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: H3680.D Lab Sample ID: 2050163-BLK1

Instrument ID: H-5975

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 05/21/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 1103

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) Y

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | F5WB4 | 0015977-01 | H3685.D | 1312 |
| 02 | F5WB8 | 0015977-02 | H3686.D | 1338 |
| 03 | F5WB9 | 0015977-03 | H3687.D | 1404 |
| 04 | F5WC1 | 0015977-05 | H3689.D | 1535 |
| 05 | F5WC2 | 0015977-06 | H3690.D | 1601 |
| 06 | F5WC3 | 0015977-07 | H3691.D | 1627 |
| 07 | F5WC0 | 0015977-04 | H3692.D | 1655 |
| 08 | VHBLKQW | 0015977-08 | H3695.D | 1844 |
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COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB5D

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: H3656.D BFB Injection Date: 05/19/2012

Instrument ID: ( H-5975 BFB Injection Time: 1046

GC Column: DB-624 ID: 0.20 (mm)

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.4 | |
| 75 | 30.0 - 80.0% of mass 95 | 49.2 | |
| 95 | Base peak, 100% relative abundance | 100 | |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 | |
| 173 | Less than 2.0% of mass 174 | 0.6 | ( 0.8 )1 |
| 174 | 50.0 - 120% of mass 95 | 73.5 | |
| 175 | 5.0 - 9.0% of mass 174 | 6.2 | ( 8.4 )1 |
| 176 | 95.0 - 101% of mass 174 | 71.9 | ( 97.8 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.8 | ( 6.7 )2 |

1 - Value is %mass 174 2 - Value is %mass 176

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD0255D | 2E21002-CAL3 | H3658.D | 05/19/2012 | 1140 |
| 02 | VSTD1005D | 2E21002-CAL5 | H3659.D | 05/19/2012 | 1206 |
| 03 | VSTD0505D | 2E21002-CAL4 | H3660.D | 05/19/2012 | 1232 |
| 04 | VSTD0055D | 2E21002-CAL2 | H3661.D | 05/19/2012 | 1350 |
| 05 | VSTD2.55D | 2E21002-CAL1 | H3662.D | 05/19/2012 | 1416 |
| 06 | VSTD0255E | 2E21002-CCV1 | H3677.D | 05/19/2012 | 2123 |
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5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB5F

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: H3678.D BFB Injection Date: 05/21/2012

Instrument ID: ( H-5975 BFB Injection Time: 0946

GC Column: DB-624 ID: 0.20 (mm)

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21.8 |
| 75 | 30.0 - 80.0% of mass 95 | 48.1 |
| 95 | Base peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 5.6 |
| 173 | Less than 2.0% of mass 174 | 0.7 ( 1.0 )1 |
| 174 | 50.0 - 120% of mass 95 | 72.9 |
| 175 | 5.0 - 9.0% of mass 174 | 5.4 ( 7.4 )1 |
| 176 | 95.0 - 101% of mass 174 | 73.6 ( 101 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.7 ( 6.4 )2 |

1 - Value is %mass 174 2 - Value is %mass 176

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD0255F | 2E21006-CCV1 | H3679.D | 05/21/2012 | 1011 |
| 02 | VBLK5F | 2050163-BLK1 | H3680.D | 05/21/2012 | 1103 |
| 03 | F5WB4 | 0015977-01 | H3685.D | 05/21/2012 | 1312 |
| 04 | F5WB8 | 0015977-02 | H3686.D | 05/21/2012 | 1338 |
| 05 | F5WB9 | 0015977-03 | H3687.D | 05/21/2012 | 1404 |
| 06 | F5WC1 | 0015977-05 | H3689.D | 05/21/2012 | 1535 |
| 07 | F5WC2 | 0015977-06 | H3690.D | 05/21/2012 | 1601 |
| 08 | F5WC3 | 0015977-07 | H3691.D | 05/21/2012 | 1627 |
| 09 | F5WC0 | 0015977-04 | H3692.D | 05/21/2012 | 1655 |
| 10 | VHBLKQW | 0015977-08 | H3695.D | 05/21/2012 | 1844 |
| 11 | VSTD0255G | 2E21006-CCV2 | H3696.D | 05/21/2012 | 1909 |
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8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255D Date Analyzed: 05/19/2012

Lab File ID (Standard): H3658.D Time Analyzed: 1140

Instrument ID: H-5975 Heated Purge: (Y/N) Y

| | | IS1 (CBZ) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (DCB) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 109771 | 9.26 | 142212 | 5.37 | 44090 | 12.82 |
| | UPPER LIMIT | 219542 | 9.76 | 284424 | 5.87 | 88180 | 13.32 |
| | LOWER LIMIT | 54886 | 8.76 | 71106 | 4.87 | 22045 | 12.32 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VSTD1005D | 117444 | 9.26 | 149105 | 5.37 | 51019 | 12.82 |
| 02 | VSTD0505D | 120090 | 9.26 | 157560 | 5.37 | 50588 | 12.82 |
| 03 | VSTD0055D | 94197 | 9.26 | 126418 | 5.37 | 35692 | 12.82 |
| 04 | VSTD2.55D | 87084 | 9.26 | 114858 | 5.37 | 33218 | 12.82 |
| 05 | VSTD0255E | 98243 | 9.26 | 131138 | 5.37 | 39273 | 12.82 |
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255F Date Analyzed: 05/21/2012

Lab File ID (Standard): H3679.D Time Analyzed: 1011

Instrument ID: H-5975 Heated Purge: (Y/N) Y

| | | IS1 (CBZ) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (DCB) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 110361 | 9.26 | 149287 | 5.37 | 44983 | 12.82 |
| | UPPER LIMIT | 220722 | 9.76 | 298574 | 5.87 | 89966 | 13.32 |
| | LOWER LIMIT | 55181 | 8.76 | 74644 | 4.87 | 22492 | 12.32 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VBLK5F | 95682 | 9.26 | 126807 | 5.37 | 35745 | 12.82 |
| 02 | F5WB4 | 116743 | 9.26 | 164325 | 5.37 | 36744 | 12.82 |
| 03 | F5WB8 | 117430 | 9.26 | 163212 | 5.37 | 35745 | 12.82 |
| 04 | F5WB9 | 114132 | 9.26 | 162290 | 5.37 | 34964 | 12.82 |
| 05 | F5WC1 | 129221 | 9.26 | 179764 | 5.38 | 44321 | 12.82 |
| 06 | F5WC2 | 113789 | 9.26 | 159050 | 5.37 | 36436 | 12.82 |
| 07 | F5WC3 | 110522 | 9.26 | 163268 | 5.37 | 33530 | 12.82 |
| 08 | F5WC0 | 98857 | 9.26 | 122039 | 5.37 | 35900 | 12.82 |
| 09 | VHBLKQW | 88952 | 9.26 | 112098 | 5.37 | 30060 | 12.82 |
| 10 | VSTD0255G | 99113 | 9.26 | 125276 | 5.37 | 41226 | 12.82 |
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 6.12 (g/mL) g Lab File ID: H3685.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.2 | U |
| 74-87-3 | Chloromethane | 5.2 | U |
| 75-01-4 | Vinyl chloride | 5.2 | U |
| 74-83-9 | Bromomethane | 5.2 | U |
| 75-00-3 | Chloroethane | 5.2 | U |
| 75-69-4 | Trichlorofluoromethane | 5.2 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.2 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.2 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.2 | U |
| 79-20-9 | Methyl acetate | 5.2 | U |
| 75-09-2 | Methylene chloride | 5.5 | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.2 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.2 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.2 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.2 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.2 | U |
| 67-66-3 | Chloroform | 5.2 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.2 | U |
| 110-82-7 | Cyclohexane | 5.2 | U |
| 56-23-5 | Carbon tetrachloride | 5.2 | U |
| 71-43-2 | Benzene | 5.2 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.2 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 6.12 (g/mL) g Lab File ID: H3685.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.2 | U |
| 108-87-2 | Methylcyclohexane | 5.2 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.2 | U |
| 75-27-4 | Bromodichloromethane | 5.2 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.2 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.2 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.2 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.2 | U |
| 127-18-4 | Tetrachloroethene | 5.2 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 124-48-1 | Dibromochloromethane | 5.2 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.2 | U |
| 108-90-7 | Chlorobenzene | 5.2 | U |
| 100-41-4 | Ethylbenzene | 5.2 | U |
| 95-47-6 | o-Xylene | 5.2 | U |
| 179601-23-1 | m,p-Xylene | 5.2 | U |
| 100-42-5 | Styrene | 5.2 | U |
| 75-25-2 | Bromoform | 5.2 | U |
| 98-82-8 | Isopropylbenzene | 5.2 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.2 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.2 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.2 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 6.12 (g/mL) g Lab File ID: H3685.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 164325 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.258 | 117 | 116743 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 36744 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 19500 | 38.94 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 77.88% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 13689 | 49.60 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 99.20% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 107577 | 32.77 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 65.54% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 74124 | 107.93 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 107.93% | | |
| 24) Chloroform-d | 4.329 | 84 | 154178 | 41.01 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 82.02% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 99552 | 49.29 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 98.58% | | |
| 28) 1,4-Dioxane-d8 | 6.040 | 96 | 35153 | 1361.51 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 136.15% | | |
| 34) Benzene-d6 | 4.889 | 84 | 337494 | 45.71 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 91.42% | | |
| 37) 1,2-Dichloropropane-d6 | 5.812 | 67 | 94359 | 46.62 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 93.24% | | |
| 43) Toluene-d8 | 7.201 | 98 | 274308 | 43.22 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 86.44% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 81481 | 50.31 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 100.62% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 47917 | 124.79 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 124.79% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.390 | 84 | 53598 | 47.36 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 94.72% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 61866 | 45.30 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 90.60% | | |
| **Target Compounds** | | | | | Qvalue |
| 16) Methylene Chloride | 2.857 | 84 | 7717 | 5.2815 ug/L | 97 |

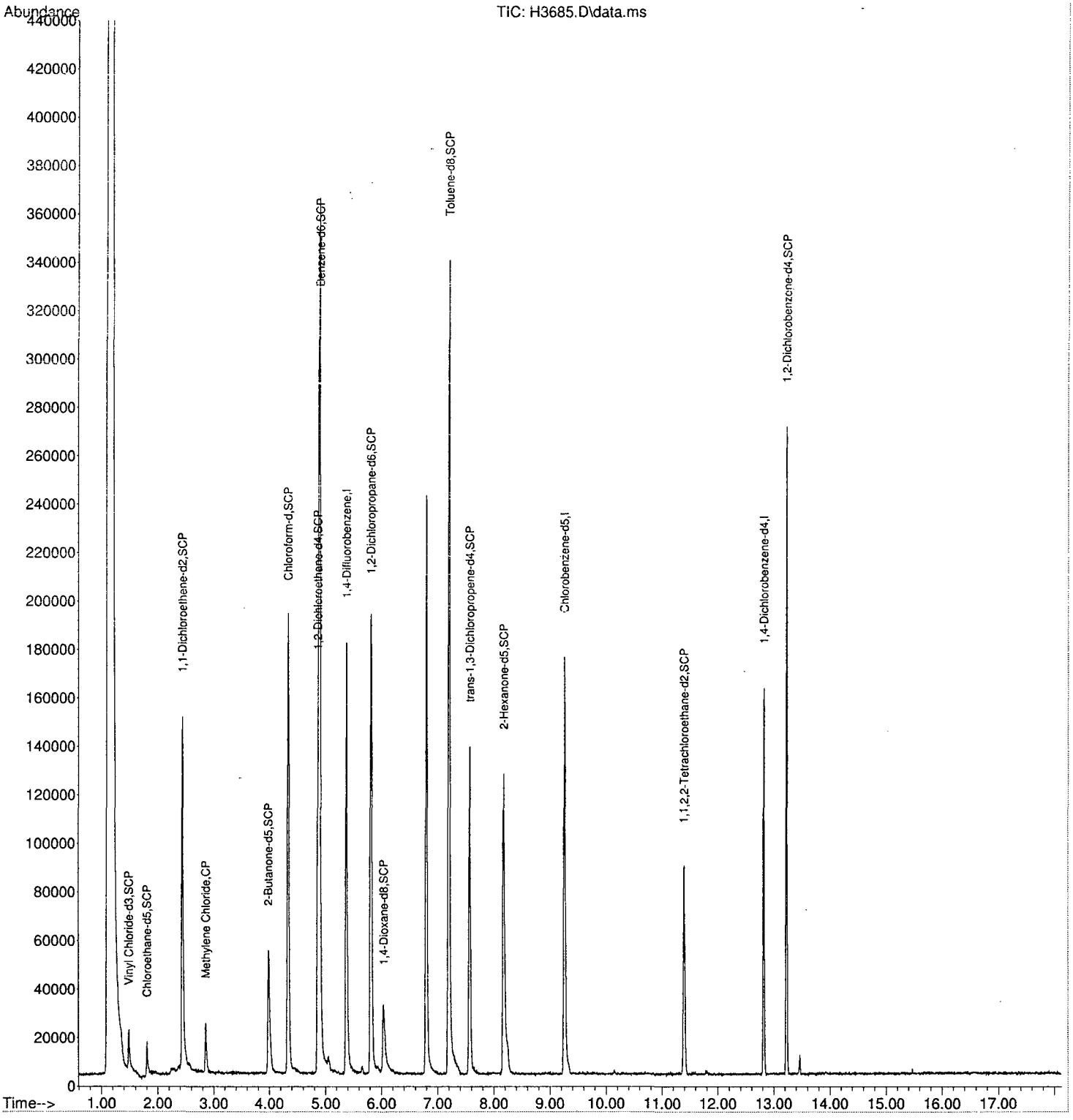
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

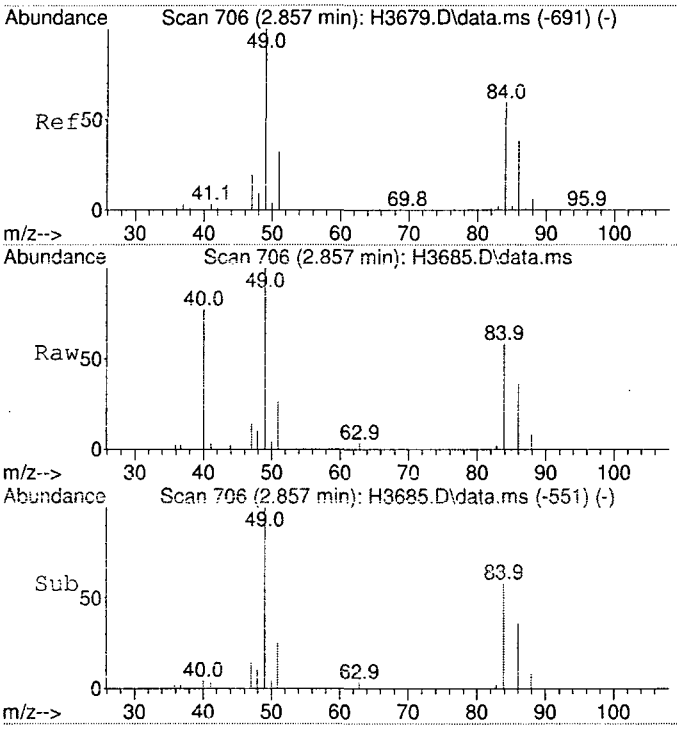
Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
MS Integration Params: RTEINT.P

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

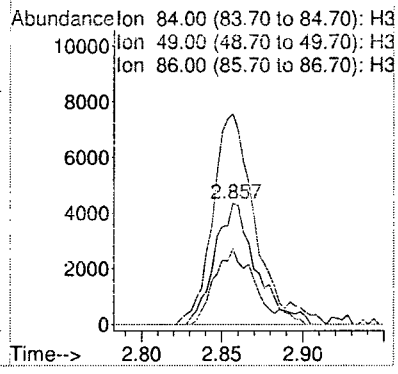
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM




#16
Methylene Chloride
Concen: 5.2815 ug/L
RT: 2.86 min Scan# 706
Delta R.T. -0.00 min
Lab File: H3685.D
Acq: 21 May 2012 13:12

Tgt Ion: 84 Resp: 7717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 178.0 | 154.4 | 194.4 |
| 86 | 61.7 | 43.7 | 83.7 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3685.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.143 | 147 | 173 | 259 | rBV | 2848427 | 12208757 | 100.00% | 67.979% |
| 2 | 1.484 | 271 | 279 | 290 | rBV2 | 16072 | 26266 | 0.22% | 0.146% |
| 3 | 1.526 | 290 | 292 | 303 | rVV3 | 3432 | 4972 | 0.04% | 0.028% |
| 4 | 1.571 | 303 | 306 | 317 | rVV4 | 1963 | 3119 | 0.03% | 0.017% |
| 5 | 1.613 | 317 | 319 | 324 | rVV3 | 2096 | 1692 | 0.01% | 0.009% |
| 6 | 1.645 | 324 | 329 | 338 | rVB6 | 2202 | 3402 | 0.03% | 0.019% |
| 7 | 1.809 | 369 | 380 | 395 | rBV3 | 14649 | 28338 | 0.23% | 0.158% |
| 8 | 2.243 | 512 | 515 | 519 | rVV4 | 1947 | 1783 | 0.01% | 0.010% |
| 9 | 2.384 | 551 | 559 | 562 | rBV3 | 1973 | 2851 | 0.02% | 0.016% |
| 10 | 2.442 | 565 | 577 | 606 | rVV2 | 144843 | 274074 | 2.24% | 1.526% |
| 11 | 2.857 | 697 | 706 | 724 | rVB3 | 20688 | 37554 | 0.31% | 0.209% |
| 12 | 3.982 | 1045 | 1056 | 1088 | rBV3 | 50624 | 127004 | 1.04% | 0.707% |
| 13 | 4.333 | 1152 | 1165 | 1187 | rBV | 189512 | 386008 | 3.16% | 2.149% |
| 14 | 4.455 | 1192 | 1203 | 1204 | rVB2 | 1260 | 2197 | 0.02% | 0.012% |
| 15 | 4.889 | 1318 | 1338 | 1374 | rBV3 | 360949 | 1005295 | 8.23% | 5.598% |
| 16 | 5.050 | 1387 | 1388 | 1396 | rVB4 | 3792 | 3134 | 0.03% | 0.017% |
| 17 | 5.371 | 1476 | 1488 | 1513 | rBV2 | 177343 | 370630 | 3.04% | 2.064% |
| 18 | 5.661 | 1576 | 1578 | 1588 | rVB5 | 3329 | 3016 | 0.02% | 0.017% |
| 19 | 5.815 | 1612 | 1626 | 1651 | rBV3 | 189108 | 424044 | 3.47% | 2.361% |
| 20 | 6.034 | 1682 | 1694 | 1714 | rBV2 | 27642 | 78106 | 0.64% | 0.435% |
| 21 | 6.101 | 1714 | 1715 | 1733 | rVB3 | 4044 | 6877 | 0.06% | 0.038% |
| 22 | 6.796 | 1918 | 1931 | 1949 | rBV2 | 237954 | 467920 | 3.83% | 2.605% |
| 23 | 6.918 | 1968 | 1969 | 1980 | rVB4 | 1703 | 1897 | 0.02% | 0.011% |
| 24 | 7.201 | 2042 | 2057 | 2088 | rBV | 335902 | 734403 | 6.02% | 4.089% |
| 25 | 7.342 | 2099 | 2101 | 2115 | rVB4 | 3274 | 4932 | 0.04% | 0.027% |
| 26 | 7.567 | 2159 | 2171 | 2189 | rBV2 | 134707 | 257448 | 2.11% | 1.433% |
| 27 | 8.175 | 2346 | 2360 | 2401 | rBV3 | 123798 | 318406 | 2.61% | 1.773% |
| 28 | 9.258 | 2684 | 2697 | 2727 | rBV2 | 171645 | 368344 | 3.02% | 2.051% |
| 29 | 9.992 | 2923 | 2925 | 2934 | rBV2 | 1135 | 1695 | 0.01% | 0.009% |
| 30 | 10.146 | 2970 | 2973 | 2982 | rVB4 | 1916 | 2129 | 0.02% | 0.012% |
| 31 | 10.477 | 3067 | 3076 | 3083 | rBV2 | 1222 | 2927 | 0.02% | 0.016% |
| 32 | 11.397 | 3344 | 3362 | 3380 | rVB2 | 86089 | 184927 | 1.51% | 1.030% |
| 33 | 11.799 | 3486 | 3487 | 3498 | rVB4 | 2035 | 2948 | 0.02% | 0.016% |
| 34 | 12.818 | 3791 | 3804 | 3818 | rVB | 159655 | 223401 | 1.83% | 1.244% |
| 35 | 13.226 | 3921 | 3931 | 3944 | rBV2 | 267232 | 372638 | 3.05% | 2.075% |
| 36 | 13.464 | 3999 | 4005 | 4011 | rVB5 | 8088 | 8731 | 0.07% | 0.049% |
| 37 | 13.696 | 4075 | 4077 | 4090 | rVB2 | 1416 | 2736 | 0.02% | 0.015% |
| 38 | 14.766 | 4402 | 4410 | 4415 | rBV2 | 885 | 1698 | 0.01% | 0.009% |
| 39 | 15.464 | 4624 | 4627 | 4640 | rBV | 2183 | 1639 | 0.01% | 0.009% |
| 40 | 16.544 | 4962 | 4963 | 4984 | rVB2 | 902 | 1772 | 0.01% | 0.010% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 17959710

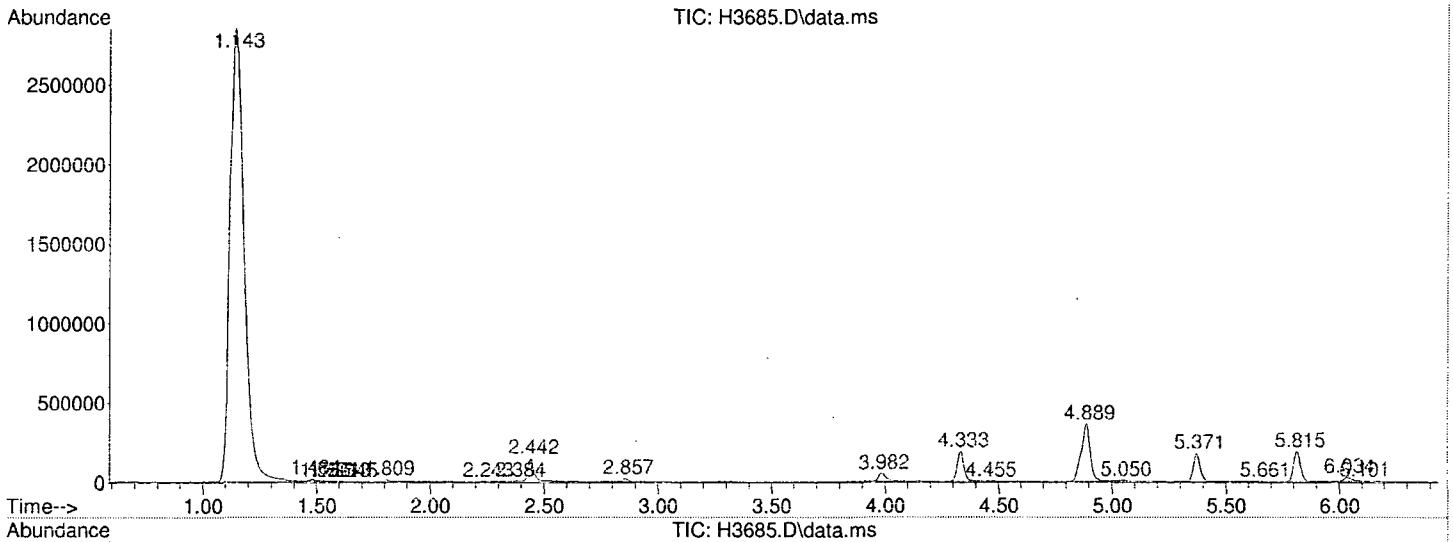
LSC Report - Integrated Chromatogram

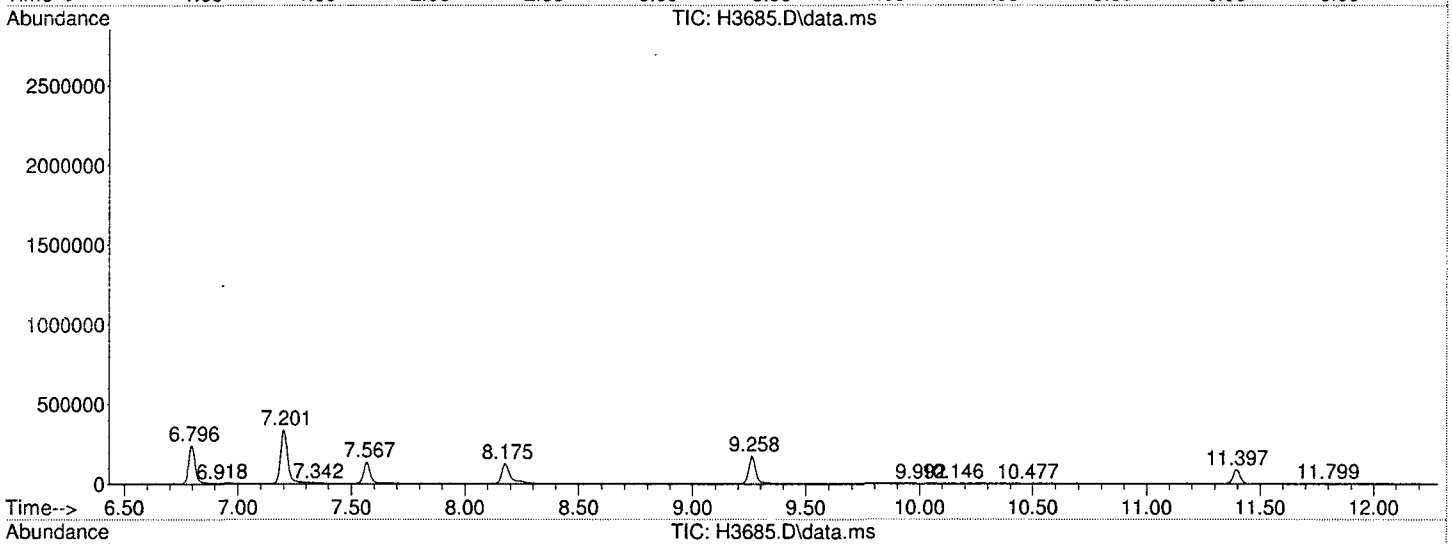
Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

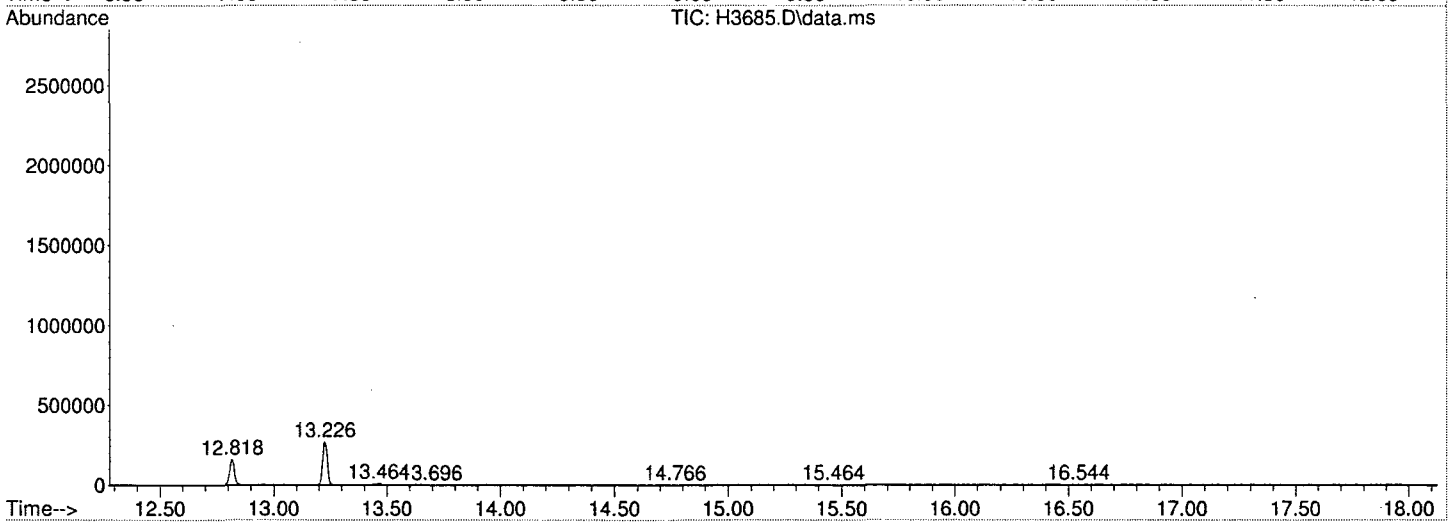
Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

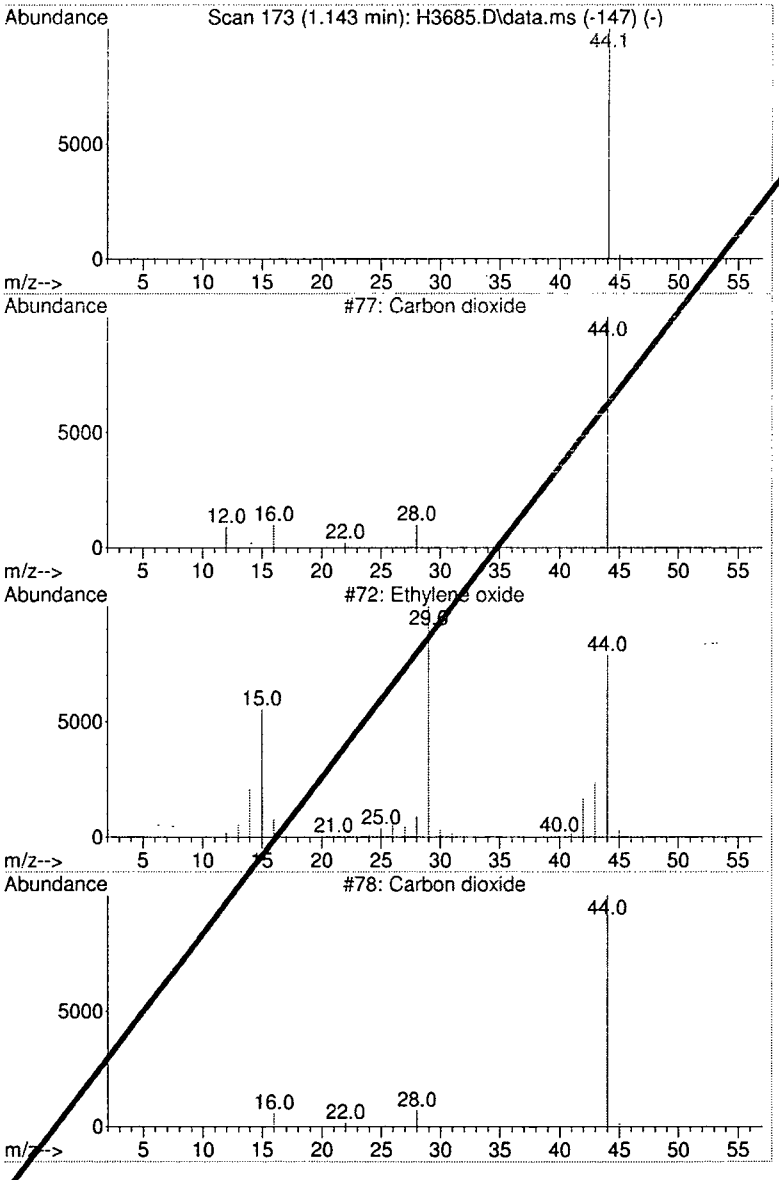
**********

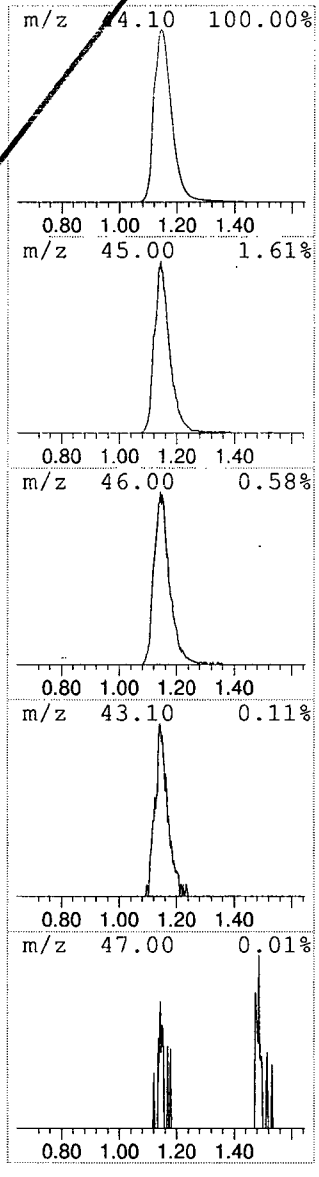
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1647.03 ug/L | 12208800 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 4 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 5 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3685.D
Acq On : 21 May 2012 13:12
Sample : 0015977-01
Misc : F5WB4 6.12GM SOIL
DataAcq Meth:VOAC.M

Vial: 96
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

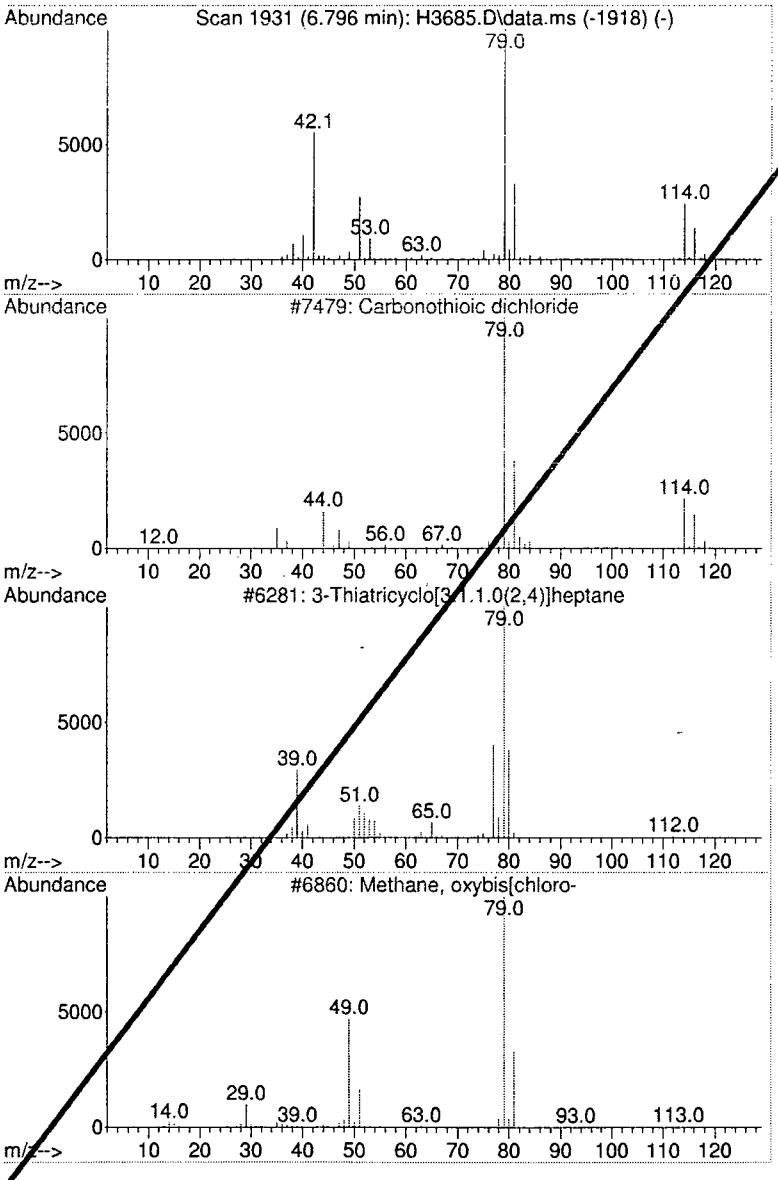
**********

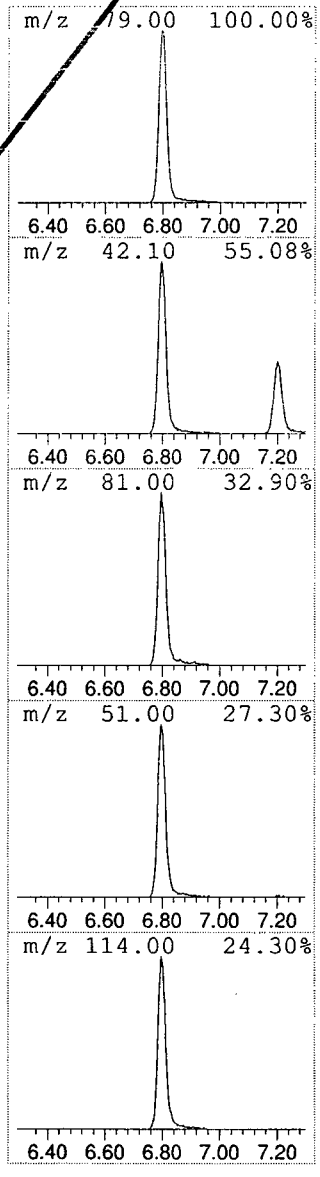
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.796 | 63.12 ug/L | 467920 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 38 |
| 2 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 32 |
| 3 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 4 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 9 |
| 5 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3685.D  Vial: 96
Acq On : 21 May 2012 13:12  Operator: AC
Sample : 0015977-01  Inst : H-5975
Misc : F5WB4 6.12GM SOIL  Multiplr: 1.00
DataAcq Meth:VOAC.M

Quant Time: May 22 10:11:52 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | \|--Internal Standard---\| # | RT | Resp | Conc\| |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1647.0 | ug/L | 12208800 | 1 | 5.371 | 370630 | 50.0 |
| Carbonothioic d... | 6.796 | 63.1 | ug/L | 467920 | 1 | 5.371 | 370630 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 6.22 (g/mL) g Lab File ID: H3686.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 25.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.4 | U |
| 74-87-3 | Chloromethane | 5.4 | U |
| 75-01-4 | Vinyl chloride | 5.4 | U |
| 74-83-9 | Bromomethane | 5.4 | U |
| 75-00-3 | Chloroethane | 5.4 | U |
| 75-69-4 | Trichlorofluoromethane | 5.4 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.4 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.4 | U |
| 67-64-1 | Acetone | 11 | U |
| 75-15-0 | Carbon disulfide | 5.4 | U |
| 79-20-9 | Methyl acetate | 5.4 | U |
| 75-09-2 | Methylene chloride | 3.6 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.4 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.4 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.4 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.4 | U |
| 78-93-3 | 2-Butanone | 11 | U |
| 74-97-5 | Bromochloromethane | 5.4 | U |
| 67-66-3 | Chloroform | 5.4 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.4 | U |
| 110-82-7 | Cyclohexane | 5.4 | U |
| 56-23-5 | Carbon tetrachloride | 5.4 | U |
| 71-43-2 | Benzene | 5.4 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.4 | U |
| 123-91-1 | 1,4-Dioxane | 110 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 6.22 (g/mL) g Lab File ID: H3686.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 25.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.4 | U |
| 108-87-2 | Methylcyclohexane | 5.4 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.4 | U |
| 75-27-4 | Bromodichloromethane | 5.4 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.4 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 11 | U |
| 108-88-3 | Toluene | 5.4 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.4 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.4 | U |
| 127-18-4 | Tetrachloroethene | 5.4 | U |
| 591-78-6 | 2-Hexanone | 11 | U |
| 124-48-1 | Dibromochloromethane | 5.4 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.4 | U |
| 108-90-7 | Chlorobenzene | 5.4 | U |
| 100-41-4 | Ethylbenzene | 5.4 | U |
| 95-47-6 | o-Xylene | 5.4 | U |
| 179601-23-1 | m,p-Xylene | 5.4 | U |
| 100-42-5 | Styrene | 5.4 | U |
| 75-25-2 | Bromoform | 5.4 | U |
| 98-82-8 | Isopropylbenzene | 5.4 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.4 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.4 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.4 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.4 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.4 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.4 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.4 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 6.22 (g/mL) g Lab File ID: H3686.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 25.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
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| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 163212 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 117430 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 35745 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 24149 | 48.55 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 97.10% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 15084 | 55.02 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 110.04% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 113281 | 34.74 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 69.48% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 57582 | 84.41 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 84.41% | | |
| 24) Chloroform-d | 4.333 | 84 | 147275 | 39.44 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 78.88% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 89428 | 44.58 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 89.16% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 22353 | 871.66 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 87.17% | | |
| 34) Benzene-d6 | 4.889 | 84 | 323539 | 43.57 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 87.14% | | |
| 37) 1,2-Dichloropropane-d6 | 5.812 | 67 | 89845 | 44.13 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 88.26% | | |
| 43) Toluene-d8 | 7.201 | 98 | 273685 | 42.87 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 85.74% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 68909 | 42.30 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 84.60% | | |
| 49) 2-Hexanone-d5 | 8.172 | 63 | 35667 | 92.34 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 92.34% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 45429 | 39.91 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 79.82% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 56878 | 42.81 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 85.62% | | |
| **Target Compounds** | | | | | Qvalue |
| 16) Methylene Chloride | 2.854 | 84 | 4790 | 3.3007 ug/L | 98 |

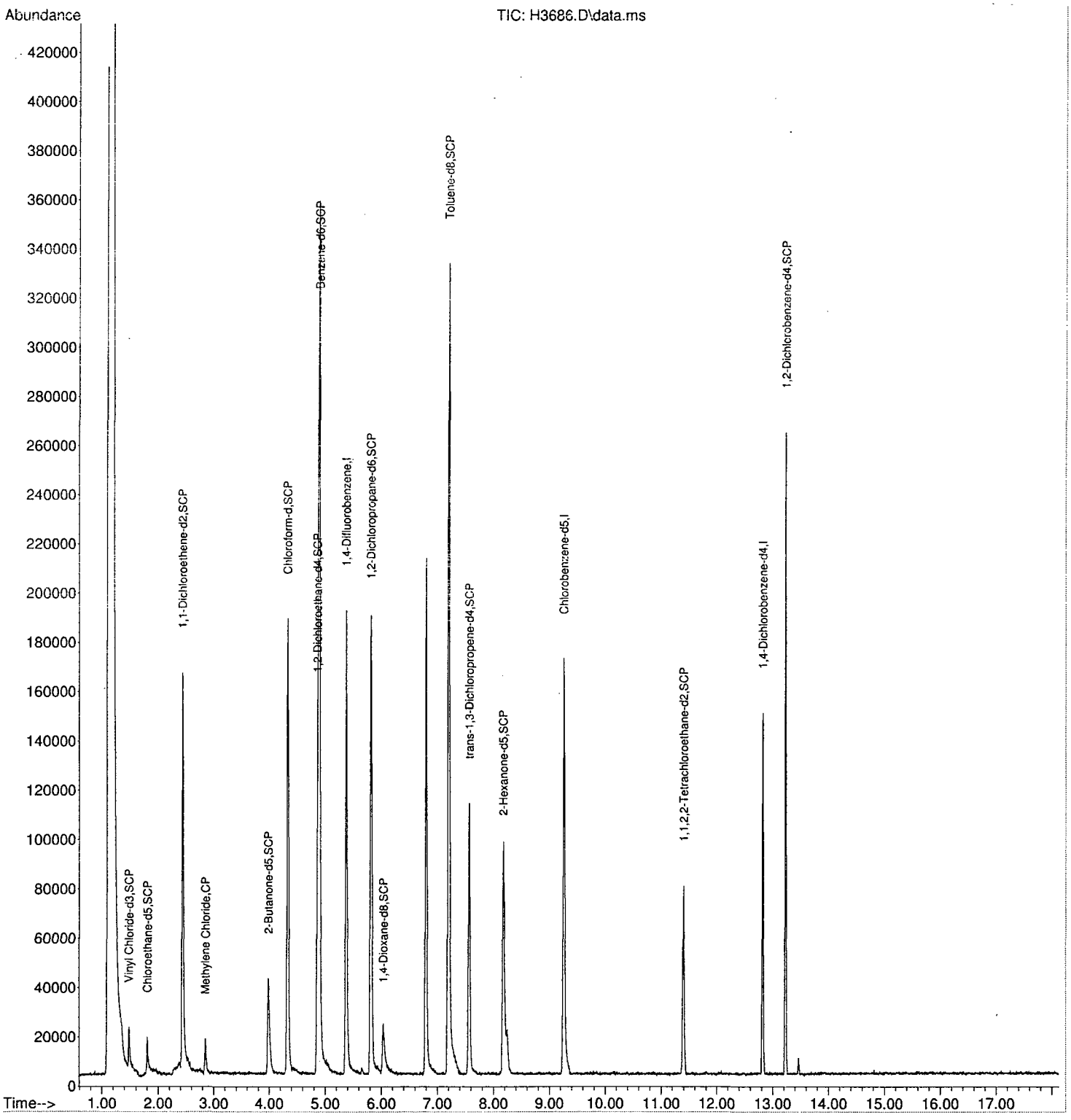
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



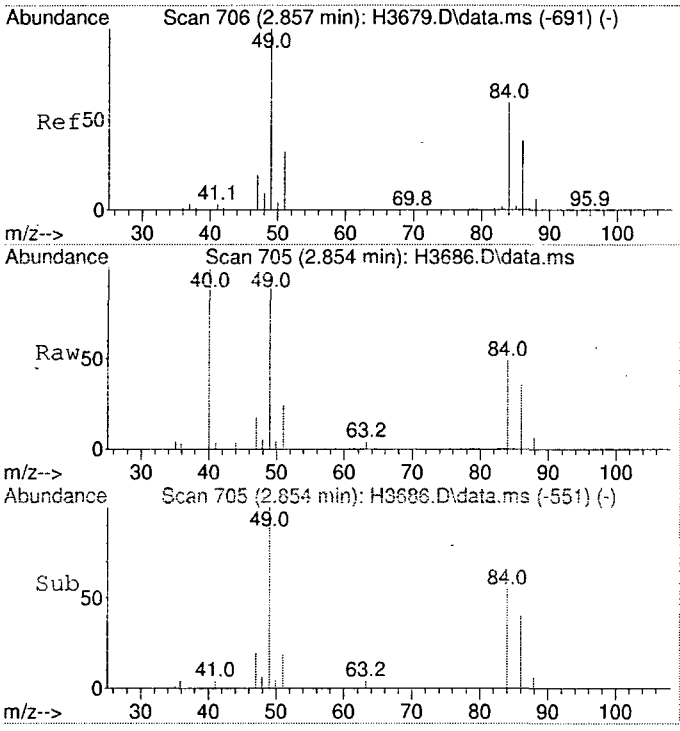



00031

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
MS Integration Params: RTEINT.P

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

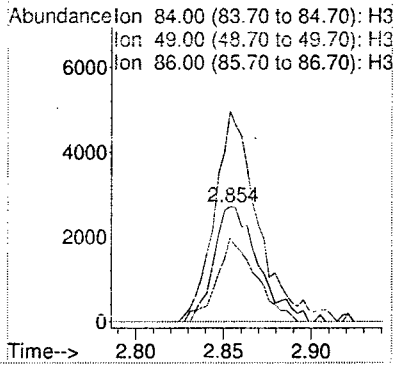
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2 LOW/MED VOA SOIL 5 GM




#16
Methylene Chloride
Concen: 3.3007 ug/L
RT: 2.85 min Scan# 705
Delta R.T. -0.00 min
Lab File: H3686.D
Acq: 21 May 2012 13:38

Tgt Ion: 84 Resp: 4790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 178.3 | 154.4 | 194.4 |
| 86 | 63.3 | 43.7 | 83.7 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3686.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.143 | 146 | 173 | 265 | rBV | 2960972 | 12785691 | 100.00% | 70.208% |
| 2 | 1.481 | 272 | 278 | 291 | rVV | 15711 | 23949 | 0.19% | 0.132% |
| 3 | 1.551 | 298 | 300 | 310 | rVB3 | 2917 | 2548 | 0.02% | 0.014% |
| 4 | 1.642 | 326 | 328 | 335 | rVB3 | 1965 | 1494 | 0.01% | 0.008% |
| 5 | 1.809 | 370 | 380 | 386 | rBV | 15218 | 22433 | 0.18% | 0.123% |
| 6 | 1.831 | 386 | 387 | 390 | rVV3 | 5779 | 2999 | 0.02% | 0.016% |
| 7 | 1.847 | 390 | 392 | 398 | rVV5 | 3111 | 3548 | 0.03% | 0.019% |
| 8 | 1.873 | 398 | 400 | 407 | rVB5 | 1570 | 2234 | 0.02% | 0.012% |
| 9 | 2.268 | 521 | 523 | 527 | rBV2 | 2076 | 1919 | 0.02% | 0.011% |
| 10 | 2.371 | 549 | 555 | 556 | rBV4 | 2084 | 1841 | 0.01% | 0.010% |
| 11 | 2.442 | 565 | 577 | 605 | rBV2 | 160131 | 295017 | 2.31% | 1.620% |
| 12 | 2.577 | 616 | 619 | 628 | rVB5 | 3520 | 3643 | 0.03% | 0.020% |
| 13 | 2.854 | 696 | 705 | 721 | rBV3 | 14722 | 27374 | 0.21% | 0.150% |
| 14 | 3.982 | 1045 | 1056 | 1078 | rBV3 | 38990 | 99630 | 0.78% | 0.547% |
| 15 | 4.333 | 1152 | 1165 | 1183 | rBV2 | 183675 | 366881 | 2.87% | 2.015% |
| 16 | 4.886 | 1318 | 1337 | 1377 | rBV3 | 354068 | 958538 | 7.50% | 5.263% |
| 17 | 5.021 | 1377 | 1379 | 1382 | rVV3 | 3449 | 2173 | 0.02% | 0.012% |
| 18 | 5.043 | 1382 | 1386 | 1392 | rVB4 | 1910 | 2144 | 0.02% | 0.012% |
| 19 | 5.371 | 1472 | 1488 | 1509 | rBV2 | 188204 | 374100 | 2.93% | 2.054% |
| 20 | 5.442 | 1509 | 1510 | 1516 | rVV2 | 3274 | 3163 | 0.02% | 0.017% |
| 21 | 5.465 | 1516 | 1517 | 1530 | rVB4 | 2365 | 2865 | 0.02% | 0.016% |
| 22 | 5.648 | 1570 | 1574 | 1586 | rBV4 | 2913 | 4674 | 0.04% | 0.026% |
| 23 | 5.815 | 1612 | 1626 | 1642 | rBV2 | 186324 | 399160 | 3.12% | 2.192% |
| 24 | 6.034 | 1682 | 1694 | 1717 | rBV3 | 19934 | 57242 | 0.45% | 0.314% |
| 25 | 6.124 | 1719 | 1722 | 1725 | rVB3 | 2015 | 1585 | 0.01% | 0.009% |
| 26 | 6.178 | 1734 | 1739 | 1745 | rVB4 | 1682 | 1552 | 0.01% | 0.009% |
| 27 | 6.799 | 1917 | 1932 | 1957 | rBV2 | 209681 | 416330 | 3.26% | 2.286% |
| 28 | 6.882 | 1957 | 1958 | 1966 | rVB4 | 2362 | 1828 | 0.01% | 0.010% |
| 29 | 7.201 | 2041 | 2057 | 2099 | rBV | 329226 | 749746 | 5.86% | 4.117% |
| 30 | 7.567 | 2157 | 2171 | 2195 | rBV2 | 109756 | 220228 | 1.72% | 1.209% |
| 31 | 7.651 | 2195 | 2197 | 2208 | rVB4 | 1504 | 1881 | 0.01% | 0.010% |
| 32 | 8.178 | 2349 | 2361 | 2399 | rBV4 | 93681 | 257620 | 2.01% | 1.415% |
| 33 | 9.259 | 2679 | 2697 | 2725 | rBV2 | 168998 | 375769 | 2.94% | 2.063% |
| 34 | 9.352 | 2725 | 2726 | 2730 | rVB | 3440 | 1410 | 0.01% | 0.008% |
| 35 | 9.525 | 2778 | 2780 | 2787 | rBV | 1045 | 1447 | 0.01% | 0.008% |
| 36 | 11.397 | 3347 | 3362 | 3378 | rVB4 | 76212 | 159132 | 1.24% | 0.874% |
| 37 | 12.818 | 3794 | 3804 | 3815 | rBV2 | 146430 | 214706 | 1.68% | 1.179% |
| 38 | 13.226 | 3921 | 3931 | 3945 | rBV2 | 260604 | 353109 | 2.76% | 1.939% |
| 39 | 13.464 | 3999 | 4005 | 4014 | rVB4 | 6993 | 7913 | 0.06% | 0.043% |
| 40 | 17.043 | 5112 | 5118 | 5122 | rBV2 | 1029 | 1727 | 0.01% | 0.009% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 18211243

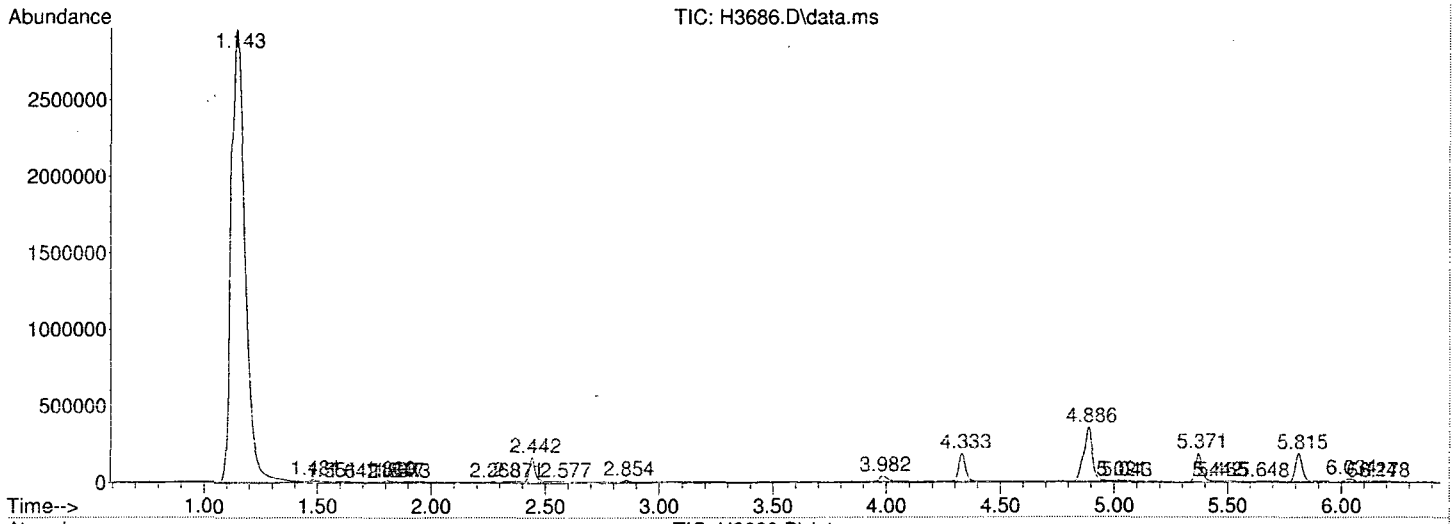
LSC Report - Integrated Chromatogram

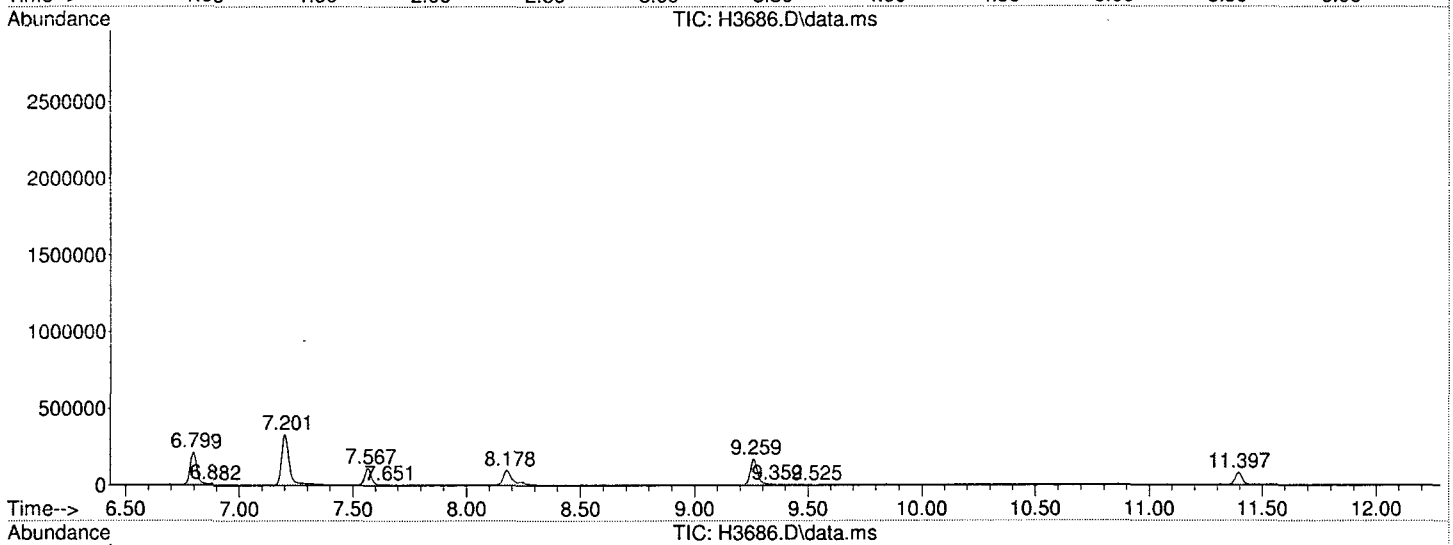
Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

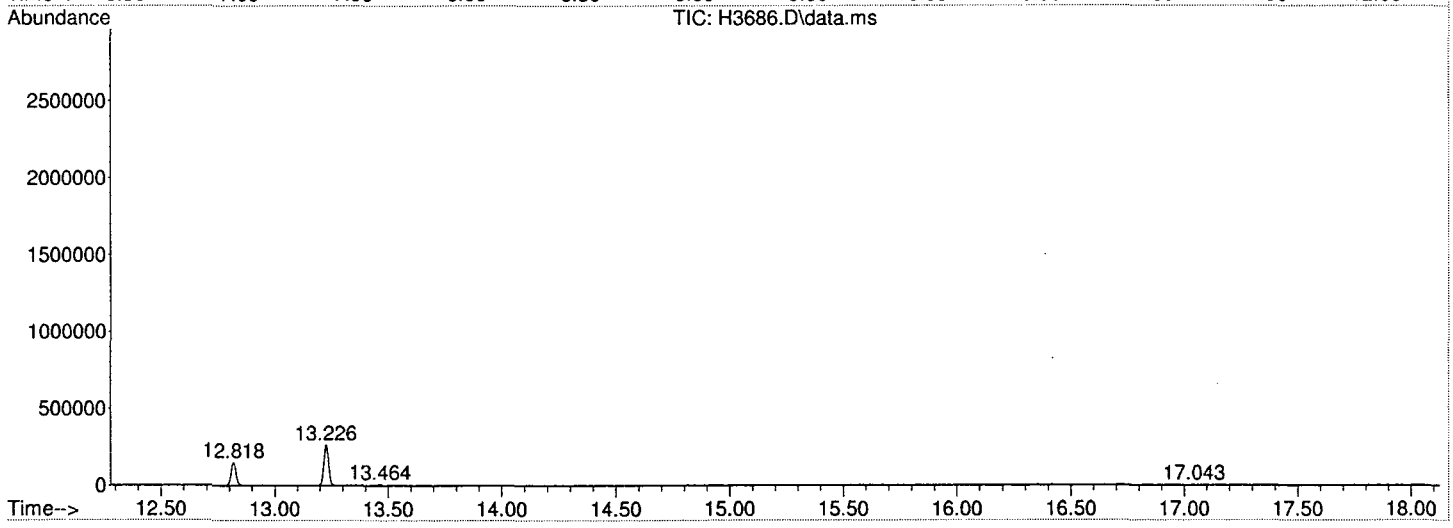
Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

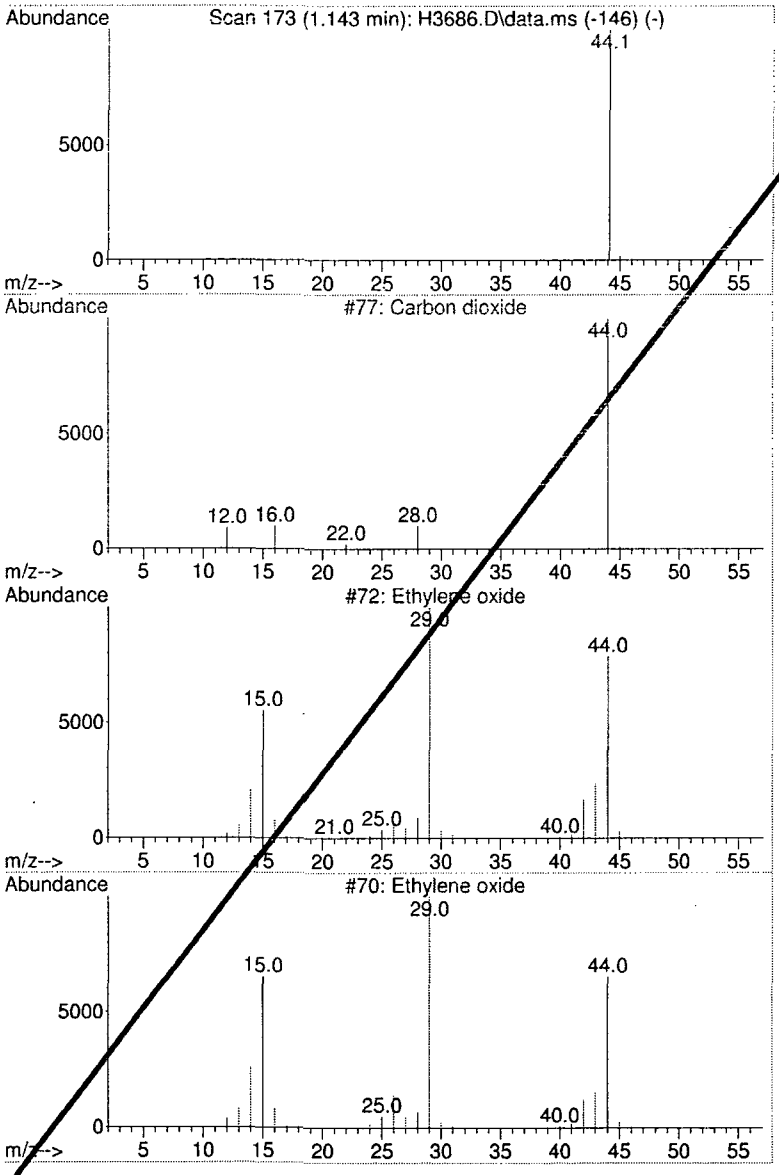
**********

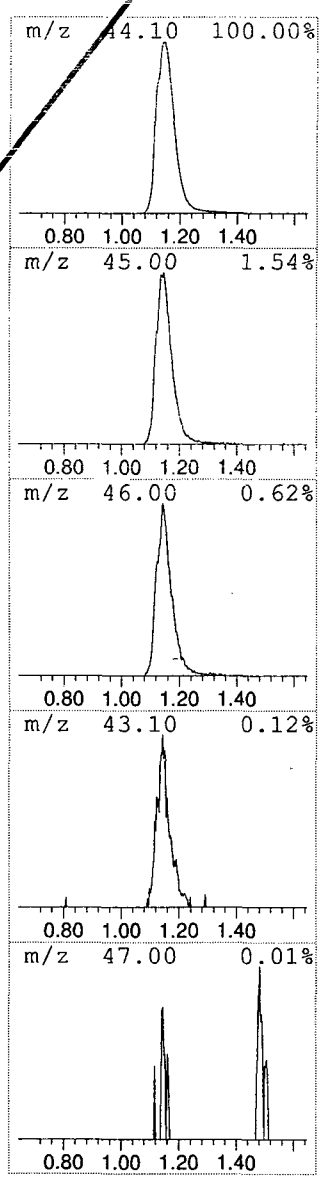
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1708.86 ug/L | 12785700 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 4 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 5 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
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Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

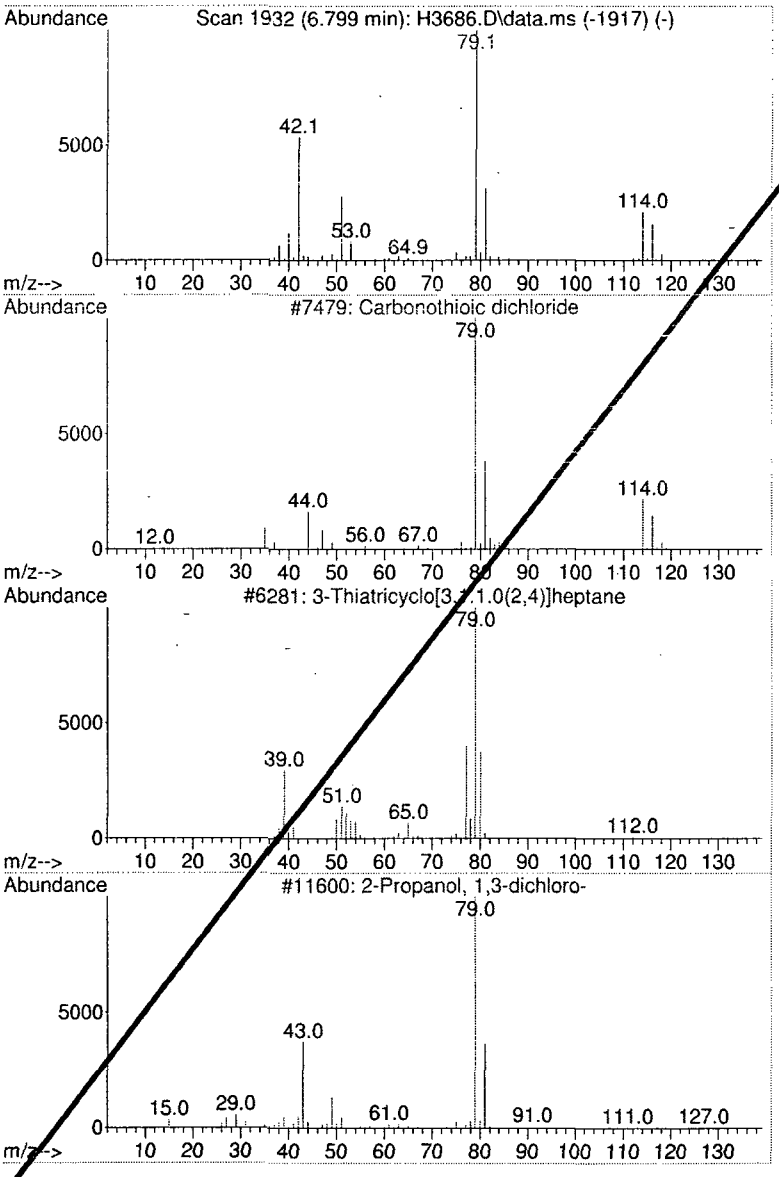
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

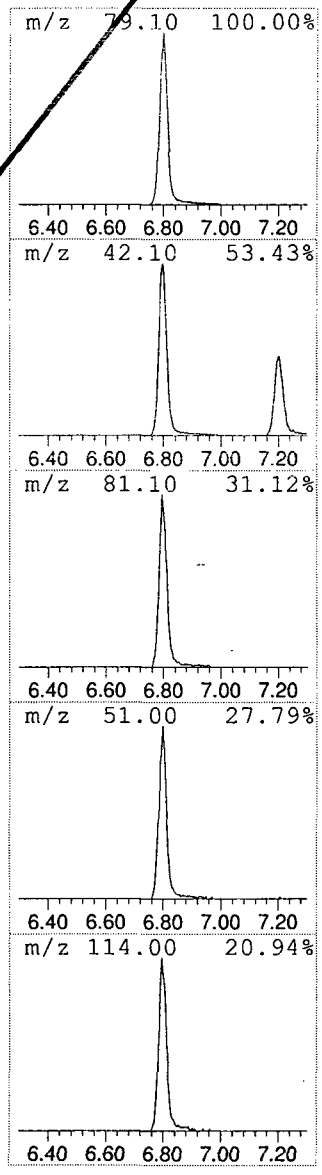
**********
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 55.64 ug/L | 416330 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 50 |
| 2 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 32 |
| 3 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 23 |
| 4 | .alpha.,.alpha.-Dichloromethyl m... | 114 | C2H4Cl2O | 004885-02-3 | 23 |
| 5 | n-Propyl chloride | 78 | C3H7Cl | 000540-54-5 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3686.D
Acq On : 21 May 2012 13:38
Sample : 0015977-02
Misc : F5WB8 6.22GM SOIL
DataAcq Meth:VOAC.M

Vial: 97
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:05 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | \|--Internal Standard---\| # | RT | Resp | Conc\| |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1708.9 | ug/L | 12785700 | 1 | 5.371 | 374100 | 50.0 |
| Carbonothioic d... | 6.799 | 55.6 | ug/L | 416330 | 1 | 5.371 | 374100 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 6.18 (g/mL) g Lab File ID: H3687.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 26.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.5 | U |
| 74-87-3 | Chloromethane | 5.5 | U |
| 75-01-4 | Vinyl chloride | 5.5 | U |
| 74-83-9 | Bromomethane | 5.5 | U |
| 75-00-3 | Chloroethane | 5.5 | U |
| 75-69-4 | Trichlorofluoromethane | 5.5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.5 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.5 | U |
| 67-64-1 | Acetone | 11 | U |
| 75-15-0 | Carbon disulfide | 5.5 | U |
| 79-20-9 | Methyl acetate | 5.5 | U |
| 75-09-2 | Methylene chloride | 4.2 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.5 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.5 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.5 | U |
| 78-93-3 | 2-Butanone | 11 | U |
| 74-97-5 | Bromochloromethane | 5.5 | U |
| 67-66-3 | Chloroform | 5.5 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.5 | U |
| 110-82-7 | Cyclohexane | 5.5 | U |
| 56-23-5 | Carbon tetrachloride | 5.5 | U |
| 71-43-2 | Benzene | 5.5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.5 | U |
| 123-91-1 | 1,4-Dioxane | 110 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 6.18 (g/mL) g Lab File ID: H3687.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 26.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.5 | U |
| 108-87-2 | Methylcyclohexane | 5.5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.5 | U |
| 75-27-4 | Bromodichloromethane | 5.5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 11 | U |
| 108-88-3 | Toluene | 5.5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.5 | U |
| 127-18-4 | Tetrachloroethene | 5.5 | U |
| 591-78-6 | 2-Hexanone | 11 | U |
| 124-48-1 | Dibromochloromethane | 5.5 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.5 | U |
| 108-90-7 | Chlorobenzene | 5.5 | U |
| 100-41-4 | Ethylbenzene | 5.5 | U |
| 95-47-6 | o-Xylene | 5.5 | U |
| 179601-23-1 | m,p-Xylene | 5.5 | U |
| 100-42-5 | Styrene | 5.5 | U |
| 75-25-2 | Bromoform | 5.5 | U |
| 98-82-8 | Isopropylbenzene | 5.5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.5 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.5 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.5 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.5 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.5 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 6.18 (g/mL) g Lab File ID: H3687.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 26.7 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
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| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 162290 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 114132 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.821 | 152 | 34964 | 50.0000 ug/L | # 0.00 |
| System Monitoring Compounds | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 23863 | 48.25 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 96.50% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 13122 | 48.14 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 96.28% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 100779 | 31.08 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 62.16% | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 55214 | 81.40 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 81.40% | | |
| 24) Chloroform-d | 4.333 | 84 | 150748 | 40.60 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 81.20% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 92178 | 46.21 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 92.42% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 23858 | 935.63 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 93.56% | | |
| 34) Benzene-d6 | 4.889 | 84 | 314864 | 43.62 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 87.24% | | |
| 37) 1,2-Dichloropropane-d6 | 5.818 | 67 | 90871 | 45.92 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 91.84% | | |
| 43) Toluene-d8 | 7.204 | 98 | 270973 | 43.68 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 87.36% | | |
| 45) trans-1,3-Dichloroprop... | 7.564 | 79 | 67847 | 42.85 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 85.70% | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 35509 | 94.59 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 94.59% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 47117 | 42.59 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 85.18% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 58274 | 44.84 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 89.68% | | |
| Target Compounds | | | | | Qvalue |
| 16) Methylene Chloride | 2.854 | 84 | 5519 | 3.8246 ug/L | 95 |

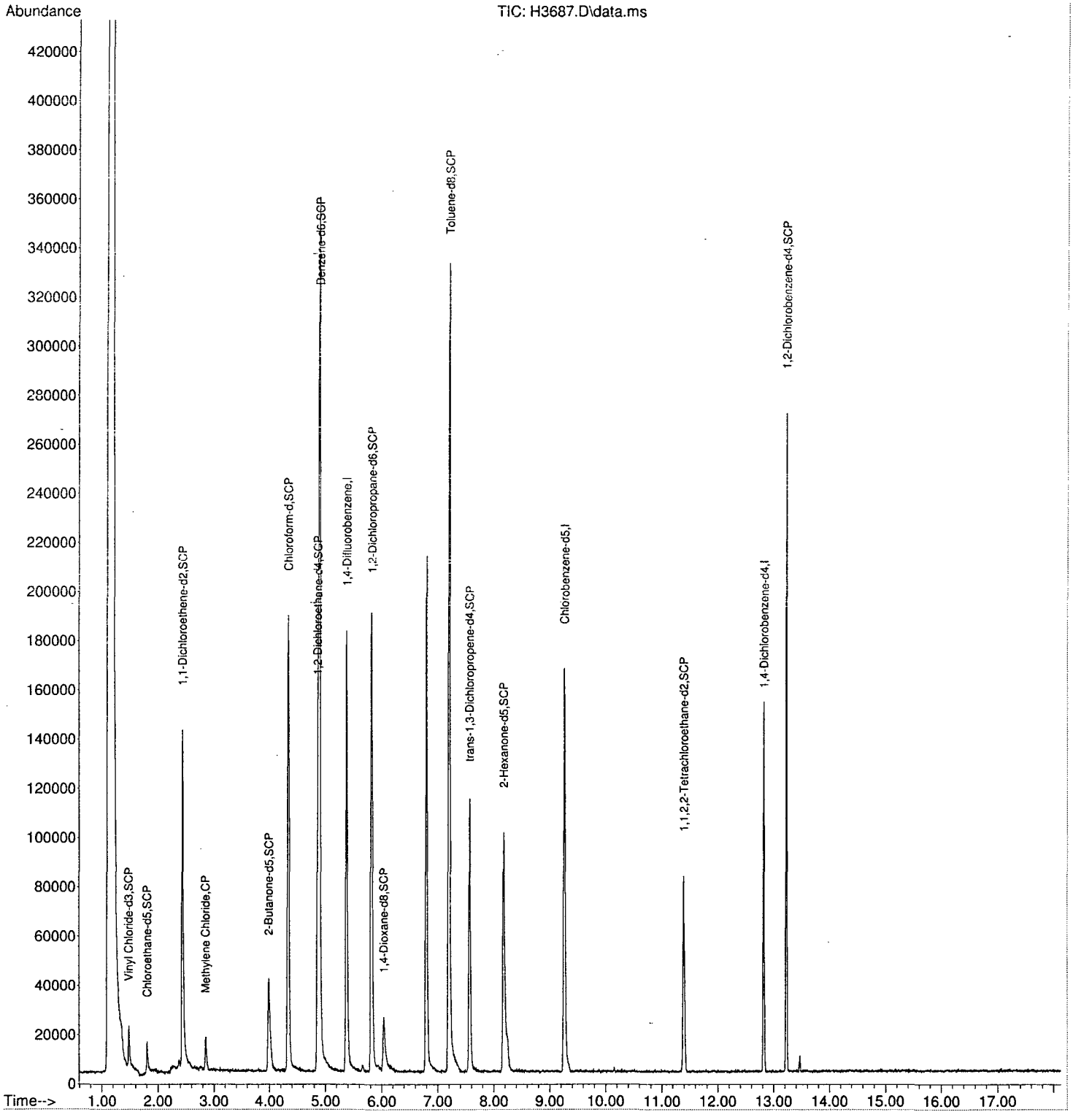
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

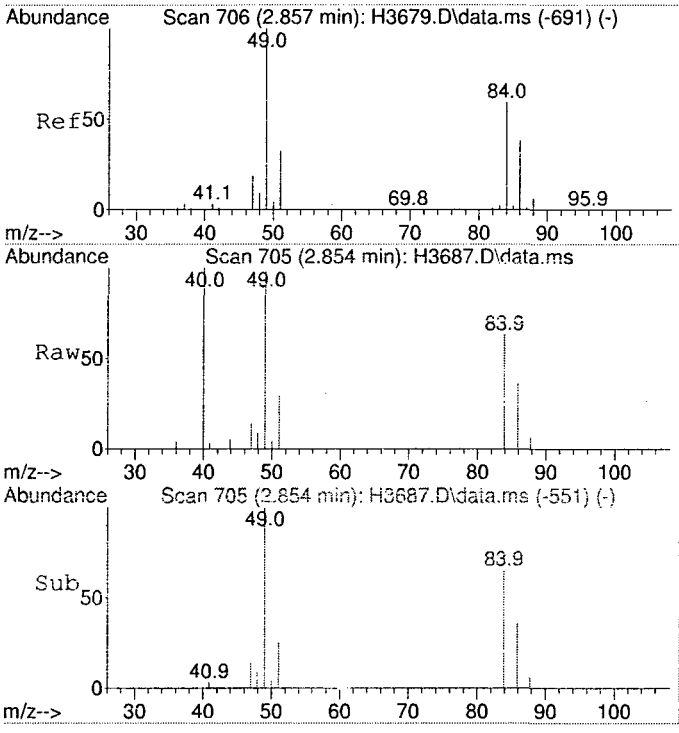
Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
MS Integration Params: RTEINT.P

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

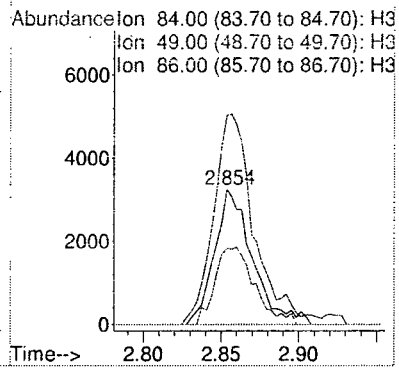
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM




#16
Methylene Chloride
Concen: 3.8246 ug/L
RT: 2.85 min Scan# 705
Delta R.T. -0.00 min
Lab File: H3687.D
Acq: 21 May 2012 14:04

Tgt Ion: 84 Resp: 5519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 166.6 | 154.4 | 194.4 |
| 86 | 59.7 | 43.7 | 83.7 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3687.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.143 | 148 | 173 | 271 | rBV | 2870768 | 12202074 | 100.00% | 69.416% |
| 2 | 1.481 | 271 | 278 | 292 | rVV2 | 16333 | 25135 | 0.21% | 0.143% |
| 3 | 1.561 | 301 | 303 | 311 | rVB3 | 1796 | 1816 | 0.01% | 0.010% |
| 4 | 1.809 | 369 | 380 | 390 | rBV2 | 13400 | 24416 | 0.20% | 0.139% |
| 5 | 2.149 | 480 | 486 | 489 | rBV3 | 1444 | 1631 | 0.01% | 0.009% |
| 6 | 2.236 | 506 | 513 | 516 | rBV3 | 2976 | 3490 | 0.03% | 0.020% |
| 7 | 2.259 | 516 | 520 | 525 | rVV4 | 2590 | 2803 | 0.02% | 0.016% |
| 8 | 2.278 | 525 | 526 | 544 | rVB7 | 1628 | 3378 | 0.03% | 0.019% |
| 9 | 2.442 | 567 | 577 | 607 | rBV | 135790 | 252608 | 2.07% | 1.437% |
| 10 | 2.857 | 698 | 706 | 719 | rBV4 | 13423 | 23990 | 0.20% | 0.136% |
| 11 | 3.989 | 1045 | 1058 | 1081 | rBV3 | 37845 | 103133 | 0.85% | 0.587% |
| 12 | 4.333 | 1152 | 1165 | 1188 | rBV | 184417 | 373506 | 3.06% | 2.125% |
| 13 | 4.889 | 1316 | 1338 | 1384 | rBV3 | 355790 | 975317 | 7.99% | 5.548% |
| 14 | 5.371 | 1475 | 1488 | 1528 | rBV2 | 179287 | 375645 | 3.08% | 2.137% |
| 15 | 5.648 | 1569 | 1574 | 1576 | rBV3 | 2691 | 2255 | 0.02% | 0.013% |
| 16 | 5.815 | 1611 | 1626 | 1651 | rBV2 | 186410 | 410577 | 3.36% | 2.336% |
| 17 | 5.966 | 1671 | 1673 | 1682 | rVB3 | 1883 | 2347 | 0.02% | 0.013% |
| 18 | 6.037 | 1682 | 1695 | 1720 | rBV5 | 21988 | 64667 | 0.53% | 0.368% |
| 19 | 6.120 | 1720 | 1721 | 1725 | rVV3 | 2360 | 1808 | 0.01% | 0.010% |
| 20 | 6.156 | 1729 | 1732 | 1737 | rBV3 | 1948 | 1607 | 0.01% | 0.009% |
| 21 | 6.220 | 1749 | 1752 | 1757 | rVB3 | 1973 | 1551 | 0.01% | 0.009% |
| 22 | 6.799 | 1916 | 1932 | 1947 | rBV2 | 209809 | 409012 | 3.35% | 2.327% |
| 23 | 6.850 | 1947 | 1948 | 1970 | rVB5 | 5112 | 9519 | 0.08% | 0.054% |
| 24 | 7.201 | 2044 | 2057 | 2088 | rBV2 | 328572 | 718550 | 5.89% | 4.088% |
| 25 | 7.567 | 2159 | 2171 | 2192 | rVB2 | 109853 | 210743 | 1.73% | 1.199% |
| 26 | 7.654 | 2197 | 2198 | 2206 | rVV3 | 1891 | 1991 | 0.02% | 0.011% |
| 27 | 8.178 | 2348 | 2361 | 2393 | rBV4 | 96448 | 254514 | 2.09% | 1.448% |
| 28 | 8.287 | 2393 | 2395 | 2400 | rVB2 | 2222 | 1644 | 0.01% | 0.009% |
| 29 | 9.262 | 2684 | 2698 | 2722 | rBV3 | 163641 | 357022 | 2.93% | 2.031% |
| 30 | 9.345 | 2722 | 2724 | 2729 | rVB4 | 2865 | 1834 | 0.02% | 0.010% |
| 31 | 11.152 | 3281 | 3286 | 3291 | rBV | 1087 | 1560 | 0.01% | 0.009% |
| 32 | 11.393 | 3347 | 3361 | 3378 | rVB3 | 79712 | 165868 | 1.36% | 0.944% |
| 33 | 12.133 | 3585 | 3591 | 3597 | rBV | 1142 | 1790 | 0.01% | 0.010% |
| 34 | 12.818 | 3794 | 3804 | 3817 | rVB2 | 150549 | 215929 | 1.77% | 1.228% |
| 35 | 13.226 | 3922 | 3931 | 3941 | rVB | 267262 | 359062 | 2.94% | 2.043% |
| 36 | 13.467 | 3998 | 4006 | 4012 | rBV6 | 6894 | 8713 | 0.07% | 0.050% |
| 37 | 15.335 | 4580 | 4587 | 4593 | rVB2 | 1013 | 1650 | 0.01% | 0.009% |
| 38 | 15.814 | 4732 | 4736 | 4752 | rBV2 | 1235 | 1963 | 0.02% | 0.011% |
| 39 | 16.959 | 5086 | 5092 | 5098 | rBV2 | 1061 | 1702 | 0.01% | 0.010% |
| 40 | 17.638 | 5301 | 5303 | 5312 | rVB2 | 1213 | 1487 | 0.01% | 0.008% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 17578307

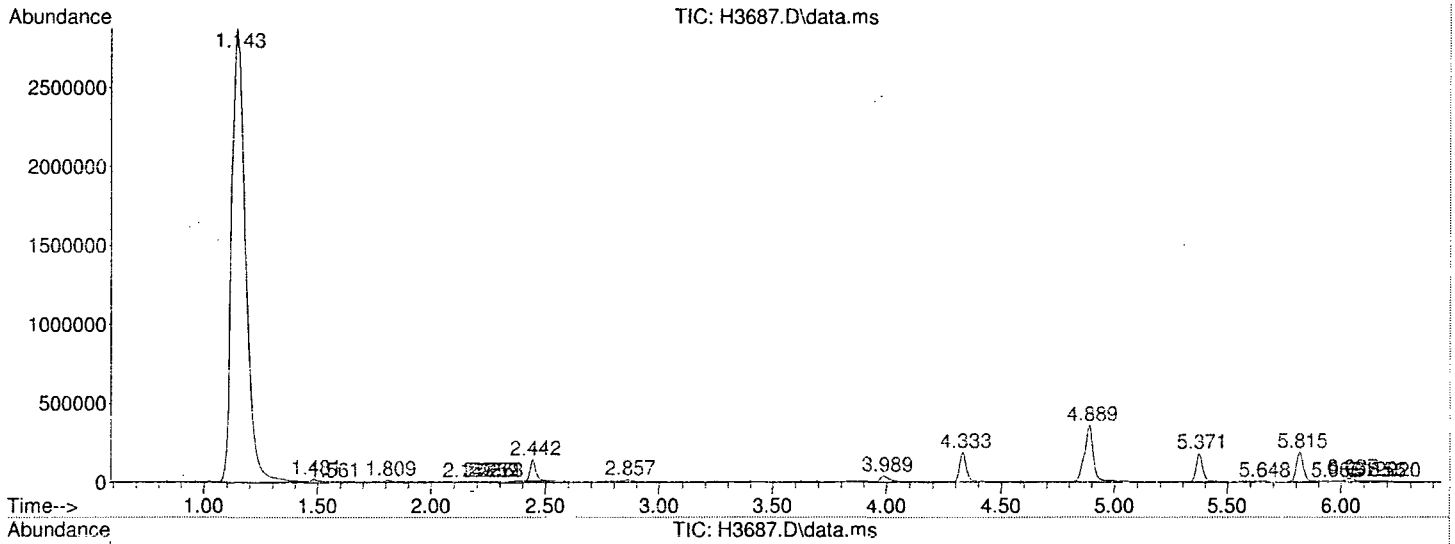
LSC Report - Integrated Chromatogram

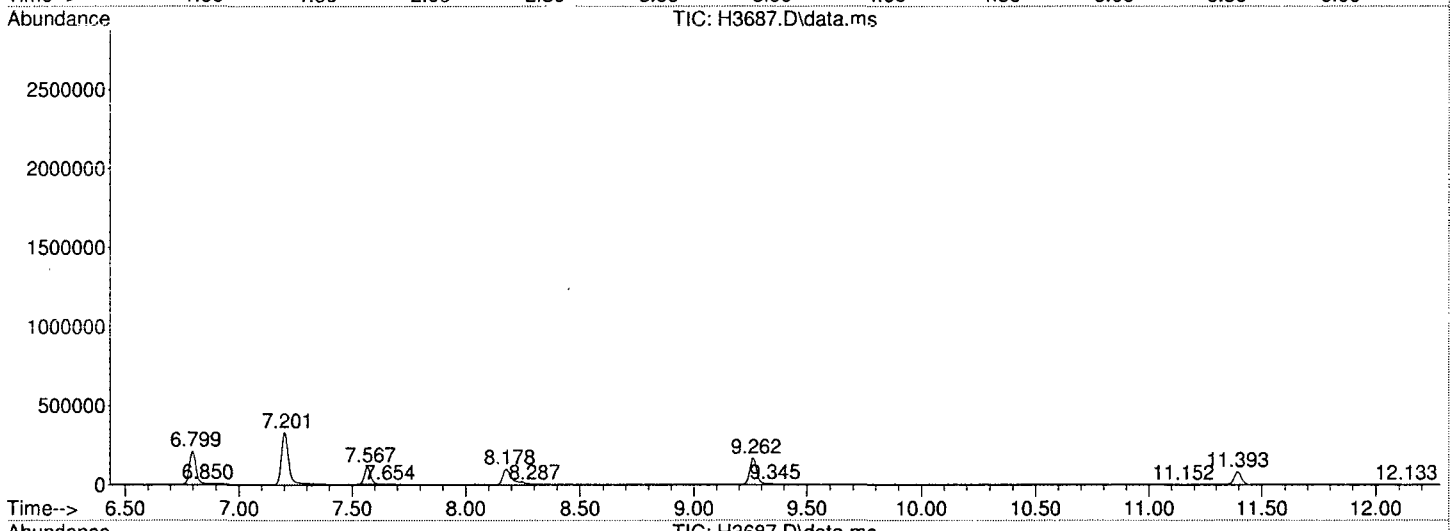
Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

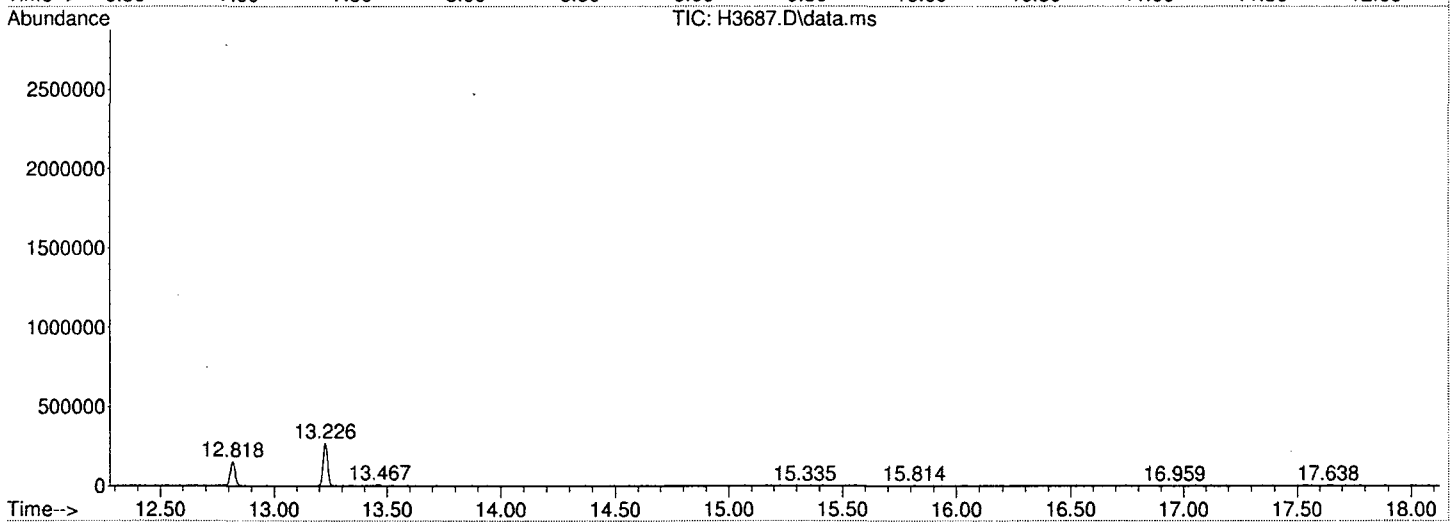
Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

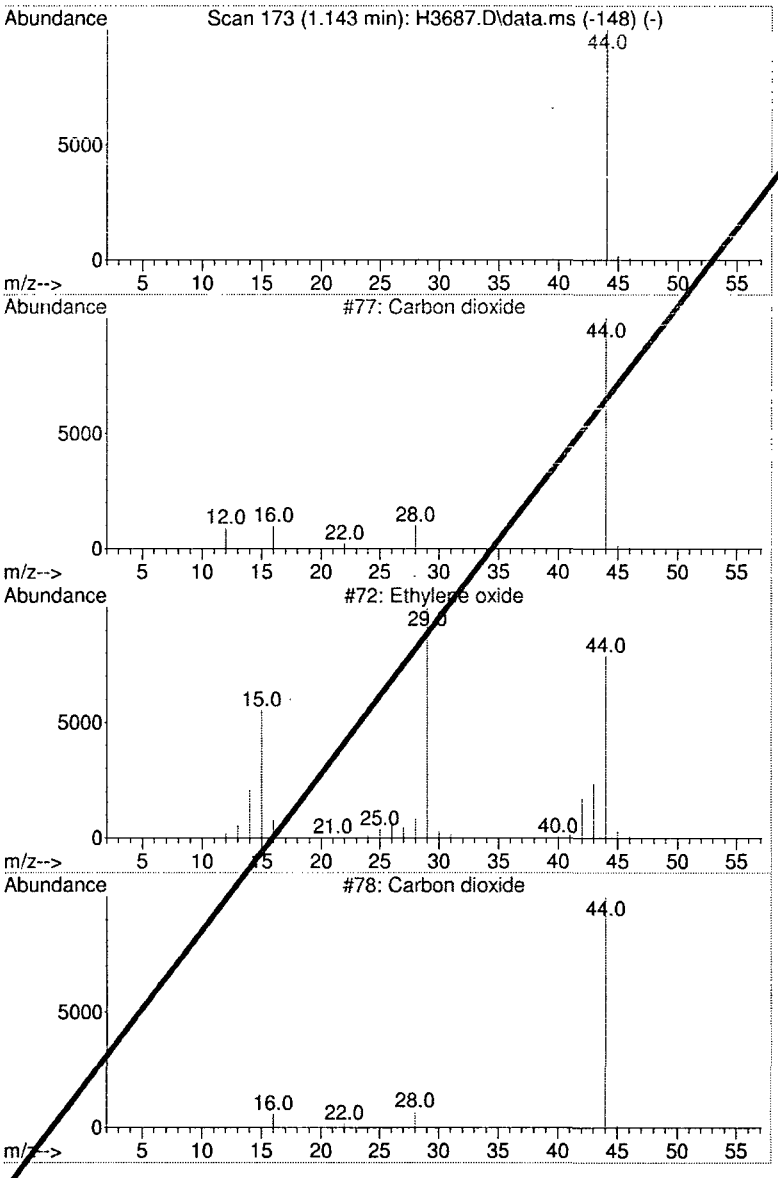
**********

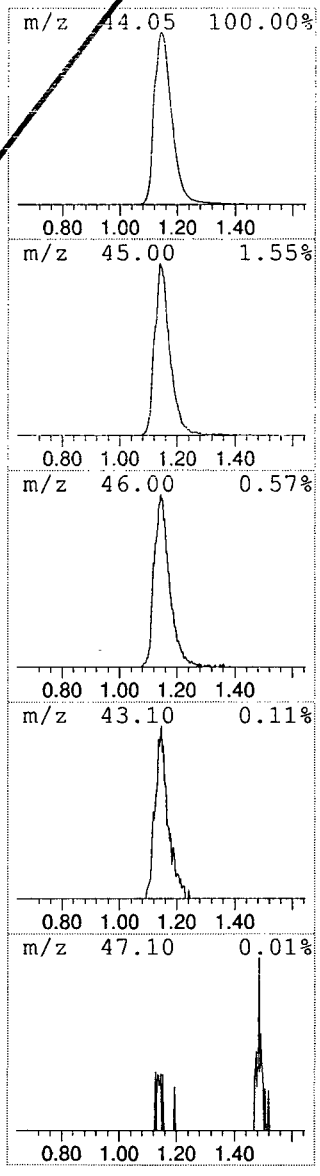
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1624.15 ug/L | 12202100 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 4 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 5 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

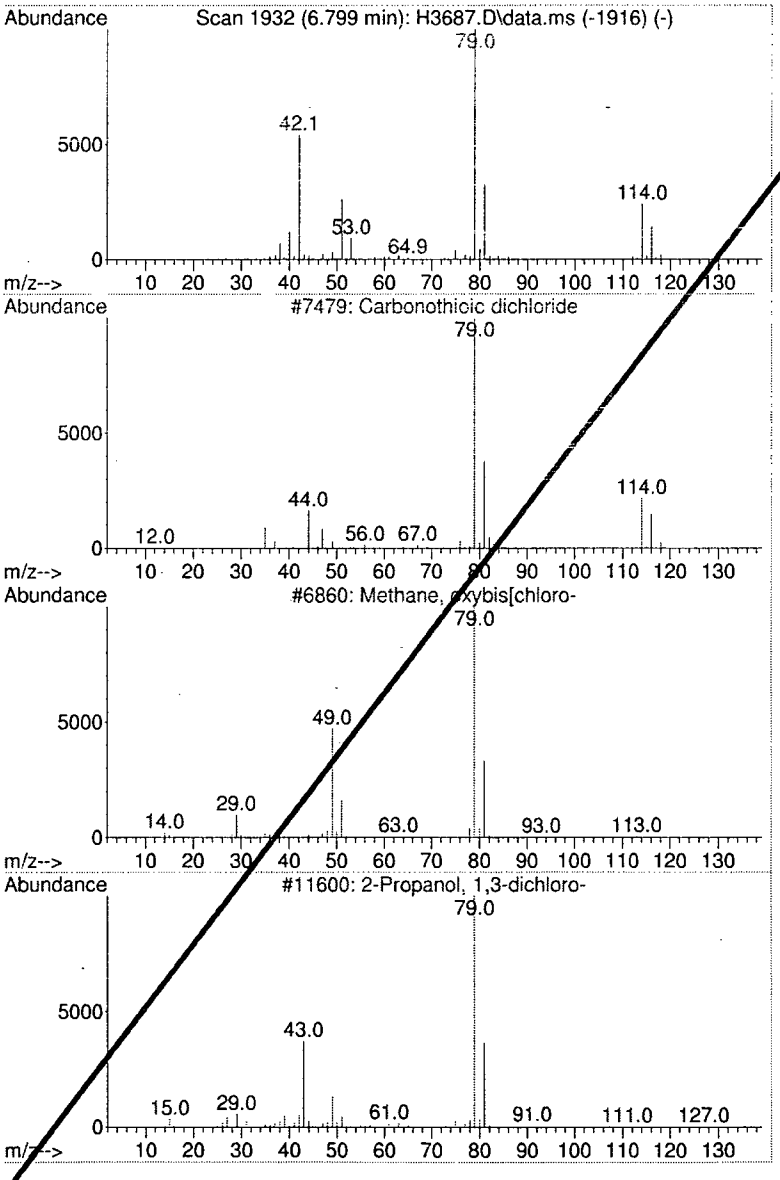
**********

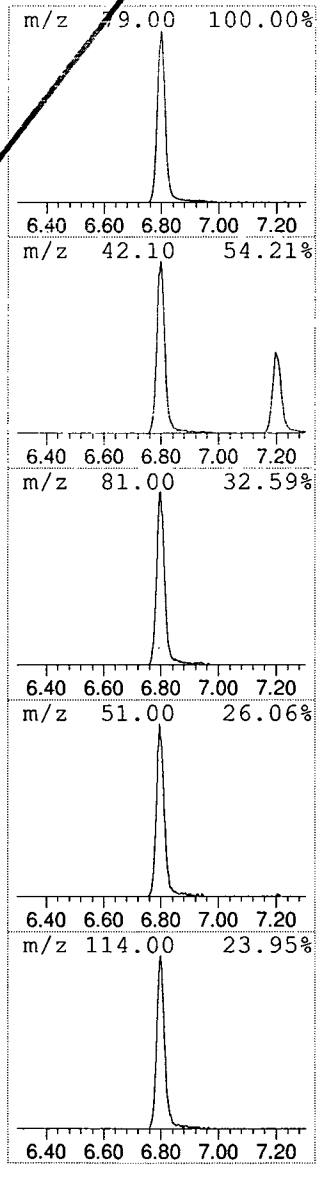
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 54.44 ug/L | 409012 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 47 |
| 2 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 3 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 23 |
| 4 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 23 |
| 5 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 17 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3687.D
Acq On : 21 May 2012 14:04
Sample : 0015977-03
Misc : F5WB9 6.18GM SOIL
DataAcq Meth:VOAC.M

Vial: 98
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:13:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1624.2 | ug/L | 12202100 | 1 | 5.371 | 375645 | 50.0 |
| Carbonothioic d... | 6.799 | 54.4 | ug/L | 409012 | 1 | 5.371 | 375645 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 6.13 (g/mL) g Lab File ID: H3692.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 14.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 4.8 | U |
| 74-87-3 | Chloromethane | 4.8 | U |
| 75-01-4 | Vinyl chloride | 4.8 | U |
| 74-83-9 | Bromomethane | 4.8 | U |
| 75-00-3 | Chloroethane | 4.8 | U |
| 75-69-4 | Trichlorofluoromethane | 4.8 | U |
| 75-35-4 | 1,1-Dichloroethene | 4.8 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.8 | U |
| 67-64-1 | Acetone | 9.6 | U |
| 75-15-0 | Carbon disulfide | 4.8 | U |
| 79-20-9 | Methyl acetate | 4.8 | U |
| 75-09-2 | Methylene chloride | 4.8 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 4.8 | U |
| 1634=04-4 | Methyl tert-butyl ether | 4.8 | U |
| 75-34-3 | 1,1-Dichloroethane | 4.8 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 4.8 | U |
| 78-93-3 | 2-Butanone | 9.6 | U |
| 74-97-5 | Bromochloromethane | 4.8 | U |
| 67-66-3 | Chloroform | 4.8 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 4.8 | U |
| 110-82-7 | Cyclohexane | 4.8 | U |
| 56-23-5 | Carbon tetrachloride | 4.8 | U |
| 71-43-2 | Benzene | 4.8 | U |
| 107-06-2 | 1,2-Dichloroethane | 4.8 | U |
| 123-91-1 | 1,4-Dioxane | 96 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 6.13 (g/mL) g Lab File ID: H3692.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 14.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 4.8 | U |
| 108-87-2 | Methylcyclohexane | 4.8 | U |
| 78-87-5 | 1,2-Dichloropropane | 4.8 | U |
| 75-27-4 | Bromodichloromethane | 4.8 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 4.8 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 9.6 | U |
| 108-88-3 | Toluene | 4.8 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 4.8 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 4.8 | U |
| 127-18-4 | Tetrachloroethene | 4.8 | U |
| 591-78-6 | 2-Hexanone | 9.6 | U |
| 124-48-1 | Dibromochloromethane | 4.8 | U |
| 106-93-4 | 1,2-Dibromoethane | 4.8 | U |
| 108-90-7 | Chlorobenzene | 4.8 | U |
| 100-41-4 | Ethylbenzene | 4.8 | U |
| 95-47-6 | o-Xylene | 4.8 | U |
| 179601-23-1 | m,p-Xylene | 4.8 | U |
| 100-42-5 | Styrene | 4.8 | U |
| 75-25-2 | Bromoform | 4.8 | U |
| 98-82-8 | Isopropylbenzene | 4.8 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 4.8 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 4.8 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 4.8 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 4.8 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 4.8 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.8 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 4.8 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 6.13 (g/mL) g Lab File ID: H3692.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 14.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
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| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 122039 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 98857 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 35900 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 12951 | 34.82 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 69.64% | | |
| 7) Chloroethane-d5 | 1.815 | 69 | 10186 | 49.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 99.38% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 88257 | 36.20 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 72.40% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 67336 | 132.02 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 132.02% | | |
| 24) Chloroform-d | 4.333 | 84 | 135146 | 48.40 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 96.80% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 85180 | 56.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 113.58% | | |
| 28) 1,4-Dioxane-d8 | 6.033 | 96 | 19934 | 1039.58 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 103.96% | | |
| 34) Benzene-d6 | 4.889 | 84 | 290923 | 46.53 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 93.06% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 81356 | 47.46 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 94.92% | | |
| 43) Toluene-d8 | 7.197 | 98 | 259589 | 48.31 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 96.62% | | |
| 45) trans-1,3-Dichloroprop... | 7.564 | 79 | 70228 | 51.21 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 102.42% | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 44019 | 135.38 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 135.38% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 52360 | 54.64 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 109.28% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 70330 | 52.71 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 105.42% | | |

Target Compounds Qvalue

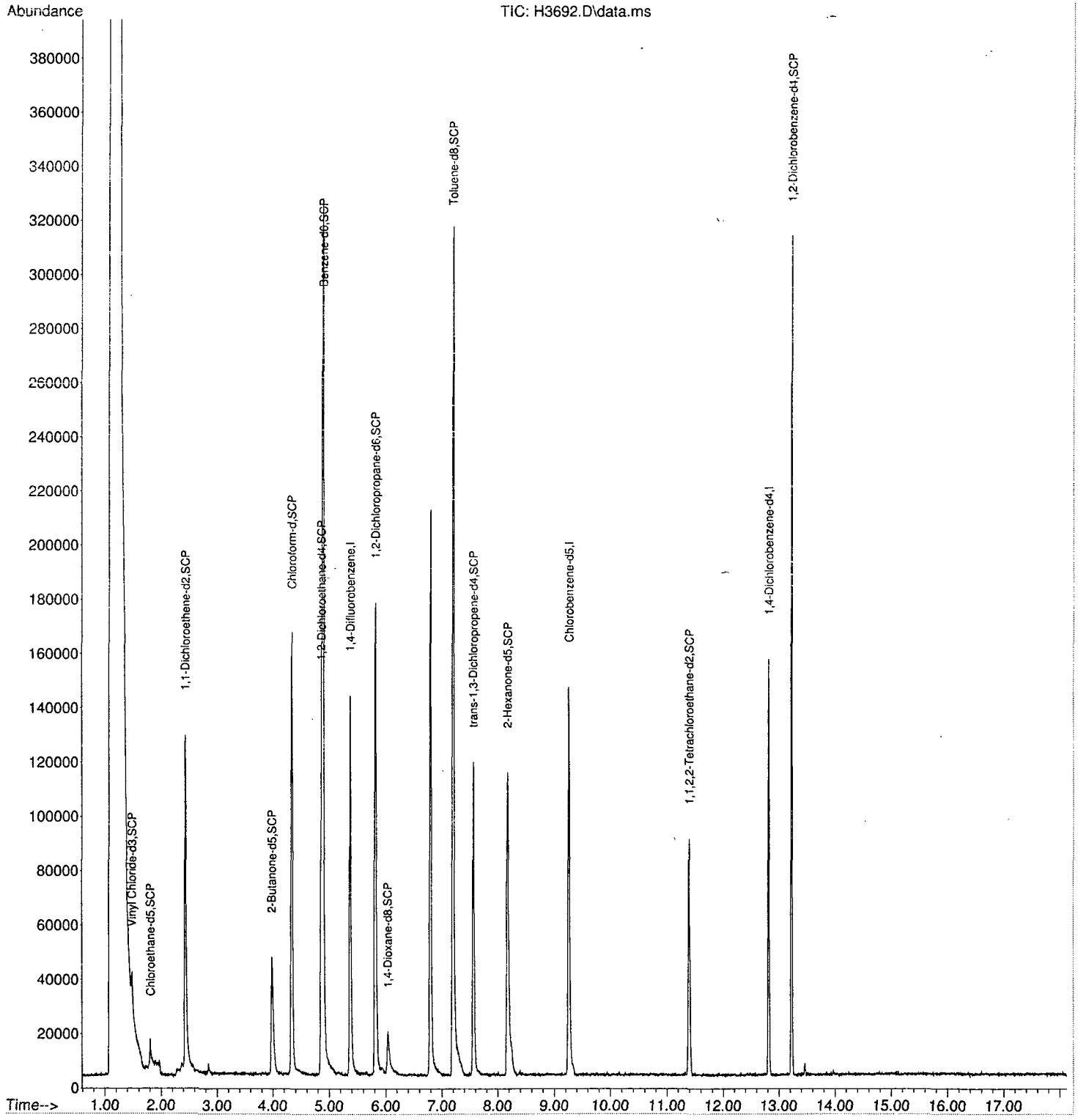
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3692.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.140 | 145 | 172 | 275 | rBV | 4293605 | 32697079 | 100.00% | 86.573% |
| 2 | 1.635 | 325 | 326 | 333 | rVB | 5044 | 3711 | 0.01% | 0.010% |
| 3 | 1.789 | 368 | 374 | 375 | rBV4 | 3181 | 2577 | 0.01% | 0.007% |
| 4 | 1.809 | 375 | 380 | 402 | rVV5 | 10838 | 23018 | 0.07% | 0.061% |
| 5 | 1.895 | 405 | 407 | 415 | rVB3 | 2229 | 2482 | 0.01% | 0.007% |
| 6 | 1.966 | 425 | 429 | 438 | rVB4 | 5357 | 7284 | 0.02% | 0.019% |
| 7 | 2.278 | 521 | 526 | 527 | rBV3 | 2426 | 1918 | 0.01% | 0.005% |
| 8 | 2.374 | 550 | 556 | 564 | rBV7 | 2882 | 5103 | 0.02% | 0.014% |
| 9 | 2.442 | 566 | 577 | 595 | rBV | 121578 | 217167 | 0.66% | 0.575% |
| 10 | 2.580 | 618 | 620 | 625 | rVB3 | 2190 | 1877 | 0.01% | 0.005% |
| 11 | 2.632 | 635 | 636 | 647 | rVB3 | 1169 | 1748 | 0.01% | 0.005% |
| 12 | 2.850 | 699 | 704 | 706 | rBV2 | 4146 | 2820 | 0.01% | 0.007% |
| 13 | 3.985 | 1046 | 1057 | 1082 | rBV3 | 42862 | 108249 | 0.33% | 0.287% |
| 14 | 4.329 | 1152 | 1164 | 1187 | rBV | 162677 | 322459 | 0.99% | 0.854% |
| 15 | 4.458 | 1202 | 1204 | 1215 | rVB4 | 1265 | 1788 | 0.01% | 0.005% |
| 16 | 4.889 | 1315 | 1338 | 1370 | rBV3 | 323441 | 883083 | 2.70% | 2.338% |
| 17 | 4.995 | 1370 | 1371 | 1378 | rVB4 | 2112 | 1739 | 0.01% | 0.005% |
| 18 | 5.371 | 1473 | 1488 | 1508 | rBV | 139939 | 282601 | 0.86% | 0.748% |
| 19 | 5.464 | 1515 | 1517 | 1524 | rVB4 | 1896 | 2145 | 0.01% | 0.006% |
| 20 | 5.815 | 1607 | 1626 | 1643 | rBV2 | 173752 | 370181 | 1.13% | 0.980% |
| 21 | 5.927 | 1659 | 1661 | 1672 | rVB5 | 2425 | 3929 | 0.01% | 0.010% |
| 22 | 6.037 | 1684 | 1695 | 1708 | rBV6 | 15475 | 38662 | 0.12% | 0.102% |
| 23 | 6.799 | 1914 | 1932 | 1959 | rBV2 | 208599 | 424498 | 1.30% | 1.124% |
| 24 | 7.201 | 2042 | 2057 | 2084 | rBV | 313448 | 693385 | 2.12% | 1.836% |
| 25 | 7.567 | 2159 | 2171 | 2188 | rBV2 | 114783 | 222469 | 0.68% | 0.589% |
| 26 | 8.181 | 2349 | 2362 | 2380 | rBV2 | 111060 | 273550 | 0.84% | 0.724% |
| 27 | 9.262 | 2683 | 2698 | 2730 | rVB | 142985 | 314857 | 0.96% | 0.834% |
| 28 | 11.393 | 3347 | 3361 | 3379 | rVB2 | 87305 | 183038 | 0.56% | 0.485% |
| 29 | 12.818 | 3794 | 3804 | 3819 | rVB2 | 153169 | 220731 | 0.68% | 0.584% |
| 30 | 13.226 | 3919 | 3931 | 3947 | rVB | 309595 | 431246 | 1.32% | 1.142% |
| 31 | 13.461 | 3999 | 4004 | 4012 | rVB3 | 4761 | 5718 | 0.02% | 0.015% |
| 32 | 13.966 | 4155 | 4161 | 4167 | rBV2 | 2063 | 2191 | 0.01% | 0.006% |
| 33 | 14.049 | 4183 | 4187 | 4193 | rVB2 | 1278 | 1554 | 0.00% | 0.004% |
| 34 | 14.351 | 4274 | 4281 | 4285 | rVB2 | 1245 | 1425 | 0.00% | 0.004% |
| 35 | 14.458 | 4309 | 4314 | 4320 | rBV2 | 1263 | 1655 | 0.01% | 0.004% |
| 36 | 15.248 | 4555 | 4560 | 4568 | rVB2 | 974 | 1538 | 0.00% | 0.004% |
| 37 | 15.782 | 4717 | 4726 | 4733 | rBV2 | 1278 | 2712 | 0.01% | 0.007% |
| 38 | 16.409 | 4917 | 4921 | 4929 | rBV | 1785 | 3233 | 0.01% | 0.009% |
| 39 | 17.335 | 5207 | 5209 | 5219 | rVB2 | 1079 | 1446 | 0.00% | 0.004% |
| 40 | 17.773 | 5341 | 5345 | 5347 | rVB | 1750 | 1476 | 0.00% | 0.004% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 37768342

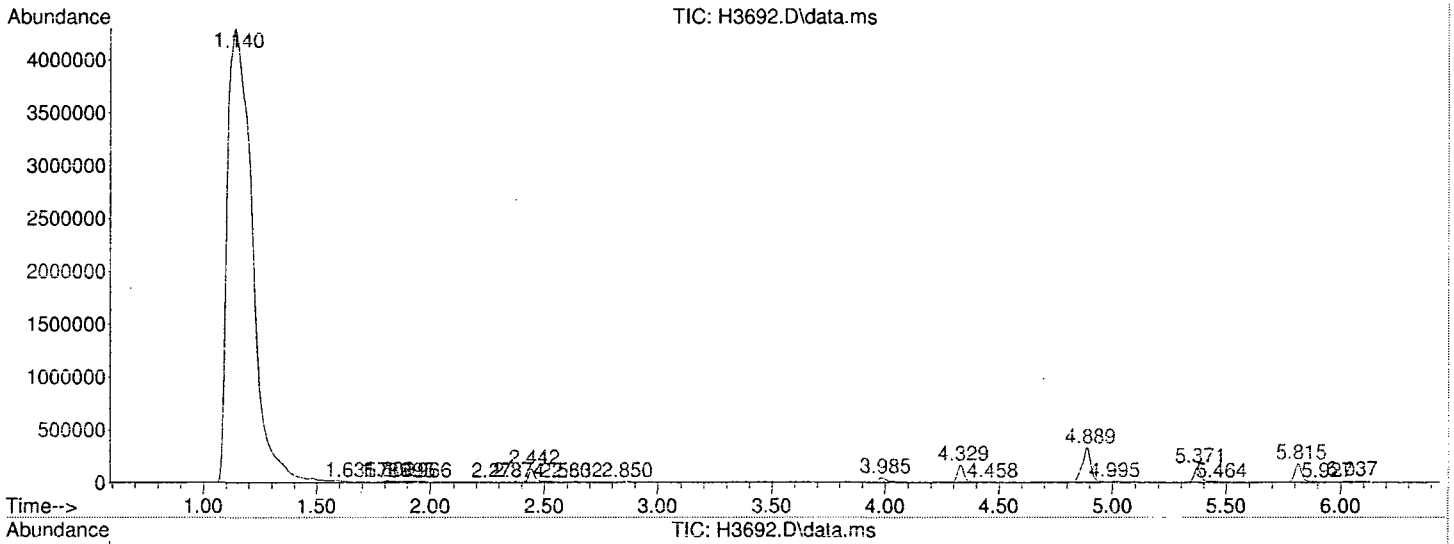
LSC Report - Integrated Chromatogram

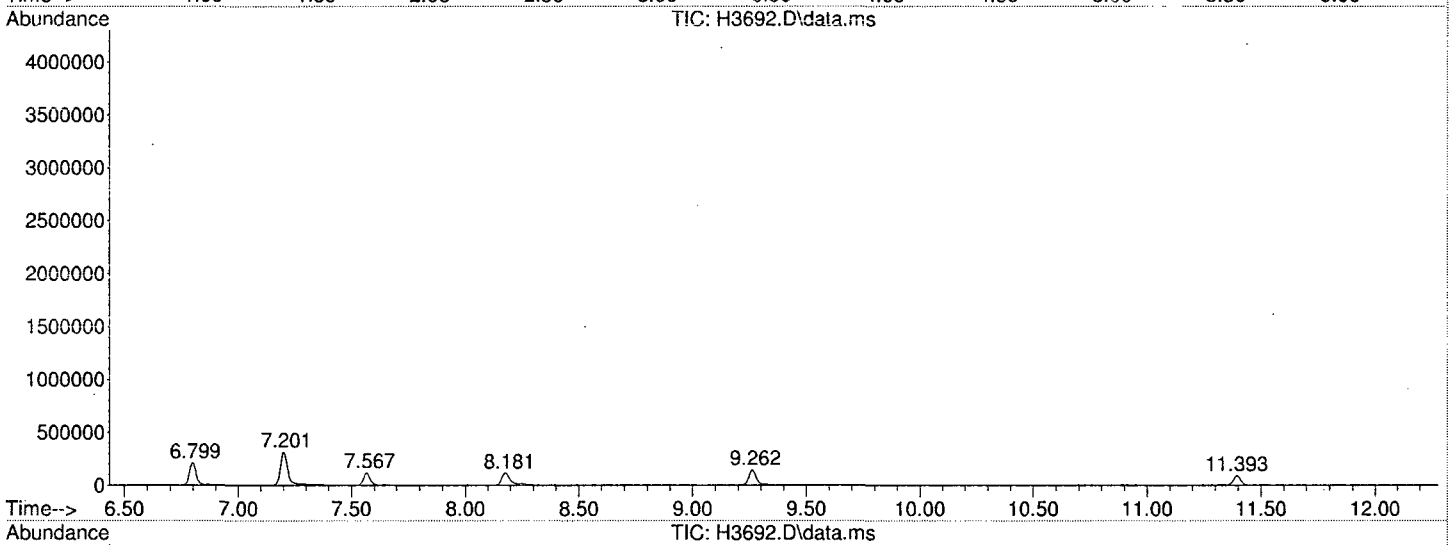
Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

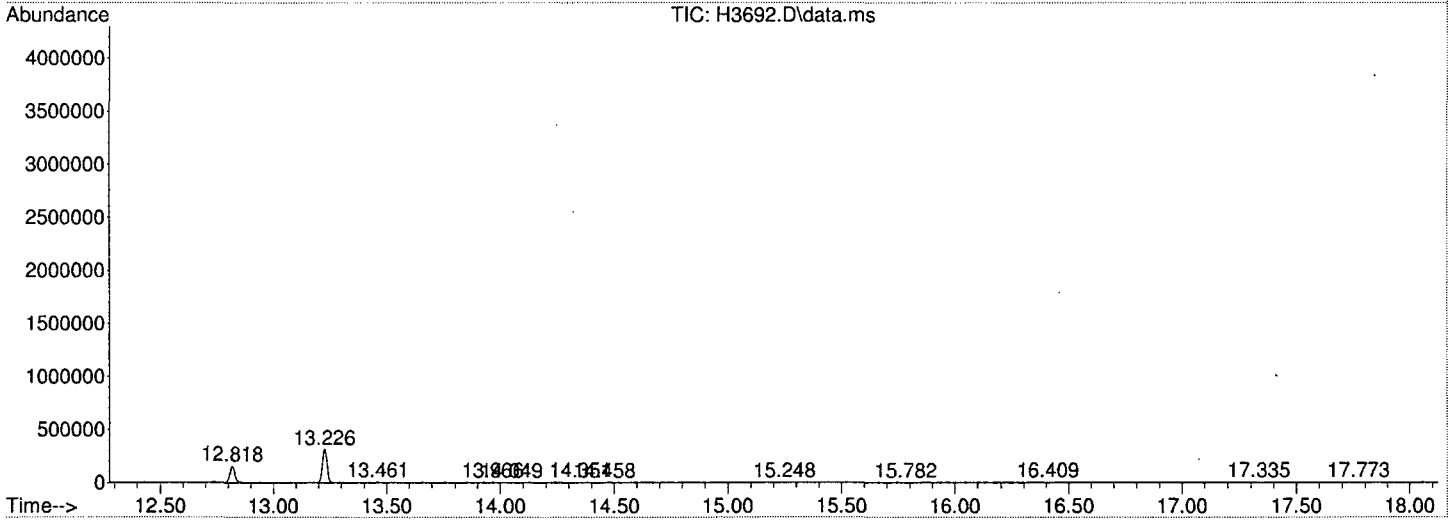
Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

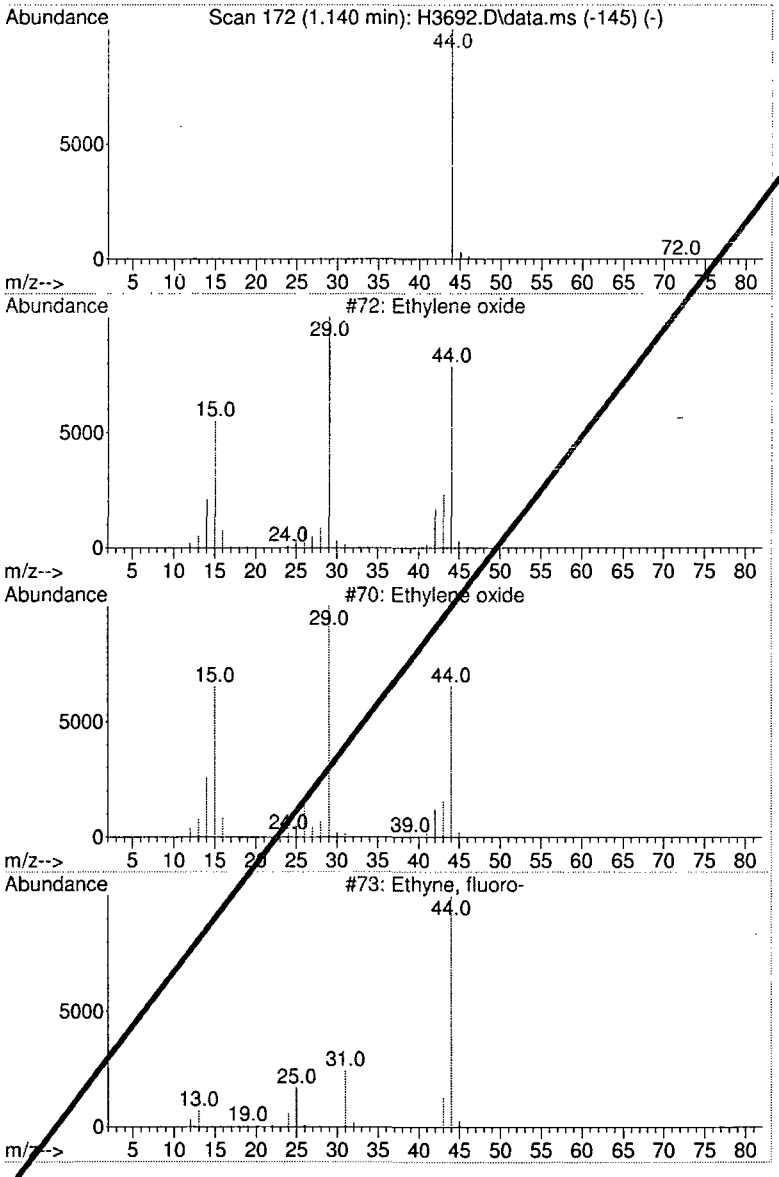
**********

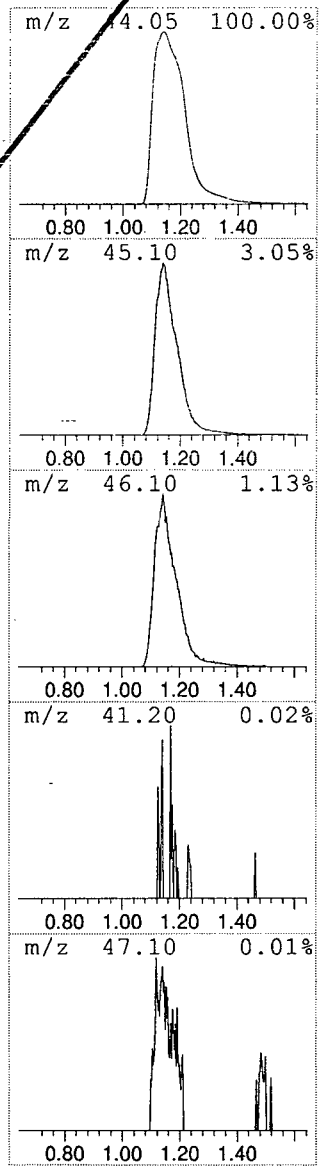
Peak Number 1 Ethylene oxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.140 | 5785.03 ug/L | 32697100 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 3 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 4 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |
| 5 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

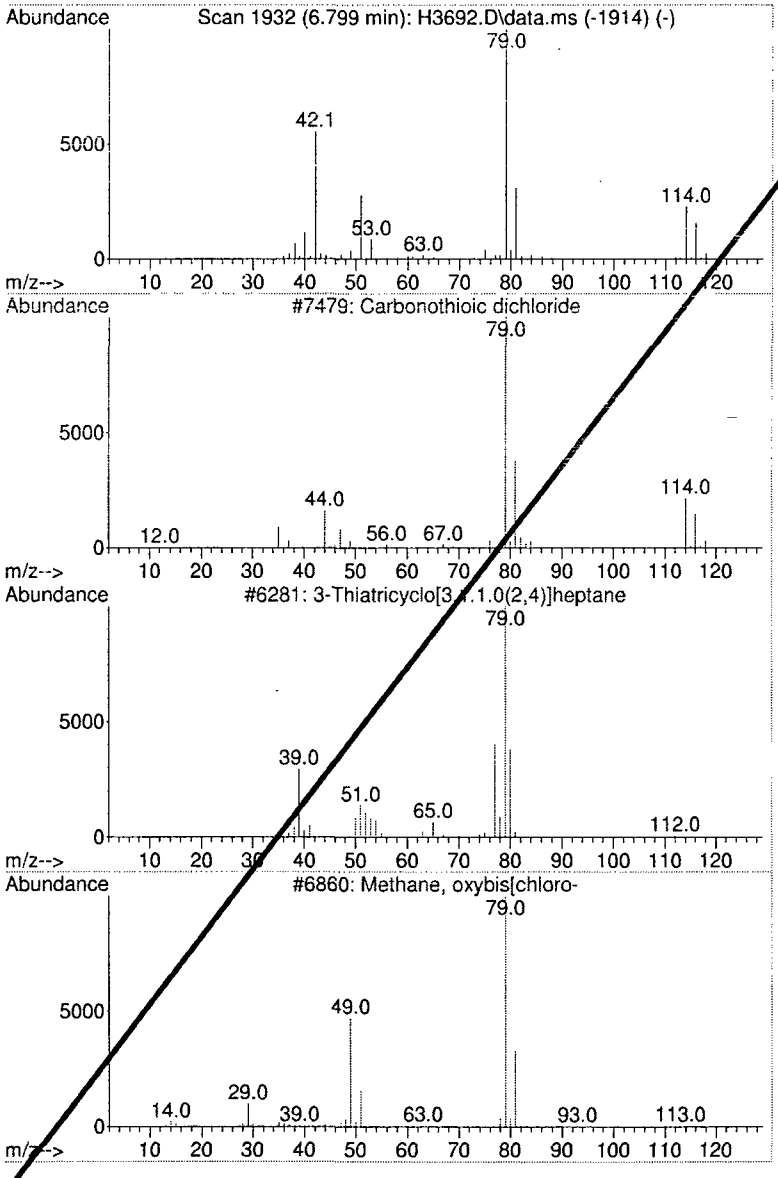
**********

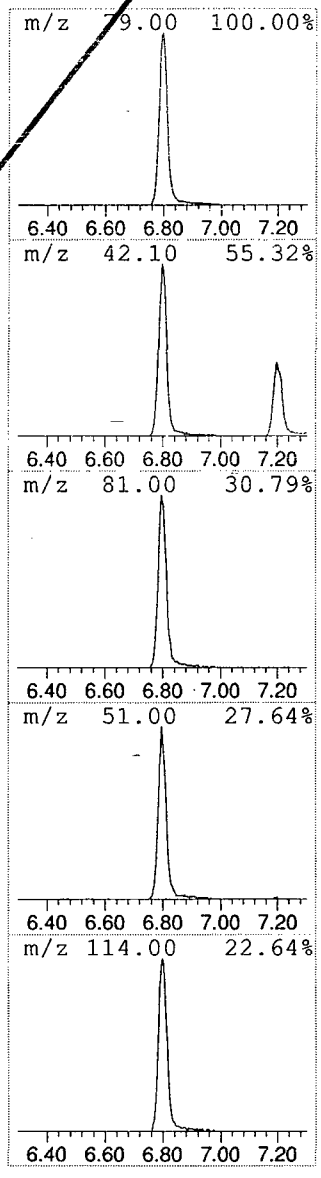
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 75.11 ug/L | 424498 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 47 |
| 2 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 25 |
| 3 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 4 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 23 |
| 5 | n-Propyl chloride | 78 | C3H7Cl | 000540-54-5 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3692.D
Acq On : 21 May 2012 16:55
Sample : 0015977-04
Misc : F5WC0 6.13GM SOIL
DataAcq Meth:VOAC.M

Vial: 4
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:19:49 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ethylene oxide | 1.140 | 5785.0 | ug/L | 32697100 | 1 | 5.371 | 282601 | 50.0 |
| Carbonothioic d... | 6.799 | 75.1 | ug/L | 424498 | 1 | 5.371 | 282601 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 6.31 (g/mL) g Lab File ID: H3689.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.2 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.0 | U |
| 79-20-9 | Methyl acetate | 5.0 | U |
| 75-09-2 | Methylene chloride | 2.4 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.0 | U |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon tetrachloride | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 6.31 (g/mL) g Lab File ID: H3689.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.2 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 95-47-6 | o-Xylene | 5.0 | U |
| 179601-23-1 | m,p-Xylene | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 6.31 (g/mL) g Lab File ID: H3689.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 21.2 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.375 | 114 | 179764 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 129221 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 44321 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 24842 | 45.35 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 90.70% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 15637 | 51.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 103.58% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 118709 | 33.05 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 66.10% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 51706 | 68.82 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 68.82% | | |
| 24) Chloroform-d | 4.333 | 84 | 149144 | 36.27 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 72.54% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 84897 | 38.42 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 76.84%# | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 21313 | 754.58 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 75.46% | | |
| 34) Benzene-d6 | 4.889 | 84 | 334047 | 40.88 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 81.76% | | |
| 37) 1,2-Dichloropropane-d6 | 5.812 | 67 | 90706 | 40.48 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 80.96% | | |
| 43) Toluene-d8 | 7.201 | 98 | 281339 | 40.05 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 80.10% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 72265 | 40.31 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 80.62% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 33875 | 79.70 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 79.70% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 44418 | 35.46 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 70.92% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 69170 | 41.99 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 83.98% | | |
| **Target Compounds** | | | | | Qvalue |
| 16) Methylene Chloride | 2.860 | 84 | 3763 | 2.3542 ug/L | 98 |

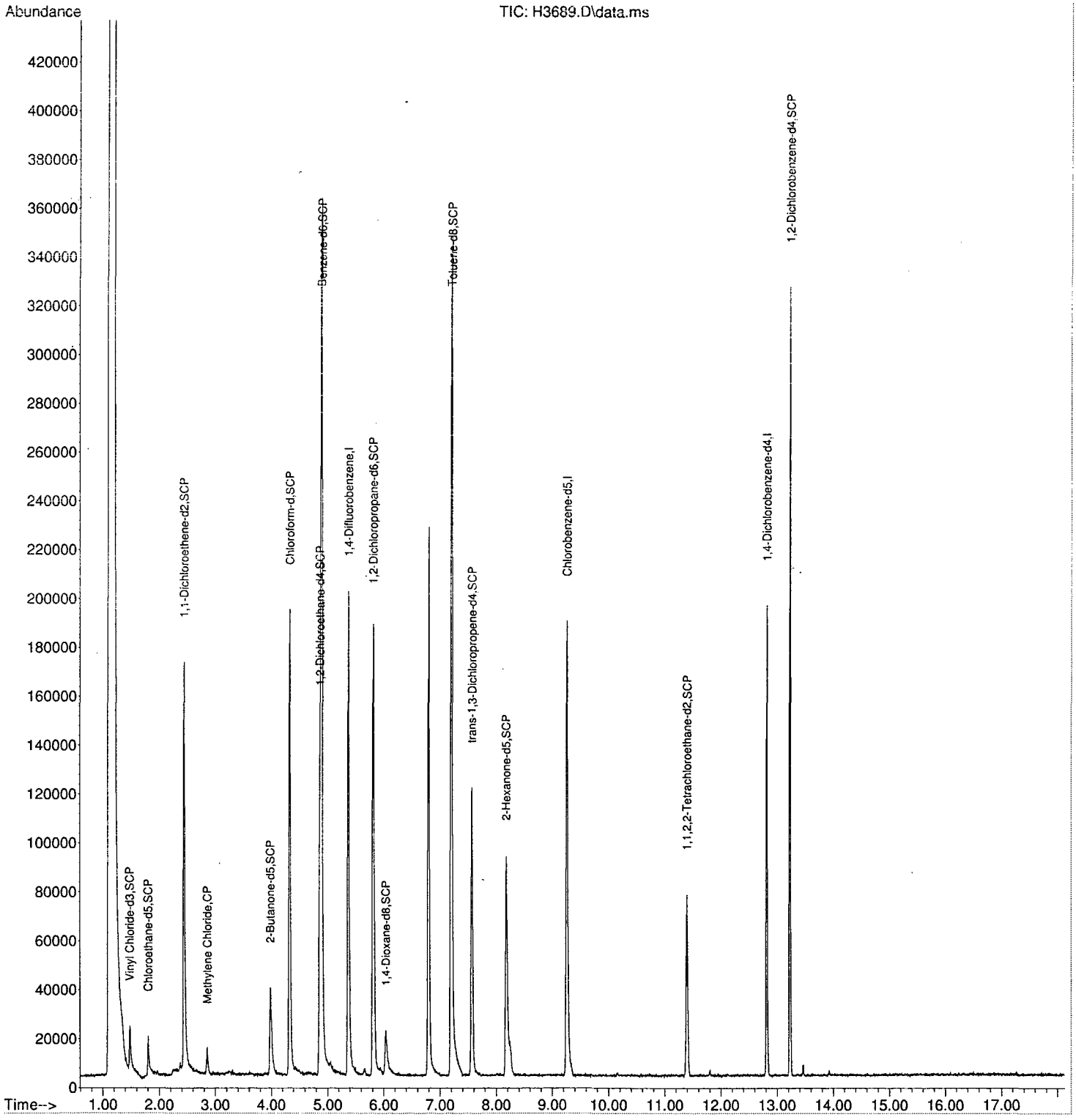
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

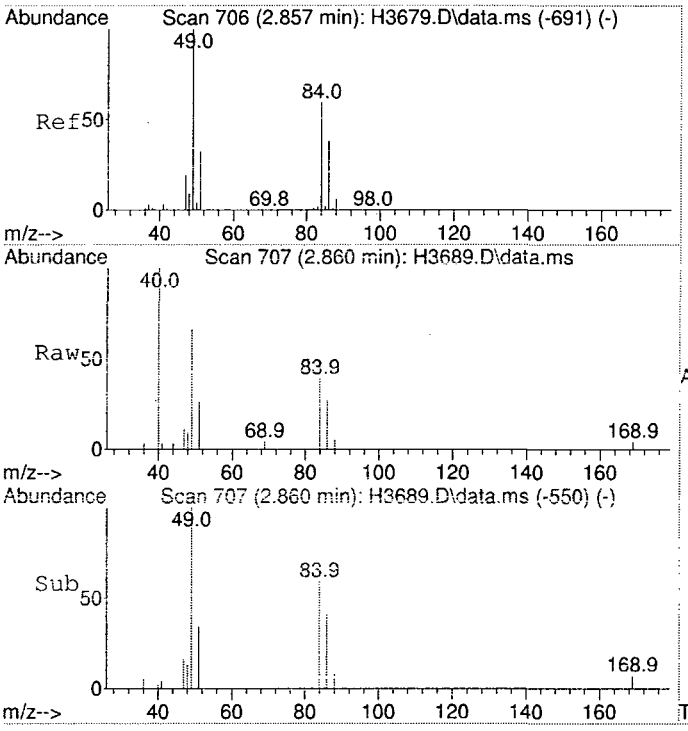
Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
MS Integration Params: RTEINT.P

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

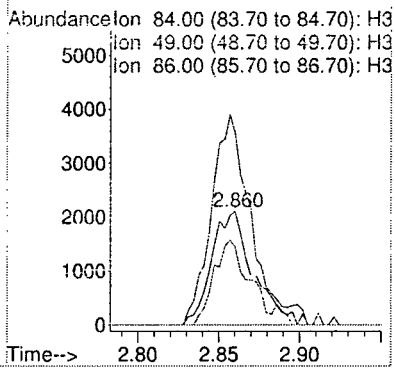
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM




#16
Methylene Chloride
Concen: 2.3542 ug/L
RT: 2.86 min Scan# 707
Delta R.T. 0.00 min
Lab File: H3689.D
Acq: 21 May 2012 15:35

Tgt Ion: 84 Resp: 3763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 177.4 | 154.4 | 194.4 |
| 86 | 62.9 | 43.7 | 83.7 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3689.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.143 | 146 | 173 | 255 | rBV | 3004659 | 13424294 | 100.00% | 70.308% |
| 2 | 1.413 | 255 | 257 | 271 | rVV2 | 5852 | 10196 | 0.08% | 0.053% |
| 3 | 1.481 | 271 | 278 | 294 | rVV2 | 18526 | 34523 | 0.26% | 0.181% |
| 4 | 1.535 | 294 | 295 | 303 | rVB2 | 2509 | 2106 | 0.02% | 0.011% |
| 5 | 1.809 | 370 | 380 | 406 | rBV | 16312 | 33877 | 0.25% | 0.177% |
| 6 | 1.970 | 427 | 430 | 439 | rVB6 | 2017 | 2345 | 0.02% | 0.012% |
| 7 | 2.246 | 512 | 516 | 523 | rBV3 | 1663 | 2269 | 0.02% | 0.012% |
| 8 | 2.375 | 552 | 556 | 557 | rBV3 | 2791 | 1615 | 0.01% | 0.008% |
| 9 | 2.442 | 566 | 577 | 611 | rVB | 165795 | 297853 | 2.22% | 1.560% |
| 10 | 2.857 | 697 | 706 | 718 | rBV3 | 11072 | 19297 | 0.14% | 0.101% |
| 11 | 3.982 | 1047 | 1056 | 1077 | rBV2 | 35139 | 86274 | 0.64% | 0.452% |
| 12 | 4.333 | 1149 | 1165 | 1189 | rBV | 190781 | 389212 | 2.90% | 2.038% |
| 13 | 4.455 | 1200 | 1203 | 1208 | rVB3 | 1535 | 1357 | 0.01% | 0.007% |
| 14 | 4.886 | 1315 | 1337 | 1363 | rBV2 | 359391 | 963438 | 7.18% | 5.046% |
| 15 | 5.050 | 1387 | 1388 | 1397 | rVB4 | 2887 | 2093 | 0.02% | 0.011% |
| 16 | 5.092 | 1397 | 1401 | 1409 | rVV4 | 2800 | 2733 | 0.02% | 0.014% |
| 17 | 5.371 | 1476 | 1488 | 1522 | rBV | 197295 | 400805 | 2.99% | 2.099% |
| 18 | 5.645 | 1566 | 1573 | 1574 | rBV3 | 2185 | 1584 | 0.01% | 0.008% |
| 19 | 5.667 | 1579 | 1580 | 1587 | rVB2 | 3247 | 1861 | 0.01% | 0.010% |
| 20 | 5.815 | 1610 | 1626 | 1653 | rBV3 | 184752 | 412867 | 3.08% | 2.162% |
| 21 | 5.957 | 1668 | 1670 | 1675 | rVB3 | 2071 | 1489 | 0.01% | 0.008% |
| 22 | 6.037 | 1681 | 1695 | 1711 | rBV4 | 18085 | 49314 | 0.37% | 0.258% |
| 23 | 6.153 | 1725 | 1731 | 1736 | rVB6 | 1240 | 1415 | 0.01% | 0.007% |
| 24 | 6.799 | 1917 | 1932 | 1960 | rBV2 | 224198 | 450323 | 3.35% | 2.359% |
| 25 | 7.201 | 2042 | 2057 | 2094 | rBV2 | 346000 | 780612 | 5.81% | 4.088% |
| 26 | 7.567 | 2157 | 2171 | 2193 | rBV | 117561 | 226108 | 1.68% | 1.184% |
| 27 | 8.018 | 2309 | 2311 | 2321 | rVB2 | 1242 | 1470 | 0.01% | 0.008% |
| 28 | 8.178 | 2348 | 2361 | 2378 | rBV3 | 89214 | 212506 | 1.58% | 1.113% |
| 29 | 9.259 | 2682 | 2697 | 2720 | rBV2 | 186007 | 407757 | 3.04% | 2.136% |
| 30 | 10.140 | 2968 | 2971 | 2975 | rBV2 | 1745 | 1394 | 0.01% | 0.007% |
| 31 | 11.397 | 3344 | 3362 | 3378 | rBV3 | 74772 | 159542 | 1.19% | 0.836% |
| 32 | 11.632 | 3433 | 3435 | 3443 | rBV2 | 1310 | 1416 | 0.01% | 0.007% |
| 33 | 11.808 | 3488 | 3490 | 3495 | rVB | 2495 | 1447 | 0.01% | 0.008% |
| 34 | 12.117 | 3582 | 3586 | 3595 | rBV2 | 1204 | 1833 | 0.01% | 0.010% |
| 35 | 12.818 | 3793 | 3804 | 3816 | rBV | 191909 | 268390 | 2.00% | 1.406% |
| 36 | 13.226 | 3920 | 3931 | 3945 | rBV | 322822 | 428972 | 3.20% | 2.247% |
| 37 | 13.458 | 3999 | 4003 | 4004 | rBV2 | 4041 | 2294 | 0.02% | 0.012% |
| 38 | 13.464 | 4004 | 4005 | 4010 | rVB3 | 4247 | 2462 | 0.02% | 0.013% |
| 39 | 13.921 | 4145 | 4147 | 4156 | rVB2 | 2187 | 2247 | 0.02% | 0.012% |
| 40 | 14.242 | 4243 | 4247 | 4253 | rVB2 | 1464 | 1899 | 0.01% | 0.010% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 19093489

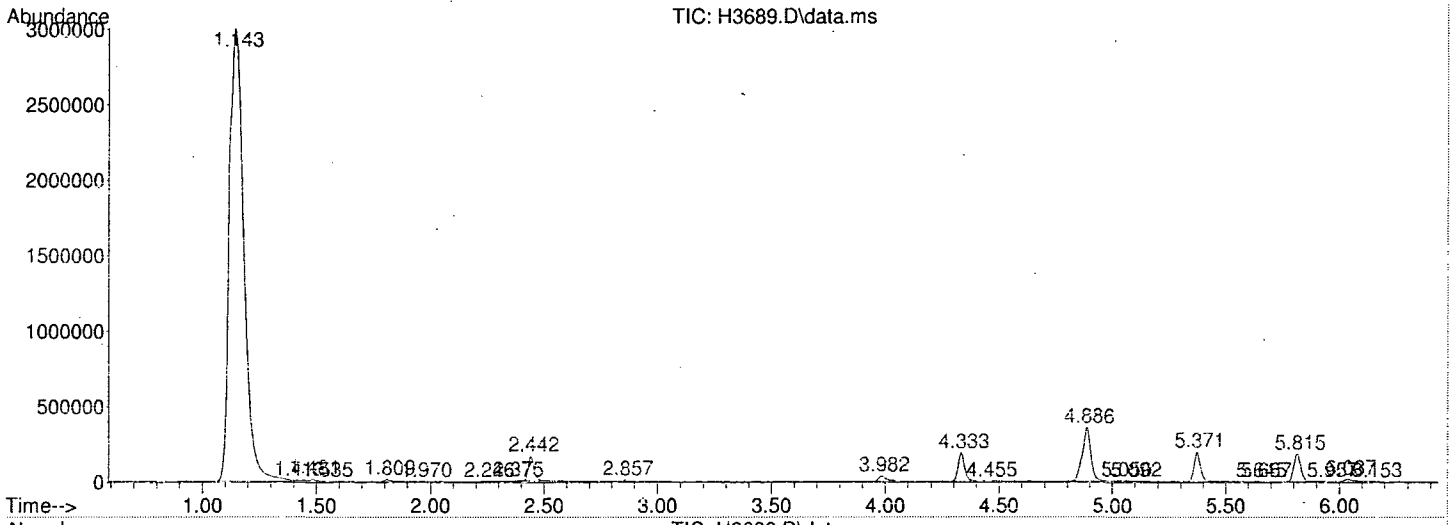
LSC Report - Integrated Chromatogram

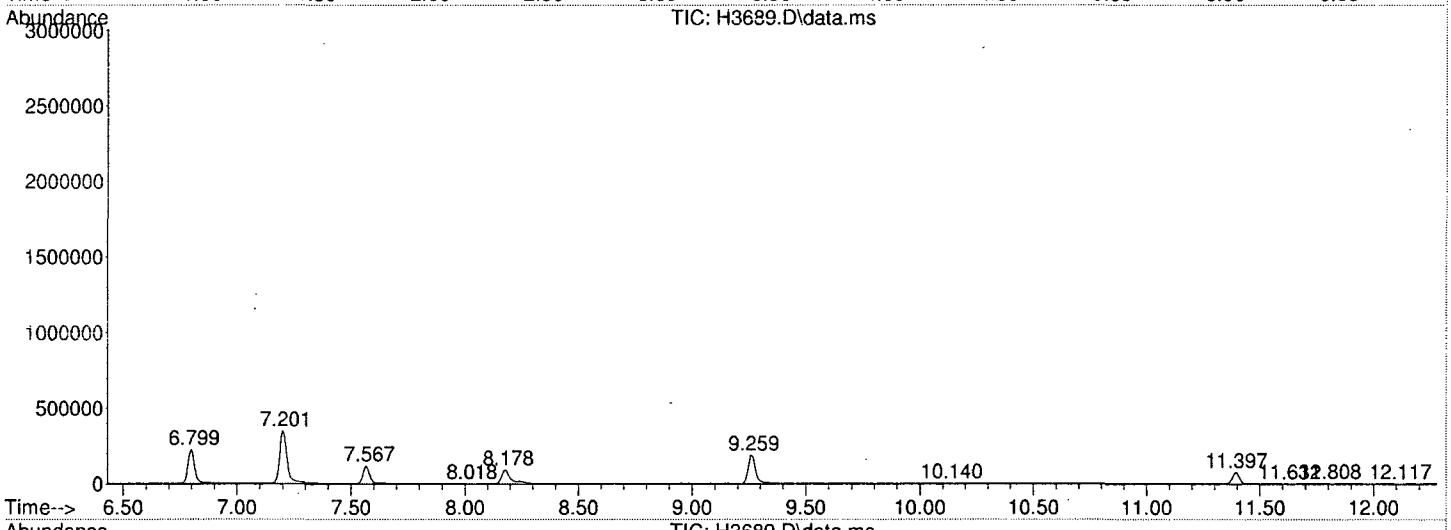
Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

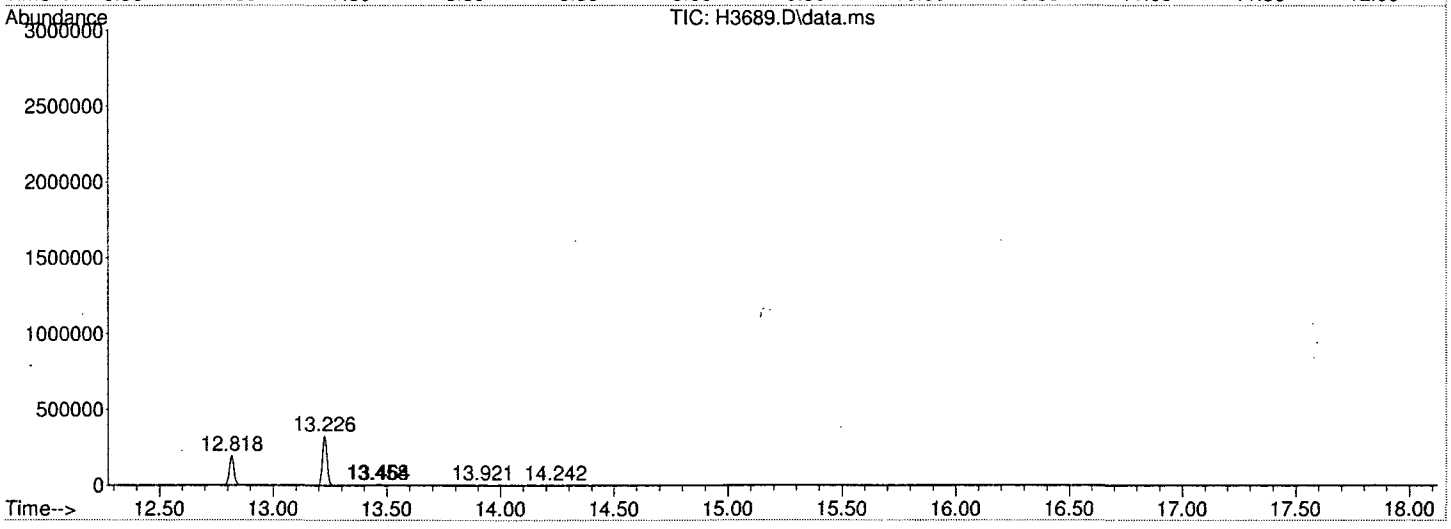
Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

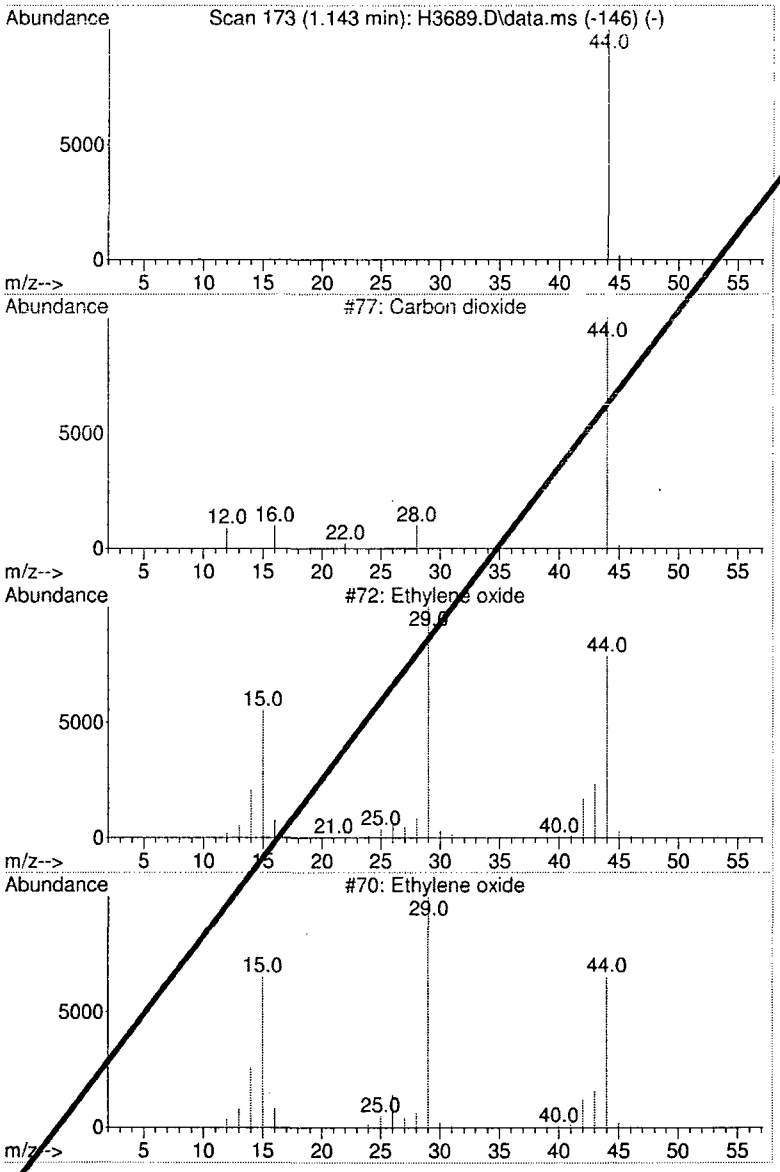
**********

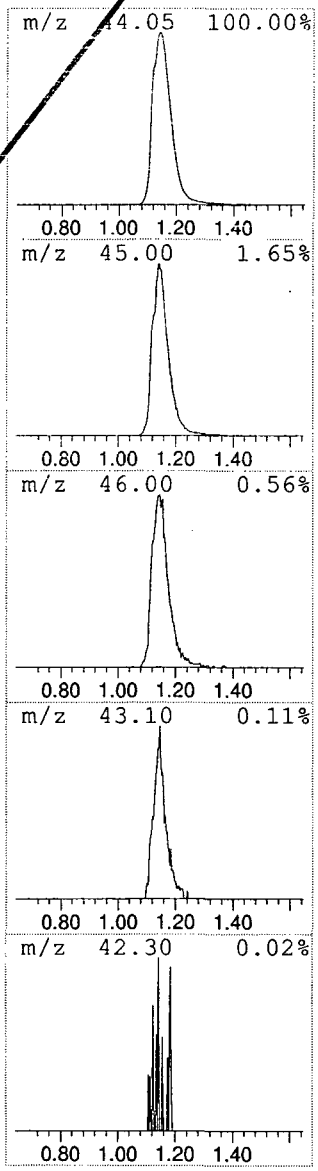
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1674.67 ug/L | 13424300 | 1,4-Difluorobenzene | 5.375 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 4 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 5 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

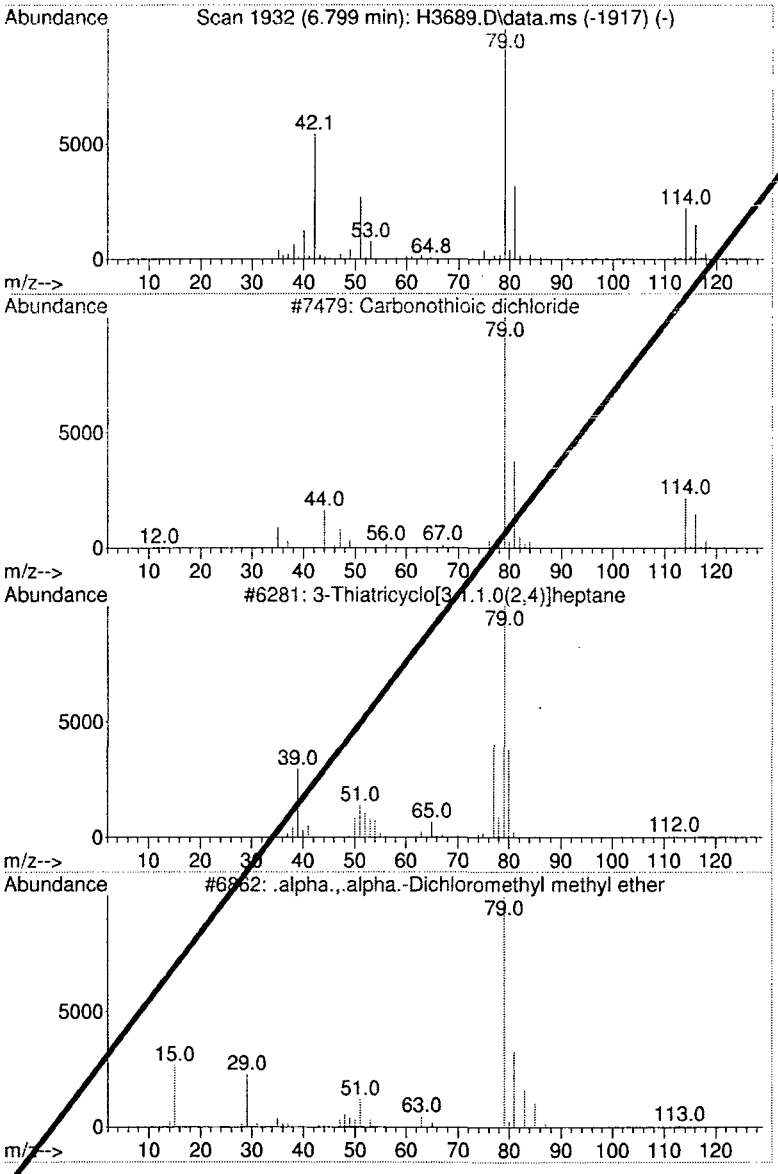
**********

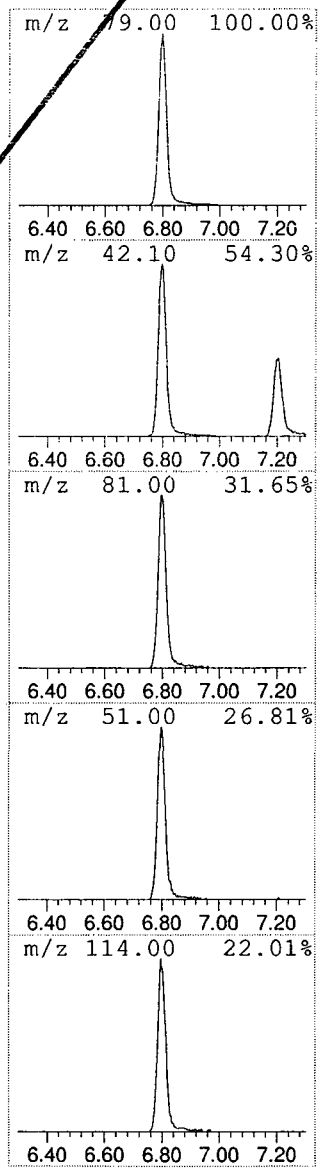
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 56.18 ug/L | 450323 | 1,4-Difluorobenzene | 5.375 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 52 |
| 2 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 25 |
| 3 | .alpha.,.alpha.-Dichloromethyl m... | 114 | C2H4Cl2O | 004885-02-3 | 25 |
| 4 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 23 |
| 5 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3689.D
Acq On : 21 May 2012 15:35
Sample : 0015977-05
Misc : F5WC1 6.31GM SOIL
DataAcq Meth:VOAC.M

Vial: 1
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:16:44 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1674.7 | ug/L | 13424300 | 1 | 5.375 | 400805 | 50.0 |
| Carbonothioic d... | 6.799 | 56.2 | ug/L | 450323 | 1 | 5.375 | 400805 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 6.19 (g/mL) g Lab File ID: H3690.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 22.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.2 | U |
| 74-87-3 | Chloromethane | 5.2 | U |
| 75-01-4 | Vinyl chloride | 5.2 | U |
| 74-83-9 | Bromomethane | 5.2 | U |
| 75-00-3 | Chloroethane | 5.2 | U |
| 75-69-4 | Trichlorofluoromethane | 5.2 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.2 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.2 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.2 | U |
| 79-20-9 | Methyl acetate | 5.2 | U |
| 75-09-2 | Methylene chloride | 2.9 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.2 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.2 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.2 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.2 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.2 | U |
| 67-66-3 | Chloroform | 5.2 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.2 | U |
| 110-82-7 | Cyclohexane | 5.2 | U |
| 56-23-5 | Carbon tetrachloride | 5.2 | U |
| 71-43-2 | Benzene | 5.2 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.2 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 6.19 (g/mL) g Lab File ID: H3690.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 22.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.2 | U |
| 108-87-2 | Methylcyclohexane | 5.2 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.2 | U |
| 75-27-4 | Bromodichloromethane | 5.2 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.2 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.2 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.2 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.2 | U |
| 127-18-4 | Tetrachloroethene | 5.2 | U |
| 591-78-6 | 2-Hexanone | 14 | |
| 124-48-1 | Dibromochloromethane | 5.2 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.2 | U |
| 108-90-7 | Chlorobenzene | 5.2 | U |
| 100-41-4 | Ethylbenzene | 5.2 | U |
| 95-47-6 | o-Xylene | 5.2 | U |
| 179601-23-1 | m,p-Xylene | 5.2 | U |
| 100-42-5 | Styrene | 5.2 | U |
| 75-25-2 | Bromoform | 5.2 | U |
| 98-82-8 | Isopropylbenzene | 5.2 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.2 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.2 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.2 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.2 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.2 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.2 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 6.19 (g/mL) g Lab File ID: H3690.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 22.4 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
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| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 159050 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 113789 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 36436 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 21921 | 45.23 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 90.46% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 14318 | 53.60 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 107.20% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 107433 | 33.81 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 67.62% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 43154 | 64.92 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 64.92% | | |
| 24) Chloroform-d | 4.333 | 84 | 140299 | 38.56 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 77.12% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 80317 | 41.09 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 82.18% | | |
| 28) 1,4-Dioxane-d8 | 6.034 | 96 | 19365 | 774.90 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 77.49% | | |
| 34) Benzene-d6 | 4.889 | 84 | 304834 | 42.36 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 84.72% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 82519 | 41.83 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 83.66% | | |
| 43) Toluene-d8 | 7.201 | 98 | 263945 | 42.67 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 85.34% | | |
| 45) trans-1,3-Dichloroprop... | 7.571 | 79 | 59300 | 37.57 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 75.14% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 27353 | 73.08 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 73.08% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.400 | 84 | 39823 | 36.10 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 72.20% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 56761 | 41.91 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 83.82% | | |
| **Target Compounds** | | | | | Qvalue |
| 16) Methylene Chloride | 2.857 | 84 | 3943 | 2.7881 ug/L | 98 |
| 50) 2-Hexanone | 8.246 | 43 | 9687 | 13.4696 ug/L | 87 |

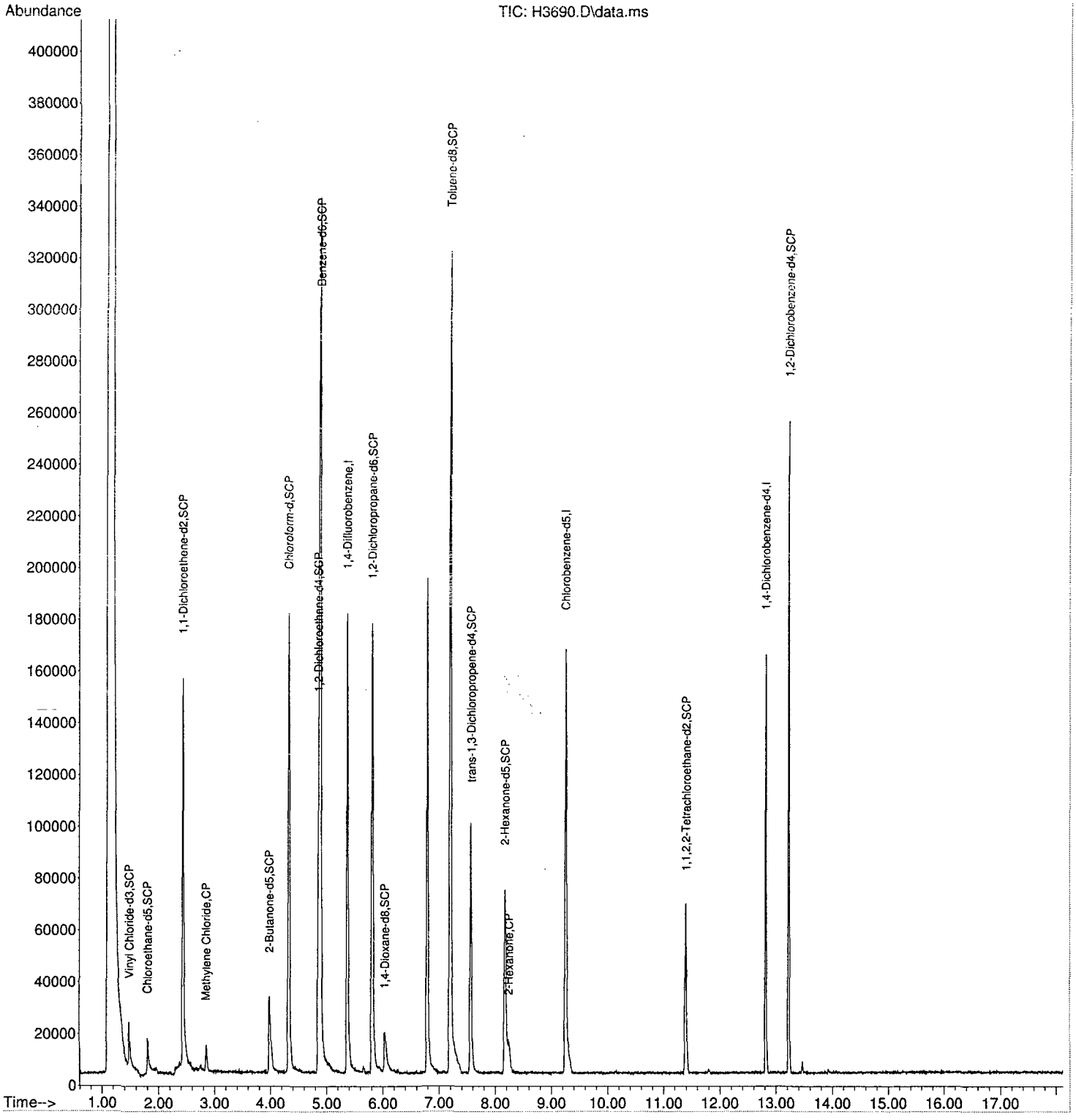
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

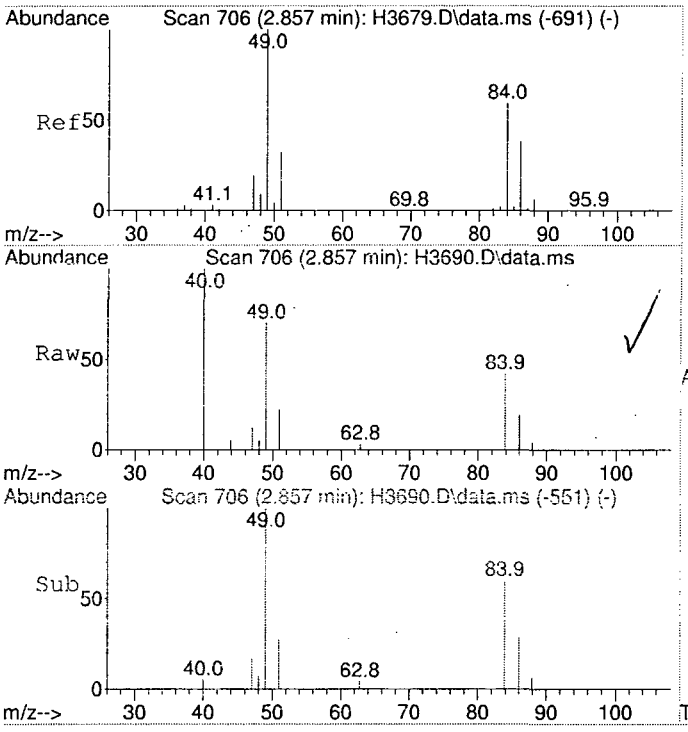
Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
MS Integration Params: RTEINT.P

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

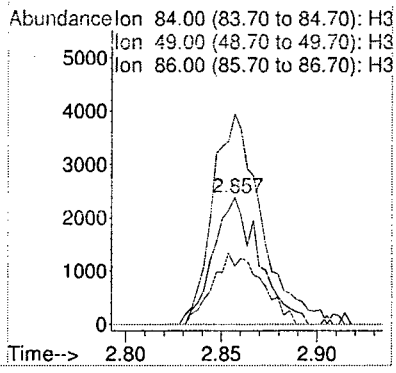
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

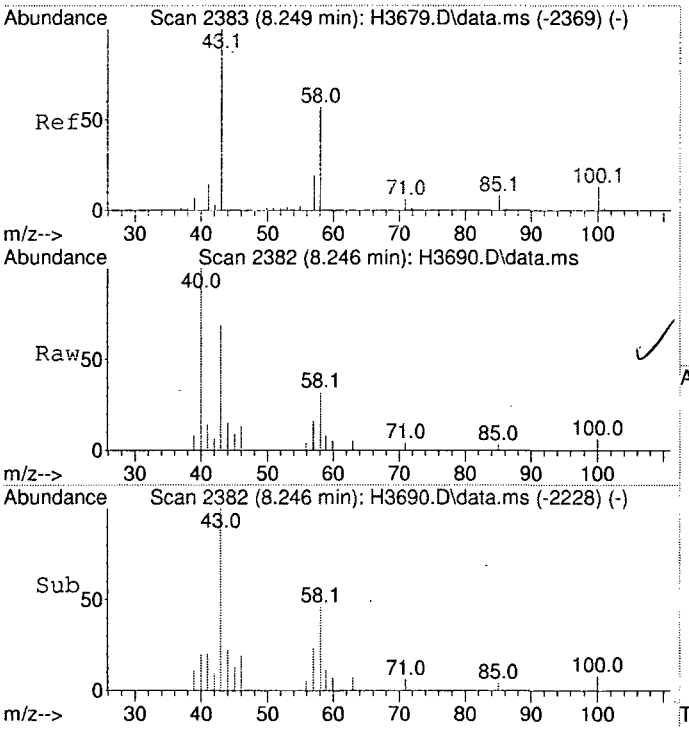



#16
Methylene Chloride
Concen: 2.7881 ug/L
RT: 2.86 min Scan# 706
Delta R.T. -0.00 min
Lab File: H3690.D
Acq: 21 May 2012 16:01

Tgt Ion: 84 Resp: 3943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 176.5 | 154.4 | 194.4 |
| 86 | 60.0 | 43.7 | 83.7 |

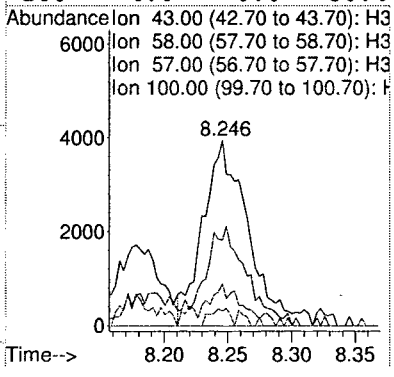



#50
2-Hexanone
Concen: 13.4696 ug/L
RT: 8.25 min Scan# 2382
Delta R.T. -0.00 min
Lab File: H3690.D
Acq: 21 May 2012 16:01

Tgt Ion: 43 Resp: 9687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 49.1 | 36.4 | 76.4 |
| 57 | 11.7 | 0.0 | 39.9 |
| 100 | 4.0 | 0.0 | 30.4 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3690.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.970 | 109 | 119 | 122 | rBV | 1261 | 2039 | 0.02% | 0.011% |
| 2 | 1.143 | 148 | 173 | 250 | rBV | 3051087 | 13366077 | 100.00% | 72.324% |
| 3 | 1.426 | 259 | 261 | 267 | rVB2 | 2730 | 2604 | 0.02% | 0.014% |
| 4 | 1.481 | 273 | 278 | 312 | rVV2 | 18842 | 40652 | 0.30% | 0.220% |
| 5 | 1.593 | 312 | 313 | 320 | rVV3 | 2685 | 3283 | 0.02% | 0.018% |
| 6 | 1.619 | 320 | 321 | 327 | rVV3 | 2635 | 2306 | 0.02% | 0.012% |
| 7 | 1.642 | 327 | 328 | 336 | rVB2 | 2489 | 2354 | 0.02% | 0.013% |
| 8 | 1.809 | 371 | 380 | 393 | rBV3 | 14094 | 28279 | 0.21% | 0.153% |
| 9 | 1.957 | 424 | 426 | 437 | rVB5 | 2866 | 3725 | 0.03% | 0.020% |
| 10 | 2.297 | 528 | 532 | 535 | rBV4 | 3034 | 2462 | 0.02% | 0.013% |
| 11 | 2.378 | 554 | 557 | 566 | rBV5 | 2278 | 2793 | 0.02% | 0.015% |
| 12 | 2.442 | 566 | 577 | 604 | rVV | 150356 | 278817 | 2.09% | 1.509% |
| 13 | 2.535 | 604 | 606 | 616 | rVV5 | 3937 | 5823 | 0.04% | 0.032% |
| 14 | 2.584 | 620 | 621 | 629 | rVB4 | 2982 | 1684 | 0.01% | 0.009% |
| 15 | 2.748 | 666 | 672 | 675 | rBV3 | 1805 | 1980 | 0.01% | 0.011% |
| 16 | 2.857 | 697 | 706 | 721 | rVB4 | 10077 | 18040 | 0.13% | 0.098% |
| 17 | 3.654 | 952 | 954 | 960 | rVB | 1673 | 1596 | 0.01% | 0.009% |
| 18 | 3.989 | 1045 | 1058 | 1080 | rBV3 | 29803 | 78778 | 0.59% | 0.426% |
| 19 | 4.104 | 1092 | 1094 | 1106 | rVB2 | 1934 | 2749 | 0.02% | 0.015% |
| 20 | 4.333 | 1150 | 1165 | 1189 | rBV | 176959 | 355192 | 2.66% | 1.922% |
| 21 | 4.889 | 1316 | 1338 | 1371 | rBV2 | 338783 | 905854 | 6.78% | 4.902% |
| 22 | 5.018 | 1376 | 1378 | 1386 | rVV5 | 3887 | 6433 | 0.05% | 0.035% |
| 23 | 5.047 | 1386 | 1387 | 1394 | rVV4 | 3569 | 4105 | 0.03% | 0.022% |
| 24 | 5.085 | 1398 | 1399 | 1410 | rVB4 | 2113 | 2111 | 0.02% | 0.011% |
| 25 | 5.371 | 1476 | 1488 | 1510 | rBV2 | 177368 | 359473 | 2.69% | 1.945% |
| 26 | 5.445 | 1510 | 1511 | 1523 | rVB4 | 1882 | 2235 | 0.02% | 0.012% |
| 27 | 5.648 | 1573 | 1574 | 1583 | rVB4 | 2761 | 3233 | 0.02% | 0.017% |
| 28 | 5.815 | 1612 | 1626 | 1658 | rBV2 | 173812 | 381037 | 2.85% | 2.062% |
| 29 | 6.043 | 1684 | 1697 | 1721 | rBV3 | 15041 | 45512 | 0.34% | 0.246% |
| 30 | 6.796 | 1919 | 1931 | 1960 | rBV2 | 190985 | 374370 | 2.80% | 2.026% |
| 31 | 7.201 | 2043 | 2057 | 2095 | rBV | 317923 | 714188 | 5.34% | 3.864% |
| 32 | 7.567 | 2156 | 2171 | 2191 | rBV3 | 96754 | 191067 | 1.43% | 1.034% |
| 33 | 8.175 | 2348 | 2360 | 2399 | rBV6 | 71072 | 202073 | 1.51% | 1.093% |
| 34 | 9.262 | 2684 | 2698 | 2732 | rVV2 | 164076 | 365092 | 2.73% | 1.976% |
| 35 | 11.394 | 3348 | 3361 | 3380 | rBV3 | 66103 | 142153 | 1.06% | 0.769% |
| 36 | 11.795 | 3484 | 3486 | 3499 | rVB4 | 1966 | 3314 | 0.02% | 0.018% |
| 37 | 12.818 | 3794 | 3804 | 3821 | rVB | 161982 | 222656 | 1.67% | 1.205% |
| 38 | 13.229 | 3922 | 3932 | 3945 | rVB | 251776 | 348292 | 2.61% | 1.885% |
| 39 | 13.464 | 3998 | 4005 | 4009 | rVB3 | 4574 | 4828 | 0.04% | 0.026% |
| 40 | 16.946 | 5087 | 5088 | 5098 | rVB | 1015 | 1554 | 0.01% | 0.008% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 18480813

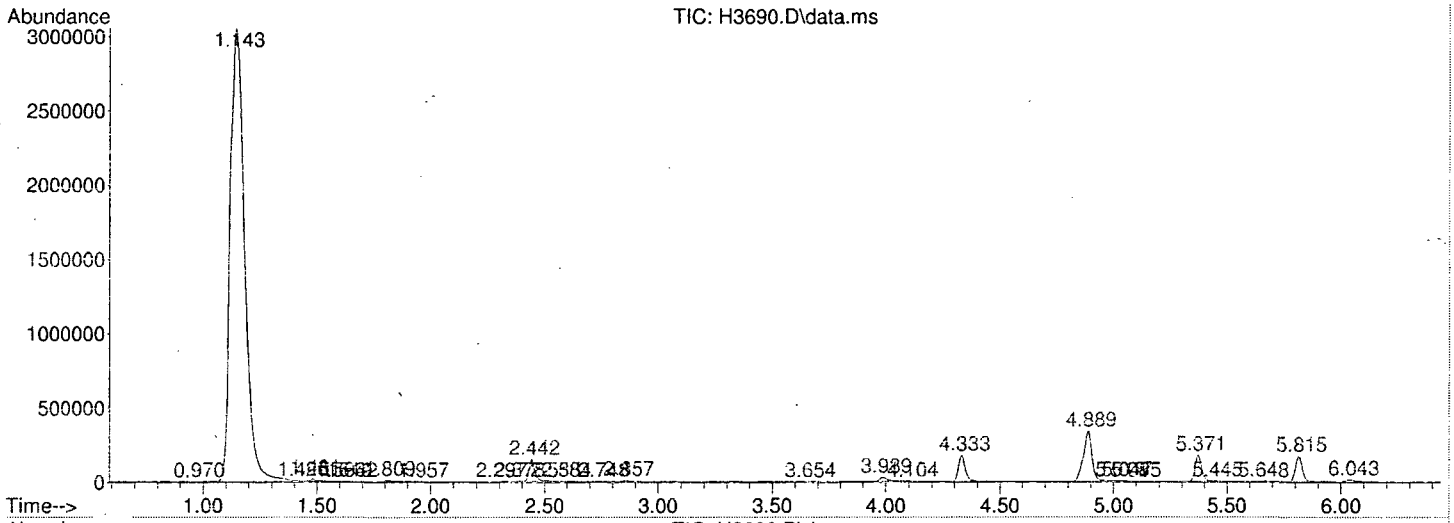
LSC Report - Integrated Chromatogram

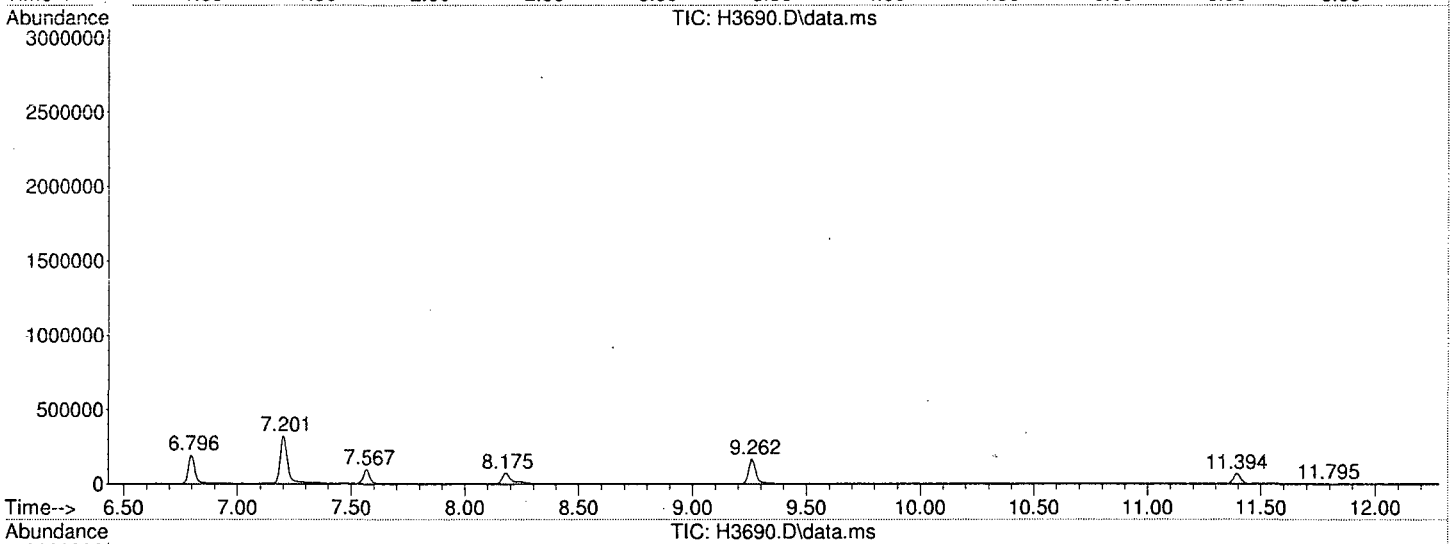
Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

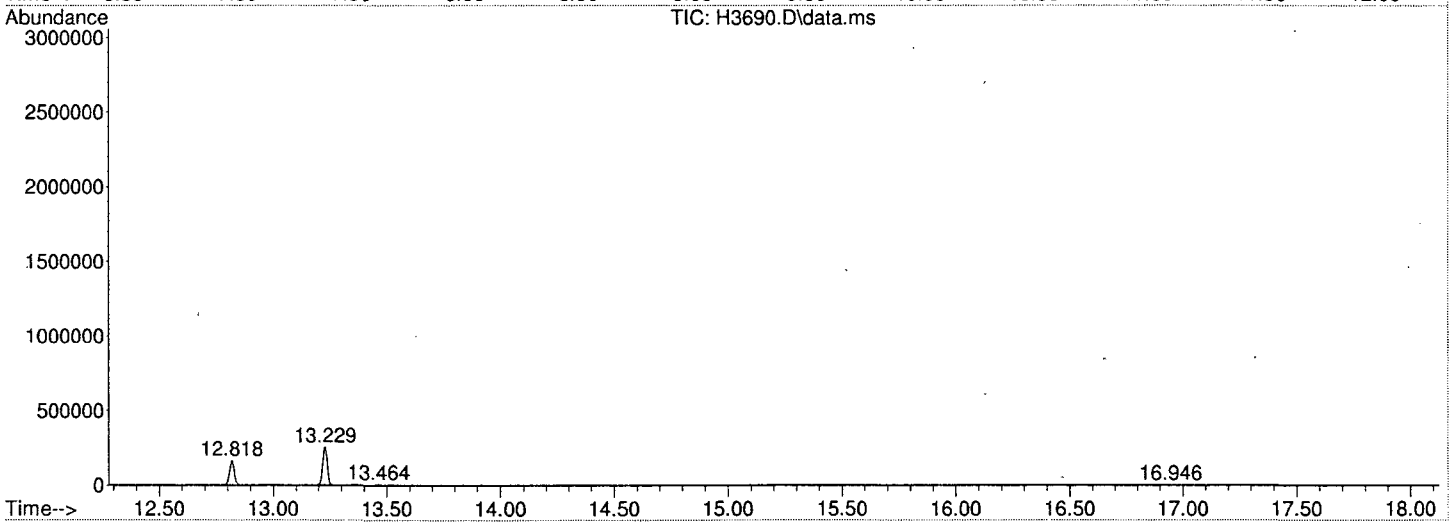
Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

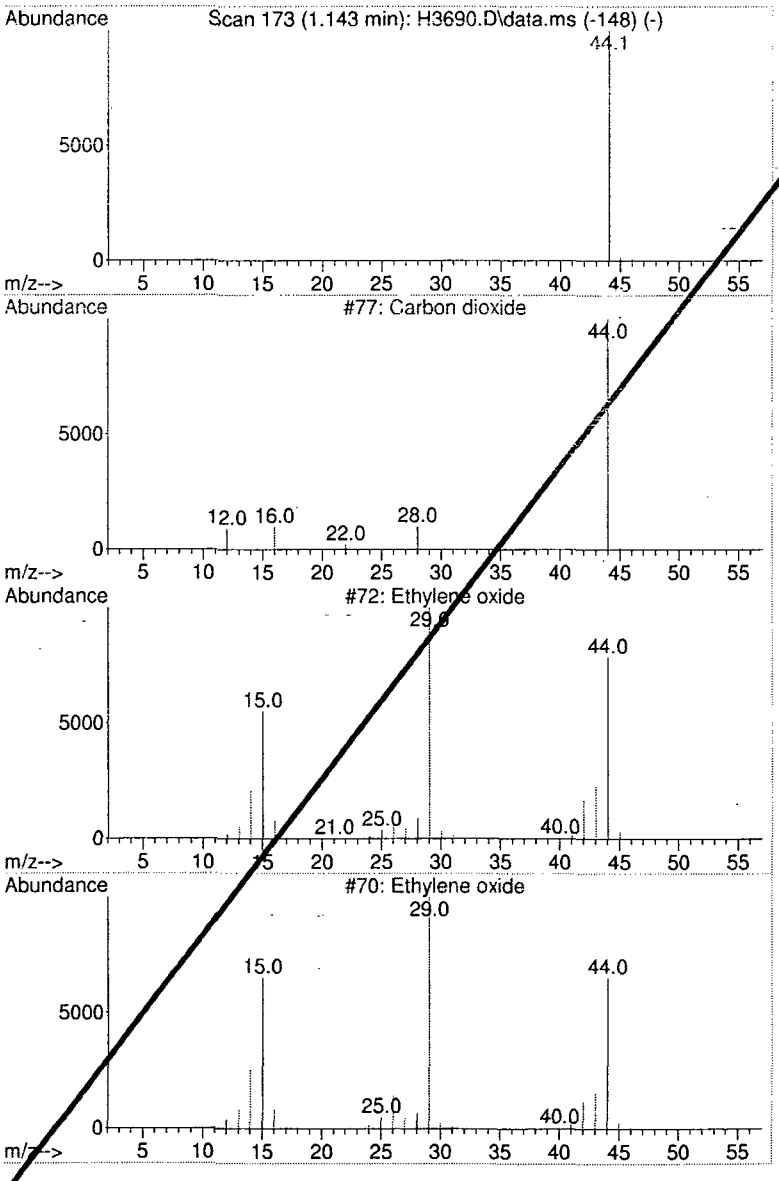
**********

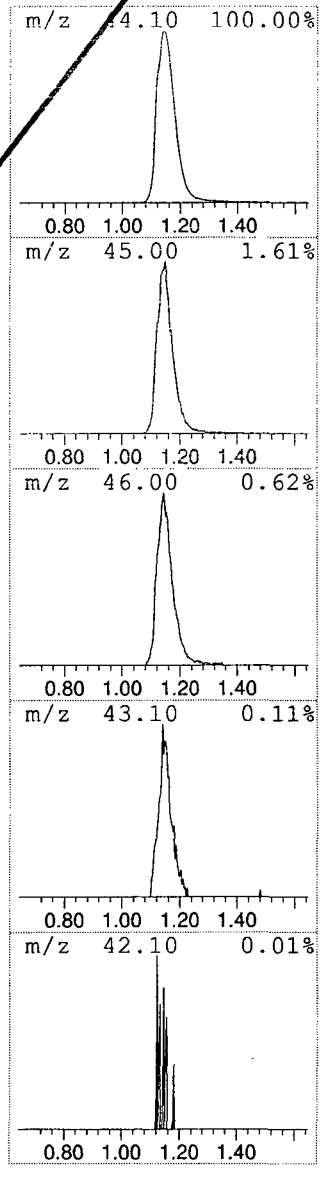
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1859.12 ug/L | 13366100 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 4 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 5 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

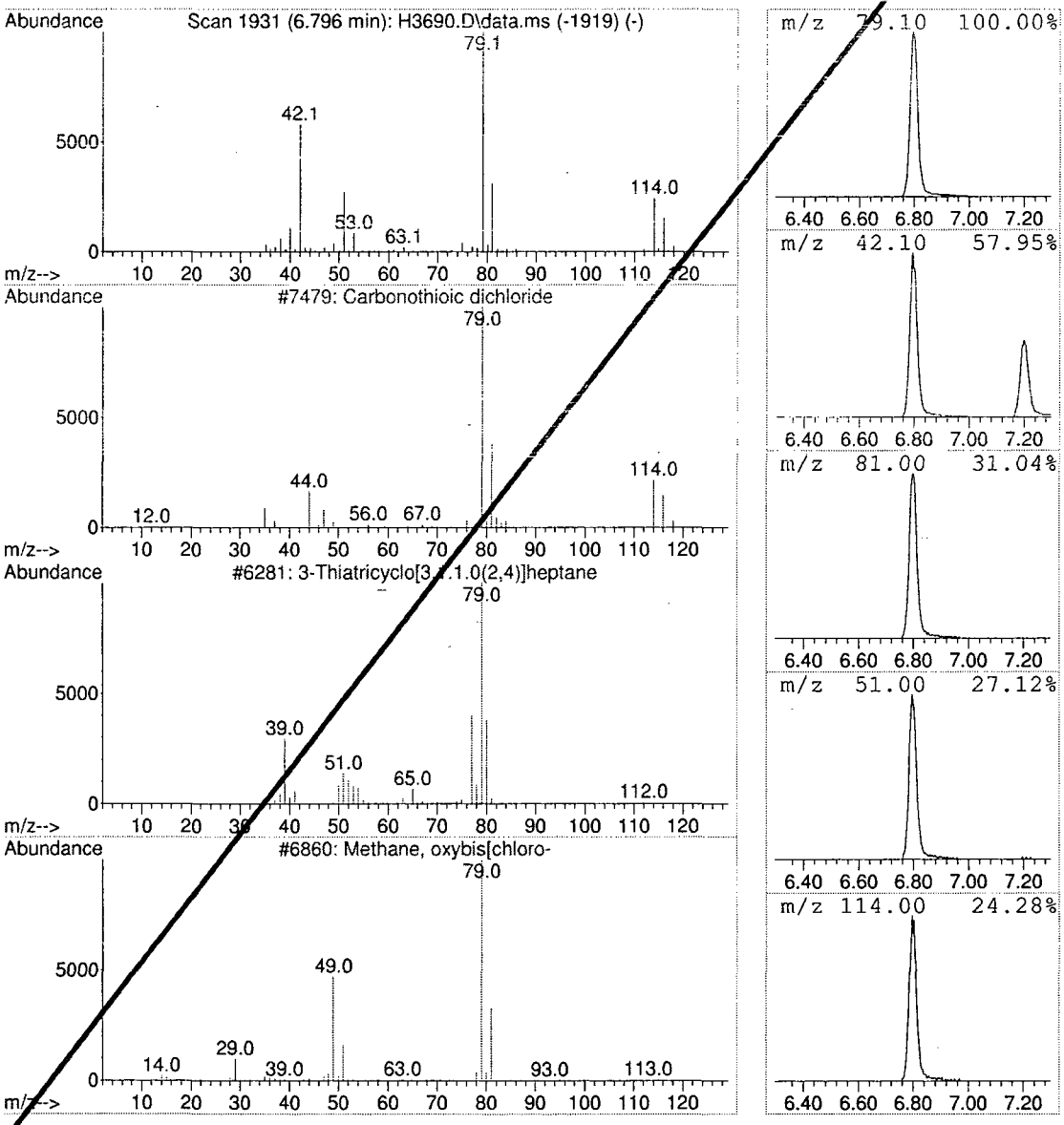
**********

Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.796 | 52.07 ug/L | 374370 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 49 |
| 2 | 3-Thiatricyclo[3.1.1.0(2,4)]heptane | 112 | C6H8S | 1000221-37-0 | 32 |
| 3 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 32 |
| 4 | .alpha.,.alpha.-Dichloromethyl m... | 114 | C2H4Cl2O | 004885-02-3 | 23 |
| 5 | n-Propyl chloride | 78 | C3H7Cl | 000540-54-5 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3690.D
Acq On : 21 May 2012 16:01
Sample : 0015977-06
Misc : F5WC2 6.19GM SOIL
DataAcq Meth:VOAC.M

Vial: 2
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:17:31 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1859.1 | ug/L | 13366100 | 1 | 5.371 | 359473 | 50.0 |
| Carbonothioic d... | 6.796 | 52.1 | ug/L | 374370 | 1 | 5.371 | 359473 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 6.29 (g/mL) g Lab File ID: H3691.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 20.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.0 | U |
| 79-20-9 | Methyl acetate | 5.0 | U |
| 75-09-2 | Methylene chloride | 2.7 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.0 | U |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon tetrachloride | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 6.29 (g/mL) g Lab File ID: H3691.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 20.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 95-47-6 | o-Xylene | 5.0 | U |
| 179601-23-1 | m,p-Xylene | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 6.29 (g/mL) g Lab File ID: H3691.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/18/2012

% Moisture: not dec. 20.9 Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
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| 17 | | | | | |
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| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 163268 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.258 | 117 | 110522 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.821 | 152 | 33530 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 25326 | 50.90 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 101.80% | | |
| 7) Chloroethane-d5 | 1.812 | 69 | 15656 | 57.09 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 114.18% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 114074 | 34.97 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 69.94% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 38732 | 56.76 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 56.76% | | |
| 24) Chloroform-d | 4.333 | 84 | 139257 | 37.28 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 74.56% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 77168 | 38.46 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 76.92%# | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 17024 | 663.63 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 66.36% | | |
| 34) Benzene-d6 | 4.886 | 84 | 310608 | 44.44 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 88.88% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 81265 | 42.41 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 84.82% | | |
| 43) Toluene-d8 | 7.204 | 98 | 257325 | 42.83 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 85.66% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 55935 | 36.48 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 72.96% | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 23331 | 64.18 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 64.18% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 35023 | 32.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 65.38% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 50970 | 40.90 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 81.80% | | |
| **Target Compounds** | | | | | Qvalue |
| 16) Methylene Chloride | 2.860 | 84 | 3948 | 2.7195 ug/L | 95 |

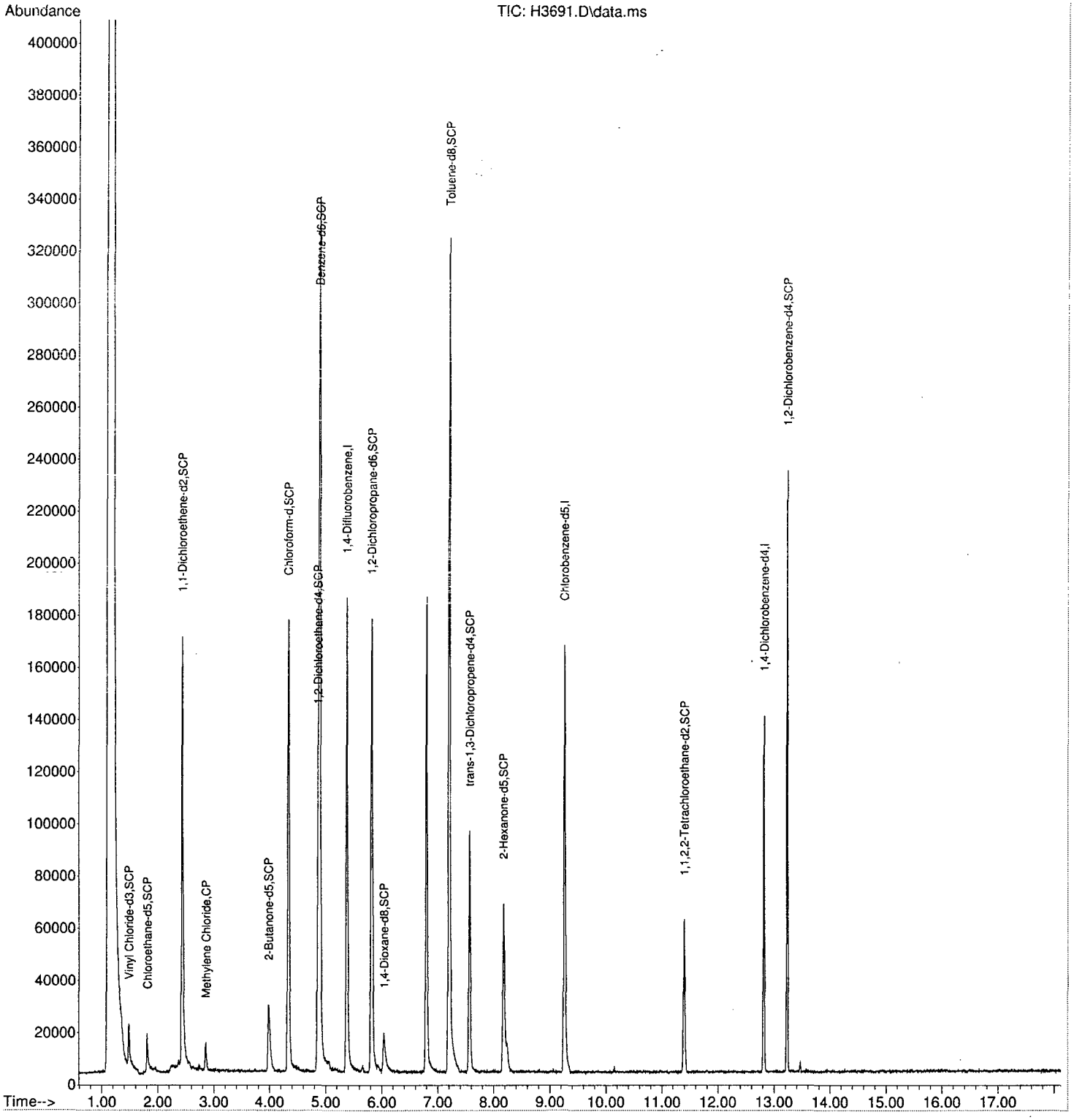
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

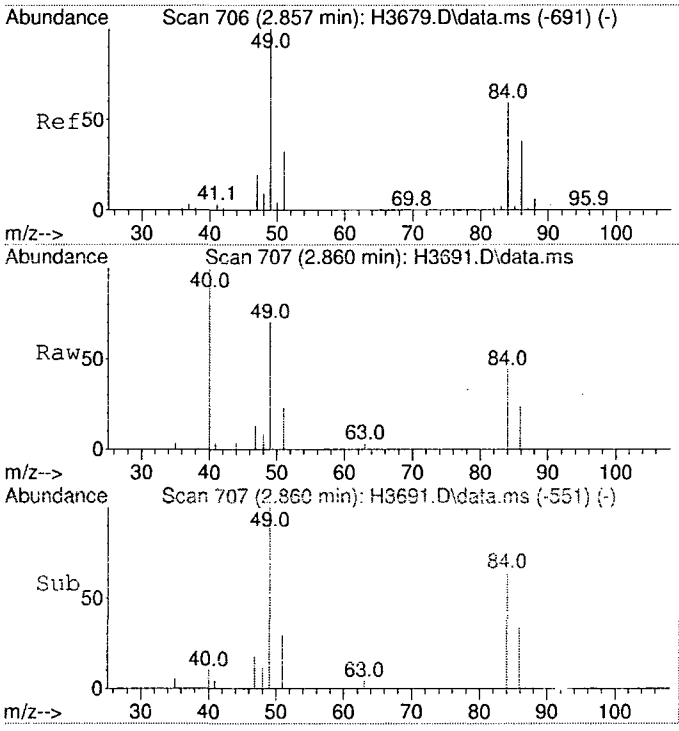
Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
MS Integration Params: RTEINT.P

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

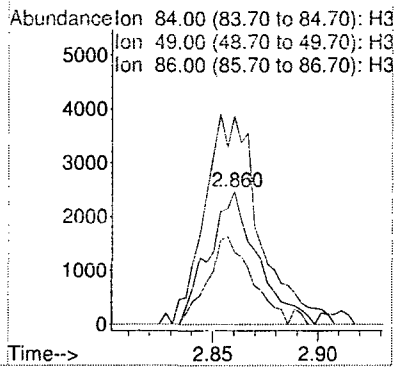
Method : C:\msdchem\1\methods\SOSH3679.M (RTE Integrator)
Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM




#16
Methylene Chloride
Concen: 2.7195 ug/L
RT: 2.86 min Scan# 707
Delta R.T. 0.00 min
Lab File: H3691.D
Acq: 21 May 2012 16:27

Tgt Ion: 84 Resp: 3948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 180.7 | 154.4 | 194.4 |
| 86 | 59.5 | 43.7 | 83.7 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3691.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.143 | 146 | 173 | 253 | rBV | 3038586 | 13552161 | 100.00% | 73.450% |
| 2 | 1.484 | 271 | 279 | 290 | rBV3 | 14970 | 24178 | 0.18% | 0.131% |
| 3 | 1.545 | 296 | 298 | 307 | rVB3 | 2771 | 2737 | 0.02% | 0.015% |
| 4 | 1.812 | 371 | 381 | 398 | rBV3 | 14712 | 29140 | 0.22% | 0.158% |
| 5 | 2.442 | 567 | 577 | 601 | rBV | 163390 | 286045 | 2.11% | 1.550% |
| 6 | 2.738 | 666 | 669 | 671 | rBV | 2783 | 1235 | 0.01% | 0.007% |
| 7 | 2.754 | 671 | 674 | 679 | rVV4 | 1563 | 1381 | 0.01% | 0.007% |
| 8 | 2.860 | 698 | 707 | 719 | rVB3 | 10601 | 16980 | 0.13% | 0.092% |
| 9 | 3.985 | 1043 | 1057 | 1086 | rBV3 | 25603 | 71922 | 0.53% | 0.390% |
| 10 | 4.333 | 1151 | 1165 | 1188 | rBV | 172912 | 356194 | 2.63% | 1.930% |
| 11 | 4.413 | 1188 | 1190 | 1195 | rVB2 | 1713 | 1243 | 0.01% | 0.007% |
| 12 | 4.461 | 1202 | 1205 | 1210 | rVB | 1964 | 1777 | 0.01% | 0.010% |
| 13 | 4.480 | 1210 | 1211 | 1216 | rBV2 | 2052 | 1197 | 0.01% | 0.006% |
| 14 | 4.889 | 1317 | 1338 | 1367 | rBV3 | 335413 | 884185 | 6.52% | 4.792% |
| 15 | 4.992 | 1367 | 1370 | 1379 | rVB7 | 2550 | 3732 | 0.03% | 0.020% |
| 16 | 5.050 | 1386 | 1388 | 1397 | rVB7 | 3225 | 4576 | 0.03% | 0.025% |
| 17 | 5.082 | 1397 | 1398 | 1405 | rVB3 | 1736 | 1591 | 0.01% | 0.009% |
| 18 | 5.371 | 1476 | 1488 | 1512 | rBV | 181874 | 371291 | 2.74% | 2.012% |
| 19 | 5.455 | 1512 | 1514 | 1521 | rVV4 | 2707 | 3170 | 0.02% | 0.017% |
| 20 | 5.490 | 1521 | 1525 | 1530 | rVB2 | 1921 | 1738 | 0.01% | 0.009% |
| 21 | 5.651 | 1568 | 1575 | 1576 | rBV4 | 1987 | 1792 | 0.01% | 0.010% |
| 22 | 5.657 | 1576 | 1577 | 1585 | rVB3 | 2930 | 2414 | 0.02% | 0.013% |
| 23 | 5.815 | 1609 | 1626 | 1655 | rBV3 | 173922 | 379121 | 2.80% | 2.055% |
| 24 | 5.911 | 1655 | 1656 | 1663 | rVV4 | 2602 | 3044 | 0.02% | 0.016% |
| 25 | 5.937 | 1663 | 1664 | 1672 | rVB4 | 2459 | 2252 | 0.02% | 0.012% |
| 26 | 6.037 | 1683 | 1695 | 1714 | rBV4 | 14717 | 41243 | 0.30% | 0.224% |
| 27 | 6.799 | 1918 | 1932 | 1955 | rBV3 | 182022 | 357489 | 2.64% | 1.938% |
| 28 | 7.201 | 2041 | 2057 | 2085 | rBV2 | 320222 | 696373 | 5.14% | 3.774% |
| 29 | 7.358 | 2104 | 2106 | 2118 | rVB4 | 2911 | 3579 | 0.03% | 0.019% |
| 30 | 7.567 | 2157 | 2171 | 2190 | rBV2 | 92436 | 177601 | 1.31% | 0.963% |
| 31 | 8.178 | 2350 | 2361 | 2397 | rVB3 | 64414 | 170531 | 1.26% | 0.924% |
| 32 | 9.258 | 2684 | 2697 | 2728 | rBV | 163345 | 350739 | 2.59% | 1.901% |
| 33 | 11.393 | 3346 | 3361 | 3377 | rBV2 | 58791 | 123287 | 0.91% | 0.668% |
| 34 | 11.882 | 3507 | 3513 | 3518 | rVB2 | 926 | 1348 | 0.01% | 0.007% |
| 35 | 12.818 | 3792 | 3804 | 3814 | rBV2 | 136669 | 203253 | 1.50% | 1.102% |
| 36 | 13.226 | 3921 | 3931 | 3942 | rBV | 230672 | 311080 | 2.30% | 1.686% |
| 37 | 13.464 | 3999 | 4005 | 4010 | rVB5 | 4862 | 5184 | 0.04% | 0.028% |
| 38 | 17.795 | 5350 | 5352 | 5357 | rVB | 1568 | 1292 | 0.01% | 0.007% |
| 39 | 17.814 | 5357 | 5358 | 5364 | rBV | 1785 | 1420 | 0.01% | 0.008% |
| 40 | 17.943 | 5393 | 5398 | 5404 | rBV2 | 1249 | 1374 | 0.01% | 0.007% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 18450889

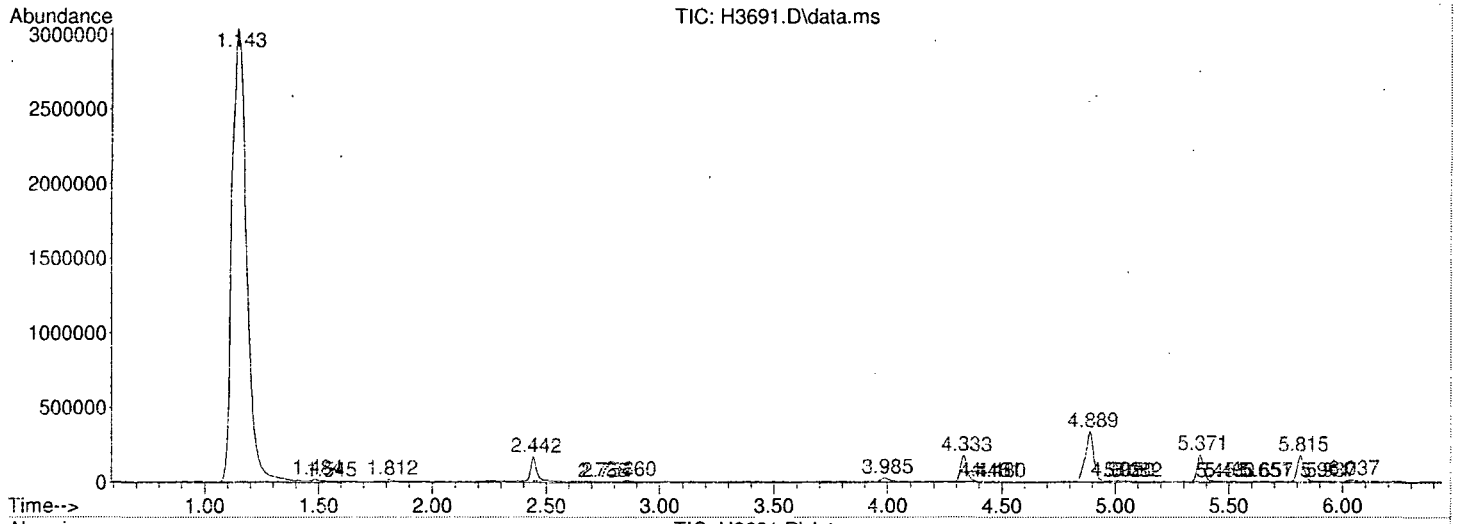
LSC Report - Integrated Chromatogram

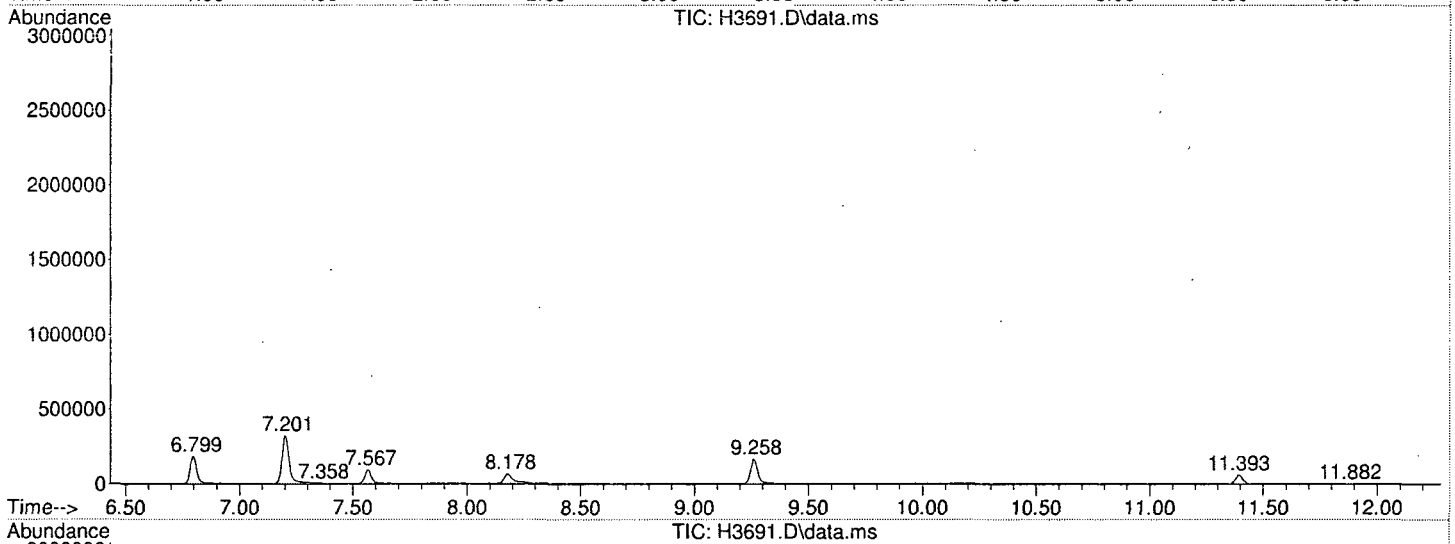
Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

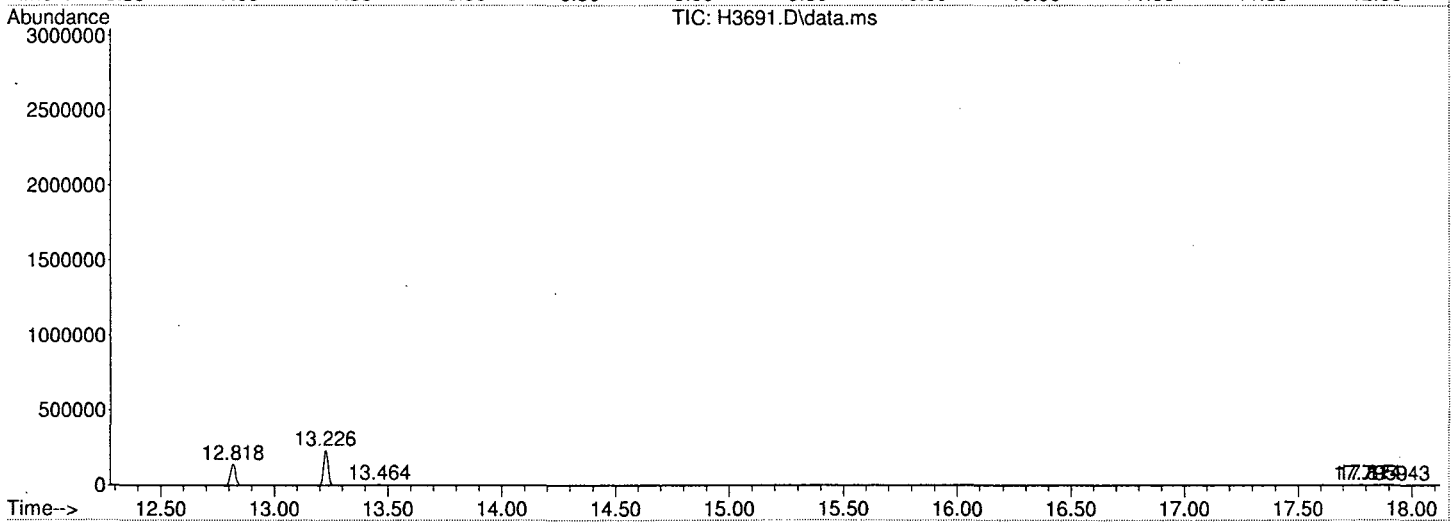
Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p



Library Search Compound Report

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

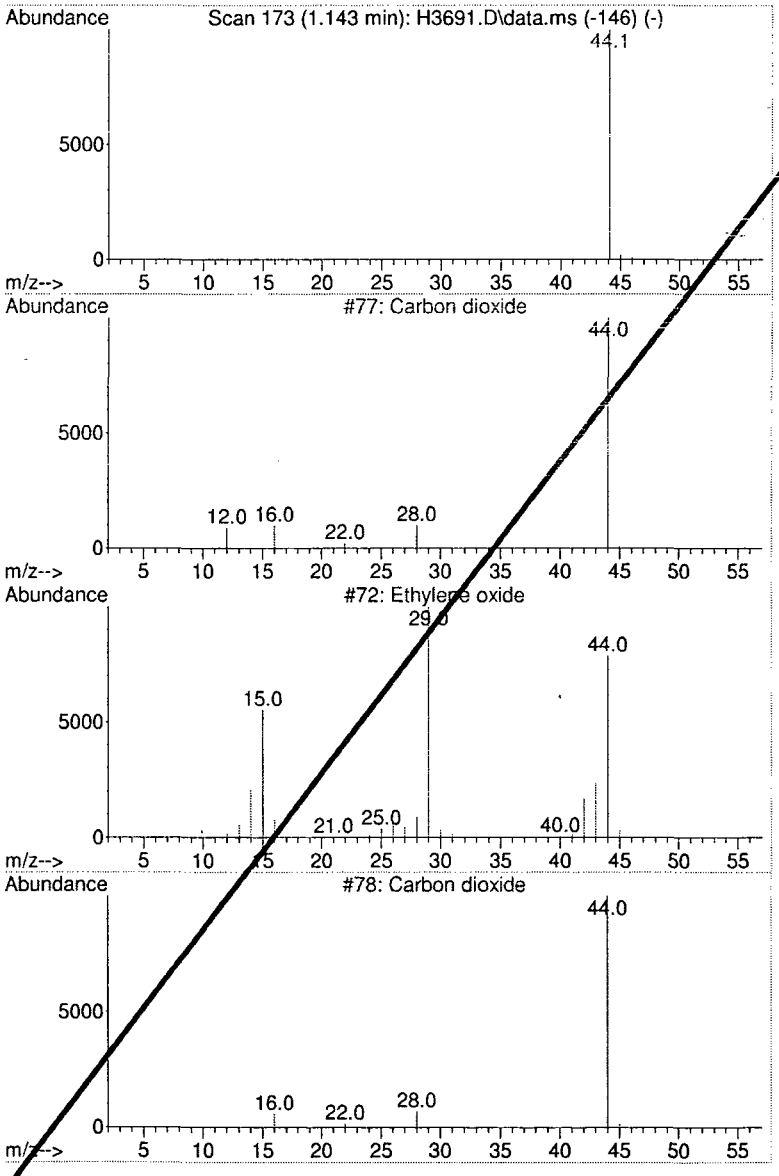
**********

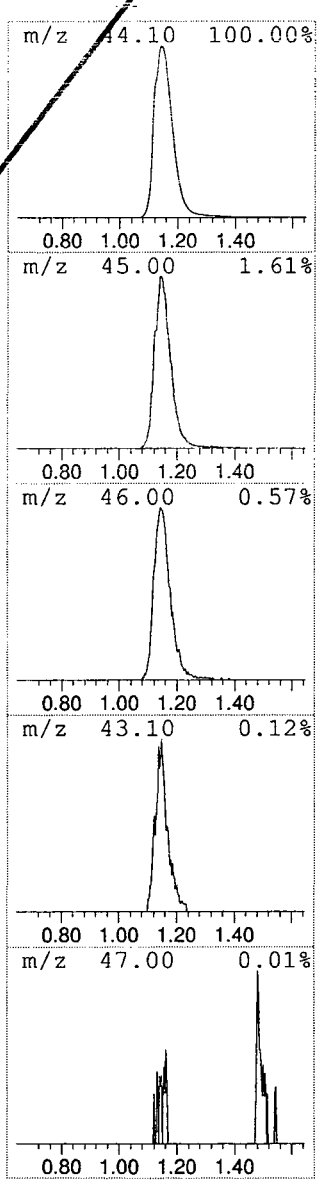
Peak Number 1 Carbon dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.143 | 1825.01 ug/L | 13552200 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |
| 3 | Carbon dioxide | 44 | CO2 | 000124-38-9 | 3 |
| 4 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 5 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

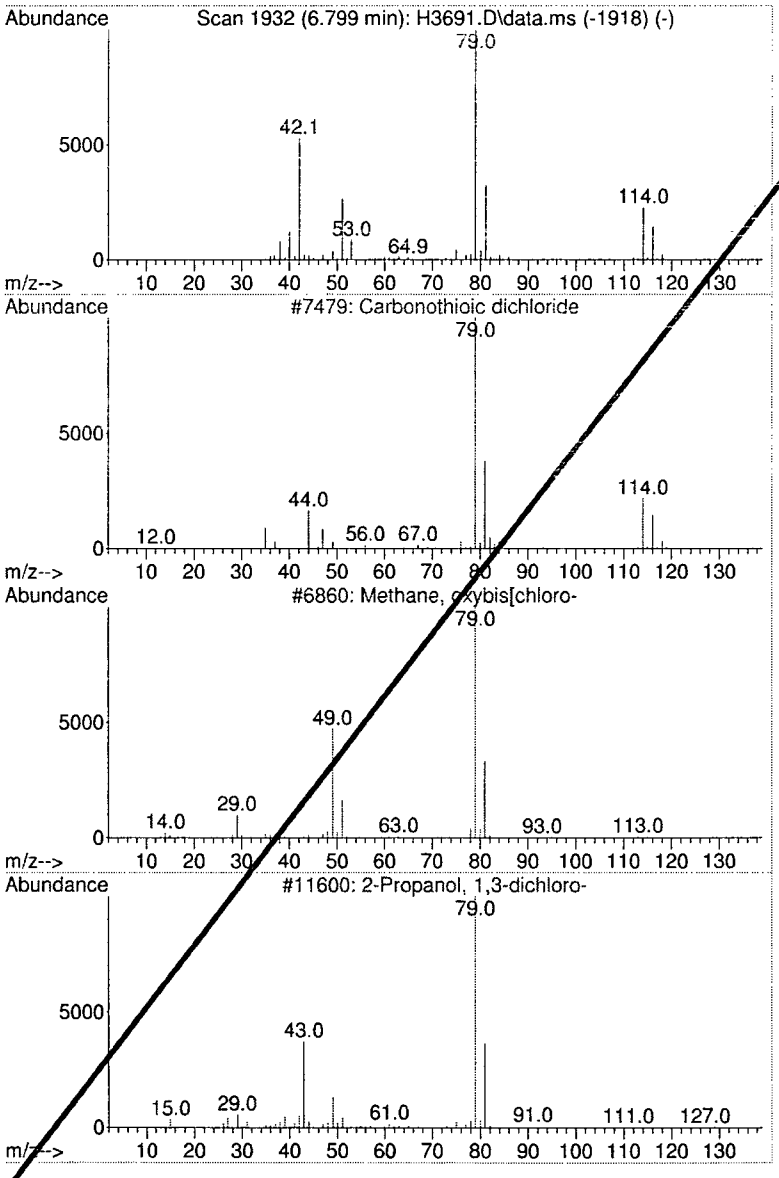
**********

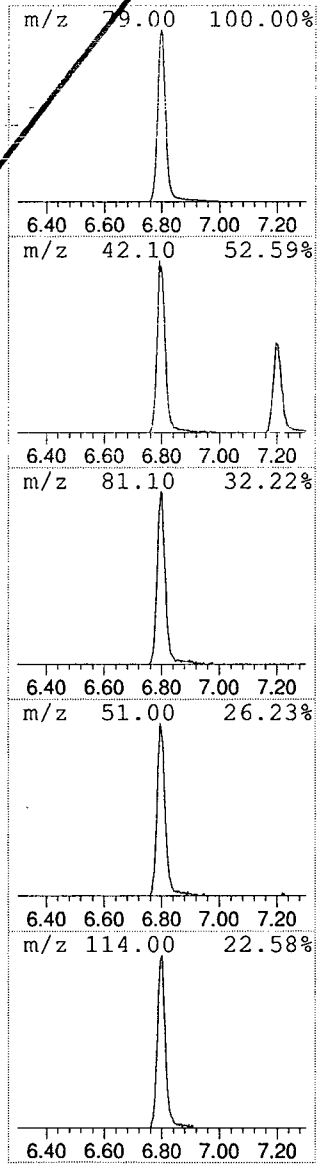
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 48.14 ug/L | 357489 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 47 |
| 2 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 3 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 23 |
| 4 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 17 |
| 5 | n-Propyl chloride | 78 | C3H7Cl | 000540-54-5 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3691.D
Acq On : 21 May 2012 16:27
Sample : 0015977-07
Misc : F5WC3 6.29GM SOIL
DataAcq Meth:VOAC.M

Vial: 3
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:18:35 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 1.143 | 1825.0 | ug/L | 13552200 | 1 | 5.371 | 371291 | 50.0 |
| Carbonothioic d... | 6.799 | 48.1 | ug/L | 357489 | 1 | 5.371 | 371291 | 50.0 |

6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date(s): 05/19/2012 05/19/2012

Heated Purge: (Y/N) Y Calibration Time(s): 1140 1416

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: _____ RRF2.5= H3662.D RRF005= H3661.D

RRF025= H3658.D RRF050= H3660.D RRF100= H3659.D

| COMPOUND | RRF2.5 | RRF005 | RRF025 | RRF050 | RRF100 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.102 | 0.166 | 0.257 | 0.233 | 0.259 | 0.203 | 33.4 |
| Chloromethane | 0.264 | 0.326 | 0.402 | 0.372 | 0.367 | 0.346 | 15.4 |
| Vinyl chloride | 0.146 | 0.150 | 0.225 | 0.237 | 0.263 | 0.204 | 26.0 |
| Bromomethane | 0.077 | 0.110 | 0.122 | 0.117 | 0.110 | 0.107 | 16.5 |
| Chloroethane | 0.069 | 0.078 | 0.107 | 0.091 | 0.055 | 0.080 | 24.8 |
| Trichlorofluoromethane | 0.371 | 0.390 | 0.409 | 0.345 | 0.329 | 0.369 | 8.8 |
| 1,1-Dichloroethene | 0.392 | 0.443 | 0.430 | 0.398 | 0.370 | 0.407 | 7.3 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.253 | 0.221 | 0.288 | 0.340 | 0.335 | 0.287 | 18.0 |
| Acetone | 0.117 | 0.094 | 0.095 | 0.099 | 0.094 | 0.100 | 9.8 |
| Carbon disulfide | 0.920 | 1.079 | 1.411 | 1.373 | 1.409 | 1.238 | 18.2 |
| Methyl acetate | 0.261 | 0.269 | 0.230 | 0.256 | 0.252 | 0.254 | 5.7 |
| Methylene chloride | 0.513 | 0.472 | 0.431 | 0.407 | 0.401 | 0.445 | 10.7 |
| trans-1,2-Dichloroethene | 0.489 | 0.564 | 0.620 | 0.573 | 0.571 | 0.563 | 8.3 |
| Methyl tert-butyl ether | 0.526 | 0.431 | 0.353 | 0.380 | 0.321 | 0.402 | 19.9 |
| 1,1-Dichloroethane | 1.049 | 1.116 | 1.208 | 1.165 | 1.169 | 1.141 | 5.3 |
| cis-1,2-Dichloroethene | 0.553 | 0.598 | 0.622 | 0.613 | 0.601 | 0.597 | 4.5 |
| 2-Butanone | 0.163 | 0.144 | 0.138 | 0.149 | 0.141 | 0.147 | 6.6 |
| Bromochloromethane | 0.247 | 0.251 | 0.237 | 0.239 | 0.237 | 0.242 | 2.6 |
| Chloroform | 1.063 | 1.099 | 1.145 | 1.069 | 1.053 | 1.086 | 3.4 |
| 1,1,1-Trichloroethane | 0.787 | 0.867 | 0.995 | 1.009 | 0.990 | 0.929 | 10.6 |
| Cyclohexane | 0.963 | 1.150 | 1.347 | 1.372 | 1.367 | 1.240 | 14.5 |
| Carbon tetrachloride | 0.490 | 0.609 | 0.730 | 0.752 | 0.810 | 0.678 | 18.9 |
| Benzene | 3.035 | 3.355 | 3.237 | 3.112 | 2.983 | 3.144 | 4.8 |
| 1,2-Dichloroethane | 0.836 | 0.834 | 0.749 | 0.713 | 0.736 | 0.774 | 7.4 |
| 1,4-Dioxane | 0.007 | 0.005 | 0.004 | 0.007 | 0.007 | 0.006 | 18.7 |
| Trichloroethene | 0.701 | 0.791 | 0.824 | 0.784 | 0.811 | 0.782 | 6.1 |
| Methylcyclohexane | 0.741 | 1.113 | 1.304 | 1.272 | 1.182 | 1.122 | 20.2 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date(s): 05/19/2012 05/19/2012

Heated Purge: (Y/N) Y Calibration Time(s): 1140 1416

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: _____ RRF2.5= H3662.D RRF005= H3661.D

RRF025= H3658.D RRF050= H3660.D RRF100= H3659.D

| COMPOUND | RRF2.5 | RRF005 | RRF025 | RRF050 | RRF100 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.786 | 0.900 | 0.834 | 0.802 | 0.766 | 0.818 | 6.4 |
| Bromodichloromethane | 0.794 | 0.835 | 0.882 | 0.906 | 0.902 | 0.864 | 5.6 |
| cis-1,3-Dichloropropene | 0.818 | 0.943 | 1.008 | 1.072 | 1.046 | 0.977 | 10.4 |
| 4-Methyl-2-pentanone | 0.391 | 0.373 | 0.365 | 0.413 | 0.397 | 0.388 | 4.9 |
| Toluene | 2.797 | 3.158 | 3.361 | 3.208 | 3.128 | 3.130 | 6.6 |
| trans-1,3-Dichloropropene | 0.615 | 0.696 | 0.794 | 0.841 | 0.854 | 0.760 | 13.4 |
| 1,1,2-Trichloroethane | 0.497 | 0.499 | 0.437 | 0.465 | 0.453 | 0.470 | 5.8 |
| Tetrachloroethene | 0.484 | 0.607 | 0.671 | 0.641 | 0.661 | 0.613 | 12.4 |
| 2-Hexanone | 0.399 | 0.284 | 0.288 | 0.328 | 0.281 | 0.316 | 15.9 |
| Dibromochloromethane | 0.452 | 0.479 | 0.530 | 0.556 | 0.569 | 0.517 | 9.7 |
| 1,2-Dibromoethane | 0.457 | 0.448 | 0.422 | 0.458 | 0.453 | 0.448 | 3.3 |
| Chlorobenzene | 2.172 | 2.193 | 2.153 | 2.051 | 1.997 | 2.113 | 4.0 |
| Ethylbenzene | 2.589 | 2.946 | 3.518 | 3.367 | 3.374 | 3.159 | 12.1 |
| o-Xylene | 0.943 | 1.079 | 1.328 | 1.261 | 1.242 | 1.170 | 13.4 |
| m,p-Xylene | 0.975 | 1.138 | 1.401 | 1.323 | 1.331 | 1.233 | 14.1 |
| Styrene | 1.573 | 1.746 | 2.025 | 1.967 | 1.945 | 1.851 | 10.2 |
| Bromoform | 0.465 | 0.524 | 0.575 | 0.619 | 0.645 | 0.566 | 12.9 |
| Isopropylbenzene | 1.986 | 2.349 | 3.219 | 3.094 | 3.225 | 2.775 | 20.6 |
| 1,1,2,2-Tetrachloroethane | 0.449 | 0.483 | 0.433 | 0.454 | 0.447 | 0.453 | 4.1 |
| 1,3-Dichlorobenzene | 3.138 | 3.263 | 3.452 | 3.273 | 3.201 | 3.265 | 3.6 |
| 1,4-Dichlorobenzene | 3.340 | 3.458 | 3.395 | 3.156 | 3.092 | 3.288 | 4.8 |
| 1,2-Dichlorobenzene | 3.166 | 3.254 | 3.043 | 2.850 | 2.733 | 3.009 | 7.2 |
| 1,2-Dibromo-3-chloropropane | 0.134 | 0.133 | 0.142 | 0.148 | 0.158 | 0.143 | 7.3 |
| 1,2,4-Trichlorobenzene | 1.594 | 1.597 | 1.596 | 1.577 | 1.596 | 1.592 | 0.5 |
| 1,2,3-Trichlorobenzene | 1.419 | 1.395 | 1.261 | 1.262 | 1.279 | 1.323 | 5.9 |

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date(s): 05/19/2012 05/19/2012

Heated Purge: (Y/N) Y Calibration Time(s): 1140 1416

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: _____ RRF2.5= H3662.D RRF005= H3661.D

RRF025= H3658.D RRF050= H3660.D RRF100= H3659.D

| COMPOUND | RRF2.5 | RRF005 | RRF025 | RRF050 | RRF100 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.134 | 0.115 | 0.153 | 0.178 | 0.181 | 0.152 | 18.5 |
| Chloroethane-d5 | 0.110 | 0.086 | 0.095 | 0.089 | 0.039 | 0.084 | 31.8 |
| 1,1-Dichloroethene-d2 | 1.202 | 1.009 | 0.955 | 0.954 | 0.875 | 0.999 | 12.3 |
| 2-Butanone-d5 | 0.225 | 0.219 | 0.184 | 0.209 | 0.208 | 0.209 | 7.5 |
| Chloroform-d | 1.336 | 1.214 | 1.084 | 1.064 | 1.022 | 1.144 | 11.3 |
| 1,2-Dichloroethane-d4 | 0.741 | 0.683 | 0.550 | 0.556 | 0.543 | 0.615 | 14.9 |
| Benzene-d6 | 3.592 | 3.420 | 2.998 | 3.000 | 2.801 | 3.162 | 10.4 |
| 1,2-Dichloropropane-d6 | 1.014 | 0.940 | 0.803 | 0.808 | 0.769 | 0.867 | 12.1 |
| Toluene-d8 | 2.825 | 2.806 | 2.735 | 2.688 | 2.536 | 2.718 | 4.3 |
| trans-1,3-Dichloropropene-d4 | 0.673 | 0.639 | 0.660 | 0.751 | 0.745 | 0.694 | 7.4 |
| 2-Hexanone-d5 | 0.153 | 0.154 | 0.147 | 0.183 | 0.185 | 0.164 | 11.2 |
| 1,4-Dioxane-d8 | 0.009 | 0.008 | 0.005 | 0.008 | 0.009 | 0.008 | 19.2 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.574 | 0.542 | 0.417 | 0.453 | 0.438 | 0.485 | 14.2 |
| 1,2-Dichlorobenzene-d4 | 2.237 | 1.911 | 1.773 | 1.740 | 1.631 | 1.858 | 12.6 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 142212 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 109771 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 44090 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 21772 | 61.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 123.58%# | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 13576 | 58.96 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 117.92% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 135852 | 54.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 109.58% | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 52389 | 104.30 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 104.30% | | |
| 24) Chloroform-d | 4.333 | 84 | 154113 | 54.53 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 109.06% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 78152 | 51.51 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 103.02% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 15365 | 843.50 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 84.35% | | |
| 34) Benzene-d6 | 4.889 | 84 | 329072 | 54.47 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 108.94% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 88196 | 53.33 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 106.66% | | |
| 43) Toluene-d8 | 7.201 | 98 | 300260 | 58.26 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 116.52% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 72482 | 57.16 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 114.32% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 32257 | 109.06 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 109.06% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 45738 | 49.85 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 99.70% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 78165 | 54.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 109.38% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 36597 | 81.9772 ug/L | 96 |
| 3) Chloromethane | 1.397 | 50 | 57133 | 68.6104 ug/L | 95 |
| 5) Vinyl Chloride | 1.490 | 62 | 32038 | 69.1710 ug/L | 91 |
| 6) Bromomethane | 1.751 | 94 | 17284 | 65.8674 ug/L | 89 |
| 8) Chloroethane | 1.831 | 64 | 15147 | 71.7584 ug/L | 94 |
| 9) Trichlorofluoromethane | 2.037 | 101 | 58138 | 63.2053 ug/L | 98 |
| 11) 1,1-Dichloroethene | 2.455 | 96 | 61159 | 60.6967 ug/L | 97 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.464 | 101 | 40927 | 61.3090 ug/L | 93 |
| 13) Acetone | 2.497 | 43 | 26989 | 110.6916 ug/L | 98 |
| 14) Carbon Disulfide | 2.628 | 76 | 200727 | 68.7087 ug/L | 100 |
| 15) Methyl Acetate | 2.783 | 43 | 32736 | 53.5849 ug/L | 98 |
| 16) Methylene Chloride | 2.860 | 84 | 61228 | 55.7688 ug/L | 98 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 88129 | 64.5215 ug/L | 97 |
| 18) Methyl tert-Butyl Ether | 3.111 | 73 | 50270 | 49.6739 ug/L | 98 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 171764 | 62.3876 ug/L | 99 |
| 21) cis-1,2-Dichloroethene | 4.027 | 96 | 88497 | 61.2092 ug/L | 97 |
| 22) 2-Butanone | 4.040 | 43 | 39155 | 109.8129 ug/L | 97 |
| 23) Bromochloromethane | 4.262 | 128 | 33744 | 57.4181 ug/L | 98 |
| 25) Chloroform | 4.352 | 83 | 162836 | 61.4063 ug/L | 100 |
| 27) 1,2-Dichloroethane | 4.943 | 62 | 106517 | 56.4143 ug/L | 98 |
| 29) 1,4-Dioxane | 6.104 | 88 | 12734 | 893.4170 ug/L # | 82 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.538 | 97 | 109265 | 63.7077 ug/L | 98 |
| 32) Cyclohexane | 4.606 | 56 | 147899 | 65.1711 ug/L | 97 |
| 33) Carbon Tetrachloride | 4.722 | 117 | 80139 | 66.0554 ug/L | 99 |
| 35) Benzene | 4.931 | 78 | 355347 | 59.7340 ug/L | 100 |
| 36) Trichloroethene | 5.667 | 95 | 90432 | 62.2858 ug/L | 99 |
| 38) Methylcyclohexane | 5.902 | 83 | 143168 | 68.5511 ug/L | 95 |
| 39) 1,2-Dichloropropane | 5.918 | 63 | 91593 | 59.0704 ug/L | 98 |
| 40) Bromodichloromethane | 6.268 | 83 | 96810 | 60.6145 ug/L | 98 |
| 41) cis-1,3-Dichloropropene | 6.850 | 75 | 110687 | 61.5905 ug/L | 98 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 80212 | 111.8225 ug/L | 99 |
| 44) Toluene | 7.291 | 91 | 368981 | 62.8775 ug/L | 99 |
| 46) trans-1,3-Dichloropropene | 7.606 | 75 | 87159 | 63.1344 ug/L | 98 |
| 47) 1,1,2-Trichloroethane | 7.847 | 97 | 47961 | 54.4373 ug/L | 99 |
| 48) Tetrachloroethene | 8.056 | 164 | 73609 | 65.2297 ug/L | 98 |
| 50) 2-Hexanone | 8.246 | 43 | 63161 | 104.9136 ug/L | 99 |
| 51) Dibromochloromethane | 8.400 | 129 | 58134 | 61.6152 ug/L | 99 |
| 52) 1,2-Dibromoethane | 8.541 | 107 | 46326 | 55.7976 ug/L | 99 |
| 53) Chlorobenzene | 9.303 | 112 | 236300 | 59.0933 ug/L | 99 |
| 54) Ethylbenzene | 9.506 | 91 | 386211 | 66.1345 ug/L | 99 |
| 55) m,p-Xylene | 9.699 | 106 | 153774 | 67.5255 ug/L | 98 |
| 56) o-Xylene | 10.310 | 106 | 145749 | 67.1702 ug/L | 98 |
| 57) Styrene | 10.339 | 104 | 222337 | 64.7730 ug/L | 100 |
| 58) Isopropylbenzene | 10.934 | 105 | 353328 | 70.2598 ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.435 | 83 | 47506 | 56.1236 ug/L | 99 |
| 62) Bromoform | 10.583 | 173 | 25346 | 61.7619 ug/L | 97 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 152195 | 61.6901 ug/L | 100 |
| 64) 1,4-Dichlorobenzene | 12.843 | 146 | 149685 | 59.7787 ug/L | 98 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 134170 | 58.1915 ug/L | 100 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 6273 | 59.9840 ug/L | 94 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 70355 | 58.9883 ug/L | 98 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 55587 | 55.7635 ug/L | 98 |

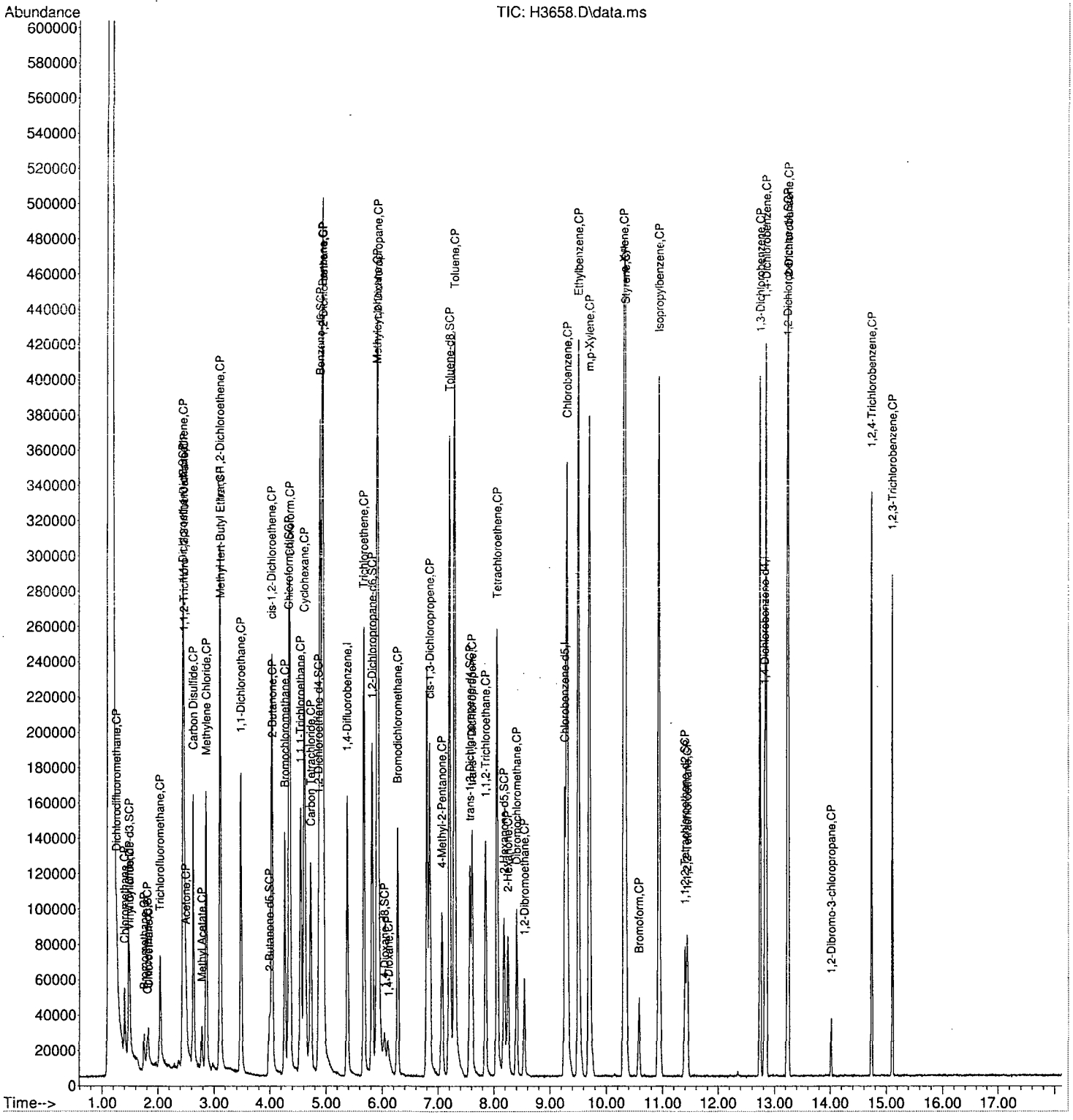
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration






00103

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | CP | Dichlorodifluoromethane | 0.203 | 0.257 | -26.6 | 100 | 0.00 |
| 3 | CP | Chloromethane | 0.346 | 0.402 | -16.2 | 100 | 0.00 |
| 4 | SCP | Vinyl Chloride-d3 | 0.152 | 0.153 | -0.7 | 100 | 0.00 |
| 5 | CP | Vinyl Chloride | 0.204 | 0.225 | -10.3 | 100 | 0.00 |
| 6 | CP | Bromomethane | 0.107 | 0.122 | -14.0 | 100 | 0.00 |
| 7 | SCP | Chloroethane-d5 | 0.084 | 0.095 | -13.1 | 100 | 0.00 |
| 8 | CP | Chloroethane | 0.080 | 0.107 | -33.8 | 100 | 0.00 |
| 9 | CP | Trichlorofluoromethane | 0.369 | 0.409 | -10.8 | 100 | 0.00 |
| 10 | SCP | 1,1-Dichloroethene-d2 | 0.999 | 0.955 | 4.4 | 100 | 0.00 |
| 11 | CP | 1,1-Dichloroethene | 0.407 | 0.430 | -5.7 | 100 | 0.00 |
| 12 | CP | 1,1,2-Trichloro-1,2,2-trifl | 0.287 | 0.288 | -0.3 | 100 | 0.00 |
| 13 | CP | Acetone | 0.100 | 0.095 | 5.0 | 100 | 0.00 |
| 14 | CP | Carbon Disulfide | 1.238 | 1.411 | -14.0 | 100 | 0.00 |
| 15 | CP | Methyl Acetate | 0.254 | 0.230 | 9.4 | 100 | 0.00 |
| 16 | CP | Methylene Chloride | 0.445 | 0.431 | 3.1 | 100 | 0.00 |
| 17 | CP | trans-1,2-Dichloroethene | 0.563 | 0.620 | -10.1 | 100 | 0.00 |
| 18 | CP | Methyl tert-Butyl Ether | 0.402 | 0.353 | 12.2 | 100 | 0.00 |
| 19 | CP | 1,1-Dichloroethane | 1.141 | 1.208 | -5.9 | 100 | 0.00 |
| 20 | SCP | 2-Butanone-d5 | 0.209 | 0.184 | 12.0 | 100 | 0.00 |
| 21 | CP | cis-1,2-Dichloroethene | 0.597 | 0.622 | -4.2 | 100 | 0.00 |
| 22 | CP | 2-Butanone | 0.147 | 0.138 | 6.1 | 100 | 0.00 |
| 23 | CP | Bromochloromethane | 0.242 | 0.237 | 2.1 | 100 | 0.00 |
| 24 | SCP | Chloroform-d | 1.144 | 1.084 | 5.2 | 100 | 0.00 |
| 25 | CP | Chloroform | 1.086 | 1.145 | -5.4 | 100 | 0.00 |
| 26 | SCP | 1,2-Dichloroethane-d4 | 0.615 | 0.550 | 10.6 | 100 | 0.00 |
| 27 | CP | 1,2-Dichloroethane | 0.774 | 0.749 | 3.2 | 100 | 0.00 |
| 28 | SCP | 1,4-Dioxane-d8 | 0.008 | 0.005 | 37.5 | 100 | 0.00 |
| 29 | CP | 1,4-Dioxane | 0.006 | 0.004# | 33.3 | 100 | 0.00 |
| 30 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 31 | CP | 1,1,1-Trichloroethane | 0.929 | 0.995 | -7.1 | 100 | 0.00 |
| 32 | CP | Cyclohexane | 1.240 | 1.347 | -8.6 | 100 | 0.00 |
| 33 | CP | Carbon Tetrachloride | 0.678 | 0.730 | -7.7 | 100 | 0.00 |
| 34 | SCP | Benzene-d6 | 3.162 | 2.998 | 5.2 | 100 | 0.00 |
| 35 | CP | Benzene | 3.144 | 3.237 | -3.0 | 100 | 0.00 |
| 36 | CP | Trichloroethene | 0.782 | 0.824 | -5.4 | 100 | 0.00 |
| 37 | SCP | 1,2-Dichloropropane-d6 | 0.867 | 0.803 | 7.4 | 100 | 0.00 |
| 38 | CP | Methylcyclohexane | 1.122 | 1.304 | -16.2 | 100 | 0.00 |
| 39 | CP | 1,2-Dichloropropane | 0.818 | 0.834 | -2.0 | 100 | 0.00 |
| 40 | CP | Bromodichloromethane | 0.864 | 0.882 | -2.1 | 100 | 0.00 |
| 41 | CP | cis-1,3-Dichloropropene | 0.977 | 1.008 | -3.2 | 100 | 0.00 |
| 42 | CP | 4-Methyl-2-Pentanone | 0.388 | 0.365 | 5.9 | 100 | 0.00 |
| 43 | SCP | Toluene-d8 | 2.718 | 2.735 | -0.6 | 100 | 0.00 |
| 44 | CP | Toluene | 3.130 | 3.361 | -7.4 | 100 | 0.00 |
| 45 | SCP | trans-1,3-Dichloropropene-d | 0.694 | 0.660 | 4.9 | 100 | 0.00 |
| 46 | CP | trans-1,3-Dichloropropene | 0.760 | 0.794 | -4.5 | 100 | 0.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 47 | CP | 1,1,2-Trichloroethane | 0.470 | 0.437 | 7.0 | 100 | 0.00 |
| 48 | CP | Tetrachloroethene | 0.613 | 0.671 | -9.5 | 100 | 0.00 |
| 49 | SCP | 2-Hexanone-d5 | 0.164 | 0.147 | 10.4 | 100 | 0.00 |
| 50 | CP | 2-Hexanone | 0.316 | 0.288 | 8.9 | 100 | 0.00 |
| 51 | CP | Dibromochloromethane | 0.517 | 0.530 | -2.5 | 100 | 0.00 |
| 52 | CP | 1,2-Dibromoethane | 0.448 | 0.422 | 5.8 | 100 | 0.00 |
| 53 | CP | Chlorobenzene | 2.113 | 2.153 | -1.9 | 100 | 0.00 |
| 54 | CP | Ethylbenzene | 3.159 | 3.518 | -11.4 | 100 | 0.00 |
| 55 | CP | m,p-Xylene | 1.233 | 1.401 | -13.6 | 100 | 0.00 |
| 56 | CP | o-Xylene | 1.170 | 1.328 | -13.5 | 100 | 0.00 |
| 57 | CP | Styrene | 1.851 | 2.025 | -9.4 | 100 | 0.00 |
| 58 | CP | Isopropylbenzene | 2.775 | 3.219 | -16.0 | 100 | 0.00 |
| 59 | SCP | 1,1,2,2-Tetrachloroethane-d | 0.485 | 0.417 | 14.0 | 100 | 0.00 |
| 60 | CP | 1,1,2,2-Tetrachloroethane | 0.453 | 0.433 | 4.4 | 100 | 0.00 |
| 61 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 62 | CP | Bromoform | 0.566 | 0.575 | -1.6 | 100 | 0.00 |
| 63 | CP | 1,3-Dichlorobenzene | 3.265 | 3.452 | -5.7 | 100 | 0.00 |
| 64 | CP | 1,4-Dichlorobenzene | 3.288 | 3.395 | -3.3 | 100 | 0.00 |
| 65 | SCP | 1,2-Dichlorobenzene-d4 | 1.858 | 1.773 | 4.6 | 100 | 0.00 |
| 66 | CP | 1,2-Dichlorobenzene | 3.009 | 3.043 | -1.1 | 100 | 0.00 |
| 67 | CP | 1,2-Dibromo-3-chloropropane | 0.143 | 0.142 | 0.7 | 100 | 0.00 |
| 68 | CP | 1,2,4-Trichlorobenzene | 1.592 | 1.596 | -0.3 | 100 | 0.00 |
| 69 | CP | 1,2,3-Trichlorobenzene | 1.323 | 1.261 | 4.7 | 100 | 0.00 |

(#) = Out of Range SPCC's out = 1 CCC's out = 0

SOSH3658.M Mon May 21 11:55:36 2012

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3659.D
Acq On : 19 May 2012 12:06
Sample : 2E21002-CAL5
Misc : VSTD1005D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 66
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

Quant Time: May 19 15:04:36 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WA4

05/22/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.368 | 114 | 149105 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.258 | 117 | 117444 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 51019 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 107763 | 260.21 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 520.42%# | | |
| 7) Chloroethane-d5 | 1.789 | 69 | 23273 | 112.87 ug/L | -0.02 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 225.74%# | | |
| 10) 1,1-Dichloroethene-d2 | 2.439 | 63 | 521774 | 189.99 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 379.98%# | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 248057 | 303.41 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 303.41%# | | |
| 24) Chloroform-d | 4.329 | 84 | 609679 | 199.17 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 398.34%# | | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 323877 | 191.46 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 382.92%# | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 102690 | 5446.23 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 544.62%# | | |
| 34) Benzene-d6 | 4.889 | 84 | 1315824 | 184.28 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 368.56%# | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 361131 | 176.87 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 353.74%# | | |
| 43) Toluene-d8 | 7.204 | 98 | 1191327 | 194.45 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 388.90%# | | |
| 45) trans-1,3-Dichloroprop... | 7.564 | 79 | 350018 | 214.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 429.38%# | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 174204 | 432.87 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 432.87%# | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 205694 | 194.32 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 388.64%# | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 332860 | 179.20 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 358.40%# | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.252 | 85 | 154454 | 226.0064 ug/L | 100 |
| 3) Chloromethane | 1.394 | 50 | 219143m | 159.5737 ug/L | |
| 5) Vinyl Chloride | 1.487 | 62 | 156910 | 266.5296 ug/L | 97 |
| 6) Bromomethane | 1.735 | 94 | 65821m | 180.9862 ug/L | |
| 8) Chloroethane | 1.815 | 64 | 32673 | 125.1731 ug/L | 86 |
| 9) Trichlorofluoromethane | 2.024 | 101 | 195980 | 202.0732 ug/L | 100 |
| 11) 1,1-Dichloroethene | 2.448 | 96 | 220660 | 180.0576 ug/L | 91 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.464 | 101 | 199930 | 235.0445 ug/L | 90 |
| 13) Acetone | 2.503 | 43 | 111660 | 329.8575 ug/L | 95 |
| 14) Carbon Disulfide | 2.619 | 76 | 840560 | 204.6756 ug/L | 99 |
| 15) Methyl Acetate | 2.783 | 43 | 150153 | 183.8049 ug/L | 99 |
| 16) Methylene Chloride | 2.854 | 84 | 238886 | 163.7545 ug/L | 98 |
| 17) trans-1,2-Dichloroethene | 3.098 | 96 | 340661 | 188.1491 ug/L | 97 |
| 18) Methyl tert-Butyl Ether | 3.114 | 73 | 191321 | 95.9440 ug/L | 100 |
| 19) 1,1-Dichloroethane | 3.471 | 63 | 696971 | 192.8627 ug/L | 99 |
| 21) cis-1,2-Dichloroethene | 4.027 | 96 | 358526 | 188.3848 ug/L | 97 |
| 22) 2-Butanone | 4.046 | 43 | 167980 | 329.8839 ug/L | 97 |
| 23) Bromochloromethane | 4.255 | 128 | 141456 | 191.1029 ug/L | 94 |
| 25) Chloroform | 4.352 | 83 | 628078 | 195.7761 ug/L | 99 |
| 27) 1,2-Dichloroethane | 4.943 | 62 | 438840 | 191.9556 ug/L | 99 |
| 29) 1,4-Dioxane | 6.098 | 88 | 78858 | 3403.4766 ug/L | 98 |

AC S.P.
AC S.P.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3659.D
Acq On : 19 May 2012 12:06
Sample : 2E21002-CAL5
Misc : VSTD1005D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 66
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:04:36 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.535 | 97 | 464888 | 211.2663 ug/L | 100 |
| 32) Cyclohexane | 4.606 | 56 | 642174 | 188.1598 ug/L | 94 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 380409 | 241.7506 ug/L | 98 |
| 35) Benzene | 4.931 | 78 | 1401297 | 183.8880 ug/L | 100 |
| 36) Trichloroethene | 5.670 | 95 | 381010 | 195.8538 ug/L | 98 |
| 38) Methylcyclohexane | 5.902 | 83 | 555094 | 185.7710 ug/L | 95 |
| 39) 1,2-Dichloropropane | 5.921 | 63 | 359819 | 174.8738 ug/L | 99 |
| 40) Bromodichloromethane | 6.268 | 83 | 423889 | 208.1064 ug/L | 99 |
| 41) cis-1,3-Dichloropropene | 6.847 | 75 | 491484 | 200.6782 ug/L | 99 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 373148 | 354.9499 ug/L | 98 |
| 44) Toluene | 7.291 | 91 | 1469342 | 192.4230 ug/L | 100 |
| 46) trans-1,3-Dichloropropene | 7.609 | 75 | 401264 | 214.2402 ug/L | 100 |
| 47) 1,1,2-Trichloroethane | 7.850 | 97 | 212580 | 189.6479 ug/L | 97 |
| 48) Tetrachloroethene | 8.053 | 164 | 310563 | 210.6067 ug/L | 98 |
| 50) 2-Hexanone | 8.246 | 43 | 263909 | 338.0762 ug/L | 99 |
| 51) Dibromochloromethane | 8.400 | 129 | 267327 | 222.6965 ug/L | 99 |
| 52) 1,2-Dibromoethane | 8.541 | 107 | 212742 | 196.8943 ug/L | 99 |
| 53) Chlorobenzene | 9.307 | 112 | 938081 | 185.7205 ug/L | 100 |
| 54) Ethylbenzene | 9.509 | 91 | 1585211 | 200.9696 ug/L | 99 |
| 55) m,p-Xylene | 9.699 | 106 | 625360 | 201.7361 ug/L | 96 |
| 56) o-Xylene | 10.313 | 106 | 583406 | 195.3076 ug/L | 96 |
| 57) Styrene | 10.339 | 104 | 913915 | 199.9547 ug/L | 98 |
| 58) Isopropylbenzene | 10.934 | 105 | 1515096 | 227.8627 ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.438 | 83 | 210050 | 201.9583 ug/L | 99 |
| 62) Bromoform | 10.583 | 173 | 131660 | 218.7965 ug/L | 99 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 653312 | 187.7438 ug/L | 100 |
| 64) 1,4-Dichlorobenzene | 12.847 | 146 | 631078 | 177.0321 ug/L | 99 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 557654 | 179.2874 ug/L | 100 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 32259 | 225.8206 ug/L | 98 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 325711 | 186.2587 ug/L | 99 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 260960 | 175.8100 ug/L | 99 |

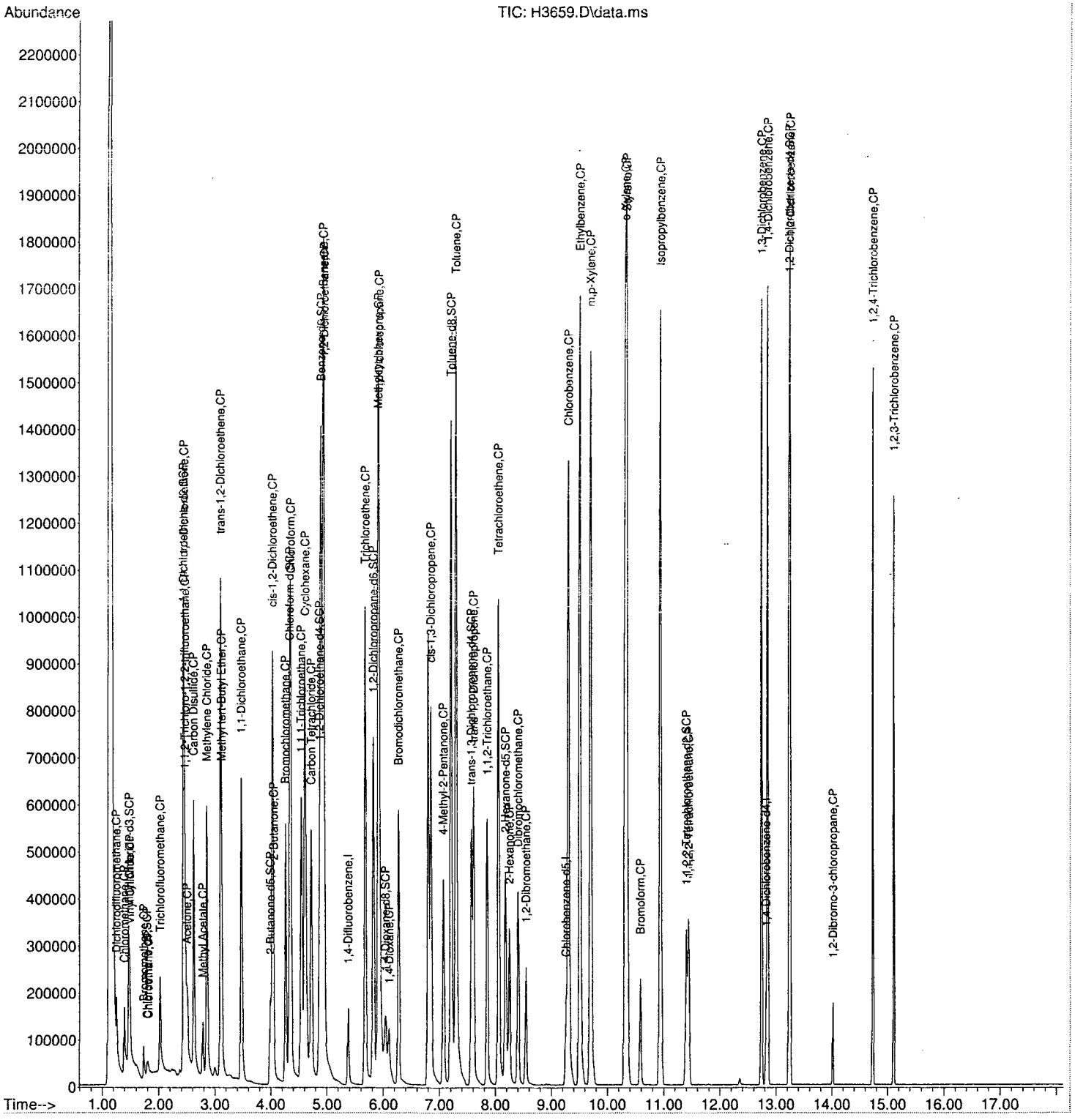
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3659.D
Acq On : 19 May 2012 12:06
Sample : 2E21002-CAL5
Misc : VSTD1005D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 66
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:04:36 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

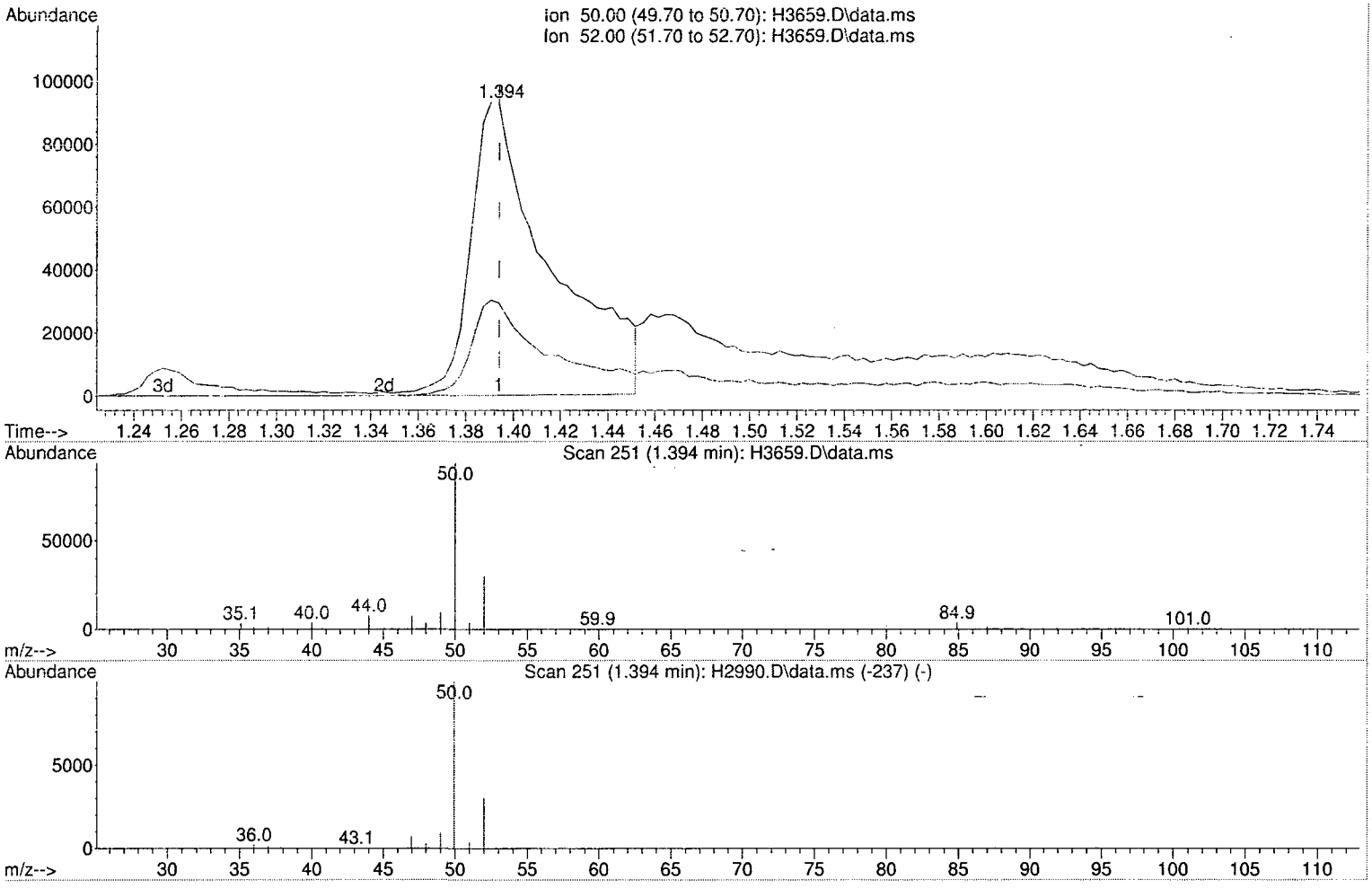


Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\H3659.D
Acq On : 19 May 2012 12:06
Sample : 2E21002-CAL5
Misc : VSTD1005D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 66
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:04:36 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3659.D\data.ms

**(3) Chloromethane (CP)**

**1.394min (-0.000) 159.57 ug/L m** AC S.P.

**response 219143**

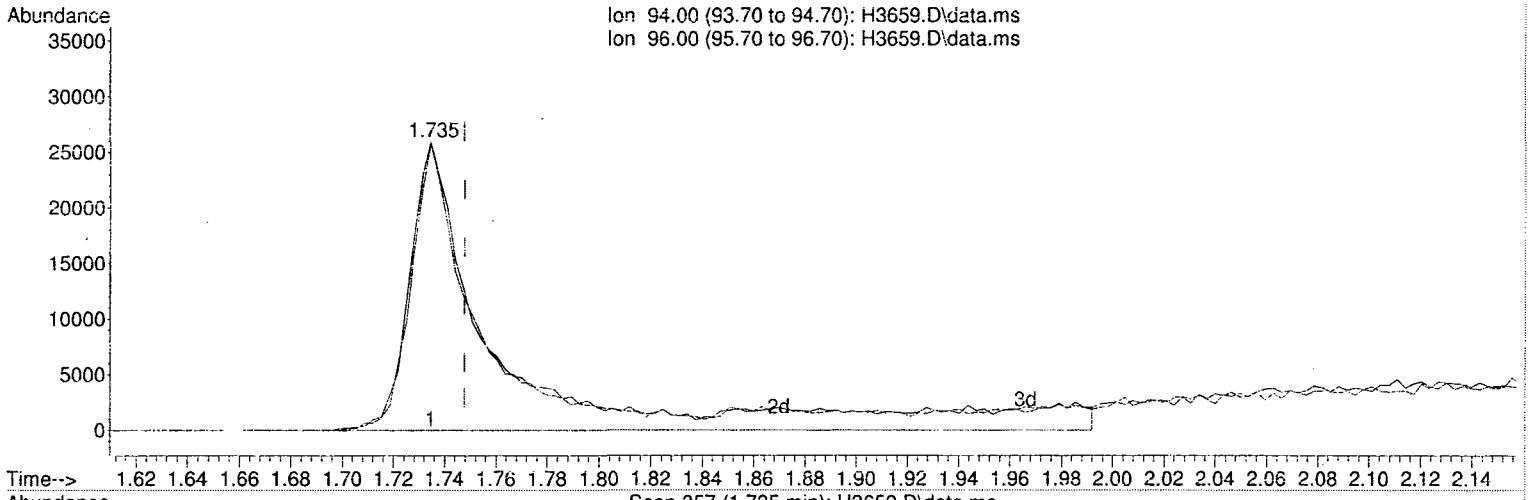
| Ion | Exp% | Act% |
|---|---|---|
| 50.00 | 100.00 | 100.00 |
| 52.00 | 32.20 | 47.76 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

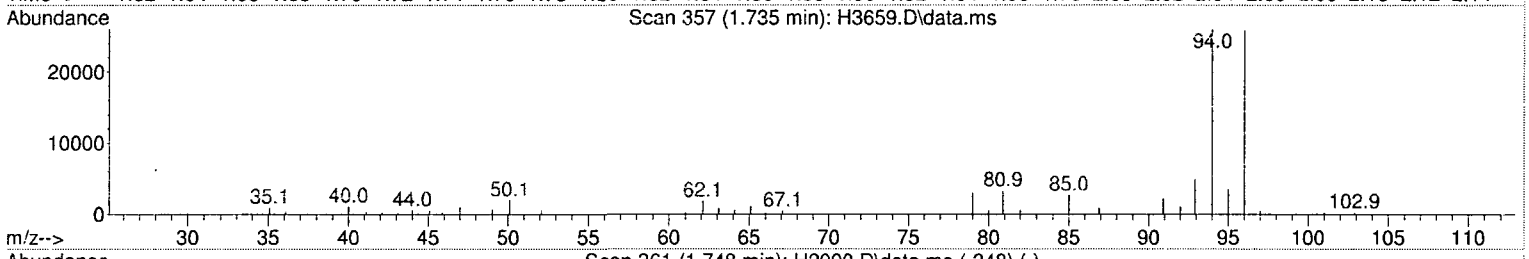
Quantitation Report (Qedit)

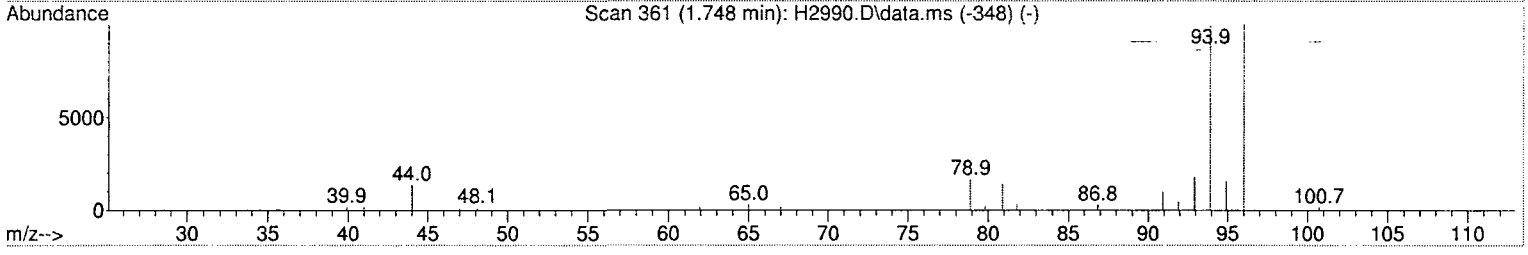
Data File : C:\msdchem\1\data\H3659.D
Acq On : 19 May 2012 12:06
Sample : 2E21002-CAL5
Misc : VSTD1005D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 66
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:04:36 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3659.D\data.ms

**(6) Bromomethane (CP)**

**1.735min (-0.013) 180.99 ug/L m** AC S.P.

**response 65821**

| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100.00 | 100.00 |
| 96.00 | 79.60 | 69.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3660.D
Acq On : 19 May 2012 12:32
Sample : 2E21002-CAL4
Misc : VSTD0505D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 67
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 19 14:55:41 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 157560 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 120090 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 50588 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 56241 | 128.52 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 257.04%# | | |
| 7) Chloroethane-d5 | 1.802 | 69 | 28191 | 129.38 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 258.76%# | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 300767 | 103.64 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 207.28%# | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 131563 | 152.29 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 152.29% | | |
| 24) Chloroform-d | 4.333 | 84 | 335196 | 103.63 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 207.26%# | | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 175210 | 98.02 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 196.04%# | | |
| 28) 1,4-Dioxane-d8 | 6.034 | 96 | 52006 | 2610.16 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 261.02%# | | |
| 34) Benzene-d6 | 4.889 | 84 | 720516 | 98.68 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 197.36%# | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 194088 | 92.97 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 185.94%# | | |
| 43) Toluene-d8 | 7.201 | 98 | 645526 | 103.04 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 206.08%# | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 180304 | 108.16 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 216.32%# | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 88113 | 214.12 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 214.12%# | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 108898 | 100.61 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 201.22%# | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 176055 | 95.59 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 191.18%# | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 73377 | 101.6080 ug/L | 93 |
| 3) Chloromethane | 1.394 | 50 | 117212 | 80.7704 ug/L | 98 |
| 5) Vinyl Chloride | 1.487 | 62 | 74579 | 119.8830 ug/L | 99 |
| 6) Bromomethane | 1.741 | 94 | 36956 | 96.1639 ug/L | 84 |
| 8) Chloroethane | 1.825 | 64 | 28596 | 103.6749 ug/L | 93 |
| 9) Trichlorofluoromethane | 2.037 | 101 | 108738 | 106.1023 ug/L | 96 |
| 11) 1,1-Dichloroethene | 2.455 | 96 | 125540 | 96.9430 ug/L # | 93 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.468 | 101 | 107277 | 119.3507 ug/L | 98 |
| 13) Acetone | 2.497 | 43 | 62164 | 173.7857 ug/L | 98 |
| 14) Carbon Disulfide | 2.625 | 76 | 432540 | 99.6713 ug/L | 100 |
| 15) Methyl Acetate | 2.780 | 43 | 80722 | 93.5107 ug/L | 98 |
| 16) Methylene Chloride | 2.857 | 84 | 128155 | 83.1351 ug/L | 97 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 180632 | 94.4106 ug/L | 98 |
| 18) Methyl tert-Butyl Ether | 3.111 | 73 | 119858 | 56.8811 ug/L | 99 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 366984 | 96.1008 ug/L | 100 |
| 21) cis-1,2-Dichloroethene | 4.027 | 96 | 193032 | 95.9844 ug/L | 99 |
| 22) 2-Butanone | 4.040 | 43 | 93664 | 174.0694 ug/L | 97 |
| 23) Bromochloromethane | 4.259 | 128 | 75325 | 96.3011 ug/L | 94 |
| 25) Chloroform | 4.352 | 83 | 336915 | 99.3831 ug/L | 99 |
| 27) 1,2-Dichloroethane | 4.944 | 62 | 224705 | 93.0151 ug/L | 99 |
| 29) 1,4-Dioxane | 6.098 | 88 | 42314 | 1728.2530 ug/L | 97 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3660.D
Acq On : 19 May 2012 12:32
Sample : 2E21002-CAL4
Misc : VSTD0505D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 67
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 14:55:41 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.539 | 97 | 242233 | 107.6562 | ug/L | 98 |
| 32) Cyclohexane | 4.603 | 56 | 329461 | 94.4066 | ug/L | 97 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 180629 | 112.2608 | ug/L | 100 |
| 35) Benzene | 4.931 | 78 | 747375 | 95.9148 | ug/L | 100 |
| 36) Trichloroethene | 5.670 | 95 | 188360 | 94.6909 | ug/L | 98 |
| 38) Methylcyclohexane | 5.902 | 83 | 305576 | 100.0126 | ug/L | 99 |
| 39) 1,2-Dichloropropane | 5.921 | 63 | 192610 | 91.5469 | ug/L | 99 |
| 40) Bromodichloromethane | 6.272 | 83 | 217540 | 104.4471 | ug/L | 100 |
| 41) cis-1,3-Dichloropropene | 6.847 | 75 | 257394 | 102.7811 | ug/L | 98 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 198457 | 184.6190 | ug/L | 97 |
| 44) Toluene | 7.291 | 91 | 770535 | 98.6848 | ug/L | 100 |
| 46) trans-1,3-Dichloropropene | 7.609 | 75 | 202007 | 105.4778 | ug/L | 100 |
| 47) 1,1,2-Trichloroethane | 7.850 | 97 | 111610 | 97.3762 | ug/L | 97 |
| 48) Tetrachloroethene | 8.053 | 164 | 153936 | 102.0908 | ug/L | 99 |
| 50) 2-Hexanone | 8.246 | 43 | 157454 | 197.2596 | ug/L | 99 |
| 51) Dibromochloromethane | 8.400 | 129 | 133505 | 108.7657 | ug/L | 99 |
| 52) 1,2-Dibromoethane | 8.535 | 107 | 109948 | 99.5156 | ug/L | 97 |
| 53) Chlorobenzene | 9.300 | 112 | 492645 | 95.3845 | ug/L | 99 |
| 54) Ethylbenzene | 9.506 | 91 | 808656 | 100.2608 | ug/L | 99 |
| 55) m,p-Xylene | 9.696 | 106 | 317792 | 100.2583 | ug/L | 97 |
| 56) o-Xylene | 10.313 | 106 | 302813 | 99.1395 | ug/L | 97 |
| 57) Styrene | 10.339 | 104 | 472390 | 101.0766 | ug/L | 99 |
| 58) Isopropylbenzene | 10.934 | 105 | 743236 | 109.3160 | ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.435 | 83 | 109159 | 102.6414 | ug/L | 99 |
| 62) Bromoform | 10.583 | 173 | 62676 | 105.0442 | ug/L | 99 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 331159 | 95.9767 | ug/L | 99 |
| 64) 1,4-Dichlorobenzene | 12.844 | 146 | 319300 | 90.3342 | ug/L | 99 |
| 66) 1,2-Dichlorobenzene | 13.246 | 146 | 288327 | 93.4877 | ug/L | 100 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 15009 | 105.9617 | ug/L | 96 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 159543 | 92.0124 | ug/L | 100 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 127690 | 86.7583 | ug/L | 99 |

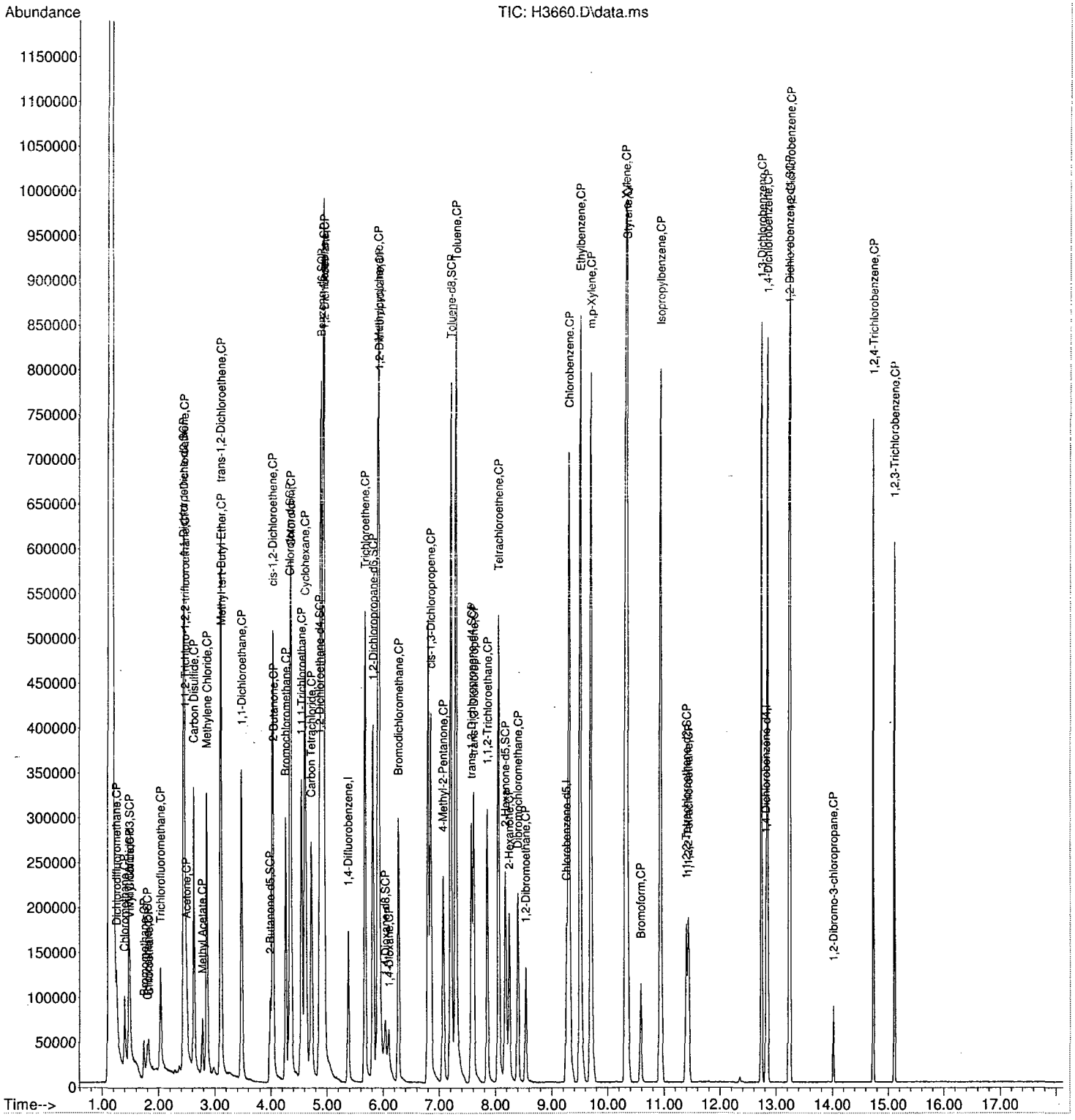
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3660.D
Acq On : 19 May 2012 12:32
Sample : 2E21002-CAL4
Misc : VSTD0505D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 67
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 14:55:41 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration






00113

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 126418 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 94197 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 35692 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 2918m | 8.31 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 16.62%# | | |
| 7) Chloroethane-d5 | 1.805 | 69 | 2181 | 12.48 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 24.96%# | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 25507 | 10.95 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 21.90%# | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 11061 | 15.96 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 15.96%# | | |
| 24) Chloroform-d | 4.333 | 84 | 30688 | 11.82 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 23.64%# | | |
| 26) 1,2-Dichloroethane-d4 | 4.857 | 65 | 17271 | 12.04 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 24.08%# | | |
| 28) 1,4-Dioxane-d8 | 6.050 | 96 | 3866 | 241.83 ug/L | 0.02 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 24.18%# | | |
| 34) Benzene-d6 | 4.889 | 84 | 64428 | 11.25 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 22.50%# | | |
| 37) 1,2-Dichloropropane-d6 | 5.812 | 67 | 17716 | 10.82 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 21.64%# | | |
| 43) Toluene-d8 | 7.201 | 98 | 52858 | 10.76 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 21.52%# | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 12039 | 9.21 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 18.42%# | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 5791 | 17.94 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 17.94% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 10205 | 12.02 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 24.04%# | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 13643 | 10.50 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 21.00%# | | |

AC S.P.

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.252 | 85 | 4187m | 7.2262 ug/L | |
| 3) Chloromethane | 1.394 | 50 | 8247 | 7.0829 ug/L | 98 |
| 5) Vinyl Chloride | 1.487 | 62 | 3800m | 7.6131 ug/L | |
| 6) Bromomethane | 1.744 | 94 | 2782m | 9.0224 ug/L | |
| 8) Chloroethane | 1.831 | 64 | 1967 | 8.8881 ug/L | 92 |
| 9) Trichlorofluoromethane | 2.040 | 101 | 9859 | 11.9898 ug/L | 94 |
| 11) 1,1-Dichloroethene | 2.458 | 96 | 11200 | 10.7793 ug/L | 93 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.468 | 101 | 5582 | 7.7401 ug/L | 84 |
| 13) Acetone | 2.497 | 43 | 4776 | 16.6409 ug/L | 98 |
| 14) Carbon Disulfide | 2.625 | 76 | 27274 | 7.8330 ug/L | 99 |
| 15) Methyl Acetate | 2.776 | 43 | 6800 | 9.8178 ug/L | 96 |
| 16) Methylene Chloride | 2.854 | 84 | 11945 | 9.6577 ug/L | 96 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 14260 | 9.2893 ug/L | 96 |
| 18) Methyl tert-Butyl Ether | 3.108 | 73 | 10885 | 6.4382 ug/L | 98 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 28228 | 9.2129 ug/L | 98 |
| 21) cis-1,2-Dichloroethene | 4.030 | 96 | 15131 | 9.3773 ug/L | 97 |
| 22) 2-Butanone | 4.043 | 43 | 7262 | 16.8207 ug/L | 84 |
| 23) Bromochloromethane | 4.252 | 128 | 6342 | 10.1054 ug/L | 95 |
| 25) Chloroform | 4.349 | 83 | 27779 | 10.2128 ug/L | 99 |
| 27) 1,2-Dichloroethane | 4.947 | 62 | 21077 | 10.8739 ug/L | 97 |
| 29) 1,4-Dioxane | 6.095 | 88 | 2444 | 124.4118 ug/L | 91 |

AC S.P.
AC S.P.
AC S.P.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.535 | 97 | 16326 | 9.2503 ug/L | 97 |
| 32) Cyclohexane | 4.600 | 56 | 21662 | 7.9135 ug/L | 96 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 11469 | 9.0873 ug/L | 100 |
| 35) Benzene | 4.928 | 78 | 63199 | 10.3402 ug/L | 100 |
| 36) Trichloroethene | 5.667 | 95 | 14906 | 9.5532 ug/L | 98 |
| 38) Methylcyclohexane | 5.905 | 83 | 20968 | 8.7491 ug/L | 98 |
| 39) 1,2-Dichloropropane | 5.924 | 63 | 16959 | 10.2762 ug/L | 97 |
| 40) Bromodichloromethane | 6.265 | 83 | 15731 | 9.6291 ug/L | 98 |
| 41) cis-1,3-Dichloropropene | 6.841 | 75 | 17770 | 9.0463 ug/L | 97 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 14043 | 16.6548 ug/L | 98 |
| 44) Toluene | 7.288 | 91 | 59487 | 9.7129 ug/L | 100 |
| 46) trans-1,3-Dichloropropene | 7.606 | 75 | 13105 | 8.7237 ug/L | 100 |
| 47) 1,1,2-Trichloroethane | 7.853 | 97 | 9395 | 10.4500 ug/L | 97 |
| 48) Tetrachloroethene | 8.056 | 164 | 11429 | 9.6633 ug/L | 98 |
| 50) 2-Hexanone | 8.246 | 43 | 10717 | 17.1170 ug/L | 95 |
| 51) Dibromochloromethane | 8.400 | 129 | 9017 | 9.3654 ug/L | 96 |
| 52) 1,2-Dibromoethane | 8.541 | 107 | 8448 | 9.7483 ug/L # | 96 |
| 53) Chlorobenzene | 9.300 | 112 | 41324 | 10.2004 ug/L | 100 |
| 54) Ethylbenzene | 9.506 | 91 | 55497 | 8.7722 ug/L | 98 |
| 55) m,p-Xylene | 9.699 | 106 | 21430 | 8.6192 ug/L | 95 |
| 56) o-Xylene | 10.310 | 106 | 20323 | 8.4826 ug/L | 96 |
| 57) Styrene | 10.336 | 104 | 32901 | 8.9749 ug/L | 98 |
| 58) Isopropylbenzene | 10.930 | 105 | 44252 | 8.2977 ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.435 | 83 | 9099 | 10.9075 ug/L | 97 |
| 62) Bromoform | 10.590 | 173 | 3739 | 8.8818 ug/L | 92 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 23294 | 9.5686 ug/L | 100 |
| 64) 1,4-Dichlorobenzene | 12.847 | 146 | 24688 | 9.8996 ug/L | 99 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 23230 | 10.6757 ug/L | 98 |
| 67) 1,2-Dibromo-3-chloropr... | 14.011 | 75 | 946 | 9.4660 ug/L | 98 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 11400 | 9.3186 ug/L | 97 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 9957 | 9.5887 ug/L | 93 |

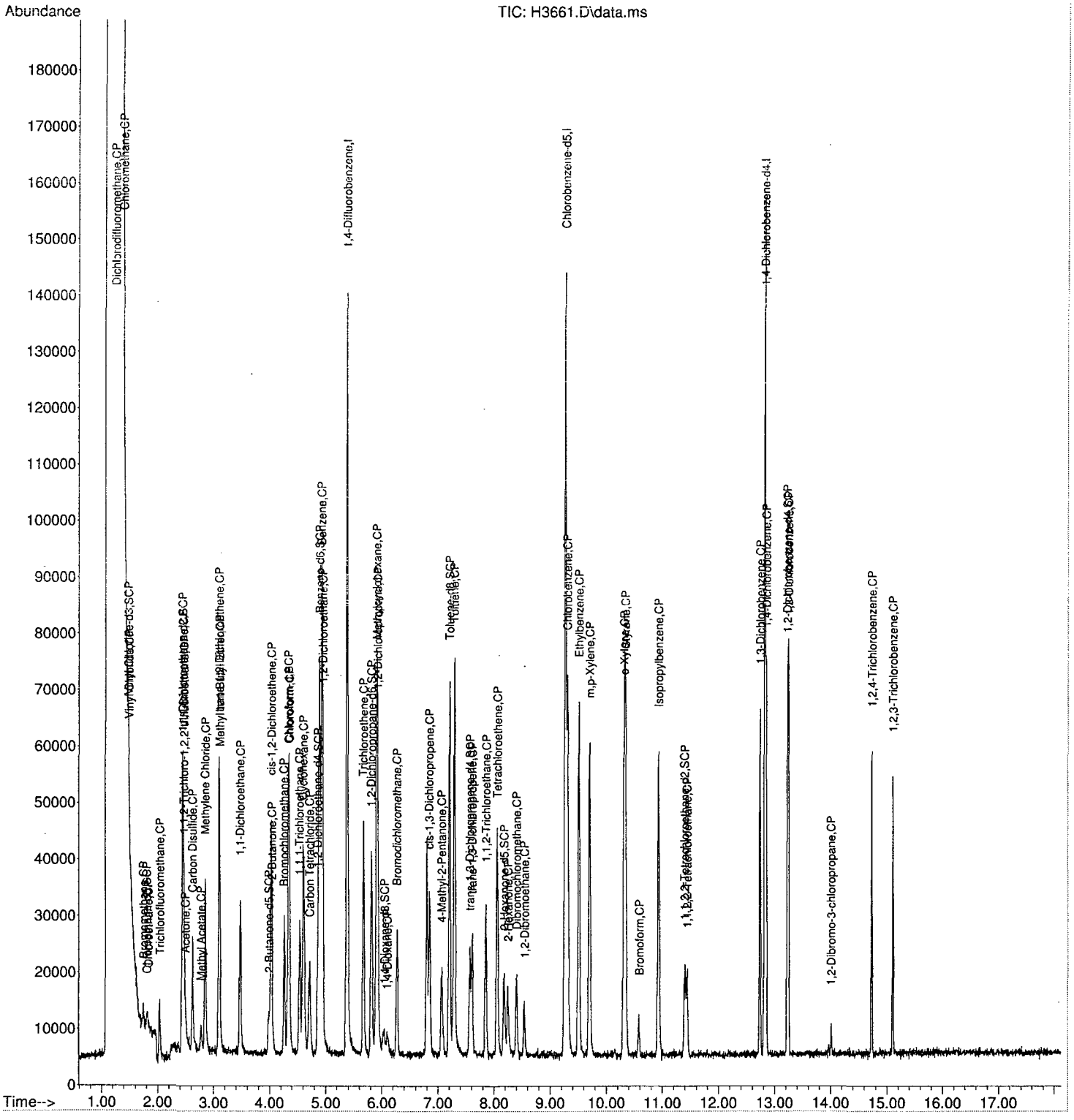
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst :'H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

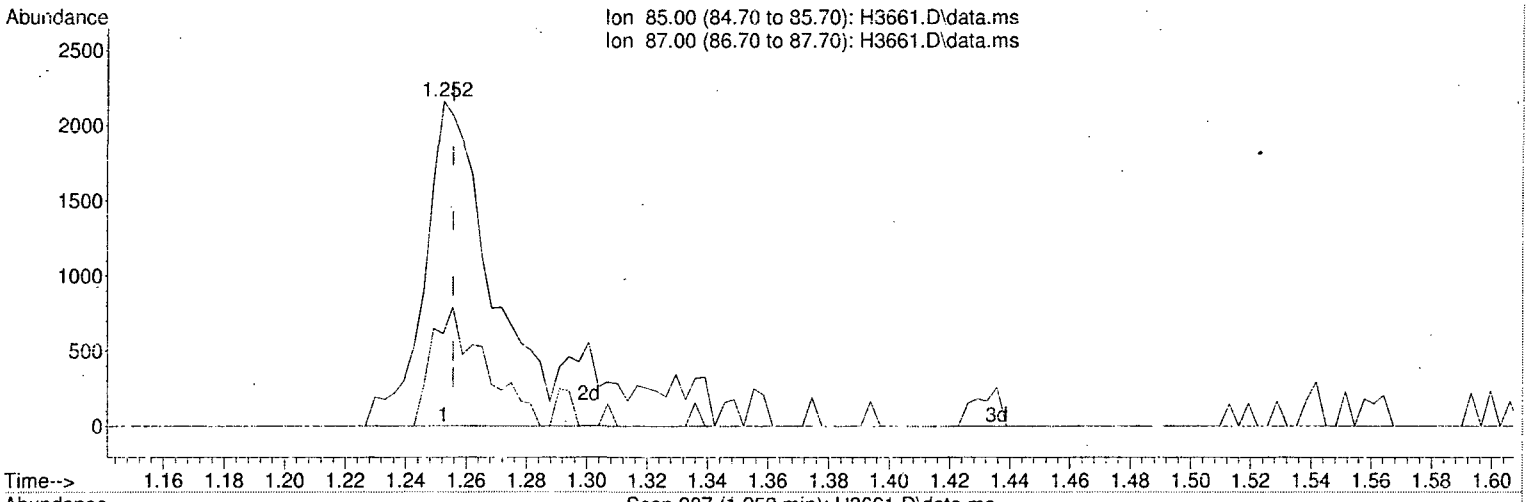


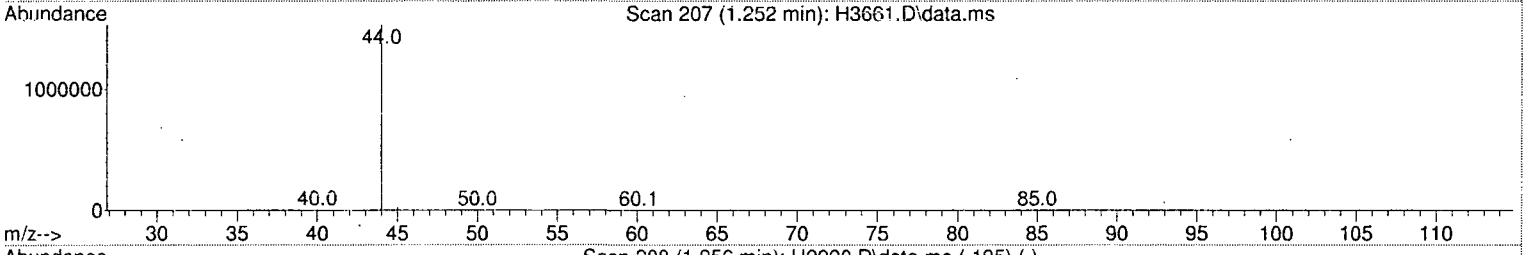
Quantitation Report (Qedit)

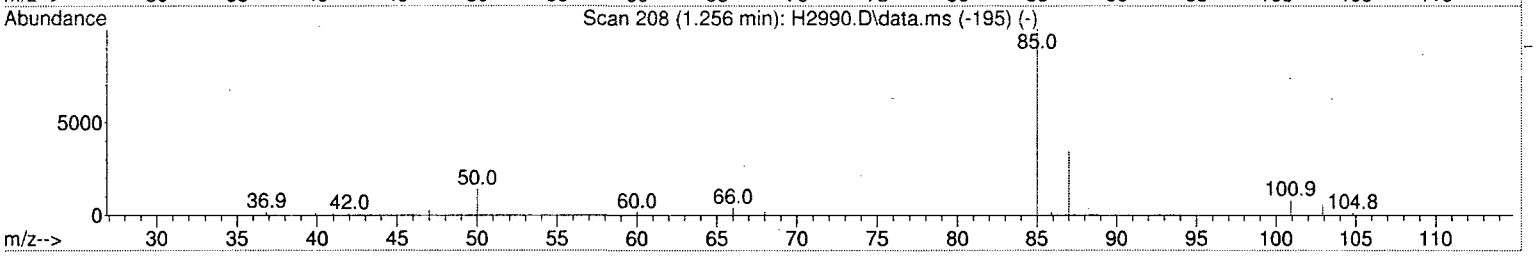
Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3661.D\data.ms

**(2) Dichlorodifluoromethane (CP)**

**1.252min (-0.003) 7.23 ug/L m** AC S.P.

**response 4187**

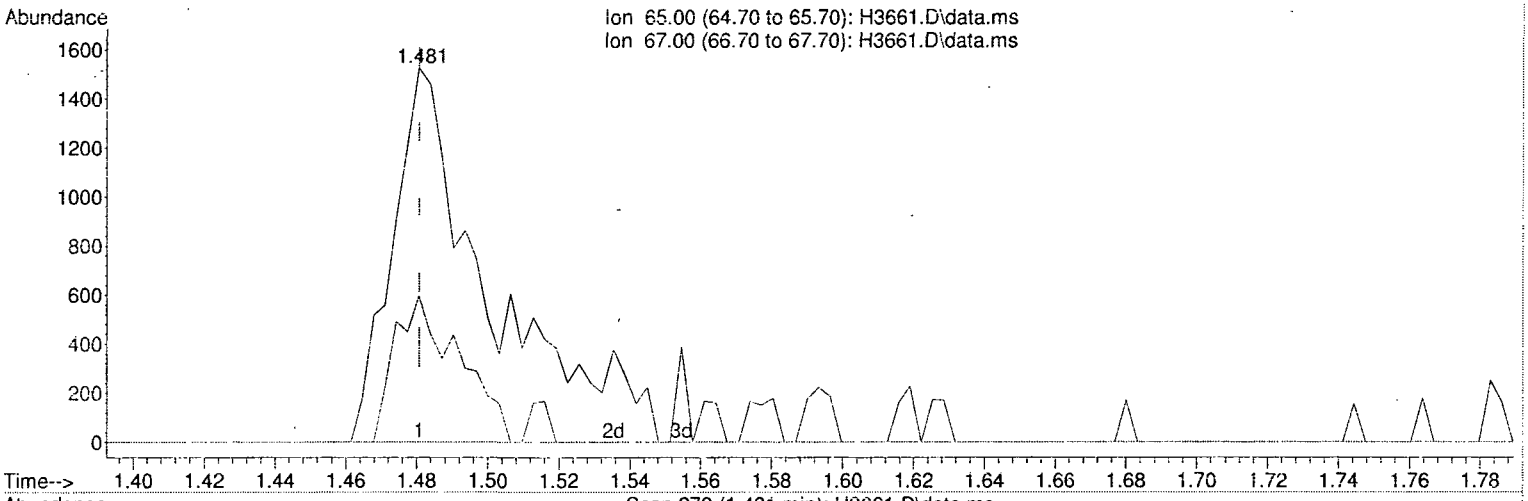
| Ion | Exp% | Act% |
|---|---|---|
| 85.00 | 100.00 | 100.00 |
| 87.00 | 28.00 | 23.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

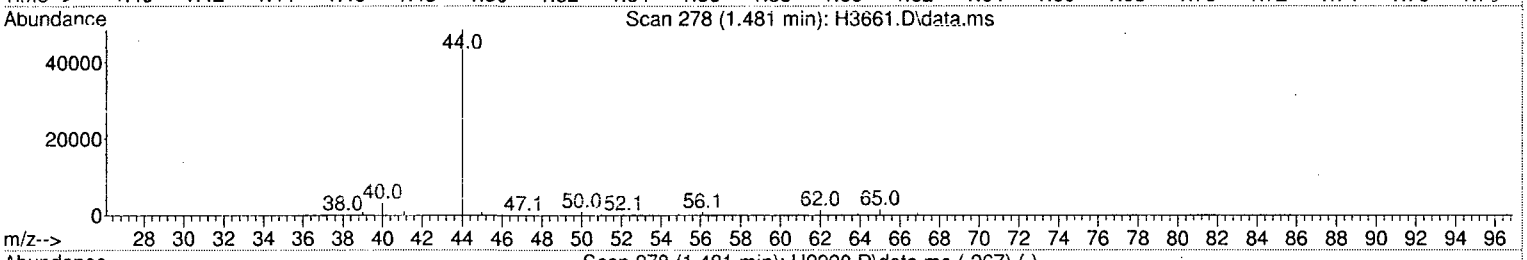
Quantitation Report (Qedit)

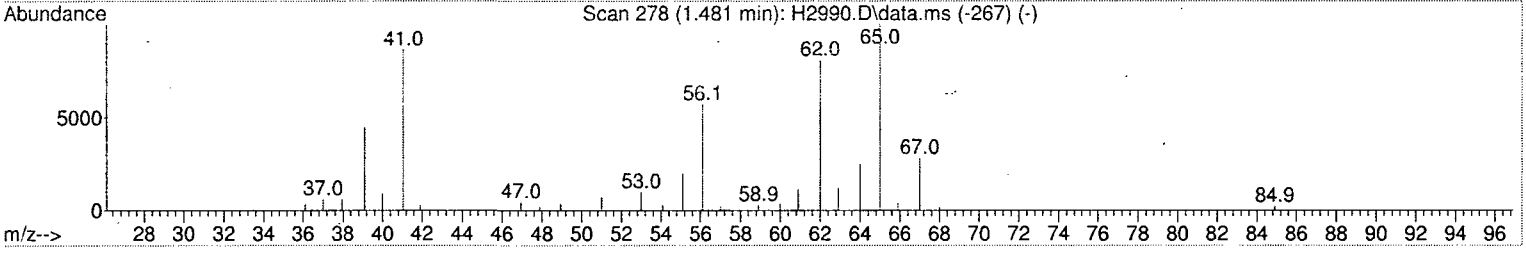
Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3661.D\data.ms

**(4) Vinyl Chloride-d3 (SCP)**

**1.481min (-0.000) 8.31 ug/L m**

AC S.P.

**response 2918**

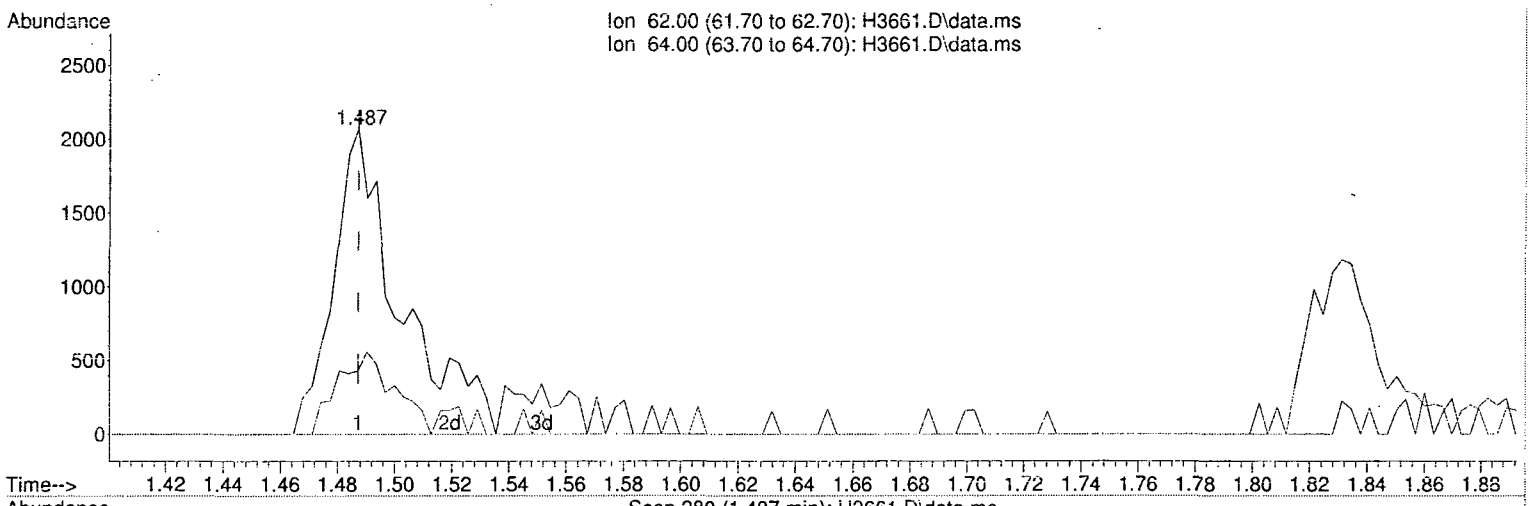
| Ion | Exp% | Act% |
|---|---|---|
| 65.00 | 100.00 | 100.00 |
| 67.00 | 37.20 | 25.87 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

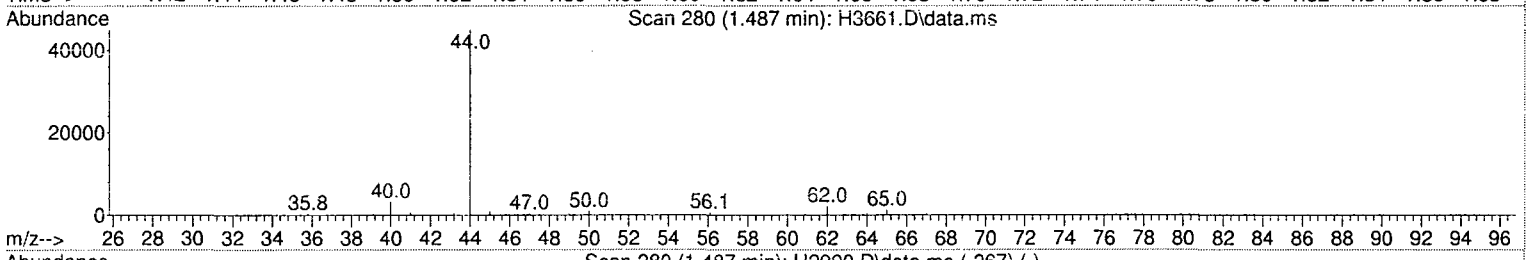
Quantitation Report (Qedit)

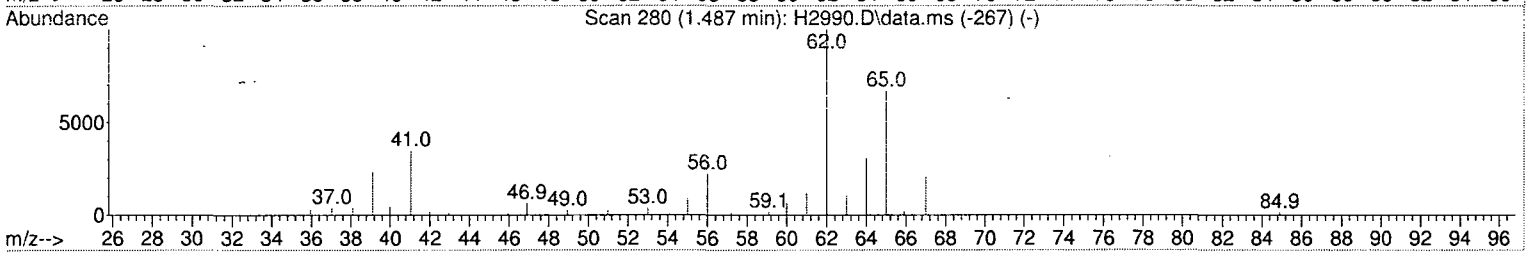
Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3661.D\data.ms

**(5) Vinyl Chloride (CP)**

**1.487min (-0.000) 7.61 ug/L m**

AC S.P.

**response 3800**

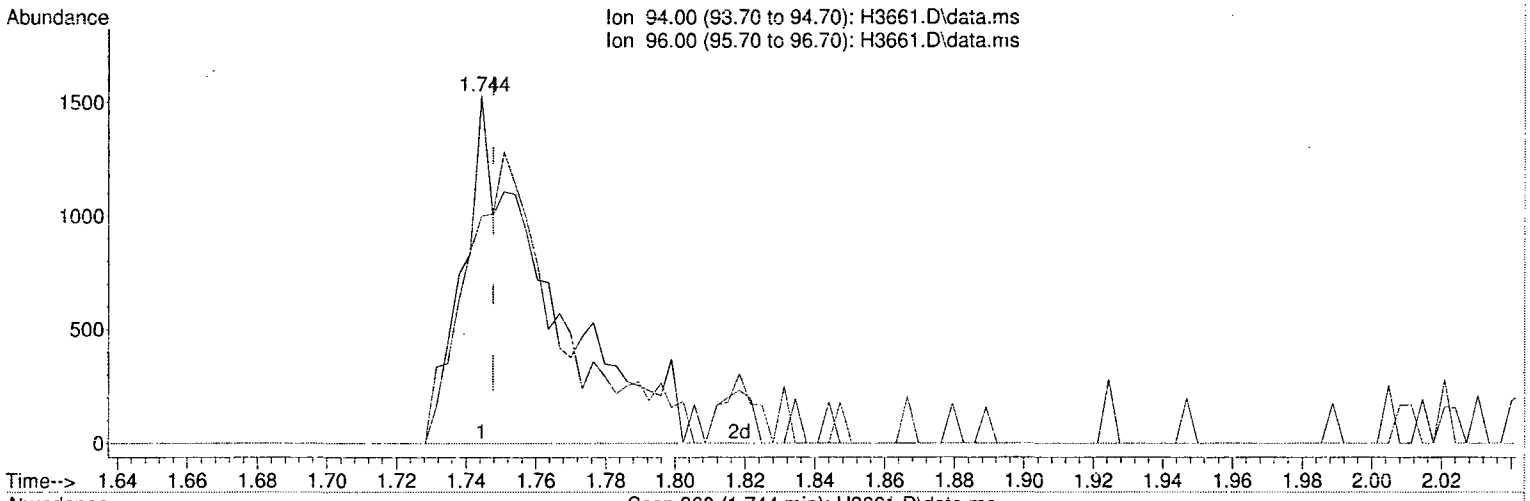
| Ion | Exp% | Act% |
|---|---|---|
| 62.00 | 100.00 | 100.00 |
| 64.00 | 25.20 | 20.37 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

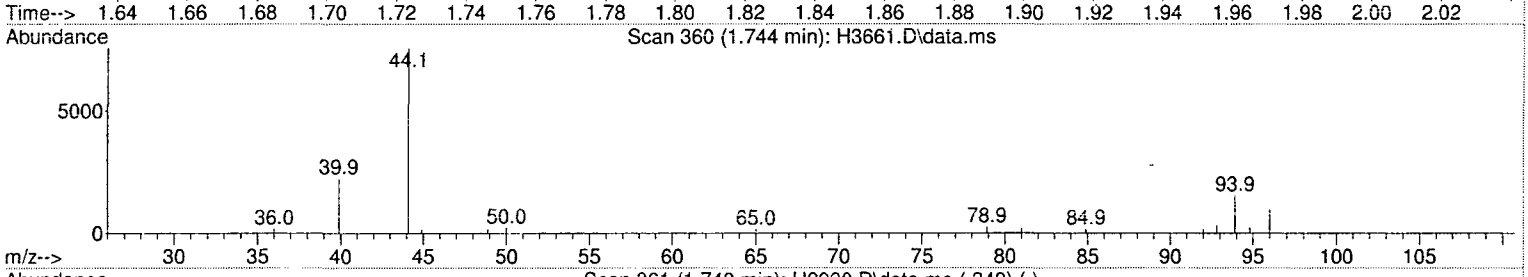
Quantitation Report (Qedit)

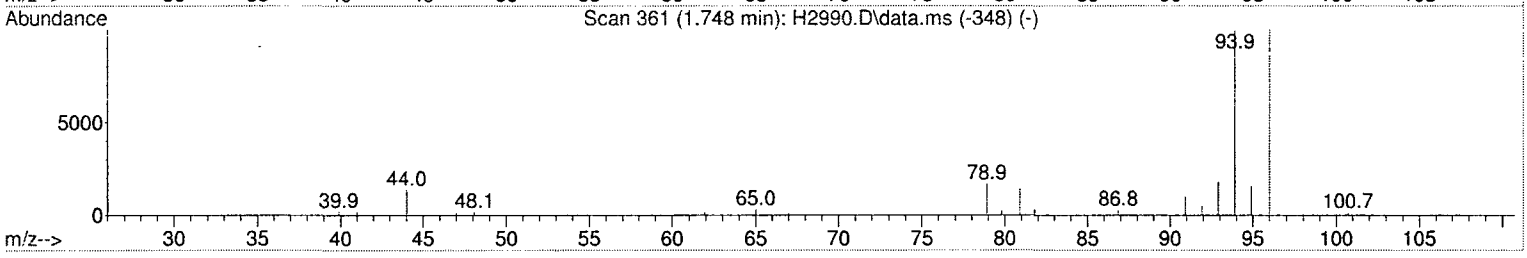
Data File : C:\msdchem\1\data\H3661.D
Acq On : 19 May 2012 13:50
Sample : 2E21002-CAL2
Misc : VSTD0055D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 70
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:05:31 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3661.D\data.ms

**(6) Bromomethane (CP)**

**1.744min (-0.003) 9.02 ug/L m**

AC S.P.

**response 2782**

| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100.00 | 100.00 |
| 96.00 | 79.60 | 85.55 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3662.D
Acq On : 19 May 2012 14:16
Sample : 2E21002-CAL1
Misc : VSTD2.55D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 71
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 19 15:00:20 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 114858 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 87084 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 33218 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.487 | 65 | 1541 | 4.83 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery | = 9.66%# | |
| 7) Chloroethane-d5 | 1.812 | 69 | 1260 | 7.93 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery | = 15.86%# | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 13801 | 6.52 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery | = 13.04%# | |
| 20) 2-Butanone-d5 | 3.989 | 46 | 5174 | 8.22 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery | = 8.22%# | |
| 24) Chloroform-d | 4.326 | 84 | 15346 | 6.51 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery | = 13.02%# | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 8511 | 6.53 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery | = 13.06%# | |
| 28) 1,4-Dioxane-d8 | 6.040 | 96 | 2153 | 148.23 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery | = 14.82%# | |
| 34) Benzene-d6 | 4.886 | 84 | 31279 | 5.91 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery | = 11.82%# | |
| 37) 1,2-Dichloropropane-d6 | 5.812 | 67 | 8830 | 5.83 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery | = 11.66%# | |
| 43) Toluene-d8 | 7.201 | 98 | 24605 | 5.42 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery | = 10.84%# | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 5861 | 4.85 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery | = 9.70%# | |
| 49) 2-Hexanone-d5 | 8.172 | 63 | 2662 | 8.92 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery | = 8.92%# | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.390 | 84 | 4997 | 6.37 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery | = 12.74%# | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 7430 | 6.14 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery | = 12.28%# | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 1177 | 2.2358 ug/L | 83 |
| 3) Chloromethane | 1.391 | 50 | 3027 | 2.8614 ug/L | 83 |
| 5) Vinyl Chloride | 1.494 | 62 | 1673m | 3.6891 ug/L | |
| 6) Bromomethane | 1.751 | 94 | 881 | 3.1448 ug/L # | 42 |
| 8) Chloroethane | 1.834 | 64 | 797 | 3.9638 ug/L | 87 |
| 9) Trichlorofluoromethane | 2.037 | 101 | 4261 | 5.7035 ug/L | 89 |
| 11) 1,1-Dichloroethene | 2.452 | 96 | 4507 | 4.7743 ug/L # | 71 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.477 | 101 | 2901 | 4.4274 ug/L | 87 |
| 13) Acetone | 2.503 | 43 | 2686 | 10.3007 ug/L | 69 |
| 14) Carbon Disulfide | 2.625 | 76 | 10567 | 3.3403 ug/L | 100 |
| 15) Methyl Acetate | 2.783 | 43 | 2999 | 4.7657 ug/L | 91 |
| 16) Methylene Chloride | 2.857 | 84 | 5889 | 5.2405 ug/L | 97 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 5620 | 4.0295 ug/L | 100 |
| 18) Methyl tert-Butyl Ether | 3.108 | 73 | 6045 | 3.9353 ug/L | 90 |
| 19) 1,1-Dichloroethane | 3.471 | 63 | 12050 | 4.3286 ug/L | 100 |
| 21) cis-1,2-Dichloroethene | 4.030 | 96 | 6349 | 4.3307 ug/L | 96 |
| 22) 2-Butanone | 4.047 | 43 | 3733 | 9.5168 ug/L | 84 |
| 23) Bromochloromethane | 4.265 | 128 | 2833 | 4.9685 ug/L | 96 |
| 25) Chloroform | 4.352 | 83 | 12204 | 4.9383 ug/L | 98 |
| 27) 1,2-Dichloroethane | 4.944 | 62 | 9605 | 5.4541 ug/L | 85 |
| 29) 1,4-Dioxane | 6.104 | 88 | 1516 | 84.9390 ug/L # | 68 |

AC S.P.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3662.D
Acq On : 19 May 2012 14:16
Sample : 2E21002-CAL1
Misc : VSTD2.55D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 71
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:00:20 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.538 | 97 | 6851 | 4.1988 ug/L | 96 |
| 32) Cyclohexane | 4.609 | 56 | 8384 | 3.3130 ug/L | 91 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 4264 | 3.6545 ug/L | 98 |
| 35) Benzene | 4.931 | 78 | 26434 | 4.6782 ug/L | 100 |
| 36) Trichloroethene | 5.670 | 95 | 6108 | 4.2344 ug/L | 97 |
| 38) Methylcyclohexane | 5.895 | 83 | 6452 | 2.9120 ug/L | 94 |
| 39) 1,2-Dichloropropane | 5.918 | 63 | 6847 | 4.4878 ug/L # | 89 |
| 40) Bromodichloromethane | 6.268 | 83 | 6917 | 4.5798 ug/L | 97 |
| 41) cis-1,3-Dichloropropene | 6.841 | 75 | 7120 | 3.9207 ug/L | 96 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 6812 | 8.7388 ug/L | 78 |
| 44) Toluene | 7.291 | 91 | 24360 | 4.3023 ug/L | 100 |
| 46) trans-1,3-Dichloropropene | 7.606 | 75 | 5355 | 3.8559 ug/L | 99 |
| 47) 1,1,2-Trichloroethane | 7.844 | 97 | 4328 | 5.2072 ug/L | 95 |
| 48) Tetrachloroethene | 8.053 | 164 | 4217 | 3.8567 ug/L | 94 |
| 50) 2-Hexanone | 8.249 | 43 | 6954 | 12.0140 ug/L # | 47 |
| 51) Dibromochloromethane | 8.400 | 129 | 3939 | 4.4254 ug/L | 93 |
| 52) 1,2-Dibromoethane | 8.538 | 107 | 3981 | 4.9689 ug/L # | 98 |
| 53) Chlorobenzene | 9.304 | 112 | 18911 | 5.0492 ug/L | 98 |
| 54) Ethylbenzene | 9.506 | 91 | 22549 | 3.8553 ug/L | 96 |
| 55) m,p-Xylene | 9.702 | 106 | 8488m | 3.6928 ug/L | |
| 56) o-Xylene | 10.310 | 106 | 8208 | 3.7058 ug/L | 95 |
| 57) Styrene | 10.342 | 104 | 13694 | 4.0406 ug/L | 98 |
| 58) Isopropylbenzene | 10.937 | 105 | 17297 | 3.5083 ug/L | 98 |
| 60) 1,1,2,2-Tetrachloroethane | 11.429 | 83 | 3913 | 5.0739 ug/L | 93 |
| 62) Bromoform | 10.580 | 173 | 1545 | 3.9434 ug/L # | 96 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 10423 | 4.6004 ug/L | 96 |
| 64) 1,4-Dichlorobenzene | 12.847 | 146 | 11095 | 4.7803 ug/L | 95 |
| 66) 1,2-Dichlorobenzene | 13.246 | 146 | 10516 | 5.1927 ug/L | 99 |
| 67) 1,2-Dibromo-3-chloropr... | 14.017 | 75 | 446 | 4.7952 ug/L | 97 |
| 68) 1,2,4-Trichlorobenzene | 14.734 | 180 | 5296 | 4.6515 ug/L | 99 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 4715 | 4.8788 ug/L | 98 |

AC S.P.

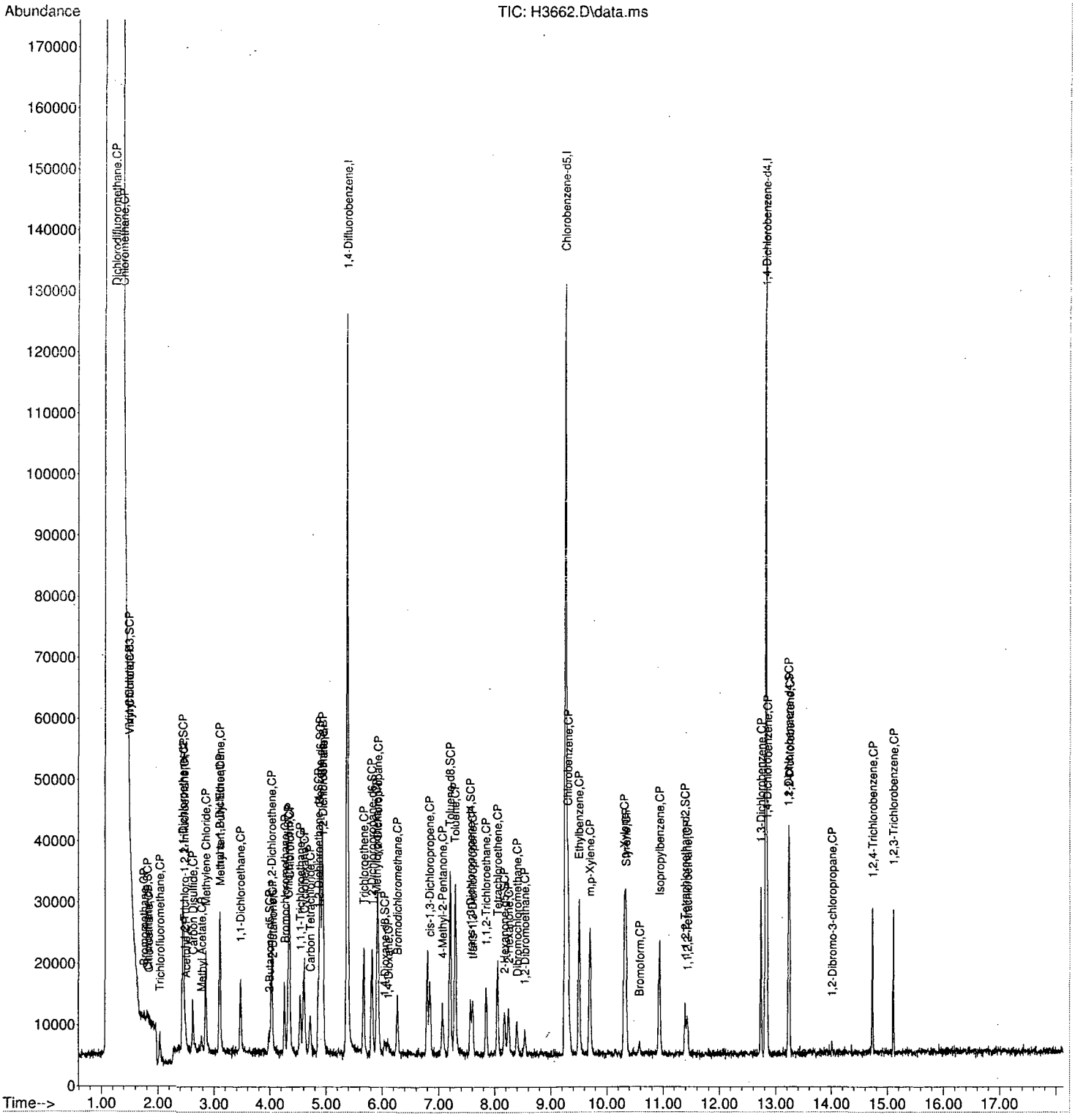
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3662.D
Acq On : 19 May 2012 14:16
Sample : 2E21002-CAL1
Misc : VSTD2.55D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 71
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:00:20 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration





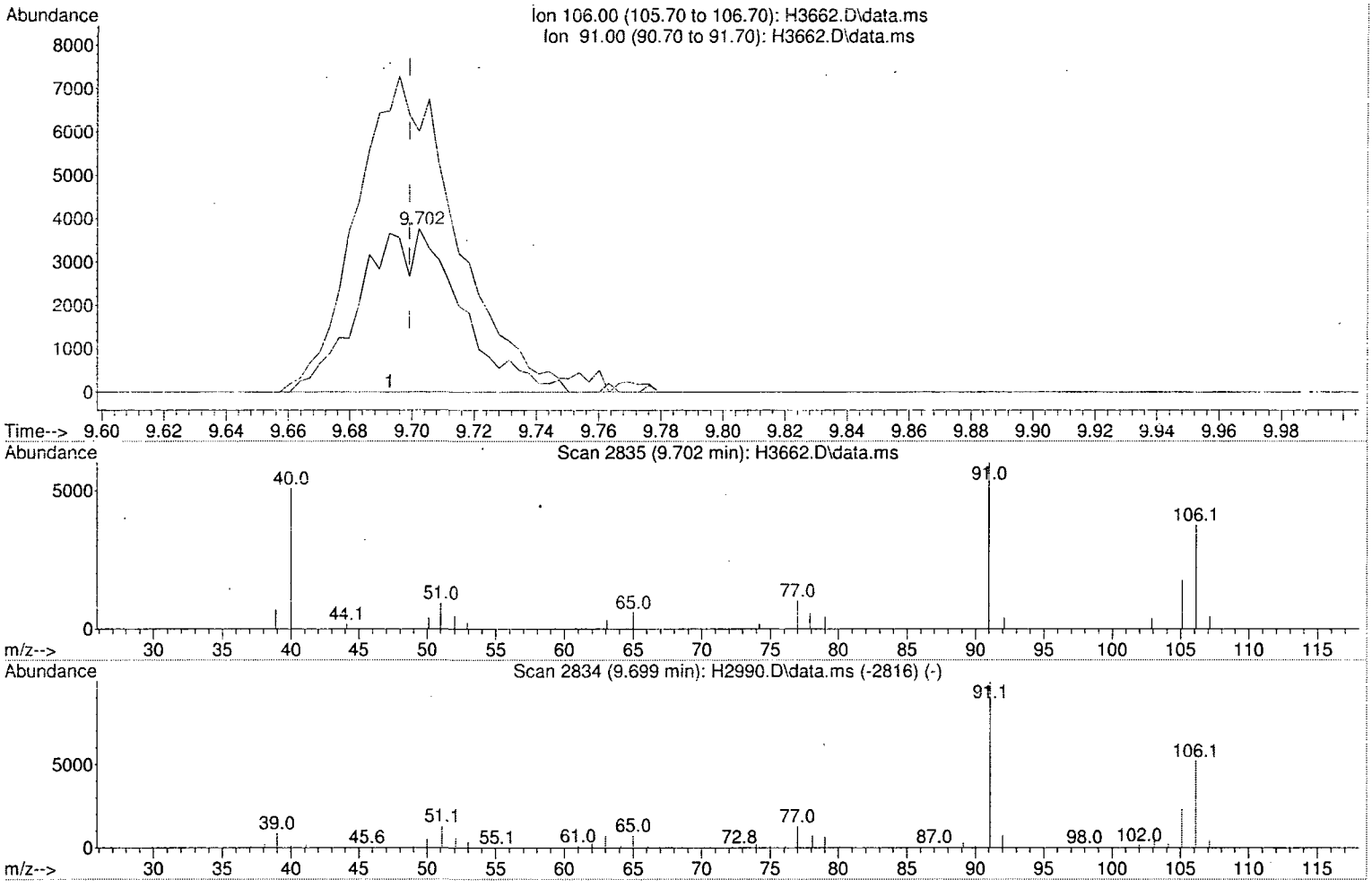

00123

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\H3662.D
Acq On : 19 May 2012 14:16
Sample : 2E21002-CAL1
Misc : VSTD2.55D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 71
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:00:20 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3662.D\data.ms

**(55) m,p-Xylene (CP)**

**9.702min (+ 0.003) 3.69 ug/L m** AC S.P.

**response 8488**

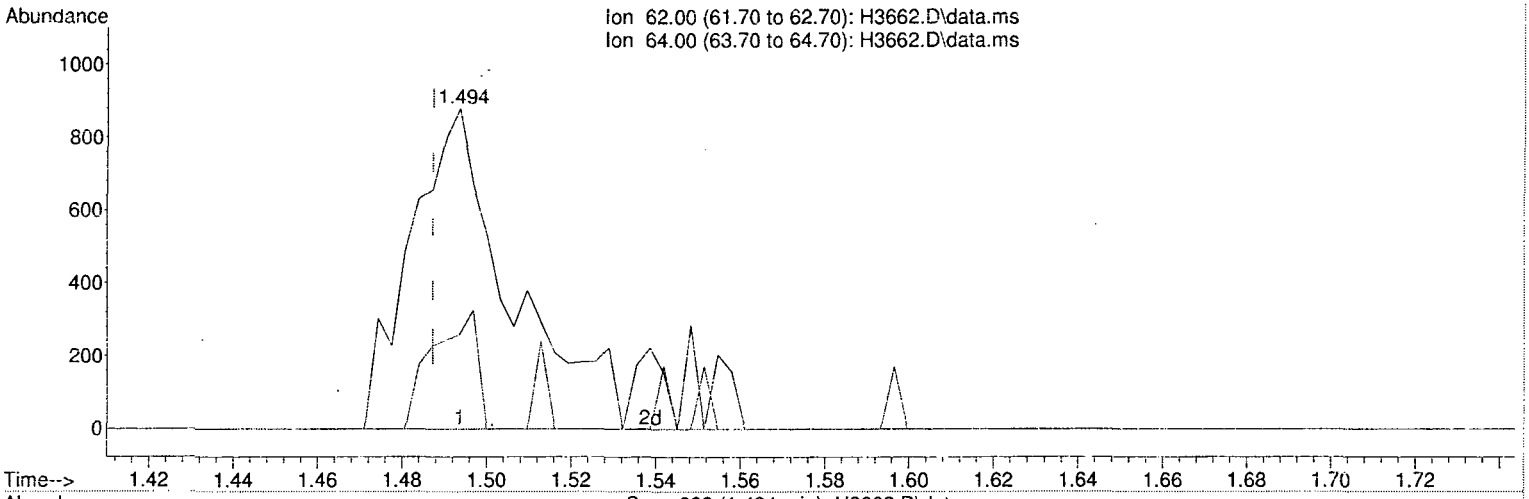
| Ion | Exp% | Act% |
|---|---|---|
| 106.00 | 100.00 | 100.00 |
| 91.00 | 190.40 | 191.46 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

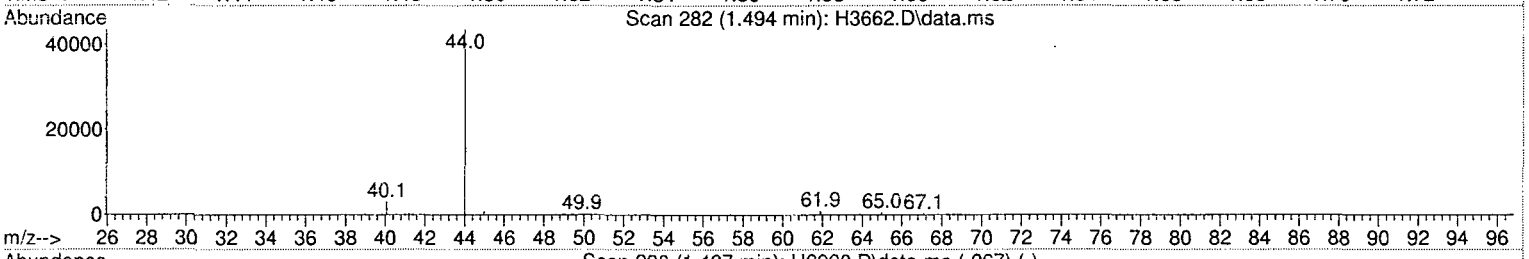
Quantitation Report (Qedit)

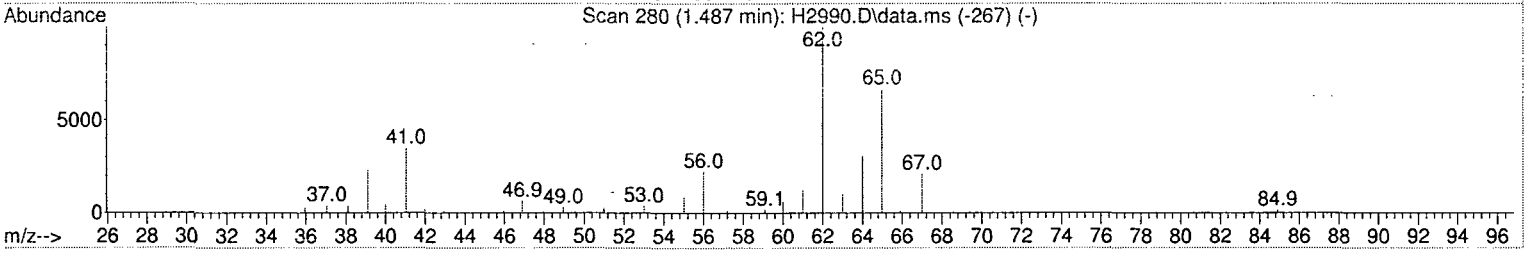
Data File : C:\msdchem\1\data\H3662.D
Acq On : 19 May 2012 14:16
Sample : 2E21002-CAL1
Misc : VSTD2.55D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 71
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:00:20 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Tue Apr 17 20:10:17 2012
Response via : Initial Calibration




TIC: H3662.D\data.ms

**(5) Vinyl Chloride (CP)**

**1.494min (+ 0.006) 3.69 ug/L m** AC S.P.

**response 1673**

| Ion | Exp% | Act% |
|---|---|---|
| 62.00 | 100.00 | 100.00 |
| 64.00 | 25.20 | 14.23 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 1140

Lab File ID: H3658.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255D Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.203 | 0.257 | 0.010 | 26.5 | 40.0 |
| Chloromethane | 0.346 | 0.402 | 0.010 | 16.1 | 40.0 |
| Vinyl chloride | 0.204 | 0.225 | 0.100 | 10.3 | 25.0 |
| Bromomethane | 0.107 | 0.122 | 0.100 | 13.4 | 25.0 |
| Chloroethane | 0.080 | 0.107 | 0.010 | 33.4 | 40.0 |
| Trichlorofluoromethane | 0.369 | 0.409 | 0.010 | 10.9 | 40.0 |
| 1,1-Dichloroethene | 0.407 | 0.430 | 0.100 | 5.7 | 25.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.287 | 0.288 | 0.010 | 0.2 | 40.0 |
| Acetone | 0.100 | 0.095 | 0.010 | -4.8 | 40.0 |
| Carbon disulfide | 1.238 | 1.411 | 0.010 | 14.0 | 40.0 |
| Methyl acetate | 0.254 | 0.230 | 0.010 | -9.2 | 40.0 |
| Methylene chloride | 0.445 | 0.431 | 0.010 | -3.2 | 40.0 |
| trans-1,2-Dichloroethene | 0.563 | 0.620 | 0.010 | 10.0 | 40.0 |
| Methyl tert-butyl ether | 0.402 | 0.353 | 0.010 | -12.1 | 40.0 |
| 1,1-Dichloroethane | 1.141 | 1.208 | 0.200 | 5.8 | 25.0 |
| cis-1,2-Dichloroethene | 0.597 | 0.622 | 0.010 | 4.2 | 40.0 |
| 2-Butanone | 0.147 | 0.138 | 0.010 | -6.1 | 40.0 |
| Bromochloromethane | 0.242 | 0.237 | 0.050 | -2.0 | 25.0 |
| Chloroform | 1.086 | 1.145 | 0.200 | 5.5 | 25.0 |
| 1,1,1-Trichloroethane | 0.929 | 0.995 | 0.100 | 7.1 | 25.0 |
| Cyclohexane | 1.240 | 1.347 | 0.010 | 8.7 | 40.0 |
| Carbon tetrachloride | 0.678 | 0.730 | 0.100 | 7.7 | 25.0 |
| Benzene | 3.144 | 3.237 | 0.400 | 3.0 | 25.0 |
| 1,2-Dichloroethane | 0.774 | 0.749 | 0.100 | -3.2 | 25.0 |
| 1,4-Dioxane | 0.006 | 0.004 | 0.005 | -23.4 | 50.0 |
| Trichloroethene | 0.782 | 0.824 | 0.300 | 5.3 | 25.0 |
| Methylcyclohexane | 1.122 | 1.304 | 0.010 | 16.2 | 40.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 1140

Lab File ID: H3658.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255D Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.818 | 0.834 | 0.010 | 2.0 | 40.0 |
| Bromodichloromethane | 0.864 | 0.882 | 0.200 | 2.1 | 25.0 |
| cis-1,3-Dichloropropene | 0.977 | 1.008 | 0.200 | 3.2 | 25.0 |
| 4-Methyl-2-pentanone | 0.388 | 0.365 | 0.010 | -5.8 | 40.0 |
| Toluene | 3.130 | 3.361 | 0.400 | 7.4 | 25.0 |
| trans-1,3-Dichloropropene | 0.760 | 0.794 | 0.100 | 4.5 | 25.0 |
| 1,1,2-Trichloroethane | 0.470 | 0.437 | 0.100 | -7.0 | 25.0 |
| Tetrachloroethene | 0.613 | 0.671 | 0.100 | 9.4 | 25.0 |
| 2-Hexanone | 0.316 | 0.288 | 0.010 | -9.0 | 40.0 |
| Dibromochloromethane | 0.517 | 0.530 | 0.100 | 2.4 | 25.0 |
| 1,2-Dibromoethane | 0.448 | 0.422 | 0.010 | -5.7 | 40.0 |
| Chlorobenzene | 2.113 | 2.153 | 0.500 | 1.9 | 25.0 |
| Ethylbenzene | 3.159 | 3.518 | 0.100 | 11.4 | 25.0 |
| o-Xylene | 1.170 | 1.328 | 0.300 | 13.5 | 25.0 |
| m,p-Xylene | 1.233 | 1.401 | 0.300 | 13.6 | 25.0 |
| Styrene | 1.851 | 2.025 | 0.300 | 9.4 | 25.0 |
| Bromoform | 0.566 | 0.575 | 0.050 | 1.6 | 25.0 |
| Isopropylbenzene | 2.775 | 3.219 | 0.010 | 16.0 | 40.0 |
| 1,1,2,2-Tetrachloroethane | 0.453 | 0.433 | 0.300 | -4.5 | 25.0 |
| 1,3-Dichlorobenzene | 3.265 | 3.452 | 0.600 | 5.7 | 25.0 |
| 1,4-Dichlorobenzene | 3.288 | 3.395 | 0.500 | 3.2 | 25.0 |
| 1,2-Dichlorobenzene | 3.009 | 3.043 | 0.400 | 1.1 | 25.0 |
| 1,2-Dibromo-3-chloropropane | 0.143 | 0.142 | 0.010 | -0.6 | 40.0 |
| 1,2,4-Trichlorobenzene | 1.592 | 1.596 | 0.200 | 0.2 | 25.0 |
| 1,2,3-Trichlorobenzene | 1.323 | 1.261 | 0.200 | -4.7 | 25.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 1140

Lab File ID: H3658.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255D Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.152 | 0.153 | 0.010 | 0.5 | 25.0 |
| Chloroethane-d5 | 0.084 | 0.095 | 0.010 | 13.7 | 40.0 |
| 1,1-Dichloroethene-d2 | 0.999 | 0.955 | 0.010 | -4.4 | 25.0 |
| 2-Butanone-d5 | 0.209 | 0.184 | 0.010 | -11.9 | 40.0 |
| Chloroform-d | 1.144 | 1.084 | 0.010 | -5.3 | 25.0 |
| 1,2-Dichloroethane-d4 | 0.615 | 0.550 | 0.010 | -10.6 | 25.0 |
| Benzene-d6 | 3.162 | 2.998 | 0.010 | -5.2 | 25.0 |
| 1,2-Dichloropropane-d6 | 0.867 | 0.803 | 0.010 | -7.3 | 40.0 |
| Toluene-d8 | 2.718 | 2.735 | 0.010 | 0.6 | 25.0 |
| trans-1,3-Dichloropropene-d4 | 0.694 | 0.660 | 0.010 | -4.8 | 25.0 |
| 2-Hexanone-d5 | 0.164 | 0.147 | 0.010 | -10.7 | 40.0 |
| 1,4-Dioxane-d8 | 0.008 | 0.005 | 0.005 | -31.2 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.485 | 0.417 | 0.010 | -14.0 | 25.0 |
| 1,2-Dichlorobenzene-d4 | 1.858 | 1.773 | 0.010 | -4.6 | 25.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 142212 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 109771 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 44090 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 21772 | 61.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 123.58%# | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 13576 | 58.96 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 117.92% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 135852 | 54.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 109.58% | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 52389 | 104.30 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 104.30% | | |
| 24) Chloroform-d | 4.333 | 84 | 154113 | 54.53 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 109.06% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 78152 | 51.51 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 103.02% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 15365 | 843.50 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 84.35% | | |
| 34) Benzene-d6 | 4.889 | 84 | 329072 | 54.47 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 108.94% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 88196 | 53.33 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 106.66% | | |
| 43) Toluene-d8 | 7.201 | 98 | 300260 | 58.26 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 116.52% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 72482 | 57.16 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 114.32% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 32257 | 109.06 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 109.06% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 45738 | 49.85 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 99.70% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 78165 | 54.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 109.38% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 36597 | 81.9772 ug/L | 96 |
| 3) Chloromethane | 1.397 | 50 | 57133 | 68.6104 ug/L | 95 |
| 5) Vinyl Chloride | 1.490 | 62 | 32038 | 69.1710 ug/L | 91 |
| 6) Bromomethane | 1.751 | 94 | 17284 | 65.8674 ug/L | 89 |
| 8) Chloroethane | 1.831 | 64 | 15147 | 71.7584 ug/L | 94 |
| 9) Trichlorofluoromethane | 2.037 | 101 | 58138 | 63.2053 ug/L | 98 |
| 11) 1,1-Dichloroethene | 2.455 | 96 | 61159 | 60.6967 ug/L | 97 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.464 | 101 | 40927 | 61.3090 ug/L | 93 |
| 13) Acetone | 2.497 | 43 | 26989 | 110.6916 ug/L | 98 |
| 14) Carbon Disulfide | 2.628 | 76 | 200727 | 68.7087 ug/L | 100 |
| 15) Methyl Acetate | 2.783 | 43 | 32736 | 53.5849 ug/L | 98 |
| 16) Methylene Chloride | 2.860 | 84 | 61228 | 55.7688 ug/L | 98 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 88129 | 64.5215 ug/L | 97 |
| 18) Methyl tert-Butyl Ether | 3.111 | 73 | 50270 | 49.6739 ug/L | 98 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 171764 | 62.3876 ug/L | 99 |
| 21) cis-1,2-Dichloroethene | 4.027 | 96 | 88497 | 61.2092 ug/L | 97 |
| 22) 2-Butanone | 4.040 | 43 | 39155 | 109.8129 ug/L | 97 |
| 23) Bromochloromethane | 4.262 | 128 | 33744 | 57.4181 ug/L | 98 |
| 25) Chloroform | 4.352 | 83 | 162836 | 61.4063 ug/L | 100 |
| 27) 1,2-Dichloroethane | 4.943 | 62 | 106517 | 56.4143 ug/L | 98 |
| 29) 1,4-Dioxane | 6.104 | 88 | 12734 | 893.4170 ug/L # | 82 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.538 | 97 | 109265 | 63.7077 ug/L | 98 |
| 32) Cyclohexane | 4.606 | 56 | 147899 | 65.1711 ug/L | 97 |
| 33) Carbon Tetrachloride | 4.722 | 117 | 80139 | 66.0554 ug/L | 99 |
| 35) Benzene | 4.931 | 78 | 355347 | 59.7340 ug/L | 100 |
| 36) Trichloroethene | 5.667 | 95 | 90432 | 62.2858 ug/L | 99 |
| 38) Methylcyclohexane | 5.902 | 83 | 143168 | 68.5511 ug/L | 95 |
| 39) 1,2-Dichloropropane | 5.918 | 63 | 91593 | 59.0704 ug/L | 98 |
| 40) Bromodichloromethane | 6.268 | 83 | 96810 | 60.6145 ug/L | 98 |
| 41) cis-1,3-Dichloropropene | 6.850 | 75 | 110687 | 61.5905 ug/L | 98 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 80212 | 111.8225 ug/L | 99 |
| 44) Toluene | 7.291 | 91 | 368981 | 62.8775 ug/L | 99 |
| 46) trans-1,3-Dichloropropene | 7.606 | 75 | 87159 | 63.1344 ug/L | 98 |
| 47) 1,1,2-Trichloroethane | 7.847 | 97 | 47961 | 54.4373 ug/L | 99 |
| 48) Tetrachloroethene | 8.056 | 164 | 73609 | 65.2297 ug/L | 98 |
| 50) 2-Hexanone | 8.246 | 43 | 63161 | 104.9136 ug/L | 99 |
| 51) Dibromochloromethane | 8.400 | 129 | 58134 | 61.6152 ug/L | 99 |
| 52) 1,2-Dibromoethane | 8.541 | 107 | 46326 | 55.7976 ug/L | 99 |
| 53) Chlorobenzene | 9.303 | 112 | 236300 | 59.0933 ug/L | 99 |
| 54) Ethylbenzene | 9.506 | 91 | 386211 | 66.1345 ug/L | 99 |
| 55) m,p-Xylene | 9.699 | 106 | 153774 | 67.5255 ug/L | 98 |
| 56) o-Xylene | 10.310 | 106 | 145749 | 67.1702 ug/L | 98 |
| 57) Styrene | 10.339 | 104 | 222337 | 64.7730 ug/L | 100 |
| 58) Isopropylbenzene | 10.934 | 105 | 353328 | 70.2598 ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.435 | 83 | 47506 | 56.1236 ug/L | 99 |
| 62) Bromoform | 10.583 | 173 | 25346 | 61.7619 ug/L | 97 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 152195 | 61.6901 ug/L | 100 |
| 64) 1,4-Dichlorobenzene | 12.843 | 146 | 149685 | 59.7787 ug/L | 98 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 134170 | 58.1915 ug/L | 100 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 6273 | 59.9840 ug/L | 94 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 70355 | 58.9883 ug/L | 98 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 55587 | 55.7635 ug/L | 98 |

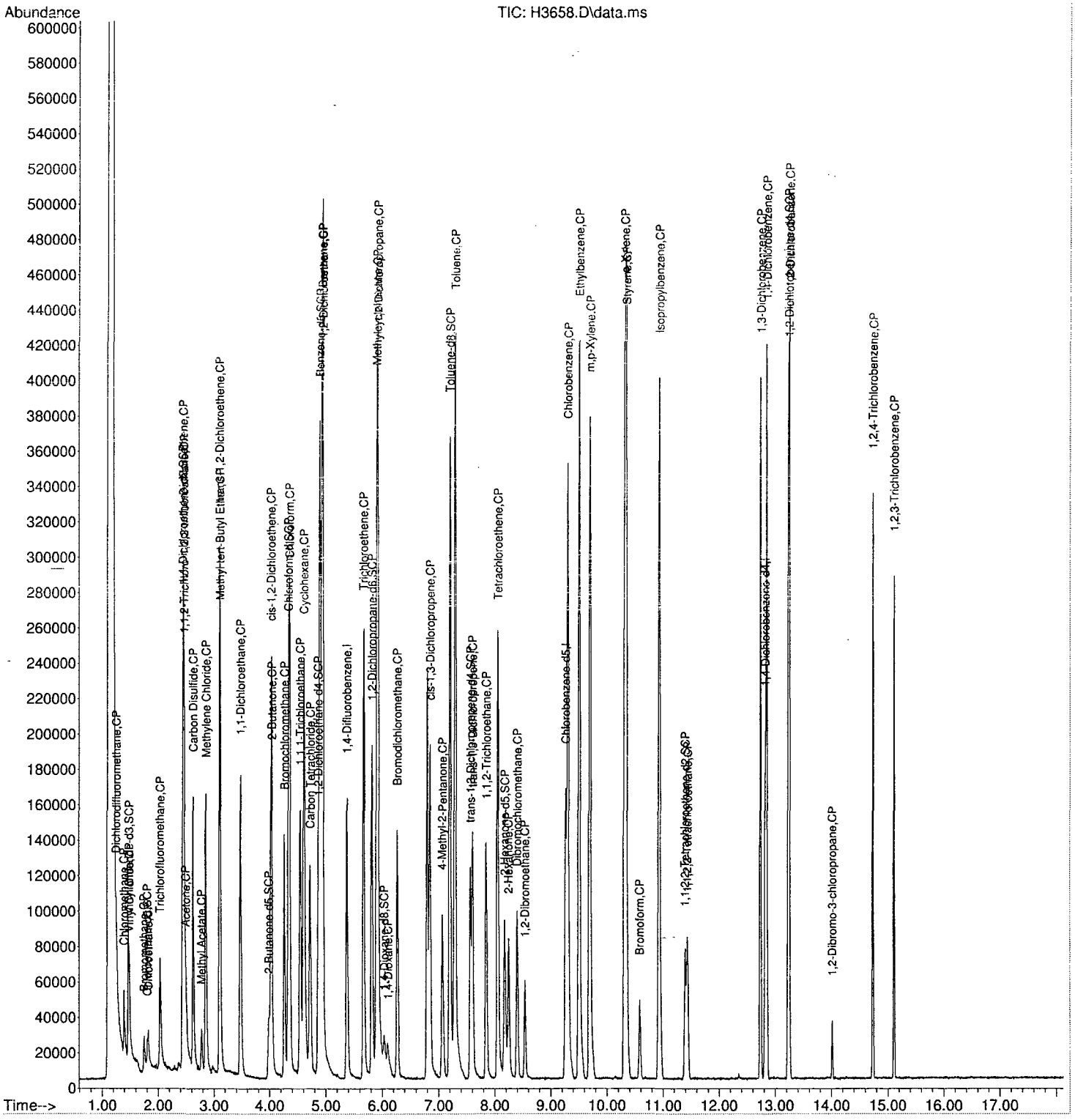
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3658.D
Acq On : 19 May 2012 11:40
Sample : 2E21002-CAL3
Misc : VSTD0255D 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 65
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 19 15:03:01 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:02:42 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | CP | Dichlorodifluoromethane | 0.203 | 0.257 | -26.6 | 100 | 0.00 |
| 3 | CP | Chloromethane | 0.346 | 0.402 | -16.2 | 100 | 0.00 |
| 4 | SCP | Vinyl Chloride-d3 | 0.152 | 0.153 | -0.7 | 100 | 0.00 |
| 5 | CP | Vinyl Chloride | 0.204 | 0.225 | -10.3 | 100 | 0.00 |
| 6 | CP | Bromomethane | 0.107 | 0.122 | -14.0 | 100 | 0.00 |
| 7 | SCP | Chloroethane-d5 | 0.084 | 0.095 | -13.1 | 100 | 0.00 |
| 8 | CP | Chloroethane | 0.080 | 0.107 | -33.8 | 100 | 0.00 |
| 9 | CP | Trichlorofluoromethane | 0.369 | 0.409 | -10.8 | 100 | 0.00 |
| 10 | SCP | 1,1-Dichloroethene-d2 | 0.999 | 0.955 | 4.4 | 100 | 0.00 |
| 11 | CP | 1,1-Dichloroethene | 0.407 | 0.430 | -5.7 | 100 | 0.00 |
| 12 | CP | 1,1,2-Trichloro-1,2,2-trifl | 0.287 | 0.288 | -0.3 | 100 | 0.00 |
| 13 | CP | Acetone | 0.100 | 0.095 | 5.0 | 100 | 0.00 |
| 14 | CP | Carbon Disulfide | 1.238 | 1.411 | -14.0 | 100 | 0.00 |
| 15 | CP | Methyl Acetate | 0.254 | 0.230 | 9.4 | 100 | 0.00 |
| 16 | CP | Methylene Chloride | 0.445 | 0.431 | 3.1 | 100 | 0.00 |
| 17 | CP | trans-1,2-Dichloroethene | 0.563 | 0.620 | -10.1 | 100 | 0.00 |
| 18 | CP | Methyl tert-Butyl Ether | 0.402 | 0.353 | 12.2 | 100 | 0.00 |
| 19 | CP | 1,1-Dichloroethane | 1.141 | 1.208 | -5.9 | 100 | 0.00 |
| 20 | SCP | 2-Butanone-d5 | 0.209 | 0.184 | 12.0 | 100 | 0.00 |
| 21 | CP | cis-1,2-Dichloroethene | 0.597 | 0.622 | -4.2 | 100 | 0.00 |
| 22 | CP | 2-Butanone | 0.147 | 0.138 | 6.1 | 100 | 0.00 |
| 23 | CP | Bromochloromethane | 0.242 | 0.237 | 2.1 | 100 | 0.00 |
| 24 | SCP | Chloroform-d | 1.144 | 1.084 | 5.2 | 100 | 0.00 |
| 25 | CP | Chloroform | 1.086 | 1.145 | -5.4 | 100 | 0.00 |
| 26 | SCP | 1,2-Dichloroethane-d4 | 0.615 | 0.550 | 10.6 | 100 | 0.00 |
| 27 | CP | 1,2-Dichloroethane | 0.774 | 0.749 | 3.2 | 100 | 0.00 |
| 28 | SCP | 1,4-Dioxane-d8 | 0.008 | 0.005 | 37.5 | 100 | 0.00 |
| 29 | CP | 1,4-Dioxane | 0.006 | 0.004# | 33.3 | 100 | 0.00 |
| 30 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 31 | CP | 1,1,1-Trichloroethane | 0.929 | 0.995 | -7.1 | 100 | 0.00 |
| 32 | CP | Cyclohexane | 1.240 | 1.347 | -8.6 | 100 | 0.00 |
| 33 | CP | Carbon Tetrachloride | 0.678 | 0.730 | -7.7 | 100 | 0.00 |
| 34 | SCP | Benzene-d6 | 3.162 | 2.998 | 5.2 | 100 | 0.00 |
| 35 | CP | Benzene | 3.144 | 3.237 | -3.0 | 100 | 0.00 |
| 36 | CP | Trichloroethene | 0.782 | 0.824 | -5.4 | 100 | 0.00 |
| 37 | SCP | 1,2-Dichloropropane-d6 | 0.867 | 0.803 | 7.4 | 100 | 0.00 |
| 38 | CP | Methylcyclohexane | 1.122 | 1.304 | -16.2 | 100 | 0.00 |
| 39 | CP | 1,2-Dichloropropane | 0.818 | 0.834 | -2.0 | 100 | 0.00 |
| 40 | CP | Bromodichloromethane | 0.864 | 0.882 | -2.1 | 100 | 0.00 |
| 41 | CP | cis-1,3-Dichloropropene | 0.977 | 1.008 | -3.2 | 100 | 0.00 |
| 42 | CP | 4-Methyl-2-Pentanone | 0.388 | 0.365 | 5.9 | 100 | 0.00 |
| 43 | SCP | Toluene-d8 | 2.718 | 2.735 | -0.6 | 100 | 0.00 |
| 44 | CP | Toluene | 3.130 | 3.361 | -7.4 | 100 | 0.00 |
| 45 | SCP | trans-1,3-Dichloropropene-d | 0.694 | 0.660 | 4.9 | 100 | 0.00 |
| 46 | CP | trans-1,3-Dichloropropene | 0.760 | 0.794 | -4.5 | 100 | 0.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 47 | CP | 1,1,2-Trichloroethane | 0.470 | 0.437 | 7.0 | 100 | 0.00 |
| 48 | CP | Tetrachloroethene | 0.613 | 0.671 | -9.5 | 100 | 0.00 |
| 49 | SCP | 2-Hexanone-d5 | 0.164 | 0.147 | 10.4 | 100 | 0.00 |
| 50 | CP | 2-Hexanone | 0.316 | 0.288 | 8.9 | 100 | 0.00 |
| 51 | CP | Dibromochloromethane | 0.517 | 0.530 | -2.5 | 100 | 0.00 |
| 52 | CP | 1,2-Dibromoethane | 0.448 | 0.422 | 5.8 | 100 | 0.00 |
| 53 | CP | Chlorobenzene | 2.113 | 2.153 | -1.9 | 100 | 0.00 |
| 54 | CP | Ethylbenzene | 3.159 | 3.518 | -11.4 | 100 | 0.00 |
| 55 | CP | m,p-Xylene | 1.233 | 1.401 | -13.6 | 100 | 0.00 |
| 56 | CP | o-Xylene | 1.170 | 1.328 | -13.5 | 100 | 0.00 |
| 57 | CP | Styrene | 1.851 | 2.025 | -9.4 | 100 | 0.00 |
| 58 | CP | Isopropylbenzene | 2.775 | 3.219 | -16.0 | 100 | 0.00 |
| 59 | SCP | 1,1,2,2-Tetrachloroethane-d | 0.485 | 0.417 | 14.0 | 100 | 0.00 |
| 60 | CP | 1,1,2,2-Tetrachloroethane | 0.453 | 0.433 | 4.4 | 100 | 0.00 |
| 61 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 62 | CP | Bromoform | 0.566 | 0.575 | -1.6 | 100 | 0.00 |
| 63 | CP | 1,3-Dichlorobenzene | 3.265 | 3.452 | -5.7 | 100 | 0.00 |
| 64 | CP | 1,4-Dichlorobenzene | 3.288 | 3.395 | -3.3 | 100 | 0.00 |
| 65 | SCP | 1,2-Dichlorobenzene-d4 | 1.858 | 1.773 | 4.6 | 100 | 0.00 |
| 66 | CP | 1,2-Dichlorobenzene | 3.009 | 3.043 | -1.1 | 100 | 0.00 |
| 67 | CP | 1,2-Dibromo-3-chloropropane | 0.143 | 0.142 | 0.7 | 100 | 0.00 |
| 68 | CP | 1,2,4-Trichlorobenzene | 1.592 | 1.596 | -0.3 | 100 | 0.00 |
| 69 | CP | 1,2,3-Trichlorobenzene | 1.323 | 1.261 | 4.7 | 100 | 0.00 |

(#) = Out of Range SPCC's out = 1 CCC's out = 0

SOSH3658.M Mon May 21 11:55:36 2012

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 2123

Lab File ID: H3677.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255E Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.203 | 0.245 | 0.010 | 20.5 | 50.0 |
| Chloromethane | 0.346 | 0.375 | 0.010 | 8.3 | 50.0 |
| Vinyl chloride | 0.204 | 0.215 | 0.010 | 5.3 | 50.0 |
| Bromomethane | 0.107 | 0.127 | 0.010 | 18.9 | 50.0 |
| Chloroethane | 0.080 | 0.115 | 0.010 | 43.5 | 50.0 |
| Trichlorofluoromethane | 0.369 | 0.398 | 0.010 | 7.9 | 50.0 |
| 1,1-Dichloroethene | 0.407 | 0.419 | 0.010 | 3.0 | 50.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.287 | 0.334 | 0.010 | 16.1 | 50.0 |
| Acetone | 0.100 | 0.103 | 0.010 | 3.7 | 50.0 |
| Carbon disulfide | 1.238 | 1.251 | 0.010 | 1.0 | 50.0 |
| Methyl acetate | 0.254 | 0.271 | 0.010 | 6.7 | 50.0 |
| Methylene chloride | 0.445 | 0.452 | 0.010 | 1.6 | 50.0 |
| trans-1,2-Dichloroethene | 0.563 | 0.600 | 0.010 | 6.5 | 50.0 |
| Methyl tert-butyl ether | 0.402 | 0.379 | 0.010 | -5.7 | 50.0 |
| 1,1-Dichloroethane | 1.141 | 1.199 | 0.010 | 5.1 | 50.0 |
| cis-1,2-Dichloroethene | 0.597 | 0.626 | 0.010 | 4.8 | 50.0 |
| 2-Butanone | 0.147 | 0.162 | 0.010 | 10.2 | 50.0 |
| Bromochloromethane | 0.242 | 0.252 | 0.010 | 4.0 | 50.0 |
| Chloroform | 1.086 | 1.152 | 0.010 | 6.1 | 50.0 |
| 1,1,1-Trichloroethane | 0.929 | 0.961 | 0.010 | 3.4 | 50.0 |
| Cyclohexane | 1.240 | 1.262 | 0.010 | 1.8 | 50.0 |
| Carbon tetrachloride | 0.678 | 0.665 | 0.010 | -2.0 | 50.0 |
| Benzene | 3.144 | 3.294 | 0.010 | 4.8 | 50.0 |
| 1,2-Dichloroethane | 0.774 | 0.826 | 0.010 | 6.7 | 50.0 |
| 1,4-Dioxane | 0.006 | 0.006 | 0.0050 | 2.3 | 50.0 |
| Trichloroethene | 0.782 | 0.818 | 0.010 | 4.5 | 50.0 |
| Methylcyclohexane | 1.122 | 1.157 | 0.010 | 3.1 | 50.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 2123

Lab File ID: H3677.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255E Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.818 | 0.866 | 0.010 | 5.9 | 50.0 |
| Bromodichloromethane | 0.864 | 0.926 | 0.010 | 7.1 | 50.0 |
| cis-1,3-Dichloropropene | 0.977 | 1.066 | 0.010 | 9.1 | 50.0 |
| 4-Methyl-2-pentanone | 0.388 | 0.415 | 0.010 | 7.1 | 50.0 |
| Toluene | 3.130 | 3.305 | 0.010 | 5.6 | 50.0 |
| trans-1,3-Dichloropropene | 0.760 | 0.809 | 0.010 | 6.4 | 50.0 |
| 1,1,2-Trichloroethane | 0.470 | 0.505 | 0.010 | 7.5 | 50.0 |
| Tetrachloroethene | 0.613 | 0.602 | 0.010 | -1.8 | 50.0 |
| 2-Hexanone | 0.316 | 0.307 | 0.010 | -2.8 | 50.0 |
| Dibromochloromethane | 0.517 | 0.563 | 0.010 | 8.9 | 50.0 |
| 1,2-Dibromoethane | 0.448 | 0.489 | 0.010 | 9.2 | 50.0 |
| Chlorobenzene | 2.113 | 2.122 | 0.010 | 0.4 | 50.0 |
| Ethylbenzene | 3.159 | 3.273 | 0.010 | 3.6 | 50.0 |
| o-Xylene | 1.170 | 1.230 | 0.010 | 5.1 | 50.0 |
| m,p-Xylene | 1.233 | 1.257 | 0.010 | 1.9 | 50.0 |
| Styrene | 1.851 | 1.923 | 0.010 | 3.9 | 50.0 |
| Bromoform | 0.566 | 0.617 | 0.010 | 9.1 | 50.0 |
| Isopropylbenzene | 2.775 | 2.795 | 0.010 | 0.7 | 50.0 |
| 1,1,2,2-Tetrachloroethane | 0.453 | 0.498 | 0.010 | 10.0 | 50.0 |
| 1,3-Dichlorobenzene | 3.265 | 3.247 | 0.010 | -0.6 | 50.0 |
| 1,4-Dichlorobenzene | 3.288 | 3.164 | 0.010 | -3.8 | 50.0 |
| 1,2-Dichlorobenzene | 3.009 | 2.947 | 0.010 | -2.1 | 50.0 |
| 1,2-Dibromo-3-chloropropane | 0.143 | 0.148 | 0.010 | 3.3 | 50.0 |
| 1,2,4-Trichlorobenzene | 1.592 | 1.411 | 0.010 | -11.4 | 50.0 |
| 1,2,3-Trichlorobenzene | 1.323 | 1.168 | 0.010 | -11.8 | 50.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/19/2012 Time: 2123

Lab File ID: H3677.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255E Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.152 | 0.169 | 0.010 | 11.2 | 50.0 |
| Chloroethane-d5 | 0.084 | 0.104 | 0.010 | 23.8 | 50.0 |
| 1,1-Dichloroethene-d2 | 0.999 | 0.944 | 0.010 | -5.5 | 50.0 |
| 2-Butanone-d5 | 0.209 | 0.214 | 0.010 | 2.5 | 50.0 |
| Chloroform-d | 1.144 | 1.098 | 0.010 | -4.0 | 50.0 |
| 1,2-Dichloroethane-d4 | 0.615 | 0.618 | 0.010 | 0.6 | 50.0 |
| Benzene-d6 | 3.162 | 3.197 | 0.010 | 1.1 | 50.0 |
| 1,2-Dichloropropane-d6 | 0.867 | 0.867 | 0.010 | 0.0 | 50.0 |
| Toluene-d8 | 2.718 | 2.760 | 0.010 | 1.5 | 50.0 |
| trans-1,3-Dichloropropene-d4 | 0.694 | 0.703 | 0.010 | 1.4 | 50.0 |
| 2-Hexanone-d5 | 0.164 | 0.182 | 0.010 | 10.5 | 50.0 |
| 1,4-Dioxane-d8 | 0.008 | 0.008 | 0.0050 | -1.4 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.485 | 0.492 | 0.010 | 1.5 | 50.0 |
| 1,2-Dichlorobenzene-d4 | 1.858 | 1.786 | 0.010 | -3.9 | 50.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3677.D
Acq On : 19 May 2012 21:23
Sample : 2E21002-CCV1
Misc : VSTD0255E 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 86
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 11:54:14 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.374 | 114 | 131138 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 98243 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 39273 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.484 | 65 | 22209 | 55.58 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 111.16% | | |
| 7) Chloroethane-d5 | 1.805 | 69 | 13630 | 61.88 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 123.76% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 123754 | 47.23 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 94.46% | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 56159 | 102.46 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 102.46% | | |
| 24) Chloroform-d | 4.333 | 84 | 143963 | 47.99 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 95.98% | | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 81103 | 50.32 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 100.64% | | |
| 28) 1,4-Dioxane-d8 | 6.040 | 96 | 20325 | 986.43 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 98.64% | | |
| 34) Benzene-d6 | 4.889 | 84 | 314052 | 50.55 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 101.10% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 85198 | 50.02 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 100.04% | | |
| 43) Toluene-d8 | 7.201 | 98 | 271111 | 50.76 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 101.52% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 69083 | 50.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 101.38% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 35692 | 110.45 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 110.45% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.390 | 84 | 48320 | 50.74 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 101.48% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 70131 | 48.05 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 96.10% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 32138 | 60.2292 ug/L | 97 |
| 3) Chloromethane | 1.397 | 50 | 49149 | 54.1333 ug/L | 98 |
| 5) Vinyl Chloride | 1.487 | 62 | 28194 | 52.6437 ug/L | 91 |
| 6) Bromomethane | 1.744 | 94 | 16706 | 59.4283 ug/L | 82 |
| 8) Chloroethane | 1.828 | 64 | 15028 | 71.7619 ug/L | 91 |
| 9) Trichlorofluoromethane | 2.037 | 101 | 52164 | 53.9467 ug/L | 97 |
| 11) 1,1-Dichloroethene | 2.455 | 96 | 54919 | 51.4788 ug/L | 97 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.465 | 101 | 43762 | 58.0653 ug/L | 98 |
| 13) Acetone | 2.497 | 43 | 27123 | 103.7231 ug/L | 100 |
| 14) Carbon Disulfide | 2.629 | 76 | 164056 | 50.5082 ug/L | 99 |
| 15) Methyl Acetate | 2.780 | 43 | 35492 | 53.3539 ug/L | 98 |
| 16) Methylene Chloride | 2.857 | 84 | 59249 | 50.8123 ug/L | 99 |
| 17) trans-1,2-Dichloroethene | 3.104 | 96 | 78677 | 53.2367 ug/L | 96 |
| 18) Methyl tert-Butyl Ether | 3.108 | 73 | 49750 | 47.1516 ug/L | 98 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 157275 | 52.5409 ug/L | 99 |
| 21) cis-1,2-Dichloroethene | 4.027 | 96 | 82106 | 52.3988 ug/L | 97 |
| 22) 2-Butanone | 4.043 | 43 | 42388 | 110.2098 ug/L | 98 |
| 23) Bromochloromethane | 4.256 | 128 | 33017 | 51.9772 ug/L | 97 |
| 25) Chloroform | 4.352 | 83 | 151125 | 53.0724 ug/L | 100 |
| 27) 1,2-Dichloroethane | 4.940 | 62 | 108272 | 53.3667 ug/L | 97 |
| 29) 1,4-Dioxane | 6.104 | 88 | 15684 | 1022.7525 ug/L # | 89 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3677.D
Acq On : 19 May 2012 21:23
Sample : 2E21002-CCV1
Misc : VSTD0255E 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 86
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:54:14 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.538 | 97 | 94414 | 51.7032 ug/L | 97 |
| 32) Cyclohexane | 4.606 | 56 | 123950 | 50.8850 ug/L | 96 |
| 33) Carbon Tetrachloride | 4.719 | 117 | 65298 | 49.0118 ug/L | 99 |
| 35) Benzene | 4.931 | 78 | 323638 | 52.3834 ug/L | 100 |
| 36) Trichloroethene | 5.670 | 95 | 80343 | 52.2659 ug/L | 100 |
| 38) Methylcyclohexane | 5.902 | 83 | 113667 | 51.5411 ug/L | 95 |
| 39) 1,2-Dichloropropane | 5.918 | 63 | 85068 | 52.9441 ug/L | 98 |
| 40) Bromodichloromethane | 6.268 | 83 | 90934 | 53.5739 ug/L | 99 |
| 41) cis-1,3-Dichloropropene | 6.847 | 75 | 104717 | 54.5265 ug/L | 98 |
| 42) 4-Methyl-2-Pentanone | 7.066 | 43 | 81612 | 107.0798 ug/L | 99 |
| 44) Toluene | 7.288 | 91 | 324705 | 52.7902 ug/L | 100 |
| 46) trans-1,3-Dichloropropene | 7.606 | 75 | 79438 | 53.1997 ug/L | 100 |
| 47) 1,1,2-Trichloroethane | 7.847 | 97 | 49629 | 53.7455 ug/L | 98 |
| 48) Tetrachloroethene | 8.053 | 164 | 59097 | 49.0896 ug/L | 97 |
| 50) 2-Hexanone | 8.249 | 43 | 60349 | 97.1926 ug/L | 98 |
| 51) Dibromochloromethane | 8.400 | 129 | 55343 | 54.4710 ug/L | 98 |
| 52) 1,2-Dibromoethane | 8.538 | 107 | 48042 | 54.6206 ug/L | 98 |
| 53) Chlorobenzene | 9.304 | 112 | 208438 | 50.2013 ug/L | 99 |
| 54) Ethylbenzene | 9.506 | 91 | 321528 | 51.8018 ug/L | 99 |
| 55) m,p-Xylene | 9.693 | 106 | 123481 | 50.9492 ug/L | 95 |
| 56) o-Xylene | 10.313 | 106 | 120870 | 52.5624 ug/L | 96 |
| 57) Styrene | 10.339 | 104 | 188932 | 51.9388 ug/L | 99 |
| 58) Isopropylbenzene | 10.930 | 105 | 274556 | 50.3595 ug/L | 100 |
| 60) 1,1,2,2-Tetrachloroethane | 11.432 | 83 | 48973 | 54.9795 ug/L | 98 |
| 62) Bromoform | 10.583 | 173 | 24248 | 54.5735 ug/L | 96 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 127518 | 49.7168 ug/L | 98 |
| 64) 1,4-Dichlorobenzene | 12.844 | 146 | 124261 | 48.1096 ug/L | 99 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 115751 | 48.9741 ug/L | 100 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 5803 | 51.6296 ug/L | 97 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 55417 | 44.3179 ug/L | 100 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 45852 | 44.1185 ug/L | 99 |

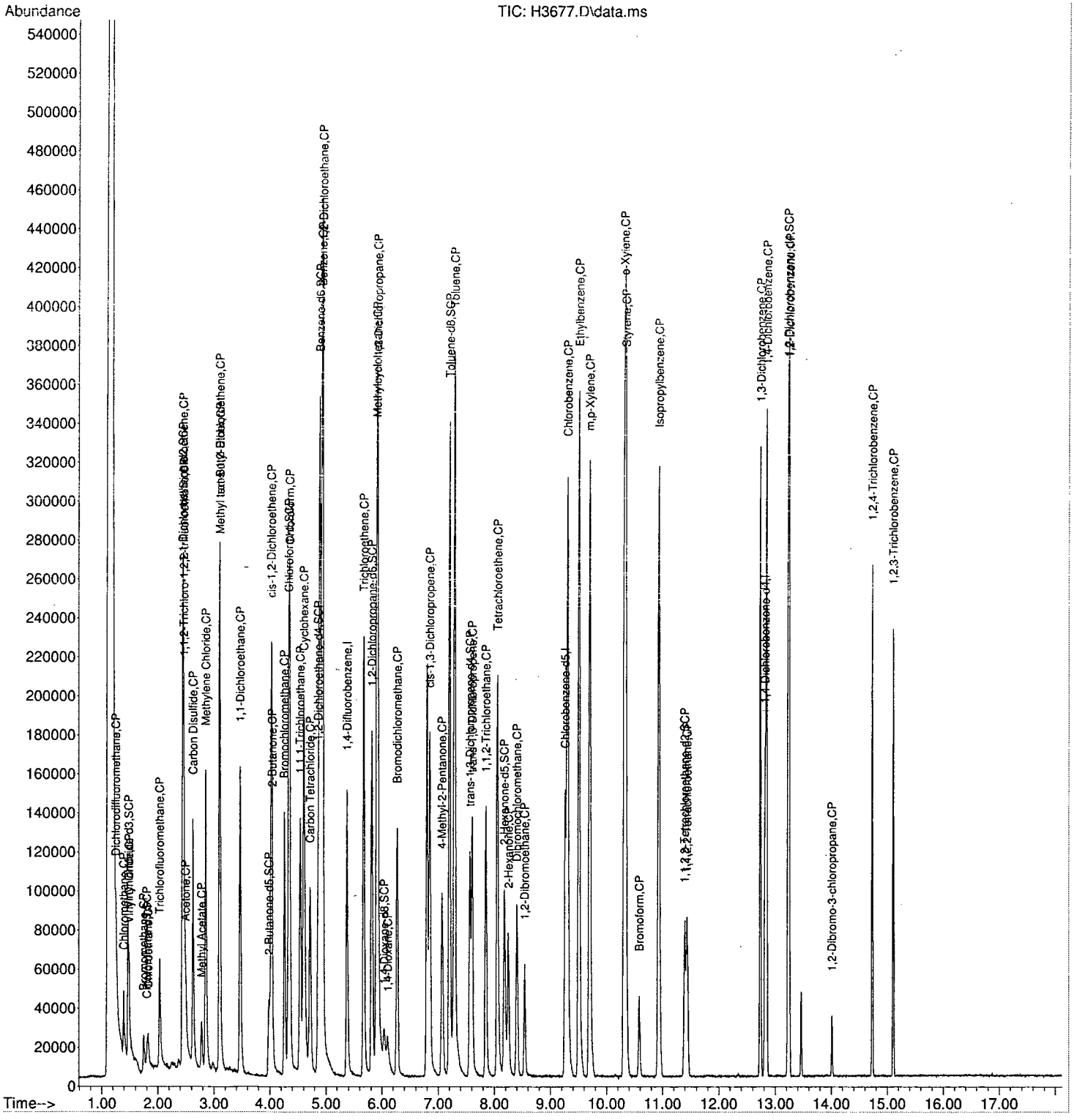
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3677.D
Acq On : 19 May 2012 21:23
Sample : 2E21002-CCV1
Misc : VSTD0255E 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 86
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:54:14 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration






00139

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3677.D
Acq On : 19 May 2012 21:23
Sample : 2E21002-CCV1
Misc : VSTD0255E 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 86
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:54:14 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3658.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 2 | CP | Dichlorodifluoromethane | 0.203 | 0.245 | -20.7 | 88 | 0.00 |
| 3 | CP | Chloromethane | 0.346 | 0.375 | -8.4 | 86 | 0.00 |
| 4 | SCP | Vinyl Chloride-d3 | 0.152 | 0.169 | -11.2 | 102 | 0.00 |
| 5 | CP | Vinyl Chloride | 0.204 | 0.215 | -5.4 | 88 | 0.00 |
| 6 | CP | Bromomethane | 0.107 | 0.127 | -18.7 | 97 | 0.00 |
| 7 | SCP | Chloroethane-d5 | 0.084 | 0.104 | -23.8 | 100 | 0.00 |
| 8 | CP | Chloroethane | 0.080 | 0.115 | -43.8# | 99 | 0.00 |
| 9 | CP | Trichlorofluoromethane | 0.369 | 0.398 | -7.9 | 90 | 0.00 |
| 10 | SCP | 1,1-Dichloroethene-d2 | 0.999 | 0.944 | 5.5 | 91 | 0.00 |
| 11 | CP | 1,1-Dichloroethene | 0.407 | 0.419 | -2.9 | 90 | 0.00 |
| 12 | CP | 1,1,2-Trichloro-1,2,2-trifl | 0.287 | 0.334 | -16.4 | 107 | 0.00 |
| 13 | CP | Acetone | 0.100 | 0.103 | -3.0 | 100 | 0.00 |
| 14 | CP | Carbon Disulfide | 1.238 | 1.251 | -1.1 | 82 | 0.00 |
| 15 | CP | Methyl Acetate | 0.254 | 0.271 | -6.7 | 108 | 0.00 |
| 16 | CP | Methylene Chloride | 0.445 | 0.452 | -1.6 | 97 | 0.00 |
| 17 | CP | trans-1,2-Dichloroethene | 0.563 | 0.600 | -6.6 | 89 | 0.00 |
| 18 | CP | Methyl tert-Butyl Ether | 0.402 | 0.379 | 5.7 | 99 | 0.00 |
| 19 | CP | 1,1-Dichloroethane | 1.141 | 1.199 | -5.1 | 92 | 0.00 |
| 20 | SCP | 2-Butanone-d5 | 0.209 | 0.214 | -2.4 | 107 | 0.00 |
| 21 | CP | cis-1,2-Dichloroethene | 0.597 | 0.626 | -4.9 | 93 | 0.00 |
| 22 | CP | 2-Butanone | 0.147 | 0.162 | -10.2 | 108 | 0.00 |
| 23 | CP | Bromochloromethane | 0.242 | 0.252 | -4.1 | 98 | 0.00 |
| 24 | SCP | Chloroform-d | 1.144 | 1.098 | 4.0 | 93 | 0.00 |
| 25 | CP | Chloroform | 1.086 | 1.152 | -6.1 | 93 | 0.00 |
| 26 | SCP | 1,2-Dichloroethane-d4 | 0.615 | 0.618 | -0.5 | 104 | 0.00 |
| 27 | CP | 1,2-Dichloroethane | 0.774 | 0.826 | -6.7 | 102 | 0.00 |
| 28 | SCP | 1,4-Dioxane-d8 | 0.008 | 0.008 | 0.0 | 132 | 0.00 |
| 29 | CP | 1,4-Dioxane | 0.006 | 0.006 | 0.0 | 123 | 0.00 |
| 30 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 31 | CP | 1,1,1-Trichloroethane | 0.929 | 0.961 | -3.4 | 86 | 0.00 |
| 32 | CP | Cyclohexane | 1.240 | 1.262 | -1.8 | 84 | 0.00 |
| 33 | CP | Carbon Tetrachloride | 0.678 | 0.665 | 1.9 | 81 | 0.00 |
| 34 | SCP | Benzene-d6 | 3.162 | 3.197 | -1.1 | 95 | 0.00 |
| 35 | CP | Benzene | 3.144 | 3.294 | -4.8 | 91 | 0.00 |
| 36 | CP | Trichloroethene | 0.782 | 0.818 | -4.6 | 89 | 0.00 |
| 37 | SCP | 1,2-Dichloropropane-d6 | 0.867 | 0.867 | 0.0 | 97 | 0.00 |
| 38 | CP | Methylcyclohexane | 1.122 | 1.157 | -3.1 | 79 | 0.00 |
| 39 | CP | 1,2-Dichloropropane | 0.818 | 0.866 | -5.9 | 93 | 0.00 |
| 40 | CP | Bromodichloromethane | 0.864 | 0.926 | -7.2 | 94 | 0.00 |
| 41 | CP | cis-1,3-Dichloropropene | 0.977 | 1.066 | -9.1 | 95 | 0.00 |
| 42 | CP | 4-Methyl-2-Pentanone | 0.388 | 0.415 | -7.0 | 102 | 0.00 |
| 43 | SCP | Toluene-d8 | 2.718 | 2.760 | -1.5 | 90 | 0.00 |
| 44 | CP | Toluene | 3.130 | 3.305 | -5.6 | 88 | 0.00 |
| 45 | SCP | trans-1,3-Dichloropropene-d | 0.694 | 0.703 | -1.3 | 95 | 0.00 |
| 46 | CP | trans-1,3-Dichloropropene | 0.760 | 0.809 | -6.4 | 91 | 0.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 47 | CP | 1,1,2-Trichloroethane | 0.470 | 0.505 | -7.4 | 103 | 0.00 |
| 48 | CP | Tetrachloroethene | 0.613 | 0.602 | 1.8 | 80 | 0.00 |
| 49 | SCP | 2-Hexanone-d5 | 0.164 | 0.182 | -11.0 | 111 | 0.00 |
| 50 | CP | 2-Hexanone | 0.316 | 0.307 | 2.8 | 96 | 0.00 |
| 51 | CP | Dibromochloromethane | 0.517 | 0.563 | -8.9 | 95 | 0.00 |
| 52 | CP | 1,2-Dibromoethane | 0.448 | 0.489 | -9.2 | 104 | 0.00 |
| 53 | CP | Chlorobenzene | 2.113 | 2.122 | -0.4 | 88 | 0.00 |
| 54 | CP | Ethylbenzene | 3.159 | 3.273 | -3.6 | 83 | 0.00 |
| 55 | CP | m,p-Xylene | 1.233 | 1.257 | -1.9 | 80 | 0.00 |
| 56 | CP | o-Xylene | 1.170 | 1.230 | -5.1 | 83 | 0.00 |
| 57 | CP | Styrene | 1.851 | 1.923 | -3.9 | 85 | 0.00 |
| 58 | CP | Isopropylbenzene | 2.775 | 2.795 | -0.7 | 78 | 0.00 |
| 59 | SCP | 1,1,2,2-Tetrachloroethane-d | 0.485 | 0.492 | -1.4 | 106 | 0.00 |
| 60 | CP | 1,1,2,2-Tetrachloroethane | 0.453 | 0.498 | -9.9 | 103 | 0.00 |
| 61 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 62 | CP | Bromoform | 0.566 | 0.617 | -9.0 | 96 | 0.00 |
| 63 | CP | 1,3-Dichlorobenzene | 3.265 | 3.247 | 0.6 | 84 | 0.00 |
| 64 | CP | 1,4-Dichlorobenzene | 3.288 | 3.164 | 3.8 | 83 | 0.00 |
| 65 | SCP | 1,2-Dichlorobenzene-d4 | 1.858 | 1.786 | 3.9 | 90 | 0.00 |
| 66 | CP | 1,2-Dichlorobenzene | 3.009 | 2.947 | 2.1 | 86 | 0.00 |
| 67 | CP | 1,2-Dibromo-3-chloropropane | 0.143 | 0.148 | -3.5 | 93 | 0.00 |
| 68 | CP | 1,2,4-Trichlorobenzene | 1.592 | 1.411 | 11.4 | 79 | 0.00 |
| 69 | CP | 1,2,3-Trichlorobenzene | 1.323 | 1.168 | 11.7 | 82 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 1

SOSH3658.M Mon May 21 12:02:30 2012

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1011

Lab File ID: H3679.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255F Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.203 | 0.251 | 0.010 | 23.5 | 40.0 |
| Chloromethane | 0.346 | 0.379 | 0.010 | 9.5 | 40.0 |
| Vinyl chloride | 0.204 | 0.238 | 0.100 | 16.7 | 25.0 |
| Bromomethane | 0.107 | 0.132 | 0.100 | 23.4 | 25.0 |
| Chloroethane | 0.080 | 0.107 | 0.010 | 33.6 | 40.0 |
| Trichlorofluoromethane | 0.369 | 0.442 | 0.010 | 19.9 | 40.0 |
| 1,1-Dichloroethene | 0.407 | 0.444 | 0.100 | 9.1 | 25.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.287 | 0.336 | 0.010 | 17.0 | 40.0 |
| Acetone | 0.100 | 0.101 | 0.010 | 1.4 | 40.0 |
| Carbon disulfide | 1.238 | 1.466 | 0.010 | 18.3 | 40.0 |
| Methyl acetate | 0.254 | 0.240 | 0.010 | -5.3 | 40.0 |
| Methylene chloride | 0.445 | 0.455 | 0.010 | 2.3 | 40.0 |
| trans-1,2-Dichloroethene | 0.563 | 0.609 | 0.010 | 8.1 | 40.0 |
| Methyl tert-butyl ether | 0.402 | 0.358 | 0.010 | -10.9 | 40.0 |
| 1,1-Dichloroethane | 1.141 | 1.207 | 0.200 | 5.7 | 25.0 |
| cis-1,2-Dichloroethene | 0.597 | 0.612 | 0.010 | 2.4 | 40.0 |
| 2-Butanone | 0.147 | 0.137 | 0.010 | -6.8 | 40.0 |
| Bromochloromethane | 0.242 | 0.243 | 0.050 | 0.4 | 25.0 |
| Chloroform | 1.086 | 1.160 | 0.200 | 6.8 | 25.0 |
| 1,1,1-Trichloroethane | 0.929 | 1.047 | 0.100 | 12.6 | 25.0 |
| Cyclohexane | 1.240 | 1.393 | 0.010 | 12.3 | 40.0 |
| Carbon tetrachloride | 0.678 | 0.811 | 0.100 | 19.6 | 25.0 |
| Benzene | 3.144 | 3.361 | 0.400 | 6.9 | 25.0 |
| 1,2-Dichloroethane | 0.774 | 0.746 | 0.100 | -3.6 | 25.0 |
| 1,4-Dioxane | 0.006 | 0.006 | 0.005 | 0.2 | 50.0 |
| Trichloroethene | 0.782 | 0.846 | 0.300 | 8.2 | 25.0 |
| Methylcyclohexane | 1.122 | 1.221 | 0.010 | 8.7 | 40.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1011

Lab File ID: H3679.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255F Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.818 | 0.835 | 0.010 | 2.1 | 40.0 |
| Bromodichloromethane | 0.864 | 0.925 | 0.200 | 7.1 | 25.0 |
| cis-1,3-Dichloropropene | 0.977 | 1.034 | 0.200 | 5.8 | 25.0 |
| 4-Methyl-2-pentanone | 0.388 | 0.367 | 0.010 | -5.4 | 40.0 |
| Toluene | 3.130 | 3.355 | 0.400 | 7.2 | 25.0 |
| trans-1,3-Dichloropropene | 0.760 | 0.813 | 0.100 | 7.0 | 25.0 |
| 1,1,2-Trichloroethane | 0.470 | 0.464 | 0.100 | -1.2 | 25.0 |
| Tetrachloroethene | 0.613 | 0.684 | 0.100 | 11.6 | 25.0 |
| 2-Hexanone | 0.316 | 0.279 | 0.010 | -11.7 | 40.0 |
| Dibromochloromethane | 0.517 | 0.558 | 0.100 | 7.9 | 25.0 |
| 1,2-Dibromoethane | 0.448 | 0.452 | 0.010 | 1.0 | 40.0 |
| Chlorobenzene | 2.113 | 2.142 | 0.500 | 1.4 | 25.0 |
| Ethylbenzene | 3.159 | 3.438 | 0.100 | 8.8 | 25.0 |
| o-Xylene | 1.170 | 1.255 | 0.300 | 7.2 | 25.0 |
| m,p-Xylene | 1.233 | 1.349 | 0.300 | 9.3 | 25.0 |
| Styrene | 1.851 | 1.954 | 0.300 | 5.5 | 25.0 |
| Bromoform | 0.566 | 0.605 | 0.050 | 7.0 | 25.0 |
| Isopropylbenzene | 2.775 | 3.029 | 0.010 | 9.2 | 40.0 |
| 1,1,2,2-Tetrachloroethane | 0.453 | 0.433 | 0.300 | -4.5 | 25.0 |
| 1,3-Dichlorobenzene | 3.265 | 3.351 | 0.600 | 2.6 | 25.0 |
| 1,4-Dichlorobenzene | 3.288 | 3.316 | 0.500 | 0.8 | 25.0 |
| 1,2-Dichlorobenzene | 3.009 | 2.933 | 0.400 | -2.5 | 25.0 |
| 1,2-Dibromo-3-chloropropane | 0.143 | 0.138 | 0.010 | -3.8 | 40.0 |
| 1,2,4-Trichlorobenzene | 1.592 | 1.534 | 0.200 | -3.6 | 25.0 |
| 1,2,3-Trichlorobenzene | 1.323 | 1.241 | 0.200 | -6.2 | 25.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1011

Lab File ID: H3679.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255F Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF025 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.152 | 0.179 | 0.010 | 17.6 | 25.0 |
| Chloroethane-d5 | 0.084 | 0.106 | 0.010 | 26.4 | 40.0 |
| 1,1-Dichloroethene-d2 | 0.999 | 1.045 | 0.010 | 4.6 | 25.0 |
| 2-Butanone-d5 | 0.209 | 0.188 | 0.010 | -9.8 | 40.0 |
| Chloroform-d | 1.144 | 1.097 | 0.010 | -4.1 | 25.0 |
| 1,2-Dichloroethane-d4 | 0.615 | 0.568 | 0.010 | -7.6 | 25.0 |
| Benzene-d6 | 3.162 | 3.126 | 0.010 | -1.2 | 25.0 |
| 1,2-Dichloropropane-d6 | 0.867 | 0.830 | 0.010 | -4.3 | 40.0 |
| Toluene-d8 | 2.718 | 2.775 | 0.010 | 2.1 | 25.0 |
| trans-1,3-Dichloropropene-d4 | 0.694 | 0.726 | 0.010 | 4.7 | 25.0 |
| 2-Hexanone-d5 | 0.164 | 0.164 | 0.010 | 0.0 | 40.0 |
| 1,4-Dioxane-d8 | 0.008 | 0.006 | 0.005 | -19.6 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.485 | 0.439 | 0.010 | -9.5 | 25.0 |
| 1,2-Dichlorobenzene-d4 | 1.858 | 1.751 | 0.010 | -5.8 | 25.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/23/12

05/23/12

Quant Time: May 21 10:49:55 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 149287 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.259 | 117 | 110361 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.815 | 152 | 44983 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 26753 | 58.81 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 117.62% | | |
| 7) Chloroethane-d5 | 1.812 | 69 | 15845 | 63.19 ug/L | 0.01 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 126.38% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 155958 | 52.29 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 104.58% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 56270 | 90.18 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 90.18% | | |
| 24) Chloroform-d | 4.330 | 84 | 163725 | 47.94 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 95.88% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 84749 | 46.19 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 92.38% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 18850 | 803.62 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 80.36% | | |
| 34) Benzene-d6 | 4.889 | 84 | 344955 | 49.42 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 98.84% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 91570 | 47.86 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 95.72% | | |
| 43) Toluene-d8 | 7.198 | 98 | 306237 | 51.05 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 102.10% | | |
| 45) trans-1,3-Dichloroprop... | 7.564 | 79 | 80148 | 52.35 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 104.70% | | |
| 49) 2-Hexanone-d5 | 8.172 | 63 | 36287 | 99.96 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 99.96% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.394 | 84 | 48423 | 45.26 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 90.52% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.230 | 152 | 78767 | 47.11 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 94.22% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.256 | 85 | 37512 | 61.7540 ug/L | 95 |
| 3) Chloromethane | 1.397 | 50 | 56590 | 54.7515 ug/L | 92 |
| 5) Vinyl Chloride | 1.490 | 62 | 35567 | 58.3369 ug/L | 98 |
| 6) Bromomethane | 1.744 | 94 | 19753 | 61.7249 ug/L | 88 |
| 8) Chloroethane | 1.828 | 64 | 15922 | 66.7878 ug/L | 90 |
| 9) Trichlorofluoromethane | 2.040 | 101 | 65974 | 59.9340 ug/L | 98 |
| 11) 1,1-Dichloroethene | 2.452 | 96 | 66255 | 54.5545 ug/L | 93 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.471 | 101 | 50211 | 58.5228 ug/L | 95 |
| 13) Acetone | 2.503 | 43 | 30198 | 101.4431 ug/L | 94 |
| 14) Carbon Disulfide | 2.629 | 76 | 218781 | 59.1679 ug/L | 100 |
| 15) Methyl Acetate | 2.780 | 43 | 35853 | 47.3443 ug/L | 99 |
| 16) Methylene Chloride | 2.857 | 84 | 67890 | 51.1446 ug/L | 99 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 90948 | 54.0584 ug/L | 96 |
| 18) Methyl tert-Butyl Ether | 3.108 | 73 | 53508 | 44.5481 ug/L | 98 |
| 19) 1,1-Dichloroethane | 3.471 | 63 | 180135 | 52.8618 ug/L | 100 |
| 21) cis-1,2-Dichloroethene | 4.024 | 96 | 91299 | 51.1822 ug/L | 97 |
| 22) 2-Butanone | 4.040 | 43 | 40807 | 93.2005 ug/L | 100 |
| 23) Bromochloromethane | 4.262 | 128 | 36301 | 50.1996 ug/L | 93 |
| 25) Chloroform | 4.349 | 83 | 173107 | 53.4015 ug/L | 98 |
| 27) 1,2-Dichloroethane | 4.944 | 62 | 111318 | 48.1976 ug/L | 9° |
| 29) 1,4-Dioxane | 6.098 | 88 | 17489m | 1001.8097 ug/L | |

AC S.P.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:49:55 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.539 | 97 | 115539 | 56.3243 ug/L | 99 |
| 32) Cyclohexane | 4.603 | 56 | 153700 | 56.1699 ug/L | 96 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 89505 | 59.8045 ug/L | 100 |
| 35) Benzene | 4.931 | 78 | 370899 | 53.4411 ug/L | 100 |
| 36) Trichloroethene | 5.667 | 95 | 93381 | 54.0773 ug/L | 98 |
| 38) Methylcyclohexane | 5.902 | 83 | 134705 | 54.3737 ug/L | 95 |
| 39) 1,2-Dichloropropane | 5.921 | 63 | 92108 | 51.0311 ug/L | 99 |
| 40) Bromodichloromethane | 6.268 | 83 | 102071 | 53.5322 ug/L | 100 |
| 41) cis-1,3-Dichloropropene | 6.844 | 75 | 114081 | 52.8798 ug/L | 100 |
| 42) 4-Methyl-2-Pentanone | 7.072 | 43 | 81036 | 94.6493 ug/L | 99 |
| 44) Toluene | 7.291 | 91 | 370217 | 53.5805 ug/L | 97 |
| 46) trans-1,3-Dichloropropene | 7.609 | 75 | 89778 | 53.5225 ug/L | 98 |
| 47) 1,1,2-Trichloroethane | 7.850 | 97 | 51242 | 49.3990 ug/L | 96 |
| 48) Tetrachloroethene | 8.050 | 164 | 75449 | 55.7909 ug/L | 99 |
| 50) 2-Hexanone | 8.249 | 43 | 61561 | 88.2581 ug/L | 97 |
| 51) Dibromochloromethane | 8.400 | 129 | 61569 | 53.9450 ug/L | 100 |
| 52) 1,2-Dibromoethane | 8.538 | 107 | 49921 | 50.5248 ug/L | 98 |
| 53) Chlorobenzene | 9.304 | 112 | 236425 | 50.6894 ug/L | 100 |
| 54) Ethylbenzene | 9.506 | 91 | 379418 | 54.4164 ug/L | 99 |
| 55) m,p-Xylene | 9.696 | 106 | 148825 | 54.6637 ug/L | 98 |
| 56) o-Xylene | 10.310 | 106 | 138486 | 53.6103 ug/L | 97 |
| 57) Styrene | 10.339 | 104 | 215651 | 52.7745 ug/L | 99 |
| 58) Isopropylbenzene | 10.934 | 105 | 334269 | 54.5799 ug/L | 99 |
| 60) 1,1,2,2-Tetrachloroethane | 11.435 | 83 | 47768 | 47.7383 ug/L | 100 |
| 62) Bromoform | 10.580 | 173 | 27232 | 53.5096 ug/L | 97 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 150753 | 51.3149 ug/L | 99 |
| 64) 1,4-Dichlorobenzene | 12.844 | 146 | 149168 | 50.4218 ug/L | 98 |
| 66) 1,2-Dichlorobenzene | 13.249 | 146 | 131914 | 48.7280 ug/L | 99 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 6193 | 48.1053 ug/L | 98 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 69026 | 48.1942 ug/L | 97 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 55810 | 46.8835 ug/L | 98 |

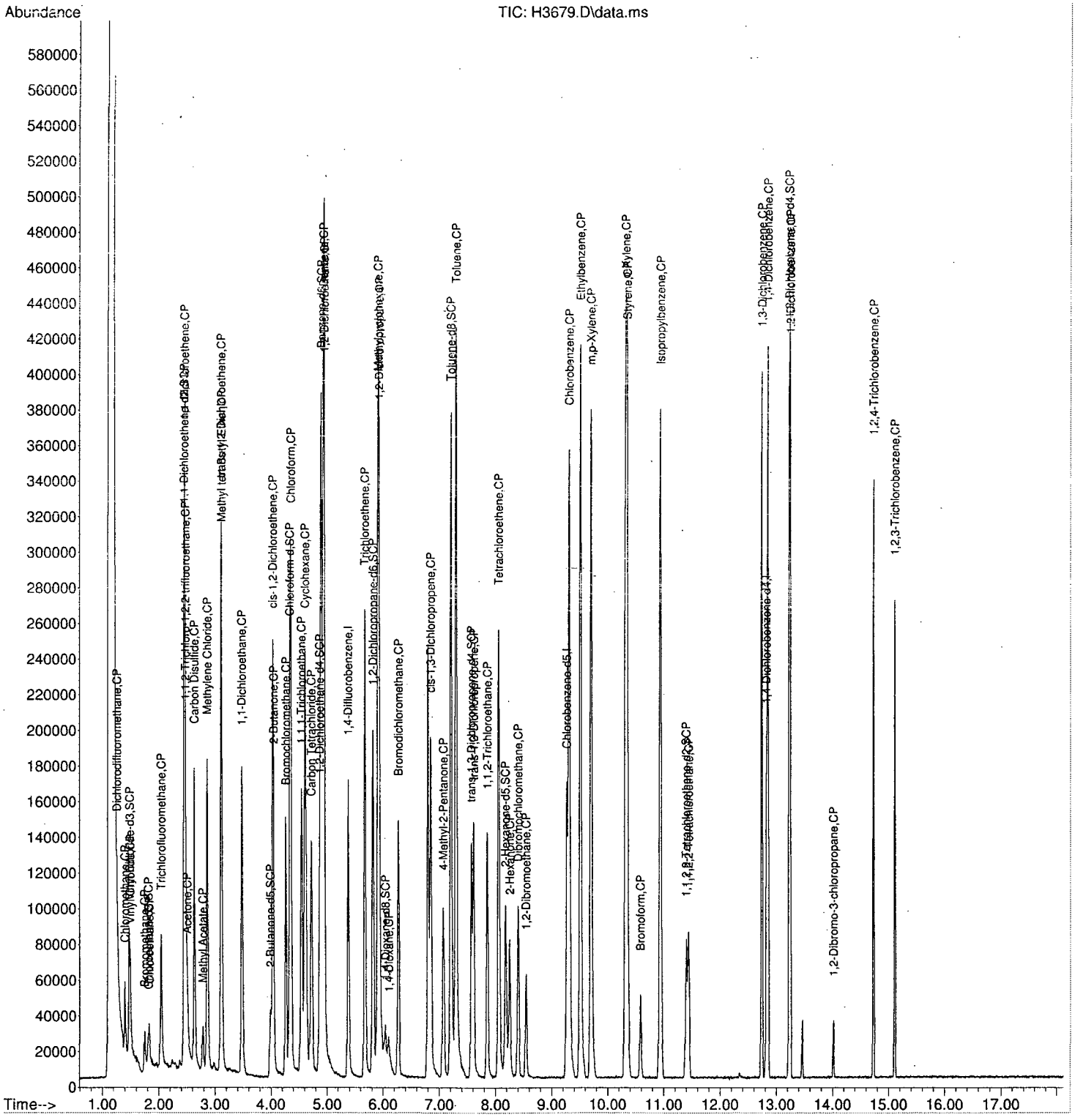
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:49:55 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration






00147

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:49:55 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 2 | CP | Dichlorodifluoromethane | 0.203 | 0.251 | -23.6 | 103 | 0.00 |
| 3 | CP | Chloromethane | 0.346 | 0.379 | -9.5 | 99 | 0.00 |
| 4 | SCP | Vinyl Chloride-d3 | 0.152 | 0.179 | -17.8 | 123 | 0.00 |
| 5 | CP | Vinyl Chloride | 0.204 | 0.238 | -16.7 | 111 | 0.00 |
| 6 | CP | Bromomethane | 0.107 | 0.132 | -23.4 | 114 | 0.00 |
| 7 | SCP | Chloroethane-d5 | 0.084 | 0.106 | -26.2 | 117 | 0.00 |
| 8 | CP | Chloroethane | 0.080 | 0.107 | -33.8 | 105 | 0.00 |
| 9 | CP | Trichlorofluoromethane | 0.369 | 0.442 | -19.8 | 113 | 0.00 |
| 10 | SCP | 1,1-Dichloroethene-d2 | 0.999 | 1.045 | -4.6 | 115 | 0.00 |
| 11 | CP | 1,1-Dichloroethene | 0.407 | 0.444 | -9.1 | 108 | 0.00 |
| 12 | CP | 1,1,2-Trichloro-1,2,2-trifl | 0.287 | 0.336 | -17.1 | 123 | 0.00 |
| 13 | CP | Acetone | 0.100 | 0.101 | -1.0 | 112 | 0.00 |
| 14 | CP | Carbon Disulfide | 1.238 | 1.466 | -18.4 | 109 | 0.00 |
| 15 | CP | Methyl Acetate | 0.254 | 0.240 | 5.5 | 110 | 0.00 |
| 16 | CP | Methylene Chloride | 0.445 | 0.455 | -2.2 | 111 | 0.00 |
| 17 | CP | trans-1,2-Dichloroethene | 0.563 | 0.609 | -8.2 | 103 | 0.00 |
| 18 | CP | Methyl tert-Butyl Ether | 0.402 | 0.358 | 10.9 | 106 | 0.00 |
| 19 | CP | 1,1-Dichloroethane | 1.141 | 1.207 | -5.8 | 105 | 0.00 |
| 20 | SCP | 2-Butanone-d5 | 0.209 | 0.188 | 10.0 | 107 | 0.00 |
| 21 | CP | cis-1,2-Dichloroethene | 0.597 | 0.612 | -2.5 | 103 | 0.00 |
| 22 | CP | 2-Butanone | 0.147 | 0.137 | 6.8 | 104 | 0.00 |
| 23 | CP | Bromochloromethane | 0.242 | 0.243 | -0.4 | 108 | 0.00 |
| 24 | SCP | Chloroform-d | 1.144 | 1.097 | 4.1 | 106 | 0.00 |
| 25 | CP | Chloroform | 1.086 | 1.160 | -6.8 | 106 | 0.00 |
| 26 | SCP | 1,2-Dichloroethane-d4 | 0.615 | 0.568 | 7.6 | 108 | 0.00 |
| 27 | CP | 1,2-Dichloroethane | 0.774 | 0.746 | 3.6 | 105 | 0.00 |
| 28 | SCP | 1,4-Dioxane-d8 | 0.008 | 0.006 | 25.0 | 123 | 0.00 |
| 29 | CP | 1,4-Dioxane | 0.006 | 0.006 | 0.0 | 137 | 0.00 |
| 30 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 31 | CP | 1,1,1-Trichloroethane | 0.929 | 1.047 | -12.7 | 106 | 0.00 |
| 32 | CP | Cyclohexane | 1.240 | 1.393 | -12.3 | 104 | 0.00 |
| 33 | CP | Carbon Tetrachloride | 0.678 | 0.811 | -19.6 | 112 | 0.00 |
| 34 | SCP | Benzene-d6 | 3.162 | 3.126 | 1.1 | 105 | 0.00 |
| 35 | CP | Benzene | 3.144 | 3.361 | -6.9 | 104 | 0.00 |
| 36 | CP | Trichloroethene | 0.782 | 0.846 | -8.2 | 103 | 0.00 |
| 37 | SCP | 1,2-Dichloropropane-d6 | 0.867 | 0.830 | 4.3 | 104 | 0.00 |
| 38 | CP | Methylcyclohexane | 1.122 | 1.221 | -8.8 | 94 | 0.00 |
| 39 | CP | 1,2-Dichloropropane | 0.818 | 0.835 | -2.1 | 101 | 0.00 |
| 40 | CP | Bromodichloromethane | 0.864 | 0.925 | -7.1 | 105 | 0.00 |
| 41 | CP | cis-1,3-Dichloropropene | 0.977 | 1.034 | -5.8 | 103 | 0.00 |
| 42 | CP | 4-Methyl-2-Pentanone | 0.388 | 0.367 | 5.4 | 101 | 0.00 |
| 43 | SCP | Toluene-d8 | 2.718 | 2.775 | -2.1 | 102 | 0.00 |
| 44 | CP | Toluene | 3.130 | 3.355 | -7.2 | 100 | 0.00 |
| 45 | SCP | trans-1,3-Dichloropropene-d | 0.694 | 0.726 | -4.6 | 111 | 0.00 |
| 46 | CP | trans-1,3-Dichloropropene | 0.760 | 0.813 | -7.0 | 103 | 0.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 47 | CP | 1,1,2-Trichloroethane | 0.470 | 0.464 | 1.3 | 107 | 0.00 |
| 48 | CP | Tetrachloroethene | 0.613 | 0.684 | -11.6 | 102 | 0.00 |
| 49 | SCP | 2-Hexanone-d5 | 0.164 | 0.164 | 0.0 | 112 | 0.00 |
| 50 | CP | 2-Hexanone | 0.316 | 0.279 | 11.7 | 97 | 0.00 |
| 51 | CP | Dibromochloromethane | 0.517 | 0.558 | -7.9 | 106 | 0.00 |
| 52 | CP | 1,2-Dibromoethane | 0.448 | 0.452 | -0.9 | 108 | 0.00 |
| 53 | CP | Chlorobenzene | 2.113 | 2.142 | -1.4 | 100 | 0.00 |
| 54 | CP | Ethylbenzene | 3.159 | 3.438 | -8.8 | 98 | 0.00 |
| 55 | CP | m,p-Xylene | 1.233 | 1.349 | -9.4 | 97 | 0.00 |
| 56 | CP | o-Xylene | 1.170 | 1.255 | -7.3 | 95 | 0.00 |
| 57 | CP | Styrene | 1.851 | 1.954 | -5.6 | 97 | 0.00 |
| 58 | CP | Isopropylbenzene | 2.775 | 3.029 | -9.2 | 95 | 0.00 |
| 59 | SCP | 1,1,2,2-Tetrachloroethane-d | 0.485 | 0.439 | 9.5 | 106 | 0.00 |
| 60 | CP | 1,1,2,2-Tetrachloroethane | 0.453 | 0.433 | 4.4 | 101 | 0.00 |
| 61 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 62 | CP | Bromoform | 0.566 | 0.605 | -6.9 | 107 | 0.00 |
| 63 | CP | 1,3-Dichlorobenzene | 3.265 | 3.351 | -2.6 | 99 | 0.00 |
| 64 | CP | 1,4-Dichlorobenzene | 3.288 | 3.316 | -0.9 | 100 | 0.00 |
| 65 | SCP | 1,2-Dichlorobenzene-d4 | 1.858 | 1.751 | 5.8 | 101 | 0.00 |
| 66 | CP | 1,2-Dichlorobenzene | 3.009 | 2.933 | 2.5 | 98 | 0.00 |
| 67 | CP | 1,2-Dibromo-3-chloropropane | 0.143 | 0.138 | 3.5 | 99 | 0.00 |
| 68 | CP | 1,2,4-Trichlorobenzene | 1.592 | 1.534 | 3.6 | 98 | 0.00 |
| 69 | CP | 1,2,3-Trichlorobenzene | 1.323 | 1.241 | 6.2 | 100 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0

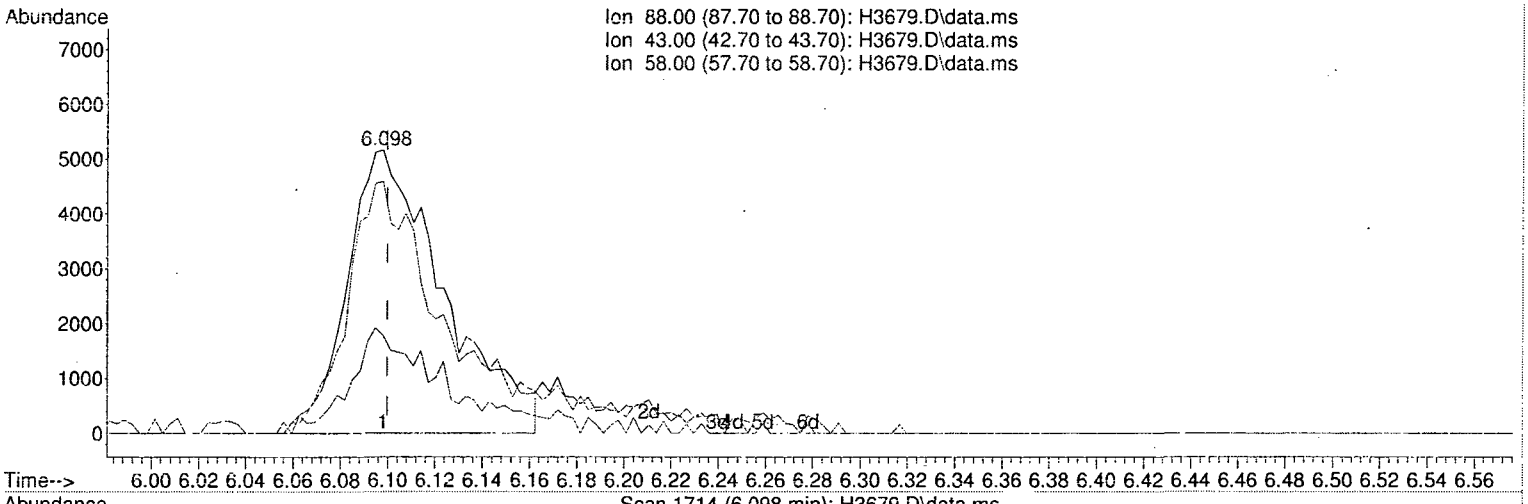
SOSH3679.M Tue May 22 10:23:31 2012

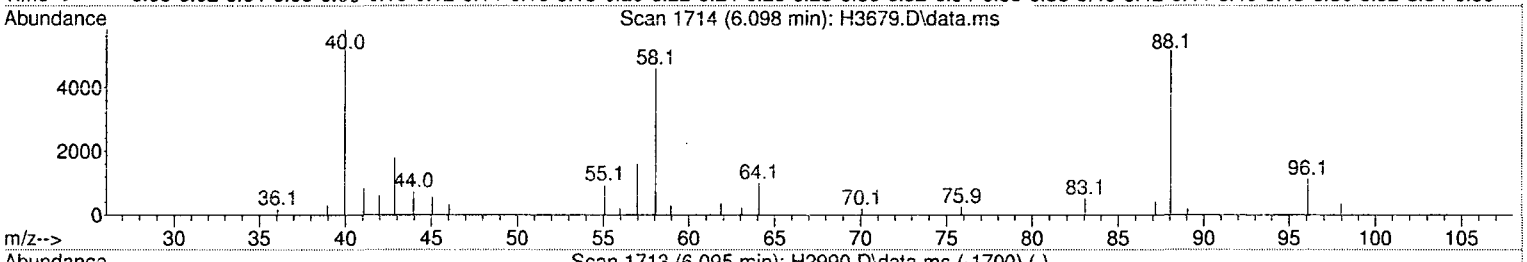
Quantitation Report (Qedit)

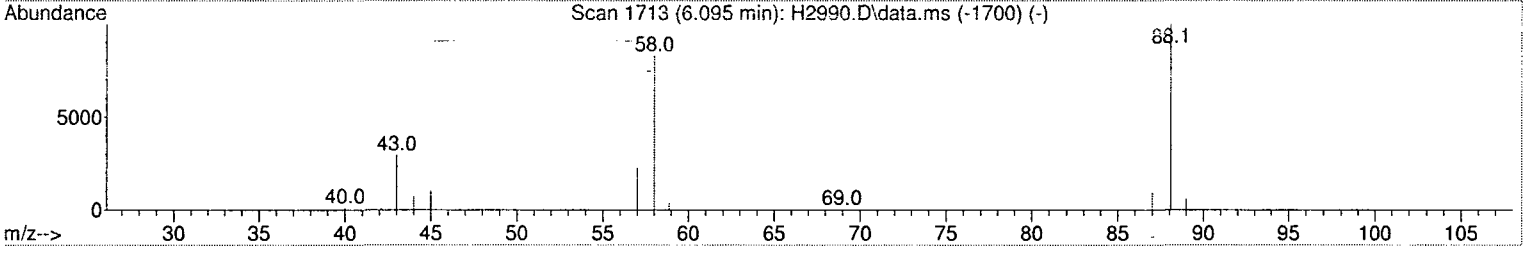
Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:48:56 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration




TIC: H3679.D\data.ms

**(29) 1,4-Dioxane (CP)**

**6.098min (-0.002) 839.19 ug/L**

**response 14650**

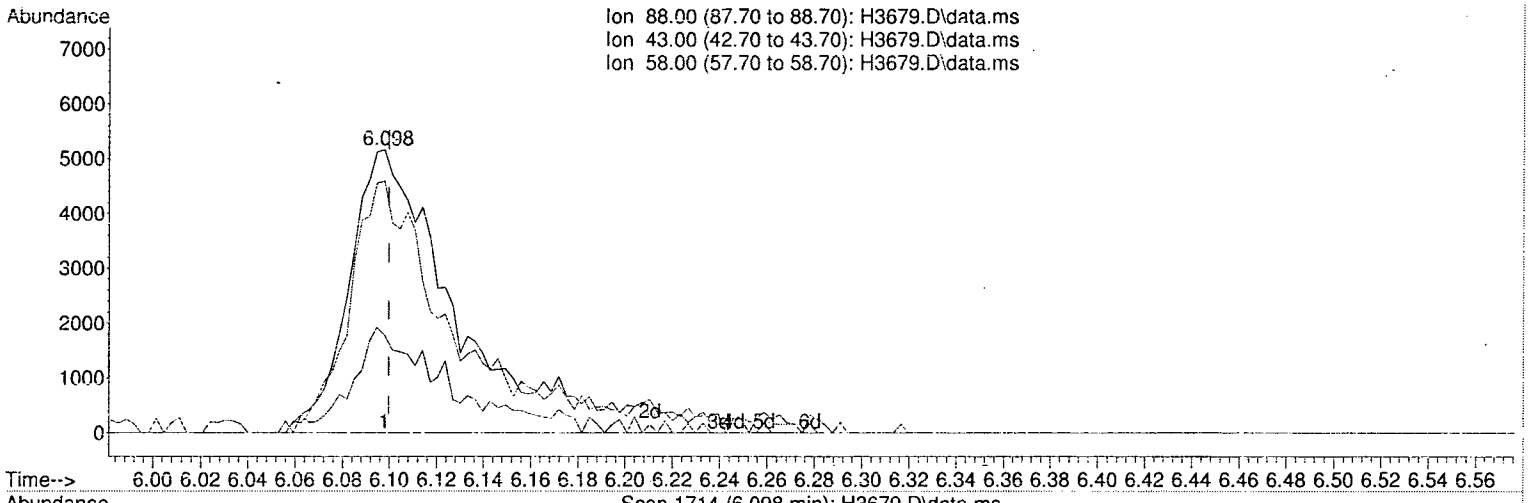
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 28.40 | 36.01# |
| 58.00 | 82.10 | 86.72 |
| 0.00 | 0.00 | 0.00 |

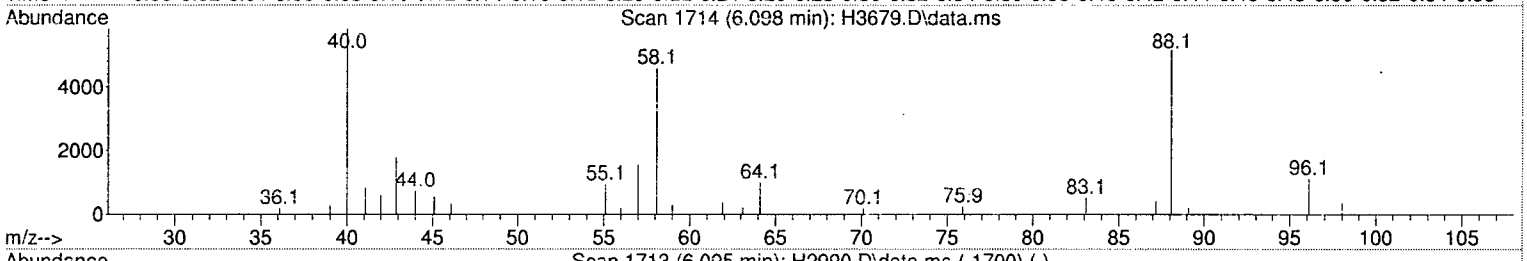
Quantitation Report (Qedit)

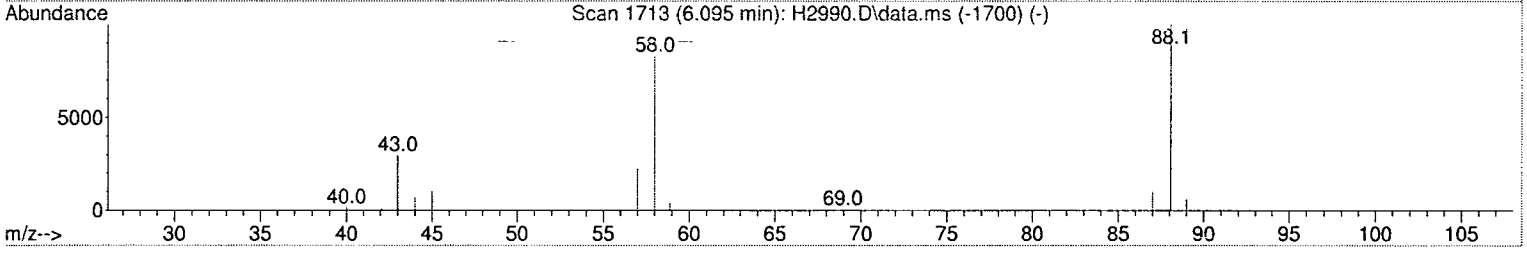
Data File : C:\msdchem\1\data\H3679.D
Acq On : 21 May 2012 10:11
Sample : 2E21006-CCV1
Misc : VSTD0255F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 89
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:48:56 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration




TIC: H3679.D\data.ms

**(29) 1,4-Dioxane (CP)**

**6.098min (-0.002) 1001.81 ug/L m** AC S.P.

**response 17489**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 28.40 | 30.17 |
| 58.00 | 82.10 | 72.65 |
| 0.00 | 0.00 | 0.00 |

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1909

Lab File ID: H3696.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255G Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF050 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.203 | 0.160 | 0.010 | -21.1 | 50.0 |
| Chloromethane | 0.346 | 0.373 | 0.010 | 7.6 | 50.0 |
| Vinyl chloride | 0.204 | 0.201 | 0.010 | -1.7 | 50.0 |
| Bromomethane | 0.107 | 0.120 | 0.010 | 12.1 | 50.0 |
| Chloroethane | 0.080 | 0.081 | 0.010 | 1.2 | 50.0 |
| Trichlorofluoromethane | 0.369 | 0.464 | 0.010 | 26.0 | 50.0 |
| 1,1-Dichloroethene | 0.407 | 0.485 | 0.010 | 19.3 | 50.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.287 | 0.417 | 0.010 | 45.2 | 50.0 |
| Acetone | 0.100 | 0.106 | 0.010 | 5.9 | 50.0 |
| Carbon disulfide | 1.238 | 1.391 | 0.010 | 12.3 | 50.0 |
| Methyl acetate | 0.254 | 0.308 | 0.010 | 21.5 | 50.0 |
| Methylene chloride | 0.445 | 0.469 | 0.010 | 5.6 | 50.0 |
| trans-1,2-Dichloroethene | 0.563 | 0.629 | 0.010 | 11.7 | 50.0 |
| Methyl tert-butyl ether | 0.402 | 0.525 | 0.010 | 30.6 | 50.0 |
| 1,1-Dichloroethane | 1.141 | 1.263 | 0.010 | 10.7 | 50.0 |
| cis-1,2-Dichloroethene | 0.597 | 0.663 | 0.010 | 11.0 | 50.0 |
| 2-Butanone | 0.147 | 0.166 | 0.010 | 12.9 | 50.0 |
| Bromochloromethane | 0.242 | 0.277 | 0.010 | 14.2 | 50.0 |
| Chloroform | 1.086 | 1.172 | 0.010 | 8.0 | 50.0 |
| 1,1,1-Trichloroethane | 0.929 | 1.024 | 0.010 | 10.2 | 50.0 |
| Cyclohexane | 1.240 | 1.564 | 0.010 | 26.1 | 50.0 |
| Carbon tetrachloride | 0.678 | 0.711 | 0.010 | 4.8 | 50.0 |
| Benzene | 3.144 | 3.252 | 0.010 | 3.4 | 50.0 |
| 1,2-Dichloroethane | 0.774 | 0.903 | 0.010 | 16.7 | 50.0 |
| 1,4-Dioxane | 0.006 | 0.007 | 0.0050 | 17.1 | 50.0 |
| Trichloroethene | 0.782 | 0.788 | 0.010 | 0.7 | 50.0 |
| Methylcyclohexane | 1.122 | 1.316 | 0.010 | 17.3 | 50.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1909

Lab File ID: H3696.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255G Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF050 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.818 | 0.852 | 0.010 | 4.2 | 50.0 |
| Bromodichloromethane | 0.864 | 0.951 | 0.010 | 10.1 | 50.0 |
| cis-1,3-Dichloropropene | 0.977 | 1.090 | 0.010 | 11.5 | 50.0 |
| 4-Methyl-2-pentanone | 0.388 | 0.432 | 0.010 | 11.4 | 50.0 |
| Toluene | 3.130 | 3.307 | 0.010 | 5.6 | 50.0 |
| trans-1,3-Dichloropropene | 0.760 | 0.863 | 0.010 | 13.6 | 50.0 |
| 1,1,2-Trichloroethane | 0.470 | 0.534 | 0.010 | 13.5 | 50.0 |
| Tetrachloroethene | 0.613 | 0.628 | 0.010 | 2.5 | 50.0 |
| 2-Hexanone | 0.316 | 0.333 | 0.010 | 5.5 | 50.0 |
| Dibromochloromethane | 0.517 | 0.590 | 0.010 | 14.1 | 50.0 |
| 1,2-Dibromoethane | 0.448 | 0.511 | 0.010 | 14.1 | 50.0 |
| Chlorobenzene | 2.113 | 2.126 | 0.010 | 0.6 | 50.0 |
| Ethylbenzene | 3.159 | 3.252 | 0.010 | 3.0 | 50.0 |
| o-Xylene | 1.170 | 1.261 | 0.010 | 7.7 | 50.0 |
| m,p-Xylene | 1.233 | 1.266 | 0.010 | 2.6 | 50.0 |
| Styrene | 1.851 | 1.958 | 0.010 | 5.8 | 50.0 |
| Bromoform | 0.566 | 0.630 | 0.010 | 11.3 | 50.0 |
| Isopropylbenzene | 2.775 | 2.820 | 0.010 | 1.6 | 50.0 |
| 1,1,2,2-Tetrachloroethane | 0.453 | 0.531 | 0.010 | 17.2 | 50.0 |
| 1,3-Dichlorobenzene | 3.265 | 3.192 | 0.010 | -2.2 | 50.0 |
| 1,4-Dichlorobenzene | 3.288 | 3.206 | 0.010 | -2.5 | 50.0 |
| 1,2-Dichlorobenzene | 3.009 | 3.019 | 0.010 | 0.3 | 50.0 |
| 1,2-Dibromo-3-chloropropane | 0.143 | 0.167 | 0.010 | 16.8 | 50.0 |
| 1,2,4-Trichlorobenzene | 1.592 | 1.491 | 0.010 | -6.3 | 50.0 |
| 1,2,3-Trichlorobenzene | 1.323 | 1.242 | 0.010 | -6.1 | 50.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: H-5975 Calibration Date: 05/21/2012 Time: 1909

Lab File ID: H3696.D Init. Calib. Date(s): 05/19/2012 05/19/2012

EPA Sample No.(VSTD#####): VSTD0255G Init. Calib. Time(s): 1140 1416

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 10.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF050 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.152 | 0.117 | 0.010 | -22.9 | 50.0 |
| Chloroethane-d5 | 0.084 | 0.073 | 0.010 | -13.2 | 50.0 |
| 1,1-Dichloroethene-d2 | 0.999 | 1.019 | 0.010 | 2.0 | 50.0 |
| 2-Butanone-d5 | 0.209 | 0.231 | 0.010 | 10.7 | 50.0 |
| Chloroform-d | 1.144 | 1.123 | 0.010 | -1.8 | 50.0 |
| 1,2-Dichloroethane-d4 | 0.615 | 0.644 | 0.010 | 4.8 | 50.0 |
| Benzene-d6 | 3.162 | 2.915 | 0.010 | -7.8 | 50.0 |
| 1,2-Dichloropropane-d6 | 0.867 | 0.806 | 0.010 | -7.1 | 50.0 |
| Toluene-d8 | 2.718 | 2.553 | 0.010 | -6.1 | 50.0 |
| trans-1,3-Dichloropropene-d4 | 0.694 | 0.721 | 0.010 | 4.0 | 50.0 |
| 2-Hexanone-d5 | 0.164 | 0.193 | 0.010 | 17.4 | 50.0 |
| 1,4-Dioxane-d8 | 0.008 | 0.009 | 0.0050 | 20.8 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.485 | 0.510 | 0.010 | 5.2 | 50.0 |
| 1,2-Dichlorobenzene-d4 | 1.858 | 1.738 | 0.010 | -6.5 | 50.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3696.D
Acq On : 21 May 2012 19:09
Sample : 2E21006-CCV2
Misc : VSTD0255G 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 8
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/25/12

05/25/12

Quant Time: May 21 19:48:09 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.374 | 114 | 125276 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.258 | 117 | 99113 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 41226 | 50.0000 ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 14716 | 38.55 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 77.10% | | |
| 7) Chloroethane-d5 | 1.805 | 69 | 9132 | 43.40 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 86.80% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 127684 | 51.01 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 102.02% | | |
| 20) 2-Butanone-d5 | 3.985 | 46 | 57947 | 110.67 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 110.67% | | |
| 24) Chloroform-d | 4.329 | 84 | 140743 | 49.11 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 98.22% | | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 80655 | 52.38 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 104.76% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 23781 | 1208.16 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 120.82% | | |
| 34) Benzene-d6 | 4.889 | 84 | 288904 | 46.09 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 92.18% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 79859 | 46.47 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 92.94% | | |
| 43) Toluene-d8 | 7.201 | 98 | 253038 | 46.96 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 93.92% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 71474 | 51.98 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 103.96% | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 38285 | 117.44 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 117.44% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 50524 | 52.59 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 105.18% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 71659 | 46.77 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 93.54% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.255 | 85 | 20102 | 39.4356 ug/L | 91 |
| 3) Chloromethane | 1.397 | 50 | 46670 | 53.8082 ug/L | 79 |
| 5) Vinyl Chloride | 1.490 | 62 | 25139 | 49.1358 ug/L | 96 |
| 6) Bromomethane | 1.747 | 94 | 15056 | 56.0649 ug/L | 90 |
| 8) Chloroethane | 1.828 | 64 | 10124 | 50.6064 ug/L | 95 |
| 9) Trichlorofluoromethane | 2.040 | 101 | 58179 | 62.9826 ug/L | 97 |
| 11) 1,1-Dichloroethene | 2.452 | 96 | 60804 | 59.6621 ug/L | 96 |
| 12) 1,1,2-Trichloro-1,2,2-... | 2.468 | 101 | 52273 | 72.6035 ug/L | 96 |
| 13) Acetone | 2.497 | 43 | 26454 | 105.8985 ug/L | 98 |
| 14) Carbon Disulfide | 2.628 | 76 | 174229 | 56.1501 ug/L | 100 |
| 15) Methyl Acetate | 2.780 | 43 | 38601 | 60.7428 ug/L | 99 |
| 16) Methylene Chloride | 2.853 | 84 | 58814 | 52.7994 ug/L | 97 |
| 17) trans-1,2-Dichloroethene | 3.101 | 96 | 78844 | 55.8461 ug/L | 98 |
| 18) Methyl tert-Butyl Ether | 3.107 | 73 | 65803 | 65.2845 ug/L | 100 |
| 19) 1,1-Dichloroethane | 3.474 | 63 | 158210 | 55.3264 ug/L | 100 |
| 21) cis-1,2-Dichloroethene | 4.030 | 96 | 83057 | 55.4860 ug/L | 100 |
| 22) 2-Butanone | 4.043 | 43 | 41477 | 112.8873 ug/L | 97 |
| 23) Bromochloromethane | 4.262 | 128 | 34663 | 57.1218 ug/L | 95 |
| 25) Chloroform | 4.352 | 83 | 146885 | 53.9971 ug/L | 99 |
| 27) 1,2-Dichloroethane | 4.943 | 62 | 113088 | 58.3487 ug/L | 98 |
| 29) 1,4-Dioxane | 6.098 | 88 | 17152 | 1170.8173 ug/L | 94 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3696.D
Acq On : 21 May 2012 19:09
Sample : 2E21006-CCV2
Misc : VSTD0255G 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 8
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 19:48:09 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 31) 1,1,1-Trichloroethane | 4.538 | 97 | 101507 | 55.0996 ug/L | 99 |
| 32) Cyclohexane | 4.606 | 56 | 154968 | 63.0604 ug/L | 98 |
| 33) Carbon Tetrachloride | 4.715 | 117 | 70426 | 52.3968 ug/L | 97 |
| 35) Benzene | 4.931 | 78 | 322316 | 51.7115 ug/L | 100 |
| 36) Trichloroethene | 5.670 | 95 | 78087 | 50.3524 ug/L | 100 |
| 38) Methylcyclohexane | 5.902 | 83 | 130453 | 58.6333 ug/L | 98 |
| 39) 1,2-Dichloropropane | 5.918 | 63 | 84431 | 52.0864 ug/L | 98 |
| 40) Bromodichloromethane | 6.268 | 83 | 94292 | 55.0646 ug/L | 100 |
| 41) cis-1,3-Dichloropropene | 6.850 | 75 | 108053 | 55.7697 ug/L | 96 |
| 42) 4-Methyl-2-Pentanone | 7.069 | 43 | 85681 | 111.4318 ug/L | 99 |
| 44) Toluene | 7.291 | 91 | 327751 | 52.8177 ug/L | 98 |
| 46) trans-1,3-Dichloropropene | 7.609 | 75 | 85546 | 56.7873 ug/L | 98 |
| 47) 1,1,2-Trichloroethane | 7.853 | 97 | 52885 | 56.7688 ug/L | 97 |
| 48) Tetrachloroethene | 8.049 | 164 | 62223 | 51.2326 ug/L | 98 |
| 50) 2-Hexanone | 8.242 | 43 | 66105 | 105.5282 ug/L | 97 |
| 51) Dibromochloromethane | 8.397 | 129 | 58479 | 57.0524 ug/L | 100 |
| 52) 1,2-Dibromoethane | 8.538 | 107 | 50621 | 57.0475 ug/L | 98 |
| 53) Chlorobenzene | 9.303 | 112 | 210668 | 50.2930 ug/L | 100 |
| 54) Ethylbenzene | 9.506 | 91 | 322357 | 51.4795 ug/L | 99 |
| 55) m,p-Xylene | 9.696 | 106 | 125475 | 51.3175 ug/L | 96 |
| 56) o-Xylene | 10.310 | 106 | 124950 | 53.8597 ug/L | 99 |
| 57) Styrene | 10.339 | 104 | 194047 | 52.8767 ug/L | 100 |
| 58) Isopropylbenzene | 10.934 | 105 | 279482 | 50.8130 ug/L | 100 |
| 60) 1,1,2,2-Tetrachloroethane | 11.432 | 83 | 52663 | 58.6031 ug/L | 99 |
| 62) Bromoform | 10.580 | 173 | 25952 | 55.6416 ug/L | 96 |
| 63) 1,3-Dichlorobenzene | 12.734 | 146 | 131609 | 48.8810 ug/L | 99 |
| 64) 1,4-Dichlorobenzene | 12.843 | 146 | 132173 | 48.7487 ug/L | 98 |
| 66) 1,2-Dichlorobenzene | 13.245 | 146 | 124471 | 50.1687 ug/L | 99 |
| 67) 1,2-Dibromo-3-chloropr... | 14.014 | 75 | 6890 | 58.3967 ug/L | 94 |
| 68) 1,2,4-Trichlorobenzene | 14.731 | 180 | 61466 | 46.8267 ug/L | 98 |
| 69) 1,2,3-Trichlorobenzene | 15.107 | 180 | 51213 | 46.9424 ug/L | 97 |

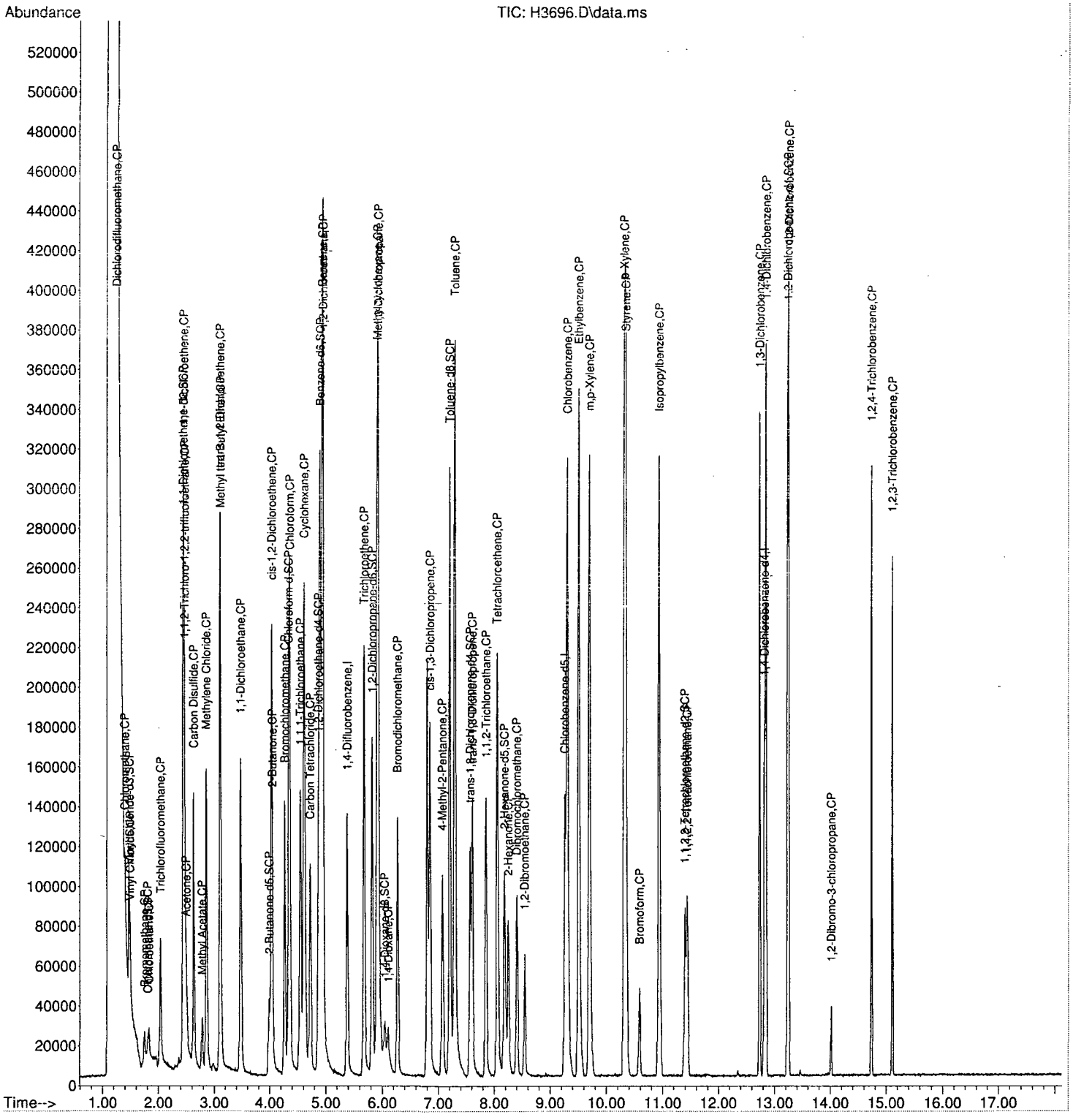
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3696.D
Acq On : 21 May 2012 19:09
Sample : 2E21006-CCV2
Misc : VSTD0255G 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 8
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 19:48:09 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration






00157

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3696.D
Acq On : 21 May 2012 19:09
Sample : 2E21006-CCV2
Misc : VSTD0255G 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 8
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 19:48:09 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 88 | 0.00 |
| 2 | CP | Dichlorodifluoromethane | 0.203 | 0.160 | 21.2 | 55 | 0.00 |
| 3 | CP | Chloromethane | 0.346 | 0.373 | -7.8 | 82 | 0.00 |
| 4 | SCP | Vinyl Chloride-d3 | 0.152 | 0.117 | 23.0 | 68 | 0.00 |
| 5 | CP | Vinyl Chloride | 0.204 | 0.201 | 1.5 | 78 | 0.00 |
| 6 | CP | Bromomethane | 0.107 | 0.120 | -12.1 | 87 | 0.00 |
| 7 | SCP | Chloroethane-d5 | 0.084 | 0.073 | 13.1 | 67 | 0.00 |
| 8 | CP | Chloroethane | 0.080 | 0.081 | -1.3 | 67 | 0.00 |
| 9 | CP | Trichlorofluoromethane | 0.369 | 0.464 | -25.7 | 100 | 0.00 |
| 10 | SCP | 1,1-Dichloroethene-d2 | 0.999 | 1.019 | -2.0 | 94 | 0.00 |
| 11 | CP | 1,1-Dichloroethene | 0.407 | 0.485 | -19.2 | 99 | 0.00 |
| 12 | CP | 1,1,2-Trichloro-1,2,2-trifl | 0.287 | 0.417 | -45.3# | 128 | 0.00 |
| 13 | CP | Acetone | 0.100 | 0.106 | -6.0 | 98 | 0.00 |
| 14 | CP | Carbon Disulfide | 1.238 | 1.391 | -12.4 | 87 | 0.00 |
| 15 | CP | Methyl Acetate | 0.254 | 0.308 | -21.3 | 118 | 0.00 |
| 16 | CP | Methylene Chloride | 0.445 | 0.469 | -5.4 | 96 | 0.00 |
| 17 | CP | trans-1,2-Dichloroethene | 0.563 | 0.629 | -11.7 | 89 | 0.00 |
| 18 | CP | Methyl tert-Butyl Ether | 0.402 | 0.525 | -30.6 | 131 | 0.00 |
| 19 | CP | 1,1-Dichloroethane | 1.141 | 1.263 | -10.7 | 92 | 0.00 |
| 20 | SCP | 2-Butanone-d5 | 0.209 | 0.231 | -10.5 | 111 | 0.00 |
| 21 | CP | cis-1,2-Dichloroethene | 0.597 | 0.663 | -11.1 | 94 | 0.00 |
| 22 | CP | 2-Butanone | 0.147 | 0.166 | -12.9 | 106 | 0.00 |
| 23 | CP | Bromochloromethane | 0.242 | 0.277 | -14.5 | 103 | 0.00 |
| 24 | SCP | Chloroform-d | 1.144 | 1.123 | 1.8 | 91 | 0.00 |
| 25 | CP | Chloroform | 1.086 | 1.172 | -7.9 | 90 | 0.00 |
| 26 | SCP | 1,2-Dichloroethane-d4 | 0.615 | 0.644 | -4.7 | 103 | 0.00 |
| 27 | CP | 1,2-Dichloroethane | 0.774 | 0.903 | -16.7 | 106 | 0.00 |
| 28 | SCP | 1,4-Dioxane-d8 | 0.008 | 0.009 | -12.5 | 155# | 0.00 |
| 29 | CP | 1,4-Dioxane | 0.006 | 0.007 | -16.7 | 135 | 0.00 |
| 30 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 31 | CP | 1,1,1-Trichloroethane | 0.929 | 1.024 | -10.2 | 93 | 0.00 |
| 32 | CP | Cyclohexane | 1.240 | 1.564 | -26.1 | 105 | 0.00 |
| 33 | CP | Carbon Tetrachloride | 0.678 | 0.711 | -4.9 | 88 | 0.00 |
| 34 | SCP | Benzene-d6 | 3.162 | 2.915 | 7.8 | 88 | 0.00 |
| 35 | CP | Benzene | 3.144 | 3.252 | -3.4 | 91 | 0.00 |
| 36 | CP | Trichloroethene | 0.782 | 0.788 | -0.8 | 86 | 0.00 |
| 37 | SCP | 1,2-Dichloropropane-d6 | 0.867 | 0.806 | 7.0 | 91 | 0.00 |
| 38 | CP | Methylcyclohexane | 1.122 | 1.316 | -17.3 | 91 | 0.00 |
| 39 | CP | 1,2-Dichloropropane | 0.818 | 0.852 | -4.2 | 92 | 0.00 |
| 40 | CP | Bromodichloromethane | 0.864 | 0.951 | -10.1 | 97 | 0.00 |
| 41 | CP | cis-1,3-Dichloropropene | 0.977 | 1.090 | -11.6 | 98 | 0.00 |
| 42 | CP | 4-Methyl-2-Pentanone | 0.388 | 0.432 | -11.3 | 107 | 0.00 |
| 43 | SCP | Toluene-d8 | 2.718 | 2.553 | 6.1 | 84 | 0.00 |
| 44 | CP | Toluene | 3.130 | 3.307 | -5.7 | 89 | 0.00 |
| 45 | SCP | trans-1,3-Dichloropropene-d | 0.694 | 0.721 | -3.9 | 99 | 0.00 |
| 46 | CP | trans-1,3-Dichloropropene | 0.760 | 0.863 | -13.6 | 98 | 0.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 47 | CP | 1,1,2-Trichloroethane | 0.470 | 0.534 | -13.6 | 110 | 0.00 |
| 48 | CP | Tetrachloroethene | 0.613 | 0.628 | -2.4 | 85 | 0.00 |
| 49 | SCP | 2-Hexanone-d5 | 0.164 | 0.193 | -17.7 | 119 | 0.00 |
| 50 | CP | 2-Hexanone | 0.316 | 0.333 | -5.4 | 105 | 0.00 |
| 51 | CP | Dibromochloromethane | 0.517 | 0.590 | -14.1 | 101 | 0.00 |
| 52 | CP | 1,2-Dibromoethane | 0.448 | 0.511 | -14.1 | 109 | 0.00 |
| 53 | CP | Chlorobenzene | 2.113 | 2.126 | -0.6 | 89 | 0.00 |
| 54 | CP | Ethylbenzene | 3.159 | 3.252 | -2.9 | 83 | 0.00 |
| 55 | CP | m,p-Xylene | 1.233 | 1.266 | -2.7 | 82 | 0.00 |
| 56 | CP | o-Xylene | 1.170 | 1.261 | -7.8 | 86 | 0.00 |
| 57 | CP | Styrene | 1.851 | 1.958 | -5.8 | 87 | 0.00 |
| 58 | CP | Isopropylbenzene | 2.775 | 2.820 | -1.6 | 79 | 0.00 |
| 59 | SCP | 1,1,2,2-Tetrachloroethane-d | 0.485 | 0.510 | -5.2 | 110 | 0.00 |
| 60 | CP | 1,1,2,2-Tetrachloroethane | 0.453 | 0.531 | -17.2 | 111 | 0.00 |
| 61 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 62 | CP | Bromoform | 0.566 | 0.630 | -11.3 | 102 | 0.00 |
| 63 | CP | 1,3-Dichlorobenzene | 3.265 | 3.192 | 2.2 | 86 | 0.00 |
| 64 | CP | 1,4-Dichlorobenzene | 3.288 | 3.206 | 2.5 | 88 | 0.00 |
| 65 | SCP | 1,2-Dichlorobenzene-d4 | 1.858 | 1.738 | 6.5 | 92 | 0.00 |
| 66 | CP | 1,2-Dichlorobenzene | 3.009 | 3.019 | -0.3 | 93 | 0.00 |
| 67 | CP | 1,2-Dibromo-3-chloropropane | 0.143 | 0.167 | -16.8 | 110 | 0.00 |
| 68 | CP | 1,2,4-Trichlorobenzene | 1.592 | 1.491 | 6.3 | 87 | 0.00 |
| 69 | CP | 1,2,3-Trichlorobenzene | 1.323 | 1.242 | 6.1 | 92 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 1

SOSH3679.M Tue May 22 10:27:38 2012

CLPBFB

Data File : C:\msdchem\1\data\H3656.D
Acq On : 19 May 2012 10:46
Sample : 2E21002-TUN1
Misc : BFB5D 50NG
DataAcq Meth:BFB.M

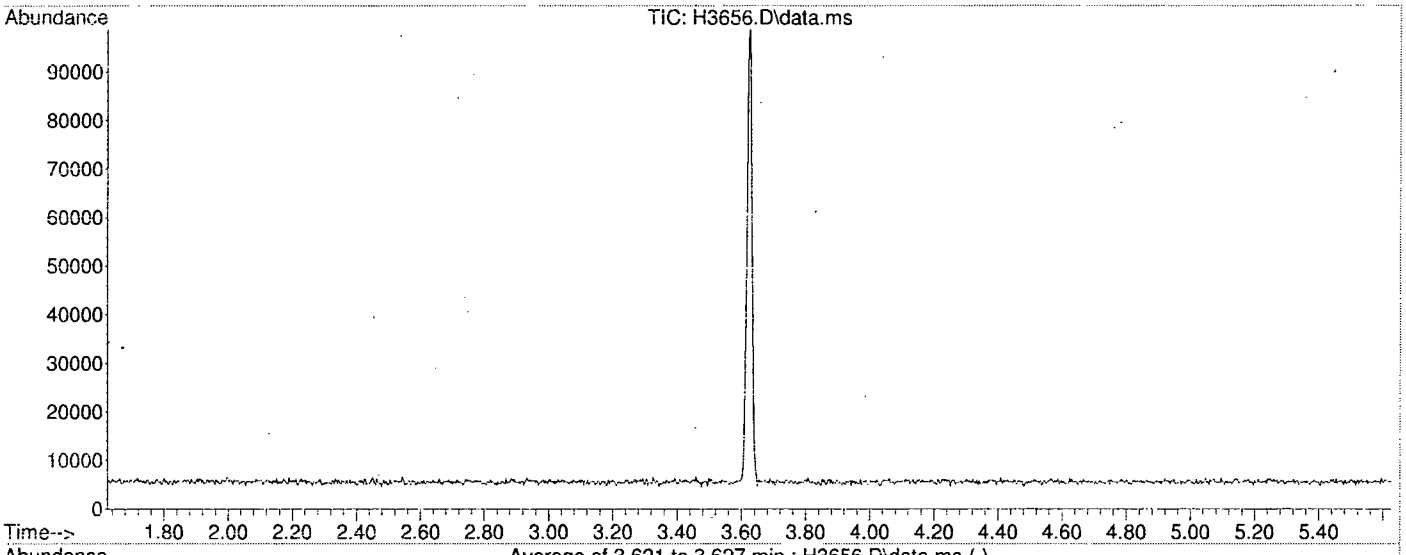
Vial: 63
Operator: AC
Inst : H-5975
Multiplr: 1.00

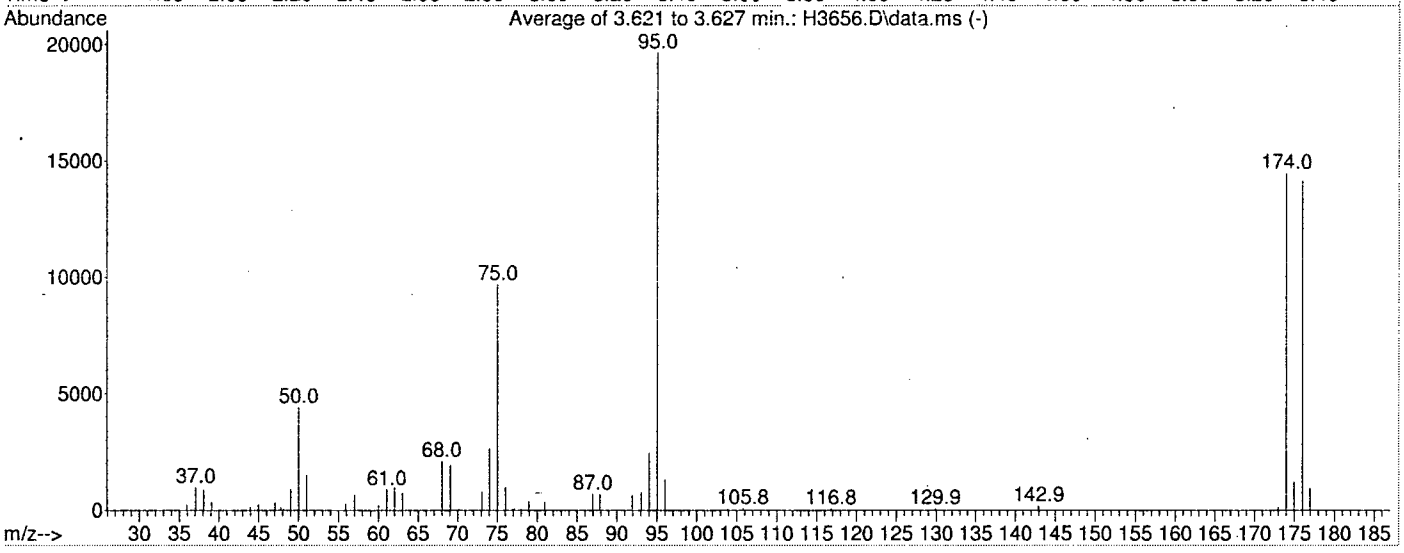
05/22/12

Quant Time: May 21 11:54:14 2012
Quant Results File: SOSH3658.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Sat May 19 15:05:41 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WA4

05/22/12




AutoFind: Scans 788, 789, 790; Background Corrected with Scan 779

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.4 | 4404 | PASS |
| 75 | 95 | 30 | 60 | 49.2 | 9677 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 19651 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 1308 | PASS |
| 173 | 174 | 0.00 | 2 | 0.8 | 121 | PASS |
| 174 | 95 | 50 | 100 | 73.5 | 14451 | PASS |
| 175 | 174 | 5 | 9 | 8.4 | 1220 | PASS |
| 176 | 174 | 95 | 101 | 97.8 | 14126 | PASS |
| 177 | 176 | 5 | 9 | 6.7 | 943 | PASS |

Average of 3.621 to 3.627 min.: H3656.D\data.ms
2E21002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 35.95 | 225 | 51.00 | 1490 | 74.05 | 2640 | 93.05 | 749 |
| 37.05 | 972 | 55.90 | 254 | 75.05 | 9677 | 94.05 | 2458 |
| 38.05 | 857 | 57.00 | 640 | 76.05 | 980 | 95.05 | 19651 |
| 39.05 | 337 | 60.00 | 204 | 76.90 | 55 | 96.00 | 1308 |
| 43.95 | 123 | 61.05 | 889 | 77.20 | 72 | 103.90 | 60 |
| 44.95 | 230 | 62.00 | 977 | 78.00 | 62 | 105.80 | 77 |
| 47.05 | 323 | 63.00 | 735 | 78.90 | 380 | 116.80 | 65 |
| 47.75 | 132 | 68.00 | 2096 | 80.90 | 350 | 129.90 | 57 |
| 48.10 | 66 | 69.05 | 1919 | 86.95 | 682 | 142.90 | 180 |
| 49.00 | 886 | 70.10 | 60 | 87.90 | 677 | 172.95 | 121 |
| 50.00 | 4404 | 73.05 | 783 | 91.95 | 638 | 174.00 | 14451 |

Average of 3.621 to 3.627 min.: H3656.D\data.ms
2E21002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 174.95 | 1220 | | | | | | |
| 176.00 | 14126 | | | | | | |
| 176.95 | 943 | | | | | | |

CLPBFB

Data File : C:\msdchem\1\data\H3678.D
Acq On : 21 May 2012 9:46
Sample : 2E21006-TUN1
Misc : BFB5F 50NG
DataAcq Meth:BFB.M

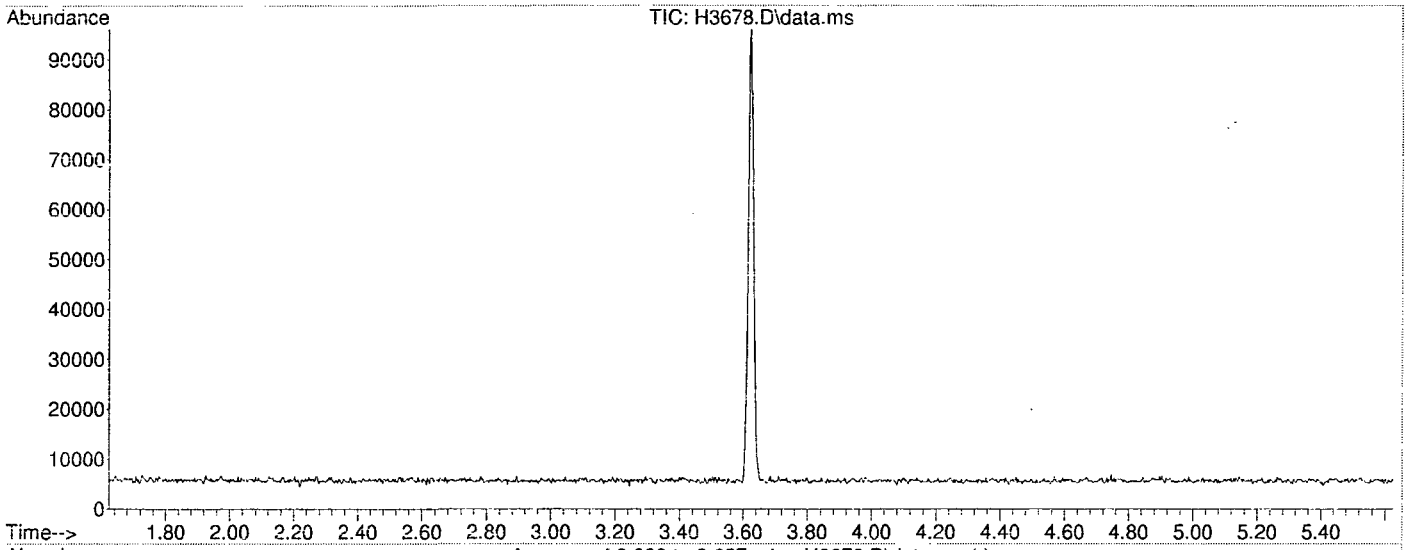
Vial: 88
Operator: AC
Inst : H-5975
Multiplr: 1.00

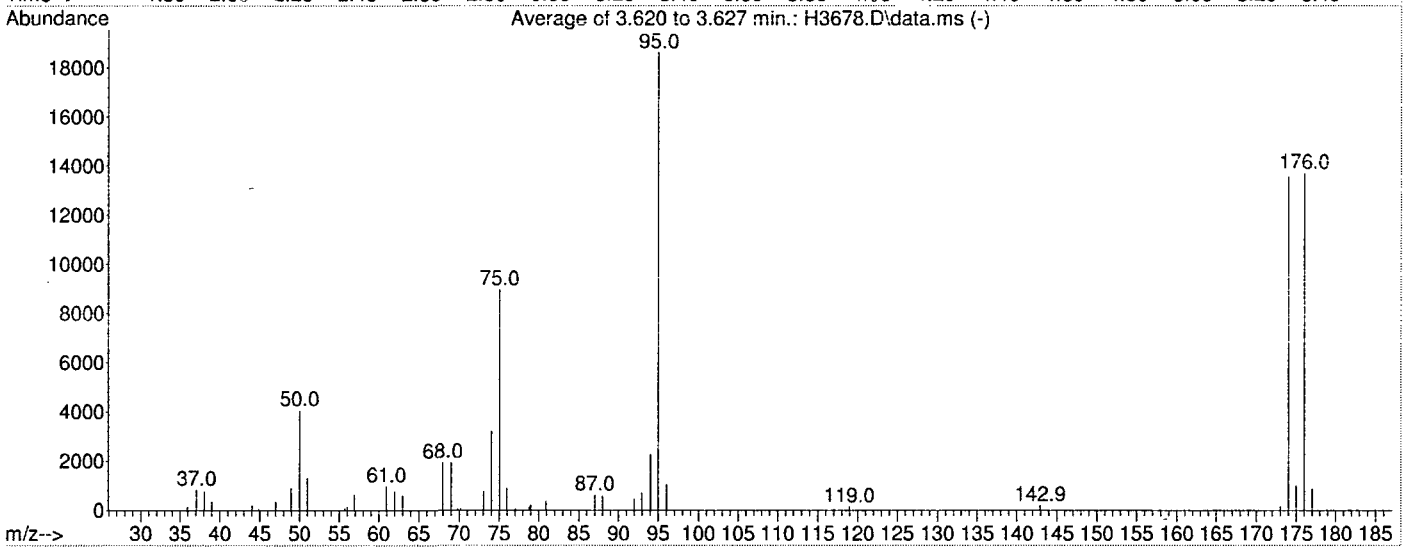
Quant Time: May 21 19:48:09 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WA4

05/23/12

05/23/12




AutoFind: Scans 788, 789, 790; Background Corrected with Scan 779

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.8 | 4053 | PASS |
| 75 | 95 | 30 | 60 | 48.1 | 8950 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 18616 | PASS |
| 96 | 95 | 5 | 9 | 5.6 | 1036 | PASS |
| 173 | 174 | 0.00 | 2 | 1.0 | 139 | PASS |
| 174 | 95 | 50 | 100 | 72.9 | 13578 | PASS |
| 175 | 174 | 5 | 9 | 7.4 | 999 | PASS |
| 176 | 174 | 95 | 101 | 100.9 | 13700 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 873 | PASS |

Average of 3.620 to 3.627 min.: H3678.D\data.ms
2E21006-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 35.95 | 128 | 56.00 | 134 | 75.05 | 8950 | 95.00 | 18616 |
| 37.05 | 828 | 56.90 | 618 | 75.95 | 891 | 96.05 | 1036 |
| 38.05 | 764 | 60.95 | 960 | 77.10 | 60 | 117.00 | 58 |
| 39.00 | 341 | 62.00 | 767 | 78.80 | 134 | 118.95 | 129 |
| 44.05 | 180 | 63.00 | 593 | 79.00 | 206 | 142.90 | 177 |
| 44.90 | 61 | 67.95 | 1927 | 80.90 | 362 | 173.00 | 139 |
| 47.00 | 350 | 69.00 | 1919 | 87.00 | 613 | 174.00 | 13578 |
| 48.95 | 890 | 69.80 | 56 | 88.00 | 588 | 175.00 | 999 |
| 50.00 | 4053 | 70.20 | 61 | 92.00 | 438 | 176.00 | 13700 |
| 51.00 | 1320 | 73.05 | 767 | 92.95 | 702 | 177.00 | 873 |
| 55.70 | 79 | 74.00 | 3207 | 94.05 | 2264 | | |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKQW

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-08

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3695.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.0 | U |
| 79-20-9 | Methyl acetate | 5.0 | U |
| 75-09-2 | Methylene chloride | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.0 | U |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon tetrachloride | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKQW

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-08

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3695.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 95-47-6 | o-Xylene | 5.0 | U |
| 179601-23-1 | m,p-Xylene | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VHBLKQW

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-08

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3695.D

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/24/12

05/24/12

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.374 | 114 | 112098 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 88952 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 30060 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 17457 | 51.10 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 102.20% | | |
| 7) Chloroethane-d5 | 1.812 | 69 | 11683 | 62.05 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 124.10% | | |
| 10) 1,1-Dichloroethene-d2 | 2.445 | 63 | 94815 | 42.33 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 84.66% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 52252 | 111.53 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 111.53% | | |
| 24) Chloroform-d | 4.333 | 84 | 128297 | 50.03 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 100.06% | | |
| 26) 1,2-Dichloroethane-d4 | 4.860 | 65 | 78101 | 56.69 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 113.38% | | |
| 28) 1,4-Dioxane-d8 | 6.037 | 96 | 15826 | 898.54 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 89.85% | | |
| 34) Benzene-d6 | 4.889 | 84 | 275489 | 48.97 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 97.94% | | |
| 37) 1,2-Dichloropropane-d6 | 5.818 | 67 | 75186 | 48.75 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 97.50% | | |
| 43) Toluene-d8 | 7.201 | 98 | 236812 | 48.97 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 97.94% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 62236 | 50.43 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 100.86% | | |
| 49) 2-Hexanone-d5 | 8.178 | 63 | 32121 | 109.78 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 109.78% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.393 | 84 | 42096 | 48.82 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 97.64% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.226 | 152 | 60330 | 54.00 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 108.00% | | |

Target Compounds Qvalue

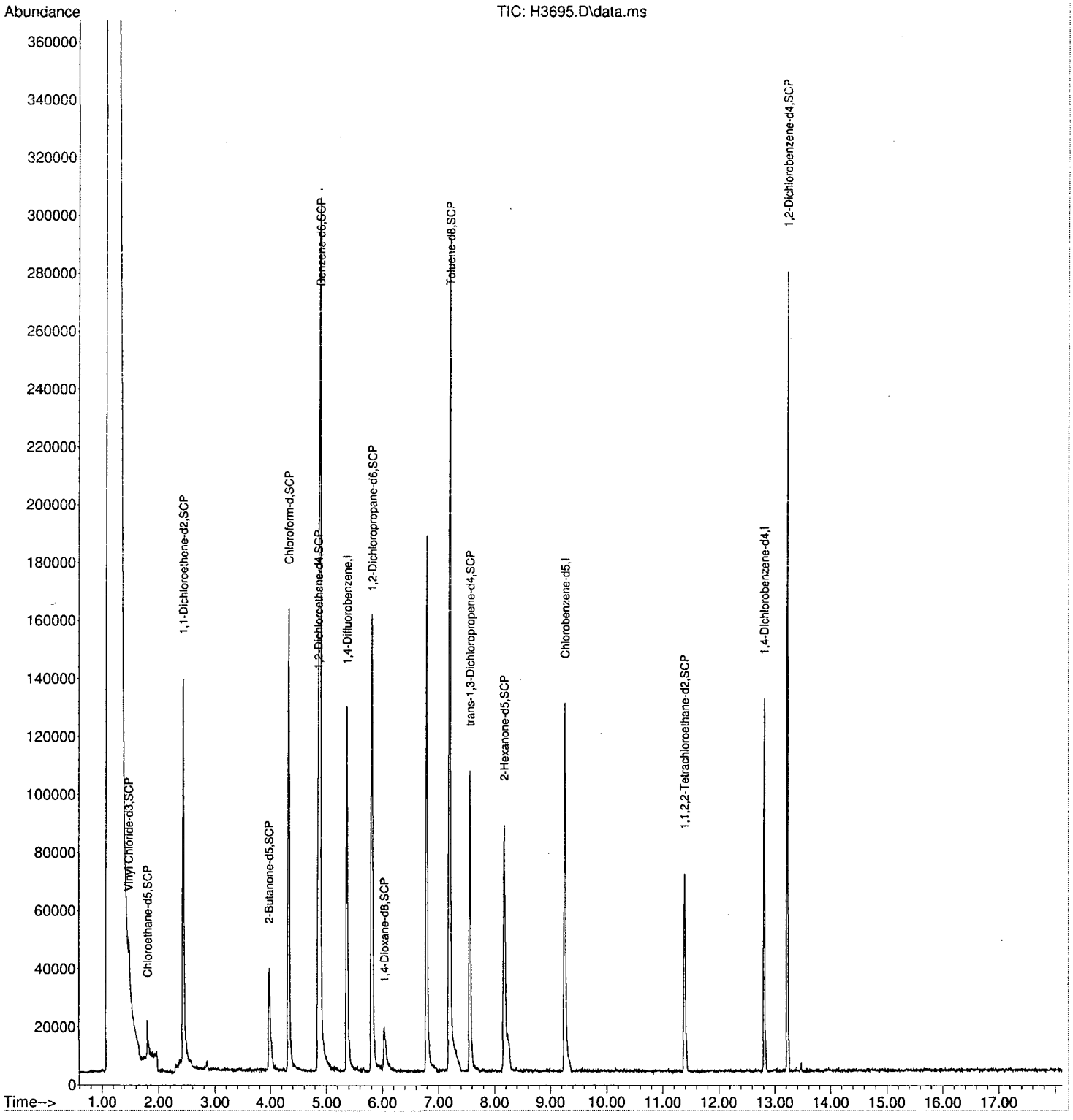
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3695.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.137 | 146 | 171 | 333 | rBV | 4560650 | 37740874 | 100.00% | 89.145% |
| 2 | 1.661 | 333 | 334 | 344 | rVB3 | 3131 | 2772 | 0.01% | 0.007% |
| 3 | 1.809 | 373 | 380 | 390 | rBV3 | 13076 | 20882 | 0.06% | 0.049% |
| 4 | 1.918 | 410 | 414 | 415 | rVV2 | 3082 | 2425 | 0.01% | 0.006% |
| 5 | 1.940 | 415 | 421 | 425 | rVV4 | 4438 | 6906 | 0.02% | 0.016% |
| 6 | 1.973 | 429 | 431 | 436 | rVB | 6967 | 4672 | 0.01% | 0.011% |
| 7 | 2.375 | 554 | 556 | 561 | rVV4 | 3023 | 2970 | 0.01% | 0.007% |
| 8 | 2.445 | 565 | 578 | 608 | rVV | 132906 | 241257 | 0.64% | 0.570% |
| 9 | 2.577 | 618 | 619 | 624 | rVB4 | 2368 | 1472 | 0.00% | 0.003% |
| 10 | 2.860 | 701 | 707 | 717 | rVB4 | 3736 | 6172 | 0.02% | 0.015% |
| 11 | 3.982 | 1045 | 1056 | 1083 | rBV2 | 35164 | 86060 | 0.23% | 0.203% |
| 12 | 4.333 | 1153 | 1165 | 1186 | rBV2 | 158494 | 302840 | 0.80% | 0.715% |
| 13 | 4.718 | 1282 | 1285 | 1289 | rVB2 | 1650 | 1358 | 0.00% | 0.003% |
| 14 | 4.735 | 1289 | 1290 | 1298 | rBV | 1726 | 1712 | 0.00% | 0.004% |
| 15 | 4.889 | 1316 | 1338 | 1371 | rBV2 | 301329 | 823115 | 2.18% | 1.944% |
| 16 | 5.371 | 1476 | 1488 | 1512 | rBV2 | 125057 | 254916 | 0.68% | 0.602% |
| 17 | 5.654 | 1569 | 1576 | 1578 | rBV2 | 2030 | 2077 | 0.01% | 0.005% |
| 18 | 5.815 | 1611 | 1626 | 1647 | rBV3 | 157200 | 342647 | 0.91% | 0.809% |
| 19 | 5.969 | 1673 | 1674 | 1680 | rVB2 | 2240 | 1172 | 0.00% | 0.003% |
| 20 | 6.037 | 1686 | 1695 | 1716 | rBV4 | 13865 | 38085 | 0.10% | 0.090% |
| 21 | 6.124 | 1719 | 1722 | 1732 | rVB4 | 2290 | 3155 | 0.01% | 0.007% |
| 22 | 6.455 | 1823 | 1825 | 1830 | rBV2 | 1399 | 1189 | 0.00% | 0.003% |
| 23 | 6.799 | 1920 | 1932 | 1948 | rBV2 | 183591 | 364956 | 0.97% | 0.862% |
| 24 | 7.201 | 2043 | 2057 | 2091 | rBV | 289873 | 639353 | 1.69% | 1.510% |
| 25 | 7.313 | 2091 | 2092 | 2108 | rVB6 | 5011 | 6651 | 0.02% | 0.016% |
| 26 | 7.567 | 2158 | 2171 | 2188 | rBV2 | 103634 | 197813 | 0.52% | 0.467% |
| 27 | 8.178 | 2347 | 2361 | 2396 | rBV2 | 85132 | 232858 | 0.62% | 0.550% |
| 28 | 9.181 | 2671 | 2673 | 2677 | rBV | 1526 | 1199 | 0.00% | 0.003% |
| 29 | 9.262 | 2684 | 2698 | 2733 | rVB2 | 127444 | 284830 | 0.75% | 0.673% |
| 30 | 9.966 | 2916 | 2917 | 2928 | rVB | 1115 | 1190 | 0.00% | 0.003% |
| 31 | 10.027 | 2930 | 2936 | 2939 | rVB2 | 1141 | 1243 | 0.00% | 0.003% |
| 32 | 11.393 | 3348 | 3361 | 3381 | rBV3 | 68365 | 148856 | 0.39% | 0.352% |
| 33 | 12.818 | 3792 | 3804 | 3822 | rBV | 128258 | 186059 | 0.49% | 0.439% |
| 34 | 13.226 | 3921 | 3931 | 3944 | rVB | 275852 | 371784 | 0.99% | 0.878% |
| 35 | 13.464 | 3997 | 4005 | 4010 | rBV2 | 3342 | 3884 | 0.01% | 0.009% |
| 36 | 13.577 | 4037 | 4040 | 4043 | rBV | 1712 | 1367 | 0.00% | 0.003% |
| 37 | 13.876 | 4131 | 4133 | 4139 | rBV2 | 1108 | 1261 | 0.00% | 0.003% |
| 38 | 14.686 | 4381 | 4385 | 4389 | rVB2 | 1513 | 1201 | 0.00% | 0.003% |
| 39 | 14.882 | 4443 | 4446 | 4451 | rBV2 | 1245 | 1413 | 0.00% | 0.003% |
| 40 | 16.512 | 4949 | 4953 | 4963 | rBV2 | 1146 | 1696 | 0.00% | 0.004% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 42336342

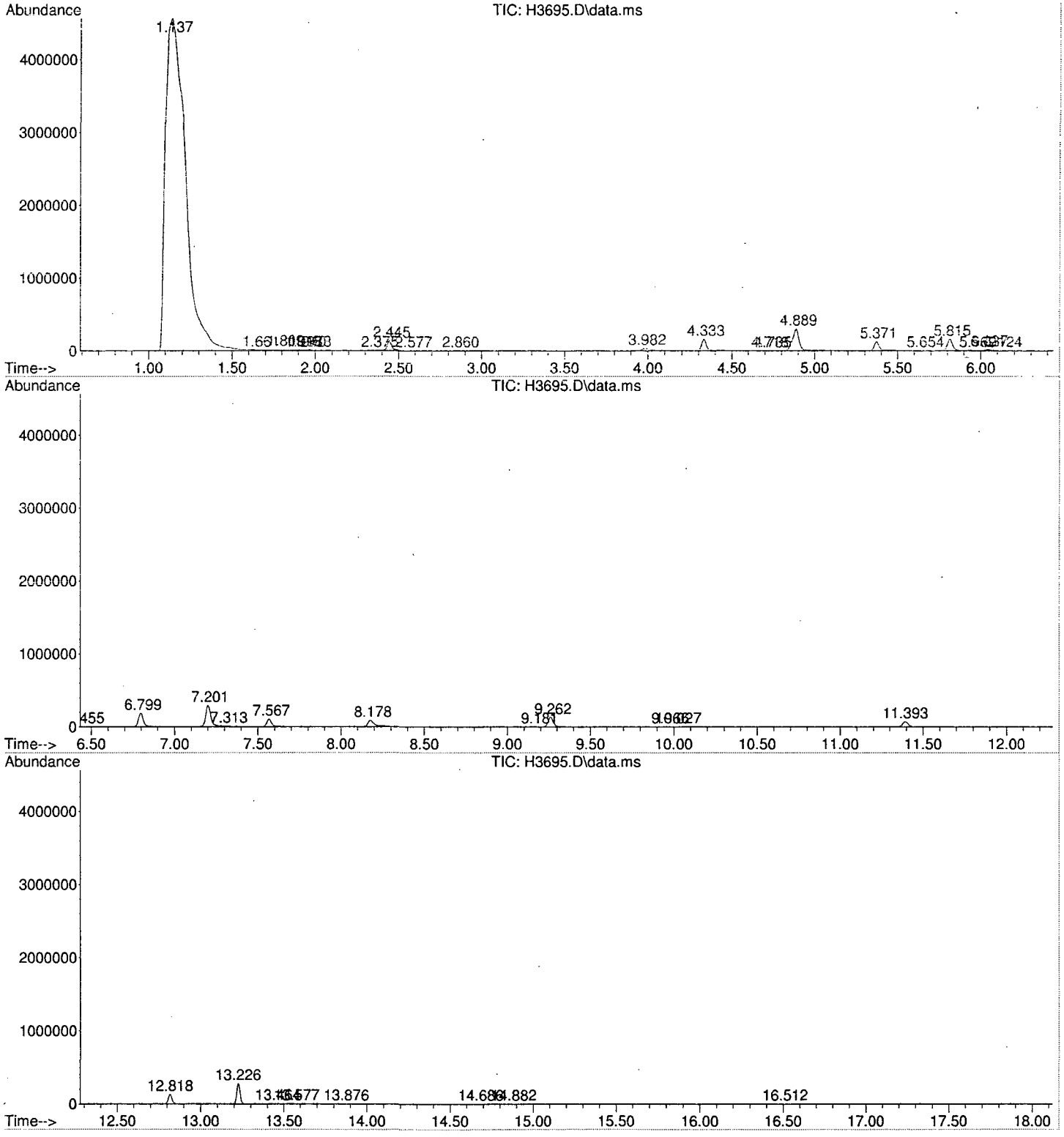
LSC Report - Integrated Chromatogram

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p






00171

Library Search Compound Report

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

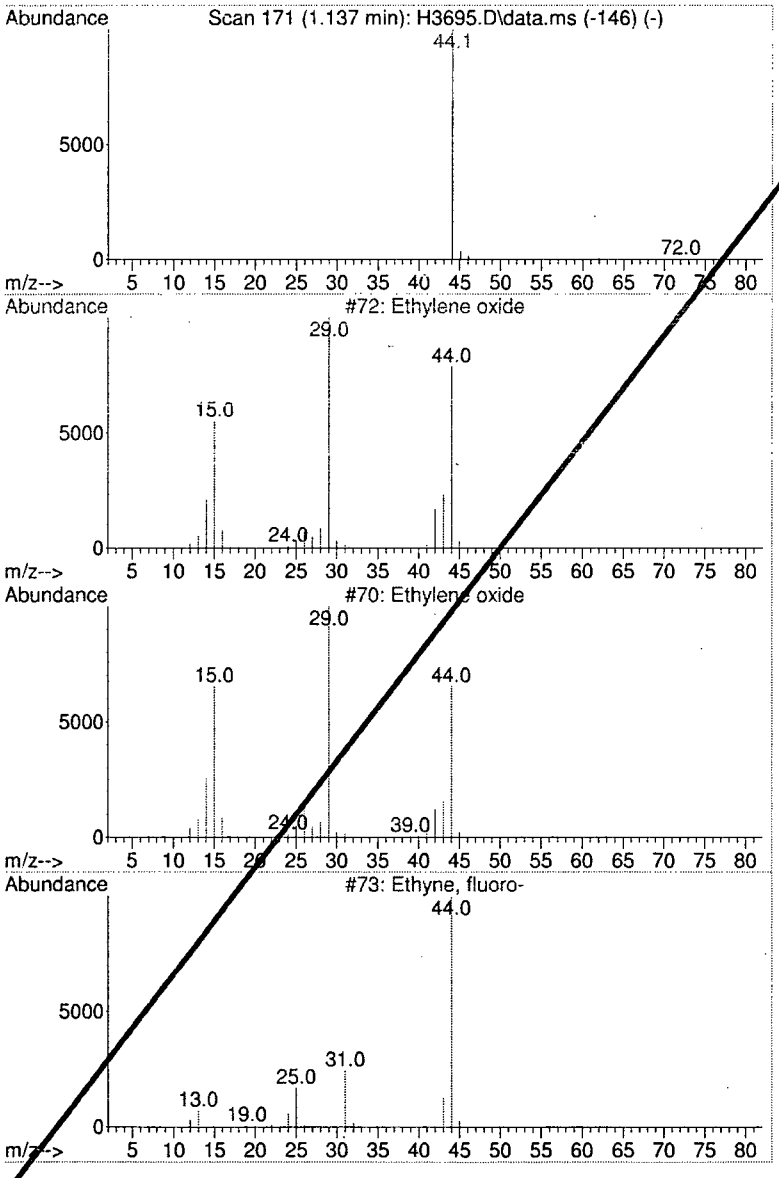
**********

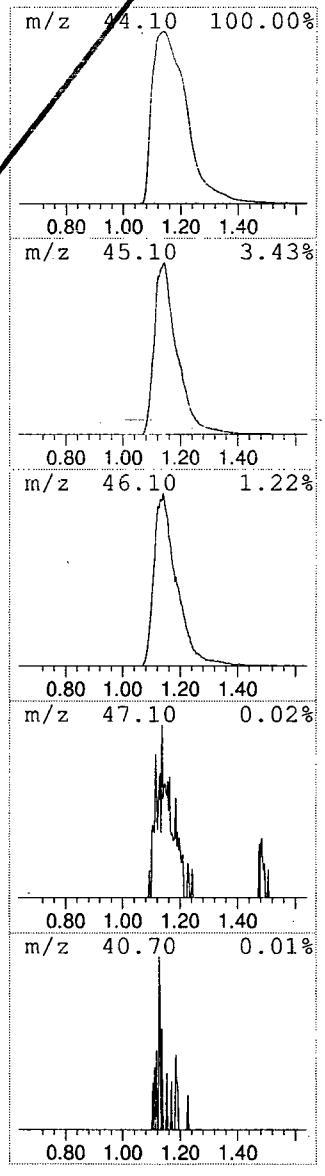
Peak Number 1 Ethylene oxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.137 | 7402.61 ug/L | 37740900 | 1,4-Difluorobenzene | 5.374 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 3 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 4 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |
| 5 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |

Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3695.D  Vial: 7
Acq On : 21 May 2012 18:44  Operator: AC
Sample : 0015977-08  Inst : H-5975
Misc : VHBLKQW 5GM SOIL  Multiplr: 1.00
DataAcq Meth:VOAC.M

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

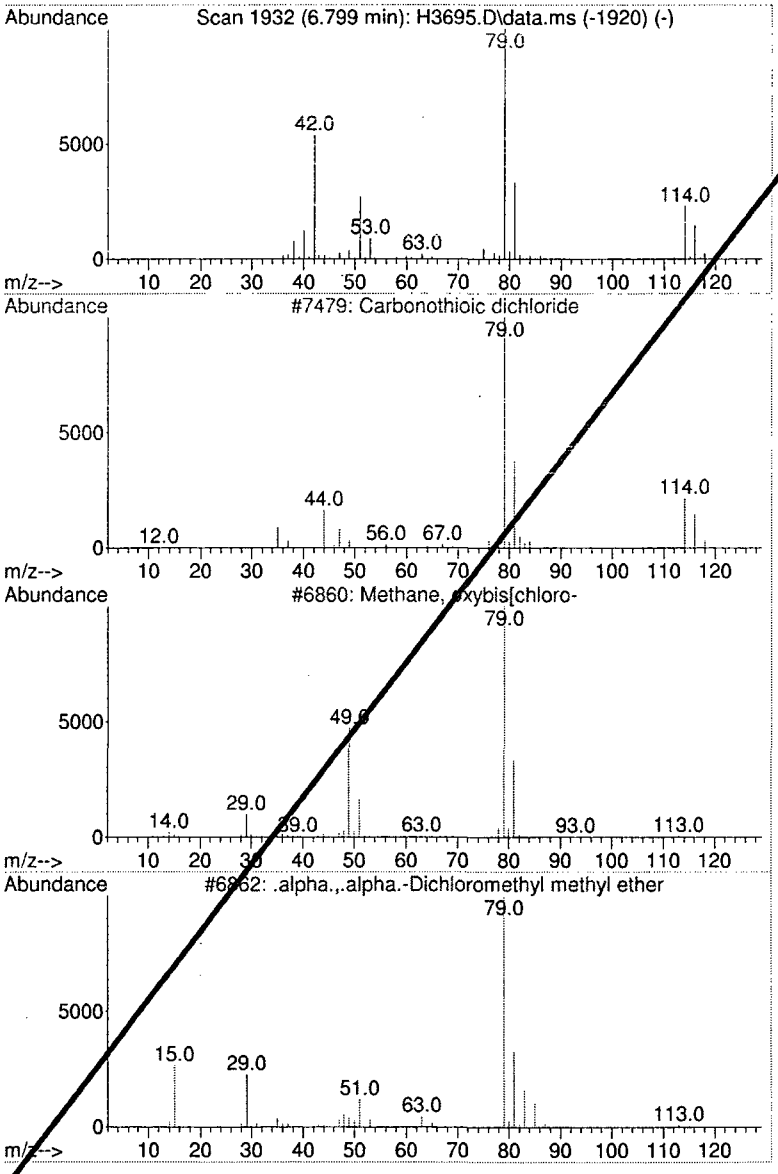
**********

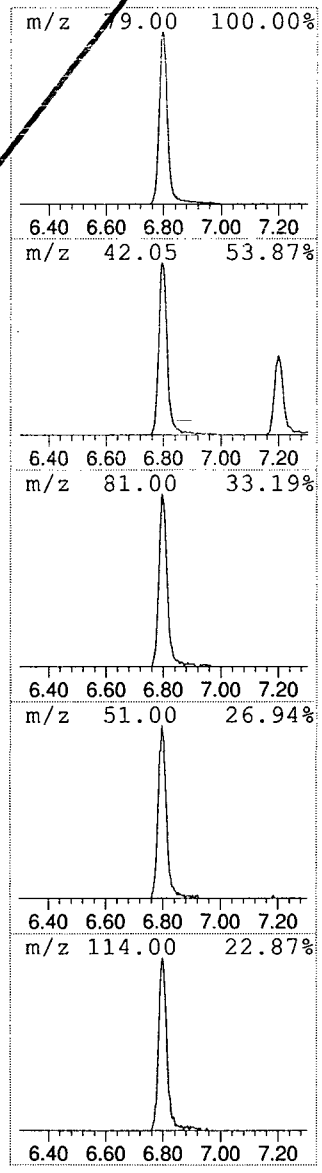
Peak Number 2 Carbonothioic dichloride  Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 71.58 ug/L | 364956 | 1,4-Difluorobenzene | 5.374 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 47 |
| 2 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 3 | .alpha.,.alpha.-Dichloromethyl m... | 114 | C2H4Cl2O | 004885-02-3 | 23 |
| 4 | Cyclopropane | 42 | C3H6 | 000075-19-4 | 9 |
| 5 | n-Propyl chloride | 78 | C3H7Cl | 000540-54-5 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3695.D
Acq On : 21 May 2012 18:44
Sample : 0015977-08
Misc : VHBLKQW 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 7
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:22:08 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ethylene oxide | 1.137 | 7402.6 | ug/L | 37740900 | 1 | 5.374 | 254916 | 50.0 |
| Carbonothioic d... | 6.799 | 71.6 | ug/L | 364956 | 1 | 5.374 | 254916 | 50.0 |

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5F

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050163-BLK1

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3680.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon disulfide | 5.0 | U |
| 79-20-9 | Methyl acetate | 5.0 | U |
| 75-09-2 | Methylene chloride | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-butyl ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 74-97-5 | Bromochloromethane | 5.0 | U |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon tetrachloride | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 123-91-1 | 1,4-Dioxane | 100 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLK5F

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050163-BLK1

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3680.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 95-47-6 | o-Xylene | 5.0 | U |
| 179601-23-1 | m,p-Xylene | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | U |

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLK5F

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050163-BLK1

Sample wt/vol: 5.00 (g/mL) g Lab File ID: H3680.D

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/21/2012

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Purge Volume: 10.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/23/12

05/23/12

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42562 SDG: F5WA4

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Difluorobenzene | 5.371 | 114 | 126807 | 50.0000 ug/L | 0.00 |
| 30) Chlorobenzene-d5 | 9.262 | 117 | 95682 | 50.0000 ug/L | 0.00 |
| 61) 1,4-Dichlorobenzene-d4 | 12.818 | 152 | 35745 | 50.0000 ug/L | # 0.00 |
| **System Monitoring Compounds** | | | | | |
| 4) Vinyl Chloride-d3 | 1.481 | 65 | 18024 | 46.64 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 68 - 122 | | Recovery = 93.28% | | |
| 7) Chloroethane-d5 | 1.809 | 69 | 11778 | 55.30 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 61 - 130 | | Recovery = 110.60% | | |
| 10) 1,1-Dichloroethene-d2 | 2.442 | 63 | 97814 | 38.61 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 45 - 132 | | Recovery = 77.22% | | |
| 20) 2-Butanone-d5 | 3.982 | 46 | 63033 | 118.93 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 20 - 182 | | Recovery = 118.93% | | |
| 24) Chloroform-d | 4.333 | 84 | 136240 | 46.96 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 123 | | Recovery = 93.92% | | |
| 26) 1,2-Dichloroethane-d4 | 4.863 | 65 | 83887 | 53.82 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 122 | | Recovery = 107.64% | | |
| 28) 1,4-Dioxane-d8 | 6.040 | 96 | 18781 | 942.62 ug/L | 0.00 |
| Spiked Amount 1000.000 | Range 50 - 150 | | Recovery = 94.26% | | |
| 34) Benzene-d6 | 4.889 | 84 | 301280 | 49.79 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 80 - 121 | | Recovery = 99.58% | | |
| 37) 1,2-Dichloropropane-d6 | 5.815 | 67 | 82400 | 49.67 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 74 - 124 | | Recovery = 99.34% | | |
| 43) Toluene-d8 | 7.201 | 98 | 253984 | 48.83 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 78 - 121 | | Recovery = 97.66% | | |
| 45) trans-1,3-Dichloroprop... | 7.567 | 79 | 71648 | 53.98 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 72 - 130 | | Recovery = 107.96% | | |
| 49) 2-Hexanone-d5 | 8.175 | 63 | 38961 | 123.80 ug/L | 0.00 |
| Spiked Amount 100.000 | Range 17 - 184 | | Recovery = 123.80% | | |
| 59) 1,1,2,2-Tetrachloroeth... | 11.397 | 84 | 46679 | 50.33 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 56 - 161 | | Recovery = 100.66% | | |
| 65) 1,2-Dichlorobenzene-d4 | 13.229 | 152 | 65735 | 49.48 ug/L | 0.00 |
| Spiked Amount 50.000 | Range 70 - 131 | | Recovery = 98.96% | | |

Target Compounds Qvalue

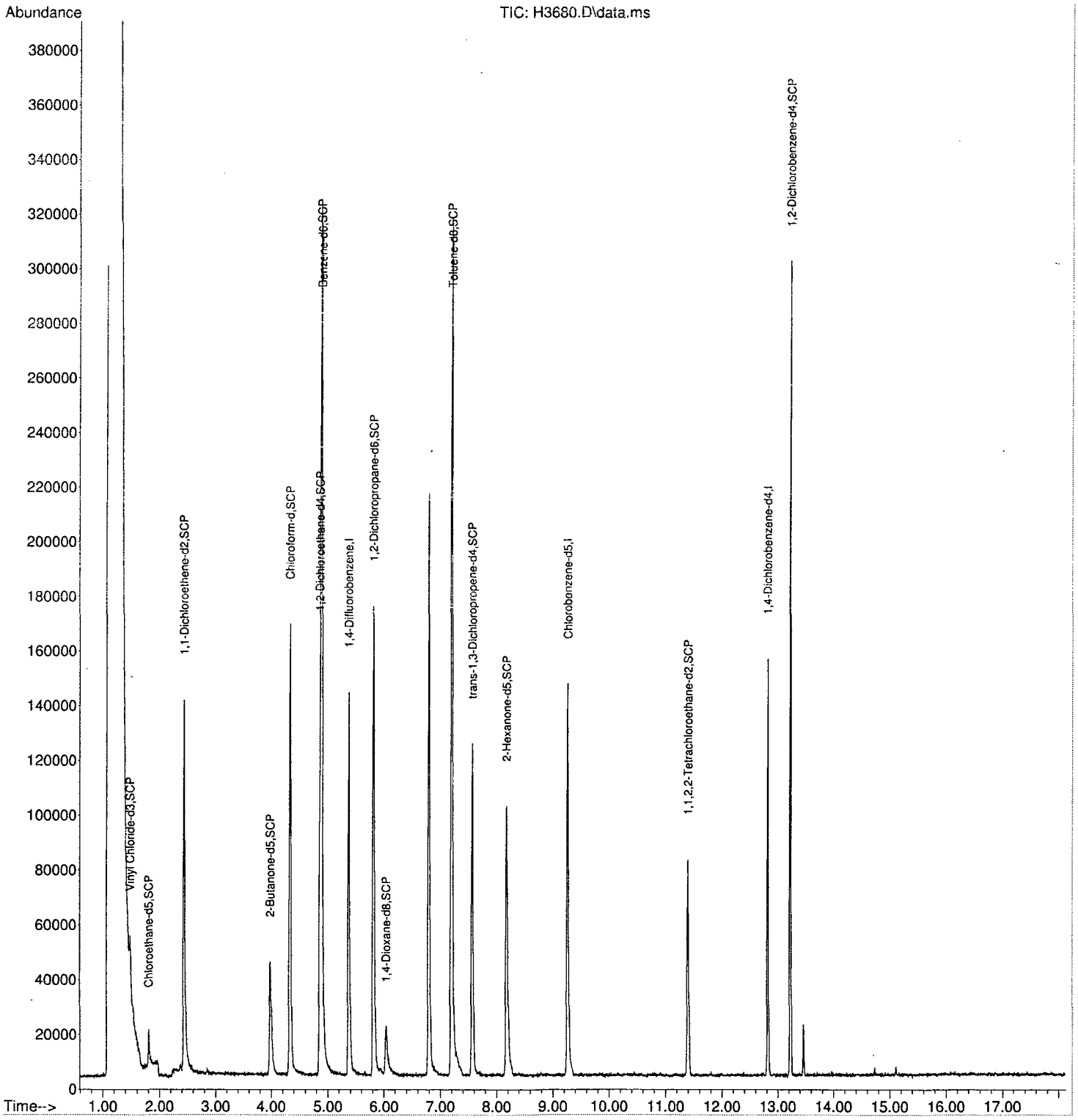
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM
QLast Update : Mon May 21 10:50:10 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC: H3680.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.854 | 81 | 83 | 87 | rBV | 1509 | 1351 | 0.00% | 0.003% |
| 2 | 1.137 | 143 | 171 | 339 | rBV | 4728129 | 39478653 | 100.00% | 88.621% |
| 3 | 1.715 | 349 | 351 | 357 | rBV5 | 1690 | 1627 | 0.00% | 0.004% |
| 4 | 1.806 | 372 | 379 | 389 | rBV3 | 13456 | 21822 | 0.06% | 0.049% |
| 5 | 1.867 | 395 | 398 | 404 | rVB3 | 1995 | 1800 | 0.00% | 0.004% |
| 6 | 1.957 | 425 | 426 | 436 | rVB3 | 5747 | 7106 | 0.02% | 0.016% |
| 7 | 2.011 | 439 | 443 | 449 | rBV6 | 1174 | 1575 | 0.00% | 0.004% |
| 8 | 2.240 | 510 | 514 | 516 | rBV2 | 2488 | 2294 | 0.01% | 0.005% |
| 9 | 2.442 | 564 | 577 | 605 | rBV | 135538 | 254382 | 0.64% | 0.571% |
| 10 | 2.577 | 618 | 619 | 626 | rVB5 | 2420 | 1823 | 0.00% | 0.004% |
| 11 | 2.850 | 698 | 704 | 709 | rBV2 | 2233 | 2139 | 0.01% | 0.005% |
| 12 | 3.982 | 1045 | 1056 | 1085 | rBV3 | 41224 | 102776 | 0.26% | 0.231% |
| 13 | 4.333 | 1150 | 1165 | 1195 | rBV2 | 164823 | 338382 | 0.86% | 0.760% |
| 14 | 4.886 | 1317 | 1337 | 1372 | rVV3 | 320564 | 894903 | 2.27% | 2.009% |
| 15 | 5.014 | 1375 | 1377 | 1382 | rVV4 | 2721 | 2670 | 0.01% | 0.006% |
| 16 | 5.037 | 1382 | 1384 | 1387 | rVB3 | 2293 | 1365 | 0.00% | 0.003% |
| 17 | 5.371 | 1475 | 1488 | 1508 | rBV2 | 139442 | 284705 | 0.72% | 0.639% |
| 18 | 5.815 | 1612 | 1626 | 1650 | rBV3 | 171690 | 376787 | 0.95% | 0.846% |
| 19 | 5.940 | 1664 | 1665 | 1672 | rVB3 | 1960 | 1334 | 0.00% | 0.003% |
| 20 | 6.034 | 1684 | 1694 | 1707 | rBV5 | 17434 | 42720 | 0.11% | 0.096% |
| 21 | 6.104 | 1714 | 1716 | 1722 | rVB2 | 2187 | 1867 | 0.00% | 0.004% |
| 22 | 6.133 | 1722 | 1725 | 1733 | rVB3 | 2362 | 3175 | 0.01% | 0.007% |
| 23 | 6.799 | 1915 | 1932 | 1951 | rBV2 | 212463 | 426961 | 1.08% | 0.958% |
| 24 | 6.873 | 1953 | 1955 | 1958 | rVV4 | 2347 | 1553 | 0.00% | 0.003% |
| 25 | 6.889 | 1958 | 1960 | 1965 | rVB3 | 2129 | 1444 | 0.00% | 0.003% |
| 26 | 6.937 | 1973 | 1975 | 1982 | rVB3 | 1753 | 1705 | 0.00% | 0.004% |
| 27 | 7.201 | 2043 | 2057 | 2100 | rBV2 | 312712 | 692865 | 1.76% | 1.555% |
| 28 | 7.368 | 2108 | 2109 | 2115 | rVB3 | 1953 | 1337 | 0.00% | 0.003% |
| 29 | 7.567 | 2156 | 2171 | 2189 | rBV2 | 121518 | 233435 | 0.59% | 0.524% |
| 30 | 8.178 | 2348 | 2361 | 2381 | rBV3 | 97902 | 230412 | 0.58% | 0.517% |
| 31 | 8.271 | 2388 | 2390 | 2393 | rVB2 | 2616 | 1311 | 0.00% | 0.003% |
| 32 | 9.262 | 2683 | 2698 | 2729 | rBV2 | 143043 | 307262 | 0.78% | 0.690% |
| 33 | 9.943 | 2906 | 2910 | 2912 | rBV | 1517 | 1377 | 0.00% | 0.003% |
| 34 | 11.397 | 3345 | 3362 | 3376 | rBV2 | 78908 | 164219 | 0.42% | 0.369% |
| 35 | 12.818 | 3793 | 3804 | 3817 | rVB | 151998 | 219132 | 0.56% | 0.492% |
| 36 | 13.191 | 3914 | 3920 | 3921 | rBV | 1220 | 1323 | 0.00% | 0.003% |
| 37 | 13.226 | 3921 | 3931 | 3942 | rVV | 298038 | 411791 | 1.04% | 0.924% |
| 38 | 13.461 | 3998 | 4004 | 4013 | rVV4 | 18723 | 20656 | 0.05% | 0.046% |
| 39 | 14.731 | 4393 | 4399 | 4404 | rVB3 | 3039 | 2557 | 0.01% | 0.006% |
| 40 | 15.110 | 4511 | 4517 | 4521 | rBV3 | 3210 | 3056 | 0.01% | 0.007% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0.15

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 40
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Sum of corrected areas: 44547652

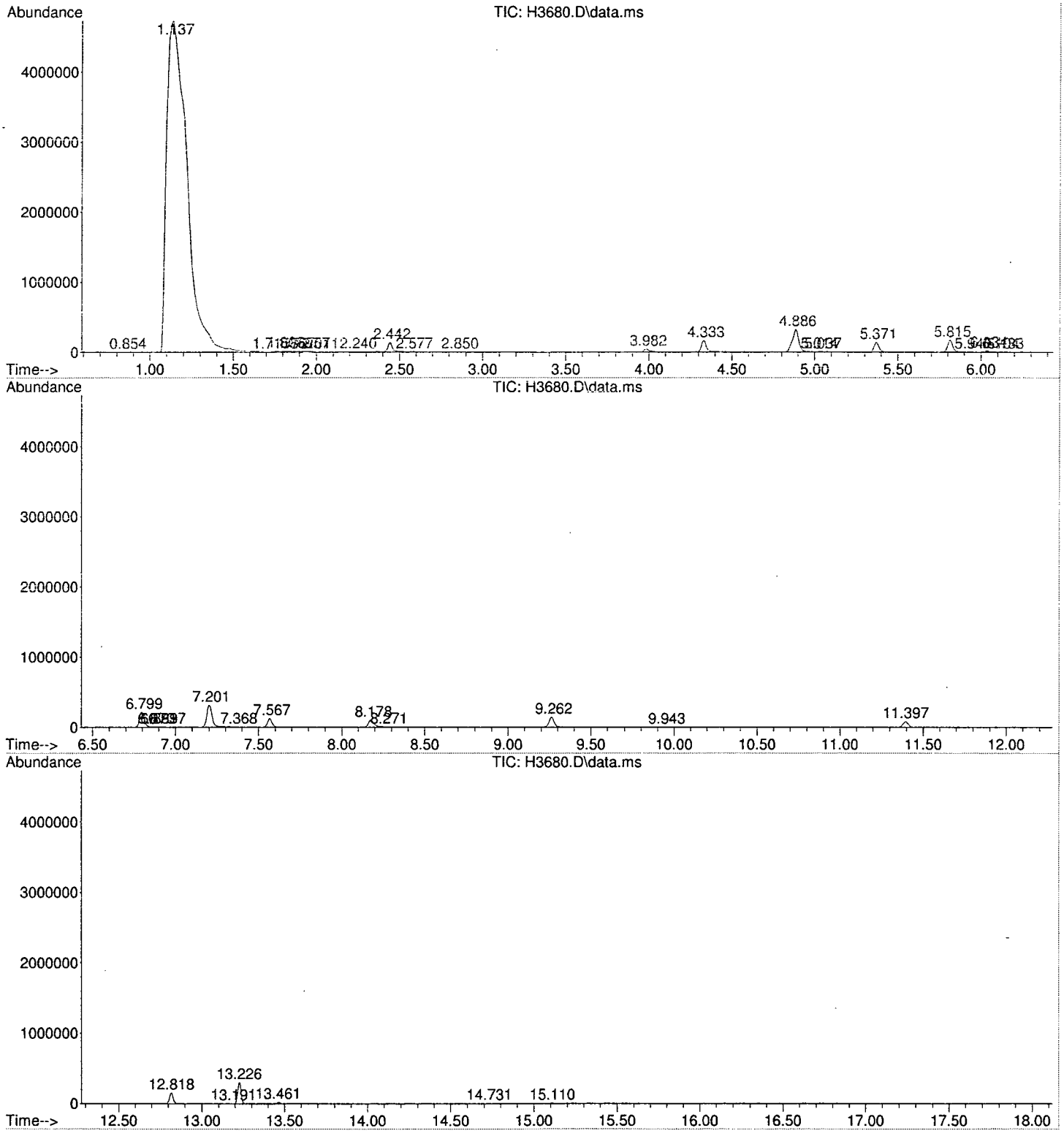
LSC Report - Integrated Chromatogram

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p






00182

Library Search Compound Report

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

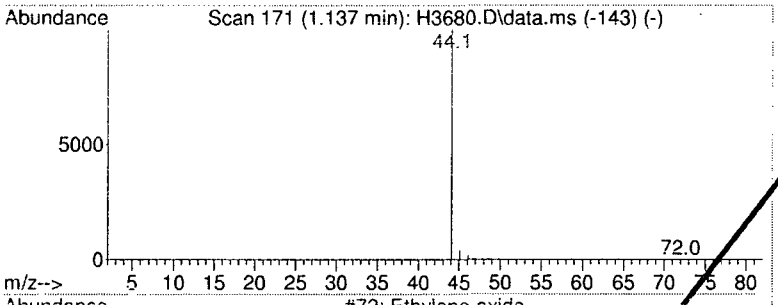
**********

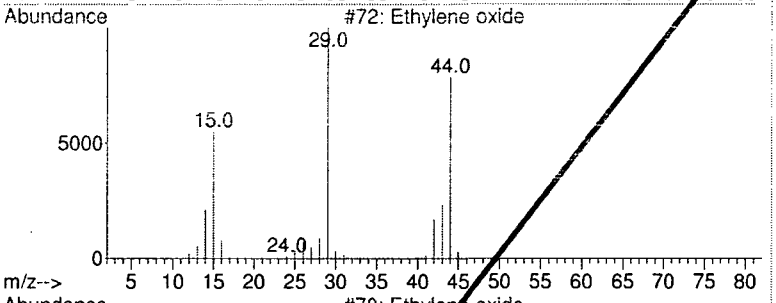
Peak Number 1 Ethylene oxide Concentration Rank 1

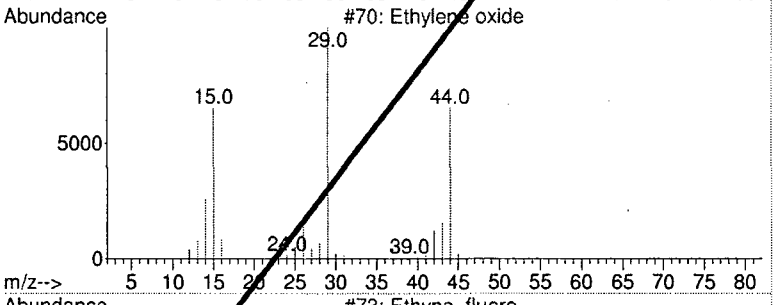
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.137 | 6933.26 ug/L | 39478700 | 1,4-Difluorobenzene | 5.371 |

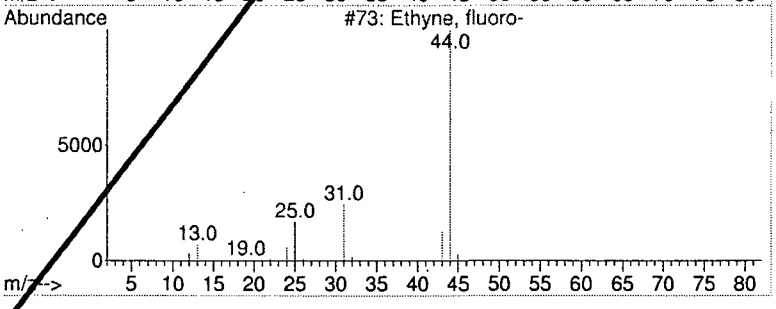
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 2 | Ethylene oxide | 44 | C2H4O | 000075-21-8 | 4 |
| 3 | Ethyne, fluoro- | 44 | C2HF | 002713-09-9 | 3 |
| 4 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |
| 5 | Acetaldehyde | 44 | C2H4O | 000075-07-0 | 3 |

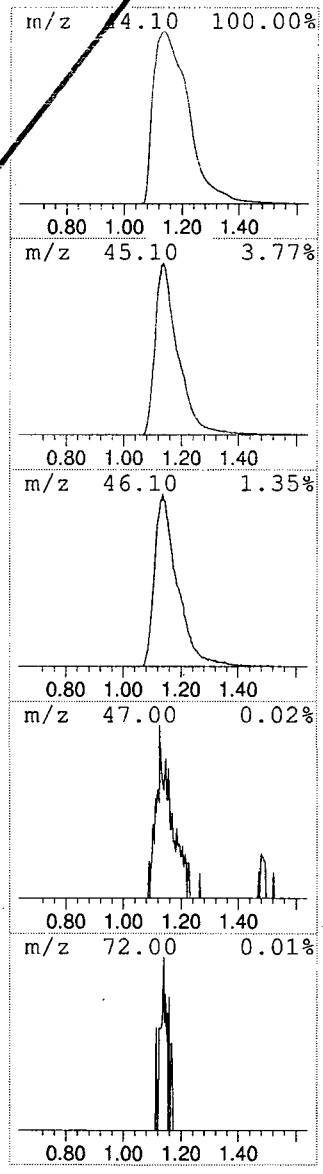
Carbon dioxide



Library Search Compound Report

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

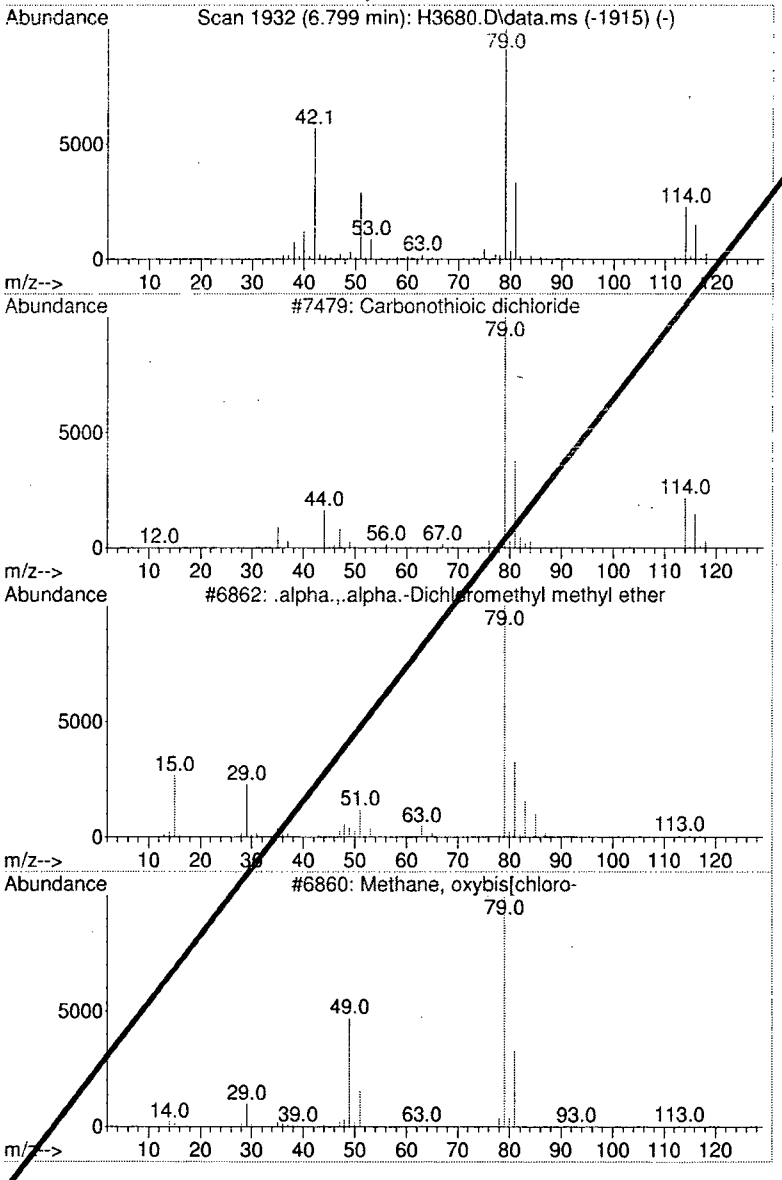
**********

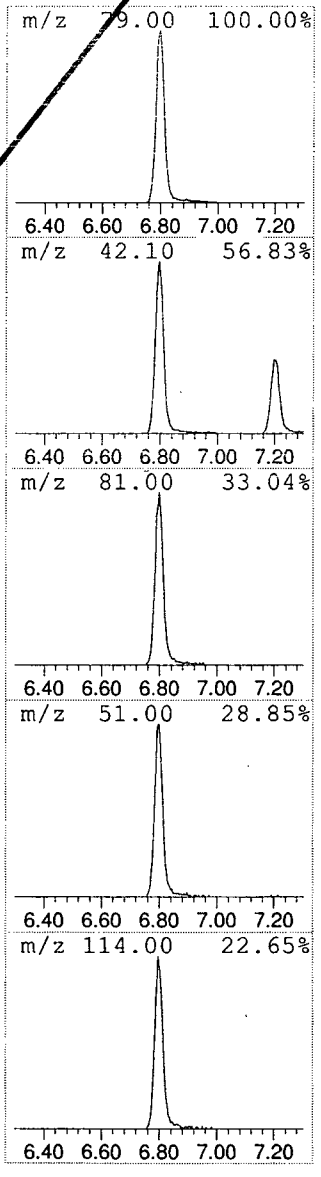
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.799 | 74.98 ug/L | 426961 | 1,4-Difluorobenzene | 5.371 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Carbonothioic dichloride | 114 | CCl2S | 000463-71-8 | 50 |
| 2 | .alpha.,.alpha.-Dichloromethyl m... | 114 | C2H4Cl2O | 004885-52-3 | 25 |
| 3 | Methane, oxybis[chloro- | 114 | C2H4Cl2O | 000542-88-1 | 23 |
| 4 | 2-Propanol, 1,3-dichloro- | 128 | C3H6Cl2O | 000096-23-1 | 17 |
| 5 | 2,4-Imidazolidinedione, 3-methyl- | 114 | C4H6N2O2 | 006843-45-4 | 9 |

DMC Artifact



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3680.D
Acq On : 21 May 2012 11:03
Sample : 2050163-BLK1
Misc : VBLK5F 5GM SOIL
DataAcq Meth:VOAC.M

Vial: 91
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 22 10:08:06 2012
Quant Results File: SOSH3679.RES
Quant Method : C:\msdchem\1\methods\SOSH3679.M
Quant Title : CLP SOM01.2-LOW/MED VOA-SOIL- 5 GM

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: Lscint.p

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ethylene oxide | 1.137 | 6933.3 | ug/L | 39478700 | 1 | 5.371 | 284705 | 50.0 |
| Carbonothioic d... | 6.799 | 75.0 | ug/L | 426961 | 1 | 5.371 | 284705 | 50.0 |

2J - FORM II SV-3
SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Level: (LOW/MED) LOW

| | EPA SAMPLE NO. | SDMC1 (PHL) # | SDMC2 (BCE) # | SDMC3 (2CP) # | SDMC4 (4MP) # | SDMC5 (NBZ) # | SDMC6 (2NP) # | SDMC7 (DCP) # | SDMC8 (4CA) # |
|---|---|---|---|---|---|---|---|---|---|
| 01 | F5WB8 | 24 | 24 | 25 | 25 | 27 | 27 | 27 | 44 |
| 02 | F5WC2 | 27 | 28 | 27 | 25 | 31 | 29 | 28 | 41 |
| 03 | SBLK6Q | 74 | 74 | 75 | 74 | 86 | 86 | 80 | 132 |
| 04 | F5WB4 | 36 | 40 | 32 | 37 | 41 | 39 | 38 | 57 |
| 05 | F5WB9 | 40 | 42 | 36 | 33 | 46 | 42 | 41 | 56 |
| 06 | F5WC0 | 25 | 24 | 25 | 23 | 25 | 22 | 26 | 17 |
| 07 | F5WC1 | 33 | 36 | 29 | 31 | 41 | 35 | 34 | 54 |
| 08 | F5WC3 | 34 | 37 | 31 | 31 | 37 | 33 | 33 | 44 |
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| | QC LIMITS |
|---|---|
| SDMC1 (PHL) = Phenol-d5 | (17-103) |
| SDMC2 (BCE) = Bis(2-chloroethyl)ether-d8 | (12-98) |
| SDMC3 (2CP) = 2-Chlorophenol-d4 | (13-101) |
| SDMC4 (4MP) = 4-Methylphenol-d8 | (8-100) |
| SDMC5 (NBZ) = Nitrobenzene-d5 | (16-103) |
| SDMC6 (2NP) = 2-Nitrophenol-d4 | (16-104) |
| SDMC7 (DCP) = 2,4-Dichlorophenol-d3 | (23-104) |
| SDMC8 (4CA) = 4-Chloroaniline-d4 | (1-145) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits
D DMC diluted out

2K - FORM II SV-4
SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Level: (LOW/MED) LOW

| | EPA SAMPLE NO. | SDMC9 (DMP) # | SDMC10 (ACY) # | SDMC11 (4NP) # | SDMC12 (FLR) # | SDMC13 (NMP) # | SDMC14 (ANC) # | SDMC15 (PYR) # | SDMC16 (BAP) # | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | F5WB8 | 26 * | 25 | 20 | 27 * | 16 | 25 | 30 * | 27 * | 4 |
| 02 | F5WC2 | 27 * | 26 | 20 | 27 * | 17 | 27 | 31 * | 28 * | 4 |
| 03 | SBLK6Q | 82 | 78 | 83 | 84 | 66 | 81 | 90 | 90 | 0 |
| 04 | F5WB4 | 43 | 45 | 70 | 46 | 9 | 46 | 54 | 48 | 0 |
| 05 | F5WB9 | 49 | 50 | 45 | 52 | 21 | 48 | 58 | 50 | 0 |
| 06 | F5WC0 | 35 D | 32 | 0 D | 34 D | 1 | 33 | 37 D | 33 D | 5 |
| 07 | F5WC1 | 43 | 43 | 35 | 45 | 6 | 43 | 50 * | 44 | 1 |
| 08 | F5WC3 | 40 * | 39 | 36 | 41 | 16 | 41 | 48 * | 43 | 2 |
| 09 | | | | | | | | | | |
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| | | QC LIMITS |
|---|---|---|
| SDMC9 | (DMP) = Dimethylphthalate-d6 | (43-111) |
| SDMC10 | (ACY) = Acenaphthylene-d8 | (20-97) |
| SDMC11 | (4NP) = 4-Nitrophenol-d4 | (16-166) |
| SDMC12 | (FLR) = Fluorene-d10 | (40-108) |
| SDMC13 | (NMP) = 4,6-Dinitro-2-methylphenol-d2 | (1-121) |
| SDMC14 | (ANC) = Anthracene-d10 | (22-98) |
| SDMC15 | (PYR) = Pyrene-d10 | (51-120) |
| SDMC16 | (BAP) = Benzo(a)pyrene-d12 | (43-111) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits
D DMC diluted out

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
SBLK6Q

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: E4642.D Lab Sample ID: 2050165-BLK1

Instrument ID: E-5973 Date Extracted: 05/22/2012

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 05/24/2012

Level: (LOW/MED) LOW Time Analyzed: 2200

Extraction: (Type) Sonication Extracti GPC Cleanup: (Y/N) Y
x

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | F5WB8 | 0015977-02 | E4644.D | 05/24/2012 |
| 02 | F5WC2 | 0015977-06 | E4647.D | 05/25/2012 |
| 03 | F5WB4 | 0015977-01 | E4686.D | 05/26/2012 |
| 04 | F5WB9 | 0015977-03 | E4687.D | 05/26/2012 |
| 05 | F5WC0 | 0015977-04 | E4688.D | 05/26/2012 |
| 06 | F5WC1 | 0015977-05 | E4689.D | 05/26/2012 |
| 07 | F5WC3 | 0015977-07 | E4690.D | 05/26/2012 |
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COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP9N

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: E4601.D DFTPP Injection Date: 05/23/2012

Instrument ID: ( E-5973 DFTPP Injection Time: 1626

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 33.5 |
| 68 | Less than 2.0% of mass 69 | 0.0 ( 0.0 )1 |
| 69 | Mass 69 relative abundance | 39.5 |
| 70 | Less than 2.0% of mass 69 | 0.2 ( 0.5 )1 |
| 127 | 10.0 - 80.0% of mass 198 | 52.2 |
| 197 | Less than 2.0% of mass 198 | 0.0 |
| 198 | Base peak, 100% relative abundance | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.7 |
| 275 | 10.0 - 60.0% of mass 198 | 22.4 |
| 365 | Greater than 1.0% of mass 198 | 2.7 |
| 441 | Present, but less than mass 443 | 7.4 |
| 442 | 50.0 - 100% of mass 198 | 51.8 |
| 443 | 15.0 - 24.0% of mass 442 | 10.0 ( 19.4 )2 |

1 - Value is %mass 69 2 - Value is %mass 442

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | SSTD0409N | 2E23005-CAL4 | E4604.D | 05/23/2012 | 1750 |
| 02 | SSTD0209N | 2E23005-CAL3 | E4605.D | 05/23/2012 | 1822 |
| 03 | SSTD0109N | 2E23005-CAL2 | E4606.D | 05/23/2012 | 1853 |
| 04 | SSTD0809N | 2E23005-CAL5 | E4607.D | 05/23/2012 | 1923 |
| 05 | SSTD0059N | 2E23005-CAL1 | E4608.D | 05/23/2012 | 1955 |
| 06 | SSTD0209O | 2E23005-CCV1 | E4618.D | 05/24/2012 | 0107 |
| 07 | SSTD0209P | 2E23005-CCV2 | E4624.D | 05/24/2012 | 1016 |
| 08 | SSTD0209Q | 2E23005-CCV3 | E4634.D | 05/24/2012 | 1650 |
| 09 | SBLK6Q | 2050165-BLK1 | E4642.D | 05/24/2012 | 2200 |
| 10 | F5WB8 | 0015977-02 | E4644.D | 05/24/2012 | 2302 |
| 11 | F5WC2 | 0015977-06 | E4647.D | 05/25/2012 | 0036 |
| 12 | SSTD0209R | 2E23005-CCV4 | E4653.D | 05/25/2012 | 0343 |
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5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP9S

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Lab File ID: E4654.D DFTPP Injection Date: 05/25/2012

Instrument ID: ( E-5973 DFTPP Injection Time: 1109

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0% of mass 198 | 26.9 |
| 68 | Less than 2.0% of mass 69 | 0.0 ( 0.0 )1 |
| 69 | Mass 69 relative abundance | 32.9 |
| 70 | Less than 2.0% of mass 69 | 0.2 ( 0.6 )1 |
| 127 | 10.0 - 80.0% of mass 198 | 48.5 |
| 197 | Less than 2.0% of mass 198 | 0.0 |
| 198 | Base peak, 100% relative abundance | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.8 |
| 275 | 10.0 - 60.0% of mass 198 | 22.7 |
| 365 | Greater than 1.0% of mass 198 | 2.5 |
| 441 | Present, but less than mass 443 | 8.2 |
| 442 | 50.0 - 100% of mass 198 | 56.5 |
| 443 | 15.0 - 24.0% of mass 442 | 11.0 ( 19.4 )2 |

1 - Value is %mass 69 2 - Value is %mass 442

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | SSTD0209S | 2E25002-CAL3 | E4655.D | 05/25/2012 | 1128 |
| 02 | SSTD0109S | 2E25002-CAL2 | E4656.D | 05/25/2012 | 1200 |
| 03 | SSTD0409S | 2E25002-CAL4 | E4657.D | 05/25/2012 | 1230 |
| 04 | SSTD0809S | 2E25002-CAL5 | E4658.D | 05/25/2012 | 1302 |
| 05 | SSTD0059S | 2E25002-CAL1 | E4659.D | 05/25/2012 | 1333 |
| 06 | SSTD0209T | 2E25002-CCV1 | E4671.D | 05/25/2012 | 1948 |
| 07 | SSTD0209U | 2E25002-CCV2 | E4685.D | 05/26/2012 | 0703 |
| 08 | F5WB4 | 0015977-01 | E4686.D | 05/26/2012 | 1225 |
| 09 | F5WB9 | 0015977-03 | E4687.D | 05/26/2012 | 1256 |
| 10 | F5WC0 | 0015977-04 | E4688.D | 05/26/2012 | 1327 |
| 11 | F5WC1 | 0015977-05 | E4689.D | 05/26/2012 | 1358 |
| 12 | F5WC3 | 0015977-07 | E4690.D | 05/26/2012 | 1430 |
| 13 | SSTD0209V | 2E25002-CCV3 | E4696.D | 05/26/2012 | 1809 |
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8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209N Date Analyzed: 05/23/2012

Lab File ID (Standard): E4605.D Time Analyzed: 1822

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 60991 | 3.30 | 257252 | 4.96 | 161819 | 7.60 |
| | UPPER LIMIT | 121982 | 3.80 | 514504 | 5.46 | 323638 | 8.10 |
| | LOWER LIMIT | 30496 | 2.80 | 128626 | 4.46 | 80910 | 7.10 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0409N | 61589 | 3.30 | 262273 | 4.96 | 166069 | 7.60 |
| 02 | SSTD0109N | 57082 | 3.30 | 241821 | 4.96 | 147115 | 7.60 |
| 03 | SSTD0809N | 56110 | 3.30 | 245810 | 4.96 | 147641 | 7.60 |
| 04 | SSTD0059N | 66765 | 3.30 | 276471 | 4.96 | 165548 | 7.60 |
| 05 | SSTD0209O | 68356 | 3.30 | 302766 | 4.96 | 192202 | 7.60 |
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref-No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209N Date Analyzed: 05/23/2012

Lab File ID (Standard): E4605.D Time Analyzed: 1822

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 288993 | 9.85 | 296748 | 13.99 | 254534 | 16.05 |
| | UPPER LIMIT | 577986 | 10.35 | 593496 | 14.49 | 509068 | 16.55 |
| | LOWER LIMIT | 144497 | 9.35 | 148374 | 13.49 | 127267 | 15.55 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0409N | 294409 | 9.85 | 299770 | 13.99 | 254538 | 16.06 |
| 02 | SSTD0109N | 266241 | 9.85 | 265585 | 13.99 | 234765 | 16.06 |
| 03 | SSTD0809N | 270384 | 9.86 | 271635 | 14.00 | 239641 | 16.06 |
| 04 | SSTD0059N | 295671 | 9.85 | 304910 | 13.99 | 266662 | 16.05 |
| 05 | SSTD0209O | 340717 | 9.85 | 346922 | 13.99 | 302914 | 16.05 |
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209O Date Analyzed: 05/24/2012

Lab File ID (Standard): E4618.D Time Analyzed: 0107

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 68356 | 3.30 | 302766 | 4.96 | 192202 | 7.60 |
| | UPPER LIMIT | 136712 | 3.80 | 605532 | 5.46 | 384404 | 8.10 |
| | LOWER LIMIT | 34178 | 2.80 | 151383 | 4.46 | 96101 | 7.10 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209P | 77410 | 3.30 | 303799 | 4.96 | 192735 | 7.60 |
| 02 | | | | | | | |
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: - SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209O Date Analyzed: 05/24/2012

Lab File ID (Standard): E4618.D Time Analyzed: 0107

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 340717 | 9.85 | 346922 | 13.99 | 302914 | 16.05 |
| | UPPER LIMIT | 681434 | 10.35 | 693844 | 14.49 | 605828 | 16.55 |
| | LOWER LIMIT | 170359 | 9.35 | 173461 | 13.49 | 151457 | 15.55 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209P | 338230 | 9.86 | 361403 | 14.00 | 322383 | 16.06 |
| 02 | | | | | | | |
| 03 | | | | | | | |
| 04 | | | | | | | |
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: - SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209P Date Analyzed: 05/24/2012

Lab File ID (Standard): E4624.D Time Analyzed: 1016

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 77410 | 3.30 | 303799 | 4.96 | 192735 | 7.60 |
| | UPPER LIMIT | 154820 | 3.80 | 607598 | 5.46 | 385470 | 8.10 |
| | LOWER LIMIT | 38705 | 2.80 | 151900 | 4.46 | 96368 | 7.10 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209Q | 66863 | 3.30 | 299524 | 4.96 | 190727 | 7.60 |
| 02 | | | | | | | |
| 03 | | | | | | | |
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209P Date Analyzed: 05/24/2012

Lab File ID (Standard): E4624.D Time Analyzed: 1016

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 338230 | 9.86 | 361403 | 14.00 | 322383 | 16.06 |
| | UPPER LIMIT | 676460 | 10.36 | 722806 | 14.50 | 644766 | 16.56 |
| | LOWER LIMIT | 169115 | 9.36 | 180702 | 13.50 | 161192 | 15.56 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209Q | 347257 | 9.85 | 362505 | 13.99 | 320814 | 16.05 |
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209Q Date Analyzed: 05/24/2012

Lab File ID (Standard): E4634.D Time Analyzed: 1650

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 66863 | 3.30 | 299524 | 4.96 | 190727 | 7.60 |
| | UPPER LIMIT | 133726 | 3.80 | 599048 | 5.46 | 381454 | 8.10 |
| | LOWER LIMIT | 33432 | 2.80 | 149762 | 4.46 | 95364 | 7.10 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SBLK6Q | 81812 | 3.30 | 339282 | 4.96 | 234275 | 7.60 |
| 02 | F5WB8 | 56280 | 3.30 | 236763 | 4.96 | 175343 | 7.60 |
| 03 | F5WC2 | 64020 | 3.30 | 276308 | 4.96 | 194095 | 7.60 |
| 04 | SSTD0209R | 199263 * | 3.30 | 830122 * | 4.96 | 519004 * | 7.60 |
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209Q Date Analyzed: 05/24/2012

Lab File ID (Standard): E4634.D Time Analyzed: 1650

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 347257 | 9.85 | 362505 | 13.99 | 320814 | 16.05 |
| | UPPER LIMIT | 694514 | 10.35 | 725010 | 14.49 | 641628 | 16.55 |
| | LOWER LIMIT | 173629 | 9.35 | 181253 | 13.49 | 160407 | 15.55 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SBLK6Q | 450622 | 9.85 | 456147 | 13.99 | 431796 | 16.05 |
| 02 | F5WB8 | 338497 | 9.85 | 326102 | 13.99 | 303140 | 16.05 |
| 03 | F5WC2 | 348247 | 9.85 | 344565 | 13.98 | 329833 | 16.05 |
| 04 | SSTD0209R | 933207 * | 9.85 | 975310 * | 13.99 | 868694 * | 16.05 |
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209S Date Analyzed: 05/25/2012

Lab File ID (Standard): E4655.D Time Analyzed: 1128

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 58472 | 3.26 | 256510 | 4.93 | 166106 | 7.56 |
| | UPPER LIMIT | 116944 | 3.76 | 513020 | 5.43 | 332212 | 8.06 |
| | LOWER LIMIT | 29236 | 2.76 | 128255 | 4.43 | 83053 | 7.06 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0109S | 71193 | 3.27 | 308395 | 4.92 | 200069 | 7.56 |
| 02 | SSTD0409S | 68222 | 3.26 | 297757 | 4.93 | 193794 | 7.56 |
| 03 | SSTD0809S | 60777 | 3.27 | 258454 | 4.93 | 167465 | 7.56 |
| 04 | SSTD0059S | 88923 | 3.27 | 369298 | 4.93 | 246938 | 7.56 |
| 05 | SSTD0209T | 83540 | 3.27 | 366691 | 4.93 | 242914 | 7.56 |
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209S Date Analyzed: 05/25/2012

Lab File ID (Standard): E4655.D Time Analyzed: 1128

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 318351 | 9.81 | 377654 | 13.93 | 373109 | 15.99 |
| | UPPER LIMIT | 636702 | 10.31 | 755308 | 14.43 | 746218 | 16.49 |
| | LOWER LIMIT | 159176 | 9.31 | 188827 | 13.43 | 186555 | 15.49 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0109S | 357073 | 9.80 | 398932 | 13.93 | 387698 | 15.99 |
| 02 | SSTD0409S | 367296 | 9.81 | 425708 | 13.93 | 428803 | 16.00 |
| 03 | SSTD0809S | 306235 | 9.81 | 333416 | 13.94 | 304239 | 16.00 |
| 04 | SSTD0059S | 452294 | 9.80 | 495071 | 13.93 | 469263 | 15.99 |
| 05 | SSTD0209T | 447602 | 9.81 | 481864 | 13.93 | 387879 | 16.00 |
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209T Date Analyzed: 05/25/2012

Lab File ID (Standard): E4671.D Time Analyzed: 1948

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 83540 | 3.27 | 366691 | 4.93 | 242914 | 7.56 |
| | UPPER LIMIT | 167080 | 3.77 | 733382 | 5.43 | 485828 | 8.06 |
| | LOWER LIMIT | 41770 | 2.77 | 183346 | 4.43 | 121457 | 7.06 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209U | 82133 | 3.24 | 346159 | 4.89 | 217953 | 7.53 |
| 02 | | | | | | | |
| 03 | | | | | | | |
| 04 | | | | | | | |
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| 22 | | | | | | | |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209T Date Analyzed: 05/25/2012

Lab File ID (Standard): E4671.D Time Analyzed: 1948

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 447602 | 9.81 | 481864 | 13.93 | 387879 | 16.00 |
| | UPPER LIMIT | 895204 | 10.31 | 963728 | 14.43 | 775758 | 16.50 |
| | LOWER LIMIT | 223801 | 9.31 | 240932 | 13.43 | 193940 | 15.50 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | SSTD0209U | 387598 | 9.77 | 396968 | 13.90 | 358299 | 15.96 |
| 02 | | | | | | | |
| 03 | | | | | | | |
| 04 | | | | | | | |
| 05 | | | | | | | |
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| 22 | | | | | | | |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

GC Column: HP-5MS ID: 0.25 (mm) Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209U Date Analyzed: 05/26/2012

Lab File ID (Standard): E4685.D Time Analyzed: 0703

Instrument ID: E-5973

| | | IS1 (DCB) AREA # | RT # | IS2 (NPT) AREA # | RT # | IS3 (ANT) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 82133 | 3.24 | 346159 | 4.89 | 217953 | 7.53 |
| | UPPER LIMIT | 164266 | 3.74 | 692318 | 5.39 | 435906 | 8.03 |
| | LOWER LIMIT | 41067 | 2.74 | 173080 | 4.39 | 108977 | 7.03 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | F5WB4 | 66030 | 3.24 | 289314 | 4.89 | 181049 | 7.53 |
| 02 | F5WB9 | 64462 | 3.24 | 268988 | 4.89 | 172043 | 7.53 |
| 03 | F5WC0 | 64558 | 3.24 | 286368 | 4.89 | 186363 | 7.53 |
| 04 | F5WC1 | 91977 | 3.24 | 375339 | 4.89 | 240676 | 7.53 |
| 05 | F5WC3 | 79365 | 3.24 | 346037 | 4.89 | 231563 | 7.53 |
| 06 | SSTD0209V | 153125 | 3.24 | 642778 | 4.89 | 426537 | 7.53 |
| 07 | | | | | | | |
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| 21 | | | | | | | |
| 22 | | | | | | | |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

EPA Sample No.(SSTD020##): SSTD0209U Date Analyzed: 05/26/2012

Lab File ID (Standard): E4685.D Time Analyzed: 0703

Instrument ID: E-5973 GC Column: HP-5MS ID: 0.25 (mm)

| | | IS4 (PHN) AREA # | RT # | IS5 (CRY) AREA # | RT # | IS6 (PRY) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 387598 | 9.77 | 396968 | 13.90 | 358299 | 15.96 |
| | UPPER LIMIT | 775196 | 10.27 | 793936 | 14.40 | 716598 | 16.46 |
| | LOWER LIMIT | 193799 | 9.27 | 198484 | 13.40 | 179150 | 15.46 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | F5WB4 | 654041 | 9.78 | 664046 | 13.92 | 609095 | 15.99 |
| 02 | F5WB9 | 326187 | 9.78 | 325631 | 13.92 | 303255 | 15.99 |
| 03 | F5WC0 | 352004 | 9.78 | 362757 | 13.92 | 325665 | 15.99 |
| 04 | F5WC1 | 442181 | 9.78 | 444610 | 13.92 | 426786 | 15.99 |
| 05 | F5WC3 | 414509 | 9.78 | 418959 | 13.92 | 370009 | 15.99 |
| 06 | SSTD0209V | 765502 | 9.78 | 809416 * | 13.93 | 737199 * | 16.00 |
| 07 | | | | | | | |
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| 22 | | | | | | | |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% 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 contract required QC limits with an asterisk.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4686.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 210 | U |
| 108-95-2 | Phenol | 210 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 210 | U |
| 95-57-8 | 2-Chlorophenol | 210 | U |
| 95-48-7 | 2-Methylphenol | 210 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 210 | U |
| 98-86-2 | Acetophenone | 210 | U |
| 106-44-5 | 4-Methylphenol | 210 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 210 | U |
| 67-72-1 | Hexachloroethane | 210 | U |
| 98-95-3 | Nitrobenzene | 210 | U |
| 78-59-1 | Isophorone | 210 | U |
| 88-75-5 | 2-Nitrophenol | 210 | U |
| 105-67-9 | 2,4-Dimethylphenol | 210 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 210 | U |
| 120-83-2 | 2,4-Dichlorophenol | 210 | U |
| 91-20-3 | Naphthalene | 210 | U |
| 106-47-8 | 4-Chloroaniline | 210 | U |
| 87-68-3 | Hexachlorobutadiene | 210 | U |
| 105-60-2 | Caprolactam | 210 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 210 | U |
| 91-57-6 | 2-Methylnaphthalene | 210 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 210 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 210 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 210 | U |
| 92-52-4 | 1,1'-Biphenyl | 210 | U |
| 91-58-7 | 2-Chloronaphthalene | 210 | U |
| 88-74-4 | 2-Nitroaniline | 410 | U |
| 131-11-3 | Dimethylphthalate | 210 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 210 | U |
| 208-96-8 | Acenaphthylene | 210 | U |
| 99-09-2 | 3-Nitroaniline | 410 | U |
| 83-32-9 | Acenaphthene | 210 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4686.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 410 | U |
| 100-02-7 | 4-Nitrophenol | 410 | U |
| 132-64-9 | Dibenzofuran | 210 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 210 | U |
| 84-66-2 | Diethylphthalate | 210 | U |
| 86-73-7 | Fluorene | 210 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 210 | U |
| 100-01-6 | 4-Nitroaniline | 410 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 410 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 210 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 210 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 210 | U |
| 118-74-1 | Hexachlorobenzene | 210 | U |
| 1912-24-9 | Atrazine | 210 | U |
| 87-86-5 | Pentachlorophenol | 410 | U |
| 85-01-8 | Phenanthrene | 47 | J |
| 120-12-7 | Anthracene | 210 | U |
| 86-74-8 | Carbazole | 210 | U |
| 84-74-2 | Di-n-butylphthalate | 31 | JB |
| 206-44-0 | Fluoranthene | 29 | J |
| 129-00-0 | Pyrene | 210 | U |
| 85-68-7 | Butylbenzylphthalate | 43 | J |
| 91-94-1 | 3,3'-Dichlorobenzidine | 210 | U |
| 56-55-3 | Benzo (a) anthracene | 210 | U |
| 218-01-9 | Chrysene | 210 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 32 | J |
| 117-84-0 | Di-n-octylphthalate | 210 | U |
| 205-99-2 | Benzo (b) fluoranthene | 210 | U |
| 207-08-9 | Benzo (k) fluoranthene | 210 | U |
| 50-32-8 | Benzo (a) pyrene | 210 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 210 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 210 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 210 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 210 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-01

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4686.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 21.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 (1 3.237) | 1.46 | 2100 | J |
| 02 | | Unknown-02 (1 3.237) | 1.68 | 1200 | J |
| 03 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.35 | 380 | JNB |
| 04 | | Unknown-03 (1 3.237) | 2.91 | 1100 | J |
| 05 | | Unknown-04 (1 3.237) | 3.77 | 1500 | J |
| 06 | | Unknown-05 (2 4.893) | 4.35 | 1000 | J |
| 07 | | Unknown-06 (3 7.532) | 7.12 | 1800 | J |
| 08 | | Unknown-07 (3 7.532) | 7.21 | 1500 | J |
| 09 | | Unknown-08 (7.532) | 7.40 | 810 | J |
| 10 | | Unknown-09 (3 7.532) | 8.25 | 2100 | J |
| 11 | | Unknown-10 (4 9.779) | 10.41 | 200 | J |
| 12 | | Unknown-11 (4 9.779) | 11.11 | 130 | J |
| 13 | 005103-74-2 | trans-Chlordane | 11.92 | 180 | JN |
| 14 | | Unknown-12 (5 13.923) | 12.10 | 99 | J |
| 15 | 003734-49-4 | 4,7-Methano-1H-indene, 1,2,. | 12.16 | 100 | JN |
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| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | 90 | J |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

06/01/12

S. Vetkati
06/01/12

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 66030 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 289314 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 181049 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.779 | 188 | 654041 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.923 | 240 | 664046 | 20.0000 ug/mL | 0.02 |
| 88) Perylene-d12 | 15.992 | 264 | 609095 | 20.0000 ug/mL | 0.03 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0 | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | |
| 7) Phenol-d5 | 3.018 | 99 | 203691 | 14.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 36.35% | | |
| 18) Bis(2-chloroethyl)ethe... | 2.986 | 67 | 117667 | 16.18 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 40.45% | | |
| 19) 2-Chlorophenol-d4 | 3.050 | 132 | 169948 | 12.90 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 32.25% | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 165491 | 14.60 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 36.50% | | |
| 22) Nitrobenzene-d5 | 3.985 | 128 | 106367 | 16.59 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 41.48% | | |
| 35) 2-Nitrophenol-d4 | 4.423 | 143 | 112020 | 15.45 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 38.63% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.786 | 165 | 180699 | 15.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 37.52% | | |
| 37) 4-Chloroaniline-d4 | 5.118 | 131 | 272104 | 22.77 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 56.93% | | |
| 62) Acenaphthylene-d8 | 7.271 | 160 | 707843 | 18.03 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 45.08% | | |
| 63) 4-Nitrophenol-d4 | 8.088 | 143 | 162676 | 27.81 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 69.52% | | |
| 64) Dimethylphthalate-d6 | 7.319 | 166 | 546949 | 17.16 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 42.90%# | | |
| 65) Fluorene-d10 | 8.318 | 176 | 458840 | 18.30 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 45.75% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.619 | 200 | 42635 | 3.56 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 8.90% | | |
| 79) Anthracene-d10 | 9.842 | 188 | 1532304 | 18.37 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 45.93% | | |
| 87) Pyrene-d10 | 11.968 | 212 | 1822191 | 21.68 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 54.20% | | |
| 96) Benzo (a) pyrene-d12 | 15.889 | 264 | 1394117 | 19.21 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 48.02% | | |
| **Target Compounds** | | | | | Qvalue |
| 4) 1,4-Dioxane | 1.015 | 88 | 28527m | 7.6743 ug/mL | |
| 73) Phenanthrene | 9.796 | 178 | 93527 | 1.1291 ug/mL | 96 |
| 76) Di-n-butylphthalate | 11.031 | 149 | 77101 | 0.7370 ug/mL | 98 |
| 77) Fluoranthene | 11.665 | 202 | 64168 | 0.6819 ug/mL | 93 |
| 82) Butylbenzylphthalate | 13.340 | 149 | 45031 | 1.0235 ug/mL | 88 |
| 86) Bis(2-ethylhexyl)phtha... | 14.369 | 149 | 47987 | 0.7754 ug/mL | 95 |

RS

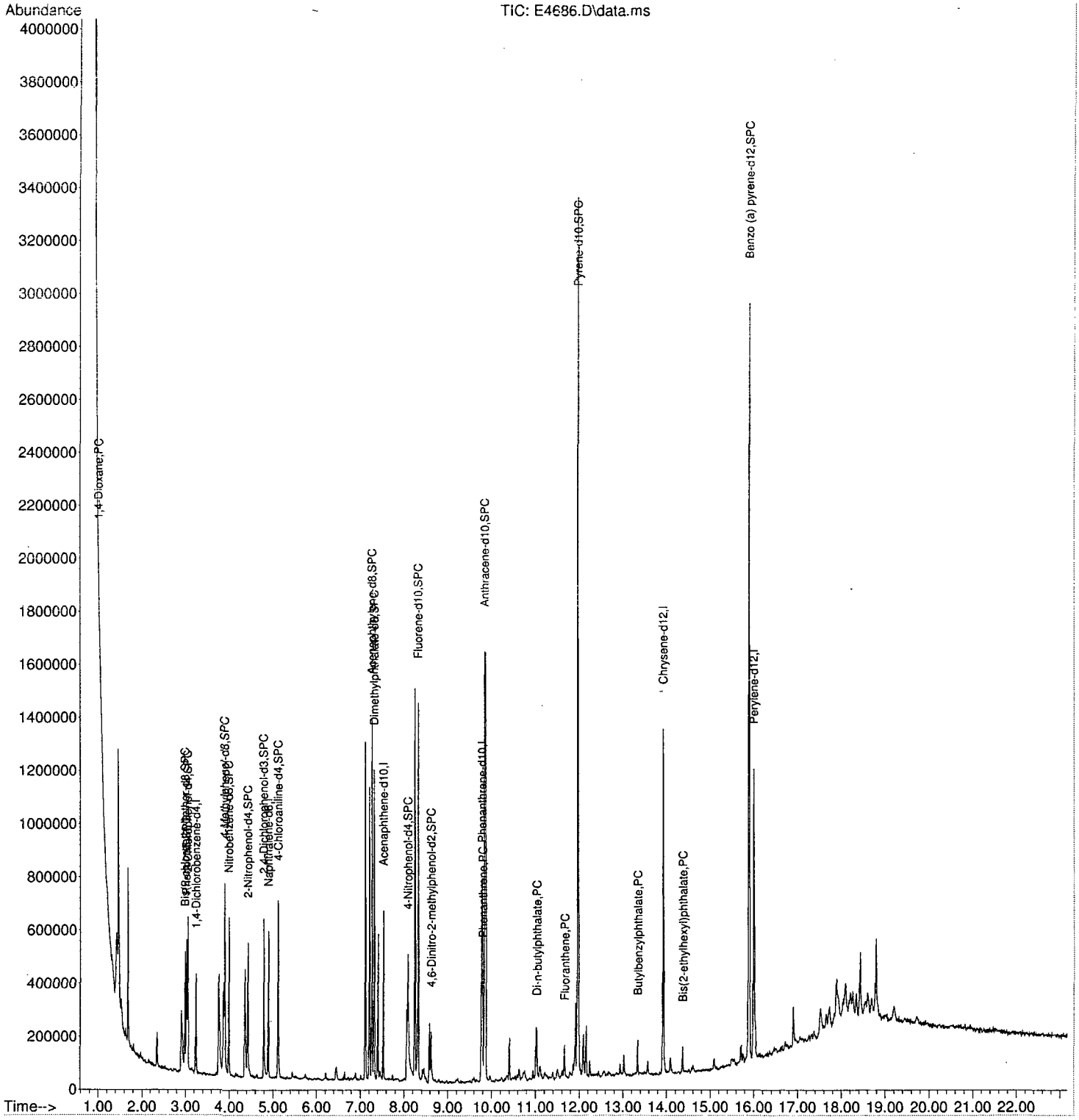
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

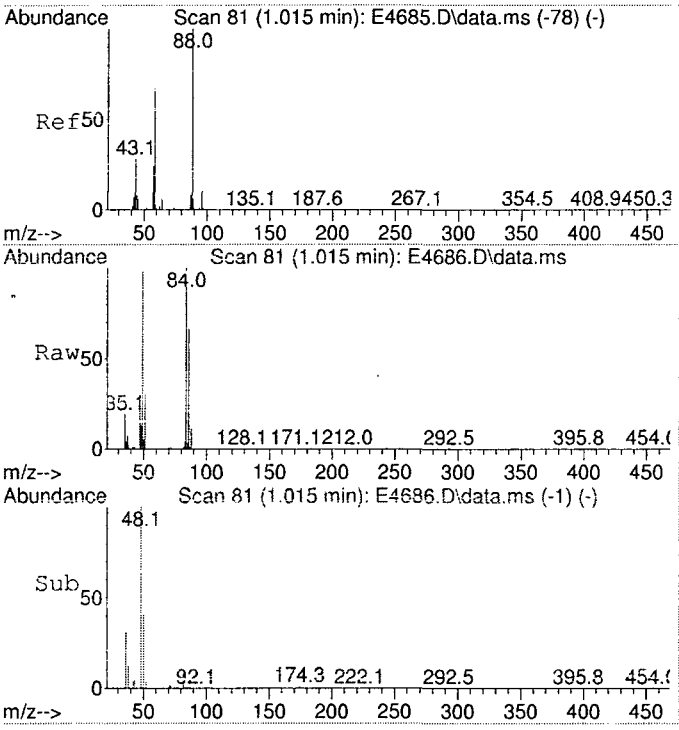
Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration



Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

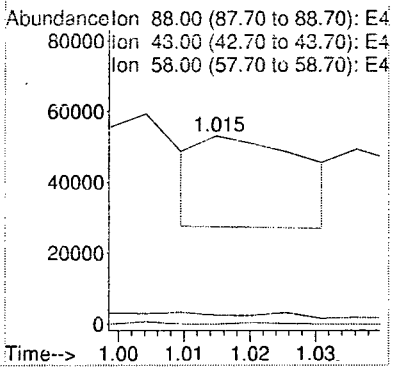
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

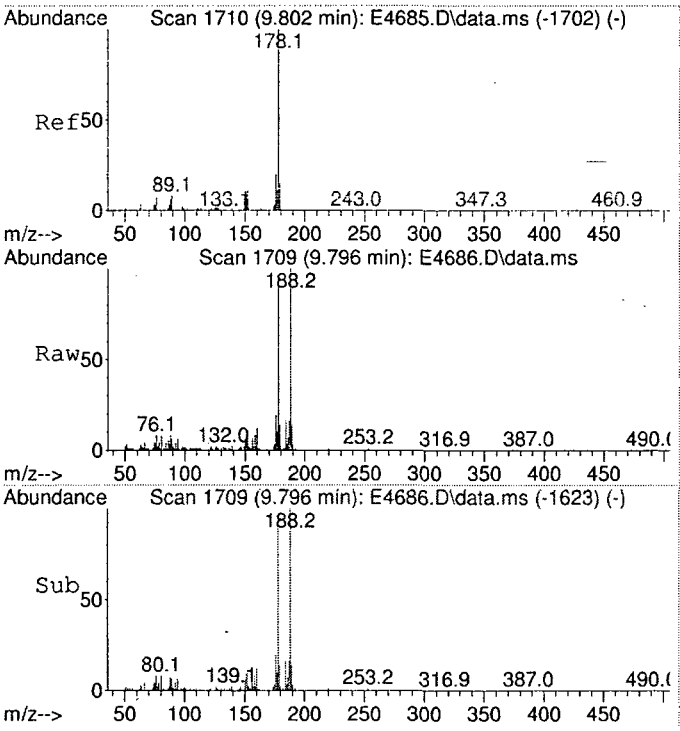



#4
1,4-Dioxane
Concen: 7.6743 ug/mL m
RT: 1.01 min Scan# 81
Delta R.T. -0.00 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion: 88 Resp: 28527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 1242.8 | 18.4 | 27.6# |
| 58 | 36.6 | 36.8 | 55.2# |

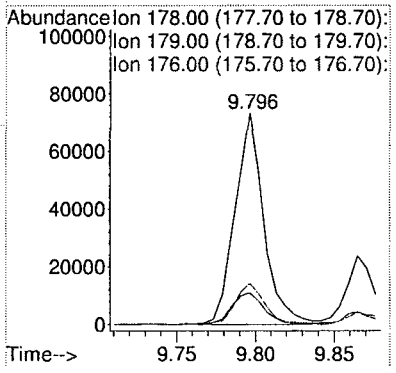



#73
Phenanthrene
Concen: 1.1291 ug/mL
RT: 9.80 min Scan# 1709
Delta R.T. -0.01 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion:178 Resp: 93527

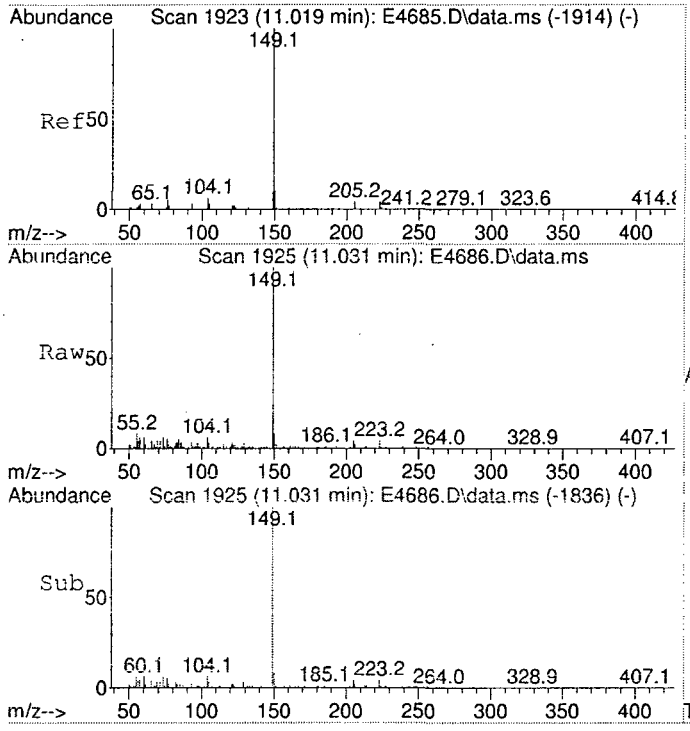
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.7 | 0.0 | 35.0 |
| 176 | 19.9 | 0.0 | 38.0 |



Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

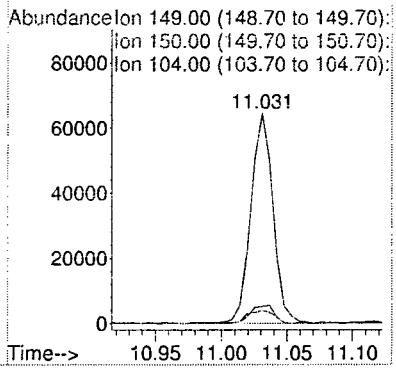
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

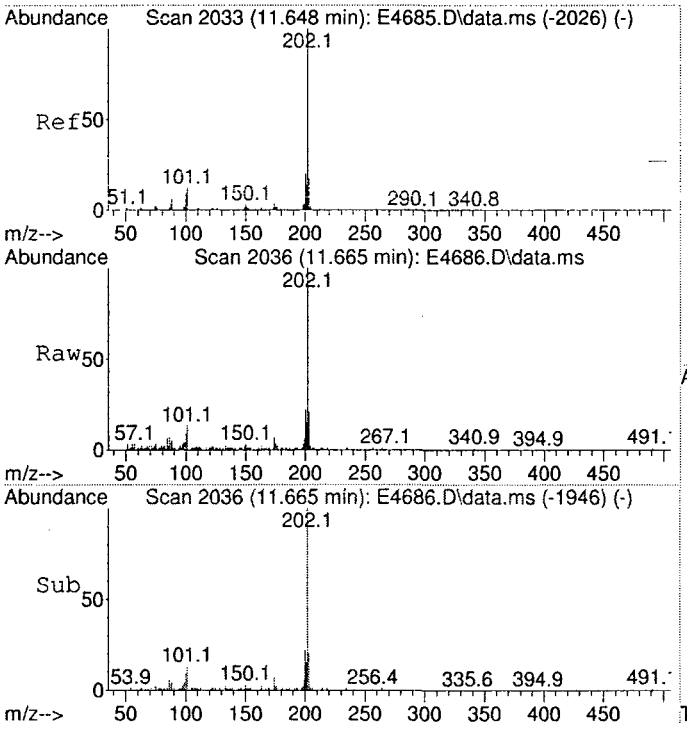



#76
Di-n-butylphthalate
Concen: 0.7370 ug/mL
RT: 11.03 min Scan# 1925
Delta R.T. 0.01 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion:149 Resp: 77101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.6 | 0.0 | 29.0 |
| 104 | 7.5 | 0.0 | 26.3 |

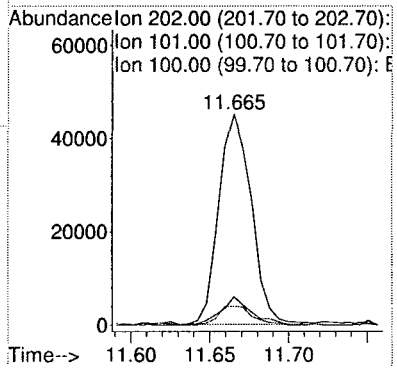



#77
Fluoranthene
Concen: 0.6819 ug/mL
RT: 11.67 min Scan# 2036
Delta R.T. 0.02 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion:202 Resp: 64168

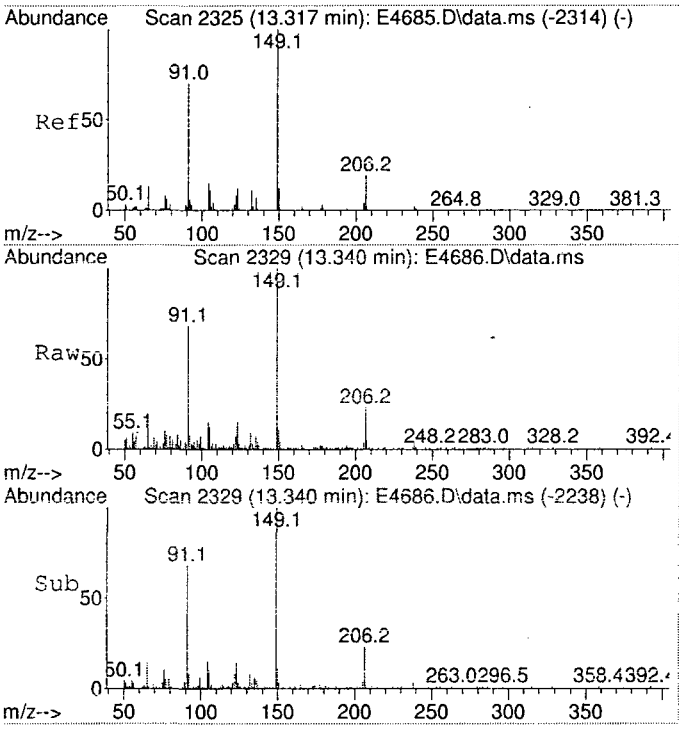
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 12.5 | 0.0 | 29.8 |
| 100 | 9.5 | 0.0 | 27.6 |



Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

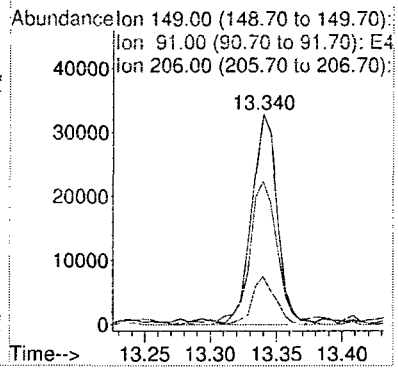
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

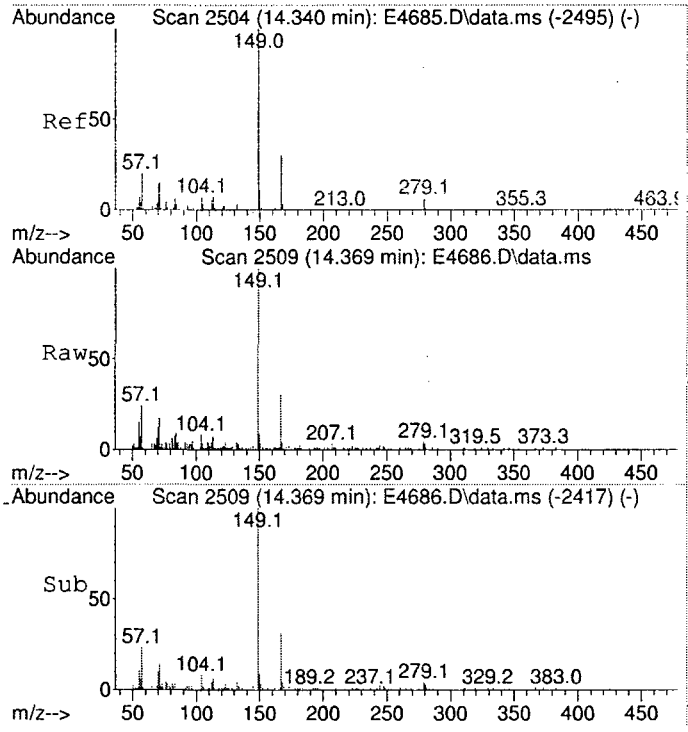



#82
Butylbenzylphthalate
Concen: 1.0235 ug/mL
RT: 13.34 min Scan# 2329
Delta R.T. 0.02 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion:149 Resp: 45031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 67.9 | 60.2 | 100.2 |
| 206 | 20.9 | 2.5 | 42.5 |

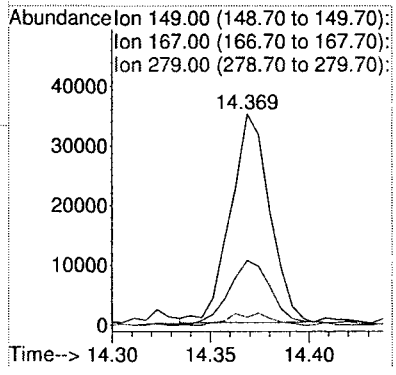



#86
Bis(2-ethylhexyl)phthalate
Concen: 0.7754 ug/mL
RT: 14.37 min Scan# 2509
Delta R.T. 0.03 min
Lab File: E4686.D
Acq: 26 May 2012 12:25

Tgt Ion:149 Resp: 47987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 32.6 | 10.2 | 50.2 |
| 279 | 5.8 | 0.0 | 28.1 |



LSC Area Percent Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4686.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.458 | 162 | 164 | 176 | rVB | 977412 | 1125387 | 25.07% | 2.605% |
| 2 | 1.677 | 202 | 205 | 218 | rVB | 673080 | 644857 | 14.36% | 1.493% |
| 3 | 2.350 | 328 | 331 | 351 | rVB2 | 138118 | 208023 | 4.63% | 0.482% |
| 4 | 2.906 | 430 | 435 | 447 | rBV2 | 230398 | 576846 | 12.85% | 1.335% |
| 5 | 2.986 | 447 | 450 | 454 | rVV | 449799 | 465792 | 10.38% | 1.078% |
| 6 | 3.018 | 454 | 456 | 460 | rVV | 493333 | 597313 | 13.30% | 1.383% |
| 7 | 3.050 | 460 | 462 | 475 | rVB | 576283 | 647714 | 14.43% | 1.499% |
| 8 | 3.237 | 492 | 497 | 506 | rVB | 378934 | 455621 | 10.15% | 1.055% |
| 9 | 3.296 | 506 | 508 | 514 | rBV7 | 11934 | 11938 | 0.27% | 0.028% |
| 10 | 3.766 | 591 | 596 | 608 | rBV | 379257 | 790689 | 17.61% | 1.830% |
| 11 | 3.868 | 610 | 615 | 618 | rVV | 317864 | 516951 | 11.51% | 1.197% |
| 12 | 3.894 | 618 | 620 | 633 | rVV | 722490 | 893568 | 19.90% | 2.069% |
| 13 | 3.985 | 633 | 637 | 647 | rVB | 594279 | 687859 | 15.32% | 1.592% |
| 14 | 4.354 | 701 | 706 | 715 | rBV | 405253 | 742033 | 16.53% | 1.718% |
| 15 | 4.423 | 715 | 719 | 725 | rVB | 480706 | 548157 | 12.21% | 1.269% |
| 16 | 4.786 | 783 | 787 | 800 | rBV | 600873 | 836259 | 18.63% | 1.936% |
| 17 | 4.893 | 803 | 807 | 818 | rVB | 550912 | 620832 | 13.83% | 1.437% |
| 18 | 5.112 | 844 | 848 | 860 | rBV | 669353 | 853801 | 19.02% | 1.977% |
| 19 | 5.326 | 885 | 888 | 889 | rBV3 | 11763 | 10984 | 0.24% | 0.025% |
| 20 | 5.454 | 907 | 912 | 920 | rBV8 | 24049 | 40352 | 0.90% | 0.093% |
| 21 | 5.529 | 922 | 926 | 931 | rBV8 | 10477 | 17382 | 0.39% | 0.040% |
| 22 | 5.748 | 965 | 967 | 973 | rVB5 | 18835 | 27673 | 0.62% | 0.064% |
| 23 | 5.850 | 983 | 986 | 992 | rBV7 | 9056 | 13716 | 0.31% | 0.032% |
| 24 | 6.213 | 1051 | 1054 | 1058 | rBV5 | 23247 | 36016 | 0.80% | 0.083% |
| 25 | 6.443 | 1094 | 1097 | 1098 | rBV3 | 39005 | 36054 | 0.80% | 0.083% |
| 26 | 6.614 | 1126 | 1129 | 1132 | rBV5 | 13913 | 15168 | 0.34% | 0.035% |
| 27 | 6.651 | 1132 | 1136 | 1144 | rVV5 | 31731 | 42811 | 0.95% | 0.099% |
| 28 | 6.736 | 1146 | 1152 | 1156 | rVB8 | 15680 | 26050 | 0.58% | 0.060% |
| 29 | 6.800 | 1159 | 1164 | 1168 | rVB7 | 11292 | 16633 | 0.37% | 0.039% |
| 30 | 6.865 | 1174 | 1176 | 1178 | rBV3 | 9430 | 10815 | 0.24% | 0.025% |
| 31 | 6.897 | 1180 | 1182 | 1188 | rVV7 | 26820 | 33865 | 0.75% | 0.078% |
| 32 | 7.014 | 1200 | 1204 | 1208 | rVB6 | 17116 | 20149 | 0.45% | 0.047% |
| 33 | 7.116 | 1217 | 1223 | 1235 | rBV | 1271734 | 1554178 | 34.62% | 3.598% |
| 34 | 7.212 | 1235 | 1241 | 1247 | rVV | 1101316 | 1297080 | 28.89% | 3.003% |
| 35 | 7.271 | 1247 | 1252 | 1257 | rVV | 1357550 | 1503493 | 33.49% | 3.481% |
| 36 | 7.319 | 1257 | 1261 | 1269 | rVV | 1165140 | 1234783 | 27.50% | 2.858% |
| 37 | 7.404 | 1271 | 1277 | 1283 | rVV | 548030 | 708836 | 15.79% | 1.641% |
| 38 | 7.463 | 1284 | 1288 | 1296 | rVB7 | 30579 | 56931 | 1.27% | 0.132% |
| 39 | 7.532 | 1296 | 1301 | 1309 | rBV | 636086 | 736008 | 16.39% | 1.704% |
| 40 | 7.682 | 1328 | 1329 | 1335 | rVV6 | 10389 | 12459 | 0.28% | 0.029% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 7.741 | 1337 | 1340 | 1344 | rVB3 | 23330 | 27511 | 0.61% | 0.064% |
| 42 | 8.056 | 1396 | 1399 | 1402 | rBV | 266921 | 344794 | 7.68% | 0.798% |
| 43 | 8.088 | 1402 | 1405 | 1429 | rVV2 | 471065 | 1064055 | 23.70% | 2.463% |
| 44 | 8.248 | 1429 | 1435 | 1441 | rVV | 1469083 | 1876223 | 41.79% | 4.343% |
| 45 | 8.318 | 1442 | 1448 | 1456 | rVB | 1410003 | 1801134 | 40.12% | 4.170% |
| 46 | 8.430 | 1462 | 1469 | 1472 | rBV2 | 40858 | 70180 | 1.56% | 0.162% |
| 47 | 8.462 | 1472 | 1475 | 1480 | rVV2 | 46621 | 71896 | 1.60% | 0.166% |
| 48 | 8.510 | 1480 | 1484 | 1492 | rVB6 | 25187 | 46768 | 1.04% | 0.108% |
| 49 | 8.579 | 1492 | 1496 | 1500 | rBV | 225628 | 296595 | 6.61% | 0.687% |
| 50 | 8.619 | 1500 | 1503 | 1516 | rVV2 | 188373 | 287037 | 6.39% | 0.664% |
| 51 | 8.716 | 1518 | 1520 | 1527 | rVB8 | 13182 | 20475 | 0.46% | 0.047% |
| 52 | 8.802 | 1530 | 1535 | 1541 | rVB9 | 15393 | 31279 | 0.70% | 0.072% |
| 53 | 8.910 | 1551 | 1554 | 1557 | rVB5 | 9459 | 13913 | 0.31% | 0.032% |
| 54 | 8.979 | 1563 | 1566 | 1571 | rVB6 | 13364 | 23001 | 0.51% | 0.053% |
| 55 | 9.048 | 1574 | 1578 | 1581 | rBV5 | 9702 | 13799 | 0.31% | 0.032% |
| 56 | 9.231 | 1608 | 1610 | 1613 | rVB4 | 15118 | 13358 | 0.30% | 0.031% |
| 57 | 9.305 | 1617 | 1623 | 1625 | rVB6 | 13577 | 16625 | 0.37% | 0.038% |
| 58 | 9.579 | 1667 | 1671 | 1673 | rBV4 | 13863 | 24742 | 0.55% | 0.057% |
| 59 | 9.602 | 1673 | 1675 | 1680 | rVB6 | 18894 | 21616 | 0.48% | 0.050% |
| 60 | 9.659 | 1682 | 1685 | 1693 | rVB10 | 11844 | 21689 | 0.48% | 0.050% |
| 61 | 9.768 | 1693 | 1704 | 1705 | rBV2 | 651629 | 902658 | 20.11% | 2.090% |
| 62 | 9.842 | 1712 | 1717 | 1718 | rBV | 1559005 | 1896165 | 42.24% | 4.390% |
| 63 | 9.962 | 1736 | 1738 | 1747 | rVB10 | 22577 | 38565 | 0.86% | 0.089% |
| 64 | 10.105 | 1759 | 1763 | 1770 | rVV9 | 11924 | 28464 | 0.63% | 0.066% |
| 65 | 10.231 | 1781 | 1785 | 1789 | rBV7 | 14952 | 24938 | 0.56% | 0.058% |
| 66 | 10.311 | 1795 | 1799 | 1800 | rBV4 | 12633 | 9768 | 0.22% | 0.023% |
| 67 | 10.356 | 1802 | 1807 | 1809 | rBV6 | 16723 | 30094 | 0.67% | 0.070% |
| 68 | 10.408 | 1812 | 1816 | 1821 | rVV | 159232 | 210126 | 4.68% | 0.486% |
| 69 | 10.539 | 1837 | 1839 | 1844 | rVB6 | 17923 | 17794 | 0.40% | 0.041% |
| 70 | 10.596 | 1844 | 1849 | 1851 | rVV5 | 21594 | 33835 | 0.75% | 0.078% |
| 71 | 10.631 | 1851 | 1855 | 1861 | rVB7 | 43597 | 77171 | 1.72% | 0.179% |
| 72 | 10.734 | 1869 | 1873 | 1875 | rBV5 | 19255 | 26179 | 0.58% | 0.061% |
| 73 | 10.882 | 1895 | 1899 | 1903 | rVV7 | 12075 | 15344 | 0.34% | 0.036% |
| 74 | 10.945 | 1905 | 1910 | 1916 | rVV10 | 35789 | 58053 | 1.29% | 0.134% |
| 75 | 11.014 | 1917 | 1922 | 1932 | rVV2 | 191381 | 378808 | 8.44% | 0.877% |
| 76 | 11.111 | 1932 | 1939 | 1950 | rVB2 | 48319 | 137151 | 3.05% | 0.318% |
| 77 | 11.219 | 1953 | 1958 | 1961 | rBV7 | 23357 | 47904 | 1.07% | 0.111% |
| 78 | 11.317 | 1973 | 1975 | 1977 | rBV3 | 11930 | 11638 | 0.26% | 0.027% |
| 79 | 11.511 | 2003 | 2009 | 2014 | rBV10 | 32261 | 74403 | 1.66% | 0.172% |
| 80 | 11.608 | 2022 | 2026 | 2030 | rBV7 | 22268 | 27024 | 0.60% | 0.063% |
| 81 | 11.665 | 2031 | 2036 | 2042 | rVB | 118183 | 165686 | 3.69% | 0.384% |
| 82 | 11.785 | 2054 | 2057 | 2058 | rBV3 | 23713 | 21124 | 0.47% | 0.049% |
| 83 | 11.865 | 2066 | 2071 | 2073 | rBV3 | 44253 | 72226 | 1.61% | 0.167% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 11.917 | 2073 | 2080 | 2083 | rVV7 | 267908 | 392955 | 8.75% | 0.910% |
| 85 | 11.968 | 2083 | 2089 | 2099 | rVB | 3295524 | 4489501 | 100.00% | 10.393% |
| 86 | 12.100 | 2107 | 2112 | 2119 | rVV6 | 147051 | 220308 | 4.91% | 0.510% |
| 87 | 12.162 | 2119 | 2123 | 2127 | rVB3 | 185142 | 230215 | 5.13% | 0.533% |
| 88 | 12.248 | 2134 | 2138 | 2145 | rBV8 | 62021 | 95962 | 2.14% | 0.222% |
| 89 | 12.454 | 2170 | 2174 | 2177 | rBV6 | 21528 | 29307 | 0.65% | 0.068% |
| 90 | 12.934 | 2255 | 2258 | 2266 | rVB9 | 40603 | 63463 | 1.41% | 0.147% |
| 91 | 13.020 | 2269 | 2273 | 2281 | rBV7 | 73506 | 113701 | 2.53% | 0.263% |
| 92 | 13.340 | 2325 | 2329 | 2334 | rVB | 132304 | 170158 | 3.79% | 0.394% |
| 93 | 13.574 | 2368 | 2370 | 2383 | rVB7 | 52717 | 89980 | 2.00% | 0.208% |
| 94 | 13.923 | 2424 | 2431 | 2443 | rBV | 1301170 | 1869167 | 41.63% | 4.327% |
| 95 | 14.094 | 2457 | 2461 | 2465 | rVB5 | 49773 | 67921 | 1.51% | 0.157% |
| 96 | 14.369 | 2504 | 2509 | 2515 | rBV | 98805 | 154274 | 3.44% | 0.357% |
| 97 | 15.723 | 2742 | 2746 | 2750 | rVB2 | 59161 | 82218 | 1.83% | 0.190% |
| 98 | 15.889 | 2768 | 2775 | 2788 | rVB | 2845018 | 4031750 | 89.80% | 9.333% |
| 99 | 15.992 | 2788 | 2793 | 2810 | rBV | 1088940 | 1831582 | 40.80% | 4.240% |
| 100 | 16.900 | 2949 | 2952 | 2959 | rVB3 | 130770 | 197546 | 4.40% | 0.457% |

Sum of corrected areas: 43196892

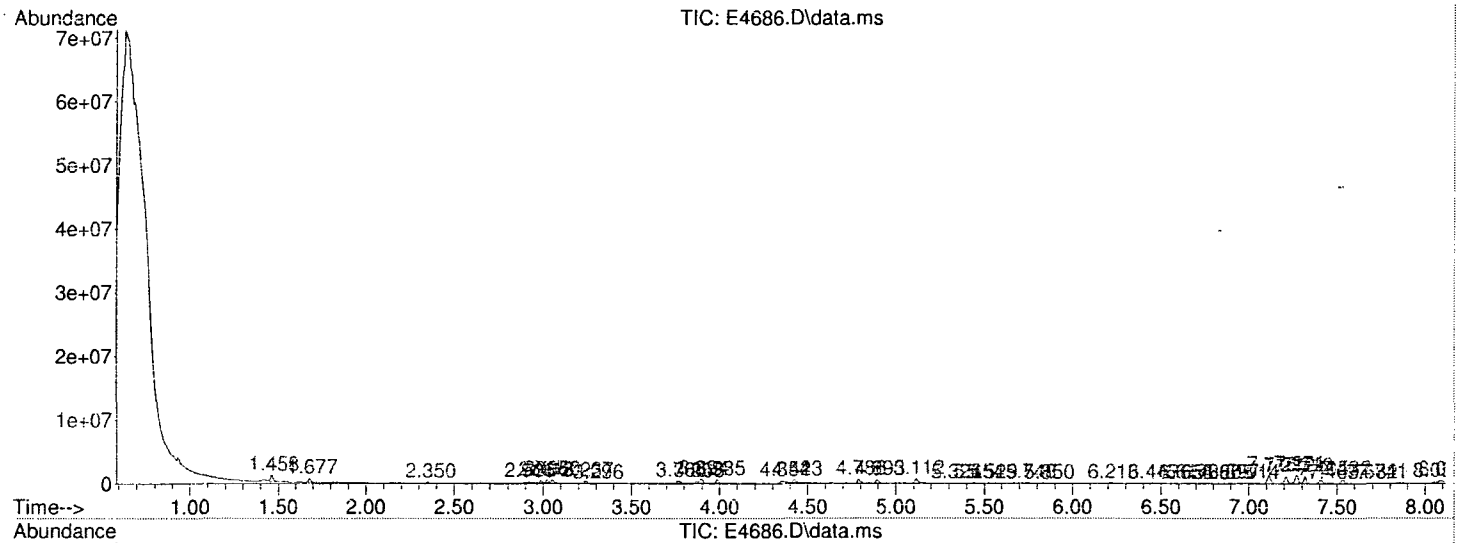
LSC Report - Integrated Chromatogram

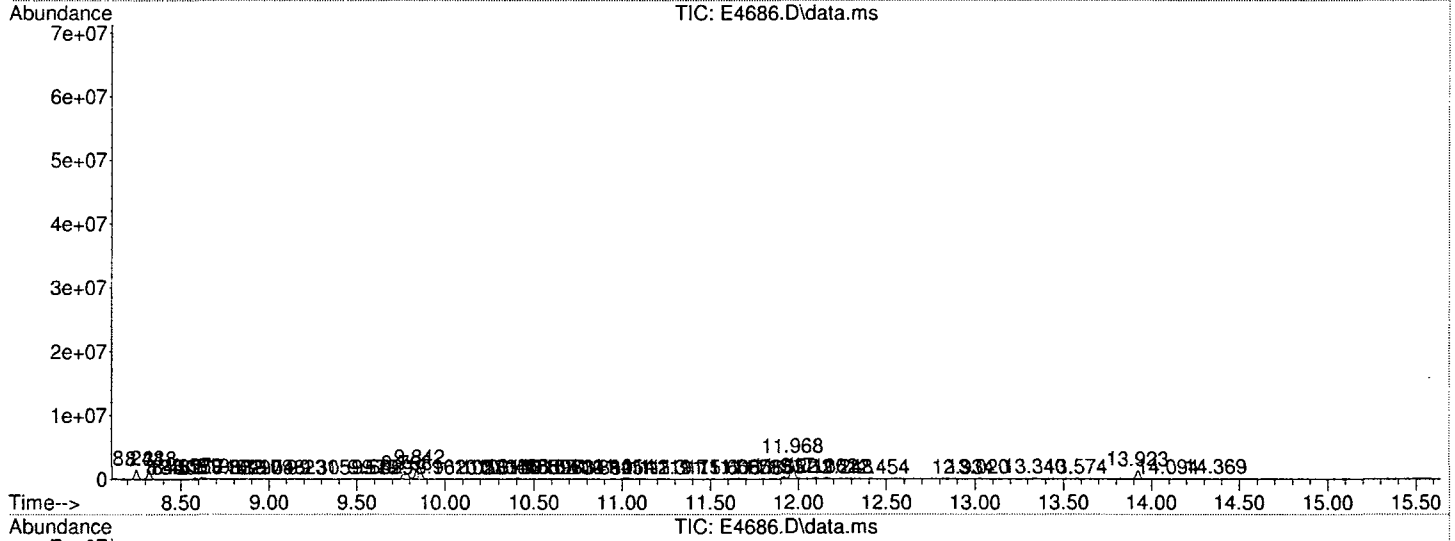
Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

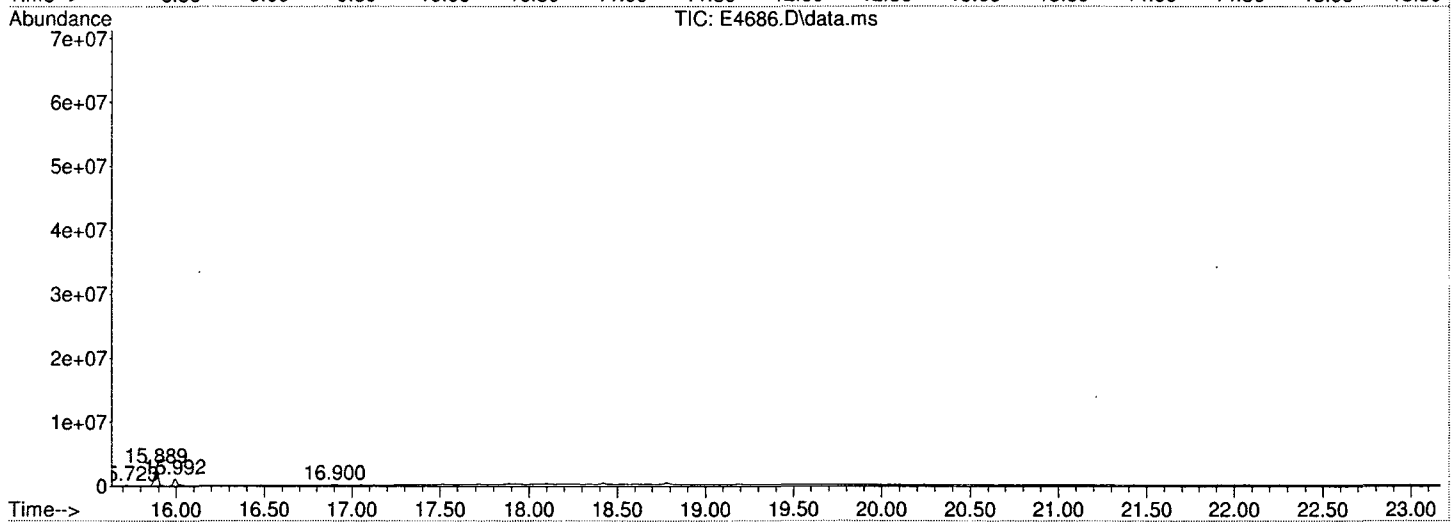
Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

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Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

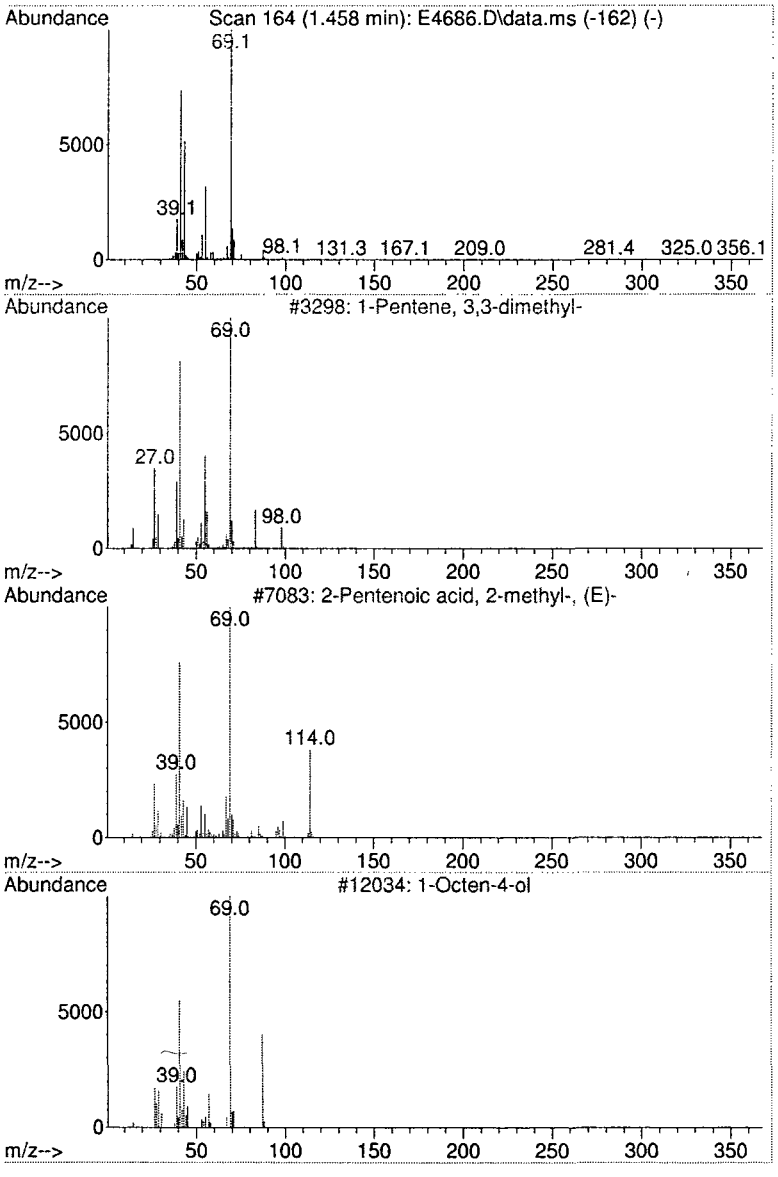
**********

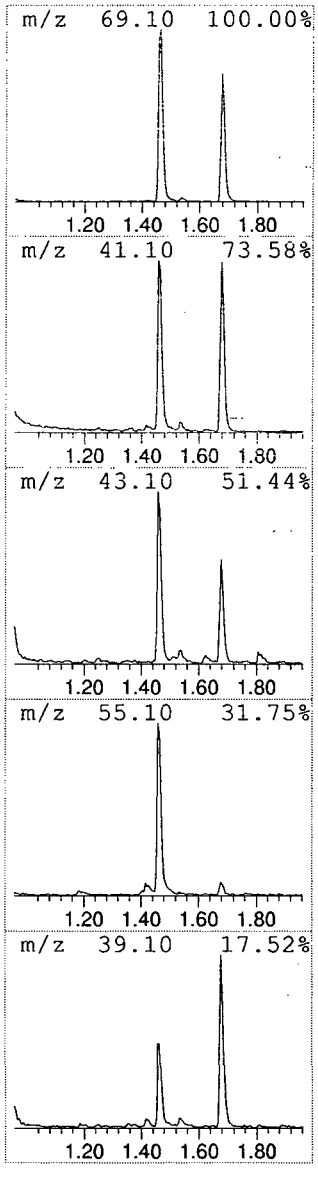
Peak Number 1 1-Pentene, 3,3-dimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.458 | 49.40 ug/mL | 1125390 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Pentene, 3,3-dimethyl- | 98 | C7H14 | 003404-73-7 | 72 |
| 2 | 2-Pentenoic acid, 2-methyl-, (E)- | 114 | C6H10O2 | 016957-70-3 | 40 |
| 3 | 1-Octen-4-ol | 128 | C8H16O | 040575-42-6 | 40 |
| 4 | 1,6-Octadiene, 2,7-dimethyl- | 138 | C10H18 | 040195-09-3 | 40 |
| 5 | 3-Methyl-2-hexene | 98 | C7H14 | 017618-77-8 | 39 |

Unknown






00217

Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

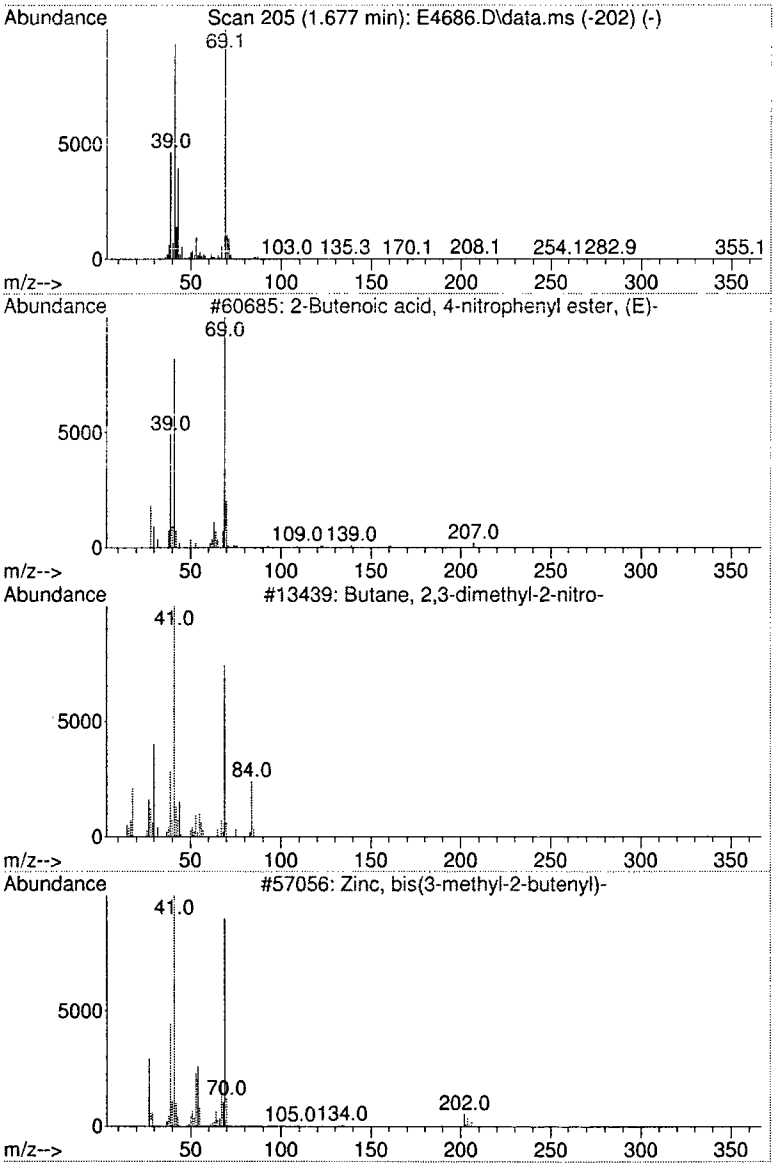
**********

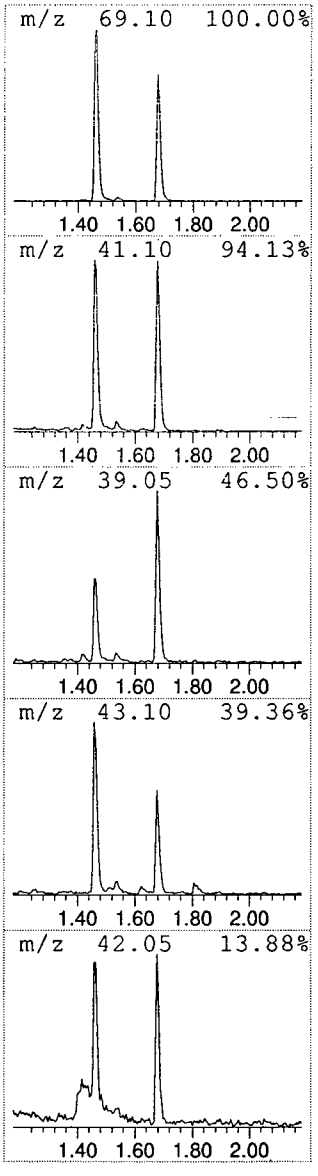
Peak Number 2 2-Butenoic acid, 4-nitrophe... Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.677 | 28.31 ug/mL | 644857 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 50 |
| 2 | Butane, 2,3-dimethyl-2-nitro- | 131 | C6H13NO2 | 034075-28-0 | 42 |
| 3 | Zinc, bis(3-methyl-2-butenyl)- | 202 | C10H18Zn | 066094-28-8 | 40 |
| 4 | 1-Pentene, 2,3-dimethyl- | 98 | C7H14 | 003404-72-6 | 40 |
| 5 | 2-Butene, 1-bromo-3-methyl- | 148 | C5H9Br | 000870-63-3 | 40 |

Unknown



Library Search Compound Report

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Sample : 0015977-01
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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

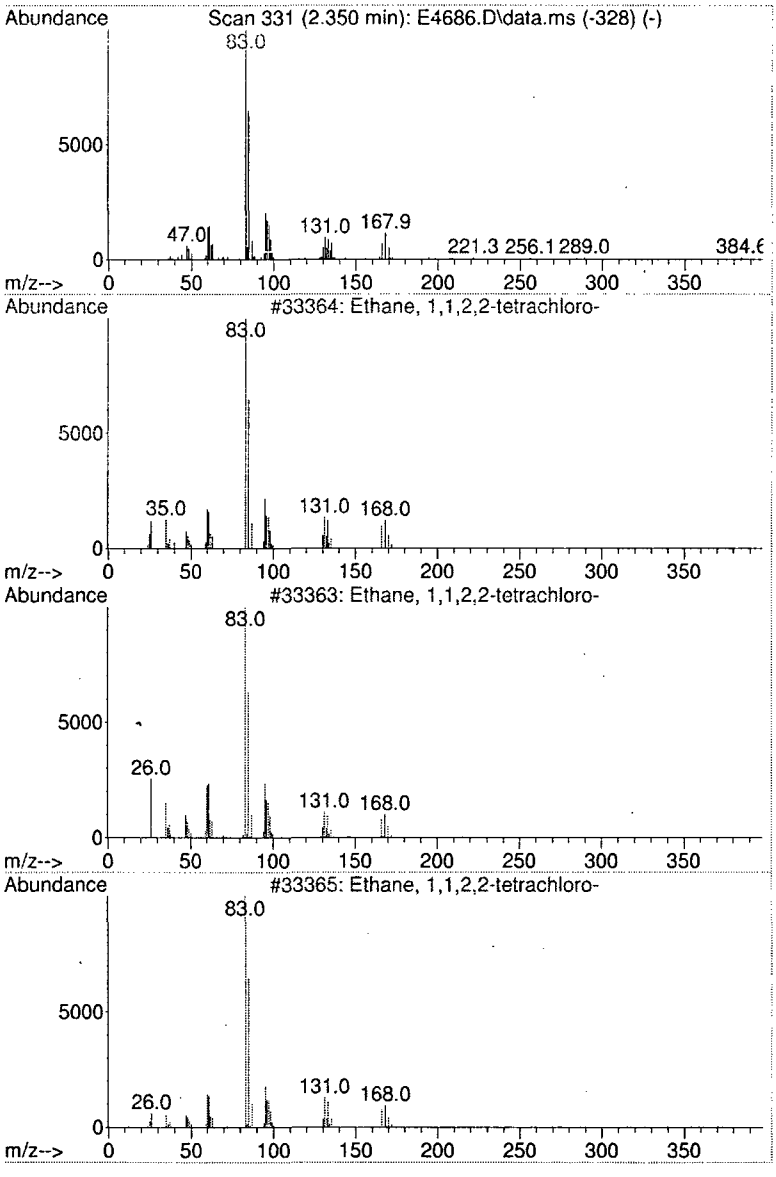
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

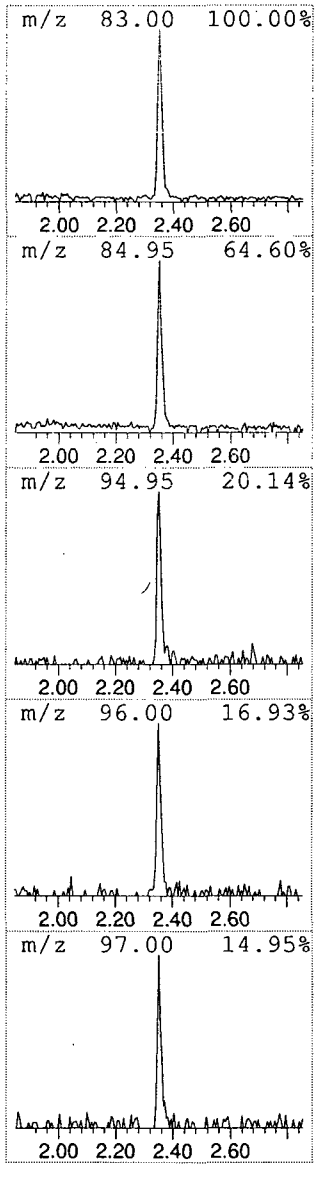
**********

Peak Number 3 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.350 | 9.13 ug/mL | 208023 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 97✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 97 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 96 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 87 |
| 5 | Ethane, 1,1,2-trichloro-2-fluoro- | 150 | C2H2Cl3F | 000359-28-4 | 40 |



Library Search Compound Report

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Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

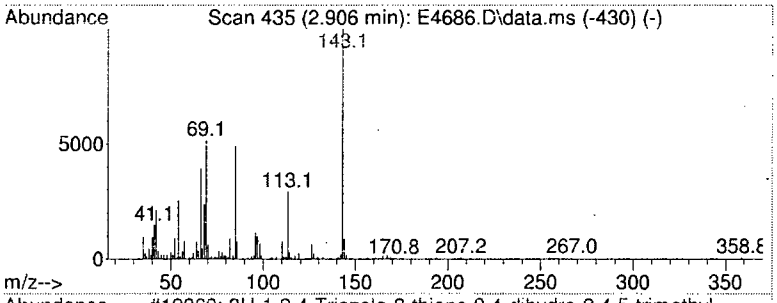
**********

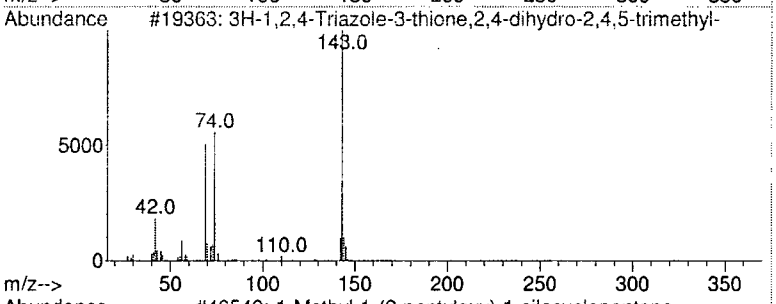
Peak Number 4 3H-1,2,4-Triazole-3-thione,... Concentration Rank 7

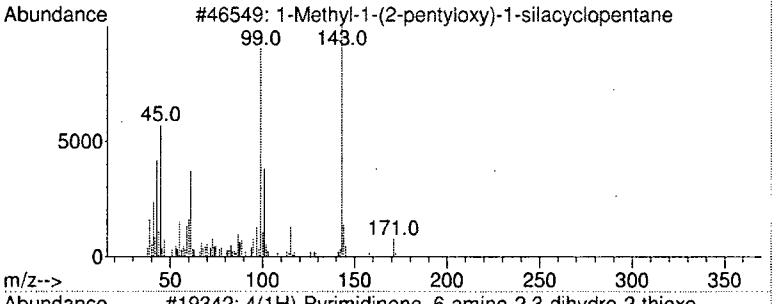
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.906 | 25.32 ug/mL | 576846 | 1,4-Dichlorobenzene-d4 | 3.237 |

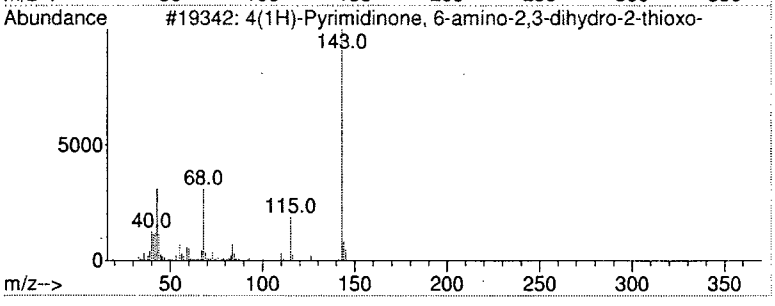
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3H-1,2,4-Triazole-3-thione,2,4-d... | 143 | C5H9N3S | 037526-42-4 | 11 |
| 2 | 1-Methyl-1-(2-pentyloxy)-1-silac... | 186 | C10H22OSi | 1000216-95-9 | 10 |
| 3 | 4(1H)-Pyrimidinone, 6-amino-2,3-... | 143 | C4H5N3OS | 001004-40-6 | 10 |
| 4 | 4-Amino-6-hydroxy-2-mercaptopyri... | 143 | C4H5N3OS | 065802-56-4 | 10 |
| 5 | 1,2-Benzenedicarbonitrile, 4-amino- | 143 | C8H5N3 | 056765-79-8 | 9 |

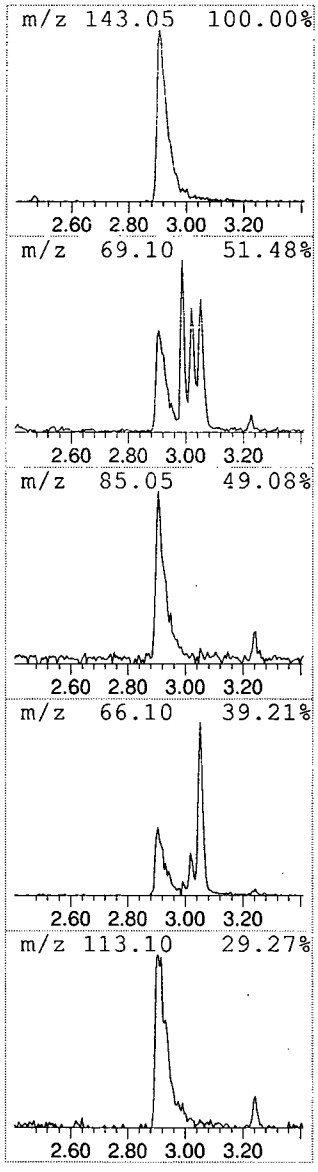
Unknown



Library Search Compound Report

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Sample : 0015977-01
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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

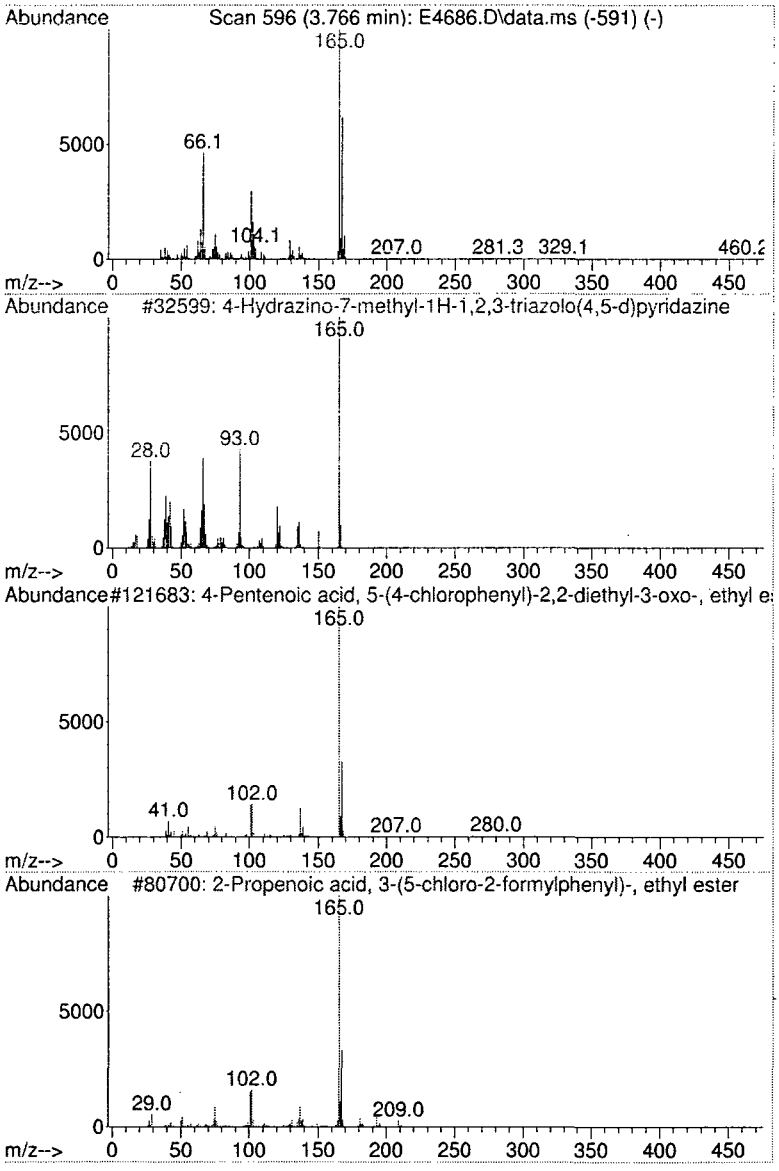
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

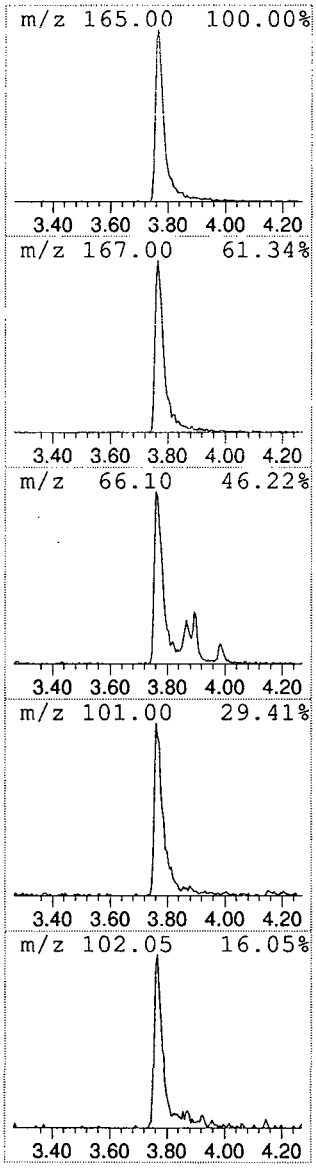
**********
Peak Number 5 4-Hydrazino-7-methyl-1H-1,2... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.766 | 34.71 ug/mL | 790689 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Hydrazino-7-methyl-1H-1,2,3-tr... | 165 | C5H7N7 | 028753-32-4 | 36 |
| 2 | 4-Pentenoic acid, 5-(4-chlorophe... | 308 | C17H21ClO3 | 302941-29-3 | 12 |
| 3 | 2-Propenoic acid, 3-(5-chloro-2-... | 238 | C12H11ClO3 | 1000196-81-4 | 12 |
| 4 | 1-Penten-3-one, 1-(4-chlorophenyl)- | 194 | C11H11ClO | 036383-96-7 | 10 |
| 5 | [3-(4-Chloro-phenyl)-1-cyclohexy... | 319 | C18H22ClNO2 | 1000296-60-9 | 10 |

Unknown



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

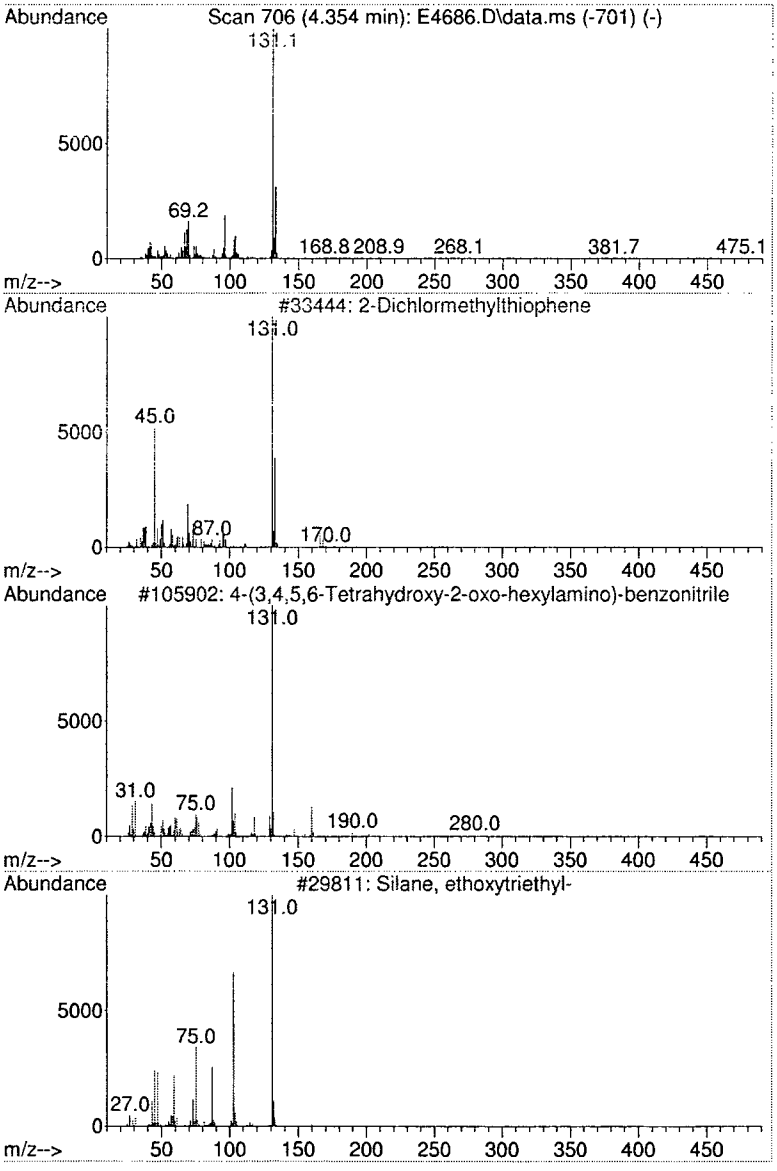
**********

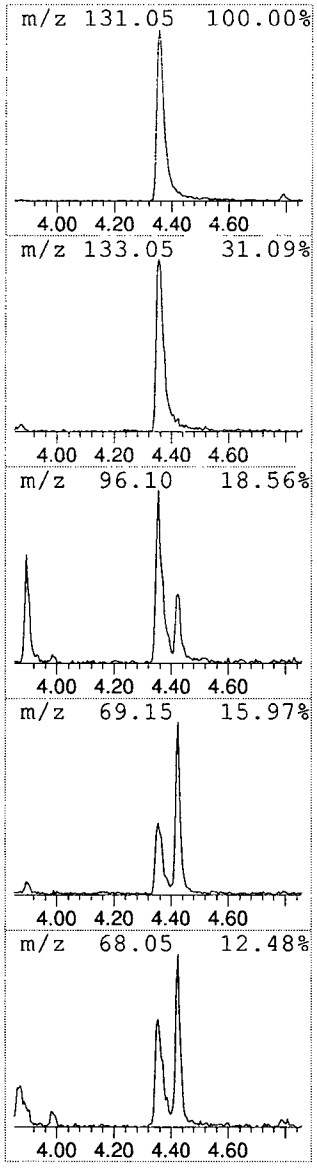
Peak Number 6 2-Dichlormethylthiophene Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.354 | 23.90 ug/mL | 742033 | Naphthalene-d8 | 4.893 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Dichlormethylthiophene | 166 | C5H4Cl2S | 036953-55-6 | 38 |
| 2 | 4-(3,4,5,6-Tetrahydroxy-2-oxo-he... | 280 | C13H16N2O5 | 1000189-82-8 | 36 |
| 3 | Silane, ethoxytriethyl- | 160 | C8H20OSi | 000597-67-1 | 33 |
| 4 | 1H-Indole, 7-methyl- | 131 | C9H9N | 000933-67-5 | 33 |
| 5 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001559-81-5 | 33 |

Unknown



Library Search Compound Report

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Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

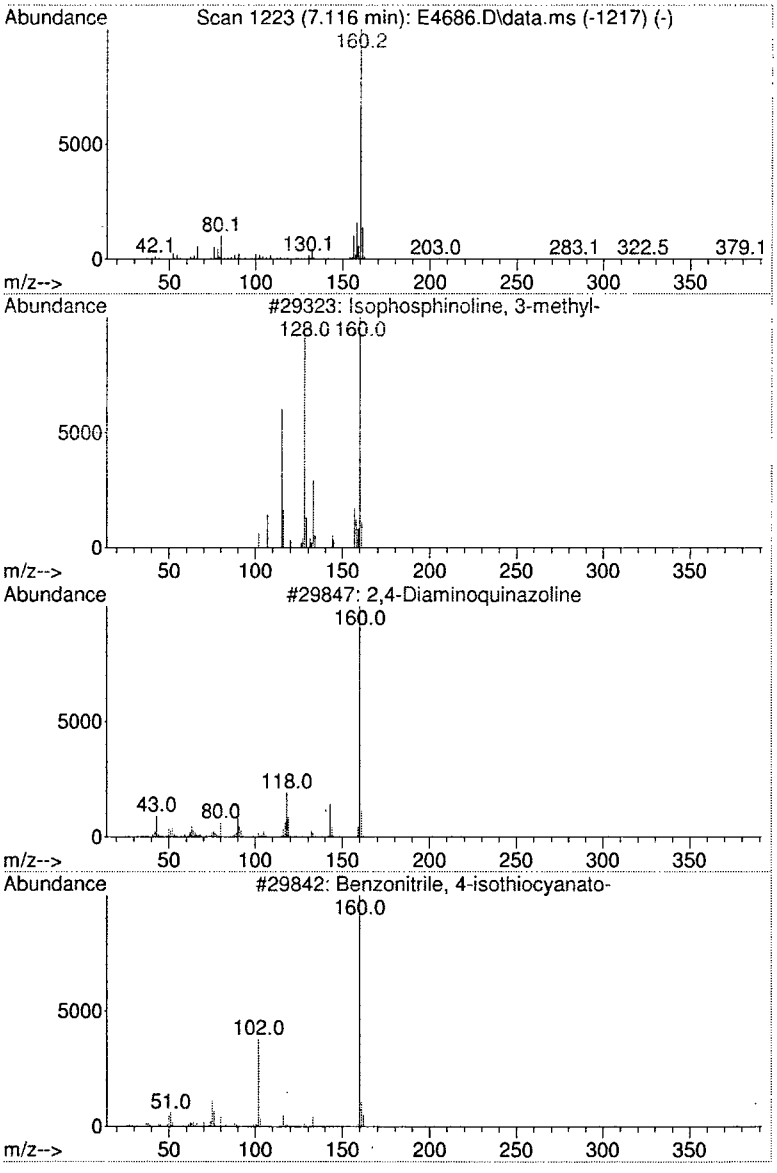
**********

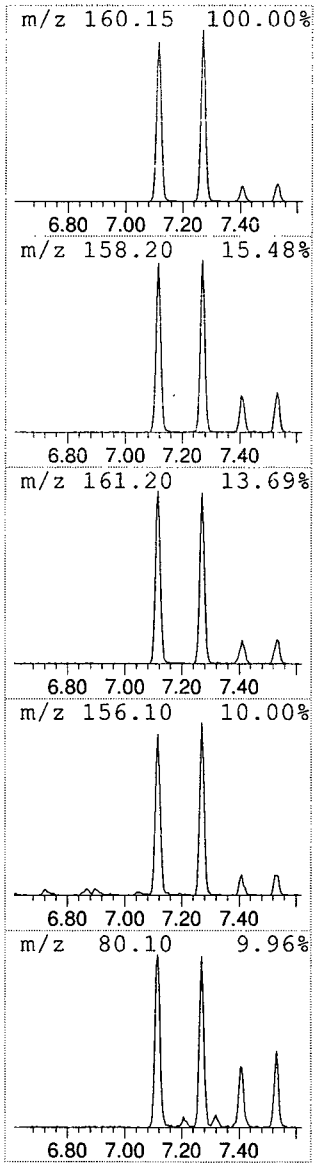
Peak Number 7 Isophosphinoline, 3-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.116 | 42.23 ug/mL | 1554180 | Acenaphthene-d10 | 7.532 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Isophosphinoline, 3-methyl- | 160 | C10H9P | 049622-63-1 | 80 |
| 2 | 2,4-Diaminoquinazoline | 160 | C8H8N4 | 001899-48-5 | 59 |
| 3 | Benzonitrile, 4-isothiocyanato- | 160 | C8H4N2S | 002719-32-6 | 58 |
| 4 | 1,7-Dihydroxynaphthalene | 160 | C10H8O2 | 000575-38-2 | 45 |
| 5 | Quinoline, 8-amino-6-hydroxy- | 160 | C9H8N2O | 007402-16-6 | 45 |

Unknown



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

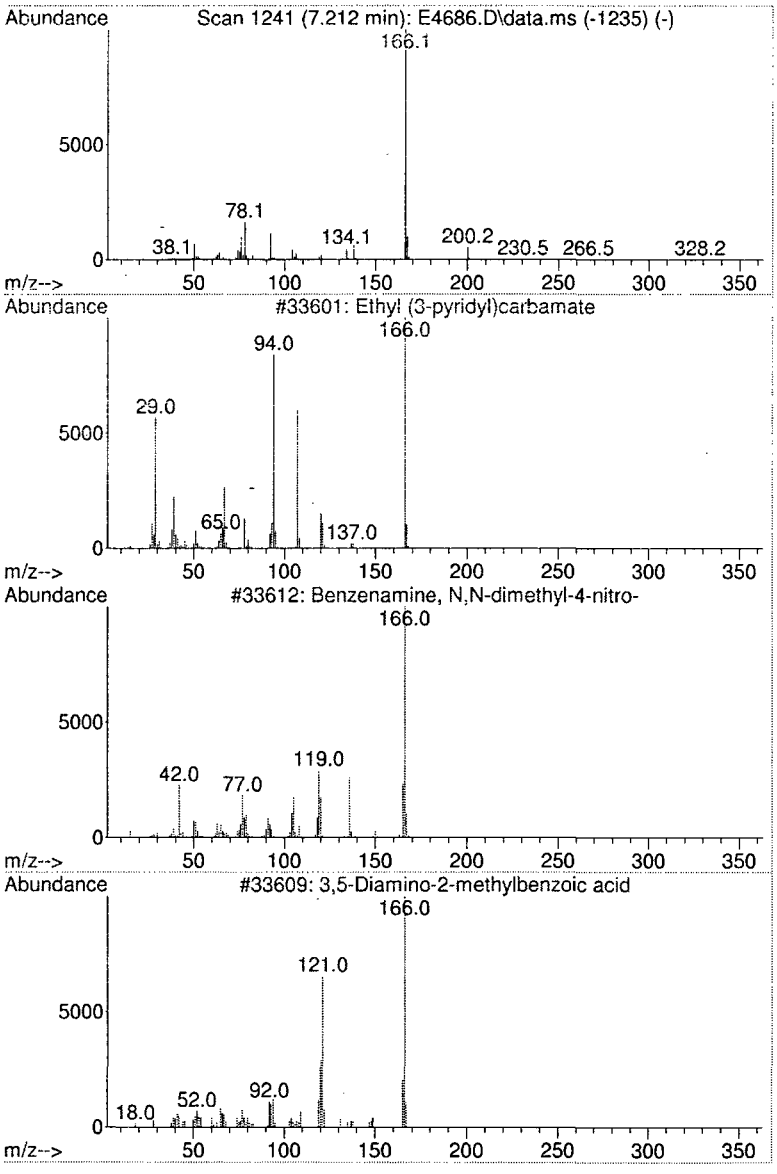
**********

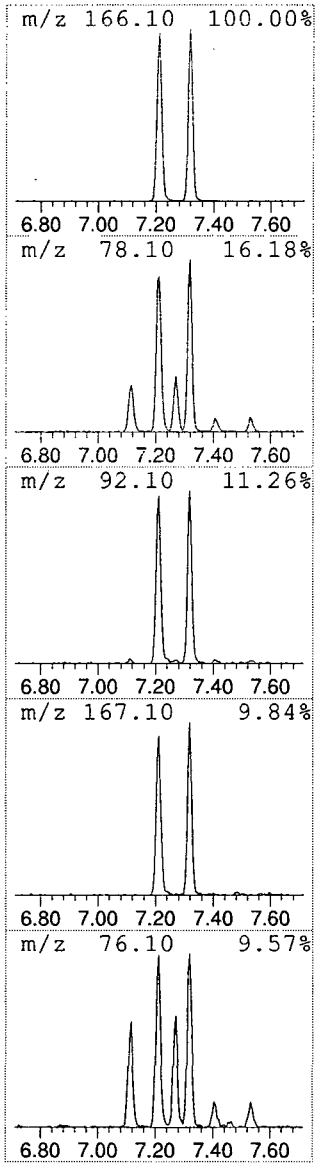
Peak Number 8 Ethyl (3-pyridyl)carbamate Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.212 | 35.25 ug/mL | 1297080 | Acenaphthene-d10 | 7.532 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethyl (3-pyridyl)carbamate | 166 | C8H10N2O2 | 006276-11-5 | 40 |
| 2 | Benzenamine, N,N-dimethyl-4-nitro- | 166 | C8H10N2O2 | 000100-23-2 | 38 |
| 3 | 3,5-Diamino-2-methylbenzoic acid | 166 | C8H10N2O2 | 090007-30-0 | 36 |
| 4 | Phenol, 5-(dimethylamino)-2-nitr... | 166 | C8H10N2O2 | 016761-04-9 | 36 |
| 5 | 1,3-Benzodioxole-5-carboxylic acid | 166 | C8H6O4 | 000094-53-1 | 9 |

Unknown



Library Search Compound Report

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Acq On : 26 May 2012 12:25
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DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

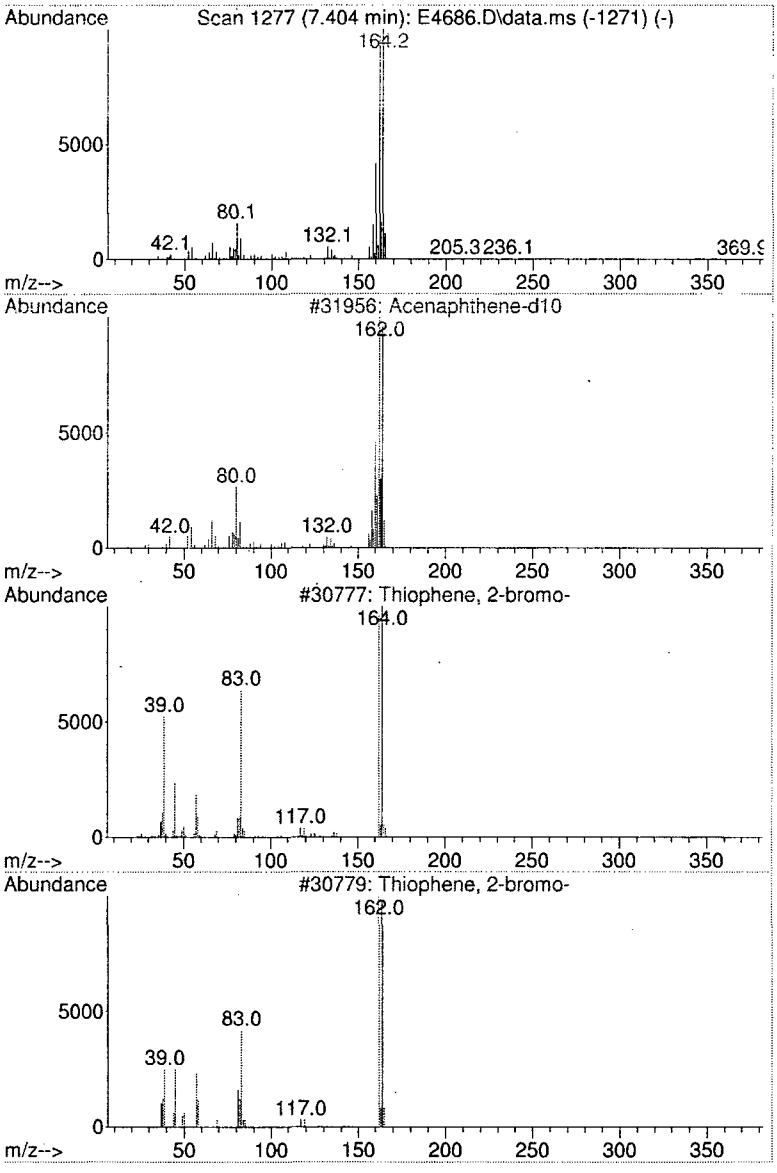
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

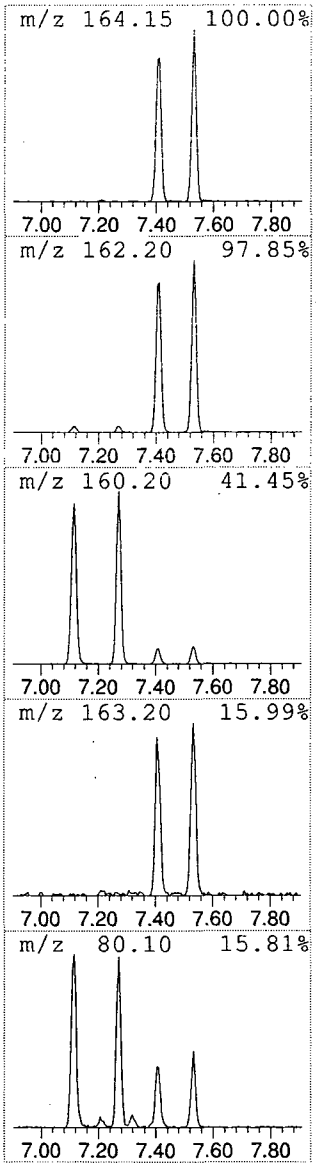
**********

Peak Number 9 Acenaphthene-d10 Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.404 | 19.26 ug/mL | 708836 | Acenaphthene-d10 | 7.532 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acenaphthene-d10 | 164 | C12D10 | 015067-26-2 | 86✓ |
| 2 | Thiophene, 2-bromo- | 162 | C4H3BrS | 001003-09-4 | 36 |
| 3 | Thiophene, 2-bromo- | 162 | C4H3BrS | 001003-09-4 | 36 |
| 4 | 1,4-Benzenediamine, N,N,N',N'-te... | 164 | C10H16N2 | 000100-22-1 | 27 |
| 5 | 2,3,5,6-Tetramethyl-para-phenyle... | 164 | C10H16N2 | 003102-87-2 | 27 |



Library Search Compound Report

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Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

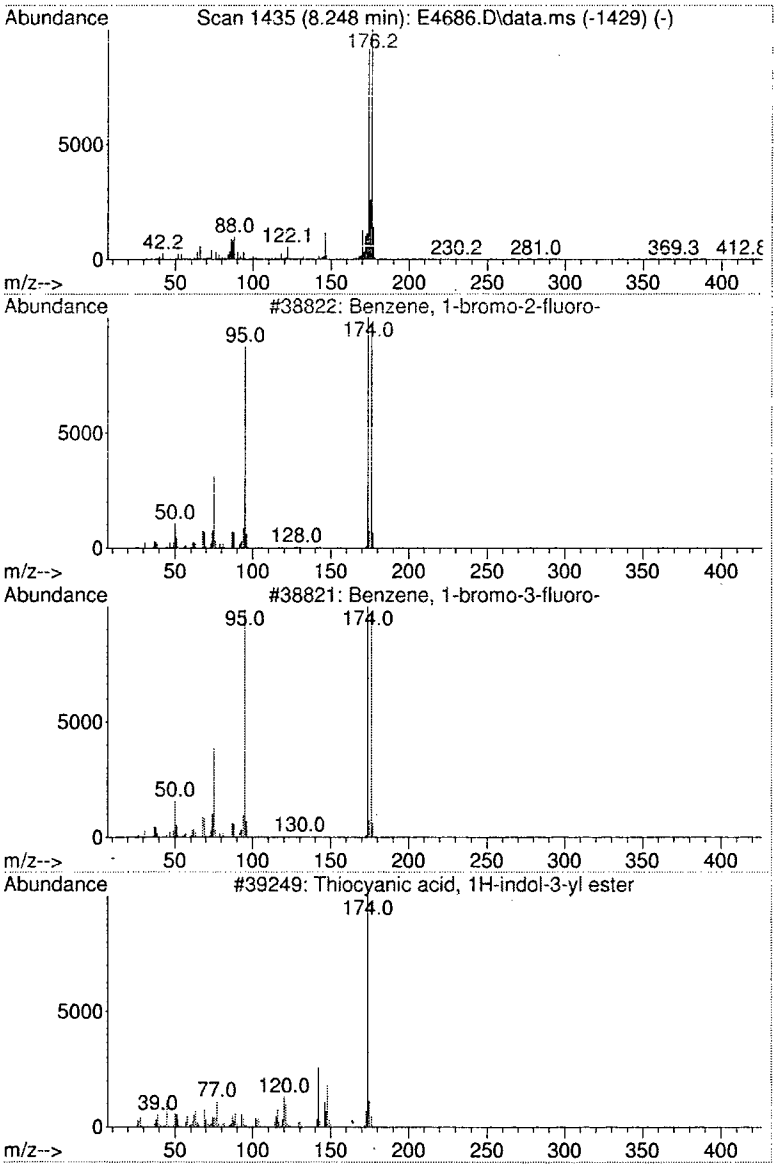
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

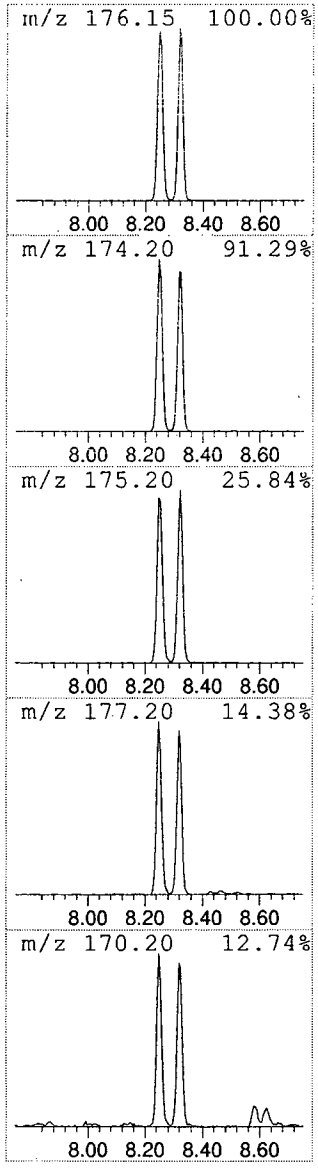
**********
Peak Number 10 Benzene, 1-bromo-2-fluoro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.248 | 50.98 ug/mL | 1876220 | Acenaphthene-d10 | 7.532 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-bromo-2-fluoro- | 174 | C6H4BrF | 001072-85-1 | 42 |
| 2 | Benzene, 1-bromo-3-fluoro- | 174 | C6H4BrF | 001073-06-9 | 36 |
| 3 | Thiocyanic acid, 1H-indol-3-yl e... | 174 | C9H6N2S | 023706-25-4 | 30 |
| 4 | 1,2,3,4-Tetrahydro-1-methyl-2,3-... | 176 | C9H8N2O2 | 020934-51-4 | 27 |
| 5 | 9-Amino-6-fluorolepidine | 176 | C10H9FN2 | 064993-16-4 | 25 |

Unknown



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

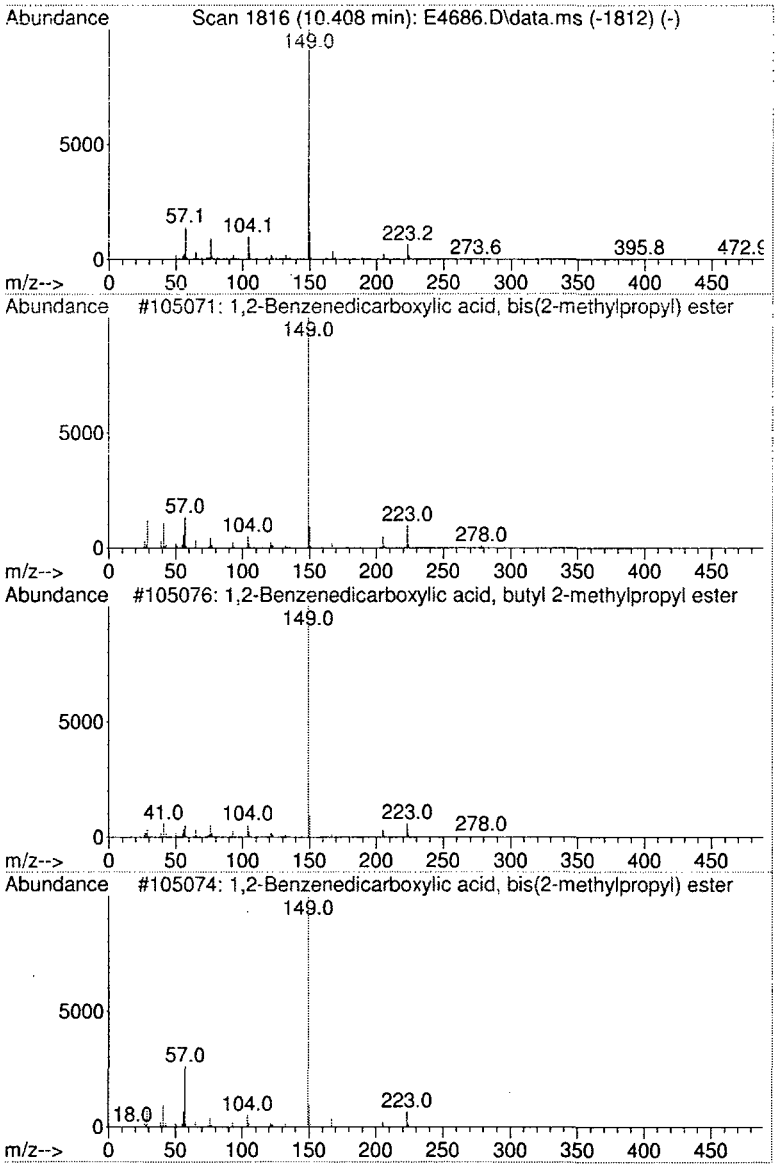
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

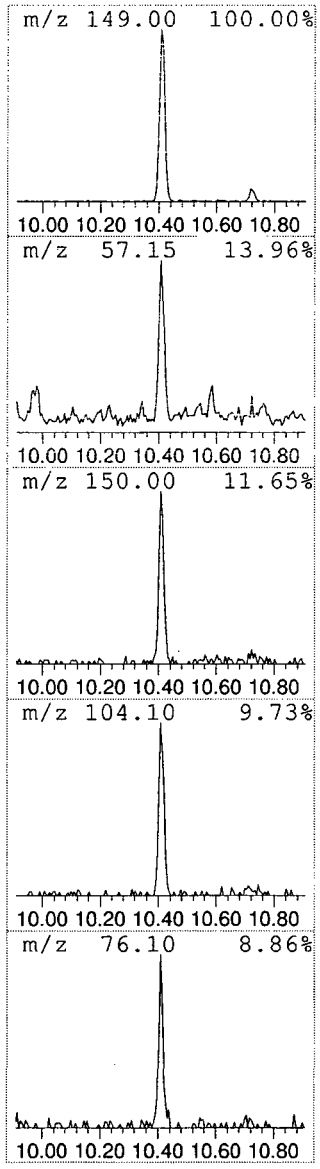
**********
Peak Number 11 1,2-Benzenedicarboxylic aci... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.408 | 4.66 ug/mL | 210126 | Phenanthrene-d10 | 9.779 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 83 |
| 2 | 1,2-Benzenedicarboxylic acid, bu... | 278 | C16H22O4 | 017851-53-5 | 78 |
| 3 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 72 |
| 4 | Dibutyl phthalate | 278 | C16H22O4 | 000084-74-2 | 72 |
| 5 | 1,2-Benzenedicarboxylic acid, bu... | 334 | C20H30O4 | 000085-69-8 | 64 |

Unknown



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

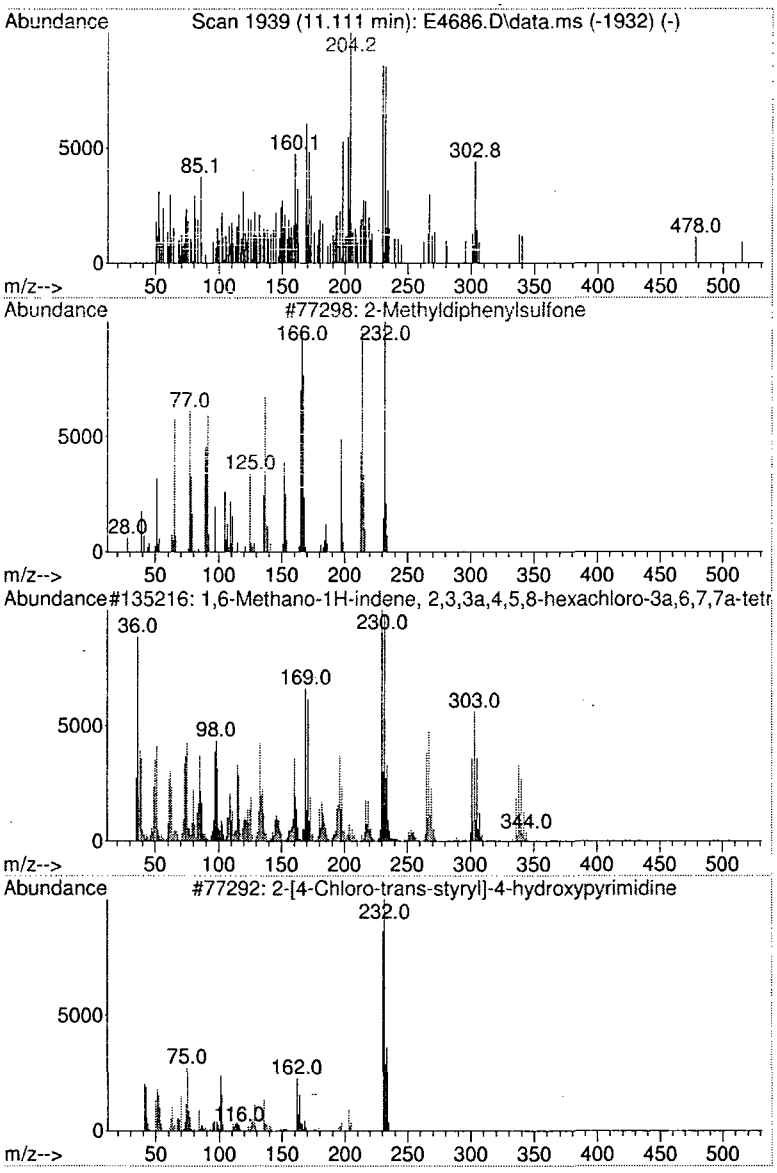
**********

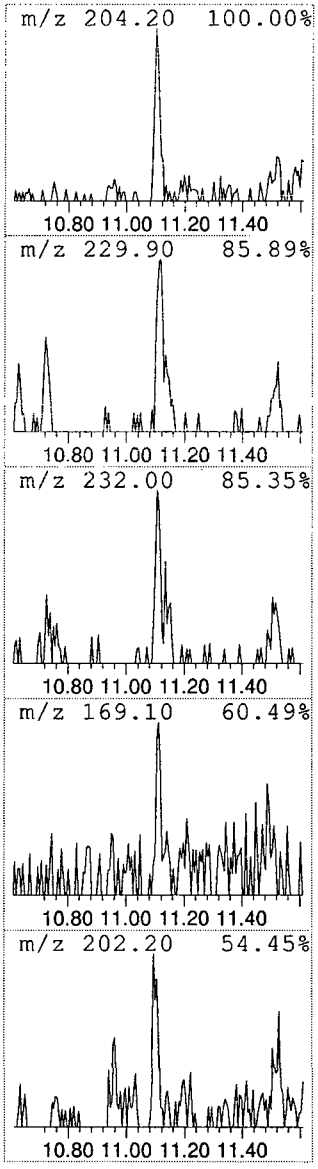
Peak Number 12 2-Methyldiphenylsulfone Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.111 | 3.04 ug/mL | 137151 | Phenanthrene-d10 | 9.779 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Methyldiphenylsulfone | 232 | C13H12O2S | 007018-84-0 | 53 |
| 2 | 1,6-Methano-1H-indene, 2,3,3a,4,... | 336 | C10H6Cl6 | 069743-73-3 | 49 |
| 3 | 2-[4-Chloro-trans-styryl]-4-hydr... | 232 | C12H9ClN2O | 1000251-23-8 | 35 |
| 4 | Benzonitrile, 4-(1-hydroxy-3-phe... | 233 | C16H11NO | 108946-36-7 | 30 |
| 5 | 1,3-Benzodioxole-5-methanol, 6-b... | 230 | C8H7BrO3 | 006642-34-8 | 30 |

Unknown



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

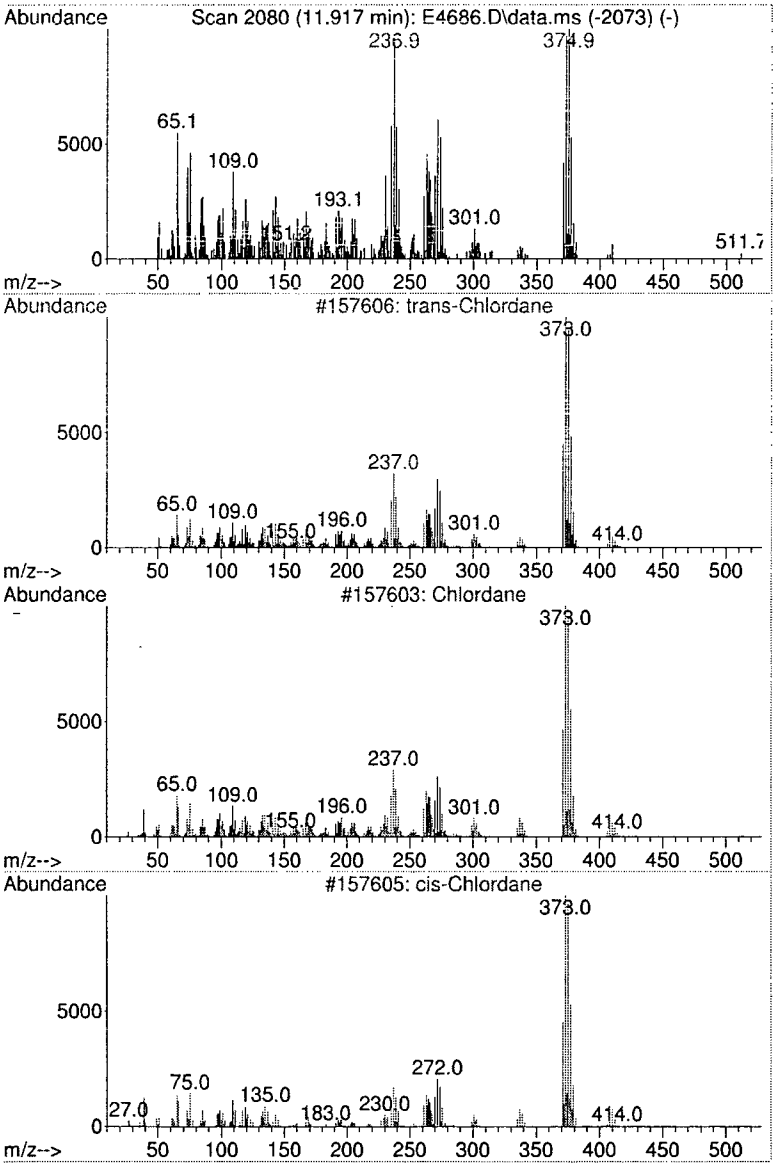
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

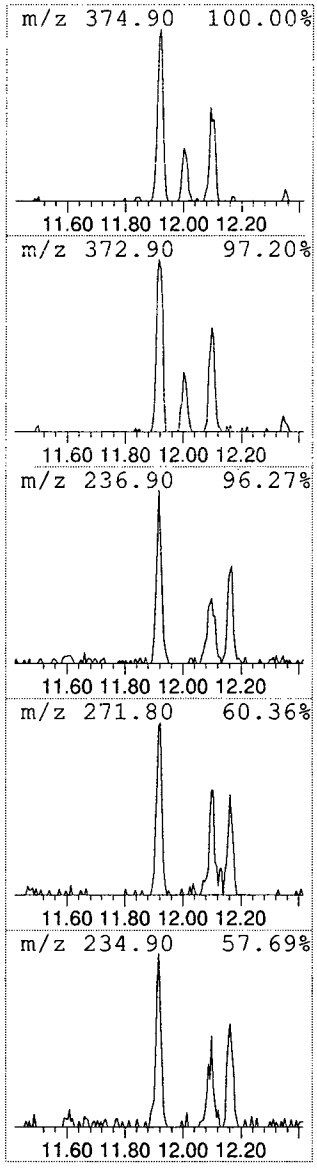
**********

Peak Number 13 trans-Chlordane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.917 | 4.20 ug/mL | 392955 | Chrysene-d12 | 13.923 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 95 ✓ |
| 2 | Chlordane | 406 | C10H6Cl8 | 000057-74-9 | 95 |
| 3 | cis-Chlordane | 406 | C10H6Cl8 | 005103-71-9 | 86 |
| 4 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 86 |
| 5 | 4,7-Methanoindene, 1,2,3,5,6,7,8... | 406 | C10H6Cl8 | 1000017-10-9 | 86 |



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

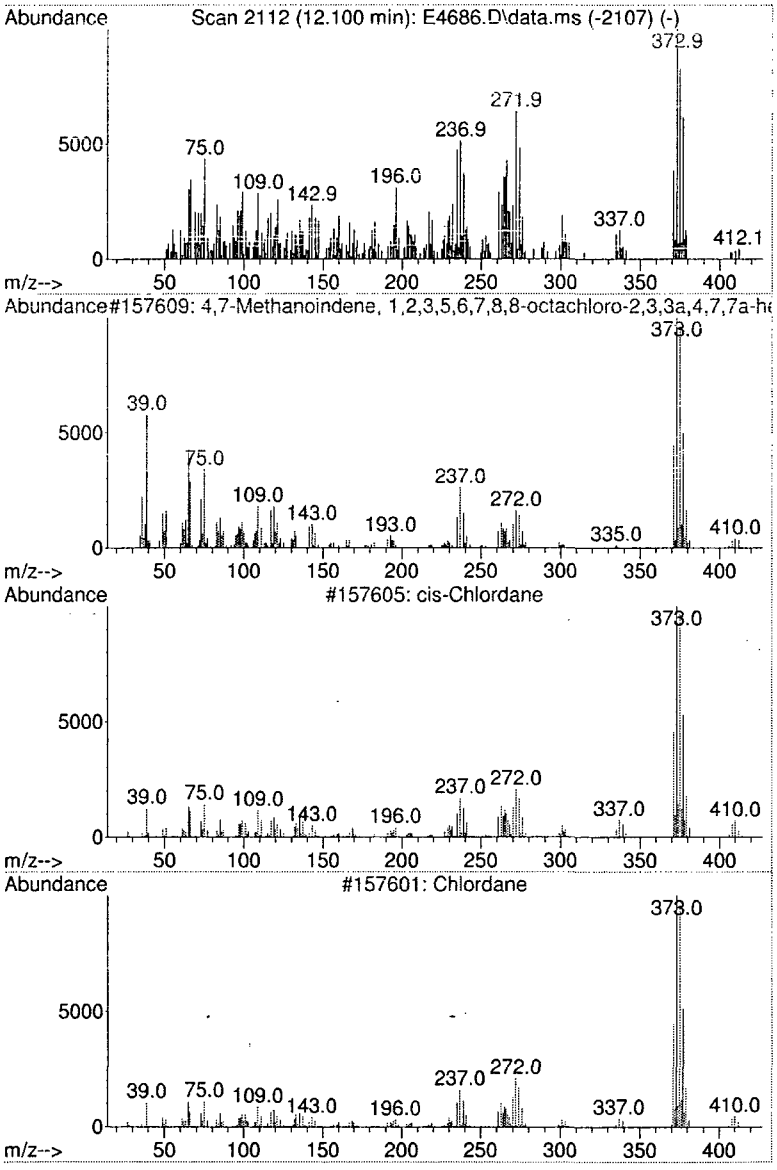
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

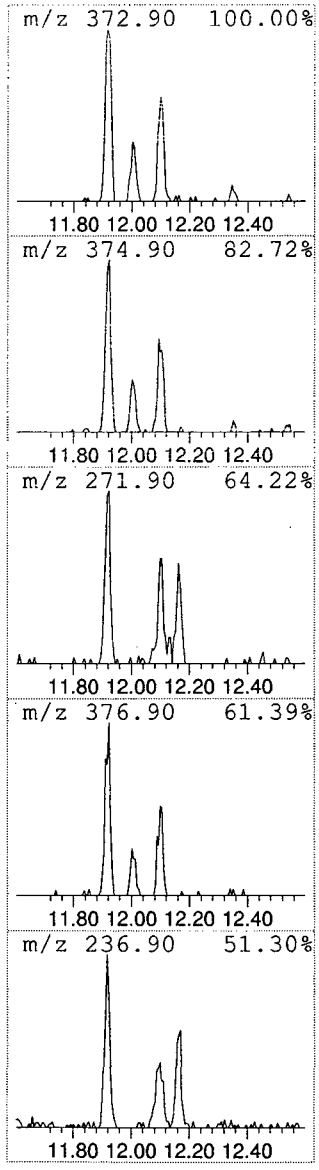
**********
Peak Number 14 4,7-Methanoindene, 1,2,3,5,... Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.100 | 2.36 ug/mL | 220308 | Chrysene-d12 | 13.923 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4,7-Methanoindene, 1,2,3,5,6,7,8... | 406 | C10H6Cl8 | 1000017-10-9 | 83 |
| 2 | cis-Chlordane | 406 | C10H6Cl8 | 005103-71-9 | 83 |
| 3 | Chlordane | 406 | C10H6Cl8 | 000057-74-9 | 46 |
| 4 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 46 |
| 5 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 30 |

Unknown



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

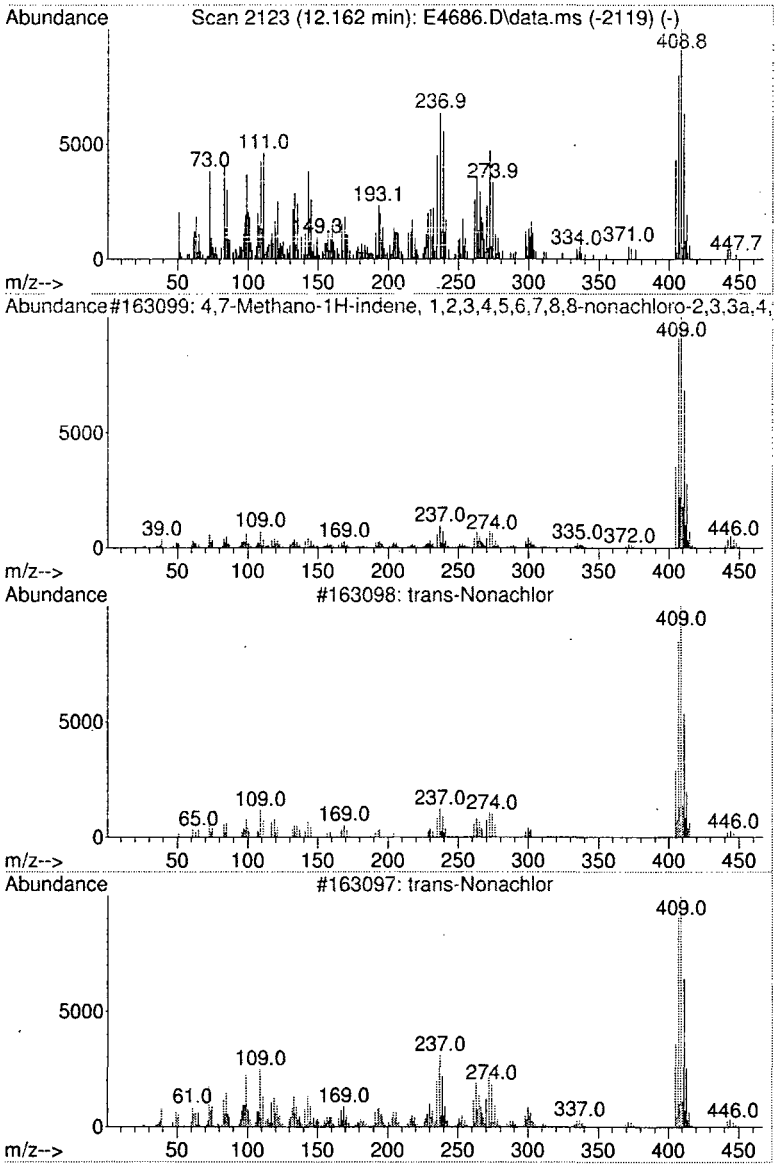
Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

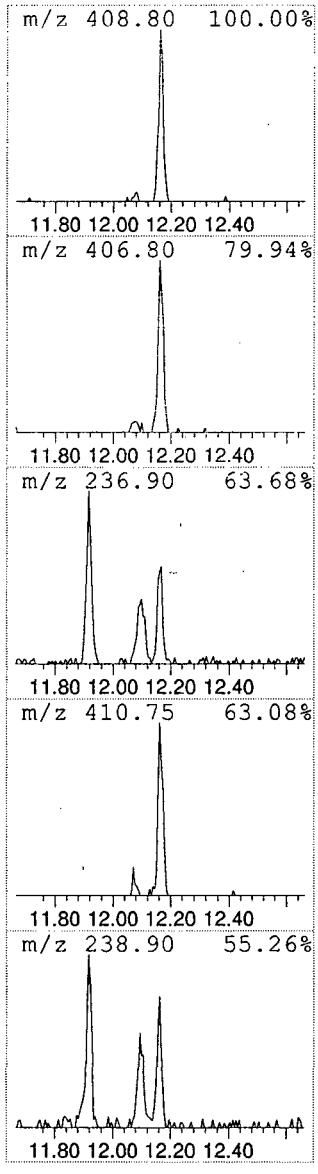
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 15 4,7-Methano-1H-indene, 1,2,... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.163 | 2.46 ug/mL | 230215 | Chrysene-d12 | 13.923 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4,7-Methano-1H-indene, 1,2,3,4,5... | 440 | C10H5Cl9 | 003734-49-4 | 91 ✓ |
| 2 | trans-Nonachlor | 440 | C10H5Cl9 | 039765-80-5 | 83 |
| 3 | trans-Nonachlor | 440 | C10H5Cl9 | 039765-80-5 | 72 |
| 4 | 4,7-Methano-1H-indene, 1,2,3,4,5... | 438 | C10H3Cl9 | 021641-70-3 | 58 |
| 5 | 4,7-Methano-1H-indene, 1,2,3,4,5... | 440 | C10H5Cl9 | 003734-49-4 | 50 |



Library Search Compound Report

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

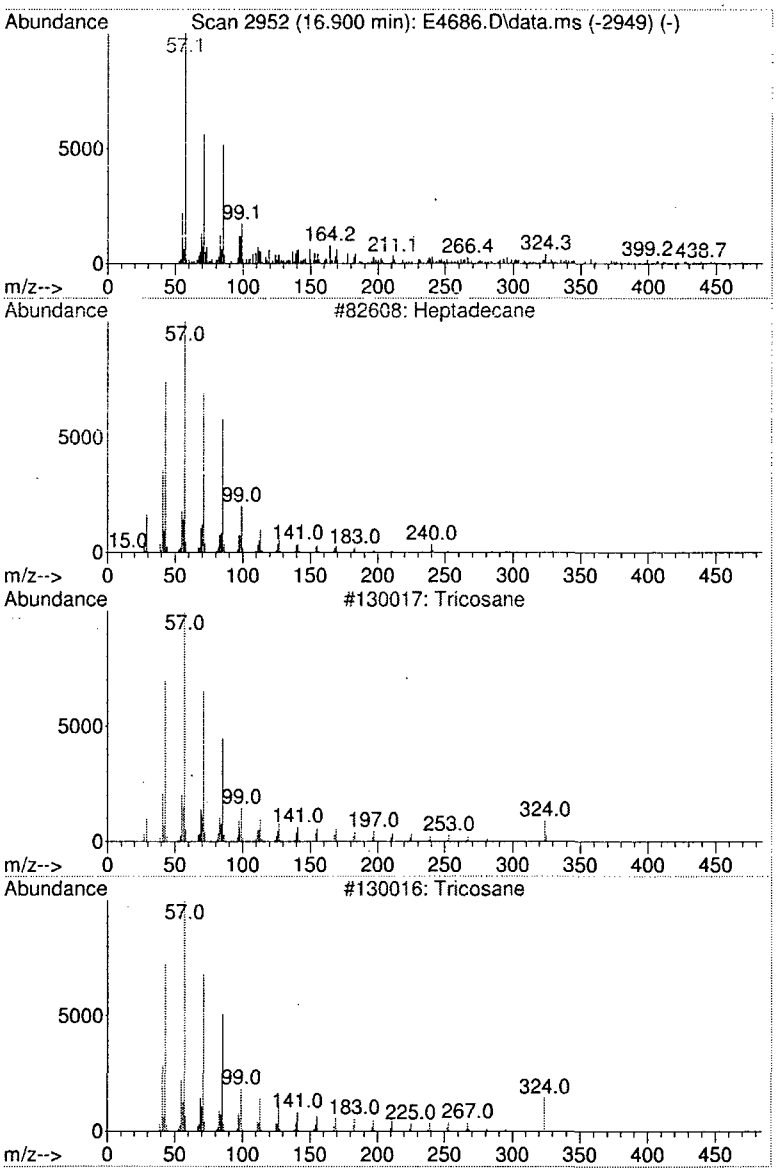
**********

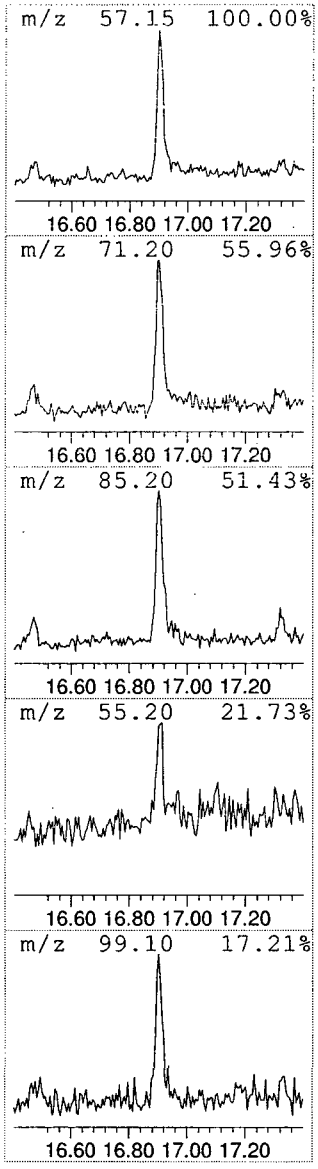
Peak Number 16 Heptadecane Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.900 | 2.16 ug/mL | 197546 | Perylene-d12 | 15.992 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptadecane | 240 | C17H36 | 000629-78-7 | 87 |
| 2 | Tricosane | 324 | C23H48 | 000638-67-5 | 83 |
| 3 | Tricosane | 324 | C23H48 | 000638-67-5 | 83 |
| 4 | Tetracosane | 338 | C24H50 | 000646-31-1 | 80 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 80 |

Alkane



Tentatively Identified Compound (LSC) summary

Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:53:20 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

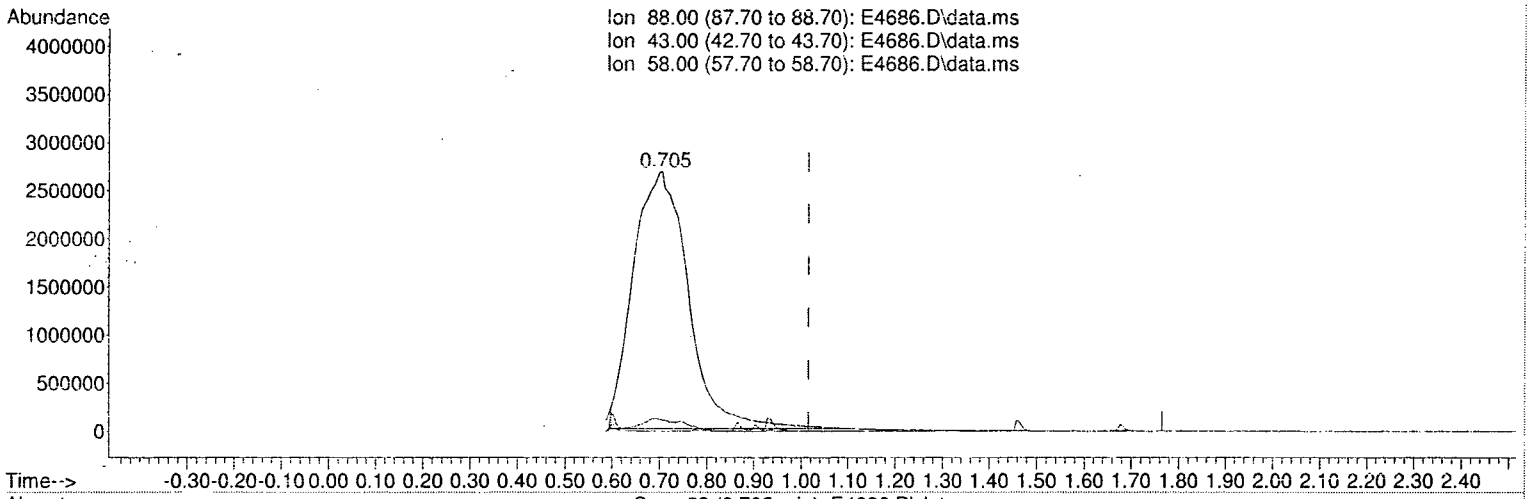
| TIC Top Hit name | RT | EstConc | Units | Response | \|--Internal Standard---\| # | RT | Resp | Conc\| |
|---|---|---|---|---|---|---|---|---|
| 1-Pentene, 3,3-... | 1.458 | 49.4 | ug/mL | 1125390 | 1 | 3.237 | 455621 | 20.0 |
| 2-Butenoic acid... | 1.677 | 28.3 | ug/mL | 644857 | 1 | 3.237 | 455621 | 20.0 |
| Ethane, 1,1,2,2... | 2.350 | 9.1 | ug/mL | 208023 | 1 | 3.237 | 455621 | 20.0 |
| 3H-1,2,4-Triazo... | 2.906 | 25.3 | ug/mL | 576846 | 1 | 3.237 | 455621 | 20.0 |
| 4-Hydrazino-7-m... | 3.766 | 34.7 | ug/mL | 790689 | 1 | 3.237 | 455621 | 20.0 |
| 2-Dichlormethyl... | 4.354 | 23.9 | ug/mL | 742033 | 2 | 4.893 | 620832 | 20.0 |
| Isophosphinolin... | 7.116 | 42.2 | ug/mL | 1554180 | 3 | 7.532 | 736008 | 20.0 |
| Ethyl (3-pyridy... | 7.212 | 35.2 | ug/mL | 1297080 | 3 | 7.532 | 736008 | 20.0 |
| Acenaphthene-d10 | 7.404 | 19.3 | ug/mL | 708836 | 3 | 7.532 | 736008 | 20.0 |
| Benzene, 1-brom... | 8.248 | 51.0 | ug/mL | 1876220 | 3 | 7.532 | 736008 | 20.0 |
| 1,2-Benzenedica... | 10.408 | 4.7 | ug/mL | 210126 | 4 | 9.779 | 902658 | 20.0 |
| 2-Methyldipheny... | 11.111 | 3.0 | ug/mL | 137151 | 4 | 9.779 | 902658 | 20.0 |
| trans-Chlordane | 11.917 | 4.2 | ug/mL | 392955 | 5 | 13.923 | 1869170 | 20.0 |
| 4,7-Methanoinde... | 12.100 | 2.4 | ug/mL | 220308 | 5 | 13.923 | 1869170 | 20.0 |
| 4,7-Methano-1H-... | 12.163 | 2.5 | ug/mL | 230215 | 5 | 13.923 | 1869170 | 20.0 |
| Heptadecane | 16.900 | 2.2 | ug/mL | 197546 | 6 | 15.992 | 1831580 | 20.0 |

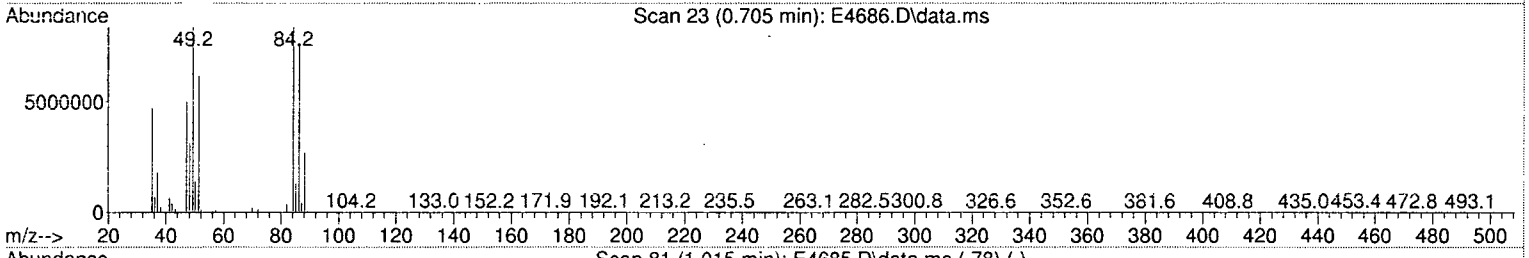
Quantitation Report (Qedit)

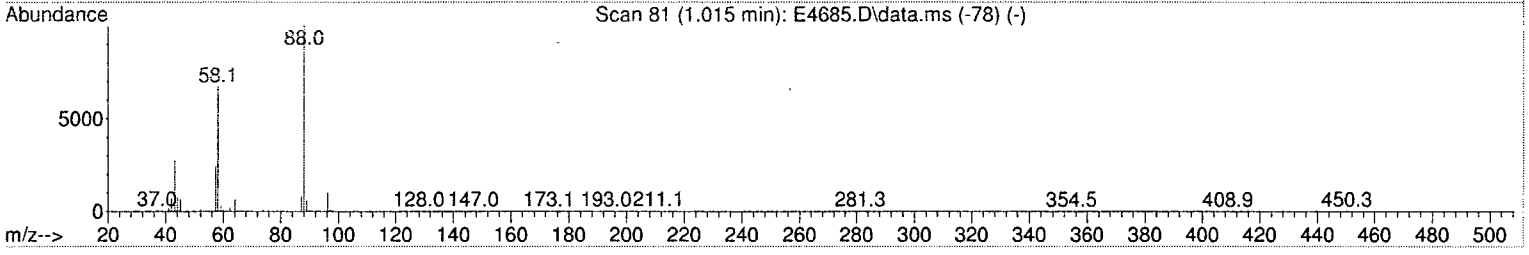
Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:45 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4686.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.705min (-0.310) 5784.58 ug/mL**

**response 21502652**

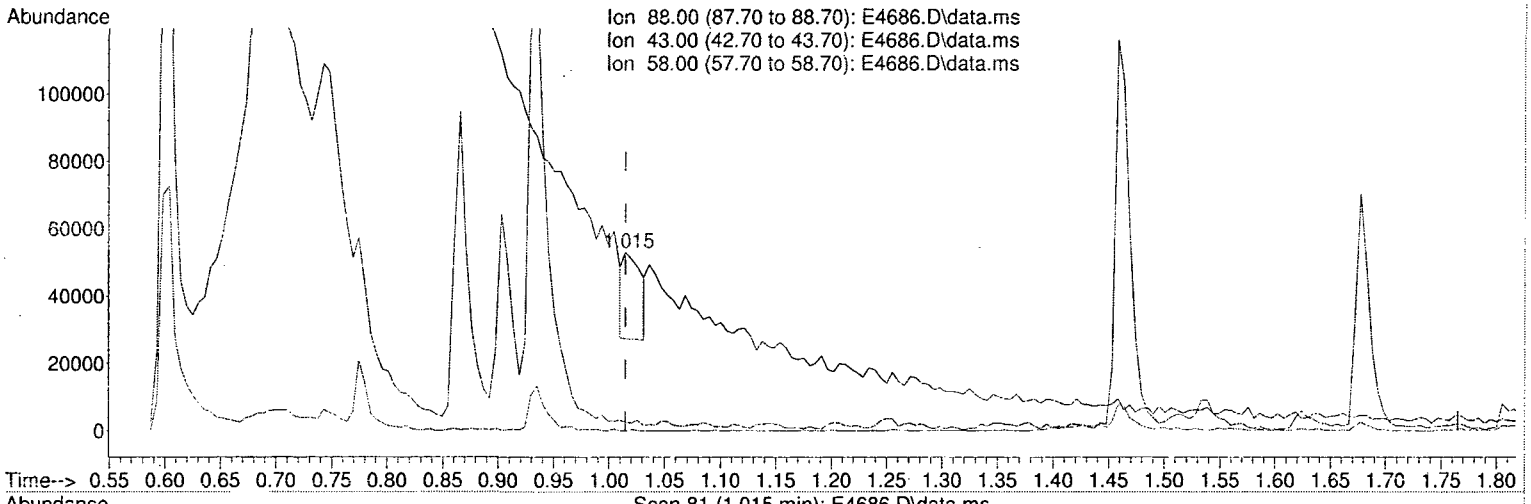
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 1.65# |
| 58.00 | 46.00 | 0.05# |
| 0.00 | 0.00 | 0.00 |

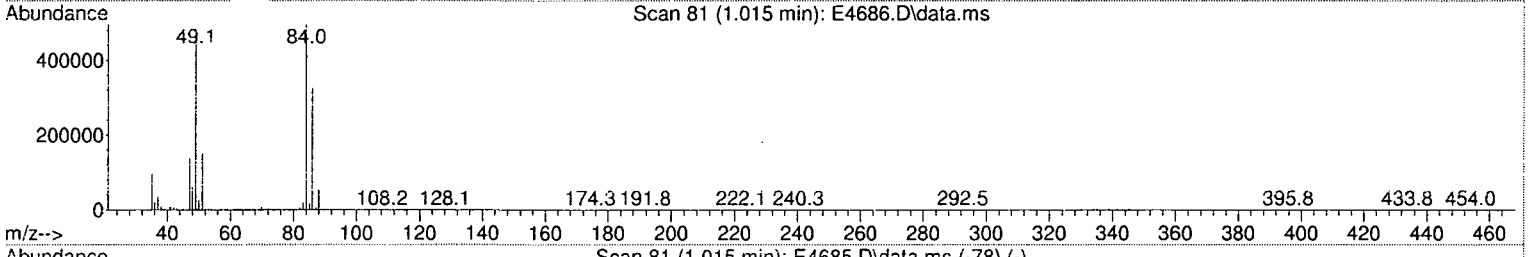
Quantitation Report (Qedit)

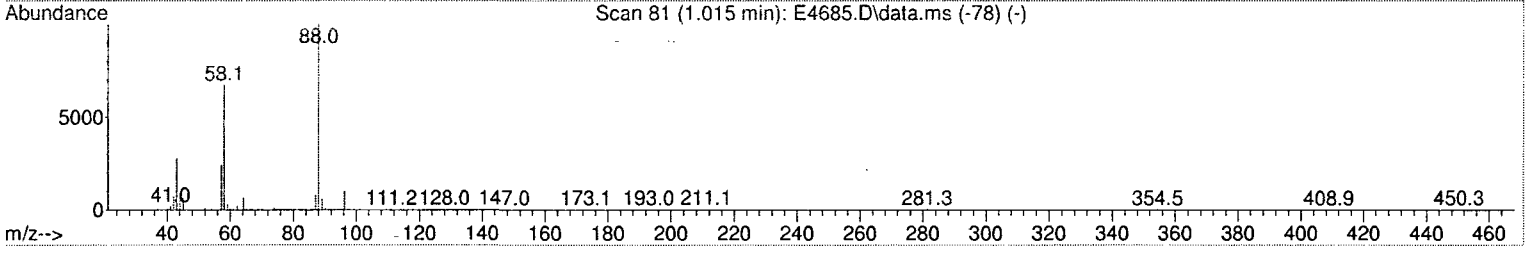
Data File : X:\msdchem\1\data\E4686.D
Acq On : 26 May 2012 12:25
Sample : 0015977-01
Misc : F5WB4 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:45 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4686.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.015min (-0.000) 7.67 ug/mL m** RS 8/2

**response 28527**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 1242.85# |
| 58.00 | 46.00 | 36.62# |
| 0.00 | 0.00 | 0.00 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 30.1 (g/mL) g Lab File ID: E4644.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 230 | U |
| 108-95-2 | Phenol | 230 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 230 | U |
| 95-57-8 | 2-Chlorophenol | 230 | U |
| 95-48-7 | 2-Methylphenol | 230 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 230 | U |
| 98-86-2 | Acetophenone | 230 | U |
| 106-44-5 | 4-Methylphenol | 230 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 230 | U |
| 67-72-1 | Hexachloroethane | 230 | U |
| 98-95-3 | Nitrobenzene | 230 | U |
| 78-59-1 | Isophorone | 230 | U |
| 88-75-5 | 2-Nitrophenol | 230 | U |
| 105-67-9 | 2,4-Dimethylphenol | 230 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 230 | U |
| 120-83-2 | 2,4-Dichlorophenol | 230 | U |
| 91-20-3 | Naphthalene | 230 | U |
| 106-47-8 | 4-Chloroaniline | 230 | U |
| 87-68-3 | Hexachlorobutadiene | 230 | U |
| 105-60-2 | Caprolactam | 230 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 230 | U |
| 91-57-6 | 2-Methylnaphthalene | 230 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 230 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 230 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 230 | U |
| 92-52-4 | 1,1'-Biphenyl | 230 | U |
| 91-58-7 | 2-Chloronaphthalene | 230 | U |
| 88-74-4 | 2-Nitroaniline | 440 | U |
| 131-11-3 | Dimethylphthalate | 230 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 230 | U |
| 208-96-8 | Acenaphthylene | 230 | U |
| 99-09-2 | 3-Nitroaniline | 440 | U |
| 83-32-9 | Acenaphthene | 230 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 30.1 (g/mL) g Lab File ID: E4644.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 440 | U |
| 100-02-7 | 4-Nitrophenol | 440 | U |
| 132-64-9 | -Dibenzofuran | 230 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 230 | U |
| 84-66-2 | Diethylphthalate | 230 | U |
| 86-73-7 | Fluorene | 230 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 230 | U |
| 100-01-6 | 4-Nitroaniline | 440 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 440 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 230 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 230 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 230 | U |
| 118-74-1 | Hexachlorobenzene | 230 | U |
| 1912-24-9 | Atrazine | 230 | U |
| 87-86-5 | Pentachlorophenol | 440 | U |
| 85-01-8 | Phenanthrene | 230 | U |
| 120-12-7 | Anthracene | 230 | U |
| 86-74-8 | Carbazole | 230 | U |
| 84-74-2 | Di-n-butylphthalate | 36 | JB |
| 206-44-0 | Fluoranthene | 230 | U |
| 129-00-0 | Pyrene | 230 | U |
| 85-68-7 | Butylbenzylphthalate | 230 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 230 | U |
| 56-55-3 | Benzo (a) anthracene | 230 | U |
| 218-01-9 | Chrysene | 20 | J |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 18 | J |
| 117-84-0 | Di-n-octylphthalate | 230 | U |
| 205-99-2 | Benzo (b) fluoranthene | 230 | U |
| 207-08-9 | Benzo (k) fluoranthene | 230 | U |
| 50-32-8 | Benzo (a) pyrene | 230 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 230 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 230 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 230 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 230 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: - F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-02

Sample wt/vol: 30.1 (g/mL) g Lab File ID: E4644.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 25.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 | 0.65 | | U |
| 02 | | Unknown-02 (1 3.296) | 1.50 | 1800 | J |
| 03 | | Unknown-03 (1 3.296) | 1.58 | 510 | J |
| 04 | | Unknown-04 (1 3.296) | 1.73 | 1400 | J |
| 05 | | Unknown-05 (1 3.296) | 1.85 | 180 | J |
| 06 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.41 | 200 | JNB |
| 07 | | Unknown-06 (4 9.848) | 10.47 | 190 | J |
| 08 | | Unknown-07 (6 16.049) | 18.46 | 190 | J |
| 09 | | Unknown-08 (6 16.049) | 18.84 | 240 | J |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
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| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
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| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vitkati
05/28/12

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 56280 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.957 | 136 | 236763 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 175343 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 338497 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.985 | 240 | 326102 | 20.0000 | ug/mL | 0.00 |
| 88) Perylene-d12 | 16.049 | 264 | 303140 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0d | 0.00 | ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | | |
| 7) Phenol-d5 | 3.087 | 99 | 120463 | 9.46 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 23.65% | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 69157 | 9.79 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 24.47% | | | |
| 19) 2-Chlorophenol-d4 | 3.114 | 132 | 111743 | 9.91 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 24.77% | | | |
| 20) 4-Methylphenol-d8 | 3.964 | 113 | 93145 | 9.84 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 24.60% | | | |
| 22) Nitrobenzene-d5 | 4.054 | 128 | 55147 | 10.96 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 27.40% | | | |
| 35) 2-Nitrophenol-d4 | 4.492 | 143 | 60589 | 10.82 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 27.05% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.866 | 165 | 101293 | 10.84 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 27.10% | | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 139468 | 17.41 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 43.53% | | | |
| 62) Acenaphthylene-d8 | 7.335 | 160 | 378508 | 9.95 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 24.87% | | | |
| 63) 4-Nitrophenol-d4 | 8.189 | 143 | 43185 | 8.09 | ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 20.22% | | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 311331 | 10.56 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 26.40%# | | | |
| 65) Fluorene-d10 | 8.382 | 176 | 255950 | 10.76 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 26.90%# | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.682 | 200 | 34513 | 6.48 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 16.20% | | | |
| 79) Anthracene-d10 | 9.922 | 188 | 412332 | 9.87 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 24.67% | | | |
| 87) Pyrene-d10 | 12.025 | 212 | 505274 | 11.84 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 29.60%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.940 | 264 | 380292 | 10.98 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 27.45%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 76) Di-n-butylphthalate | 11.088 | 149 | 43412 | 0.8140 | ug/mL | 98 |
| 85) Chrysene | 14.025 | 228 | 16904 | 0.4386 | ug/mL | 97 |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 12455 | 0.4021 | ug/mL | 91 |

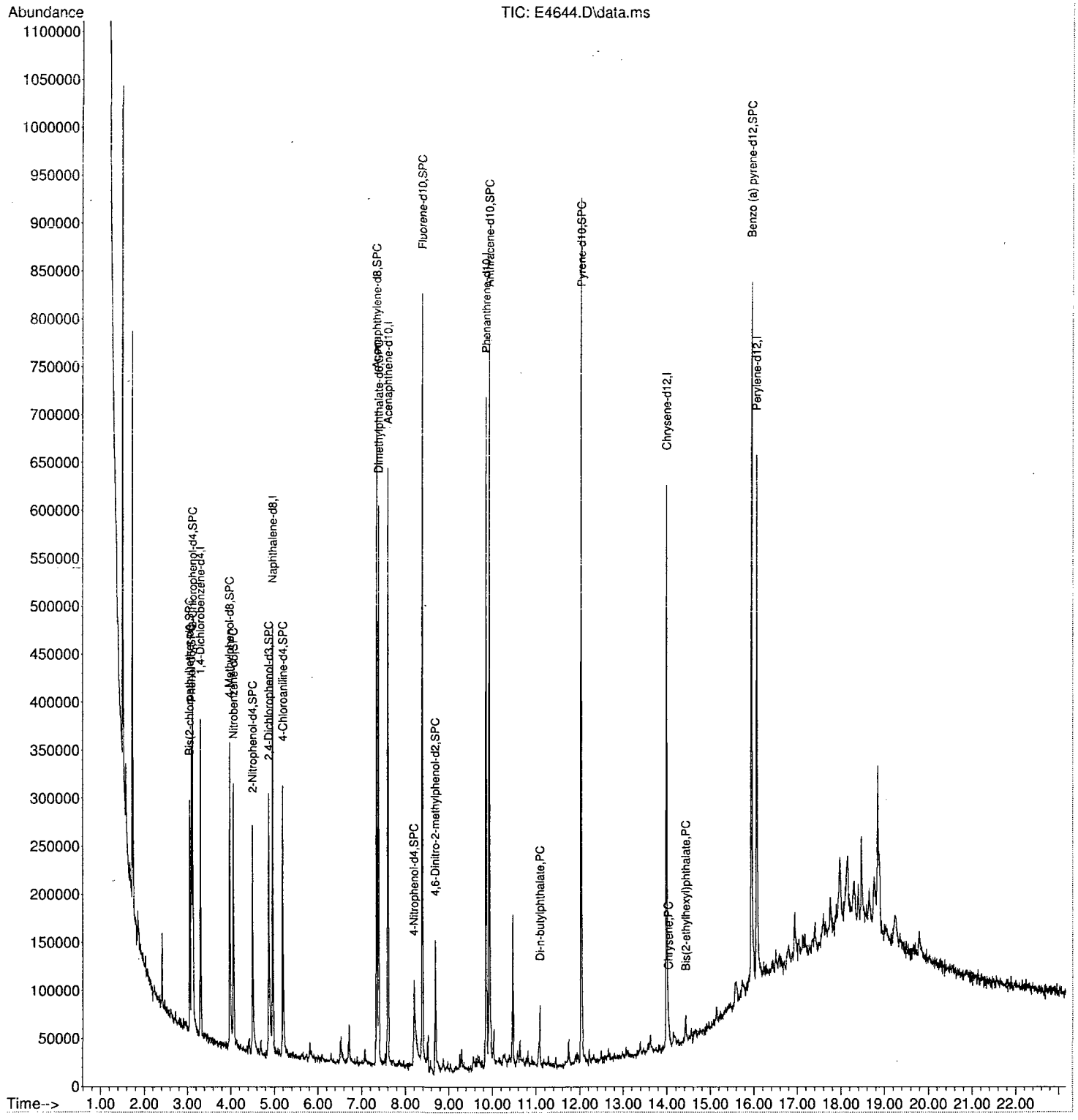
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

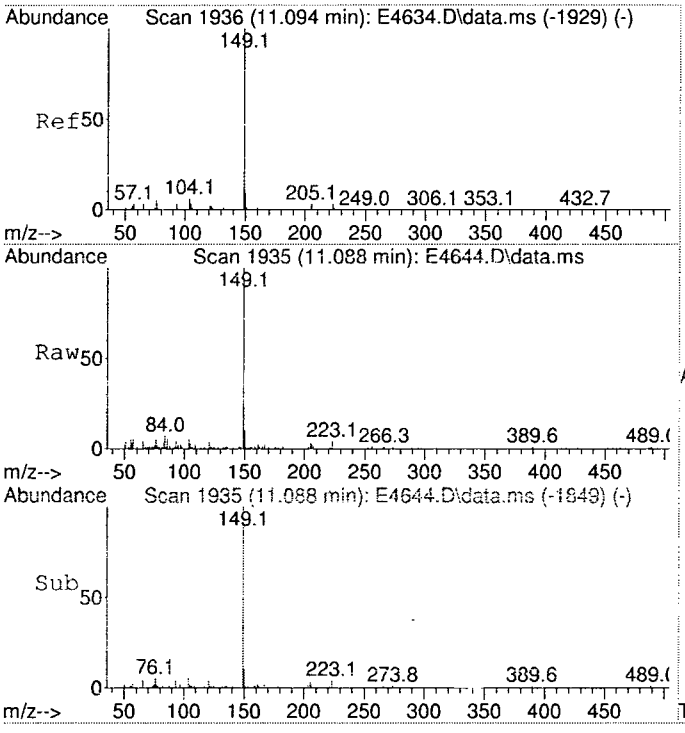
Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

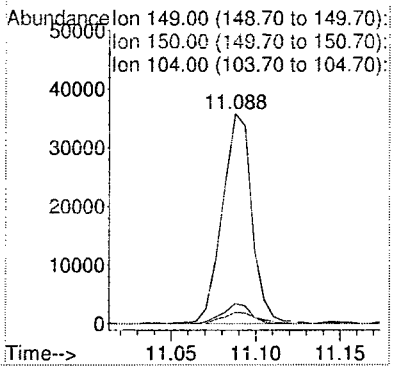
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

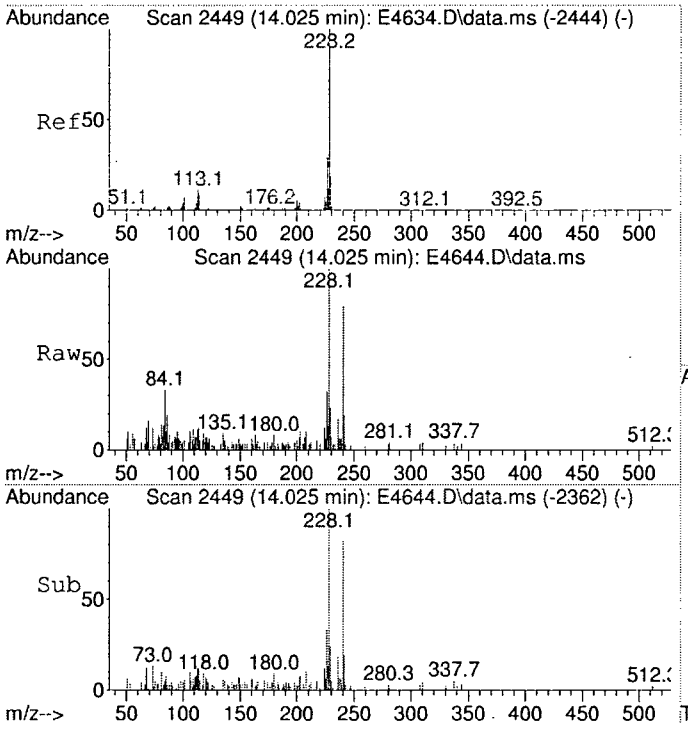



#76
Di-n-butylphthalate
Concen: 0.8140 ug/mL
RT: 11.09 min Scan# 1935
Delta R.T. -0.01 min
Lab File: E4644.D
Acq: 24 May 2012 23:02

Tgt Ion:149 Resp: 43412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.8 | 0.0 | 29.0 |
| 104 | 5.8 | 0.0 | 26.3 |

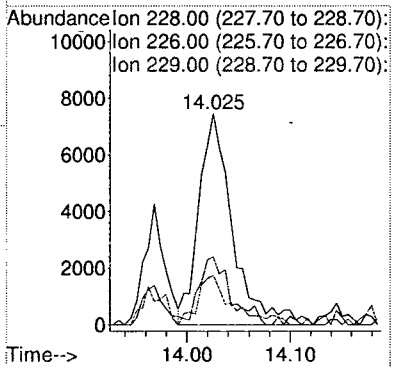


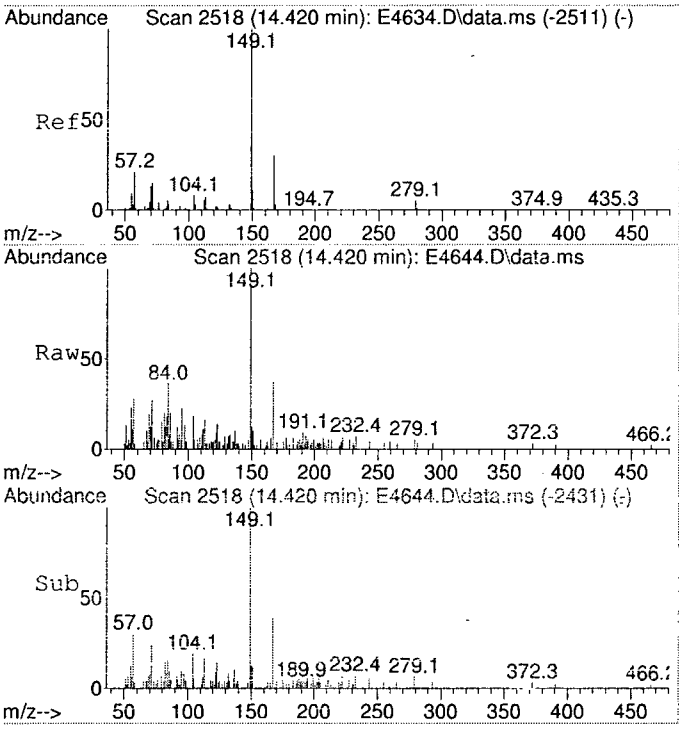

#85
Chrysene
Concen: 0.4386 ug/mL
RT: 14.03 min Scan# 2449
Delta R.T. -0.00 min
Lab File: E4644.D
Acq: 24 May 2012 23:02

Tgt Ion:228 Resp: 16904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.6 | 9.4 | 49.4 |
| 229 | 22.3 | 0.0 | 38.9 |



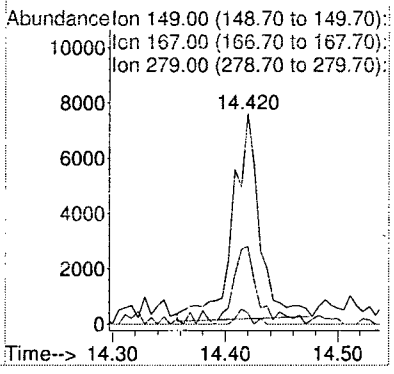
```
Data File : C:\msdchem\1\data\E4644.D                    Vial: 10
Acq On    : 24 May 2012  23:02                        Operator: RS
Sample    : 0015977-02                                Inst    : E-5973
Misc      : F5WB8  30.1GM/0.5ML GPC SOIL              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method    : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title     : CLP SOM1.2  BNA Calibration
```




#86
Bis(2-ethylhexyl)phthalate
Concen: 0.4021 ug/mL
RT: 14.42 min Scan# 2518
Delta R.T. -0.00 min
Lab File: E4644.D
Acq: 24 May 2012 23:02

Tgt Ion:149 Resp: 12455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 34.5 | 10.2 | 50.2 |
| 279 | 3.7 | 0.0 | 28.1 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4644.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.651 | 3 | 13 | 69 | rVB7 | 67672974 | 631042150 | 100.00% | 97.245% |
| 2 | 1.501 | 170 | 172 | 184 | rVB | 760637 | 849022 | 0.13% | 0.131% |
| 3 | 1.576 | 184 | 186 | 202 | rVB4 | 121683 | 240848 | 0.04% | 0.037% |
| 4 | 1.725 | 211 | 214 | 224 | rVB | 615250 | 668202 | 0.11% | 0.103% |
| 5 | 1.848 | 235 | 237 | 249 | rVB5 | 45470 | 84922 | 0.01% | 0.013% |
| 6 | 2.409 | 338 | 342 | 347 | rVB2 | 77859 | 91676 | 0.01% | 0.014% |
| 7 | 2.900 | 432 | 434 | 438 | rBV4 | 11674 | 12925 | 0.00% | 0.002% |
| 8 | 3.045 | 458 | 461 | 466 | rBV | 236823 | 249864 | 0.04% | 0.039% |
| 9 | 3.087 | 466 | 469 | 472 | rVV | 290022 | 320181 | 0.05% | 0.049% |
| 10 | 3.114 | 472 | 474 | 484 | rVB | 364599 | 448199 | 0.07% | 0.069% |
| 11 | 3.296 | 503 | 508 | 516 | rVB2 | 329526 | 418896 | 0.07% | 0.065% |
| 12 | 3.964 | 630 | 633 | 646 | rBV | 315477 | 454574 | 0.07% | 0.070% |
| 13 | 4.054 | 646 | 650 | 660 | rVB | 272270 | 372789 | 0.06% | 0.057% |
| 14 | 4.412 | 714 | 717 | 718 | rBV3 | 15785 | 16093 | 0.00% | 0.002% |
| 15 | 4.487 | 728 | 731 | 756 | rVB | 237846 | 376435 | 0.06% | 0.058% |
| 16 | 4.695 | 765 | 770 | 776 | rBV7 | 15330 | 23333 | 0.00% | 0.004% |
| 17 | 4.824 | 793 | 794 | 797 | rBV3 | 8918 | 7234 | 0.00% | 0.001% |
| 18 | 4.861 | 798 | 801 | 815 | rVV | 271511 | 458067 | 0.07% | 0.071% |
| 19 | 4.957 | 815 | 819 | 826 | rVB | 437596 | 501237 | 0.08% | 0.077% |
| 20 | 5.123 | 848 | 850 | 855 | rVB5 | 7855 | 7387 | 0.00% | 0.001% |
| 21 | 5.187 | 858 | 862 | 873 | rBV | 278939 | 408084 | 0.06% | 0.063% |
| 22 | 5.625 | 941 | 944 | 949 | rBV6 | 5991 | 8775 | 0.00% | 0.001% |
| 23 | 5.743 | 964 | 966 | 971 | rVB5 | 8672 | 11184 | 0.00% | 0.002% |
| 24 | 5.785 | 971 | 974 | 976 | rBV4 | 5571 | 7151 | 0.00% | 0.001% |
| 25 | 5.817 | 976 | 980 | 985 | rBV6 | 16712 | 23326 | 0.00% | 0.004% |
| 26 | 6.020 | 1017 | 1018 | 1022 | rVB4 | 7250 | 7986 | 0.00% | 0.001% |
| 27 | 6.063 | 1022 | 1026 | 1027 | rBV4 | 5923 | 7609 | 0.00% | 0.001% |
| 28 | 6.528 | 1109 | 1113 | 1119 | rBV6 | 27326 | 47706 | 0.01% | 0.007% |
| 29 | 6.709 | 1144 | 1147 | 1152 | rVV3 | 39092 | 52726 | 0.01% | 0.008% |
| 30 | 7.078 | 1211 | 1216 | 1219 | rBV7 | 15034 | 19489 | 0.00% | 0.003% |
| 31 | 7.335 | 1258 | 1264 | 1269 | rBV | 679670 | 806282 | 0.13% | 0.124% |
| 32 | 7.377 | 1269 | 1272 | 1279 | rVB | 572760 | 683396 | 0.11% | 0.105% |
| 33 | 7.538 | 1297 | 1302 | 1306 | rVB6 | 12480 | 16472 | 0.00% | 0.003% |
| 34 | 7.596 | 1308 | 1313 | 1318 | rBV | 619555 | 697109 | 0.11% | 0.107% |
| 35 | 7.735 | 1335 | 1339 | 1342 | rVB5 | 5603 | 7644 | 0.00% | 0.001% |
| 36 | 7.965 | 1378 | 1382 | 1385 | rVB5 | 8523 | 9473 | 0.00% | 0.001% |
| 37 | 8.189 | 1420 | 1424 | 1440 | rBV2 | 88948 | 263201 | 0.04% | 0.041% |
| 38 | 8.382 | 1456 | 1460 | 1468 | rVV2 | 797999 | 986270 | 0.16% | 0.152% |
| 39 | 8.522 | 1483 | 1486 | 1492 | rVB2 | 39089 | 55115 | 0.01% | 0.008% |
| 40 | 8.579 | 1492 | 1496 | 1498 | rBV4 | 13172 | 15333 | 0.00% | 0.002% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 8.682 | 1510 | 1514 | 1523 | rBV2 | 140434 | 230071 | 0.04% | 0.035% |
| 42 | 8.853 | 1541 | 1544 | 1545 | rVV3 | 6913 | 7252 | 0.00% | 0.001% |
| 43 | 8.876 | 1545 | 1548 | 1555 | rVV9 | 14442 | 24426 | 0.00% | 0.004% |
| 44 | 8.962 | 1561 | 1563 | 1565 | rVV2 | 7555 | 7359 | 0.00% | 0.001% |
| 45 | 8.979 | 1565 | 1566 | 1573 | rVB7 | 11377 | 11625 | 0.00% | 0.002% |
| 46 | 9.036 | 1573 | 1576 | 1579 | rBV5 | 8798 | 12386 | 0.00% | 0.002% |
| 47 | 9.253 | 1610 | 1614 | 1617 | rVV5 | 16074 | 21901 | 0.00% | 0.003% |
| 48 | 9.293 | 1617 | 1621 | 1626 | rVB5 | 19479 | 28531 | 0.00% | 0.004% |
| 49 | 9.505 | 1654 | 1658 | 1661 | rVB4 | 6808 | 9063 | 0.00% | 0.001% |
| 50 | 9.567 | 1664 | 1669 | 1672 | rBV6 | 15075 | 23697 | 0.00% | 0.004% |
| 51 | 9.630 | 1676 | 1680 | 1682 | rBV5 | 9481 | 8954 | 0.00% | 0.001% |
| 52 | 9.670 | 1684 | 1687 | 1691 | rBV5 | 12244 | 13430 | 0.00% | 0.002% |
| 53 | 9.705 | 1691 | 1693 | 1697 | rVV5 | 9945 | 7818 | 0.00% | 0.001% |
| 54 | 9.768 | 1700 | 1704 | 1709 | rVB7 | 9716 | 15930 | 0.00% | 0.002% |
| 55 | 9.848 | 1712 | 1718 | 1727 | rBV | 698610 | 885297 | 0.14% | 0.136% |
| 56 | 9.922 | 1727 | 1731 | 1745 | rVV | 760834 | 1048307 | 0.17% | 0.162% |
| 57 | 10.030 | 1745 | 1750 | 1755 | rVB4 | 32356 | 44780 | 0.01% | 0.007% |
| 58 | 10.105 | 1760 | 1763 | 1768 | rBV8 | 4921 | 8132 | 0.00% | 0.001% |
| 59 | 10.253 | 1784 | 1789 | 1791 | rBV5 | 11387 | 18755 | 0.00% | 0.003% |
| 60 | 10.288 | 1793 | 1795 | 1800 | rVB6 | 8854 | 10127 | 0.00% | 0.002% |
| 61 | 10.391 | 1812 | 1813 | 1817 | rVV4 | 7895 | 7979 | 0.00% | 0.001% |
| 62 | 10.471 | 1821 | 1827 | 1831 | rBV | 153689 | 188638 | 0.03% | 0.029% |
| 63 | 10.551 | 1838 | 1841 | 1843 | rBV3 | 6359 | 8235 | 0.00% | 0.001% |
| 64 | 10.585 | 1843 | 1847 | 1849 | rBV5 | 13662 | 15588 | 0.00% | 0.002% |
| 65 | 10.636 | 1853 | 1856 | 1859 | rBV4 | 23196 | 22776 | 0.00% | 0.004% |
| 66 | 10.785 | 1877 | 1882 | 1885 | rBV7 | 8854 | 15449 | 0.00% | 0.002% |
| 67 | 10.825 | 1885 | 1889 | 1895 | rVB6 | 16358 | 24731 | 0.00% | 0.004% |
| 68 | 10.865 | 1895 | 1896 | 1902 | rBV6 | 4303 | 7243 | 0.00% | 0.001% |
| 69 | 11.088 | 1927 | 1935 | 1941 | rBV | 64071 | 116131 | 0.02% | 0.018% |
| 70 | 11.185 | 1948 | 1952 | 1954 | rBV4 | 10369 | 15182 | 0.00% | 0.002% |
| 71 | 11.294 | 1966 | 1971 | 1974 | rVB4 | 9993 | 12935 | 0.00% | 0.002% |
| 72 | 11.454 | 1997 | 1999 | 2003 | rVB5 | 12821 | 14812 | 0.00% | 0.002% |
| 73 | 11.745 | 2046 | 2050 | 2056 | rVB | 24242 | 33933 | 0.01% | 0.005% |
| 74 | 11.905 | 2076 | 2078 | 2082 | rVB5 | 7768 | 9225 | 0.00% | 0.001% |
| 75 | 11.945 | 2082 | 2085 | 2088 | rBV5 | 10360 | 13000 | 0.00% | 0.002% |
| 76 | 12.025 | 2094 | 2099 | 2112 | rBV | 900953 | 1270061 | 0.20% | 0.196% |
| 77 | 12.219 | 2130 | 2133 | 2139 | rBV8 | 17608 | 30457 | 0.00% | 0.005% |
| 78 | 12.499 | 2179 | 2182 | 2187 | rVB7 | 13490 | 23643 | 0.00% | 0.004% |
| 79 | 12.545 | 2187 | 2190 | 2191 | rBV3 | 6765 | 8024 | 0.00% | 0.001% |
| 80 | 12.585 | 2195 | 2197 | 2199 | rBV3 | 8826 | 9795 | 0.00% | 0.002% |
| 81 | 12.637 | 2204 | 2206 | 2209 | rBV4 | 5137 | 7795 | 0.00% | 0.001% |
| 82 | 12.665 | 2209 | 2211 | 2214 | rVV4 | 12414 | 14637 | 0.00% | 0.002% |
| 83 | 12.991 | 2262 | 2268 | 2273 | rBV10 | 8133 | 14714 | 0.00% | 0.002% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 13.071 | 2277 | 2282 | 2285 | rBV6 | 11790 | 16359 | 0.00% | 0.003% |
| 85 | 13.260 | 2313 | 2315 | 2320 | rBV6 | 4545 | 7434 | 0.00% | 0.001% |
| 86 | 13.397 | 2337 | 2339 | 2344 | rVB6 | 13606 | 15055 | 0.00% | 0.002% |
| 87 | 13.620 | 2375 | 2378 | 2391 | rVB6 | 18592 | 42964 | 0.01% | 0.007% |
| 88 | 13.900 | 2423 | 2427 | 2428 | rBV4 | 6953 | 8488 | 0.00% | 0.001% |
| 89 | 13.980 | 2435 | 2441 | 2454 | rVV | 586176 | 948418 | 0.15% | 0.146% |
| 90 | 14.140 | 2466 | 2469 | 2473 | rBV5 | 12555 | 19444 | 0.00% | 0.003% |
| 91 | 14.420 | 2513 | 2518 | 2523 | rBV5 | 26322 | 41101 | 0.01% | 0.006% |
| 92 | 14.608 | 2548 | 2551 | 2555 | rBV6 | 12528 | 21477 | 0.00% | 0.003% |
| 93 | 14.906 | 2598 | 2603 | 2606 | rBV7 | 12771 | 18656 | 0.00% | 0.003% |
| 94 | 15.128 | 2641 | 2642 | 2645 | rBV3 | 14008 | 14267 | 0.00% | 0.002% |
| 95 | 15.940 | 2778 | 2784 | 2798 | rVB | 726818 | 1147628 | 0.18% | 0.177% |
| 96 | 16.049 | 2798 | 2803 | 2821 | rBV | 546445 | 958217 | 0.15% | 0.148% |
| 97 | 16.940 | 2954 | 2959 | 2962 | rBV4 | 45953 | 74829 | 0.01% | 0.012% |
| 98 | 18.461 | 3221 | 3225 | 3238 | rVB4 | 89417 | 207891 | 0.03% | 0.032% |
| 99 | 18.838 | 3286 | 3291 | 3296 | rBV7 | 138700 | 262761 | 0.04% | 0.040% |
| 100 | 20.369 | 3557 | 3559 | 3560 | rBV2 | 17808 | 12357 | 0.00% | 0.002% |

Sum of corrected areas: 648918535

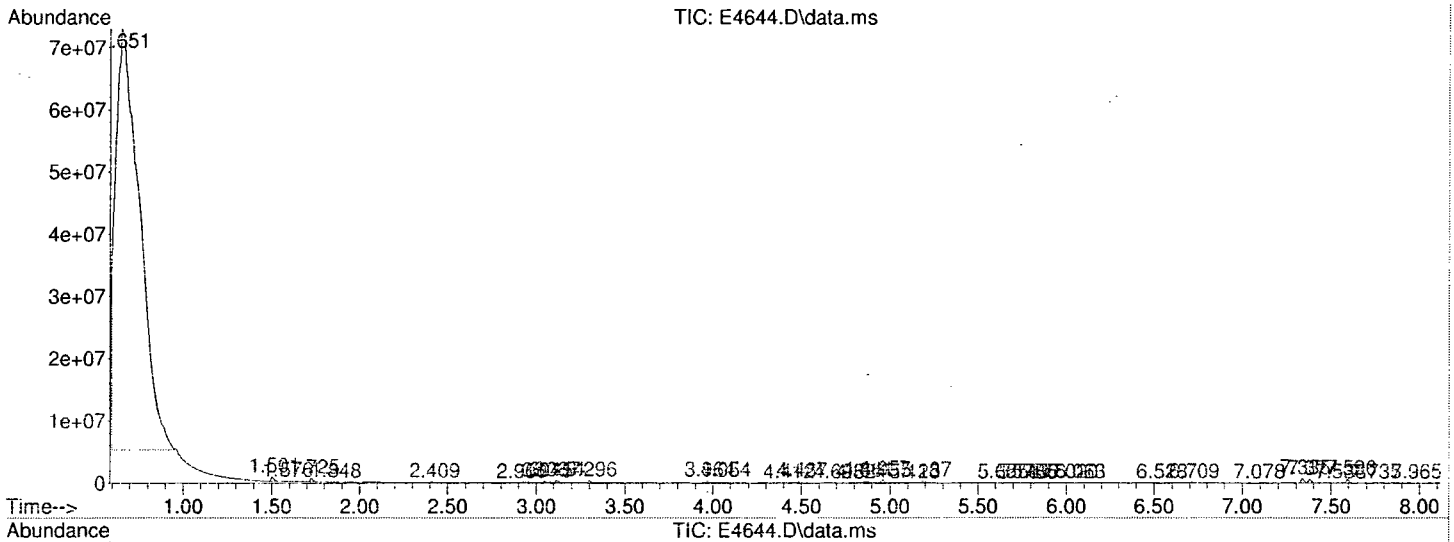
LSC Report - Integrated Chromatogram

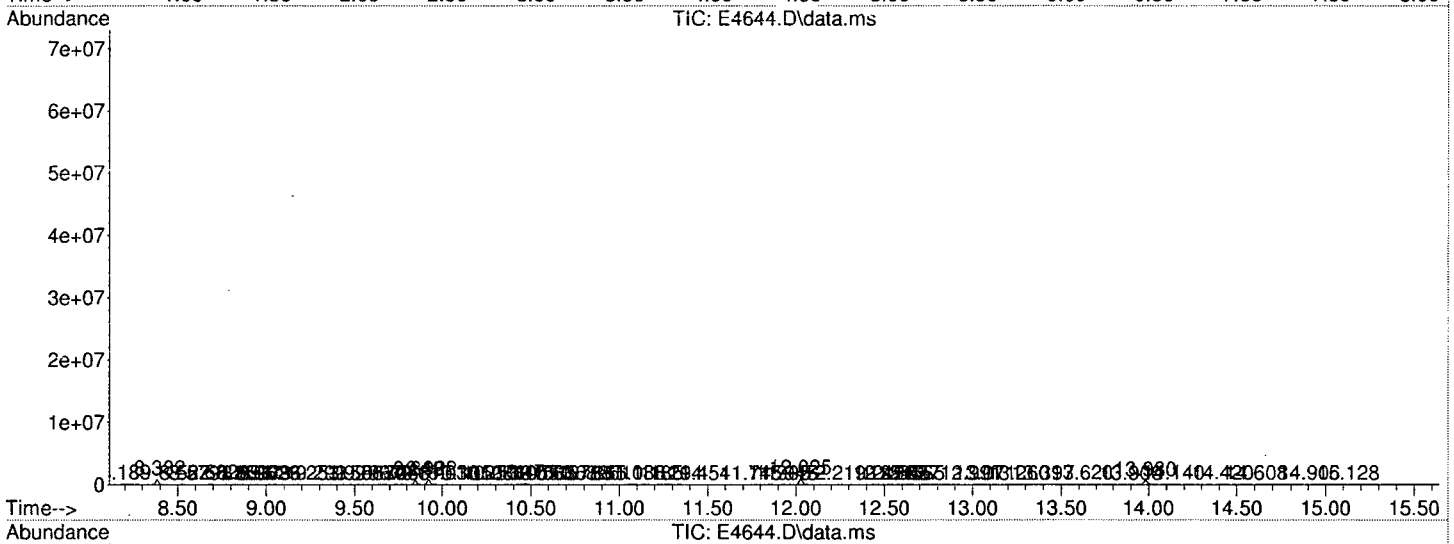
Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

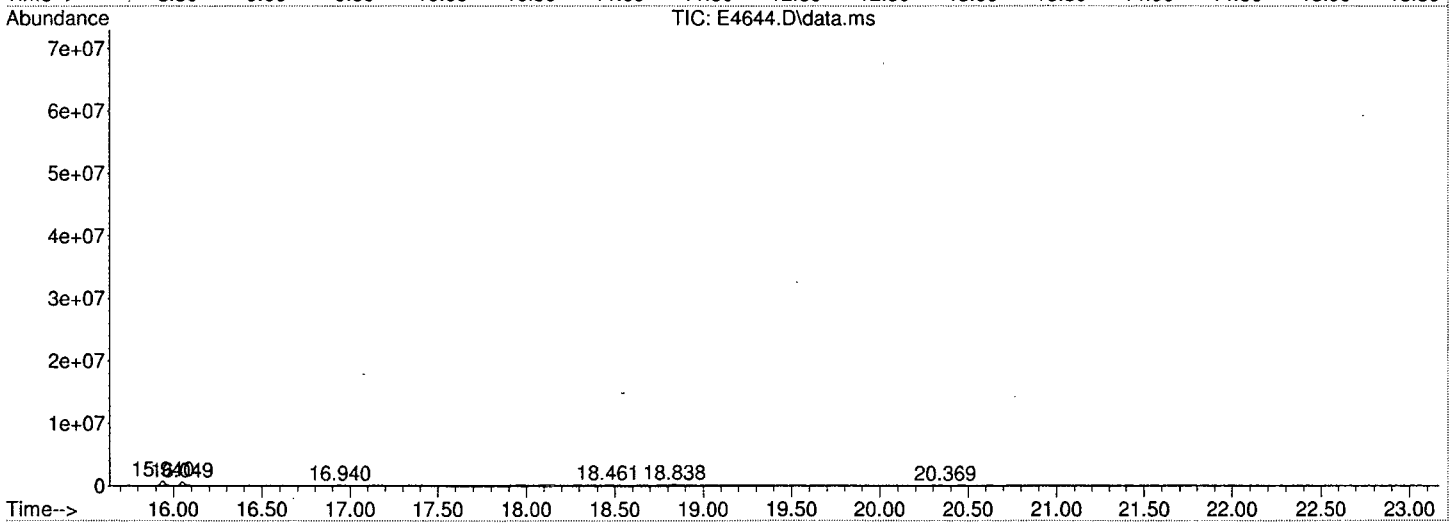
Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

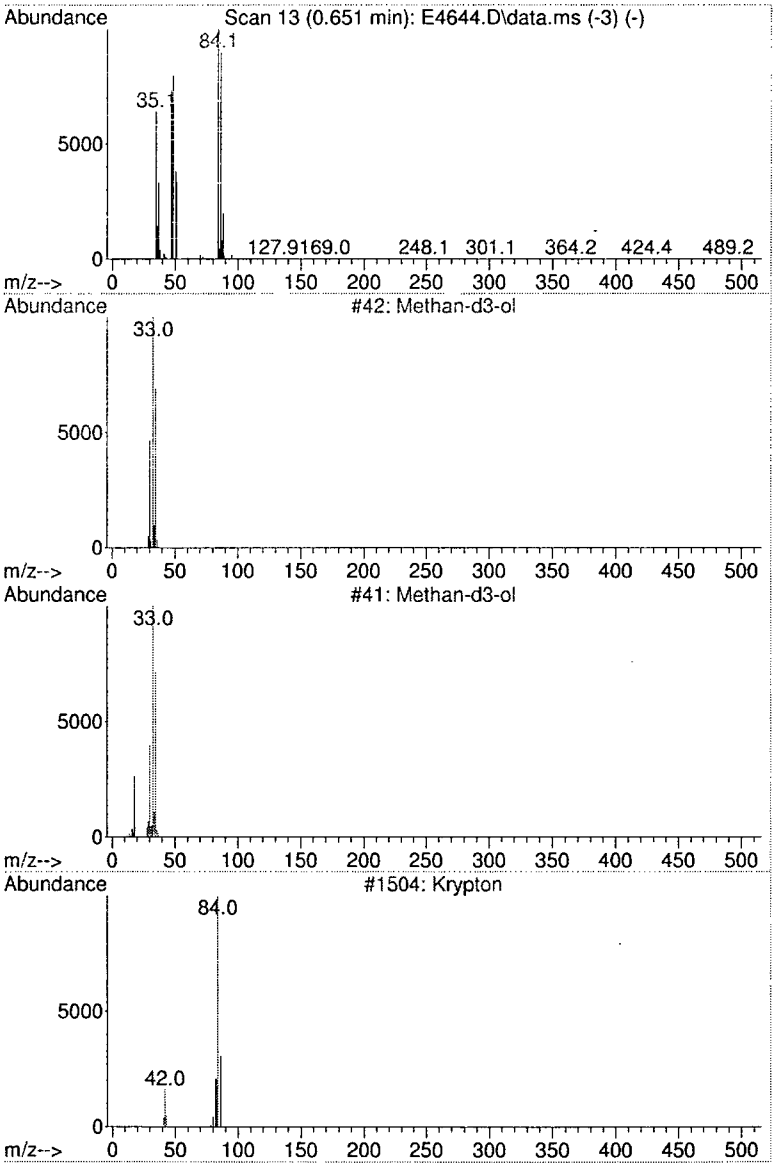
**********

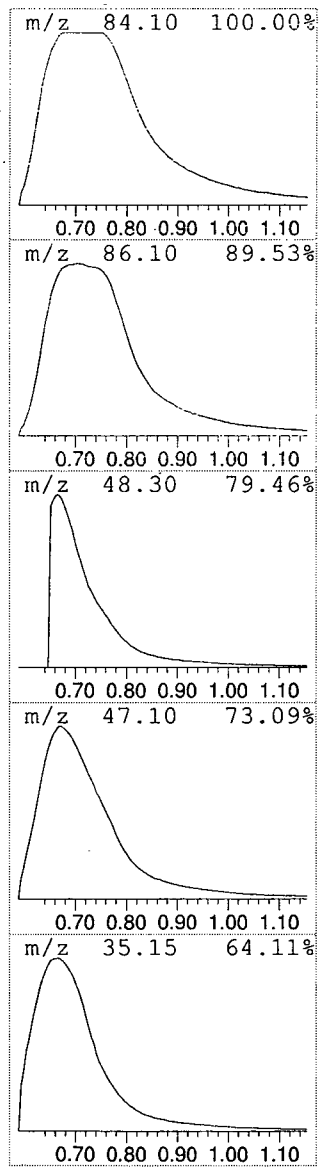
Peak Number 1 Methan-d3-ol Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 0.651 | 30128.80 ug/mL | 631042000 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methan-d3-ol | 35 | CHD3O | 001849-29-2 | 3 |
| 2 | Methan-d3-ol | 35 | CHD3O | 001849-29-2 | 3 |
| 3 | Krypton | 84 | Kr | 007439-90-9 | 3 |
| 4 | 2-Butanone, 3-(methylthio)-, O-[... | 190 | C7H14N2O2S | 034681-10-2 | 2 |
| 5 | 1-Propanol, 3-mercapto- | 92 | C3H8OS | 019721-22-3 | 2 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

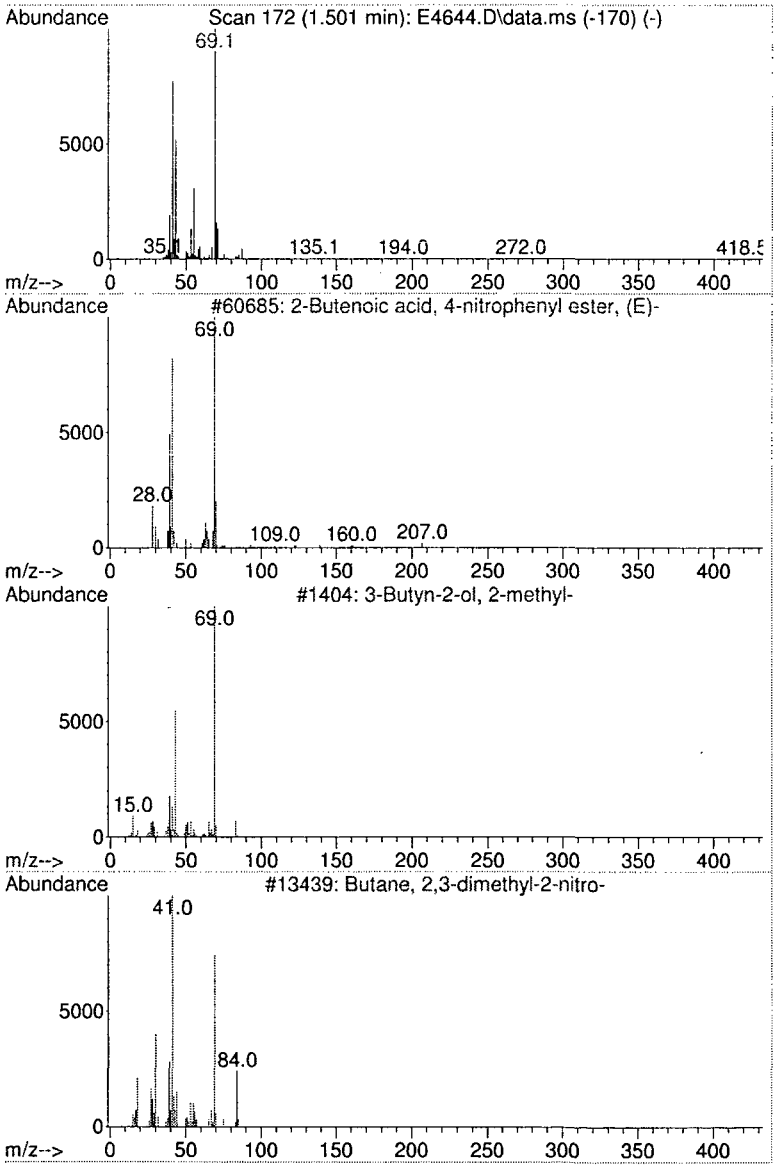
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

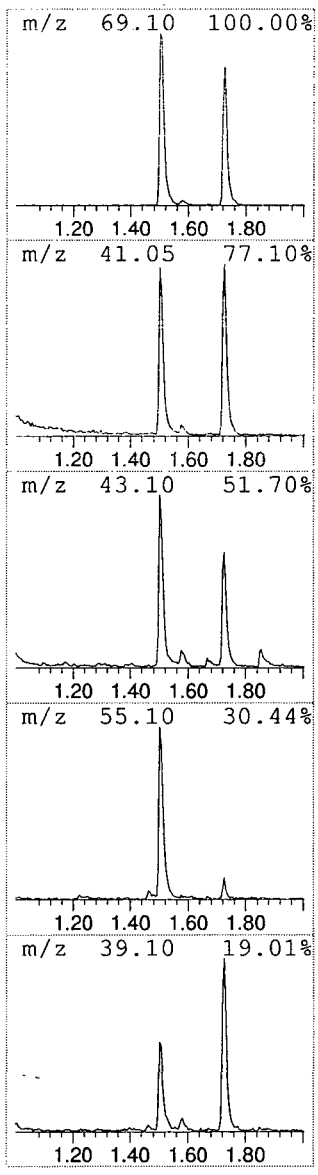
**********
Peak Number 2 2-Butenoic acid, 4-nitrophe... Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.501 | 40.54 ug/mL | 849022 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 38 |
| 2 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 33 |
| 3 | Butane, 2,3-dimethyl-2-nitro- | 131 | C6H13NO2 | 034075-28-0 | 12 |
| 4 | 1-Pentyn-3-ol, 3-methyl- | 98 | C6H10O | 000077-75-8 | 9 |
| 5 | 1-Octyn-4-ol | 126 | C8H14O | 052517-92-7 | 9 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

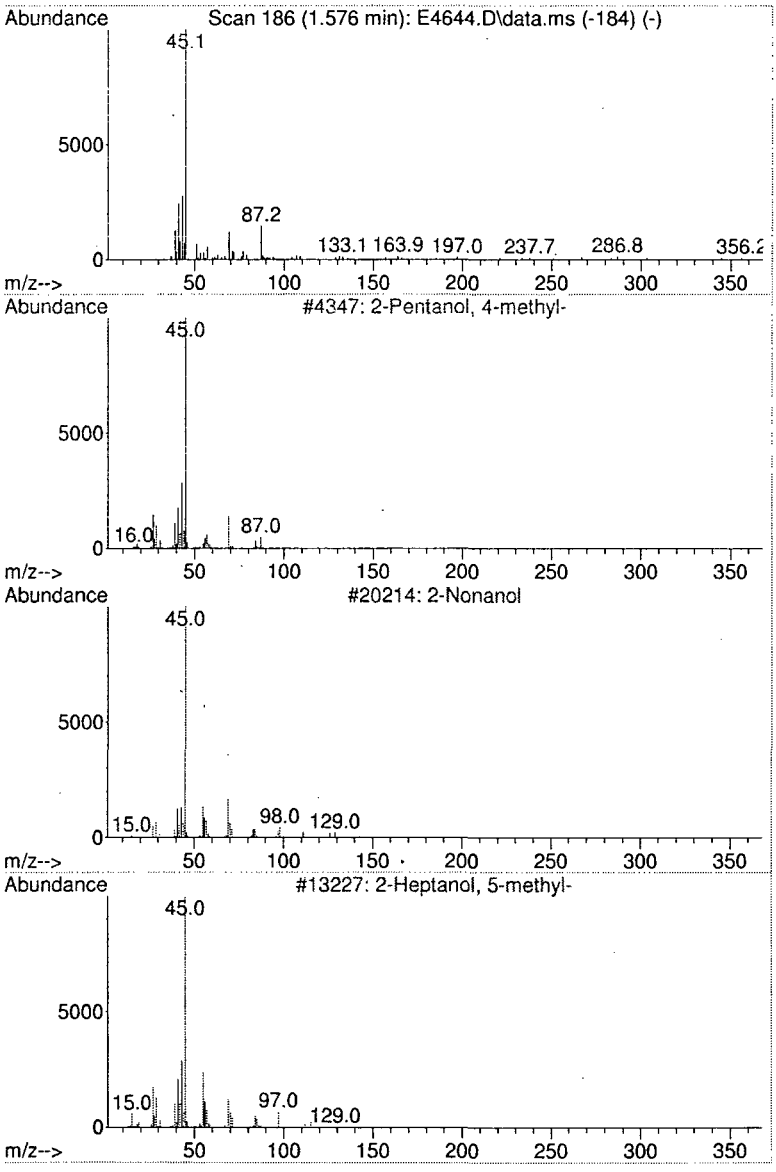
**********

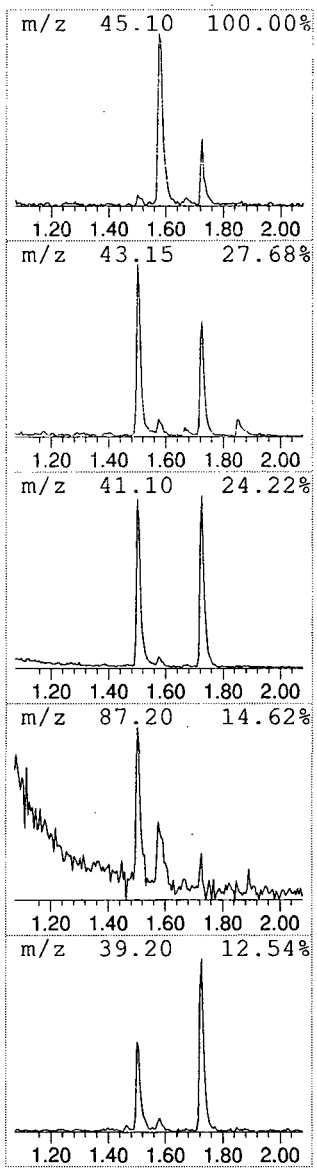
Peak Number 3 2-Pentanol, 4-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.576 | 11.50 ug/mL | 240848 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanol, 4-methyl- | 102 | C6H14O | 000108-11-2 | 50 |
| 2 | 2-Nonanol | 144 | C9H20O | 000628-99-9 | 45 |
| 3 | 2-Heptanol, 5-methyl- | 130 | C8H18O | 054630-50-1 | 38 |
| 4 | 2-Nonanol | 144 | C9H20O | 000628-99-9 | 38 |
| 5 | 2-Heptanol, 6-methyl- | 130 | C8H18O | 004730-22-7 | 38 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

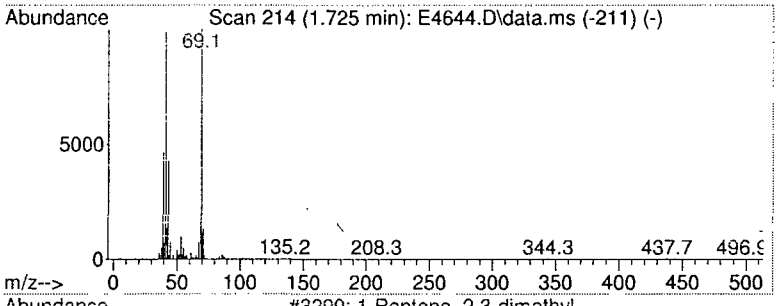
**********

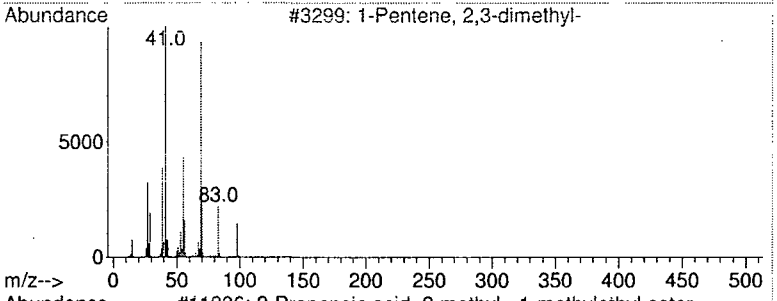
Peak Number 4 1-Pentene, 2,3-dimethyl- Concentration Rank 3

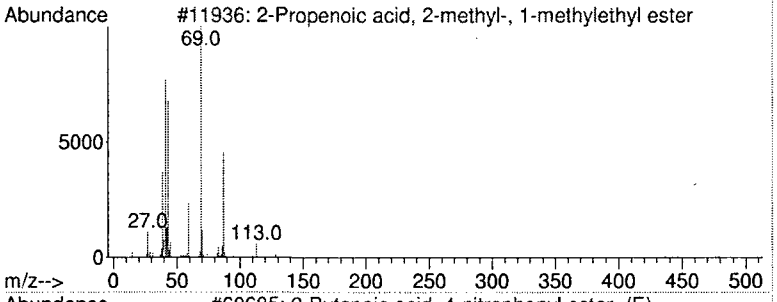
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.725 | 31.90 ug/mL | 668202 | 1,4-Dichlorobenzene-d4 | 3.296 |

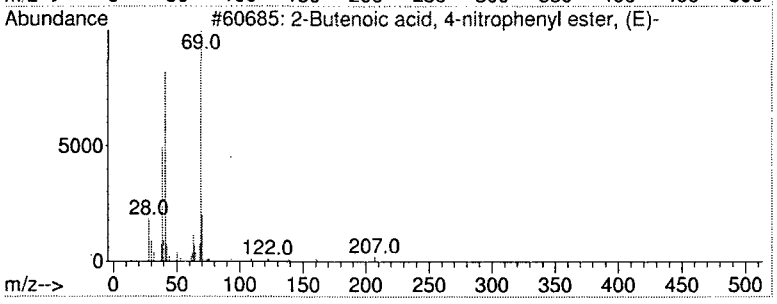
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Pentene, 2,3-dimethyl- | 98 | C7H14 | 003404-72-6 | 56 |
| 2 | 2-Propenoic acid, 2-methyl-, 1-m... | 128 | C7H12O2 | 004655-34-9 | 50 |
| 3 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 50 |
| 4 | 2-Propenoic acid, 2-methyl-, 1-m... | 128 | C7H12O2 | 004655-34-9 | 40 |
| 5 | 1,6-Octadiene, 2,7-dimethyl- | 138 | C10H18 | 040195-09-3 | 40 |

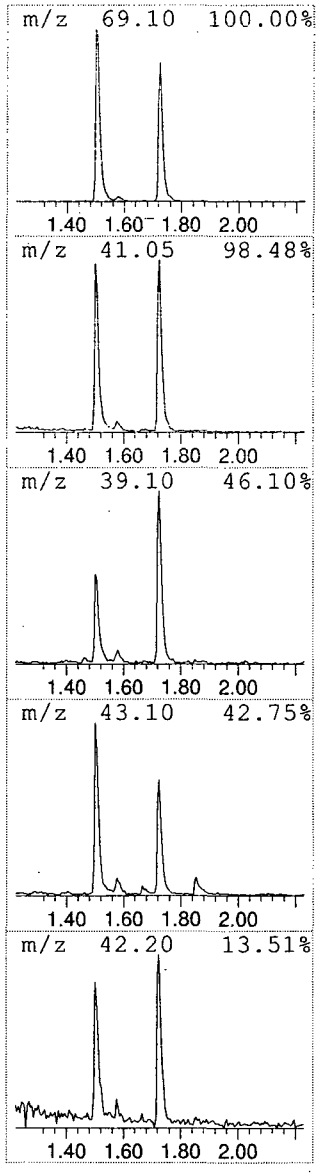
Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

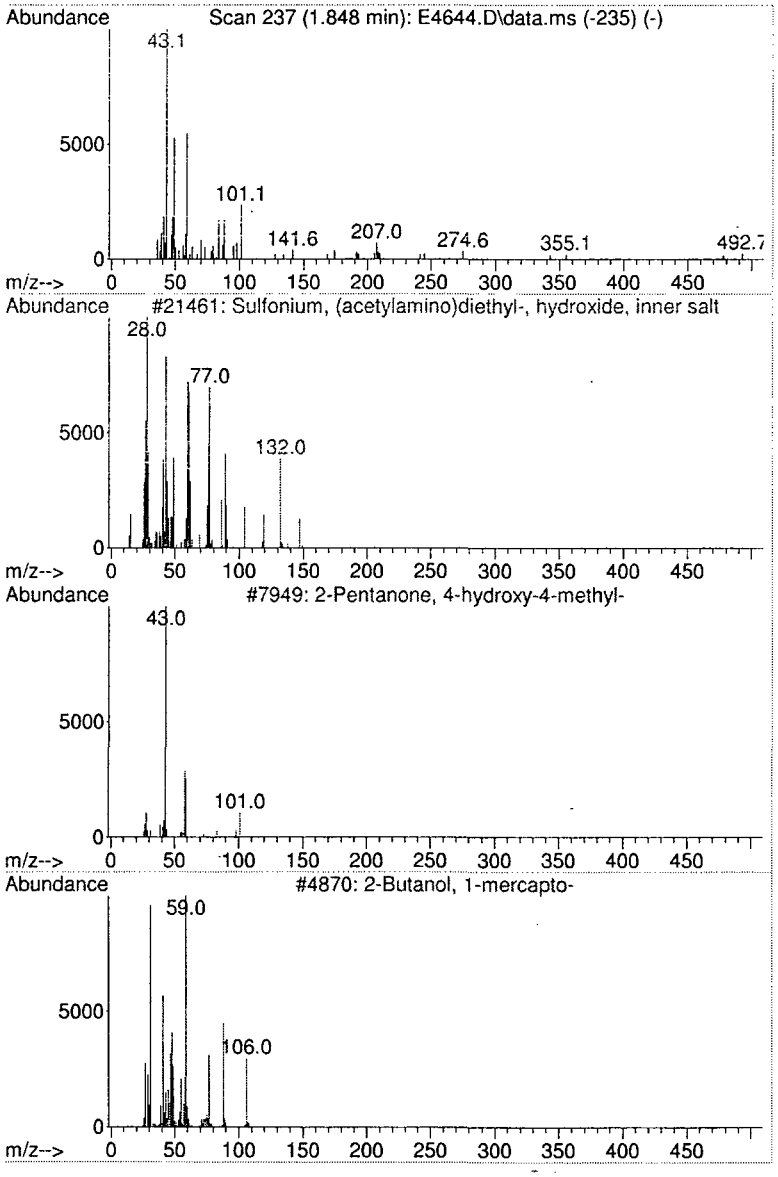
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

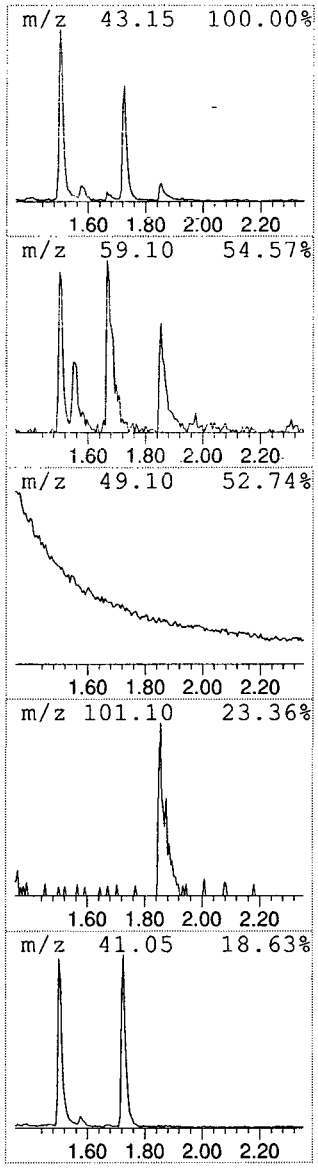
**********
Peak Number 5 Sulfonium, (acetylamino)die... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.848 | 4.05 ug/mL | 84922 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Sulfonium, (acetylamino)diethyl-... | 147 | C6H13NOS | 032805-46-2 | 28 |
| 2 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 9 |
| 3 | 2-Butanol, 1-mercapto- | 106 | C4H10OS | 025807-94-7 | 9 |
| 4 | trans-2-Chlorovinylacetate | 120 | C4H5ClO2 | 1000288-27-5 | 9 |
| 5 | Xanthumin | 306 | C17H22O5 | 026791-72-0 | 9 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

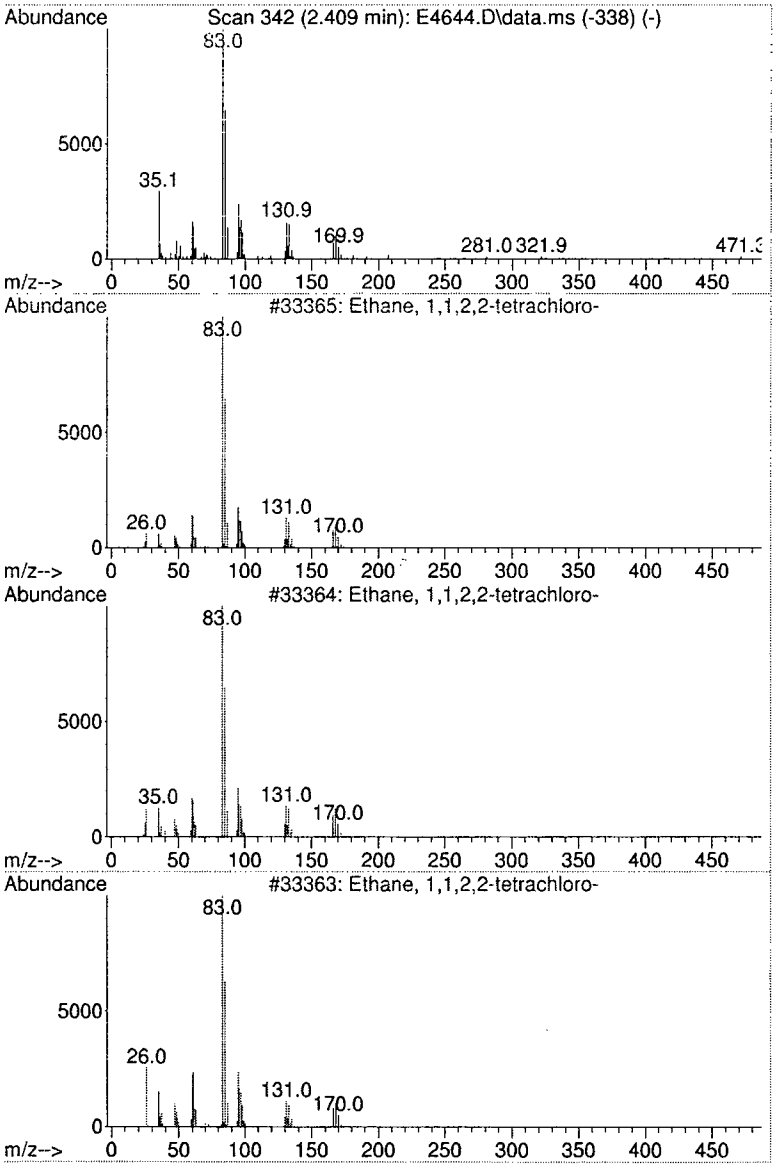
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

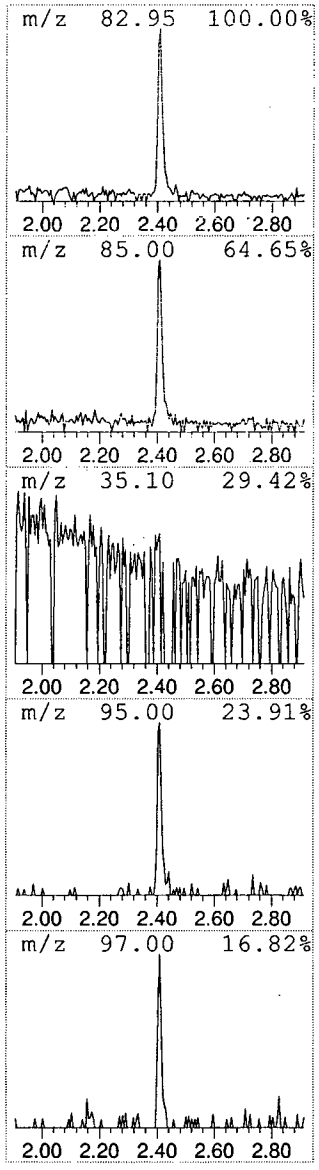
**********

Peak Number 6 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.409 | 4.38 ug/mL | 91676 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 98✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 91 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 89 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 58 |
| 5 | Ethane, 1,2,2-trichloro-1,1-difl... | 168 | C2HCl3F2 | 000354-21-2 | 46 |



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

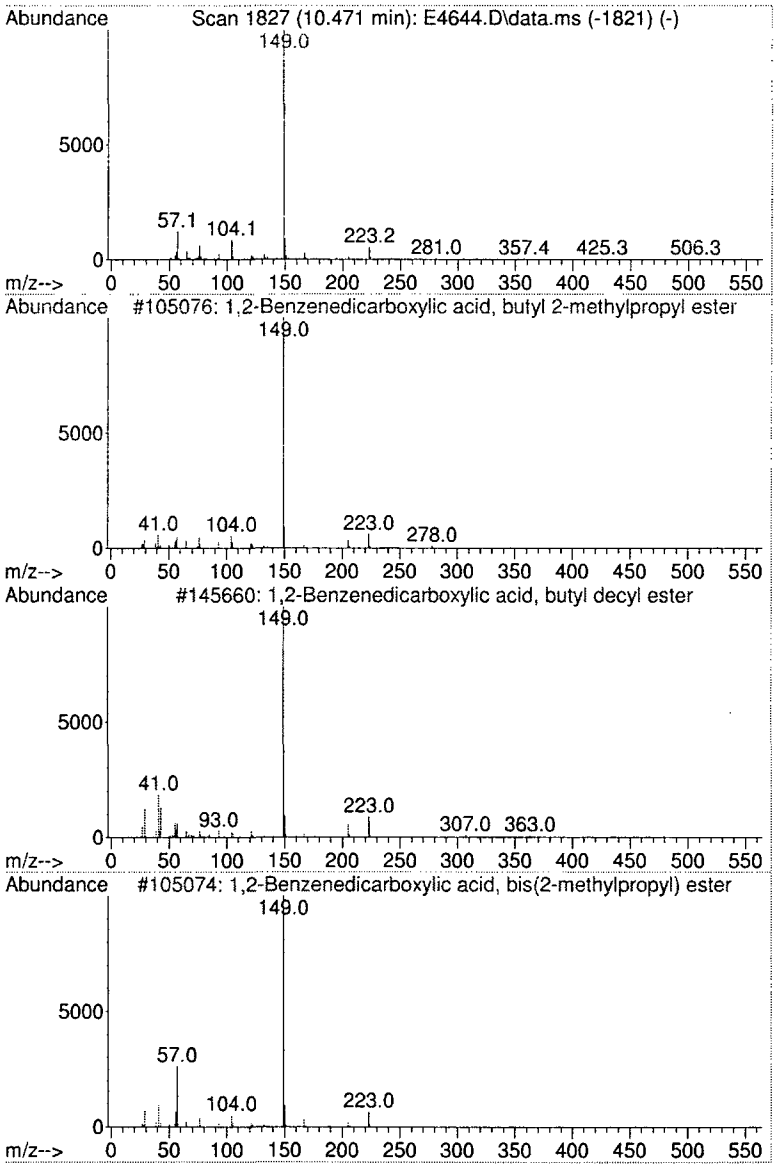
**********

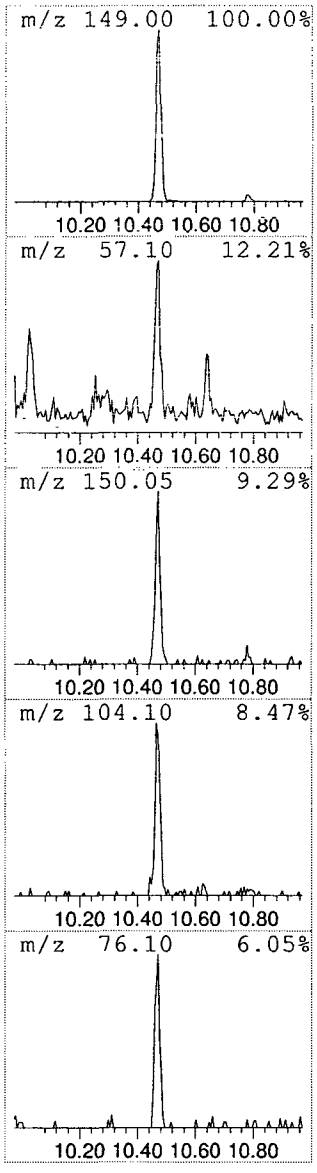
Peak Number 7 1,2-Benzenedicarboxylic aci... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.470 | 4.26 ug/mL | 188638 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2-Benzenedicarboxylic acid, bu... | 278 | C16H22O4 | 017851-53-5 | 78 |
| 2 | 1,2-Benzenedicarboxylic acid, bu... | 362 | C22H34O4 | 000089-19-0 | 78 |
| 3 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 78 |
| 4 | 1,2-Benzenedicarboxylic acid, bu... | 304 | C18H24O4 | 000084-64-0 | 72 |
| 5 | 1,2-Benzenedicarboxylic acid, de... | 418 | C26H42O4 | 000119-07-3 | 64 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

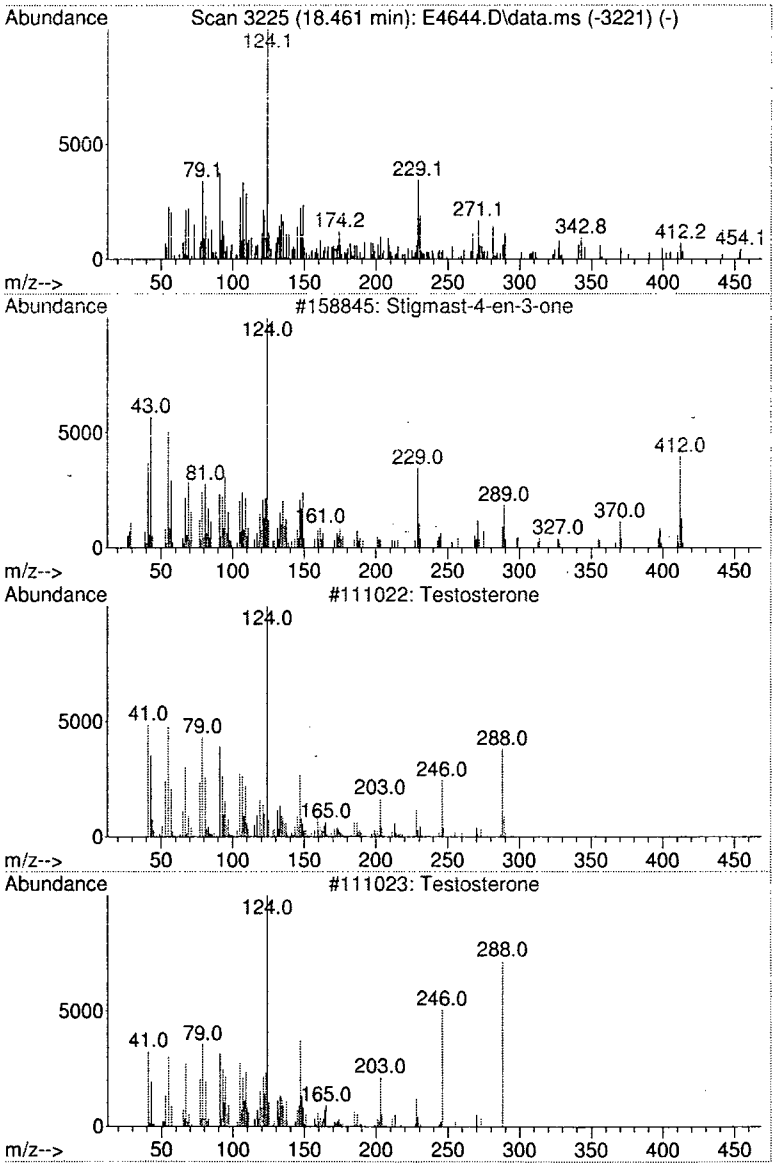
**********

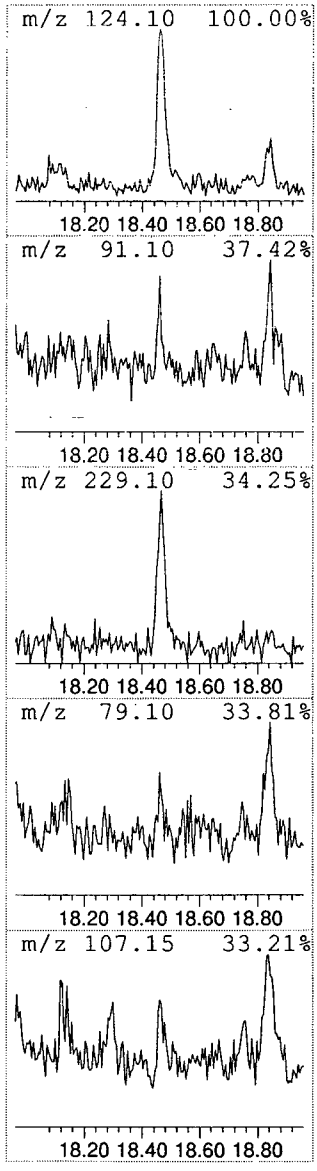
Peak Number 8 Stigmast-4-en-3-one Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.461 | 4.34 ug/mL | 207891 | Perylene-d12 | 16.049 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Stigmast-4-en-3-one | 412 | C29H48O | 001058-61-3 | 70 |
| 2 | Testosterone | 288 | C19H28O2 | 000058-22-0 | 41 |
| 3 | Testosterone | 288 | C19H28O2 | 000058-22-0 | 41 |
| 4 | Testosterone | 288 | C19H28O2 | 000058-22-0 | 38 |
| 5 | Phenol, 2-methoxy-, acetate | 166 | C9H10O3 | 000613-70-7 | 38 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

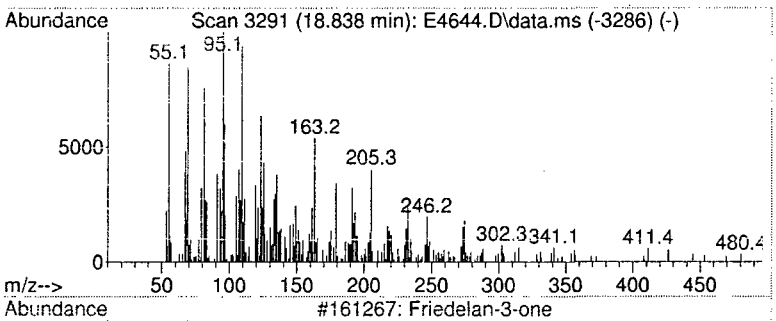
**********

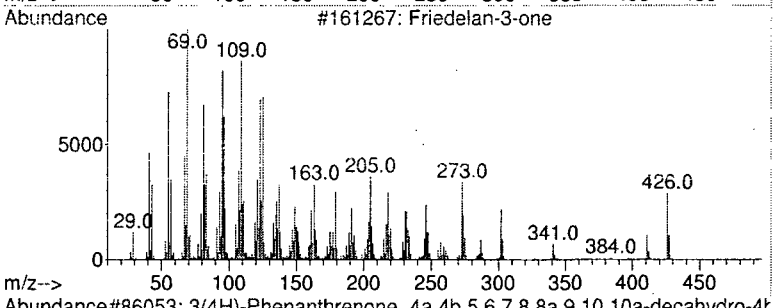
Peak Number 9 Friedelan-3-one Concentration Rank 5

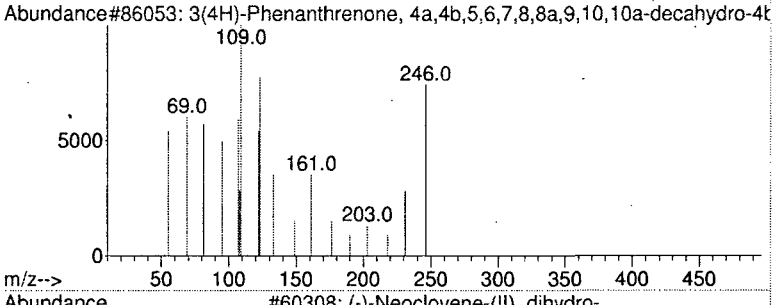
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.838 | 5.48 ug/mL | 262761 | Perylene-d12 | 16.049 |

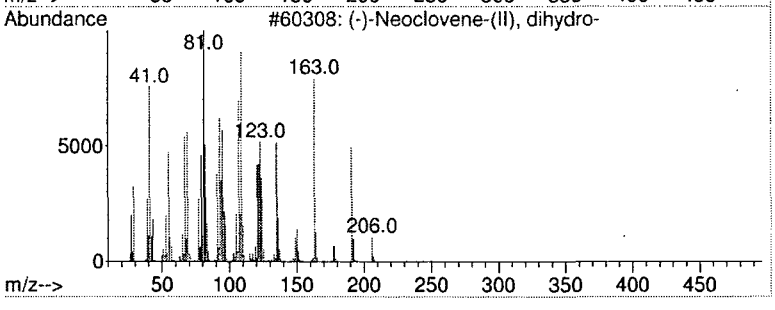
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Friedelan-3-one | 426 | C30H50O | 000559-74-0 | 84 |
| 2 | 3(4H)-Phenanthrenone, 4a,4b,5,6,... | 246 | C17H26O | 057684-12-5 | 50 |
| 3 | (-)-Neoclovene-(II), dihydro- | 206 | C15H26 | 1000152-83-6 | 42 |
| 4 | 6-Isopropenyl-4,8a-dimethyl-4a,5... | 218 | C15H22O | 086917-79-5 | 30 |
| 5 | 4,6,10,10-Tetramethyl-5-oxatricy... | 208 | C13H20O2 | 097371-50-1 | 25 |

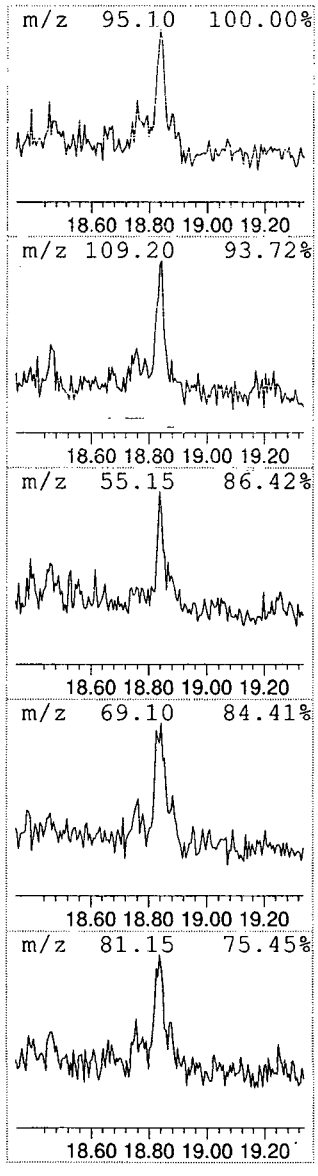
Unknown



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4644.D
Acq On : 24 May 2012 23:02
Sample : 0015977-02
Misc : F5WB8 30.1GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:16:02 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Methan-d3-ol | 0.651 | 30128.8 | ug/mL | 631042000 | 1 | 3.296 | 418896 | 20.0 |
| 2-Butenoic acid... | 1.501 | 40.5 | ug/mL | 849022 | 1 | 3.296 | 418896 | 20.0 |
| 2-Pentanol, 4-m... | 1.576 | 11.5 | ug/mL | 240848 | 1 | 3.296 | 418896 | 20.0 |
| 1-Pentene, 2,3-... | 1.725 | 31.9 | ug/mL | 668202 | 1 | 3.296 | 418896 | 20.0 |
| Sulfonium, (ace... | 1.848 | 4.1 | ug/mL | 84922 | 1 | 3.296 | 418896 | 20.0 |
| Ethane, 1,1,2,2... | 2.409 | 4.4 | ug/mL | 91676 | 1 | 3.296 | 418896 | 20.0 |
| 1,2-Benzenedica... | 10.470 | 4.3 | ug/mL | 188638 | 4 | 9.848 | 885297 | 20.0 |
| Stigmast-4-en-3... | 18.461 | 4.3 | ug/mL | 207891 | 6 | 16.049 | 958217 | 20.0 |
| Friedelan-3-one | 18.838 | 5.5 | ug/mL | 262761 | 6 | 16.049 | 958217 | 20.0 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4687.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 26.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 230 | U |
| 108-95-2 | Phenol | 230 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 230 | U |
| 95-57-8 | 2-Chlorophenol | 230 | U |
| 95-48-7 | 2-Methylphenol | 230 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 230 | U |
| 98-86-2 | Acetophenone | 230 | U |
| 106-44-5 | 4-Methylphenol | 230 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 230 | U |
| 67-72-1 | Hexachloroethane | 230 | U |
| 98-95-3 | Nitrobenzene | 230 | U |
| 78-59-1 | Isophorone | 230 | U |
| 88-75-5 | 2-Nitrophenol | 230 | U |
| 105-67-9 | 2,4-Dimethylphenol | 230 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 230 | U |
| 120-83-2 | 2,4-Dichlorophenol | 230 | U |
| 91-20-3 | Naphthalene | 230 | U |
| 106-47-8 | 4-Chloroaniline | 230 | U |
| 87-68-3 | Hexachlorobutadiene | 230 | U |
| 105-60-2 | Caprolactam | 230 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 230 | U |
| 91-57-6 | 2-Methylnaphthalene | 230 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 230 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 230 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 230 | U |
| 92-52-4 | 1,1'-Biphenyl | 230 | U |
| 91-58-7 | 2-Chloronaphthalene | 230 | U |
| 88-74-4 | 2-Nitroaniline | 440 | U |
| 131-11-3 | Dimethylphthalate | 230 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 230 | U |
| 208-96-8 | Acenaphthylene | 230 | U |
| 99-09-2 | 3-Nitroaniline | 440 | U |
| 83-32-9 | Acenaphthene | 20 | J |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4687.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 26.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 440 | U |
| 100-02-7 | 4-Nitrophenol | 440 | U |
| 132-64-9 | Dibenzofuran | 13 | J |
| 121-14-2 | 2,4-Dinitrotoluene | 230 | U |
| 84-66-2 | Diethylphthalate | 230 | U |
| 86-73-7 | Fluorene | 24 | J |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 230 | U |
| 100-01-6 | 4-Nitroaniline | 440 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 440 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 230 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 230 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 230 | U |
| 118-74-1 | Hexachlorobenzene | 230 | U |
| 1912-24-9 | Atrazine | 230 | U |
| 87-86-5 | Pentachlorophenol | 440 | U |
| 85-01-8 | Phenanthrene | 99 | J |
| 120-12-7 | Anthracene | 30 | J |
| 86-74-8 | Carbazole | 230 | U |
| 84-74-2 | Di-n-butylphthalate | 34 | JB |
| 206-44-0 | Fluoranthene | 57 | J |
| 129-00-0 | Pyrene | 230 | U |
| 85-68-7 | Butylbenzylphthalate | 230 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 230 | U |
| 56-55-3 | Benzo (a) anthracene | 230 | U |
| 218-01-9 | Chrysene | 20 | J |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 230 | U |
| 117-84-0 | Di-n-octylphthalate | 230 | U |
| 205-99-2 | Benzo (b) fluoranthene | 230 | U |
| 207-08-9 | Benzo (k) fluoranthene | 230 | U |
| 50-32-8 | Benzo (a) pyrene | 230 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 230 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 230 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 230 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 230 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WB9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-03

Sample wt/vol: 30.4 (g/mL) g Lab File ID: E4687.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 26.7 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 (1 3.237) | 1.46 | 7000 | J |
| 02 | | Unknown-02 (1 3.237) | 1.68 | 6000 | J |
| 03 | | Unknown-03 (1 3.237) | 1.87 | 120 | J |
| 04 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.35 | 300 | JNB |
| 05 | | Unknown-04 (3 7.532) | 6.65 | 100 | JB |
| 06 | | Unknown-05 (4 9.779) | 10.41 | 95 | J |
| 07 | 000057-74-9 | Chlordane | 12.10 | 230 | JN |
| 08 | | Unknown-06 (5 13.923) | 12.16 | 250 | J |
| 09 | | | | | |
| 10 | | | | | |
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| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

06/01/12
S. Vakati
06/01/12

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 64462 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 268988 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 172043 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.779 | 188 | 326187 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.923 | 240 | 325631 | 20.0000 ug/mL | 0.02 |
| 88) Perylene-d12 | 15.992 | 264 | 303255 | 20.0000 ug/mL | 0.03 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0 | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | |
| 7) Phenol-d5 | 3.018 | 99 | 217111 | 15.88 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 39.70% | | |
| 18) Bis(2-chloroethyl)ethe... | 2.986 | 67 | 120574 | 16.98 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 42.45% | | |
| 19) 2-Chlorophenol-d4 | 3.050 | 132 | 185014 | 14.38 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 35.95% | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 145329 | 13.14 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 32.85% | | |
| 22) Nitrobenzene-d5 | 3.985 | 128 | 109421 | 18.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 45.88% | | |
| 35) 2-Nitrophenol-d4 | 4.423 | 143 | 112429 | 16.68 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 41.70% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.786 | 165 | 183591 | 16.40 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 41.00% | | |
| 37) 4-Chloroaniline-d4 | 5.112 | 131 | 250532 | 22.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 56.38% | | |
| 62) Acenaphthylene-d8 | 7.270 | 160 | 746547 | 20.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 50.03% | | |
| 63) 4-Nitrophenol-d4 | 8.093 | 143 | 99265 | 17.85 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 44.63% | | |
| 64) Dimethylphthalate-d6 | 7.318 | 166 | 598533 | 19.76 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 49.40% | | |
| 65) Fluorene-d10 | 8.317 | 176 | 493456 | 20.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 51.78% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.619 | 200 | 51404 | 8.60 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 21.50% | | |
| 79) Anthracene-d10 | 9.859 | 188 | 803166 | 19.31 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 48.27% | | |
| 87) Pyrene-d10 | 11.962 | 212 | 963490 | 23.38 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 58.45% | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 723516 | 20.02 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 50.05% | | |
| **Target Compounds** | | | | | Qvalue |
| 4) 1,4-Dioxane | 0.999 | 88 | 45565m | 12.5559 ug/mL | |
| 49) Acenaphthene | 7.580 | 153 | 10358 | 0.4514 ug/mL | 92 |
| 52) Dibenzofuran | 7.842 | 168 | 9698 | 0.2991 ug/mL | 89 |
| 57) Fluorene | 8.360 | 166 | 15277 | 0.5391 ug/mL | 93 |
| 73) Phenanthrene | 9.813 | 178 | 90950 | 2.2016 ug/mL | 98 |
| 74) Anthracene | 9.888 | 178 | 28656 | 0.6713 ug/mL | 93 |
| 76) Di-n-butylphthalate | 11.025 | 149 | 39194 | 0.7512 ug/mL | 97 |
| 77) Fluoranthene | 11.665 | 202 | 59957 | 1.2776 ug/mL | 94 |
| 85) Chrysene | 13.957 | 228 | 17299 | 0.4365 ug/mL | 88 |

RS 8/21

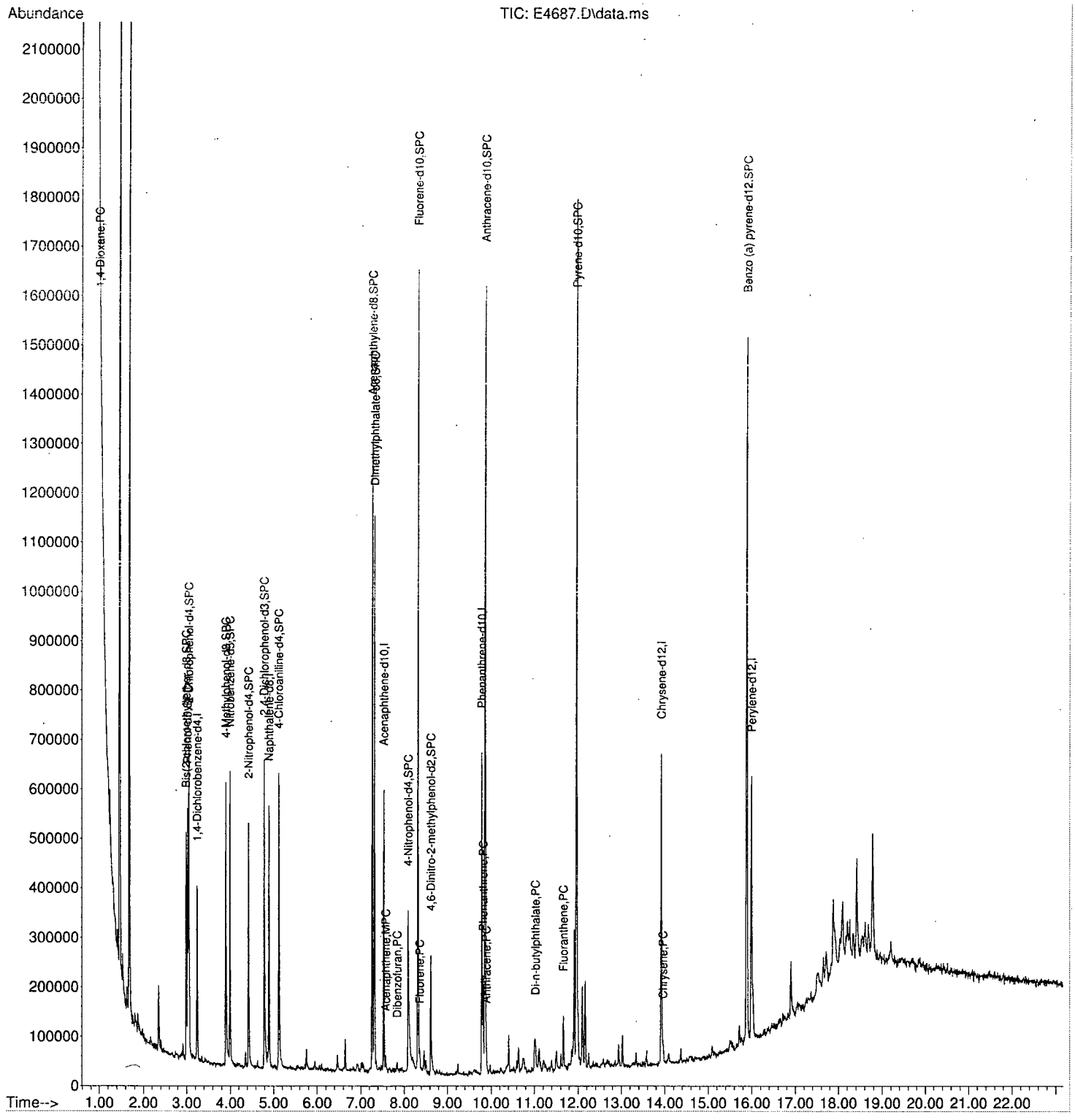
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

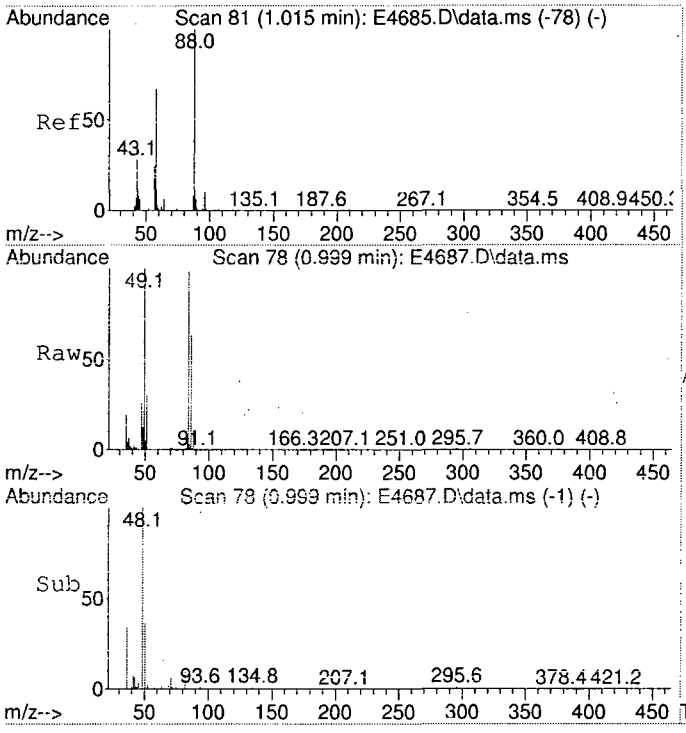
Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration



Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

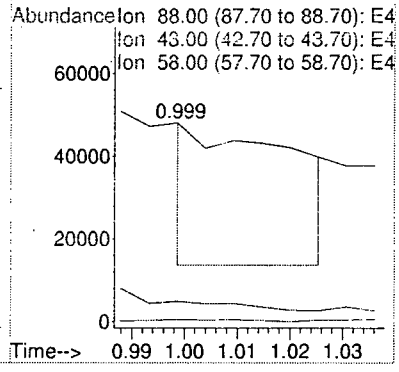
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

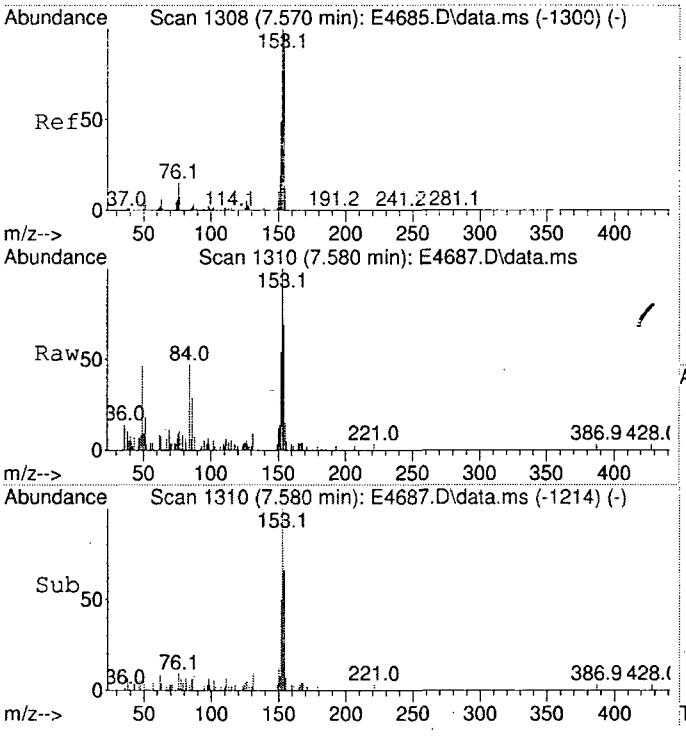



#4
1,4-Dioxane
Concen: 12.5559 ug/mL m
RT: 1.00 min Scan# 78
Delta R.T. -0.02 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion: 88 Resp: 45565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 294.1 | 18.4 | 27.6# |
| 58 | 0.0 | 36.8 | 55.2# |

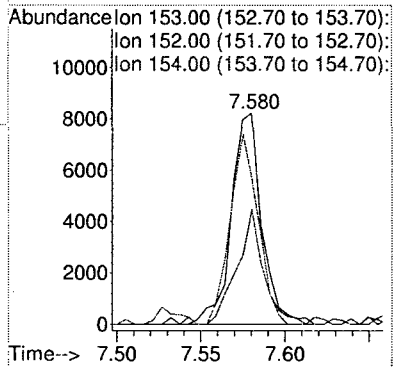



#49
Acenaphthene
Concen: 0.4514 ug/mL
RT: 7.58 min Scan# 1310
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

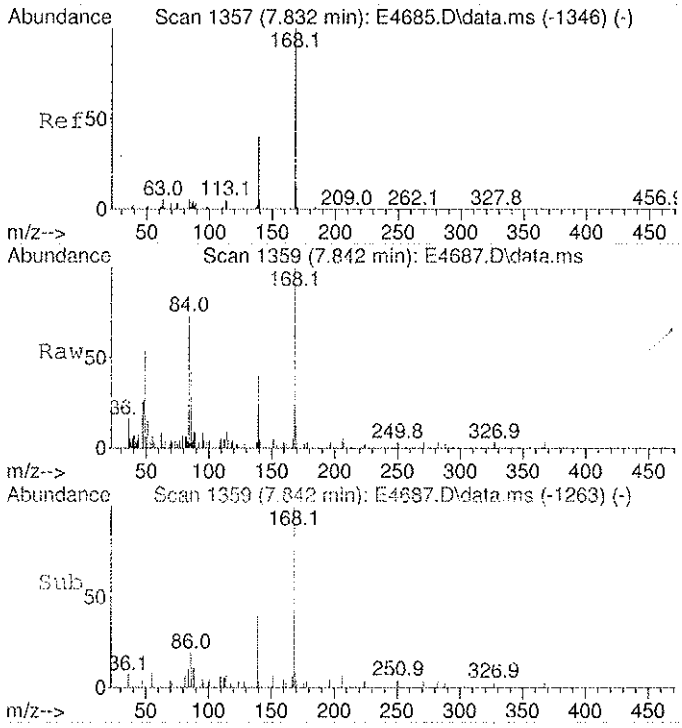
Tgt Ion:153 Resp: 10358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 152 | 47.2 | 26.7 | 66.7 |
| 154 | 82.7 | 73.3 | 113.3 |



Data File : X:\msdchem\1\data\E4687.D  Vial: 4
Acq On : 26 May 2012 12:56  Operator: RS
Sample : 0015977-03  Inst : E-5973
Misc : F5WB9 30.4GM/0.5ML GPC SOIL  Multiplr: 1.00
MS Integration Params: RTEINT.P

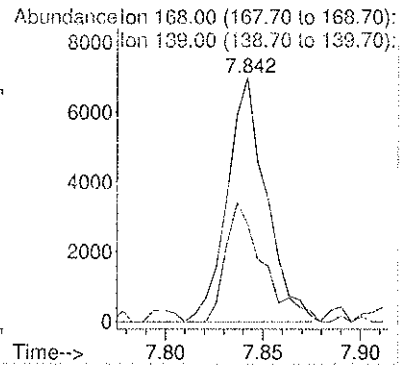
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

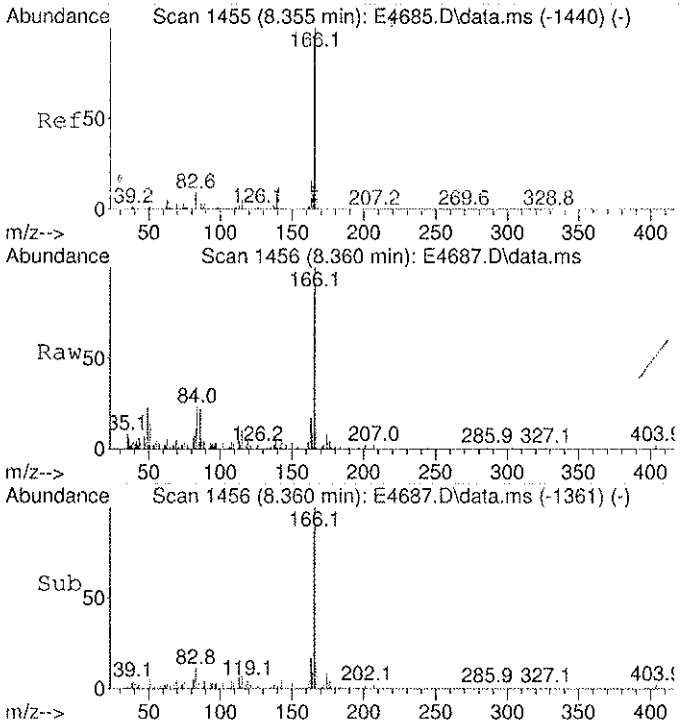



#52
Dibenzofuran
Concen: 0.2991 ug/mL
RT: 7.84 min Scan# 1359
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:168 Resp: 9698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 47.1 | 20.2 | 60.2 |

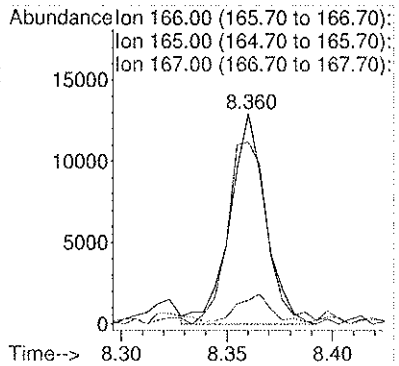



#57
Fluorene
Concen: 0.5391 ug/mL
RT: 8.36 min Scan# 1456
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:166 Resp: 15277

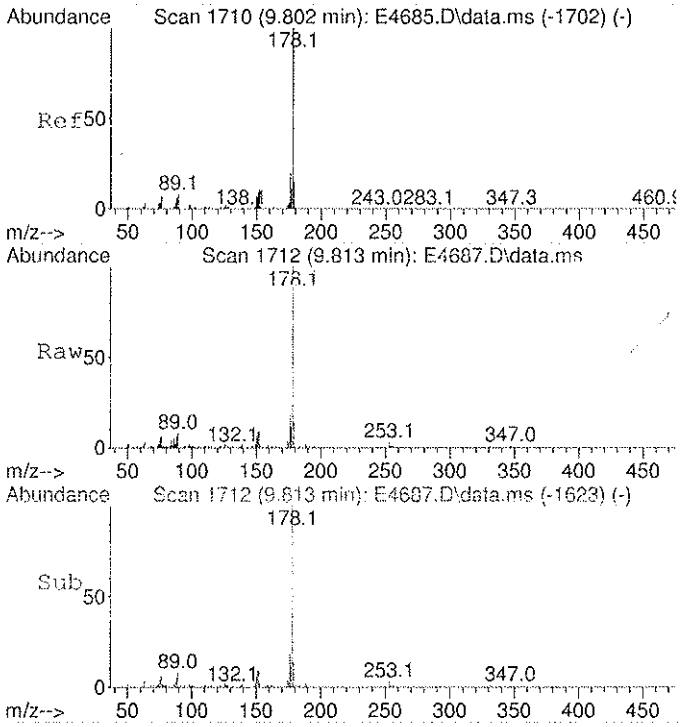
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 98.9 | 71.9 | 111.9 |
| 167 | 14.3 | 0.0 | 33.5 |



Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

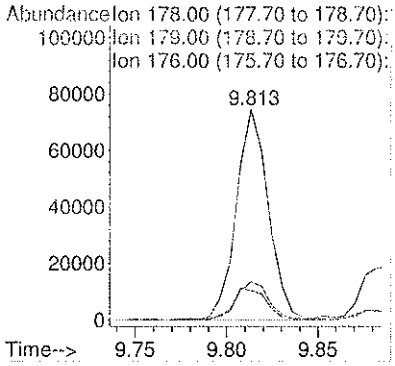
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

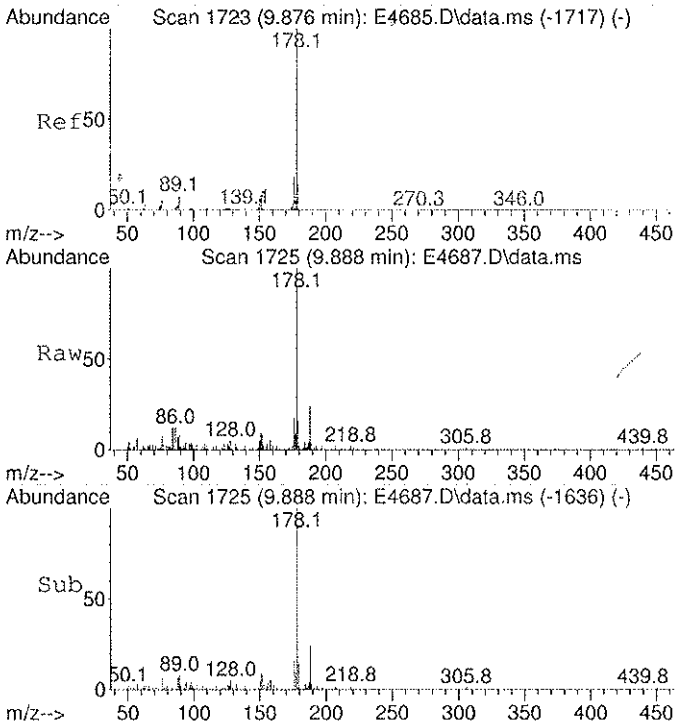



#73
Phenanthrene
Concen: 2.2016 ug/mL
RT: 9.81 min Scan# 1712
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:178 Resp: 90950

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.3 | 0.0 | 35.0 |
| 176 | 18.4 | 0.0 | 38.0 |

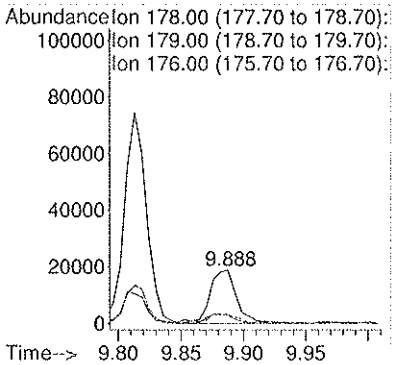



#74
Anthracene
Concen: 0.6713 ug/mL
RT: 9.89 min Scan# 1725
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:178 Resp: 28656

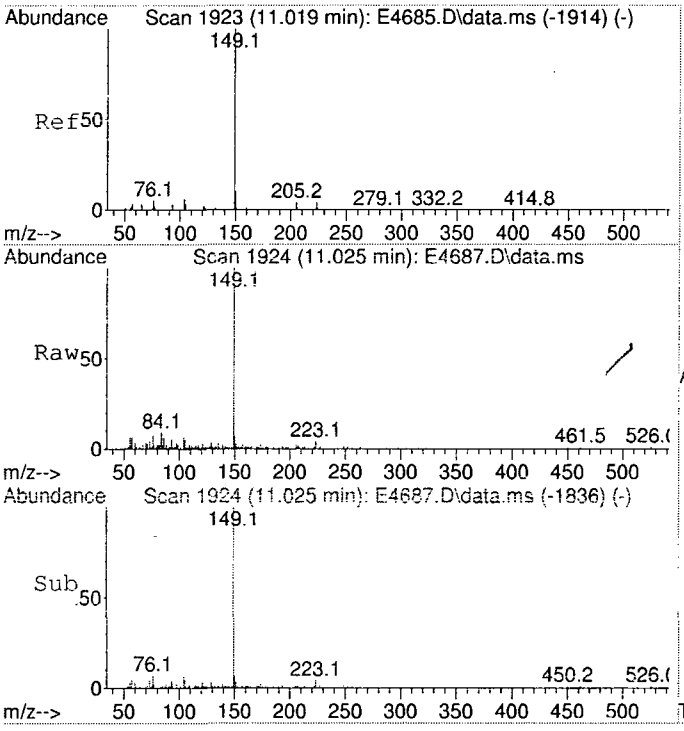
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 20.0 | 0.0 | 35.2 |
| 176 | 19.8 | 0.0 | 38.1 |



Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

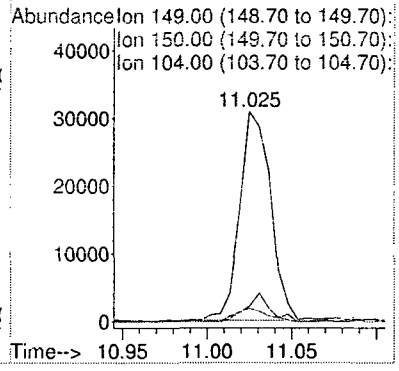
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

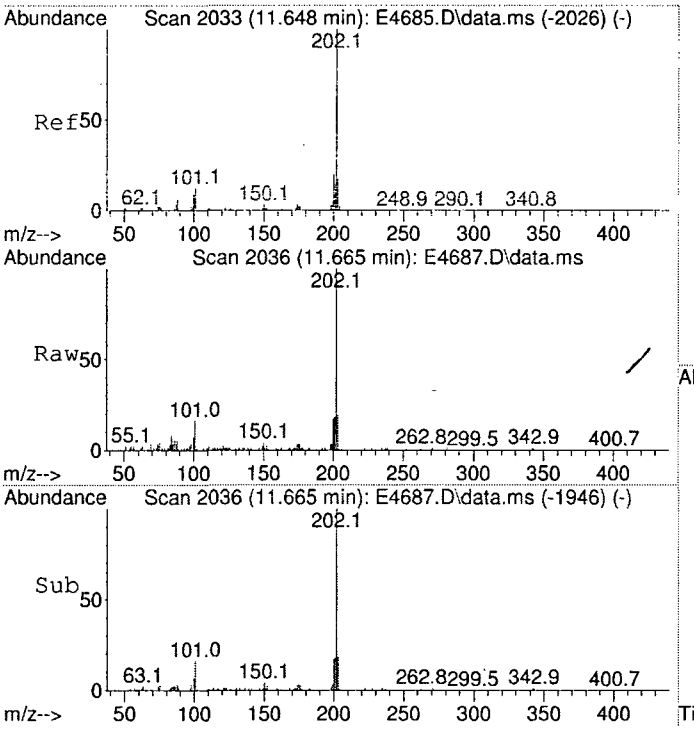



#76
Di-n-butylphthalate
Concen: 0.7512 ug/mL
RT: 11.02 min Scan# 1924
Delta R.T. 0.01 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:149 Resp: 39194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 10.8 | 0.0 | 29.0 |
| 104 | 6.2 | 0.0 | 26.3 |

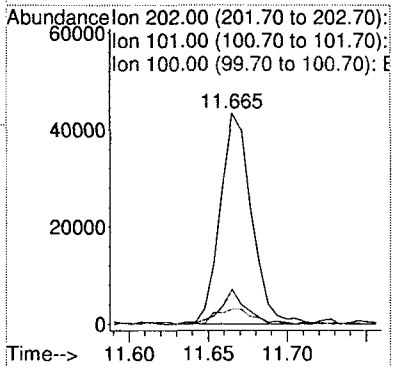



#77
Fluoranthene
Concen: 1.2776 ug/mL
RT: 11.67 min Scan# 2036
Delta R.T. 0.02 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:202 Resp: 59957

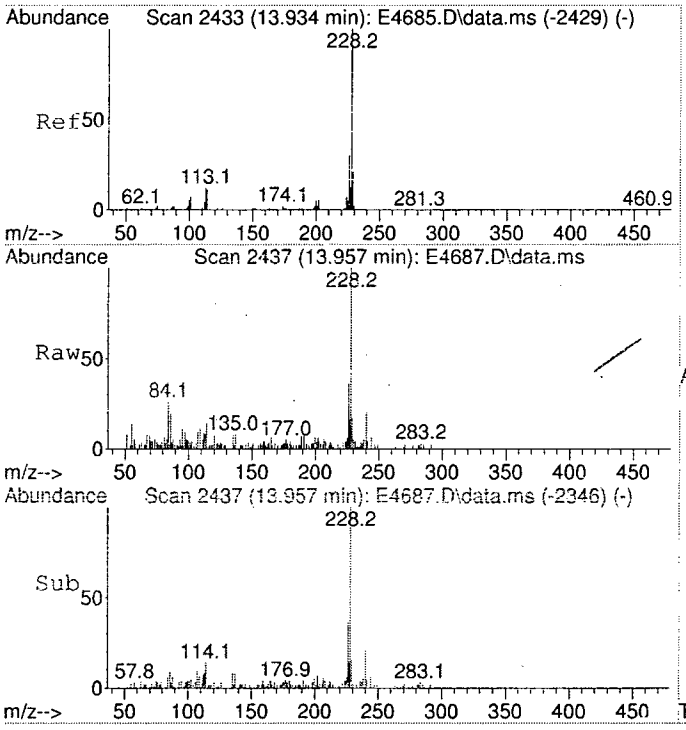
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 13.0 | 0.0 | 29.8 |
| 100 | 8.3 | 0.0 | 27.6 |



Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

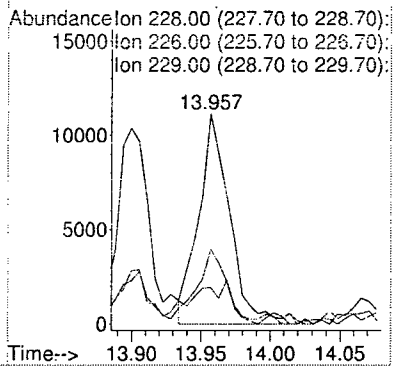
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration




#85
Chrysene
Concen: 0.4365 ug/mL
RT: 13.96 min Scan# 2437
Delta R.T. 0.02 min
Lab File: E4687.D
Acq: 26 May 2012 12:56

Tgt Ion:228 Resp: 17299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 33.7 | 9.4 | 49.4 |
| 229 | 27.3 | 0.0 | 38.9 |



LSC Area Percent Report

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4687.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.458 | 162 | 164 | 176 | rVB | 3407283 | 3207914 | 100.00% | 10.192% |
| 2 | 1.677 | 202 | 205 | 218 | rVB | 3145617 | 2764271 | 86.17% | 8.783% |
| 3 | 1.869 | 239 | 241 | 247 | rBV5 | 38240 | 55765 | 1.74% | 0.177% |
| 4 | 2.350 | 328 | 331 | 338 | rVB | 127187 | 138918 | 4.33% | 0.441% |
| 5 | 2.916 | 434 | 437 | 441 | rVB4 | 30036 | 30836 | 0.96% | 0.098% |
| 6 | 2.986 | 447 | 450 | 454 | rBV | 459697 | 462902 | 14.43% | 1.471% |
| 7 | 3.018 | 454 | 456 | 459 | rVV | 508056 | 556772 | 17.36% | 1.769% |
| 8 | 3.050 | 459 | 462 | 476 | rVB | 628753 | 803411 | 25.04% | 2.553% |
| 9 | 3.237 | 493 | 497 | 506 | rVB | 352010 | 414109 | 12.91% | 1.316% |
| 10 | 3.894 | 616 | 620 | 633 | rBV | 571584 | 731828 | 22.81% | 2.325% |
| 11 | 3.985 | 633 | 637 | 652 | rVB | 592391 | 711951 | 22.19% | 2.262% |
| 12 | 4.354 | 703 | 706 | 711 | rVB4 | 30888 | 37533 | 1.17% | 0.119% |
| 13 | 4.423 | 715 | 719 | 742 | rVB | 492665 | 614553 | 19.16% | 1.953% |
| 14 | 4.786 | 783 | 787 | 799 | rBV | 623632 | 863598 | 26.92% | 2.744% |
| 15 | 4.866 | 799 | 802 | 803 | rVV3 | 31252 | 32850 | 1.02% | 0.104% |
| 16 | 4.893 | 803 | 807 | 817 | rVB | 527623 | 598933 | 18.67% | 1.903% |
| 17 | 5.053 | 834 | 837 | 841 | rVB5 | 8989 | 12661 | 0.39% | 0.040% |
| 18 | 5.112 | 844 | 848 | 859 | rBV | 592678 | 751490 | 23.43% | 2.388% |
| 19 | 5.556 | 929 | 931 | 937 | rBV6 | 8233 | 10643 | 0.33% | 0.034% |
| 20 | 5.753 | 964 | 968 | 972 | rBV3 | 40366 | 49959 | 1.56% | 0.159% |
| 21 | 5.951 | 1000 | 1005 | 1010 | rVB8 | 18075 | 30283 | 0.94% | 0.096% |
| 22 | 6.052 | 1021 | 1024 | 1029 | rVB6 | 11254 | 14660 | 0.46% | 0.047% |
| 23 | 6.106 | 1031 | 1034 | 1037 | rVB4 | 12104 | 9680 | 0.30% | 0.031% |
| 24 | 6.464 | 1097 | 1101 | 1106 | rBV3 | 28365 | 39578 | 1.23% | 0.126% |
| 25 | 6.603 | 1122 | 1127 | 1130 | rBV7 | 8559 | 16896 | 0.53% | 0.054% |
| 26 | 6.645 | 1130 | 1135 | 1141 | rVB4 | 63295 | 77989 | 2.43% | 0.248% |
| 27 | 6.779 | 1158 | 1160 | 1166 | rBV7 | 5095 | 9101 | 0.28% | 0.029% |
| 28 | 6.822 | 1166 | 1168 | 1171 | rVV4 | 10238 | 8787 | 0.27% | 0.028% |
| 29 | 7.009 | 1201 | 1203 | 1206 | rVV4 | 19486 | 24111 | 0.75% | 0.077% |
| 30 | 7.041 | 1206 | 1209 | 1211 | rVV4 | 19488 | 23378 | 0.73% | 0.074% |
| 31 | 7.067 | 1211 | 1214 | 1217 | rVB5 | 14662 | 17369 | 0.54% | 0.055% |
| 32 | 7.164 | 1230 | 1232 | 1236 | rBV5 | 6618 | 8051 | 0.25% | 0.026% |
| 33 | 7.270 | 1246 | 1252 | 1256 | rBV | 1273289 | 1543778 | 48.12% | 4.905% |
| 34 | 7.313 | 1256 | 1260 | 1267 | rVB | 1109725 | 1297963 | 40.46% | 4.124% |
| 35 | 7.468 | 1287 | 1289 | 1295 | rBV7 | 12936 | 16245 | 0.51% | 0.052% |
| 36 | 7.532 | 1295 | 1301 | 1306 | rVV | 568363 | 696474 | 21.71% | 2.213% |
| 37 | 7.575 | 1306 | 1309 | 1316 | rVV4 | 33404 | 51845 | 1.62% | 0.165% |
| 38 | 7.644 | 1318 | 1322 | 1323 | rBV3 | 8146 | 10098 | 0.31% | 0.032% |
| 39 | 7.660 | 1323 | 1325 | 1335 | rVB10 | 10849 | 19958 | 0.62% | 0.063% |
| 40 | 7.741 | 1335 | 1340 | 1341 | rBV5 | 9381 | 9748 | 0.30% | 0.031% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 7.842 | 1354 | 1359 | 1362 | rBV4 | 17172 | 23272 | 0.73% | 0.074% |
| 42 | 7.949 | 1378 | 1379 | 1385 | rVB6 | 11887 | 12703 | 0.40% | 0.040% |
| 43 | 8.093 | 1402 | 1406 | 1423 | rBV | 317138 | 614490 | 19.16% | 1.952% |
| 44 | 8.317 | 1443 | 1448 | 1454 | rBV | 1613172 | 1888986 | 58.89% | 6.002% |
| 45 | 8.462 | 1470 | 1475 | 1479 | rBV3 | 40064 | 58017 | 1.81% | 0.184% |
| 46 | 8.510 | 1480 | 1484 | 1490 | rVB6 | 28450 | 41613 | 1.30% | 0.132% |
| 47 | 8.562 | 1490 | 1493 | 1496 | rVB4 | 9308 | 8478 | 0.26% | 0.027% |
| 48 | 8.619 | 1498 | 1503 | 1516 | rBV | 243078 | 351353 | 10.95% | 1.116% |
| 49 | 8.756 | 1525 | 1527 | 1533 | rVB7 | 10791 | 12537 | 0.39% | 0.040% |
| 50 | 8.979 | 1561 | 1566 | 1569 | rVB7 | 7936 | 10383 | 0.32% | 0.033% |
| 51 | 9.236 | 1606 | 1611 | 1616 | rBV6 | 21776 | 30514 | 0.95% | 0.097% |
| 52 | 9.367 | 1630 | 1634 | 1635 | rVB3 | 8371 | 8357 | 0.26% | 0.027% |
| 53 | 9.596 | 1668 | 1674 | 1677 | rBV7 | 10486 | 23307 | 0.73% | 0.074% |
| 54 | 9.659 | 1683 | 1685 | 1689 | rVB5 | 8071 | 8662 | 0.27% | 0.028% |
| 55 | 9.779 | 1700 | 1706 | 1710 | rBV | 651391 | 840044 | 26.19% | 2.669% |
| 56 | 9.813 | 1710 | 1712 | 1715 | rVV2 | 200418 | 224770 | 7.01% | 0.714% |
| 57 | 9.859 | 1715 | 1720 | 1733 | rVV | 1596372 | 2015203 | 62.82% | 6.403% |
| 58 | 9.973 | 1733 | 1740 | 1748 | rVB8 | 19117 | 37430 | 1.17% | 0.119% |
| 59 | 10.150 | 1769 | 1771 | 1775 | rBV5 | 7534 | 8318 | 0.26% | 0.026% |
| 60 | 10.225 | 1782 | 1784 | 1788 | rBV4 | 9571 | 10472 | 0.33% | 0.033% |
| 61 | 10.356 | 1803 | 1807 | 1810 | rVV6 | 9468 | 14679 | 0.46% | 0.047% |
| 62 | 10.408 | 1813 | 1816 | 1821 | rVB | 73874 | 88437 | 2.76% | 0.281% |
| 63 | 10.488 | 1828 | 1830 | 1835 | rVV6 | 5866 | 8550 | 0.27% | 0.027% |
| 64 | 10.528 | 1835 | 1837 | 1841 | rVB5 | 12337 | 12503 | 0.39% | 0.040% |
| 65 | 10.596 | 1843 | 1849 | 1851 | rBV7 | 25510 | 32357 | 1.01% | 0.103% |
| 66 | 10.636 | 1853 | 1856 | 1861 | rVB2 | 50131 | 61963 | 1.93% | 0.197% |
| 67 | 10.693 | 1861 | 1866 | 1867 | rBV5 | 7366 | 8822 | 0.28% | 0.028% |
| 68 | 10.739 | 1870 | 1874 | 1875 | rBV4 | 20811 | 22210 | 0.69% | 0.071% |
| 69 | 10.939 | 1906 | 1909 | 1913 | rBV6 | 11141 | 16212 | 0.51% | 0.052% |
| 70 | 11.008 | 1916 | 1921 | 1923 | rBV2 | 65025 | 86968 | 2.71% | 0.276% |
| 71 | 11.111 | 1932 | 1939 | 1942 | rBV9 | 39155 | 70123 | 2.19% | 0.223% |
| 72 | 11.139 | 1942 | 1944 | 1949 | rVB6 | 21275 | 27509 | 0.86% | 0.087% |
| 73 | 11.208 | 1951 | 1956 | 1963 | rBV9 | 20783 | 54606 | 1.70% | 0.173% |
| 74 | 11.259 | 1963 | 1965 | 1973 | rVB9 | 15120 | 25861 | 0.81% | 0.082% |
| 75 | 11.316 | 1973 | 1975 | 1977 | rBV3 | 7319 | 8156 | 0.25% | 0.026% |
| 76 | 11.396 | 1983 | 1989 | 1995 | rVB10 | 25447 | 50626 | 1.58% | 0.161% |
| 77 | 11.442 | 1995 | 1997 | 2000 | rBV4 | 7333 | 8085 | 0.25% | 0.026% |
| 78 | 11.511 | 2003 | 2009 | 2016 | rVB4 | 36564 | 78848 | 2.46% | 0.251% |
| 79 | 11.608 | 2022 | 2026 | 2032 | rBV9 | 30283 | 43672 | 1.36% | 0.139% |
| 80 | 11.665 | 2032 | 2036 | 2041 | rVV2 | 102222 | 136092 | 4.24% | 0.432% |
| 81 | 11.785 | 2054 | 2057 | 2058 | rBV2 | 14604 | 14793 | 0.46% | 0.047% |
| 82 | 11.854 | 2065 | 2069 | 2072 | rBV6 | 32056 | 47622 | 1.48% | 0.151% |
| 83 | 11.916 | 2073 | 2080 | 2083 | rVV4 | 269623 | 378534 | 11.80% | 1.203% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 11.962 | 2083 | 2088 | 2099 | rVB | 1744314 | 2419135 | 75.41% | 7.686% |
| 85 | 12.099 | 2106 | 2112 | 2118 | rVV4 | 156510 | 226942 | 7.07% | 0.721% |
| 86 | 12.162 | 2118 | 2123 | 2130 | rVB6 | 175887 | 248032 | 7.73% | 0.788% |
| 87 | 12.242 | 2134 | 2137 | 2143 | rVB7 | 30524 | 33307 | 1.04% | 0.106% |
| 88 | 12.351 | 2153 | 2156 | 2158 | rBV4 | 12039 | 10638 | 0.33% | 0.034% |
| 89 | 12.442 | 2170 | 2172 | 2182 | rVB4 | 10428 | 11813 | 0.37% | 0.038% |
| 90 | 12.768 | 2227 | 2229 | 2235 | rBV7 | 8005 | 11938 | 0.37% | 0.038% |
| 91 | 12.934 | 2254 | 2258 | 2269 | rVB7 | 42509 | 65333 | 2.04% | 0.208% |
| 92 | 13.025 | 2270 | 2274 | 2278 | rVB6 | 60347 | 82079 | 2.56% | 0.261% |
| 93 | 13.340 | 2325 | 2329 | 2335 | rVB7 | 29633 | 45803 | 1.43% | 0.146% |
| 94 | 13.523 | 2359 | 2361 | 2365 | rVB5 | 11432 | 12078 | 0.38% | 0.038% |
| 95 | 13.580 | 2367 | 2371 | 2376 | rVB7 | 31912 | 45974 | 1.43% | 0.146% |
| 96 | 13.917 | 2424 | 2430 | 2435 | rBV | 625294 | 898622 | 28.01% | 2.855% |
| 97 | 14.363 | 2505 | 2508 | 2515 | rVB3 | 29683 | 44085 | 1.37% | 0.140% |
| 98 | 15.088 | 2633 | 2635 | 2641 | rVB7 | 20493 | 28557 | 0.89% | 0.091% |
| 99 | 15.883 | 2768 | 2774 | 2783 | rVB | 1418977 | 2072212 | 64.60% | 6.584% |
| 100 | 15.992 | 2788 | 2793 | 2811 | rBV | 527425 | 914219 | 28.50% | 2.905% |

Sum of corrected areas: 31473793

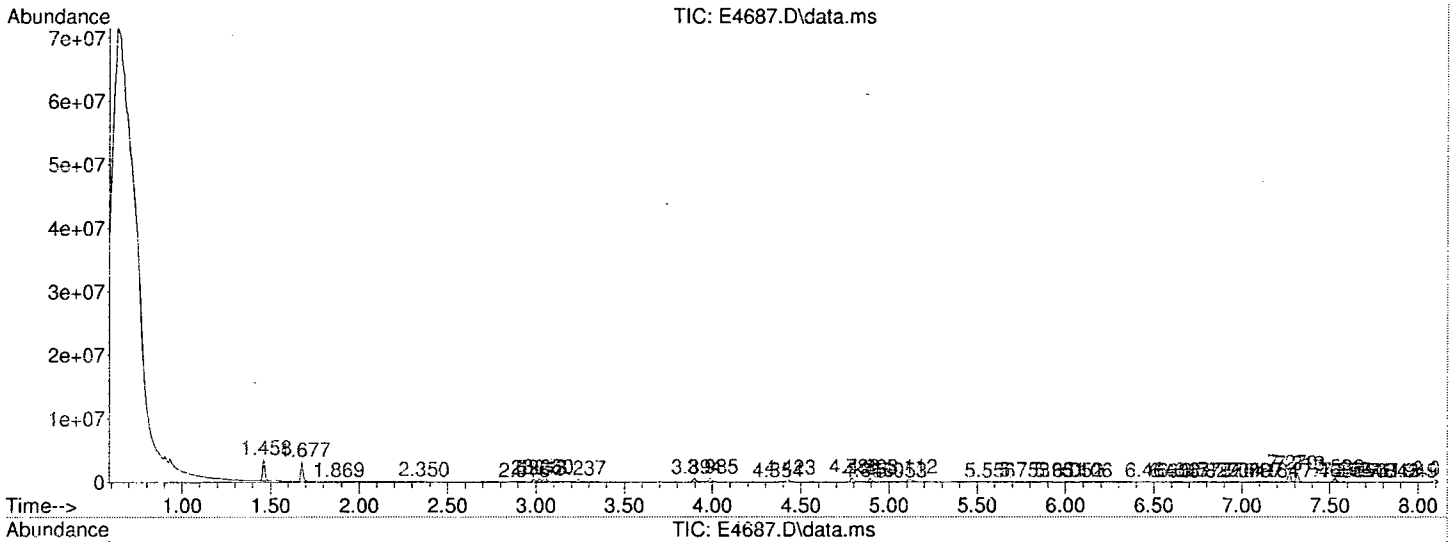
LSC Report - Integrated Chromatogram

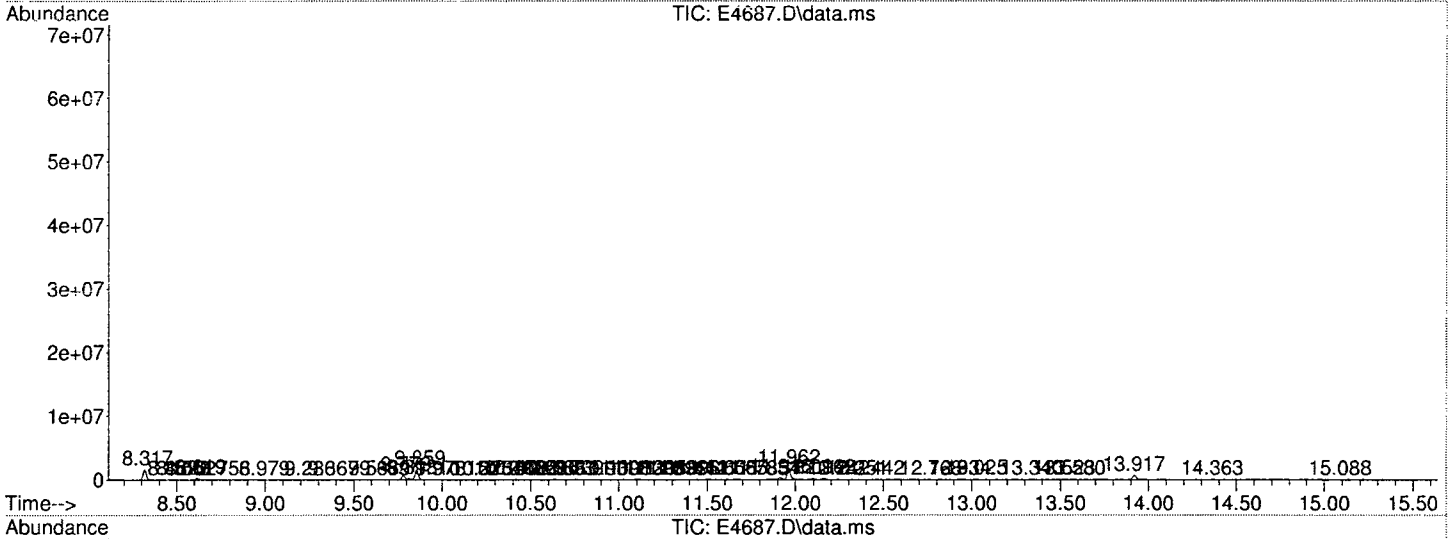
Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

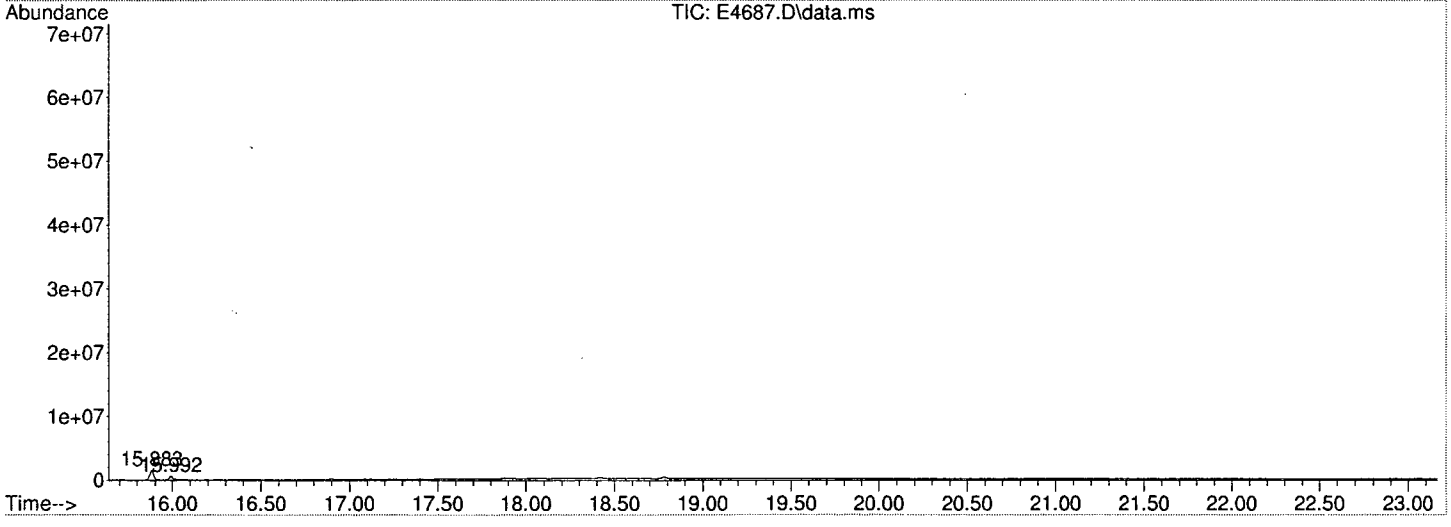
Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

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Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
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Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

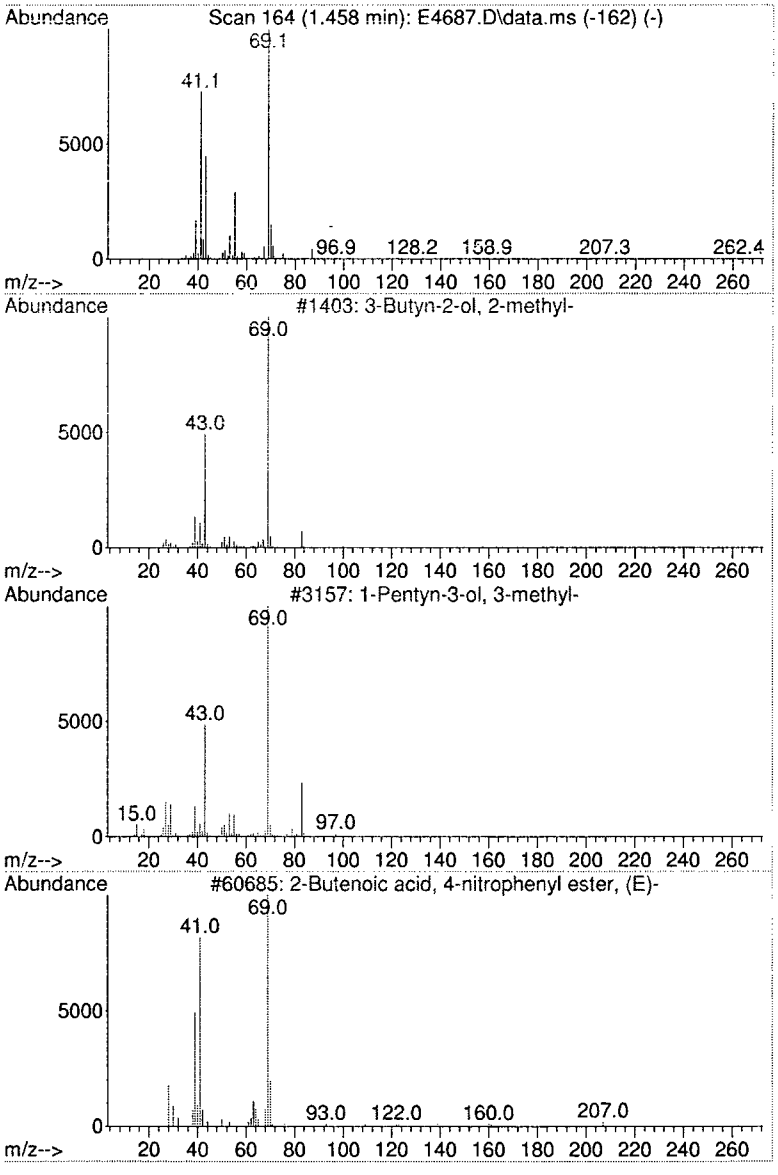
**********

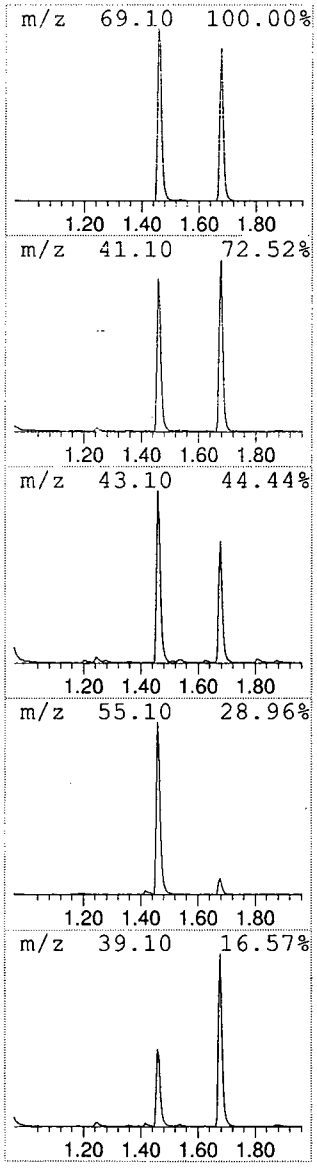
Peak Number 1 3-Butyn-2-ol, 2-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.458 | 154.93 ug/mL | 3207910 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 59 |
| 2 | 1-Pentyn-3-ol, 3-methyl- | 98 | C6H10O | 000077-75-8 | 38 |
| 3 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 36 |
| 4 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 9 |
| 5 | 4-Heptanol, 2,6-dimethyl- | 144 | C9H20O | 000108-82-7 | 9 |

Unknown



Library Search Compound Report

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Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

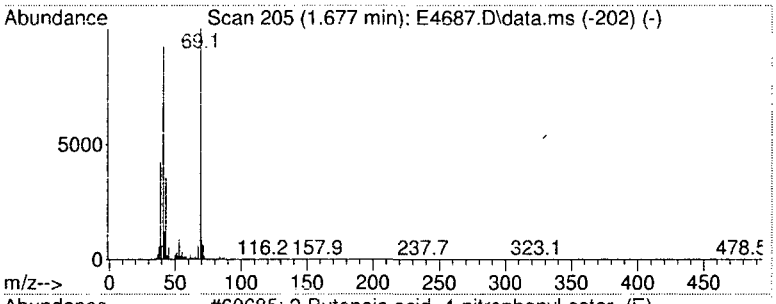
**********

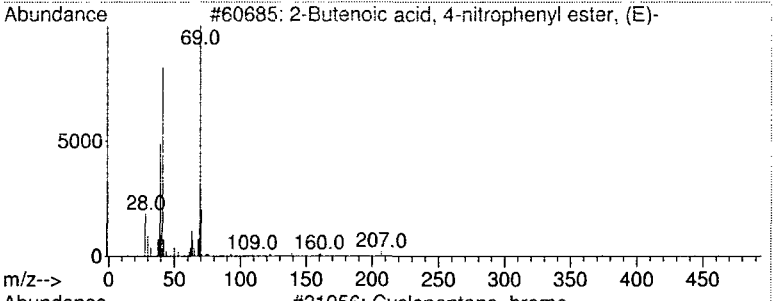
Peak Number 2 2-Butenoic acid, 4-nitrophe... Concentration Rank 2

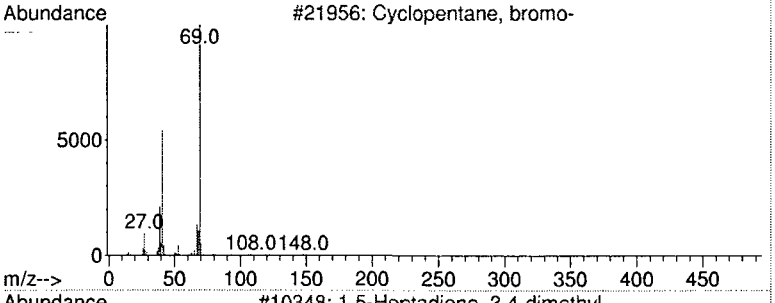
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.677 | 133.51 ug/mL | 2764270 | 1,4-Dichlorobenzene-d4 | 3.237 |

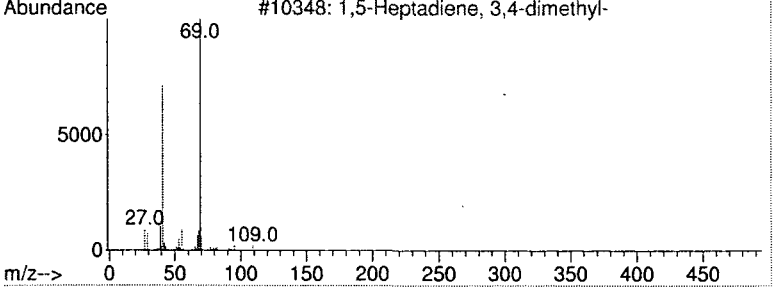
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 56 |
| 2 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 56 |
| 3 | 1,5-Heptadiene, 3,4-dimethyl- | 124 | C9H16 | 1000061-77-9 | 40 |
| 4 | 1-Butene, 3,3-dimethyl- | 84 | C6H12 | 000558-37-2 | 36 |
| 5 | 1,5-Heptadiene, 3,6-dimethyl- | 124 | C9H16 | 034891-10-6 | 33 |

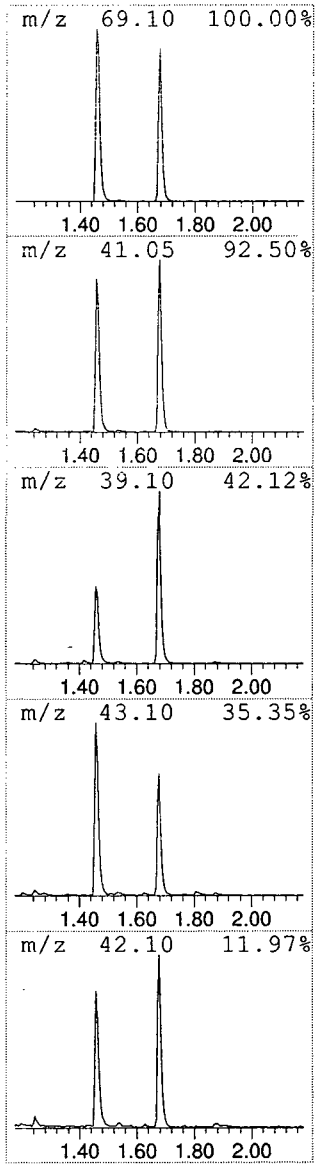
Unknown



Library Search Compound Report

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Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

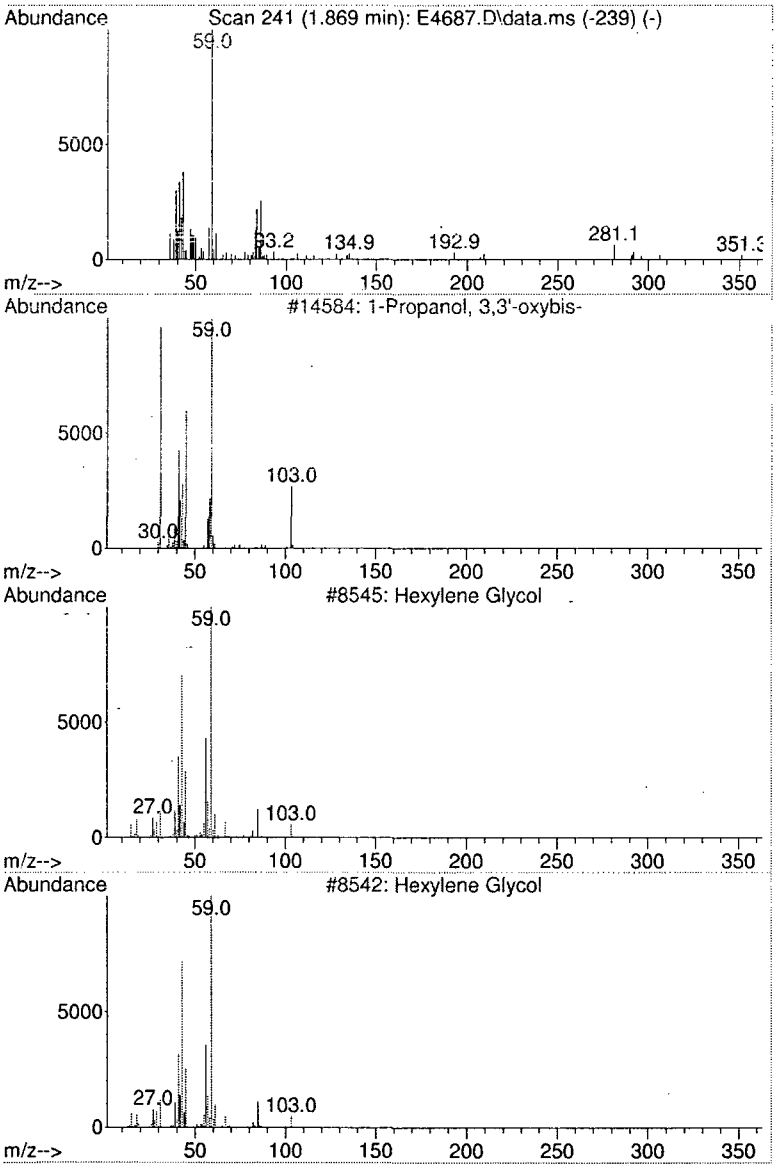
**********

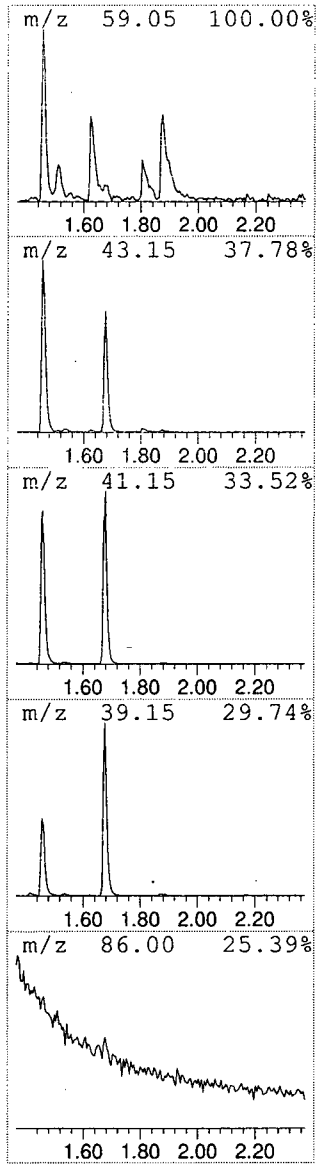
Peak Number 3 1-Propanol, 3,3'-oxybis- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.869 | 2.69 ug/mL | 55765 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Propanol, 3,3'-oxybis- | 134 | C6H14O3 | 002396-61-4 | 35 |
| 2 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 32 |
| 3 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 32 |
| 4 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 32 |
| 5 | 2-Furanmethanol, tetrahydro-.alp... | 238 | C15H26O2 | 026184-88-3 | 25 |

Unknown



Library Search Compound Report

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

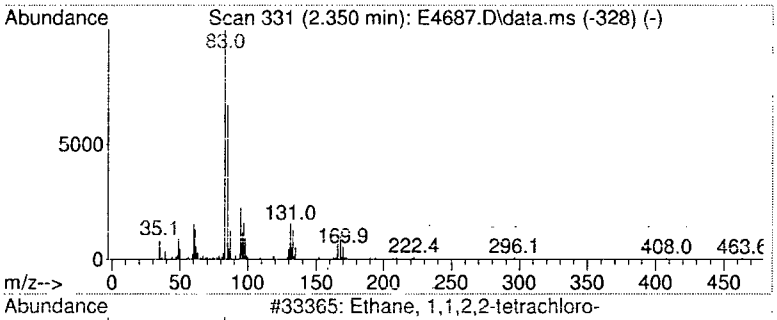
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

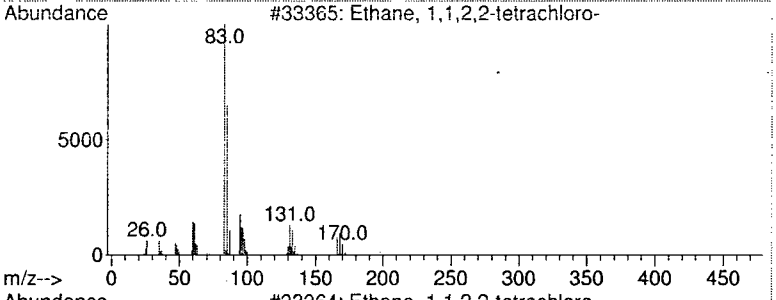
**********

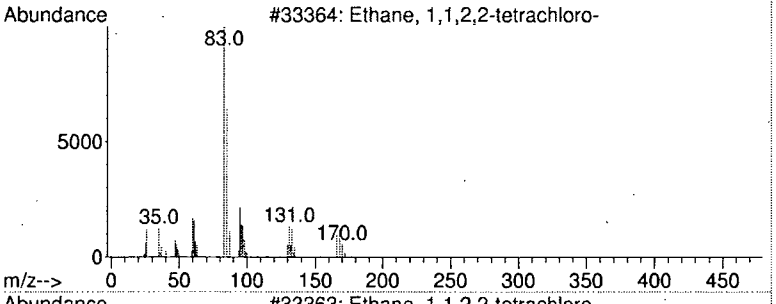
Peak Number 4 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 3

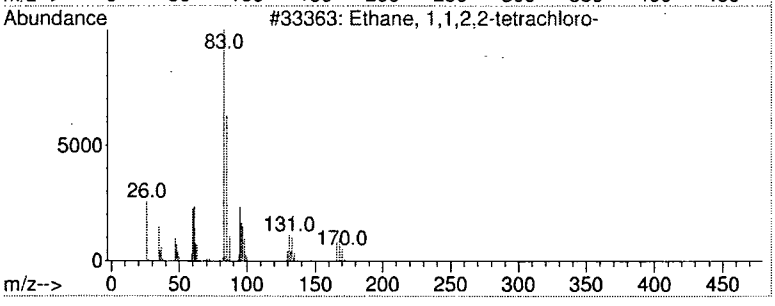
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.350 | 6.71 ug/mL | 138918 | 1,4-Dichlorobenzene-d4 | 3.237 |

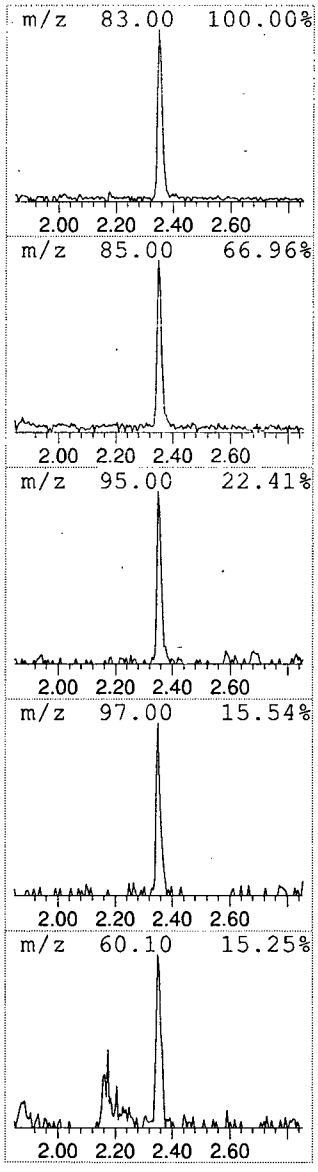
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 95✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 94 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 93 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 90 |
| 5 | Methane, bromodichloro- | 162 | CHBrCl2 | 000075-27-4 | 49 |



Library Search Compound Report

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

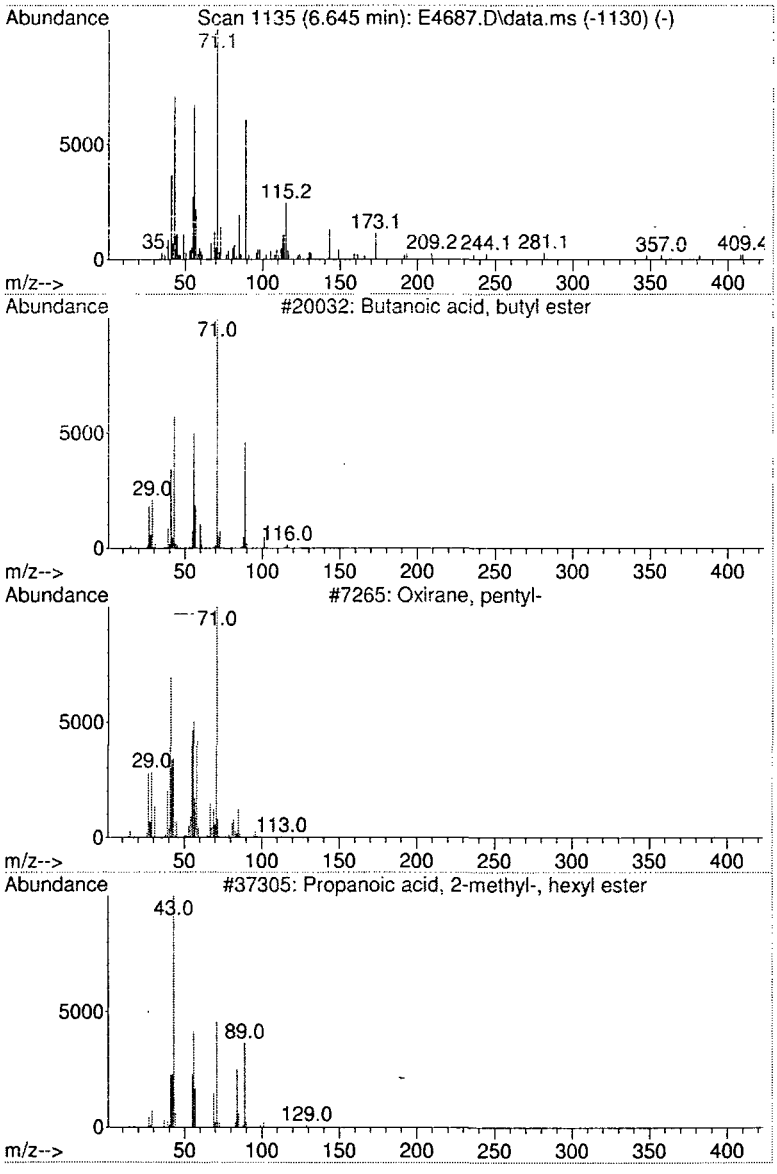
**********

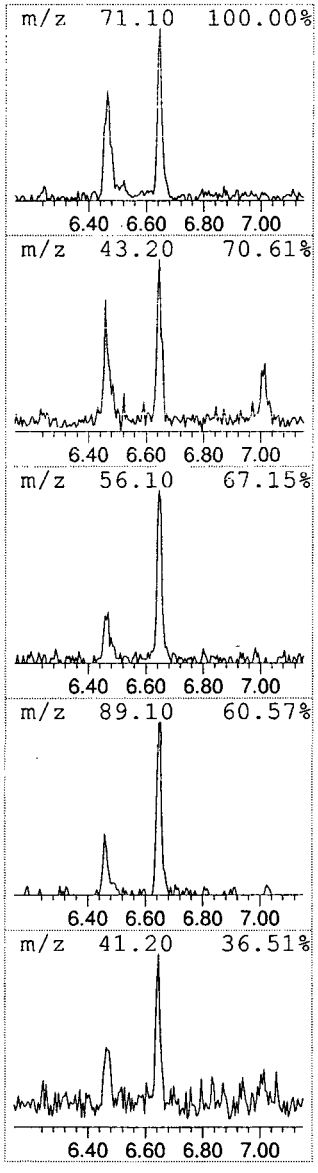
Peak Number 5 Butanoic acid, butyl ester Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.645 | 2.24 ug/mL | 77989 | Acenaphthene-d10 | 7.532 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butanoic acid, butyl ester | 144 | C8H16O2 | 000109-21-7 | 53 |
| 2 | Oxirane, pentyl- | 114 | C7H14O | 005063-65-0 | 37 |
| 3 | Propanoic acid, 2-methyl-, hexyl... | 172 | C10H20O2 | 002349-07-7 | 37 |
| 4 | 2-Hexen-1-ol, 3-methyl-, (E)- | 114 | C7H14O | 030801-96-8 | 35 |
| 5 | Propanoic acid, 2-methyl-, propy... | 130 | C7H14O2 | 000644-49-5 | 32 |

Unknown



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DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

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Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

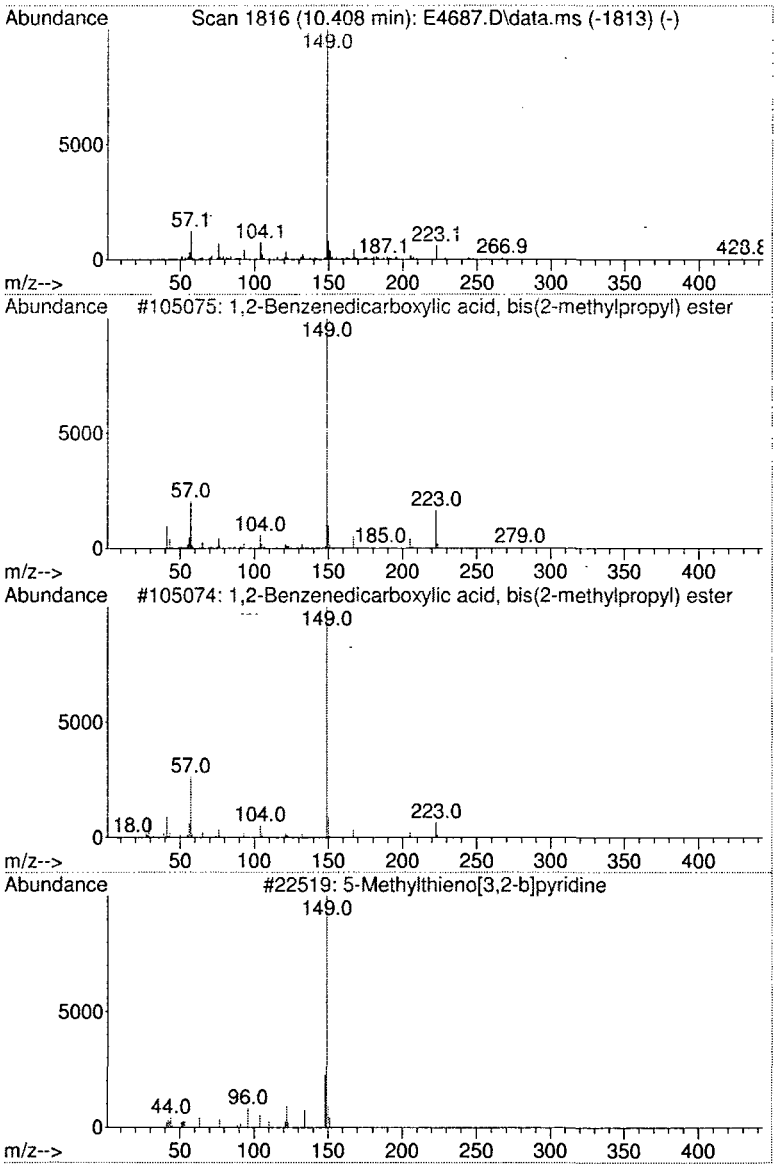
**********

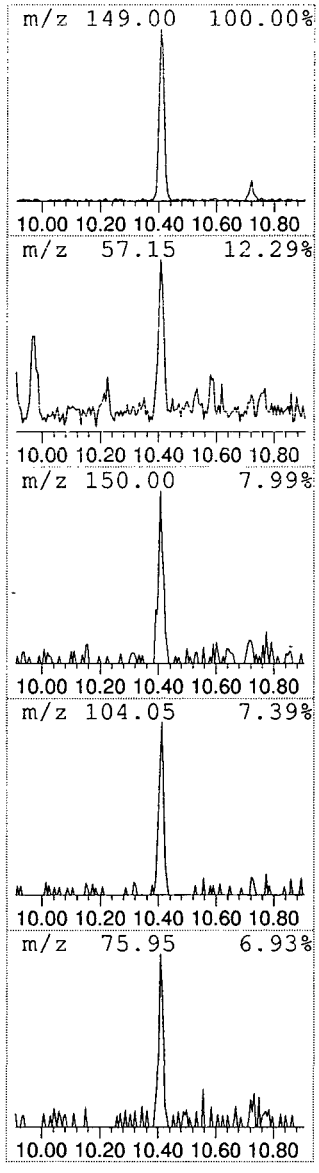
Peak Number 6 1,2-Benzenedicarboxylic aci... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.408 | 2.11 ug/mL | 88437 | Phenanthrene-d10 | 9.779 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 64 |
| 2 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 64 |
| 3 | 5-Methylthieno[3,2-b]pyridine | 149 | C8H7NS | 001759-29-1 | 59 |
| 4 | 1,2-Benzenedicarboxylic acid, bu... | 334 | C20H30O4 | 000084-78-6 | 56 |
| 5 | Benzene, 1-isothiocyanato-2-methyl- | 149 | C8H7NS | 000614-69-7 | 50 |

Unknown



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DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
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Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

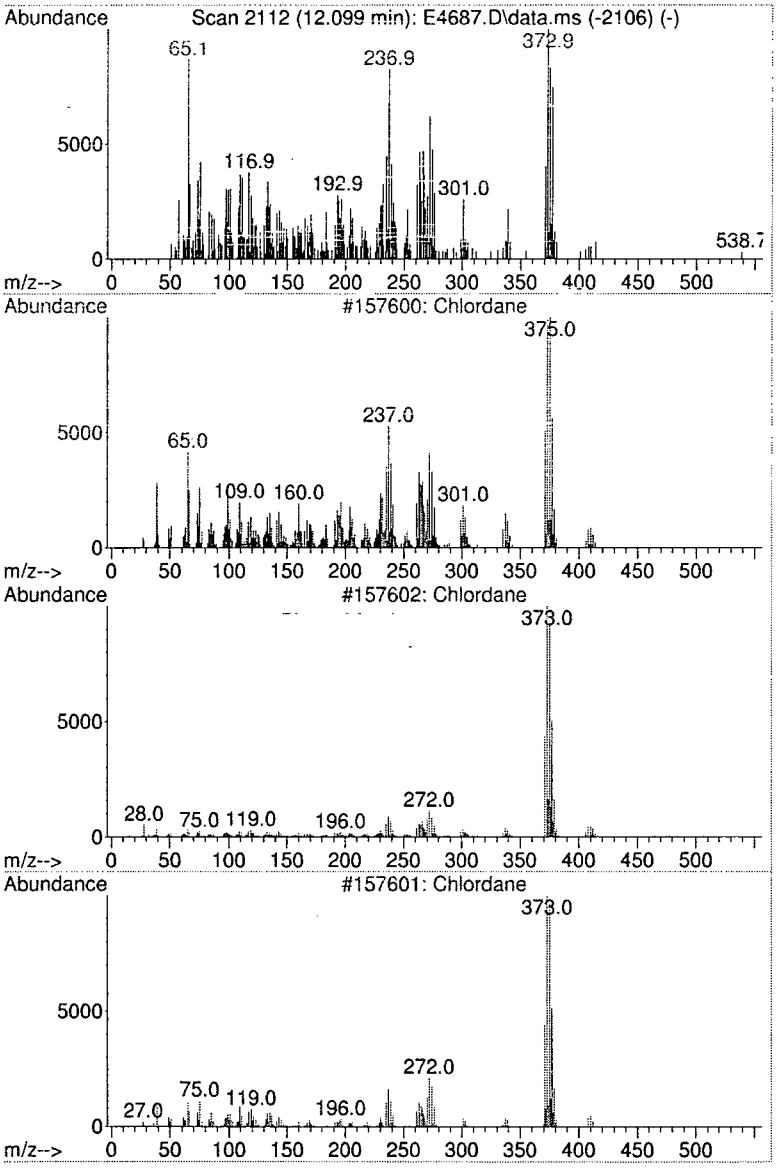
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

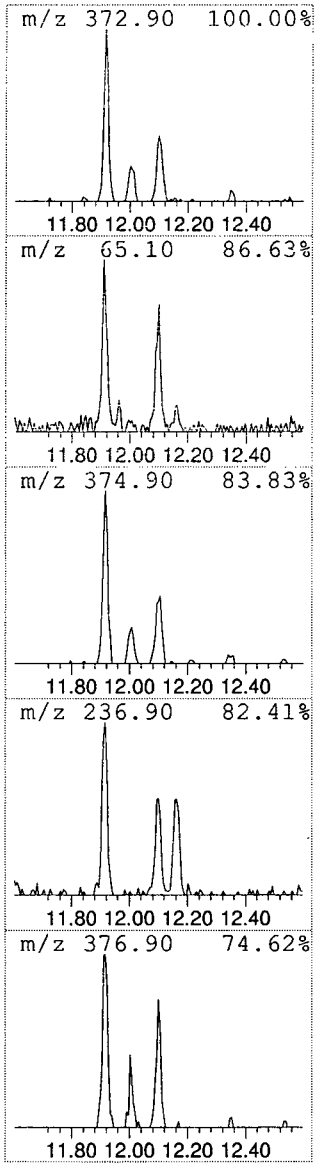
**********

Peak Number 7 Chlordane Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.099 | 5.05 ug/mL | 226942 | Chrysene-d12 | 13.923 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Chlordane | 406 | C10H6Cl8 | 000057-74-9 | 96 ✓ |
| 2 | Chlordane | 406 | C10H6Cl8 | 000057-74-9 | 95 |
| 3 | Chlordane | 406 | C10H6Cl8 | 000057-74-9 | 86 |
| 4 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 74 |
| 5 | trans-Chlordane | 406 | C10H6Cl8 | 005103-74-2 | 51 |



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Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
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Quant Title : CLP SOM1.2 BNA Calibration

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TIC Integration Parameters: LSCINT.P

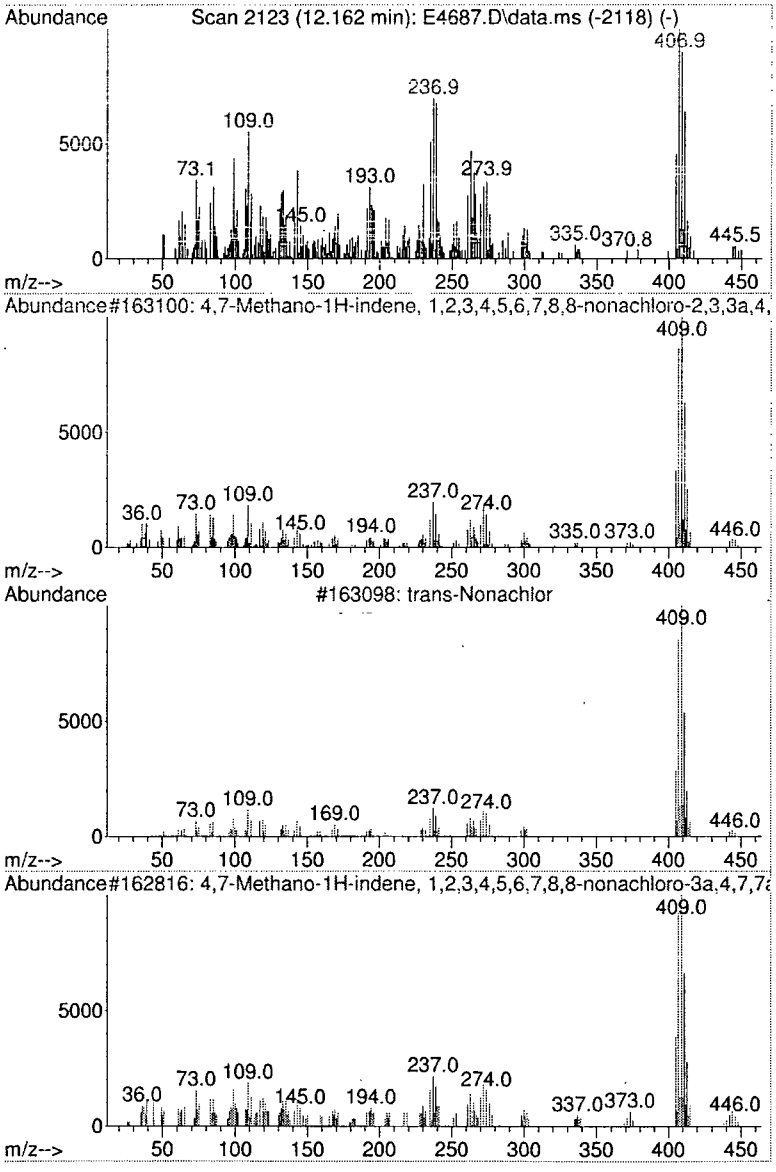
**********

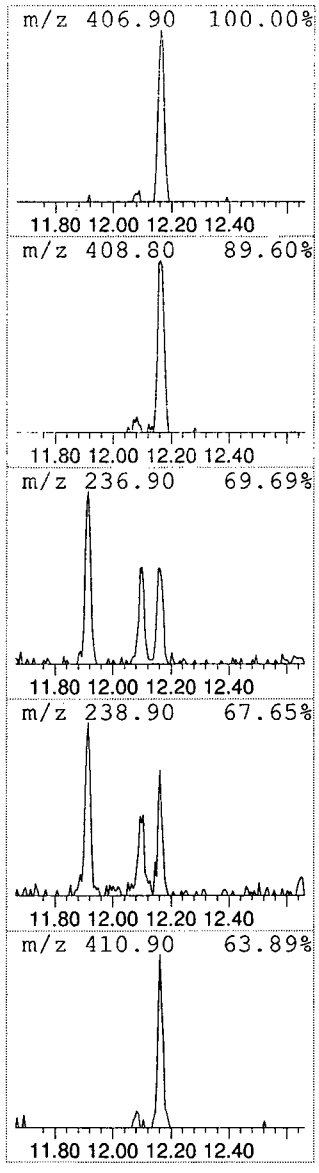
Peak Number 8 4,7-Methano-1H-indene, 1,2,... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.162 | 5.52 ug/mL | 248032 | Chrysene-d12 | 13.923 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4,7-Methano-1H-indene, 1,2,3,4,5... | 440 | C10H5Cl9 | 003734-49-4 | 70 |
| 2 | trans-Nonachlor | 440 | C10H5Cl9 | 039765-80-5 | 64 |
| 3 | 4,7-Methano-1H-indene, 1,2,3,4,5... | 438 | C10H3Cl9 | 021641-70-3 | 58 |
| 4 | trans-Nonachlor | 440 | C10H5Cl9 | 039765-80-5 | 49 |
| 5 | cis-Nonachlor | 440 | C10H5Cl9 | 005103-73-1 | 42 |

Unknown



Tentatively Identified Compound (LSC) summary

Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 05:59:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

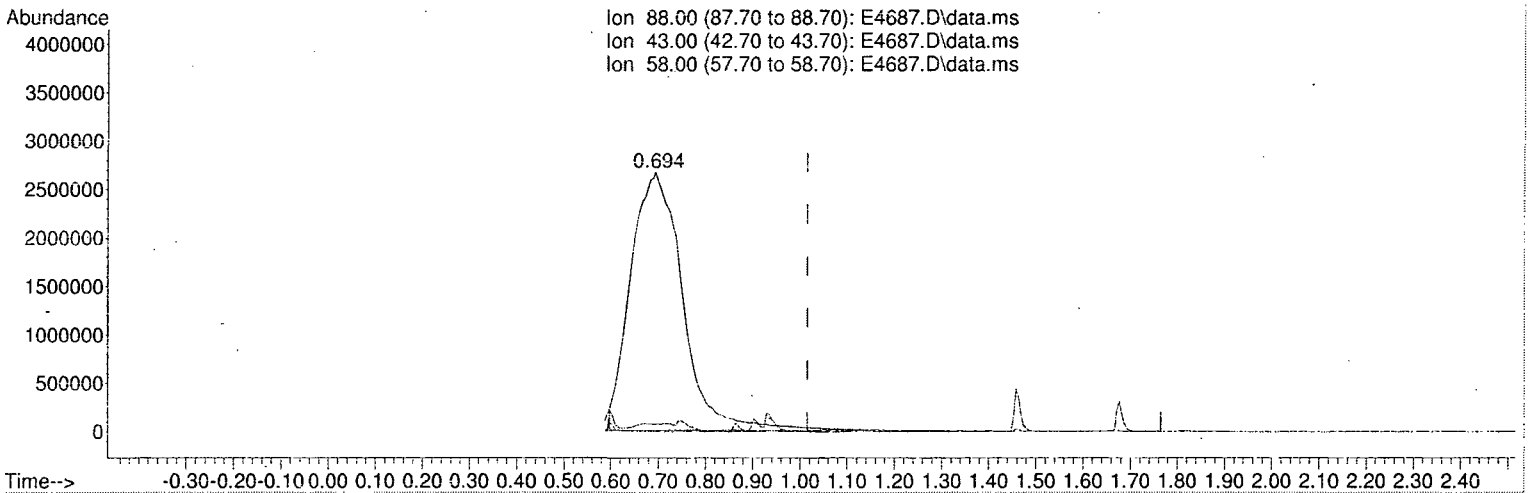
| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 3-Butyn-2-ol, 2... | 1.458 | 154.9 | ug/mL | 3207910 | 1 | 3.237 | 414109 | 20.0 |
| 2-Butenoic acid... | 1.677 | 133.5 | ug/mL | 2764270 | 1 | 3.237 | 414109 | 20.0 |
| 1-Propanol, 3,3... | 1.869 | 2.7 | ug/mL | 55765 | 1 | 3.237 | 414109 | 20.0 |
| Ethane, 1,1,2,2... | 2.350 | 6.7 | ug/mL | 138918 | 1 | 3.237 | 414109 | 20.0 |
| Butanoic acid, ... | 6.645 | 2.2 | ug/mL | 77989 | 3 | 7.532 | 696474 | 20.0 |
| 1,2-Benzenedica... | 10.408 | 2.1 | ug/mL | 88437 | 4 | 9.779 | 840044 | 20.0 |
| Chlordane | 12.099 | 5.1 | ug/mL | 226942 | 5 | 13.923 | 898622 | 20.0 |
| 4,7-Methano-1H-... | 12.162 | 5.5 | ug/mL | 248032 | 5 | 13.923 | 898622 | 20.0 |

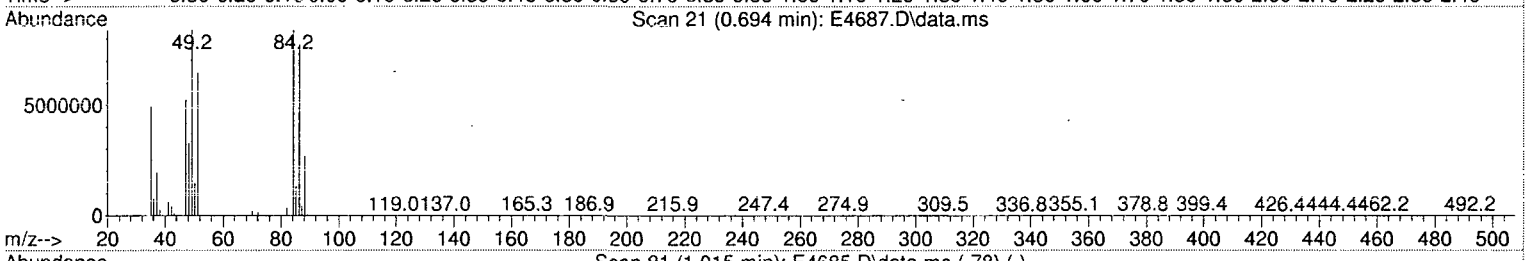
Quantitation Report (Qedit)

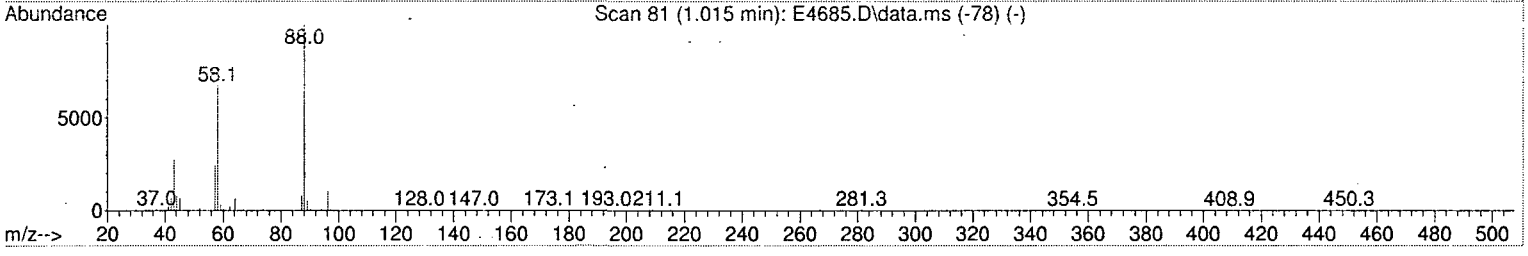
Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:48 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4687.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.694min (-0.321) 5547.77 ug/mL**

**response 20132642**

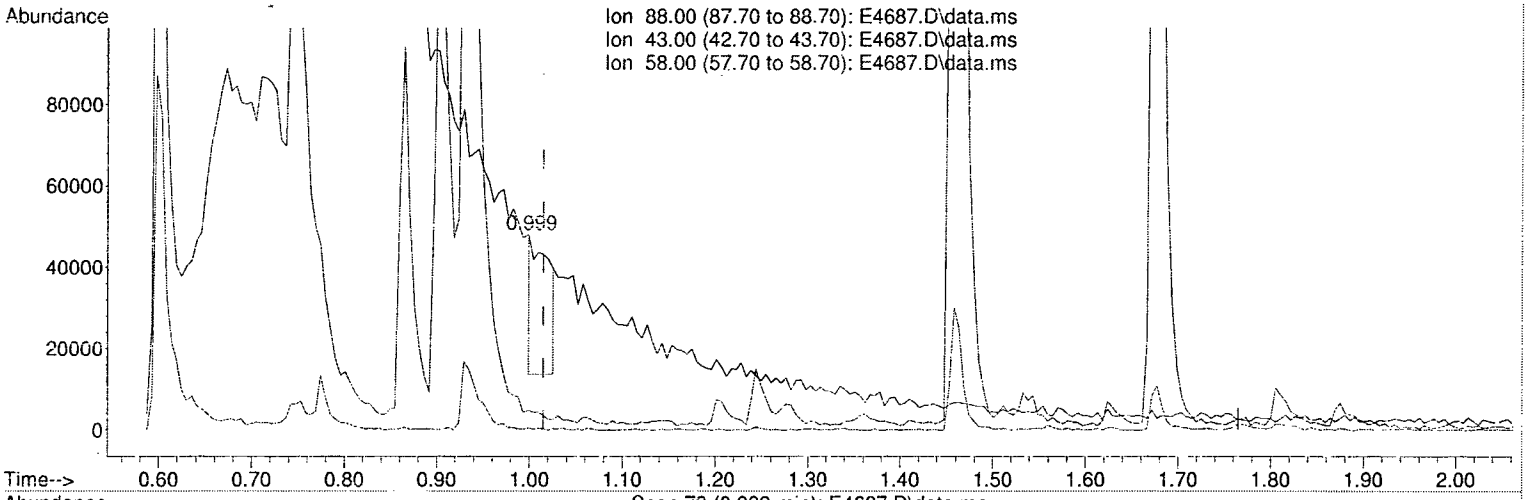
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.67# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

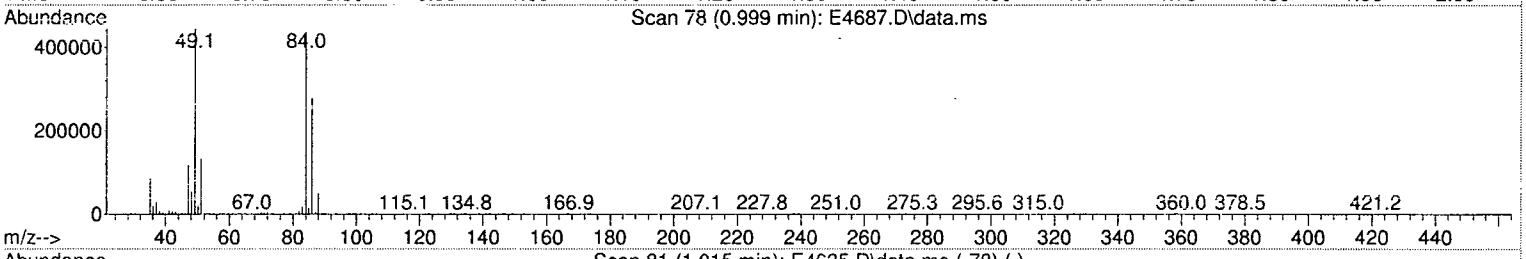
Quantitation Report (Qedit)

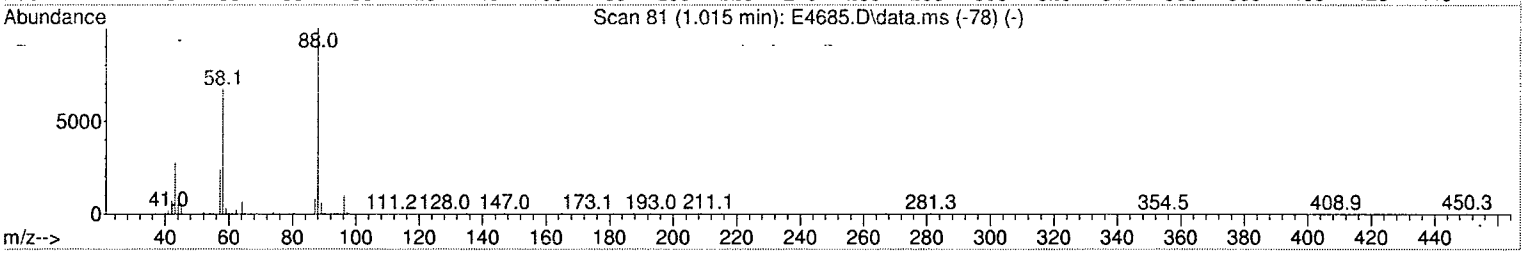
Data File : X:\msdchem\1\data\E4687.D
Acq On : 26 May 2012 12:56
Sample : 0015977-03
Misc : F5WB9 30.4GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:48 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4687.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.999min (-0.016) 12.56 ug/mL m** RS

**response 45565**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 294.09# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 30.2 (g/mL) g Lab File ID: E4688.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 14.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 10.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 2000 | U |
| 108-95-2 | Phenol | 2000 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 2000 | U |
| 95-57-8 | 2-Chlorophenol | 2000 | U |
| 95-48-7 | 2-Methylphenol | 2000 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 2000 | U |
| 98-86-2 | Acetophenone | 2000 | U |
| 106-44-5 | 4-Methylphenol | 2000 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 2000 | U |
| 67-72-1 | Hexachloroethane | 2000 | U |
| 98-95-3 | Nitrobenzene | 2000 | U |
| 78-59-1 | Isophorone | 2000 | U |
| 88-75-5 | 2-Nitrophenol | 2000 | U |
| 105-67-9 | 2,4-Dimethylphenol | 2000 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 2000 | U |
| 120-83-2 | 2,4-Dichlorophenol | 2000 | U |
| 91-20-3 | Naphthalene | 2000 | U |
| 106-47-8 | 4-Chloroaniline | 2000 | U |
| 87-68-3 | Hexachlorobutadiene | 2000 | U |
| 105-60-2 | Caprolactam | 2000 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 2000 | U |
| 91-57-6 | 2-Methylnaphthalene | 2000 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 2000 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 2000 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 2000 | U |
| 92-52-4 | 1,1'-Biphenyl | 2000 | U |
| 91-58-7 | 2-Chloronaphthalene | 2000 | U |
| 88-74-4 | 2-Nitroaniline | 3900 | U |
| 131-11-3 | Dimethylphthalate | 2000 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 2000 | U |
| 208-96-8 | Acenaphthylene | 2000 | U |
| 99-09-2 | 3-Nitroaniline | 3900 | U |
| 83-32-9 | Acenaphthene | 2000 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 30.2 (g/mL) g Lab File ID: E4688.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 14.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 10.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 3900 | U |
| 100-02-7 | 4-Nitrophenol | 3900 | U |
| 132-64-9 | Dibenzofuran | 2000 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 2000 | U |
| 84-66-2 | Diethylphthalate | 2000 | U |
| 86-73-7 | Fluorene | 2000 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 2000 | U |
| 100-01-6 | 4-Nitroaniline | 3900 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 3900 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 2000 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 2000 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 2000 | U |
| 118-74-1 | Hexachlorobenzene | 2000 | U |
| 1912-24-9 | Atrazine | 2000 | U |
| 87-86-5 | Pentachlorophenol | 3900 | U |
| 85-01-8 | Phenanthrene | 390 | J |
| 120-12-7 | Anthracene | 2000 | U |
| 86-74-8 | Carbazole | 2000 | U |
| 84-74-2 | Di-n-butylphthalate | 2000 | U |
| 206-44-0 | Fluoranthene | 220 | J |
| 129-00-0 | Pyrene | 170 | J |
| 85-68-7 | Butylbenzylphthalate | 2000 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 2000 | U |
| 56-55-3 | Benzo (a) anthracene | 2000 | U |
| 218-01-9 | Chrysene | 2000 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 2000 | U |
| 117-84-0 | Di-n-octylphthalate | 2000 | U |
| 205-99-2 | Benzo (b) fluoranthene | 2000 | U |
| 207-08-9 | Benzo (k) fluoranthene | 2000 | U |
| 50-32-8 | Benzo (a) pyrene | 2000 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 2000 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 2000 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 2000 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 2000 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-04

Sample wt/vol: 30.2 (g/mL) g Lab File ID: E4688.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 14.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 10.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 (1 3.242) | 1.46 | 24000 | J |
| 02 | | Unknown-02 (1 3.242) | 1.68 | 12000 | J |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
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| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

06/01/12

S. Vitkati

06/01/12

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.242 | 152 | 64558 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 286368 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 186363 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.779 | 188 | 352004 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.923 | 240 | 362757 | 20.0000 ug/mL | 0.02 |
| 88) Perylene-d12 | 15.992 | 264 | 325665 | 20.0000 ug/mL | 0.03 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0 | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery | = 0.00%# | |
| 7) Phenol-d5 | 3.039 | 99 | 13628 | 1.00 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery | = 2.50%# | |
| 18) Bis(2-chloroethyl)ethe... | 3.007 | 67 | 6926 | 0.97 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery | = 2.43%# | |
| 19) 2-Chlorophenol-d4 | 3.066 | 132 | 12737 | 0.99 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery | = 2.48%# | |
| 20) 4-Methylphenol-d8 | 3.915 | 113 | 10272 | 0.93 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery | = 2.33%# | |
| 22) Nitrobenzene-d5 | 4.006 | 128 | 6278 | 0.99 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery | = 2.48%# | |
| 35) 2-Nitrophenol-d4 | 4.444 | 143 | 6369 | 0.89 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery | = 2.23%# | |
| 36) 2,4-Dichlorophenol-d3 | 4.813 | 165 | 12524 | 1.05 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery | = 2.63%# | |
| 37) 4-Chloroaniline-d4 | 5.144 | 131 | 8207 | 0.69 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery | = 1.72% | |
| 62) Acenaphthylene-d8 | 7.270 | 160 | 51649 | 1.28 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery | = 3.20%# | |
| 63) 4-Nitrophenol-d4 | 8.093 | 143 | 56 | 0.01 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery | = 0.03%# | |
| 64) Dimethylphthalate-d6 | 7.319 | 166 | 45527 | 1.39 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery | = 3.47%# | |
| 65) Fluorene-d10 | 8.323 | 176 | 34746 | 1.35 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery | = 3.38%# | |
| 78) 4,6-Dinitro-2-methylph... | 8.653 | 200 | 290 | 0.04 ug/mL | 0.04 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery | = 0.10%# | |
| 79) Anthracene-d10 | 9.859 | 188 | 59304 | 1.32 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery | = 3.30%# | |
| 87) Pyrene-d10 | 11.962 | 212 | 68773 | 1.50 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery | = 3.75%# | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 51315 | 1.32 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery | = 3.30%# | |
| **Target Compounds** | | | | | Qvalue |
| 4) 1,4-Dioxane | 1.004 | 88 | 41370m | 11.3830 ug/mL | RSPW |
| 73) Phenanthrene | 9.813 | 178 | 44757 | 1.0039 ug/mL | 96 |
| 77) Fluoranthene | 11.671 | 202 | 28115 | 0.5551 ug/mL | 97 |
| 81) Pyrene | 11.991 | 202 | 21250 | 0.4252 ug/mL | 95 |

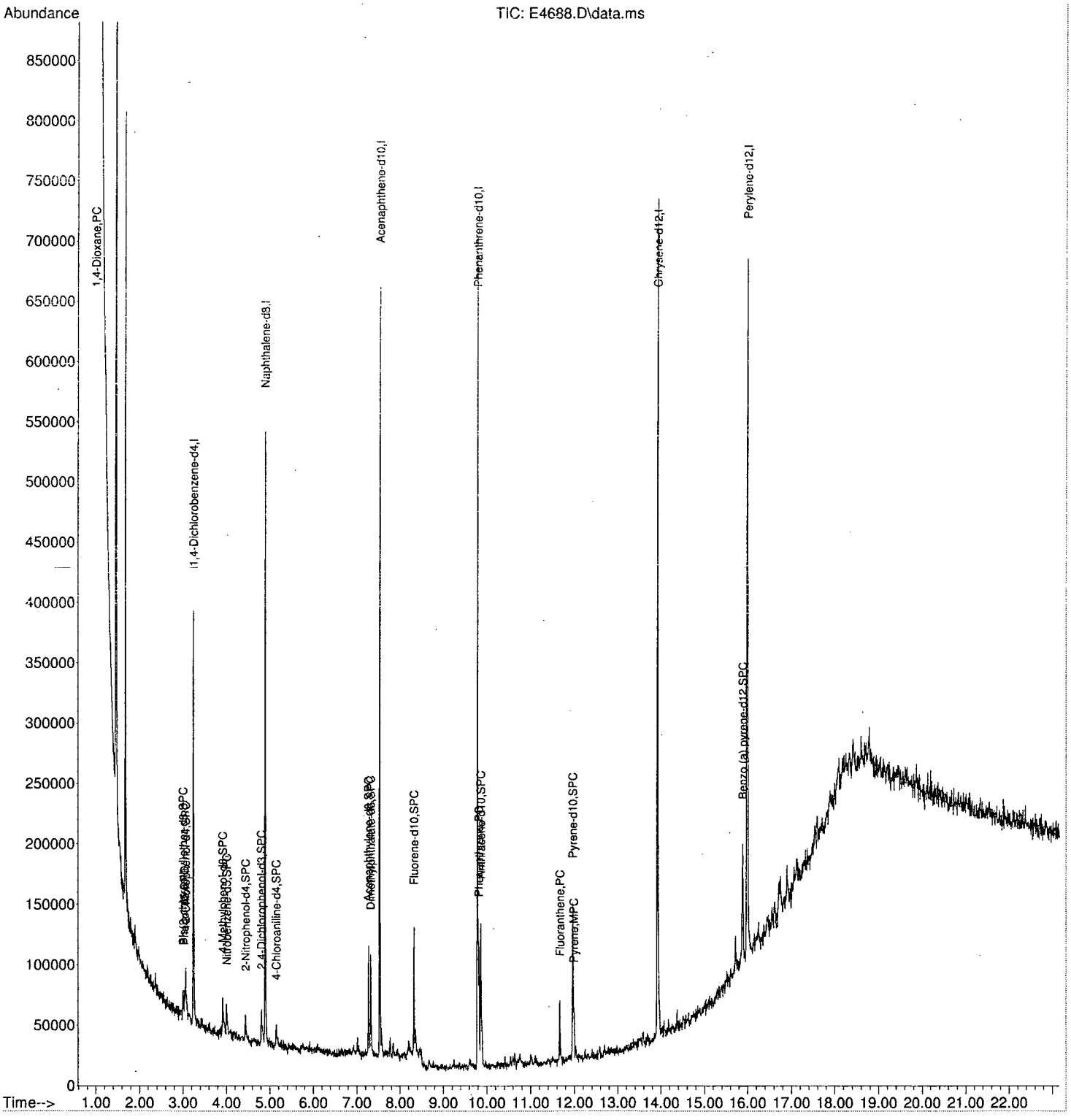
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

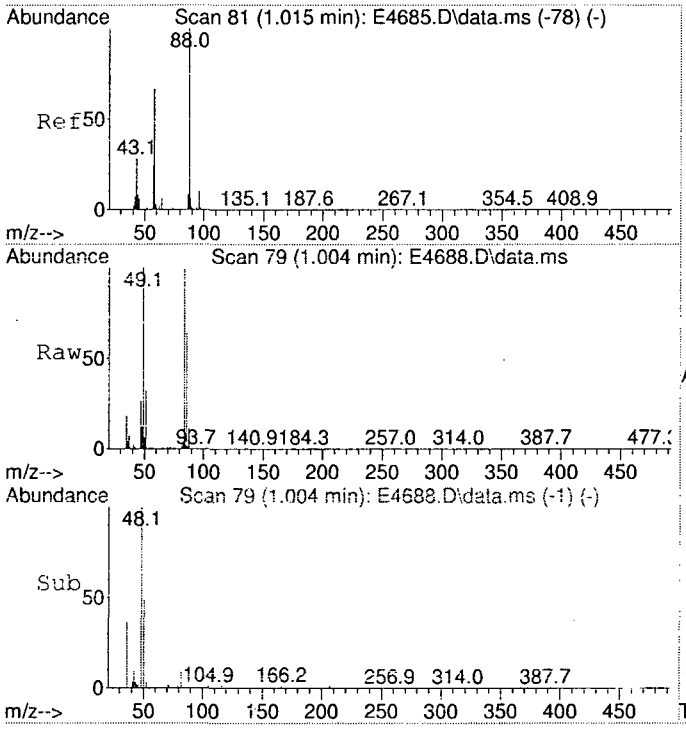
Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration



Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
MS Integration Params: RTEINT.P

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

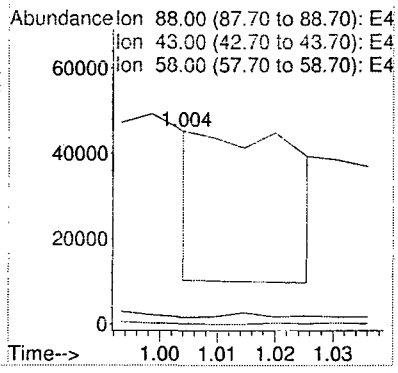
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

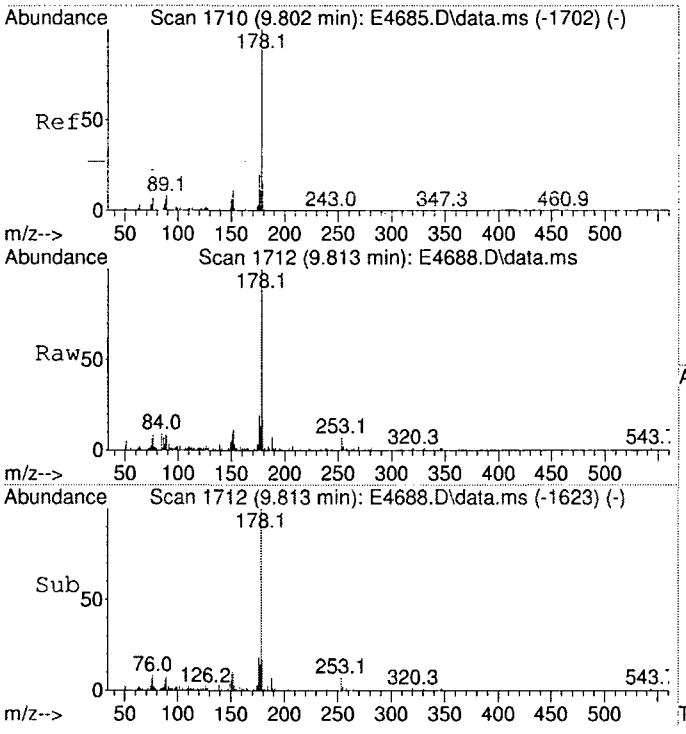



#4
1,4-Dioxane
Concen: 11.3830 ug/mL m
RT: 1.00 min Scan# 79
Delta R.T. -0.01 min
Lab File: E4688.D
Acq: 26 May 2012 13:27

Tgt Ion: 88 Resp: 41370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 3486.2 | 18.4 | 27.6# |
| 58 | 202.8 | 36.8 | 55.2# |

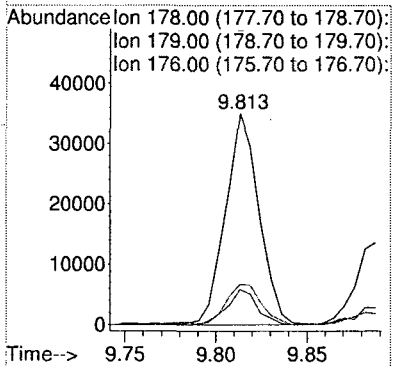



#73
Phenanthrene
Concen: 1.0039 ug/mL
RT: 9.81 min Scan# 1712
Delta R.T. 0.01 min
Lab File: E4688.D
Acq: 26 May 2012 13:27

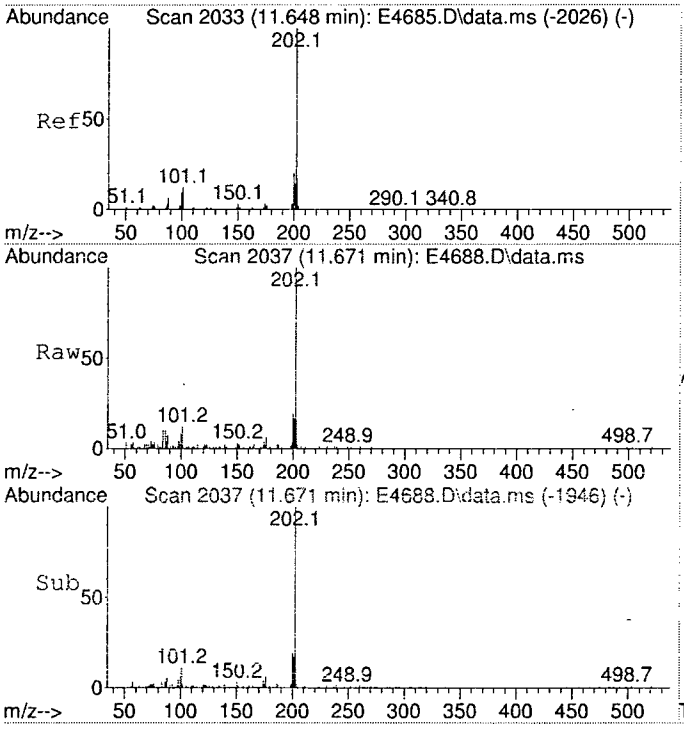
Tgt Ion:178 Resp: 44757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.9 | 0.0 | 35.0 |
| 176 | 20.1 | 0.0 | 38.0 |



Data File : X:\msdchem\1\data\E4688.D  Vial: 5
Acq On : 26 May 2012 13:27  Operator: RS
Sample : 0015977-04  Inst : E-5973
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X  Multiplr: 1.00
MS Integration Params: RTEINT.P

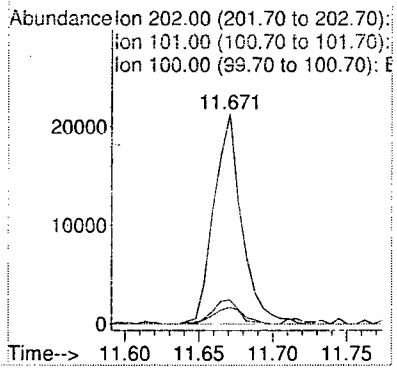
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

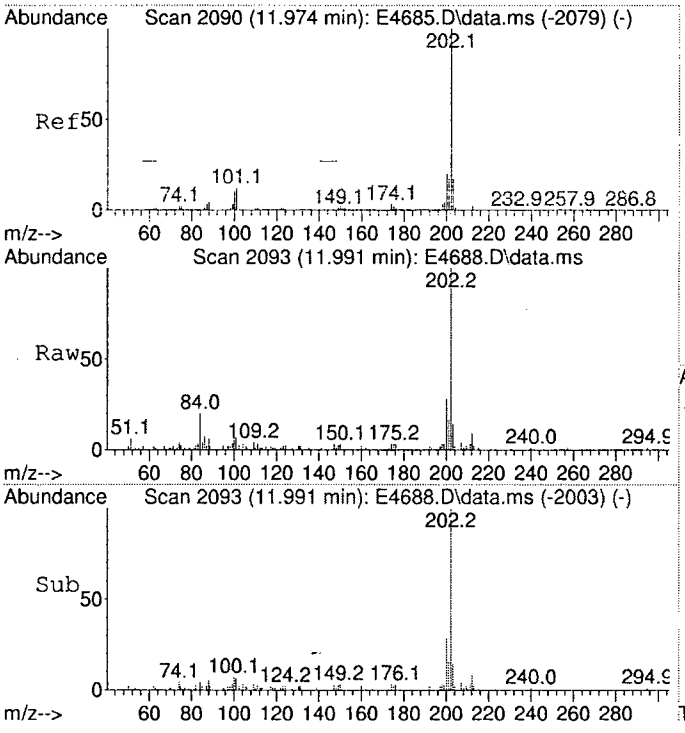



#77
Fluoranthene
Concen: 0.5551 ug/mL
RT: 11.67 min Scan# 2037
Delta R.T. 0.02 min
Lab File: E4688.D
Acq: 26 May 2012 13:27

Tgt Ion:202 Resp: 28115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 11.6 | 0.0 | 29.8 |
| 100 | 8.2 | 0.0 | 27.6 |

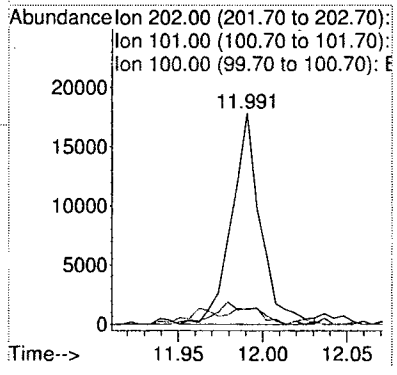



#81
Pyrene
Concen: 0.4252 ug/mL
RT: 11.99 min Scan# 2093
Delta R.T. 0.02 min
Lab File: E4688.D
Acq: 26 May 2012 13:27

Tgt Ion:202 Resp: 21250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 14.4 | 0.0 | 32.2 |
| 100 | 9.3 | 0.0 | 31.0 |



LSC Area Percent Report

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4688.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.463 | 162 | 165 | 191 | rVB | 869925 | 1229872 | 100.00% | 15.067% |
| 2 | 1.677 | 202 | 205 | 214 | rVB | 663459 | 611854 | 49.75% | 7.496% |
| 3 | 3.242 | 494 | 498 | 507 | rVB | 338451 | 394197 | 32.05% | 4.829% |
| 4 | 3.915 | 621 | 624 | 633 | rBV7 | 29974 | 52723 | 4.29% | 0.646% |
| 5 | 4.001 | 638 | 640 | 661 | rVB6 | 29369 | 74680 | 6.07% | 0.915% |
| 6 | 4.434 | 719 | 721 | 733 | rVB7 | 20773 | 34654 | 2.82% | 0.425% |
| 7 | 4.818 | 789 | 793 | 802 | rVV6 | 27623 | 50276 | 4.09% | 0.616% |
| 8 | 4.893 | 803 | 807 | 821 | rVB | 509149 | 614565 | 49.97% | 7.529% |
| 9 | 5.144 | 850 | 854 | 859 | rBV6 | 17726 | 26264 | 2.14% | 0.322% |
| 10 | 5.716 | 959 | 961 | 965 | rBV5 | 8153 | 11010 | 0.90% | 0.135% |
| 11 | 5.919 | 997 | 999 | 1002 | rBV3 | 7612 | 3890 | 0.32% | 0.048% |
| 12 | 6.485 | 1103 | 1105 | 1107 | rBV3 | 6591 | 5564 | 0.45% | 0.068% |
| 13 | 6.544 | 1115 | 1116 | 1118 | rVB2 | 6938 | 4172 | 0.34% | 0.051% |
| 14 | 6.581 | 1121 | 1123 | 1125 | rBV3 | 6636 | 4208 | 0.34% | 0.052% |
| 15 | 6.790 | 1160 | 1162 | 1165 | rBV3 | 4192 | 3934 | 0.32% | 0.048% |
| 16 | 6.838 | 1169 | 1171 | 1174 | rBV4 | 5146 | 3714 | 0.30% | 0.045% |
| 17 | 7.110 | 1221 | 1222 | 1225 | rBV3 | 7179 | 6937 | 0.56% | 0.085% |
| 18 | 7.196 | 1236 | 1238 | 1243 | rBV6 | 6104 | 7107 | 0.58% | 0.087% |
| 19 | 7.270 | 1248 | 1252 | 1257 | rBV | 86954 | 100899 | 8.20% | 1.236% |
| 20 | 7.319 | 1257 | 1261 | 1273 | rVB | 84467 | 114126 | 9.28% | 1.398% |
| 21 | 7.532 | 1295 | 1301 | 1306 | rBV | 636652 | 749930 | 60.98% | 9.187% |
| 22 | 7.575 | 1306 | 1309 | 1316 | rVB5 | 24442 | 35209 | 2.86% | 0.431% |
| 23 | 7.767 | 1341 | 1345 | 1351 | rVB9 | 16117 | 22975 | 1.87% | 0.281% |
| 24 | 7.847 | 1355 | 1360 | 1363 | rBV3 | 12578 | 18721 | 1.52% | 0.229% |
| 25 | 7.944 | 1376 | 1378 | 1385 | rVB7 | 8393 | 13459 | 1.09% | 0.165% |
| 26 | 8.168 | 1416 | 1420 | 1421 | rBV4 | 7460 | 8567 | 0.70% | 0.105% |
| 27 | 8.318 | 1444 | 1448 | 1453 | rBV2 | 105385 | 137683 | 11.19% | 1.687% |
| 28 | 8.360 | 1453 | 1456 | 1460 | rVB5 | 18767 | 25353 | 2.06% | 0.311% |
| 29 | 8.446 | 1469 | 1472 | 1474 | rBV3 | 7207 | 8852 | 0.72% | 0.108% |
| 30 | 8.550 | 1488 | 1491 | 1492 | rBV4 | 5718 | 4255 | 0.35% | 0.052% |
| 31 | 8.573 | 1492 | 1495 | 1497 | rVB4 | 4474 | 4807 | 0.39% | 0.059% |
| 32 | 8.659 | 1506 | 1510 | 1511 | rBV3 | 6527 | 7116 | 0.58% | 0.087% |
| 33 | 8.813 | 1534 | 1537 | 1540 | rBV5 | 3326 | 4121 | 0.34% | 0.050% |
| 34 | 8.882 | 1547 | 1549 | 1552 | rBV4 | 4155 | 4451 | 0.36% | 0.055% |
| 35 | 8.979 | 1565 | 1566 | 1572 | rVB4 | 4474 | 5542 | 0.45% | 0.068% |
| 36 | 9.065 | 1580 | 1581 | 1583 | rBV2 | 5459 | 4521 | 0.37% | 0.055% |
| 37 | 9.242 | 1609 | 1612 | 1616 | rVB4 | 7553 | 10272 | 0.84% | 0.126% |
| 38 | 9.270 | 1616 | 1617 | 1622 | rBV5 | 3450 | 4066 | 0.33% | 0.050% |
| 39 | 9.362 | 1631 | 1633 | 1634 | rBV2 | 5667 | 3922 | 0.32% | 0.048% |
| 40 | 9.482 | 1651 | 1654 | 1656 | rBV3 | 6161 | 6650 | 0.54% | 0.081% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 9.608 | 1671 | 1676 | 1678 | rBV4 | 8495 | 12587 | 1.02% | 0.154% |
| 42 | 9.625 | 1678 | 1679 | 1682 | rVB3 | 5409 | 4478 | 0.36% | 0.055% |
| 43 | 9.779 | 1700 | 1706 | 1710 | rBV | 689716 | 881582 | 71.68% | 10.800% |
| 44 | 9.813 | 1710 | 1712 | 1716 | rVB | 91129 | 102128 | 8.30% | 1.251% |
| 45 | 9.859 | 1716 | 1720 | 1723 | rBV | 105007 | 127296 | 10.35% | 1.559% |
| 46 | 9.968 | 1737 | 1739 | 1744 | rVB6 | 6598 | 8282 | 0.67% | 0.101% |
| 47 | 10.042 | 1750 | 1752 | 1755 | rVB3 | 5405 | 5108 | 0.42% | 0.063% |
| 48 | 10.190 | 1773 | 1778 | 1781 | rVB5 | 3435 | 5788 | 0.47% | 0.071% |
| 49 | 10.231 | 1781 | 1785 | 1787 | rBV4 | 5878 | 7001 | 0.57% | 0.086% |
| 50 | 10.253 | 1787 | 1789 | 1791 | rVV2 | 6109 | 5514 | 0.45% | 0.068% |
| 51 | 10.276 | 1791 | 1793 | 1796 | rVB3 | 4990 | 5053 | 0.41% | 0.062% |
| 52 | 10.328 | 1800 | 1802 | 1805 | rBV4 | 5330 | 6456 | 0.52% | 0.079% |
| 53 | 10.413 | 1812 | 1817 | 1821 | rBV7 | 10226 | 15173 | 1.23% | 0.186% |
| 54 | 10.465 | 1823 | 1826 | 1828 | rBV4 | 5883 | 6924 | 0.56% | 0.085% |
| 55 | 10.533 | 1834 | 1838 | 1841 | rVB4 | 7626 | 7879 | 0.64% | 0.097% |
| 56 | 10.596 | 1845 | 1849 | 1854 | rBV7 | 7774 | 12291 | 1.00% | 0.151% |
| 57 | 10.636 | 1854 | 1856 | 1862 | rVB4 | 13964 | 19860 | 1.61% | 0.243% |
| 58 | 10.705 | 1864 | 1868 | 1869 | rBV4 | 5317 | 4735 | 0.38% | 0.058% |
| 59 | 10.756 | 1873 | 1877 | 1883 | rVV7 | 8222 | 15731 | 1.28% | 0.193% |
| 60 | 10.802 | 1883 | 1885 | 1888 | rVB4 | 4382 | 4912 | 0.40% | 0.060% |
| 61 | 10.876 | 1895 | 1898 | 1899 | rBV3 | 6120 | 5339 | 0.43% | 0.065% |
| 62 | 11.002 | 1916 | 1920 | 1922 | rBV5 | 8511 | 10061 | 0.82% | 0.123% |
| 63 | 11.111 | 1935 | 1939 | 1940 | rVB3 | 6454 | 5837 | 0.47% | 0.072% |
| 64 | 11.225 | 1955 | 1959 | 1962 | rVB6 | 3738 | 4015 | 0.33% | 0.049% |
| 65 | 11.442 | 1995 | 1997 | 1999 | rVB2 | 6417 | 5349 | 0.43% | 0.066% |
| 66 | 11.471 | 1999 | 2002 | 2004 | rBV3 | 4696 | 6281 | 0.51% | 0.077% |
| 67 | 11.619 | 2025 | 2028 | 2029 | rBV3 | 6196 | 7183 | 0.58% | 0.088% |
| 68 | 11.671 | 2033 | 2037 | 2046 | rVB | 53360 | 81441 | 6.62% | 0.998% |
| 69 | 11.962 | 2083 | 2088 | 2092 | rBV | 130641 | 190574 | 15.50% | 2.335% |
| 70 | 12.037 | 2099 | 2101 | 2105 | rVB5 | 10006 | 9911 | 0.81% | 0.121% |
| 71 | 12.197 | 2128 | 2129 | 2133 | rBV3 | 3615 | 5174 | 0.42% | 0.063% |
| 72 | 12.237 | 2133 | 2136 | 2137 | rVV3 | 6853 | 5646 | 0.46% | 0.069% |
| 73 | 12.311 | 2145 | 2149 | 2150 | rBV3 | 4067 | 3945 | 0.32% | 0.048% |
| 74 | 12.408 | 2164 | 2166 | 2170 | rVB5 | 7697 | 6931 | 0.56% | 0.085% |
| 75 | 12.448 | 2170 | 2173 | 2176 | rVB4 | 5772 | 6894 | 0.56% | 0.084% |
| 76 | 12.522 | 2184 | 2186 | 2187 | rVB2 | 8086 | 4279 | 0.35% | 0.052% |
| 77 | 12.671 | 2209 | 2212 | 2213 | rBV3 | 5756 | 5042 | 0.41% | 0.062% |
| 78 | 12.934 | 2256 | 2258 | 2261 | rBV3 | 6210 | 6309 | 0.51% | 0.077% |
| 79 | 12.980 | 2265 | 2266 | 2269 | rVB3 | 6603 | 4285 | 0.35% | 0.052% |
| 80 | 13.157 | 2294 | 2297 | 2300 | rBV5 | 6263 | 8051 | 0.65% | 0.099% |
| 81 | 13.254 | 2313 | 2314 | 2316 | rBV2 | 6236 | 4571 | 0.37% | 0.056% |
| 82 | 13.357 | 2330 | 2332 | 2334 | rVB3 | 7682 | 4023 | 0.33% | 0.049% |
| 83 | 13.460 | 2348 | 2350 | 2353 | rBV4 | 9404 | 9534 | 0.78% | 0.117% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 13.597 | 2368 | 2374 | 2378 | rBV9 | 11800 | 22392 | 1.82% | 0.274% |
| 85 | 13.923 | 2425 | 2431 | 2442 | rVB | 693544 | 979928 | 79.68% | 12.005% |
| 86 | 15.883 | 2771 | 2774 | 2786 | rVB3 | 97551 | 157356 | 12.79% | 1.928% |
| 87 | 15.986 | 2788 | 2792 | 2815 | rVB | 578482 | 908698 | 73.89% | 11.132% |

Sum of corrected areas: 8162945

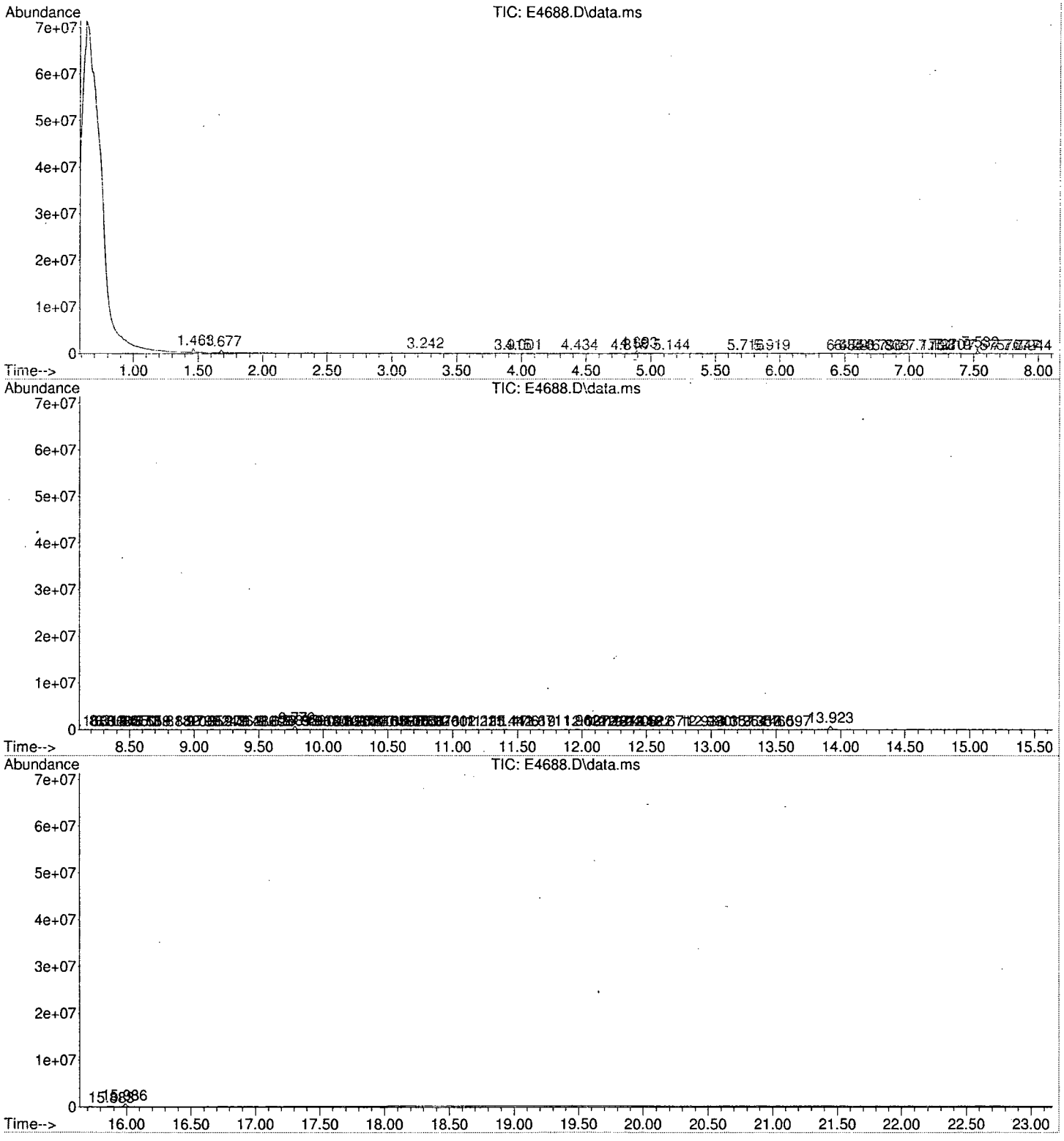
LSC Report - Integrated Chromatogram

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

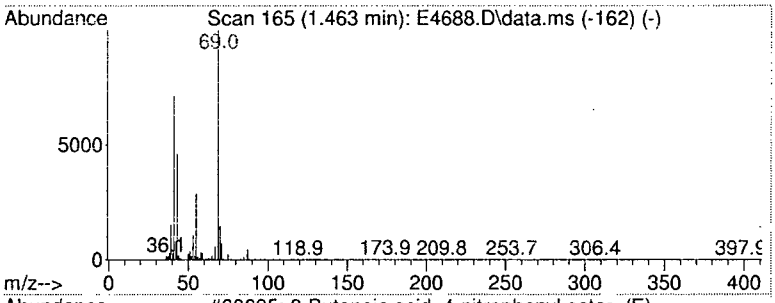
**********

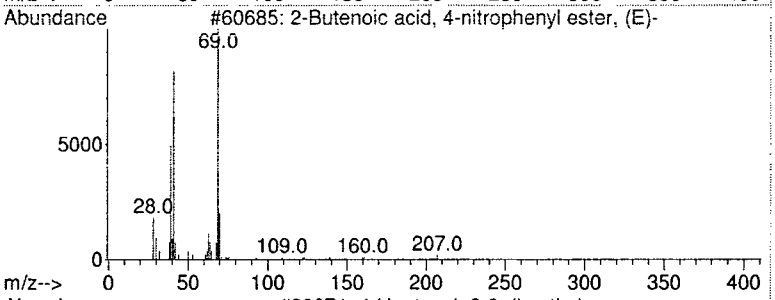
Peak Number 1 2-Butenoic acid, 4-nitrophe... Concentration Rank 1

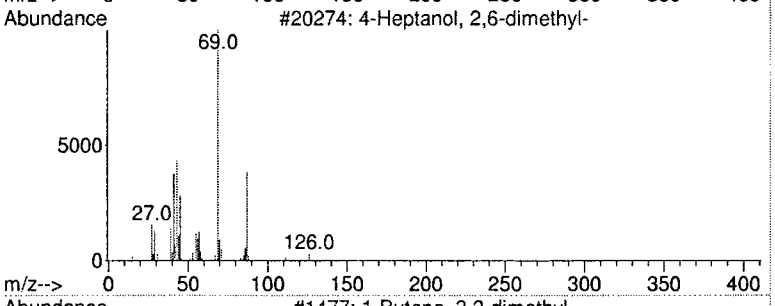
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.463 | 62.40 ug/mL | 1229870 | 1,4-Dichlorobenzene-d4 | 3.242 |

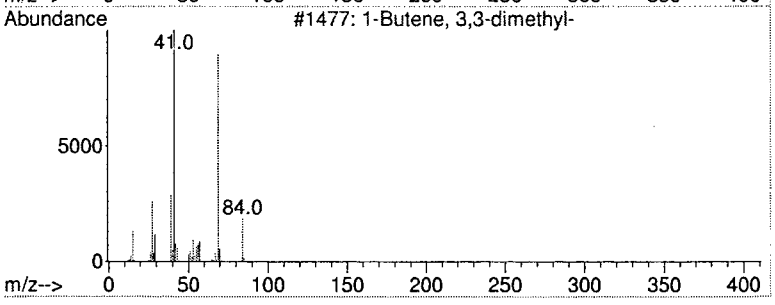
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 33 |
| 2 | 4-Heptanol, 2,6-dimethyl- | 144 | C9H20O | 000108-82-7 | 9 |
| 3 | 1-Butene, 3,3-dimethyl- | 84 | C6H12 | 000558-37-2 | 9 |
| 4 | 1-Octyn-4-ol | 126 | C8H14O | 052517-92-7 | 9 |
| 5 | 3-Penten-1-ol, 2-methyl- | 100 | C6H12O | 062238-37-3 | 9 |

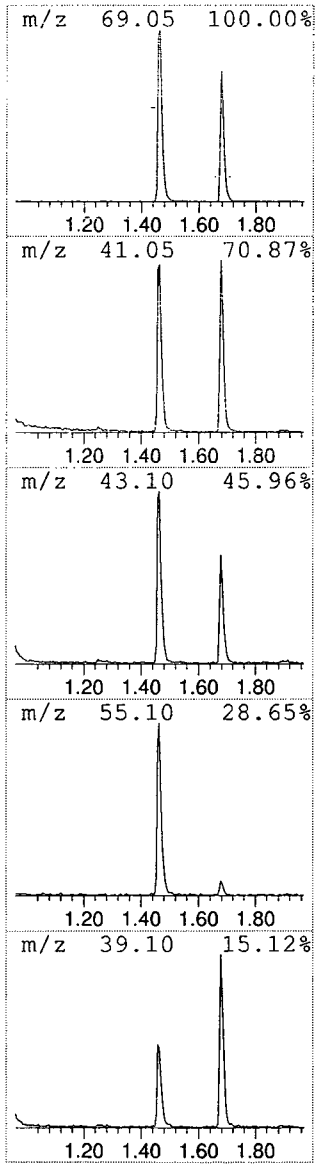
**Unknown**



Library Search Compound Report

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

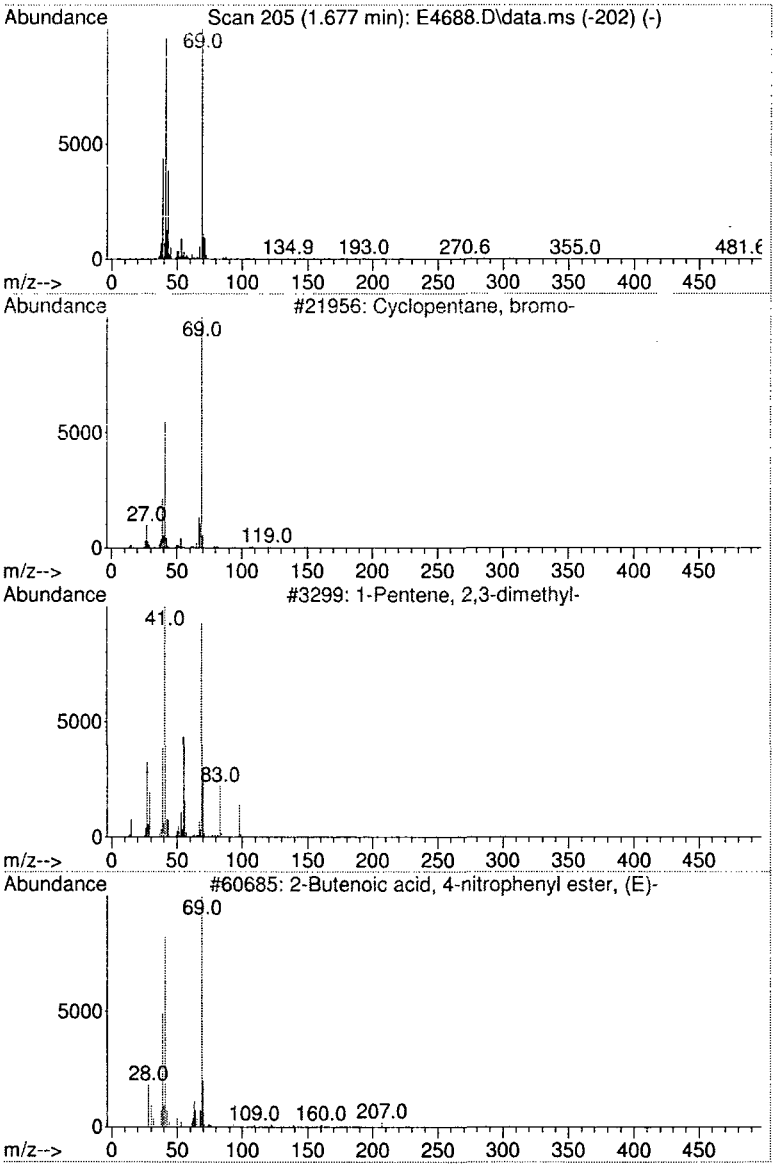
**********

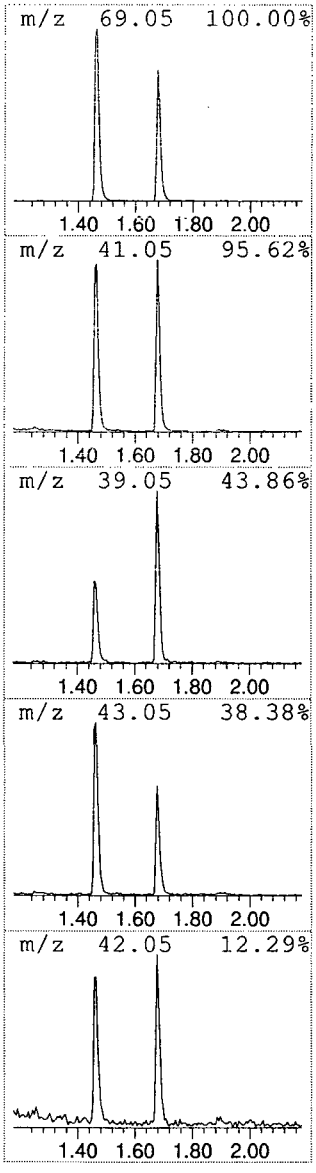
Peak Number 2 Cyclopentane, bromo- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.677 | 31.04 ug/mL | 611854 | 1,4-Dichlorobenzene-d4 | 3.242 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 56 |
| 2 | 1-Pentene, 2,3-dimethyl- | 98 | C7H14 | 003404-72-6 | 56 |
| 3 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 50 |
| 4 | 2-Propenoic acid, 2-methyl-, 2-p... | 126 | C7H10O2 | 000096-05-9 | 40 |
| 5 | Vinyl crotonate | 112 | C6H8O2 | 014861-06-4 | 39 |

**Unknown**



Tentatively Identified Compound (LSC) summary

Data File : X:\msdchem\1\data\E4688.D  Vial: 5
Acq On : 26 May 2012 13:27  Operator: RS
Sample : 0015977-04  Inst : E-5973
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X  Multiplr: 1.00
DataAcq Meth:CLPACQ.M

Quant Time: May 31 06:04:38 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

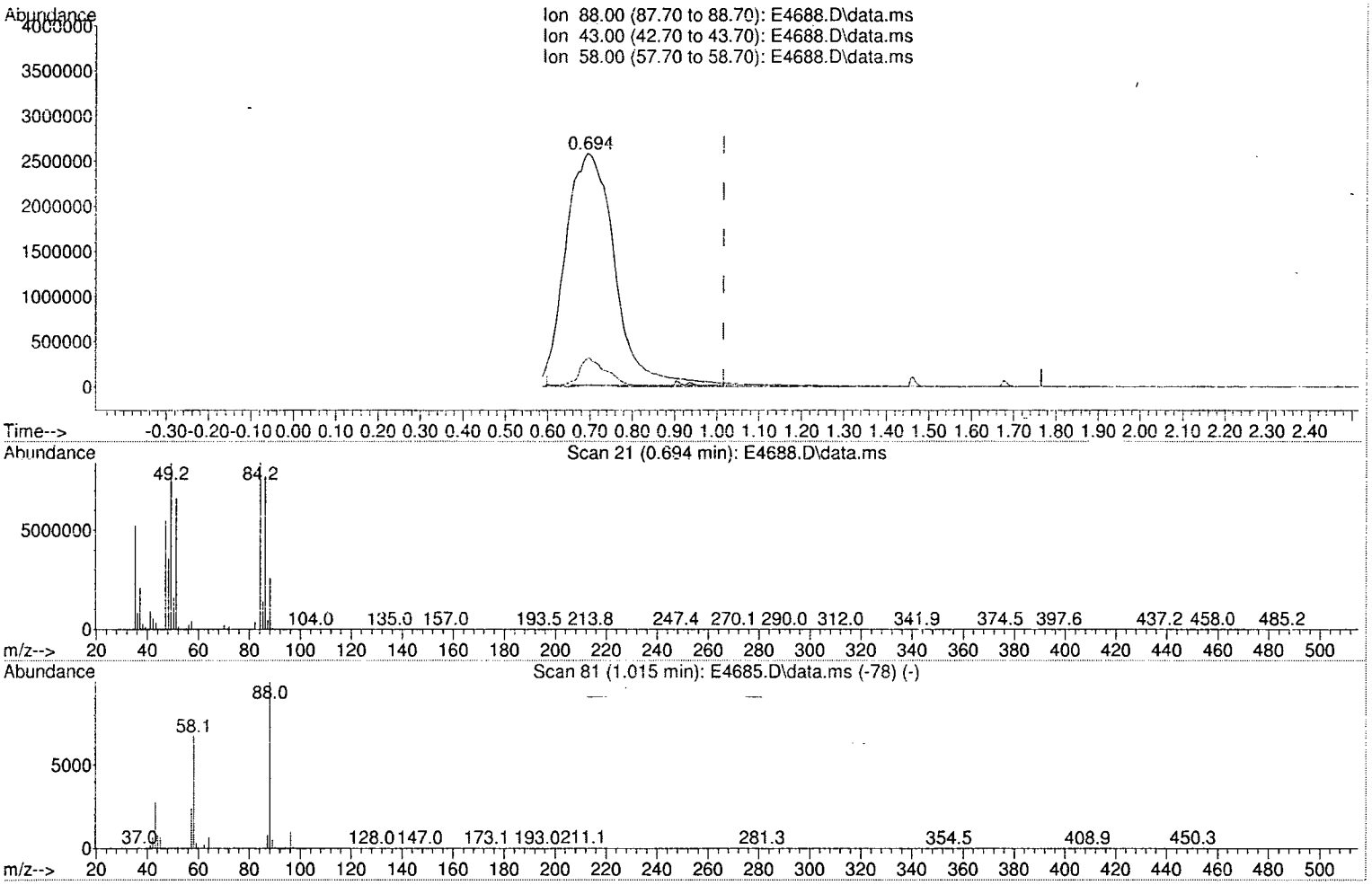
| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 2-Butenoic acid... | 1.463 | 62.4 | ug/mL | 1229870 | 1 | 3.242 | 394197 | 20.0 |
| Cyclopentane, b... | 1.677 | 31.0 | ug/mL | 611854 | 1 | 3.242 | 394197 | 20.0 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:51 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




**(4) 1,4-Dioxane (PC)**

**0.694min (-0.321) 5638.75 ug/mL**

**response 20493282**

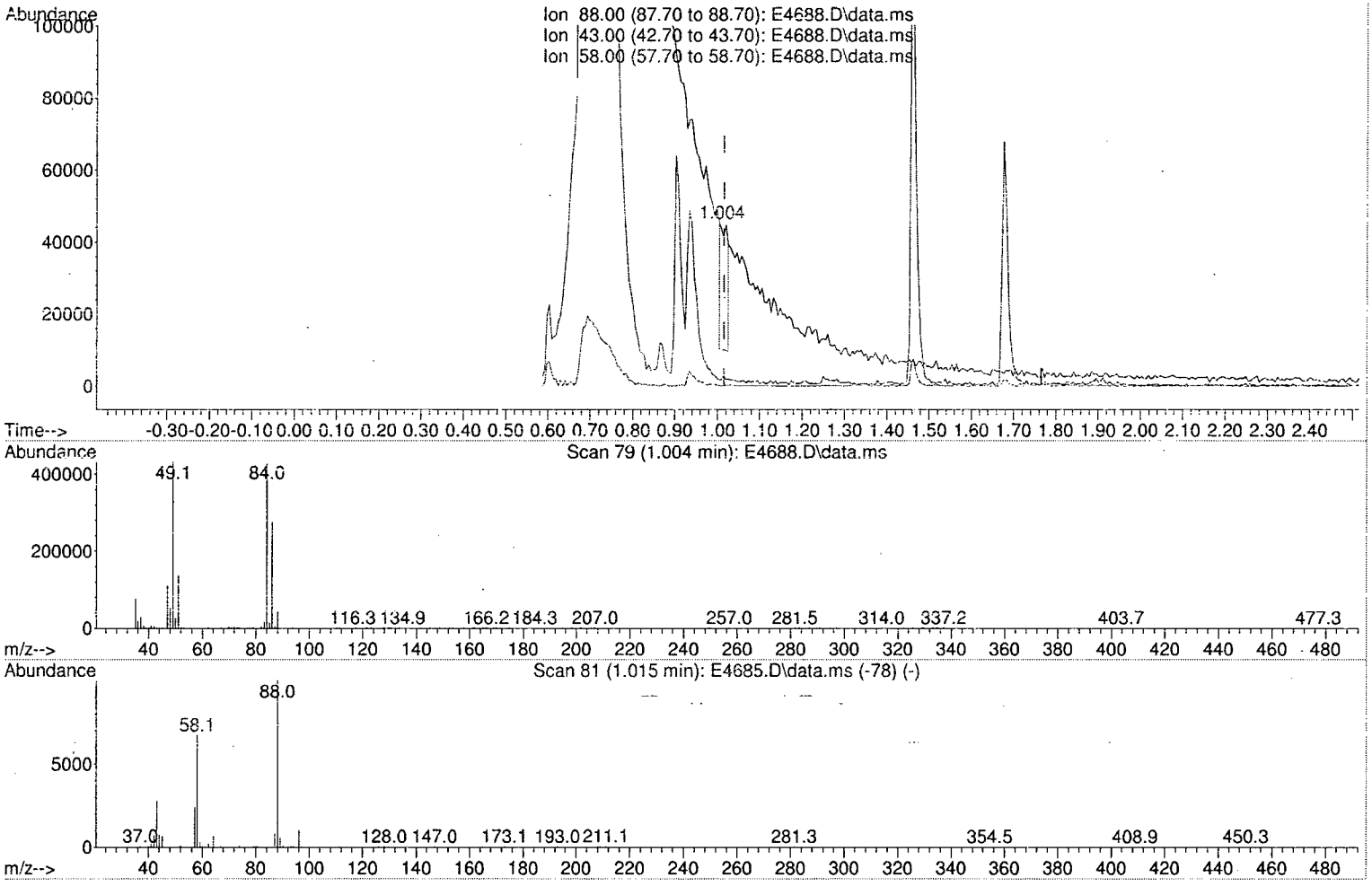
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 7.04# |
| 58.00 | 46.00 | 0.41# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4688.D
Acq On : 26 May 2012 13:27
Sample : 0015977-04
Misc : F5WC0 30.2GM/0.5ML GPC SOIL 10X
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:51 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




**(4) 1,4-Dioxane (PC)**

**1.004min (-0.011) 11.38 ug/mL m** RS 8/21

**response 41370**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 3486.17# |
| 58.00 | 46.00 | 202.77# |
| 0.00 | 0.00 | 0.00 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4689.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21.2 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 220 | U |
| 108-95-2 | Phenol | 220 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 220 | U |
| 95-57-8 | 2-Chlorophenol | 220 | U |
| 95-48-7 | 2-Methylphenol | 220 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 220 | U |
| 98-86-2 | Acetophenone | 220 | U |
| 106-44-5 | 4-Methylphenol | 220 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 220 | U |
| 67-72-1 | Hexachloroethane | 220 | U |
| 98-95-3 | Nitrobenzene | 220 | U |
| 78-59-1 | Isophorone | 220 | U |
| 88-75-5 | 2-Nitrophenol | 220 | U |
| 105-67-9 | 2,4-Dimethylphenol | 220 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 220 | U |
| 120-83-2 | 2,4-Dichlorophenol | 220 | U |
| 91-20-3 | Naphthalene | 220 | U |
| 106-47-8 | 4-Chloroaniline | 220 | U |
| 87-68-3 | Hexachlorobutadiene | 220 | U |
| 105-60-2 | Caprolactam | 220 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 220 | U |
| 91-57-6 | 2-Methylnaphthalene | 220 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 220 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 220 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 220 | U |
| 92-52-4 | 1,1'-Biphenyl | 220 | U |
| 91-58-7 | 2-Chloronaphthalene | 220 | U |
| 88-74-4 | 2-Nitroaniline | 420 | U |
| 131-11-3 | Dimethylphthalate | 220 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 220 | U |
| 208-96-8 | Acenaphthylene | 220 | U |
| 99-09-2 | 3-Nitroaniline | 420 | U |
| 83-32-9 | Acenaphthene | 220 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4689.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21.2 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 420 | U |
| 100-02-7 | 4-Nitrophenol | 420 | U |
| 132-64-9 | Dibenzofuran | 220 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 220 | U |
| 84-66-2 | Diethylphthalate | 220 | U |
| 86-73-7 | Fluorene | 220 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 220 | U |
| 100-01-6 | 4-Nitroaniline | 420 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 420 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 220 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 220 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 220 | U |
| 118-74-1 | Hexachlorobenzene | 220 | U |
| 1912-24-9 | Atrazine | 220 | U |
| 87-86-5 | Pentachlorophenol | 420 | U |
| 85-01-8 | Phenanthrene | 220 | U |
| 120-12-7 | Anthracene | 220 | U |
| 86-74-8 | Carbazole | 220 | U |
| 84-74-2 | Di-n-butylphthalate | 19 | JB |
| 206-44-0 | Fluoranthene | 220 | U |
| 129-00-0 | Pyrene | 220 | U |
| 85-68-7 | Butylbenzylphthalate | 220 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 220 | U |
| 56-55-3 | Benzo (a) anthracene | 220 | U |
| 218-01-9 | Chrysene | 220 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 220 | U |
| 117-84-0 | Di-n-octylphthalate | 220 | U |
| 205-99-2 | Benzo (b) fluoranthene | 220 | U |
| 207-08-9 | Benzo (k) fluoranthene | 220 | U |
| 50-32-8 | Benzo (a) pyrene | 220 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 220 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 220 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 220 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 220 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-05

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4689.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 21.2 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 (1 3.237) | 1.46 | 680 | J |
| 02 | | Unknown-02 (1 3.237) | 1.68 | 530 | J |
| 03 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.35 | 260 | JNB |
| 04 | | | | | |
| 05 | | | | | |
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| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

06/01/12

S. Vokati
06/01/12

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 91977 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 375339 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 240676 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.779 | 188 | 442181 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.923 | 240 | 444610 | 20.0000 | ug/mL | 0.02 |
| 88) Perylene-d12 | 15.992 | 264 | 426786 | 20.0000 | ug/mL | 0.03 |
| System Monitoring Compounds | | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0 | 0.00 | ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | | |
| 7) Phenol-d5 | 3.018 | 99 | 258494 | 13.25 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 33.13% | | | |
| 18) Bis(2-chloroethyl)ethe... | 2.986 | 67 | 145015 | 14.31 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 35.77% | | | |
| 19) 2-Chlorophenol-d4 | 3.050 | 132 | 210510 | 11.47 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 28.68% | | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 195687 | 12.40 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 31.00% | | | |
| 22) Nitrobenzene-d5 | 3.985 | 128 | 135795 | 16.32 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 40.80% | | | |
| 35) 2-Nitrophenol-d4 | 4.423 | 143 | 131714 | 14.00 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 35.00% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.787 | 165 | 210629 | 13.48 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 33.70% | | | |
| 37) 4-Chloroaniline-d4 | 5.112 | 131 | 337682 | 21.78 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 54.45% | | | |
| 62) Acenaphthylene-d8 | 7.271 | 160 | 901979 | 17.28 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 43.20% | | | |
| 63) 4-Nitrophenol-d4 | 8.088 | 143 | 109685 | 14.10 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 35.25% | | | |
| 64) Dimethylphthalate-d6 | 7.319 | 166 | 721439 | 17.03 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 42.58%# | | | |
| 65) Fluorene-d10 | 8.318 | 176 | 600437 | 18.01 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 45.03% | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.625 | 200 | 20328 | 2.51 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 6.28% | | | |
| 79) Anthracene-d10 | 9.859 | 188 | 976033 | 17.31 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 43.27% | | | |
| 87) Pyrene-d10 | 11.962 | 212 | 1115786 | 19.83 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 49.57%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 896679 | 17.63 | ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 44.07% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) 1,4-Dioxane | 1.010 | 88 | 18403m | 3.5541 | ug/mL | |
| 76) Di-n-butylphthalate | 11.031 | 149 | 31894 | 0.4510 | ug/mL | 97 |

RS 6/1

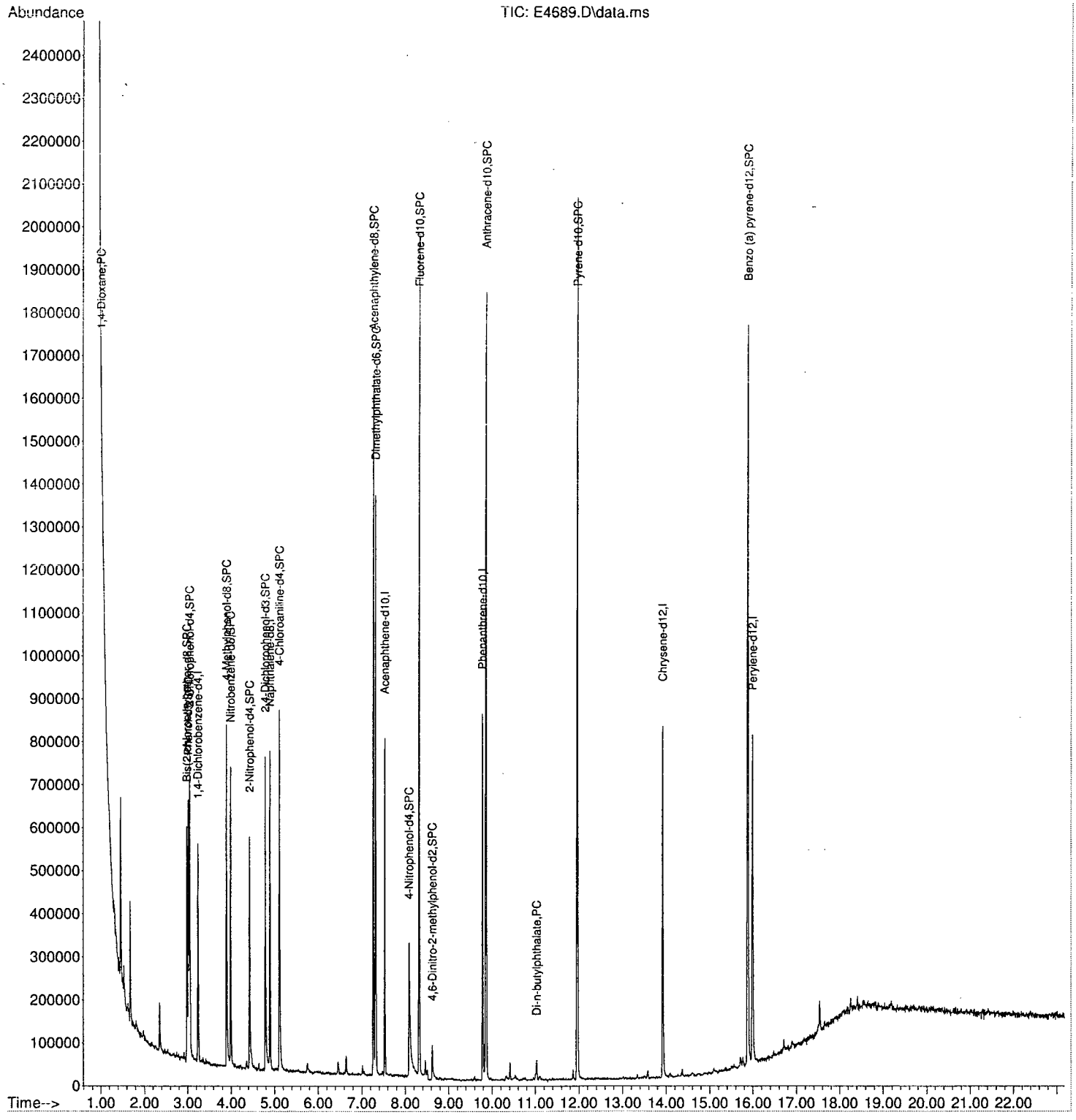
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

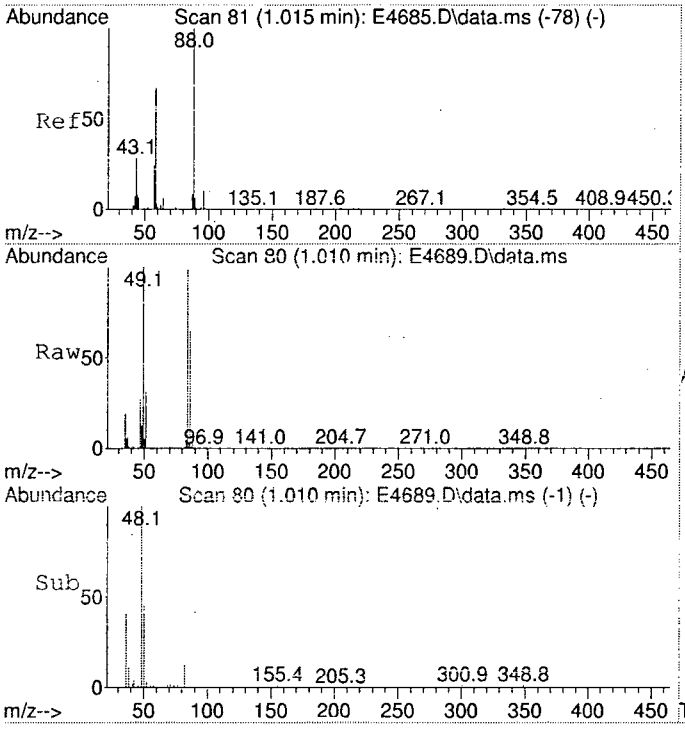
Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration



Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

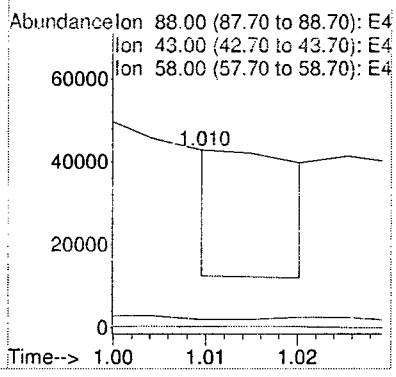
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

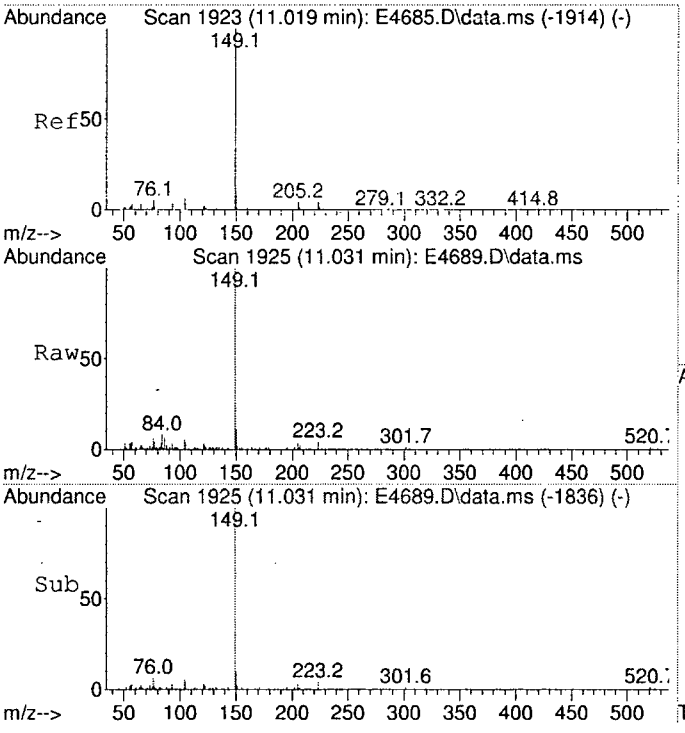



#4
1,4-Dioxane
Concen: 3.5541 ug/mL m
RT: 1.01 min Scan# 80
Delta R.T. -0.01 min
Lab File: E4689.D
Acq: 26 May 2012 13:58

Tgt Ion: 88 Resp: 18403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 1007.6 | 18.4 | 27.6# |
| 58 | 0.0 | 36.8 | 55.2# |

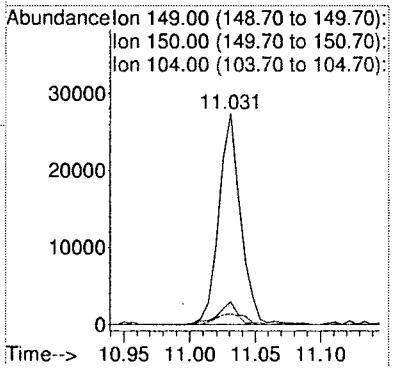



#76
Di-n-butylphthalate
Concen: 0.4510 ug/mL
RT: 11.03 min Scan# 1925
Delta R.T. 0.01 min
Lab File: E4689.D
Acq: 26 May 2012 13:58

Tgt Ion:149 Resp: 31894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 10.5 | 0.0 | 29.0 |
| 104 | 5.7 | 0.0 | 26.3 |



LSC Area Percent Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4689.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.464 | 162 | 165 | 177 | rVB | 443927 | 463587 | 16.98% | 1.642% |
| 2 | 1.677 | 203 | 205 | 228 | rVB | 296114 | 365017 | 13.37% | 1.293% |
| 3 | 2.350 | 328 | 331 | 348 | rVB2 | 119863 | 174050 | 6.37% | 0.617% |
| 4 | 2.986 | 447 | 450 | 454 | rBV | 542088 | 563926 | 20.65% | 1.998% |
| 5 | 3.018 | 454 | 456 | 459 | rVV | 602332 | 639177 | 23.41% | 2.264% |
| 6 | 3.050 | 459 | 462 | 474 | rVB | 711205 | 873092 | 31.98% | 3.093% |
| 7 | 3.237 | 492 | 497 | 508 | rVB | 506672 | 577475 | 21.15% | 2.046% |
| 8 | 3.894 | 617 | 620 | 633 | rBV | 792680 | 936894 | 34.31% | 3.319% |
| 9 | 3.985 | 633 | 637 | 653 | rVB | 697692 | 870066 | 31.87% | 3.082% |
| 10 | 4.423 | 715 | 719 | 725 | rBV | 537803 | 669193 | 24.51% | 2.371% |
| 11 | 4.787 | 783 | 787 | 800 | rBV | 729906 | 989672 | 36.25% | 3.506% |
| 12 | 4.893 | 803 | 807 | 818 | rVB | 739551 | 794690 | 29.11% | 2.815% |
| 13 | 5.112 | 844 | 848 | 860 | rBV | 832186 | 1009748 | 36.98% | 3.577% |
| 14 | 5.753 | 964 | 968 | 971 | rBV5 | 20598 | 29637 | 1.09% | 0.105% |
| 15 | 6.111 | 1033 | 1035 | 1037 | rBV | 7574 | 5191 | 0.19% | 0.018% |
| 16 | 6.293 | 1065 | 1069 | 1070 | rVB4 | 7216 | 5621 | 0.21% | 0.020% |
| 17 | 6.309 | 1070 | 1072 | 1075 | rBV4 | 5899 | 6229 | 0.23% | 0.022% |
| 18 | 6.459 | 1097 | 1100 | 1103 | rBV3 | 21966 | 26521 | 0.97% | 0.094% |
| 19 | 6.646 | 1132 | 1135 | 1139 | rBV4 | 38409 | 42745 | 1.57% | 0.151% |
| 20 | 7.009 | 1201 | 1203 | 1209 | rVB4 | 18099 | 16823 | 0.62% | 0.060% |
| 21 | 7.271 | 1246 | 1252 | 1256 | rBV | 1630164 | 1886192 | 69.08% | 6.682% |
| 22 | 7.313 | 1256 | 1260 | 1269 | rVB | 1343864 | 1587174 | 58.13% | 5.622% |
| 23 | 7.474 | 1287 | 1290 | 1295 | rVB6 | 11795 | 16613 | 0.61% | 0.059% |
| 24 | 7.532 | 1295 | 1301 | 1308 | rBV | 783644 | 958256 | 35.10% | 3.395% |
| 25 | 7.896 | 1367 | 1369 | 1375 | rBV6 | 5591 | 7661 | 0.28% | 0.027% |
| 26 | 8.003 | 1386 | 1389 | 1391 | rBV4 | 9239 | 8950 | 0.33% | 0.032% |
| 27 | 8.051 | 1396 | 1398 | 1399 | rBV2 | 5118 | 4001 | 0.15% | 0.014% |
| 28 | 8.093 | 1402 | 1406 | 1423 | rVV | 307610 | 671623 | 24.60% | 2.379% |
| 29 | 8.318 | 1442 | 1448 | 1464 | rVB | 1958016 | 2300871 | 84.27% | 8.151% |
| 30 | 8.462 | 1471 | 1475 | 1479 | rVB | 34605 | 39081 | 1.43% | 0.138% |
| 31 | 8.510 | 1483 | 1484 | 1487 | rVB3 | 22476 | 16721 | 0.61% | 0.059% |
| 32 | 8.625 | 1500 | 1504 | 1518 | rBV3 | 78979 | 136524 | 5.00% | 0.484% |
| 33 | 8.790 | 1530 | 1533 | 1536 | rBV4 | 7051 | 9332 | 0.34% | 0.033% |
| 34 | 8.905 | 1550 | 1553 | 1555 | rBV4 | 7120 | 8321 | 0.30% | 0.029% |
| 35 | 8.973 | 1562 | 1565 | 1566 | rBV2 | 4657 | 4540 | 0.17% | 0.016% |
| 36 | 9.151 | 1594 | 1596 | 1600 | rVB4 | 3840 | 4237 | 0.16% | 0.015% |
| 37 | 9.528 | 1659 | 1662 | 1665 | rVB4 | 6659 | 8904 | 0.33% | 0.032% |
| 38 | 9.596 | 1671 | 1674 | 1676 | rBV4 | 9393 | 9427 | 0.35% | 0.033% |
| 39 | 9.619 | 1676 | 1678 | 1679 | rVB | 6617 | 4278 | 0.16% | 0.015% |
| 40 | 9.631 | 1679 | 1680 | 1683 | rBV3 | 5677 | 4213 | 0.15% | 0.015% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 9.665 | 1683 | 1686 | 1687 | rBV2 | 3837 | 4079 | 0.15% | 0.014% |
| 42 | 9.779 | 1701 | 1706 | 1711 | rBV | 849985 | 1090510 | 39.94% | 3.863% |
| 43 | 9.859 | 1715 | 1720 | 1729 | rVB | 1826158 | 2316689 | 84.85% | 8.207% |
| 44 | 9.968 | 1736 | 1739 | 1743 | rVB6 | 6885 | 9581 | 0.35% | 0.034% |
| 45 | 10.311 | 1797 | 1799 | 1802 | rBV4 | 9473 | 12284 | 0.45% | 0.044% |
| 46 | 10.408 | 1812 | 1816 | 1825 | rVB2 | 41027 | 55792 | 2.04% | 0.198% |
| 47 | 10.476 | 1825 | 1828 | 1831 | rBV4 | 3623 | 6181 | 0.23% | 0.022% |
| 48 | 10.757 | 1876 | 1877 | 1881 | rVB2 | 6699 | 7226 | 0.26% | 0.026% |
| 49 | 10.899 | 1900 | 1902 | 1906 | rVB3 | 4267 | 4824 | 0.18% | 0.017% |
| 50 | 10.957 | 1909 | 1912 | 1914 | rBV3 | 6811 | 6587 | 0.24% | 0.023% |
| 51 | 11.031 | 1917 | 1925 | 1930 | rBV | 46631 | 80010 | 2.93% | 0.283% |
| 52 | 11.094 | 1931 | 1936 | 1938 | rBV3 | 8802 | 14531 | 0.53% | 0.051% |
| 53 | 11.242 | 1955 | 1962 | 1966 | rBV7 | 5226 | 10296 | 0.38% | 0.036% |
| 54 | 11.294 | 1970 | 1971 | 1976 | rBV4 | 6217 | 10963 | 0.40% | 0.039% |
| 55 | 11.397 | 1987 | 1989 | 1993 | rVB3 | 6690 | 8027 | 0.29% | 0.028% |
| 56 | 11.545 | 2013 | 2015 | 2018 | rBV3 | 4509 | 4892 | 0.18% | 0.017% |
| 57 | 11.642 | 2031 | 2032 | 2035 | rVB3 | 6037 | 4258 | 0.16% | 0.015% |
| 58 | 11.865 | 2067 | 2071 | 2075 | rBV3 | 21626 | 24380 | 0.89% | 0.086% |
| 59 | 11.962 | 2082 | 2088 | 2100 | rBV | 2052861 | 2730340 | 100.00% | 9.672% |
| 60 | 12.357 | 2154 | 2157 | 2159 | rVB4 | 5347 | 5771 | 0.21% | 0.020% |
| 61 | 12.380 | 2159 | 2161 | 2162 | rBV2 | 6113 | 4297 | 0.16% | 0.015% |
| 62 | 12.494 | 2179 | 2181 | 2187 | rBV5 | 3793 | 4631 | 0.17% | 0.016% |
| 63 | 12.540 | 2187 | 2189 | 2192 | rVB4 | 5128 | 4644 | 0.17% | 0.016% |
| 64 | 12.745 | 2221 | 2225 | 2228 | rVB6 | 4145 | 4828 | 0.18% | 0.017% |
| 65 | 12.865 | 2245 | 2246 | 2250 | rVB4 | 4668 | 4845 | 0.18% | 0.017% |
| 66 | 13.014 | 2271 | 2272 | 2276 | rVB4 | 8931 | 9259 | 0.34% | 0.033% |
| 67 | 13.071 | 2280 | 2282 | 2287 | rVB4 | 7067 | 10520 | 0.39% | 0.037% |
| 68 | 13.117 | 2287 | 2290 | 2293 | rBV5 | 6002 | 7502 | 0.27% | 0.027% |
| 69 | 13.294 | 2317 | 2321 | 2322 | rBV4 | 3992 | 4267 | 0.16% | 0.015% |
| 70 | 13.340 | 2325 | 2329 | 2335 | rVB4 | 10797 | 17693 | 0.65% | 0.063% |
| 71 | 13.391 | 2335 | 2338 | 2342 | rBV5 | 4799 | 6468 | 0.24% | 0.023% |
| 72 | 13.500 | 2353 | 2357 | 2364 | rVB8 | 7617 | 15457 | 0.57% | 0.055% |
| 73 | 13.574 | 2366 | 2370 | 2376 | rVB5 | 19762 | 33068 | 1.21% | 0.117% |
| 74 | 13.643 | 2381 | 2382 | 2384 | rBV2 | 5384 | 4856 | 0.18% | 0.017% |
| 75 | 13.786 | 2403 | 2407 | 2409 | rVB5 | 6300 | 7591 | 0.28% | 0.027% |
| 76 | 13.831 | 2411 | 2415 | 2418 | rVV5 | 5136 | 6020 | 0.22% | 0.021% |
| 77 | 13.923 | 2424 | 2431 | 2442 | rBV | 817255 | 1189291 | 43.56% | 4.213% |
| 78 | 14.083 | 2457 | 2459 | 2460 | rBV2 | 7652 | 7639 | 0.28% | 0.027% |
| 79 | 14.271 | 2491 | 2492 | 2500 | rVB6 | 5930 | 6566 | 0.24% | 0.023% |
| 80 | 14.369 | 2504 | 2509 | 2512 | rBV2 | 15794 | 21230 | 0.78% | 0.075% |
| 81 | 14.712 | 2567 | 2569 | 2570 | rBV2 | 5619 | 3970 | 0.15% | 0.014% |
| 82 | 14.974 | 2612 | 2615 | 2617 | rBV4 | 7984 | 8583 | 0.31% | 0.030% |
| 83 | 15.352 | 2679 | 2681 | 2683 | rBV3 | 8474 | 5997 | 0.22% | 0.021% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 15.883 | 2768 | 2774 | 2785 | rVB | 1710578 | 2557623 | 93.67% | 9.060% |
| 85 | 15.992 | 2788 | 2793 | 2809 | rVB | 755823 | 1128795 | 41.34% | 3.999% |

Sum of corrected areas: 28229134

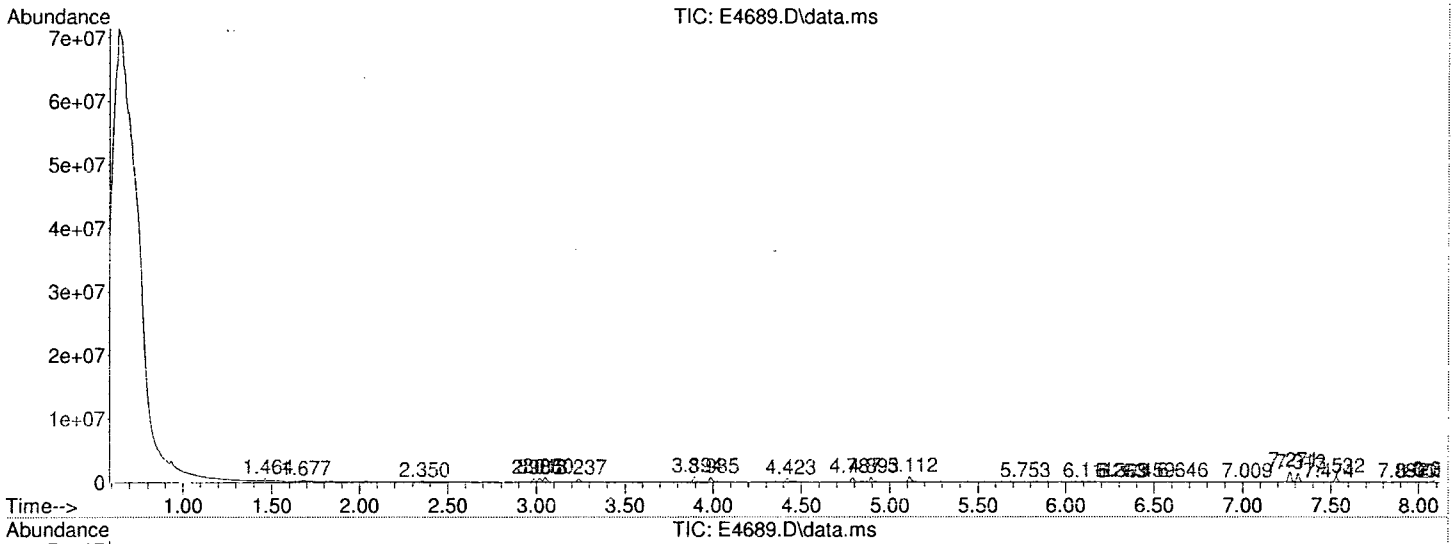
LSC Report - Integrated Chromatogram

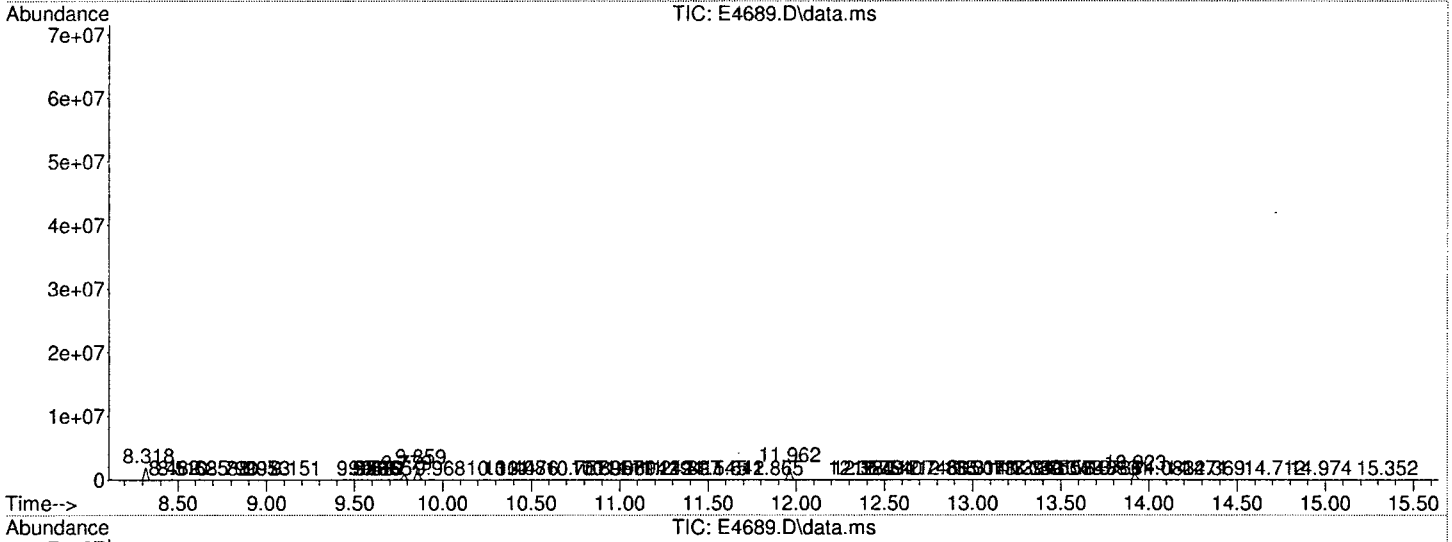
Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

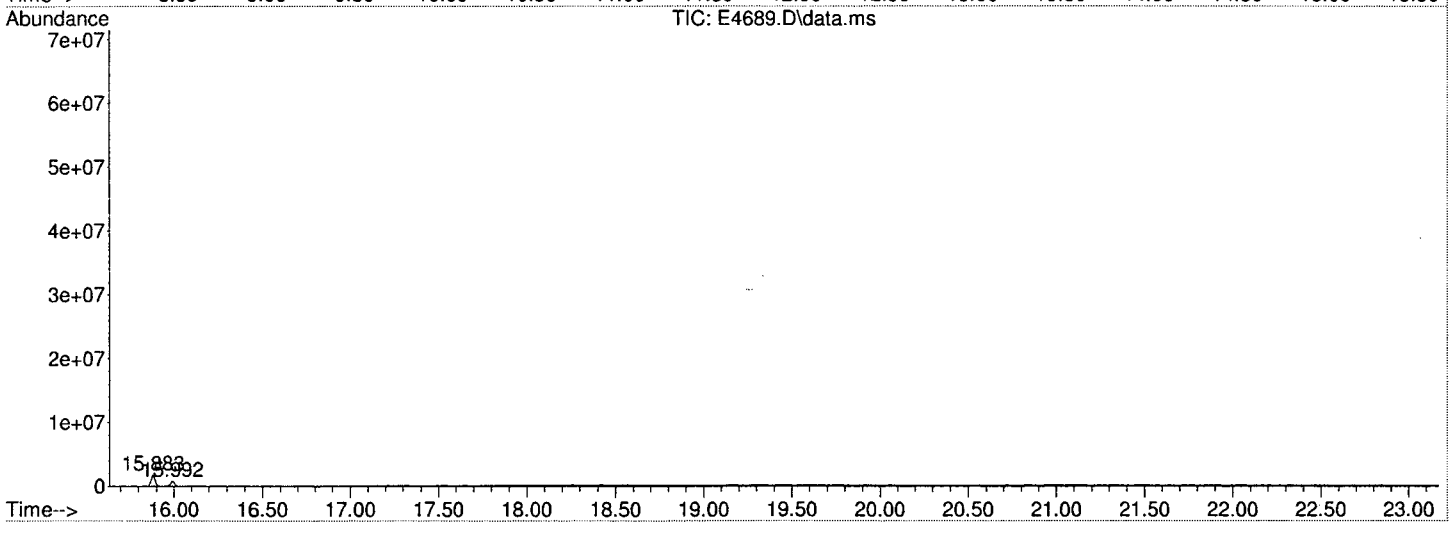
Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

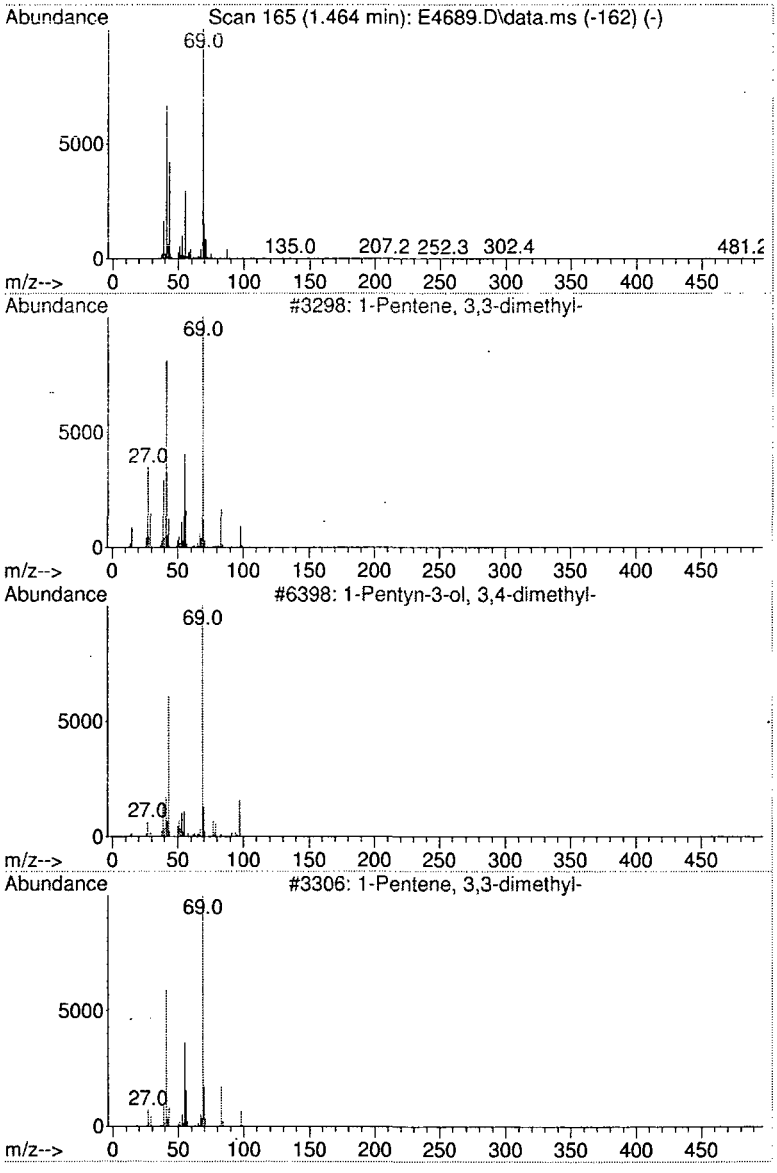
**********

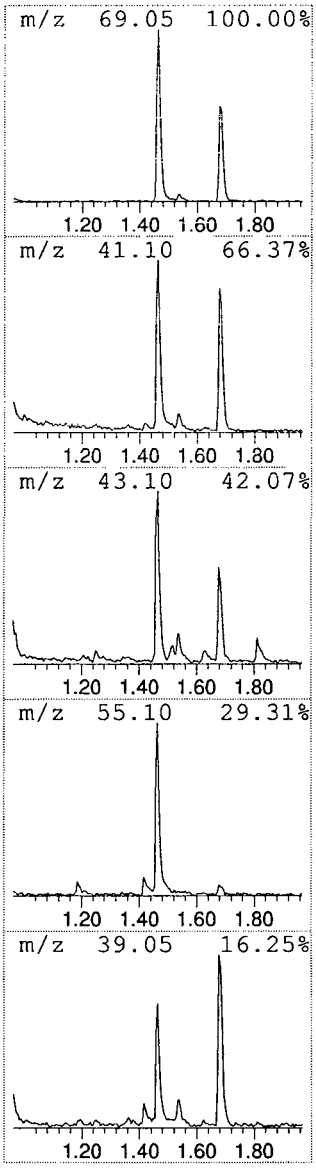
Peak Number 1 1-Pentene, 3,3-dimethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.464 | 16.06 ug/mL | 463587 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Pentene, 3,3-dimethyl- | 98 | C7H14 | 003404-73-7 | 56 |
| 2 | 1-Pentyn-3-ol, 3,4-dimethyl- | 112 | C7H12O | 001482-15-1 | 40 |
| 3 | 1-Pentene, 3,3-dimethyl- | 98 | C7H14 | 003404-73-7 | 39 |
| 4 | 1-Pentene, 3,3-dimethyl- | 98 | C7H14 | 003404-73-7 | 39 |
| 5 | 2-Butene, 1-bromo-3-methyl- | 148 | C5H9Br | 000870-63-3 | 39 |

**Unknown**



Library Search Compound Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

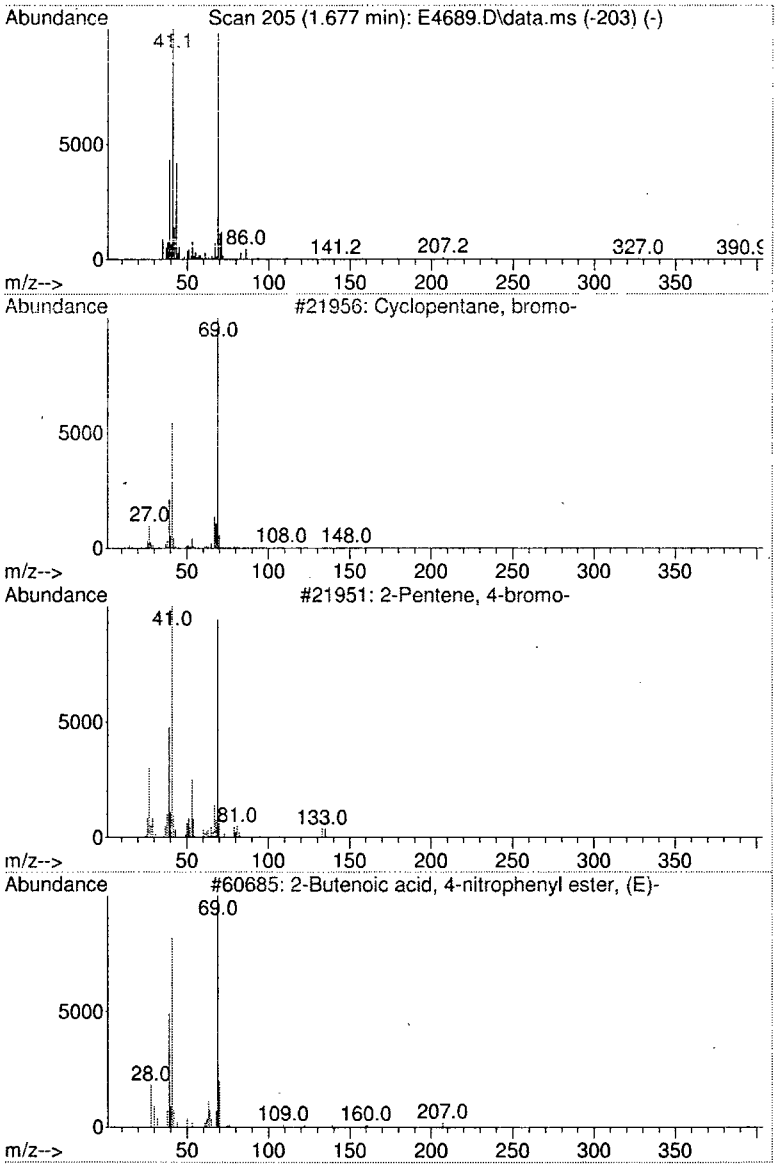
**********

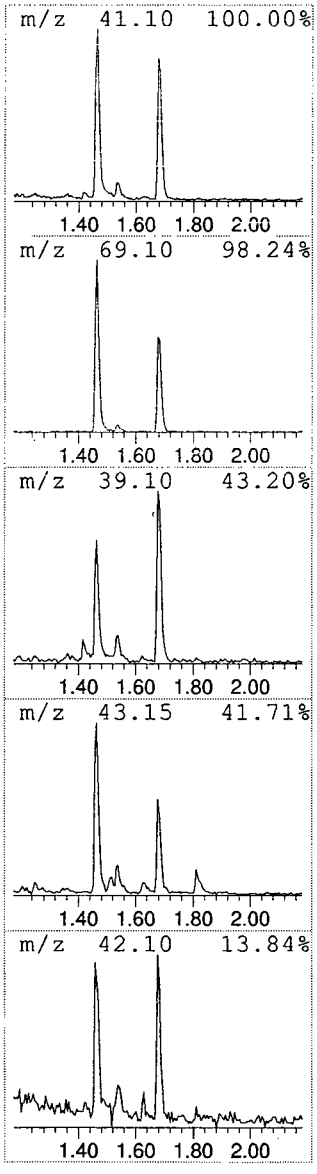
Peak Number 2 Cyclopentane, bromo- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.677 | 12.64 ug/mL | 365017 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 56 |
| 2 | 2-Pentene, 4-bromo- | 148 | C5H9Br | 001809-26-3 | 50 |
| 3 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 45 |
| 4 | 1-Pentene, 5-bromo- | 148 | C5H9Br | 001119-51-3 | 39 |
| 5 | 2-Butyn-1-ol | 70 | C4H6O | 000764-01-2 | 37 |

**Unknown**



Library Search Compound Report

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

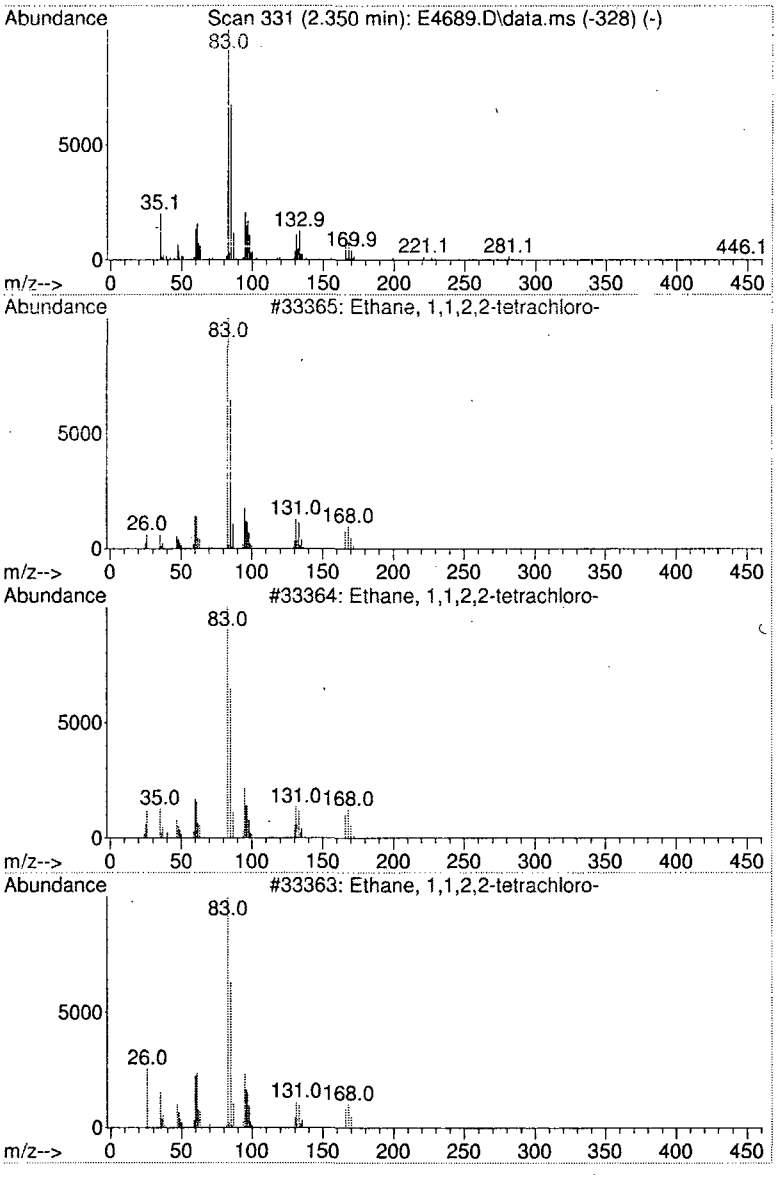
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

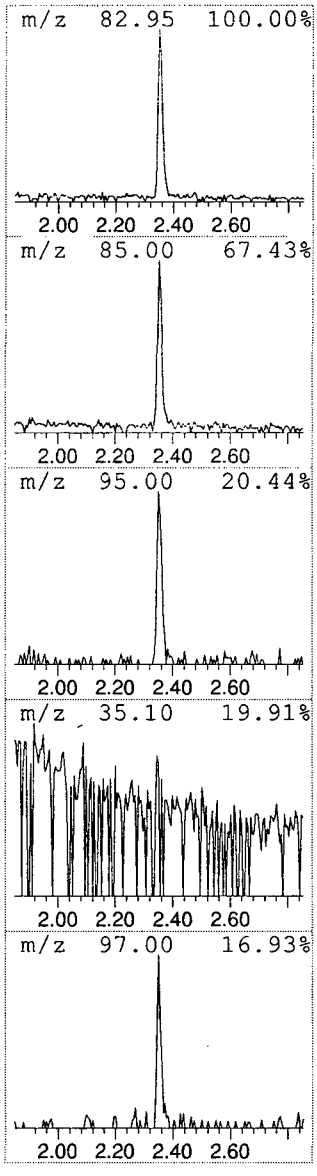
**********

Peak Number 3 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.350 | 6.03 ug/mL | 174050 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 90 ✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 91 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 86 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 60 |
| 5 | Methane, dichloronitro- | 129 | CHCl2NO2 | 007119-89-3 | 40 |



Tentatively Identified Compound (LSC) summary

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:08:55 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

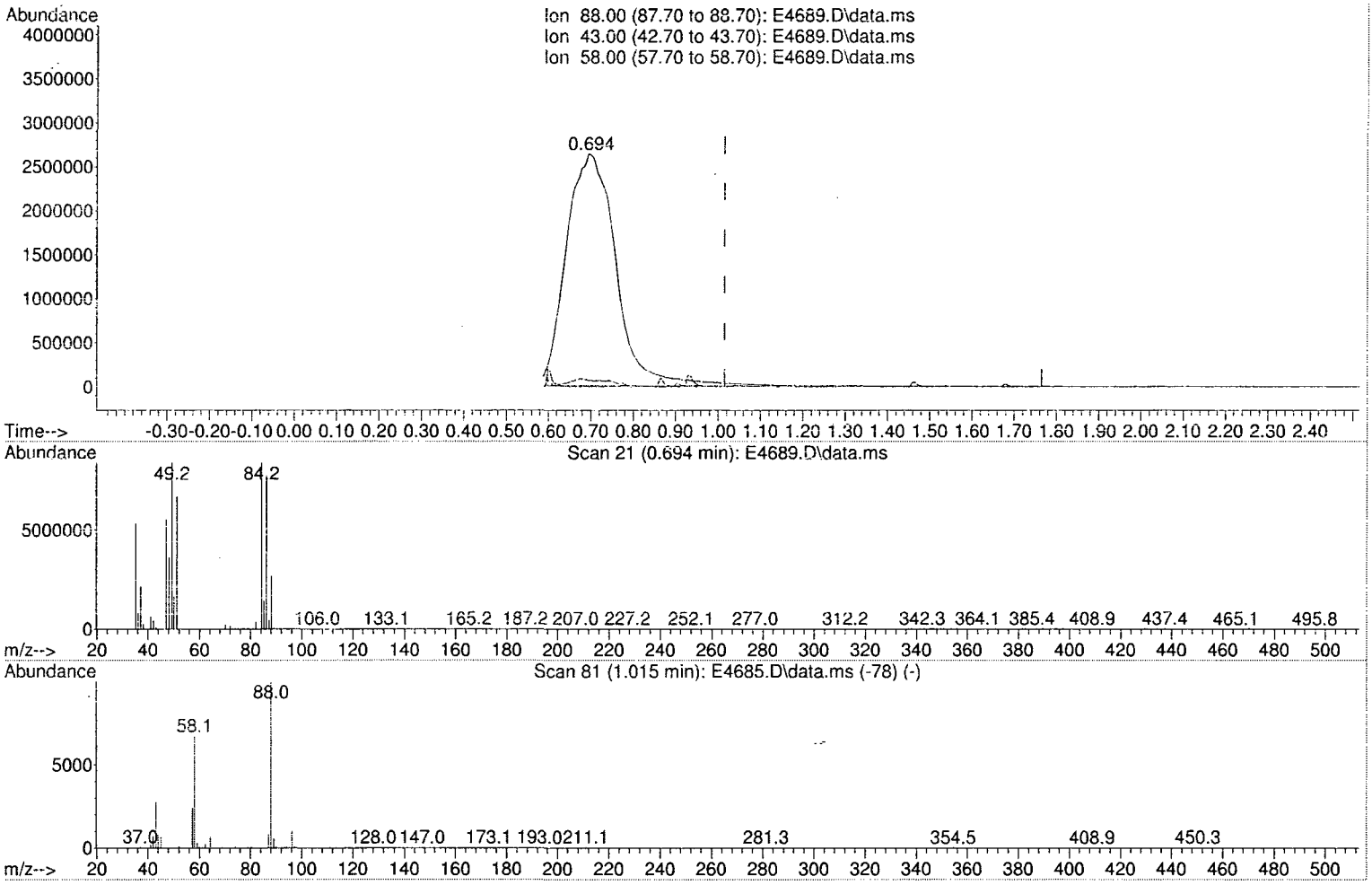
| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 1-Pentene, 3,3-... | 1.464 | 16.1 | ug/mL | 463587 | 1 | 3.237 | 577475 | 20.0 |
| Cyclopentane, b... | 1.677 | 12.6 | ug/mL | 365017 | 1 | 3.237 | 577475 | 20.0 |
| Ethane, 1,1,2,2... | 2.350 | 6.0 | ug/mL | 174050 | 1 | 3.237 | 577475 | 20.0 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:54 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4689.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.694min (-0.321) 4080.89 ug/mL**

**response 21130638**

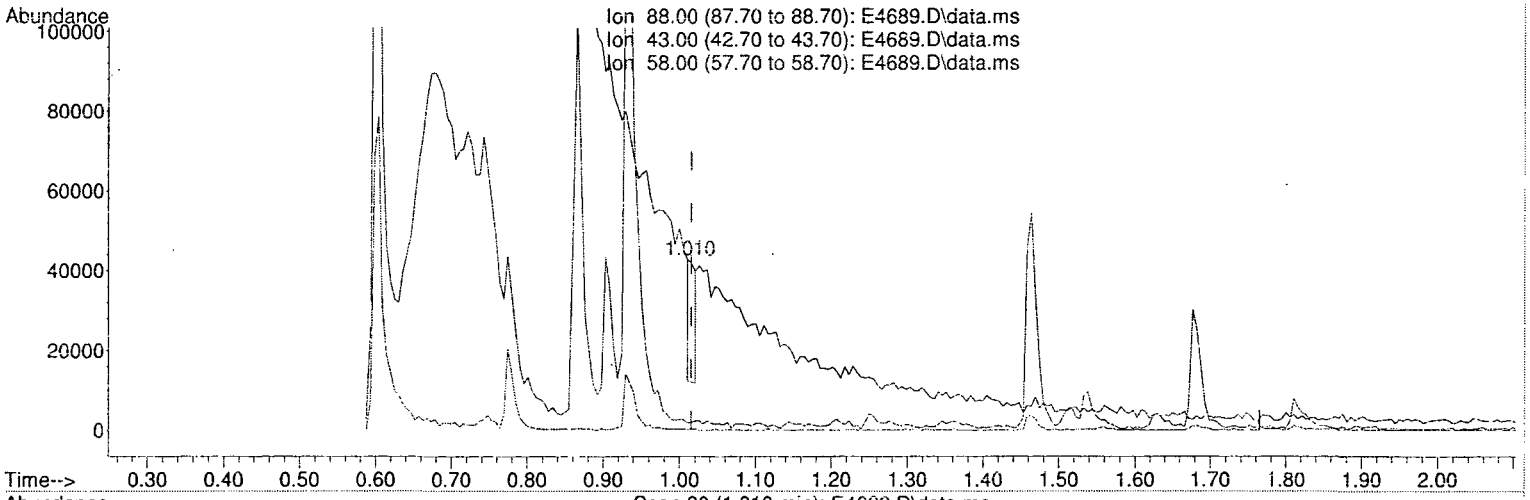
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.88# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

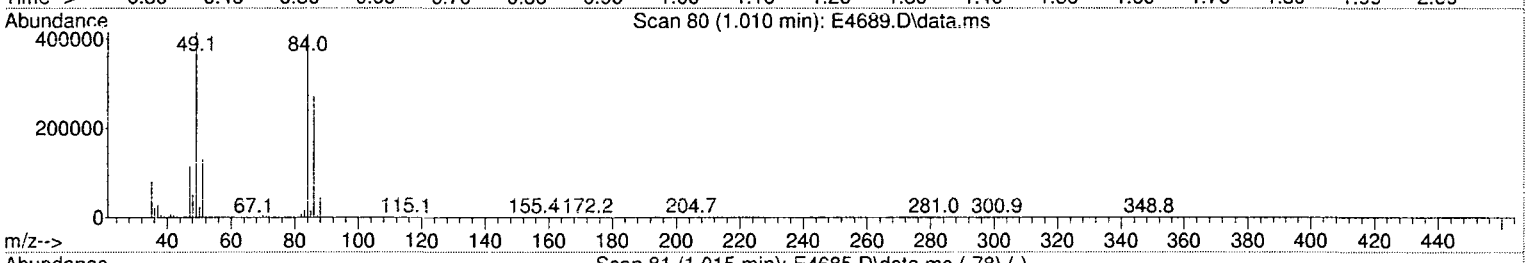
Quantitation Report (Qedit)

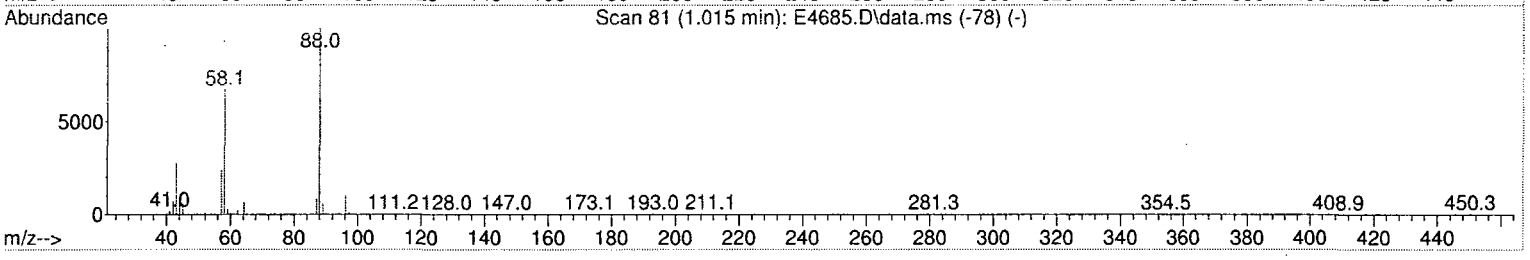
Data File : X:\msdchem\1\data\E4689.D
Acq On : 26 May 2012 13:58
Sample : 0015977-05
Misc : F5WC1 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:54 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4689.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.010min (-0.005) 3.55 ug/mL m** RS

**response 18403**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 1007.58# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 30.3 (g/mL) g Lab File ID: E4647.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/25/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 220 | U |
| 108-95-2 | Phenol | 220 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 220 | U |
| 95-57-8 | 2-Chlorophenol | 220 | U |
| 95-48-7 | 2-Methylphenol | 220 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 220 | U |
| 98-86-2 | Acetophenone | 220 | U |
| 106-44-5 | 4-Methylphenol | 220 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 220 | U |
| 67-72-1 | Hexachloroethane | 220 | U |
| 98-95-3 | Nitrobenzene | 220 | U |
| 78-59-1 | Isophorone | 220 | U |
| 88-75-5 | 2-Nitrophenol | 220 | U |
| 105-67-9 | 2,4-Dimethylphenol | 220 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 220 | U |
| 120-83-2 | 2,4-Dichlorophenol | 220 | U |
| 91-20-3 | Naphthalene | 1400 | |
| 106-47-8 | 4-Chloroaniline | 220 | U |
| 87-68-3 | Hexachlorobutadiene | 220 | U |
| 105-60-2 | Caprolactam | 220 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 220 | U |
| 91-57-6 | 2-Methylnaphthalene | 290 | |
| 77-47-4 | Hexachlorocyclopentadiene | 220 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 220 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 220 | U |
| 92-52-4 | 1,1'-Biphenyl | 53 | J |
| 91-58-7 | 2-Chloronaphthalene | 220 | U |
| 88-74-4 | 2-Nitroaniline | 420 | U |
| 131-11-3 | Dimethylphthalate | 220 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 220 | U |
| 208-96-8 | Acenaphthylene | 220 | U |
| 99-09-2 | 3-Nitroaniline | 420 | U |
| 83-32-9 | Acenaphthene | 120 | J |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 30.3 (g/mL) g Lab File ID: E4647.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/25/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 420 | U |
| 100-02-7 | 4-Nitrophenol | 420 | U |
| 132-64-9 | Dibenzofuran | 67 | J |
| 121-14-2 | 2,4-Dinitrotoluene | 220 | U |
| 84-66-2 | Diethylphthalate | 220 | U |
| 86-73-7 | Fluorene | 89 | J |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 220 | U |
| 100-01-6 | 4-Nitroaniline | 420 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 420 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 220 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 220 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 220 | U |
| 118-74-1 | Hexachlorobenzene | 220 | U |
| 1912-24-9 | Atrazine | 220 | U |
| 87-86-5 | Pentachlorophenol | 420 | U |
| 85-01-8 | Phenanthrene | 250 | |
| 120-12-7 | Anthracene | 64 | J |
| 86-74-8 | Carbazole | 220 | U |
| 84-74-2 | Di-n-butylphthalate | 27 | JB |
| 206-44-0 | Fluoranthene | 74 | J |
| 129-00-0 | Pyrene | 74 | J |
| 85-68-7 | Butylbenzylphthalate | 220 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 220 | U |
| 56-55-3 | Benzo (a) anthracene | 24 | J |
| 218-01-9 | Chrysene | 29 | J |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 220 | U |
| 117-84-0 | Di-n-octylphthalate | 220 | U |
| 205-99-2 | Benzo (b) fluoranthene | 220 | U |
| 207-08-9 | Benzo (k) fluoranthene | 14 | J |
| 50-32-8 | Benzo (a) pyrene | 220 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 220 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 220 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 220 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 220 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-06

Sample wt/vol: 30.3 (g/mL) g Lab File ID: E4647.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 22.4 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/25/2012

GPC Cleanup: (Y/N) Y pH: 7.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 | 0.65 | | U |
| 02 | | Unknown-02 (1 3.296) | 1.50 | 4200 | J |
| 03 | | Unknown-03 (1 3.296) | 1.58 | 410 | J |
| 04 | | Unknown-04 (1 3.296) | 1.67 | 96 | J |
| 05 | | Unknown-05 (1 3.296) | 1.72 | 4000 | J |
| 06 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.40 | 250 | JBN |
| 07 | 000090-12-0 | Naphthalene,1-methyl | 6.17 | 450 | JN |
| 08 | | Unknown-06 (3 7.596) | 6.89 | 170 | J |
| 09 | 000581-42-0 | Naphthalene, 2,6-dimethyl- ( | 6.98 | 160 | JN |
| 10 | 000581-42-0 | Naphthalene, 2,6-dimethyl- ( | 7.11 | 180 | JN |
| 11 | | Unknown-07 (3 7.596) | 8.57 | 89 | J |
| 12 | | Unknown-08 (4 9.848) | 9.30 | 94 | J |
| 13 | | Unknown-09 (4 9.848) | 9.69 | 100 | J |
| 14 | | Unknown-10 (4 9.848) | 10.47 | 92 | J |
| 15 | 000779-02-2 | Anthracene, 9-methyl- | 10.71 | 86 | JN |
| 16 | | Unknown-11 (4 9.848) | 11.46 | 200 | J |
| 17 | | Unknown-12 (6 16.049) | 17.88 | 89 | J |
| 18 | | Unknown-13 (6 16.049) | 18.46 | 150 | J |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | 730 | J |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vitkati

05/28/12

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 64020 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.957 | 136 | 276308 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 194095 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 348247 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.980 | 240 | 344565 | 20.0000 | ug/mL | 0.00 |
| 88) Perylene-d12 | 16.049 | 264 | 329833 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0d | 0.00 | ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | | |
| 7) Phenol-d5 | 3.082 | 99 | 155507 | 10.74 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 26.85% | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 89100 | 11.09 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 27.73% | | | |
| 19) 2-Chlorophenol-d4 | 3.114 | 132 | 136642 | 10.66 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 26.65% | | | |
| 20) 4-Methylphenol-d8 | 3.964 | 113 | 106981 | 9.94 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 24.85% | | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 72837 | 12.41 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 31.03% | | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 76810 | 11.75 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 29.38% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 120855 | 11.08 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 27.70% | | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 152049 | 16.26 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 40.65% | | | |
| 62) Acenaphthylene-d8 | 7.335 | 160 | 440758 | 10.46 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 26.15% | | | |
| 63) 4-Nitrophenol-d4 | 8.184 | 143 | 48421 | 8.20 | ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 20.50% | | | |
| 64) Dimethylphthalate-d6 | 7.377 | 166 | 351514 | 10.77 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 26.92%# | | | |
| 65) Fluorene-d10 | 8.382 | 176 | 288667 | 10.97 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 27.43%# | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.688 | 200 | 36262 | 6.62 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 16.55% | | | |
| 79) Anthracene-d10 | 9.922 | 188 | 456103 | 10.62 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 26.55% | | | |
| 87) Pyrene-d10 | 12.025 | 212 | 554158 | 12.29 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 30.72%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.940 | 264 | 419756 | 11.14 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 27.85%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 29) Naphthalene | 4.984 | 128 | 1136224 | 33.2698 | ug/mL | 99 |
| 34) 2-Methylnaphthalene | 6.010 | 142 | 157152 | 6.8417 | ug/mL | 97 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 39702 | 1.2363 | ug/mL | 96 |
| 49) Acenaphthene | 7.645 | 153 | 70631 | 2.7183 | ug/mL | 94 |
| 52) Dibenzofuran | 7.906 | 168 | 57113 | 1.5849 | ug/mL | 94 |
| 57) Fluorene | 8.425 | 166 | 65114 | 2.0890 | ug/mL | 99 |
| 73) Phenanthrene | 9.882 | 178 | 256223 | 5.8865 | ug/mL | 97 |
| 74) Anthracene | 9.951 | 178 | 67950 | 1.5126 | ug/mL | 99 |
| 76) Di-n-butylphthalate | 11.088 | 149 | 34973 | 0.6374 | ug/mL | 94 |
| 77) Fluoranthene | 11.734 | 202 | 83919 | 1.7498 | ug/mL | 98 |
| 81) Pyrene | 12.054 | 202 | 86941 | 1.7331 | ug/mL | 96 |
| 84) Benzo (a) anthracene | 13.963 | 228 | 23521 | 0.5540 | ug/mL | 73 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 85) Chrysene | 14.020 | 228 | 28210 | 0.6927 ug/mL | 88 |
| 91) Benzo (k) fluoranthene | 15.574 | 252 | 14844m | 0.3328 ug/mL | |

RS 5/26/12

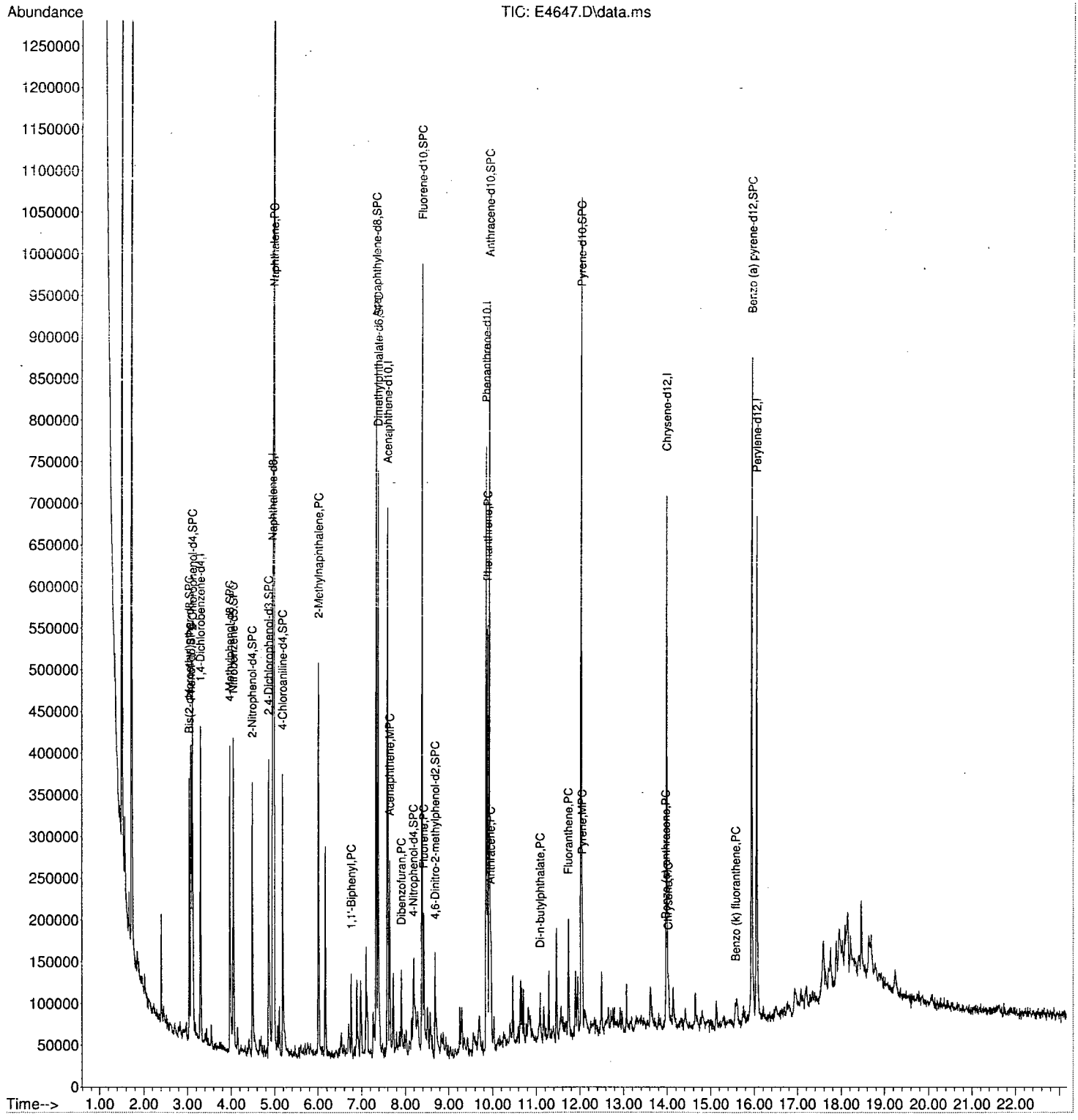
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

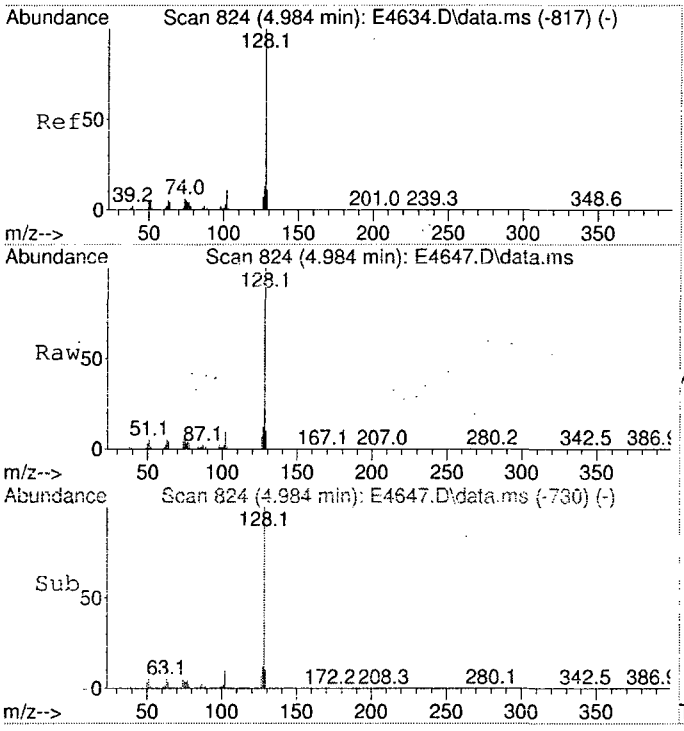
Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

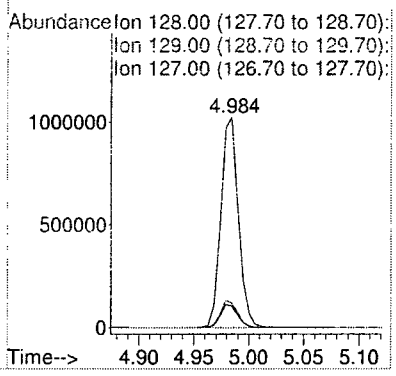
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

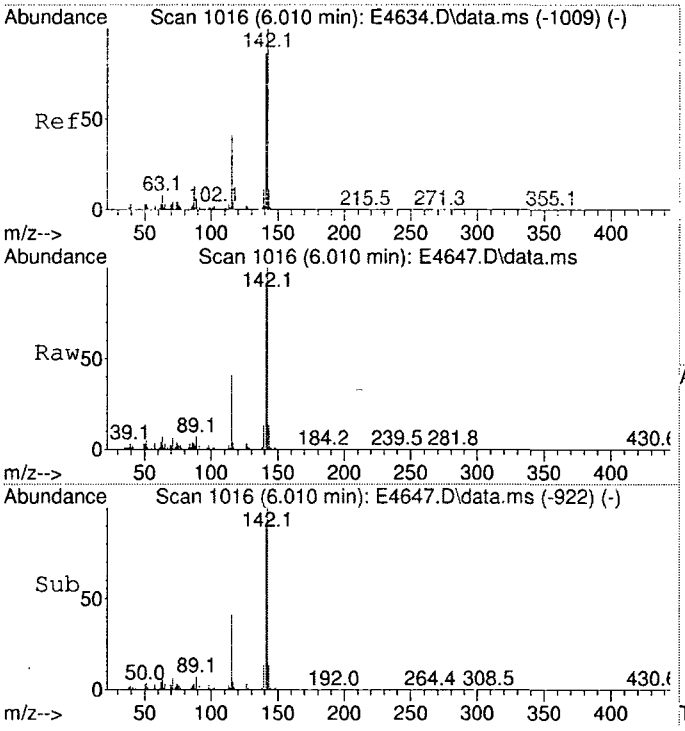



#29
Naphthalene
Concen: 33.2698 ug/mL
RT: 4.98 min Scan# 824
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:128 Resp: 1136224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.8 | 0.0 | 30.7 |
| 127 | 12.7 | 0.0 | 33.1 |

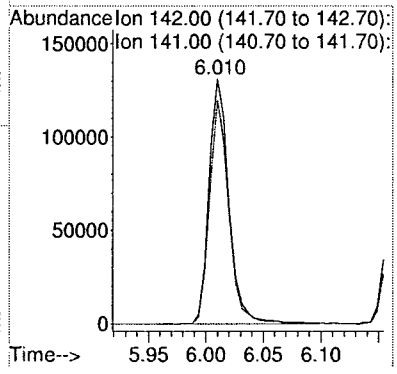



#34
2-Methylnaphthalene
Concen: 6.8417 ug/mL
RT: 6.01 min Scan# 1016
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:142 Resp: 157152

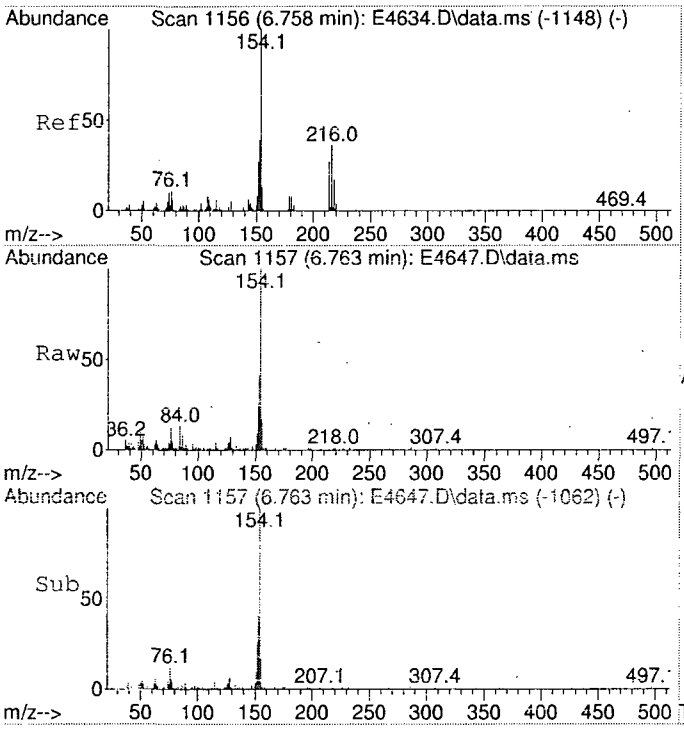
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.2 | 65.7 | 105.7 |



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

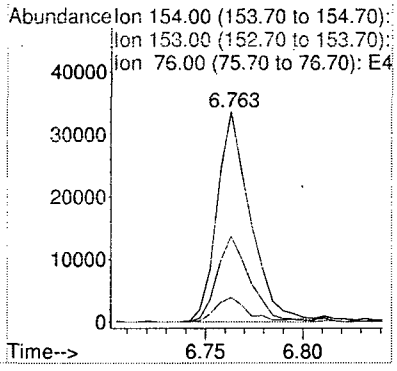
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

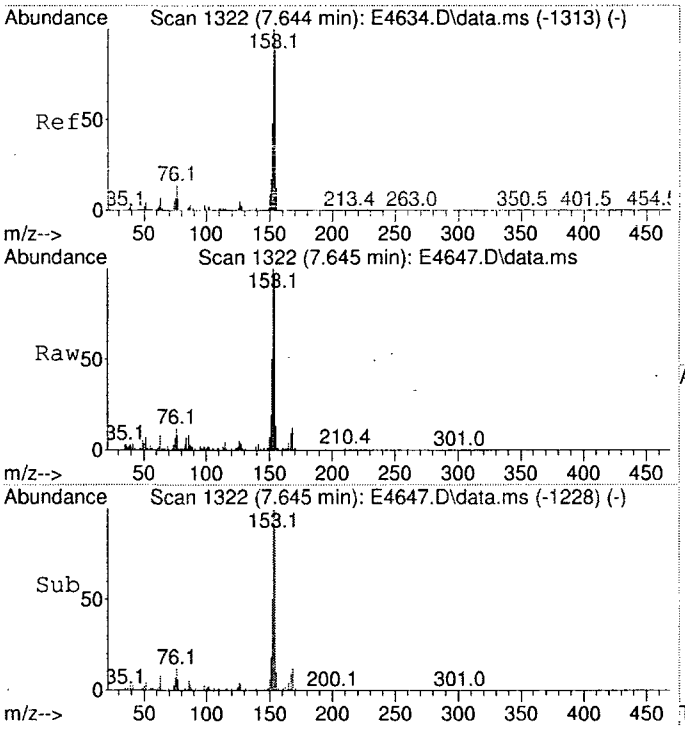



#42
1,1'-Biphenyl
Concen: 1.2363 ug/mL
RT: 6.76 min Scan# 1157
Delta R.T. 0.01 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:154 Resp: 39702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 39.9 | 20.3 | 60.3 |
| 76 | 11.3 | 0.0 | 36.0 |

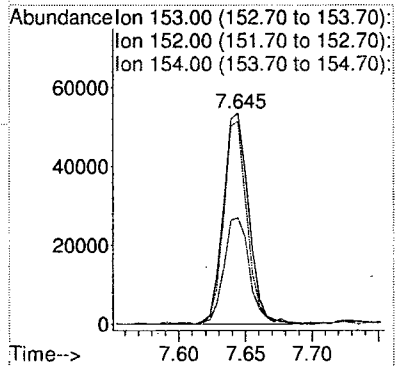



#49
Acenaphthene
Concen: 2.7183 ug/mL
RT: 7.64 min Scan# 1322
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

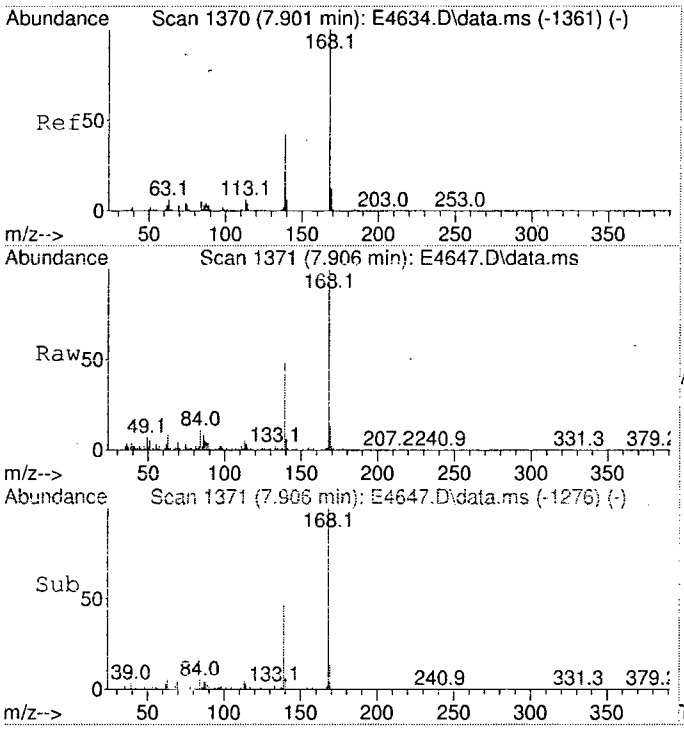
Tgt Ion:153 Resp: 70631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 152 | 51.4 | 26.7 | 66.7 |
| 154 | 88.3 | 73.3 | 113.3 |



Data File : C:\msdchem\1\data\E4647.D  Vial: 13
Acq On : 25 May 2012 00:36  Operator: RS
Sample : 0015977-06  Inst : E-5973
Misc : F5WC2 30.3GM/0.5ML GPC SOIL  Multiplr: 1.00
MS Integration Params: RTEINT.P

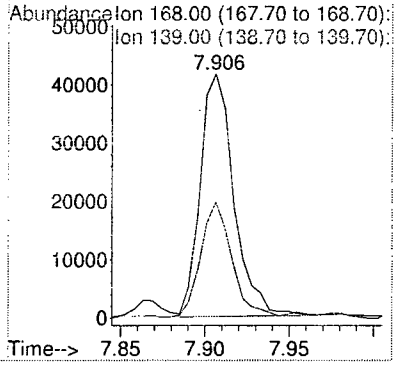
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

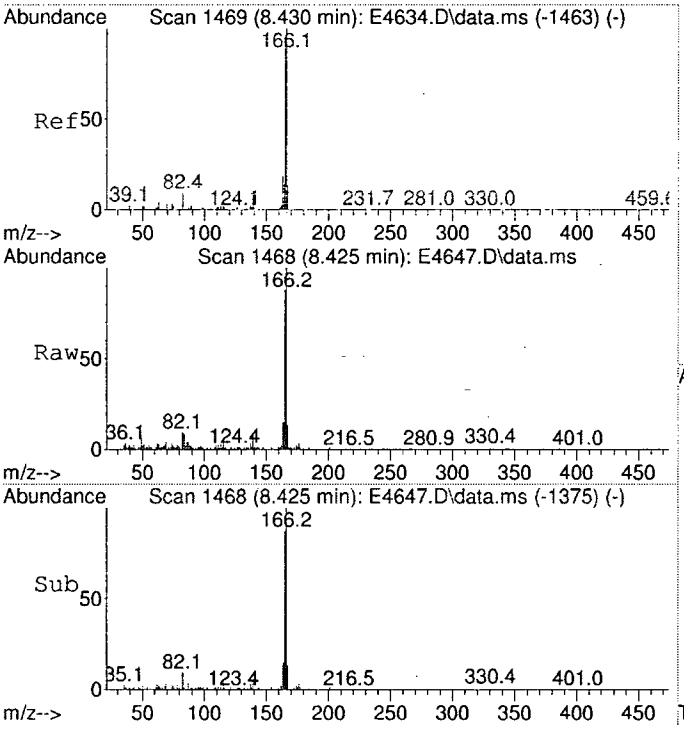



#52
Dibenzofuran
Concen: 1.5849 ug/mL
RT: 7.91 min Scan# 1371
Delta R.T. 0.01 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:168 Resp: 57113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 43.7 | 20.2 | 60.2 |

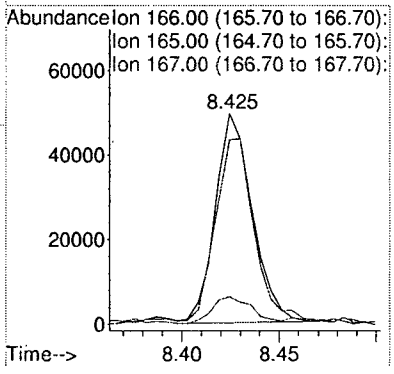



#57
Fluorene
Concen: 2.0890 ug/mL
RT: 8.42 min Scan# 1468
Delta R.T. -0.01 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:166 Resp: 65114

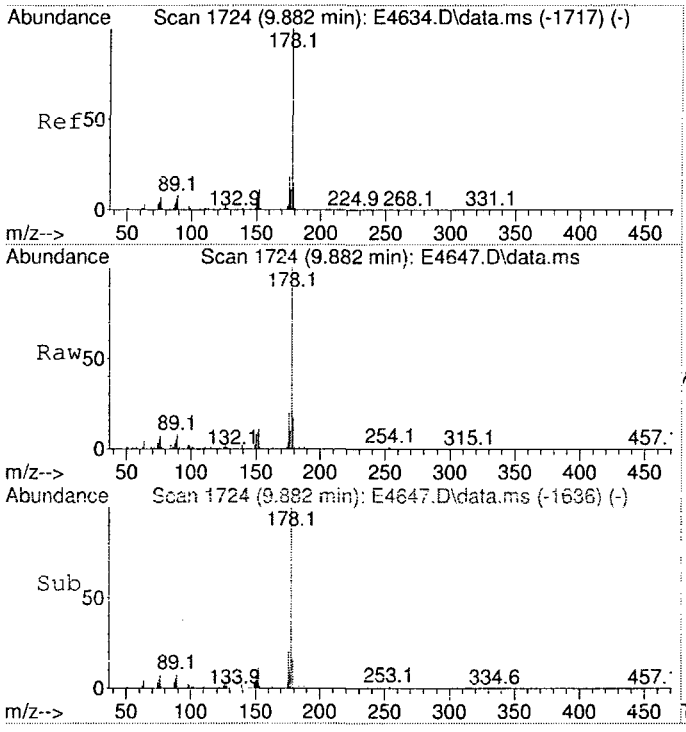
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 91.5 | 71.9 | 111.9 |
| 167 | 14.5 | 0.0 | 33.5 |



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

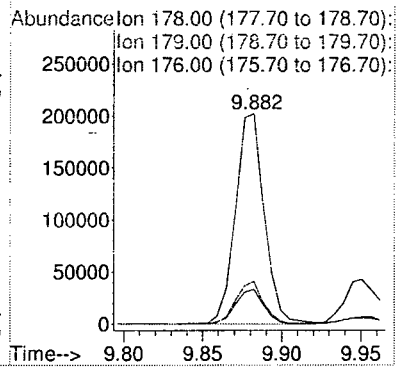
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

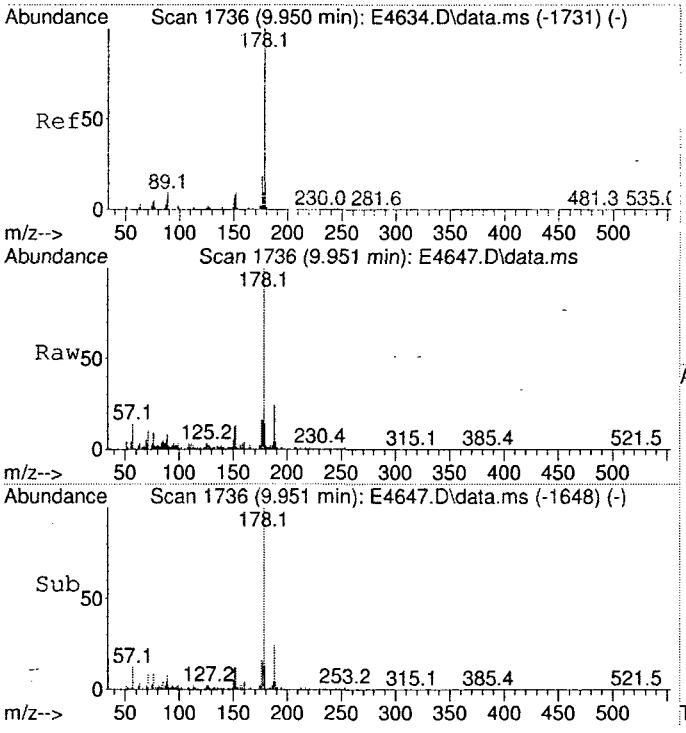



#73
Phenanthrene
Concen: 5.8865 ug/mL
RT: 9.88 min Scan# 1724
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:178 Resp: 256223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.4 | 0.0 | 35.0 |
| 176 | 19.5 | 0.0 | 38.0 |

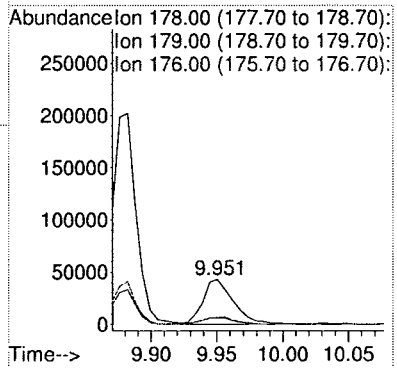



#74
Anthracene
Concen: 1.5126 ug/mL
RT: 9.95 min Scan# 1736
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:178 Resp: 67950

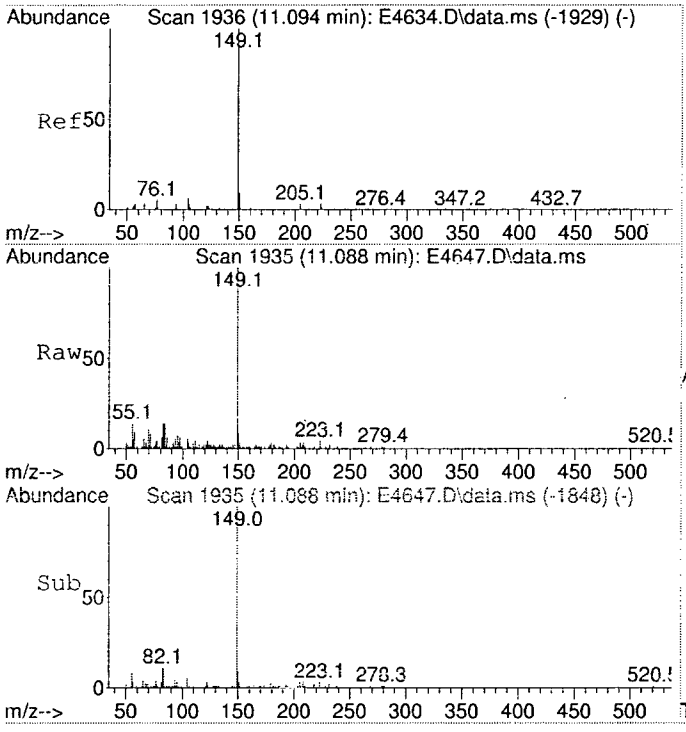
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.8 | 0.0 | 35.2 |
| 176 | 17.5 | 0.0 | 38.1 |



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

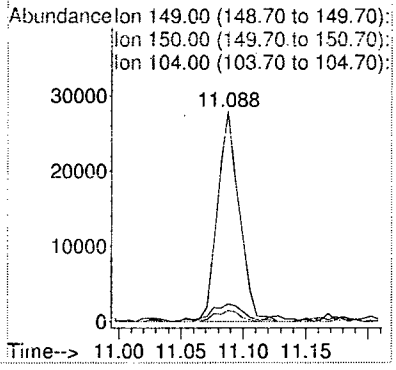
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

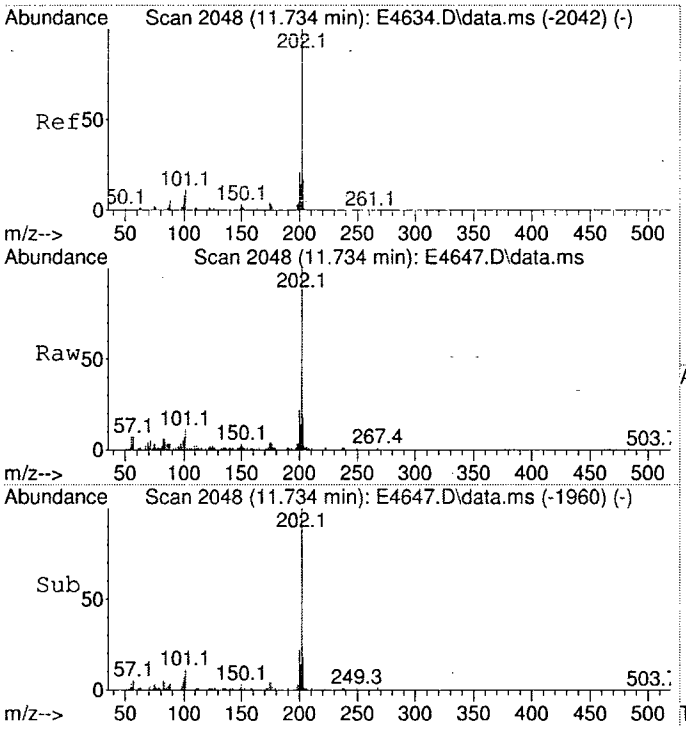



#76
Di-n-butylphthalate
Concen: 0.6374 ug/mL
RT: 11.09 min Scan# 1935
Delta R.T. -0.01 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:149 Resp: 34973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 12.1 | 0.0 | 29.0 |
| 104 | 5.8 | 0.0 | 26.3 |

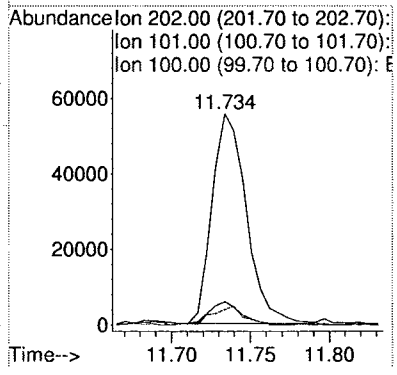



#77
Fluoranthene
Concen: 1.7498 ug/mL
RT: 11.73 min Scan# 2048
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:202 Resp: 83919

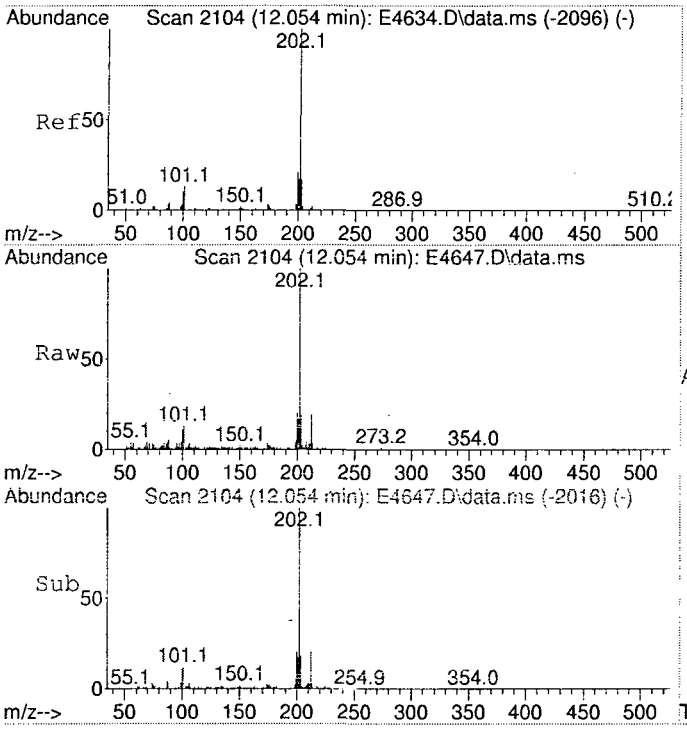
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.6 | 0.0 | 29.8 |
| 100 | 8.2 | 0.0 | 27.6 |



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

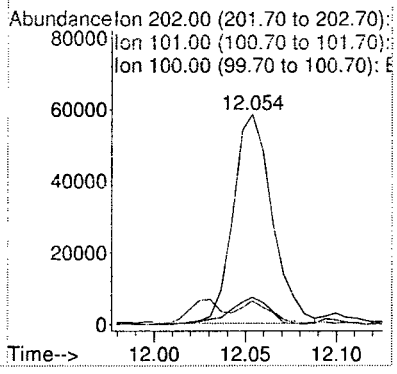
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

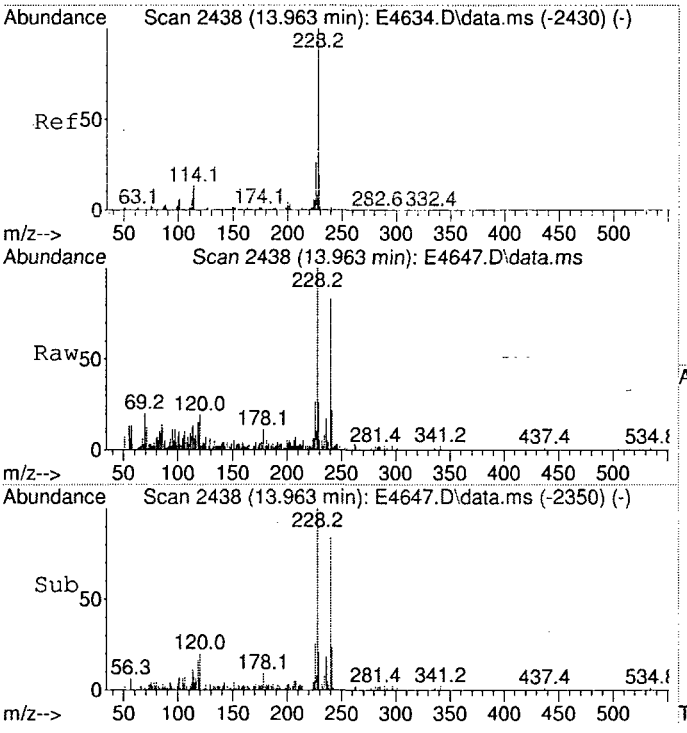



#81
Pyrene
Concen: 1.7331 ug/mL
RT: 12.05 min Scan# 2104
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:202 Resp: 86941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 13.9 | 0.0 | 32.2 |
| 100 | 9.8 | 0.0 | 31.0 |

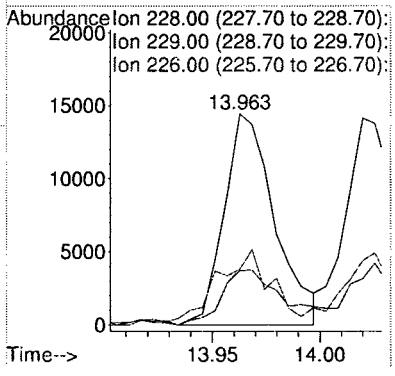



#84
Benzo (a) anthracene
Concen: 0.5540 ug/mL
RT: 13.96 min Scan# 2438
Delta R.T. 0.00 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:228 Resp: 23521

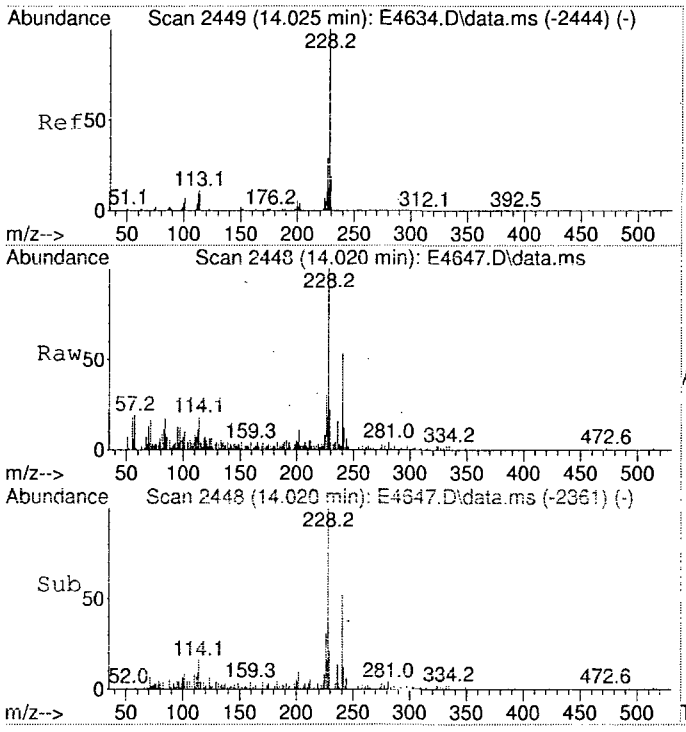
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 32.5 | 0.0 | 39.3 |
| 226 | 39.2 | 6.3 | 46.3 |



Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

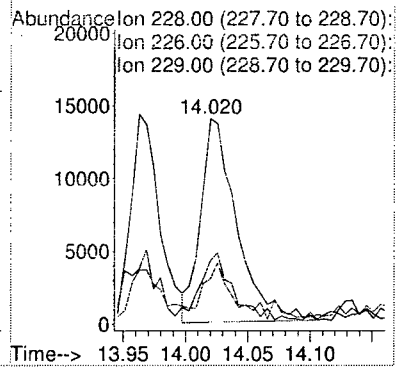
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

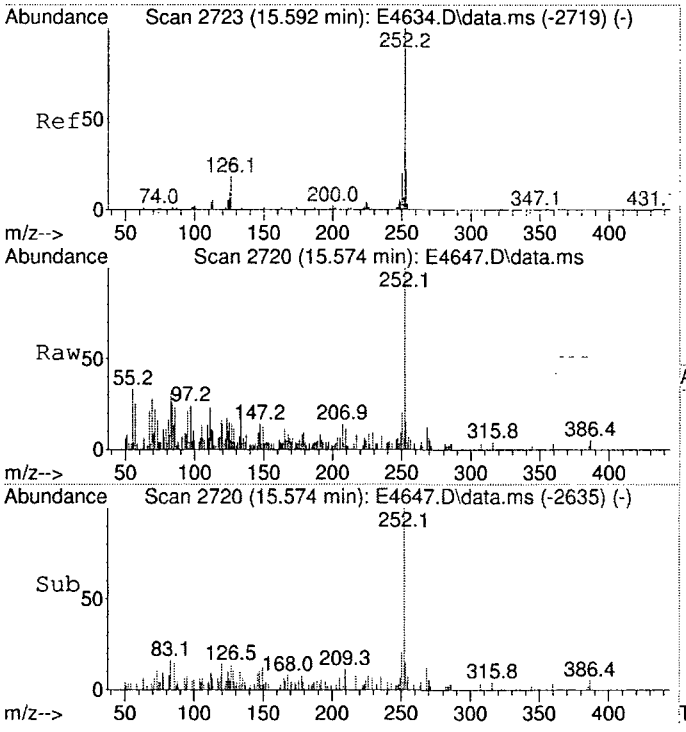



#85
Chrysene
Concen: 0.6927 ug/mL
RT: 14.02 min Scan# 2448
Delta R.T. -0.01 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:228 Resp: 28210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 36.3 | 9.4 | 49.4 |
| 229 | 13.9 | 0.0 | 38.9 |

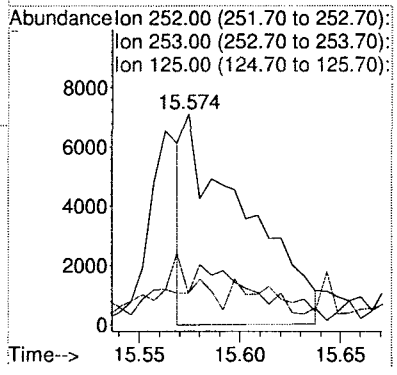



#91
Benzo (k) fluoranthene
Concen: 0.3328 ug/mL m
RT: 15.57 min Scan# 2720
Delta R.T. -0.02 min
Lab File: E4647.D
Acq: 25 May 2012 00:36

Tgt Ion:252 Resp: 14844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 13.0 | 0.0 | 39.3 |
| 125 | 11.2 | 0.0 | 28.3 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4647.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.652 | 3 | 13 | 69 | rVB7 | 68670139 | 640667008 | 100.00% | 95.480% |
| 2 | 1.501 | 169 | 172 | 184 | rVB | 2357534 | 2351352 | 0.37% | 0.350% |
| 3 | 1.576 | 184 | 186 | 199 | rVB3 | 137094 | 229901 | 0.04% | 0.034% |
| 4 | 1.667 | 201 | 203 | 210 | rVB3 | 56870 | 53048 | 0.01% | 0.008% |
| 5 | 1.720 | 210 | 213 | 228 | rVB | 2230705 | 2222005 | 0.35% | 0.331% |
| 6 | 1.848 | 235 | 237 | 244 | rVB7 | 25792 | 33578 | 0.01% | 0.005% |
| 7 | 2.025 | 268 | 270 | 277 | rVB8 | 28739 | 34506 | 0.01% | 0.005% |
| 8 | 2.404 | 338 | 341 | 349 | rVB | 128940 | 141260 | 0.02% | 0.021% |
| 9 | 2.601 | 376 | 378 | 388 | rVB10 | 13849 | 35181 | 0.01% | 0.005% |
| 10 | 3.045 | 458 | 461 | 466 | rBV | 311318 | 326958 | 0.05% | 0.049% |
| 11 | 3.082 | 466 | 468 | 471 | rVV | 347199 | 378175 | 0.06% | 0.056% |
| 12 | 3.114 | 471 | 474 | 482 | rVB | 428013 | 585627 | 0.09% | 0.087% |
| 13 | 3.296 | 503 | 508 | 518 | rVB2 | 378745 | 471553 | 0.07% | 0.070% |
| 14 | 3.542 | 550 | 554 | 562 | rVB5 | 29737 | 42726 | 0.01% | 0.006% |
| 15 | 3.964 | 629 | 633 | 643 | rBV | 366406 | 511057 | 0.08% | 0.076% |
| 16 | 4.049 | 645 | 649 | 657 | rVB | 370456 | 472054 | 0.07% | 0.070% |
| 17 | 4.151 | 664 | 668 | 673 | rVB4 | 33400 | 48595 | 0.01% | 0.007% |
| 18 | 4.487 | 726 | 731 | 739 | rBV | 328883 | 421396 | 0.07% | 0.063% |
| 19 | 4.861 | 797 | 801 | 811 | rBV | 358142 | 555438 | 0.09% | 0.083% |
| 20 | 4.957 | 815 | 819 | 821 | rBV | 547542 | 620426 | 0.10% | 0.092% |
| 21 | 4.979 | 821 | 823 | 835 | rVB | 2016984 | 2224083 | 0.35% | 0.331% |
| 22 | 5.070 | 837 | 840 | 844 | rBV2 | 29740 | 35093 | 0.01% | 0.005% |
| 23 | 5.107 | 844 | 847 | 856 | rVB | 60132 | 71074 | 0.01% | 0.011% |
| 24 | 5.182 | 857 | 861 | 876 | rBV | 335376 | 497937 | 0.08% | 0.074% |
| 25 | 6.010 | 1011 | 1016 | 1027 | rBV | 468696 | 599171 | 0.09% | 0.089% |
| 26 | 6.165 | 1039 | 1045 | 1053 | rVB | 251554 | 325222 | 0.05% | 0.048% |
| 27 | 6.539 | 1110 | 1115 | 1118 | rVV6 | 25427 | 39756 | 0.01% | 0.006% |
| 28 | 6.704 | 1141 | 1146 | 1153 | rVB6 | 35179 | 58545 | 0.01% | 0.009% |
| 29 | 6.763 | 1153 | 1157 | 1164 | rVB | 102061 | 129961 | 0.02% | 0.019% |
| 30 | 6.891 | 1175 | 1181 | 1185 | rBV4 | 91266 | 154647 | 0.02% | 0.023% |
| 31 | 6.982 | 1192 | 1198 | 1204 | rBV | 91815 | 147917 | 0.02% | 0.022% |
| 32 | 7.105 | 1216 | 1221 | 1224 | rBV | 127730 | 165845 | 0.03% | 0.025% |
| 33 | 7.132 | 1224 | 1226 | 1232 | rVB3 | 68149 | 73453 | 0.01% | 0.011% |
| 34 | 7.271 | 1248 | 1252 | 1255 | rBV | 55512 | 76120 | 0.01% | 0.011% |
| 35 | 7.297 | 1255 | 1257 | 1260 | rVV4 | 36610 | 41150 | 0.01% | 0.006% |
| 36 | 7.335 | 1260 | 1264 | 1269 | rVV | 830277 | 954864 | 0.15% | 0.142% |
| 37 | 7.377 | 1269 | 1272 | 1287 | rVB | 697324 | 899729 | 0.14% | 0.134% |
| 38 | 7.596 | 1304 | 1313 | 1317 | rVV | 658472 | 777586 | 0.12% | 0.116% |
| 39 | 7.645 | 1317 | 1322 | 1331 | rVV2 | 232325 | 329858 | 0.05% | 0.049% |
| 40 | 7.725 | 1333 | 1337 | 1342 | rVB3 | 95576 | 115308 | 0.02% | 0.017% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 7.799 | 1347 | 1351 | 1357 | rVB5 | 22299 | 31913 | 0.00% | 0.005% |
| 42 | 7.906 | 1366 | 1371 | 1378 | rVV | 92726 | 120814 | 0.02% | 0.018% |
| 43 | 8.018 | 1388 | 1392 | 1399 | rVB8 | 30332 | 39574 | 0.01% | 0.006% |
| 44 | 8.141 | 1412 | 1415 | 1418 | rBV5 | 37922 | 46760 | 0.01% | 0.007% |
| 45 | 8.189 | 1420 | 1424 | 1429 | rBV3 | 93364 | 159745 | 0.02% | 0.024% |
| 46 | 8.382 | 1455 | 1460 | 1465 | rBV | 939402 | 1118506 | 0.17% | 0.167% |
| 47 | 8.425 | 1465 | 1468 | 1477 | rVB | 152317 | 214734 | 0.03% | 0.032% |
| 48 | 8.510 | 1480 | 1484 | 1491 | rVB3 | 50442 | 101839 | 0.02% | 0.015% |
| 49 | 8.568 | 1491 | 1494 | 1502 | rVB4 | 44956 | 80788 | 0.01% | 0.012% |
| 50 | 8.682 | 1510 | 1514 | 1518 | rBV2 | 127618 | 172490 | 0.03% | 0.026% |
| 51 | 8.825 | 1536 | 1539 | 1544 | rBV4 | 21027 | 40767 | 0.01% | 0.006% |
| 52 | 8.870 | 1545 | 1547 | 1554 | rVV5 | 23950 | 36007 | 0.01% | 0.005% |
| 53 | 8.933 | 1554 | 1558 | 1564 | rVB8 | 22724 | 34941 | 0.01% | 0.005% |
| 54 | 9.253 | 1608 | 1614 | 1617 | rVV2 | 56534 | 75872 | 0.01% | 0.011% |
| 55 | 9.299 | 1617 | 1622 | 1627 | rVV6 | 52491 | 98891 | 0.02% | 0.015% |
| 56 | 9.425 | 1640 | 1644 | 1649 | rVB8 | 20706 | 36572 | 0.01% | 0.005% |
| 57 | 9.556 | 1663 | 1667 | 1672 | rBV7 | 28722 | 63094 | 0.01% | 0.009% |
| 58 | 9.693 | 1682 | 1691 | 1696 | rVV6 | 44571 | 106715 | 0.02% | 0.016% |
| 59 | 9.848 | 1713 | 1718 | 1721 | rBV | 725386 | 896889 | 0.14% | 0.134% |
| 60 | 9.882 | 1721 | 1724 | 1727 | rVV | 505854 | 610202 | 0.10% | 0.091% |
| 61 | 9.922 | 1727 | 1731 | 1744 | rVV | 893365 | 1344987 | 0.21% | 0.200% |
| 62 | 10.025 | 1745 | 1749 | 1755 | rVB6 | 40100 | 67583 | 0.01% | 0.010% |
| 63 | 10.402 | 1810 | 1815 | 1819 | rBV8 | 24990 | 47048 | 0.01% | 0.007% |
| 64 | 10.471 | 1823 | 1827 | 1832 | rVB | 79867 | 97344 | 0.02% | 0.015% |
| 65 | 10.642 | 1852 | 1857 | 1859 | rBV | 75324 | 90567 | 0.01% | 0.013% |
| 66 | 10.671 | 1859 | 1862 | 1865 | rVV | 62574 | 76260 | 0.01% | 0.011% |
| 67 | 10.711 | 1865 | 1869 | 1876 | rVB | 64676 | 90790 | 0.01% | 0.014% |
| 68 | 10.774 | 1876 | 1880 | 1884 | rBV7 | 23505 | 40473 | 0.01% | 0.006% |
| 69 | 10.814 | 1884 | 1887 | 1895 | rVV7 | 35464 | 88836 | 0.01% | 0.013% |
| 70 | 11.088 | 1926 | 1935 | 1945 | rVB2 | 60914 | 139512 | 0.02% | 0.021% |
| 71 | 11.174 | 1945 | 1950 | 1955 | rBV3 | 44482 | 81360 | 0.01% | 0.012% |
| 72 | 11.288 | 1965 | 1970 | 1975 | rBV2 | 80925 | 99989 | 0.02% | 0.015% |
| 73 | 11.459 | 1995 | 2000 | 2010 | rBV2 | 137034 | 209960 | 0.03% | 0.031% |
| 74 | 11.539 | 2010 | 2014 | 2016 | rBV5 | 22529 | 32454 | 0.01% | 0.005% |
| 75 | 11.568 | 2016 | 2019 | 2022 | rVV5 | 36384 | 52005 | 0.01% | 0.008% |
| 76 | 11.734 | 2042 | 2048 | 2057 | rVB | 141284 | 234215 | 0.04% | 0.035% |
| 77 | 11.900 | 2073 | 2077 | 2082 | rBV3 | 78240 | 121253 | 0.02% | 0.018% |
| 78 | 11.951 | 2082 | 2086 | 2090 | rVB6 | 66324 | 88489 | 0.01% | 0.013% |
| 79 | 12.031 | 2094 | 2100 | 2109 | rVB2 | 996505 | 1512090 | 0.24% | 0.225% |
| 80 | 12.100 | 2109 | 2112 | 2115 | rBV4 | 22360 | 33408 | 0.01% | 0.005% |
| 81 | 12.500 | 2176 | 2182 | 2187 | rBV3 | 74992 | 117008 | 0.02% | 0.017% |
| 82 | 12.963 | 2260 | 2263 | 2274 | rVB3 | 24510 | 40800 | 0.01% | 0.006% |
| 83 | 13.065 | 2277 | 2281 | 2288 | rBV3 | 58682 | 94090 | 0.01% | 0.014% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 13.608 | 2373 | 2376 | 2381 | rBV5 | 48802 | 87333 | 0.01% | 0.013% |
| 85 | 13.980 | 2432 | 2441 | 2447 | rBV | 638905 | 1002736 | 0.16% | 0.149% |
| 86 | 14.140 | 2465 | 2469 | 2473 | rBV4 | 44922 | 70796 | 0.01% | 0.011% |
| 87 | 14.643 | 2553 | 2557 | 2563 | rBV7 | 38587 | 66004 | 0.01% | 0.010% |
| 88 | 14.763 | 2574 | 2578 | 2582 | rBV7 | 17267 | 32053 | 0.01% | 0.005% |
| 89 | 15.129 | 2639 | 2642 | 2646 | rVB6 | 28013 | 36706 | 0.01% | 0.005% |
| 90 | 15.569 | 2715 | 2719 | 2723 | rBV6 | 26468 | 53984 | 0.01% | 0.008% |
| 91 | 15.906 | 2773 | 2778 | 2779 | rBV5 | 29127 | 34704 | 0.01% | 0.005% |
| 92 | 15.940 | 2779 | 2784 | 2796 | rVV | 792236 | 1297236 | 0.20% | 0.193% |
| 93 | 16.049 | 2797 | 2803 | 2817 | rVB | 597779 | 946247 | 0.15% | 0.141% |
| 94 | 16.935 | 2955 | 2958 | 2963 | rBV7 | 18532 | 34046 | 0.01% | 0.005% |
| 95 | 17.083 | 2979 | 2984 | 2987 | rBV7 | 21747 | 31834 | 0.00% | 0.005% |
| 96 | 17.878 | 3119 | 3123 | 3128 | rBV8 | 52726 | 98311 | 0.02% | 0.015% |
| 97 | 18.084 | 3155 | 3159 | 3161 | rBV4 | 49271 | 66271 | 0.01% | 0.010% |
| 98 | 18.209 | 3179 | 3181 | 3196 | rVB4 | 36594 | 81147 | 0.01% | 0.012% |
| 99 | 18.461 | 3221 | 3225 | 3237 | rVB4 | 85413 | 171776 | 0.03% | 0.026% |
| 100 | 18.638 | 3253 | 3256 | 3263 | rBV8 | 31327 | 74654 | 0.01% | 0.011% |

Sum of corrected areas: 670992635

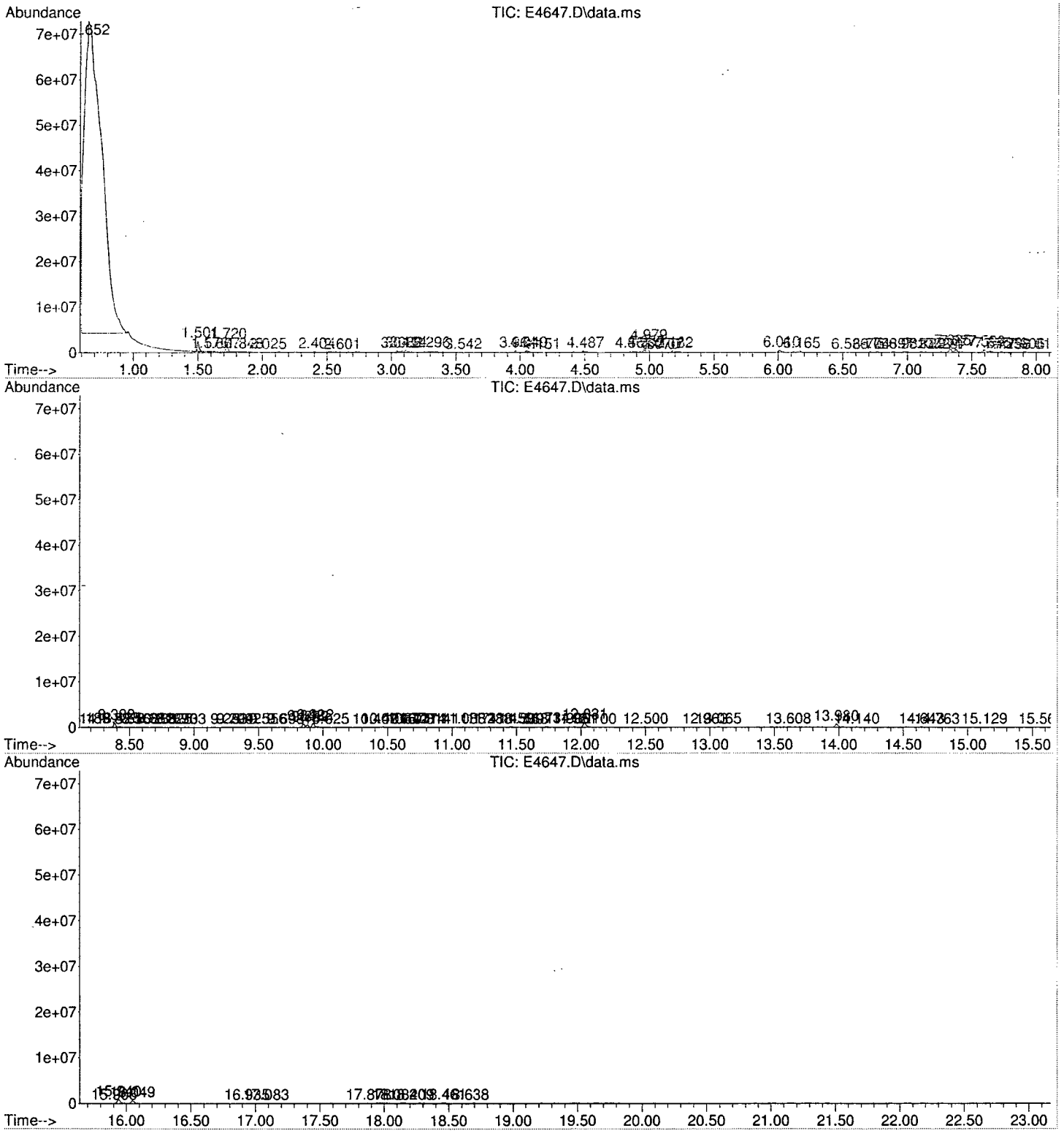
LSC Report - Integrated Chromatogram

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

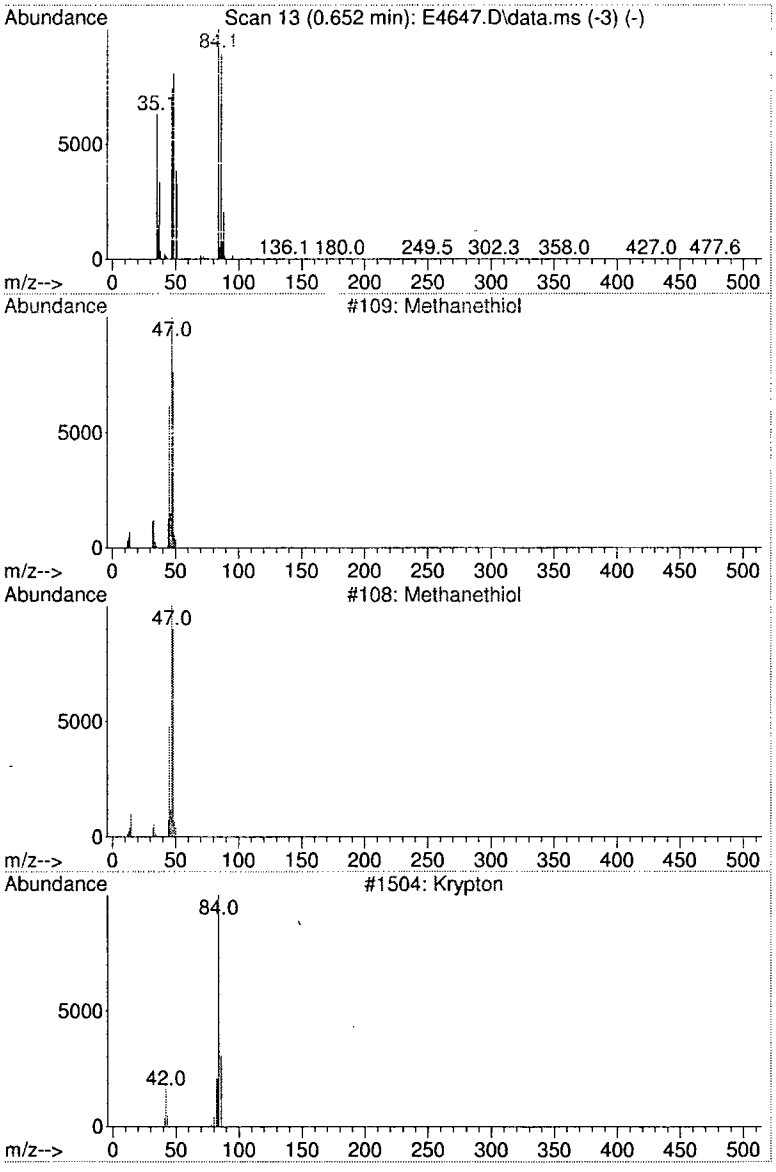
**********

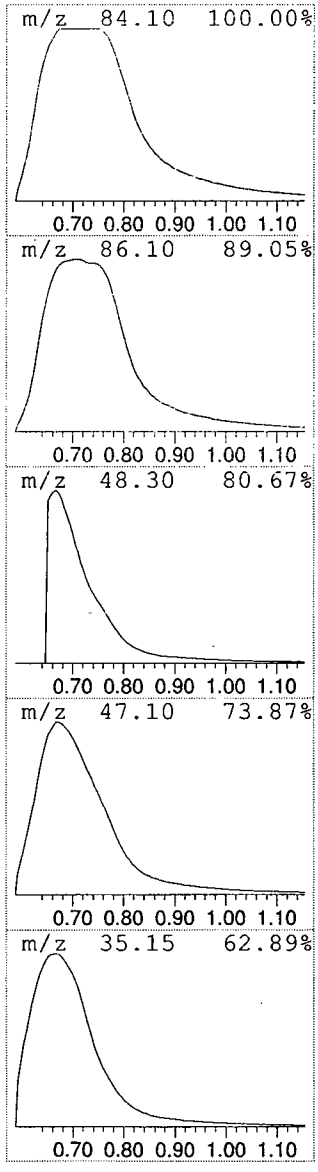
Peak Number 1 Methanethiol Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 0.652 | 27172.60 ug/mL | 640667000 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methanethiol | 48 | CH4S | 000074-93-1 | 7 |
| 2 | Methanethiol | 48 | CH4S | 000074-93-1 | 7 |
| 3 | Krypton | 84 | Kr | 007439-90-9 | 3 |
| 4 | Methan-d3-ol | 35 | CHD3O | 001849-29-2 | 3 |
| 5 | Methan-d3-ol | 35 | CHD3O | 001849-29-2 | 3 |

**Unknown**



Library Search Compound Report

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Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********

Peak Number 2 1-Octen-4-ol Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.501 | 99.73 ug/mL | 2351350 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Octen-4-ol | 128 | C8H16O | 040575-42-6 | 39 |
| 2 | 3-Penten-1-ol, 2-methyl- | 100 | C6H12O | 062238-37-3 | 9 |
| 3 | 1-Butene, 3,3-dimethyl- | 84 | C6H12 | 000558-37-2 | 9 |
| 4 | 4-Heptanol, 2,6-dimethyl- | 144 | C9H20O | 000108-82-7 | 9 |
| 5 | 2-Butyn-1-ol | 70 | C4H6O | 000764-01-2 | 7 |

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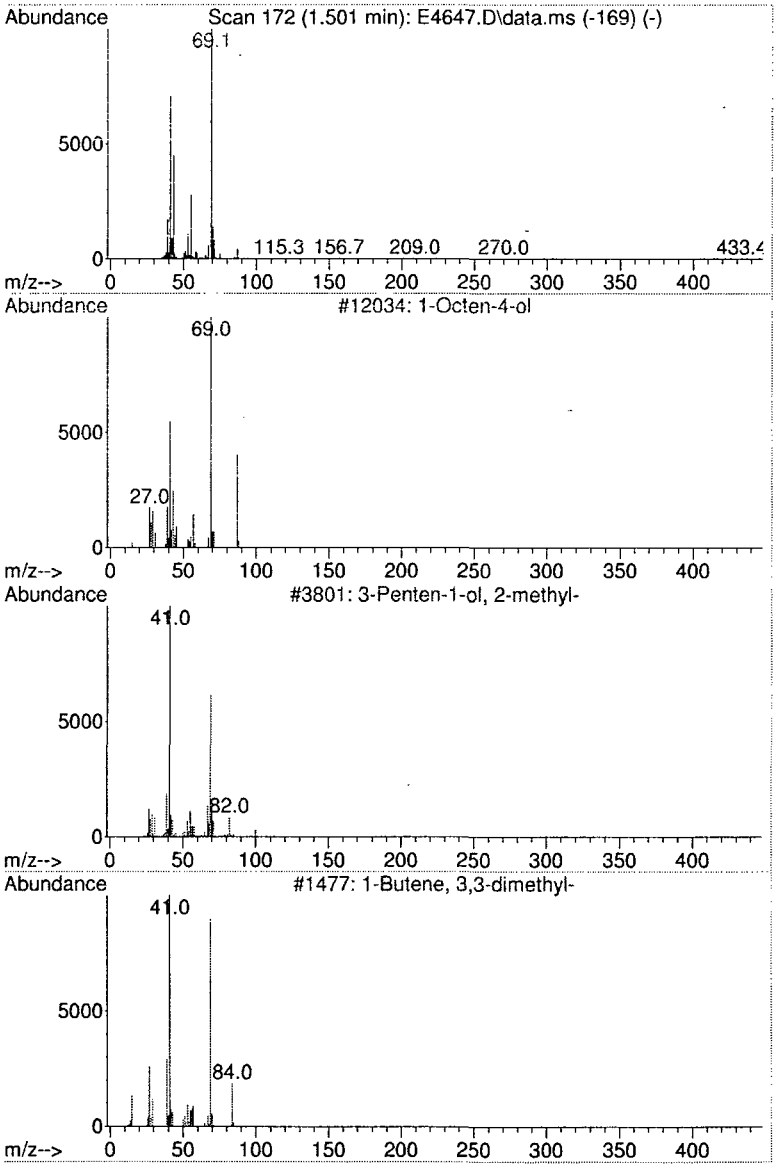


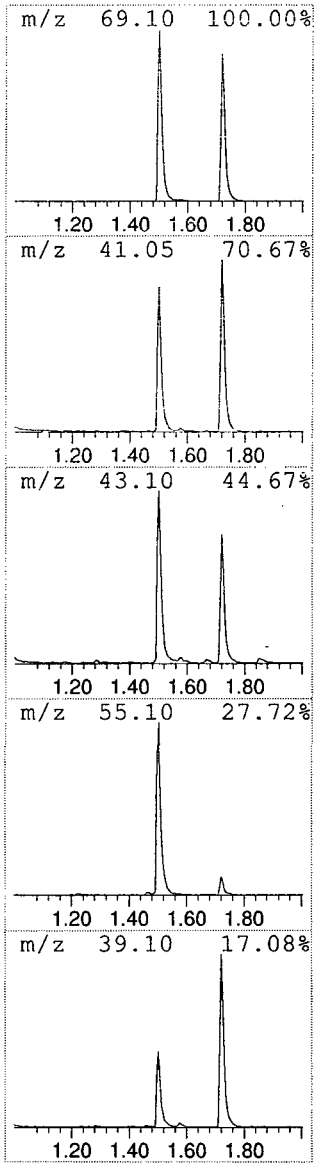

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
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Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********

Peak Number 3 Butanamide, 3,N-dihydroxy- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.576 | 9.75 ug/mL | 229901 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butanamide, 3,N-dihydroxy- | 119 | C4H9NO3 | 090567-52-5 | 72 |
| 2 | Butane, 1-bromo-4-methoxy- | 166 | C5H11BrO | 004457-67-4 | 42 |
| 3 | 2-Heptanol, 6-methyl- | 130 | C8H18O | 004730-22-7 | 40 |
| 4 | Methoxyacetic acid, 2-propenyl e... | 130 | C6H10O3 | 053421-44-6 | 40 |
| 5 | 2-Heptanol, 4-methyl- | 130 | C8H18O | 056298-90-9 | 39 |

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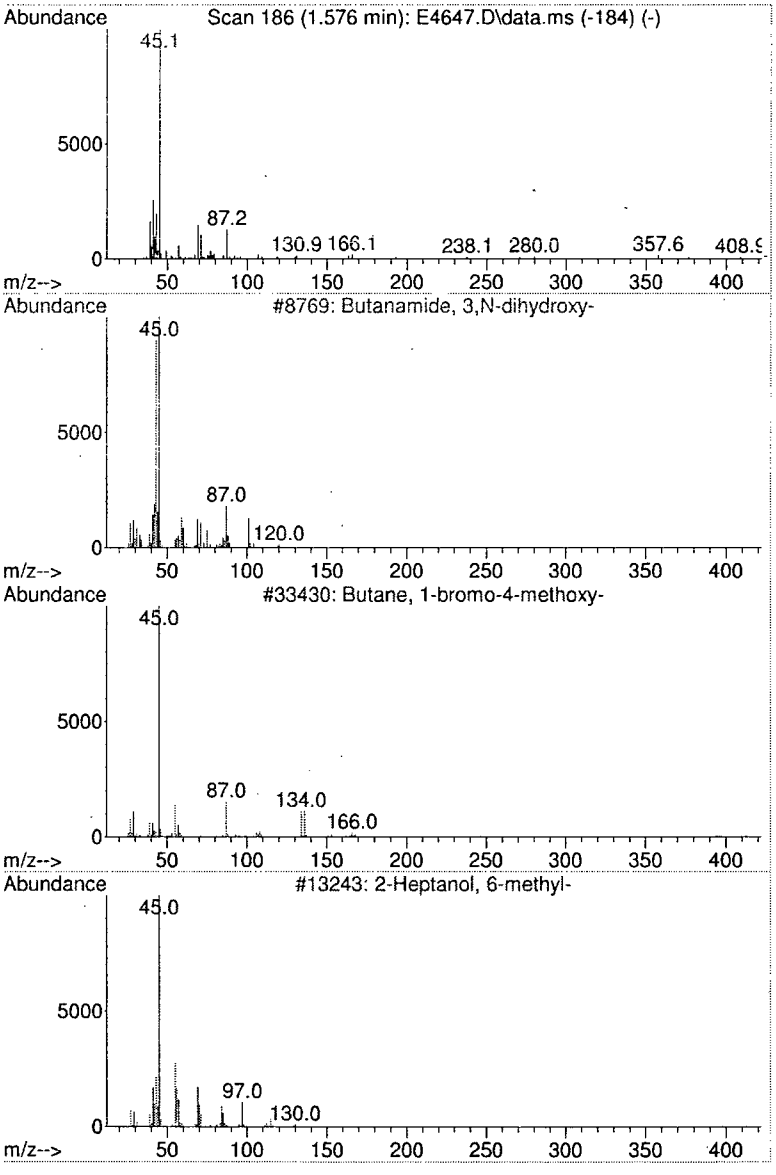


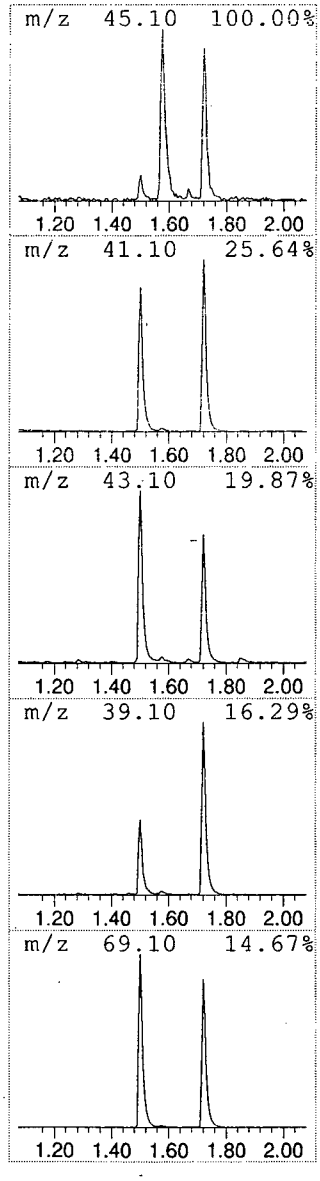

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
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Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********

Peak Number 4 Propane, 1-ethoxy- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.667 | 2.25 ug/mL | 53048 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propane, 1-ethoxy- | 88 | C5H12O | 000628-32-0 | 59 |
| 2 | Propane, 1-ethoxy- | 88 | C5H12O | 000628-32-0 | 59 |
| 3 | Propane, 1-ethoxy- | 88 | C5H12O | 000628-32-0 | 59 |
| 4 | Butanal, 3-methyl-, oxime | 101 | C5H11NO | 000626-90-4 | 59 |
| 5 | Butane, 1,3-dimethoxy- | 118 | C6H14O2 | 010143-66-5 | 45 |

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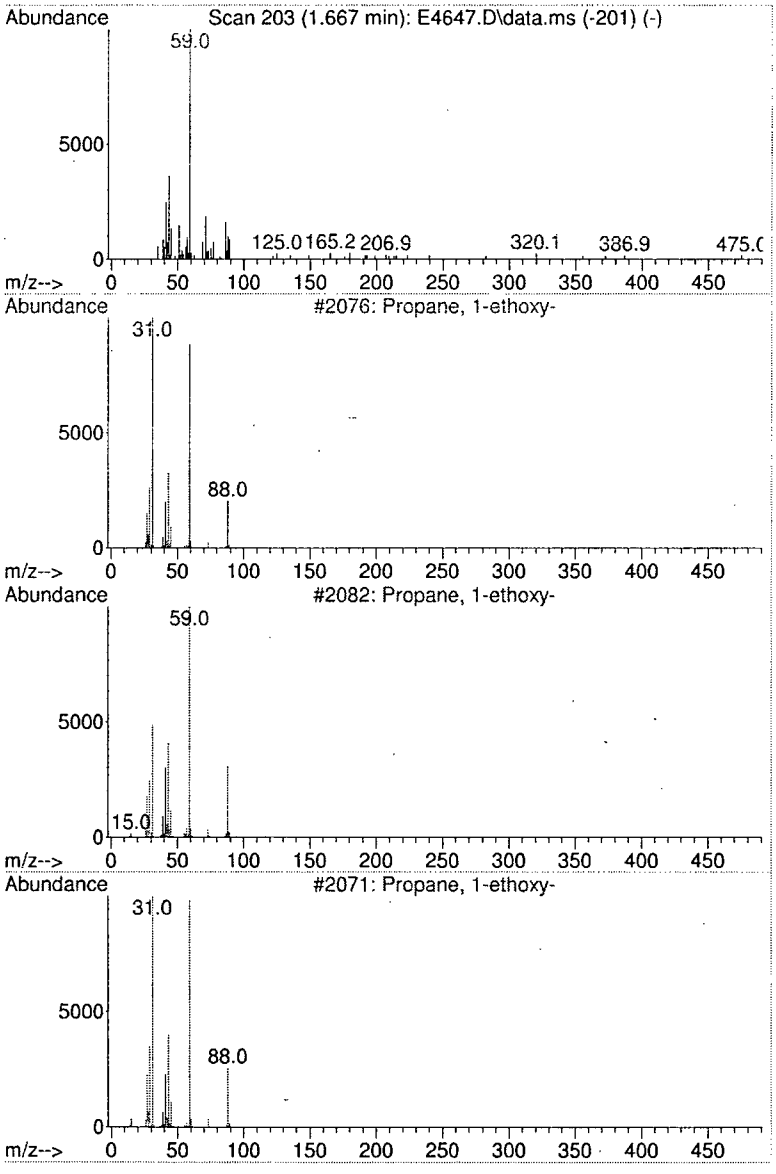


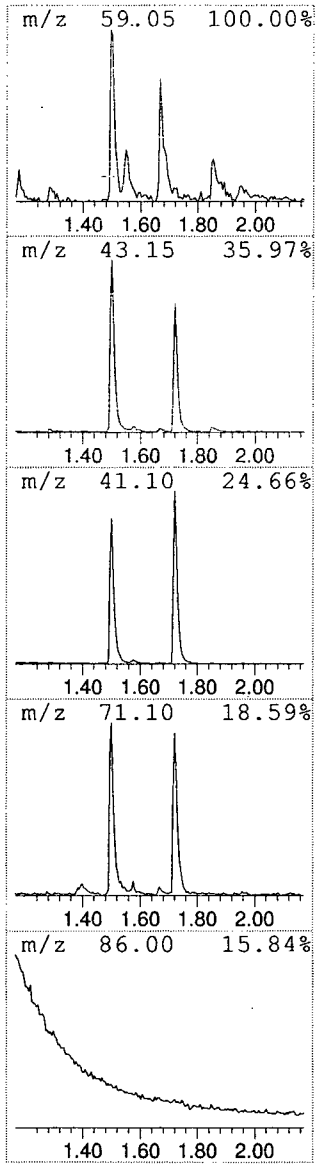

Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********

Peak Number 5 Cyclopentane, bromo- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.720 | 94.24 ug/mL | 2222010 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 64 |
| 2 | 1,5-Heptadiene, 3,4-dimethyl- | 124 | C9H16 | 1000061-77-9 | 40 |
| 3 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 39 |
| 4 | Cyclopentane, nitro- | 115 | C5H9NO2 | 002562-38-1 | 36 |
| 5 | 1-Butene, 3,3-dimethyl- | 84 | C6H12 | 000558-37-2 | 36 |

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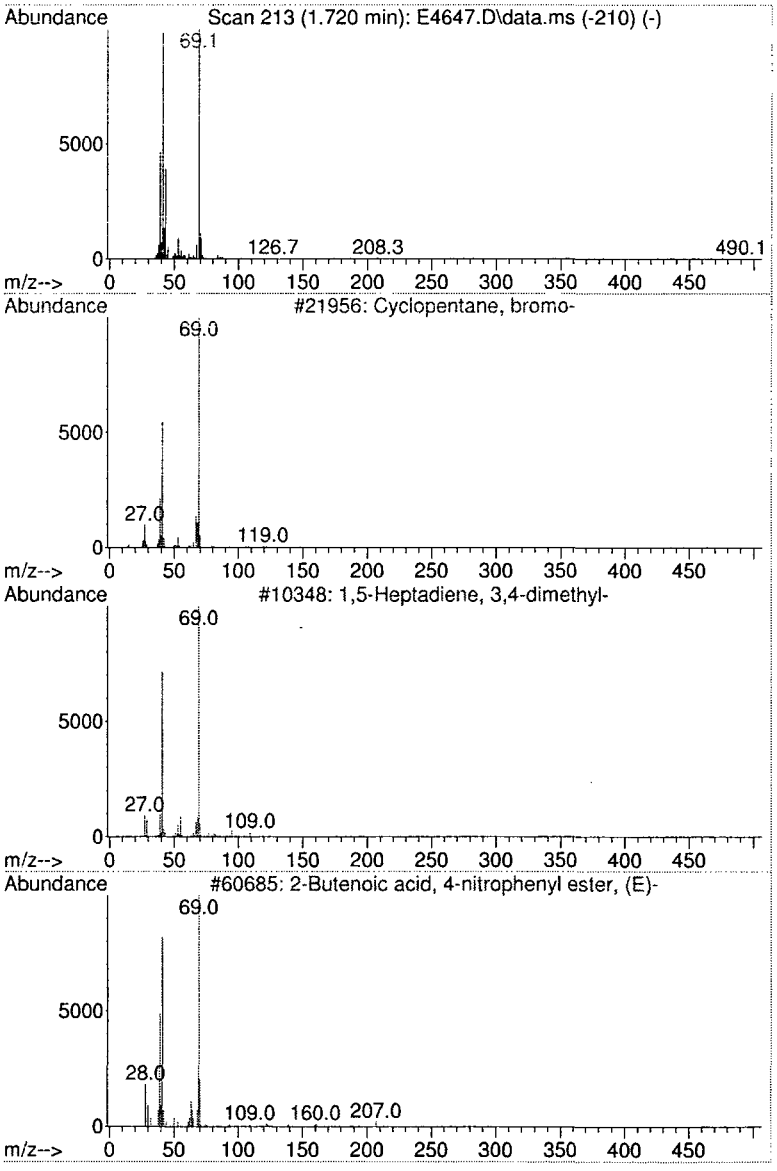


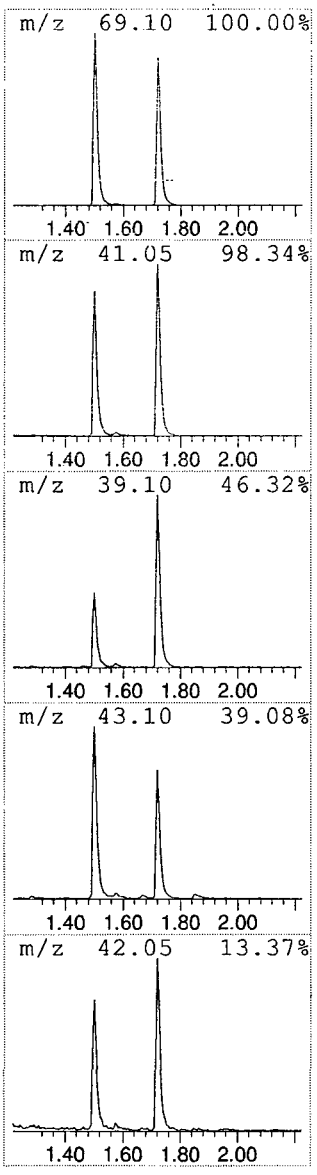

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
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Quant Title : CLP SOM1.2 BNA Calibration

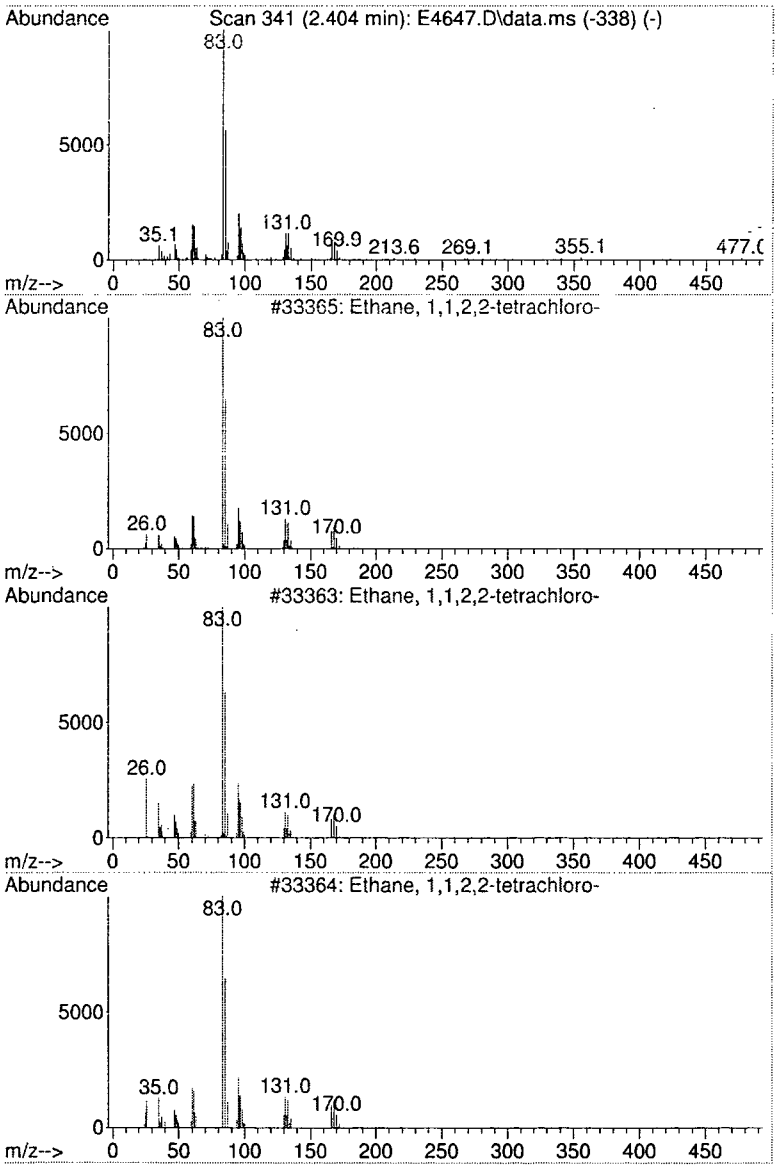
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

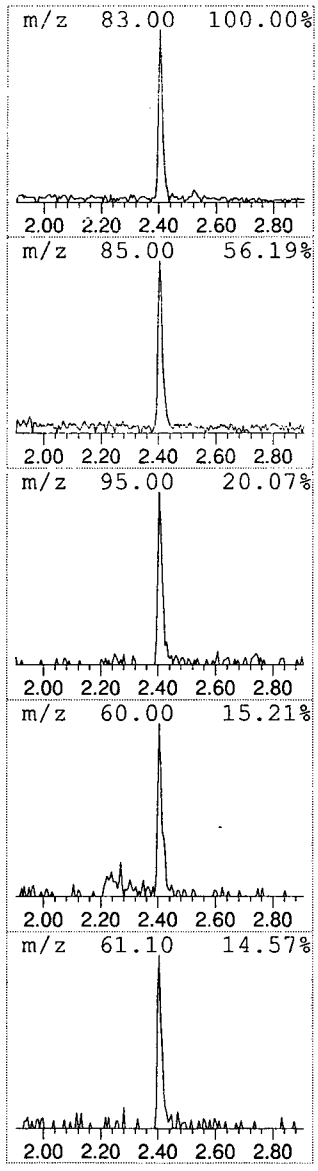
**********

Peak Number 6 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.404 | 5.99 ug/mL | 141260 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 97 ✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 96 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 95 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 83 |
| 5 | Methane, oxybis[dichloro- | 182 | C2H2Cl4O | 020524-86-1 | 50 |



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
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Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

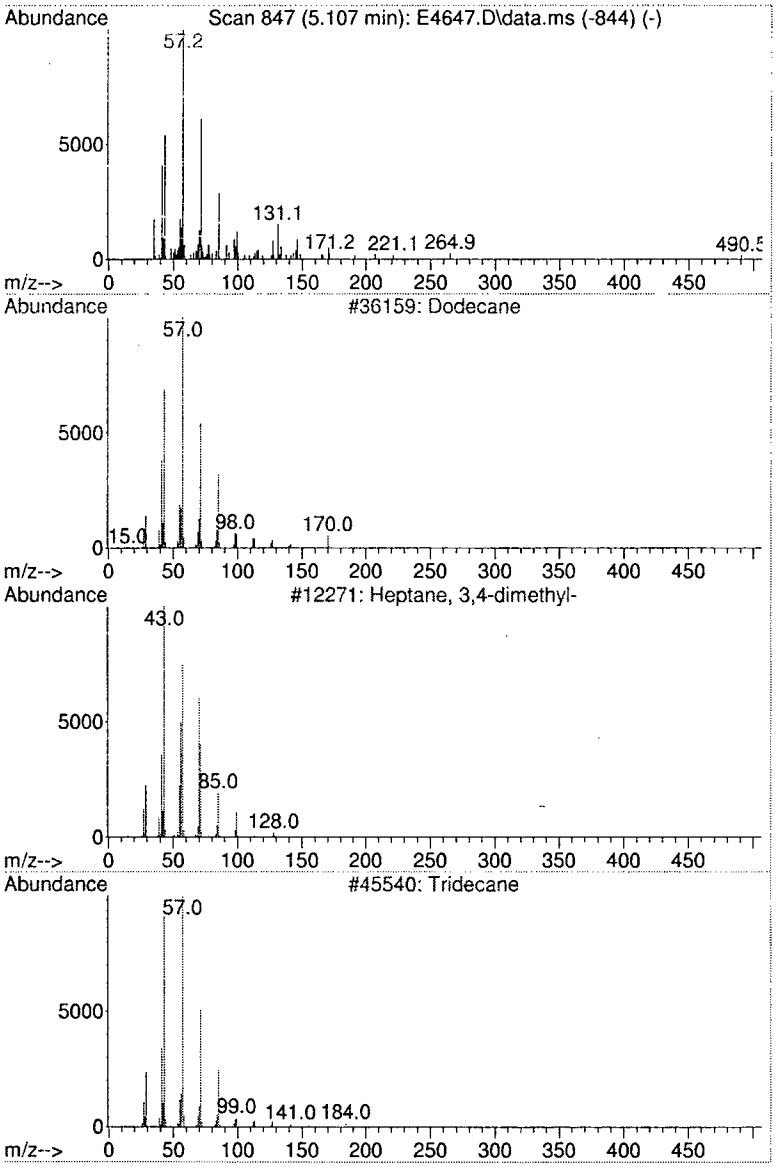
**********

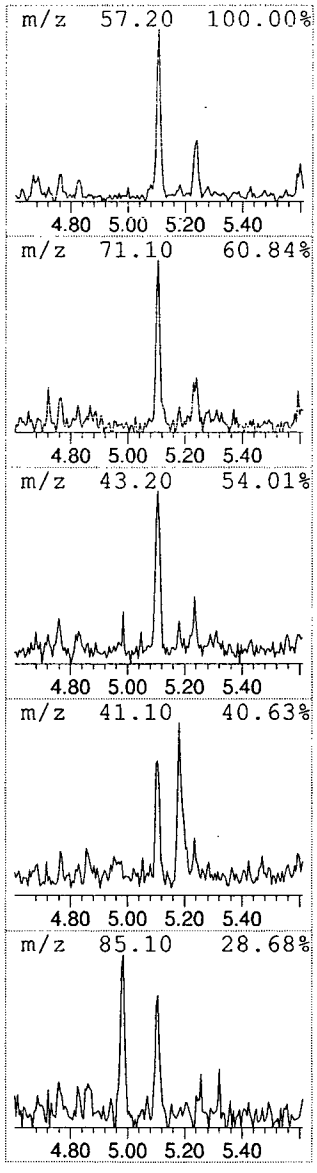
Peak Number 7 Dodecane Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.107 | 2.29 ug/mL | 71074 | Naphthalene-d8 | 4.957 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane | 170 | C12H26 | 000112-40-3 | 62 |
| 2 | Heptane, 3,4-dimethyl- | 128 | C9H20 | 000922-28-1 | 53 |
| 3 | Tridecane | 184 | C13H28 | 000629-50-5 | 50 |
| 4 | Tridecane | 184 | C13H28 | 000629-50-5 | 50 |
| 5 | Undecane, 2-methyl- | 170 | C12H26 | 007045-71-8 | 47 |

**Alkane**



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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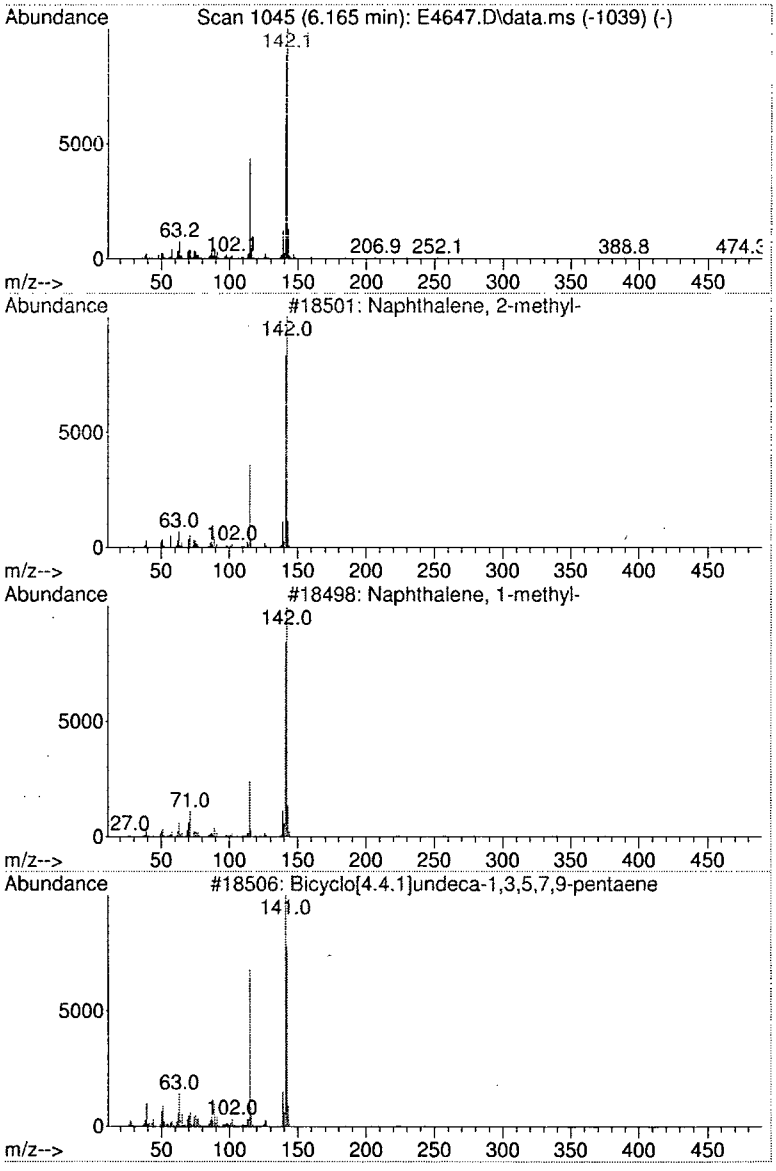
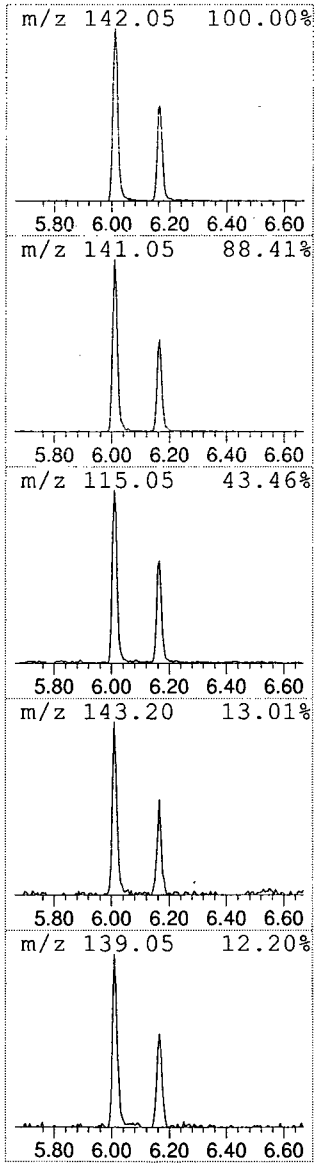
Peak Number 8 Naphthalene, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.165 | 10.48 ug/mL | 325222 | Naphthalene-d8 | 4.957 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 97 ✓ |
| 2 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 94 |
| 3 | Bicyclo[4.4.1]undeca-1,3,5,7,9-p... | 142 | C11H10 | 002443-46-1 | 91 |
| 4 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 91 |
| 5 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 91 |



Library Search Compound Report

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Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********

Peak Number 9 Naphthalene, 1,3-dimethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.891 | 3.98 ug/mL | 154647 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 60 |
| 2 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 60 |
| 3 | 2-Thiophenecarboxylic acid, 5-et... | 156 | C7H8O2S | 023229-72-3 | 53 |
| 4 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 53 |
| 5 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 49 |

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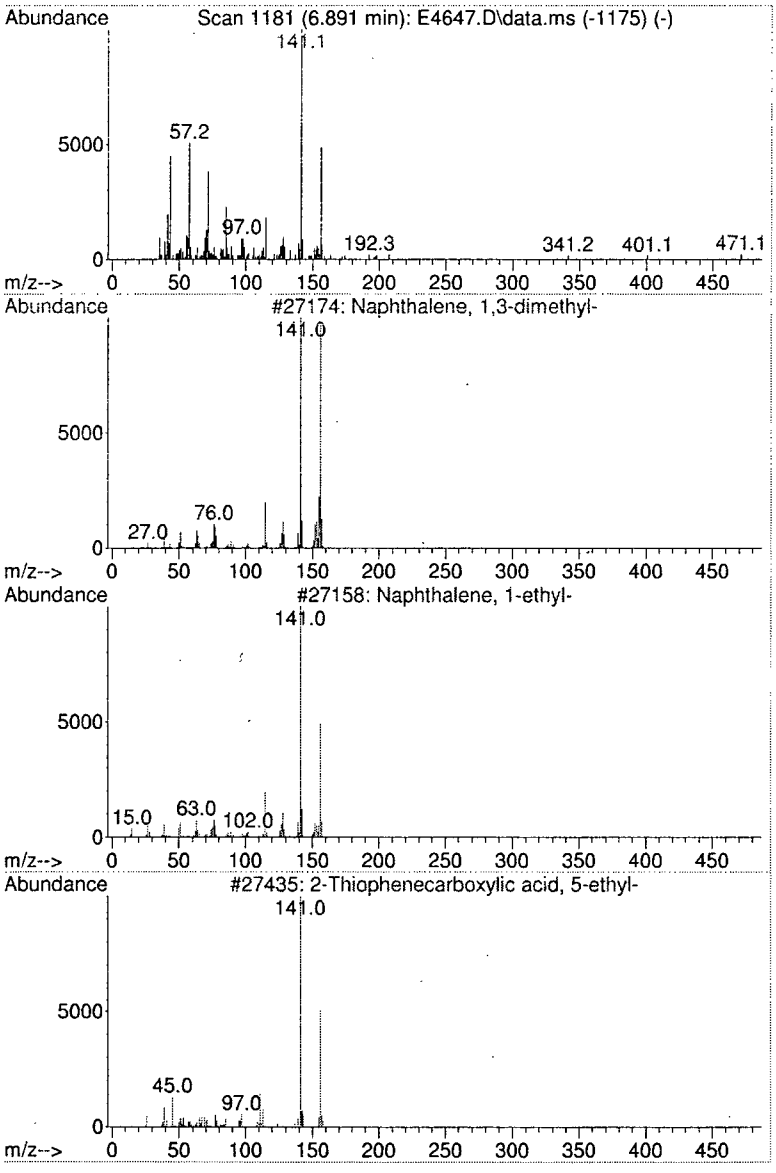


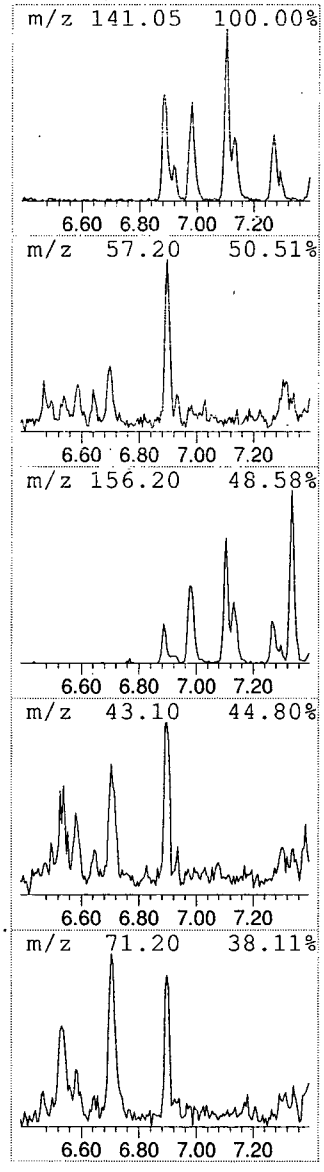

Library Search Compound Report

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Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

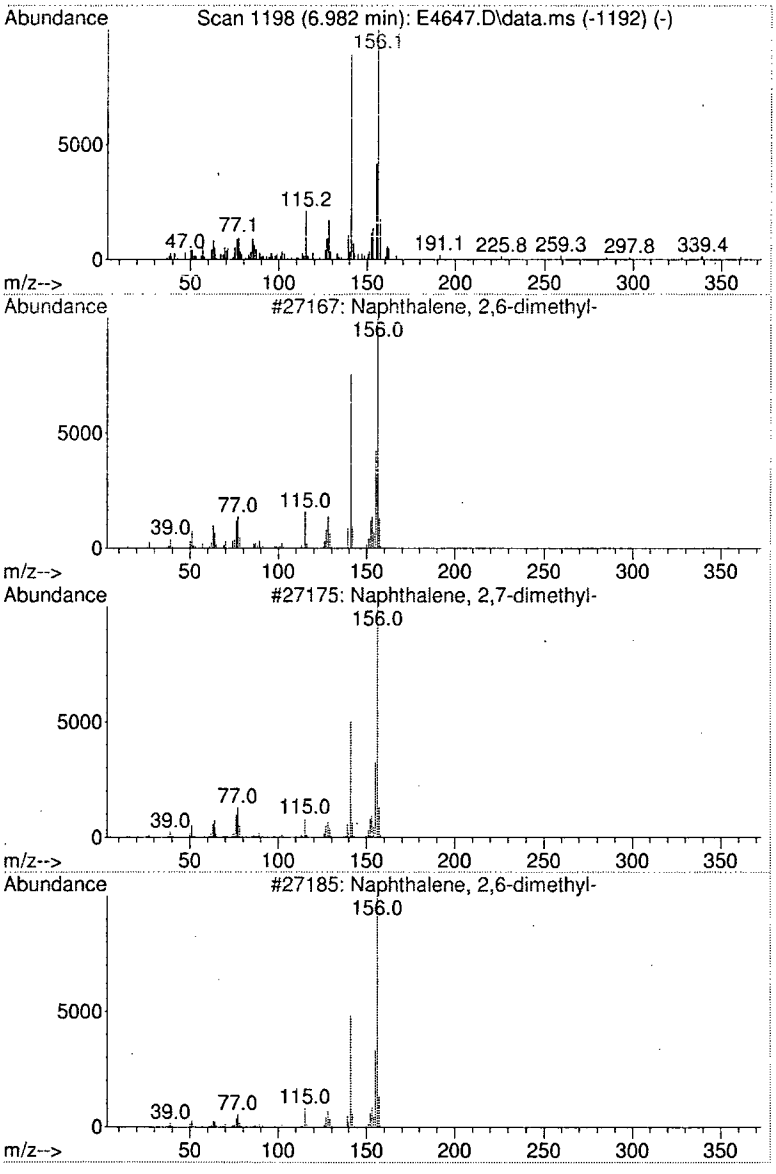
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

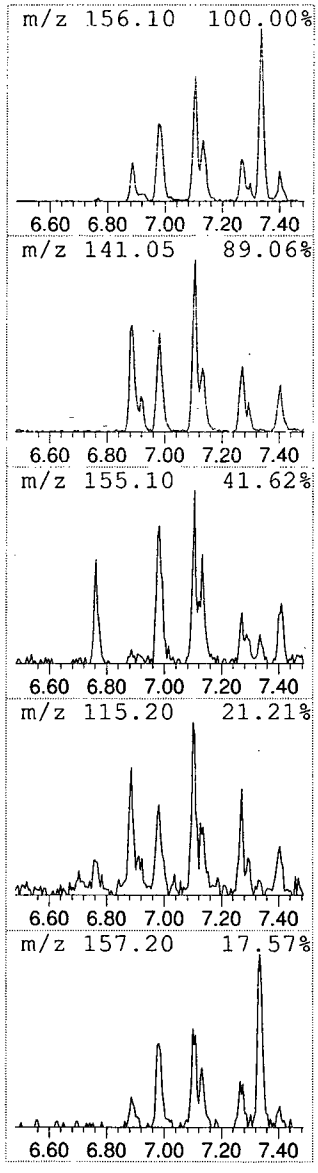
**********

Peak Number 10 Naphthalene, 2,6-dimethyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.982 | 3.80 ug/mL | 147917 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 94 ✓ |
| 2 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 93 |
| 3 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 93 |
| 4 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 91 |
| 5 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 91 |



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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

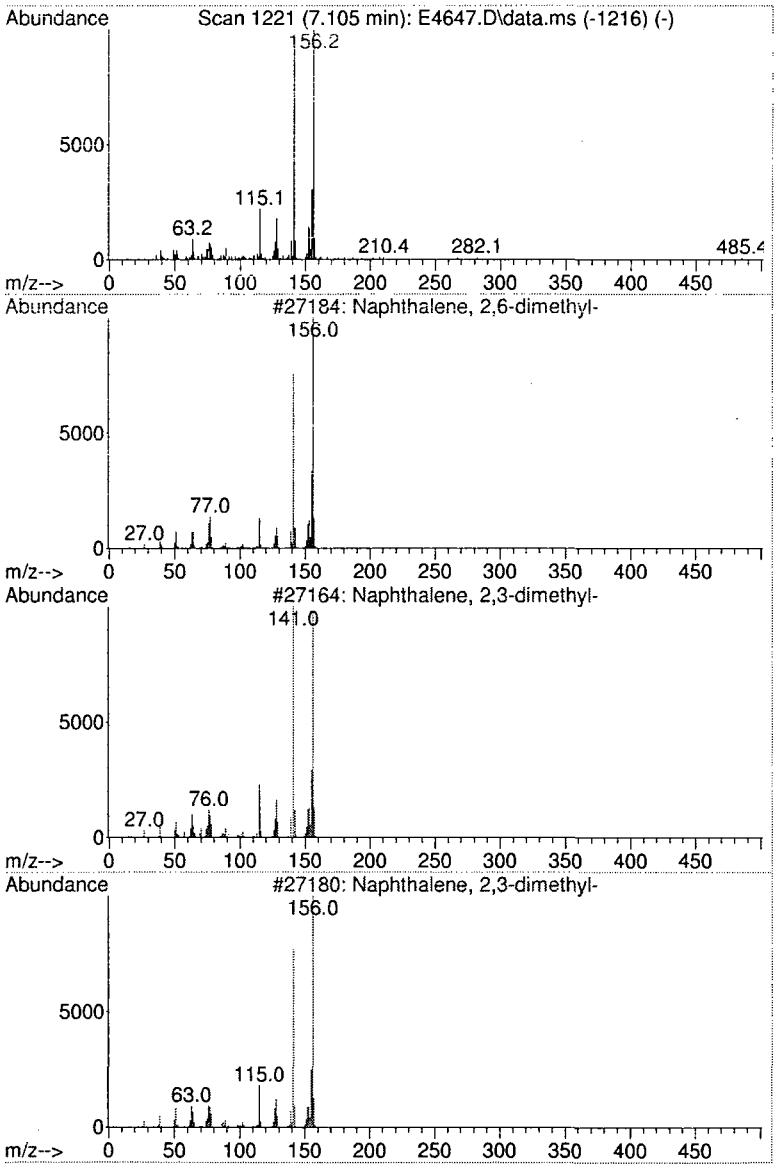
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

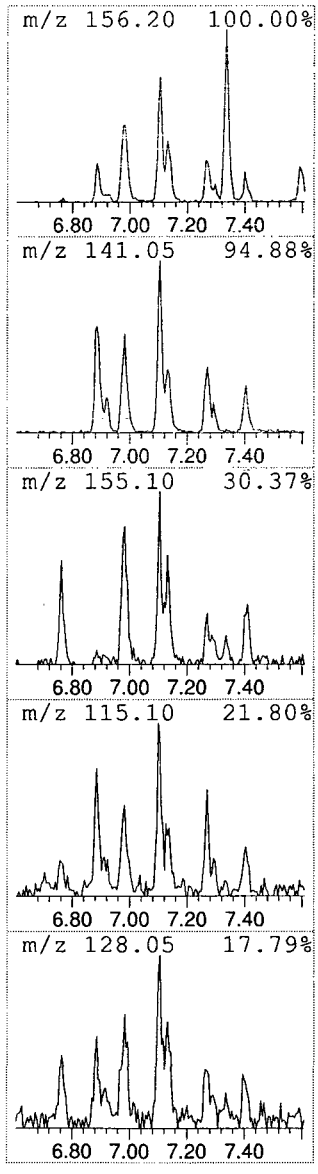
**********

Peak Number 11 Naphthalene, 2,6-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.105 | 4.27 ug/mL | 165845 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 95 ✓ |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 91 |
| 3 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 91 |
| 4 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 91 |
| 5 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 91 |



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

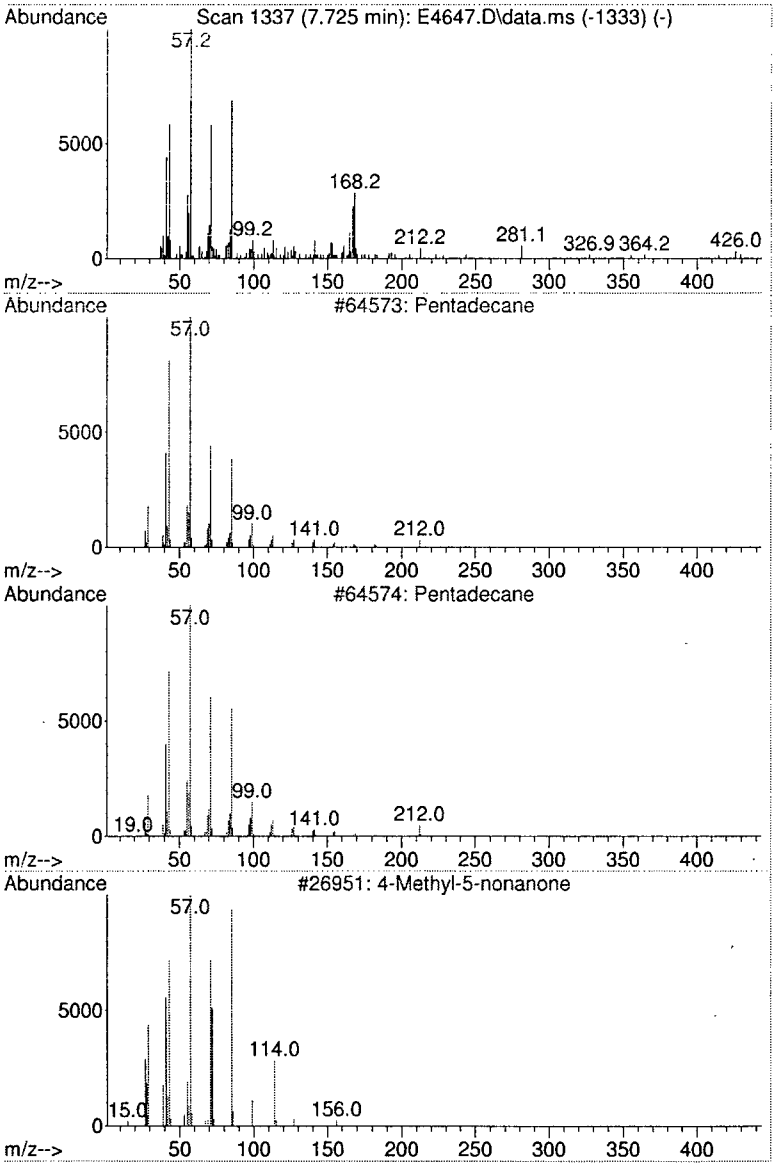
**********

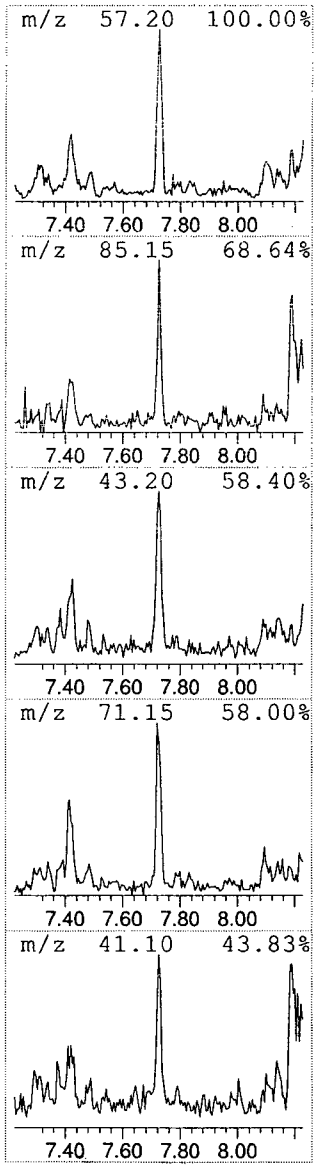
Peak Number 12 Pentadecane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.725 | 2.97 ug/mL | 115308 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pentadecane | 212 | C15H32 | 000629-62-9 | 49 |
| 2 | Pentadecane | 212 | C15H32 | 000629-62-9 | 49 |
| 3 | 4-Methyl-5-nonanone | 156 | C10H20O | 035900-26-6 | 46 |
| 4 | Pentadecane | 212 | C15H32 | 000629-62-9 | 46 |
| 5 | 2,6-Dimethyldecane | 170 | C12H26 | 013150-81-7 | 30 |

**Alkane**



Library Search Compound Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

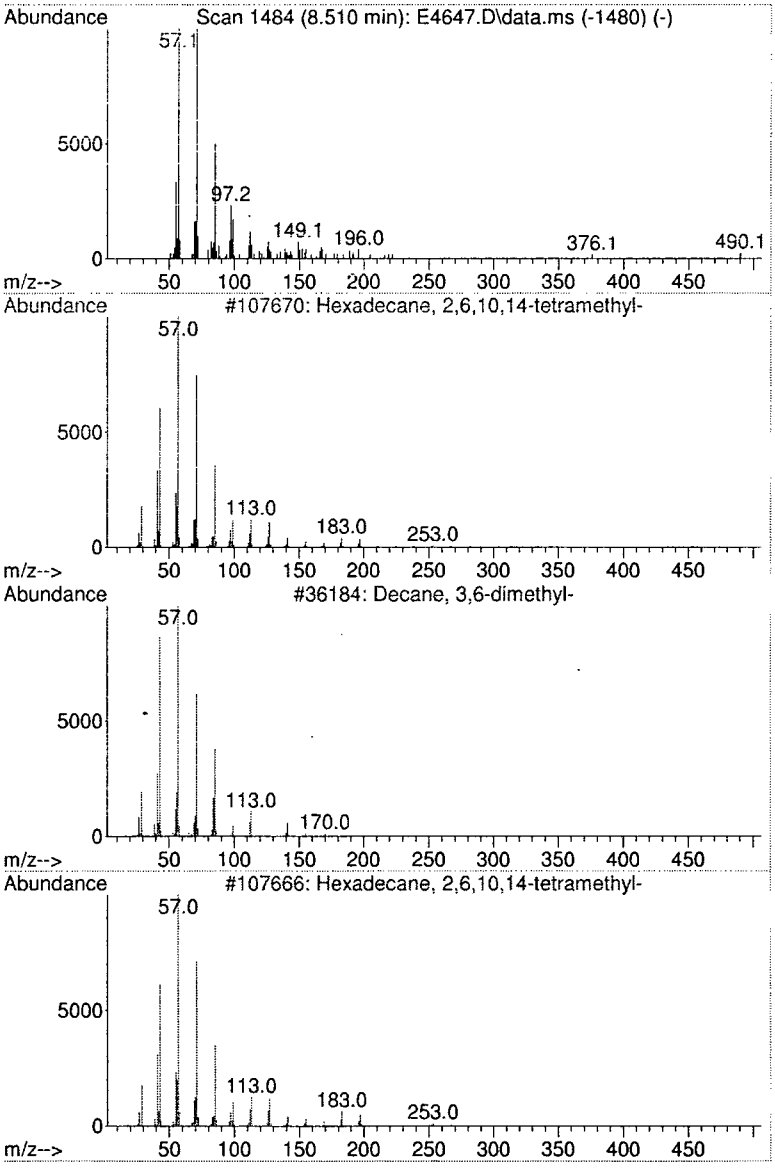
**********

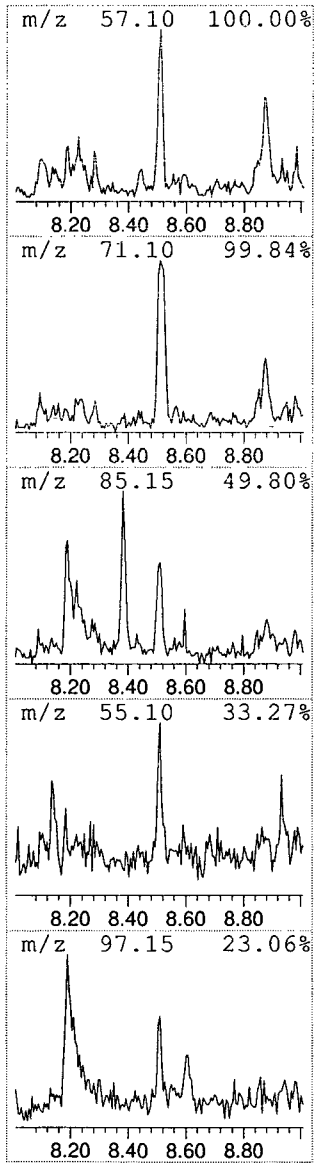
Peak Number 13 Hexadecane, 2,6,10,14-tetra... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.510 | 2.62 ug/mL | 101839 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane, 2,6,10,14-tetramethyl- | 282 | C20H42 | 000638-36-8 | 78 |
| 2 | Decane, 3,6-dimethyl- | 170 | C12H26 | 017312-53-7 | 72 |
| 3 | Hexadecane, 2,6,10,14-tetramethyl- | 282 | C20H42 | 000638-36-8 | 72 |
| 4 | Nonane, 3-methyl-5-propyl- | 184 | C13H28 | 031081-18-2 | 64 |
| 5 | Undecane, 2,3-dimethyl- | 184 | C13H28 | 017312-77-5 | 59 |

**Alkane**



Library Search Compound Report

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Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

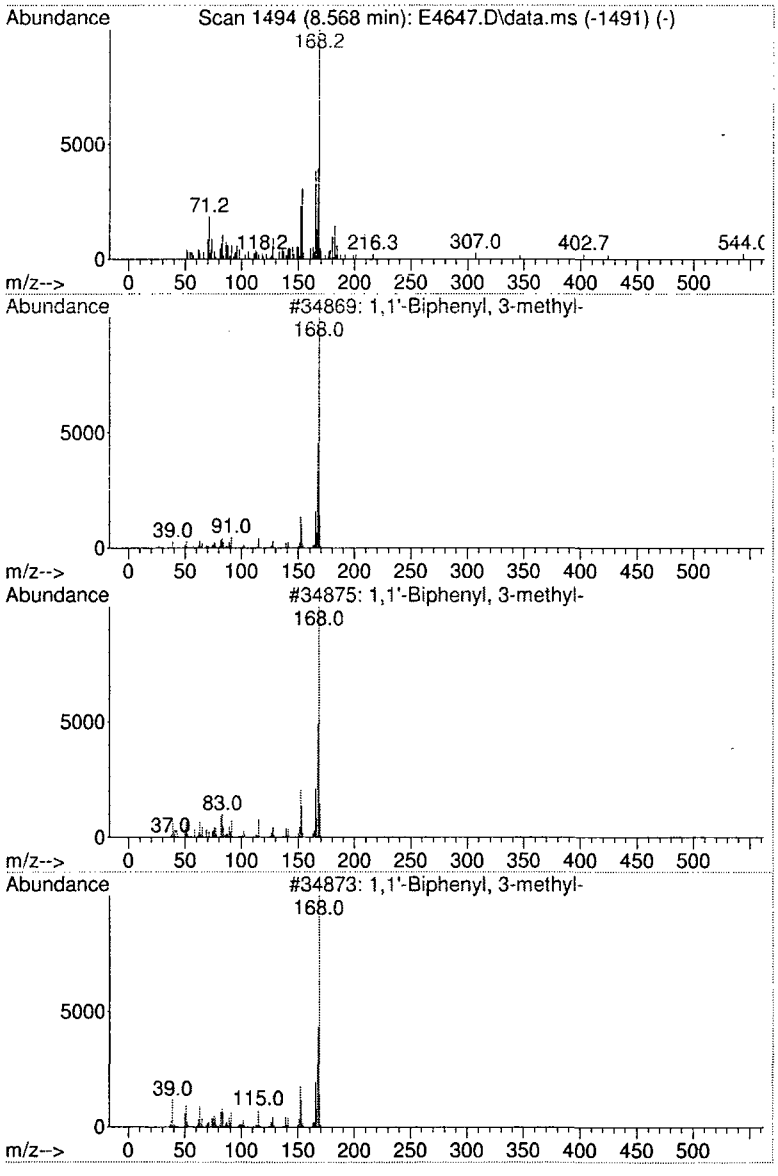
**********

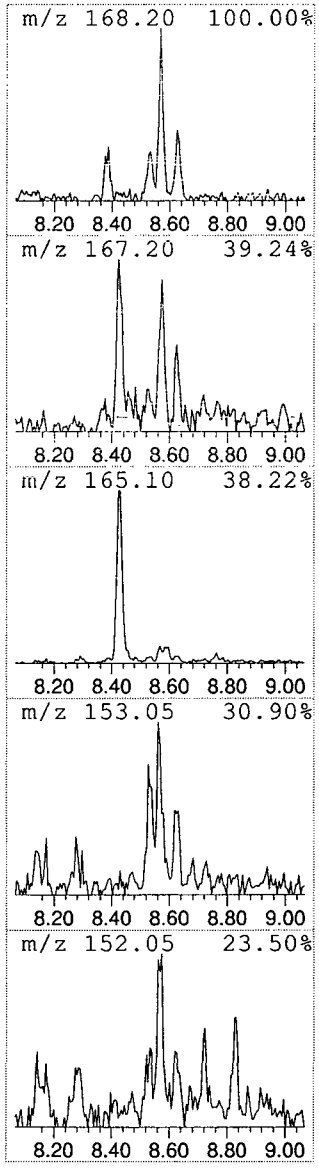
Peak Number 14 1,1'-Biphenyl, 3-methyl- Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.568 | 2.08 ug/mL | 80788 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,1'-Biphenyl, 3-methyl- | 168 | C13H12 | 000643-93-6 | 50 |
| 2 | 1,1'-Biphenyl, 3-methyl- | 168 | C13H12 | 000643-93-6 | 50 |
| 3 | 1,1'-Biphenyl, 3-methyl- | 168 | C13H12 | 000643-93-6 | 50 |
| 4 | 1,1-Diphenyl-2-propanol | 212 | C15H16O | 029338-49-6 | 50 |
| 5 | Naphthalene, 2-(1-methylethenyl)- | 168 | C13H12 | 003710-23-4 | 43 |

Unknown



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

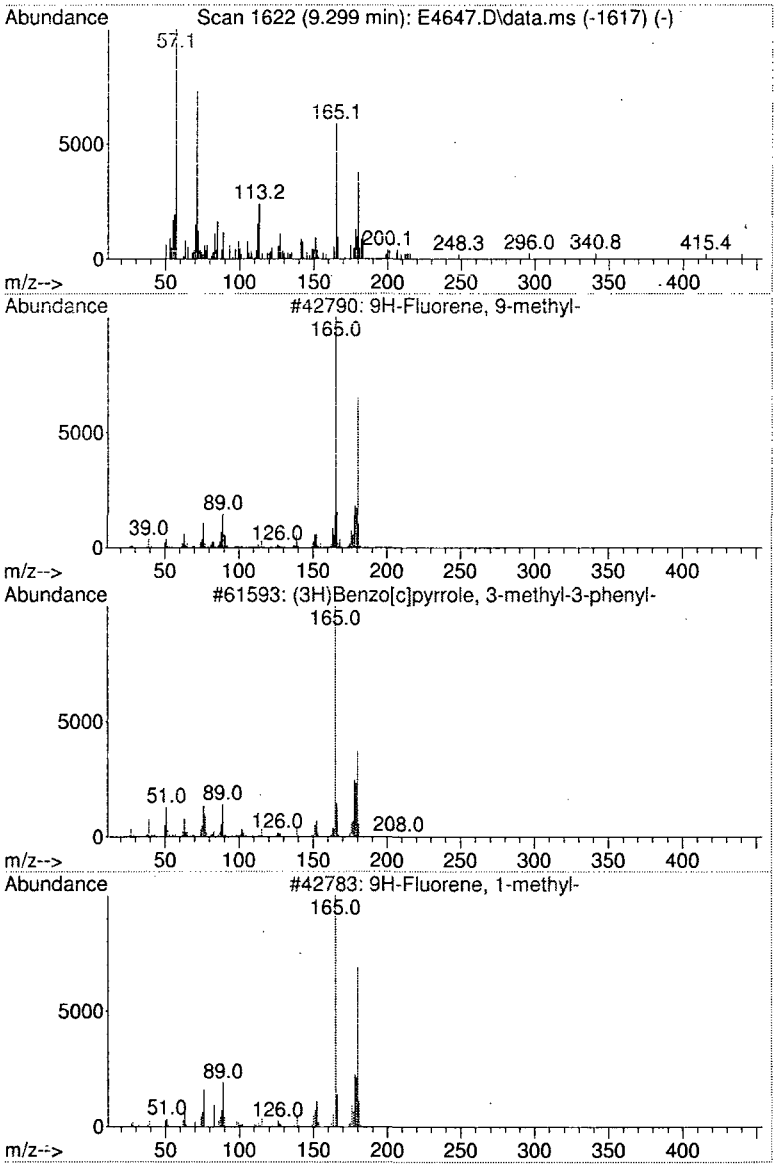
**********

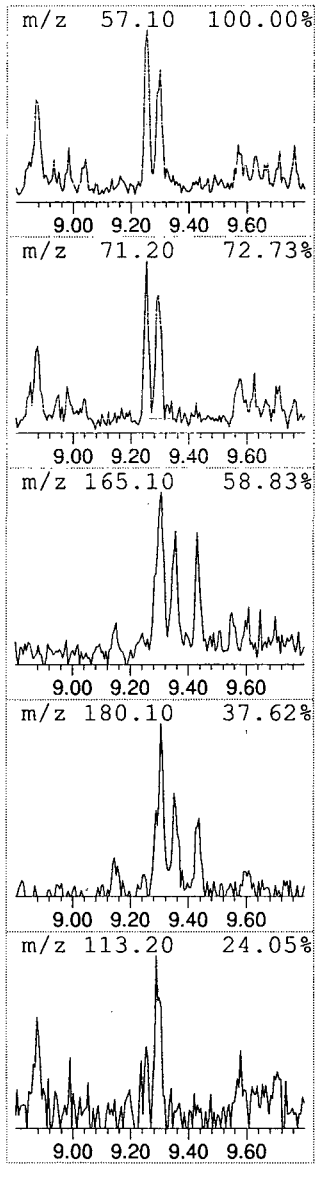
Peak Number 15 9H-Fluorene, 9-methyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.299 | 2.21 ug/mL | 98891 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 46 |
| 2 | (3H)Benzo[c]pyrrole, 3-methyl-3-... | 208 | C14H12N2 | 059341-20-7 | 46 |
| 3 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 41 |
| 4 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 41 |
| 5 | Pentacyclo[6.4.0.1(1,8).1(2,7)]t... | 180 | C14H12 | 086120-84-5 | 38 |

Unknown



Library Search Compound Report

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Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

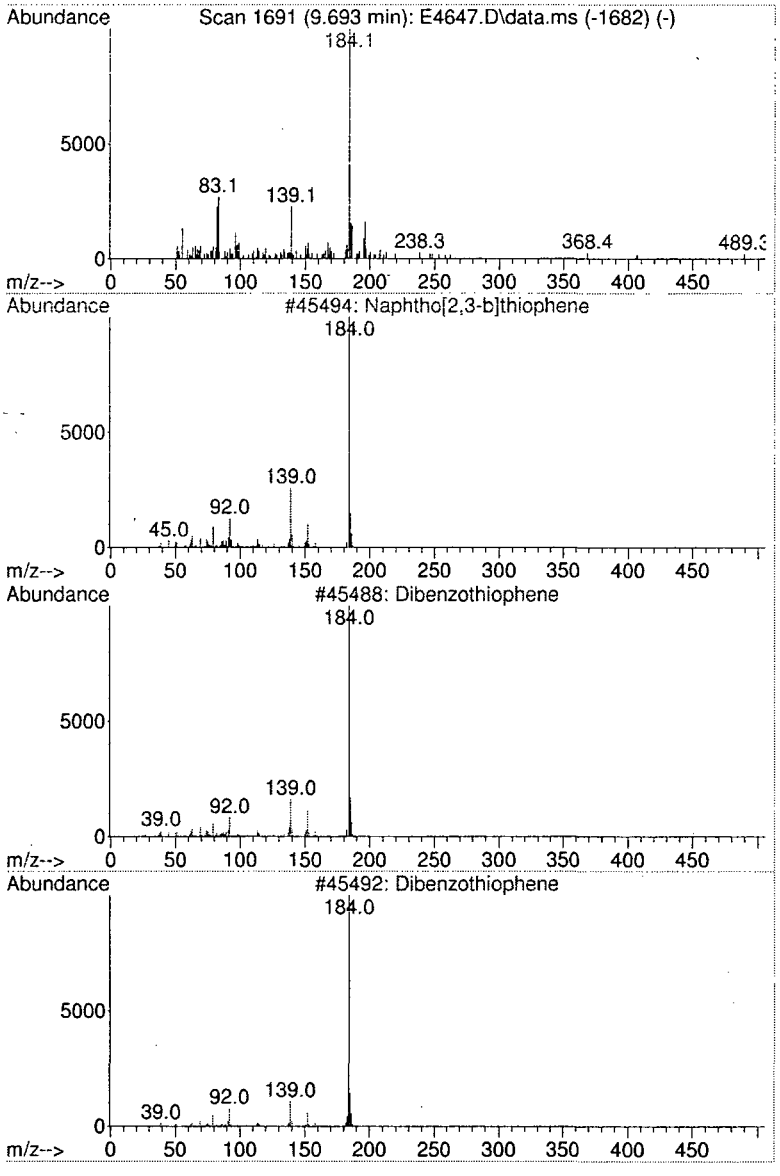
**********

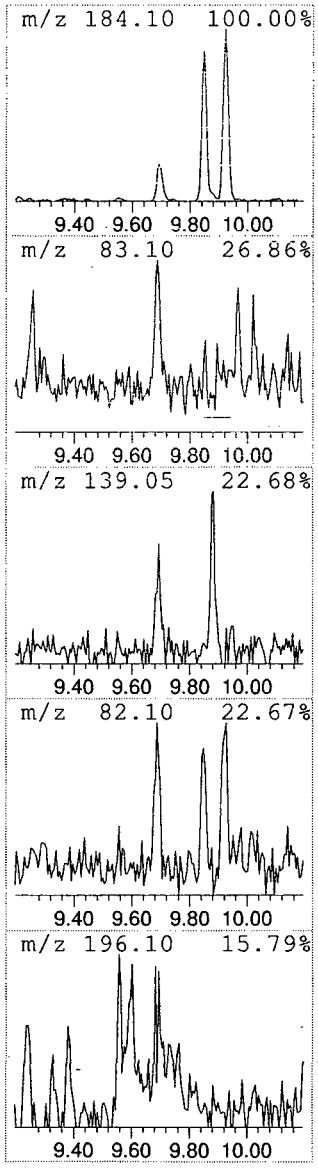
Peak Number 16 Naphtho[2,3-b]thiophene Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.693 | 2.38 ug/mL | 106715 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 52 |
| 2 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 47 |
| 3 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 47 |
| 4 | 1,3,5-Trihydroxy-2,6-dinitrosobe... | 184 | C6H4N2O5 | 1000110-75-8 | 47 |
| 5 | [1,1'-Biphenyl]-4-methanol | 184 | C13H12O | 003597-91-9 | 46 |

Unknown



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

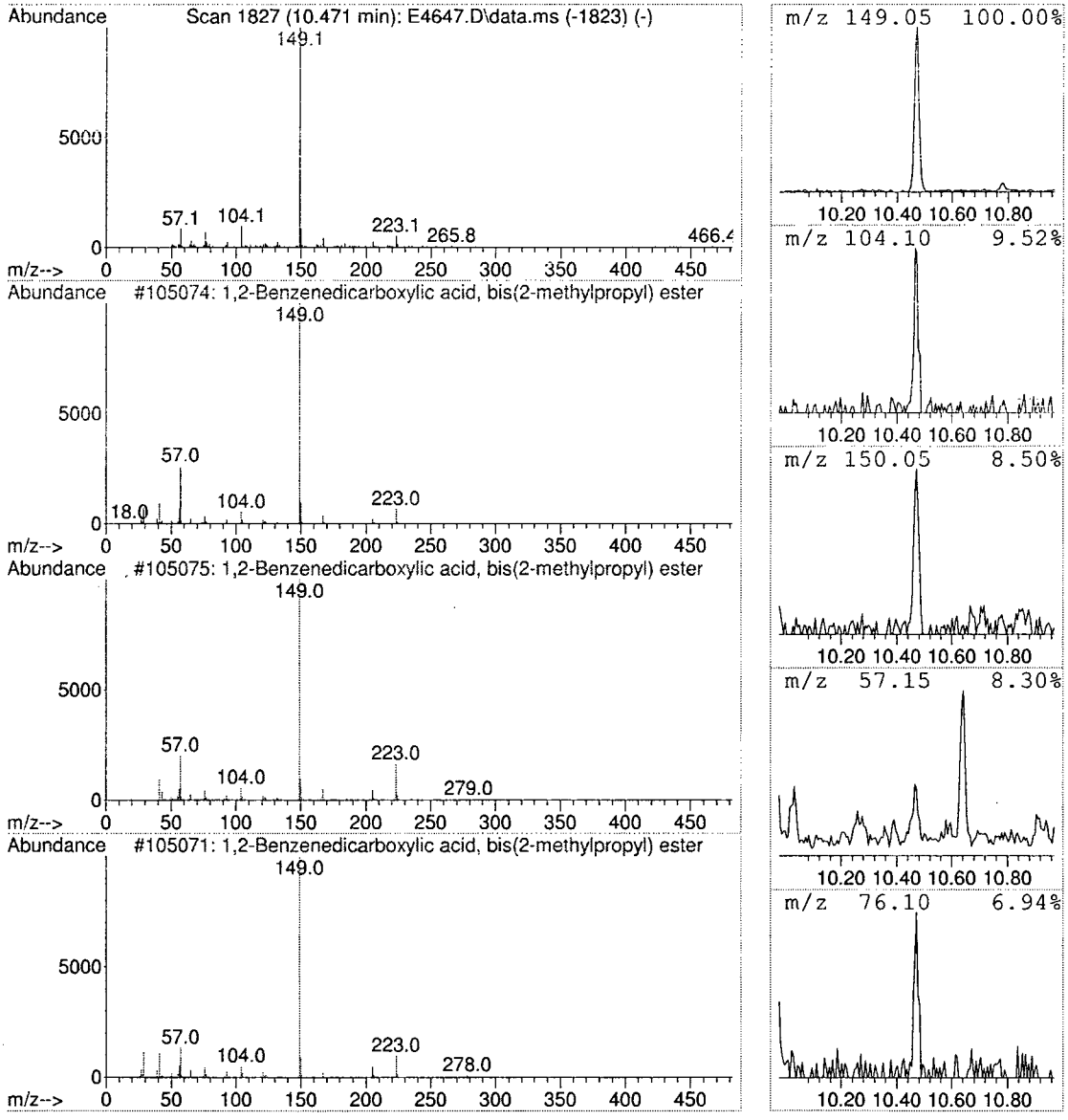
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 17 1,2-Benzenedicarboxylic aci... Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.471 | 2.17 ug/mL | 97344 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 72 |
| 2 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 72 |
| 3 | 1,2-Benzenedicarboxylic acid, bi... | 278 | C16H22O4 | 000084-69-5 | 64 |
| 4 | 1,2-Benzenedicarboxylic acid, bu... | 334 | C20H30O4 | 000085-69-8 | 64 |
| 5 | 1,2-Benzenedicarboxylic acid, di... | 250 | C14H18O4 | 000131-16-8 | 64 |

Unknown



Library Search Compound Report

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Sample : 0015977-06
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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

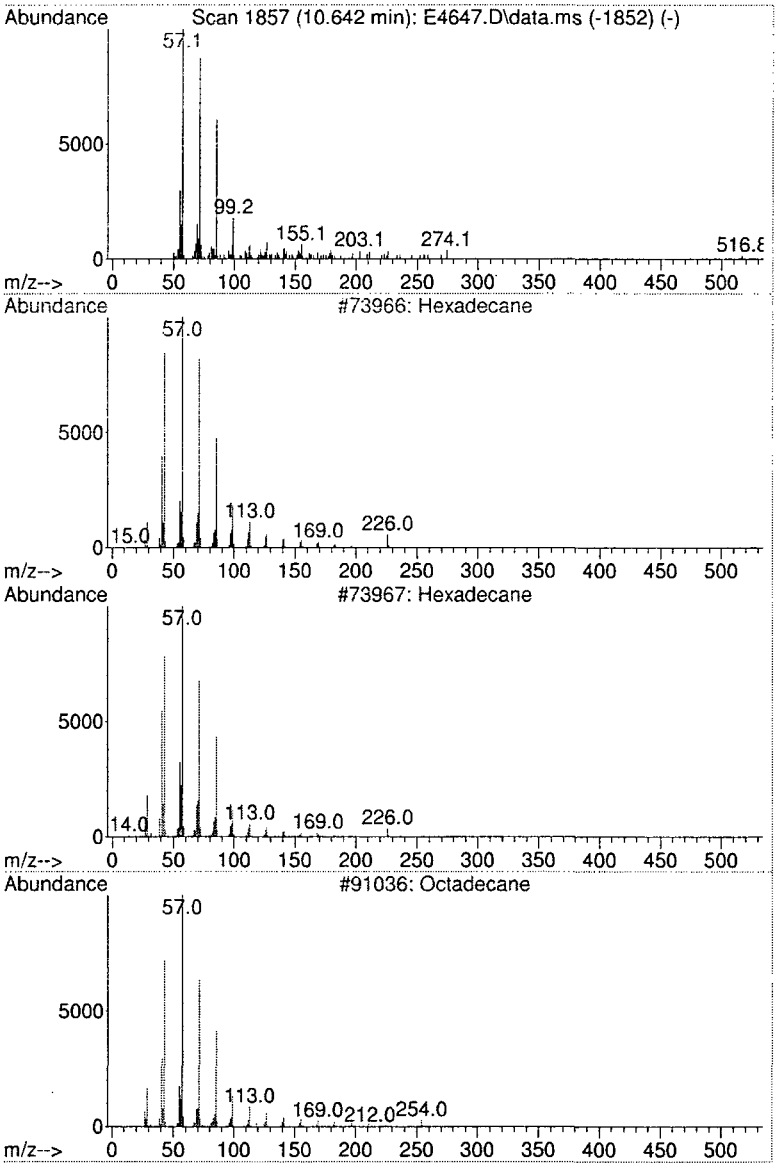
**********

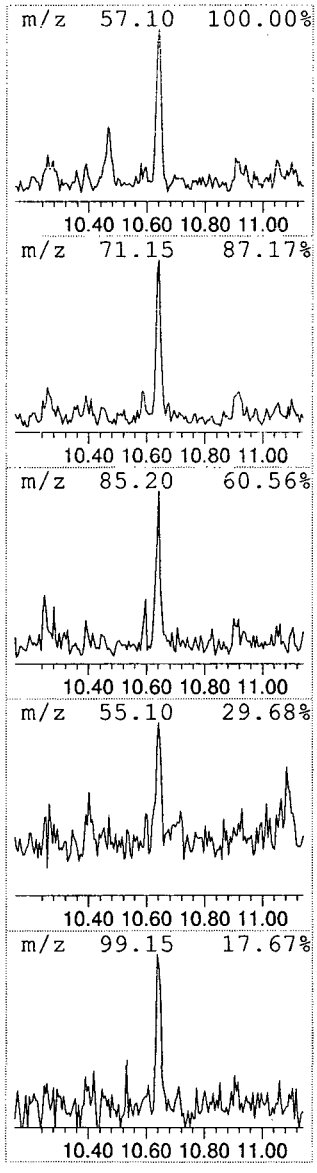
Peak Number 18 Hexadecane Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.642 | 2.02 ug/mL | 90567 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm. | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane | 226 | C16H34 | 000544-76-3 | 86 |
| 2 | Hexadecane | 226 | C16H34 | 000544-76-3 | 86 |
| 3 | Octadecane | 254 | C18H38 | 000593-45-3 | 86 |
| 4 | Nonane, 4,5-dimethyl- | 156 | C11H24 | 017302-23-7 | 80 |
| 5 | Octadecane, 1-iodo- | 380 | C18H37I | 000629-93-6 | 78 |

**Alkane**



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

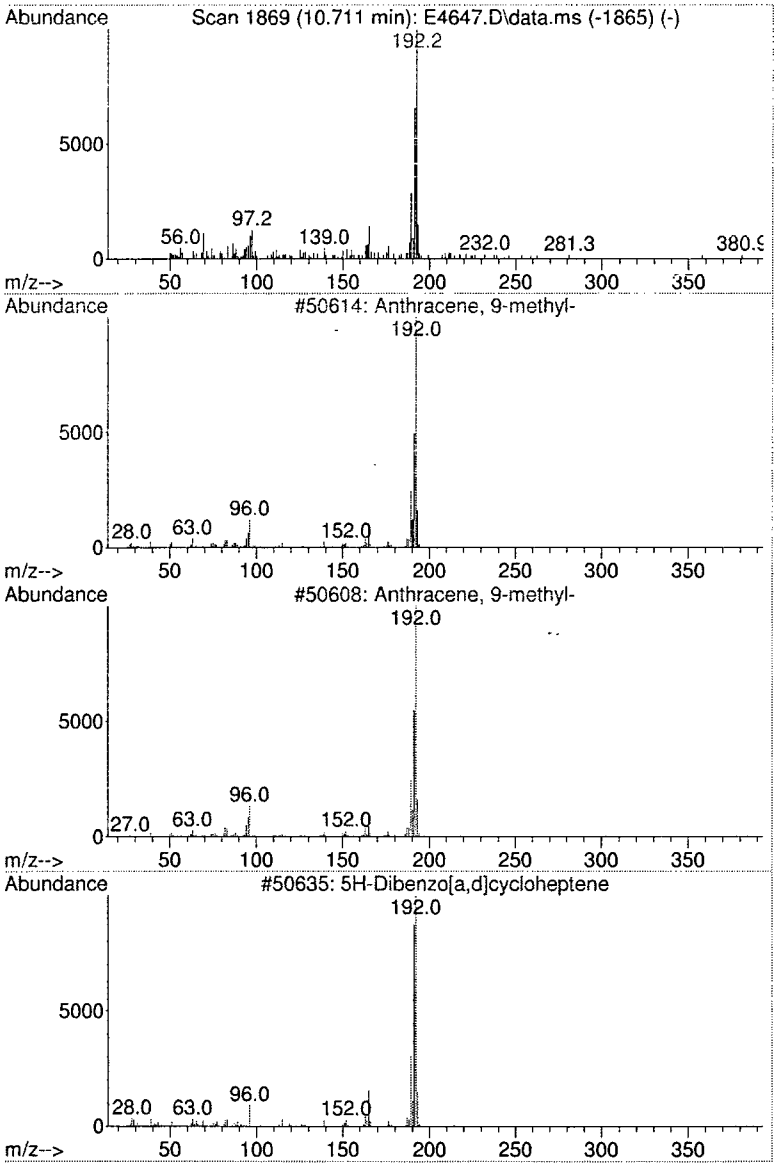
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

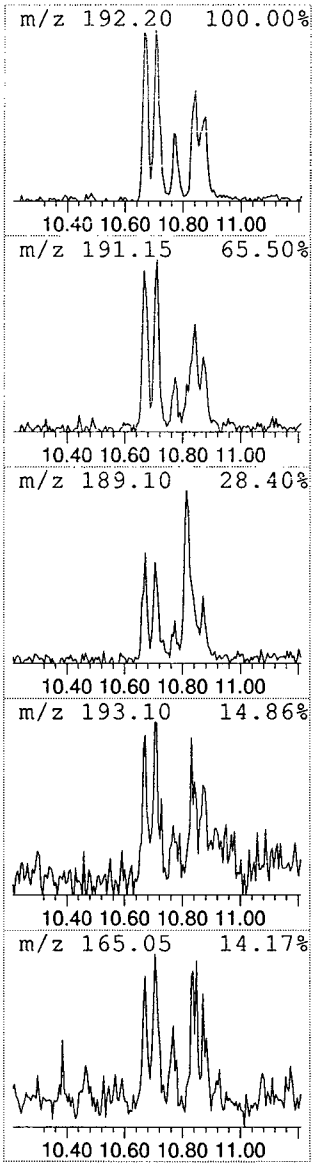
**********

Peak Number 19 Anthracene, 9-methyl- Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.711 | 2.02 ug/mL | 90790 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 90 ✓ |
| 2 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 81 |
| 3 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 81 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 81 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 81 |



Library Search Compound Report

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Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

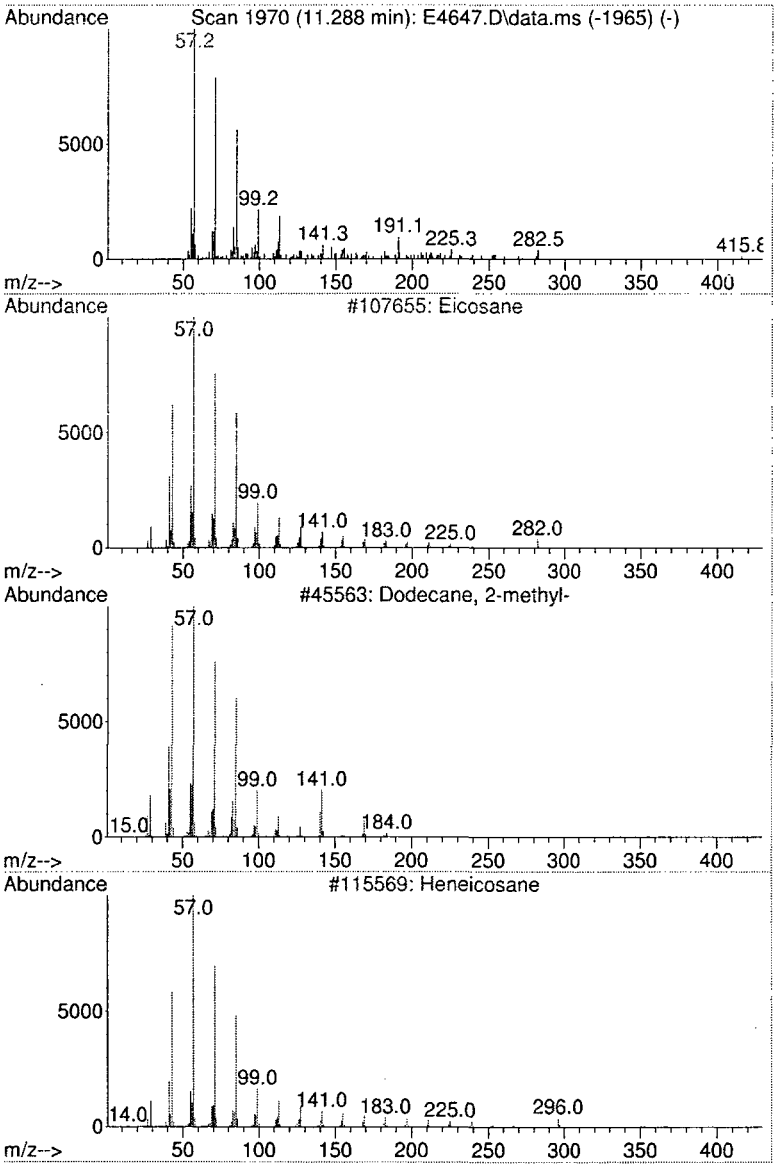
**********

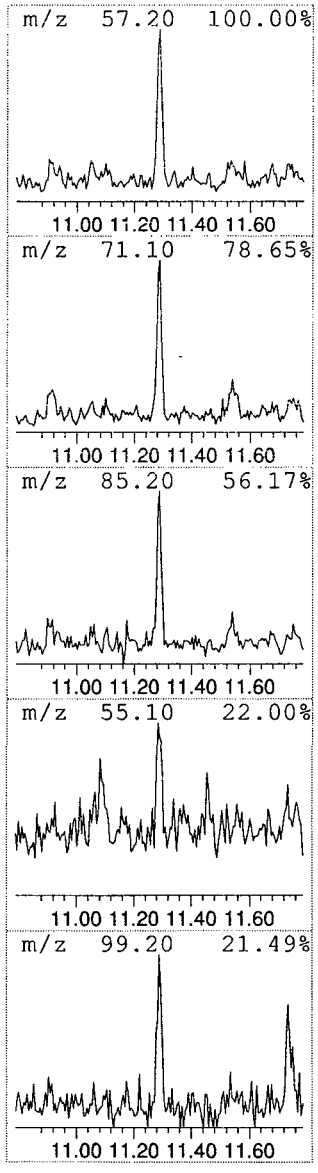
Peak Number 20 Eicosane Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.288 | 2.23 ug/mL | 99989 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Eicosane | 282 | C20H42 | 000112-95-8 | 90 |
| 2 | Dodecane, 2-methyl- | 184 | C13H28 | 001560-97-0 | 87 |
| 3 | Heneicosane | 296 | C21H44 | 000629-94-7 | 72 |
| 4 | Hexadecane, 1-iodo- | 352 | C16H33I | 000544-77-4 | 72 |
| 5 | Heptadecane, 8-methyl- | 254 | C18H38 | 013287-23-5 | 64 |

**Alkane**



Library Search Compound Report

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Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

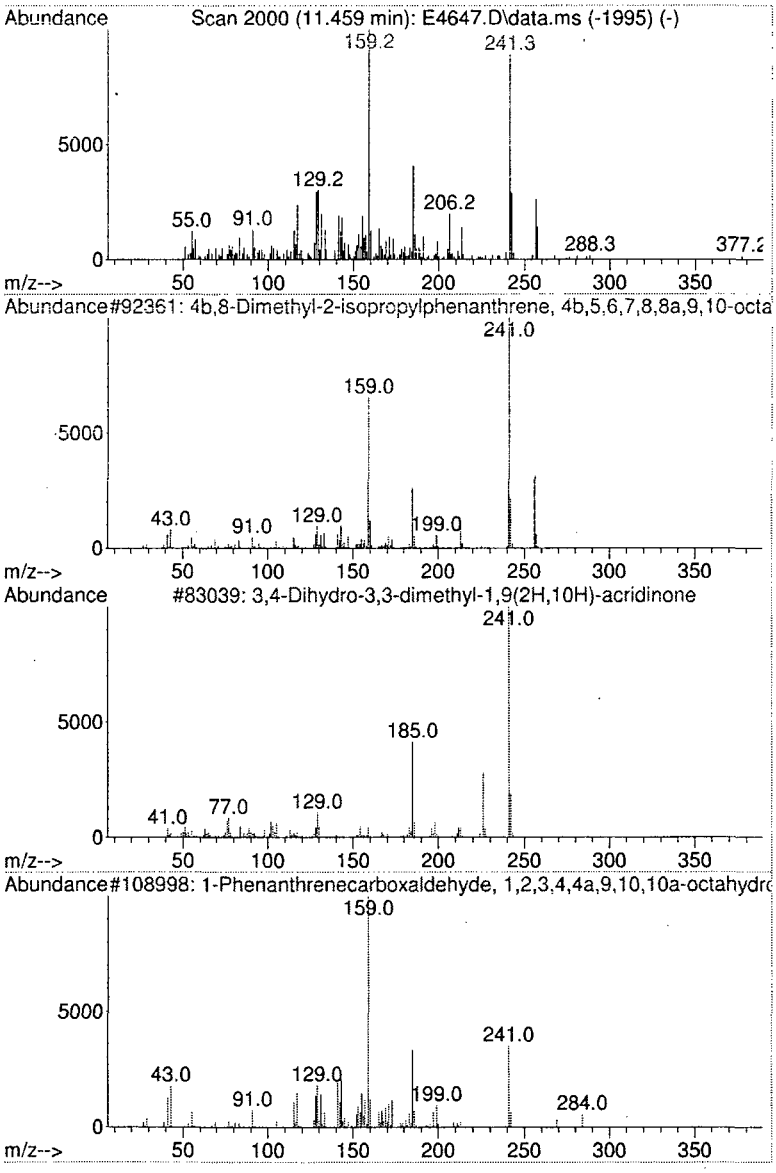
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

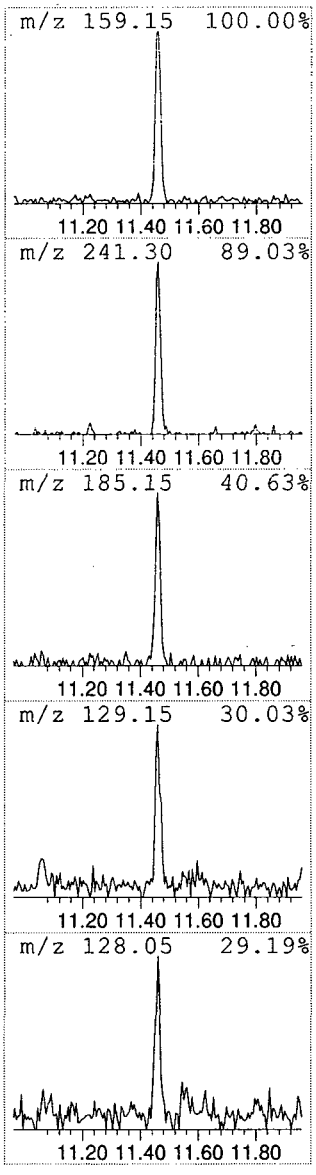
**********
Peak Number 21 4b,8-Dimethyl-2-isopropylph... Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T.. |
|---|---|---|---|---|
| 11.460 | 4.68 ug/mL | 209960 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4b,8-Dimethyl-2-isopropylphenant... | 256 | C19H28 | 1000197-14-1 | 68 |
| 2 | 3,4-Dihydro-3,3-dimethyl-1,9(2H,... | 241 | C15H15NO2 | 1000212-95-2 | 46 |
| 3 | 1-Phenanthrenecarboxaldehyde, 1,... | 284 | C20H28O | 024035-50-5 | 38 |
| 4 | s-Indacen-1(2H)-one, 3,5,6,7-tet... | 256 | C18H24O | 038754-94-8 | 30 |
| 5 | Benzene, 1-(1-formylethyl)-4-(1-... | 188 | C13H16O | 1000161-46-6 | 25 |

Unknown



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

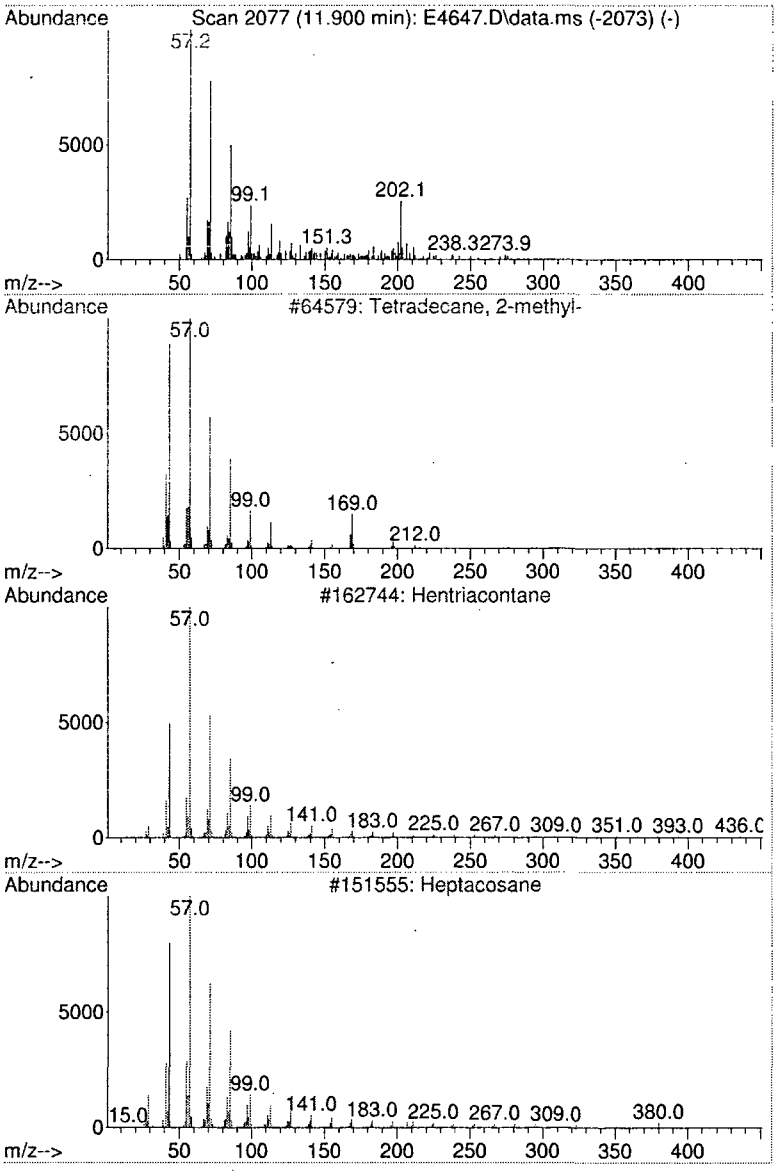
**********

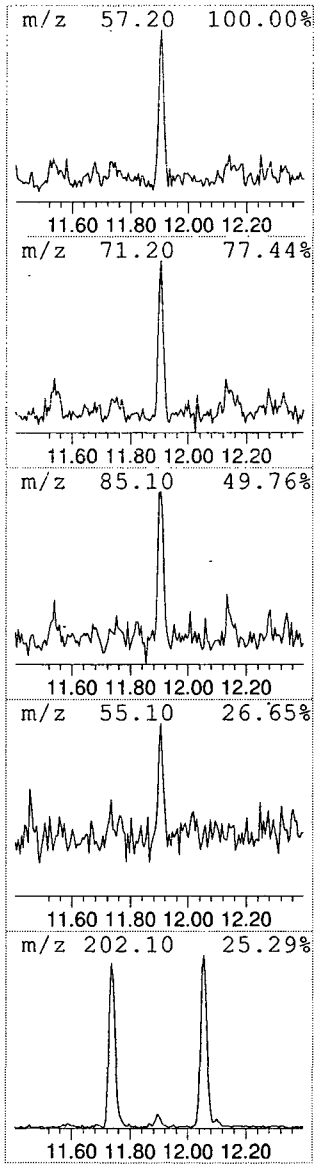
Peak Number 22 Tetradecane, 2-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.900 | 2.70 ug/mL | 121253 | Phenanthrene-d10 | 9.848 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetradecane, 2-methyl- | 212 | C15H32 | 001560-95-8 | 76 |
| 2 | Hentriacontane | 437 | C31H64 | 000630-04-6 | 64 |
| 3 | Heptacosane | 380 | C27H56 | 000593-49-7 | 64 |
| 4 | Pentadecane, 8-heptyl- | 310 | C22H46 | 071005-15-7 | 62 |
| 5 | Octadecane, 2-methyl- | 268 | C19H40 | 001560-88-9 | 59 |

**Alkane**



Library Search Compound Report

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DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

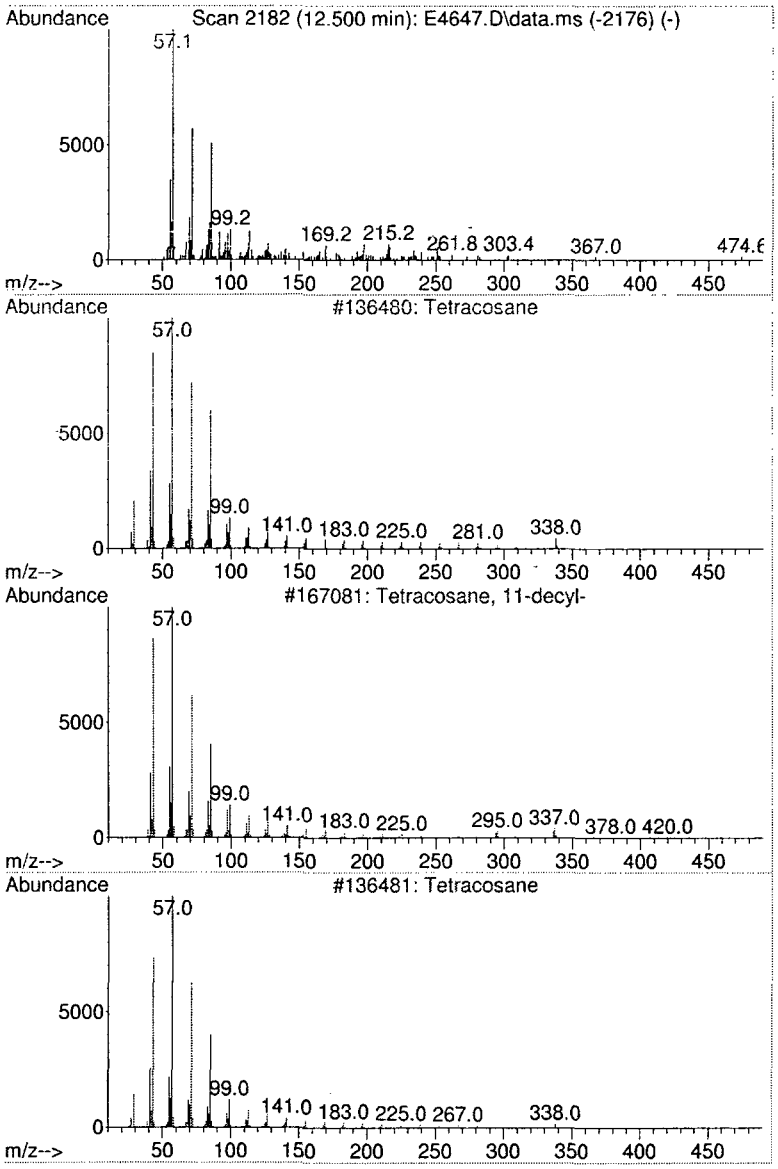
**********

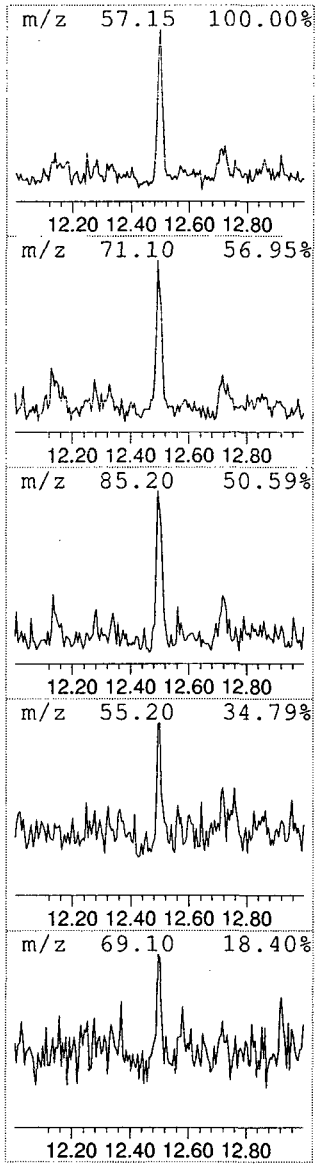
Peak Number 23 Tetracosane Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.500 | 2.33 ug/mL | 117008 | Chrysene-d12 | 13.980 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetracosane | 338 | C24H50 | 000646-31-1 | 72 |
| 2 | Tetracosane, 11-decyl- | 479 | C34H70 | 055429-84-0 | 72 |
| 3 | Tetracosane | 338 | C24H50 | 000646-31-1 | 72 |
| 4 | Hexadecane, 1-iodo- | 352 | C16H33I | 000544-77-4 | 72 |
| 5 | Octacosane | 394 | C28H58 | 000630-02-4 | 72 |

**Alkane**



Library Search Compound Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

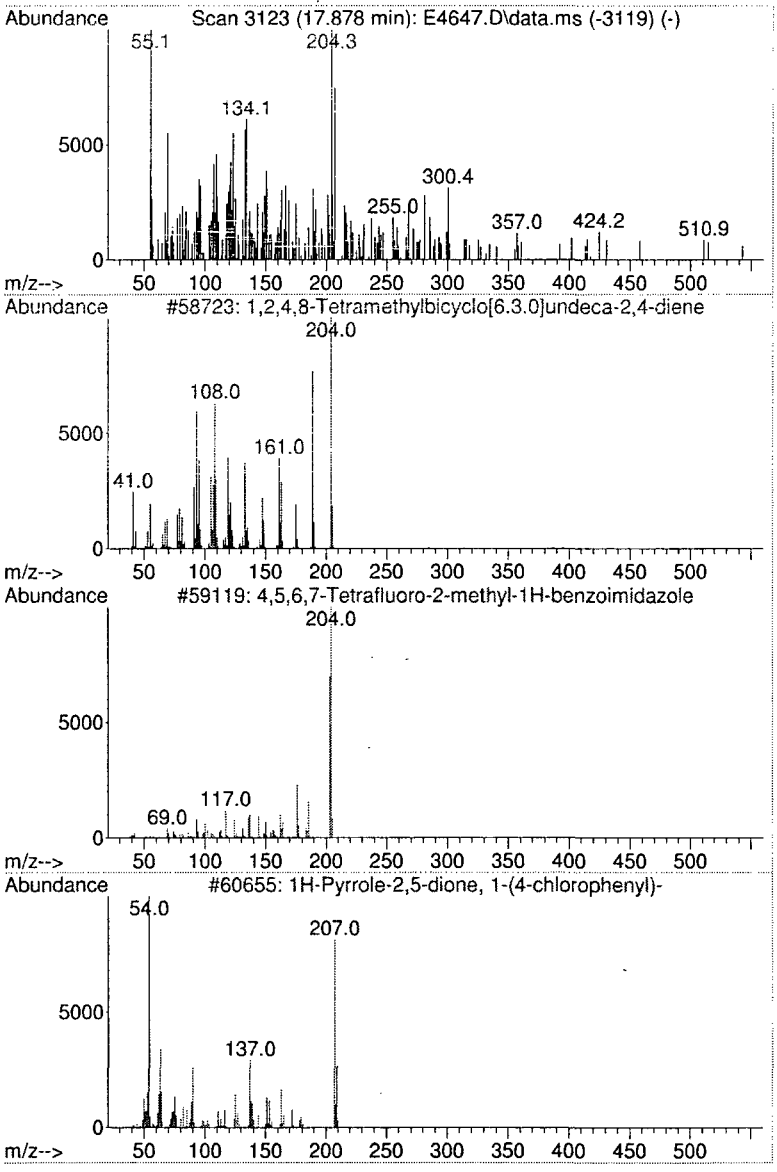
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

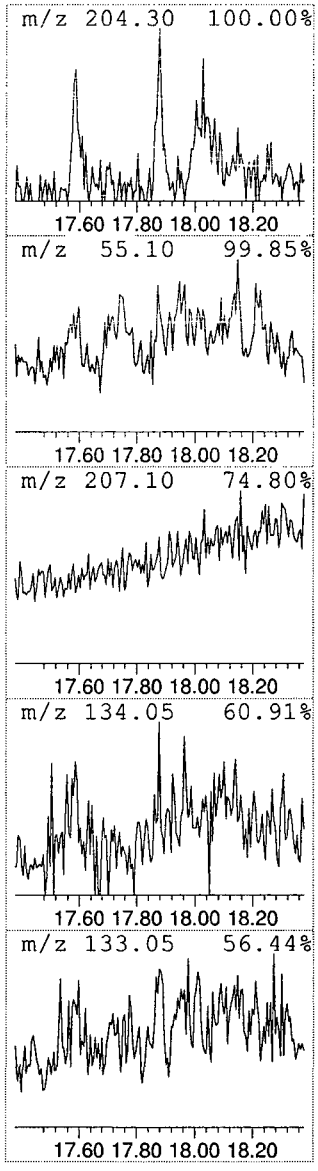
**********
Peak Number 24 1,2,4,8-Tetramethylbicyclo[... Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.878 | 2.08 ug/mL | 98311 | Perylene-d12 | 16.049 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 20 |
| 2 | 4,5,6,7-Tetrafluoro-2-methyl-1H-... | 204 | C8H4F4N2 | 081430-75-3 | 18 |
| 3 | 1H-Pyrrole-2,5-dione, 1-(4-chlor... | 207 | C10H6ClNO2 | 001631-29-4 | 18 |
| 4 | 2,5,5,8a-Tetramethyl-6,7,8,8a-te... | 204 | C14H20O | 124957-09-1 | 18 |
| 5 | 3-Methoxy-5-methylsulfanyl-isoth... | 204 | C6H8N2O2S2 | 1000274-69-9 | 18 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

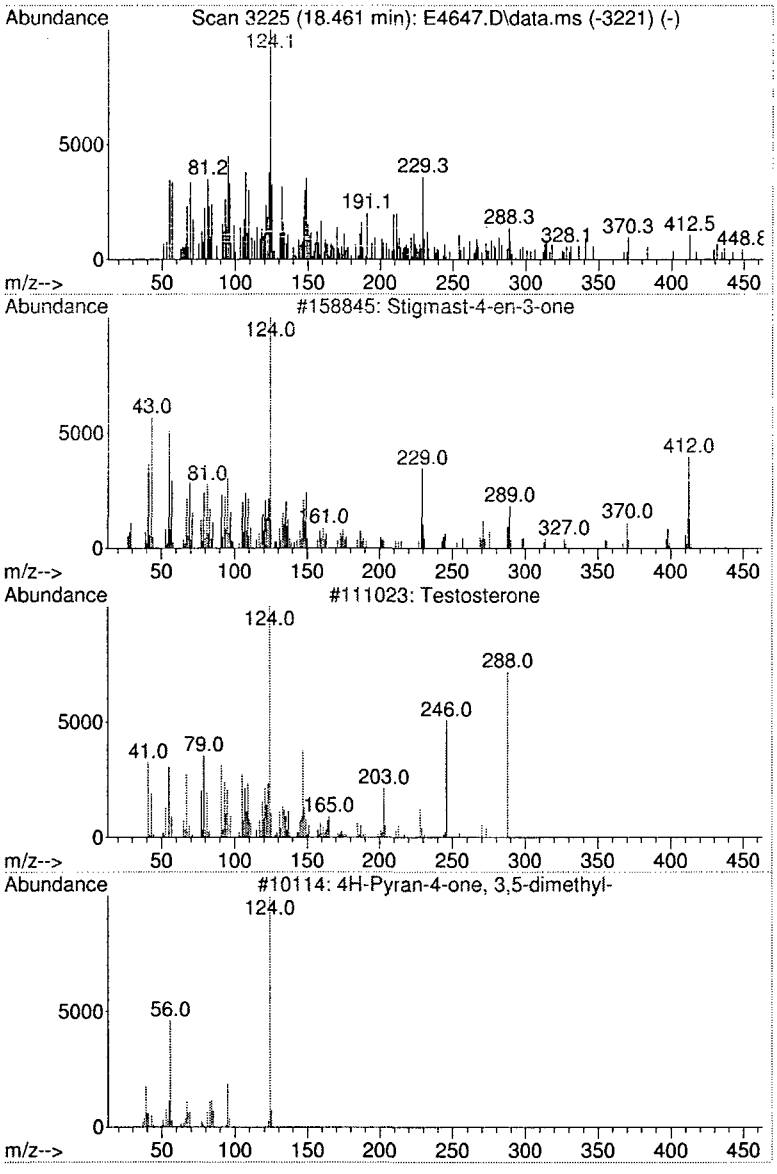
**********

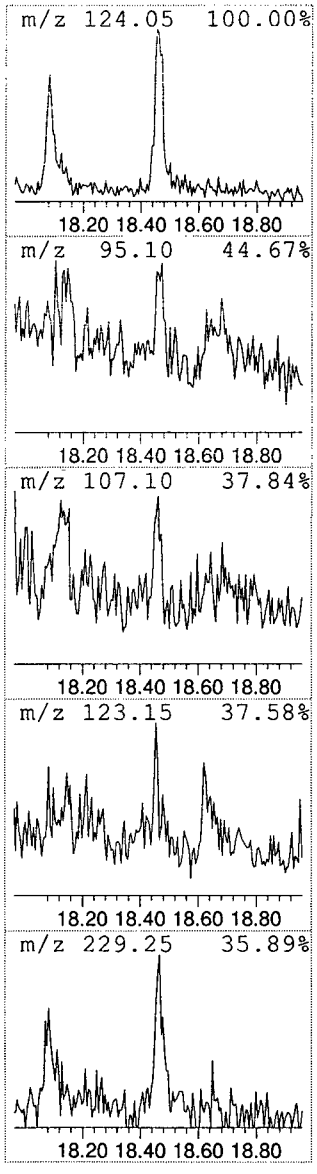
Peak Number 25 Stigmast-4-en-3-one Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.461 | 3.63 ug/mL | 171776 | Perylene-d12 | 16.049 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Stigmast-4-en-3-one | 412 | C29H48O | 001058-61-3 | 72 |
| 2 | Testosterone | 288 | C19H28O2 | 000058-22-0 | 64 |
| 3 | 4H-Pyran-4-one, 3,5-dimethyl- | 124 | C7H8O2 | 019083-61-5 | 52 |
| 4 | cis-4-Octylcyclohexylmethyl nico... | 331 | C21H33NO2 | 104519-18-8 | 52 |
| 5 | Androst-4-en-3-one, 17-hydroxy-,... | 288 | C19H28O2 | 000604-39-7 | 50 |

Unknown



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:37:49 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

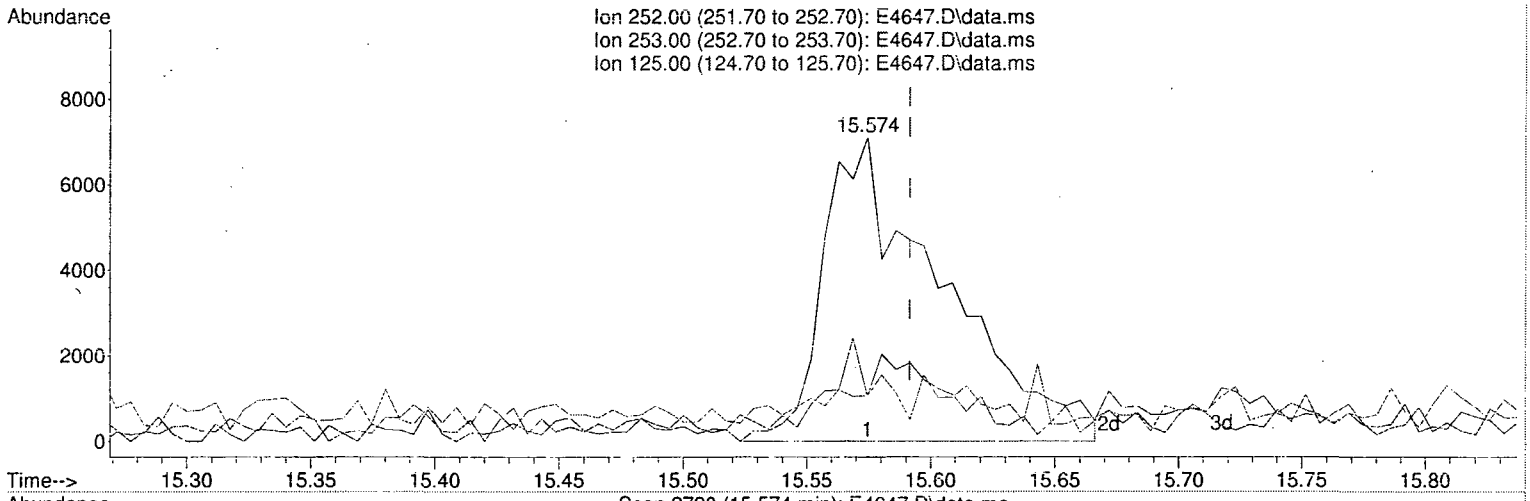
| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Methanethiol | 0.652 | 27172.6 | ug/mL | 640667000 | 1 | 3.296 | 471553 | 20.0 |
| 1-Octen-4-ol | 1.501 | 99.7 | ug/mL | 2351350 | 1 | 3.296 | 471553 | 20.0 |
| Butanamide, 3,N... | 1.576 | 9.8 | ug/mL | 229901 | 1 | 3.296 | 471553 | 20.0 |
| Propane, 1-ethoxy- | 1.667 | 2.2 | ug/mL | 53048 | 1 | 3.296 | 471553 | 20.0 |
| Cyclopentane, b... | 1.720 | 94.2 | ug/mL | 2222010 | 1 | 3.296 | 471553 | 20.0 |
| Ethane, 1,1,2,2... | 2.404 | 6.0 | ug/mL | 141260 | 1 | 3.296 | 471553 | 20.0 |
| Dodecane | 5.107 | 2.3 | ug/mL | 71074 | 2 | 4.957 | 620426 | 20.0 |
| Naphthalene, 2-... | 6.165 | 10.5 | ug/mL | 325222 | 2 | 4.957 | 620426 | 20.0 |
| Naphthalene, 1,... | 6.891 | 4.0 | ug/mL | 154647 | 3 | 7.596 | 777586 | 20.0 |
| Naphthalene, 2,... | 6.982 | 3.8 | ug/mL | 147917 | 3 | 7.596 | 777586 | 20.0 |
| Naphthalene, 2,... | 7.105 | 4.3 | ug/mL | 165845 | 3 | 7.596 | 777586 | 20.0 |
| Pentadecane | 7.725 | 3.0 | ug/mL | 115308 | 3 | 7.596 | 777586 | 20.0 |
| Hexadecane, 2,6... | 8.510 | 2.6 | ug/mL | 101839 | 3 | 7.596 | 777586 | 20.0 |
| 1,1'-Biphenyl, ... | 8.568 | 2.1 | ug/mL | 80788 | 3 | 7.596 | 777586 | 20.0 |
| 9H-Fluorene, 9-... | 9.299 | 2.2 | ug/mL | 98891 | 4 | 9.848 | 896889 | 20.0 |
| Naphtho[2,3-b]t... | 9.693 | 2.4 | ug/mL | 106715 | 4 | 9.848 | 896889 | 20.0 |
| 1,2-Benzenedica... | 10.471 | 2.2 | ug/mL | 97344 | 4 | 9.848 | 896889 | 20.0 |
| Hexadecane | 10.642 | 2.0 | ug/mL | 90567 | 4 | 9.848 | 896889 | 20.0 |
| Anthracene, 9-m... | 10.711 | 2.0 | ug/mL | 90790 | 4 | 9.848 | 896889 | 20.0 |
| Eicosane | 11.288 | 2.2 | ug/mL | 99989 | 4 | 9.848 | 896889 | 20.0 |
| 4b,8-Dimethyl-2... | 11.460 | 4.7 | ug/mL | 209960 | 4 | 9.848 | 896889 | 20.0 |
| Tetradecane, 2-... | 11.900 | 2.7 | ug/mL | 121253 | 4 | 9.848 | 896889 | 20.0 |
| Tetracosane | 12.500 | 2.3 | ug/mL | 117008 | 5 | 13.980 | 1002740 | 20.0 |
| 1,2,4,8-Tetrame... | 17.878 | 2.1 | ug/mL | 98311 | 6 | 16.049 | 946247 | 20.0 |
| Stigmast-4-en-3... | 18.461 | 3.6 | ug/mL | 171776 | 6 | 16.049 | 946247 | 20.0 |

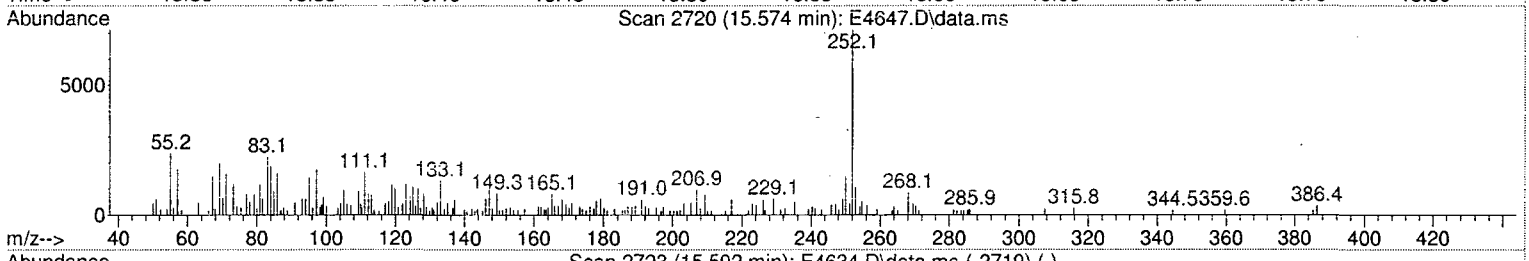
Quantitation Report (Qedit)

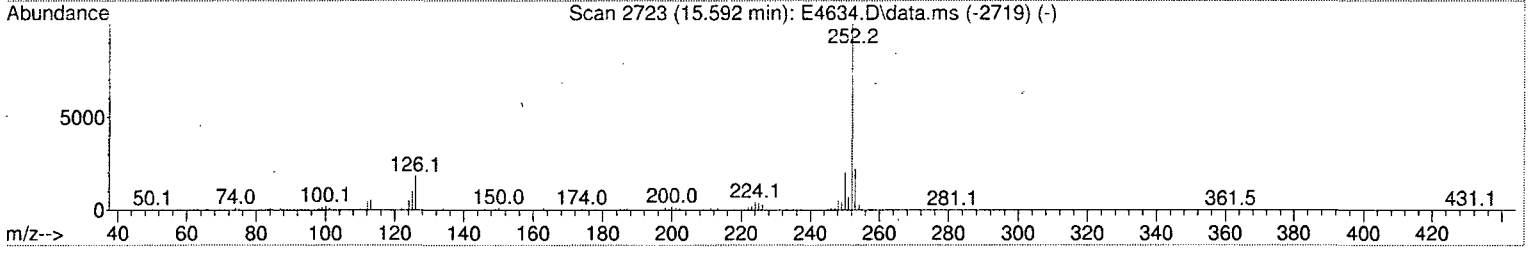
Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:23 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4647.D\data.ms

**(91) Benzo (k) fluoranthene (PC)**

**15.574min (-0.017) 0.53 ug/mL**

**response 23624**

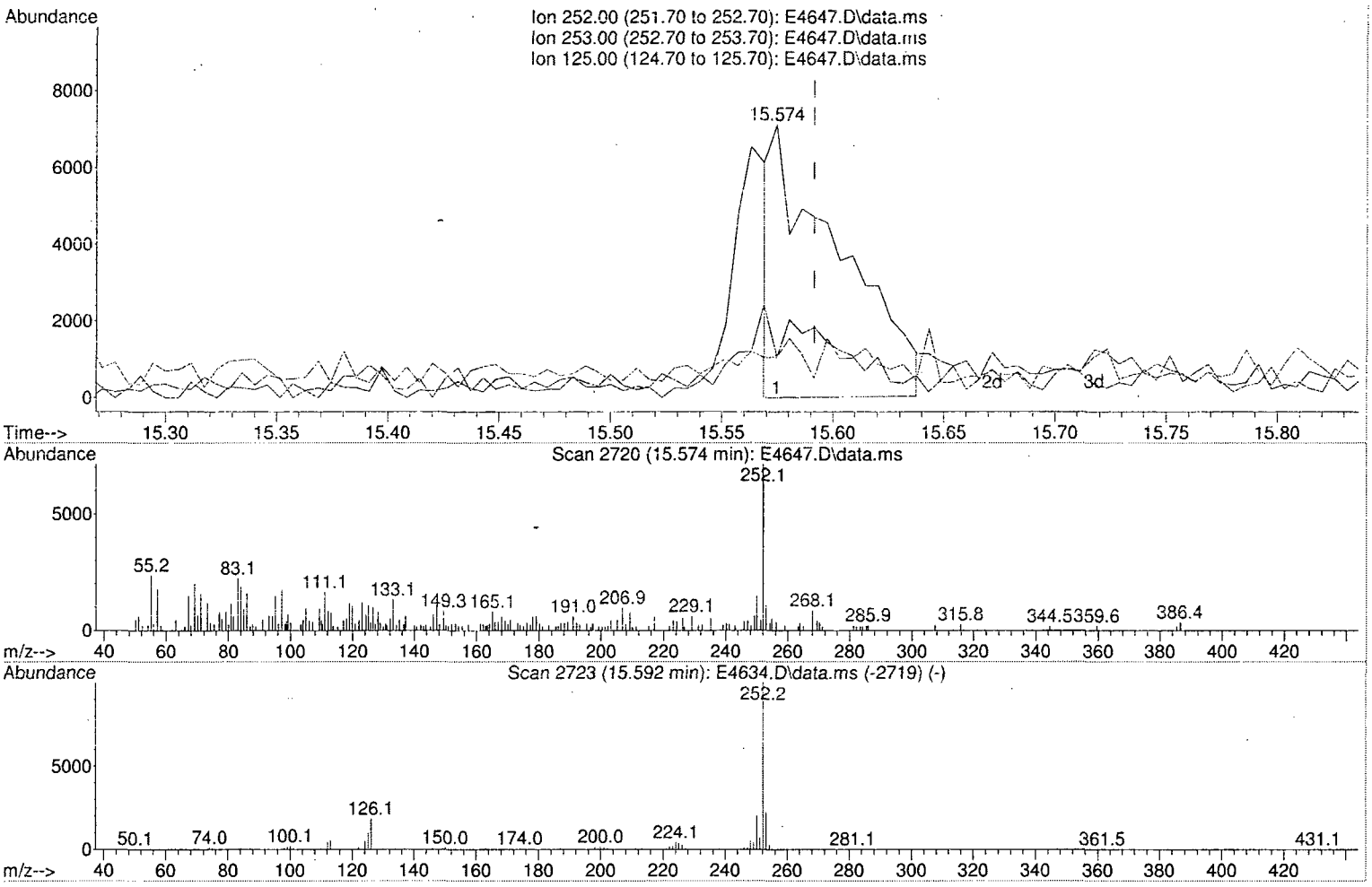
| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100.00 | 100.00 |
| 253.00 | 19.30 | 8.15 |
| 125.00 | 8.30 | 7.04 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4647.D
Acq On : 25 May 2012 00:36
Sample : 0015977-06
Misc : F5WC2 30.3GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:23 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4647.D\data.ms

**(91) Benzo (k) fluoranthene (PC)**

**15.574min (-0.017) 0.33 ug/mL m** RS 5/24

**response 14844**

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100.00 | 100.00 |
| 253.00 | 19.30 | 12.97 |
| 125.00 | 8.30 | 11.20 |
| 0.00 | 0.00 | 0.00 |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4690.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 220 | U |
| 108-95-2 | Phenol | 220 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 220 | U |
| 95-57-8 | 2-Chlorophenol | 220 | U |
| 95-48-7 | 2-Methylphenol | 220 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 220 | U |
| 98-86-2 | Acetophenone | 220 | U |
| 106-44-5 | 4-Methylphenol | 220 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 220 | U |
| 67-72-1 | Hexachloroethane | 220 | U |
| 98-95-3 | Nitrobenzene | 220 | U |
| 78-59-1 | Isophorone | 220 | U |
| 88-75-5 | 2-Nitrophenol | 220 | U |
| 105-67-9 | 2,4-Dimethylphenol | 220 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 220 | U |
| 120-83-2 | 2,4-Dichlorophenol | 220 | U |
| 91-20-3 | Naphthalene | 220 | U |
| 106-47-8 | 4-Chloroaniline | 220 | U |
| 87-68-3 | Hexachlorobutadiene | 220 | U |
| 105-60-2 | Caprolactam | 220 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 220 | U |
| 91-57-6 | 2-Methylnaphthalene | 220 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 220 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 220 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 220 | U |
| 92-52-4 | 1,1'-Biphenyl | 220 | U |
| 91-58-7 | 2-Chloronaphthalene | 220 | U |
| 88-74-4 | 2-Nitroaniline | 420 | U |
| 131-11-3 | Dimethylphthalate | 220 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 220 | U |
| 208-96-8 | Acenaphthylene | 220 | U |
| 99-09-2 | 3-Nitroaniline | 420 | U |
| 83-32-9 | Acenaphthene | 220 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4690.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 420 | U |
| 100-02-7 | 4-Nitrophenol | 420 | U |
| 132-64-9 | Dibenzofuran | 220 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 220 | U |
| 84-66-2 | Diethylphthalate | 220 | U |
| 86-73-7 | Fluorene | 220 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 220 | U |
| 100-01-6 | 4-Nitroaniline | 420 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 420 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 220 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 220 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 220 | U |
| 118-74-1 | Hexachlorobenzene | 220 | U |
| 1912-24-9 | Atrazine | 220 | U |
| 87-86-5 | Pentachlorophenol | 420 | U |
| 85-01-8 | Phenanthrene | 220 | U |
| 120-12-7 | Anthracene | 220 | U |
| 86-74-8 | Carbazole | 220 | U |
| 84-74-2 | Di-n-butylphthalate | 21 | JB |
| 206-44-0 | Fluoranthene | 220 | U |
| 129-00-0 | Pyrene | 220 | U |
| 85-68-7 | Butylbenzylphthalate | 18 | J |
| 91-94-1 | 3,3'-Dichlorobenzidine | 220 | U |
| 56-55-3 | Benzo (a) anthracene | 220 | U |
| 218-01-9 | Chrysene | 220 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 31 | J |
| 117-84-0 | Di-n-octylphthalate | 220 | U |
| 205-99-2 | Benzo (b) fluoranthene | 220 | U |
| 207-08-9 | Benzo (k) fluoranthene | 220 | U |
| 50-32-8 | Benzo (a) pyrene | 220 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 220 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 220 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 220 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 220 | U |

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 0015977-07

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4690.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: 20.9 Decanted: (Y/N) N Date Received: 05/18/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/26/2012

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | 000625-33-2 | 3-Penten-2-one | 0.90 | 1700 | JN |
| 02 | | Unknown-01 (1 3.237) | 0.94 | 27000 | J |
| 03 | | Unknown-02 (1 3.237) | 1.47 | 20000 | J |
| 04 | | Unknown-03 (1 3.237) | 1.53 | 180 | J |
| 05 | | Unknown-04 (1 3.237) | 1.69 | 18000 | J |
| 06 | | Unknown-05 (1 3.237) | 1.87 | 220 | J |
| 07 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.36 | 210 | JNB |
| 08 | | Unknown-06 (1 3.237) | 2.40 | 99 | JB |
| 09 | | Unknown-07 (2 4.893) | 5.75 | 89 | J |
| 10 | | Unknown-08 (6 15.992) | 18.42 | 230 | J |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

06/01/12

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

S. Vokati

06/01/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 79365 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 346037 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 231563 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.779 | 188 | 414509 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.923 | 240 | 418959 | 20.0000 ug/mL | 0.02 |
| 88) Perylene-d12 | 15.992 | 264 | 370009 | 20.0000 ug/mL | 0.03 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0 | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | |
| 7) Phenol-d5 | 3.018 | 99 | 229723 | 13.65 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 34.13% | | |
| 18) Bis(2-chloroethyl)ethe... | 2.986 | 67 | 128253 | 14.67 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 36.68% | | |
| 19) 2-Chlorophenol-d4 | 3.050 | 132 | 197588 | 12.47 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 31.18% | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 168133 | 12.34 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 30.85% | | |
| 22) Nitrobenzene-d5 | 3.985 | 128 | 114207 | 14.89 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = 37.23% | | |
| 35) 2-Nitrophenol-d4 | 4.423 | 143 | 115740 | 13.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 33.38% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.786 | 165 | 192724 | 13.38 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 33.45% | | |
| 37) 4-Chloroaniline-d4 | 5.112 | 131 | 252756 | 17.69 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 44.23% | | |
| 62) Acenaphthylene-d8 | 7.270 | 160 | 784321 | 15.62 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 39.05% | | |
| 63) 4-Nitrophenol-d4 | 8.093 | 143 | 108293 | 14.47 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 36.18% | | |
| 64) Dimethylphthalate-d6 | 7.313 | 166 | 650659 | 15.96 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 39.90%# | | |
| 65) Fluorene-d10 | 8.318 | 176 | 525760 | 16.39 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 40.98% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.619 | 200 | 49150 | 6.47 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 16.18% | | |
| 79) Anthracene-d10 | 9.859 | 188 | 872153 | 16.50 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 41.25% | | |
| 87) Pyrene-d10 | 11.962 | 212 | 1012370 | 19.09 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 47.73%# | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 760848 | 17.26 ug/mL | 0.03 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 43.15% | | |
| **Target Compounds** | | | | | Qvalue |
| 4) 1,4-Dioxane | 1.020 | 88 | 40542m | 9.0740 ug/mL | |
| 76) Di-n-butylphthalate | 11.031 | 149 | 32364 | 0.4881 ug/mL | 94 |
| 82) Butylbenzylphthalate | 13.340 | 149 | 12031 | 0.4334 ug/mL | 91 |
| 86) Bis(2-ethylhexyl)phtha... | 14.368 | 149 | 28908 | 0.7404 ug/mL | 95 |
| 90) Benzo (b) fluoranthene | 15.500 | 252 | 11584m | 0.2312 ug/mL | |

RS RW

RS RW

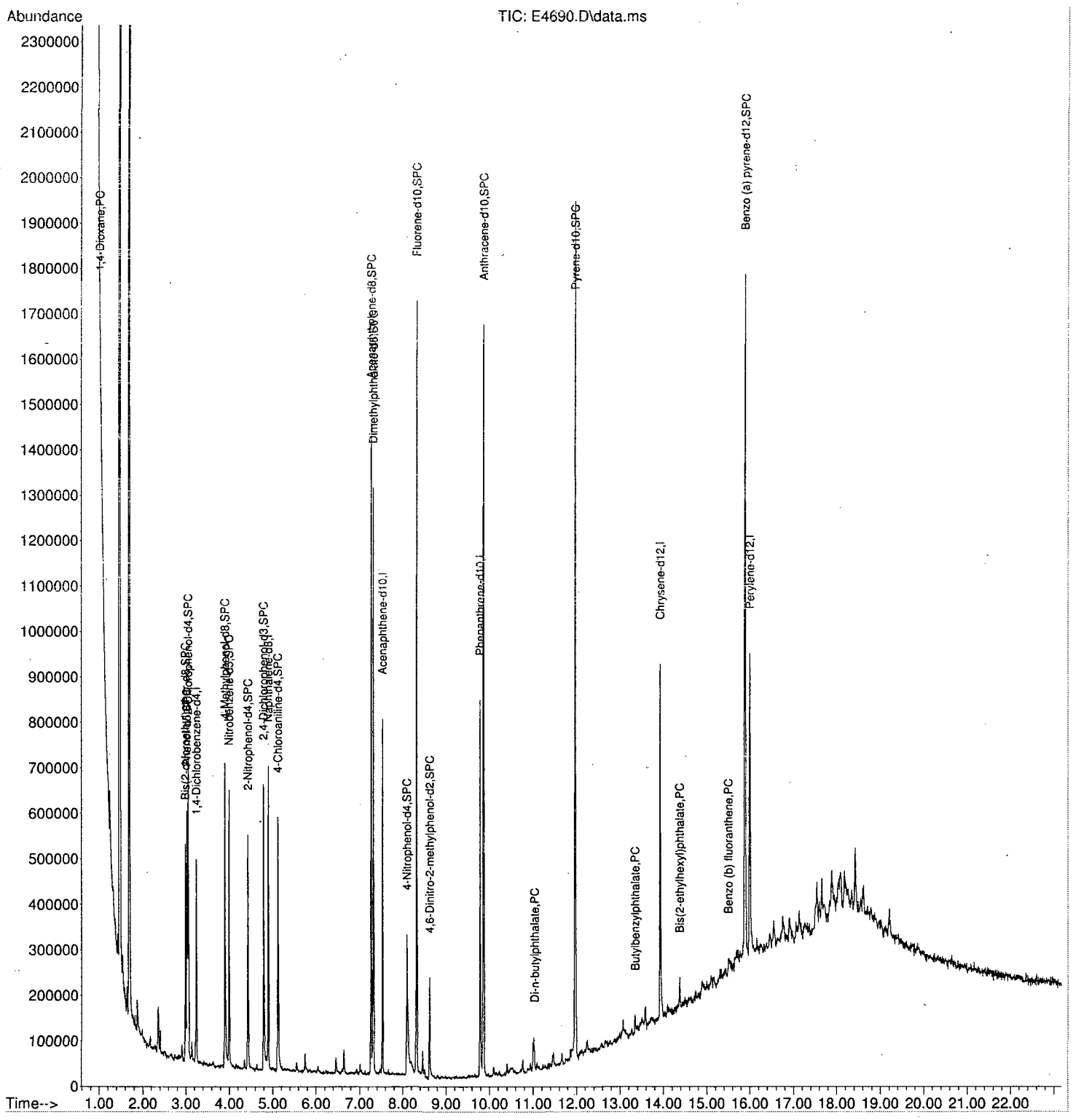
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

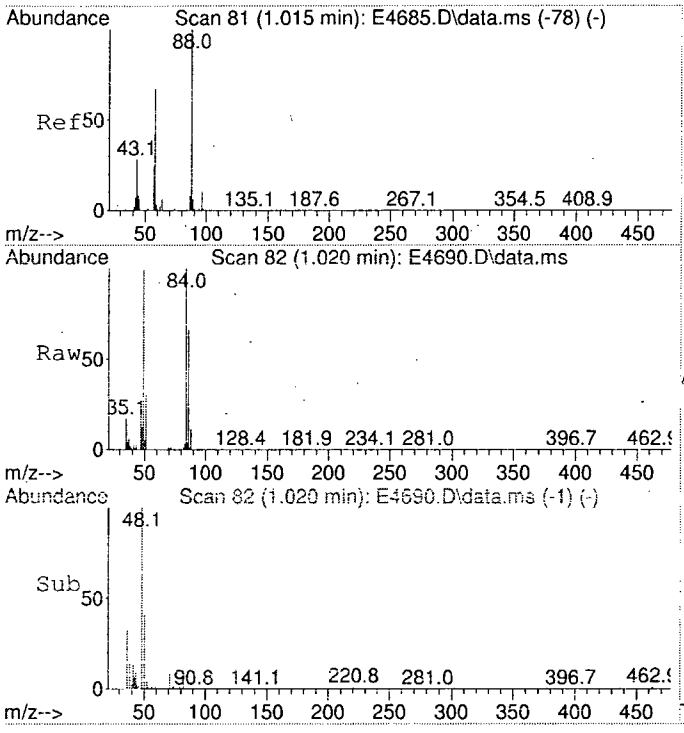
Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration



Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

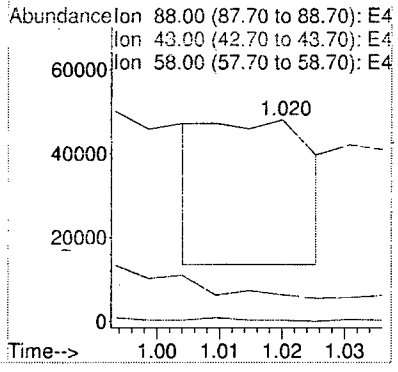
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

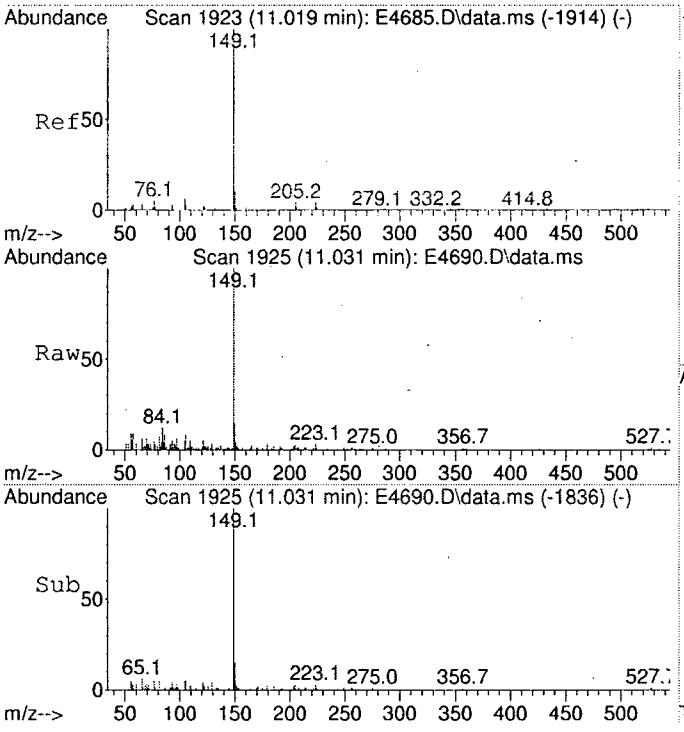



#4
1,4-Dioxane
Concen: 9.0740 ug/mL m
RT: 1.02 min Scan# 82
Delta R.T. 0.01 min
Lab File: E4690.D
Acq: 26 May 2012 14:30

Tgt Ion: 88 Resp: 40542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 2331.6 | 18.4 | 27.6# |
| 58 | 123.8 | 36.8 | 55.2# |

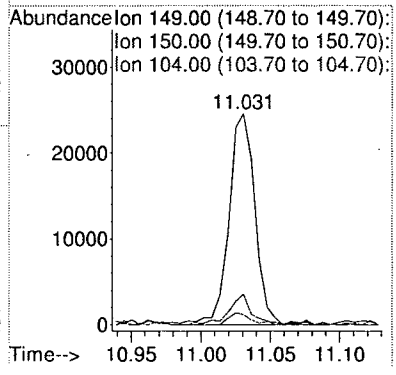



#76
Di-n-butylphthalate
Concen: 0.4881 ug/mL
RT: 11.03 min Scan# 1925
Delta R.T. 0.01 min
Lab File: E4690.D
Acq: 26 May 2012 14:30

Tgt Ion:149 Resp: 32364

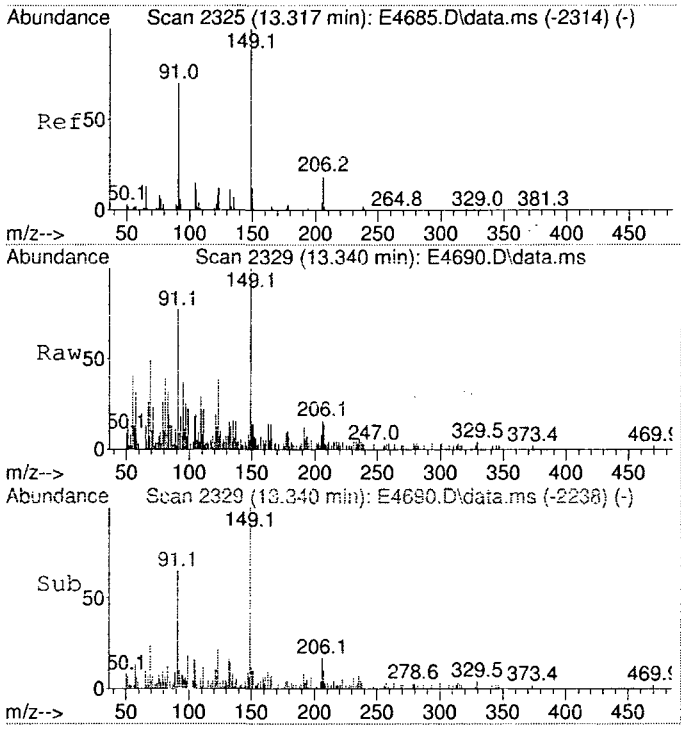
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 11.8 | 0.0 | 29.0 |
| 104 | 5.2 | 0.0 | 26.3 |



Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

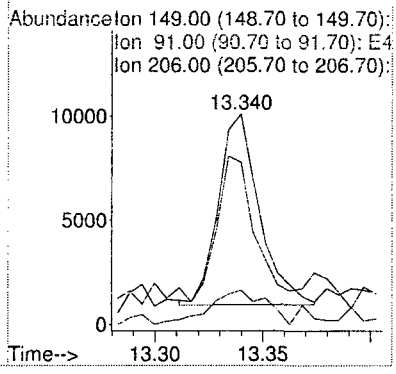
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

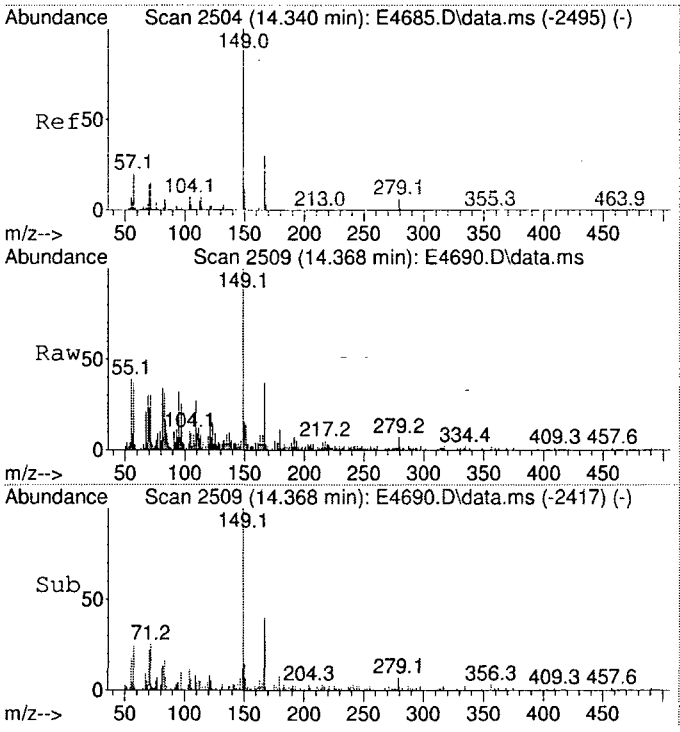



#82
Butylbenzylphthalate
Concen: 0.4334 ug/mL
RT: 13.34 min Scan# 2329
Delta R.T. 0.02 min
Lab File: E4690.D
Acq: 26 May 2012 14:30

Tgt Ion:149 Resp: 12031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 70.5 | 60.2 | 100.2 |
| 206 | 24.4 | 2.5 | 42.5 |

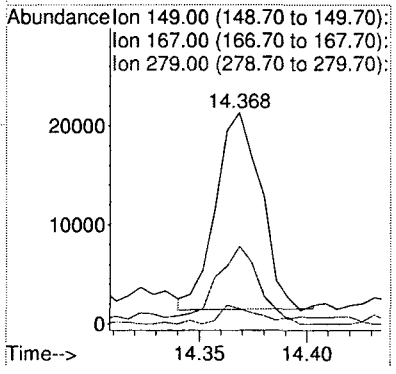



#86
Bis(2-ethylhexyl)phthalate
Concen: 0.7404 ug/mL
RT: 14.37 min Scan# 2509
Delta R.T. 0.03 min
Lab File: E4690.D
Acq: 26 May 2012 14:30

Tgt Ion:149 Resp: 28908

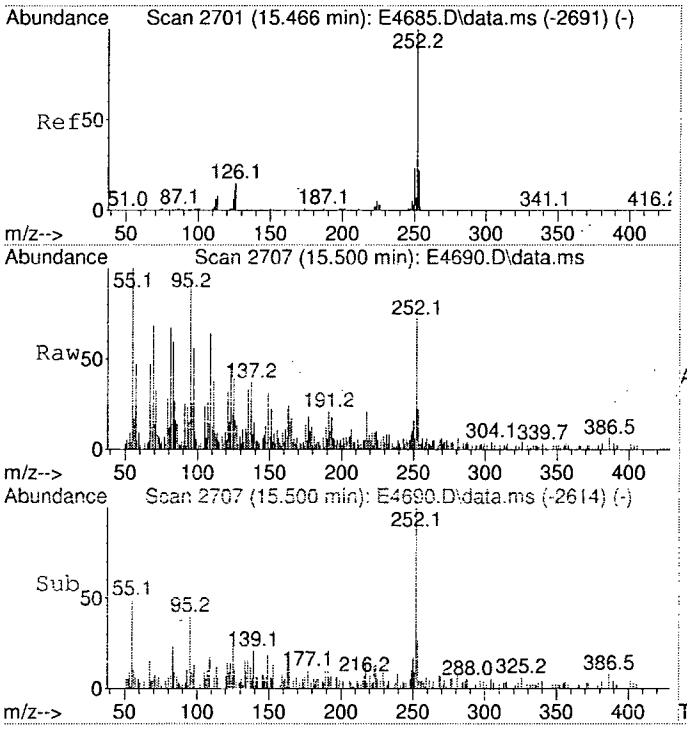
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 33.1 | 10.2 | 50.2 |
| 279 | 8.6 | 0.0 | 28.1 |



Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

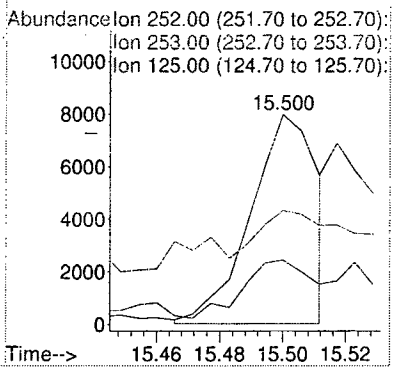
Method : X:\msdchem\1\methods\SOME4685.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration




#90
Benzo (b) fluoranthene
Concen: 0.2312 ug/mL m
RT: 15.50 min Scan# 2707
Delta R.T. 0.03 min
Lab File: E4690.D
Acq: 26 May 2012 14:30

Tgt Ion:252 Resp: 11584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 28.7 | 3.8 | 43.8 |
| 125 | 41.2 | 0.0 | 29.3# |



LSC Area Percent Report

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4690.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.903 | 58 | 60 | 64 | rVB2 | 1175363 | 1117015 | 6.51% | 1.612% |
| 2 | 0.935 | 64 | 66 | 122 | rVB3 | 3640320 | 17168388 | 100.00% | 24.775% |
| 3 | 1.469 | 161 | 166 | 176 | rVV | 12519289 | 12759458 | 74.32% | 18.412% |
| 4 | 1.533 | 176 | 178 | 185 | rVB3 | 85354 | 117948 | 0.69% | 0.170% |
| 5 | 1.629 | 194 | 196 | 202 | rVV2 | 52108 | 46231 | 0.27% | 0.067% |
| 6 | 1.688 | 202 | 207 | 218 | rVB | 11448693 | 11453884 | 66.71% | 16.528% |
| 7 | 1.811 | 228 | 230 | 234 | rVB4 | 30236 | 28402 | 0.17% | 0.041% |
| 8 | 1.869 | 239 | 241 | 259 | rVB4 | 77805 | 140506 | 0.82% | 0.203% |
| 9 | 2.356 | 328 | 332 | 338 | rBV2 | 99741 | 134966 | 0.79% | 0.195% |
| 10 | 2.404 | 338 | 341 | 347 | rVB2 | 50986 | 63309 | 0.37% | 0.091% |
| 11 | 2.751 | 402 | 406 | 413 | rBV9 | 14655 | 30802 | 0.18% | 0.044% |
| 12 | 2.917 | 434 | 437 | 442 | rVB5 | 37077 | 45515 | 0.27% | 0.066% |
| 13 | 2.986 | 447 | 450 | 454 | rBV | 476671 | 480065 | 2.80% | 0.693% |
| 14 | 3.018 | 454 | 456 | 460 | rVV | 549325 | 679274 | 3.96% | 0.980% |
| 15 | 3.050 | 460 | 462 | 472 | rVV | 663440 | 757850 | 4.41% | 1.094% |
| 16 | 3.114 | 472 | 474 | 476 | rVV3 | 10230 | 9868 | 0.06% | 0.014% |
| 17 | 3.141 | 476 | 479 | 483 | rVB2 | 41036 | 40703 | 0.24% | 0.059% |
| 18 | 3.237 | 492 | 497 | 505 | rVB | 443745 | 538702 | 3.14% | 0.777% |
| 19 | 3.419 | 528 | 531 | 534 | rBV4 | 12180 | 12349 | 0.07% | 0.018% |
| 20 | 3.638 | 570 | 572 | 578 | rVB6 | 14163 | 17820 | 0.10% | 0.026% |
| 21 | 3.697 | 580 | 583 | 586 | rBV3 | 7803 | 10406 | 0.06% | 0.015% |
| 22 | 3.894 | 616 | 620 | 633 | rBV | 668594 | 847149 | 4.93% | 1.222% |
| 23 | 3.985 | 633 | 637 | 645 | rVB | 600229 | 697181 | 4.06% | 1.006% |
| 24 | 4.087 | 653 | 656 | 661 | rVB7 | 9165 | 14152 | 0.08% | 0.020% |
| 25 | 4.161 | 667 | 670 | 676 | rBV8 | 11843 | 18893 | 0.11% | 0.027% |
| 26 | 4.215 | 678 | 680 | 686 | rBV7 | 6693 | 10110 | 0.06% | 0.015% |
| 27 | 4.348 | 703 | 705 | 711 | rVB7 | 19898 | 23045 | 0.13% | 0.033% |
| 28 | 4.423 | 715 | 719 | 732 | rBV | 513971 | 602955 | 3.51% | 0.870% |
| 29 | 4.637 | 756 | 759 | 763 | rVB4 | 13315 | 15534 | 0.09% | 0.022% |
| 30 | 4.786 | 783 | 787 | 800 | rBV | 627708 | 906857 | 5.28% | 1.309% |
| 31 | 4.861 | 800 | 801 | 803 | rVV2 | 30056 | 25373 | 0.15% | 0.037% |
| 32 | 4.893 | 803 | 807 | 817 | rVB | 664451 | 737313 | 4.29% | 1.064% |
| 33 | 5.005 | 825 | 828 | 833 | rVV6 | 7318 | 10975 | 0.06% | 0.016% |
| 34 | 5.112 | 844 | 848 | 864 | rVV | 556333 | 785483 | 4.58% | 1.133% |
| 35 | 5.556 | 927 | 931 | 938 | rVV9 | 19923 | 26913 | 0.16% | 0.039% |
| 36 | 5.673 | 951 | 953 | 956 | rVB4 | 8248 | 9770 | 0.06% | 0.014% |
| 37 | 5.753 | 961 | 968 | 980 | rVB9 | 42058 | 77427 | 0.45% | 0.112% |
| 38 | 6.052 | 1018 | 1024 | 1027 | rBV7 | 15018 | 22377 | 0.13% | 0.032% |
| 39 | 6.239 | 1055 | 1059 | 1063 | rVB7 | 9542 | 16757 | 0.10% | 0.024% |
| 40 | 6.458 | 1096 | 1100 | 1104 | rBV3 | 35110 | 48422 | 0.28% | 0.070% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 6.608 | 1124 | 1128 | 1129 | rVV4 | 11663 | 14081 | 0.08% | 0.020% |
| 42 | 6.645 | 1131 | 1135 | 1144 | rVB3 | 50910 | 66241 | 0.39% | 0.096% |
| 43 | 6.929 | 1186 | 1188 | 1193 | rVB6 | 9744 | 12769 | 0.07% | 0.018% |
| 44 | 7.009 | 1199 | 1203 | 1207 | rBV6 | 22609 | 34365 | 0.20% | 0.050% |
| 45 | 7.196 | 1232 | 1238 | 1242 | rVB8 | 7432 | 8577 | 0.05% | 0.012% |
| 46 | 7.270 | 1246 | 1252 | 1256 | rVV | 1432013 | 1641993 | 9.56% | 2.369% |
| 47 | 7.313 | 1256 | 1260 | 1273 | rVB | 1287303 | 1448085 | 8.43% | 2.090% |
| 48 | 7.479 | 1286 | 1291 | 1295 | rBV8 | 13433 | 24856 | 0.14% | 0.036% |
| 49 | 7.532 | 1295 | 1301 | 1308 | rVV | 780075 | 928436 | 5.41% | 1.340% |
| 50 | 8.093 | 1402 | 1406 | 1420 | rBV | 308022 | 623827 | 3.63% | 0.900% |
| 51 | 8.318 | 1442 | 1448 | 1458 | rVB | 1696477 | 2030590 | 11.83% | 2.930% |
| 52 | 8.462 | 1470 | 1475 | 1481 | rVV | 51856 | 70492 | 0.41% | 0.102% |
| 53 | 8.505 | 1481 | 1483 | 1489 | rVB6 | 20386 | 28818 | 0.17% | 0.042% |
| 54 | 8.619 | 1498 | 1503 | 1510 | rBV | 225137 | 299023 | 1.74% | 0.432% |
| 55 | 8.670 | 1510 | 1512 | 1518 | rVV6 | 10747 | 15532 | 0.09% | 0.022% |
| 56 | 8.807 | 1531 | 1536 | 1538 | rBV3 | 9304 | 13183 | 0.08% | 0.019% |
| 57 | 8.985 | 1563 | 1567 | 1569 | rVB5 | 7241 | 8537 | 0.05% | 0.012% |
| 58 | 9.242 | 1608 | 1612 | 1616 | rVV7 | 7542 | 8755 | 0.05% | 0.013% |
| 59 | 9.528 | 1659 | 1662 | 1664 | rVV4 | 9789 | 9894 | 0.06% | 0.014% |
| 60 | 9.602 | 1670 | 1675 | 1678 | rVV5 | 7178 | 13861 | 0.08% | 0.020% |
| 61 | 9.670 | 1682 | 1687 | 1691 | rVB5 | 10338 | 14026 | 0.08% | 0.020% |
| 62 | 9.779 | 1701 | 1706 | 1715 | rVV | 829029 | 1082640 | 6.31% | 1.562% |
| 63 | 9.859 | 1715 | 1720 | 1732 | rVV | 1655182 | 2104449 | 12.26% | 3.037% |
| 64 | 9.979 | 1736 | 1741 | 1744 | rVB6 | 9836 | 14797 | 0.09% | 0.021% |
| 65 | 10.105 | 1758 | 1763 | 1768 | rVV9 | 20527 | 35325 | 0.21% | 0.051% |
| 66 | 10.162 | 1768 | 1773 | 1775 | rVV6 | 8201 | 10506 | 0.06% | 0.015% |
| 67 | 10.231 | 1781 | 1785 | 1789 | rVB7 | 12105 | 15899 | 0.09% | 0.023% |
| 68 | 10.408 | 1809 | 1816 | 1820 | rBV3 | 26592 | 46085 | 0.27% | 0.067% |
| 69 | 10.493 | 1828 | 1831 | 1832 | rBV3 | 9894 | 11283 | 0.07% | 0.016% |
| 70 | 10.528 | 1835 | 1837 | 1841 | rVB5 | 10986 | 14427 | 0.08% | 0.021% |
| 71 | 10.768 | 1875 | 1879 | 1885 | rVB8 | 30347 | 46354 | 0.27% | 0.067% |
| 72 | 10.882 | 1896 | 1899 | 1905 | rBV7 | 9214 | 19157 | 0.11% | 0.028% |
| 73 | 10.939 | 1905 | 1909 | 1915 | rVB9 | 18177 | 28497 | 0.17% | 0.041% |
| 74 | 11.008 | 1915 | 1921 | 1923 | rBV3 | 74386 | 104367 | 0.61% | 0.151% |
| 75 | 11.094 | 1933 | 1936 | 1944 | rBV9 | 16563 | 31887 | 0.19% | 0.046% |
| 76 | 11.236 | 1957 | 1961 | 1963 | rBV5 | 10492 | 11872 | 0.07% | 0.017% |
| 77 | 11.276 | 1963 | 1968 | 1971 | rBV7 | 9556 | 11326 | 0.07% | 0.016% |
| 78 | 11.299 | 1971 | 1972 | 1977 | rVB5 | 8501 | 7927 | 0.05% | 0.011% |
| 79 | 11.339 | 1977 | 1979 | 1980 | rBV2 | 11800 | 9473 | 0.06% | 0.014% |
| 80 | 11.391 | 1985 | 1988 | 1989 | rBV3 | 13485 | 11850 | 0.07% | 0.017% |
| 81 | 11.448 | 1994 | 1998 | 2000 | rBV3 | 25492 | 32731 | 0.19% | 0.047% |
| 82 | 11.471 | 2000 | 2002 | 2005 | rVB4 | 27055 | 29202 | 0.17% | 0.042% |
| 83 | 11.665 | 2034 | 2036 | 2042 | rVB3 | 26816 | 37497 | 0.22% | 0.054% |

LSC Area Percent Report

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 11.711 | 2042 | 2044 | 2049 | rBV5 | 5030 | 8760 | 0.05% | 0.013% |
| 85 | 11.751 | 2049 | 2051 | 2056 | rBV6 | 11928 | 21209 | 0.12% | 0.031% |
| 86 | 11.859 | 2067 | 2070 | 2074 | rBV4 | 25938 | 37513 | 0.22% | 0.054% |
| 87 | 11.899 | 2074 | 2077 | 2081 | rVV6 | 24898 | 51821 | 0.30% | 0.075% |
| 88 | 11.962 | 2082 | 2088 | 2100 | rVB | 1885269 | 2561909 | 14.92% | 3.697% |
| 89 | 12.071 | 2104 | 2107 | 2108 | rBV3 | 17613 | 17827 | 0.10% | 0.026% |
| 90 | 12.094 | 2109 | 2111 | 2114 | rVV4 | 16133 | 19644 | 0.11% | 0.028% |
| 91 | 12.122 | 2114 | 2116 | 2123 | rVB8 | 15818 | 29879 | 0.17% | 0.043% |
| 92 | 12.248 | 2133 | 2138 | 2142 | rBV8 | 27920 | 51428 | 0.30% | 0.074% |
| 93 | 12.374 | 2158 | 2160 | 2164 | rBV4 | 12059 | 11312 | 0.07% | 0.016% |
| 94 | 13.054 | 2277 | 2279 | 2288 | rVB6 | 29754 | 43048 | 0.25% | 0.062% |
| 95 | 13.340 | 2325 | 2329 | 2335 | rBV5 | 40062 | 68992 | 0.40% | 0.100% |
| 96 | 13.923 | 2425 | 2431 | 2443 | rBV | 777727 | 1146277 | 6.68% | 1.654% |
| 97 | 14.368 | 2506 | 2509 | 2517 | rVB2 | 66722 | 91766 | 0.53% | 0.132% |
| 98 | 15.883 | 2768 | 2774 | 2787 | rVB | 1500017 | 2242144 | 13.06% | 3.236% |
| 99 | 15.992 | 2788 | 2793 | 2804 | rVV | 651474 | 1024997 | 5.97% | 1.479% |
| 100 | 18.415 | 3213 | 3217 | 3236 | rVB9 | 138020 | 285691 | 1.66% | 0.412% |

Sum of corrected areas: 69297856

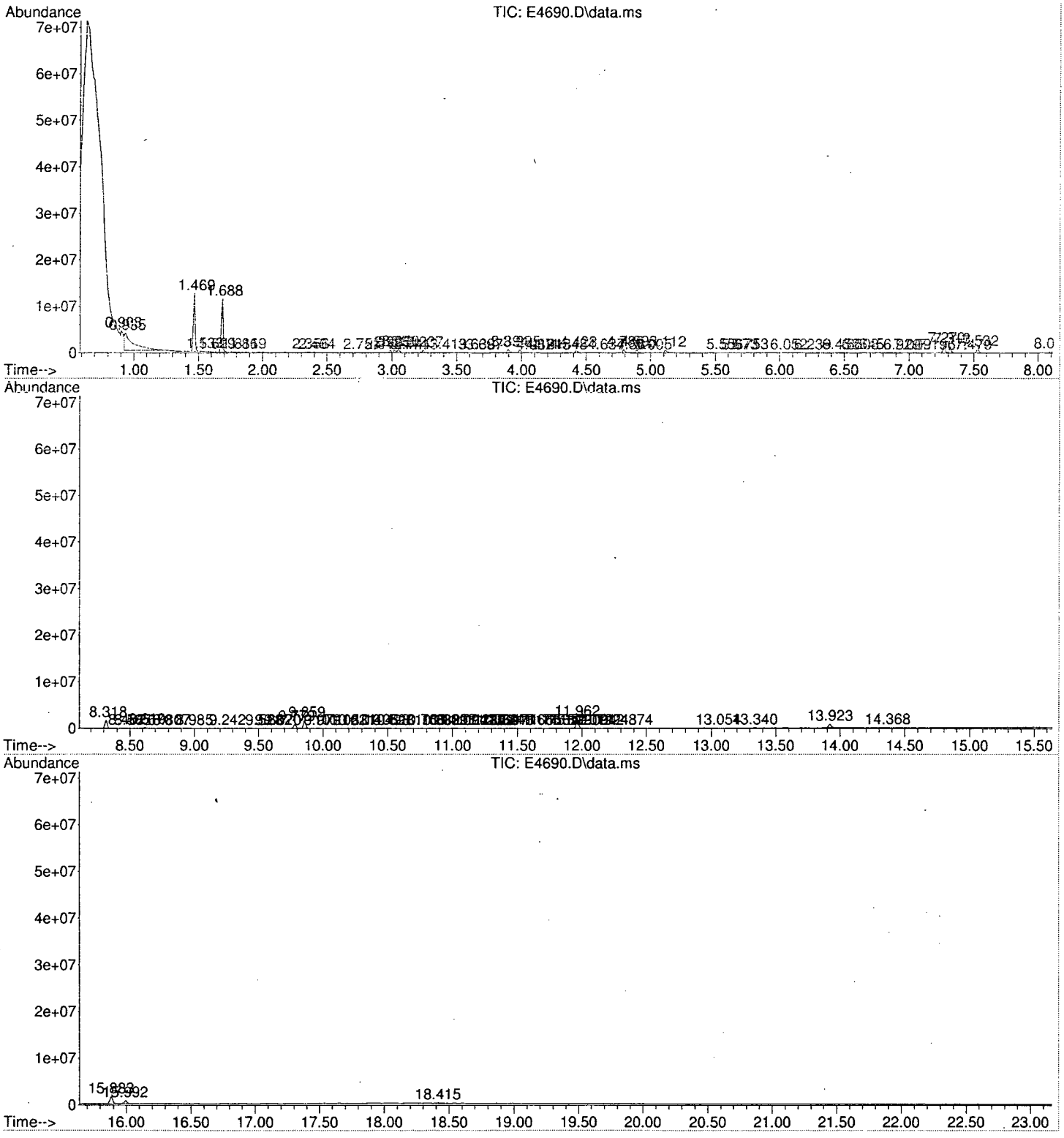
LSC Report - Integrated Chromatogram

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

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Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

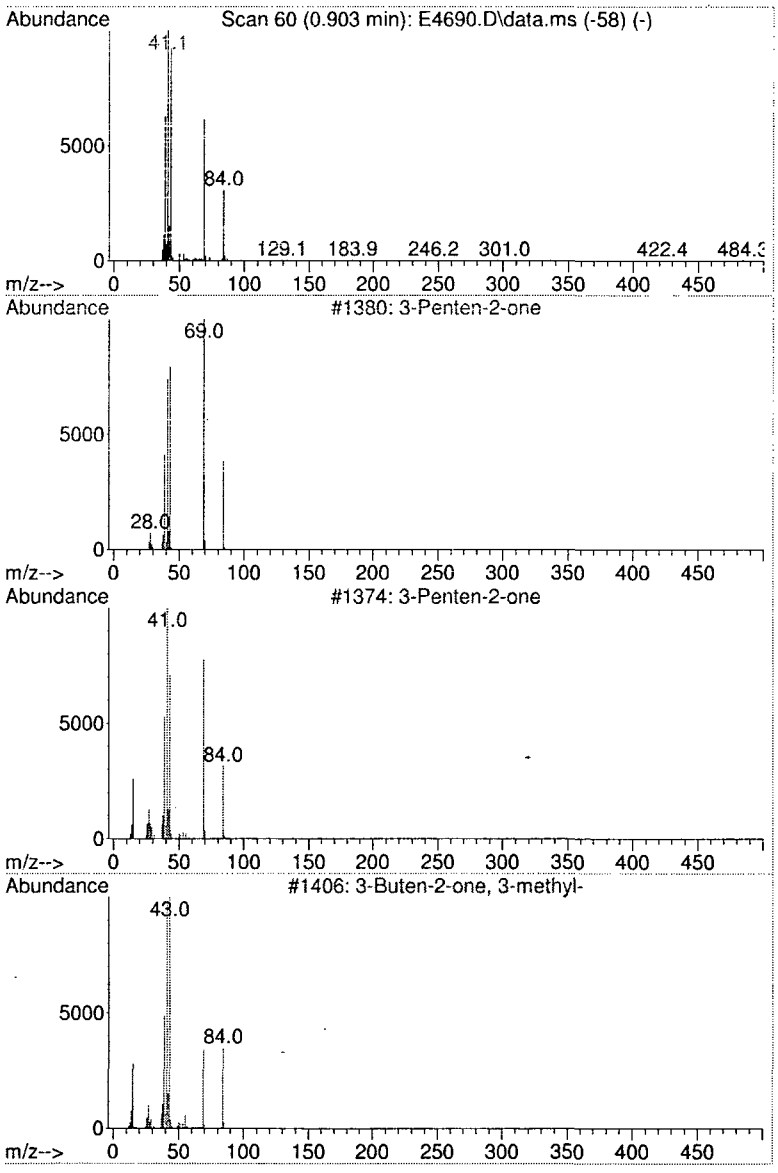
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

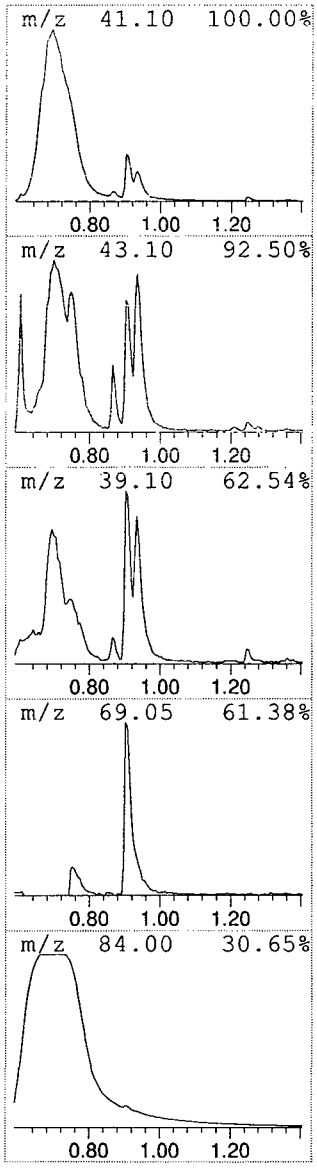
**********

Peak Number 1 3-Penten-2-one Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 0.903 | 41.47 ug/mL | 1117020 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Penten-2-one | 84 | C5H8O | 000625-33-2 | 91 |
| 2 | 3-Penten-2-one | 84 | C5H8O | 000625-33-2 | 78 |
| 3 | 3-Buten-2-one, 3-methyl- | 84 | C5H8O | 000814-78-8 | 78 |
| 4 | Ethanone, 1-cyclopropyl- | 84 | C5H8O | 000765-43-5 | 59 |
| 5 | 3-Buten-2-one, 3-methyl- | 84 | C5H8O | 000814-78-8 | 58 |



Library Search Compound Report

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Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

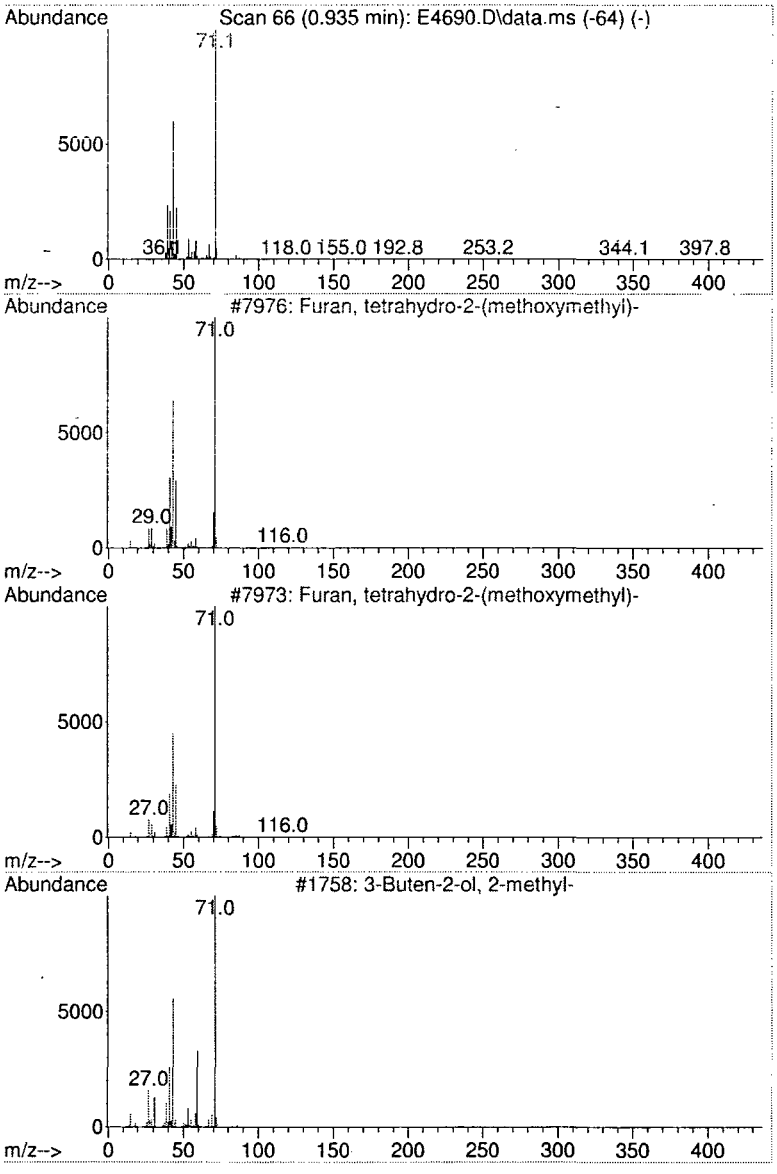
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

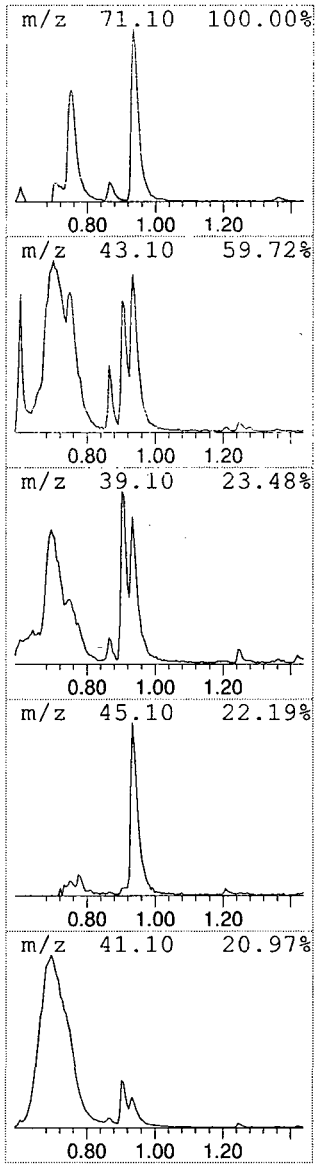
**********
Peak Number 2 Furan, tetrahydro-2-(methox... Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 0.935 | 637.40 ug/mL | 17168400 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro-2-(methoxymeth... | 116 | C6H12O2 | 019354-27-9 | 78 |
| 2 | Furan, tetrahydro-2-(methoxymeth... | 116 | C6H12O2 | 019354-27-9 | 78 |
| 3 | 3-Buten-2-ol, 2-methyl- | 86 | C5H10O | 000115-18-4 | 45 |
| 4 | 2-Furanmethanol, tetrahydro- | 102 | C5H10O2 | 000097-99-4 | 42 |
| 5 | Propanoic acid, 2-methyl-, anhyd... | 158 | C8H14O3 | 000097-72-3 | 42 |

**Unknown**



Library Search Compound Report

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Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

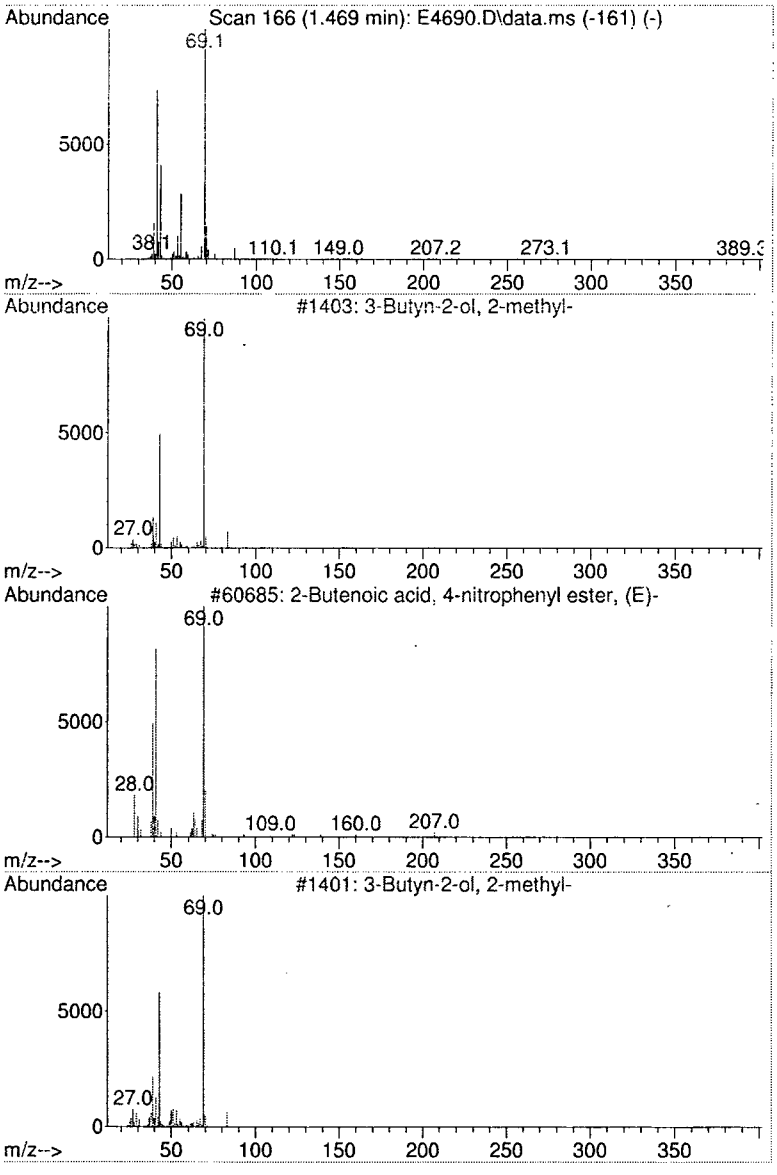
**********

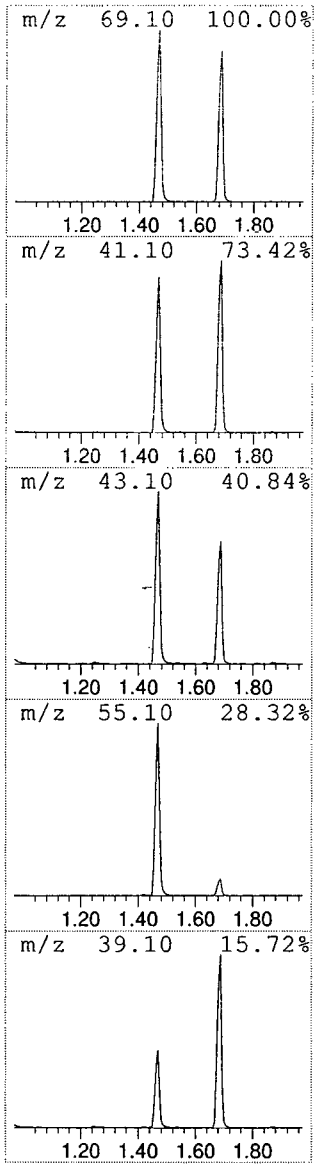
Peak Number 3 3-Butyn-2-ol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.469 | 473.71 ug/mL | 12759500 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 50 |
| 2 | 2-Butenoic acid, 4-nitrophenyl e... | 207 | C10H9NO4 | 014617-88-0 | 42 |
| 3 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 9 |
| 4 | 4-Heptanol, 2,6-dimethyl- | 144 | C9H20O | 000108-82-7 | 9 |
| 5 | 3-Methyl-3-nitrobut-1-ene | 115 | C5H9NO2 | 001809-67-2 | 9 |

**Unknown**



Library Search Compound Report

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Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

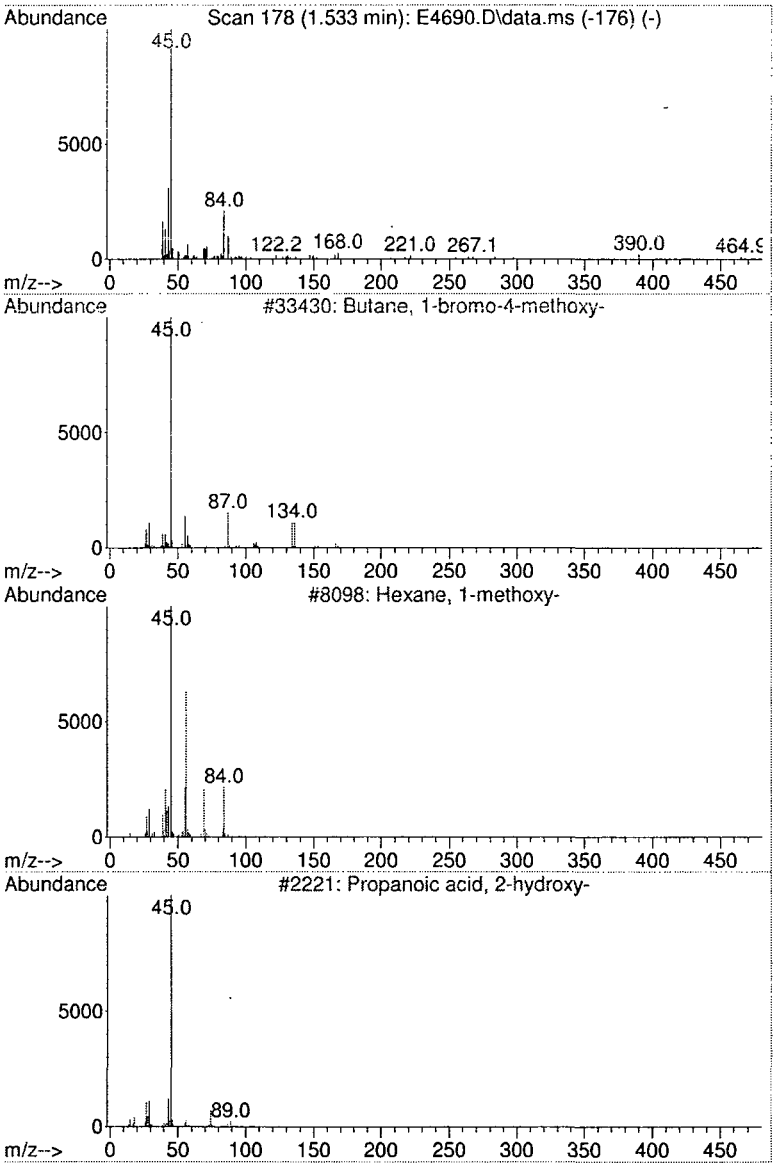
**********

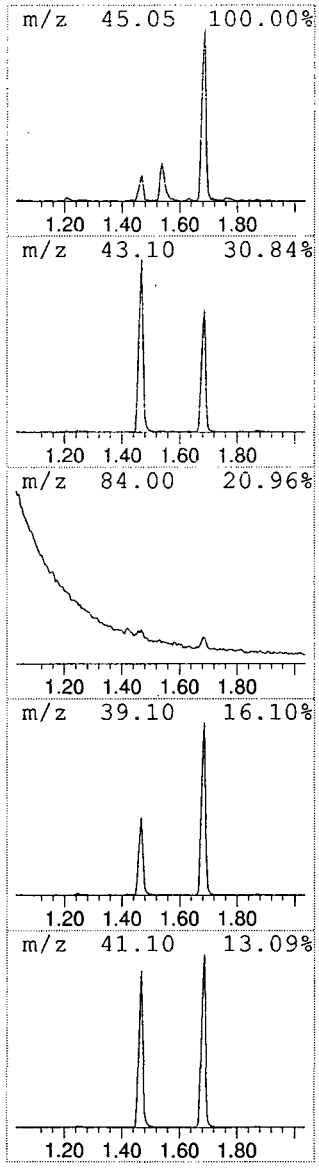
Peak Number 4 Butane, 1-bromo-4-methoxy- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.533 | 4.38 ug/mL | 117948 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 1-bromo-4-methoxy- | 166 | C5H11BrO | 004457-67-4 | 9 |
| 2 | Hexane, 1-methoxy- | 116 | C7H16O | 004747-07-3 | 9 |
| 3 | Propanoic acid, 2-hydroxy- | 90 | C3H6O3 | 000050-21-5 | 9 |
| 4 | 2-Hexanol, 3-methyl- | 116 | C7H16O | 002313-65-7 | 9 |
| 5 | Bromomethyl methyl ether | 124 | C2H5BrO | 013057-17-5 | 9 |

**Unknown**



Library Search Compound Report

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Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

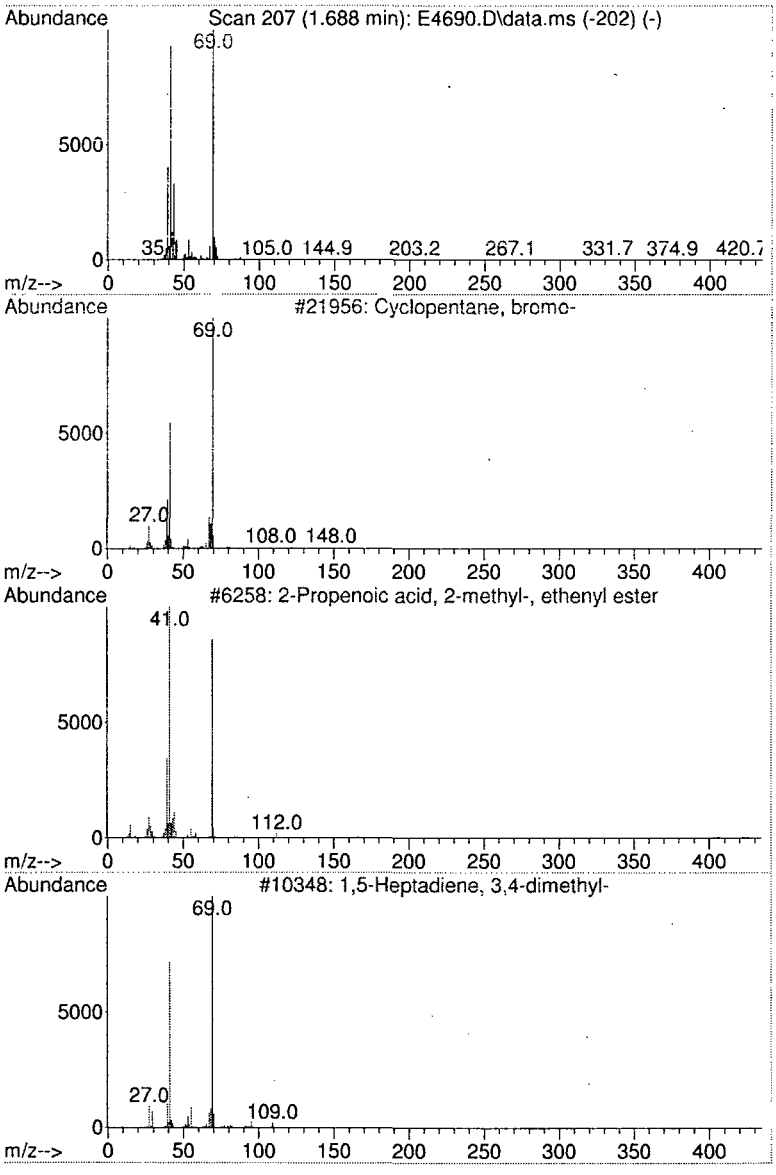
**********

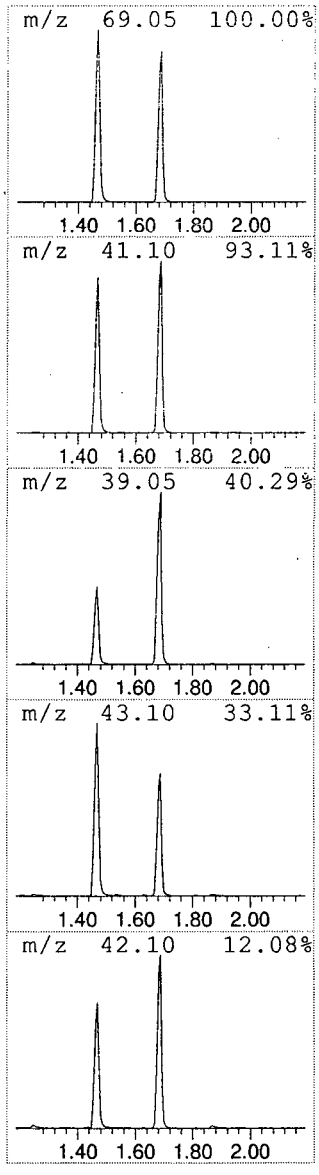
Peak Number 5 Cyclopentane, bromo- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.688 | 425.24 ug/mL | 11453900 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 56 |
| 2 | 2-Propenoic acid, 2-methyl-, eth... | 112 | C6H8O2 | 004245-37-8 | 40 |
| 3 | 1,5-Heptadiene, 3,4-dimethyl- | 124 | C9H16 | 1000061-77-9 | 40 |
| 4 | 3-Butyn-2-ol, 2-methyl- | 84 | C5H8O | 000115-19-5 | 37 |
| 5 | 1-Butene, 3,3-dimethyl- | 84 | C6H12 | 000558-37-2 | 36 |

**Unknown**



Library Search Compound Report

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Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

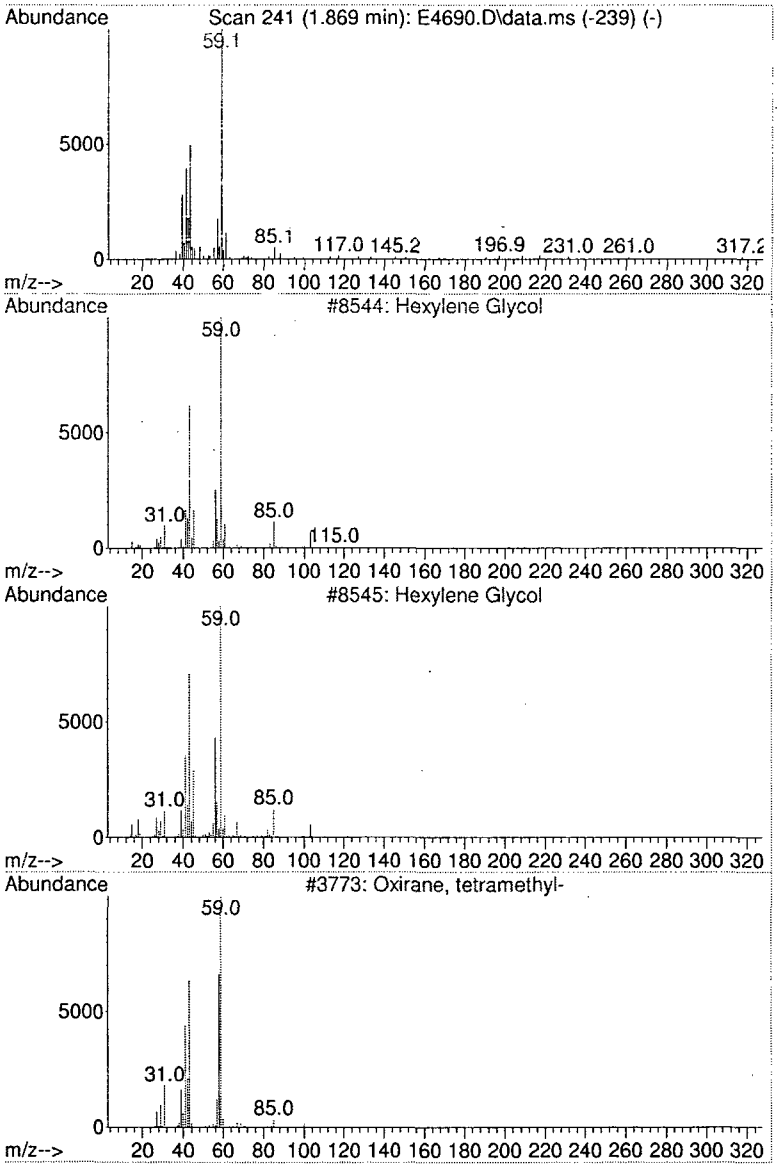
**********

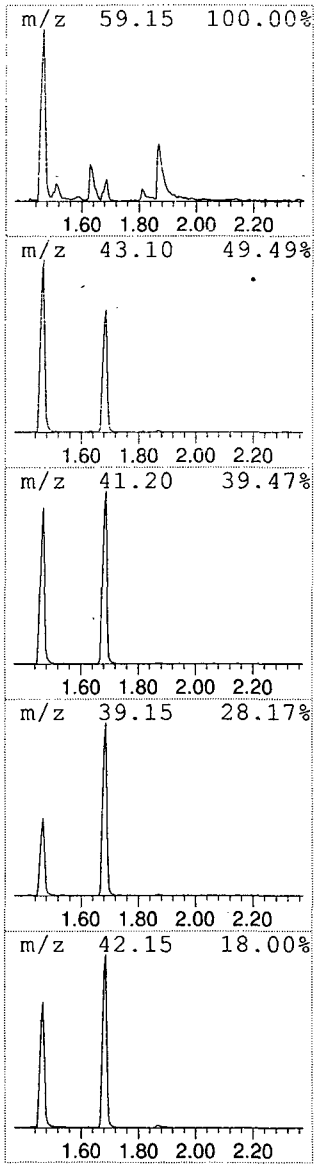
Peak Number 6 Hexylene Glycol Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.869 | 5.22 ug/mL | 140506 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 56 |
| 2 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 56 |
| 3 | Oxirane, tetramethyl- | 100 | C6H12O | 005076-20-0 | 50 |
| 4 | Hexane, 1-(1-methoxyethoxy)- | 160 | C9H20O2 | 054340-90-8 | 50 |
| 5 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 50 |

**Unknown**



Library Search Compound Report

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Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

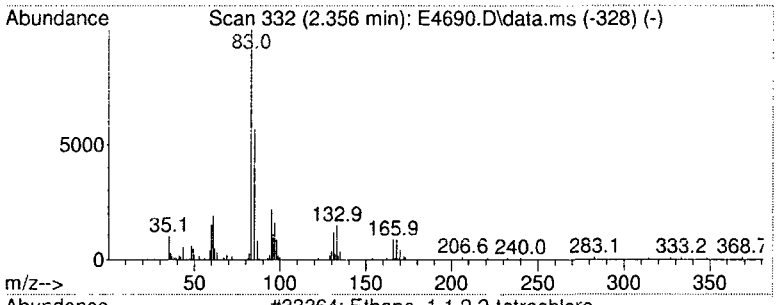
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

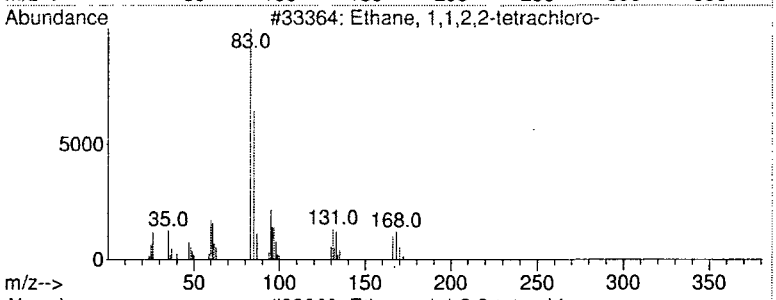
**********

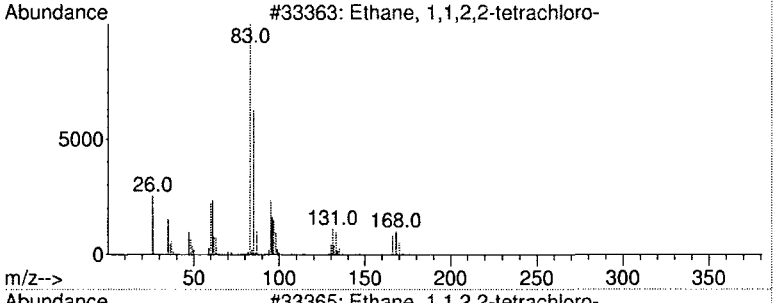
Peak Number 7 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 7

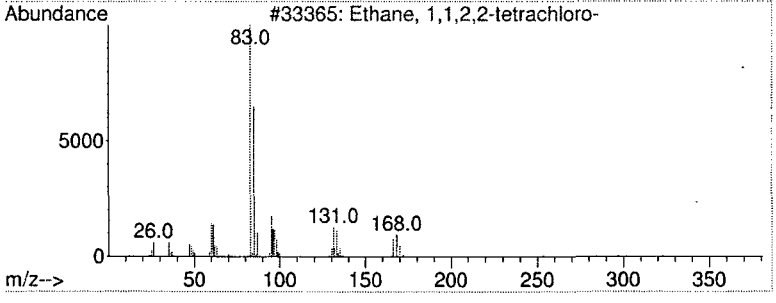
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.356 | 5.01 ug/mL | 134966 | 1,4-Dichlorobenzene-d4 | 3.237 |

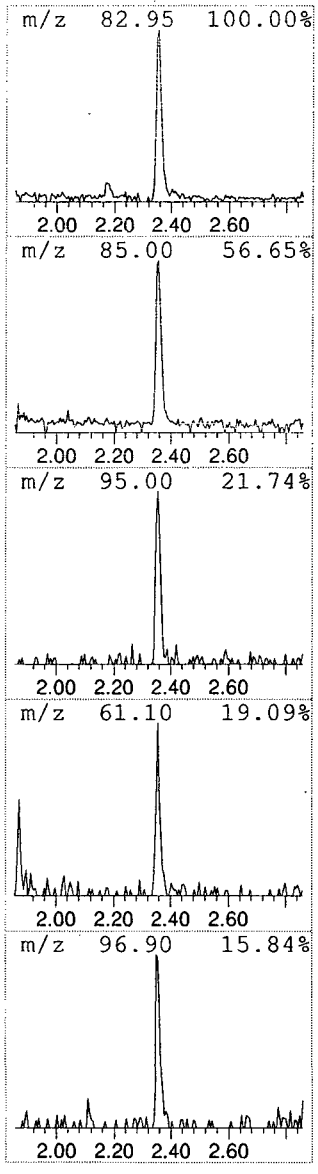
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 96 ✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 96 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 94 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 68 |
| 5 | Ethane, 1,2,2-trichloro-1,1-difl... | 168 | C2HCl3F2 | 000354-21-2 | 50 |



Library Search Compound Report

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Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

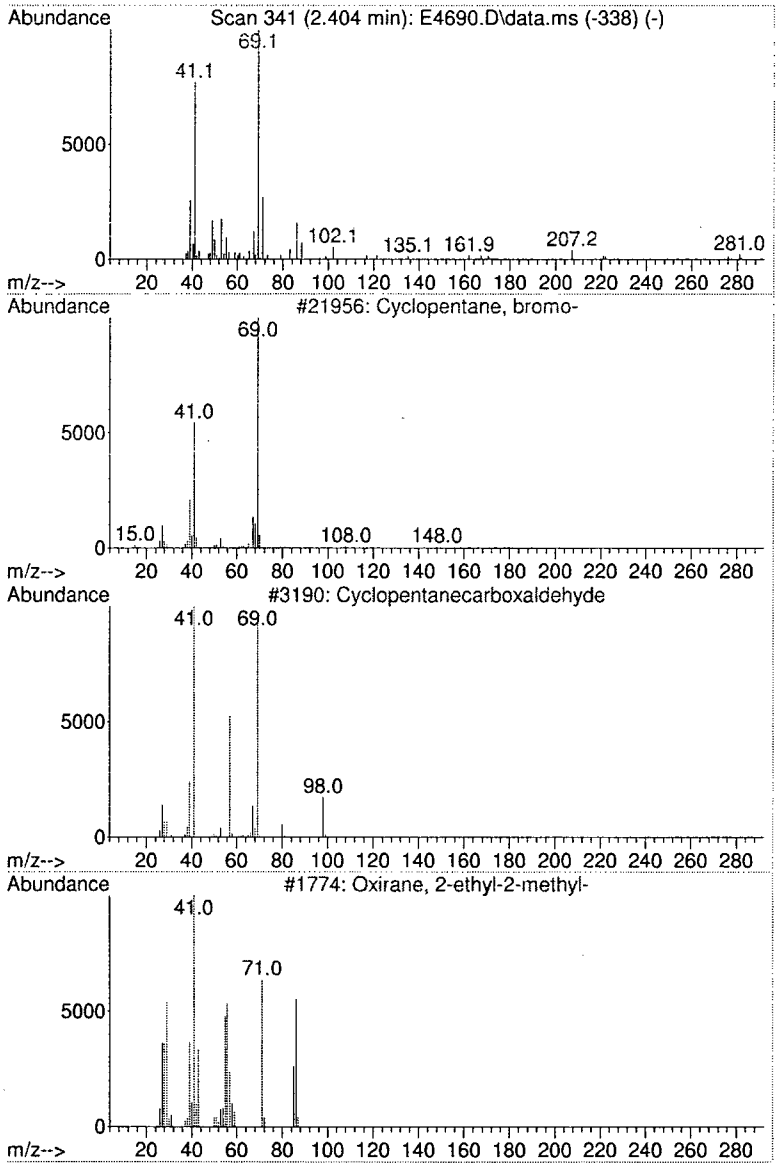
**********

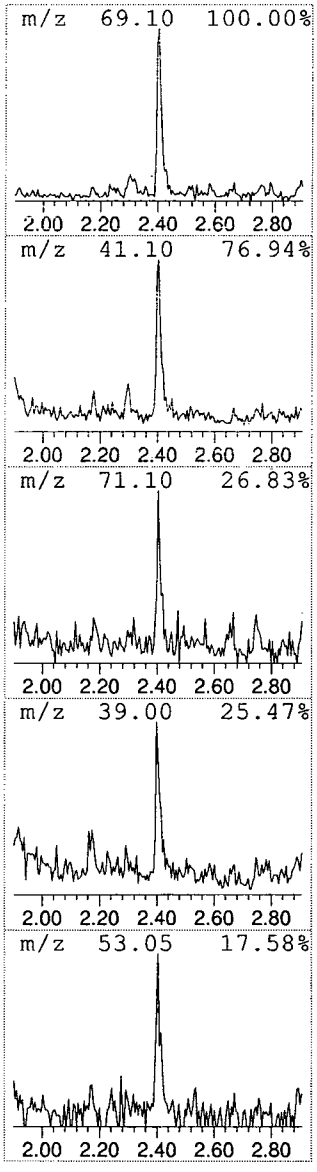
Peak Number 8 Cyclopentane, bromo- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.404 | 2.35 ug/mL | 63309 | 1,4-Dichlorobenzene-d4 | 3.237 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 37 |
| 2 | Cyclopentanecarboxaldehyde | 98 | C6H10O | 000872-53-7 | 25 |
| 3 | Oxirane, 2-ethyl-2-methyl- | 86 | C5H10O | 030095-63-7 | 9 |
| 4 | Cyclopentane, bromo- | 148 | C5H9Br | 000137-43-9 | 9 |
| 5 | 2,7-Nonadien-5-one, 4,6-dimethyl- | 166 | C11H18O | 074630-80-1 | 9 |

**Unknown**



Library Search Compound Report

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Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

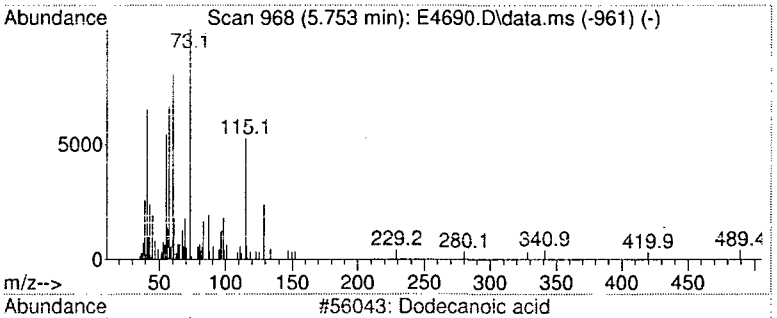
**********

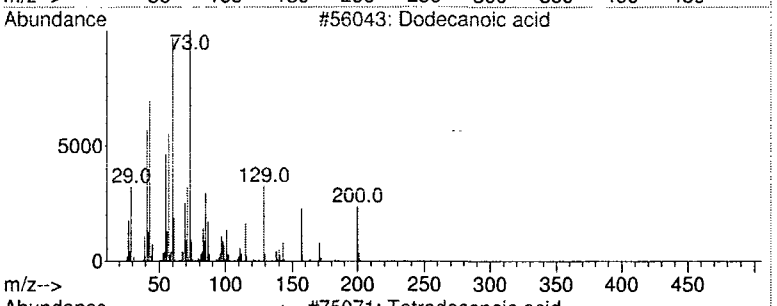
Peak Number 9 Dodecanoic acid Concentration Rank 10

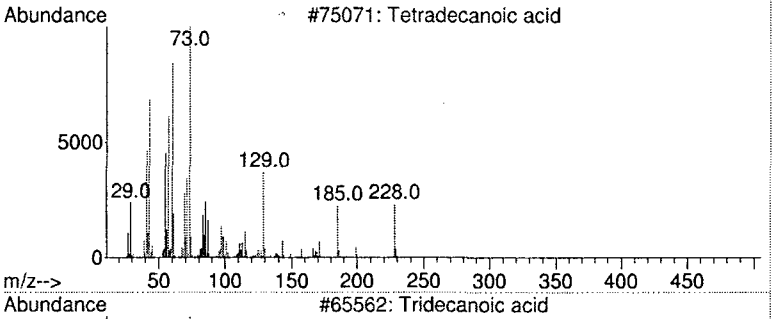
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.753 | 2.10 ug/mL | 77427 | Naphthalene-d8 | 4.893 |

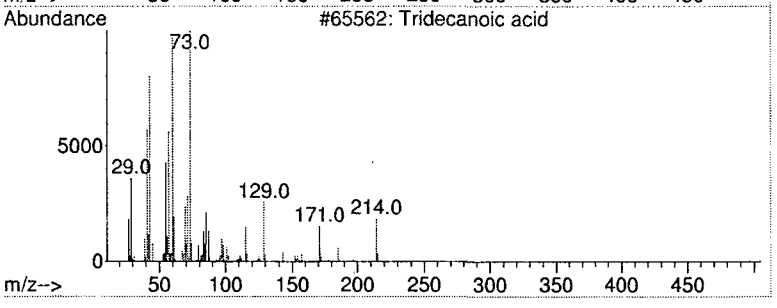
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecanoic acid | 200 | C12H24O2 | 000143-07-7 | 59 |
| 2 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 53 |
| 3 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 53 |
| 4 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 53 |
| 5 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 53 |

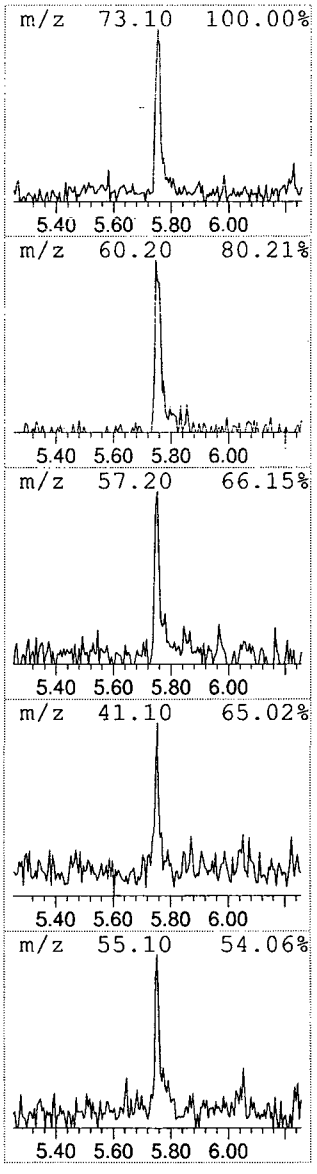
**Unknown**



Library Search Compound Report

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

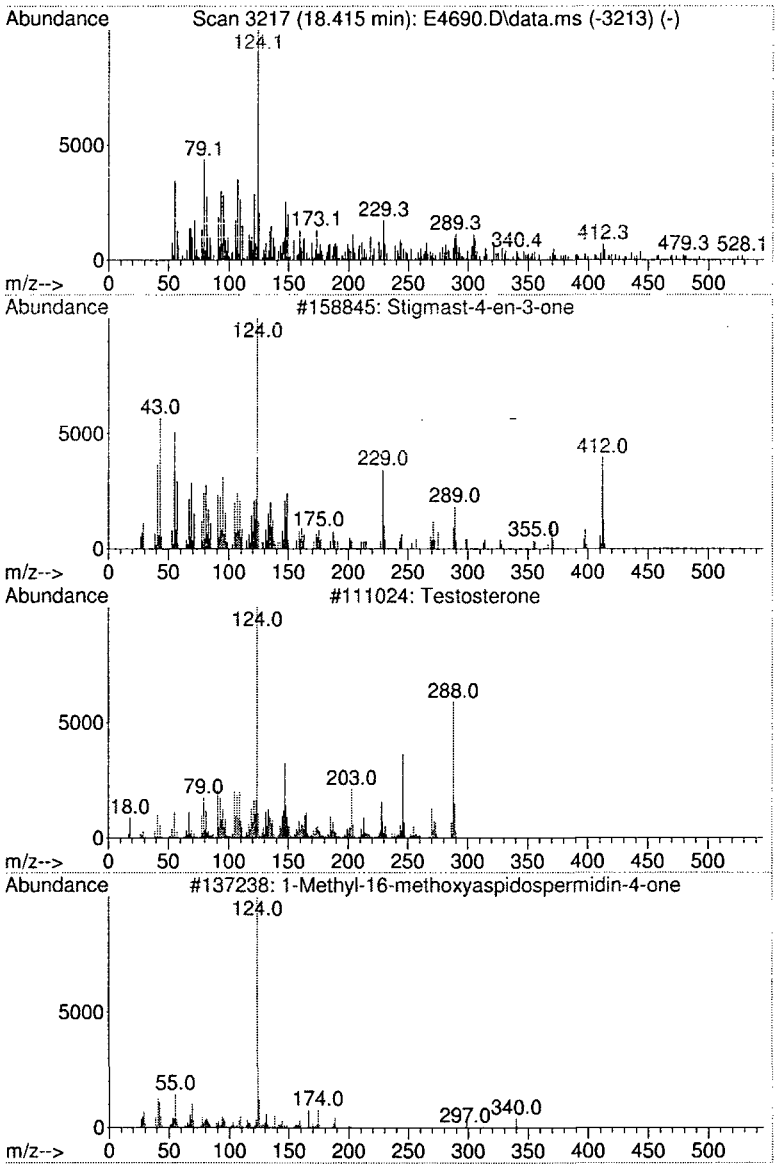
**********

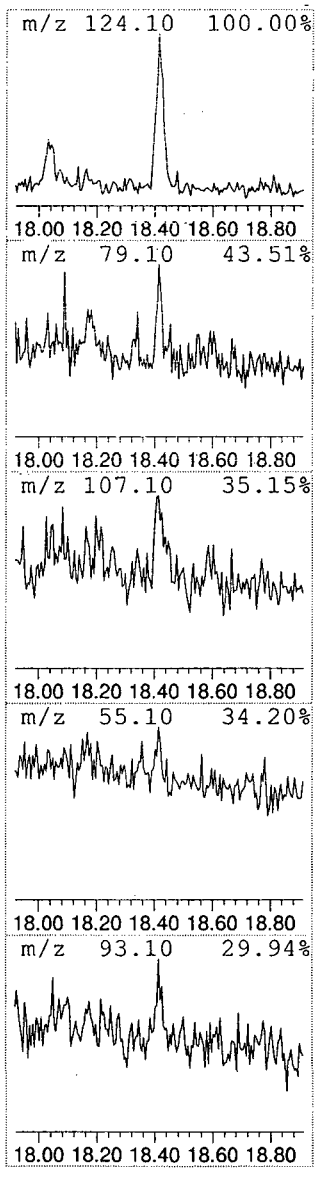
Peak Number 10 Stigmast-4-en-3-one Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.415 | 5.57 ug/mL | 285691 | Perylene-d12 | 15.992 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Stigmast-4-en-3-one | 412 | C29H48O | 001058-61-3 | 70 |
| 2 | Testosterone | 288 | C19H28O2 | 000058-22-0 | 60 |
| 3 | 1-Methyl-16-methoxyaspidospermid... | 340 | C21H28N2O2 | 104112-78-9 | 53 |
| 4 | Progesterone | 314 | C21H30O2 | 000057-83-0 | 53 |
| 5 | 1,5-Dioxaspiro[5.5]undec-3-en-2-... | 278 | C17H26O3 | 1000155-15-1 | 53 |

**Unknown**



Tentatively Identified Compound (LSC) summary

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 31 06:18:24 2012
Quant Results File: SOME4685.RES
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

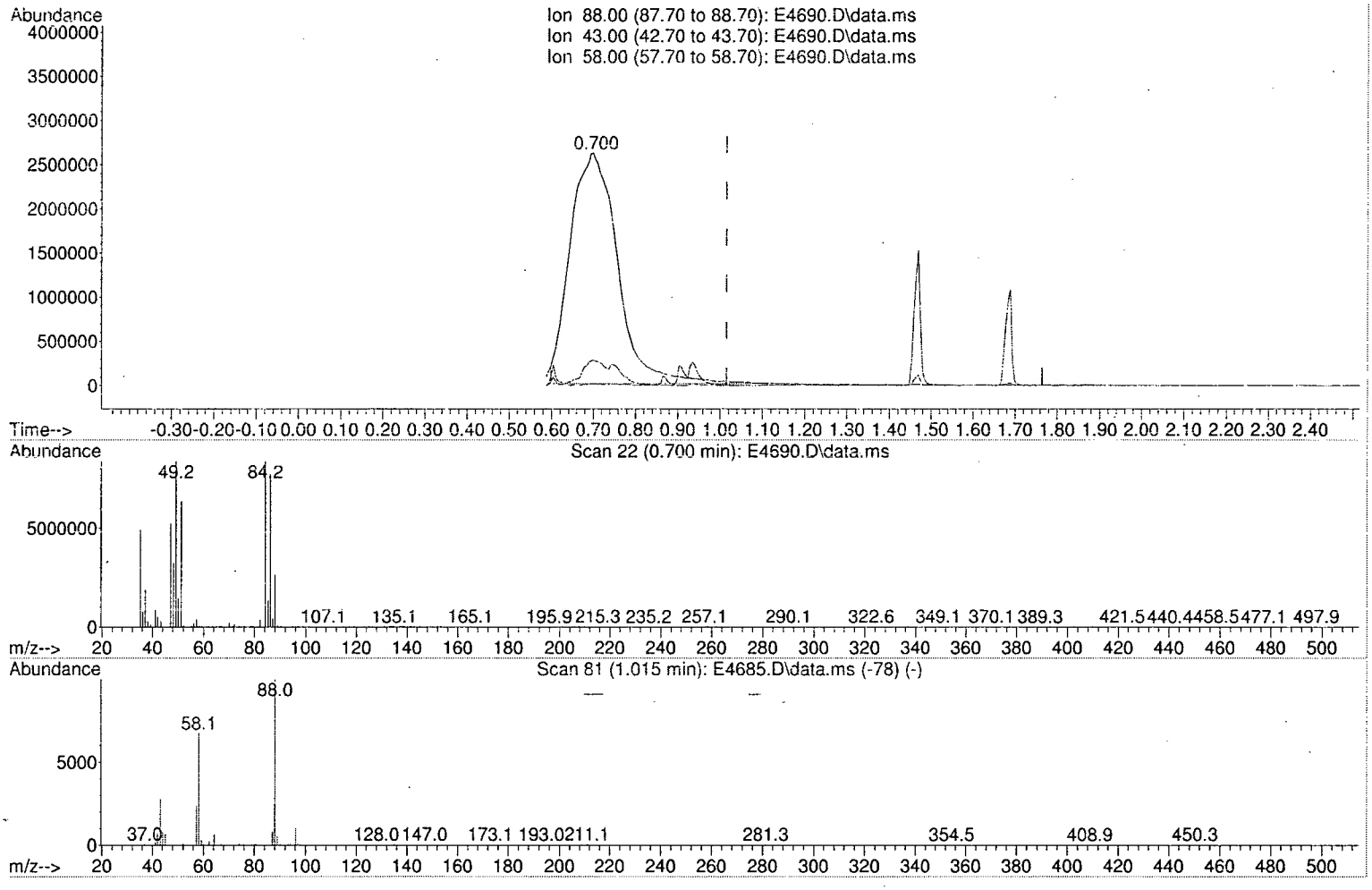
| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 3-Penten-2-one | 0.903 | 41.5 | ug/mL | 1117020 | 1 | 3.237 | 538702 | 20.0 |
| Furan, tetrahyd... | 0.935 | 637.4 | ug/mL | 17168400 | 1 | 3.237 | 538702 | 20.0 |
| 3-Butyn-2-ol, 2... | 1.469 | 473.7 | ug/mL | 12759500 | 1 | 3.237 | 538702 | 20.0 |
| Butane, 1-bromo... | 1.533 | 4.4 | ug/mL | 117948 | 1 | 3.237 | 538702 | 20.0 |
| Cyclopentane, b... | 1.688 | 425.2 | ug/mL | 11453900 | 1 | 3.237 | 538702 | 20.0 |
| Hexylene Glycol | 1.869 | 5.2 | ug/mL | 140506 | 1 | 3.237 | 538702 | 20.0 |
| Ethane, 1,1,2,2... | 2.356 | 5.0 | ug/mL | 134966 | 1 | 3.237 | 538702 | 20.0 |
| Cyclopentane, b... | 2.404 | 2.4 | ug/mL | 63309 | 1 | 3.237 | 538702 | 20.0 |
| Dodecanoic acid | 5.753 | 2.1 | ug/mL | 77427 | 2 | 4.893 | 737313 | 20.0 |
| Stigmast-4-en-3... | 18.415 | 5.6 | ug/mL | 285691 | 6 | 15.992 | 1025000 | 20.0 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:57 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4690.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.700min (-0.315) 4594.54 ug/mL**

**response 20528126**

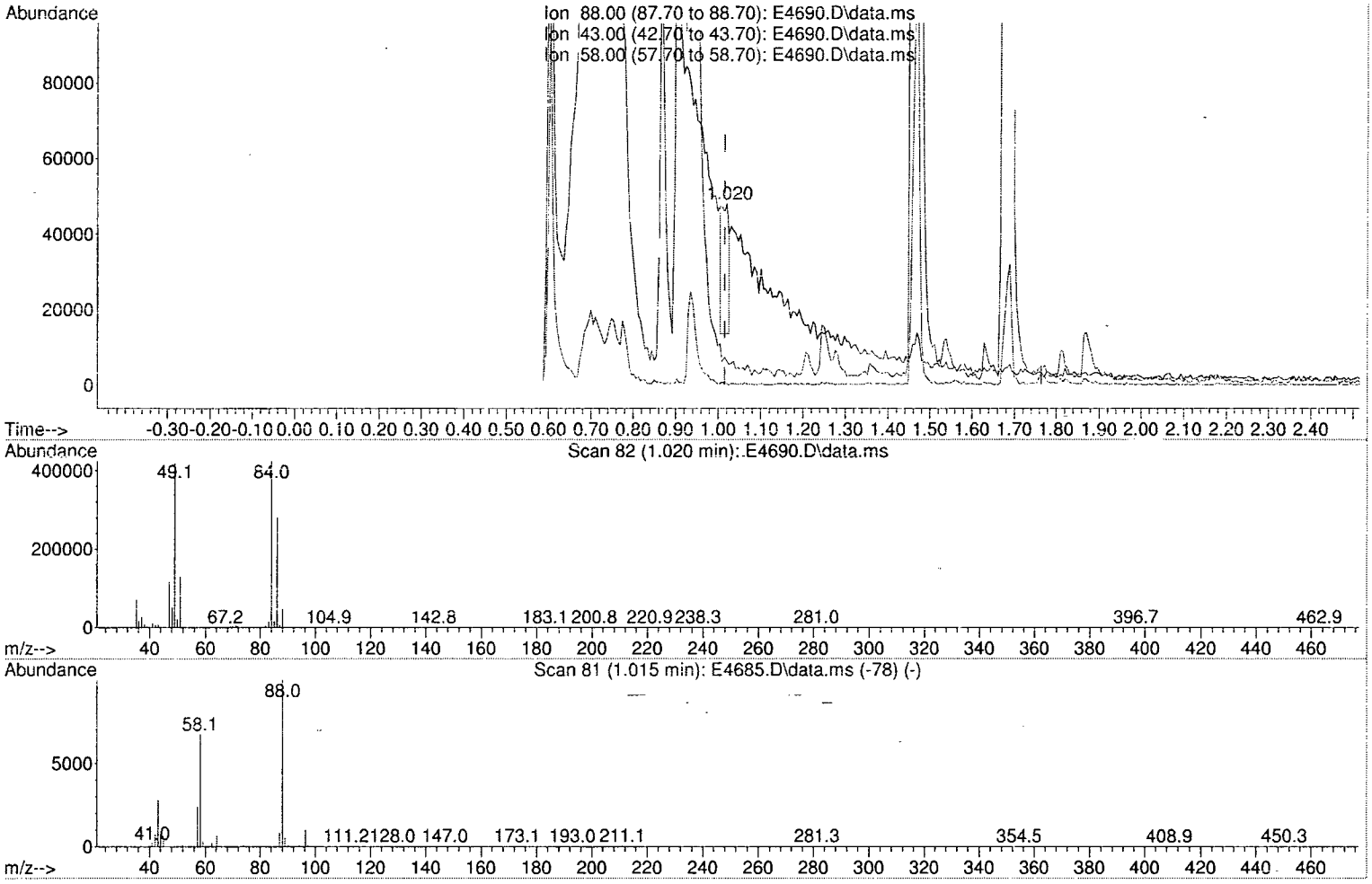
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 4.60# |
| 58.00 | 46.00 | 0.24# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:57 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




**(4) 1,4-Dioxane (PC)**

**1.020min (+ 0.005) 9.07 ug/mL m** RS 5/29

**response 40542**

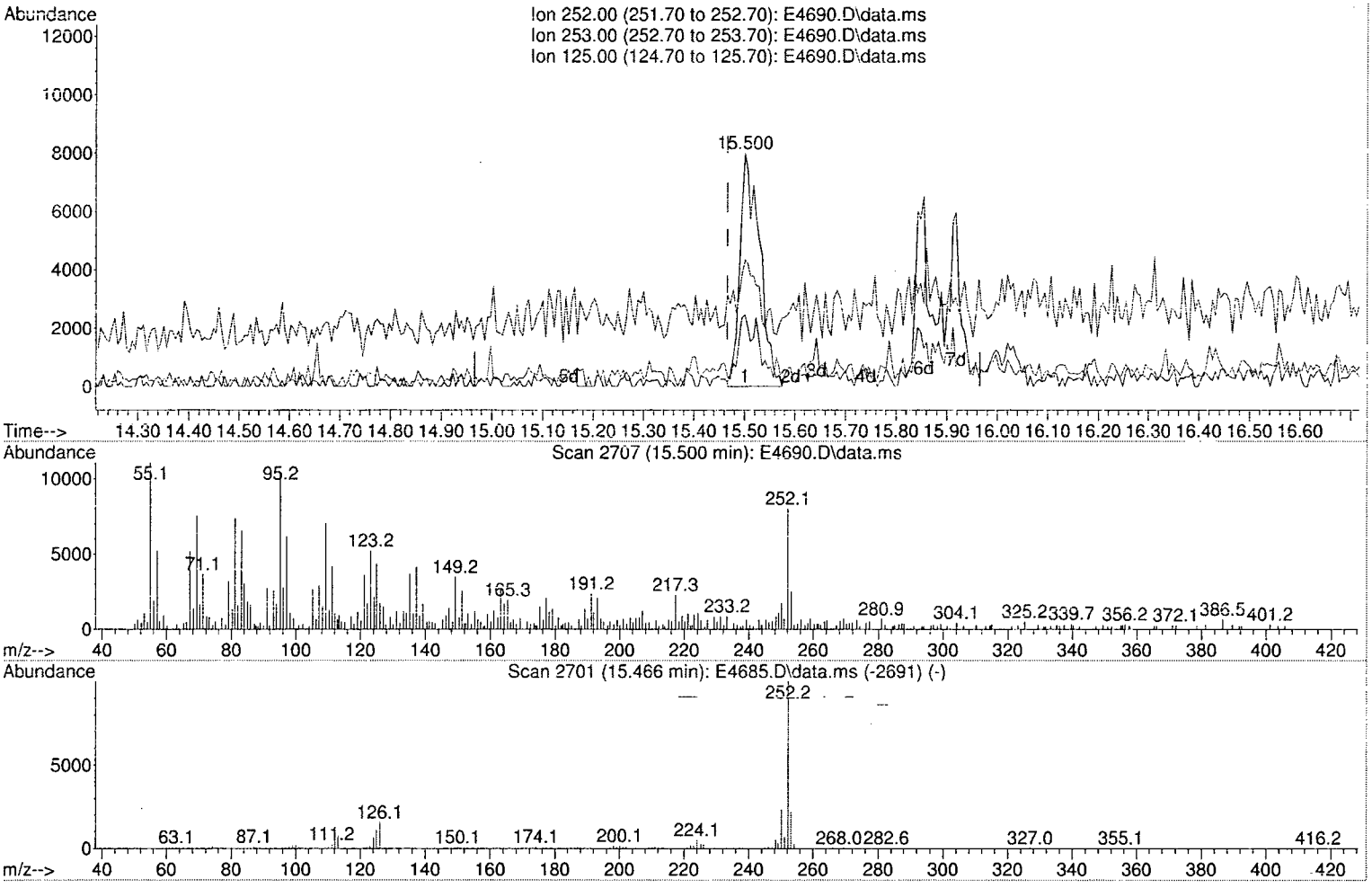
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 2331.59# |
| 58.00 | 46.00 | 123.79# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:57 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




**(90) Benzo (b) fluoranthene (PC)**

**15.500min (+ 0.034) 0.43 ug/mL**

**response 21528**

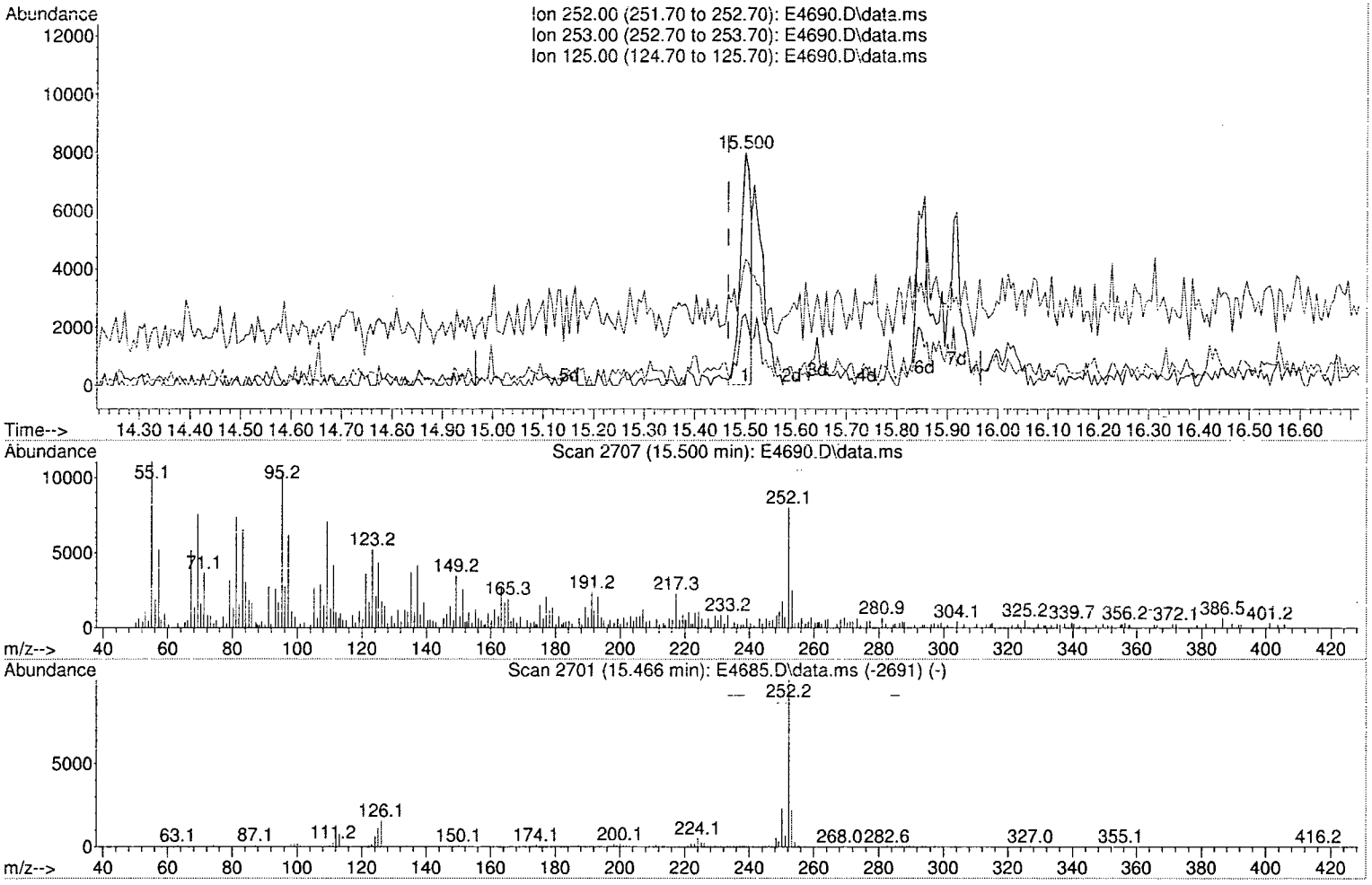
| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100.00 | 100.00 |
| 253.00 | 23.80 | 15.45 |
| 125.00 | 9.30 | 22.18 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : X:\msdchem\1\data\E4690.D
Acq On : 26 May 2012 14:30
Sample : 0015977-07
Misc : F5WC3 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 7
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:08:57 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4690.D\data.ms

**(90) Benzo (b) fluoranthene (PC)**

**15.500min (+ 0.034) 0.23 ug/mL m** RS 8/31

**response 11584**

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100.00 | 100.00 |
| 253.00 | 23.80 | 28.71 |
| 125.00 | 9.30 | 41.22# |
| 0.00 | 0.00 | 0.00 |

6E - FORM VI SV-1
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/25/2012 05/25/2012

Calibration Time(s): 1128 1333

LAB FILE ID: RRF5.0= E4659.D RRF10.0= E4656.D

RRF20= E4655.D RRF40= E4657.D RRF80= E4658.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Benzaldehyde | 2.852 | 2.964 | 2.825 | 2.375 | 1.542 | 2.512 | 23.4 |
| Phenol | 4.145 | 4.308 | 4.327 | 4.439 | 4.727 | 4.389 | 4.9 |
| Bis(2-chloroethyl)ether | 3.298 | 3.480 | 3.356 | 3.287 | 3.556 | 3.395 | 3.5 |
| 2-Chlorophenol | 3.421 | 3.508 | 3.469 | 3.476 | 3.778 | 3.530 | 4.0 |
| 2-Methylphenol | 3.214 | 3.310 | 3.327 | 3.304 | 3.450 | 3.321 | 2.6 |
| 2,2'-Oxybis(1-chloropropane) | 2.939 | 2.994 | 2.853 | 2.794 | 2.992 | 2.914 | 3.0 |
| Acetophenone | 4.950 | 5.047 | 4.977 | 4.958 | 5.088 | 5.004 | 1.2 |
| 4-Methylphenol | 3.438 | 3.581 | 3.470 | 3.458 | 3.659 | 3.521 | 2.7 |
| N-Nitroso-di-n-propylamine | 2.586 | 2.768 | 2.625 | 2.635 | 2.691 | 2.661 | 2.7 |
| Hexachloroethane | 1.566 | 1.557 | 1.469 | 1.444 | 1.550 | 1.517 | 3.7 |
| Nitrobenzene | 0.989 | 0.935 | 0.876 | 0.888 | 0.945 | 0.927 | 4.9 |
| Isophorone | 1.671 | 1.677 | 1.622 | 1.652 | 1.688 | 1.662 | 1.6 |
| 2-Nitrophenol | 0.482 | 0.458 | 0.441 | 0.453 | 0.484 | 0.464 | 4.0 |
| 2,4-Dimethylphenol | 0.899 | 0.932 | 0.896 | 0.942 | 0.990 | 0.932 | 4.1 |
| Bis(2-chloroethoxy)methane | 0.954 | 0.946 | 0.878 | 0.907 | 0.944 | 0.926 | 3.5 |
| 2,4-Dichlorophenol | 0.723 | 0.717 | 0.699 | 0.741 | 0.764 | 0.729 | 3.4 |
| Naphthalene | 2.597 | 2.553 | 2.403 | 2.445 | 2.568 | 2.513 | 3.4 |
| 4-Chloroaniline | 0.662 | 0.670 | 0.882 | 0.818 | 0.742 | 0.755 | 12.6 |
| Hexachlorobutadiene | 0.475 | 0.465 | 0.451 | 0.428 | 0.465 | 0.457 | 3.9 |
| Caprolactam | 0.268 | 0.241 | 0.300 | 0.314 | 0.304 | 0.286 | 10.6 |
| 4-Chloro-3-methylphenol | 0.825 | 0.797 | 0.797 | 0.832 | 0.886 | 0.827 | 4.4 |
| 2-Methylnaphthalene | 1.709 | 1.714 | 1.665 | 1.698 | 1.786 | 1.714 | 2.6 |
| Hexachlorocyclopentadiene | 0.617 | 0.751 | 0.757 | 0.787 | 0.839 | 0.750 | 11.0 |
| 2,4,6-Trichlorophenol | 0.832 | 0.809 | 0.790 | 0.835 | 0.866 | 0.826 | 3.5 |
| 2,4,5-Trichlorophenol | 0.859 | 0.812 | 0.834 | 0.876 | 0.904 | 0.857 | 4.2 |
| 1,1'-Biphenyl | 3.349 | 3.357 | 3.178 | 3.240 | 3.431 | 3.311 | 3.1 |
| 2-Chloronaphthalene | 2.592 | 2.625 | 2.514 | 2.559 | 2.659 | 2.590 | 2.2 |
| 2-Nitroaniline | | 0.709 | 0.726 | 0.773 | 0.784 | 0.748 | 4.8 |
| Dimethylphthalate | 3.340 | 3.338 | 3.220 | 3.332 | 3.315 | 3.309 | 1.5 |
| 2,6-Dinitrotoluene | 0.627 | 0.643 | 0.693 | 0.731 | 0.726 | 0.684 | 6.9 |
| Acenaphthylene | 4.000 | 4.343 | 4.073 | 4.255 | 4.342 | 4.203 | 3.8 |
| 3-Nitroaniline | | 0.634 | 0.769 | 0.704 | 0.592 | 0.675 | 11.6 |
| Acenaphthene | 2.692 | 2.685 | 2.608 | 2.650 | 2.703 | 2.668 | 1.4 |
| 2,4-Dinitrophenol | | 0.227 | 0.290 | 0.289 | 0.329 | 0.284 | 14.9 |
| 4-Nitrophenol | | 0.400 | 0.452 | 0.525 | 0.536 | 0.478 | 13.4 |
| Dibenzofuran | 3.868 | 3.891 | 3.701 | 3.658 | 3.725 | 3.769 | 2.8 |

6F - FORM VI SV-2
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/25/2012 05/25/2012

Calibration Time(s): 1128 1333

LAB FILE ID: RRF5.0= E4659.D RRF10.0= E4656.D

RRF20= E4655.D RRF40= E4657.D RRF80= E4658.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.890 | 0.931 | 0.941 | 0.997 | 0.995 | 0.951 | 4.8 |
| Diethylphthalate | 3.567 | 3.411 | 3.463 | 3.465 | 3.362 | 3.454 | 2.2 |
| Fluorene | 3.396 | 3.327 | 3.174 | 3.279 | 3.296 | 3.294 | 2.5 |
| 4-Chlorophenyl-phenylether | 1.510 | 1.511 | 1.449 | 1.502 | 1.516 | 1.498 | 1.9 |
| 4-Nitroaniline | | 0.727 | 0.757 | 0.706 | 0.544 | 0.683 | 13.9 |
| 4,6-Dinitro-2-methylphenol | | 0.294 | 0.306 | 0.344 | 0.345 | 0.322 | 8.2 |
| N-Nitrosodiphenylamine (1) | 1.446 | 1.494 | 1.373 | 1.448 | 1.501 | 1.452 | 3.5 |
| 1,2,4,5-Tetrachlorobenzene | 1.186 | 1.172 | 1.128 | 1.136 | 1.182 | 1.161 | 2.3 |
| 4-Bromophenyl-phenylether | 0.434 | 0.455 | 0.411 | 0.438 | 0.457 | 0.439 | 4.3 |
| Hexachlorobenzene | 0.437 | 0.464 | 0.434 | 0.439 | 0.463 | 0.448 | 3.3 |
| Atrazine | 0.507 | 0.526 | 0.522 | 0.530 | 0.549 | 0.527 | 2.8 |
| Pentachlorophenol | | 0.228 | 0.235 | 0.275 | 0.295 | 0.258 | 12.4 |
| Phenanthrene | 2.607 | 2.614 | 2.425 | 2.491 | 2.528 | 2.533 | 3.2 |
| Anthracene | 2.634 | 2.721 | 2.491 | 2.612 | 2.629 | 2.617 | 3.1 |
| Carbazole | 2.482 | 2.556 | 2.446 | 2.541 | 2.508 | 2.507 | 1.8 |
| Di-n-butylphthalate | 3.158 | 3.284 | 3.080 | 3.253 | 3.219 | 3.199 | 2.5 |
| Fluoranthene | 2.840 | 2.915 | 2.847 | 2.890 | 2.895 | 2.878 | 1.1 |
| Pyrene | 2.837 | 2.838 | 2.594 | 2.702 | 2.806 | 2.755 | 3.8 |
| Butylbenzylphthalate | 1.284 | 1.338 | 1.257 | 1.344 | 1.402 | 1.325 | 4.3 |
| 3,3'-Dichlorobenzidine | 0.730 | 0.766 | 0.802 | 0.808 | 0.617 | 0.745 | 10.4 |
| Benzo (a) anthracene | 2.561 | 2.468 | 2.333 | 2.470 | 2.538 | 2.474 | 3.6 |
| Chrysene | 2.622 | 2.487 | 2.273 | 2.358 | 2.431 | 2.434 | 5.4 |
| Bis(2-ethylhexyl)phthalate | 1.885 | 1.835 | 1.782 | 1.875 | 1.941 | 1.864 | 3.2 |
| Di-n-octylphthalate | 3.698 | 3.324 | 3.163 | 3.332 | 3.693 | 3.442 | 7.0 |
| Benzo (b) fluoranthene | 2.657 | 2.570 | 2.698 | 2.668 | 2.946 | 2.708 | 5.2 |
| Benzo (k) fluoranthene | 3.264 | 2.803 | 2.510 | 2.504 | 2.710 | 2.759 | 11.3 |
| Benzo (a) pyrene | 2.886 | 2.649 | 2.596 | 2.603 | 2.823 | 2.711 | 4.9 |
| Indeno (1,2,3-cd) pyrene | 1.951 | 1.927 | 2.191 | 2.194 | 2.309 | 2.114 | 7.9 |
| Dibenzo (a,h) anthracene | 2.010 | 2.123 | 2.310 | 2.337 | 2.452 | 2.247 | 7.9 |
| Benzo (g,h,i) perylene | 2.274 | 2.304 | 2.468 | 2.321 | 2.383 | 2.350 | 3.3 |
| 2,3,4,6-Tetrachlorophenol | 0.654 | 0.686 | 0.646 | 0.692 | 0.706 | 0.677 | 3.8 |

(1) Cannot be separated from Diphenylamine

6G - FORM VI SV-3
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/25/2012 05/25/2012

Calibration Time(s): 1128 1333

LAB FILE ID: RRF5.0= E4659.D RRF10.0= E4656.D

RRF20= E4655.D RRF40= E4657.D RRF80= E4658.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Phenol-d5 | 3.282 | 4.645 | 3.896 | 4.123 | 5.263 | 4.242 | 17.7 |
| Bis(2-chloroethyl)ether-d8 | 2.176 | 2.165 | 2.217 | 2.138 | 2.320 | 2.203 | 3.2 |
| 2-Chlorophenol-d4 | 3.657 | 4.018 | 3.958 | 3.985 | 4.340 | 3.992 | 6.1 |
| 4-Methylphenol-d8 | 3.128 | 3.374 | 3.281 | 3.438 | 3.941 | 3.432 | 9.0 |
| Nitrobenzene-d5 | 0.466 | 0.454 | 0.422 | 0.426 | 0.447 | 0.443 | 4.2 |
| 2-Nitrophenol-d4 | 0.484 | 0.506 | 0.481 | 0.503 | 0.532 | 0.501 | 4.0 |
| 2,4-Dichlorophenol-d3 | 0.765 | 0.845 | 0.820 | 0.843 | 0.888 | 0.832 | 5.4 |
| 4-Chloroaniline-d4 | 0.788 | 0.699 | 0.962 | 0.886 | 0.796 | 0.826 | 12.2 |
| Dimethylphthalate-d6 | 3.723 | 3.469 | 3.424 | 3.514 | 3.475 | 3.521 | 3.3 |
| Acenaphthylene-d8 | 4.386 | 4.349 | 4.196 | 4.298 | 4.460 | 4.338 | 2.3 |
| 4-Nitrophenol-d4 | | 0.545 | 0.633 | 0.706 | 0.701 | 0.646 | 11.6 |
| Fluorene-d10 | 2.860 | 2.750 | 2.672 | 2.765 | 2.802 | 2.770 | 2.5 |
| 4,6-Dinitro-2-methylphenol-d2 | | 0.333 | 0.351 | 0.388 | 0.395 | 0.367 | 8.1 |
| Anthracene-d10 | 2.649 | 2.609 | 2.421 | 2.514 | 2.560 | 2.551 | 3.5 |
| Pyrene-d10 | 2.719 | 2.558 | 2.341 | 2.453 | 2.586 | 2.531 | 5.6 |
| Benzo (a) pyrene-d12 | 2.625 | 2.351 | 2.250 | 2.258 | 2.432 | 2.383 | 6.5 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/26/12

ORIGINAL LOCATED IN
CASE: 42583 SDG: H3200

S. Vokati
05/26/12

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.264 | 152 | 58472 | 20.0000 ug/mL | -0.04 |
| 21) Naphthalene-d8 | 4.925 | 136 | 256510 | 20.0000 ug/mL | -0.04 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 166106 | 20.0000 ug/mL | -0.04 |
| 66) Phenanthrene-d10 | 9.808 | 188 | 318351 | 20.0000 ug/mL | -0.05 |
| 80) Chrysene-d12 | 13.934 | 240 | 377654 | 20.0000 ug/mL | -0.06 |
| 88) Perylene-d12 | 15.992 | 264 | 373109 | 20.0000 ug/mL | -0.07 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.015 | 96 | 14103m | 17.27 ug/mL | -0.02 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 86.35% | | |
| 7) Phenol-d5 | 3.045 | 99 | 227815 | 17.22 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 43.05% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.013 | 67 | 129653 | 17.67 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 44.18% | | |
| 19) 2-Chlorophenol-d4 | 3.077 | 132 | 231455 | 19.76 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 49.40% | | |
| 20) 4-Methylphenol-d8 | 3.926 | 113 | 191835 | 19.51 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.77% | | |
| 22) Nitrobenzene-d5 | 4.012 | 128 | 108279 | 19.87 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.68% | | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 123506 | 20.36 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 50.90% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.819 | 165 | 210348 | 20.78 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 51.95% | | |
| 37) 4-Chloroaniline-d4 | 5.144 | 131 | 246708 | 28.42 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 71.05% | | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 696940 | 19.33 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.32% | | |
| 63) 4-Nitrophenol-d4 | 8.115 | 143 | 105156 | 20.80 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 52.00% | | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 568751 | 20.37 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 50.92% | | |
| 65) Fluorene-d10 | 8.344 | 176 | 443880 | 19.70 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 49.25% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.642 | 200 | 111673 | 22.28 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 55.70% | | |
| 79) Anthracene-d10 | 9.882 | 188 | 770757 | 19.62 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 49.05% | | |
| 87) Pyrene-d10 | 11.980 | 212 | 884050 | 17.89 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 44.73%# | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 839541 | 19.70 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.25% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.865 | 79 | 379352 | 16.0058 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.026 | 88 | 77719m | 16.6921 ug/mL | |
| 5) Benzaldehyde | 2.810 | 77 | 165170 | 17.7982 ug/mL | 94 |
| 6) Bis(2-chloroethyl)ether | 3.061 | 93 | 196209 | 18.7083 ug/mL | 93 |
| 8) Phenol | 3.061 | 94 | 252991 | 19.2631 ug/mL# | 66 |
| 9) 2-Chlorophenol | 3.093 | 128 | 202832 | 19.7818 ug/mL | 96 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.707 | 45 | 166817 | 16.8736 ug/mL# | 30 |
| 11) Aniline | 2.981 | 93 | 256424 | 24.5891 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 231420 | 17.6528 ug/mL# | 100 |
| 13) Acetophenone | 3.830 | 105 | 291009 | 19.4801 ug/mL | 93 |
| 14) 2-Methylphenol | 3.755 | 108 | 194528 | 20.0637 ug/mL | 94 |
| 15) Hexachloroethane | 3.862 | 117 | 85901 | 18.1844 ug/mL | 99 |

RS PRN

RS PRN

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.894 | 70 | 153481 | 17.6965 ug/mL | 94 | |
| 17) 4-Methylphenol | 3.964 | 108 | 202925 | 19.9334 ug/mL | 94 | |
| 23) Nitrobenzene | 4.033 | 77 | 224761 | 17.2311 ug/mL | 94 | |
| 24) Isophorone | 4.354 | 82 | 416043 | 18.5355 ug/mL | 95 | |
| 25) 2-Nitrophenol | 4.466 | 139 | 113229 | 20.1846 ug/mL | 92 | |
| 26) 2,4-Dimethylphenol | 4.648 | 107 | 229935 | 18.6418 ug/mL | 95 | |
| 27) Bis(2-chloroethoxy)met... | 4.738 | 93 | 225236 | 18.2865 ug/mL | 96 | |
| 28) 2,4- Dichlorophenol | 4.835 | 162 | 179286 | 20.4137 ug/mL | 98 | |
| 29) Naphthalene | 4.947 | 128 | 616446 | 19.4433 ug/mL | 99 | |
| 30) 4-Chloroaniline | 5.155 | 127 | 226291 | 28.7938 ug/mL | 98 | |
| 31) Hexachlorobutadiene | 5.257 | 225 | 115680 | 21.5398 ug/mL | 97 | |
| 32) Caprolactam | 5.614 | 113 | 76895 | 21.5890 ug/mL | 92 | |
| 33) 4-Chloro-3-methylphenol | 6.010 | 107 | 204488 | 19.0792 ug/mL | 90 | |
| 34) 2-Methylnaphthalene | 5.972 | 142 | 426968 | 20.0230 ug/mL | 98 | |
| 39) Hexachlorocyclopentadiene | 6.330 | 237 | 125671 | 21.3960 ug/mL | 98 | |
| 40) 2,4,6-Trichlorophenol | 6.517 | 196 | 131211 | 19.8892 ug/mL | 99 | |
| 41) 2,4,5-Trichlorophenol | 6.597 | 196 | 138571 | 20.9118 ug/mL | 95 | |
| 42) 1,1'-Biphenyl | 6.720 | 154 | 527836 | 19.2067 ug/mL | 96 | |
| 43) 2-Chloronaphthalene | 6.688 | 162 | 417519 | 18.9640 ug/mL | 97 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 194860 | 20.2940 ug/mL | 98 | |
| 45) 2-Nitroaniline | 6.998 | 65 | 120665 | 16.4250 ug/mL | 92 | |
| 46) Acenaphthylene | 7.313 | 152 | 676489 | 19.3894 ug/mL | 100 | |
| 47) Dimethylphthalate | 7.377 | 163 | 534857 | 20.0675 ug/mL | 99 | |
| 48) 2,6-Dinitrotoluene | 7.452 | 165 | 115164 | 21.5594 ug/mL | 92 | |
| 49) Acenaphthene | 7.602 | 153 | 433242 | 19.4832 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.661 | 138 | 127815 | 25.0403 ug/mL# | 82 | RS RW |
| 51) 2,4-Dinitrophenol | 7.821 | 184 | 48122m | 26.2378 ug/mL | | |
| 52) Dibenzofuran | 7.864 | 168 | 614820 | 19.9357 ug/mL | 98 | |
| 53) Pentachlorobenzene | 9.202 | 250 | 127800 | 21.4953 ug/mL | 98 | |
| 54) 2,4-Dinitrotoluene | 8.051 | 165 | 156360 | 21.2384 ug/mL | 84 | |
| 55) 4-Nitrophenol | 8.120 | 109 | 75137 | 17.8389 ug/mL# | 85 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.195 | 232 | 107320 | 21.7643 ug/mL | 93 | |
| 57) Fluorene | 8.387 | 166 | 527301 | 19.7674 ug/mL | 99 | |
| 58) 4-Chlorophenyl-phenyle... | 8.467 | 204 | 240653 | 20.8866 ug/mL | 93 | |
| 59) Diethylphthalate | 8.489 | 149 | 575302 | 20.8989 ug/mL | 100 | |
| 60) 4-Nitroaniline | 8.613 | 138 | 125677 | 20.0215 ug/mL | 87 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 187410 | 20.0378 ug/mL | 99 | |
| 67) 4,6-Dinitro-2-methylph... | 8.653 | 198 | 97287 | 21.7736 ug/mL | 97 | |
| 68) N-Nitrosodiphenylamine... | 8.693 | 169 | 437086 | 18.5617 ug/mL | 100 | |
| 69) 4-Bromophenyl-phenylether | 9.202 | 248 | 130855 | 19.5956 ug/mL | 92 | |
| 70) Hexachlorobenzene | 9.351 | 284 | 138117 | 21.0302 ug/mL | 87 | |
| 71) Atrazine | 9.665 | 200 | 166074 | 21.3233 ug/mL | 93 | |
| 72) Pentachlorophenol | 9.705 | 266 | 74676 | 23.1131 ug/mL | 98 | |
| 73) Phenanthrene | 9.836 | 178 | 771920 | 19.3996 ug/mL | 98 | |
| 74) Anthracene | 9.911 | 178 | 793018 | 19.3103 ug/mL | 98 | |
| 75) Carbazole | 10.259 | 167 | 778528 | 19.6227 ug/mL | 98 | |
| 76) Di-n-butylphthalate | 11.048 | 149 | 980663 | 19.5520 ug/mL | 99 | |
| 77) Fluoranthene | 11.682 | 202 | 906483 | 20.6759 ug/mL | 98 | |
| 81) Pyrene | 12.008 | 202 | 979718 | 17.8189 ug/mL | 100 | |
| 82) Butylbenzylphthalate | 13.351 | 149 | 474605 | 17.8012 ug/mL | 90 | |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 302883 | 23.6086 ug/mL | 96 | |
| 84) Benzo (a) anthracene | 13.911 | 228 | 880965 | 18.9311 ug/mL | 99 | |
| 85) Chrysene | 13.969 | 228 | 858533 | 19.2330 ug/mL | 96 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.369 | 149 | 673058 | 18.7650 ug/mL | 97 | |
| 89) Di-n-octylphthalate | 15.289 | 149 | 1180067 | 16.8345 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.500 | 252 | 1006778 | 19.7615 ug/mL | 96 | |
| 91) Benzo (k) fluoranthene | 15.529 | 252 | 936668 | 18.5647 ug/mL | 95 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.917 | 252 | 968578 | 19.4252 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.301 | 276 | 817424 | 21.2736 ug/mL | 93 |
| 94) Dibenzo (a,h) anthracene | 17.346 | 278 | 861995 | 21.6248 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.575 | 276 | 920947 | 22.0631 ug/mL | 93 |

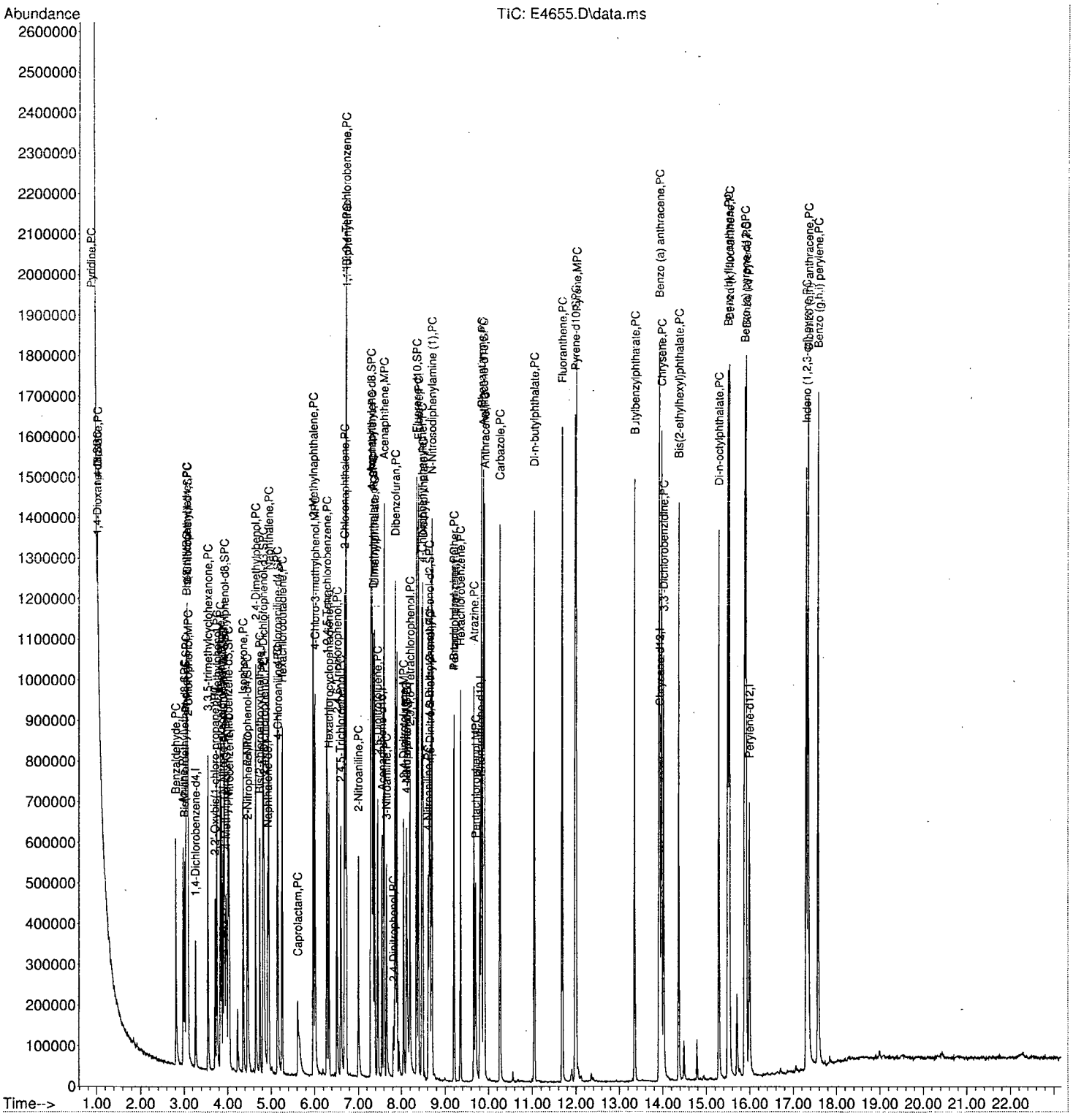
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration






00392

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | PC | Pyridine | 6.446 | 6.488 | -0.7 | 100 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.224 | 0.241 | -7.6# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.126 | 1.329 | -18.0# | 100 | 0.00 |
| 5 | PC | Benzaldehyde | 2.512 | 2.825 | -12.5 | 100 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.395 | 3.356 | 1.1 | 100 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.242 | 3.896 | 8.2 | 100 | 0.00 |
| 8 | MPC | Phenol | 4.389 | 4.327 | 1.4 | 100 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.530 | 3.469 | 1.7 | 100 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 2.914 | 2.853 | 2.1 | 100 | 0.00 |
| 11 | PC | Aniline | 3.810 | 4.385 | -15.1 | 100 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.104 | 3.958 | 3.6 | 100 | 0.00 |
| 13 | PC | Acetophenone | 5.004 | 4.977 | 0.5 | 100 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.321 | 3.327 | -0.2 | 100 | 0.00 |
| 15 | PC | Hexachloroethane | 1.517 | 1.469 | 3.2 | 100 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.661 | 2.625 | 1.4 | 100 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.521 | 3.470 | 1.4 | 100 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.203 | 2.217 | -0.6 | 100 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 3.992 | 3.958 | 0.9 | 100 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.432 | 3.281 | 4.4 | 100 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.443 | 0.422 | 4.7 | 100 | 0.00 |
| 23 | PC | Nitrobenzene | 0.927 | 0.876 | 5.5 | 100 | 0.00 |
| 24 | PC | Isophorone | 1.662 | 1.622 | 2.4 | 100 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.464 | 0.441 | 5.0 | 100 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.932 | 0.896 | 3.9 | 100 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.926 | 0.878 | 5.2 | 100 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.729 | 0.699 | 4.1 | 100 | 0.00 |
| 29 | PC | Naphthalene | 2.513 | 2.403 | 4.4 | 100 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.755 | 0.882 | -16.8 | 100 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.457 | 0.451 | 1.3 | 100 | 0.00 |
| 32 | PC | Caprolactam | 0.286 | 0.300 | -4.9 | 100 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.827 | 0.797 | 3.6 | 100 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.714 | 1.665 | 2.9 | 100 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.501 | 0.481 | 4.0 | 100 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.832 | 0.820 | 1.4 | 100 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.826 | 0.962 | -16.5 | 100 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.750 | 0.757 | -0.9 | 100 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.826 | 0.790 | 4.4 | 100 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.857 | 0.834 | 2.7 | 100 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.311 | 3.178 | 4.0 | 100 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.590 | 2.514 | 2.9 | 100 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.206 | 1.173 | 2.7 | 100 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.748 | 0.726 | 2.9 | 100 | 0.00 |
| 46 | PC | Acenaphthylene | 4.203 | 4.073 | 3.1 | 100 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.309 | 3.220 | 2.7 | 100 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.684 | 0.693 | -1.3 | 100 | 0.00 |
| 49 | MPC | Acenaphthene | 2.668 | 2.608 | 2.2 | 100 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.675 | 0.769 | -13.9 | 100 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.284 | 0.290 | -2.1 | 100 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.769 | 3.701 | 1.8 | 100 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.795 | 0.769 | 3.3 | 100 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.951 | 0.941 | 1.1 | 100 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.478 | 0.452 | 5.4 | 100 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.677 | 0.646 | 4.6 | 100 | 0.00 |
| 57 | PC | Fluorene | 3.294 | 3.174 | 3.6 | 100 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.498 | 1.449 | 3.3 | 100 | 0.00 |
| 59 | PC | Diethylphthalate | 3.454 | 3.463 | -0.3 | 100 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.683 | 0.757 | -10.8 | 100 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.161 | 1.128 | 2.8 | 100 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.338 | 4.196 | 3.3 | 100 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.646 | 0.633 | 2.0 | 100 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.521 | 3.424 | 2.8 | 100 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.770 | 2.672 | 3.5 | 100 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.322 | 0.306 | 5.0 | 100 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.452 | 1.373 | 5.4 | 100 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.439 | 0.411 | 6.4 | 100 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.448 | 0.434 | 3.1 | 100 | 0.00 |
| 71 | PC | Atrazine | 0.527 | 0.522 | 0.9 | 100 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.258 | 0.235 | 8.9 | 100 | 0.00 |
| 73 | PC | Phenanthrene | 2.533 | 2.425 | 4.3 | 100 | 0.00 |
| 74 | PC | Anthracene | 2.617 | 2.491 | 4.8 | 100 | 0.00 |
| 75 | PC | Carbazole | 2.507 | 2.446 | 2.4 | 100 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.199 | 3.080 | 3.7 | 100 | 0.00 |
| 77 | PC | Fluoranthene | 2.878 | 2.847 | 1.1 | 100 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.367 | 0.351 | 4.4 | 100 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.551 | 2.421 | 5.1 | 100 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 81 | MPC | Pyrene | 2.755 | 2.594 | 5.8 | 100 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.325 | 1.257 | 5.1 | 100 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.745 | 0.802 | -7.7 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.474 | 2.333 | 5.7 | 100 | 0.00 |
| 85 | PC | Chrysene | 2.434 | 2.273 | 6.6 | 100 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.864 | 1.782 | 4.4 | 100 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.531 | 2.341 | 7.5 | 100 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.442 | 3.163 | 8.1 | 100 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.708 | 2.698 | 0.4 | 100 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.759 | 2.510 | 9.0 | 100 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.711 | 2.596 | 4.2 | 100 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.114 | 2.191 | -3.6 | 100 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.247 | 2.310 | -2.8 | 100 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.350 | 2.468 | -5.0 | 100 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.383 | 2.250 | 5.6 | 100 | 0.00 |

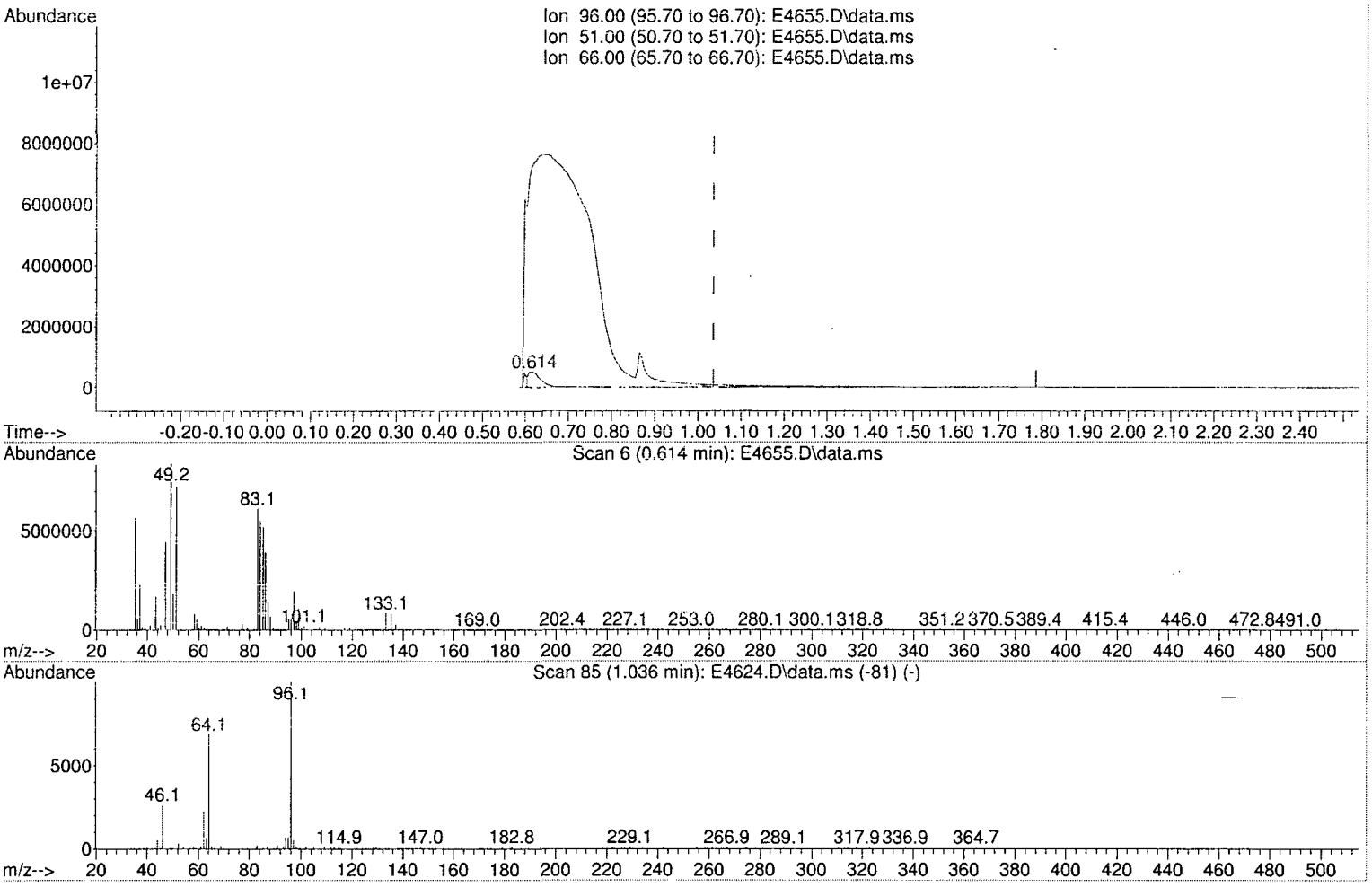
(#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.614min (-0.422) 1292.04 ug/mL**

**response 1055165**

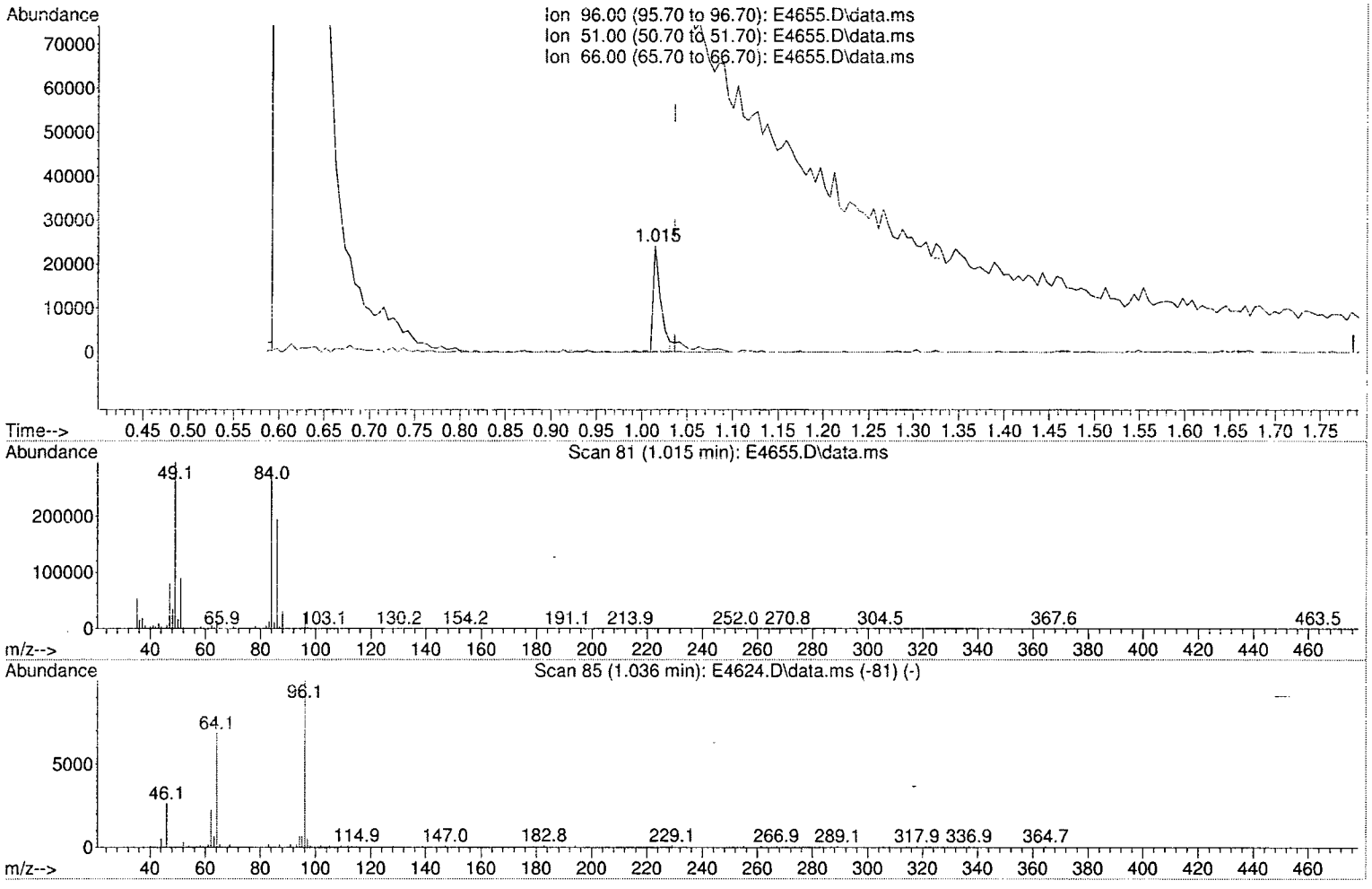
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.15# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.015min (-0.021) 17.27 ug/mL m** RS [illegible]

**response 14103**

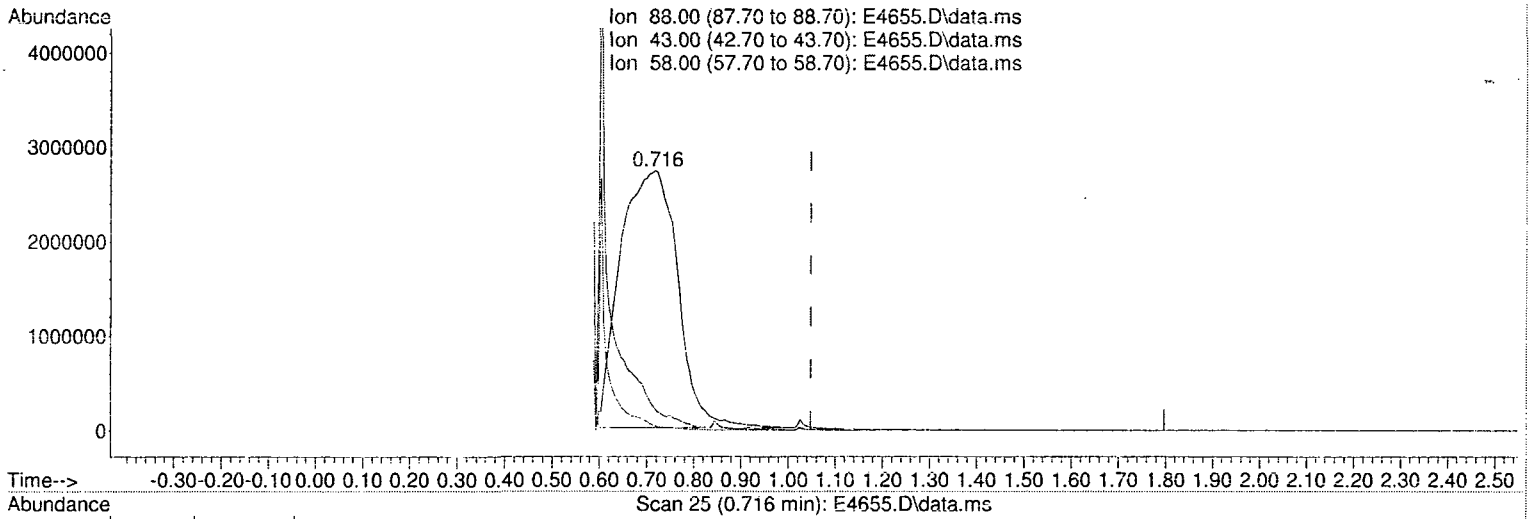
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 11.59# |
| 0.00 | 0.00 | 0.00 |

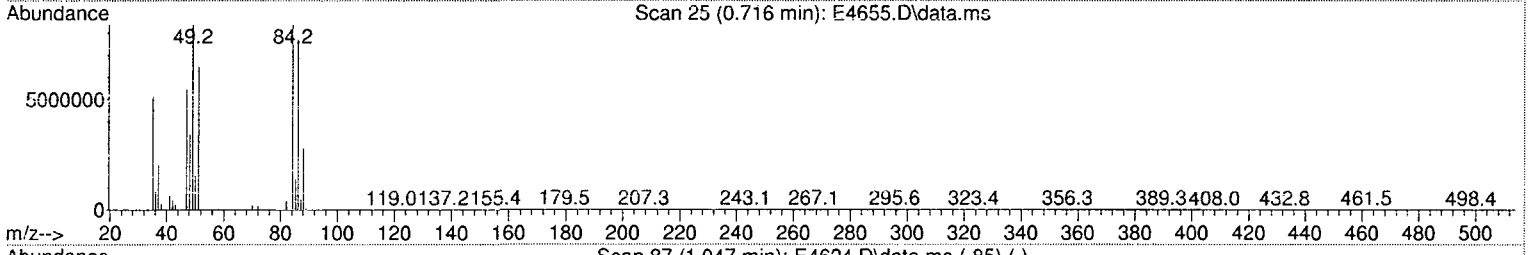
Quantitation Report (Qedit)

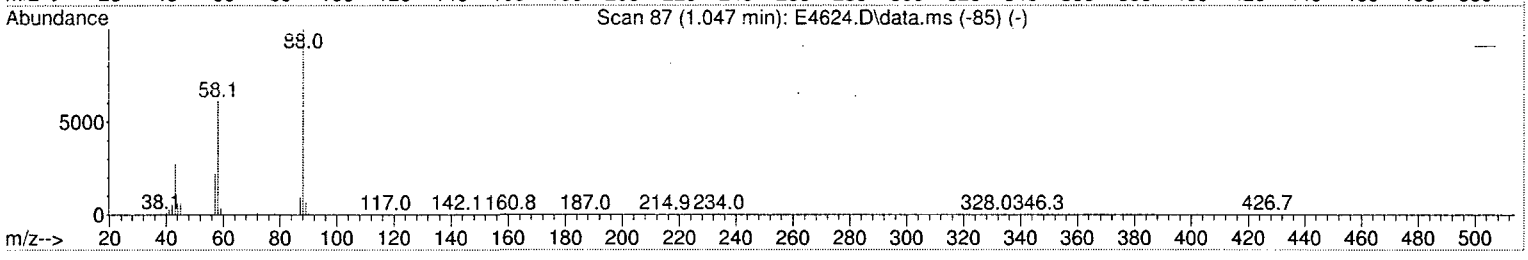
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.716min (-0.331) 4897.97 ug/mL**

**response 22805140**

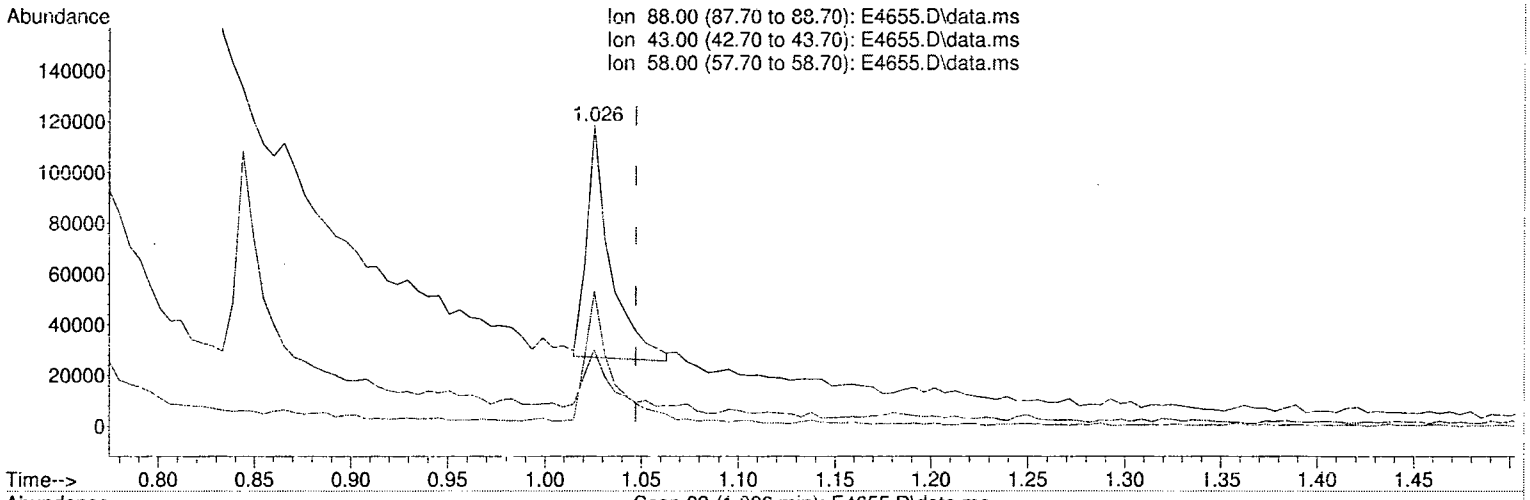
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

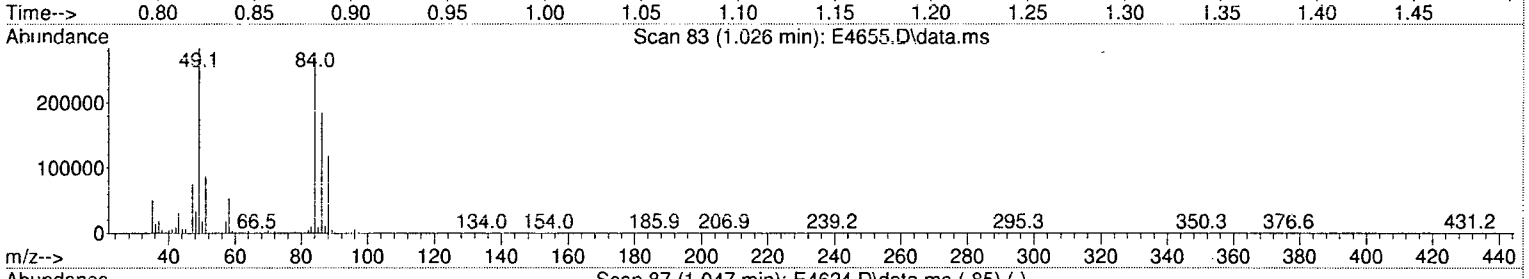
Quantitation Report (Qedit)

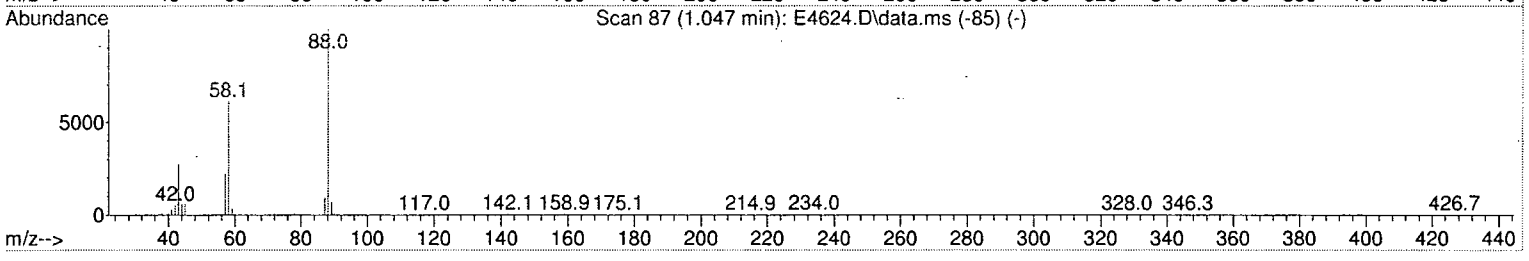
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.026min (-0.021) 16.69 ug/mL m** RS 8/21

**response 77719**

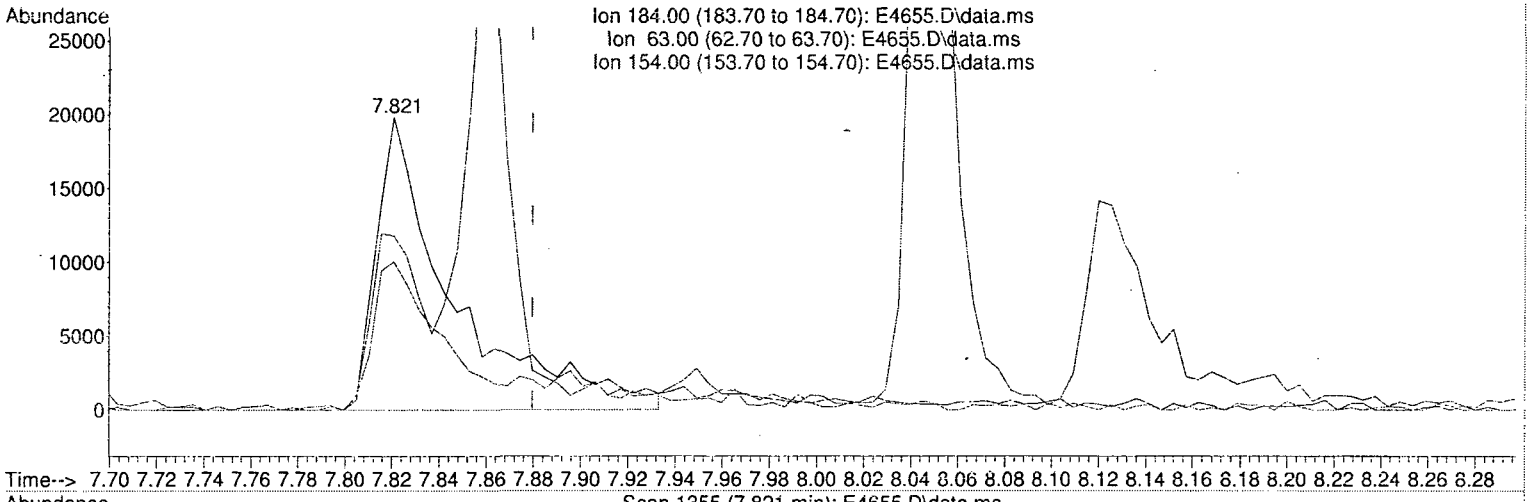
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

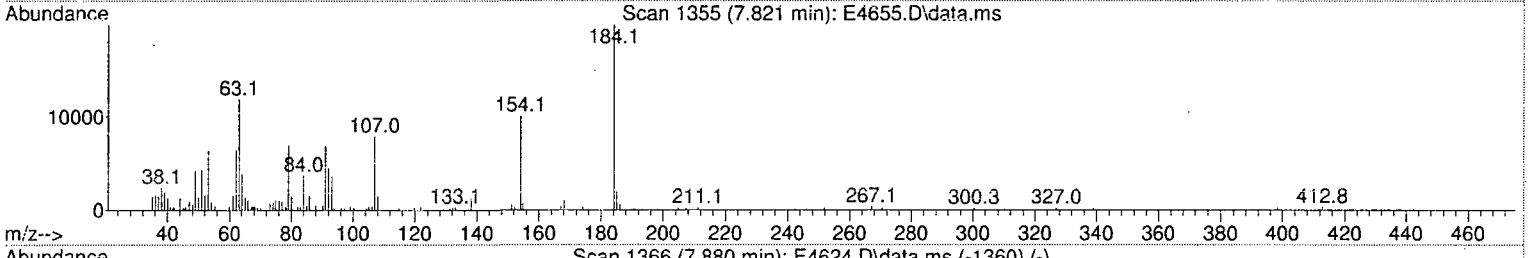
Quantitation Report (Qedit)

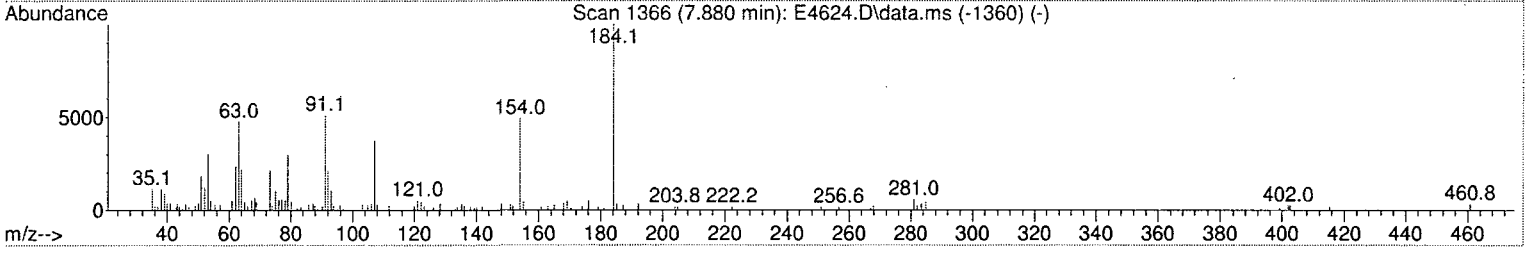
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:10 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.821min (-0.059) 24.42 ug/mL**

**response 44789**

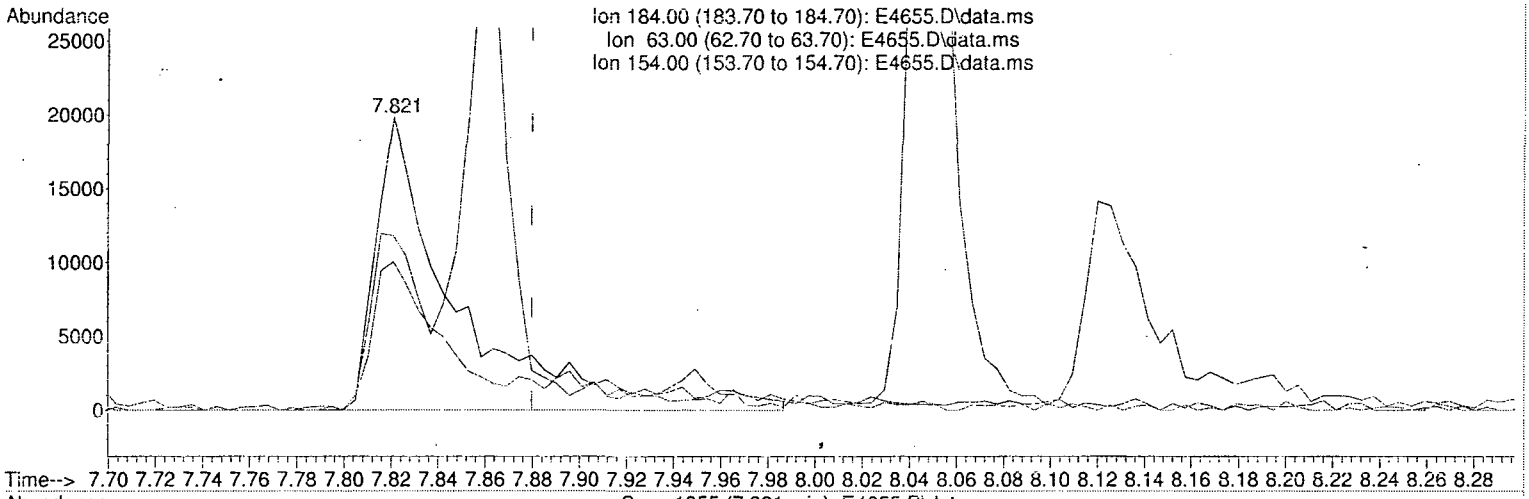
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 38.96# |
| 154.00 | 63.80 | 44.59 |
| 0.00 | 0.00 | 0.00 |

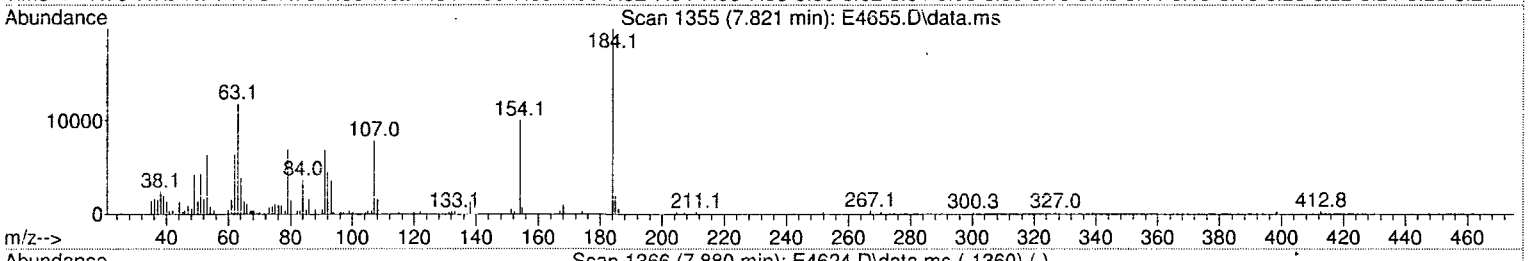
Quantitation Report (Qedit)

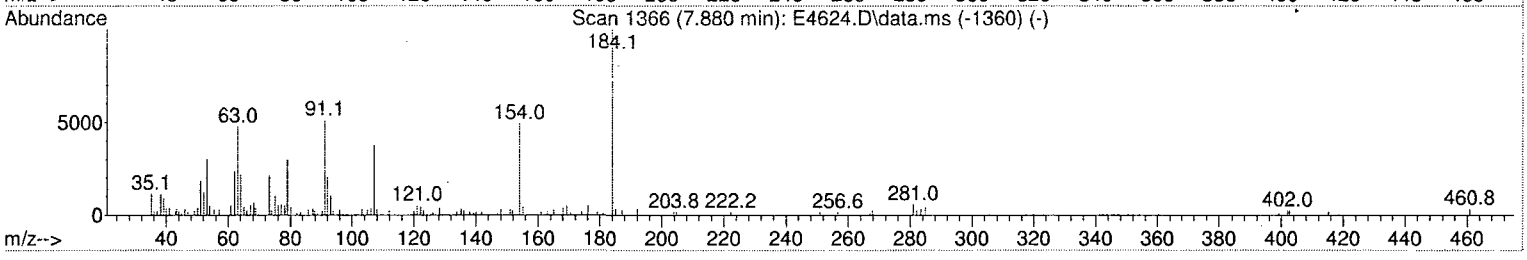
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:10 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.821min (-0.059) 26.24 ug/mL m** RS 8/1

**response 48122**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 36.26# |
| 154.00 | 63.80 | 41.50# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/26/12

Quant Time: May 25 13:05:07 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42583 SDG: H3200

S. Vakati
05/26/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.269 | 152 | 71193 | 20.0000 ug/mL | -0.03 |
| 21) Naphthalene-d8 | 4.920 | 136 | 308395 | 20.0000 ug/mL | -0.04 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 200069 | 20.0000 ug/mL | -0.04 |
| 66) Phenanthrene-d10 | 9.802 | 188 | 357073 | 20.0000 ug/mL | -0.06 |
| 80) Chrysene-d12 | 13.934 | 240 | 398932 | 20.0000 ug/mL | -0.06 |
| 88) Perylene-d12 | 15.992 | 264 | 387698 | 20.0000 ug/mL | -0.07 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.025 | 96 | 3056m | 3.07 ug/mL | -0.01 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 15.35%# | | |
| 7) Phenol-d5 | 3.050 | 99 | 165341 | 10.27 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 25.67%# | | |
| 18) Bis(2-chloroethyl)ethe... | 3.013 | 67 | 77075 | 8.63 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 21.58%# | | |
| 19) 2-Chlorophenol-d4 | 3.077 | 132 | 143032 | 10.03 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 25.07%# | | |
| 20) 4-Methylphenol-d8 | 3.926 | 113 | 120086 | 10.03 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 25.07% | | |
| 22) Nitrobenzene-d5 | 4.017 | 128 | 70051 | 10.69 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 26.72%# | | |
| 35) 2-Nitrophenol-d4 | 4.455 | 143 | 78038 | 10.70 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 26.75%# | | |
| 36) 2,4-Dichlorophenol-d3 | 4.818 | 165 | 130303 | 10.71 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 26.78%# | | |
| 37) 4-Chloroaniline-d4 | 5.144 | 131 | 107739 | 10.32 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 25.80% | | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 435037 | 10.02 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 25.05%# | | |
| 63) 4-Nitrophenol-d4 | 8.120 | 143 | 54529 | 8.96 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 22.40%# | | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 347033 | 10.32 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 25.80%# | | |
| 65) Fluorene-d10 | 8.344 | 176 | 275110 | 10.14 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 25.35%# | | |
| 78) 4,6-Dinitro-2-methylph... | 8.642 | 200 | 59417 | 10.57 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 26.42% | | |
| 79) Anthracene-d10 | 9.882 | 188 | 465754 | 10.57 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 26.42%# | | |
| 87) Pyrene-d10 | 11.979 | 212 | 510264 | 9.77 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 24.43%# | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 455649 | 10.29 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 25.72%# | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.870 | 79 | 225233 | 7.8051 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.031 | 88 | 11335m | 1.9995 ug/mL | |
| 5) Benzaldehyde | 2.815 | 77 | 105522 | 9.3389 ug/mL | 97 |
| 6) Bis(2-chloroethyl)ether | 3.066 | 93 | 123868 | 9.7003 ug/mL | 95 |
| 8) Phenol | 3.061 | 94 | 153336 | 9.5891 ug/mL# | 51 |
| 9) 2-Chlorophenol | 3.093 | 128 | 124870 | 10.0023 ug/mL | 98 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.712 | 45 | 106580 | 8.8543 ug/mL# | 31 |
| 11) Aniline | 2.986 | 93 | 116104 | 9.1441 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 158115 | 9.9060 ug/mL# | 100 |
| 13) Acetophenone | 3.835 | 105 | 179660 | 9.8775 ug/mL | 93 |
| 14) 2-Methylphenol | 3.755 | 108 | 117814 | 9.9801 ug/mL | 95 |
| 15) Hexachloroethane | 3.867 | 117 | 55407 | 9.6333 ug/mL | 99 |

RS RW

RS RW

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:05:07 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.894 | 70 | 98543 | 9.3319 ug/mL | 96 | |
| 17) 4-Methylphenol | 3.964 | 108 | 127474 | 10.2844 ug/mL | 93 | |
| 23) Nitrobenzene | 4.038 | 77 | 144132 | 9.1907 ug/mL | 95 | |
| 24) Isophorone | 4.354 | 82 | 258606 | 9.5830 ug/mL | 96 | |
| 25) 2-Nitrophenol | 4.471 | 139 | 70577 | 10.4646 ug/mL | 90 | |
| 26) 2,4-Dimethylphenol | 4.647 | 107 | 143682 | 9.6891 ug/mL | 95 | |
| 27) Bis(2-chloroethoxy)met... | 4.744 | 93 | 145843 | 9.8486 ug/mL | 98 | |
| 28) 2,4- Dichlorophenol | 4.834 | 162 | 110558 | 10.4704 ug/mL | 98 | |
| 29) Naphthalene | 4.947 | 128 | 393643 | 10.3270 ug/mL | 99 | |
| 30) 4-Chloroaniline | 5.160 | 127 | 103293 | 10.9320 ug/mL | 99 | |
| 31) Hexachlorobutadiene | 5.256 | 225 | 71713 | 11.1065 ug/mL | 98 | |
| 32) Caprolactam | 5.609 | 113 | 37222 | 8.6922 ug/mL | 88 | |
| 33) 4-Chloro-3-methylphenol | 6.010 | 107 | 122918 | 9.5391 ug/mL | 86 | |
| 34) 2-Methylnaphthalene | 5.972 | 142 | 264365 | 10.3118 ug/mL | 94 | |
| 39) Hexachlorocyclopentadiene | 6.330 | 237 | 75137 | 10.6208 ug/mL | 99 | |
| 40) 2,4,6-Trichlorophenol | 6.517 | 196 | 80902 | 10.1815 ug/mL | 95 | |
| 41) 2,4,5-Trichlorophenol | 6.597 | 196 | 81228 | 10.1773 ug/mL | 98 | |
| 42) 1,1'-Biphenyl | 6.720 | 154 | 335817 | 10.1452 ug/mL | 96 | |
| 43) 2-Chloronaphthalene | 6.688 | 162 | 262547 | 9.9007 ug/mL | 97 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 121067 | 10.4683 ug/mL | 95 | |
| 45) 2-Nitroaniline | 7.003 | 65 | 70945 | 8.0177 ug/mL | 90 | |
| 46) Acenaphthylene | 7.313 | 152 | 434463 | 10.3386 ug/mL | 97 | |
| 47) Dimethylphthalate | 7.377 | 163 | 333914 | 10.4015 ug/mL | 99 | |
| 48) 2,6-Dinitrotoluene | 7.457 | 165 | 64360 | 10.0032 ug/mL | 99 | |
| 49) Acenaphthene | 7.602 | 153 | 268561 | 10.0272 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.660 | 138 | 63457 | 10.3215 ug/mL | 92 | |
| 51) 2,4-Dinitrophenol | 7.842 | 184 | 22705m | 10.2780 ug/mL | | RS PRN |
| 52) Dibenzofuran | 7.863 | 168 | 389190 | 10.4773 ug/mL | 100 | |
| 53) Pentachlorobenzene | 9.202 | 250 | 79165 | 11.0548 ug/mL# | 98 | |
| 54) 2,4-Dinitrotoluene | 8.050 | 165 | 93130 | 10.5025 ug/mL | 85 | |
| 55) 4-Nitrophenol | 8.131 | 109 | 40038 | 7.8921 ug/mL | 91 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.195 | 232 | 68629 | 11.5552 ug/mL | 93 | |
| 57) Fluorene | 8.387 | 166 | 332791 | 10.3578 ug/mL | 97 | |
| 58) 4-Chlorophenyl-phenyle... | 8.467 | 204 | 151181 | 10.8938 ug/mL | 94 | |
| 59) Diethylphthalate | 8.488 | 149 | 341248 | 10.2921 ug/mL | 99 | |
| 60) 4-Nitroaniline | 8.613 | 138 | 72734 | 9.6202 ug/mL | 87 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.287 | 216 | 117231 | 10.4065 ug/mL | 95 | |
| 67) 4,6-Dinitro-2-methylph... | 8.653 | 198 | 52405 | 10.4568 ug/mL | 95 | |
| 68) N-Nitrosodiphenylamine... | 8.693 | 169 | 266651 | 10.0959 ug/mL | 98 | |
| 69) 4-Bromophenyl-phenylether | 9.202 | 248 | 81318 | 10.8569 ug/mL | 90 | |
| 70) Hexachlorobenzene | 9.350 | 284 | 82888 | 11.2522 ug/mL | 85 | |
| 71) Atrazine | 9.665 | 200 | 93946 | 10.7543 ug/mL | 97 | |
| 72) Pentachlorophenol | 9.705 | 266 | 40757 | 11.2468 ug/mL | 94 | |
| 73) Phenanthrene | 9.836 | 178 | 466767 | 10.4585 ug/mL | 97 | |
| 74) Anthracene | 9.905 | 178 | 485783 | 10.5462 ug/mL | 99 | |
| 75) Carbazole | 10.259 | 167 | 456291 | 10.2536 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.048 | 149 | 586251 | 10.4209 ug/mL | 99 | |
| 77) Fluoranthene | 11.688 | 202 | 520455 | 10.5837 ug/mL | 97 | |
| 81) Pyrene | 12.008 | 202 | 566023 | 9.7456 ug/mL | 99 | |
| 82) Butylbenzylphthalate | 13.345 | 149 | 266827 | 9.4742 ug/mL | 90 | |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 152768 | 11.2726 ug/mL | 99 | |
| 84) Benzo (a) anthracene | 13.911 | 228 | 492365 | 10.0161 ug/mL | 99 | |
| 85) Chrysene | 13.968 | 228 | 495995 | 10.5187 ug/mL | 100 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.368 | 149 | 366064 | 9.6616 ug/mL | 97 | |
| 89) Di-n-octylphthalate | 15.283 | 149 | 644444 | 8.8475 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.494 | 252 | 498184 | 9.4106 ug/mL | 96 | |
| 91) Benzo (k) fluoranthene | 15.529 | 252 | 543388 | 10.3646 ug/mL | 94 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:05:07 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.912 | 252 | 513561 | 9.9121 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.300 | 276 | 373454 | 9.3535 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.346 | 278 | 411550 | 9.9360 ug/mL | 92 |
| 95) Benzo (g,h,i) perylene | 17.569 | 276 | 446597 | 10.2965 ug/mL | 90 |

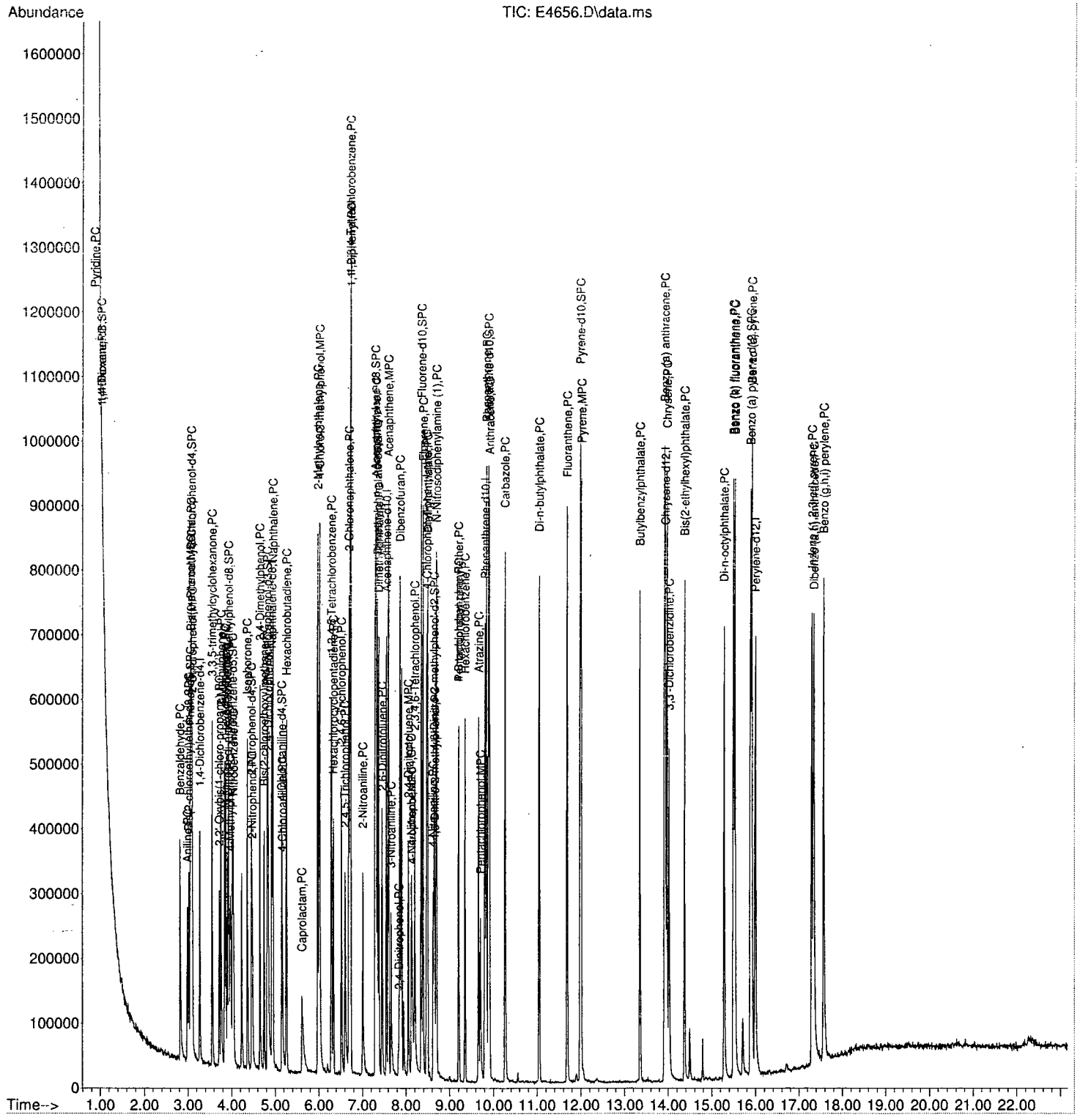
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:05:07 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration





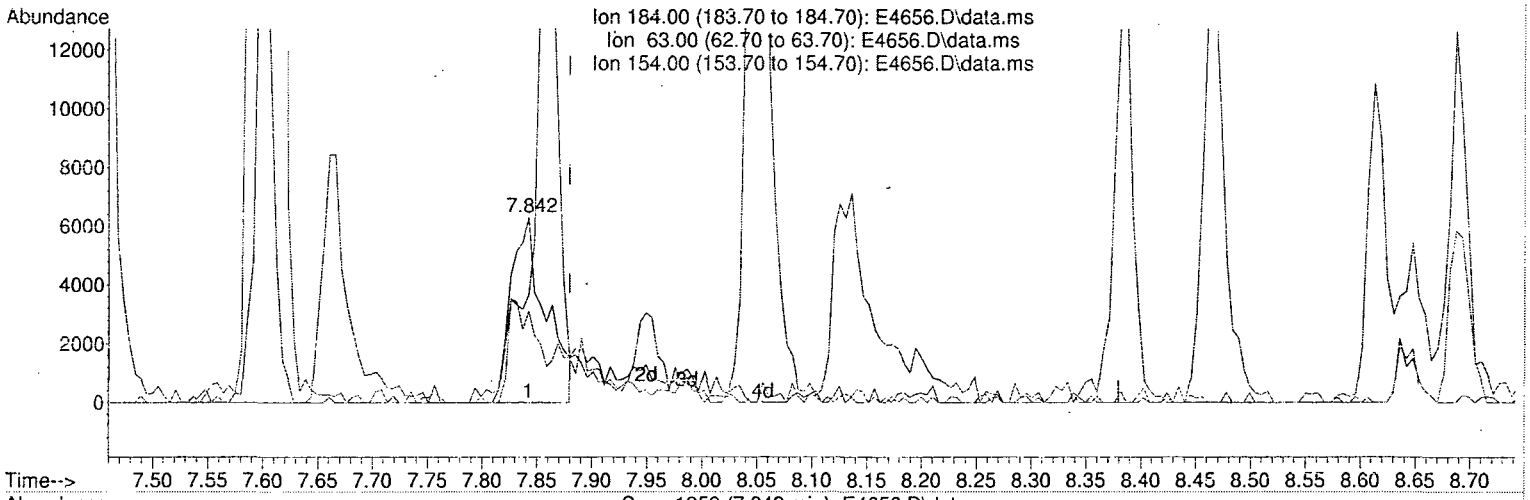

00404

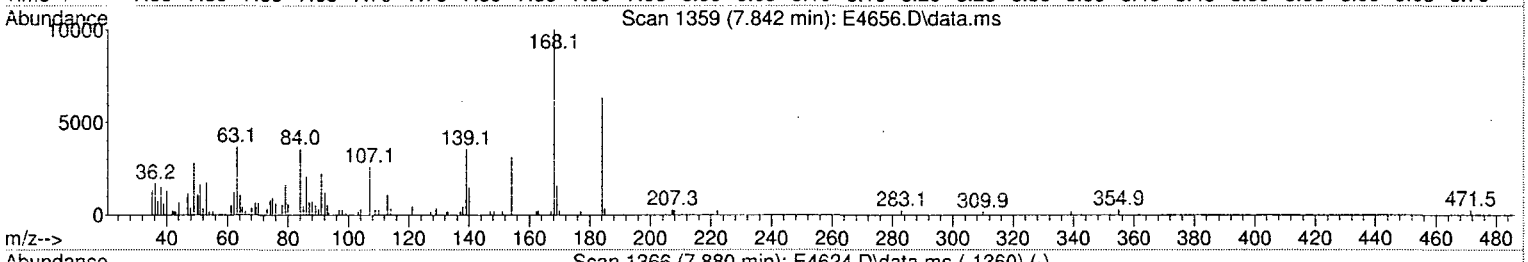
Quantitation Report (Qedit)

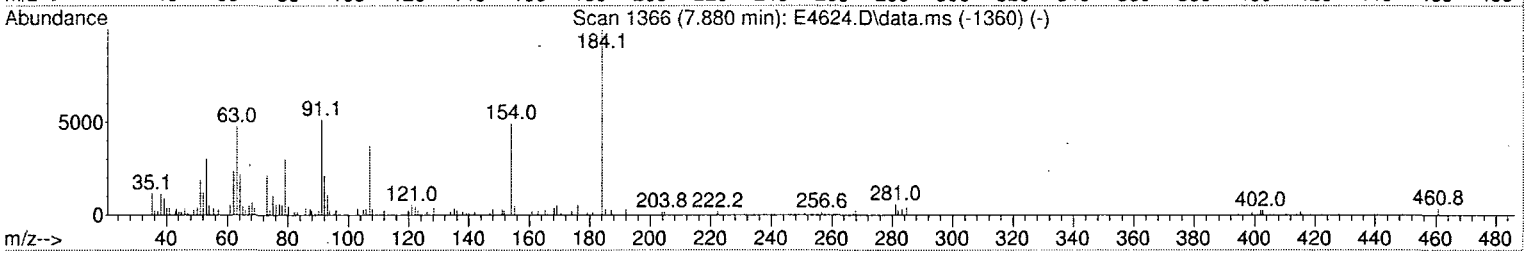
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:45 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.842min (-0.038) 6.18 ug/mL**

**response 13646**

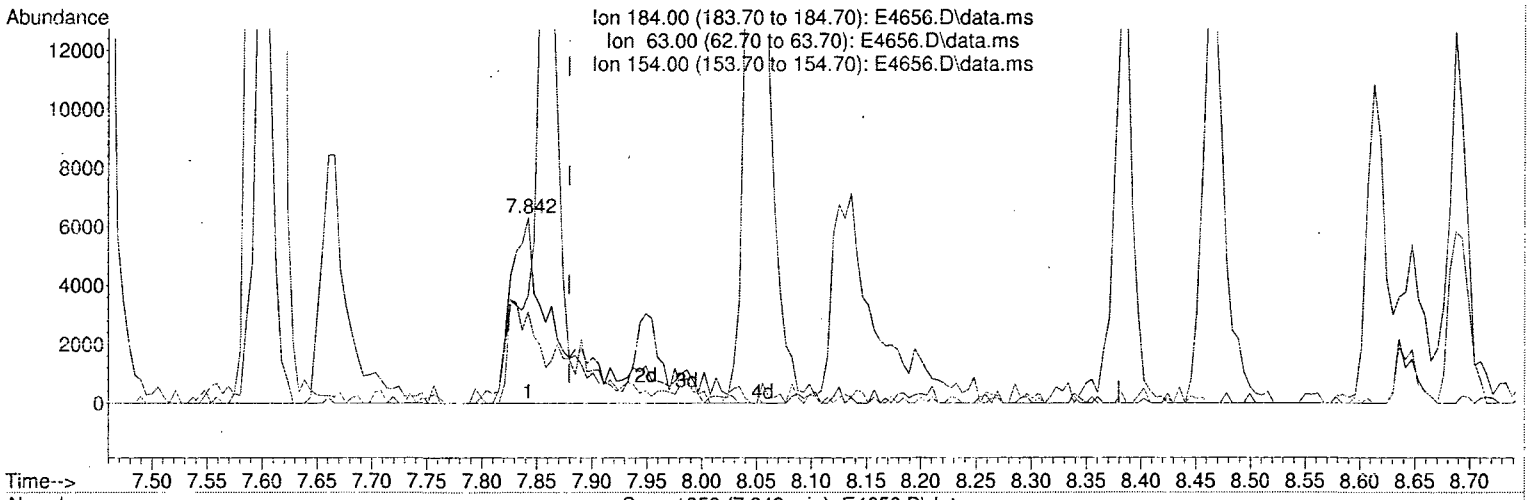
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 221.02# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

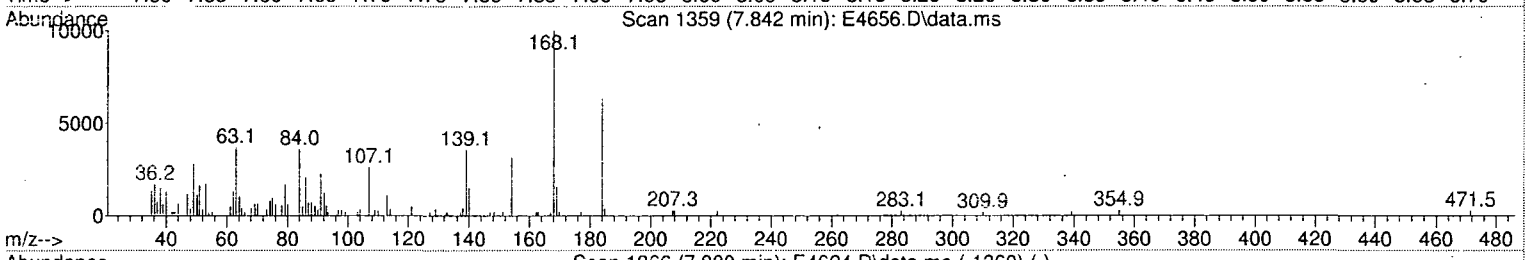
Quantitation Report (Qedit)

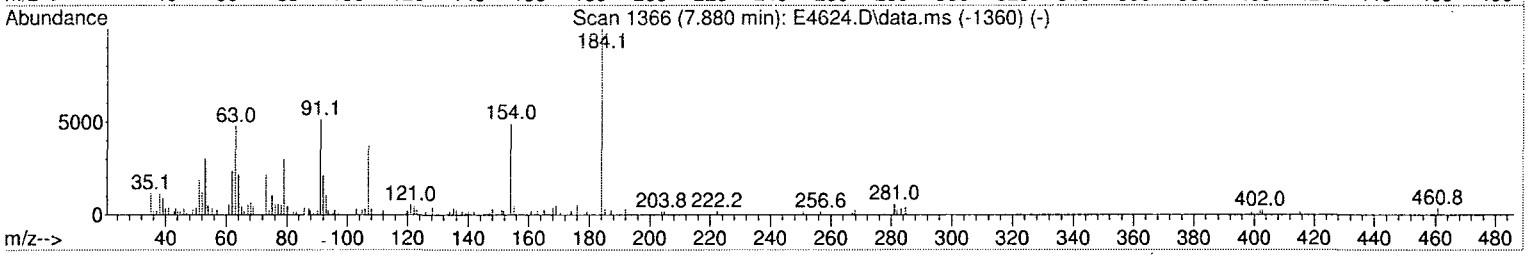
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:45 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.842min (-0.038) 10.28 ug/mL m** RS 8/21

**response 22705**

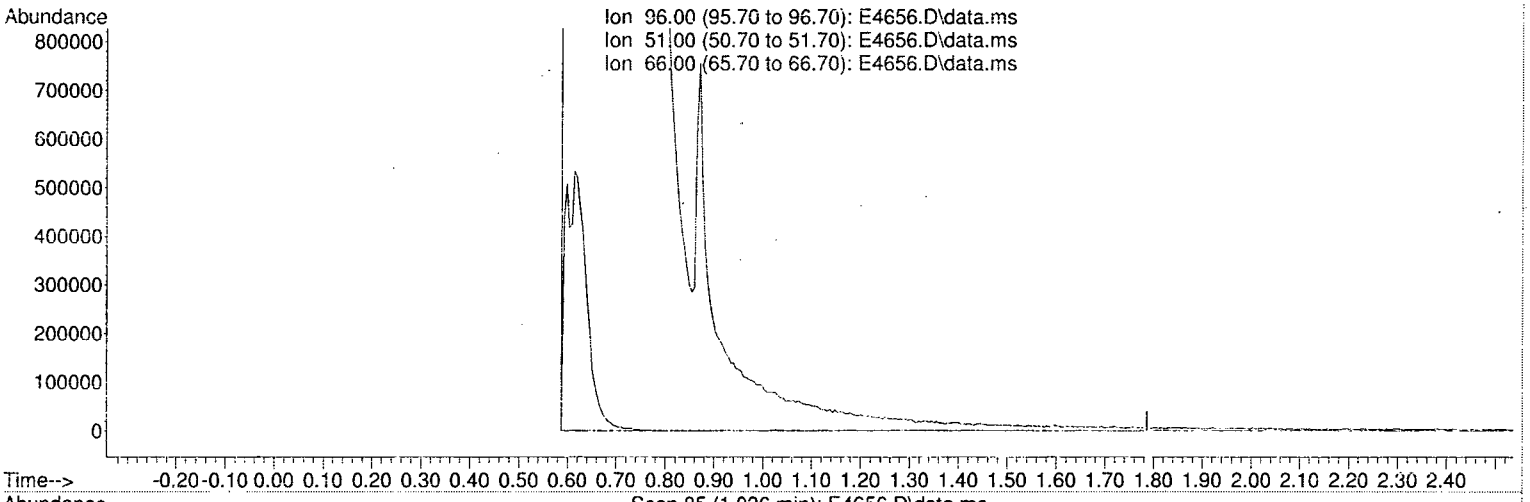
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 132.83# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

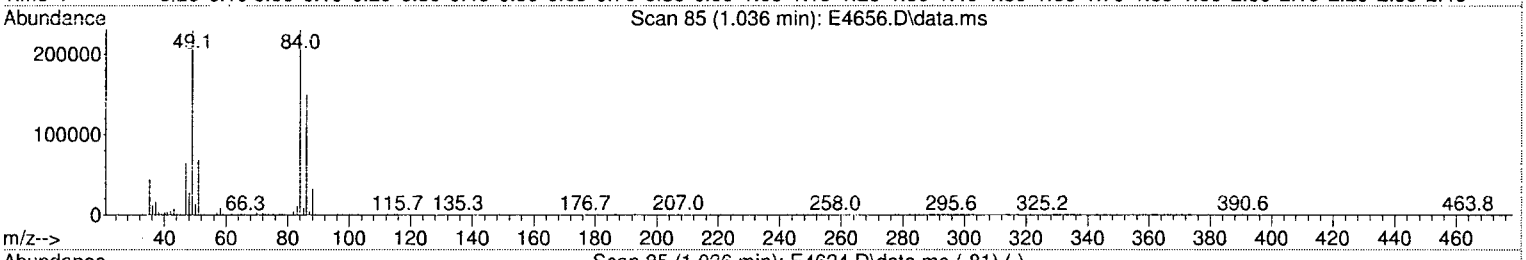
Quantitation Report (Qedit)

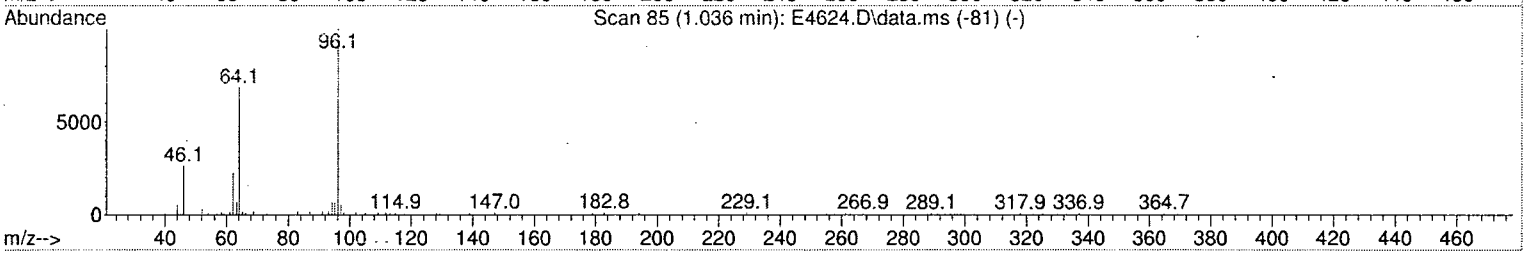
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:45 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min (-1.036) 0.00 ug/mL**

**response 0**

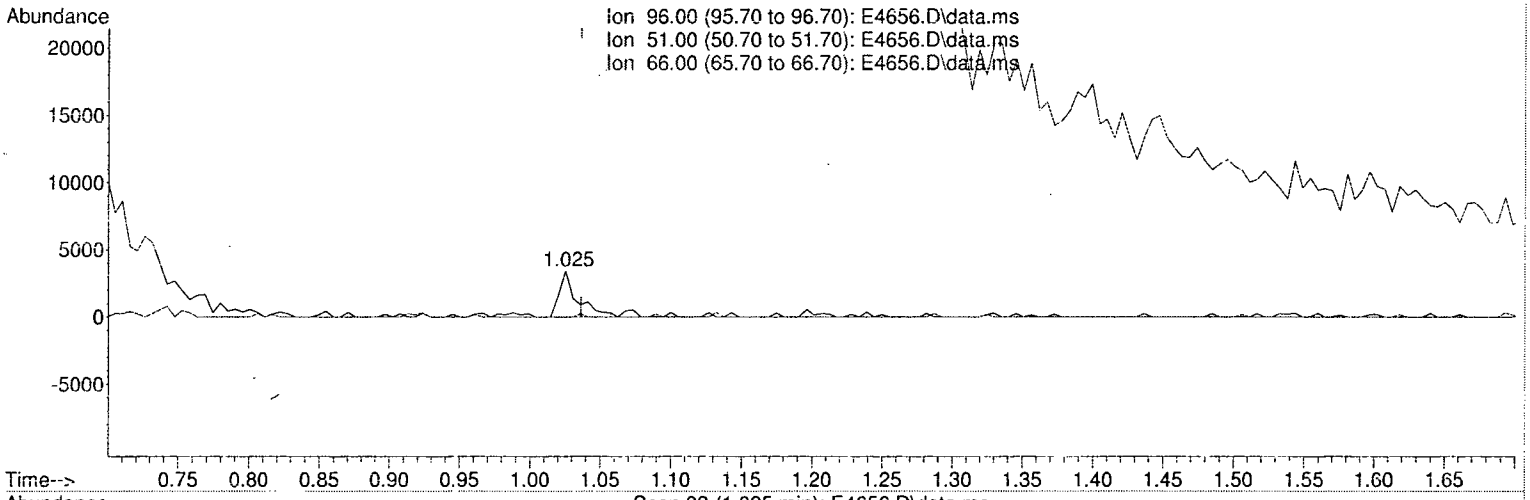
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 0.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.00# |
| 0.00 | 0.00 | 0.00 |

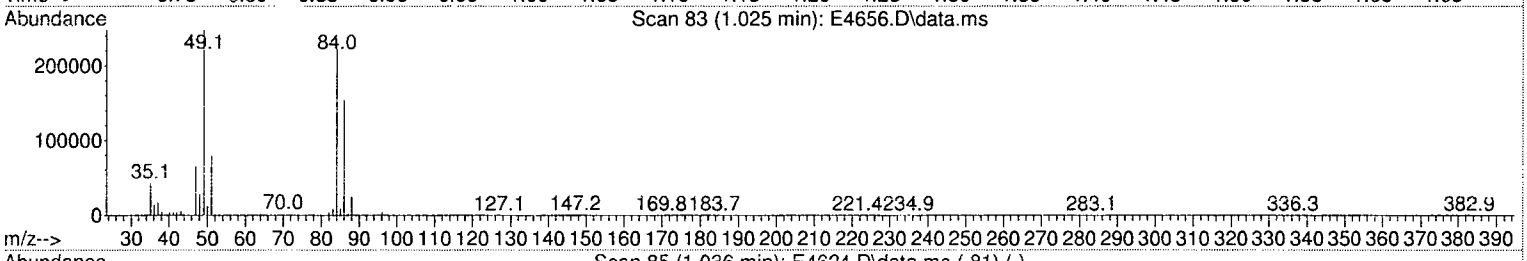
Quantitation Report (Qedit)

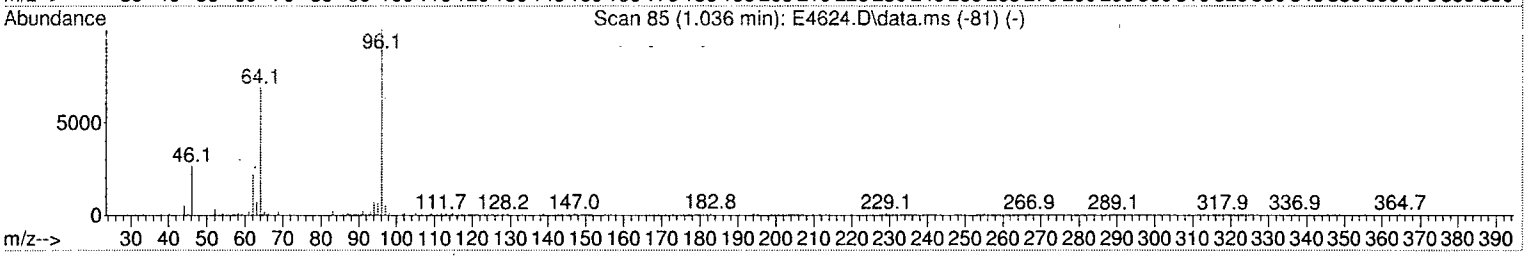
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:45 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.025min (-0.011) 3.07 ug/mL m** RS

**response 3056**

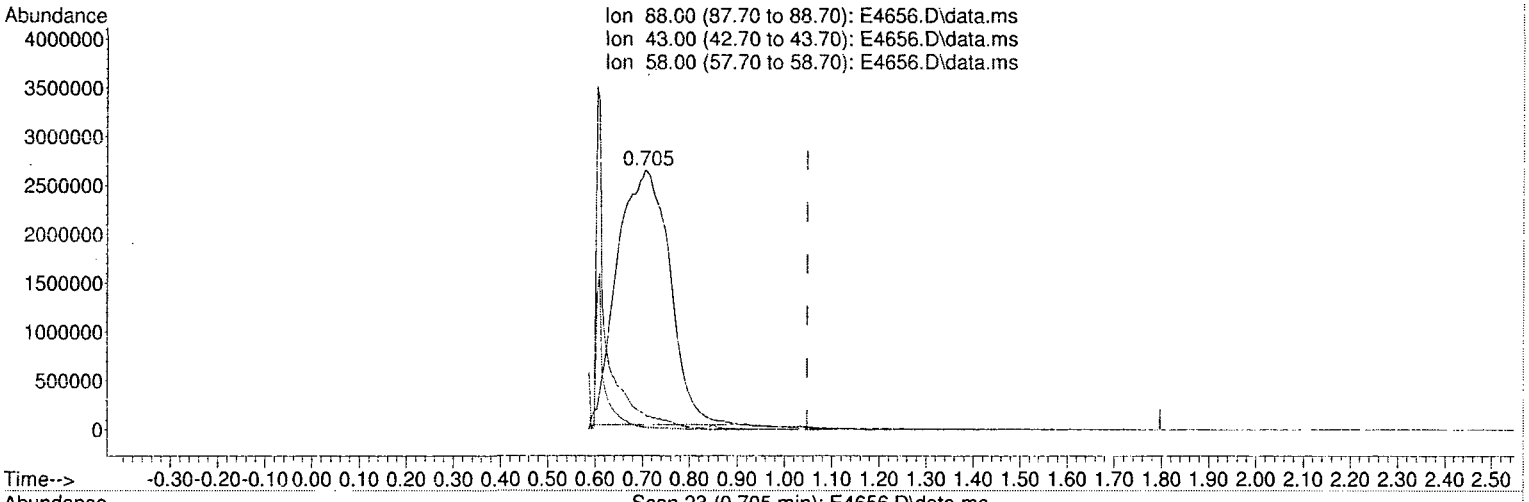
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.00# |
| 0.00 | 0.00 | 0.00 |

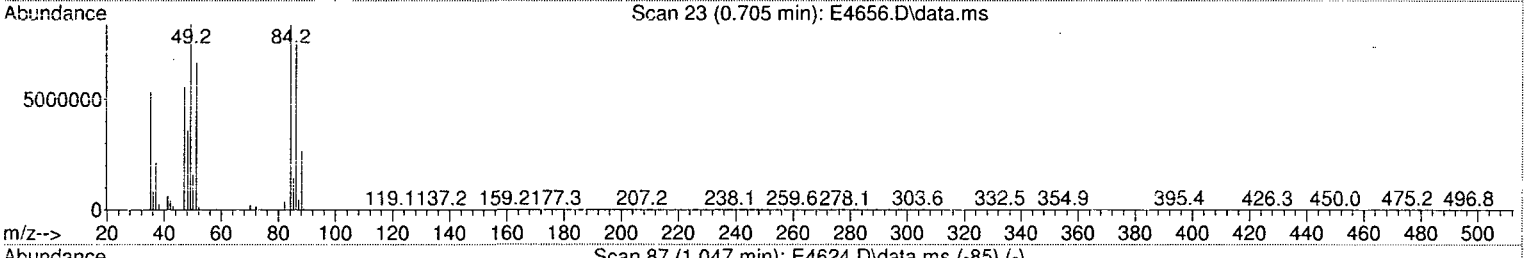
Quantitation Report (Qedit)

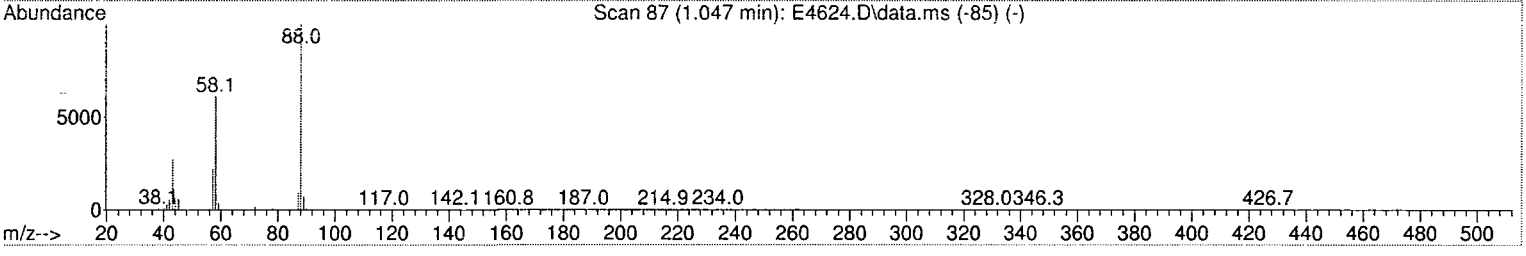
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:45 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.705min (-0.342) 3534.17 ug/mL**

**response 20035169**

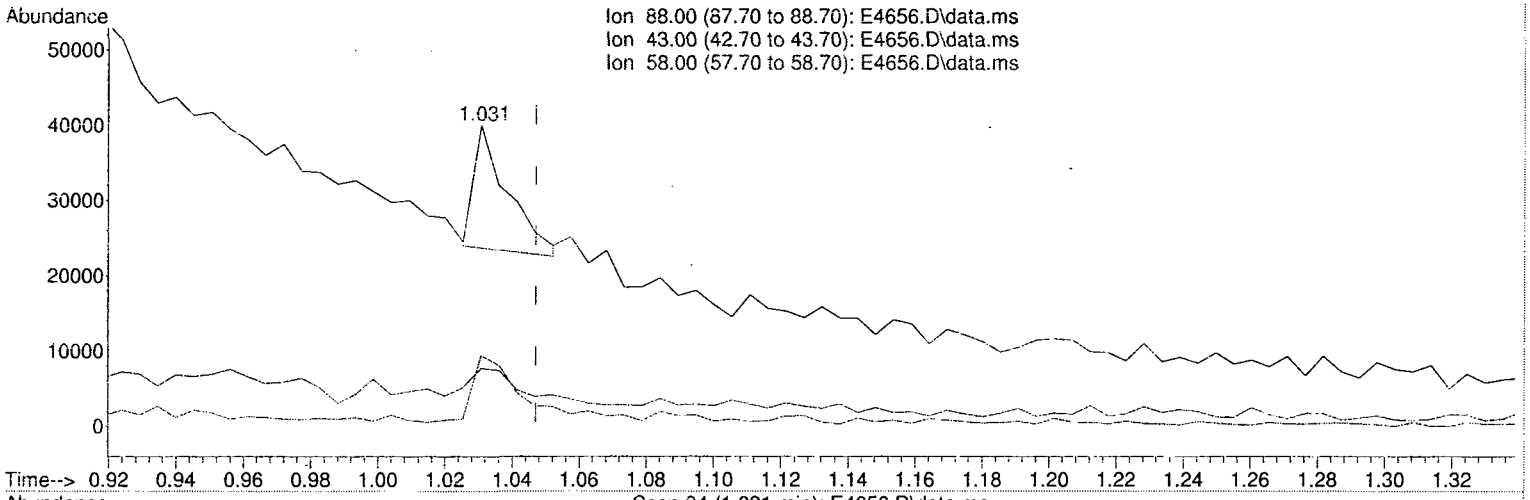
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

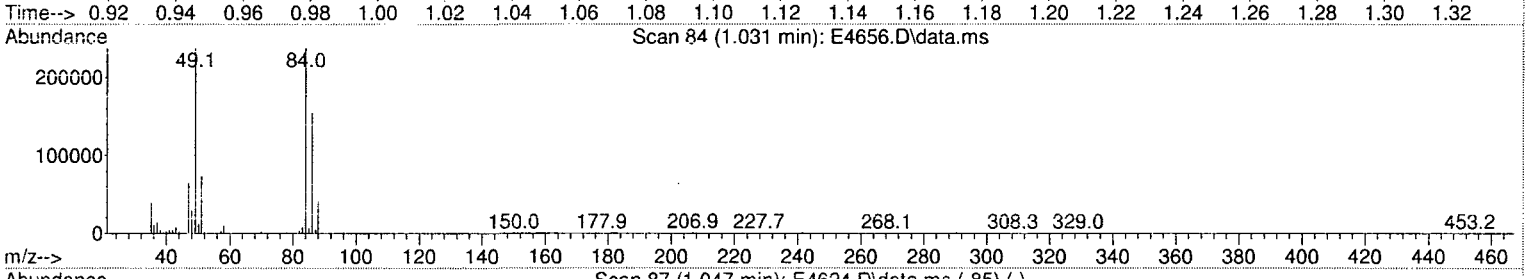
Quantitation Report (Qedit)

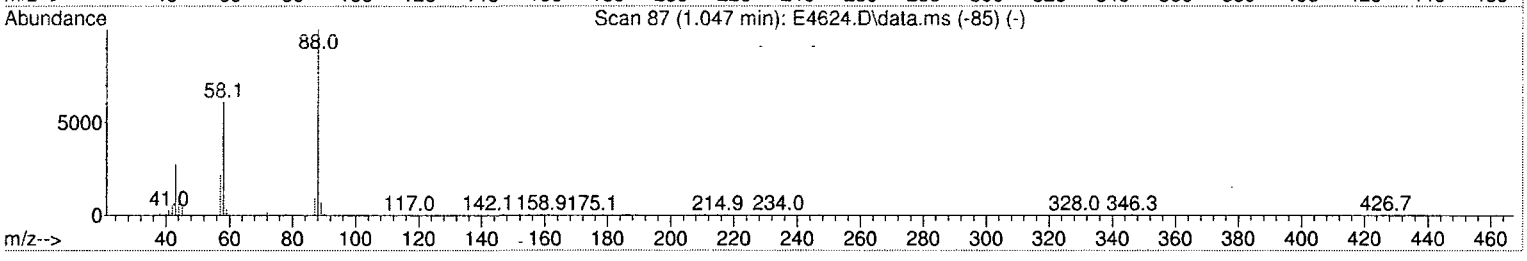
Data File : C:\msdchem\1\data\E4656.D
Acq On : 25 May 2012 12:00
Sample : 2E25002-CAL2
Misc : SSTD0109S
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:02:19 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4656.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.031min (-0.016) 2.00 ug/mL m**

RS 8RN

**response 11335**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vokati
05/28/12

Quant Time: May 25 13:03:49 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42583 SDG: H3200

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.264 | 152 | 68222 | 20.0000 ug/mL | -0.04 |
| 21) Naphthalene-d8 | 4.925 | 136 | 297757 | 20.0000 ug/mL | -0.04 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 193794 | 20.0000 ug/mL | -0.04 |
| 66) Phenanthrene-d10 | 9.808 | 188 | 367296 | 20.0000 ug/mL | -0.05 |
| 80) Chrysene-d12 | 13.934 | 240 | 425708 | 20.0000 ug/mL | -0.06 |
| 88) Perylene-d12 | 15.997 | 264 | 428803 | 20.0000 ug/mL | -0.06 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.015 | 96 | 30067 | 31.56 ug/mL | -0.02 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 157.80%# | | |
| 7) Phenol-d5 | 3.045 | 99 | 562590 | 36.45 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 91.13% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.008 | 67 | 291662 | 34.06 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 85.15% | | |
| 19) 2-Chlorophenol-d4 | 3.072 | 132 | 543703 | 39.79 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 99.48% | | |
| 20) 4-Methylphenol-d8 | 3.926 | 113 | 469097 | 40.89 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 102.23% | | |
| 22) Nitrobenzene-d5 | 4.012 | 128 | 253853 | 40.13 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 100.33% | | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 299369 | 42.51 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 106.27% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.813 | 165 | 502226 | 42.74 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 106.85%# | | |
| 37) 4-Chloroaniline-d4 | 5.139 | 131 | 527569 | 52.36 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 130.90% | | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 1665902 | 39.61 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 99.02% | | |
| 63) 4-Nitrophenol-d4 | 8.115 | 143 | 273529 | 46.38 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 115.95% | | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 1361842 | 41.80 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 104.50% | | |
| 65) Fluorene-d10 | 8.350 | 176 | 1071580 | 40.77 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 101.93% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.648 | 200 | 285014 | 49.30 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 123.25%# | | |
| 79) Anthracene-d10 | 9.888 | 188 | 1847071 | 40.76 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 101.90% | | |
| 87) Pyrene-d10 | 11.985 | 212 | 2088572 | 37.49 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 93.73% | | |
| 96) Benzo (a) pyrene-d12 | 15.889 | 264 | 1936266 | 39.53 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 98.83% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.865 | 79 | 839757 | 30.3677 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.026 | 88 | 198260m | 36.4957 ug/mL | |
| 5) Benzaldehyde | 2.810 | 77 | 324003 | 29.9238 ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.061 | 93 | 448467 | 36.6495 ug/mL | 90 |
| 8) Phenol | 3.056 | 94 | 605628 | 39.5231 ug/mL# | 68 |
| 9) 2-Chlorophenol | 3.088 | 128 | 474335 | 39.6495 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.707 | 45 | 381290 | 33.0557 ug/mL# | 31 |
| 11) Aniline | 2.975 | 93 | 558753 | 45.9227 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 539708 | 35.2854 ug/mL# | 100 |
| 13) Acetophenone | 3.830 | 105 | 676534 | 38.8148 ug/mL | 94 |
| 14) 2-Methylphenol | 3.755 | 108 | 450777 | 39.8487 ug/mL | 95 |
| 15) Hexachloroethane | 3.862 | 117 | 197059 | 35.7537 ug/mL | 99 |

RS 6/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:03:49 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.894 | 70 | 359513 | 35.5281 ug/mL | 95 |
| 17) 4-Methylphenol | 3.958 | 108 | 471859 | 39.7266 ug/mL | 99 |
| 23) Nitrobenzene | 4.033 | 77 | 529080 | 34.9426 ug/mL | 95 |
| 24) Isophorone | 4.354 | 82 | 983765 | 37.7573 ug/mL | 96 |
| 25) 2-Nitrophenol | 4.466 | 139 | 269674 | 41.4137 ug/mL | 90 |
| 26) 2,4-Dimethylphenol | 4.648 | 107 | 561191 | 39.1956 ug/mL | 97 |
| 27) Bis(2-chloroethoxy)met... | 4.744 | 93 | 540037 | 37.7710 ug/mL | 98 |
| 28) 2,4- Dichlorophenol | 4.829 | 162 | 441016 | 43.2587 ug/mL | 96 |
| 29) Naphthalene | 4.947 | 128 | 1455990 | 39.5617 ug/mL | 100 |
| 30) 4-Chloroaniline | 5.155 | 127 | 487160 | 53.4006 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.257 | 225 | 255079 | 40.9167 ug/mL | 98 |
| 32) Caprolactam | 5.625 | 113 | 187243m | 45.2878 ug/mL | RSQW |
| 33) 4-Chloro-3-methylphenol | 6.010 | 107 | 495577 | 39.8333 ug/mL | 90 |
| 34) 2-Methylnaphthalene | 5.972 | 142 | 1011007 | 40.8441 ug/mL | 100 |
| 39) Hexachlorocyclopentadiene | 6.330 | 237 | 305004 | 44.5090 ug/mL | 100 |
| 40) 2,4,6-Trichlorophenol | 6.517 | 196 | 323515 | 42.0327 ug/mL | 98 |
| 41) 2,4,5-Trichlorophenol | 6.592 | 196 | 339561 | 43.9221 ug/mL | 97 |
| 42) 1,1'-Biphenyl | 6.720 | 154 | 1255874 | 39.1692 ug/mL | 97 |
| 43) 2-Chloronaphthalene | 6.688 | 162 | 991700 | 38.6081 ug/mL | 97 |
| 44) 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 458232 | 40.9048 ug/mL | 95 |
| 45) 2-Nitroaniline | 7.004 | 65 | 299661 | 34.9622 ug/mL | 89 |
| 46) Acenaphthylene | 7.319 | 152 | 1649284 | 40.5177 ug/mL | 100 |
| 47) Dimethylphthalate | 7.383 | 163 | 1291428 | 41.5309 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.458 | 165 | 283183 | 45.4393 ug/mL | 93 |
| 49) Acenaphthene | 7.607 | 153 | 1027280 | 39.5971 ug/mL | 99 |
| 50) 3-Nitroaniline | 7.661 | 138 | 272939 | 45.8320 ug/mL | 88 |
| 51) 2,4-Dinitrophenol | 7.816 | 184 | 112084 | 52.3807 ug/mL | 87 |
| 52) Dibenzofuran | 7.864 | 168 | 1417947 | 39.4084 ug/mL | 95 |
| 53) Pentachlorobenzene | 9.202 | 250 | 310350 | 44.7414 ug/mL# | 97 |
| 54) 2,4-Dinitrotoluene | 8.051 | 165 | 386321 | 44.9769 ug/mL | 85 |
| 55) 4-Nitrophenol | 8.120 | 109 | 203556 | 41.4231 ug/mL# | 88 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.195 | 232 | 268091 | 46.6006 ug/mL | 92 |
| 57) Fluorene | 8.393 | 166 | 1270826 | 40.8341 ug/mL | 99 |
| 58) 4-Chlorophenyl-phenyle... | 8.467 | 204 | 582277 | 43.3162 ug/mL | 93 |
| 59) Diethylphthalate | 8.494 | 149 | 1343075 | 41.8189 ug/mL | 100 |
| 60) 4-Nitroaniline | 8.625 | 138 | 273584 | 37.3573 ug/mL# | 84 |
| 61) 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 440476 | 40.3667 ug/mL | 98 |
| 67) 4,6-Dinitro-2-methylph... | 8.659 | 198 | 252816 | 49.0422 ug/mL | 98 |
| 68) N-Nitrosodiphenylamine... | 8.699 | 169 | 1063929 | 39.1610 ug/mL | 99 |
| 69) 4-Bromophenyl-phenylether | 9.202 | 248 | 322065 | 41.8025 ug/mL | 93 |
| 70) Hexachlorobenzene | 9.356 | 284 | 322716 | 42.5900 ug/mL | 85 |
| 71) Atrazine | 9.676 | 200 | 388996 | 43.2901 ug/mL | 96 |
| 72) Pentachlorophenol | 9.705 | 266 | 201701 | 54.1096 ug/mL | 96 |
| 73) Phenanthrene | 9.842 | 178 | 1829645 | 39.8544 ug/mL | 97 |
| 74) Anthracene | 9.911 | 178 | 1918422 | 40.4892 ug/mL | 99 |
| 75) Carbazole | 10.259 | 167 | 1866779 | 40.7819 ug/mL | 99 |
| 76) Di-n-butylphthalate | 11.048 | 149 | 2389568 | 41.2934 ug/mL | 99 |
| 77) Fluoranthene | 11.688 | 202 | 2122835 | 41.9672 ug/mL | 98 |
| 81) Pyrene | 12.014 | 202 | 2300110 | 37.1116 ug/mL | 99 |
| 82) Butylbenzylphthalate | 13.351 | 149 | 1144722 | 38.0889 ug/mL | 90 |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 688229 | 47.5894 ug/mL | 97 |
| 84) Benzo (a) anthracene | 13.917 | 228 | 2103356 | 40.0970 ug/mL | 99 |
| 85) Chrysene | 13.974 | 228 | 2007249 | 39.8909 ug/mL | 99 |
| 86) Bis(2-ethylhexyl)phtha... | 14.374 | 149 | 1596347 | 39.4826 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.289 | 149 | 2857292 | 35.4671 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.506 | 252 | 2288374 | 39.0833 ug/mL | 97 |
| 91) Benzo (k) fluoranthene | 15.540 | 252 | 2147817 | 37.0406 ug/mL | 93 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:03:49 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.923 | 252 | 2232122 | 38.9517 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.312 | 276 | 1881177 | 42.5992 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.352 | 278 | 2004105 | 43.7468 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.586 | 276 | 1990648 | 41.4958 ug/mL | 91 |

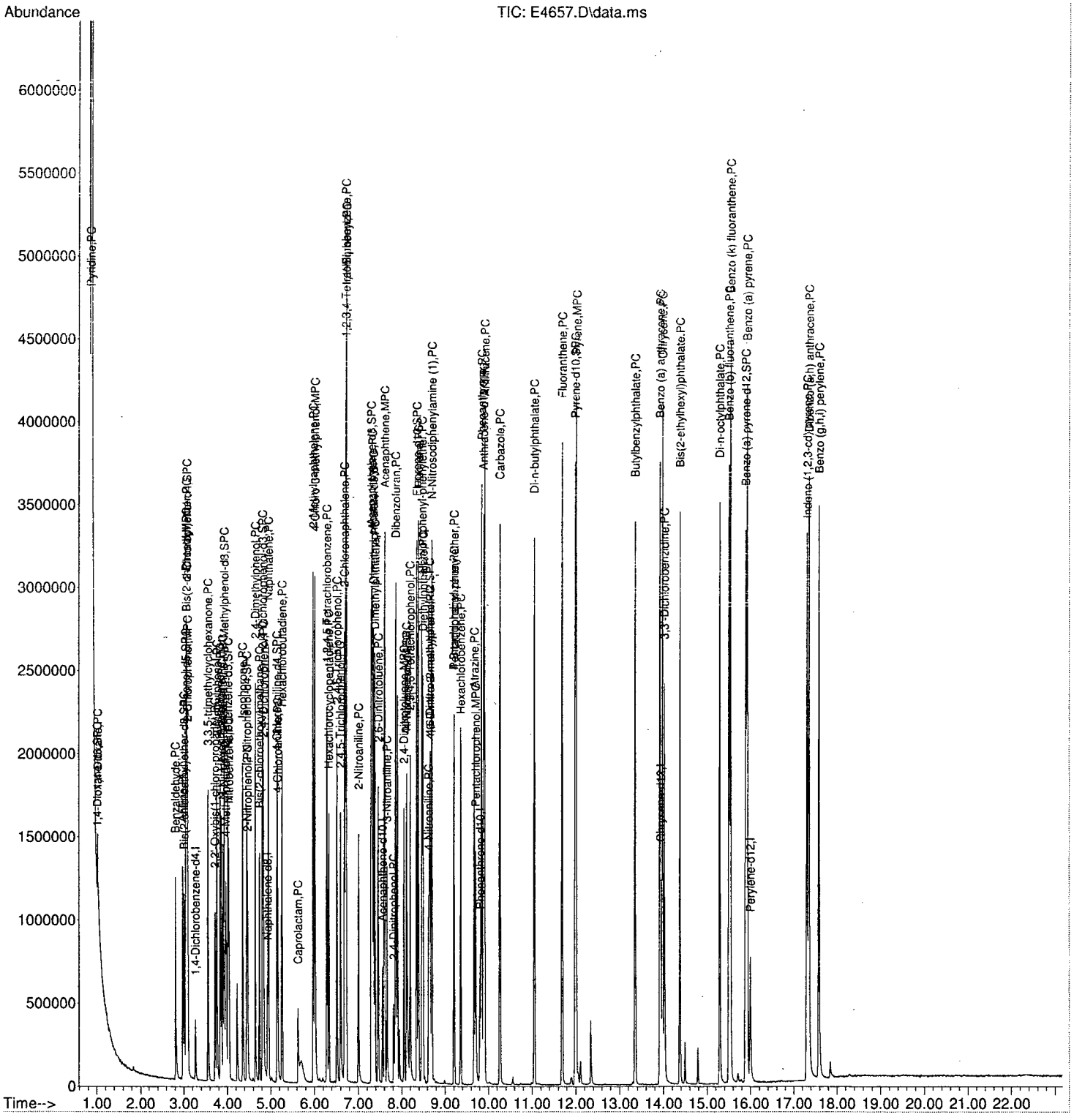
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:03:49 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

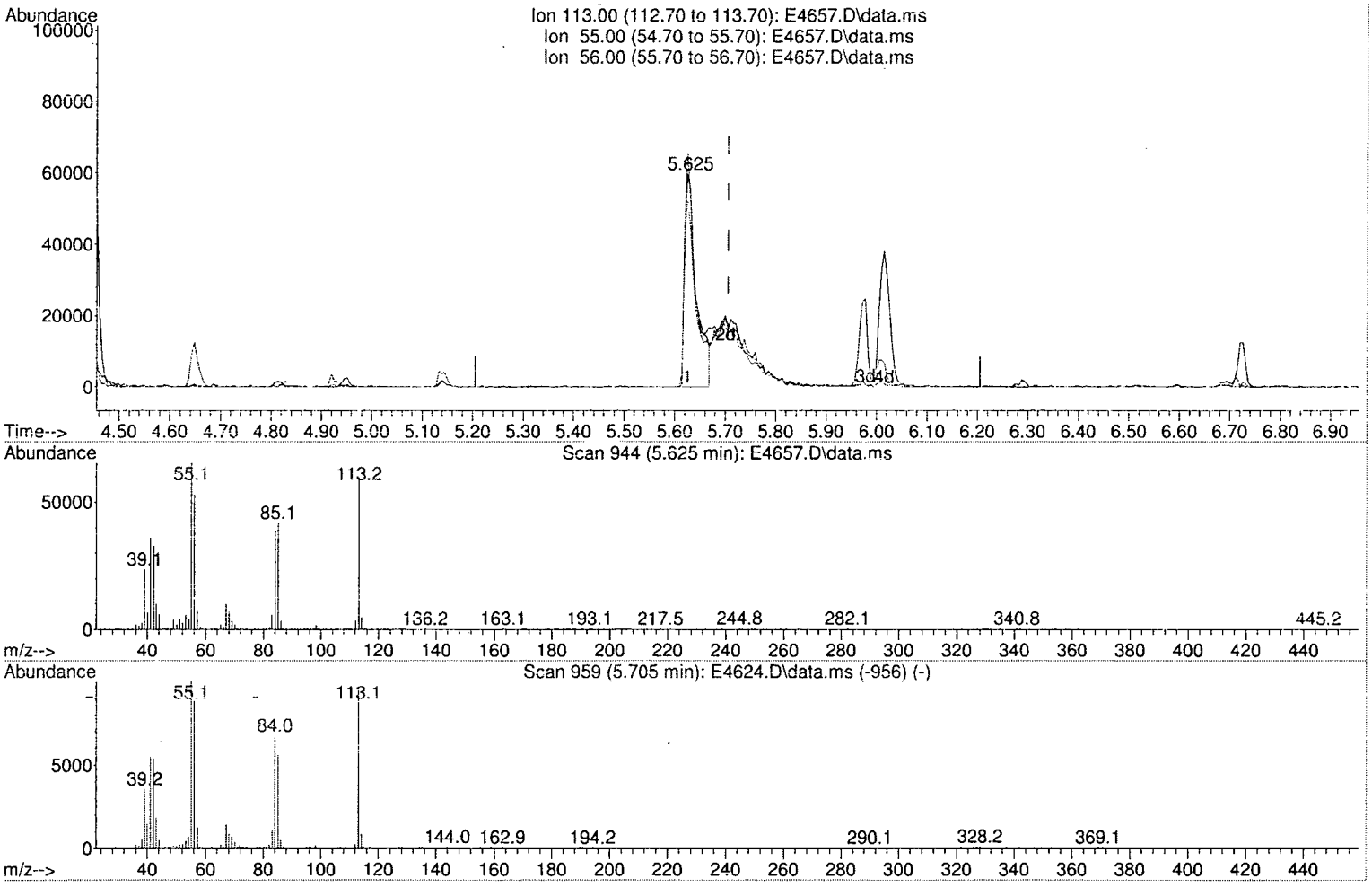


Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:02:32 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4657.D\data.ms

**(32) Caprolactam (PC)**

**5.625min (-0.080) 23.07 ug/mL**

**response 95376**

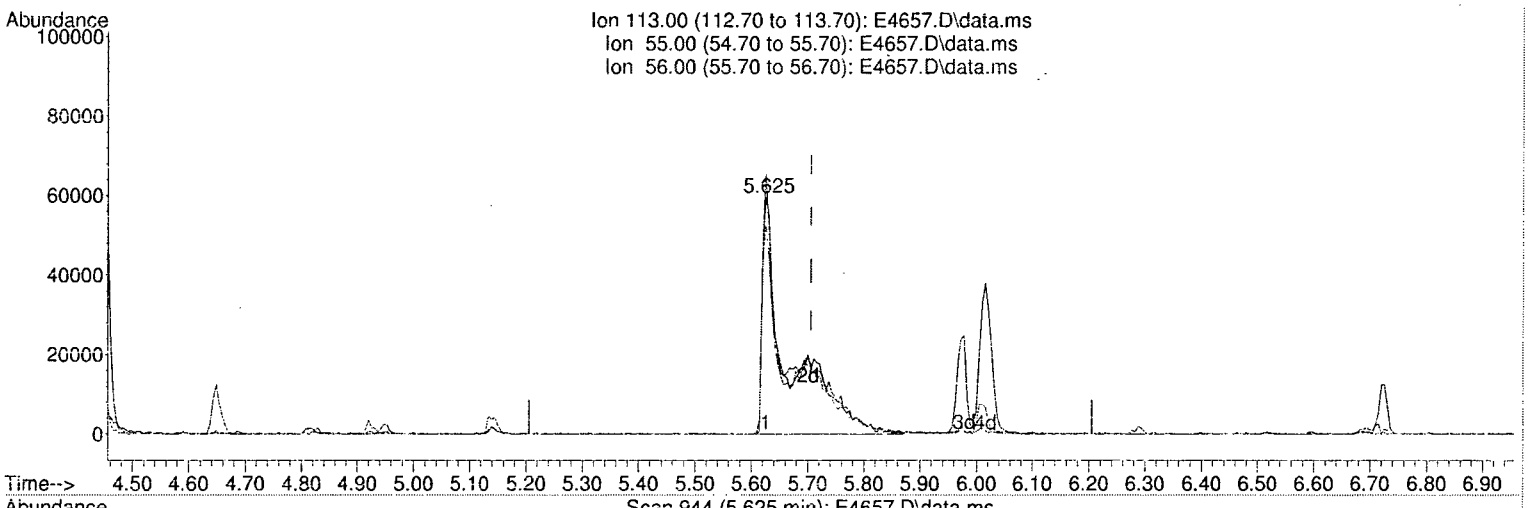
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 95.77 |
| 56.00 | 92.50 | 89.89 |
| 0.00 | 0.00 | 0.00 |

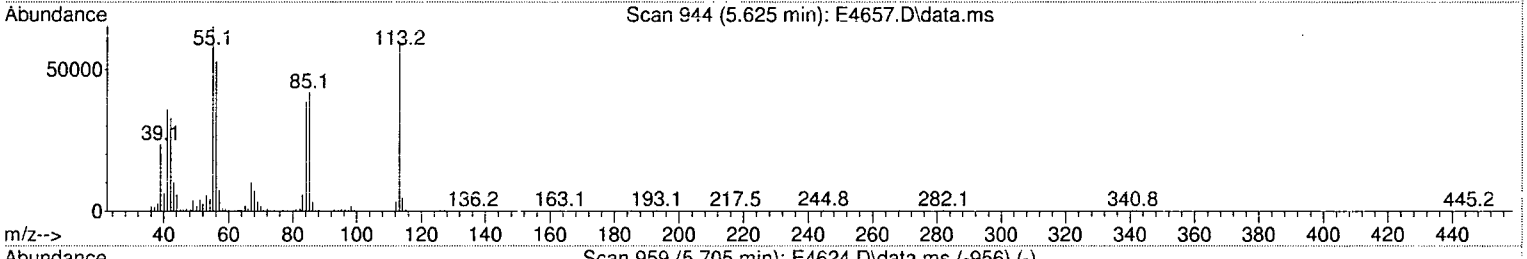
Quantitation Report (Qedit)

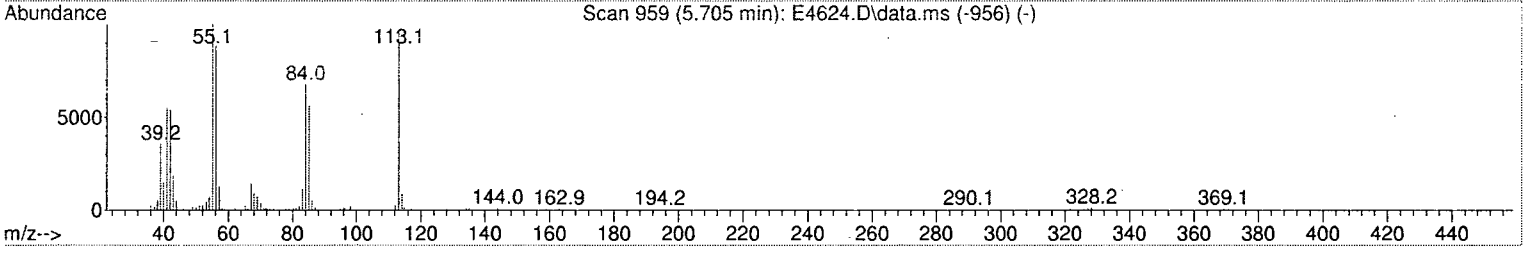
Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:02:32 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4657.D\data.ms

**(32) Caprolactam (PC)**

**5.625min (-0.080) 45.29 ug/mL m** RS 5/25

**response 187243**

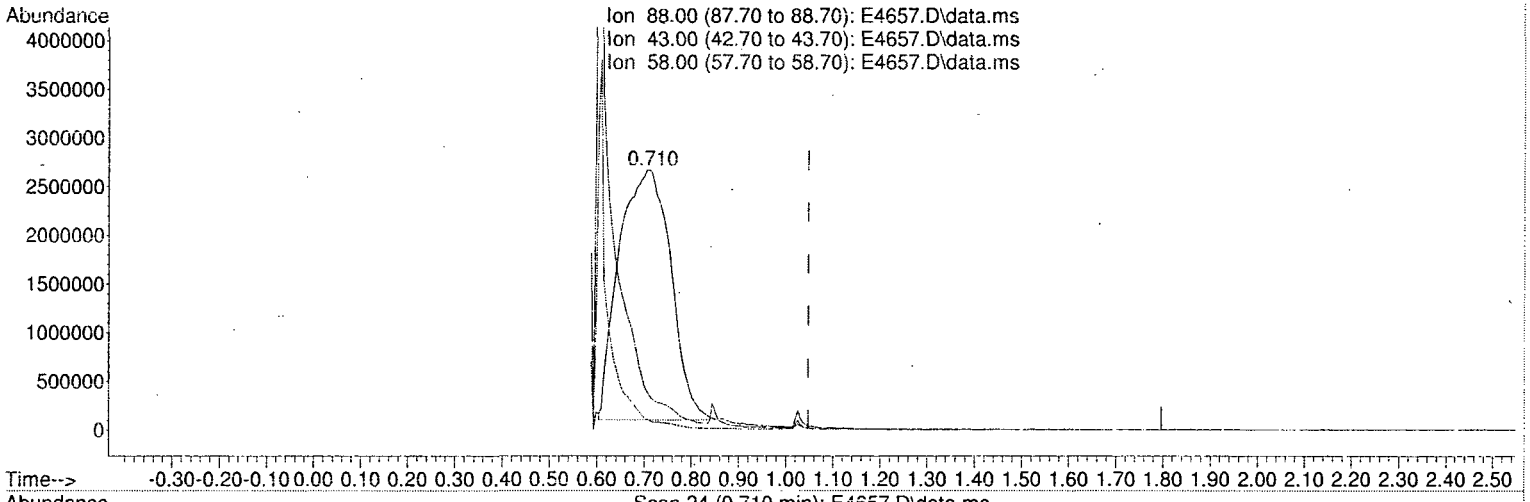
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 48.78# |
| 56.00 | 92.50 | 45.79# |
| 0.00 | 0.00 | 0.00 |

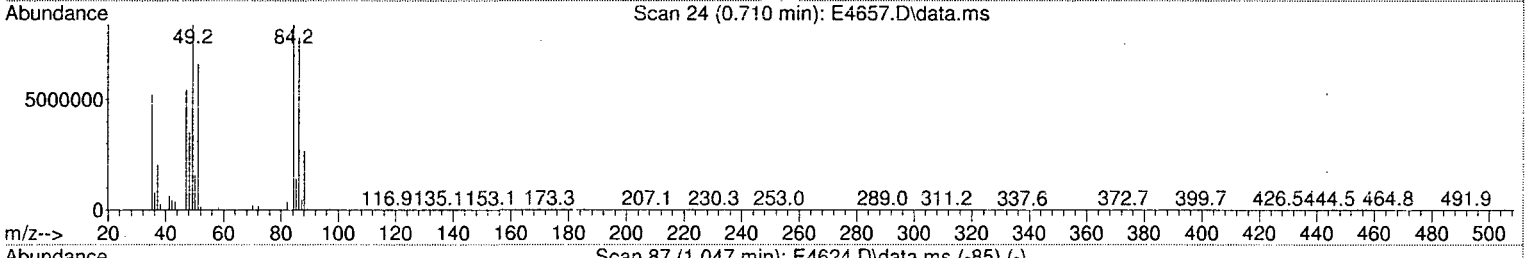
Quantitation Report (Qedit)

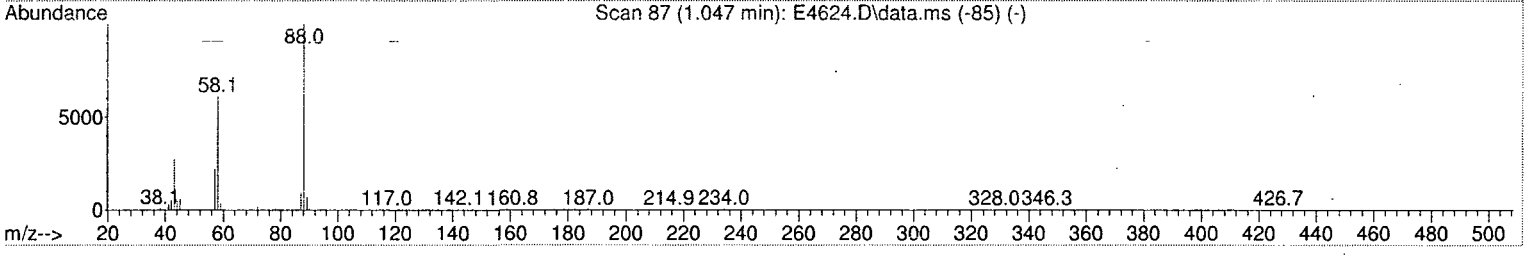
Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:02:32 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4657.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.710min (-0.337) 3590.08 ug/mL**

**response 19502822**

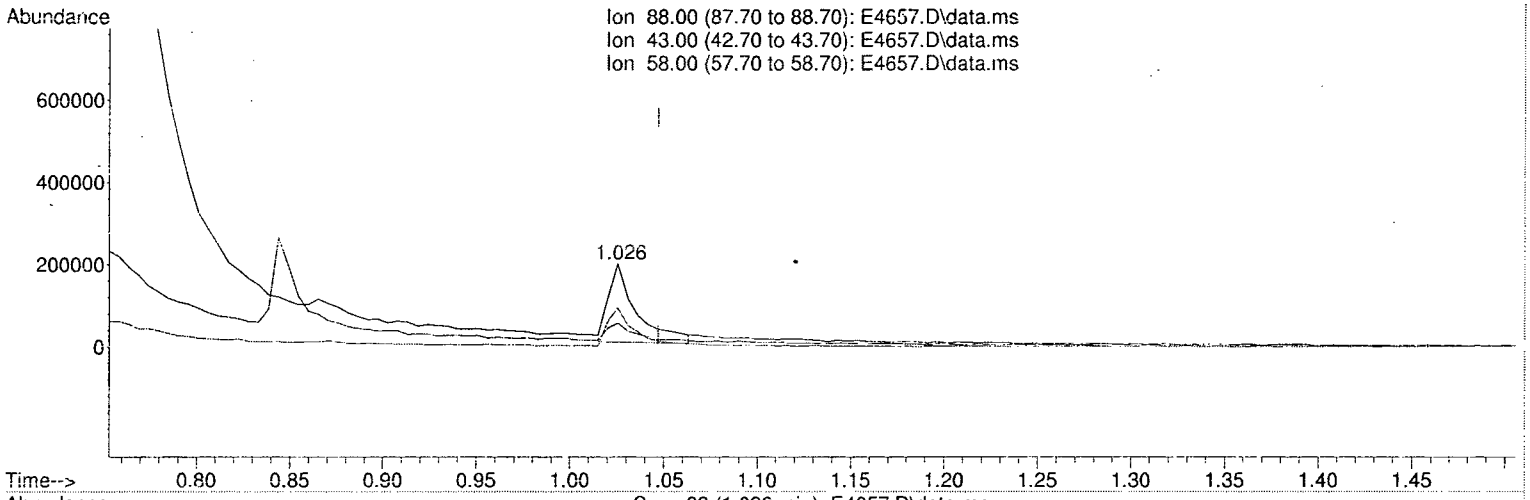
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

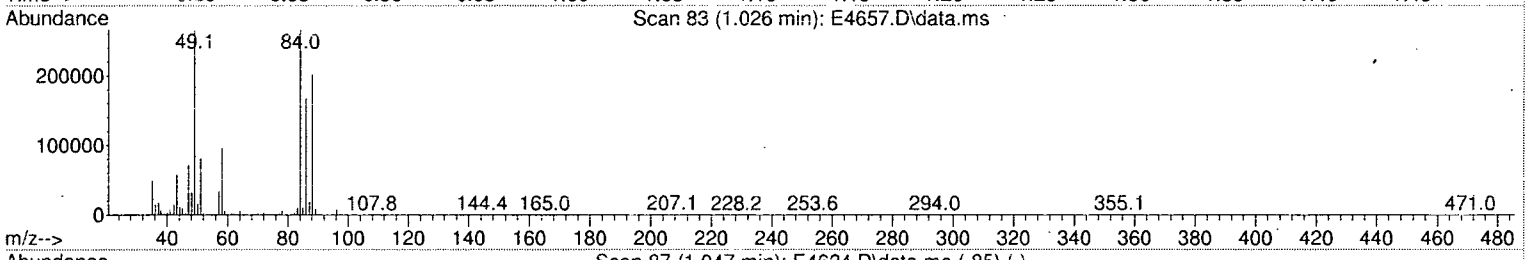
Quantitation Report (Qedit)

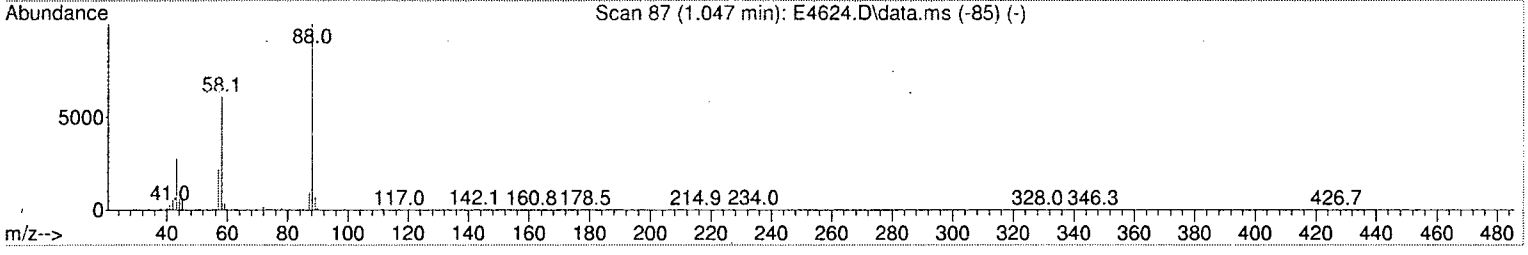
Data File : C:\msdchem\1\data\E4657.D
Acq On : 25 May 2012 12:30
Sample : 2E25002-CAL4
Misc : SSTD0409S
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:02:32 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4657.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.026min (-0.021) 36.50 ug/mL m** RS 8/21

**response 198260**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12
S. Vitkati
05/28/12

Quant Time: May 25 13:58:03 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42583 SDG: H3200

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.269 | 152 | 60777 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.925 | 136 | 258454 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 167465 | 20.0000 ug/mL | # 0.00 |
| 66) Phenanthrene-d10 | 9.808 | 188 | 306235 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.940 | 240 | 333416 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.003 | 264 | 304239 | 20.0000 ug/mL | 0.01 |
| System Monitoring Compounds | | | | | |
| 3) 1,4-Dioxane-d8 | 1.015 | 96 | 59083 | 86.26 ug/mL | -0.01 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 431.30%# | | |
| 7) Phenol-d5 | 3.050 | 99 | 1279569 | 99.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 249.38%# | | |
| 18) Bis(2-chloroethyl)ethe... | 3.007 | 67 | 564123 | 85.41 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 213.53%# | | |
| 19) 2-Chlorophenol-d4 | 3.077 | 132 | 1055059 | 87.08 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 217.70%# | | |
| 20) 4-Methylphenol-d8 | 3.932 | 113 | 958029 | 93.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 234.27%# | | |
| 22) Nitrobenzene-d5 | 4.012 | 128 | 462589 | 82.44 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 206.10%# | | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 549667 | 85.62 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 214.05%# | | |
| 36) 2,4-Dichlorophenol-d3 | 4.818 | 165 | 918000 | 84.96 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 212.40%# | | |
| 37) 4-Chloroaniline-d4 | 5.144 | 131 | 822652 | 75.00 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 187.50%# | | |
| 62) Acenaphthylene-d8 | 7.303 | 160 | 2987850 | 83.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 208.37%# | | |
| 63) 4-Nitrophenol-d4 | 8.120 | 143 | 469774 | 89.34 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 223.35%# | | |
| 64) Dimethylphthalate-d6 | 7.351 | 166 | 2327529 | 80.13 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 200.32%# | | |
| 65) Fluorene-d10 | 8.355 | 176 | 1877071 | 82.14 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 205.35%# | | |
| 78) 4,6-Dinitro-2-methylph... | 8.659 | 200 | 483529 | 88.41 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 221.02%# | | |
| 79) Anthracene-d10 | 9.893 | 188 | 3136325 | 81.45 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 203.63%# | | |
| 87) Pyrene-d10 | 11.991 | 212 | 3448819 | 84.42 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 211.05%# | | |
| 96) Benzo (a) pyrene-d12 | 15.900 | 264 | 2959617 | 85.10 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 212.75%# | | |
| Target Compounds | | | | | Qvalue |
| 2) Pyridine | 0.865 | 79 | 1806657 | 94.0213 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.025 | 88 | 345621m | 95.3534 ug/mL | |
| 5) Benzaldehyde | 2.810 | 77 | 374889 | 45.3339 ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.061 | 93 | 864477 | 84.3122 ug/mL | 95 |
| 8) Phenol | 3.061 | 94 | 1149099 | 86.7751 ug/mL# | 72 |
| 9) 2-Chlorophenol | 3.093 | 128 | 918522 | 86.7465 ug/mL | 96 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.707 | 45 | 727329 | 83.0906 ug/mL# | 31 |
| 11) Aniline | 2.975 | 93 | 975135 | 81.9837 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 986944 | 78.8597 ug/mL# | 100 |
| 13) Acetophenone | 3.830 | 105 | 1236921 | 81.5031 ug/mL | 93 |
| 14) 2-Methylphenol | 3.755 | 108 | 838784 | 83.3033 ug/mL | 93 |
| 15) Hexachloroethane | 3.862 | 117 | 376716 | 83.2014 ug/mL | 98 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:03 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.900 | 70 | 654318 | 80.4618 ug/mL | 93 |
| 17) 4-Methylphenol | 3.964 | 108 | 889507 | 83.5539 ug/mL | 97 |
| 23) Nitrobenzene | 4.039 | 77 | 976812 | 84.0065 ug/mL | 94 |
| 24) Isophorone | 4.359 | 82 | 1745067 | 81.8251 ug/mL | 95 |
| 25) 2-Nitrophenol | 4.466 | 139 | 500561 | 85.9525 ug/mL | 89 |
| 26) 2,4-Dimethylphenol | 4.653 | 107 | 1023326 | 85.7459 ug/mL | 97 |
| 27) Bis(2-chloroethoxy)met... | 4.744 | 93 | 975917 | 82.9661 ug/mL | 98 |
| 28) 2,4- Dichlorophenol | 4.829 | 162 | 789927 | 85.0367 ug/mL | 98 |
| 29) Naphthalene | 4.952 | 128 | 2655226 | 83.2875 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.155 | 127 | 767040 | 75.1305 ug/mL | 99 |
| 31) Hexachlorobutadiene | 5.257 | 225 | 480287 | 82.9365 ug/mL | 99 |
| 32) Caprolactam | 5.646 | 113 | 314745m | 85.4008 ug/mL | RS 8/21 |
| 33) 4-Chloro-3-methylphenol | 6.015 | 107 | 916095 | 87.6444 ug/mL | 91 |
| 34) 2-Methylnaphthalene | 5.978 | 142 | 1846341 | 84.4305 ug/mL | 100 |
| 39) Hexachlorocyclopentadiene | 6.336 | 237 | 562273 | 87.7941 ug/mL | 97 |
| 40) 2,4,6-Trichlorophenol | 6.523 | 196 | 579889 | 85.3822 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.597 | 196 | 605410 | 85.9957 ug/mL | 99 |
| 42) 1,1'-Biphenyl | 6.726 | 154 | 2298548 | 84.2493 ug/mL | 96 |
| 43) 2-Chloronaphthalene | 6.694 | 162 | 1780933 | 82.9021 ug/mL | 97 |
| 44) 1,2,3,4-Tetrachloroben... | 6.720 | 216 | 839209 | 84.3260 ug/mL | 96 |
| 45) 2-Nitroaniline | 7.003 | 65 | 525500 | 85.2407 ug/mL | 89 |
| 46) Acenaphthylene | 7.319 | 152 | 2908221 | 82.2324 ug/mL | 100 |
| 47) Dimethylphthalate | 7.388 | 163 | 2220394 | 80.4386 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.463 | 165 | 486038 | 84.2343 ug/mL | 94 |
| 49) Acenaphthene | 7.607 | 153 | 1810558 | 81.6650 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.661 | 138 | 396331 | 67.3610 ug/mL | 87 |
| 51) 2,4-Dinitrophenol | 7.815 | 184 | 220668 | 98.1084 ug/mL | 89 |
| 52) Dibenzofuran | 7.869 | 168 | 2495505 | 79.4732 ug/mL | 97 |
| 53) Pentachlorobenzene | 8.208 | 250 | 538590 | 81.7147 ug/mL | 97 |
| 54) 2,4-Dinitrotoluene | 8.056 | 165 | 666262 | 83.2025 ug/mL | 86 |
| 55) 4-Nitrophenol | 8.131 | 109 | 358723 | 93.2844 ug/mL# | 88 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.200 | 232 | 473249 | 83.7802 ug/mL | 93 |
| 57) Fluorene | 8.392 | 166 | 2207758 | 80.8793 ug/mL | 100 |
| 58) 4-Chlorophenyl-phenyle... | 8.473 | 204 | 1015271 | 81.5158 ug/mL | 93 |
| 59) Diethylphthalate | 8.499 | 149 | 2251746 | 78.0238 ug/mL | 99 |
| 60) 4-Nitroaniline | 8.636 | 138 | 364678 | 59.6733 ug/mL# | 82 |
| 61) 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 791529 | 82.5207 ug/mL | 98 |
| 67) 4,6-Dinitro-2-methylph... | 8.670 | 198 | 423004 | 87.8618 ug/mL | 97 |
| 68) N-Nitrosodiphenylamine... | 8.705 | 169 | 1839167 | 83.5129 ug/mL | 96 |
| 69) 4-Bromophenyl-phenylether | 9.208 | 248 | 559446 | 83.9973 ug/mL | 93 |
| 70) Hexachlorobenzene | 9.356 | 284 | 567489 | 83.1349 ug/mL | 88 |
| 71) Atrazine | 9.682 | 200 | 672281 | 83.5031 ug/mL | 95 |
| 72) Pentachlorophenol | 9.711 | 266 | 360905 | 95.8889 ug/mL | 98 |
| 73) Phenanthrene | 9.848 | 178 | 3096375 | 80.5682 ug/mL | 97 |
| 74) Anthracene | 9.916 | 178 | 3220319 | 80.6483 ug/mL | 98 |
| 75) Carbazole | 10.265 | 167 | 3072242 | 79.8064 ug/mL | 99 |
| 76) Di-n-butylphthalate | 11.054 | 149 | 3943381 | 80.3387 ug/mL | 99 |
| 77) Fluoranthene | 11.694 | 202 | 3546692 | 80.3128 ug/mL | 97 |
| 81) Pyrene | 12.020 | 202 | 3741704 | 82.7867 ug/mL | 97 |
| 82) Butylbenzylphthalate | 13.357 | 149 | 1870145 | 85.4404 ug/mL | 89 |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 823467 | 62.3623 ug/mL | 98 |
| 84) Benzo (a) anthracene | 13.923 | 228 | 3384608 | 83.7616 ug/mL | 100 |
| 85) Chrysene | 13.980 | 228 | 3241797 | 81.9641 ug/mL | 99 |
| 86) Bis(2-ethylhexyl)phtha... | 14.374 | 149 | 2589067 | 84.8299 ug/mL | 97 |
| 89) Di-n-octylphthalate | 15.294 | 149 | 4493624 | 90.2542 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.512 | 252 | 3585173 | 89.0861 ug/mL | 96 |
| 91) Benzo (k) fluoranthene | 15.546 | 252 | 3298511 | 83.2065 ug/mL | 93 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:03 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.935 | 252 | 3436006 | 86.3440 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.318 | 276 | 2809514 | 87.7965 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.363 | 278 | 2984488 | 86.9369 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.592 | 276 | 2899929 | 80.6259 ug/mL | 91 |

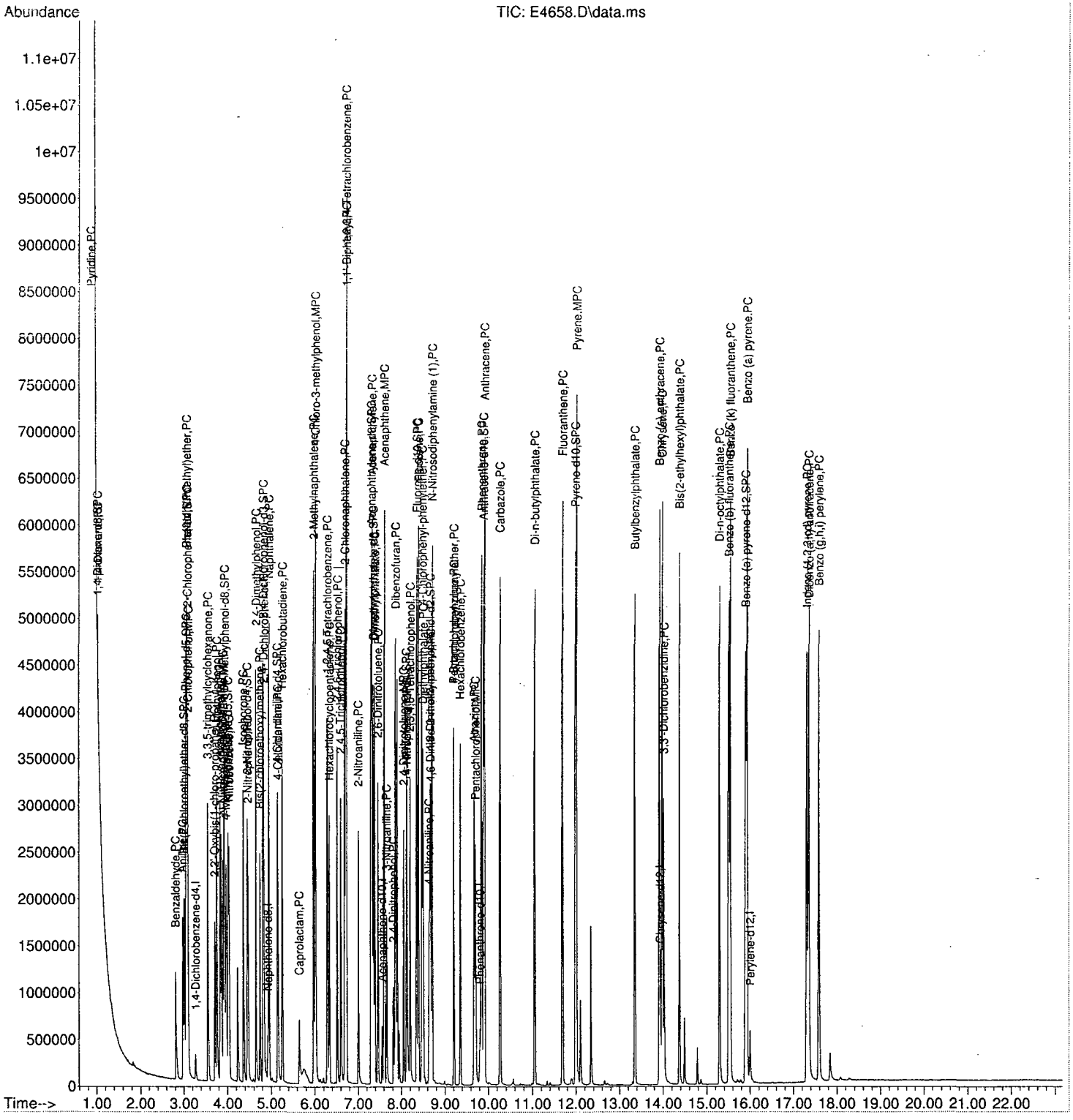
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:03 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration

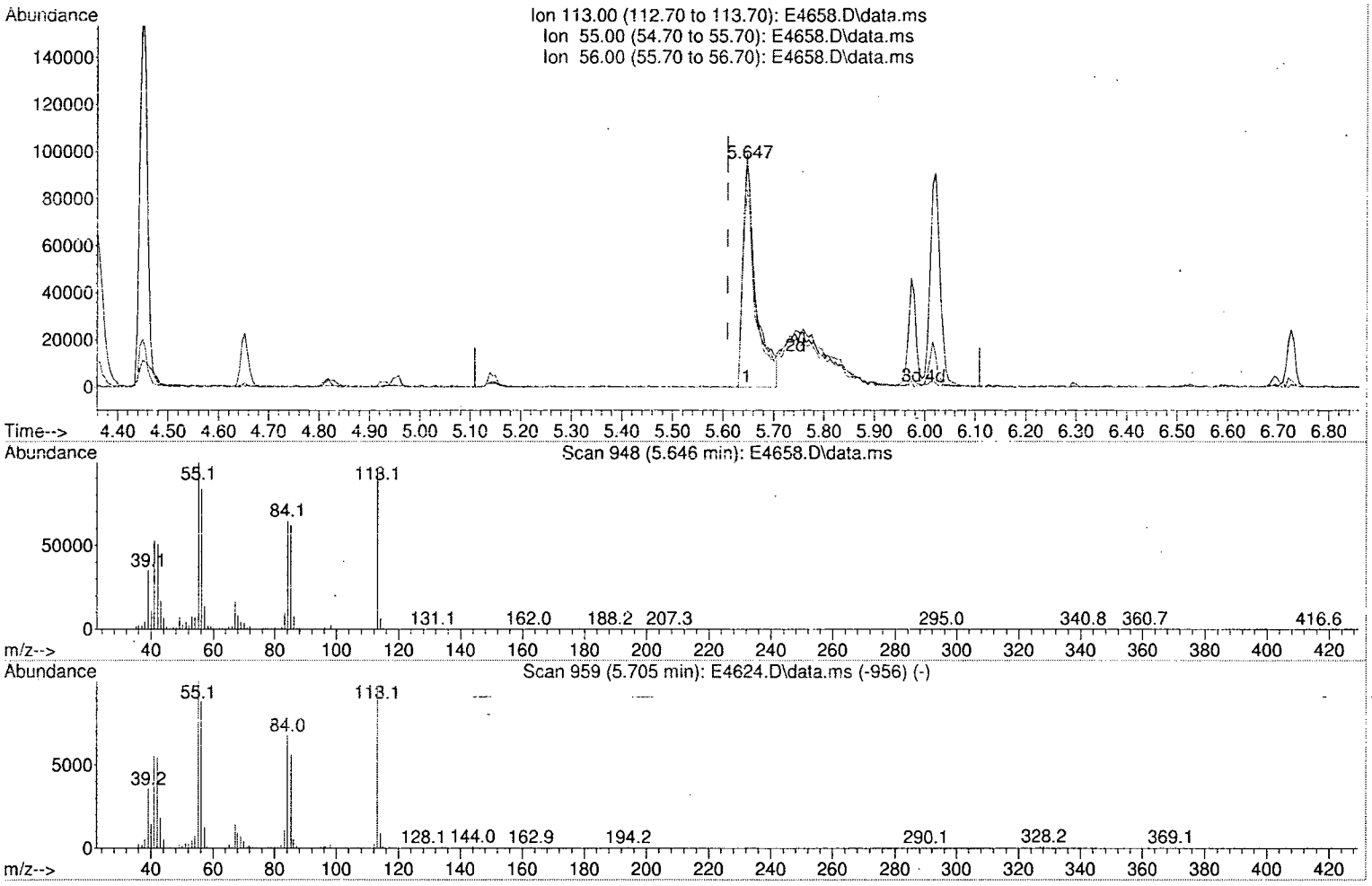


Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:56:46 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration




TIC: E4658.D\data.ms

**(32) Caprolactam (PC)**

**5.646min (+ 0.038) 46.57 ug/mL**

**response 171651**

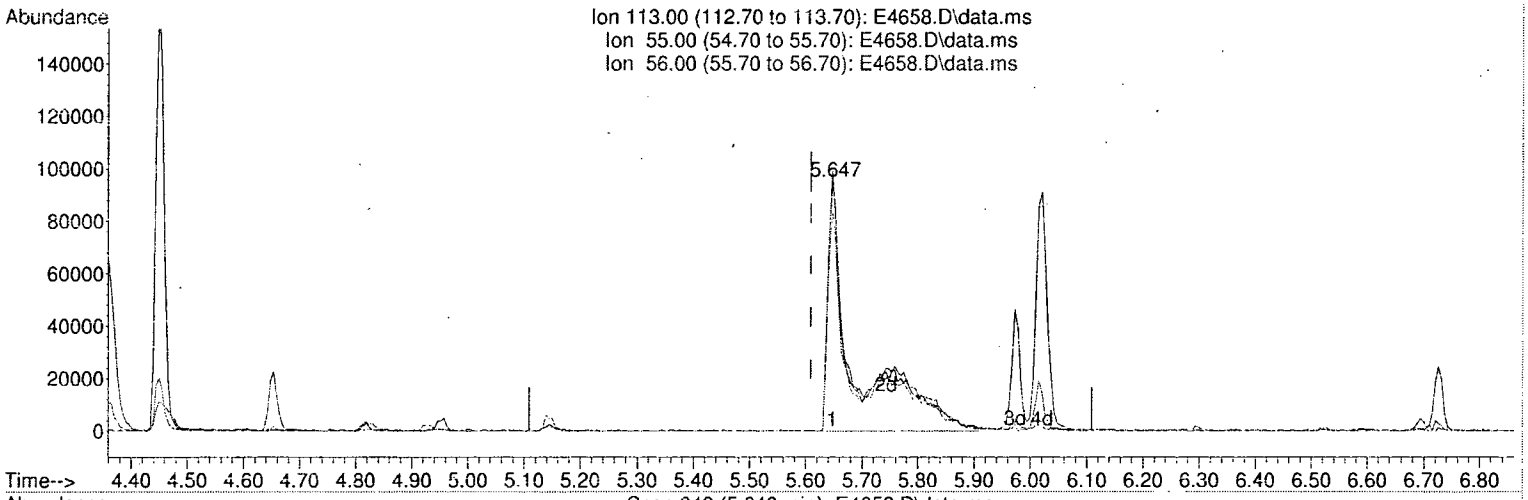
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 98.58 |
| 56.00 | 92.50 | 86.74 |
| 0.00 | 0.00 | 0.00 |

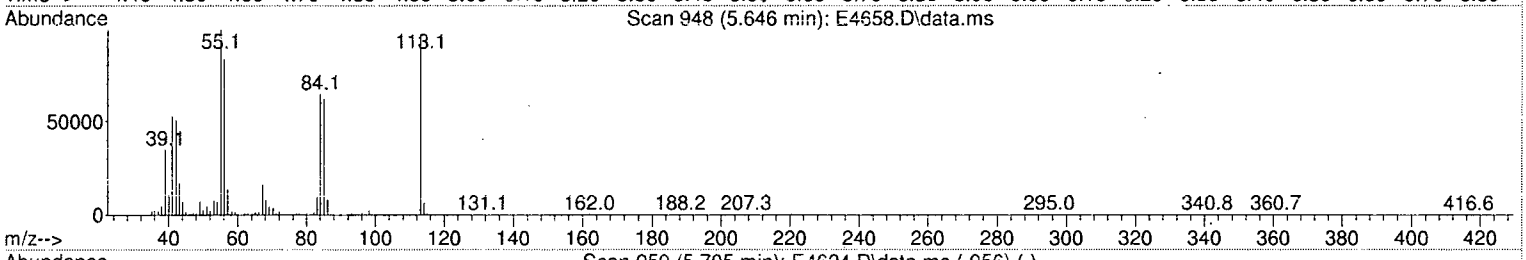
Quantitation Report (Qedit)

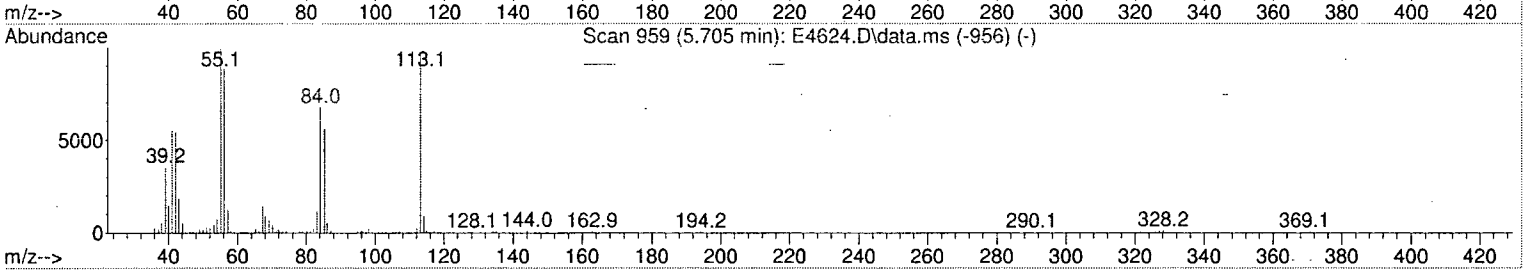
Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:56:46 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration




TIC: E4658.D\data.ms

**(32) Caprolactam (PC)**

**5.646min (+ 0.038) 85.40 ug/mL m** RS

**response 314745**

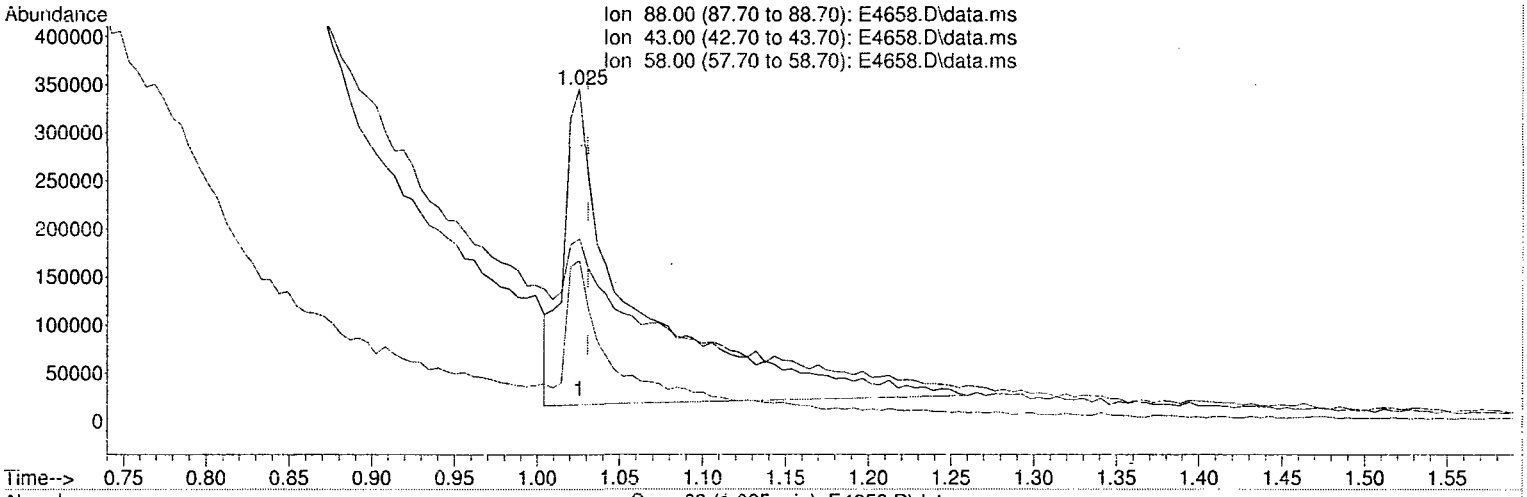
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 53.76# |
| 56.00 | 92.50 | 47.30# |
| 0.00 | 0.00 | 0.00 |

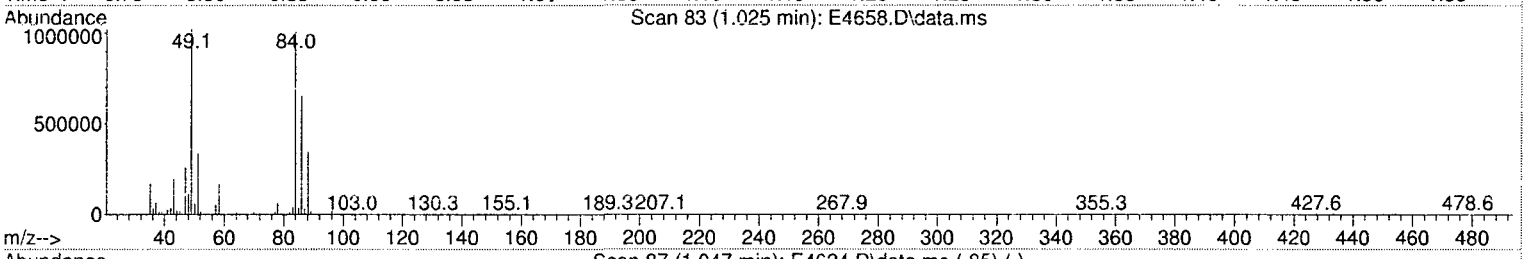
Quantitation Report (Qedit)

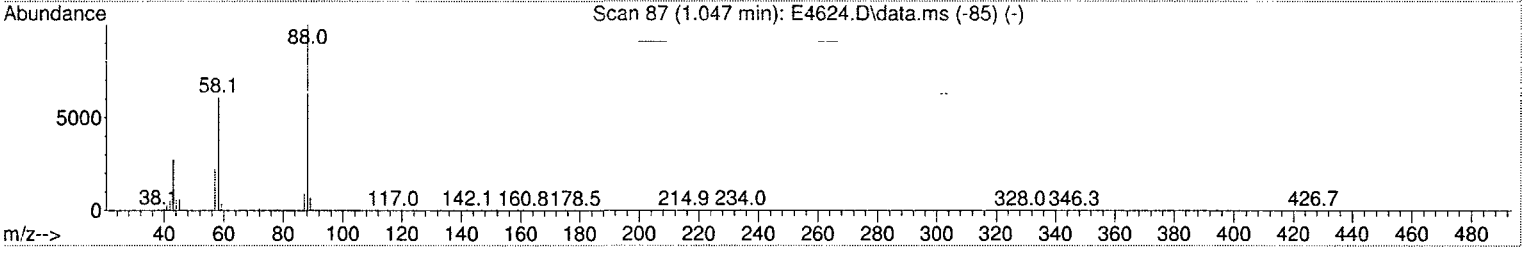
Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:56:46 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration




TIC: E4658.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.025min (-0.005) 267.30 ug/mL**

**response 968856**

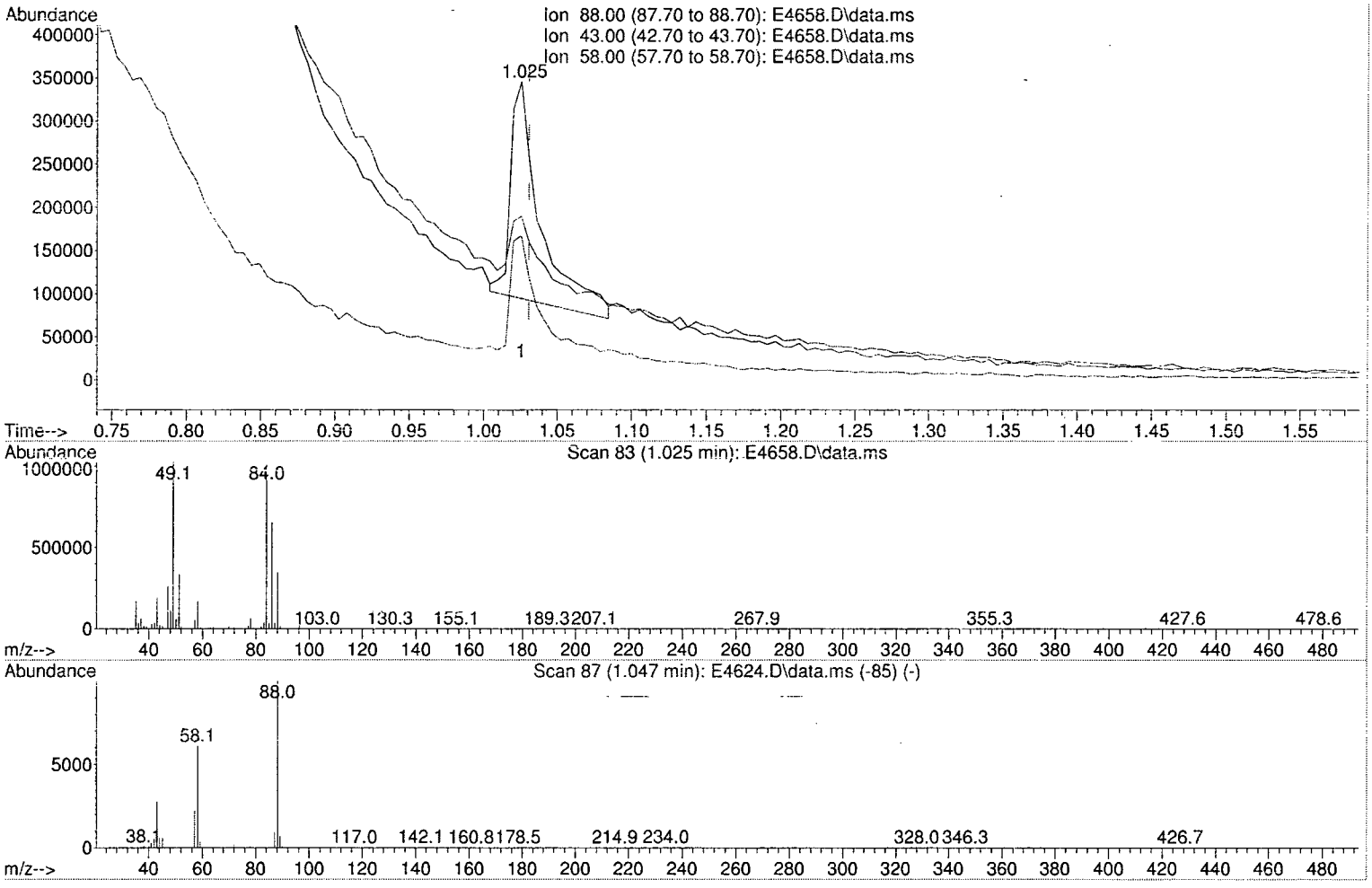
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 97.96# |
| 58.00 | 46.00 | 31.77# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4658.D
Acq On : 25 May 2012 13:02
Sample : 2E25002-CAL5
Misc : SSTD0809S
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:56:46 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:05:17 2012
Response via : Initial Calibration




TIC: E4658.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.025min (-0.005) 95.35 ug/mL m** RS 8/2

**response 345621**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 274.60# |
| 58.00 | 46.00 | 89.07# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vitkati
05/28/12

Quant Time: May 25 13:58:54 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42583 SDG: H3200

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.269 | 152 | 88923 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.925 | 136 | 369298 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 246938 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.802 | 188 | 452294 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.928 | 240 | 495071 | 20.0000 ug/mL | -0.01 |
| 88) Perylene-d12 | 15.992 | 264 | 469263 | 20.0000 ug/mL | -0.01 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.025 | 96 | 1790m | 1.75 ug/mL | 0.01 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery | = 8.75%# | |
| 7) Phenol-d5 | 3.050 | 99 | 72969 | 3.66 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery | = 9.15%# | |
| 18) Bis(2-chloroethyl)ethe... | 3.018 | 67 | 48364 | 4.92 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery | = 12.30%# | |
| 19) 2-Chlorophenol-d4 | 3.082 | 132 | 81306 | 4.49 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery | = 11.23%# | |
| 20) 4-Methylphenol-d8 | 3.932 | 113 | 69535 | 4.46 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery | = 11.15%# | |
| 22) Nitrobenzene-d5 | 4.017 | 128 | 43056 | 5.33 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery | = 13.33%# | |
| 35) 2-Nitrophenol-d4 | 4.455 | 143 | 44665 | 4.79 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery | = 11.98%# | |
| 36) 2,4-Dichlorophenol-d3 | 4.824 | 165 | 70671 | 4.51 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery | = 11.27%# | |
| 37) 4-Chloroaniline-d4 | 5.150 | 131 | 72726 | 4.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery | = 11.77% | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 270753 | 5.07 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery | = 12.68%# | |
| 63) 4-Nitrophenol-d4 | 8.131 | 143 | 28420 | 3.56 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery | = 8.90%# | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 229812 | 5.36 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery | = 13.40%# | |
| 65) Fluorene-d10 | 8.344 | 176 | 176576 | 5.21 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery | = 13.03%# | |
| 78) 4,6-Dinitro-2-methylph... | 8.642 | 200 | 28111 | 3.39 ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery | = 8.48%# | |
| 79) Anthracene-d10 | 9.882 | 188 | 299498 | 5.24 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery | = 13.10%# | |
| 87) Pyrene-d10 | 11.980 | 212 | 336526 | 5.47 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery | = 13.67%# | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 307897 | 5.65 ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery | = 14.13%# | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.871 | 79 | 129587 | 4.4158 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.031 | 88 | 5599m | 1.0074 ug/mL | |
| 5) Benzaldehyde | 2.820 | 77 | 63403 | 5.8769 ug/mL | 94 |
| 6) Bis(2-chloroethyl)ether | 3.066 | 93 | 73323 | 4.8227 ug/mL | 91 |
| 8) Phenol | 3.066 | 94 | 92153 | 4.6577 ug/mL# | 52 |
| 9) 2-Chlorophenol | 3.098 | 128 | 76051 | 4.8076 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.713 | 45 | 65337 | 5.0528 ug/mL# | 31 |
| 11) Aniline | 3.066 | 93 | 73323 | 4.1874 ug/mL# | 100 |
| 13) Acetophenone | 3.835 | 105 | 110038 | 4.9325 ug/mL | 92 |
| 14) 2-Methylphenol | 3.755 | 108 | 71439 | 4.7997 ug/mL | 97 |
| 15) Hexachloroethane | 3.868 | 117 | 34803 | 5.2016 ug/mL | 96 |
| 16) N-Nitroso-di-n-propyla... | 3.900 | 70 | 57497 | 4.8255 ug/mL | 80 |

RS 8/21

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:54 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 17) | 4-Methylphenol | 3.974 | 108 | 76428 | 4.8529 ug/mL | 98 |
| 23) | Nitrobenzene | 4.038 | 77 | 91319 | 5.4283 ug/mL | 99 |
| 24) | Isophorone | 4.359 | 82 | 154245 | 5.0329 ug/mL | 97 |
| 25) | 2-Nitrophenol | 4.471 | 139 | 44509 | 5.2511 ug/mL | 87 |
| 26) | 2,4-Dimethylphenol | 4.653 | 107 | 82973 | 4.7798 ug/mL | 96 |
| 27) | Bis(2-chloroethoxy)met... | 4.744 | 93 | 88113 | 5.1943 ug/mL | 98 |
| 28) | 2,4- Dichlorophenol | 4.840 | 162 | 66729 | 4.9495 ug/mL | 94 |
| 29) | Naphthalene | 4.952 | 128 | 239801 | 5.2107 ug/mL | 99 |
| 30) | 4-Chloroaniline | 5.160 | 127 | 61088 | 4.2523 ug/mL | 93 |
| 31) | Hexachlorobutadiene | 5.257 | 225 | 43819 | 5.2474 ug/mL | 99 |
| 32) | Caprolactam | 5.609 | 113 | 24706 | 4.6136 ug/mL# | 81 |
| 33) | 4-Chloro-3-methylphenol | 6.015 | 107 | 76133 | 4.9786 ug/mL | 90 |
| 34) | 2-Methylnaphthalene | 5.972 | 142 | 157808 | 4.9814 ug/mL | 92 |
| 39) | Hexachlorocyclopentadiene | 6.330 | 237 | 38094 | 3.9379 ug/mL | 99 |
| 40) | 2,4,6-Trichlorophenol | 6.523 | 196 | 51370 | 5.0446 ug/mL | 98 |
| 41) | 2,4,5-Trichlorophenol | 6.603 | 196 | 53046 | 5.0160 ug/mL | 94 |
| 42) | 1,1'-Biphenyl | 6.720 | 154 | 206757 | 5.0720 ug/mL | 94 |
| 43) | 2-Chloronaphthalene | 6.694 | 162 | 160033 | 5.0066 ug/mL | 96 |
| 44) | 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 74822 | 5.0307 ug/mL | 95 |
| 45) | 2-Nitroaniline | 7.003 | 65 | 40491 | 4.3824 ug/mL | 91 |
| 46) | Acenaphthylene | 7.313 | 152 | 246946 | 4.7026 ug/mL | 99 |
| 47) | Dimethylphthalate | 7.377 | 163 | 206175 | 5.0584 ug/mL | 99 |
| 48) | 2,6-Dinitrotoluene | 7.458 | 165 | 38678 | 4.4865 ug/mL | 97 |
| 49) | Acenaphthene | 7.602 | 153 | 166198 | 5.0574 ug/mL | 99 |
| 50) | 3-Nitroaniline | 7.666 | 138 | 35228 | 4.2274 ug/mL | 97 |
| 52) | Dibenzofuran | 7.864 | 168 | 238812 | 5.1662 ug/mL | 97 |
| 53) | Pentachlorobenzene | 9.202 | 250 | 49939 | 5.1109 ug/mL | 97 |
| 54) | 2,4-Dinitrotoluene | 8.051 | 165 | 54939 | 4.6066 ug/mL | 84 |
| 55) | 4-Nitrophenol | 8.141 | 109 | 18985 | 3.2146 ug/mL# | 76 |
| 56) | 2,3,4,6-Tetrachlorophenol | 8.200 | 232 | 40344 | 4.7870 ug/mL | 95 |
| 57) | Fluorene | 8.387 | 166 | 209671 | 5.1948 ug/mL | 98 |
| 58) | 4-Chlorophenyl-phenyle... | 8.467 | 204 | 93242 | 5.0531 ug/mL | 92 |
| 59) | Diethylphthalate | 8.489 | 149 | 220213 | 5.2069 ug/mL | 99 |
| 60) | 4-Nitroaniline | 8.619 | 138 | 42865 | 5.0794 ug/mL | 95 |
| 61) | 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 73212 | 5.1358 ug/mL | 96 |
| 67) | 4,6-Dinitro-2-methylph... | 8.653 | 198 | 26807 | 3.6796 ug/mL | 88 |
| 68) | N-Nitrosodiphenylamine... | 8.687 | 169 | 163481 | 4.9716 ug/mL | 98 |
| 69) | 4-Bromophenyl-phenylether | 9.202 | 248 | 49033 | 4.9231 ug/mL | 89 |
| 70) | Hexachlorobenzene | 9.350 | 284 | 49438 | 4.8561 ug/mL | 83 |
| 71) | Atrazine | 9.659 | 200 | 57363 | 4.7719 ug/mL | 95 |
| 72) | Pentachlorophenol | 9.705 | 266 | 19483 | 3.3390 ug/mL | 97 |
| 73) | Phenanthrene | 9.836 | 178 | 294816 | 5.1847 ug/mL | 98 |
| 74) | Anthracene | 9.905 | 178 | 297817 | 5.0397 ug/mL | 100 |
| 75) | Carbazole | 10.259 | 167 | 280667 | 4.9394 ug/mL | 99 |
| 76) | Di-n-butylphthalate | 11.048 | 149 | 357137 | 4.9211 ug/mL | 99 |
| 77) | Fluoranthene | 11.688 | 202 | 321110 | 4.9184 ug/mL | 96 |
| 81) | Pyrene | 12.008 | 202 | 351167 | 5.1875 ug/mL | 98 |
| 82) | Butylbenzylphthalate | 13.345 | 149 | 158957 | 4.8091 ug/mL | 90 |
| 83) | 3,3'-Dichlorobenzidine | 14.020 | 252 | 90403 | 4.8798 ug/mL | 99 |
| 84) | Benzo (a) anthracene | 13.911 | 228 | 316931 | 5.2209 ug/mL | 98 |
| 85) | Chrysene | 13.968 | 228 | 324559 | 5.4928 ug/mL | 99 |
| 86) | Bis(2-ethylhexyl)phtha... | 14.369 | 149 | 233363 | 5.0728 ug/mL | 98 |
| 89) | Di-n-octylphthalate | 15.283 | 149 | 433852 | 5.4741 ug/mL | 100 |
| 90) | Benzo (b) fluoranthene | 15.494 | 252 | 311666 | 4.8823 ug/mL | 94 |
| 91) | Benzo (k) fluoranthene | 15.534 | 252 | 382952 | 6.2009 ug/mL | 94 |
| 92) | Benzo (a) pyrene | 15.912 | 252 | 338561 | 5.4086 ug/mL | 96 |
| 93) | Indeno (1,2,3-cd) pyrene | 17.300 | 276 | 228845 | 4.5262 ug/mL | 92 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:54 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 94) Dibenzo (a,h) anthracene | 17.346 | 278 | 235801 | 4.3588 ug/mL | 92 |
| 95) Benzo (g,h,i) perylene | 17.569 | 276 | 266725 | 4.7984 ug/mL | 90 |

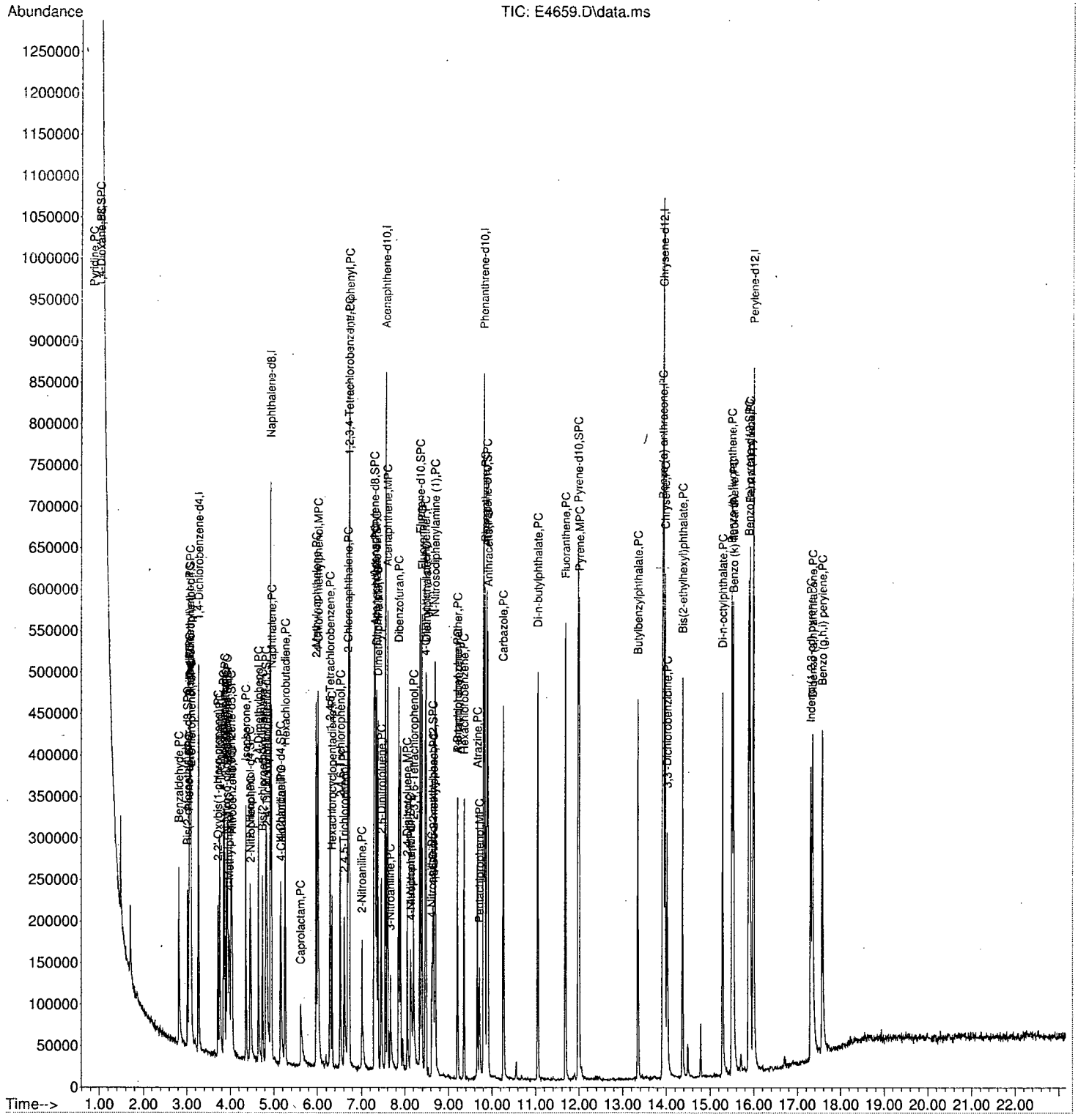
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:54 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration

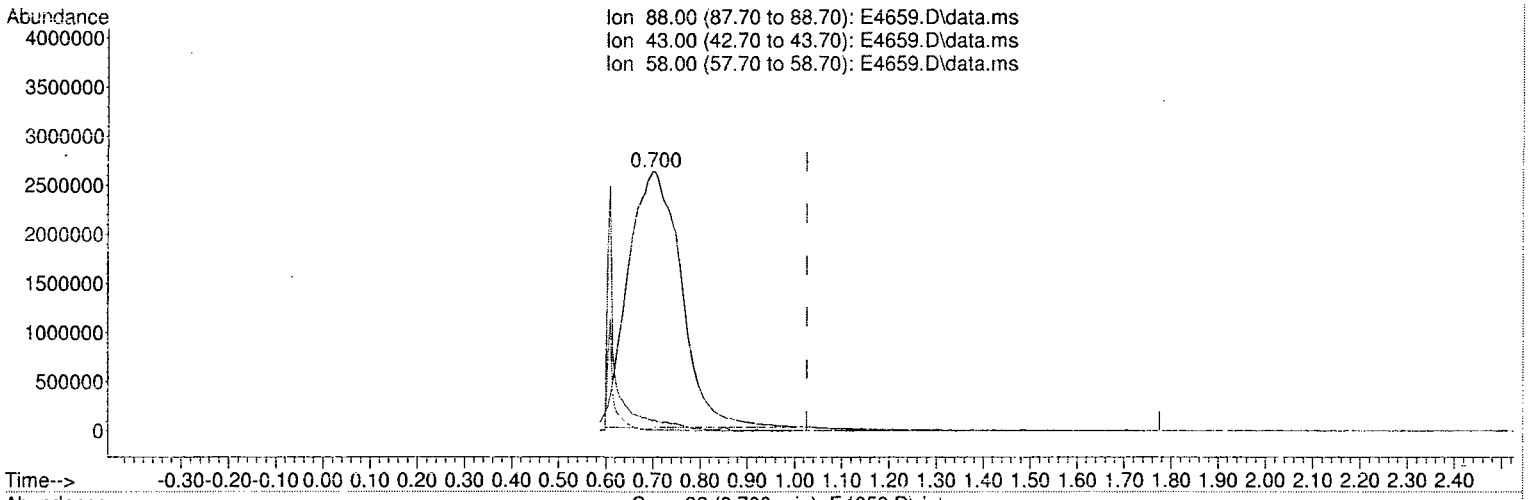


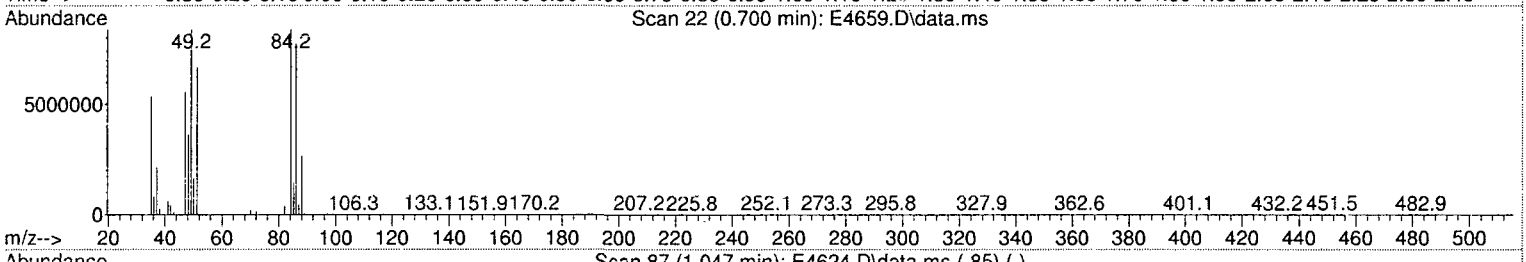
Quantitation Report (Qedit)

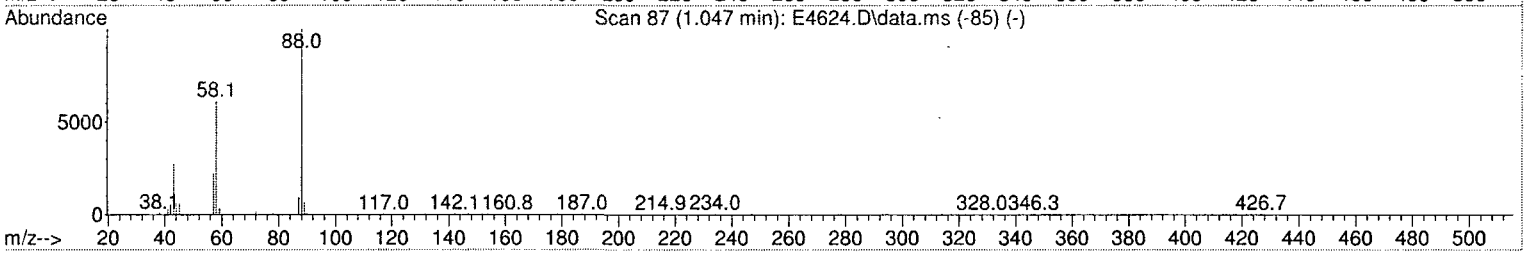
Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:23 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration




TIC: E4659.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.700min (-0.326) 3642.21 ug/mL**

**response 20242123**

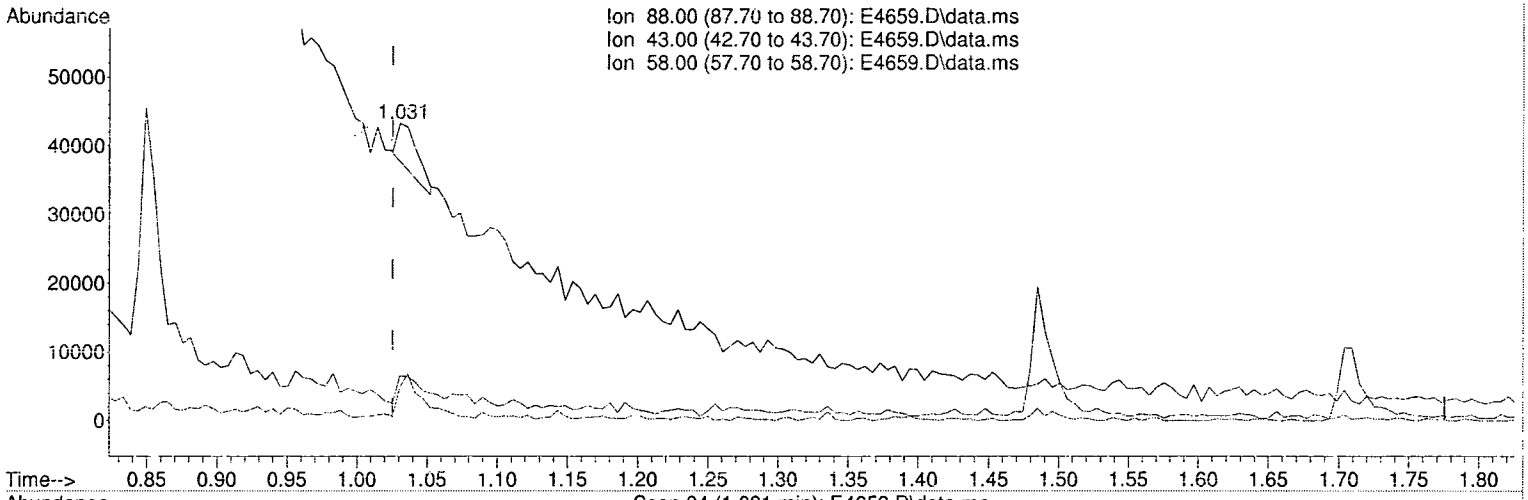
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

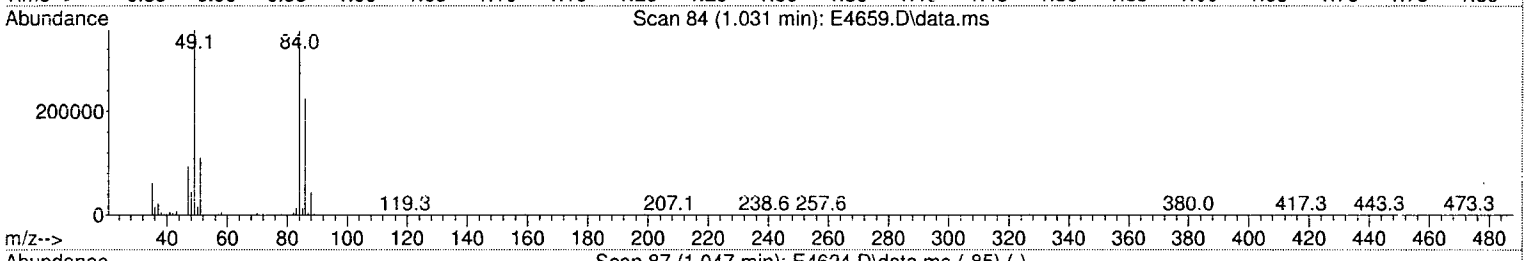
Quantitation Report (Qedit)

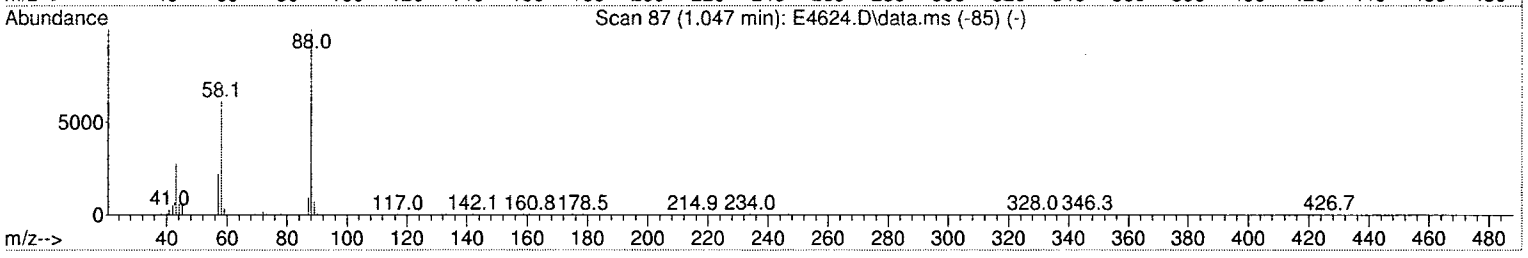
Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:23 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration




TIC: E4659.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.031min (+ 0.005) 1.01 ug/mL m** RS RW

**response 5599**

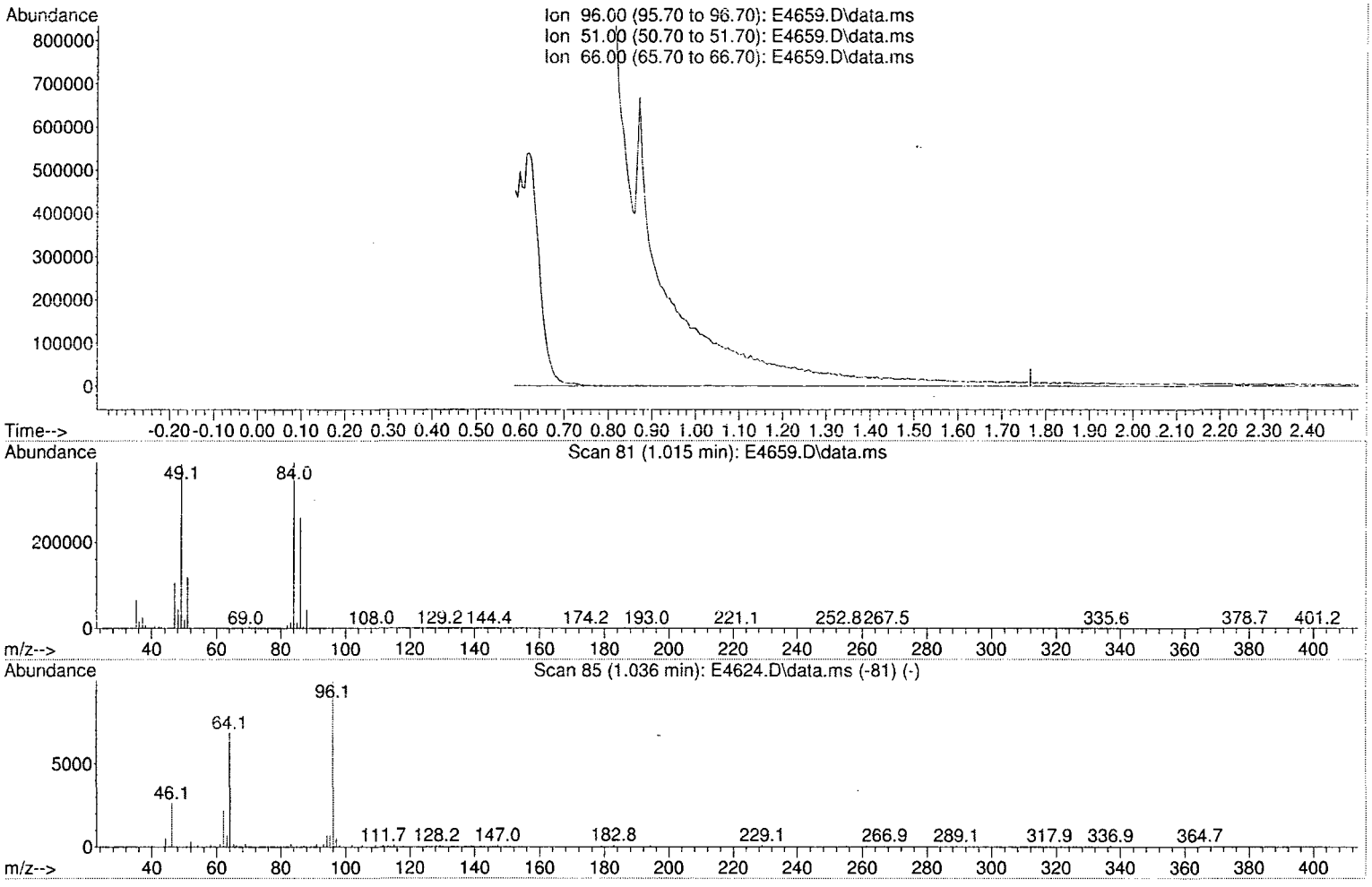
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:23 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration




TIC: E4659.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.015min (-1.015) 0.00 ug/mL**

**response 0**

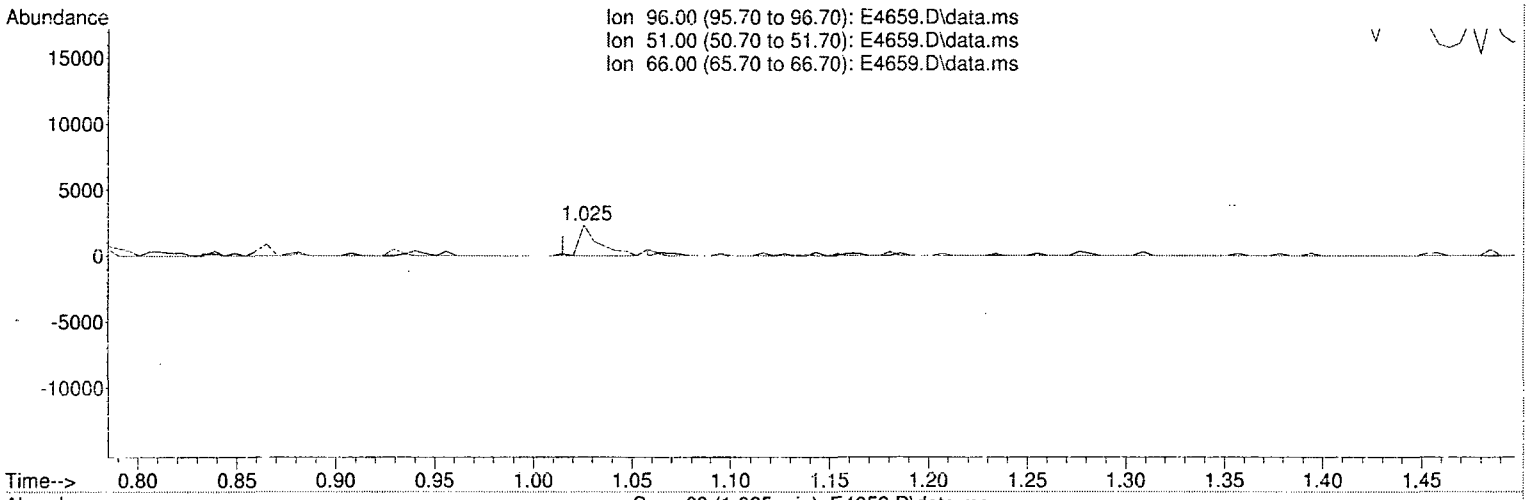
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 0.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.00# |
| 0.00 | 0.00 | 0.00 |

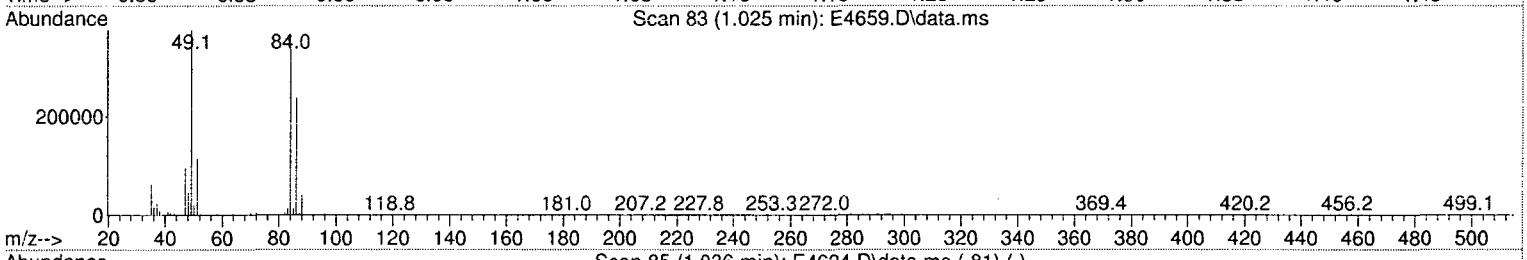
Quantitation Report (Qedit)

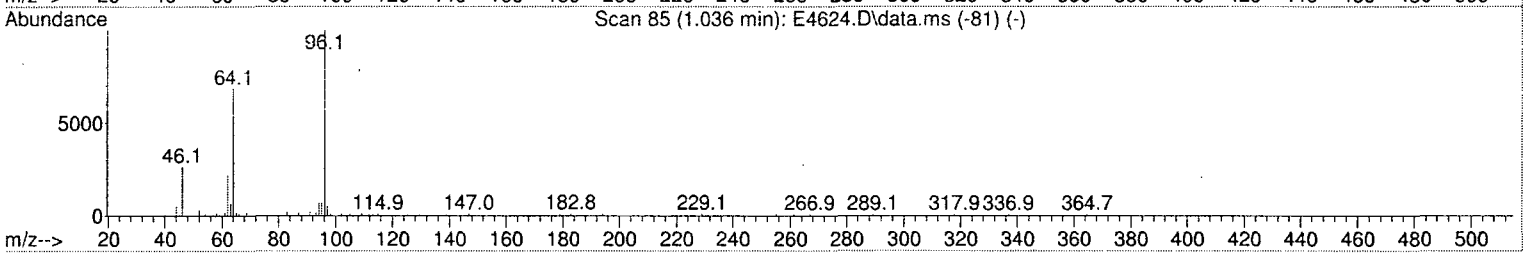
Data File : C:\msdchem\1\data\E4659.D
Acq On : 25 May 2012 13:33
Sample : 2E25002-CAL1
Misc : SSTD0059S
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:58:23 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 13:58:15 2012
Response via : Initial Calibration




TIC: E4659.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.025min (+ 0.011) 1.75 ug/mL m** RS 8/24

**response 1790**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.00# |
| 0.00 | 0.00 | 0.00 |

6E - FORM VI SV-1
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/23/2012 05/23/2012

Calibration Time(s): 1750 1955

LAB FILE ID: RRF5.0= E4608.D RRF10.0= E4606.D

RRF20= E4605.D RRF40= E4604.D RRF80= E4607.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Benzaldehyde | 2.999 | 3.374 | 3.214 | 3.180 | 3.104 | 3.174 | 4.4 |
| Phenol | 3.973 | 4.450 | 4.395 | 4.595 | 5.048 | 4.492 | 8.6 |
| Bis(2-chloroethyl)ether | 3.269 | 3.665 | 3.527 | 3.578 | 3.898 | 3.587 | 6.3 |
| 2-Chlorophenol | 3.247 | 3.535 | 3.424 | 3.542 | 3.787 | 3.507 | 5.6 |
| 2-Methylphenol | 3.040 | 3.374 | 3.240 | 3.363 | 3.565 | 3.316 | 5.8 |
| 2,2'-Oxybis(1-chloropropane) | 3.246 | 3.540 | 3.246 | 3.295 | 3.581 | 3.382 | 4.9 |
| Acetophenone | 4.754 | 5.382 | 4.957 | 5.044 | 5.411 | 5.110 | 5.5 |
| 4-Methylphenol | 3.275 | 3.598 | 3.354 | 3.477 | 3.706 | 3.482 | 5.0 |
| N-Nitroso-di-n-propylamine | 2.878 | 3.044 | 2.884 | 2.935 | 3.091 | 2.967 | 3.2 |
| Hexachloroethane | 1.523 | 1.710 | 1.571 | 1.599 | 1.676 | 1.616 | 4.7 |
| Nitrobenzene | 0.969 | 1.050 | 1.013 | 1.021 | 1.033 | 1.017 | 3.0 |
| Isophorone | 1.614 | 1.835 | 1.732 | 1.776 | 1.793 | 1.750 | 4.8 |
| 2-Nitrophenol | 0.373 | 0.466 | 0.440 | 0.445 | 0.463 | 0.437 | 8.7 |
| 2,4-Dimethylphenol | 0.894 | 0.958 | 0.956 | 1.001 | 0.999 | 0.962 | 4.5 |
| Bis(2-chloroethoxy)methane | 0.888 | 1.013 | 0.958 | 0.950 | 0.992 | 0.960 | 5.0 |
| 2,4-Dichlorophenol | 0.620 | 0.699 | 0.683 | 0.703 | 0.718 | 0.685 | 5.6 |
| Naphthalene | 2.353 | 2.640 | 2.402 | 2.456 | 2.509 | 2.472 | 4.5 |
| 4-Chloroaniline | 0.523 | 0.589 | 0.617 | 0.634 | 0.700 | 0.613 | 10.5 |
| Hexachlorobutadiene | 0.406 | 0.432 | 0.416 | 0.421 | 0.418 | 0.419 | 2.2 |
| Caprolactam | 0.223 | 0.288 | 0.281 | 0.296 | 0.301 | 0.278 | 11.4 |
| 4-Chloro-3-methylphenol | 0.735 | 0.875 | 0.825 | 0.860 | 0.884 | 0.836 | 7.3 |
| 2-Methylnaphthalene | 1.553 | 1.729 | 1.638 | 1.670 | 1.723 | 1.663 | 4.3 |
| Hexachlorocyclopentadiene | 0.606 | 0.703 | 0.687 | 0.739 | 0.800 | 0.707 | 10.1 |
| 2,4,6-Trichlorophenol | 0.703 | 0.821 | 0.764 | 0.812 | 0.871 | 0.794 | 8.0 |
| 2,4,5-Trichlorophenol | 0.621 | 0.856 | 0.788 | 0.822 | 0.902 | 0.798 | 13.4 |
| 1,1'-Biphenyl | 3.172 | 3.415 | 3.153 | 3.250 | 3.554 | 3.309 | 5.2 |
| 2-Chloronaphthalene | 2.672 | 2.787 | 2.501 | 2.556 | 2.739 | 2.651 | 4.5 |
| 2-Nitroaniline | | 0.873 | 0.841 | 0.880 | 0.944 | 0.885 | 4.9 |
| Dimethylphthalate | 3.104 | 3.385 | 3.086 | 3.115 | 3.355 | 3.209 | 4.6 |
| 2,6-Dinitrotoluene | 0.547 | 0.661 | 0.623 | 0.664 | 0.721 | 0.643 | 10.0 |
| Acenaphthylene | 4.010 | 4.343 | 4.022 | 4.166 | 4.464 | 4.201 | 4.7 |
| 3-Nitroaniline | | 0.656 | 0.565 | 0.585 | 0.652 | 0.615 | 7.6 |
| Acenaphthene | 2.586 | 2.868 | 2.543 | 2.573 | 2.817 | 2.677 | 5.7 |
| 2,4-Dinitrophenol | | 0.165 | 0.198 | 0.219 | 0.302 | 0.221 | 26.4 |
| 4-Nitrophenol | | 0.405 | 0.467 | 0.557 | 0.599 | 0.507 | 17.2 |
| Dibenzofuran | 3.564 | 3.925 | 3.577 | 3.645 | 3.855 | 3.713 | 4.5 |

6F - FORM VI SV-2
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/23/2012 05/23/2012

Calibration Time(s): 1750 1955

LAB FILE ID: RRF5.0= E4608.D RRF10.0= E4606.D

RRF20= E4605.D RRF40= E4604.D RRF80= E4607.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.755 | 0.906 | 0.855 | 0.919 | 0.997 | 0.886 | 10.0 |
| Diethylphthalate | 3.169 | 3.416 | 3.243 | 3.285 | 3.459 | 3.314 | 3.6 |
| Fluorene | 3.162 | 3.310 | 3.060 | 3.161 | 3.365 | 3.212 | 3.8 |
| 4-Chlorophenyl-phenylether | 1.351 | 1.454 | 1.325 | 1.343 | 1.463 | 1.387 | 4.8 |
| 4-Nitroaniline | | 0.759 | 0.733 | 0.749 | 0.783 | 0.756 | 2.8 |
| 4,6-Dinitro-2-methylphenol | | 0.229 | 0.263 | 0.306 | 0.325 | 0.281 | 15.4 |
| N-Nitrosodiphenylamine (1) | 1.394 | 1.557 | 1.419 | 1.495 | 1.532 | 1.479 | 4.8 |
| 1,2,4,5-Tetrachlorobenzene | 1.110 | 1.184 | 1.078 | 1.086 | 1.173 | 1.126 | 4.4 |
| 4-Bromophenyl-phenylether | 0.397 | 0.447 | 0.401 | 0.417 | 0.436 | 0.420 | 5.2 |
| Hexachlorobenzene | 0.408 | 0.426 | 0.390 | 0.420 | 0.420 | 0.413 | 3.5 |
| Atrazine | 0.422 | 0.498 | 0.489 | 0.513 | 0.526 | 0.489 | 8.2 |
| Pentachlorophenol | | 0.146 | 0.180 | 0.231 | 0.254 | 0.203 | 24.1 |
| Phenanthrene | 2.434 | 2.588 | 2.435 | 2.492 | 2.550 | 2.500 | 2.7 |
| Anthracene | 2.446 | 2.674 | 2.523 | 2.583 | 2.675 | 2.580 | 3.8 |
| Carbazole | 2.370 | 2.578 | 2.493 | 2.482 | 2.540 | 2.493 | 3.2 |
| Di-n-butylphthalate | 2.831 | 3.261 | 3.159 | 3.212 | 3.291 | 3.151 | 5.9 |
| Fluoranthene | 2.630 | 2.858 | 2.648 | 2.803 | 2.834 | 2.754 | 3.9 |
| Pyrene | 2.755 | 3.096 | 2.797 | 2.914 | 2.997 | 2.912 | 4.8 |
| Butylbenzylphthalate | 1.172 | 1.435 | 1.404 | 1.501 | 1.548 | 1.412 | 10.3 |
| 3,3'-Dichlorobenzidine | 0.595 | 0.712 | 0.682 | 0.695 | 0.713 | 0.679 | 7.2 |
| Benzo (a) anthracene | 2.205 | 2.558 | 2.414 | 2.527 | 2.618 | 2.464 | 6.6 |
| Chrysene | 2.276 | 2.483 | 2.269 | 2.344 | 2.447 | 2.364 | 4.1 |
| Bis(2-ethylhexyl)phthalate | 1.563 | 1.919 | 1.902 | 2.009 | 2.104 | 1.900 | 10.8 |
| Di-n-octylphthalate | 2.982 | 3.730 | 3.820 | 4.092 | 4.164 | 3.758 | 12.5 |
| Benzo (b) fluoranthene | 2.234 | 2.992 | 2.695 | 2.820 | 2.913 | 2.731 | 10.9 |
| Benzo (k) fluoranthene | 2.746 | 2.614 | 2.626 | 2.743 | 2.793 | 2.705 | 3.0 |
| Benzo (a) pyrene | 2.393 | 2.756 | 2.654 | 2.714 | 2.846 | 2.673 | 6.4 |
| Indeno (1,2,3-cd) pyrene | 1.678 | 2.065 | 2.044 | 2.170 | 2.342 | 2.060 | 11.8 |
| Dibenzo (a,h) anthracene | 1.785 | 2.144 | 2.078 | 2.243 | 2.433 | 2.137 | 11.1 |
| Benzo (g,h,i) perylene | 1.990 | 2.287 | 2.235 | 2.289 | 2.387 | 2.237 | 6.7 |
| 2,3,4,6-Tetrachlorophenol | 0.512 | 0.595 | 0.576 | 0.621 | 0.665 | 0.594 | 9.5 |

(1) Cannot be separated from Diphenylamine

6G - FORM VI SV-3
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date(s): 05/23/2012 05/23/2012

Calibration Time(s): 1750 1955

LAB FILE ID: RRF5.0= E4608.D RRF10.0= E4606.D

RRF20= E4605.D RRF40= E4604.D RRF80= E4607.D

| COMPOUND | RRF5.0 | RRF10.0 | RRF20 | RRF40 | RRF80 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Phenol-d5 | 4.252 | 4.933 | 4.157 | 4.317 | 4.966 | 4.525 | 8.7 |
| Bis(2-chloroethyl)ether-d8 | 2.318 | 2.656 | 2.446 | 2.502 | 2.629 | 2.510 | 5.5 |
| 2-Chlorophenol-d4 | 3.557 | 4.173 | 3.859 | 4.060 | 4.381 | 4.006 | 7.8 |
| 4-Methylphenol-d8 | 2.902 | 3.599 | 3.267 | 3.371 | 3.676 | 3.363 | 9.1 |
| Nitrobenzene-d5 | 0.396 | 0.452 | 0.414 | 0.424 | 0.438 | 0.425 | 5.1 |
| 2-Nitrophenol-d4 | 0.443 | 0.480 | 0.457 | 0.481 | 0.504 | 0.473 | 5.0 |
| 2,4-Dichlorophenol-d3 | 0.667 | 0.818 | 0.789 | 0.812 | 0.859 | 0.789 | 9.2 |
| 4-Chloroaniline-d4 | 0.639 | 0.680 | 0.651 | 0.675 | 0.739 | 0.677 | 5.7 |
| Dimethylphthalate-d6 | 3.248 | 3.532 | 3.238 | 3.291 | 3.504 | 3.363 | 4.3 |
| Acenaphthylene-d8 | 3.996 | 4.529 | 4.175 | 4.327 | 4.676 | 4.340 | 6.3 |
| 4-Nitrophenol-d4 | | 0.530 | 0.562 | 0.644 | 0.699 | 0.609 | 12.6 |
| Fluorene-d10 | 2.593 | 2.892 | 2.568 | 2.628 | 2.881 | 2.712 | 5.9 |
| 4,6-Dinitro-2-methylphenol-d2 | | 0.240 | 0.291 | 0.344 | 0.385 | 0.315 | 20.1 |
| Anthracene-d10 | 2.362 | 2.558 | 2.428 | 2.468 | 2.522 | 2.468 | 3.1 |
| Pyrene-d10 | 2.485 | 2.745 | 2.526 | 2.622 | 2.707 | 2.617 | 4.3 |
| Benzo (a) pyrene-d12 | 2.026 | 2.342 | 2.276 | 2.355 | 2.422 | 2.284 | 6.7 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/25/12

Quant Time: May 24 12:40:16 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

S. Vokati

05/25/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 61589 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 262273 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 166069 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 294409 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.991 | 240 | 299770 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.060 | 264 | 254538 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 29843m | 59.83 ug/mL | 0.00 RS PRN |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 299.15%# | | |
| 7) Phenol-d5 | 3.087 | 99 | 531774 | 38.51 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 96.28% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 308151 | 40.88 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 102.20% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 500069 | 40.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 100.80% | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 415205 | 40.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 100.88% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 222586 | 40.39 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 100.97% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 252093 | 40.28 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 100.70% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.856 | 165 | 425945 | 40.63 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 101.58% | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 354184 | 40.97 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 102.42% | | |
| 62) Acenaphthylene-d8 | 7.345 | 160 | 1437041 | 39.86 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 99.65% | | |
| 63) 4-Nitrophenol-d4 | 8.173 | 143 | 213782 | 42.87 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 107.18% | | |
| 64) Dimethylphthalate-d6 | 7.393 | 166 | 1092906 | 39.72 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 99.30% | | |
| 65) Fluorene-d10 | 8.392 | 176 | 872737 | 38.97 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 97.42% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.699 | 200 | 202352 | 43.33 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 108.33%# | | |
| 79) Anthracene-d10 | 9.933 | 188 | 1453241 | 39.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 99.28% | | |
| 87) Pyrene-d10 | 12.042 | 212 | 1572245 | 40.31 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 100.78% | | |
| 96) Benzo (a) pyrene-d12 | 15.952 | 264 | 1198922 | 40.46 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 101.15% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 1059359 | 68.8850 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.041 | 88 | 170496m | 50.2404 ug/mL | RS PRN |
| 5) Benzaldehyde | 2.842 | 77 | 391672 | 40.3598 ug/mL | 98 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 440733 | 40.3307 ug/mL | 83 |
| 8) Phenol | 3.098 | 94 | 565964 | 40.9190 ug/mL# | 52 |
| 9) 2-Chlorophenol | 3.125 | 128 | 436252 | 40.7568 ug/mL | 92 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 405919 | 40.2850 ug/mL# | 30 |
| 11) Aniline | 3.013 | 93 | 471442 | 43.8557 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.579 | 83 | 527257 | 38.6792 ug/mL# | 100 |
| 13) Acetophenone | 3.862 | 105 | 621366 | 40.3000 ug/mL | 98 |
| 14) 2-Methylphenol | 3.798 | 108 | 414228 | 40.7523 ug/mL | 95 |
| 15) Hexachloroethane | 3.900 | 117 | 197005 | 39.7878 ug/mL | 90 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:16 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 361582 | 40.7036 ug/mL | 93 |
| 17) 4-Methylphenol | 4.006 | 108 | 428290 | 40.4987 ug/mL | 100 |
| 23) Nitrobenzene | 4.070 | 77 | 535517 | 40.4683 ug/mL | 99 |
| 24) Isophorone | 4.396 | 82 | 931648 | 40.4273 ug/mL | 98 |
| 25) 2-Nitrophenol | 4.503 | 139 | 233659 | 40.3589 ug/mL | 96 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 525075 | 41.3071 ug/mL | 97 |
| 27) Bis(2-chloroethoxy)met... | 4.781 | 93 | 498402 | 39.9112 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 368756 | 40.2434 ug/mL | 100 |
| 29) Naphthalene | 4.989 | 128 | 1288530 | 39.5919 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.198 | 127 | 332347 | 42.9385 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 220835 | 39.3494 ug/mL | 98 |
| 32) Caprolactam | 5.678 | 113 | 155499m | 43.0867 ug/mL | |
| 33) 4-Chloro-3-methylphenol | 6.058 | 107 | 451239 | 41.0769 ug/mL | 96 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 875754 | 39.7824 ug/mL | 99 |
| 39) Hexachlorocyclopentadiene | 6.373 | 237 | 245512 | 40.9679 ug/mL | 97 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 269723 | 40.8025 ug/mL | 98 |
| 41) 2,4,5-Trichlorophenol | 6.645 | 196 | 272940 | 40.8896 ug/mL | 100 |
| 42) 1,1'-Biphenyl | 6.768 | 154 | 1079542 | 39.3111 ug/mL | 97 |
| 43) 2-Chloronaphthalene | 6.736 | 162 | 849087 | 38.9928 ug/mL | 100 |
| 44) 1,2,3,4-Tetrachloroben... | 6.763 | 216 | 381092 | 39.3829 ug/mL | 96 |
| 45) 2-Nitroaniline | 7.046 | 65 | 292369 | 40.0201 ug/mL | 95 |
| 46) Acenaphthylene | 7.361 | 152 | 1383782 | 39.5629 ug/mL | 100 |
| 47) Dimethylphthalate | 7.425 | 163 | 1034765 | 39.2082 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.500 | 165 | 220422 | 41.0329 ug/mL | 91 |
| 49) Acenaphthene | 7.650 | 153 | 854491 | 38.9832 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.709 | 138 | 194445 | 39.4459 ug/mL | 94 |
| 51) 2,4-Dinitrophenol | 7.863 | 184 | 72687 | 39.9315 ug/mL | 95 |
| 52) Dibenzofuran | 7.906 | 168 | 1210624 | 39.2979 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.253 | 250 | 237207 | 39.4562 ug/mL | 97 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 305243 | 41.8491 ug/mL | 99 |
| 55) 4-Nitrophenol | 8.184 | 109 | 184973 | 43.8388 ug/mL | 85 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.248 | 232 | 206293 | 41.0339 ug/mL | 88 |
| 57) Fluorene | 8.435 | 166 | 1050019 | 39.7837 ug/mL | 100 |
| 58) 4-Chlorophenyl-phenyle... | 8.516 | 204 | 446177 | 38.6355 ug/mL | 87 |
| 59) Diethylphthalate | 8.539 | 149 | 1091083 | 39.8626 ug/mL | 98 |
| 60) 4-Nitroaniline | 8.676 | 138 | 248734 | 39.6739 ug/mL# | 77 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 360849 | 38.1093 ug/mL | 96 |
| 67) 4,6-Dinitro-2-methylph... | 8.710 | 198 | 180258 | 42.9446 ug/mL | 89 |
| 68) N-Nitrosodiphenylamine... | 8.745 | 169 | 880260 | 40.3675 ug/mL | 100 |
| 69) 4-Bromophenyl-phenylether | 9.248 | 248 | 245323 | 38.9771 ug/mL# | 83 |
| 70) Hexachlorobenzene | 9.402 | 284 | 247459 | 40.2012 ug/mL | 77 |
| 71) Atrazine | 9.728 | 200 | 301771 | 40.9275 ug/mL | 93 |
| 72) Pentachlorophenol | 9.756 | 266 | 135964 | 44.7543 ug/mL | 98 |
| 73) Phenanthrene | 9.893 | 178 | 1467072 | 39.7798 ug/mL | 98 |
| 74) Anthracene | 9.962 | 178 | 1520891 | 40.0776 ug/mL | 99 |
| 75) Carbazole | 10.316 | 167 | 1461386 | 39.8965 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.099 | 149 | 1891575 | 40.6595 ug/mL | 99 |
| 77) Fluoranthene | 11.739 | 202 | 1650256 | 40.5749 ug/mL | 96 |
| 81) Pyrene | 12.065 | 202 | 1746895 | 40.0069 ug/mL | 97 |
| 82) Butylbenzylphthalate | 13.408 | 149 | 899658 | 42.3705 ug/mL | 93 |
| 83) 3,3'-Dichlorobenzidine | 14.077 | 252 | 416887 | 40.8025 ug/mL | 98 |
| 84) Benzo (a) anthracene | 13.974 | 228 | 1514885 | 40.3642 ug/mL | 100 |
| 85) Chrysene | 14.031 | 228 | 1405467 | 39.6626 ug/mL | 99 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 1204517 | 42.3403 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.346 | 149 | 2083256 | 43.2119 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.563 | 252 | 1435663 | 39.4421 ug/mL | 96 |
| 91) Benzo (k) fluoranthene | 15.597 | 252 | 1396535 | 41.8863 ug/mL | 94 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:16 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.986 | 252 | 1381673 | 40.0090 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.369 | 276 | 1104593 | 41.0376 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.415 | 278 | 1142027 | 40.8416 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.649 | 276 | 1165145 | 40.2601 ug/mL | 91 |

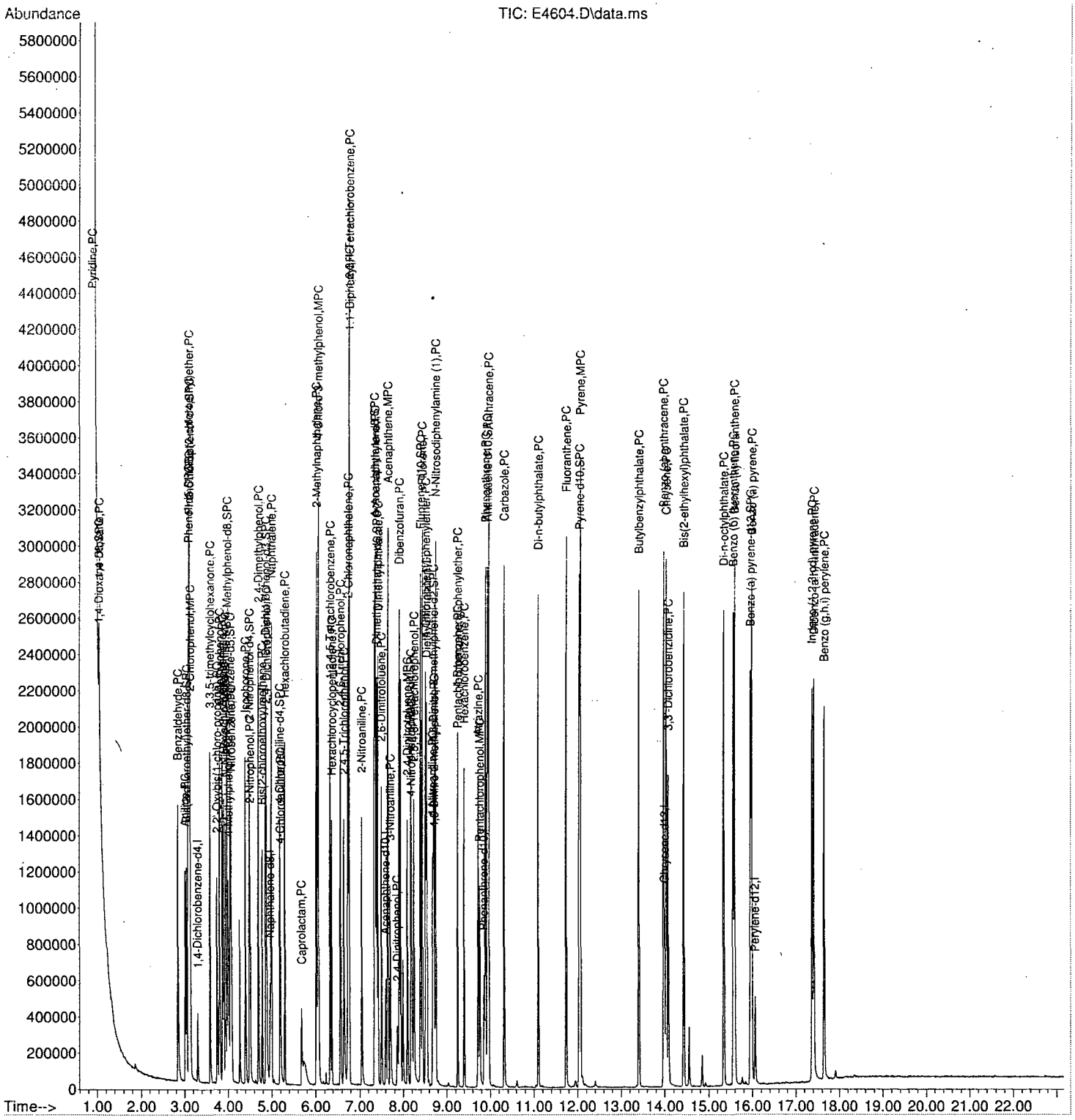
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:16 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration





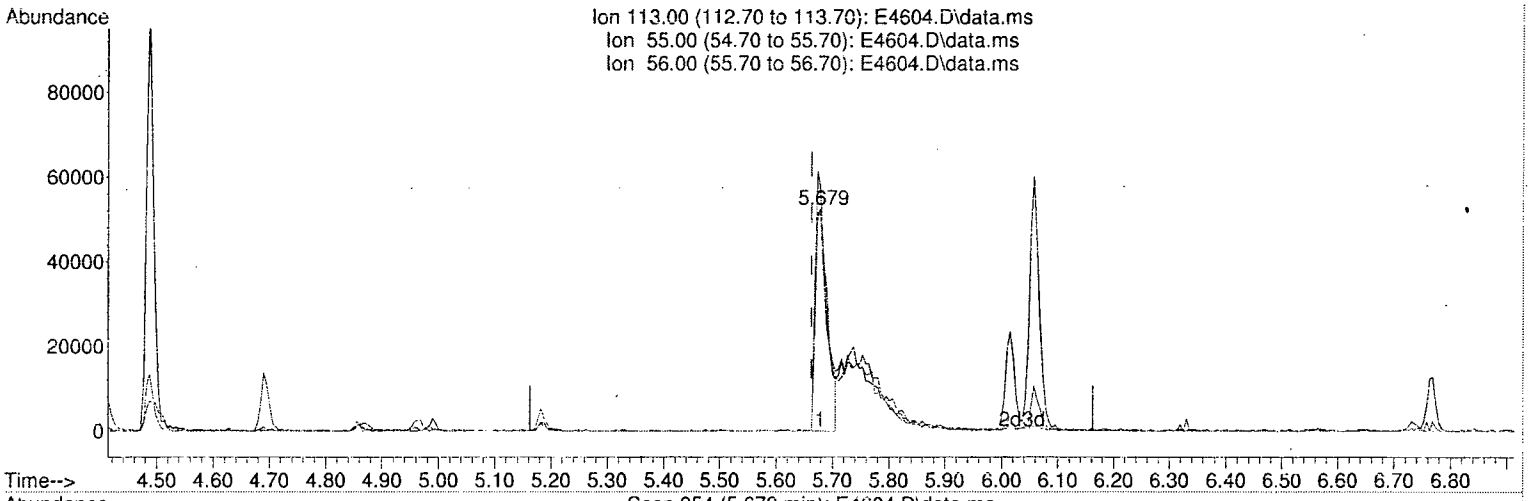

00441

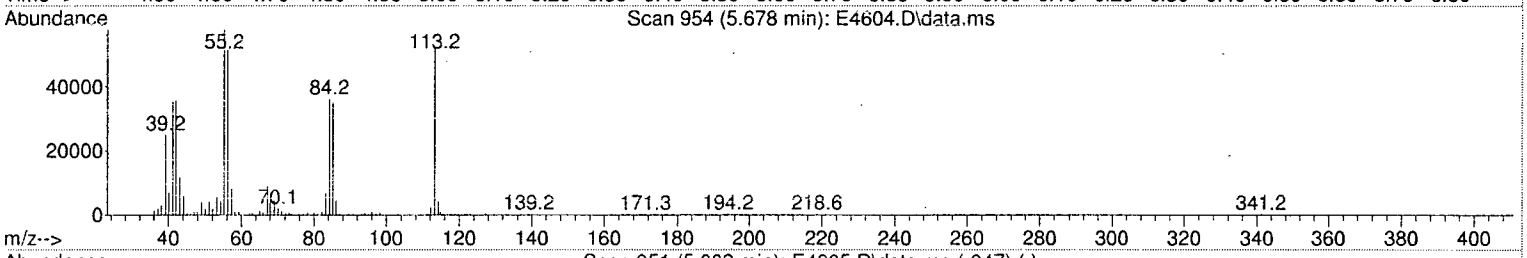
Quantitation Report (Qedit)

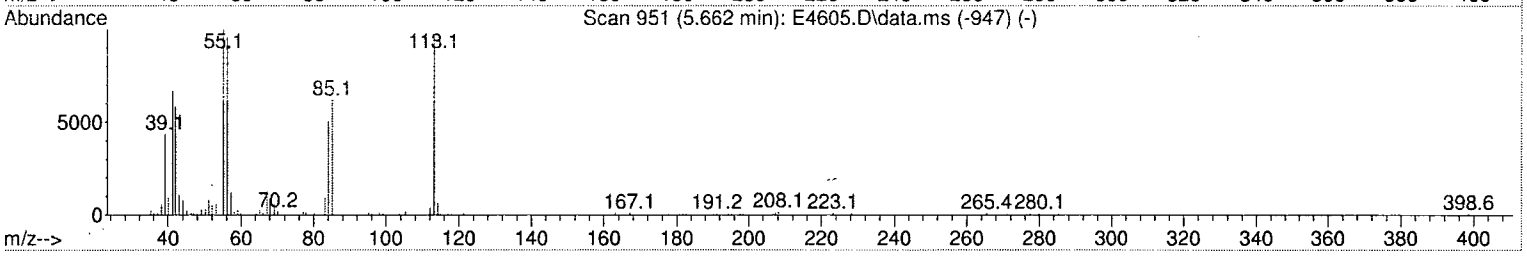
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(32) Caprolactam (PC)**

**5.678min (+ 0.016) 20.71 ug/mL**

**response 74734**

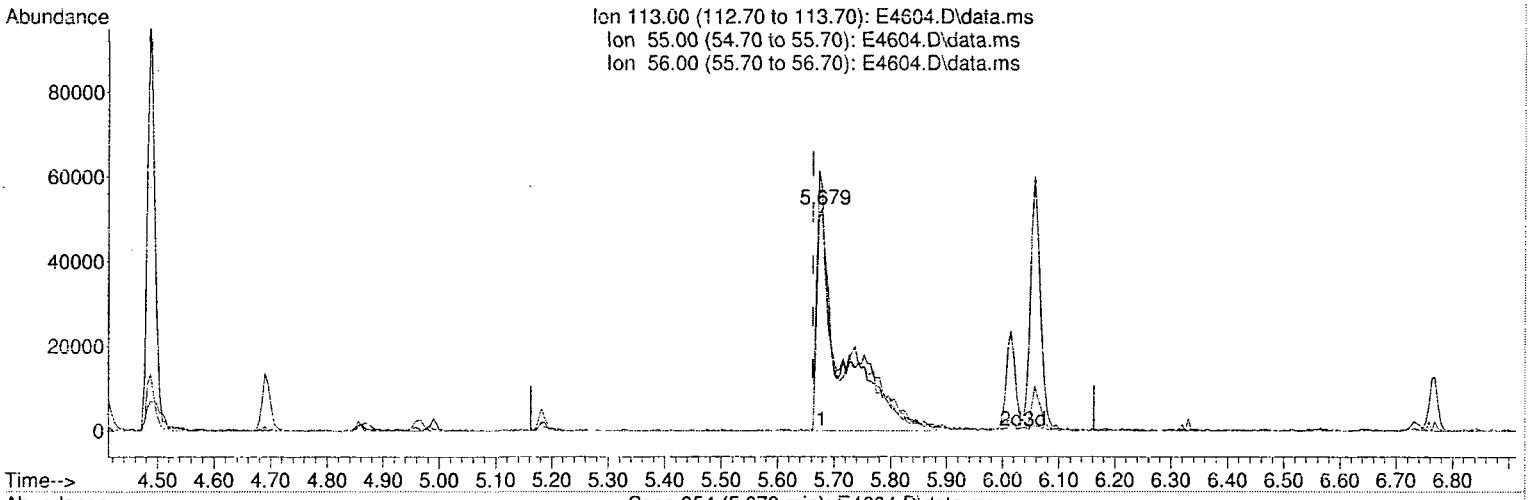
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 117.86 |
| 56.00 | 92.50 | 109.17 |
| 0.00 | 0.00 | 0.00 |

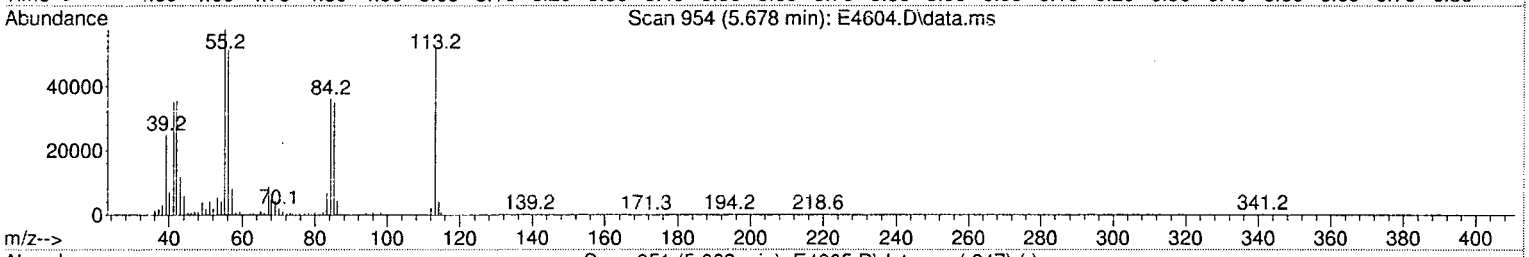
Quantitation Report (Qedit)

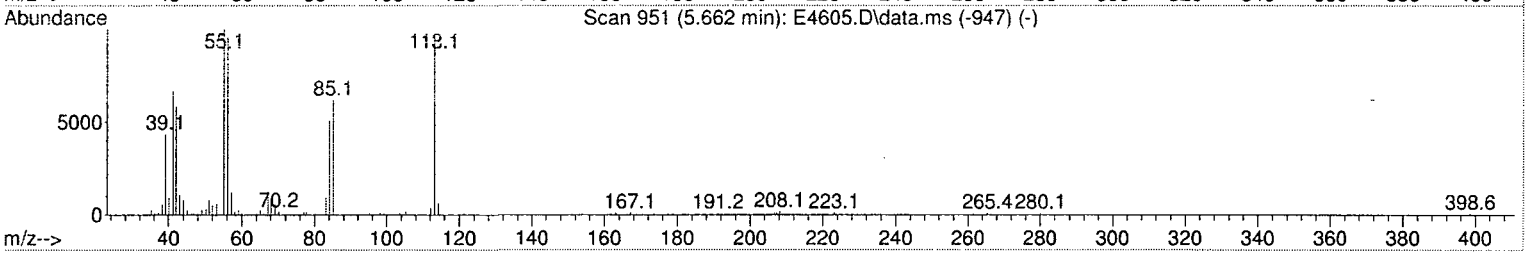
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(32) Caprolactam (PC)**

**5.678min (+ 0.016) 43.09 ug/mL m** RS 8/24

**response 155499**

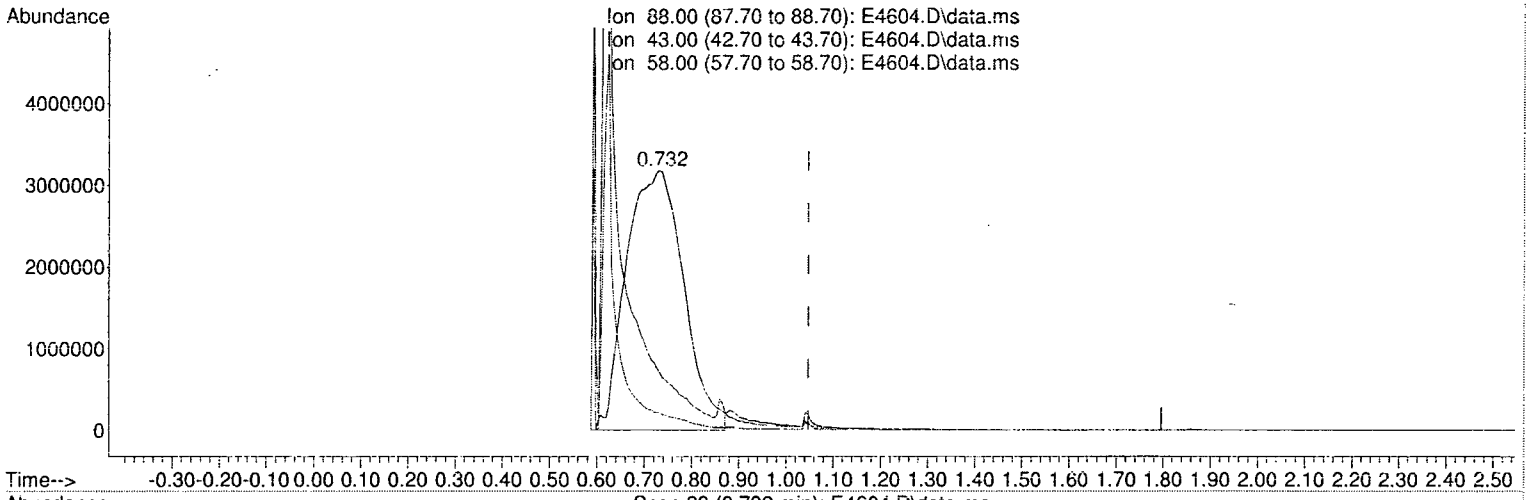
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 56.64# |
| 56.00 | 92.50 | 52.47# |
| 0.00 | 0.00 | 0.00 |

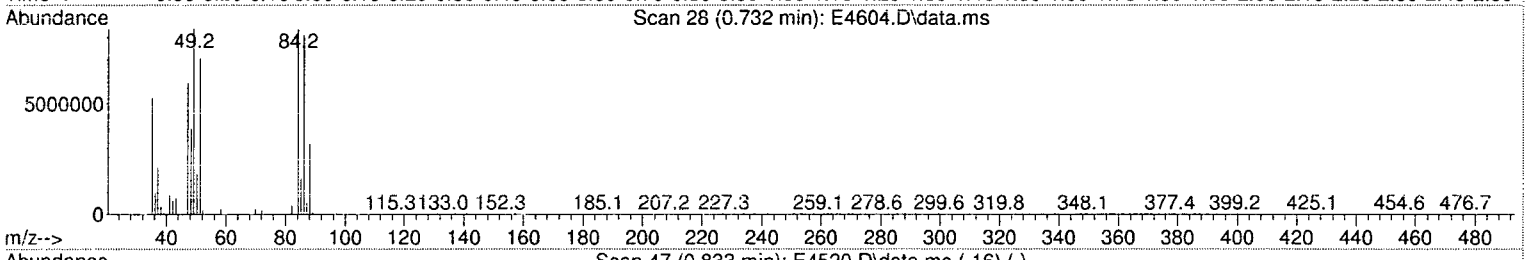
Quantitation Report (Qedit)

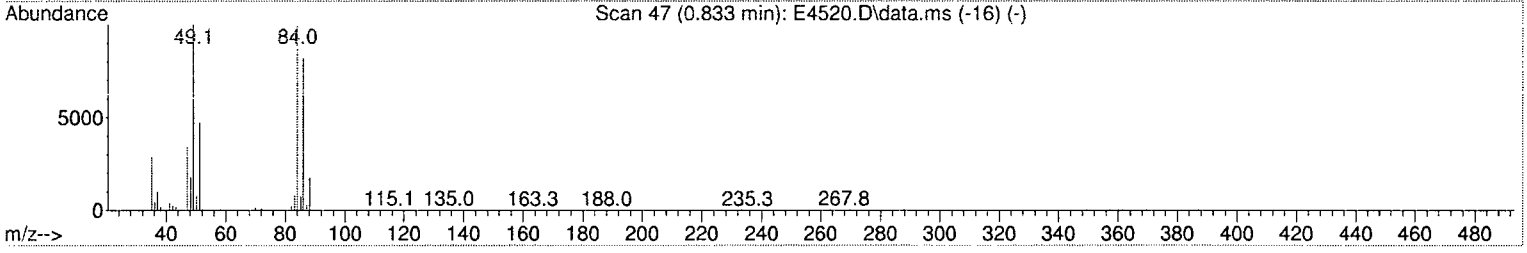
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.732min (-0.315) 7872.38 ug/mL**

**response 26715700**

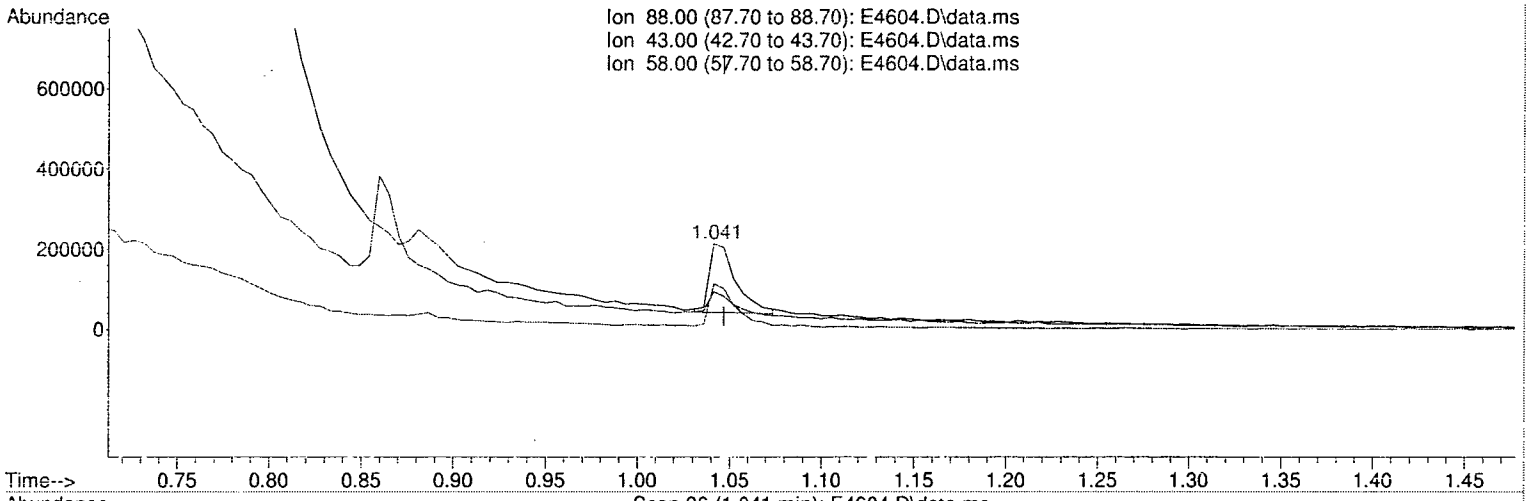
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

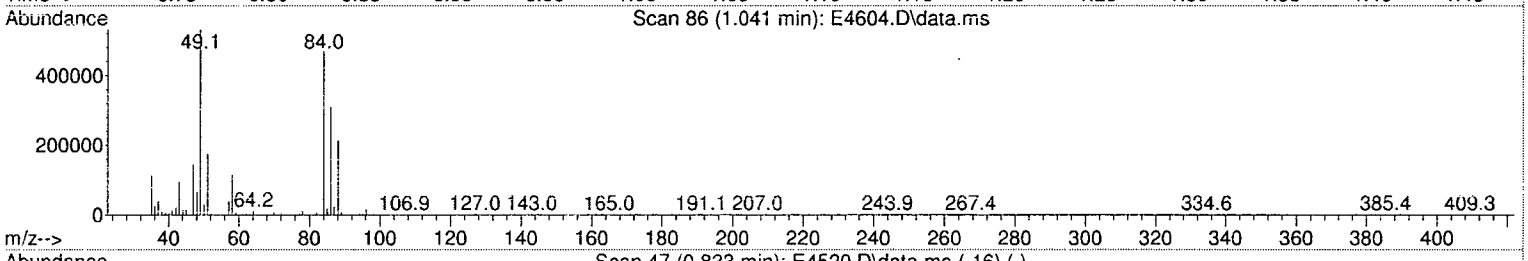
Quantitation Report (Qedit)

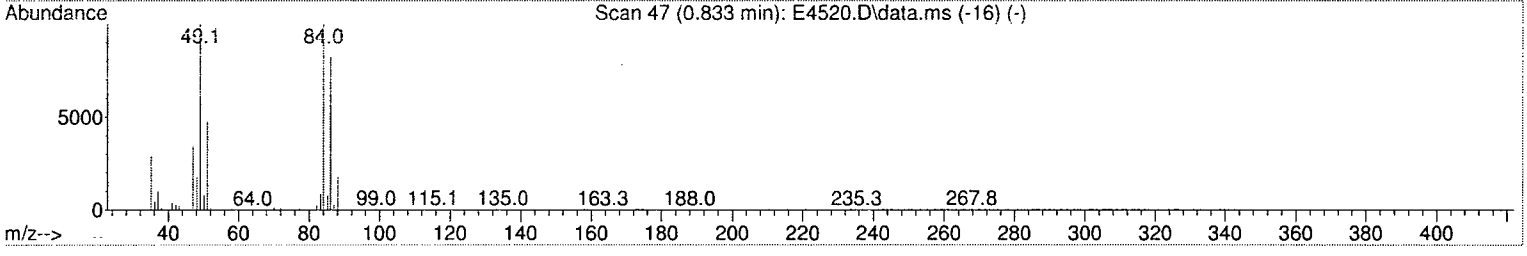
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.041min (-0.005) 50.24 ug/mL m** RS 8/21

**response 170496**

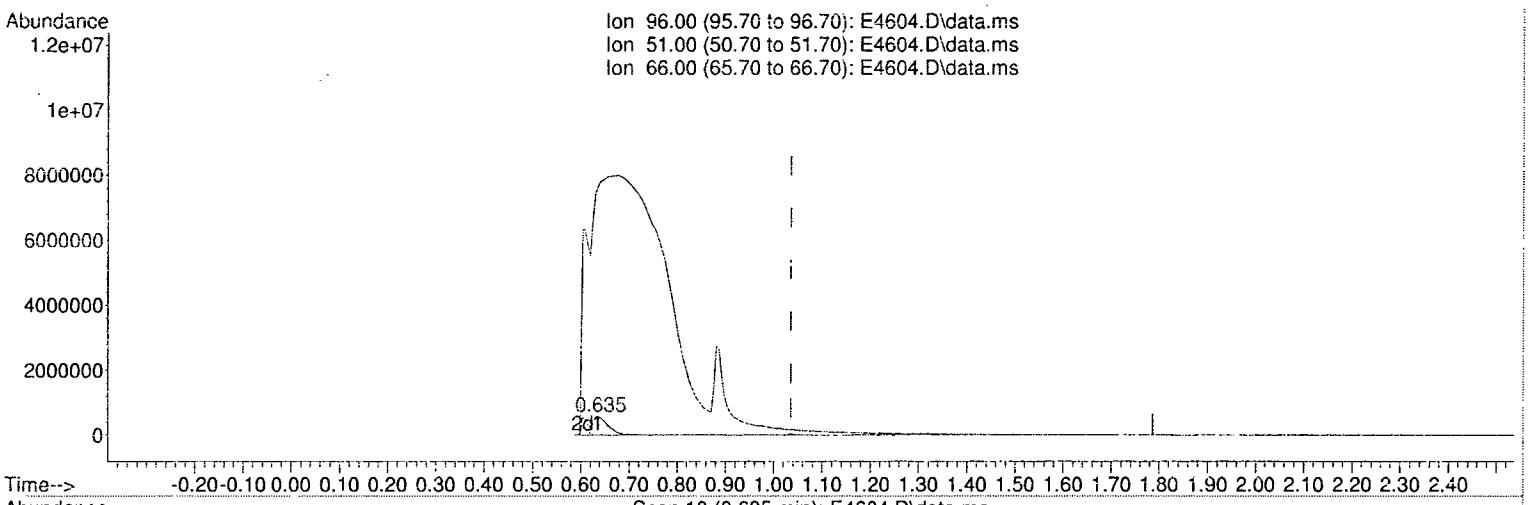
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

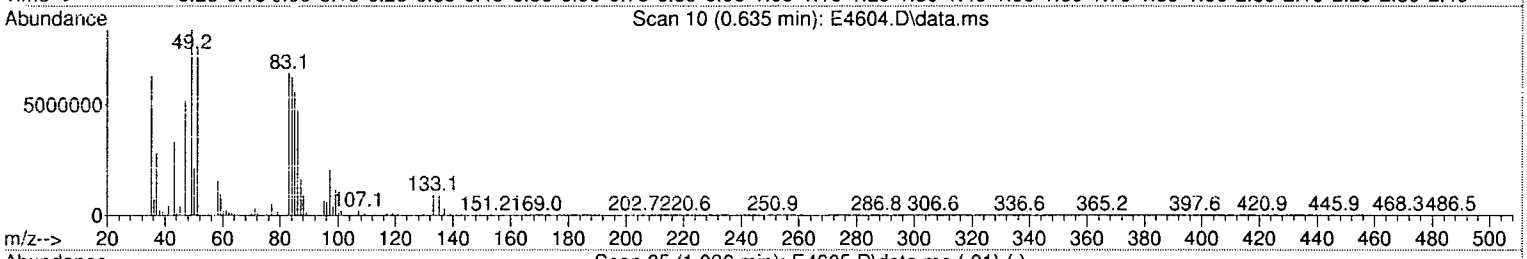
Quantitation Report (Qedit)

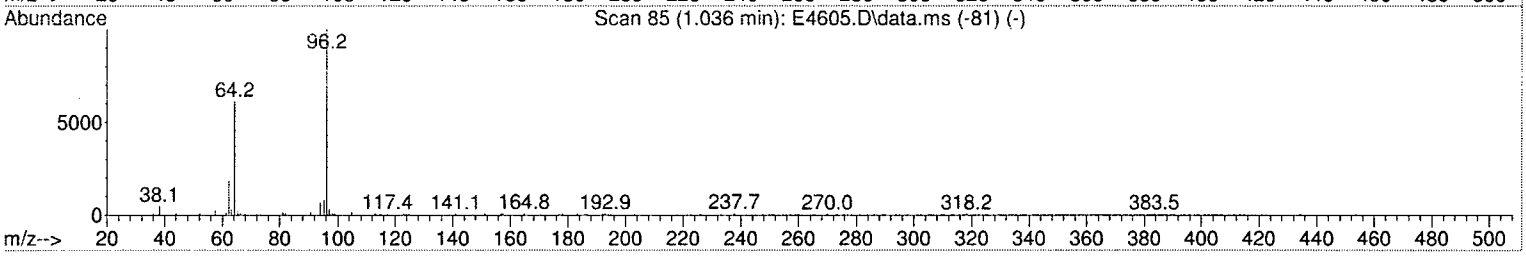
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.635min (-0.401) 2573.68 ug/mL**

**response 1283699**

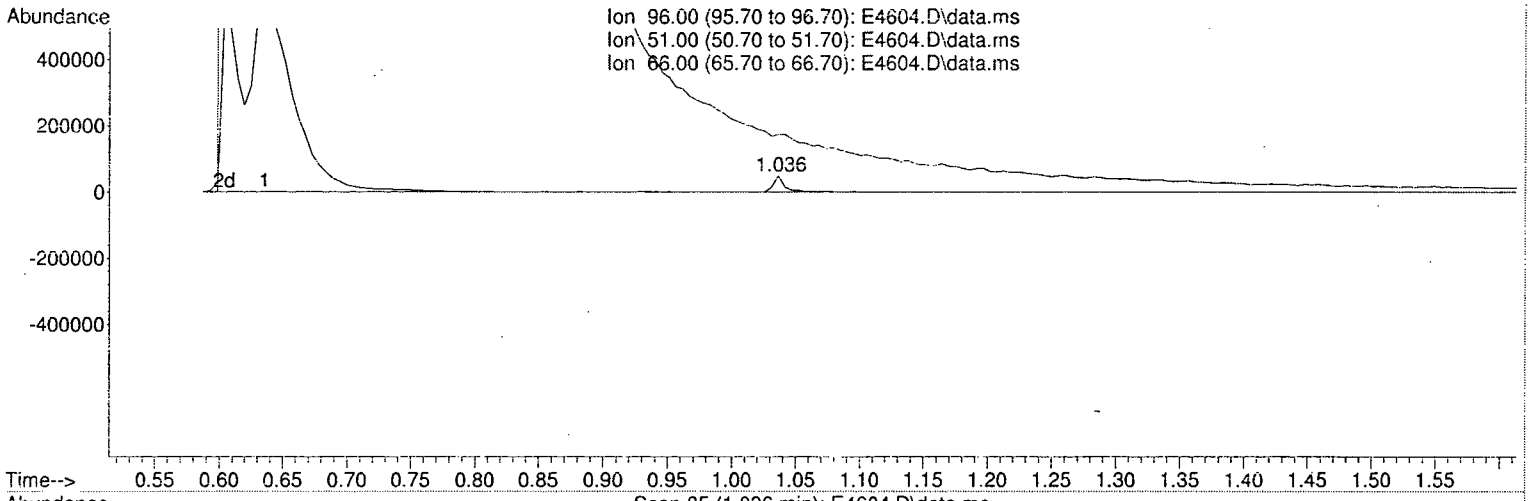
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.21# |
| 0.00 | 0.00 | 0.00 |

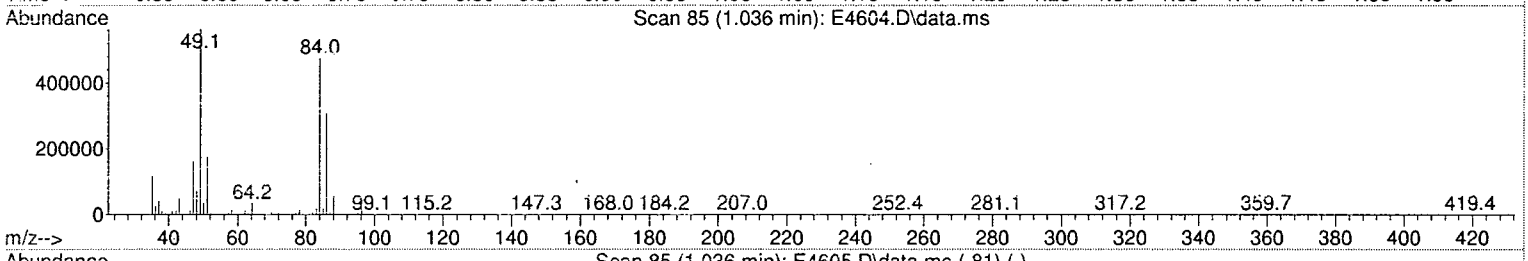
Quantitation Report (Qedit)

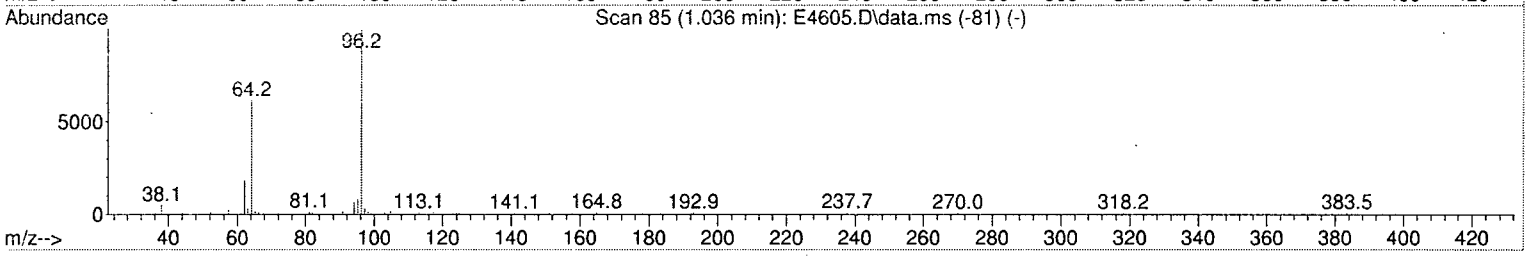
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:38:05 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4604.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min (+ 0.000) 59.83 ug/mL m** RS 8RV

**response 29843**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 9.03# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/25/12

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

CASE: 42543 SDG: X0T49

S. Vokati

05/25/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 60991 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 257252 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 161819 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 288993 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.985 | 240 | 296748 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.054 | 264 | 254534 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 18696m | 37.85 ug/mL | 0.00 RS PRN |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 189.25%# | | |
| 7) Phenol-d5 | 3.087 | 99 | 253513 | 18.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 46.35% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 149154 | 19.98 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 49.95% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 235384 | 19.17 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 47.93% | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 199258 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.88% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 106481 | 19.70 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.25% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 117548 | 19.15 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 47.87% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 203068 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 49.38% | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 167453 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 49.38% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 675534 | 19.23 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.08% | | |
| 63) 4-Nitrophenol-d4 | 8.173 | 143 | 90911 | 18.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 46.77% | | |
| 64) Dimethylphthalate-d6 | 7.388 | 166 | 523897 | 19.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.85% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 415520 | 19.04 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 47.60% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 83983 | 18.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 45.80% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 701597 | 19.53 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 48.83% | | |
| 87) Pyrene-d10 | 12.037 | 212 | 749601 | 19.41 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.52%# | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 579395 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 48.88% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 496748 | 32.6178 ug/mL# | 1 RS PRN |
| 4) 1,4-Dioxane | 1.047 | 88 | 82987m | 24.6937 ug/mL | |
| 5) Benzaldehyde | 2.847 | 77 | 196031 | 20.3980 ug/mL | 95 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 215110 | 19.8774 ug/mL | 89 |
| 8) Phenol | 3.098 | 94 | 268060 | 19.5707 ug/mL# | 51 |
| 9) 2-Chlorophenol | 3.130 | 128 | 208845 | 19.7026 ug/mL | 91 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 197982 | 19.8412 ug/mL# | 30 |
| 11) Aniline | 3.013 | 93 | 186169 | 17.4881 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.584 | 83 | 256241 | 18.9820 ug/mL# | 100 |
| 13) Acetophenone | 3.867 | 105 | 302327 | 19.8003 ug/mL | 96 |
| 14) 2-Methylphenol | 3.798 | 108 | 197611 | 19.6318 ug/mL | 96 |
| 15) Hexachloroethane | 3.899 | 117 | 95810 | 19.5398 ug/mL | 87 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 175909 | 19.9964 ug/mL | 94 |
| 17) 4-Methylphenol | 4.006 | 108 | 204588 | 19.5353 ug/mL | 97 |
| 23) Nitrobenzene | 4.070 | 77 | 260542 | 20.0731 ug/mL | 98 |
| 24) Isophorone | 4.391 | 82 | 445565 | 19.7119 ug/mL | 98 |
| 25) 2-Nitrophenol | 4.503 | 139 | 113095 | 19.9157 ug/mL | 98 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 245967 | 19.7276 ug/mL | 99 |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 246506 | 20.1250 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 175798 | 19.5598 ug/mL | 100 |
| 29) Naphthalene | 4.989 | 128 | 617927 | 19.3572 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.198 | 127 | 158799 | 20.9169 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 107111 | 19.4581 ug/mL | 98 |
| 32) Caprolactam | 5.662 | 113 | 72305 | 20.4258 ug/mL | 94 |
| 33) 4-Chloro-3-methylphenol | 6.058 | 107 | 212199 | 19.6938 ug/mL | 94 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 421479 | 19.5200 ug/mL | 93 |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 111245 | 19.0507 ug/mL | 98 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 123710 | 19.2058 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.645 | 196 | 127583 | 19.6154 ug/mL | 96 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 510218 | 19.0673 ug/mL | 98 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 404659 | 19.0713 ug/mL | 99 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 179060 | 18.9905 ug/mL | 98 |
| 45) 2-Nitroaniline | 7.046 | 65 | 136089 | 19.1174 ug/mL | 94 |
| 46) Acenaphthylene | 7.356 | 152 | 650802 | 19.0954 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 499343 | 19.4175 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 100875 | 19.2717 ug/mL | 89 |
| 49) Acenaphthene | 7.644 | 153 | 411488 | 19.2658 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.703 | 138 | 91354 | 19.0192 ug/mL | 99 |
| 51) 2,4-Dinitrophenol | 7.869 | 184 | 32046m | 18.0672 ug/mL | |
| 52) Dibenzofuran | 7.906 | 168 | 578903 | 19.2852 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.247 | 250 | 109310 | 18.6598 ug/mL | 95 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 138373 | 19.4693 ug/mL | 98 |
| 55) 4-Nitrophenol | 8.179 | 109 | 75634 | 18.3961 ug/mL | 95 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 93145 | 19.0141 ug/mL | 87 |
| 57) Fluorene | 8.430 | 166 | 495231 | 19.2564 ug/mL | 100 |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 214341 | 19.0478 ug/mL | 90 |
| 59) Diethylphthalate | 8.533 | 149 | 524810 | 19.6775 ug/mL | 97 |
| 60) 4-Nitroaniline | 8.665 | 138 | 118553 | 19.4062 ug/mL# | 84 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 174396 | 18.9017 ug/mL | 94 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 76009 | 18.4477 ug/mL | 87 |
| 68) N-Nitrosodiphenylamine... | 8.739 | 169 | 409938 | 19.1515 ug/mL | 98 |
| 69) 4-Bromophenyl-phenylether | 9.247 | 248 | 115754 | 18.7357 ug/mL# | 82 |
| 70) Hexachlorobenzene | 9.396 | 284 | 112595 | 18.6346 ug/mL# | 74 |
| 71) Atrazine | 9.716 | 200 | 141182 | 19.5066 ug/mL | 95 |
| 72) Pentachlorophenol | 9.756 | 266 | 52161 | 17.4912 ug/mL | 94 |
| 73) Phenanthrene | 9.888 | 178 | 703700 | 19.4385 ug/mL | 98 |
| 74) Anthracene | 9.956 | 178 | 729200 | 19.5755 ug/mL | 99 |
| 75) Carbazole | 10.310 | 167 | 720384 | 20.0354 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 913011 | 19.9930 ug/mL | 100 |
| 77) Fluoranthene | 11.734 | 202 | 765122 | 19.1646 ug/mL | 95 |
| 81) Pyrene | 12.059 | 202 | 830147 | 19.2054 ug/mL | 96 |
| 82) Butylbenzylphthalate | 13.402 | 149 | 416629 | 19.8215 ug/mL | 95 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 202463 | 20.0177 ug/mL | 96 |
| 84) Benzo (a) anthracene | 13.968 | 228 | 716391 | 19.2827 ug/mL | 99 |
| 85) Chrysene | 14.025 | 228 | 673345 | 19.1954 ug/mL | 98 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 564422 | 20.0422 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 972233 | 20.1668 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 685868 | 18.8432 ug/mL | 95 |
| 91) Benzo (k) fluoranthene | 15.591 | 252 | 668319 | 20.0452 ug/mL | 94 |

RS 8RW

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.974 | 252 | 675645 | 19.5649 ug/mL | 96 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 520203 | 19.3268 ug/mL | 89 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 528941 | 18.9165 ug/mL | 93 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 568764 | 19.6532 ug/mL | 91 |

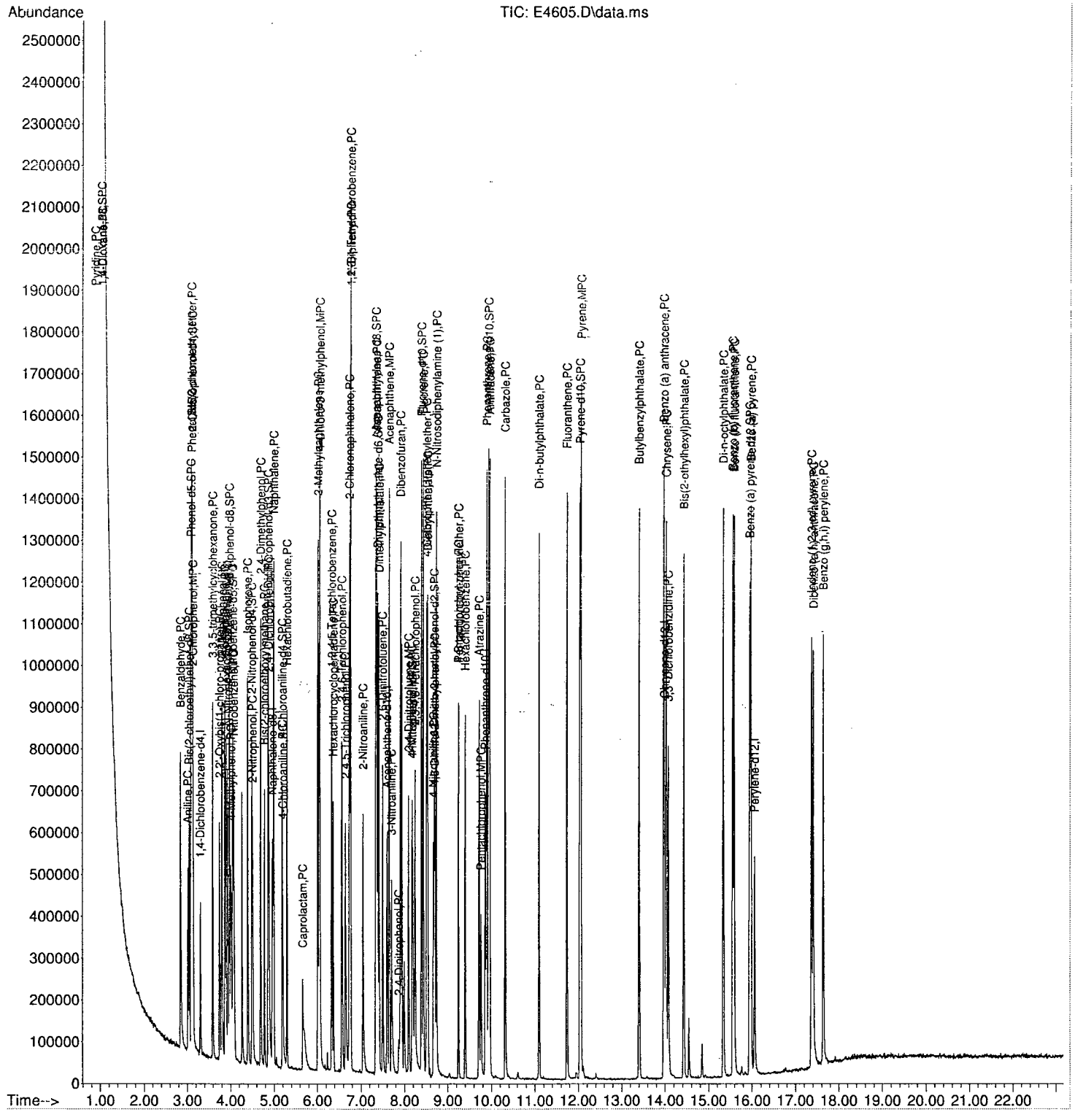
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration






00451

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 8.145 | -0.5 | 100 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.307 | -10.0# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.361 | 14.6# | 100 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 3.214 | -1.3 | 100 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.527 | 1.7 | 100 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.157 | 8.1 | 100 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.395 | 2.2 | 100 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.424 | 2.4 | 100 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 3.246 | 4.0 | 100 | 0.00 |
| 11 | PC | Aniline | 3.567 | 3.052 | 14.4 | 100 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 4.201 | 6.3 | 100 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 4.957 | 3.0 | 100 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.240 | 2.3 | 100 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.571 | 2.8 | 100 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.884 | 2.8 | 100 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.354 | 3.7 | 100 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.446 | 2.5 | 100 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 3.859 | 3.7 | 100 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.267 | 2.9 | 100 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.414 | 2.6 | 100 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 1.013 | 0.4 | 100 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.732 | 1.0 | 100 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.440 | -0.7 | 100 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.956 | 0.6 | 100 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.958 | 0.2 | 100 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.683 | 0.3 | 100 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.402 | 2.8 | 100 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.617 | -0.7 | 100 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.416 | 0.7 | 100 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.281 | -1.1 | 100 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.825 | 1.3 | 100 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.638 | 1.5 | 100 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.457 | 3.4 | 100 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.789 | 0.0 | 100 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.651 | 3.8 | 100 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.687 | 2.8 | 100 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.764 | 3.8 | 100 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.788 | 1.3 | 100 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.153 | 4.7 | 100 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.501 | 5.7 | 100 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.107 | 4.2 | 100 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.841 | 5.0 | 100 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.022 | 4.3 | 100 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.086 | 3.8 | 100 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.623 | 3.1 | 100 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.543 | 5.0 | 100 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.565 | 8.1 | 100 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.198 | 10.4 | 100 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.577 | 3.7 | 100 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.676 | 5.6 | 100 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.855 | 3.5 | 100 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.467 | 7.9 | 100 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.576 | 3.0 | 100 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.060 | 4.7 | 100 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.325 | 4.5 | 100 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.243 | 2.1 | 100 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.733 | 3.0 | 100 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.078 | 4.3 | 100 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.175 | 3.8 | 100 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.562 | 7.7 | 100 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.238 | 3.7 | 100 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.568 | 5.3 | 100 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.263 | 6.4 | 100 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.419 | 4.1 | 100 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.401 | 4.5 | 100 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.390 | 5.6 | 100 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.489 | 0.0 | 100 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.180 | 11.3 | 100 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.435 | 2.6 | 100 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.523 | 2.2 | 100 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.493 | 0.0 | 100 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 3.159 | -0.3 | 100 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.648 | 3.8 | 100 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.291 | 7.6 | 100 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.428 | 1.6 | 100 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.797 | 3.9 | 100 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.404 | 0.6 | 100 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.682 | -0.4 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.414 | 2.0 | 100 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.269 | 4.0 | 100 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.902 | -0.1 | 100 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.526 | 3.5 | 100 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.820 | -1.6 | 100 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.695 | 1.3 | 100 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.626 | 2.9 | 100 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.654 | 0.7 | 100 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.044 | 0.8 | 100 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.078 | 2.8 | 100 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.235 | 0.1 | 100 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.276 | 0.4 | 100 | 0.00 |

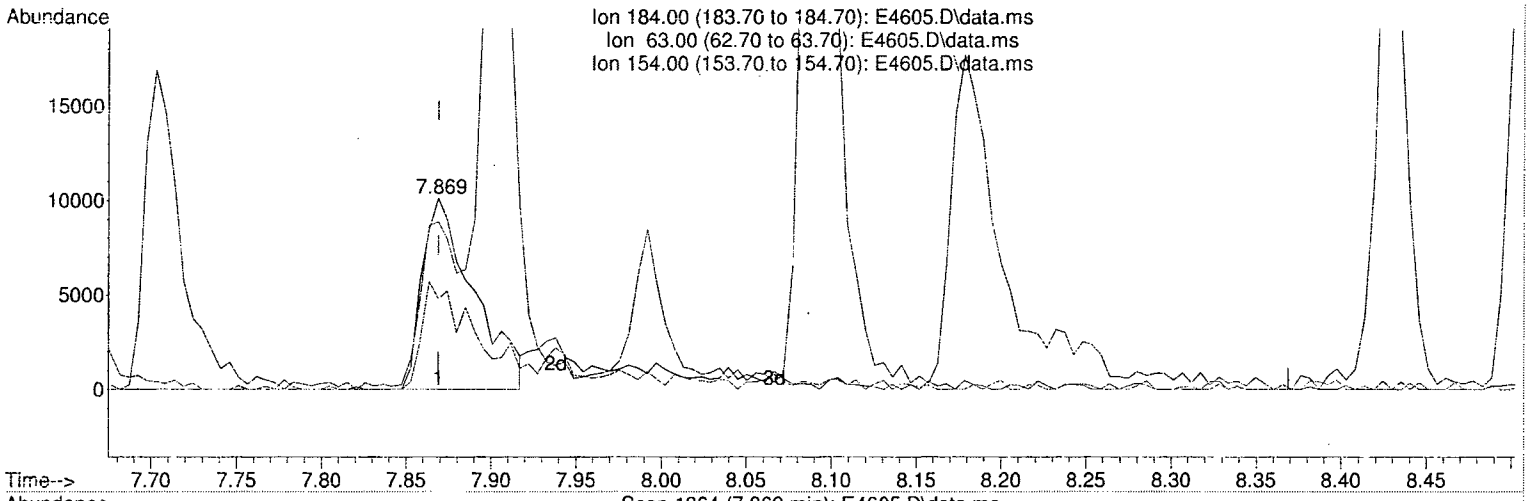
(#) = Out of Range SPCC's out = 0 CCC's out = 2

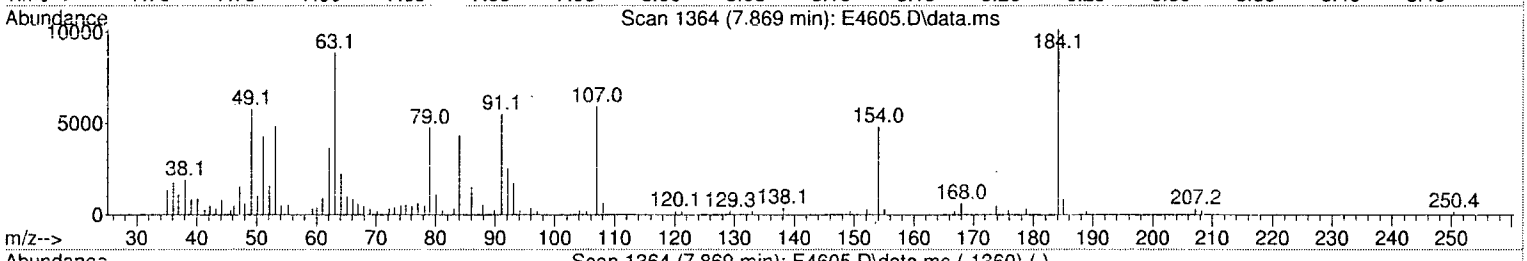
Quantitation Report (Qedit)

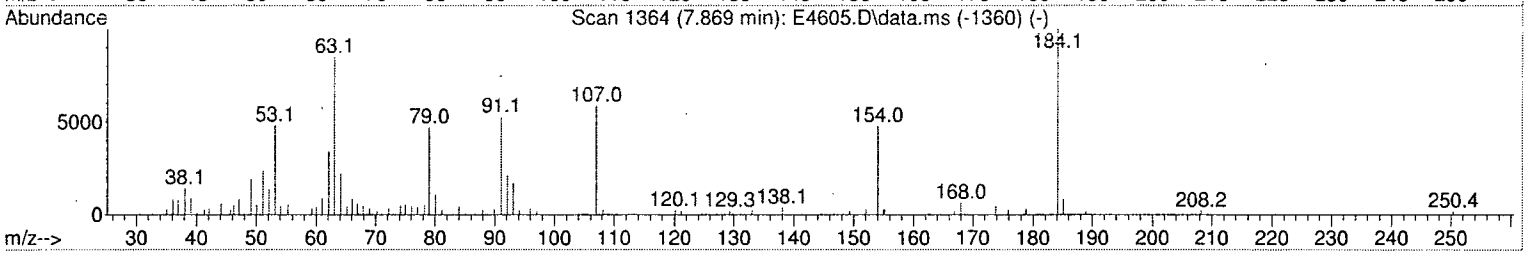
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 12.00 ug/mL**

**response 21289**

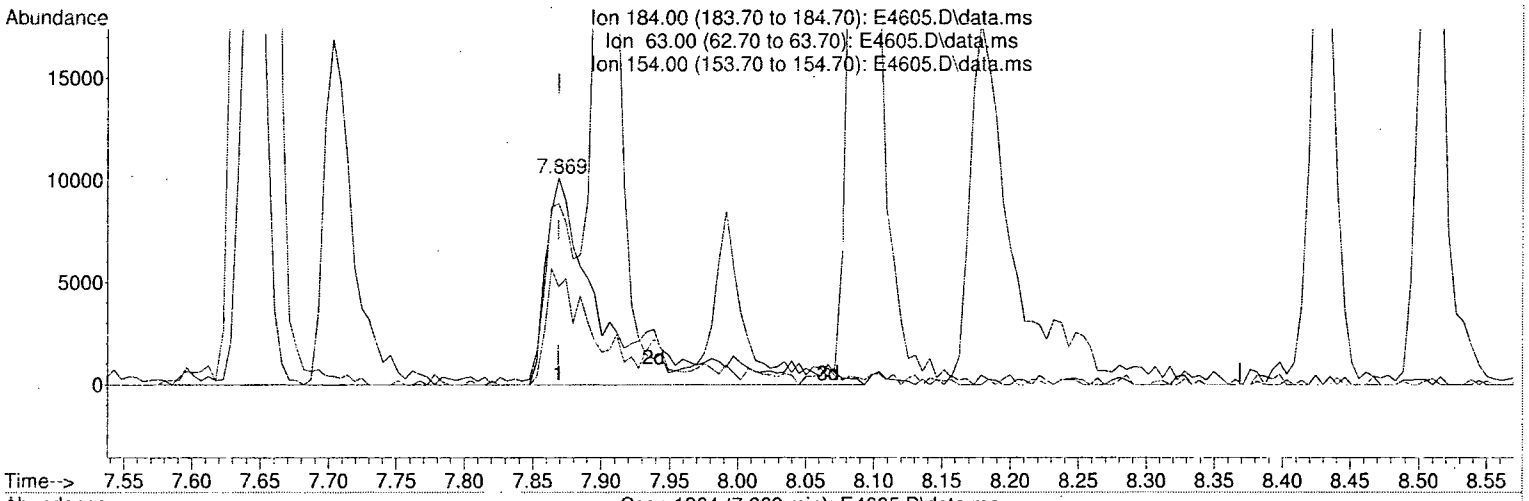
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 55.73 |
| 154.00 | 63.80 | 60.55 |
| 0.00 | 0.00 | 0.00 |

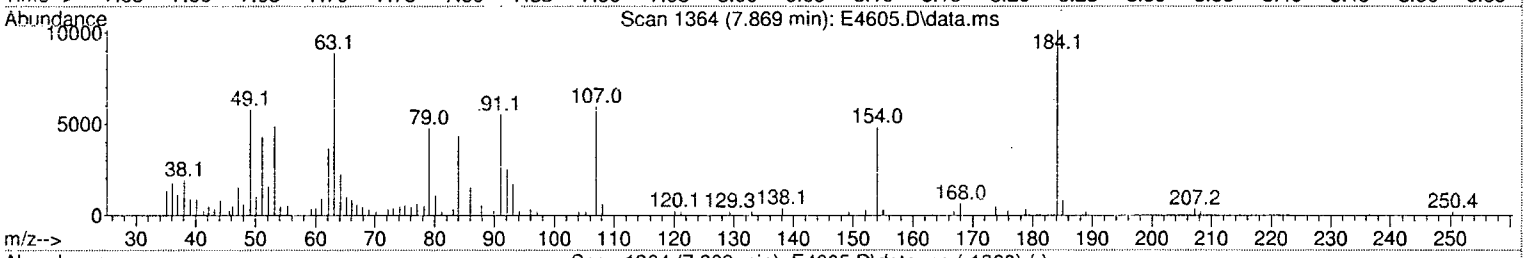
Quantitation Report (Qedit)

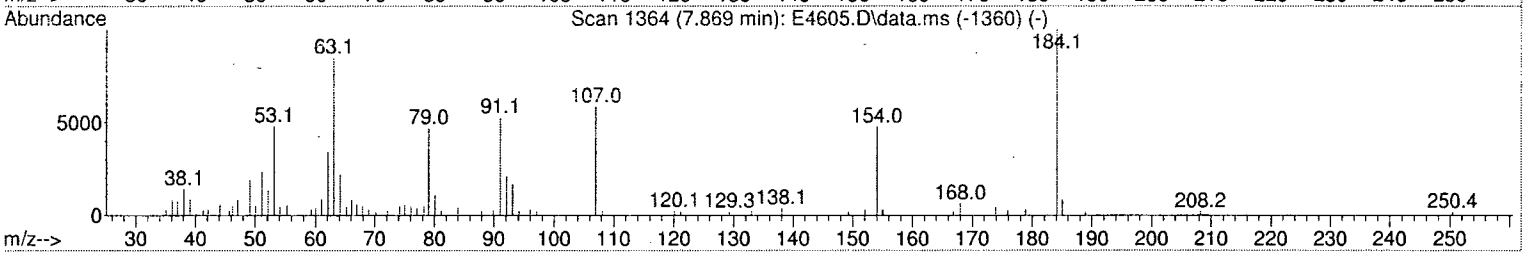
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 18.07 ug/mL m** RS 8/21

**response 32046**

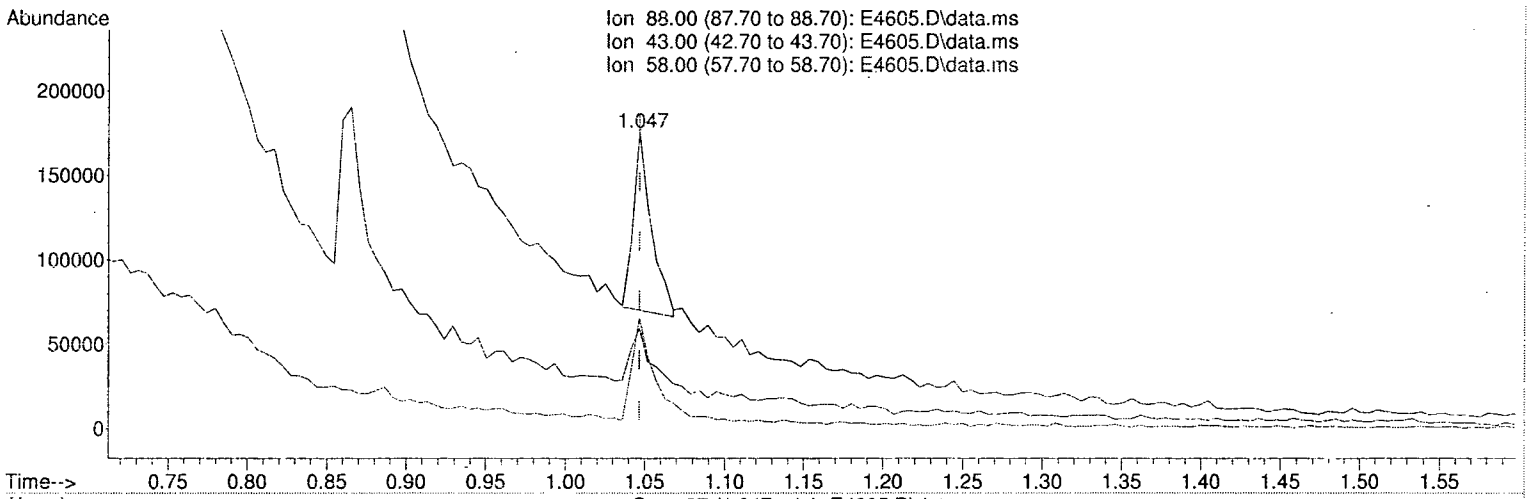
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 37.02# |
| 154.00 | 63.80 | 40.22# |
| 0.00 | 0.00 | 0.00 |

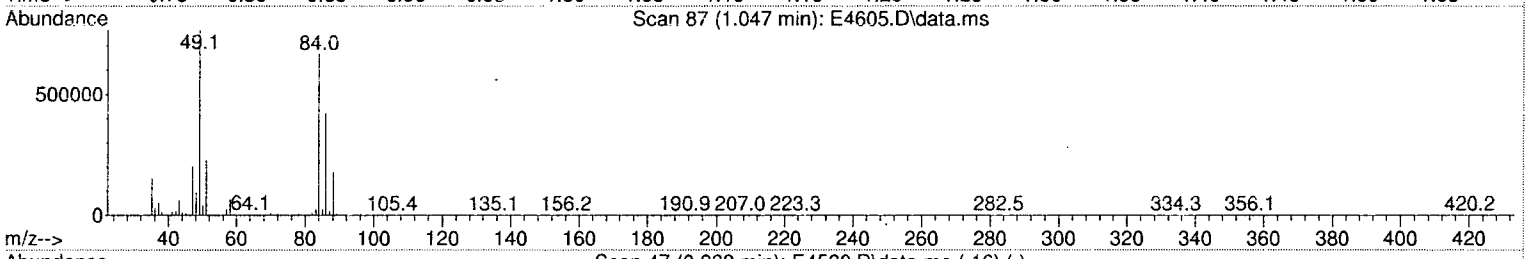
Quantitation Report (Qedit)

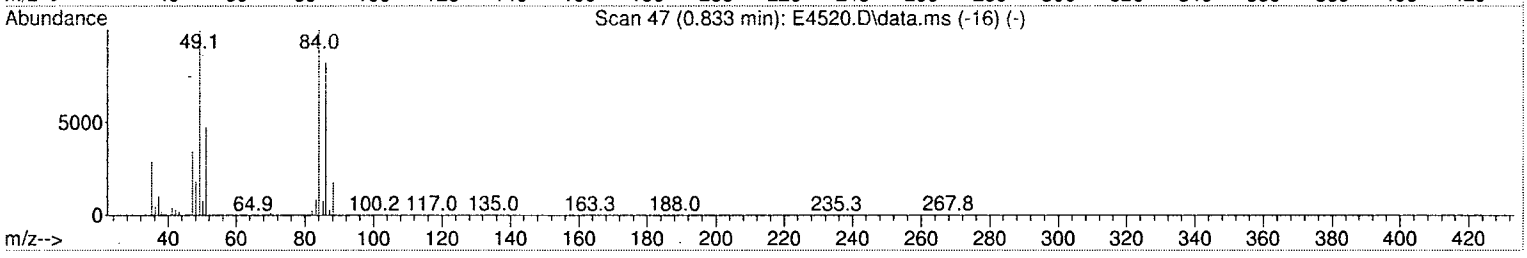
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min ( 0.000) 24.69 ug/mL m** RS 8RV

**response 82987**

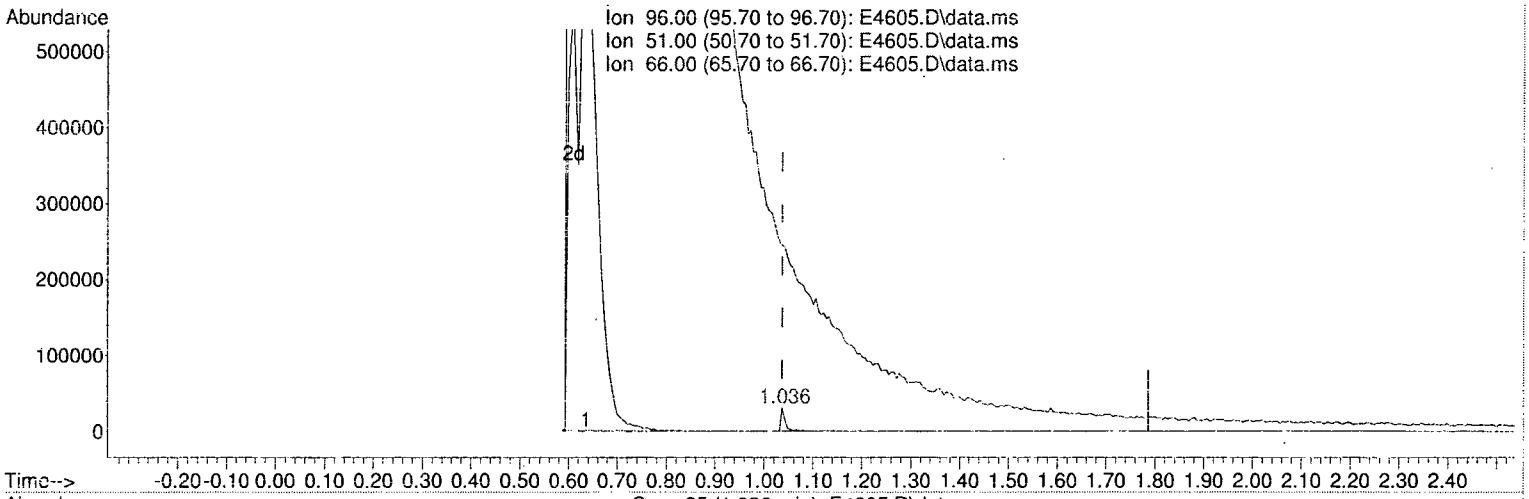
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

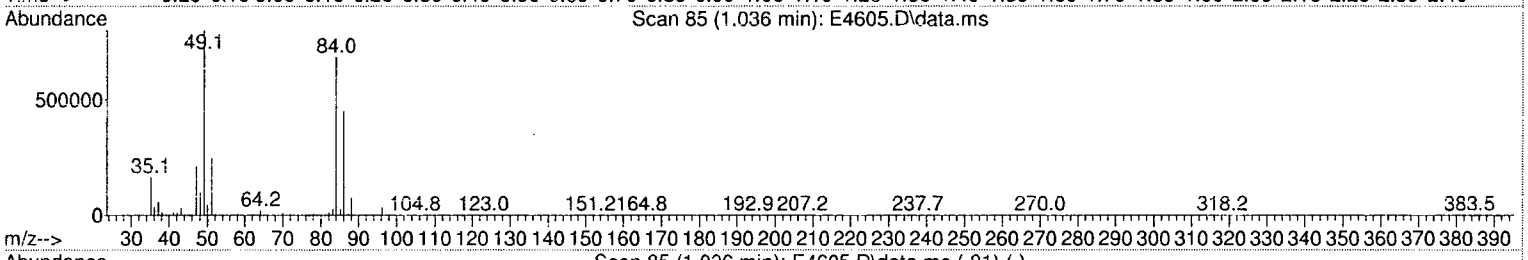
Quantitation Report (Qedit)

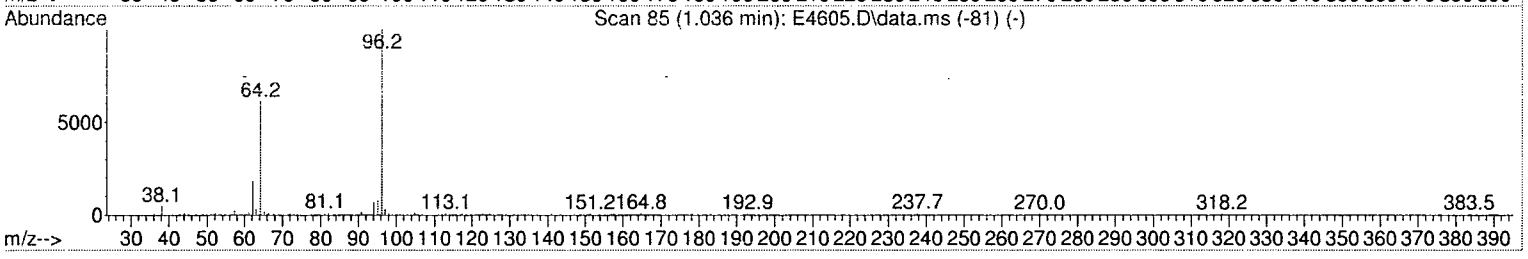
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min ( 0.000) 37.85 ug/mL m** RSPW

**response 18696**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 8.10# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/25/12

Quant Time: May 24 12:54:06 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

S. Vokati

05/25/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 57082 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 241821 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 147115 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 266241 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.986 | 240 | 265585 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.055 | 264 | 234765 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.042 | 96 | 3151m | 6.82 ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 34.10%# | | |
| 7) Phenol-d5 | 3.088 | 99 | 140788 | 11.00 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 27.50%# | | |
| 18) Bis(2-chloroethyl)ethe... | 3.050 | 67 | 75813 | 10.85 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 27.13%# | | |
| 19) 2-Chlorophenol-d4 | 3.114 | 132 | 119100 | 10.36 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 25.90%# | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 102709 | 10.77 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 26.92% | | |
| 22) Nitrobenzene-d5 | 4.055 | 128 | 54653 | 10.76 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 26.90%# | | |
| 35) 2-Nitrophenol-d4 | 4.493 | 143 | 58033 | 10.06 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 25.15%# | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 98938 | 10.24 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 25.60%# | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 82179 | 10.31 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 25.78% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 333116 | 10.43 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 26.07%# | | |
| 63) 4-Nitrophenol-d4 | 8.179 | 143 | 38993 | 8.83 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 22.07%# | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 259837 | 10.66 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 26.65%# | | |
| 65) Fluorene-d10 | 8.387 | 176 | 212750 | 10.73 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 26.82%# | | |
| 78) 4,6-Dinitro-2-methylph... | 8.688 | 200 | 31924 | 7.56 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 18.90%# | | |
| 79) Anthracene-d10 | 9.928 | 188 | 340573 | 10.29 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 25.72%# | | |
| 87) Pyrene-d10 | 12.031 | 212 | 364541 | 10.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 26.38%# | | |
| 96) Benzo (a) pyrene-d12 | 15.940 | 264 | 274951 | 10.06 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 25.15%# | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.887 | 79 | 233920 | 16.4117 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.052 | 88 | 16202m | 5.1512 ug/mL | |
| 5) Benzaldehyde | 2.853 | 77 | 96300 | 10.7067 ug/mL | 97 |
| 6) Bis(2-chloroethyl)ether | 3.098 | 93 | 104603 | 10.3278 ug/mL | 91 |
| 8) Phenol | 3.104 | 94 | 127019 | 9.9085 ug/mL# | 50 |
| 9) 2-Chlorophenol | 3.130 | 128 | 100897 | 10.1706 ug/mL | 94 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 101033 | 10.8186 ug/mL# | 29 |
| 11) Aniline | 3.018 | 93 | 86471 | 8.6791 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.584 | 83 | 142085 | 11.2462 ug/mL# | 100 |
| 13) Acetophenone | 3.868 | 105 | 153603 | 10.7488 ug/mL | 93 |
| 14) 2-Methylphenol | 3.798 | 108 | 96298 | 10.2219 ug/mL | 96 |
| 15) Hexachloroethane | 3.900 | 117 | 48804 | 10.6349 ug/mL | 87 |

RS 8/21

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:06 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 86878 | 10.5521 ug/mL | 93 |
| 17) 4-Methylphenol | 4.017 | 108 | 102689 | 10.4769 ug/mL | 95 |
| 23) Nitrobenzene | 4.076 | 77 | 126957 | 10.4054 ug/mL | 99 |
| 24) Isophorone | 4.391 | 82 | 221880 | 10.4424 ug/mL | 99 |
| 25) 2-Nitrophenol | 4.509 | 139 | 56403 | 10.5662 ug/mL | 98 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 115873 | 9.8865 ug/mL | 98 |
| 27) Bis(2-chloroethoxy)met... | 4.781 | 93 | 122507 | 10.6398 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.877 | 162 | 84564 | 10.0092 ug/mL | 98 |
| 29) Naphthalene | 4.989 | 128 | 319207 | 10.6376 ug/mL | 100 |
| 30) 4-Chloroaniline | 5.198 | 127 | 71269 | 9.9865 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 52233 | 10.0943 ug/mL | 99 |
| 32) Caprolactam | 5.652 | 113 | 34774 | 10.4503 ug/mL | 89 |
| 33) 4-Chloro-3-methylphenol | 6.058 | 107 | 105787 | 10.4444 ug/mL | 94 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 208998 | 10.2970 ug/mL | 91 |
| 39) Hexachlorocyclopentadiene | 6.373 | 237 | 51742 | 9.7464 ug/mL | 98 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 60385 | 10.3117 ug/mL | 96 |
| 41) 2,4,5-Trichlorophenol | 6.651 | 196 | 62983 | 10.6513 ug/mL | 94 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 251218 | 10.3266 ug/mL | 97 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 204997 | 10.6270 ug/mL | 99 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 86980 | 10.1468 ug/mL | 94 |
| 45) 2-Nitroaniline | 7.046 | 65 | 64203 | 9.9205 ug/mL | 91 |
| 46) Acenaphthylene | 7.356 | 152 | 319475 | 10.3107 ug/mL | 98 |
| 47) Dimethylphthalate | 7.420 | 163 | 249024 | 10.6514 ug/mL | 98 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 48613 | 10.2155 ug/mL | 93 |
| 49) Acenaphthene | 7.645 | 153 | 210985 | 10.8656 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.709 | 138 | 48254 | 11.0502 ug/mL | 94 |
| 51) 2,4-Dinitrophenol | 7.885 | 184 | 12128m | 7.5211 ug/mL | |
| 52) Dibenzofuran | 7.906 | 168 | 288702 | 10.5789 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.248 | 250 | 54292 | 10.1943 ug/mL# | 91 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 66644 | 10.3141 ug/mL | 92 |
| 55) 4-Nitrophenol | 8.184 | 109 | 29800 | 7.9726 ug/mL# | 89 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 43768 | 9.8276 ug/mL | 87 |
| 57) Fluorene | 8.430 | 166 | 243482 | 10.4137 ug/mL | 98 |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 106963 | 10.4555 ug/mL | 90 |
| 59) Diethylphthalate | 8.533 | 149 | 251267 | 10.3628 ug/mL | 99 |
| 60) 4-Nitroaniline | 8.665 | 138 | 55796 | 10.0463 ug/mL | 86 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 87092 | 10.3828 ug/mL | 95 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 30441 | 8.0195 ug/mL | 86 |
| 68) N-Nitrosodiphenylamine... | 8.733 | 169 | 207242 | 10.5093 ug/mL | 98 |
| 69) 4-Bromophenyl-phenylether | 9.248 | 248 | 59535 | 10.4597 ug/mL# | 82 |
| 70) Hexachlorobenzene | 9.396 | 284 | 56646 | 10.1761 ug/mL# | 72 |
| 71) Atrazine | 9.711 | 200 | 66235 | 9.9335 ug/mL | 95 |
| 72) Pentachlorophenol | 9.756 | 266 | 19459 | 7.0828 ug/mL | 97 |
| 73) Phenanthrene | 9.882 | 178 | 344504 | 10.3296 ug/mL | 97 |
| 74) Anthracene | 9.951 | 178 | 355918 | 10.3712 ug/mL | 98 |
| 75) Carbazole | 10.311 | 167 | 343185 | 10.3604 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 434159 | 10.3196 ug/mL | 99 |
| 77) Fluoranthene | 11.734 | 202 | 380418 | 10.3429 ug/mL | 95 |
| 81) Pyrene | 12.060 | 202 | 411139 | 10.6277 ug/mL | 97 |
| 82) Butylbenzylphthalate | 13.397 | 149 | 190560 | 10.1298 ug/mL | 94 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 94564 | 10.4467 ug/mL | 95 |
| 84) Benzo (a) anthracene | 13.969 | 228 | 339674 | 10.2156 ug/mL | 99 |
| 85) Chrysene | 14.026 | 228 | 329741 | 10.5031 ug/mL | 96 |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 254825 | 10.1104 ug/mL | 97 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 437785 | 9.8456 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 351232 | 10.4621 ug/mL | 92 |
| 91) Benzo (k) fluoranthene | 15.586 | 252 | 306875 | 9.9793 ug/mL | 87 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:06 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.975 | 252 | 323491 | 10.1563 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 242397 | 9.7640 ug/mL | 89 |
| 94) Dibenzo (a,h) anthracene | 17.403 | 278 | 251681 | 9.7588 ug/mL | 90 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 268495 | 10.0589 ug/mL | 90 |

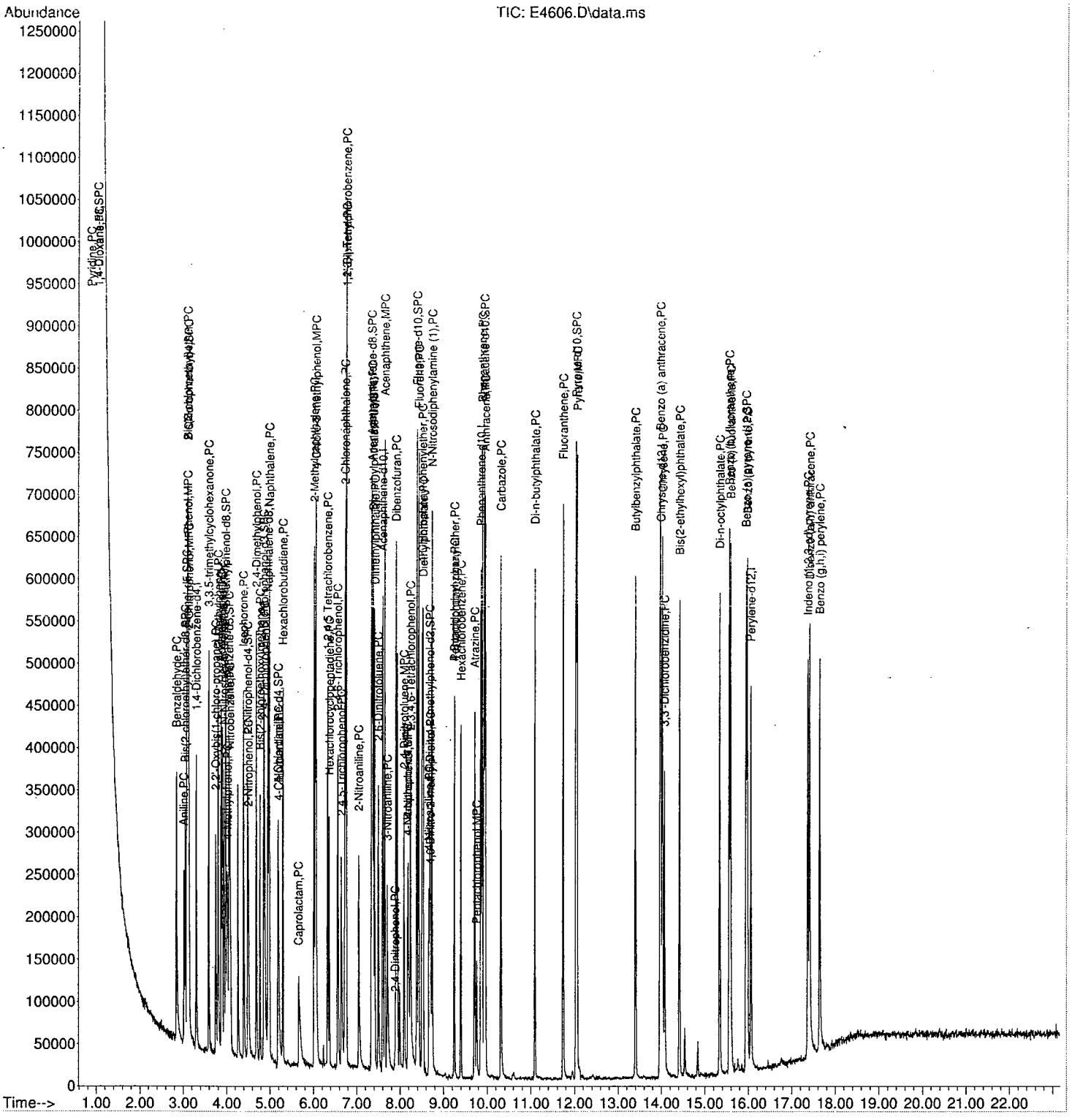
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:06 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration





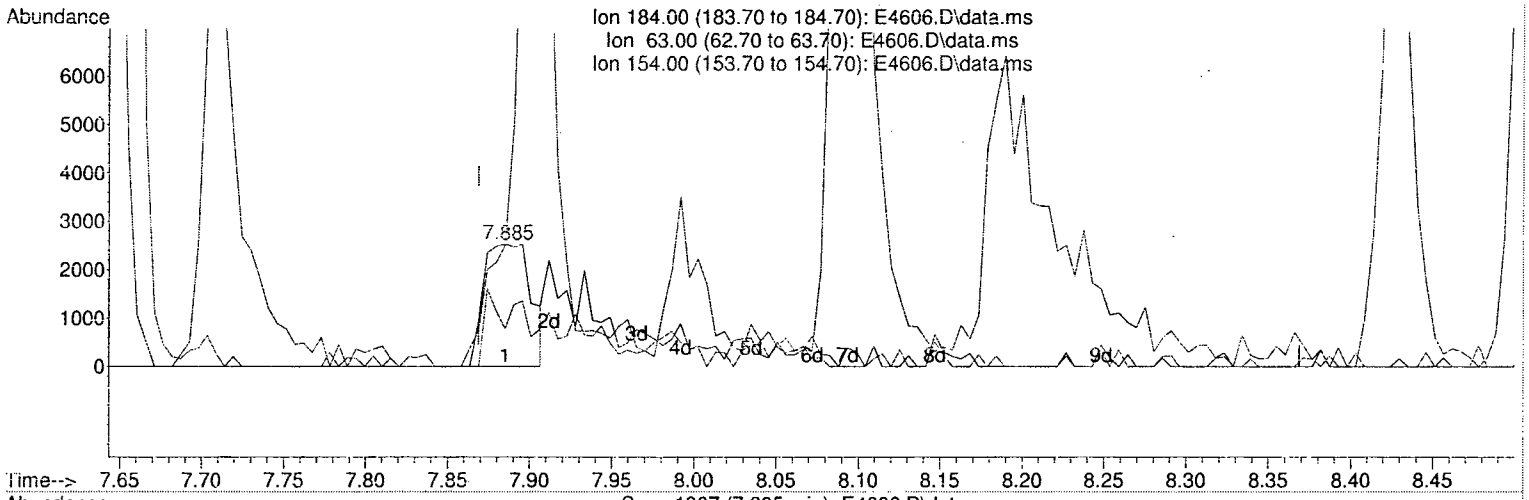

00461

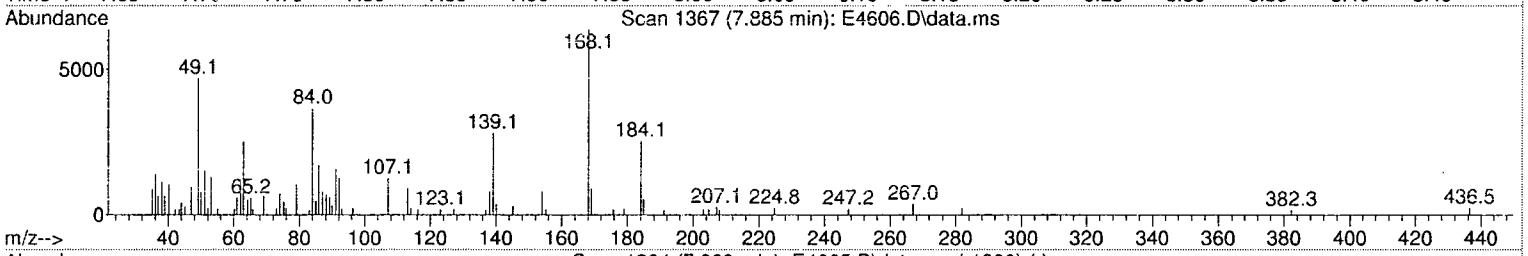
Quantitation Report (Qedit)

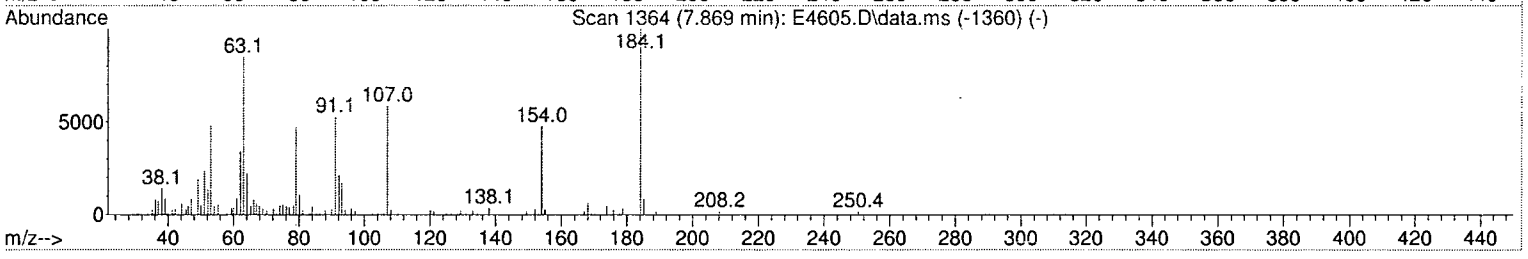
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.885min (+ 0.016) 3.16 ug/mL**

**response 5093**

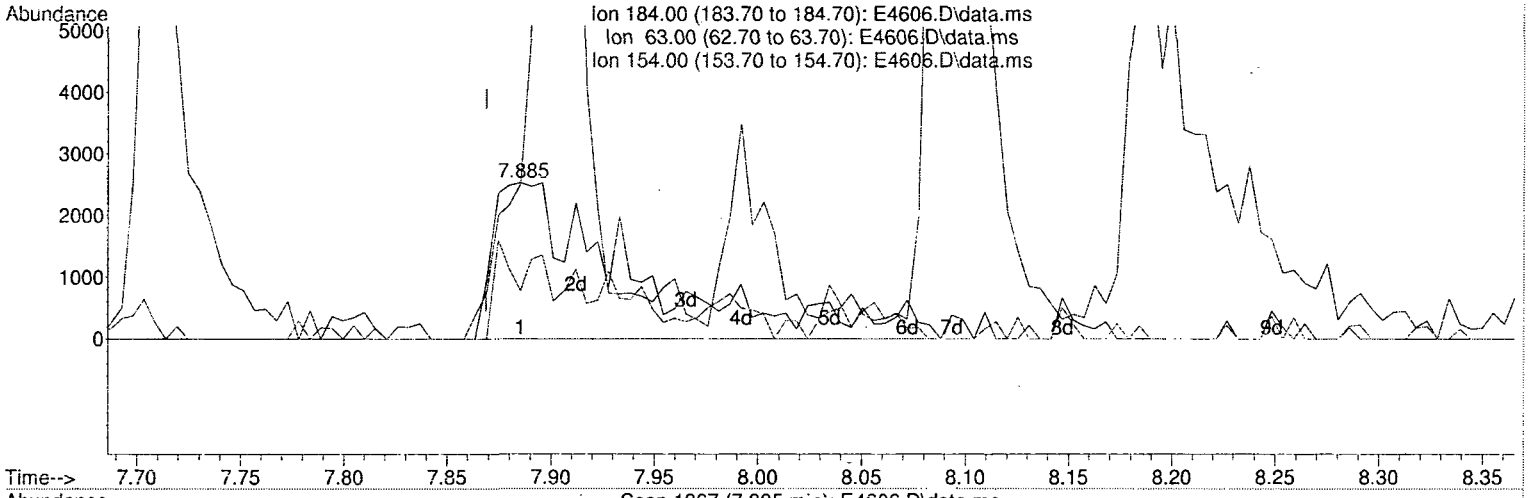
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 0.00# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

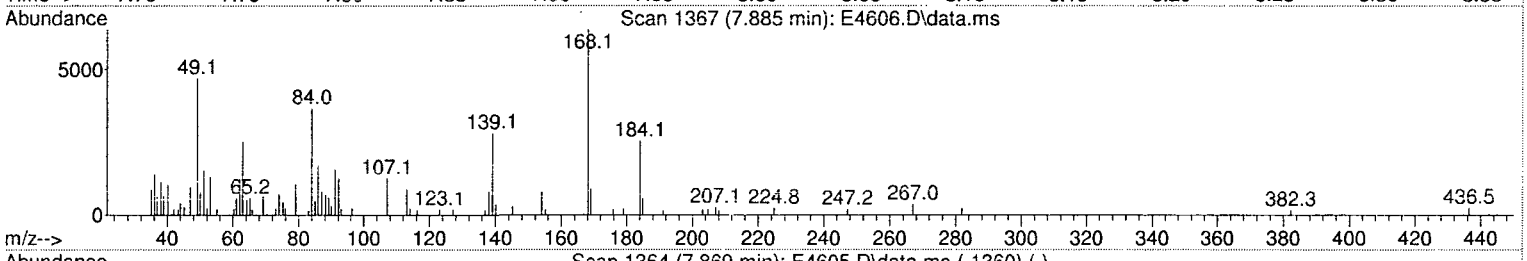
Quantitation Report (Qedit)

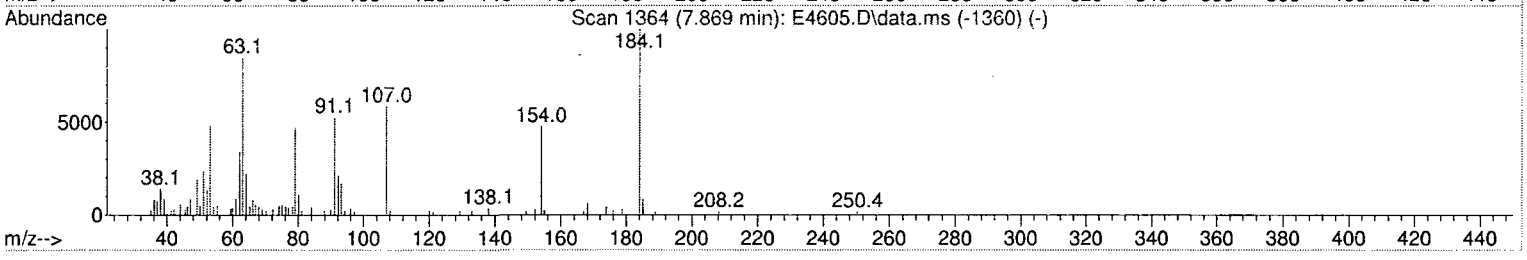
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.885min (+ 0.016) 7.52 ug/mL m** RS 8/21

**response 12128**

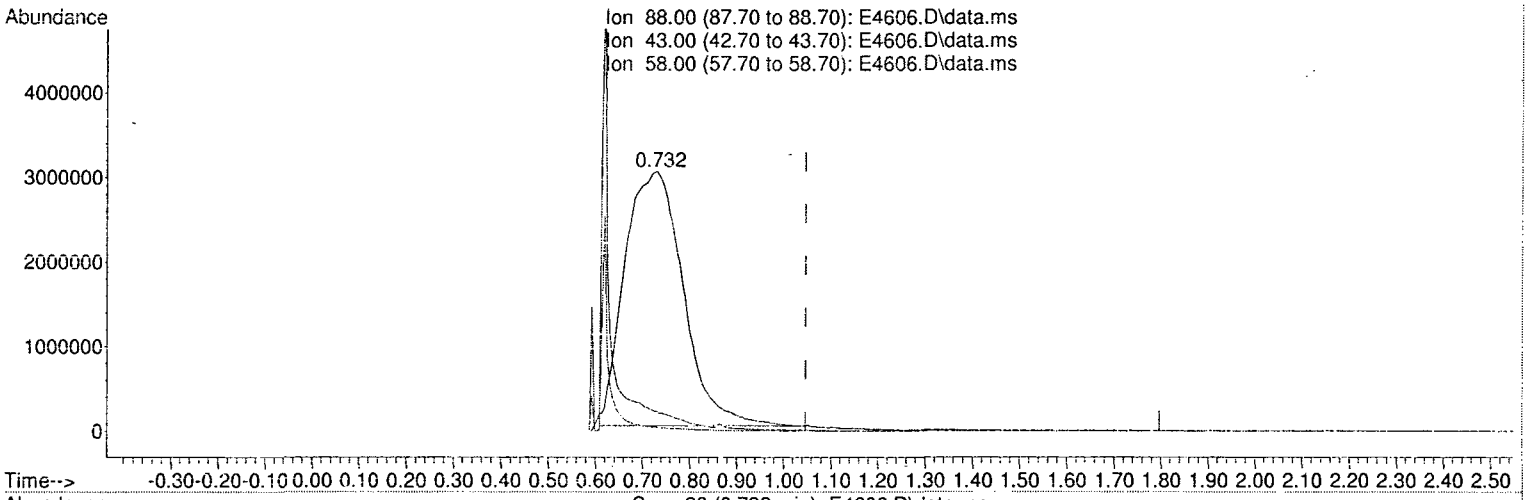
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 0.00# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

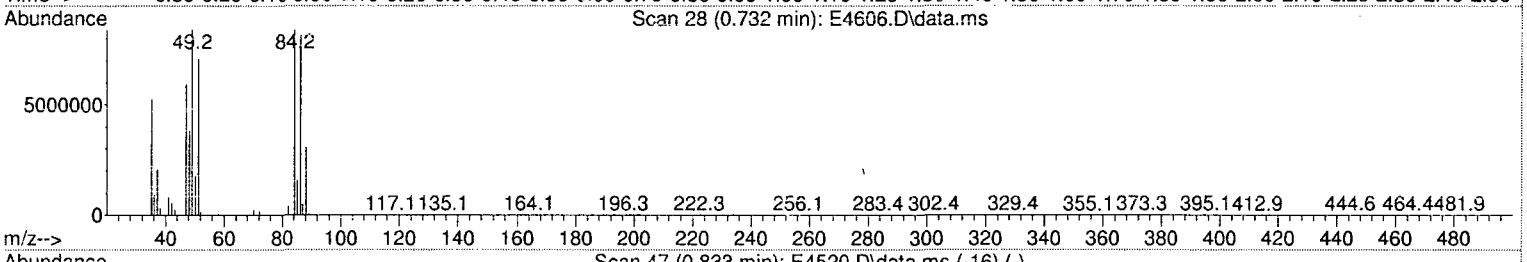
Quantitation Report (Qedit)

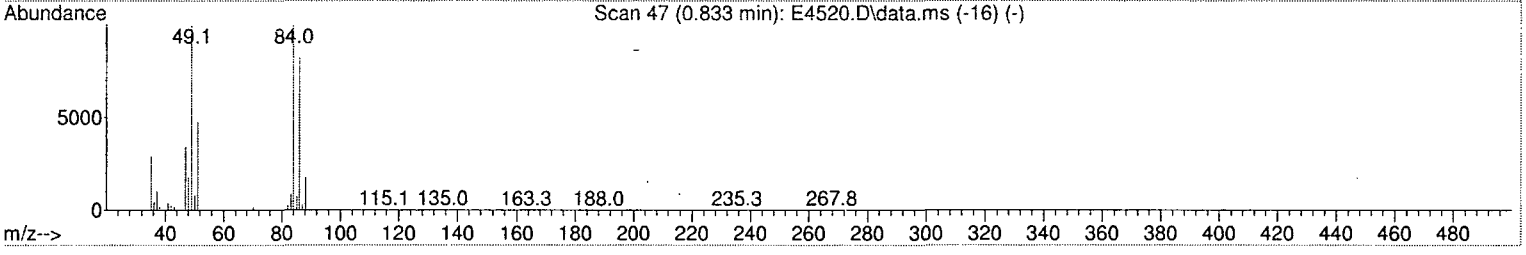
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.732min (-0.315) 8301.17 ug/mL**

**response 26109365**

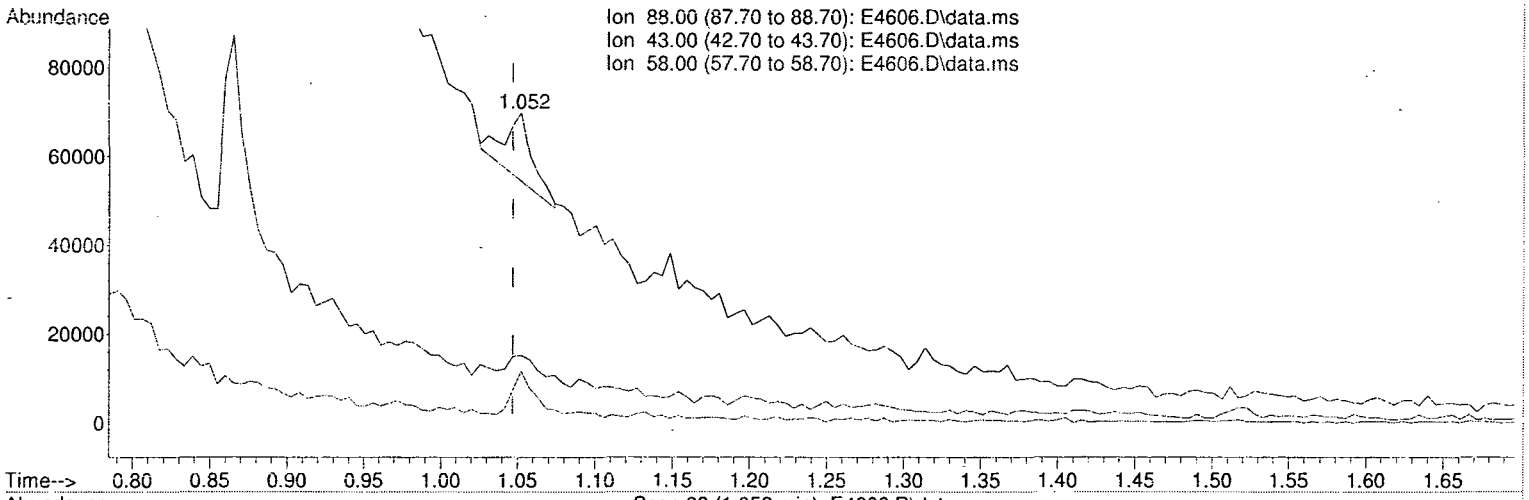
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

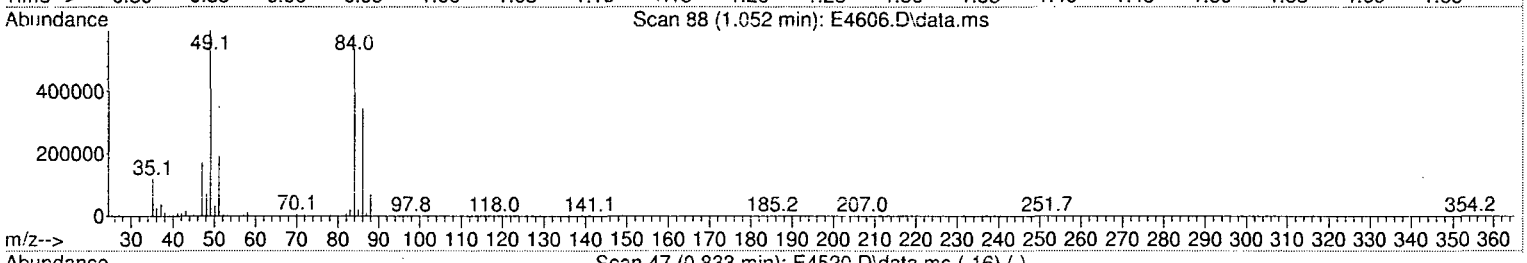
Quantitation Report (Qedit)

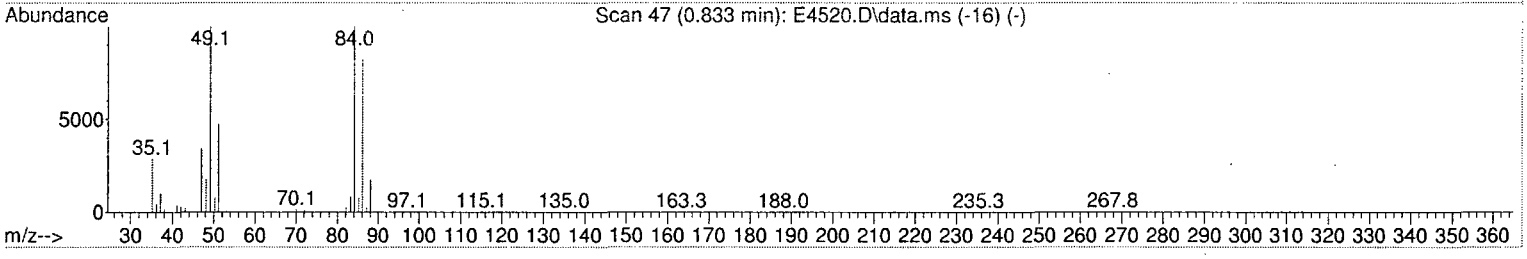
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.052min (+ 0.006) 5.15 ug/mL m** RS 8/24

**response 16202**

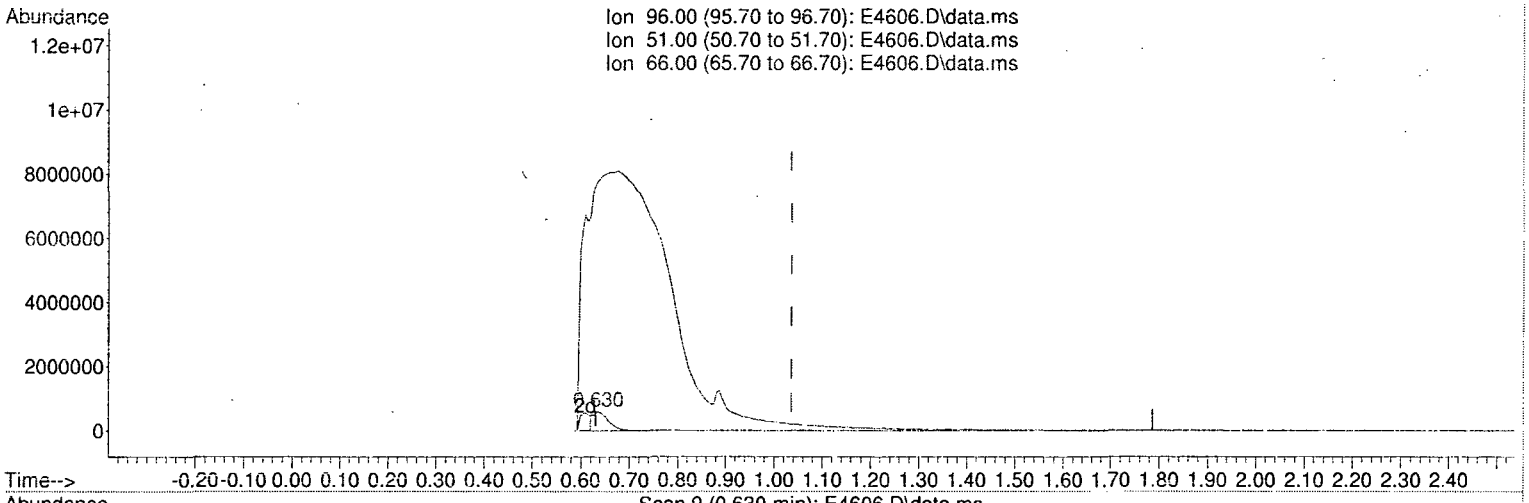
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

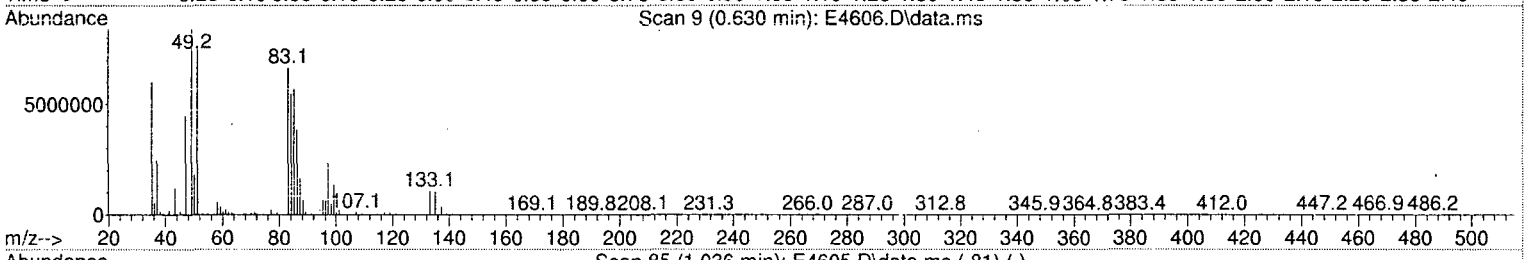
Quantitation Report (Qedit)

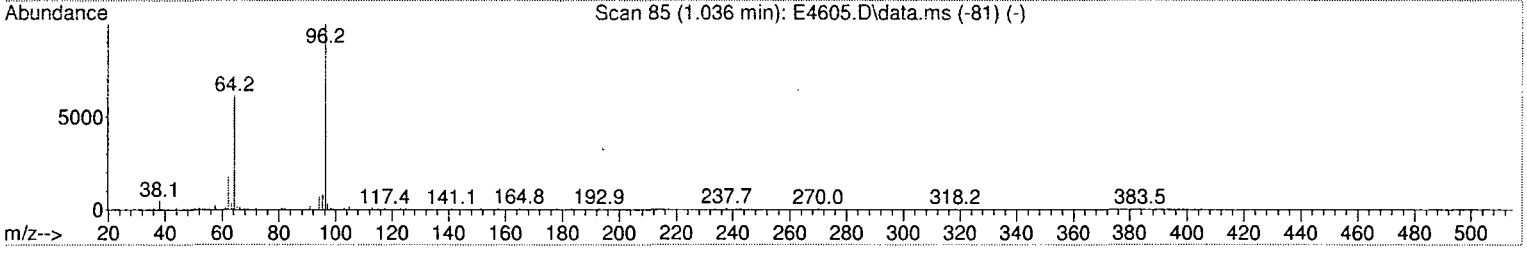
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.630min (-0.406) 3137.38 ug/mL**

**response 1450347**

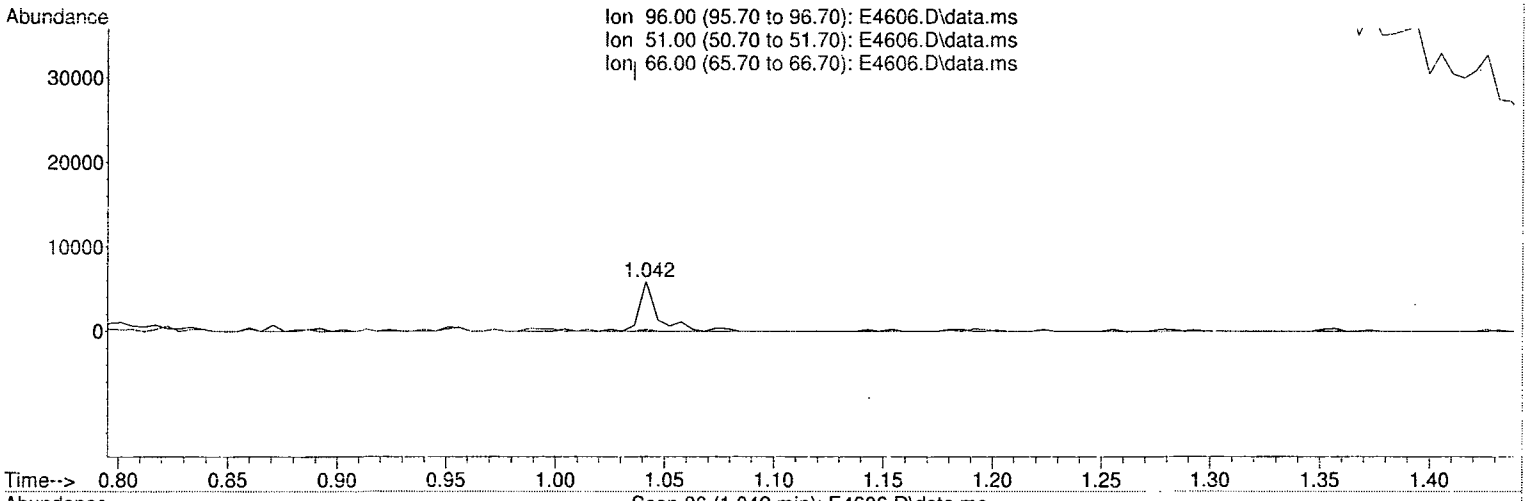
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.03# |
| 0.00 | 0.00 | 0.00 |

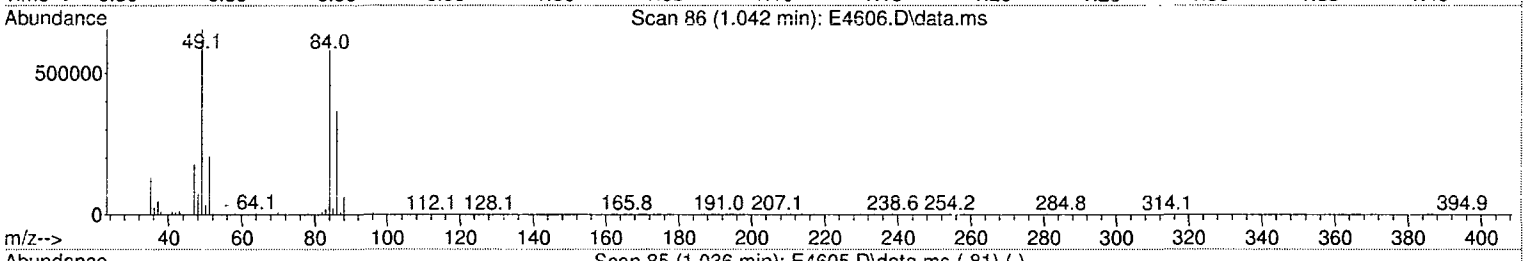
Quantitation Report (Qedit)

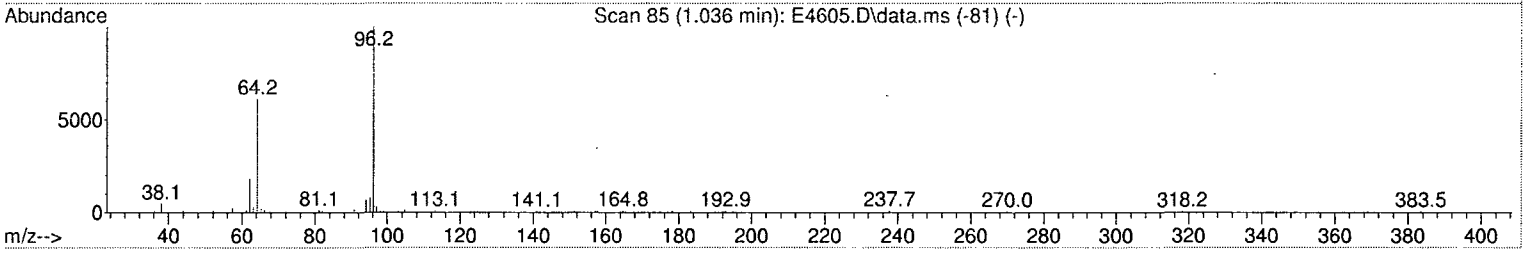
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

Vial: 6
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:52:10 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4606.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.042min (+ 0.006) 6.82 ug/mL m** RS 8/21

**response 3151**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 14.50# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:55:54 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

CASE: 42543 SDG: X0T49

05/25/12

S. Vokati
05/25/12

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 56110 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 245810 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 147641 | 20.0000 | ug/mL | # 0.00 |
| 66) Phenanthrene-d10 | 9.859 | 188 | 270384 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.997 | 240 | 271635 | 20.0000 | ug/mL | 0.01 |
| 88) Perylene-d12 | 16.060 | 264 | 239641 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 1.031 | 96 | 63669 | 140.11 | ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 700.55%# | | | |
| 7) Phenol-d5 | 3.088 | 99 | 1114472 | 88.58 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 221.45%# | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.040 | 67 | 590124 | 85.93 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 214.82%# | | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 983336 | 87.03 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 217.57%# | | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 825027 | 88.00 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 220.00%# | | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 430940 | 83.43 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 208.57%# | | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 495990 | 84.57 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 211.42%# | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.856 | 165 | 844897 | 85.99 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 214.97%# | | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 726708 | 89.68 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 224.20%# | | | |
| 62) Acenaphthylene-d8 | 7.345 | 160 | 2761394 | 86.16 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 215.40%# | | | |
| 63) 4-Nitrophenol-d4 | 8.179 | 143 | 412879 | 93.12 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 232.80%# | | | |
| 64) Dimethylphthalate-d6 | 7.394 | 166 | 2069574 | 84.60 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 211.50%# | | | |
| 65) Fluorene-d10 | 8.398 | 176 | 1701303 | 85.46 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 213.65%# | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.710 | 200 | 416615 | 97.14 | ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 242.85%# | | | |
| 79) Anthracene-d10 | 9.939 | 188 | 2727153 | 81.14 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 202.85%# | | | |
| 87) Pyrene-d10 | 12.043 | 212 | 2941641 | 83.23 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 208.08%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.957 | 264 | 2321899 | 83.22 | ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 208.05%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 0.881 | 79 | 1902749 | 135.8082 | ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.042 | 88 | 439104m | 142.0266 | ug/mL | |
| 5) Benzaldehyde | 2.837 | 77 | 696658 | 78.7968 | ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 874765 | 87.8648 | ug/mL | 84 |
| 8) Phenol | 3.098 | 94 | 1132960 | 89.9112 | ug/mL# | 59 |
| 9) 2-Chlorophenol | 3.125 | 128 | 850035 | 87.1691 | ug/mL | 93 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 803620 | 87.5422 | ug/mL# | 29 |
| 11) Aniline | 3.013 | 93 | 1107150 | 113.0491 | ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.585 | 83 | 1004626 | 80.8952 | ug/mL# | 100 |
| 13) Acetophenone | 3.868 | 105 | 1214489 | 86.4597 | ug/mL | 97 |
| 14) 2-Methylphenol | 3.798 | 108 | 800097 | 86.4008 | ug/mL | 96 |
| 15) Hexachloroethane | 3.900 | 117 | 376098 | 83.3751 | ug/mL | 89 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:55:54 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.937 | 70 | 693785 | 85.7263 ug/mL | 92 |
| 17) 4-Methylphenol | 4.007 | 108 | 831849 | 86.3398 ug/mL | 99 |
| 23) Nitrobenzene | 4.076 | 77 | 1015332 | 81.8661 ug/mL | 99 |
| 24) Isophorone | 4.397 | 82 | 1762678 | 81.6113 ug/mL | 98 |
| 25) 2-Nitrophenol | 4.503 | 139 | 455061 | 83.8649 ug/mL | 99 |
| 26) 2,4-Dimethylphenol | 4.696 | 107 | 982292 | 82.4513 ug/mL | 99 |
| 27) Bis(2-chloroethoxy)met... | 4.781 | 93 | 975460 | 83.3447 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 706273 | 82.2397 ug/mL | 99 |
| 29) Naphthalene | 4.990 | 128 | 2466660 | 80.8677 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.198 | 127 | 688478 | 94.9072 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 411226 | 78.1817 ug/mL | 98 |
| 32) Caprolactam | 5.700 | 113 | 295806m | 87.4533 ug/mL | |
| 33) 4-Chloro-3-methylphenol | 6.063 | 107 | 868796 | 84.3845 ug/mL | 93 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 1694573 | 82.1341 ug/mL | 99 |
| 39) Hexachlorocyclopentadiene | 6.373 | 237 | 472595 | 88.7036 ug/mL | 97 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 514221 | 87.4984 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.646 | 196 | 532487 | 89.7298 ug/mL | 99 |
| 42) 1,1'-Biphenyl | 6.769 | 154 | 2098873 | 85.9693 ug/mL | 98 |
| 43) 2-Chloronaphthalene | 6.736 | 162 | 1617413 | 83.5478 ug/mL | 99 |
| 44) 1,2,3,4-Tetrachloroben... | 6.763 | 216 | 736949 | 85.6637 ug/mL | 96 |
| 45) 2-Nitroaniline | 7.052 | 65 | 557556 | 85.8455 ug/mL | 96 |
| 46) Acenaphthylene | 7.367 | 152 | 2636034 | 84.7721 ug/mL | 99 |
| 47) Dimethylphthalate | 7.426 | 163 | 1981469 | 84.4509 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.506 | 165 | 425882 | 89.1761 ug/mL | 96 |
| 49) Acenaphthene | 7.650 | 153 | 1663866 | 85.3827 ug/mL | 99 |
| 50) 3-Nitroaniline | 7.714 | 138 | 385275 | 87.9139 ug/mL | 96 |
| 51) 2,4-Dinitrophenol | 7.864 | 184 | 178095 | 110.0504 ug/mL | 96 |
| 52) Dibenzofuran | 7.912 | 168 | 2276679 | 83.1273 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.253 | 250 | 447534 | 83.7328 ug/mL | 95 |
| 54) 2,4-Dinitrotoluene | 8.099 | 165 | 588551 | 90.7624 ug/mL | 98 |
| 55) 4-Nitrophenol | 8.190 | 109 | 353826 | 94.3239 ug/mL | 89 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.248 | 232 | 392541 | 87.8263 ug/mL | 89 |
| 57) Fluorene | 8.441 | 166 | 1987189 | 84.6894 ug/mL | 99 |
| 58) 4-Chlorophenyl-phenyle... | 8.516 | 204 | 864192 | 84.1727 ug/mL | 90 |
| 59) Diethylphthalate | 8.545 | 149 | 2042757 | 83.9472 ug/mL | 98 |
| 60) 4-Nitroaniline | 8.693 | 138 | 462491 | 82.9764 ug/mL# | 82 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 692719 | 82.2895 ug/mL | 96 |
| 67) 4,6-Dinitro-2-methylph... | 8.722 | 198 | 351494 | 91.1804 ug/mL | 87 |
| 68) N-Nitrosodiphenylamine... | 8.750 | 169 | 1656968 | 82.7379 ug/mL | 97 |
| 69) 4-Bromophenyl-phenylether | 9.253 | 248 | 471839 | 81.6272 ug/mL# | 86 |
| 70) Hexachlorobenzene | 9.402 | 284 | 453984 | 80.3058 ug/mL | 79 |
| 71) Atrazine | 9.734 | 200 | 568749 | 83.9902 ug/mL | 95 |
| 72) Pentachlorophenol | 9.762 | 266 | 275068 | 98.5873 ug/mL | 98 |
| 73) Phenanthrene | 9.894 | 178 | 2758252 | 81.4358 ug/mL | 98 |
| 74) Anthracene | 9.968 | 178 | 2892623 | 82.9975 ug/mL | 99 |
| 75) Carbazole | 10.316 | 167 | 2747368 | 81.6690 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.099 | 149 | 3559169 | 83.3024 ug/mL | 99 |
| 77) Fluoranthene | 11.745 | 202 | 3065459 | 82.0676 ug/mL | 94 |
| 81) Pyrene | 12.071 | 202 | 3256282 | 82.2986 ug/mL | 95 |
| 82) Butylbenzylphthalate | 13.408 | 149 | 1682330 | 87.4379 ug/mL | 94 |
| 83) 3,3'-Dichlorobenzidine | 14.077 | 252 | 774193 | 83.6219 ug/mL | 97 |
| 84) Benzo (a) anthracene | 13.980 | 228 | 2844718 | 83.6486 ug/mL | 99 |
| 85) Chrysene | 14.037 | 228 | 2658782 | 82.8029 ug/mL | 98 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 2286606 | 88.7022 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.346 | 149 | 3991391 | 87.9379 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.569 | 252 | 2792474 | 81.4869 ug/mL | 95 |
| 91) Benzo (k) fluoranthene | 15.609 | 252 | 2677636 | 85.3027 ug/mL | 93 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:55:54 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.998 | 252 | 2728111 | 83.9085 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.381 | 276 | 2245106 | 88.5948 ug/mL | 91 |
| 94) Dibenzo (a,h) anthracene | 17.426 | 278 | 2331810 | 88.5750 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.661 | 276 | 2288190 | 83.9804 ug/mL | 90 |

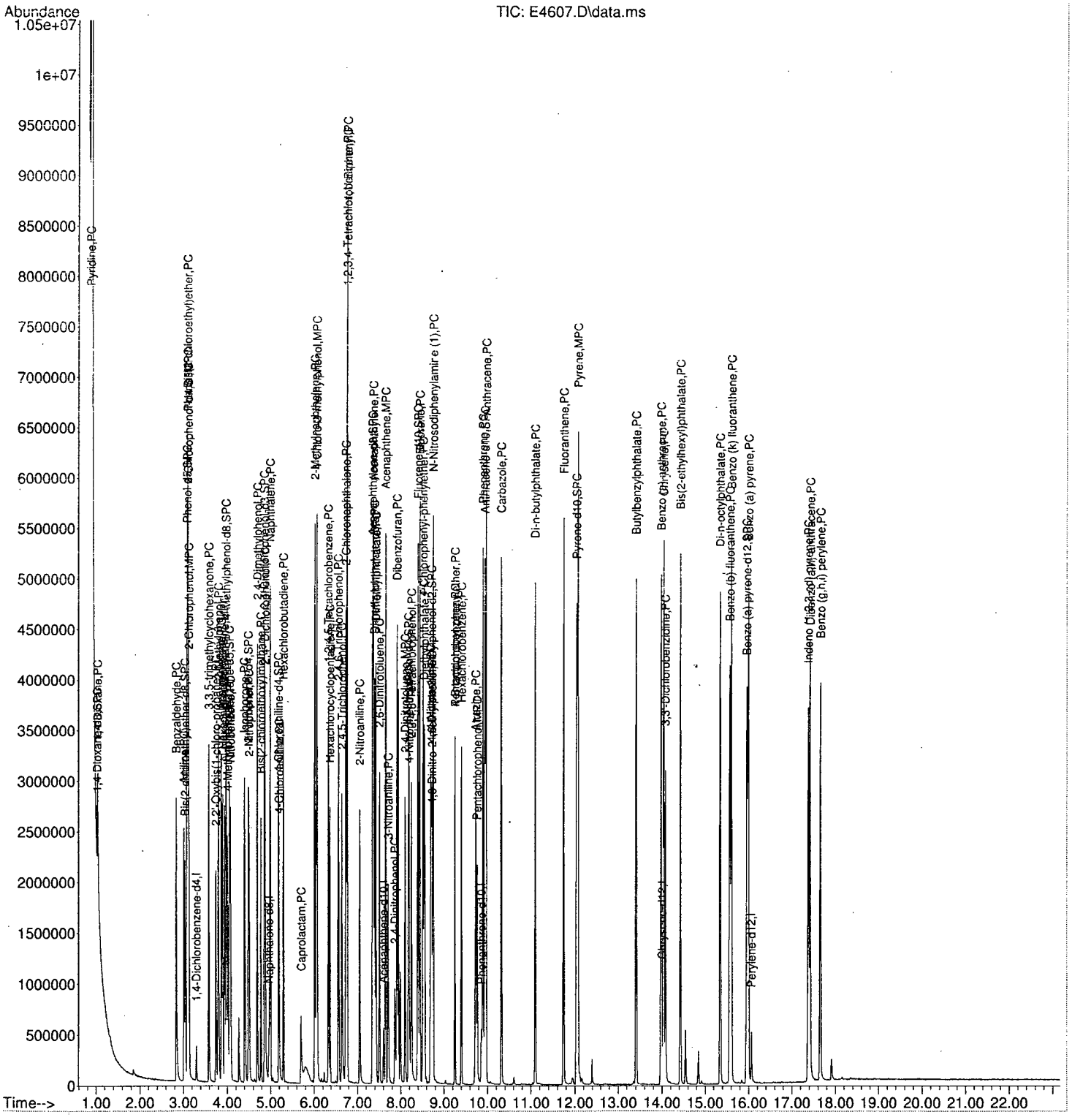
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:55:54 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

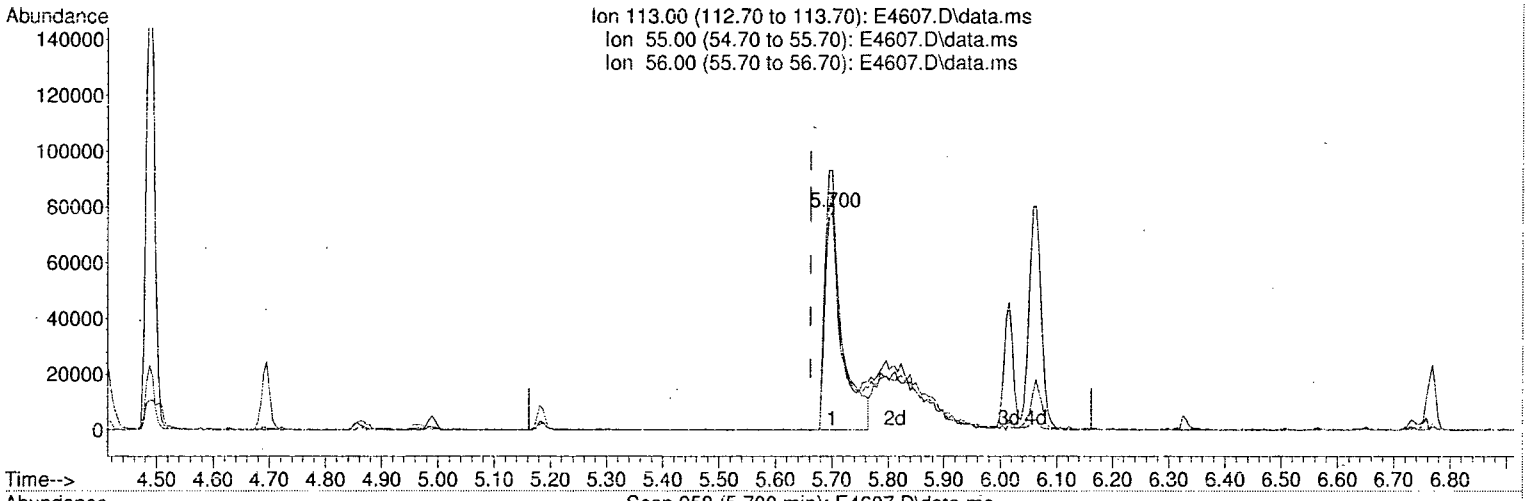


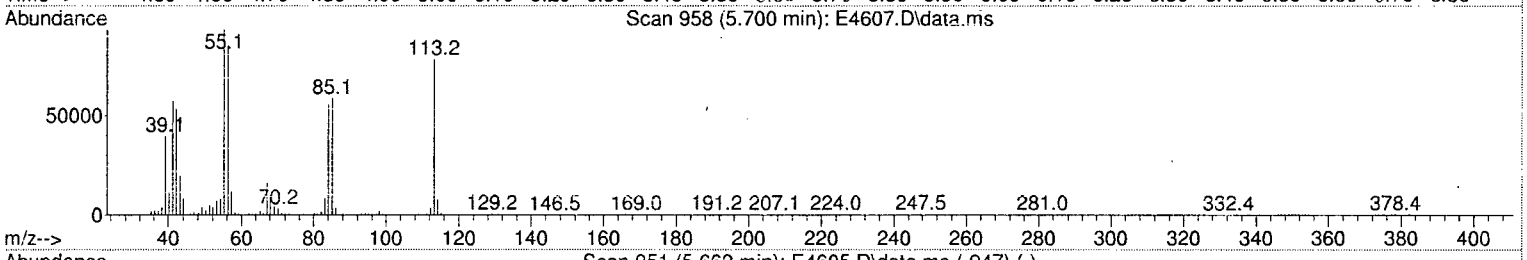
Quantitation Report (Qedit)

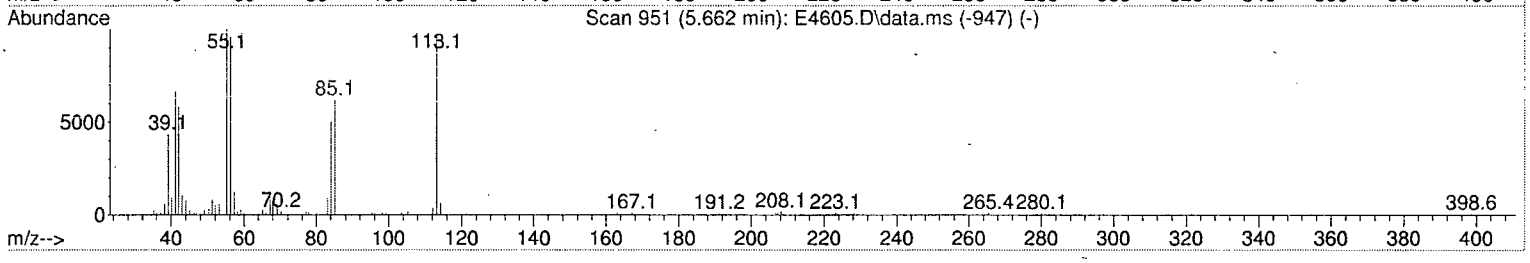
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:18 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4607.D\data.ms

**(32) Caprolactam (PC)**

**5.700min (+ 0.038) 48.79 ug/mL**

**response 165021**

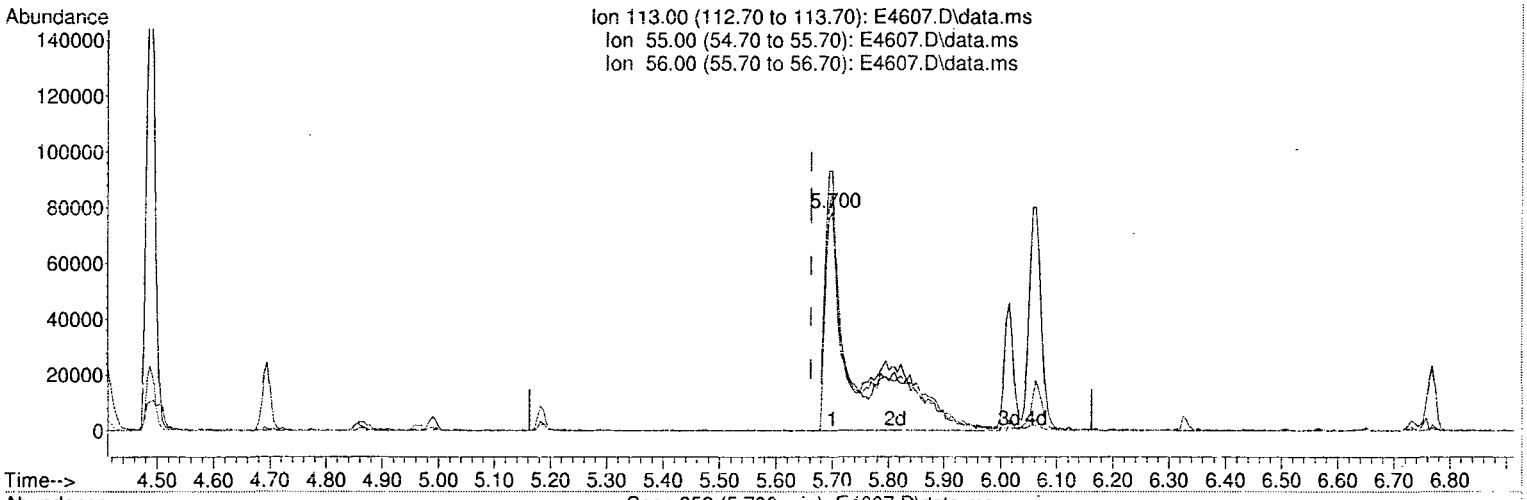
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 108.45 |
| 56.00 | 92.50 | 99.59 |
| 0.00 | 0.00 | 0.00 |

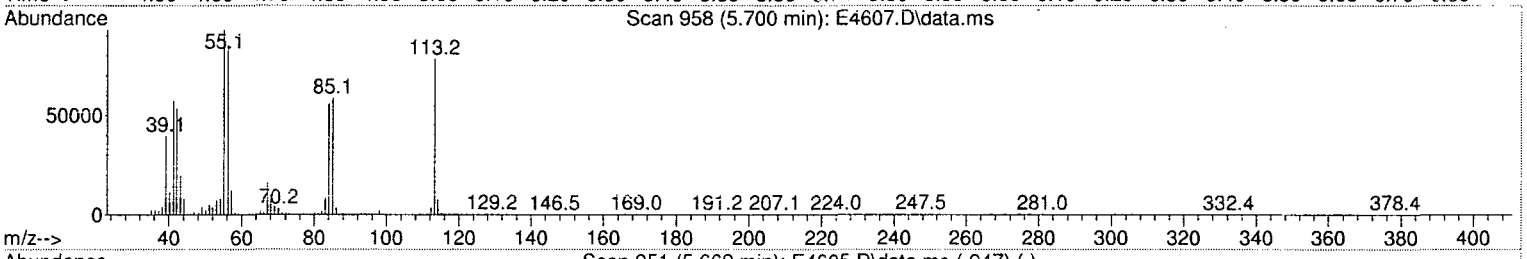
Quantitation Report (Qedit)

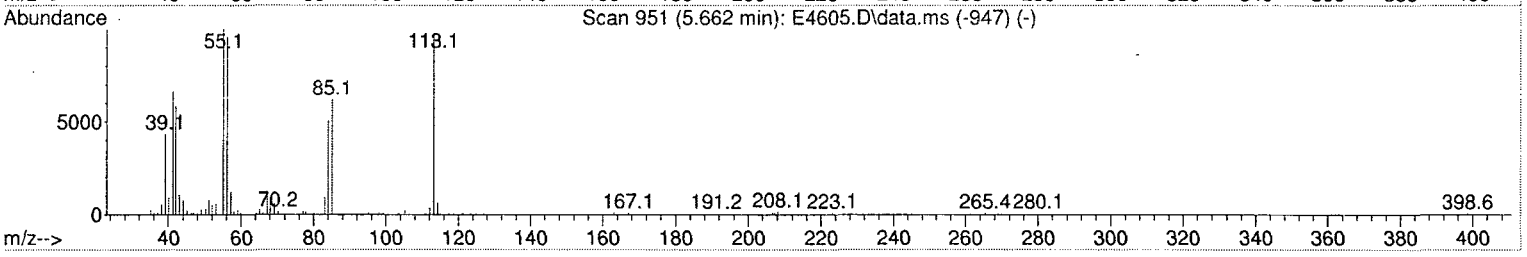
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:18 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4607.D\data.ms

**(32) Caprolactam (PC)**

**5.700min (+ 0.038) 87.45 ug/mL m** RS 8/24

**response 295806**

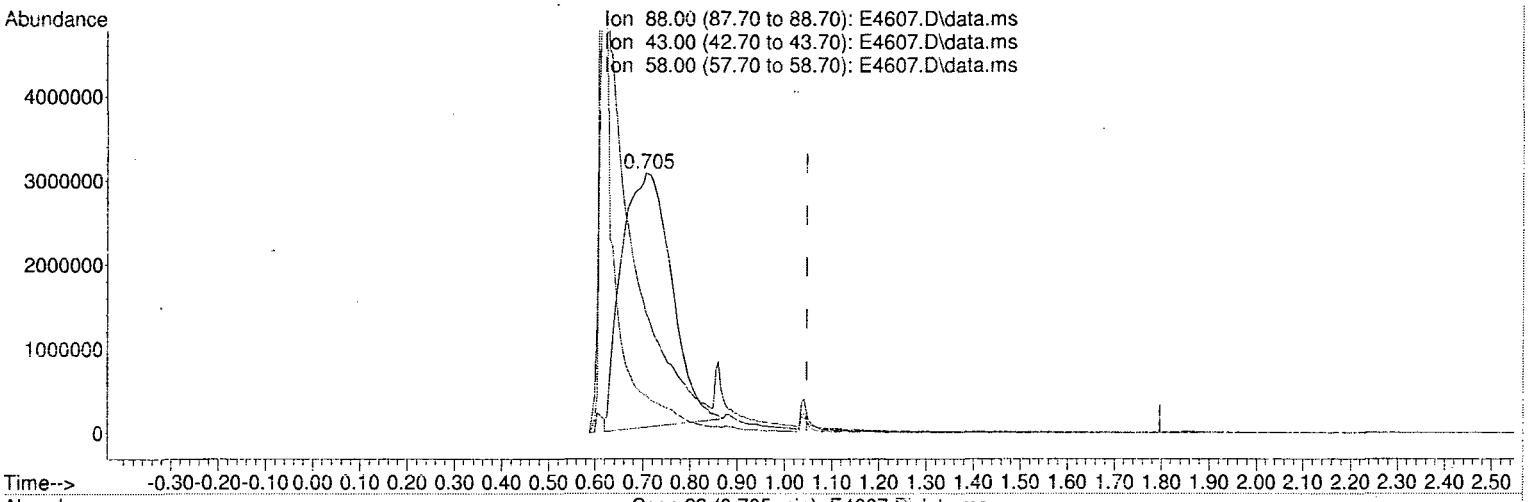
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 60.50# |
| 56.00 | 92.50 | 55.56# |
| 0.00 | 0.00 | 0.00 |

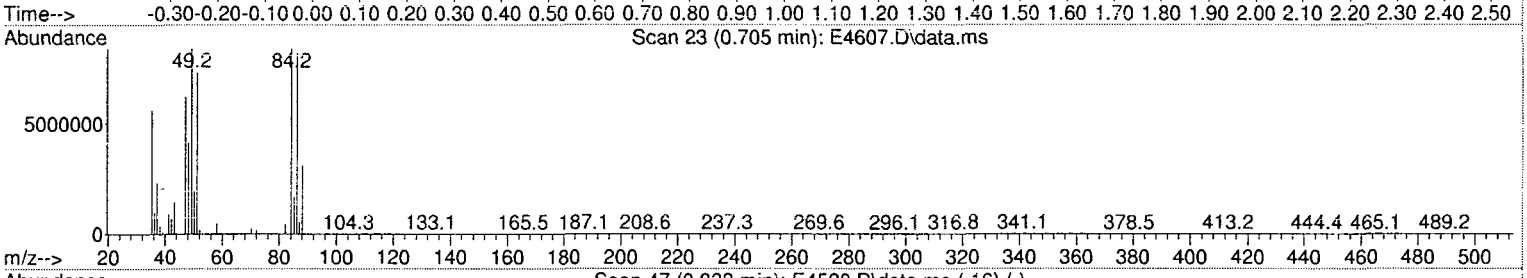
Quantitation Report (Qedit)

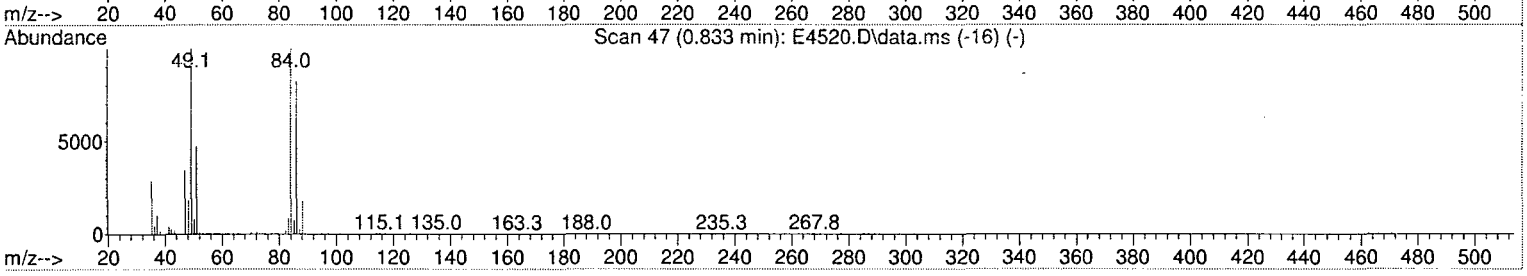
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:18 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4607.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.705min (-0.342) 7144.97 ug/mL**

**response 22090116**

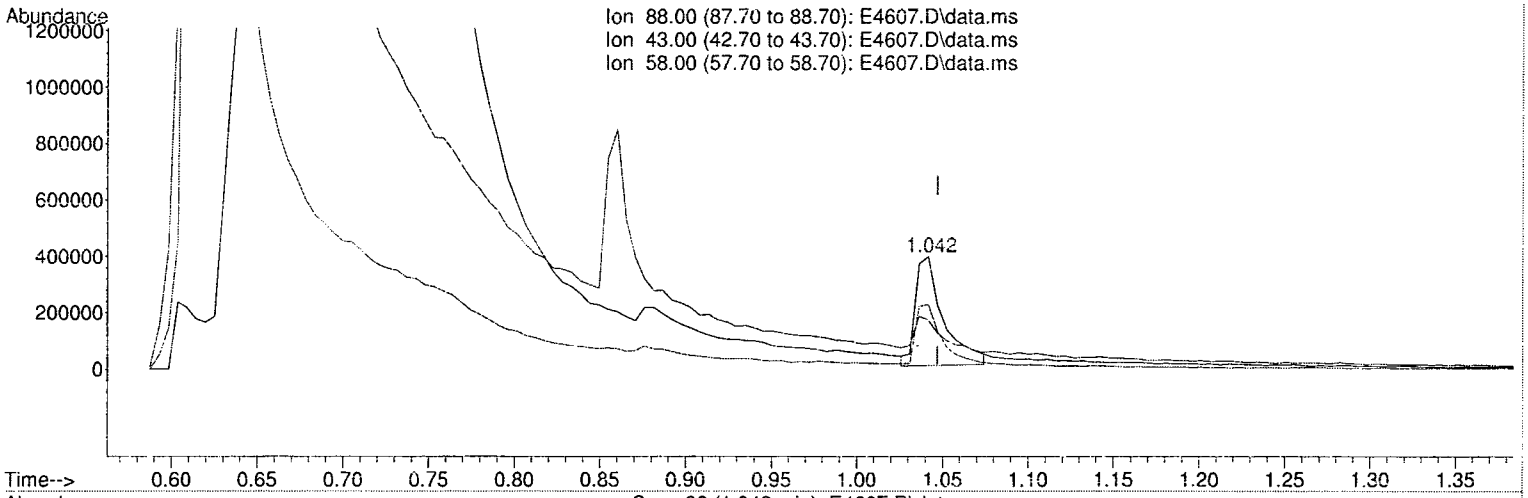
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

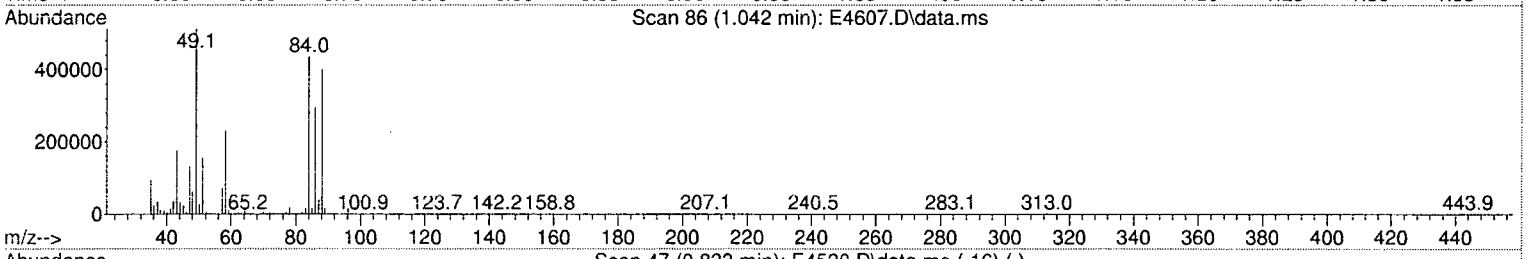
Quantitation Report (Qedit)

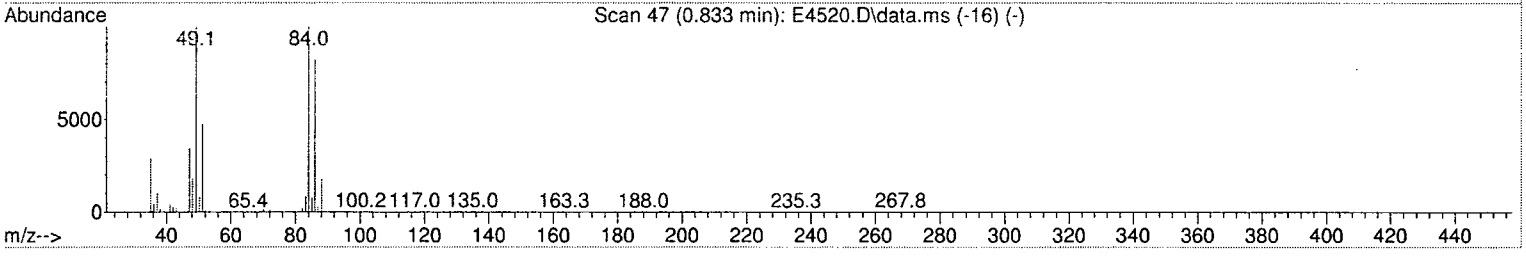
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

Vial: 15
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:54:18 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4607.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.042min (-0.005) 142.03 ug/mL m** RS 8/24

**response 439104**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/25/12

S. Vitkati

05/25/12

Quant Time: May 24 12:58:07 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 66765 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 276471 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 165548 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.854 | 188 | 295671 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.986 | 240 | 304910 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.049 | 264 | 266662 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.047 | 96 | 1924m | 3.56 ug/mL | 0.01 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery | = 17.80%# | |
| 7) Phenol-d5 | 3.093 | 99 | 70967 | 4.74 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery | = 11.85%# | |
| 18) Bis(2-chloroethyl)ethe... | 3.056 | 67 | 38684 | 4.73 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery | = 11.83%# | |
| 19) 2-Chlorophenol-d4 | 3.120 | 132 | 59371 | 4.42 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery | = 11.05%# | |
| 20) 4-Methylphenol-d8 | 3.974 | 113 | 48444 | 4.34 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery | = 10.85%# | |
| 22) Nitrobenzene-d5 | 4.060 | 128 | 27372 | 4.71 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery | = 11.77%# | |
| 35) 2-Nitrophenol-d4 | 4.493 | 143 | 30633 | 4.64 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery | = 11.60%# | |
| 36) 2,4-Dichlorophenol-d3 | 4.867 | 165 | 46125 | 4.17 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery | = 10.42%# | |
| 37) 4-Chloroaniline-d4 | 5.193 | 131 | 44170 | 4.85 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery | = 12.13% | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 165362 | 4.60 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery | = 11.50%# | |
| 63) 4-Nitrophenol-d4 | 8.190 | 143 | 12047 | 2.42 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery | = 6.05%# | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 134426 | 4.90 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery | = 12.25%# | |
| 65) Fluorene-d10 | 8.387 | 176 | 107337 | 4.81 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery | = 12.03%# | |
| 78) 4,6-Dinitro-2-methylph... | 8.688 | 200 | 15657 | 3.34 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery | = 8.35%# | |
| 79) Anthracene-d10 | 9.928 | 188 | 174609 | 4.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery | = 11.88%# | |
| 87) Pyrene-d10 | 12.031 | 212 | 189392 | 4.77 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery | = 11.92%# | |
| 96) Benzo (a) pyrene-d12 | 15.940 | 264 | 135055 | 4.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery | = 10.87%# | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.887 | 79 | 118763 | 7.1239 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.052 | 88 | 12301m | 3.3438 ug/mL | |
| 5) Benzaldehyde | 2.858 | 77 | 50061 | 4.7586 ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.104 | 93 | 54564 | 4.6060 ug/mL | 91 |
| 8) Phenol | 3.109 | 94 | 66314 | 4.4228 ug/mL# | 38 |
| 9) 2-Chlorophenol | 3.136 | 128 | 54202 | 4.6712 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.750 | 45 | 54176 | 4.9598 ug/mL# | 29 |
| 11) Aniline | 3.024 | 93 | 49947 | 4.2861 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.585 | 83 | 163941 | 11.0942 ug/mL# | 100 |
| 13) Acetophenone | 3.873 | 105 | 79354 | 4.7477 ug/mL | 97 |
| 14) 2-Methylphenol | 3.798 | 108 | 50737 | 4.6046 ug/mL | 95 |
| 15) Hexachloroethane | 3.900 | 117 | 25420 | 4.7359 ug/mL | 88 |

RS PRN

RS PRN

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:58:07 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.937 | 70 | 48035 | 4.9881 ug/mL | 96 |
| 17) 4-Methylphenol | 4.023 | 108 | 54658 | 4.7677 ug/mL | 88 |
| 23) Nitrobenzene | 4.081 | 77 | 66961 | 4.8003 ug/mL | 96 |
| 24) Isophorone | 4.397 | 82 | 111590 | 4.5936 ug/mL | 97 |
| 25) 2-Nitrophenol | 4.514 | 139 | 25749 | 4.2191 ug/mL | 95 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 61792 | 4.6115 ug/mL | 99 |
| 27) Bis(2-chloroethoxy)met... | 4.781 | 93 | 61384 | 4.6631 ug/mL | 97 |
| 28) 2,4- Dichlorophenol | 4.883 | 162 | 42840 | 4.4352 ug/mL | 99 |
| 29) Naphthalene | 4.990 | 128 | 162623 | 4.7402 ug/mL | 98 |
| 30) 4-Chloroaniline | 5.203 | 127 | 36169 | 4.4330 ug/mL | 88 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 28068 | 4.7445 ug/mL | 99 |
| 32) Caprolactam | 5.657 | 113 | 15385 | 4.0441 ug/mL | 98 |
| 33) 4-Chloro-3-methylphenol | 6.063 | 107 | 50780 | 4.3852 ug/mL | 97 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 107351 | 4.6261 ug/mL | 92 |
| 39) Hexachlorocyclopentadiene | 6.373 | 237 | 25069 | 4.1964 ug/mL | 95 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 29111 | 4.4176 ug/mL | 100 |
| 41) 2,4,5-Trichlorophenol | 6.656 | 196 | 25709 | 3.8636 ug/mL | 94 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 131289 | 4.7959 ug/mL | 97 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 110573 | 5.0939 ug/mL | 98 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 45372 | 4.7036 ug/mL | 93 |
| 45) 2-Nitroaniline | 7.052 | 65 | 28402 | 3.9000 ug/mL | 94 |
| 46) Acenaphthylene | 7.356 | 152 | 165942 | 4.7593 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 128455 | 4.8826 ug/mL | 98 |
| 48) 2,6-Dinitrotoluene | 7.500 | 165 | 22630 | 4.2260 ug/mL | 92 |
| 49) Acenaphthene | 7.645 | 153 | 107017 | 4.8976 ug/mL | 97 |
| 50) 3-Nitroaniline | 7.719 | 138 | 23295 | 4.7406 ug/mL | 99 |
| 51) 2,4-Dinitrophenol | 7.912 | 184 | 800 | 0.4409 ug/mL# | 1 |
| 52) Dibenzofuran | 7.906 | 168 | 147511 | 4.8034 ug/mL | 95 |
| 53) Pentachlorobenzene | 9.248 | 250 | 28712 | 4.7909 ug/mL# | 99 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 31266 | 4.3001 ug/mL | 96 |
| 55) 4-Nitrophenol | 8.200 | 109 | 10988 | 2.6124 ug/mL# | 70 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.248 | 232 | 21197 | 4.2296 ug/mL | 93 |
| 57) Fluorene | 8.430 | 166 | 130881 | 4.9745 ug/mL | 98 |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 55917 | 4.8572 ug/mL | 90 |
| 59) Diethylphthalate | 8.528 | 149 | 131169 | 4.8073 ug/mL | 97 |
| 60) 4-Nitroaniline | 8.670 | 138 | 25118 | 4.0190 ug/mL# | 82 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 45919 | 4.8648 ug/mL | 97 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 11531 | 2.7354 ug/mL | 98 |
| 68) N-Nitrosodiphenylamine... | 8.733 | 169 | 103076 | 4.7067 ug/mL | 99 |
| 69) 4-Bromophenyl-phenylether | 9.248 | 248 | 29341 | 4.6418 ug/mL# | 82 |
| 70) Hexachlorobenzene | 9.391 | 284 | 30146 | 4.8765 ug/mL# | 73 |
| 71) Atrazine | 9.711 | 200 | 31194 | 4.2126 ug/mL | 93 |
| 72) Pentachlorophenol | 9.756 | 266 | 9111 | 2.9862 ug/mL# | 75 |
| 73) Phenanthrene | 9.882 | 178 | 179930 | 4.8580 ug/mL | 98 |
| 74) Anthracene | 9.956 | 178 | 180771 | 4.7432 ug/mL | 98 |
| 75) Carbazole | 10.311 | 167 | 175165 | 4.7617 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 209271 | 4.4791 ug/mL | 99 |
| 77) Fluoranthene | 11.740 | 202 | 194368 | 4.7585 ug/mL | 93 |
| 81) Pyrene | 12.060 | 202 | 209977 | 4.7278 ug/mL | 94 |
| 82) Butylbenzylphthalate | 13.403 | 149 | 89326 | 4.1360 ug/mL | 98 |
| 83) 3,3'-Dichlorobenzidine | 14.077 | 252 | 45344 | 4.3632 ug/mL | 95 |
| 84) Benzo (a) anthracene | 13.969 | 228 | 168101 | 4.4036 ug/mL | 99 |
| 85) Chrysene | 14.026 | 228 | 173531 | 4.8145 ug/mL | 96 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 119140 | 4.1173 ug/mL | 97 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 198812 | 3.9364 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 148961 | 3.9064 ug/mL | 95 |
| 91) Benzo (k) fluoranthene | 15.586 | 252 | 183065 | 5.2410 ug/mL | 96 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:58:07 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.975 | 252 | 159563 | 4.4104 ug/mL | 96 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 111844 | 3.9663 ug/mL | 90 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 119027 | 4.0632 ug/mL | 91 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 132648 | 4.3751 ug/mL | 84 |

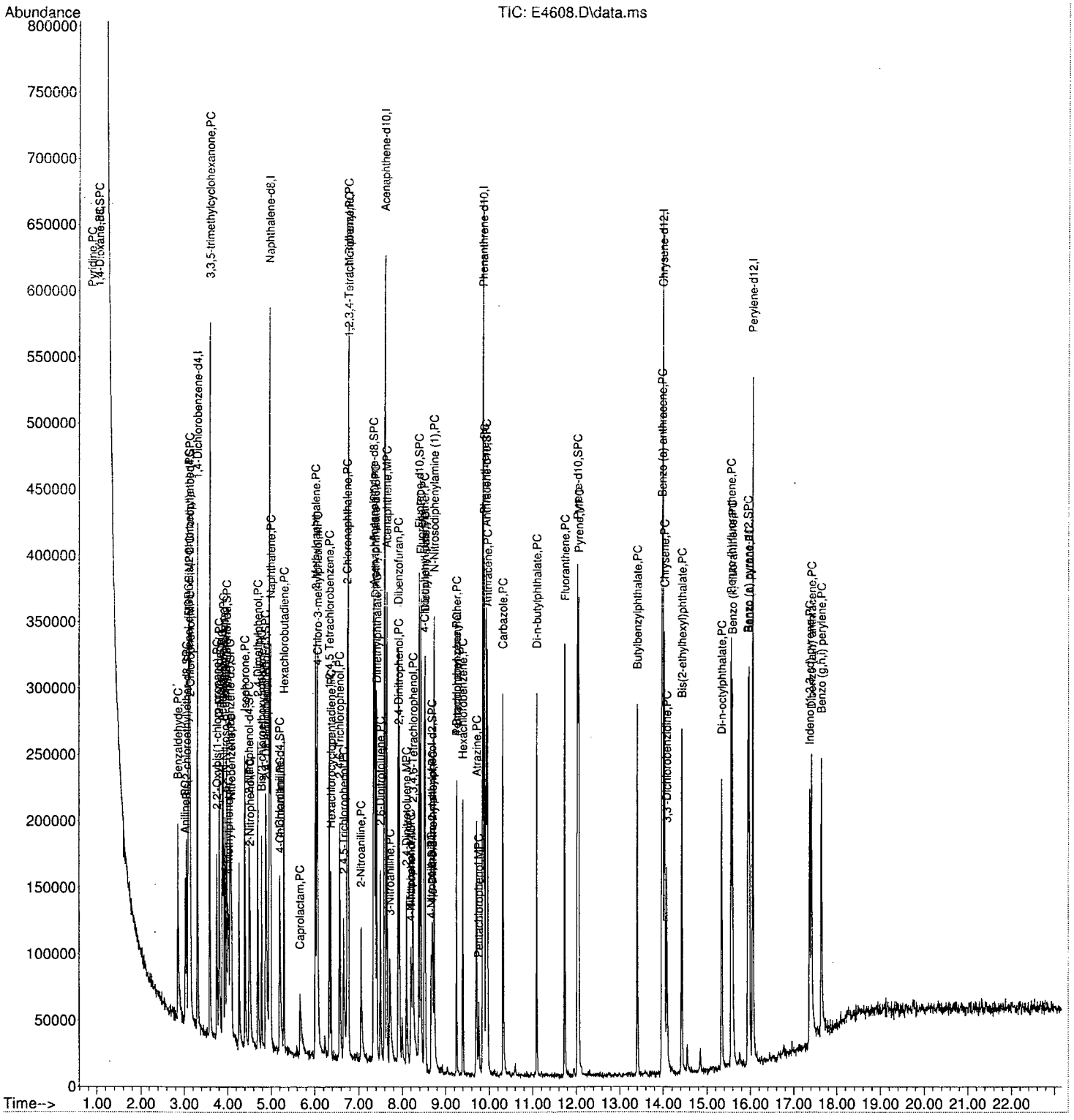
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:58:07 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration





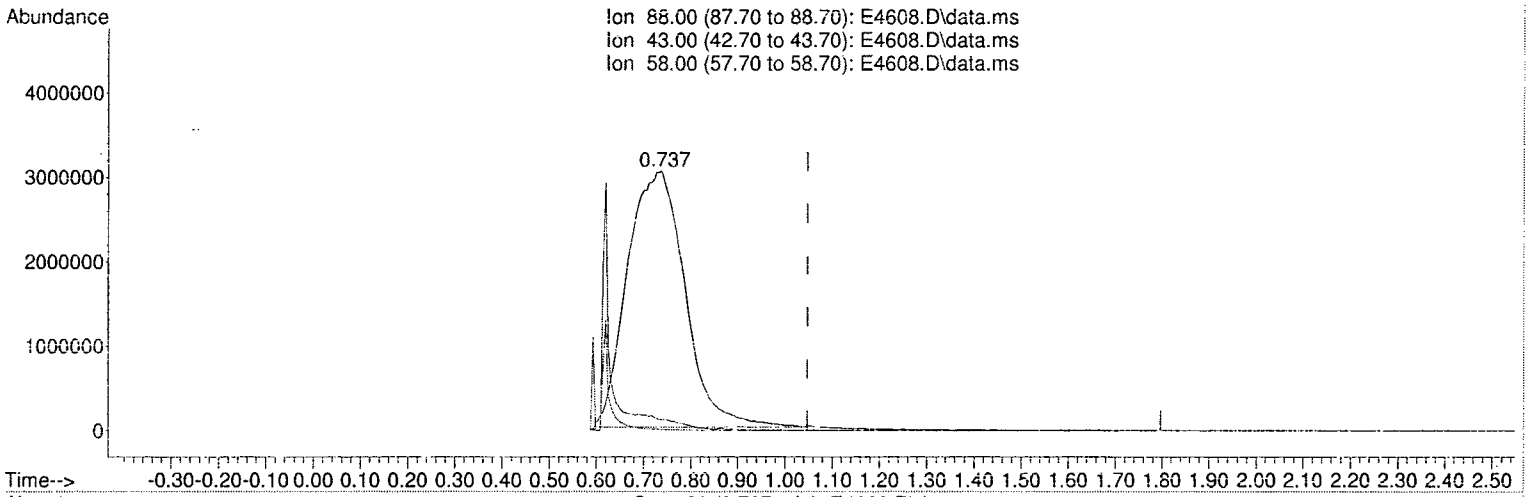

00479

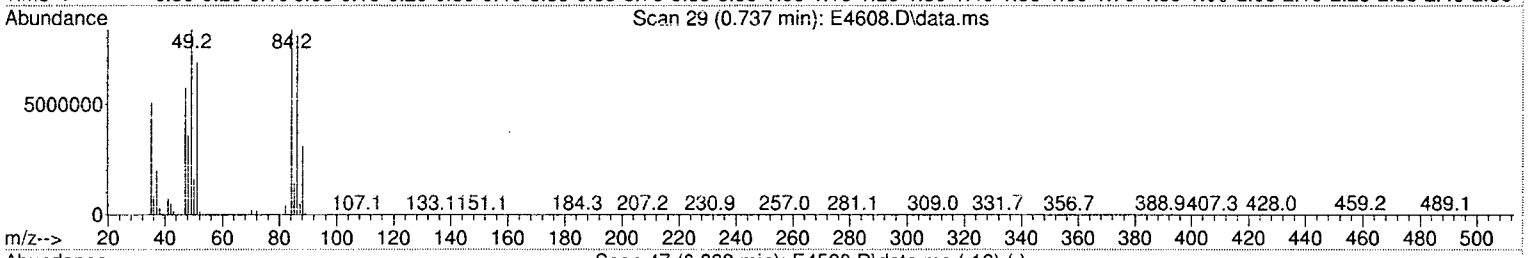
Quantitation Report (Qedit)

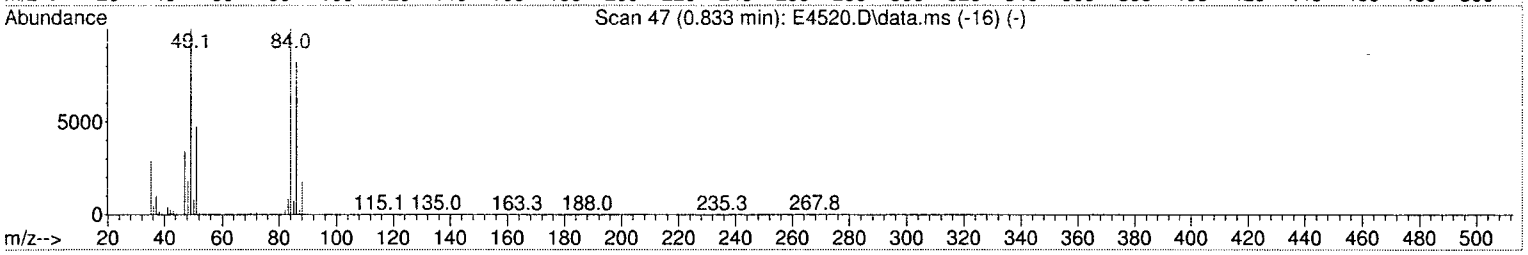
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:56:27 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4608.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.737min (-0.310) 6948.15 ug/mL**

**response 25560859**

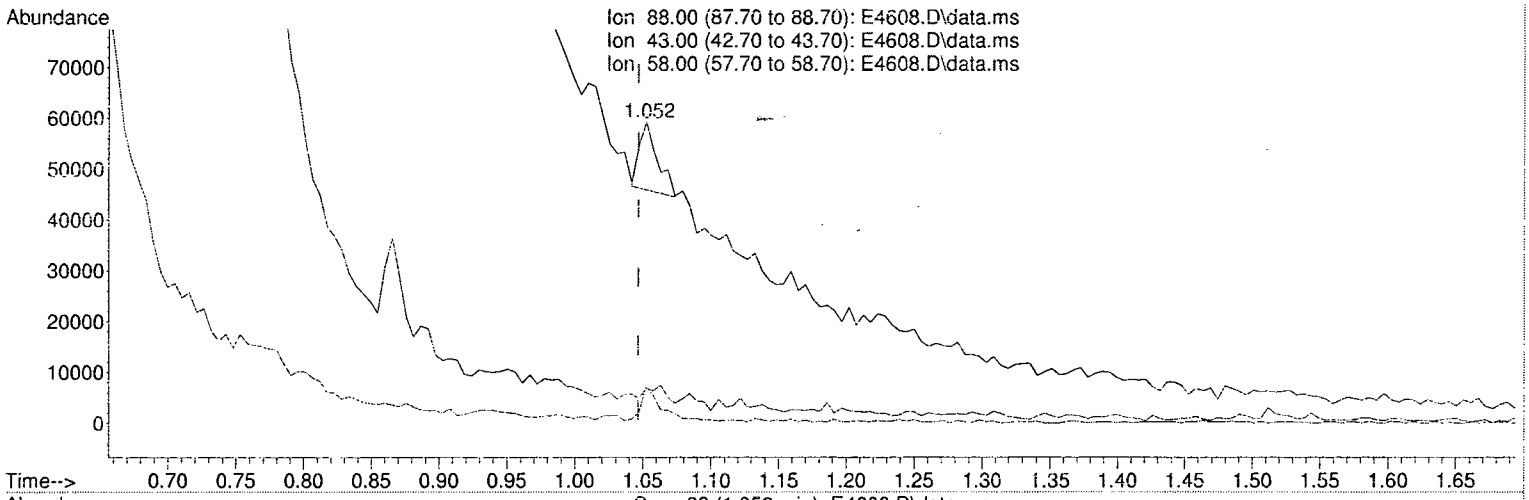
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

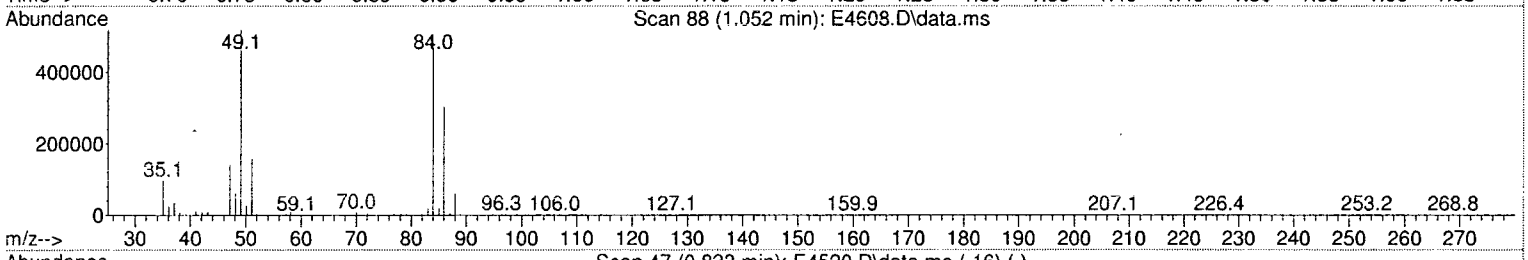
Quantitation Report (Qedit)

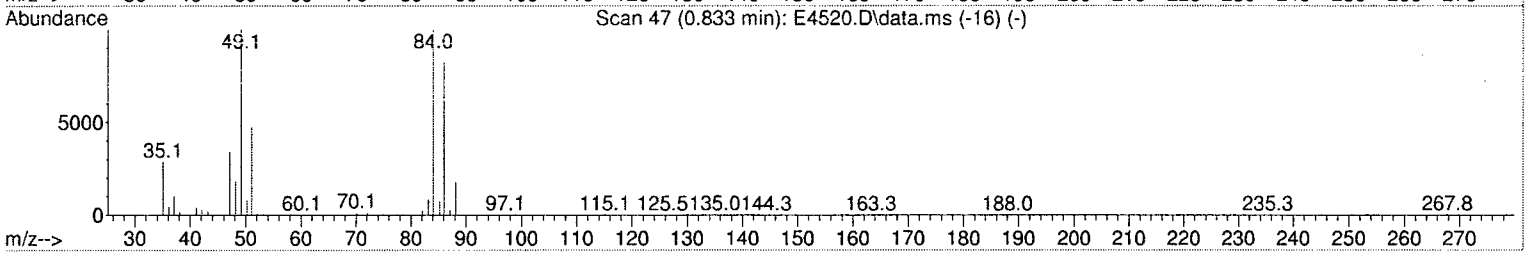
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:56:27 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4608.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.052min (+ 0.006) 3.34 ug/mL m** RS 8RV

**response 12301**

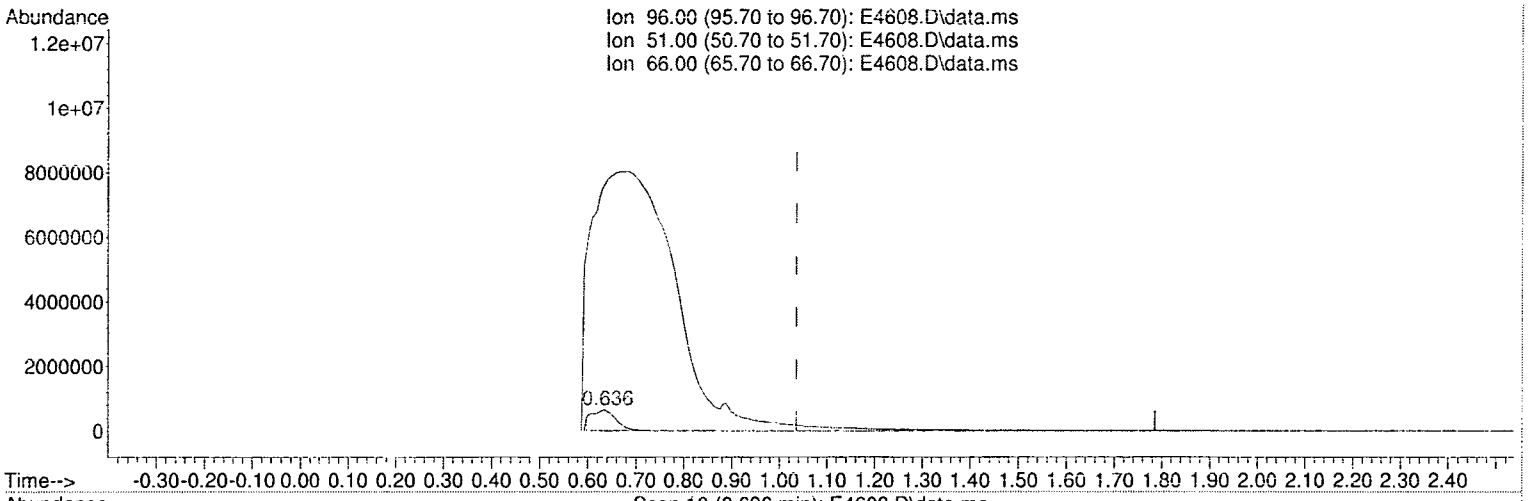
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

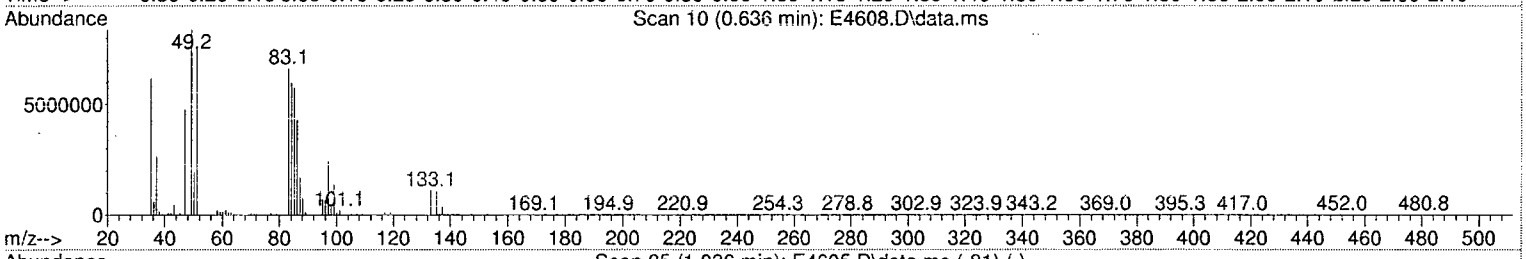
Quantitation Report (Qedit)

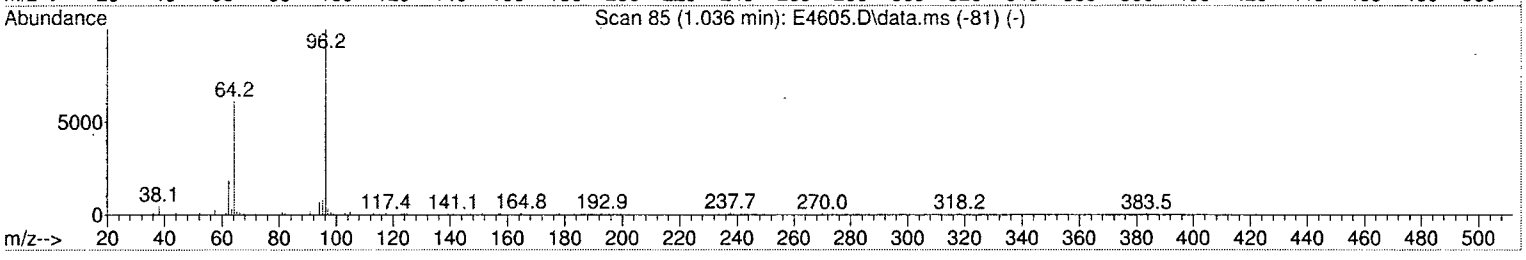
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:56:27 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4608.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.636min (-0.400) 4267.04 ug/mL**

**response 2307180**

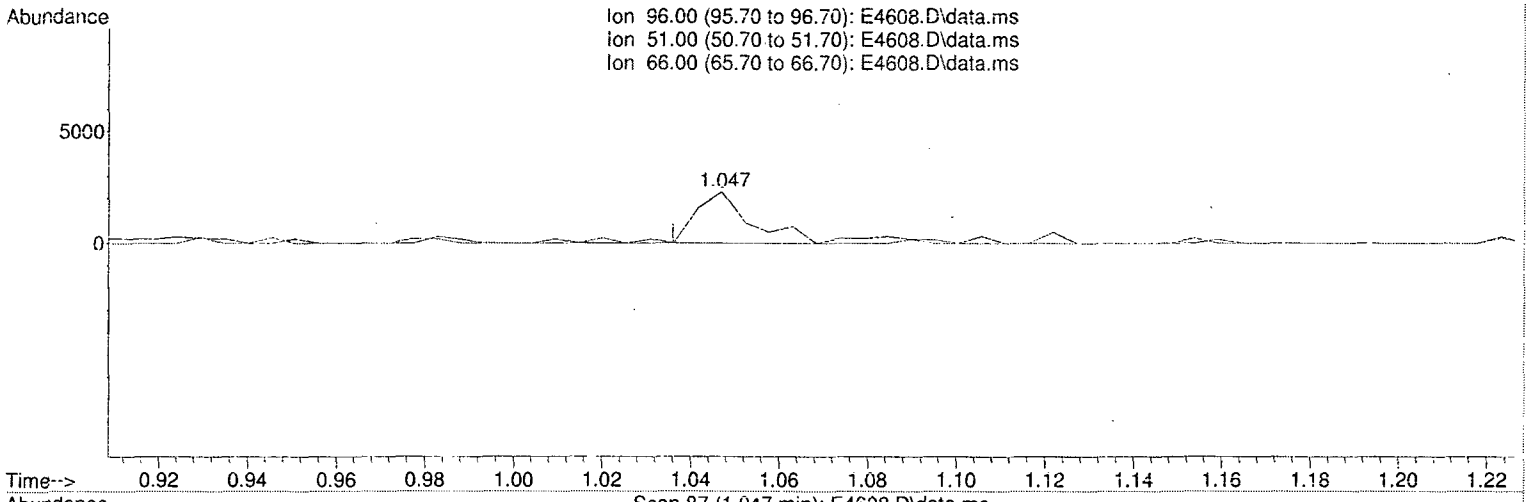
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.05# |
| 0.00 | 0.00 | 0.00 |

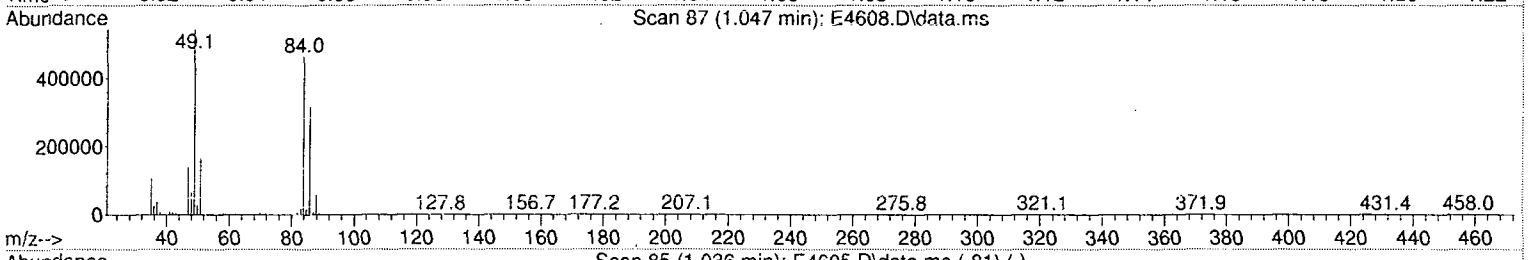
Quantitation Report (Qedit)

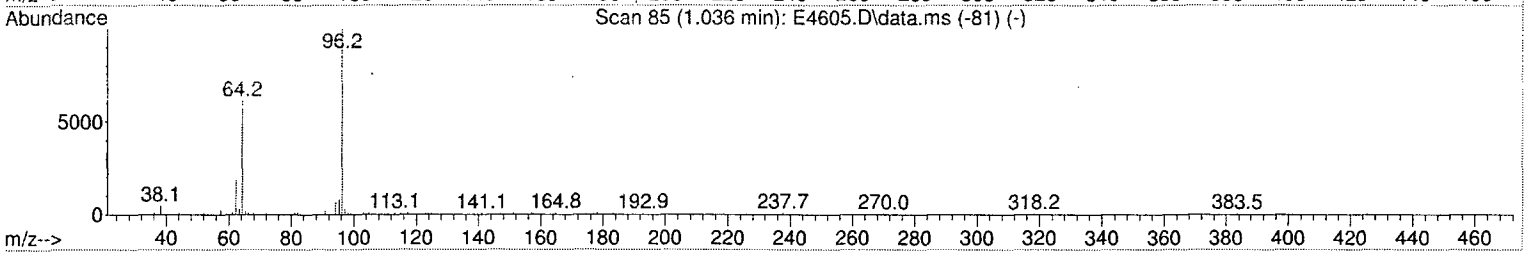
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

Vial: 16
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:56:27 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4608.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.047min (+ 0.011) 3.56 ug/mL m** RS 8/24

**response 1924**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 54.26# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/23/2012 Time: 1822

Lab File ID: E4605.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209N Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 3.174 | 3.214 | 0.010 | 1.3 | 40.0 |
| Phenol | 4.492 | 4.395 | 0.800 | -2.2 | 25.0 |
| Bis(2-chloroethyl)ether | 3.587 | 3.527 | 0.700 | -1.7 | 25.0 |
| 2-Chlorophenol | 3.507 | 3.424 | 0.800 | -2.4 | 25.0 |
| 2-Methylphenol | 3.316 | 3.240 | 0.700 | -2.3 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 3.382 | 3.246 | 0.010 | -4.0 | 40.0 |
| Acetophenone | 5.110 | 4.957 | 0.010 | -3.0 | 40.0 |
| 4-Methylphenol | 3.482 | 3.354 | 0.600 | -3.7 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.967 | 2.884 | 0.500 | -2.8 | 25.0 |
| Hexachloroethane | 1.616 | 1.571 | 0.300 | -2.8 | 25.0 |
| Nitrobenzene | 1.017 | 1.013 | 0.200 | -0.4 | 25.0 |
| Isophorone | 1.750 | 1.732 | 0.400 | -1.0 | 25.0 |
| 2-Nitrophenol | 0.437 | 0.440 | 0.100 | 0.5 | 25.0 |
| 2,4-Dimethylphenol | 0.962 | 0.956 | 0.200 | -0.6 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.960 | 0.958 | 0.300 | -0.2 | 25.0 |
| 2,4-Dichlorophenol | 0.685 | 0.683 | 0.200 | -0.2 | 25.0 |
| Naphthalene | 2.472 | 2.402 | 0.700 | -2.8 | 25.0 |
| 4-Chloroaniline | 0.613 | 0.617 | 0.010 | 0.7 | 40.0 |
| Hexachlorobutadiene | 0.419 | 0.416 | 0.010 | -0.6 | 40.0 |
| Caprolactam | 0.278 | 0.281 | 0.010 | 1.2 | 40.0 |
| 4-Chloro-3-methylphenol | 0.836 | 0.825 | 0.200 | -1.3 | 25.0 |
| 2-Methylnaphthalene | 1.663 | 1.638 | 0.400 | -1.5 | 25.0 |
| Hexachlorocyclopentadiene | 0.707 | 0.687 | 0.010 | -2.8 | 40.0 |
| 2,4,6-Trichlorophenol | 0.794 | 0.764 | 0.200 | -3.8 | 25.0 |
| 2,4,5-Trichlorophenol | 0.798 | 0.788 | 0.200 | -1.2 | 25.0 |
| 1,1'-Biphenyl | 3.309 | 3.153 | 0.010 | -4.7 | 40.0 |
| 2-Chloronaphthalene | 2.651 | 2.501 | 0.800 | -5.7 | 25.0 |
| 2-Nitroaniline | 0.885 | 0.841 | 0.010 | -4.9 | 40.0 |
| Dimethylphthalate | 3.209 | 3.086 | 0.010 | -3.8 | 40.0 |
| 2,6-Dinitrotoluene | 0.643 | 0.623 | 0.200 | -3.1 | 25.0 |
| Acenaphthylene | 4.201 | 4.022 | 0.900 | -4.3 | 25.0 |
| 3-Nitroaniline | 0.615 | 0.565 | 0.010 | -8.1 | 40.0 |
| Acenaphthene | 2.677 | 2.543 | 0.900 | -5.0 | 25.0 |
| 2,4-Dinitrophenol | 0.221 | 0.198 | 0.010 | -10.3 | 40.0 |
| 4-Nitrophenol | 0.507 | 0.467 | 0.010 | -7.8 | 40.0 |
| Dibenzofuran | 3.713 | 3.577 | 0.800 | -3.7 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/23/2012 Time: 1822

Lab File ID: E4605.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209N Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.886 | 0.855 | 0.200 | -3.5 | 25.0 |
| Diethylphthalate | 3.314 | 3.243 | 0.010 | -2.2 | 40.0 |
| Fluorene | 3.212 | 3.060 | 0.900 | -4.7 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.387 | 1.325 | 0.400 | -4.5 | 25.0 |
| 4-Nitroaniline | 0.756 | 0.733 | 0.010 | -3.1 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.281 | 0.263 | 0.010 | -6.3 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.479 | 1.419 | 0.010 | -4.1 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.126 | 1.078 | 0.010 | -4.3 | 40.0 |
| 4-Bromophenyl-phenylether | 0.420 | 0.401 | 0.100 | -4.5 | 25.0 |
| Hexachlorobenzene | 0.413 | 0.390 | 0.100 | -5.6 | 25.0 |
| Atrazine | 0.489 | 0.489 | 0.010 | -0.2 | 40.0 |
| Pentachlorophenol | 0.203 | 0.180 | 0.050 | -11.1 | 25.0 |
| Phenanthrene | 2.500 | 2.435 | 0.700 | -2.6 | 25.0 |
| Anthracene | 2.580 | 2.523 | 0.700 | -2.2 | 25.0 |
| Carbazole | 2.493 | 2.493 | 0.010 | 0.0 | 40.0 |
| Di-n-butylphthalate | 3.151 | 3.159 | 0.010 | 0.3 | 40.0 |
| Fluoranthene | 2.754 | 2.648 | 0.600 | -3.9 | 25.0 |
| Pyrene | 2.912 | 2.797 | 0.600 | -3.9 | 25.0 |
| Butylbenzylphthalate | 1.412 | 1.404 | 0.010 | -0.6 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.679 | 0.682 | 0.010 | 0.4 | 40.0 |
| Benzo (a) anthracene | 2.464 | 2.414 | 0.800 | -2.0 | 25.0 |
| Chrysene | 2.364 | 2.269 | 0.700 | -4.0 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.900 | 1.902 | 0.010 | 0.1 | 40.0 |
| Di-n-octylphthalate | 3.758 | 3.820 | 0.010 | 1.7 | 40.0 |
| Benzo (b) fluoranthene | 2.731 | 2.695 | 0.700 | -1.3 | 25.0 |
| Benzo (k) fluoranthene | 2.705 | 2.626 | 0.700 | -2.9 | 25.0 |
| Benzo (a) pyrene | 2.673 | 2.654 | 0.700 | -0.7 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.060 | 2.044 | 0.500 | -0.8 | 25.0 |
| Dibenzo (a,h) anthracene | 2.137 | 2.078 | 0.400 | -2.7 | 25.0 |
| Benzo (g,h,i) perylene | 2.237 | 2.235 | 0.500 | -0.1 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.594 | 0.576 | 0.100 | -3.0 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/23/2012 Time: 1822

Lab File ID: E4605.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209N Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.525 | 4.157 | 0.010 | -8.1 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.510 | 2.446 | 0.010 | -2.6 | 25.0 |
| 2-Chlorophenol-d4 | 4.006 | 3.859 | 0.010 | -3.7 | 25.0 |
| 4-Methylphenol-d8 | 3.363 | 3.267 | 0.010 | -2.9 | 25.0 |
| Nitrobenzene-d5 | 0.425 | 0.414 | 0.010 | -2.6 | 25.0 |
| 2-Nitrophenol-d4 | 0.473 | 0.457 | 0.010 | -3.4 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.789 | 0.789 | 0.010 | 0.0 | 25.0 |
| 4-Chloroaniline-d4 | 0.677 | 0.651 | 0.010 | -3.8 | 40.0 |
| Dimethylphthalate-d6 | 3.363 | 3.238 | 0.010 | -3.7 | 40.0 |
| Acenaphthylene-d8 | 4.340 | 4.175 | 0.010 | -3.8 | 25.0 |
| 4-Nitrophenol-d4 | 0.609 | 0.562 | 0.010 | -7.7 | 40.0 |
| Fluorene-d10 | 2.712 | 2.568 | 0.010 | -5.3 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.315 | 0.291 | 0.010 | -7.7 | 40.0 |
| Anthracene-d10 | 2.468 | 2.428 | 0.010 | -1.6 | 25.0 |
| Pyrene-d10 | 2.617 | 2.526 | 0.010 | -3.5 | 25.0 |
| Benzo (a) pyrene-d12 | 2.284 | 2.276 | 0.010 | -0.4 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

CASE: 42543 SDG: X0T49

05/25/12

S. Vokati

05/25/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 60991 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 257252 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 161819 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 288993 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.985 | 240 | 296748 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.054 | 264 | 254534 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 18696m | 37.85 ug/mL | 0.00 RS PRV |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 189.25%# | | |
| 7) Phenol-d5 | 3.087 | 99 | 253513 | 18.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 46.35% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 149154 | 19.98 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 49.95% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 235384 | 19.17 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 47.93% | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 199258 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.88% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 106481 | 19.70 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.25% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 117548 | 19.15 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 47.87% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 203068 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 49.38% | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 167453 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 49.38% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 675534 | 19.23 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.08% | | |
| 63) 4-Nitrophenol-d4 | 8.173 | 143 | 90911 | 18.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 46.77% | | |
| 64) Dimethylphthalate-d6 | 7.388 | 166 | 523897 | 19.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.85% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 415520 | 19.04 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 47.60% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 83983 | 18.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 45.80% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 701597 | 19.53 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 48.83% | | |
| 87) Pyrene-d10 | 12.037 | 212 | 749601 | 19.41 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.52%# | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 579395 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 48.88% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 496748 | 32.6178 ug/mL# | 1 RS PRV |
| 4) 1,4-Dioxane | 1.047 | 88 | 82987m | 24.6937 ug/mL | |
| 5) Benzaldehyde | 2.847 | 77 | 196031 | 20.3980 ug/mL | 95 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 215110 | 19.8774 ug/mL | 89 |
| 8) Phenol | 3.098 | 94 | 268060 | 19.5707 ug/mL# | 51 |
| 9) 2-Chlorophenol | 3.130 | 128 | 208845 | 19.7026 ug/mL | 91 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 197982 | 19.8412 ug/mL# | 30 |
| 11) Aniline | 3.013 | 93 | 186169 | 17.4881 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.584 | 83 | 256241 | 18.9820 ug/mL# | 100 |
| 13) Acetophenone | 3.867 | 105 | 302327 | 19.8003 ug/mL | 96 |
| 14) 2-Methylphenol | 3.798 | 108 | 197611 | 19.6318 ug/mL | 96 |
| 15) Hexachloroethane | 3.899 | 117 | 95810 | 19.5398 ug/mL | 87 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 175909 | 19.9964 ug/mL | 94 |
| 17) 4-Methylphenol | 4.006 | 108 | 204588 | 19.5353 ug/mL | 97 |
| 23) Nitrobenzene | 4.070 | 77 | 260542 | 20.0731 ug/mL | 98 |
| 24) Isophorone | 4.391 | 82 | 445565 | 19.7119 ug/mL | 98 |
| 25) 2-Nitrophenol | 4.503 | 139 | 113095 | 19.9157 ug/mL | 98 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 245967 | 19.7276 ug/mL | 99 |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 246506 | 20.1250 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 175798 | 19.5598 ug/mL | 100 |
| 29) Naphthalene | 4.989 | 128 | 617927 | 19.3572 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.198 | 127 | 158799 | 20.9169 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 107111 | 19.4581 ug/mL | 98 |
| 32) Caprolactam | 5.662 | 113 | 72305 | 20.4258 ug/mL | 94 |
| 33) 4-Chloro-3-methylphenol | 6.058 | 107 | 212199 | 19.6938 ug/mL | 94 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 421479 | 19.5200 ug/mL | 93 |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 111245 | 19.0507 ug/mL | 98 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 123710 | 19.2058 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.645 | 196 | 127583 | 19.6154 ug/mL | 96 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 510218 | 19.0673 ug/mL | 98 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 404659 | 19.0713 ug/mL | 99 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 179060 | 18.9905 ug/mL | 98 |
| 45) 2-Nitroaniline | 7.046 | 65 | 136089 | 19.1174 ug/mL | 94 |
| 46) Acenaphthylene | 7.356 | 152 | 650802 | 19.0954 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 499343 | 19.4175 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 100875 | 19.2717 ug/mL | 89 |
| 49) Acenaphthene | 7.644 | 153 | 411488 | 19.2658 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.703 | 138 | 91354 | 19.0192 ug/mL | 99 |
| 51) 2,4-Dinitrophenol | 7.869 | 184 | 32046m | 18.0672 ug/mL | |
| 52) Dibenzofuran | 7.906 | 168 | 578903 | 19.2852 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.247 | 250 | 109310 | 18.6598 ug/mL | 95 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 138373 | 19.4693 ug/mL | 98 |
| 55) 4-Nitrophenol | 8.179 | 109 | 75634 | 18.3961 ug/mL | 95 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 93145 | 19.0141 ug/mL | 87 |
| 57) Fluorene | 8.430 | 166 | 495231 | 19.2564 ug/mL | 100 |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 214341 | 19.0478 ug/mL | 90 |
| 59) Diethylphthalate | 8.533 | 149 | 524810 | 19.6775 ug/mL | 97 |
| 60) 4-Nitroaniline | 8.665 | 138 | 118553 | 19.4062 ug/mL# | 84 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 174396 | 18.9017 ug/mL | 94 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 76009 | 18.4477 ug/mL | 87 |
| 68) N-Nitrosodiphenylamine... | 8.739 | 169 | 409938 | 19.1515 ug/mL | 98 |
| 69) 4-Bromophenyl-phenylether | 9.247 | 248 | 115754 | 18.7357 ug/mL# | 82 |
| 70) Hexachlorobenzene | 9.396 | 284 | 112595 | 18.6346 ug/mL# | 74 |
| 71) Atrazine | 9.716 | 200 | 141182 | 19.5066 ug/mL | 95 |
| 72) Pentachlorophenol | 9.756 | 266 | 52161 | 17.4912 ug/mL | 94 |
| 73) Phenanthrene | 9.888 | 178 | 703700 | 19.4385 ug/mL | 98 |
| 74) Anthracene | 9.956 | 178 | 729200 | 19.5755 ug/mL | 99 |
| 75) Carbazole | 10.310 | 167 | 720384 | 20.0354 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 913011 | 19.9930 ug/mL | 100 |
| 77) Fluoranthene | 11.734 | 202 | 765122 | 19.1646 ug/mL | 95 |
| 81) Pyrene | 12.059 | 202 | 830147 | 19.2054 ug/mL | 96 |
| 82) Butylbenzylphthalate | 13.402 | 149 | 416629 | 19.8215 ug/mL | 95 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 202463 | 20.0177 ug/mL | 96 |
| 84) Benzo (a) anthracene | 13.968 | 228 | 716391 | 19.2827 ug/mL | 99 |
| 85) Chrysene | 14.025 | 228 | 673345 | 19.1954 ug/mL | 98 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 564422 | 20.0422 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 972233 | 20.1668 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 685868 | 18.8432 ug/mL | 95 |
| 91) Benzo (k) fluoranthene | 15.591 | 252 | 668319 | 20.0452 ug/mL | 94 |

RS 8RW

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.974 | 252 | 675645 | 19.5649 ug/mL | 96 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 520203 | 19.3268 ug/mL | 89 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 528941 | 18.9165 ug/mL | 93 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 568764 | 19.6532 ug/mL | 91 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
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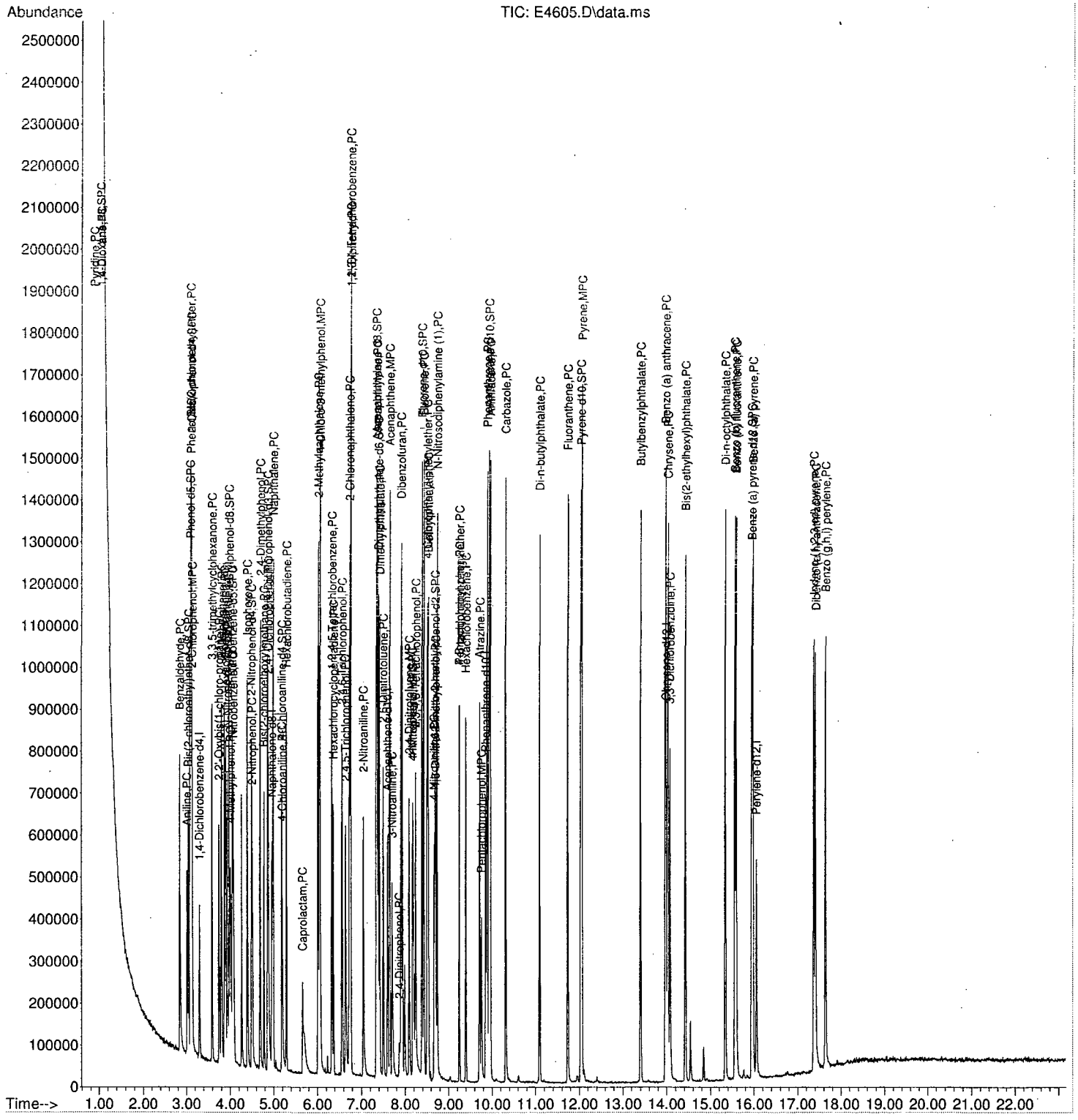
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration






00490

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 8.145 | -0.5 | 100 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.307 | -10.0# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.361 | 14.6# | 100 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 3.214 | -1.3 | 100 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.527 | 1.7 | 100 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.157 | 8.1 | 100 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.395 | 2.2 | 100 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.424 | 2.4 | 100 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 3.246 | 4.0 | 100 | 0.00 |
| 11 | PC | Aniline | 3.567 | 3.052 | 14.4 | 100 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 4.201 | 6.3 | 100 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 4.957 | 3.0 | 100 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.240 | 2.3 | 100 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.571 | 2.8 | 100 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.884 | 2.8 | 100 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.354 | 3.7 | 100 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.446 | 2.5 | 100 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 3.859 | 3.7 | 100 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.267 | 2.9 | 100 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.414 | 2.6 | 100 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 1.013 | 0.4 | 100 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.732 | 1.0 | 100 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.440 | -0.7 | 100 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.956 | 0.6 | 100 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.958 | 0.2 | 100 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.683 | 0.3 | 100 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.402 | 2.8 | 100 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.617 | -0.7 | 100 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.416 | 0.7 | 100 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.281 | -1.1 | 100 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.825 | 1.3 | 100 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.638 | 1.5 | 100 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.457 | 3.4 | 100 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.789 | 0.0 | 100 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.651 | 3.8 | 100 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.687 | 2.8 | 100 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.764 | 3.8 | 100 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.788 | 1.3 | 100 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.153 | 4.7 | 100 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.501 | 5.7 | 100 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.107 | 4.2 | 100 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.841 | 5.0 | 100 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.022 | 4.3 | 100 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.086 | 3.8 | 100 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.623 | 3.1 | 100 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.543 | 5.0 | 100 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.565 | 8.1 | 100 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.198 | 10.4 | 100 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.577 | 3.7 | 100 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.676 | 5.6 | 100 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.855 | 3.5 | 100 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.467 | 7.9 | 100 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.576 | 3.0 | 100 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.060 | 4.7 | 100 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.325 | 4.5 | 100 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.243 | 2.1 | 100 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.733 | 3.0 | 100 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.078 | 4.3 | 100 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.175 | 3.8 | 100 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.562 | 7.7 | 100 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.238 | 3.7 | 100 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.568 | 5.3 | 100 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.263 | 6.4 | 100 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.419 | 4.1 | 100 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.401 | 4.5 | 100 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.390 | 5.6 | 100 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.489 | 0.0 | 100 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.180 | 11.3 | 100 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.435 | 2.6 | 100 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.523 | 2.2 | 100 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.493 | 0.0 | 100 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 3.159 | -0.3 | 100 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.648 | 3.8 | 100 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.291 | 7.6 | 100 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.428 | 1.6 | 100 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.797 | 3.9 | 100 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.404 | 0.6 | 100 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.682 | -0.4 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.414 | 2.0 | 100 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.269 | 4.0 | 100 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.902 | -0.1 | 100 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.526 | 3.5 | 100 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.820 | -1.6 | 100 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.695 | 1.3 | 100 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.626 | 2.9 | 100 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.654 | 0.7 | 100 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.044 | 0.8 | 100 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.078 | 2.8 | 100 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.235 | 0.1 | 100 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.276 | 0.4 | 100 | 0.00 |

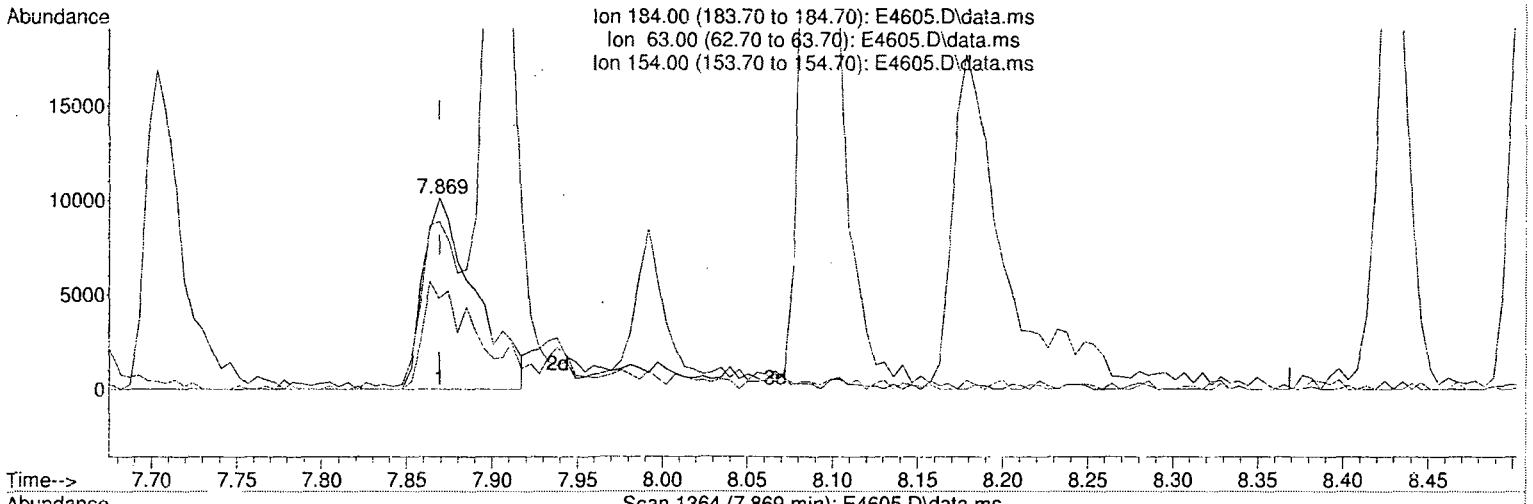
(#) = Out of Range SPCC's out = 0 CCC's out = 2

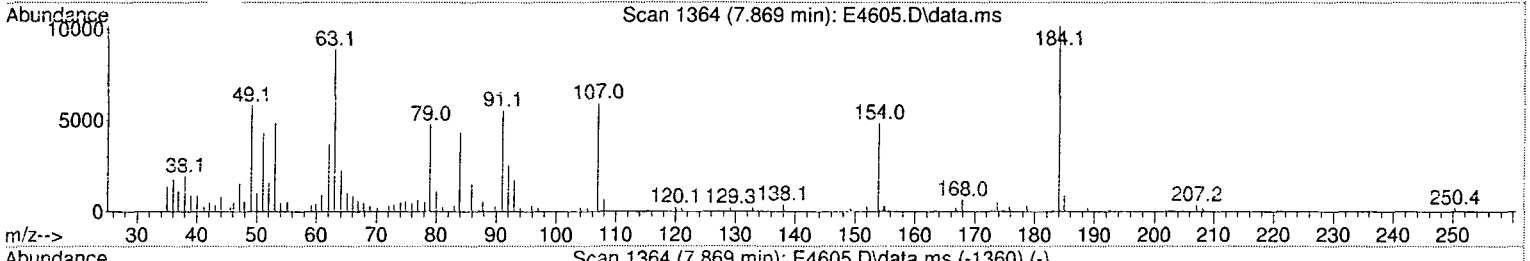
Quantitation Report (Qedit)

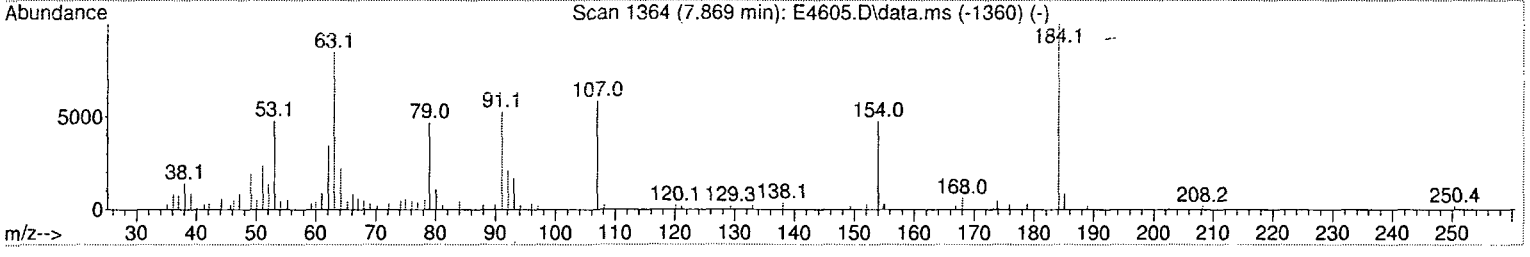
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 12.00 ug/mL**

**response 21289**

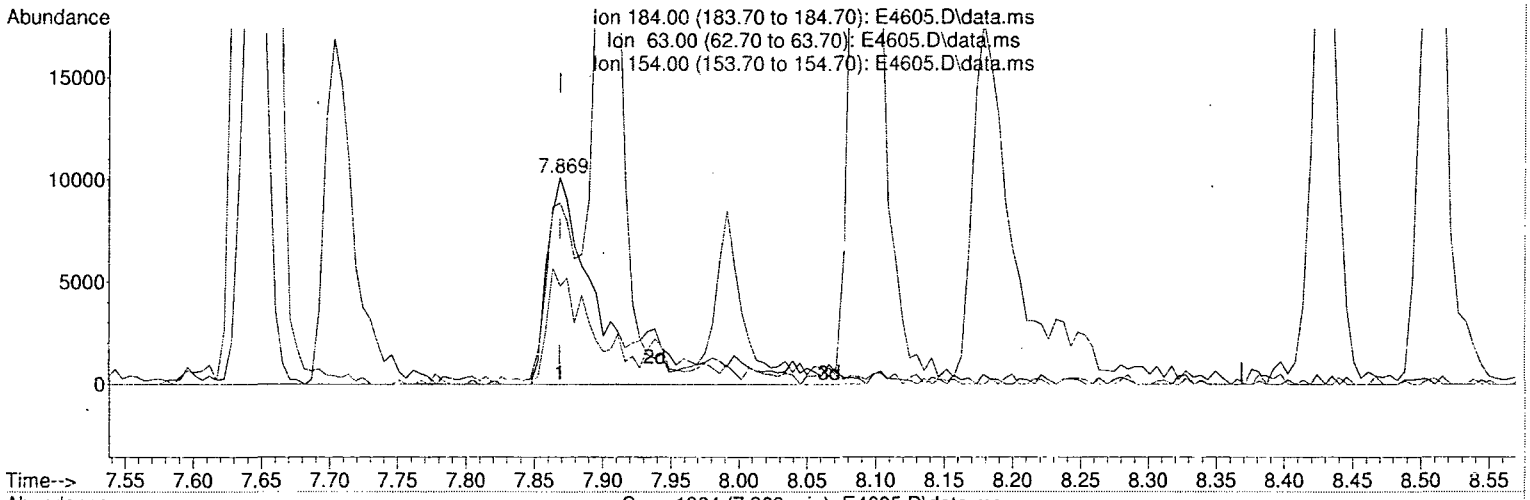
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 55.73 |
| 154.00 | 63.80 | 60.55 |
| 0.00 | 0.00 | 0.00 |

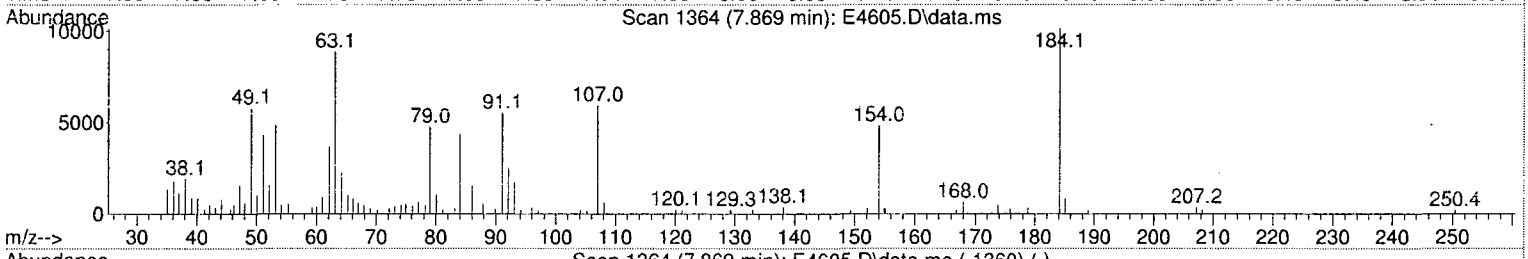
Quantitation Report (Qedit)

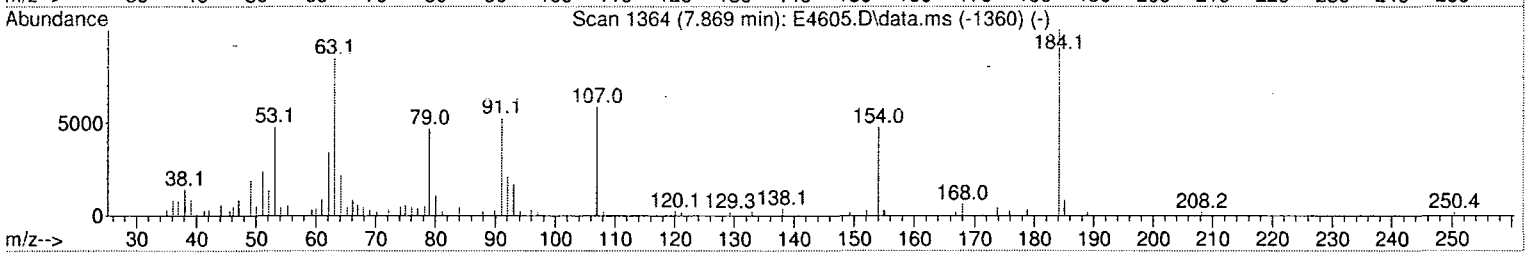
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 18.07 ug/mL m** RS 8/23

**response 32046**

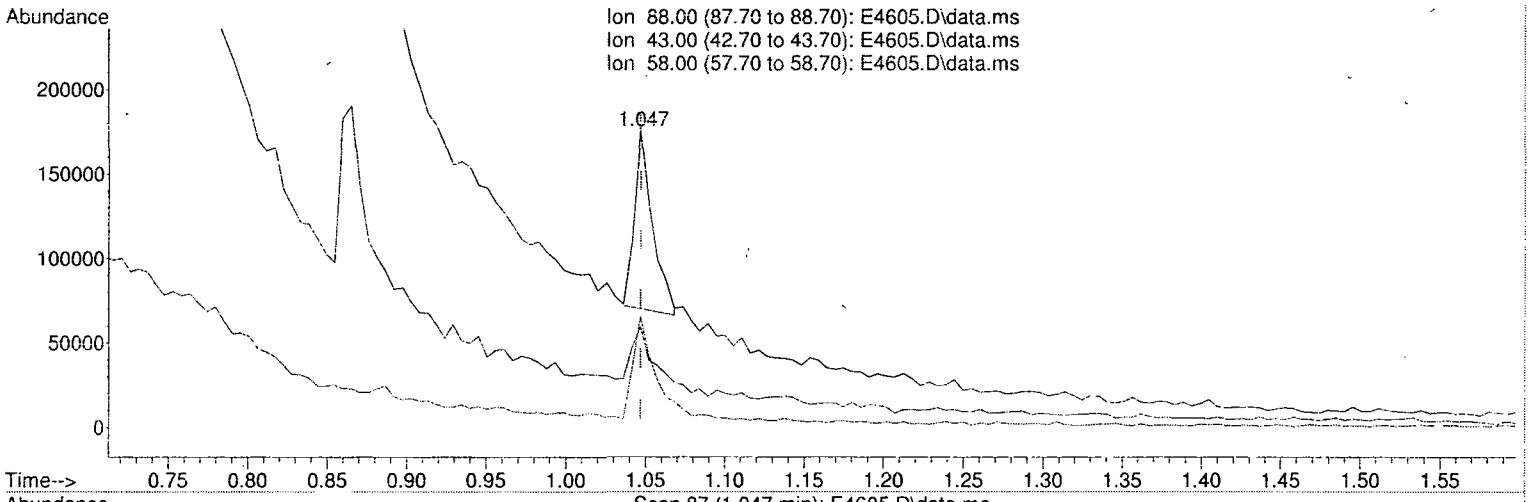
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 37.02# |
| 154.00 | 63.80 | 40.22# |
| 0.00 | 0.00 | 0.00 |

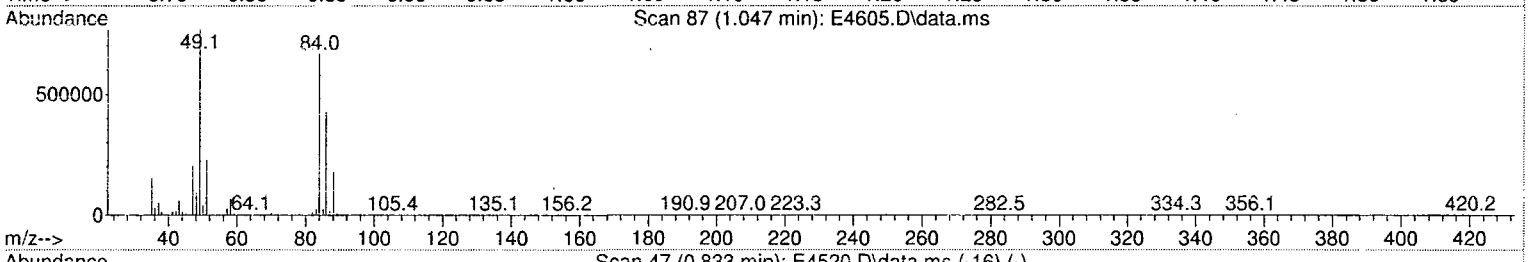
Quantitation Report (Qedit)

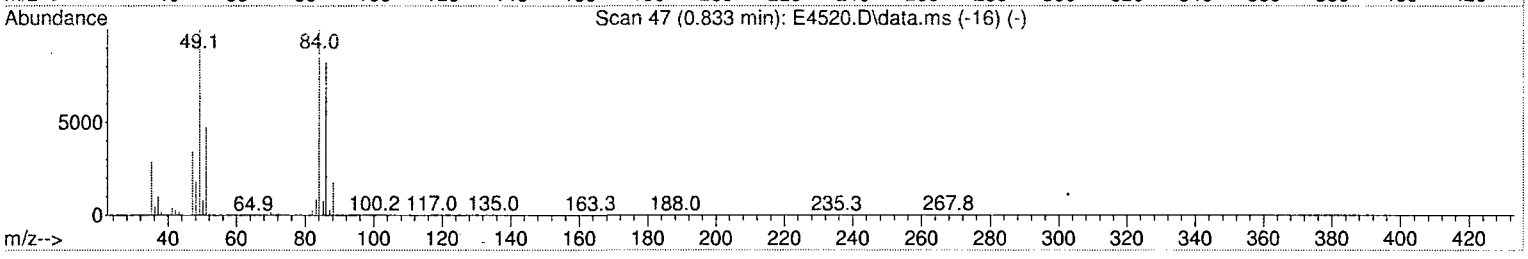
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min ( 0.000) 24.69 ug/mL m** RS 8RW

**response 82987**

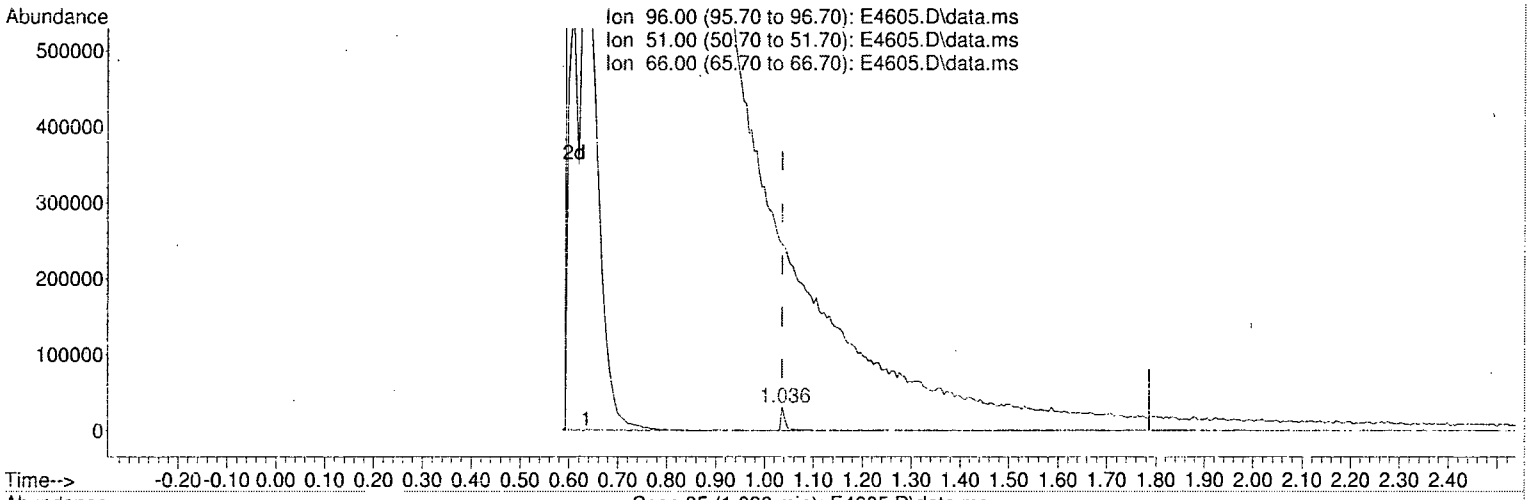
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

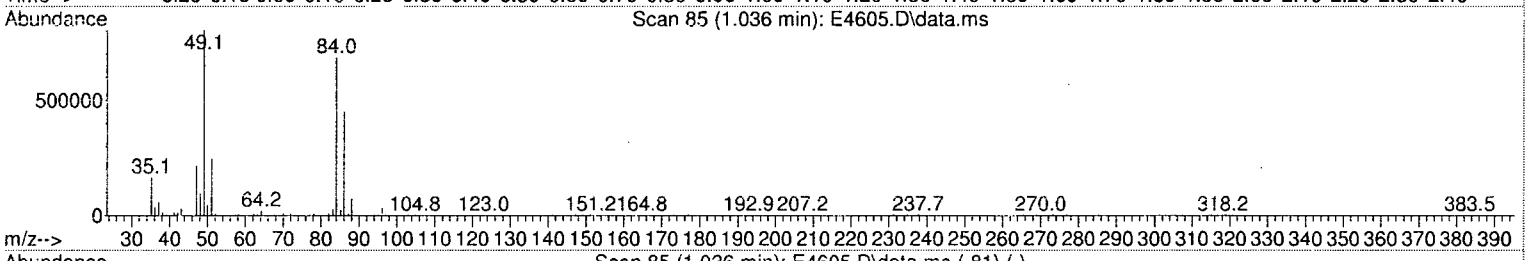
Quantitation Report (Qedit)

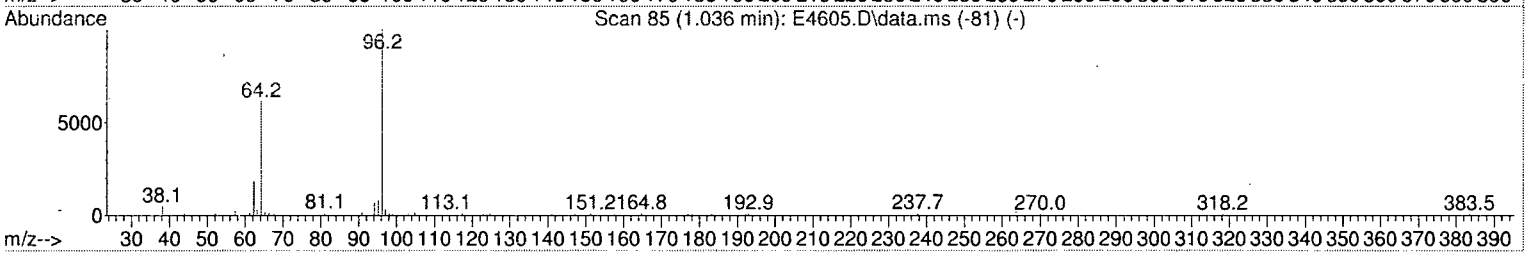
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min ( 0.000) 37.85 ug/mL m** RSPW

**response 18696**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 8.10# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 0107

Lab File ID: E4618.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD02090 Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 3.174 | 3.019 | 0.010 | -4.9 | 40.0 |
| Phenol | 4.492 | 4.304 | 0.800 | -4.2 | 25.0 |
| Bis(2-chloroethyl)ether | 3.587 | 3.383 | 0.700 | -5.7 | 25.0 |
| 2-Chlorophenol | 3.507 | 3.484 | 0.800 | -0.7 | 25.0 |
| 2-Methylphenol | 3.316 | 3.291 | 0.700 | -0.7 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 3.382 | 2.928 | 0.010 | -13.4 | 40.0 |
| Acetophenone | 5.110 | 5.030 | 0.010 | -1.6 | 40.0 |
| 4-Methylphenol | 3.482 | 3.496 | 0.600 | 0.4 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.967 | 2.743 | 0.500 | -7.5 | 25.0 |
| Hexachloroethane | 1.616 | 1.588 | 0.300 | -1.7 | 25.0 |
| Nitrobenzene | 1.017 | 0.904 | 0.200 | -11.1 | 25.0 |
| Isophorone | 1.750 | 1.599 | 0.400 | -8.6 | 25.0 |
| 2-Nitrophenol | 0.437 | 0.441 | 0.100 | 0.9 | 25.0 |
| 2,4-Dimethylphenol | 0.962 | 0.907 | 0.200 | -5.7 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.960 | 0.875 | 0.300 | -8.9 | 25.0 |
| 2,4-Dichlorophenol | 0.685 | 0.682 | 0.200 | -0.4 | 25.0 |
| Naphthalene | 2.472 | 2.429 | 0.700 | -1.7 | 25.0 |
| 4-Chloroaniline | 0.613 | 0.650 | 0.010 | 6.1 | 40.0 |
| Hexachlorobutadiene | 0.419 | 0.419 | 0.010 | 0.0 | 40.0 |
| Caprolactam | 0.278 | 0.266 | 0.010 | -4.3 | 40.0 |
| 4-Chloro-3-methylphenol | 0.836 | 0.782 | 0.200 | -6.4 | 25.0 |
| 2-Methylnaphthalene | 1.663 | 1.635 | 0.400 | -1.7 | 25.0 |
| Hexachlorocyclopentadiene | 0.707 | 0.699 | 0.010 | -1.2 | 40.0 |
| 2,4,6-Trichlorophenol | 0.794 | 0.763 | 0.200 | -3.9 | 25.0 |
| 2,4,5-Trichlorophenol | 0.798 | 0.743 | 0.200 | -6.8 | 25.0 |
| 1,1'-Biphenyl | 3.309 | 3.133 | 0.010 | -5.3 | 40.0 |
| 2-Chloronaphthalene | 2.651 | 2.453 | 0.800 | -7.5 | 25.0 |
| 2-Nitroaniline | 0.885 | 0.728 | 0.010 | -17.7 | 40.0 |
| Dimethylphthalate | 3.209 | 3.062 | 0.010 | -4.6 | 40.0 |
| 2,6-Dinitrotoluene | 0.643 | 0.623 | 0.200 | -3.2 | 25.0 |
| Acenaphthylene | 4.201 | 4.009 | 0.900 | -4.6 | 25.0 |
| 3-Nitroaniline | 0.615 | 0.586 | 0.010 | -4.6 | 40.0 |
| Acenaphthene | 2.677 | 2.511 | 0.900 | -6.2 | 25.0 |
| 2,4-Dinitrophenol | 0.221 | 0.184 | 0.010 | -16.5 | 40.0 |
| 4-Nitrophenol | 0.507 | 0.417 | 0.010 | -17.7 | 40.0 |
| Dibenzofuran | 3.713 | 3.543 | 0.800 | -4.6 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 0107

Lab File ID: E4618.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD02090 Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.886 | 0.855 | 0.200 | -3.6 | 25.0 |
| Diethylphthalate | 3.314 | 3.068 | 0.010 | -7.4 | 40.0 |
| Fluorene | 3.212 | 3.020 | 0.900 | -6.0 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.387 | 1.349 | 0.400 | -2.8 | 25.0 |
| 4-Nitroaniline | 0.756 | 0.719 | 0.010 | -4.9 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.281 | 0.258 | 0.010 | -8.0 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.479 | 1.386 | 0.010 | -6.3 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.126 | 1.110 | 0.010 | -1.4 | 40.0 |
| 4-Bromophenyl-phenylether | 0.420 | 0.402 | 0.100 | -4.1 | 25.0 |
| Hexachlorobenzene | 0.413 | 0.420 | 0.100 | 1.8 | 25.0 |
| Atrazine | 0.489 | 0.461 | 0.010 | -5.8 | 40.0 |
| Pentachlorophenol | 0.203 | 0.174 | 0.050 | -14.3 | 25.0 |
| Phenanthrene | 2.500 | 2.367 | 0.700 | -5.3 | 25.0 |
| Anthracene | 2.580 | 2.437 | 0.700 | -5.5 | 25.0 |
| Carbazole | 2.493 | 2.373 | 0.010 | -4.8 | 40.0 |
| Di-n-butylphthalate | 3.151 | 2.964 | 0.010 | -5.9 | 40.0 |
| Fluoranthene | 2.754 | 2.614 | 0.600 | -5.1 | 25.0 |
| Pyrene | 2.912 | 2.757 | 0.600 | -5.3 | 25.0 |
| Butylbenzylphthalate | 1.412 | 1.277 | 0.010 | -9.6 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.679 | 0.660 | 0.010 | -2.9 | 40.0 |
| Benzo (a) anthracene | 2.464 | 2.352 | 0.800 | -4.6 | 25.0 |
| Chrysene | 2.364 | 2.300 | 0.700 | -2.7 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.900 | 1.743 | 0.010 | -8.2 | 40.0 |
| Di-n-octylphthalate | 3.758 | 3.318 | 0.010 | -11.7 | 40.0 |
| Benzo (b) fluoranthene | 2.731 | 2.620 | 0.700 | -4.1 | 25.0 |
| Benzo (k) fluoranthene | 2.705 | 2.598 | 0.700 | -3.9 | 25.0 |
| Benzo (a) pyrene | 2.673 | 2.598 | 0.700 | -2.8 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.060 | 1.909 | 0.500 | -7.3 | 25.0 |
| Dibenzo (a,h) anthracene | 2.137 | 2.086 | 0.400 | -2.4 | 25.0 |
| Benzo (g,h,i) perylene | 2.237 | 2.275 | 0.500 | 1.7 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.594 | 0.574 | 0.100 | -3.3 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 0107

Lab File ID: E4618.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209O Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.525 | 3.913 | 0.010 | -13.5 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.510 | 2.304 | 0.010 | -8.2 | 25.0 |
| 2-Chlorophenol-d4 | 4.006 | 4.047 | 0.010 | 1.0 | 25.0 |
| 4-Methylphenol-d8 | 3.363 | 3.347 | 0.010 | -0.5 | 25.0 |
| Nitrobenzene-d5 | 0.425 | 0.419 | 0.010 | -1.4 | 25.0 |
| 2-Nitrophenol-d4 | 0.473 | 0.466 | 0.010 | -1.4 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.789 | 0.793 | 0.010 | 0.5 | 25.0 |
| 4-Chloroaniline-d4 | 0.677 | 0.708 | 0.010 | 4.6 | 40.0 |
| Dimethylphthalate-d6 | 3.363 | 3.195 | 0.010 | -5.0 | 40.0 |
| Acenaphthylene-d8 | 4.340 | 4.136 | 0.010 | -4.7 | 25.0 |
| 4-Nitrophenol-d4 | 0.609 | 0.545 | 0.010 | -10.5 | 40.0 |
| Fluorene-d10 | 2.712 | 2.535 | 0.010 | -6.5 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.315 | 0.277 | 0.010 | -12.1 | 40.0 |
| Anthracene-d10 | 2.468 | 2.352 | 0.010 | -4.7 | 25.0 |
| Pyrene-d10 | 2.617 | 2.529 | 0.010 | -3.3 | 25.0 |
| Benzo (a) pyrene-d12 | 2.284 | 2.258 | 0.010 | -1.2 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD02090
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

05/27/12

S. Vokati
05/27/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 68356 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 302766 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 192202 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 340717 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.986 | 240 | 346922 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.055 | 264 | 302914 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 17999m | 18.85 ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 94.25% | | |
| 7) Phenol-d5 | 3.082 | 99 | 267445 | 17.29 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 43.22% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 157461 | 18.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 45.88% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 276635 | 20.20 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 50.50% | | |
| 20) 4-Methylphenol-d8 | 3.964 | 113 | 228780 | 19.90 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 49.75% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 126865 | 19.72 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.30% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 141219 | 19.72 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 49.30% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.856 | 165 | 240046 | 20.09 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 50.22% | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 214315 | 20.92 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 52.30% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 794880 | 19.06 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 47.65% | | |
| 63) 4-Nitrophenol-d4 | 8.163 | 143 | 104667 | 17.89 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 44.73% | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 614072 | 19.00 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 47.50% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 487259 | 18.69 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 46.73% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 94234 | 17.57 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 43.93% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 801298 | 19.06 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 47.65% | | |
| 87) Pyrene-d10 | 12.031 | 212 | 877536 | 19.33 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.32%# | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 683978 | 19.77 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.42% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.887 | 79 | 503531 | 18.1732 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.047 | 88 | 97212m | 17.8597 ug/mL | |
| 5) Benzaldehyde | 2.842 | 77 | 206372 | 19.0224 ug/mL | 99 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 231237 | 18.8601 ug/mL | 87 |
| 8) Phenol | 3.093 | 94 | 294235 | 19.1640 ug/mL# | 61 |
| 9) 2-Chlorophenol | 3.125 | 128 | 238159 | 19.8686 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 200162 | 17.3189 ug/mL# | 31 |
| 11) Aniline | 3.013 | 93 | 240536 | 19.7304 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.579 | 83 | 271558 | 17.7193 ug/mL# | 100 |
| 13) Acetophenone | 3.862 | 105 | 343832 | 19.6880 ug/mL | 95 |
| 14) 2-Methylphenol | 3.793 | 108 | 224990 | 19.8501 ug/mL | 96 |
| 15) Hexachloroethane | 3.900 | 117 | 108535 | 19.6536 ug/mL | 93 |

RS RW

RS RW

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 187491 | 18.4921 ug/mL | 93 | |
| 17) 4-Methylphenol | 3.996 | 108 | 238998 | 20.0822 ug/mL | 97 | |
| 23) Nitrobenzene | 4.071 | 77 | 273739 | 17.7798 ug/mL | 97 | |
| 24) Isophorone | 4.391 | 82 | 484180 | 18.2756 ug/mL | 96 | |
| 25) 2-Nitrophenol | 4.503 | 139 | 133604 | 20.1781 ug/mL | 92 | |
| 26) 2,4-Dimethylphenol | 4.685 | 107 | 274651 | 18.8652 ug/mL | 98 | |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 265002 | 18.2280 ug/mL | 97 | |
| 28) 2,4- Dichlorophenol | 4.867 | 162 | 206490 | 19.9192 ug/mL | 95 | |
| 29) Naphthalene | 4.984 | 128 | 735467 | 19.6533 ug/mL | 99 | |
| 30) 4-Chloroaniline | 5.192 | 127 | 196759 | 21.2111 ug/mL | 98 | |
| 31) Hexachlorobutadiene | 5.294 | 225 | 126747 | 19.9948 ug/mL | 99 | |
| 32) Caprolactam | 5.652 | 113 | 80499m | 19.1479 ug/mL | | RS RW |
| 33) 4-Chloro-3-methylphenol | 6.053 | 107 | 236914 | 18.7276 ug/mL | 92 | |
| 34) 2-Methylnaphthalene | 6.010 | 142 | 494954 | 19.6651 ug/mL | 95 | |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 134352 | 19.7683 ug/mL | 97 | |
| 40) 2,4,6-Trichlorophenol | 6.560 | 196 | 146698 | 19.2176 ug/mL | 99 | |
| 41) 2,4,5-Trichlorophenol | 6.640 | 196 | 142892 | 18.6361 ug/mL | 95 | |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 602245 | 18.9389 ug/mL | 97 | |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 471486 | 18.5076 ug/mL | 97 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 216436 | 19.4805 ug/mL | 96 | |
| 45) 2-Nitroaniline | 7.041 | 65 | 139891 | 16.4566 ug/mL | 91 | |
| 46) Acenaphthylene | 7.356 | 152 | 770611 | 19.0883 ug/mL | 100 | |
| 47) Dimethylphthalate | 7.415 | 163 | 588478 | 19.0816 ug/mL | 98 | |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 119694 | 19.3651 ug/mL | 98 | |
| 49) Acenaphthene | 7.644 | 153 | 482585 | 18.7556 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.703 | 138 | 112656 | 19.0739 ug/mL | 91 | |
| 51) 2,4-Dinitrophenol | 7.864 | 184 | 35426m | 16.6929 ug/mL | | RS RW |
| 52) Dibenzofuran | 7.901 | 168 | 680996 | 19.0834 ug/mL | 95 | |
| 53) Pentachlorobenzene | 9.248 | 250 | 133756 | 19.4426 ug/mL# | 98 | |
| 54) 2,4-Dinitrotoluene | 8.088 | 165 | 164248 | 19.2807 ug/mL | 92 | |
| 55) 4-Nitrophenol | 8.168 | 109 | 80198 | 16.4553 ug/mL# | 88 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 110388 | 19.3470 ug/mL | 90 | |
| 57) Fluorene | 8.430 | 166 | 580373 | 18.8030 ug/mL | 100 | |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 259252 | 19.4458 ug/mL | 92 | |
| 59) Diethylphthalate | 8.533 | 149 | 589689 | 18.5130 ug/mL | 98 | |
| 60) 4-Nitroaniline | 8.659 | 138 | 138149 | 19.0202 ug/mL | 89 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.325 | 216 | 213336 | 19.7128 ug/mL | 94 | |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 88029 | 18.4083 ug/mL | 95 | |
| 68) N-Nitrosodiphenylamine... | 8.733 | 169 | 472123 | 18.7335 ug/mL | 100 | |
| 69) 4-Bromophenyl-phenylether | 9.242 | 248 | 137127 | 19.1868 ug/mL# | 88 | |
| 70) Hexachlorobenzene | 9.396 | 284 | 143107 | 20.3596 ug/mL | 84 | |
| 71) Atrazine | 9.711 | 200 | 157036 | 18.8393 ug/mL | 97 | |
| 72) Pentachlorophenol | 9.751 | 266 | 59279 | 17.1431 ug/mL | 97 | |
| 73) Phenanthrene | 9.882 | 178 | 806535 | 18.9389 ug/mL | 98 | |
| 74) Anthracene | 9.956 | 178 | 830441 | 18.8941 ug/mL | 99 | |
| 75) Carbazole | 10.305 | 167 | 808596 | 19.0427 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.094 | 149 | 1009768 | 18.8107 ug/mL | 99 | |
| 77) Fluoranthene | 11.734 | 202 | 890694 | 18.9821 ug/mL | 97 | |
| 81) Pyrene | 12.054 | 202 | 956357 | 18.9348 ug/mL | 98 | |
| 82) Butylbenzylphthalate | 13.403 | 149 | 442993 | 18.0874 ug/mL | 91 | |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 228840 | 19.4173 ug/mL | 98 | |
| 84) Benzo (a) anthracene | 13.963 | 228 | 815976 | 19.0878 ug/mL | 100 | |
| 85) Chrysene | 14.026 | 228 | 797928 | 19.4588 ug/mL | 99 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 604698 | 18.3526 ug/mL | 98 | |
| 89) Di-n-octylphthalate | 15.340 | 149 | 1005190 | 17.6627 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 793532 | 19.1852 ug/mL | 97 | |
| 91) Benzo (k) fluoranthene | 15.592 | 252 | 787096 | 19.2153 ug/mL | 93 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.975 | 252 | 786995 | 19.4410 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 578325 | 18.5388 ug/mL | 91 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 631765 | 19.5218 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 689267 | 20.3393 ug/mL | 92 |

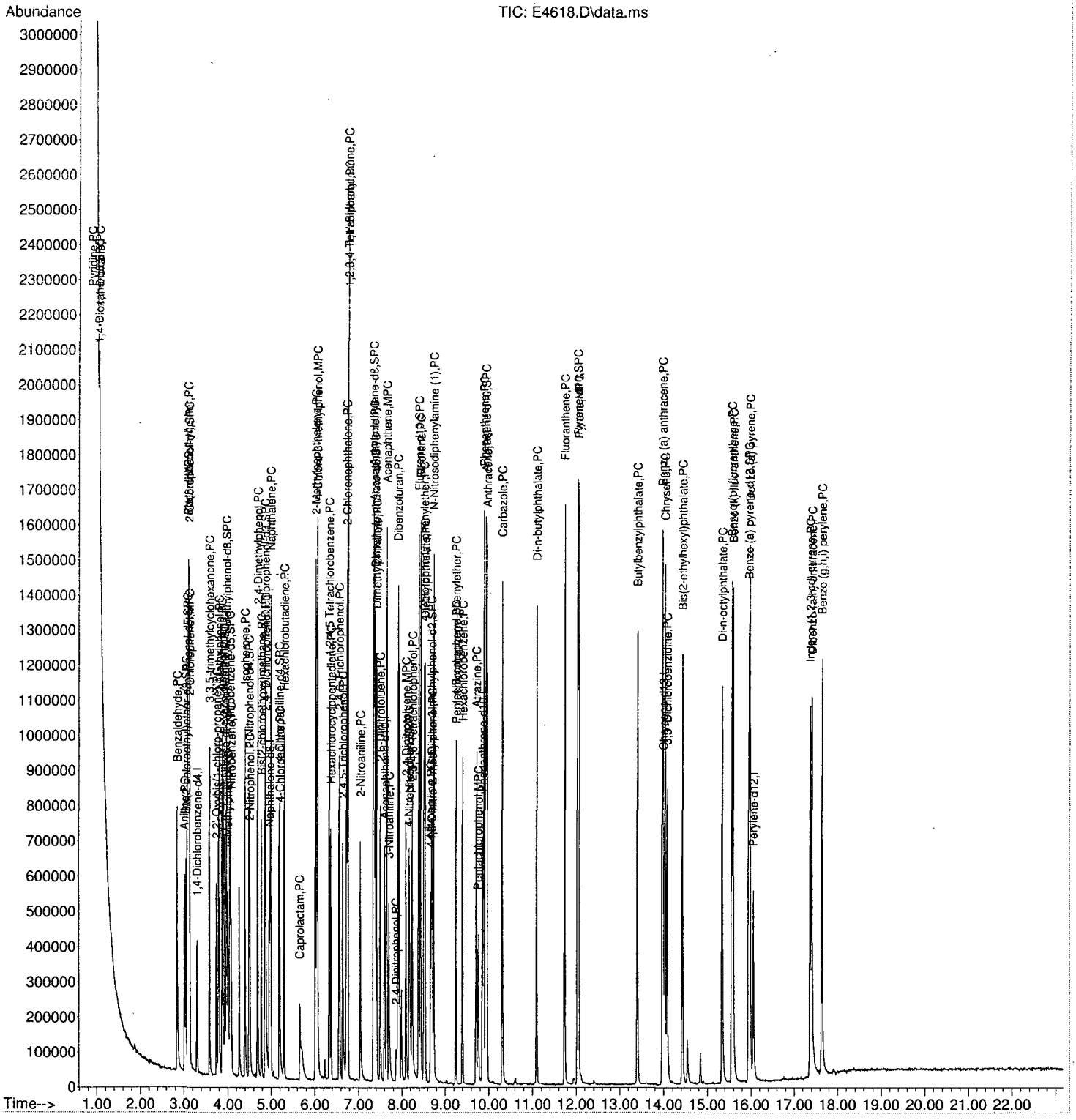
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration






00503

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD02090
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 7.366 | 9.1 | 101 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.263 | 5.7# | 96 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.422 | 10.7# | 117 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 3.019 | 4.9 | 105 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.383 | 5.7 | 107 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 3.913 | 13.5 | 105 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.304 | 4.2 | 110 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.484 | 0.7 | 114 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 2.928 | 13.4 | 101 | 0.00 |
| 11 | PC | Aniline | 3.567 | 3.519 | 1.3 | 129 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 3.973 | 11.4 | 106 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 5.030 | 1.6 | 114 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.291 | 0.8 | 114 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.588 | 1.7 | 113 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.743 | 7.5 | 107 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.496 | -0.4 | 117 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.304 | 8.2 | 106 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 4.047 | -1.0 | 118 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.347 | 0.5 | 115 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.419 | 1.4 | 119 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 0.904 | 11.1 | 105 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.599 | 8.6 | 109 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.441 | -0.9 | 118 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.907 | 5.7 | 112 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.875 | 8.9 | 108 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.682 | 0.4 | 117 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.429 | 1.7 | 119 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.650 | -6.0 | 124 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.419 | 0.0 | 118 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.266 | 4.3 | 111 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.782 | 6.5 | 112 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.635 | 1.7 | 117 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.466 | 1.5 | 120 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.793 | -0.5 | 118 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.708 | -4.6 | 128 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 119 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.699 | 1.1 | 121 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.763 | 3.9 | 119 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.743 | 6.9 | 112 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.133 | 5.3 | 118 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.453 | 7.5 | 117 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.126 | 2.6 | 121 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.728 | 17.7 | 103 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.009 | 4.6 | 118 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.062 | 4.6 | 118 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.623 | 3.1 | 119 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.511 | 6.2 | 117 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.586 | 4.7 | 123 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.184 | 16.7 | 111 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.543 | 4.6 | 118 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.696 | 2.8 | 122 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.855 | 3.5 | 119 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.417 | 17.8 | 106 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.574 | 3.4 | 119 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.020 | 6.0 | 117 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.349 | 2.7 | 121 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.068 | 7.4 | 112 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.719 | 4.9 | 117 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.110 | 1.4 | 122 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.136 | 4.7 | 118 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.545 | 10.5 | 115 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.195 | 5.0 | 117 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.535 | 6.5 | 117 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.258 | 8.2 | 116 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.386 | 6.3 | 115 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.402 | 4.3 | 118 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.420 | -1.7 | 127 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.461 | 5.7 | 111 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.174 | 14.3 | 114 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.367 | 5.3 | 115 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.437 | 5.5 | 114 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.373 | 4.8 | 112 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 2.964 | 5.9 | 111 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.614 | 5.1 | 116 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.277 | 12.1 | 112 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.352 | 4.7 | 114 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 117 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.757 | 5.3 | 115 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.277 | 9.6 | 106 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.660 | 2.8 | 113 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.352 | 4.5 | 114 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.300 | 2.7 | 119 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.743 | 8.3 | 107 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.529 | 3.4 | 117 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 119 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.318 | 11.7 | 103 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.620 | 4.1 | 116 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.598 | 4.0 | 118 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.598 | 2.8 | 116 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 1.909 | 7.3 | 111 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.086 | 2.4 | 119 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.275 | -1.7 | 121 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.258 | 1.1 | 118 | 0.00 |

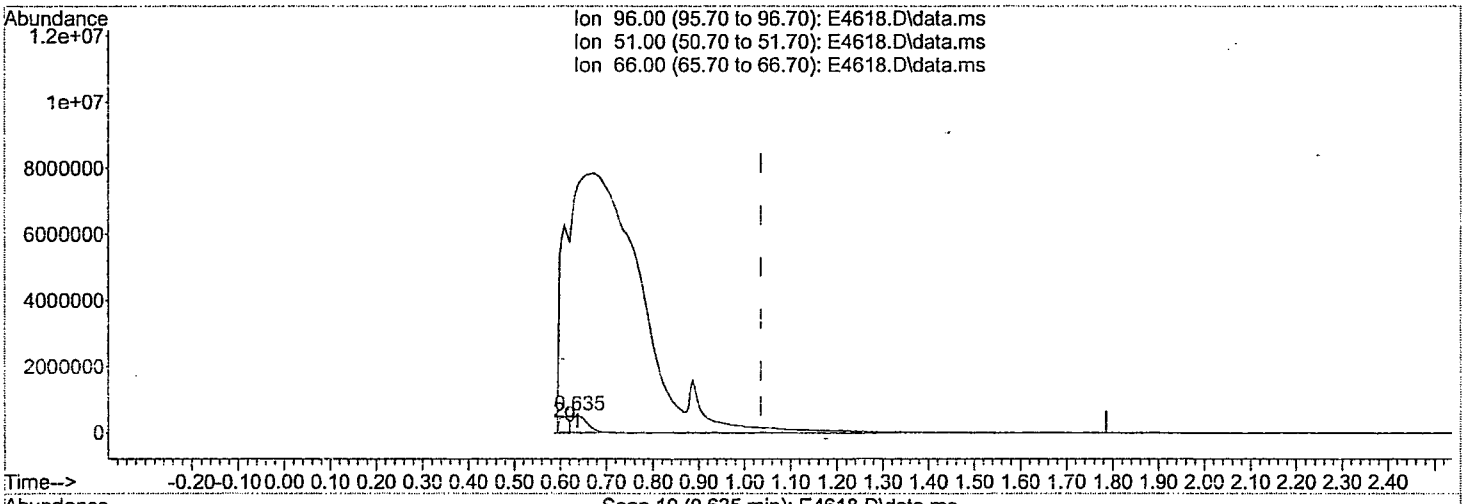
(#) = Out of Range SPCC's out = 0 CCC's out = 2

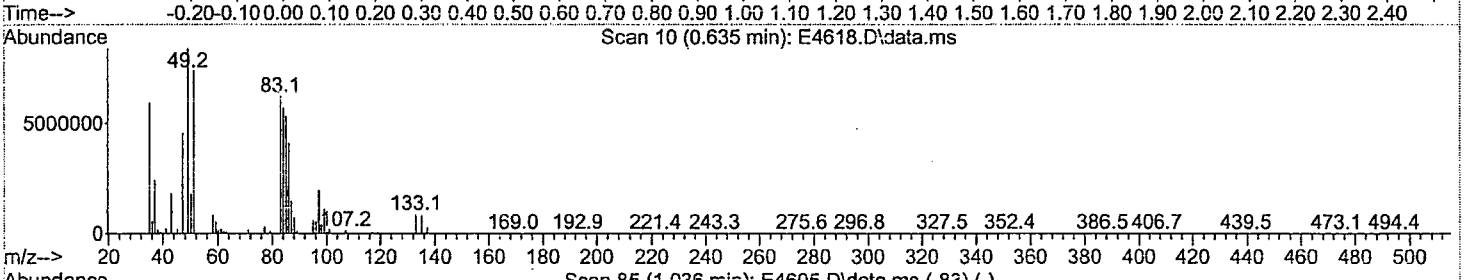
Quantitation Report (Qedit)

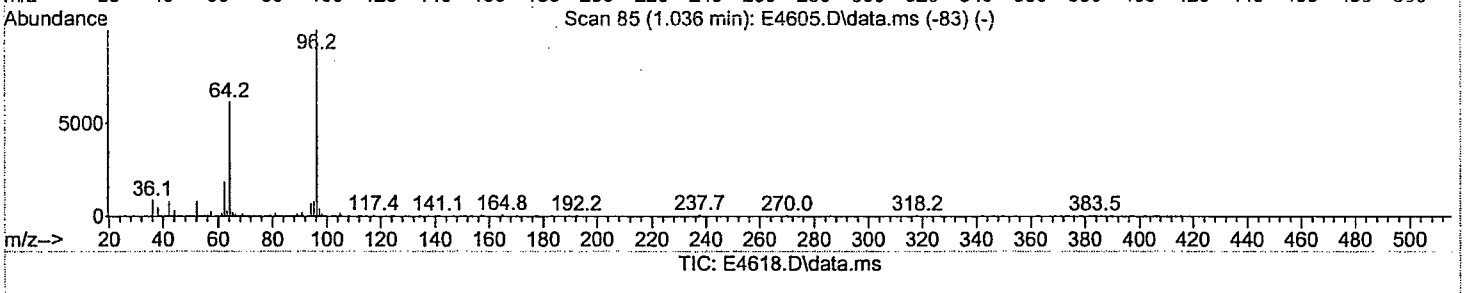
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(3) 1,4-Dioxane-d8 (SPC)

0.635min (-0.401) 1313.35 ug/mL

response 1253873

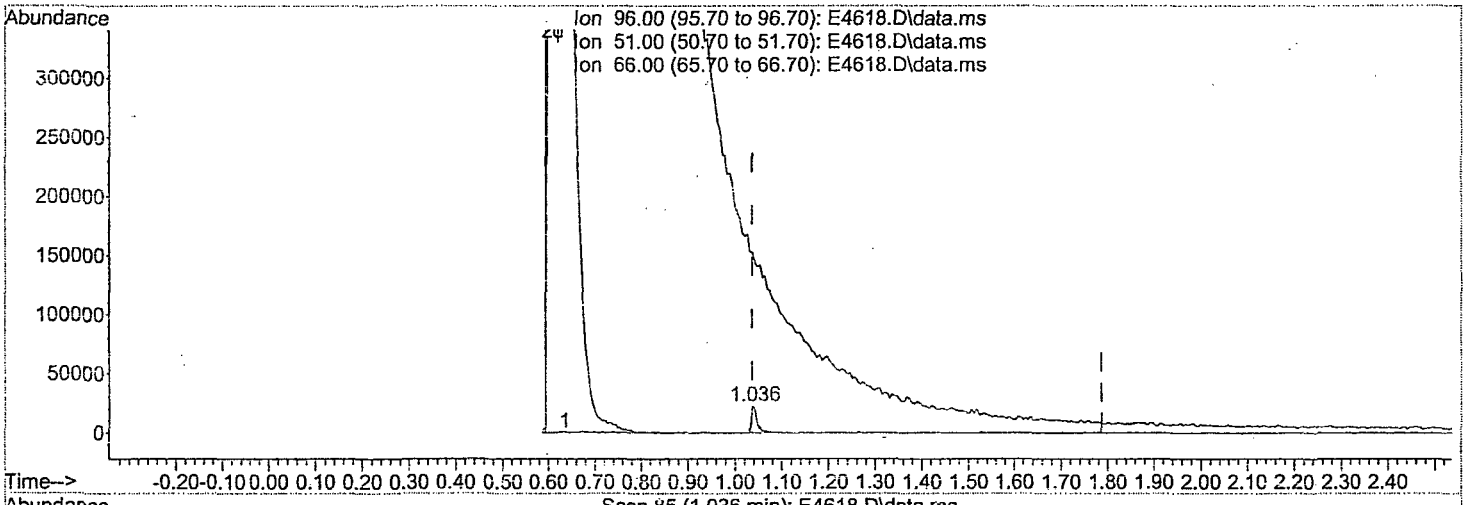
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.09# |
| 0.00 | 0.00 | 0.00 |

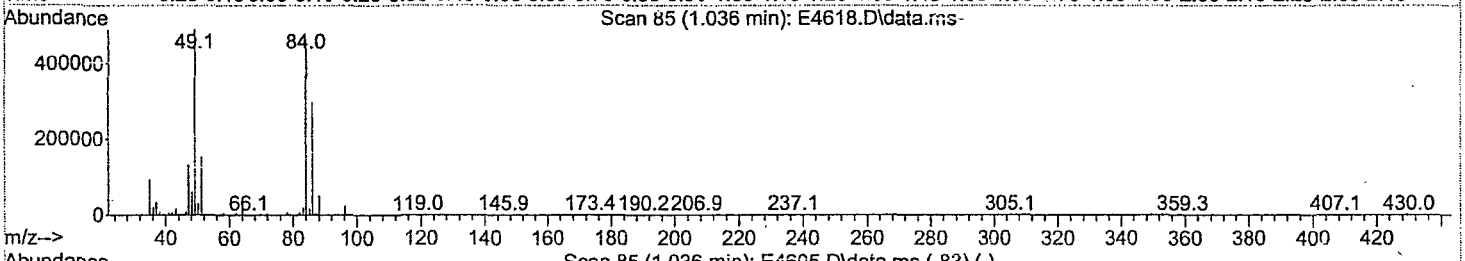
Quantitation Report (Qedit)

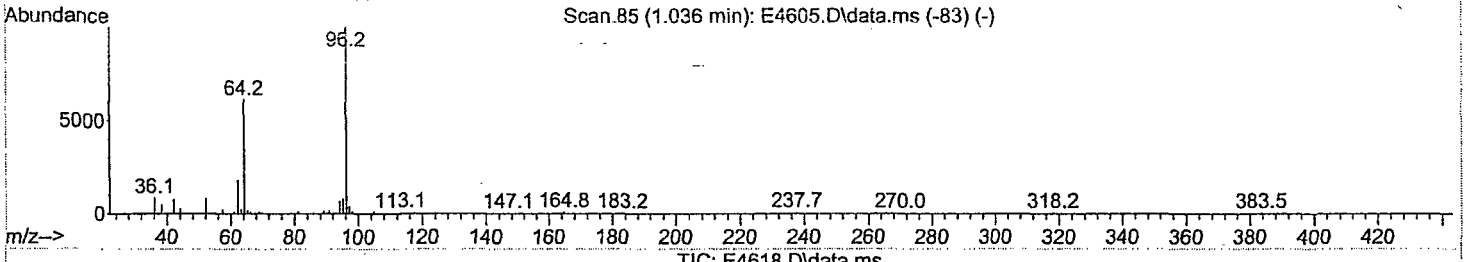
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(3) 1,4-Dioxane-d8 (SPC)

1.036min (+ 0.000) 18.85 ug/mL m RS 8/24

response 17999

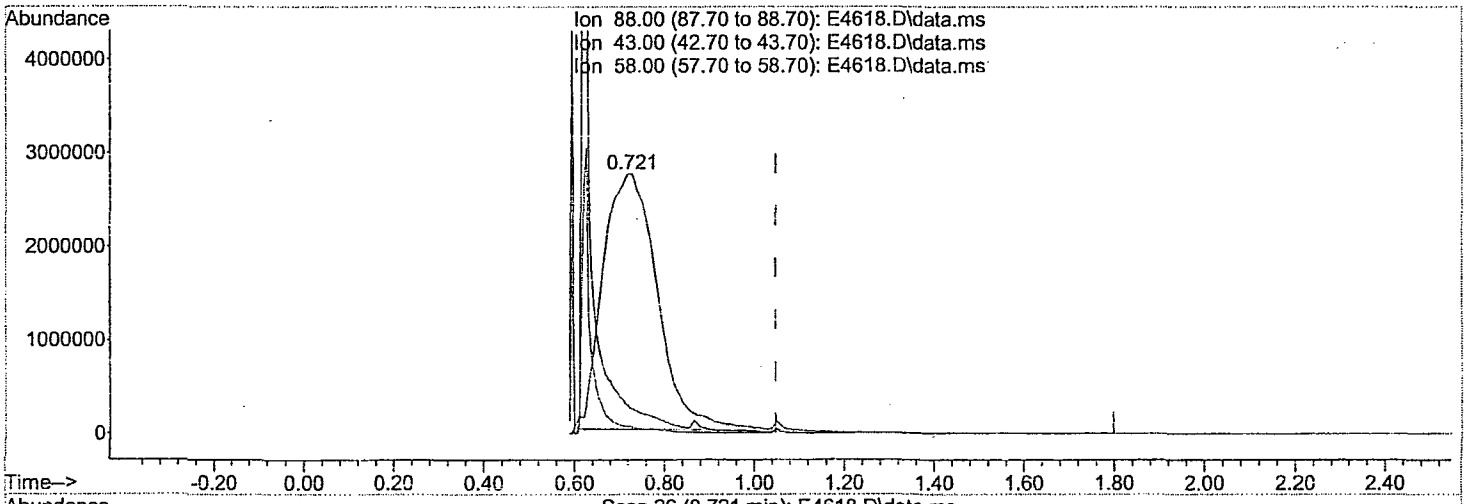
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 6.34# |
| 0.00 | 0.00 | 0.00 |

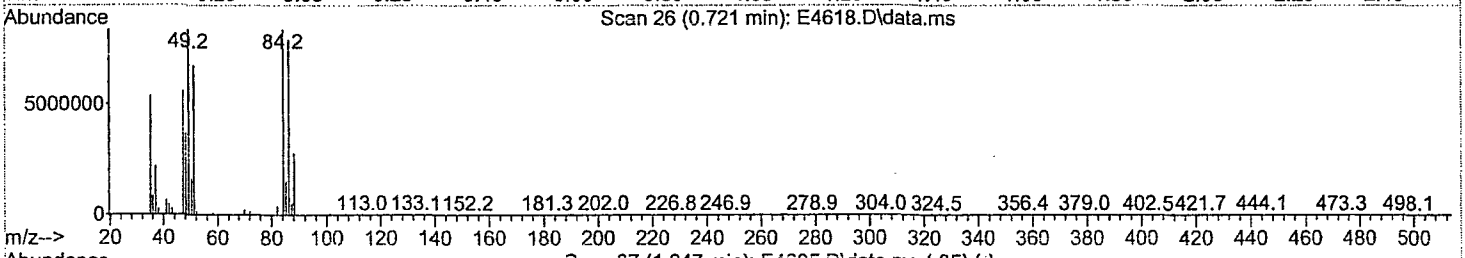
Quantitation Report (Qedit)

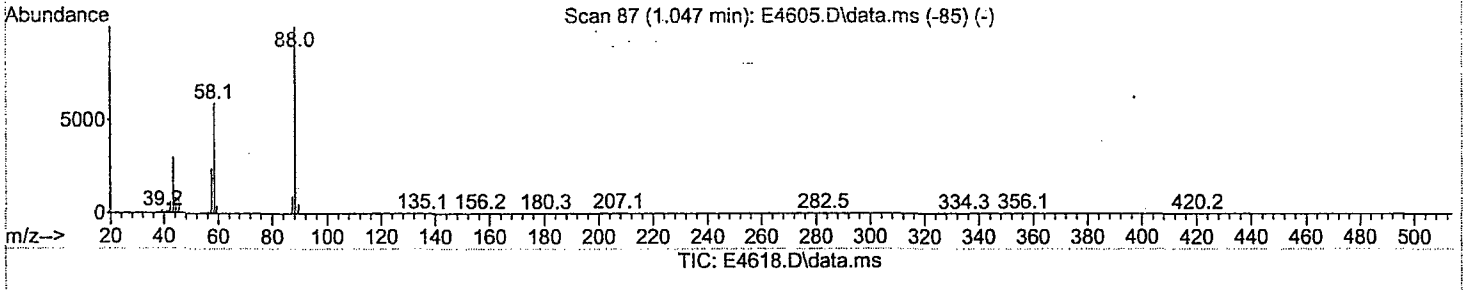
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(4) 1,4-Dioxane (PC)

0.721min (-0.326) 4208.86 ug/mL

response 22909162

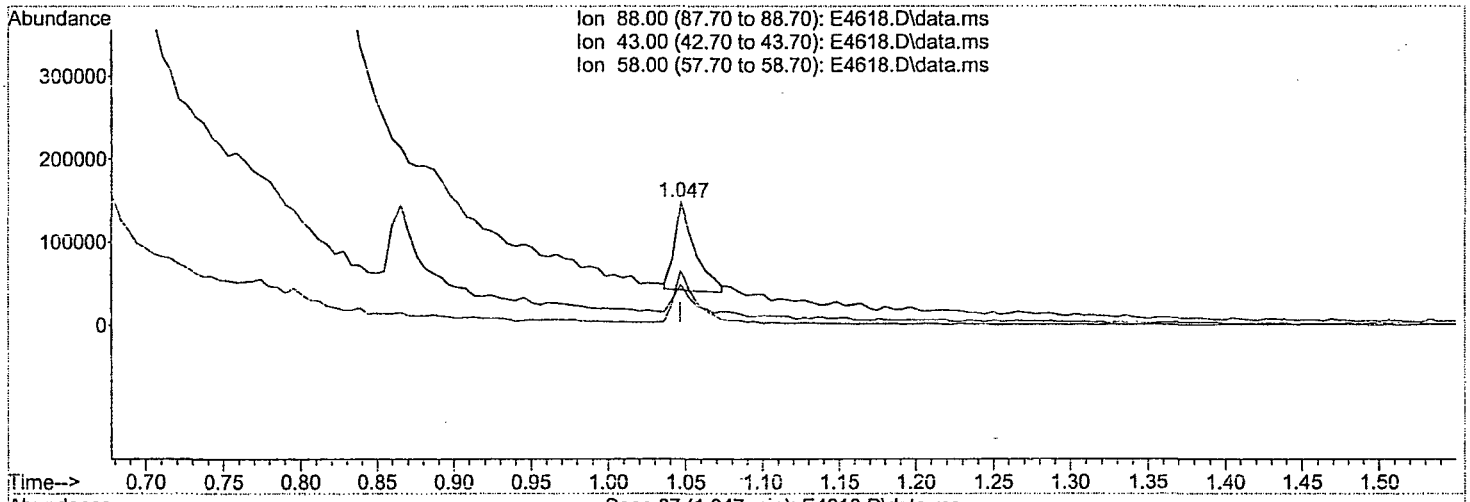
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

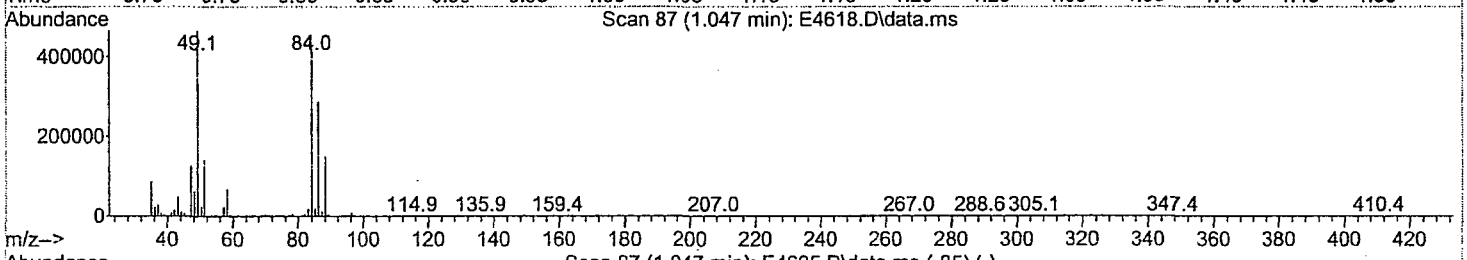
Quantitation Report (Qedit)

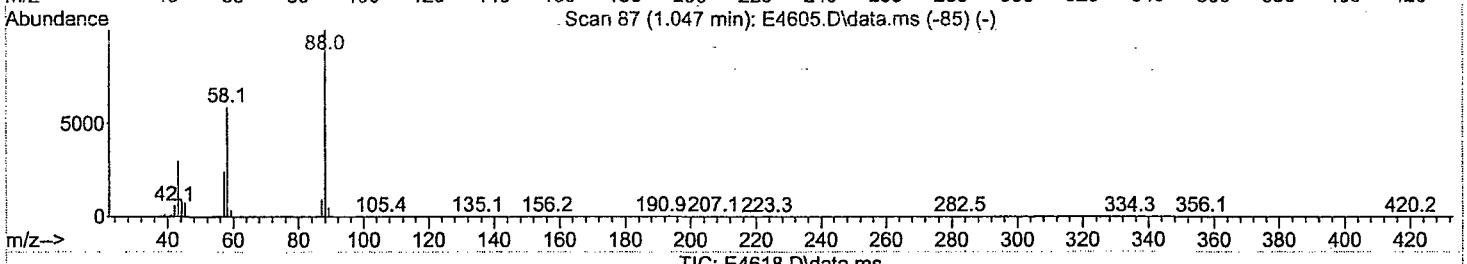
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(4) 1,4-Dioxane (PC)

1.047min (+ 0.000) 17.86 ug/mL m RS 8/21

response 97212

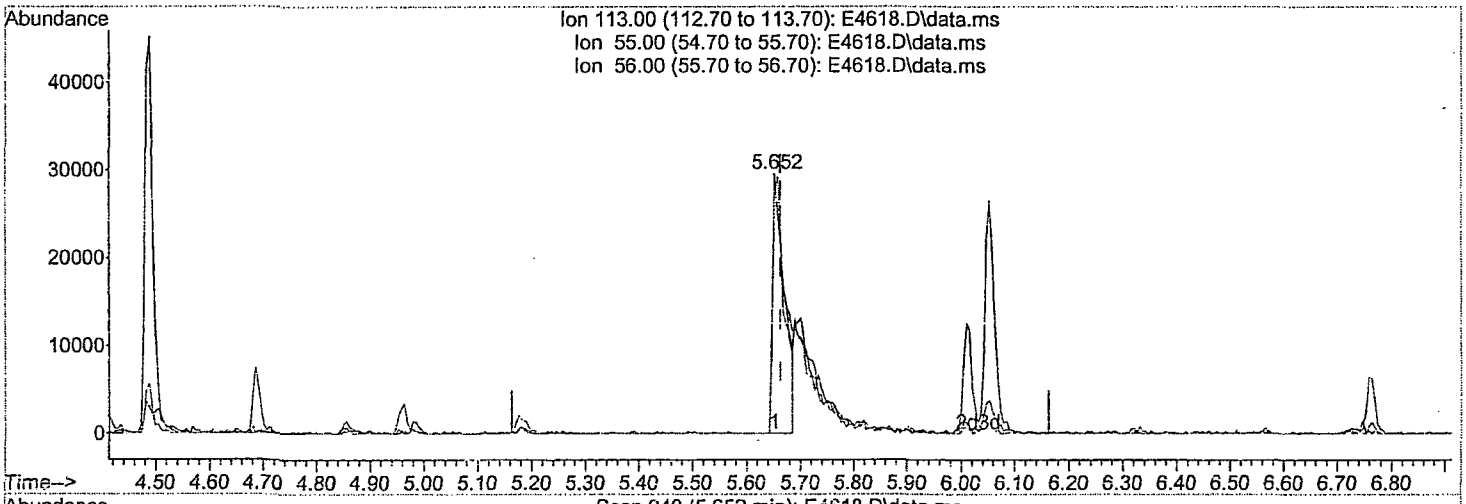
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

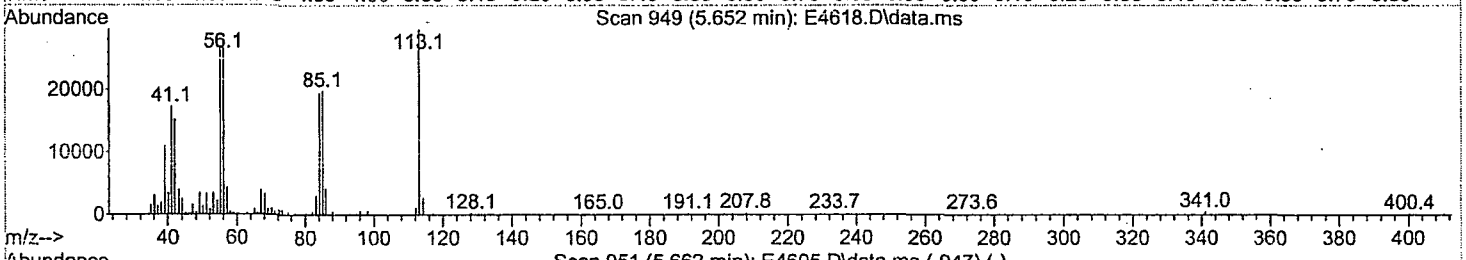
Quantitation Report (Qedit)

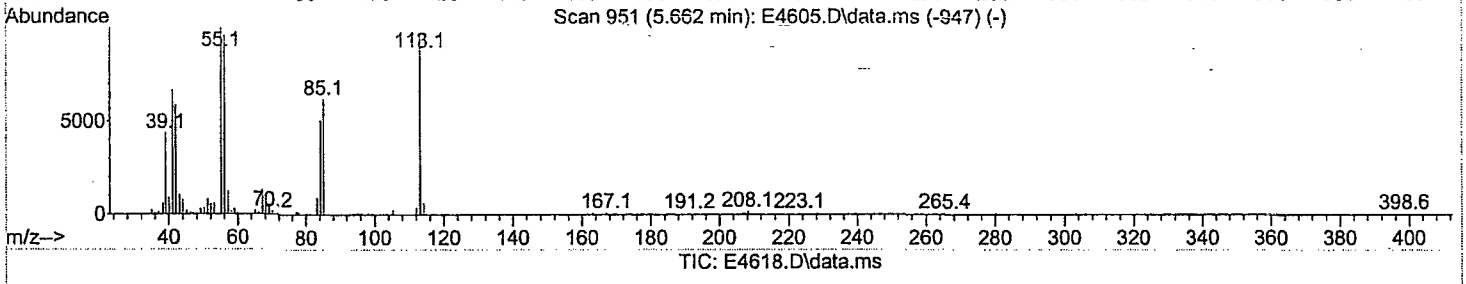
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(32) Caprolactam (PC)

5.652min (-0.011) 10.64 ug/mL

response 44744

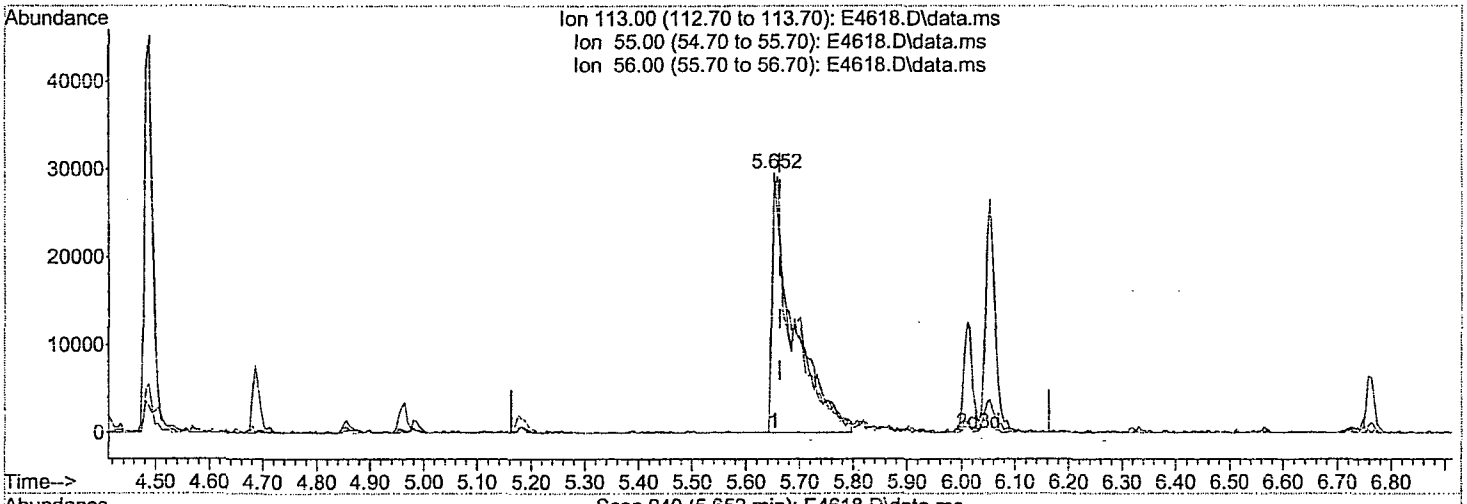
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 115.12 |
| 56.00 | 92.50 | 94.62 |
| 0.00 | 0.00 | 0.00 |

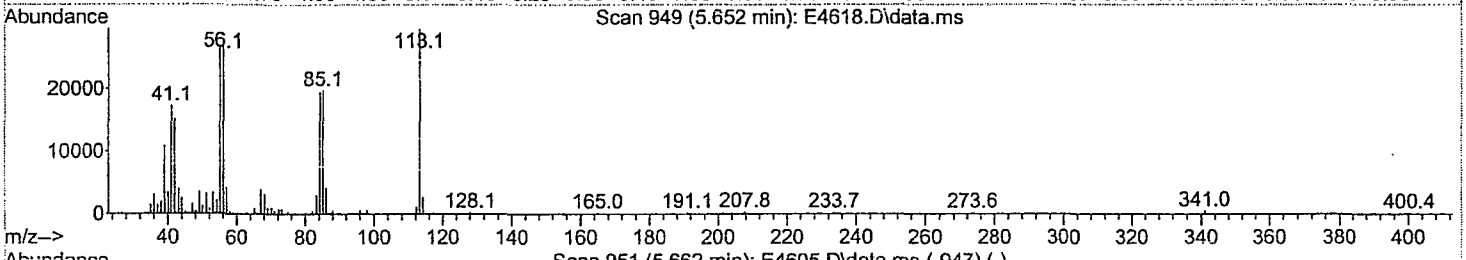
Quantitation Report (Qedit)

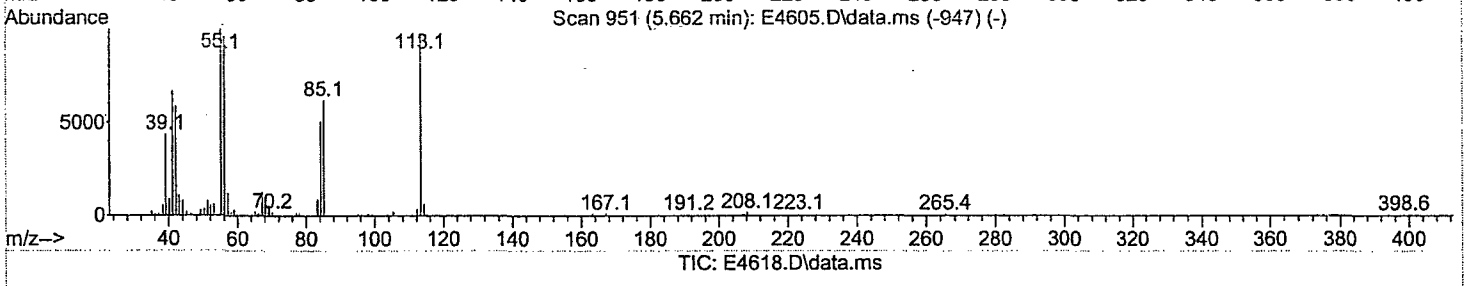
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(32) Caprolactam (PC)

5.652min (-0.011) 19.15 ug/mL m RS 8/24

response 80499

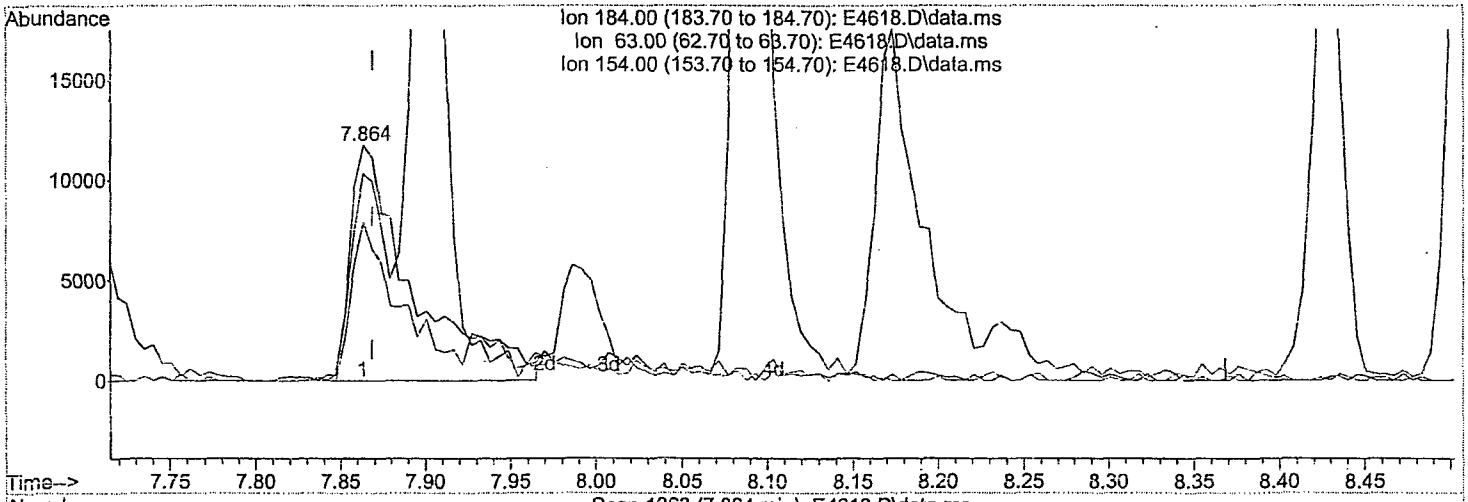
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 63.99# |
| 56.00 | 92.50 | 52.59# |
| 0.00 | 0.00 | 0.00 |

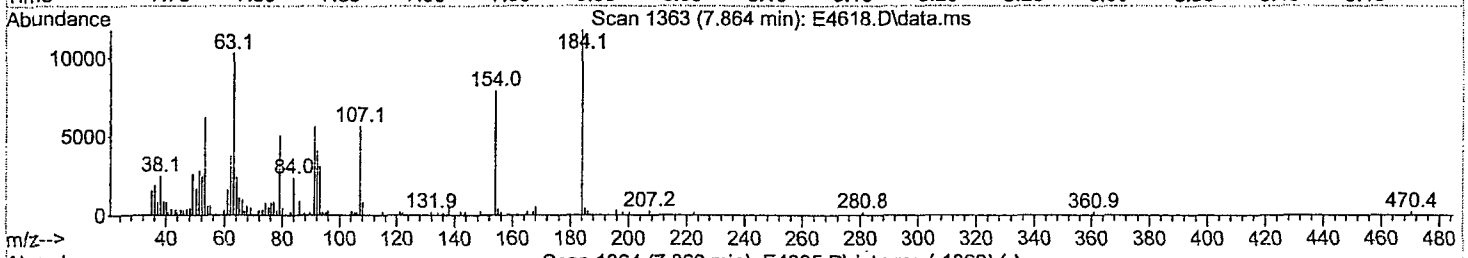
Quantitation Report (Qedit)

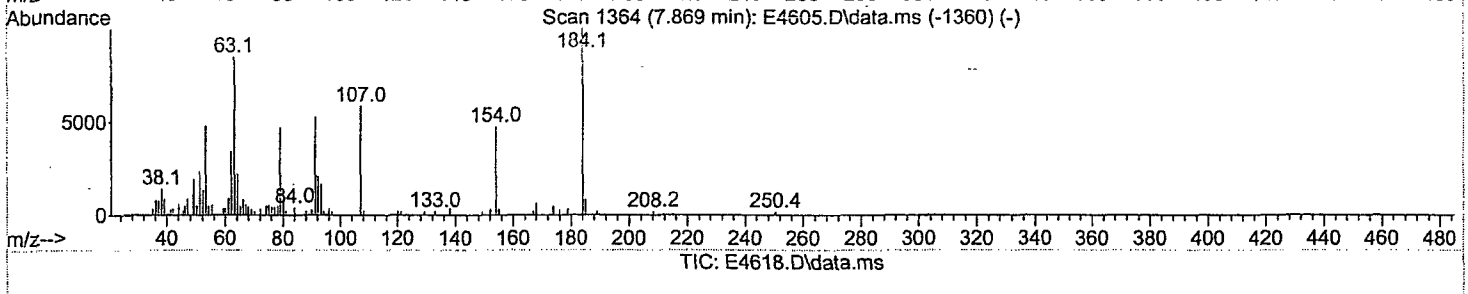
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(51) 2,4-Dinitrophenol (PC)

7.864min (-0.005) 14.24 ug/mL

response 30214

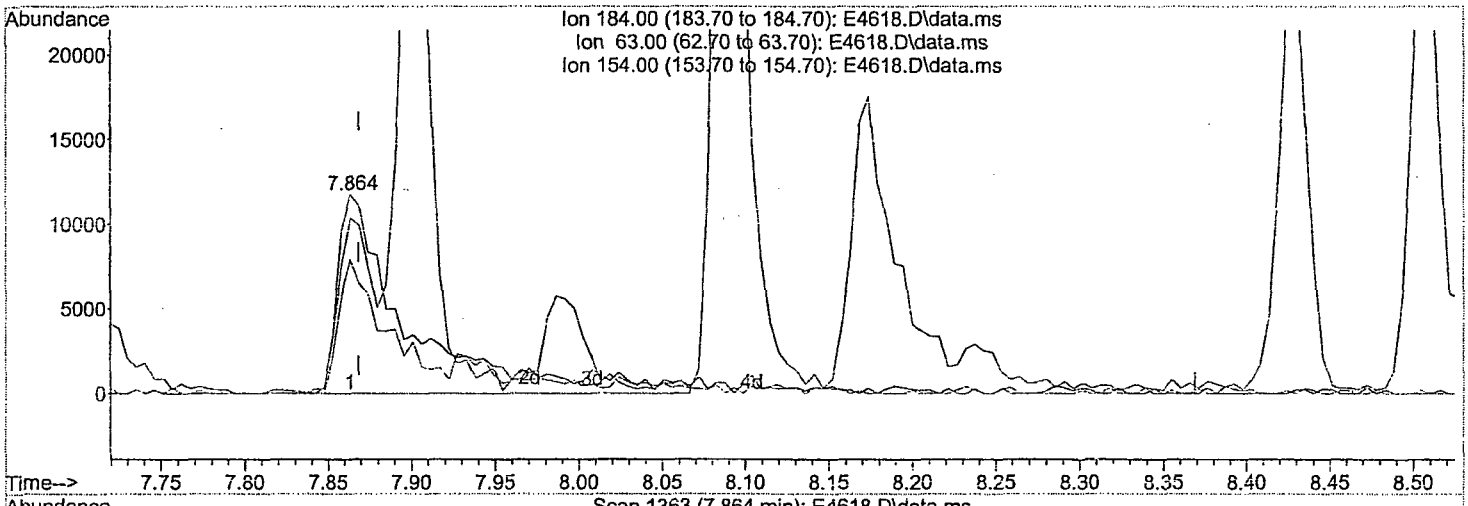
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 46.85# |
| 154.00 | 63.80 | 53.09 |
| 0.00 | 0.00 | 0.00 |

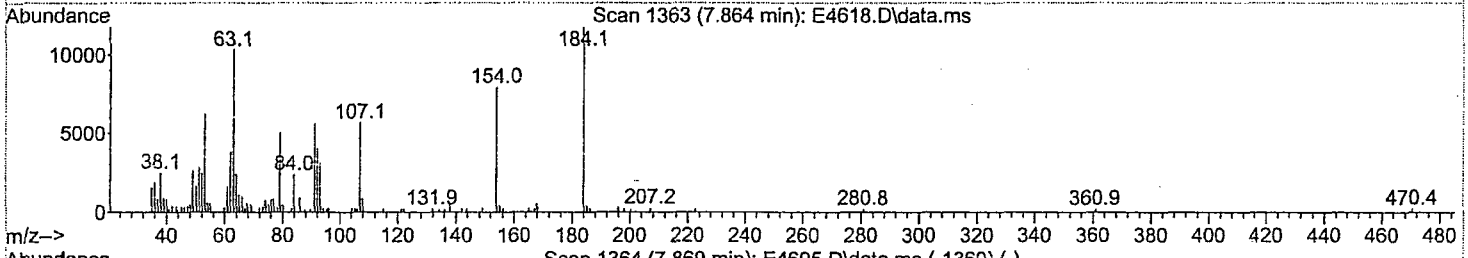
Quantitation Report (Qedit)

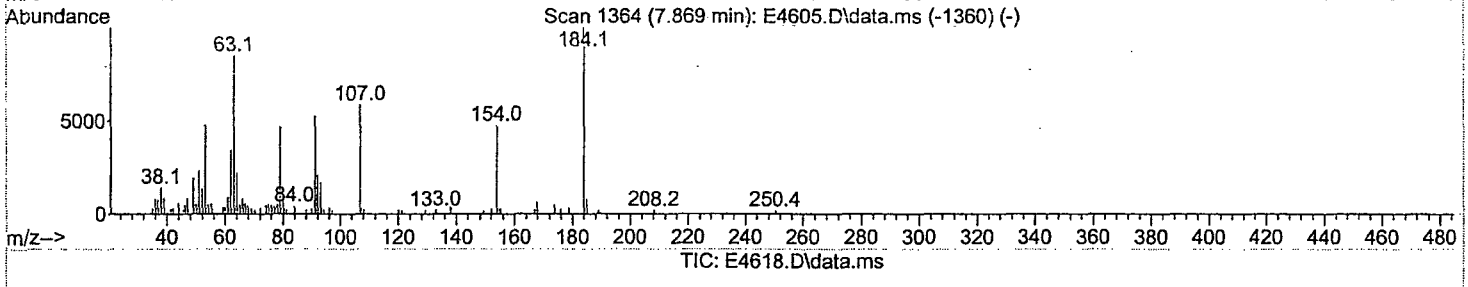
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 13:03:06 2012
Quant Results File: SOME4618.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration




TIC: E4618.D\data.ms

(51) 2,4-Dinitrophenol (PC)

7.864min (-0.005) 16.69 ug/mL m RS 8/24

response 35426

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 39.95# |
| 154.00 | 63.80 | 45.28 |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1016

Lab File ID: F4624.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209P Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 3.174 | 2.611 | 0.010 | -17.7 | 40.0 |
| Phenol | 4.492 | 4.085 | 0.800 | -9.1 | 25.0 |
| Bis(2-chloroethyl)ether | 3.587 | 3.059 | 0.700 | -14.7 | 25.0 |
| 2-Chlorophenol | 3.507 | 3.244 | 0.800 | -7.5 | 25.0 |
| 2-Methylphenol | 3.316 | 3.019 | 0.700 | -9.0 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 3.382 | 2.749 | 0.010 | -18.7 | 40.0 |
| Acetophenone | 5.110 | 4.502 | 0.010 | -11.9 | 40.0 |
| 4-Methylphenol | 3.482 | 3.275 | 0.600 | -6.0 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.967 | 2.334 | 0.500 | -21.3 | 25.0 |
| Hexachloroethane | 1.616 | 1.420 | 0.300 | -12.1 | 25.0 |
| Nitrobenzene | 1.017 | 0.900 | 0.200 | -11.5 | 25.0 |
| Isophorone | 1.750 | 1.673 | 0.400 | -4.4 | 25.0 |
| 2-Nitrophenol | 0.437 | 0.469 | 0.100 | 7.2 | 25.0 |
| 2,4-Dimethylphenol | 0.962 | 0.922 | 0.200 | -4.1 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.960 | 0.892 | 0.300 | -7.1 | 25.0 |
| 2,4-Dichlorophenol | 0.685 | 0.728 | 0.200 | 6.3 | 25.0 |
| Naphthalene | 2.472 | 2.465 | 0.700 | -0.3 | 25.0 |
| 4-Chloroaniline | 0.613 | 0.708 | 0.010 | 15.5 | 40.0 |
| Hexachlorobutadiene | 0.419 | 0.440 | 0.010 | 5.2 | 40.0 |
| Caprolactam | 0.278 | 0.290 | 0.010 | 4.3 | 40.0 |
| 4-Chloro-3-methylphenol | 0.836 | 0.807 | 0.200 | -3.5 | 25.0 |
| 2-Methylnaphthalene | 1.663 | 1.696 | 0.400 | 2.0 | 25.0 |
| Hexachlorocyclopentadiene | 0.707 | 0.743 | 0.010 | 5.1 | 40.0 |
| 2,4,6-Trichlorophenol | 0.794 | 0.836 | 0.200 | 5.3 | 25.0 |
| 2,4,5-Trichlorophenol | 0.798 | 0.843 | 0.200 | 5.6 | 25.0 |
| 1,1'-Biphenyl | 3.309 | 3.229 | 0.010 | -2.4 | 40.0 |
| 2-Chloronaphthalene | 2.651 | 2.542 | 0.800 | -4.1 | 25.0 |
| 2-Nitroaniline | 0.885 | 0.747 | 0.010 | -15.6 | 40.0 |
| Dimethylphthalate | 3.209 | 3.106 | 0.010 | -3.2 | 40.0 |
| 2,6-Dinitrotoluene | 0.643 | 0.670 | 0.200 | 4.2 | 25.0 |
| Acenaphthylene | 4.201 | 4.086 | 0.900 | -2.7 | 25.0 |
| 3-Nitroaniline | 0.615 | 0.629 | 0.010 | 2.4 | 40.0 |
| Acenaphthene | 2.677 | 2.554 | 0.900 | -4.6 | 25.0 |
| 2,4-Dinitrophenol | 0.221 | 0.160 | 0.010 | -27.5 | 40.0 |
| 4-Nitrophenol | 0.507 | 0.450 | 0.010 | -11.2 | 40.0 |
| Dibenzofuran | 3.713 | 3.559 | 0.800 | -4.2 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1016

Lab File ID: E4624.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209P Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.886 | 0.878 | 0.200 | -0.9 | 25.0 |
| Diethylphthalate | 3.314 | 3.089 | 0.010 | -6.8 | 40.0 |
| Fluorene | 3.212 | 3.003 | 0.900 | -6.5 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.387 | 1.337 | 0.400 | -3.6 | 25.0 |
| 4-Nitroaniline | 0.756 | 0.733 | 0.010 | -3.1 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.281 | 0.262 | 0.010 | -6.8 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.479 | 1.397 | 0.010 | -5.6 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.126 | 1.154 | 0.010 | 2.4 | 40.0 |
| 4-Bromophenyl-phenylether | 0.420 | 0.433 | 0.100 | 3.1 | 25.0 |
| Hexachlorobenzene | 0.413 | 0.432 | 0.100 | 4.7 | 25.0 |
| Atrazine | 0.489 | 0.538 | 0.010 | 10.0 | 40.0 |
| Pentachlorophenol | 0.203 | 0.239 | 0.050 | 17.6 | 25.0 |
| Phenanthrene | 2.500 | 2.449 | 0.700 | -2.1 | 25.0 |
| Anthracene | 2.580 | 2.478 | 0.700 | -4.0 | 25.0 |
| Carbazole | 2.493 | 2.417 | 0.010 | -3.0 | 40.0 |
| Di-n-butylphthalate | 3.151 | 3.070 | 0.010 | -2.6 | 40.0 |
| Fluoranthene | 2.754 | 2.733 | 0.600 | -0.8 | 25.0 |
| Pyrene | 2.912 | 2.734 | 0.600 | -6.1 | 25.0 |
| Butylbenzylphthalate | 1.412 | 1.309 | 0.010 | -7.3 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.679 | 0.558 | 0.010 | -17.8 | 40.0 |
| Benzo (a) anthracene | 2.464 | 2.389 | 0.800 | -3.0 | 25.0 |
| Chrysene | 2.364 | 2.293 | 0.700 | -3.0 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.900 | 1.811 | 0.010 | -4.7 | 40.0 |
| Di-n-octylphthalate | 3.758 | 3.590 | 0.010 | -4.4 | 40.0 |
| Benzo (b) fluoranthene | 2.731 | 2.648 | 0.700 | -3.1 | 25.0 |
| Benzo (k) fluoranthene | 2.705 | 2.532 | 0.700 | -6.4 | 25.0 |
| Benzo (a) pyrene | 2.673 | 2.475 | 0.700 | -7.4 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.060 | 2.009 | 0.500 | -2.5 | 25.0 |
| Dibenzo (a,h) anthracene | 2.137 | 2.064 | 0.400 | -3.4 | 25.0 |
| Benzo (g,h,i) perylene | 2.237 | 2.173 | 0.500 | -2.9 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.594 | 0.652 | 0.100 | 9.8 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1016

Lab File ID: E4624.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209P Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.525 | 4.492 | 0.010 | -0.7 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.510 | 2.046 | 0.010 | -18.5 | 25.0 |
| 2-Chlorophenol-d4 | 4.006 | 3.689 | 0.010 | -7.9 | 25.0 |
| 4-Methylphenol-d8 | 3.363 | 3.111 | 0.010 | -7.5 | 25.0 |
| Nitrobenzene-d5 | 0.425 | 0.437 | 0.010 | 2.8 | 25.0 |
| 2-Nitrophenol-d4 | 0.473 | 0.500 | 0.010 | 5.7 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.789 | 0.818 | 0.010 | 3.6 | 25.0 |
| 4-Chloroaniline-d4 | 0.677 | 0.776 | 0.010 | 14.7 | 40.0 |
| Dimethylphthalate-d6 | 3.363 | 3.314 | 0.010 | -1.5 | 40.0 |
| Acenaphthylene-d8 | 4.340 | 4.141 | 0.010 | -4.6 | 25.0 |
| 4-Nitrophenol-d4 | 0.609 | 0.551 | 0.010 | -9.5 | 40.0 |
| Fluorene-d10 | 2.712 | 2.615 | 0.010 | -3.6 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.315 | 0.287 | 0.010 | -8.9 | 40.0 |
| Anthracene-d10 | 2.468 | 2.346 | 0.010 | -4.9 | 25.0 |
| Pyrene-d10 | 2.617 | 2.504 | 0.010 | -4.3 | 25.0 |
| Benzo (a) pyrene-d12 | 2.284 | 2.193 | 0.010 | -4.0 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

CASE: 42543 SDG: X0T49

05/26/12

S. Vokati

05/26/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 77410 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 303799 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 192735 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.859 | 188 | 338230 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.997 | 240 | 361403 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.060 | 264 | 322383 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 18615m | 17.22 ug/mL | 0.00 RS |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 86.10% | | |
| 7) Phenol-d5 | 3.093 | 99 | 347701 | 19.85 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 49.63% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 158370 | 16.30 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 40.75% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 285536 | 18.42 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 46.05% | | |
| 20) 4-Methylphenol-d8 | 3.974 | 113 | 240810 | 18.50 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 46.25% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 132697 | 20.56 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 51.40% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 151909 | 21.14 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 52.85% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 248469 | 20.72 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 51.80% | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 235822 | 22.94 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 57.35% | | |
| 62) Acenaphthylene-d8 | 7.345 | 160 | 798146 | 19.08 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 47.70% | | |
| 63) 4-Nitrophenol-d4 | 8.190 | 143 | 106114 | 18.09 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 45.23% | | |
| 64) Dimethylphthalate-d6 | 7.388 | 166 | 638667 | 19.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 49.28% | | |
| 65) Fluorene-d10 | 8.393 | 176 | 504013 | 19.28 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 48.20% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.693 | 200 | 97034 | 18.23 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 45.57% | | |
| 79) Anthracene-d10 | 9.934 | 188 | 793499 | 19.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 47.53% | | |
| 87) Pyrene-d10 | 12.037 | 212 | 905012 | 19.14 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 47.85%# | | |
| 96) Benzo (a) pyrene-d12 | 15.952 | 264 | 706964 | 19.20 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 48.00% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.881 | 79 | 526699 | 16.7860 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.047 | 88 | 106365m | 17.2557 ug/mL | RS |
| 5) Benzaldehyde | 2.842 | 77 | 202114 | 16.4510 ug/mL | 94 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 236825 | 17.0566 ug/mL | 89 |
| 8) Phenol | 3.104 | 94 | 316230 | 18.1876 ug/mL# | 50 |
| 9) 2-Chlorophenol | 3.130 | 128 | 251082 | 18.4968 ug/mL | 99 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 212764 | 16.2561 ug/mL# | 31 |
| 11) Aniline | 3.013 | 93 | 323787 | 23.4528 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.584 | 83 | 292414 | 16.8485 ug/mL# | 100 |
| 13) Acetophenone | 3.868 | 105 | 348534 | 17.6230 ug/mL | 94 |
| 14) 2-Methylphenol | 3.798 | 108 | 233673 | 18.2049 ug/mL | 95 |
| 15) Hexachloroethane | 3.900 | 117 | 109895 | 17.5724 ug/mL | 96 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 180711 | 15.7387 ug/mL | 91 | |
| 17) 4-Methylphenol | 4.007 | 108 | 253505 | 18.8097 ug/mL | 97 | |
| 23) Nitrobenzene | 4.071 | 77 | 273434 | 17.6996 ug/mL | 95 | |
| 24) Isophorone | 4.397 | 82 | 508278 | 19.1199 ug/mL | 97 | |
| 25) 2-Nitrophenol | 4.503 | 139 | 142406 | 21.4343 ug/mL | 93 | |
| 26) 2,4-Dimethylphenol | 4.696 | 107 | 280190 | 19.1803 ug/mL | 96 | |
| 27) Bis(2-chloroethoxy)met... | 4.781 | 93 | 270977 | 18.5756 ug/mL | 97 | |
| 28) 2,4- Dichlorophenol | 4.877 | 162 | 221116 | 21.2576 ug/mL | 96 | |
| 29) Naphthalene | 4.990 | 128 | 748754 | 19.9403 ug/mL | 100 | |
| 30) 4-Chloroaniline | 5.198 | 127 | 214989 | 23.0976 ug/mL | 94 | |
| 31) Hexachlorobutadiene | 5.294 | 225 | 133772 | 21.0313 ug/mL | 98 | |
| 32) Caprolactam | 5.705 | 113 | 87960m | 20.8515 ug/mL | | RS 8/24 |
| 33) 4-Chloro-3-methylphenol | 6.063 | 107 | 245046 | 19.3045 ug/mL | 93 | |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 515302 | 20.4039 ug/mL | 98 | |
| 39) Hexachlorocyclopentadiene | 6.373 | 237 | 143212 | 21.0137 ug/mL | 97 | |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 161171 | 21.0552 ug/mL | 100 | |
| 41) 2,4,5-Trichlorophenol | 6.651 | 196 | 162415 | 21.1237 ug/mL | 96 | |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 622415 | 19.5190 ug/mL | 95 | |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 489959 | 19.1795 ug/mL | 97 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 225366 | 20.2282 ug/mL | 98 | |
| 45) 2-Nitroaniline | 7.052 | 65 | 143915 | 16.8832 ug/mL | 93 | |
| 46) Acenaphthylene | 7.361 | 152 | 787460 | 19.4517 ug/mL | 100 | |
| 47) Dimethylphthalate | 7.426 | 163 | 598657 | 19.3580 ug/mL | 99 | |
| 48) 2,6-Dinitrotoluene | 7.500 | 165 | 129200 | 20.8452 ug/mL | 96 | |
| 49) Acenaphthene | 7.650 | 153 | 492304 | 19.0804 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.709 | 138 | 121247 | 20.4717 ug/mL | 89 | |
| 51) 2,4-Dinitrophenol | 7.880 | 184 | 30843m | 14.4932 ug/mL | | RS 8/24 |
| 52) Dibenzofuran | 7.906 | 168 | 685876 | 19.1670 ug/mL | 98 | |
| 53) Pentachlorobenzene | 9.248 | 250 | 142238 | 20.6183 ug/mL | 98 | |
| 54) 2,4-Dinitrotoluene | 8.099 | 165 | 169228 | 19.8104 ug/mL | 91 | |
| 55) 4-Nitrophenol | 8.195 | 109 | 86752 | 17.7508 ug/mL# | 89 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.248 | 232 | 125624 | 21.9564 ug/mL | 92 | |
| 57) Fluorene | 8.435 | 166 | 578705 | 18.6971 ug/mL | 99 | |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 257767 | 19.2809 ug/mL | 92 | |
| 59) Diethylphthalate | 8.539 | 149 | 595316 | 18.6380 ug/mL | 98 | |
| 60) 4-Nitroaniline | 8.670 | 138 | 141223 | 19.3897 ug/mL | 88 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 222339 | 20.4879 ug/mL | 96 | |
| 67) 4,6-Dinitro-2-methylph... | 8.705 | 198 | 88503 | 18.6435 ug/mL | 96 | |
| 68) N-Nitrosodiphenylamine... | 8.745 | 169 | 472560 | 18.8887 ug/mL | 99 | |
| 69) 4-Bromophenyl-phenylether | 9.248 | 248 | 146364 | 20.6299 ug/mL | 92 | |
| 70) Hexachlorobenzene | 9.396 | 284 | 146154 | 20.9460 ug/mL | 83 | |
| 71) Atrazine | 9.728 | 200 | 181994 | 21.9940 ug/mL | 91 | |
| 72) Pentachlorophenol | 9.762 | 266 | 80728 | 23.5177 ug/mL | 98 | |
| 73) Phenanthrene | 9.894 | 178 | 828165 | 19.5898 ug/mL | 98 | |
| 74) Anthracene | 9.956 | 178 | 838055 | 19.2075 ug/mL | 99 | |
| 75) Carbazole | 10.316 | 167 | 817669 | 19.3980 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.099 | 149 | 1038383 | 19.4860 ug/mL | 99 | |
| 77) Fluoranthene | 11.740 | 202 | 924449 | 19.8464 ug/mL | 98 | |
| 81) Pyrene | 12.065 | 202 | 987931 | 18.7762 ug/mL | 99 | |
| 82) Butylbenzylphthalate | 13.408 | 149 | 472976 | 18.5378 ug/mL | 93 | |
| 83) 3,3'-Dichlorobenzidine | 14.083 | 252 | 201754 | 16.4331 ug/mL | 99 | |
| 84) Benzo (a) anthracene | 13.974 | 228 | 863520 | 19.3906 ug/mL | 100 | |
| 85) Chrysene | 14.031 | 228 | 828637 | 19.3980 ug/mL | 98 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 654508 | 19.0684 ug/mL | 96 | |
| 89) Di-n-octylphthalate | 15.346 | 149 | 1157515 | 19.1110 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.563 | 252 | 853510 | 19.3891 ug/mL | 96 | |
| 91) Benzo (k) fluoranthene | 15.597 | 252 | 816256 | 18.7237 ug/mL | 94 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.980 | 252 | 797785 | 18.5174 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.369 | 276 | 647692 | 19.5086 ug/mL | 93 |
| 94) Dibenzo (a,h) anthracene | 17.415 | 278 | 665429 | 19.3203 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.644 | 276 | 700435 | 19.4206 ug/mL | 93 |

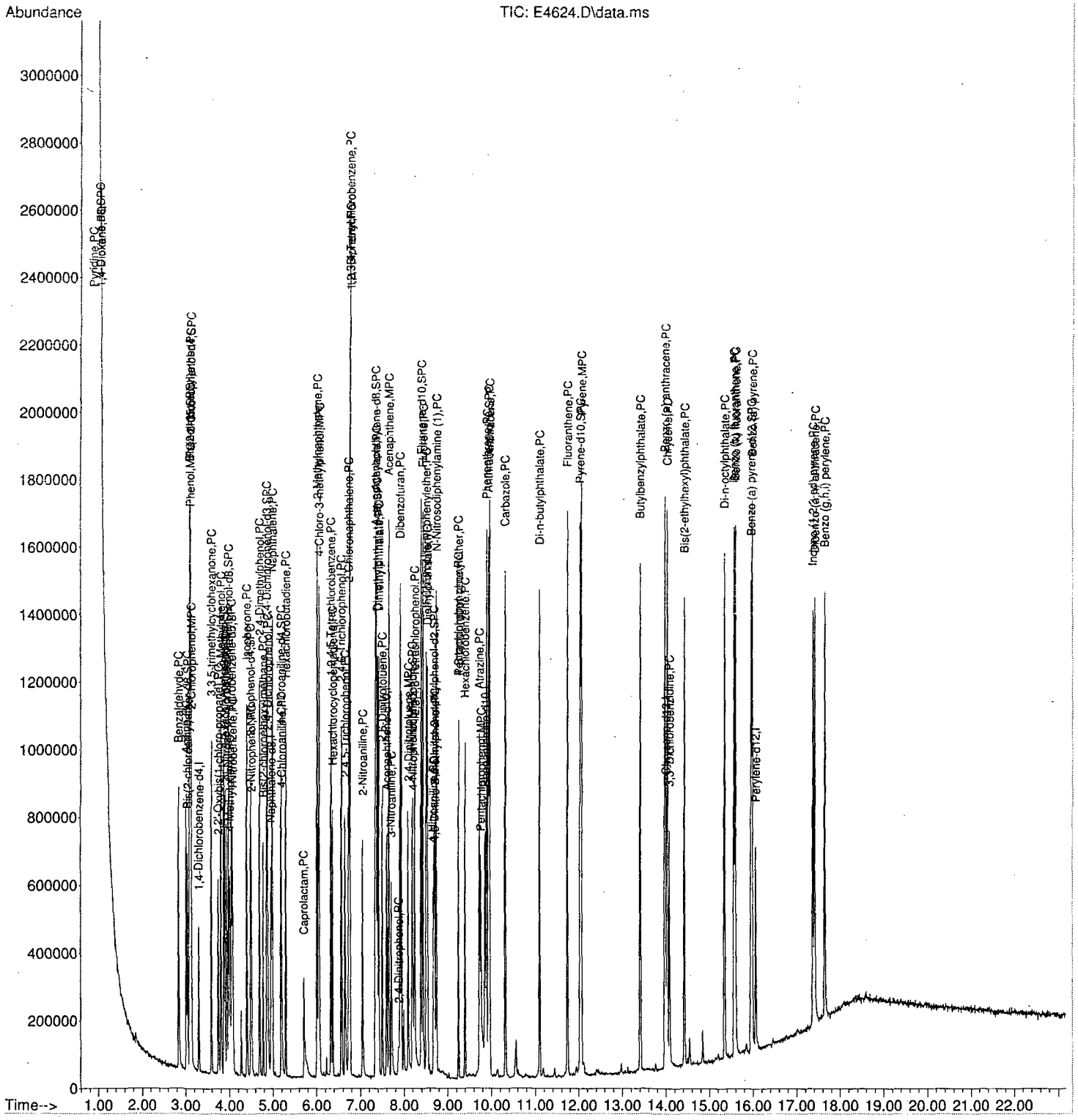
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration






00520

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 127 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 6.804 | 16.1 | 106 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.240 | 14.0# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.374 | 13.7# | 128 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 2.611 | 17.7 | 103 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.059 | 14.7 | 110 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.492 | 0.7 | 137 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.085 | 9.1 | 118 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.244 | 7.5 | 120 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 2.749 | 18.7 | 107 | 0.00 |
| 11 | PC | Aniline | 3.567 | 4.183 | -17.3 | 174# | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 3.777 | 15.8 | 114 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 4.502 | 11.9 | 115 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.019 | 9.0 | 118 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.420 | 12.1 | 115 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.334 | 21.3 | 103 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.275 | 5.9 | 124 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.046 | 18.5 | 106 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 3.689 | 7.9 | 121 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.111 | 7.5 | 121 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.437 | -2.8 | 125 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 0.900 | 11.5 | 105 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.673 | 4.4 | 114 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.469 | -7.3 | 126 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.922 | 4.2 | 114 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.892 | 7.1 | 110 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.728 | -6.3 | 126 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.465 | 0.3 | 121 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.708 | -15.5 | 135 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.440 | -5.0 | 125 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.290 | -4.3 | 122 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.807 | 3.5 | 115 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.696 | -2.0 | 122 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.500 | -5.7 | 129 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.818 | -3.7 | 122 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.776 | -14.6 | 141 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 119 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.743 | -5.1 | 129 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.836 | -5.3 | 130 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.843 | -5.6 | 127 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.229 | 2.4 | 122 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.542 | 4.1 | 121 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.169 | -1.1 | 126 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.747 | 15.6 | 106 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.086 | 2.7 | 121 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.106 | 3.2 | 120 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.670 | -4.2 | 128 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.554 | 4.6 | 120 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.629 | -2.3 | 133 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.160 | 27.6 | 96 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:26:00 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.559 | 4.1 | 118 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.738 | -3.1 | 130 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.878 | 0.9 | 122 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.450 | 11.2 | 115 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.652 | -9.8 | 135 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.003 | 6.5 | 117 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.337 | 3.6 | 120 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.089 | 6.8 | 113 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.733 | 3.0 | 119 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.154 | -2.5 | 127 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.141 | 4.6 | 118 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.551 | 9.5 | 117 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.314 | 1.5 | 122 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.615 | 3.6 | 121 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 117 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.262 | 6.8 | 116 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.397 | 5.5 | 115 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.433 | -3.1 | 126 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.432 | -4.6 | 130 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.538 | -10.0 | 129 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.239 | -17.7 | 155# | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.449 | 2.0 | 118 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.478 | 4.0 | 115 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.417 | 3.0 | 114 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 3.070 | 2.6 | 114 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.733 | 0.8 | 121 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.287 | 8.9 | 116 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.346 | 4.9 | 113 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.734 | 6.1 | 119 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.309 | 7.3 | 114 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.558 | 17.8 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.389 | 3.0 | 121 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.293 | 3.0 | 123 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.811 | 4.7 | 116 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.504 | 4.3 | 121 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 127 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.590 | 4.5 | 119 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.648 | 3.0 | 124 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.532 | 6.4 | 122 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.475 | 7.4 | 118 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.009 | 2.5 | 125 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.064 | 3.4 | 126 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.173 | 2.9 | 123 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.193 | 4.0 | 122 | 0.00 |

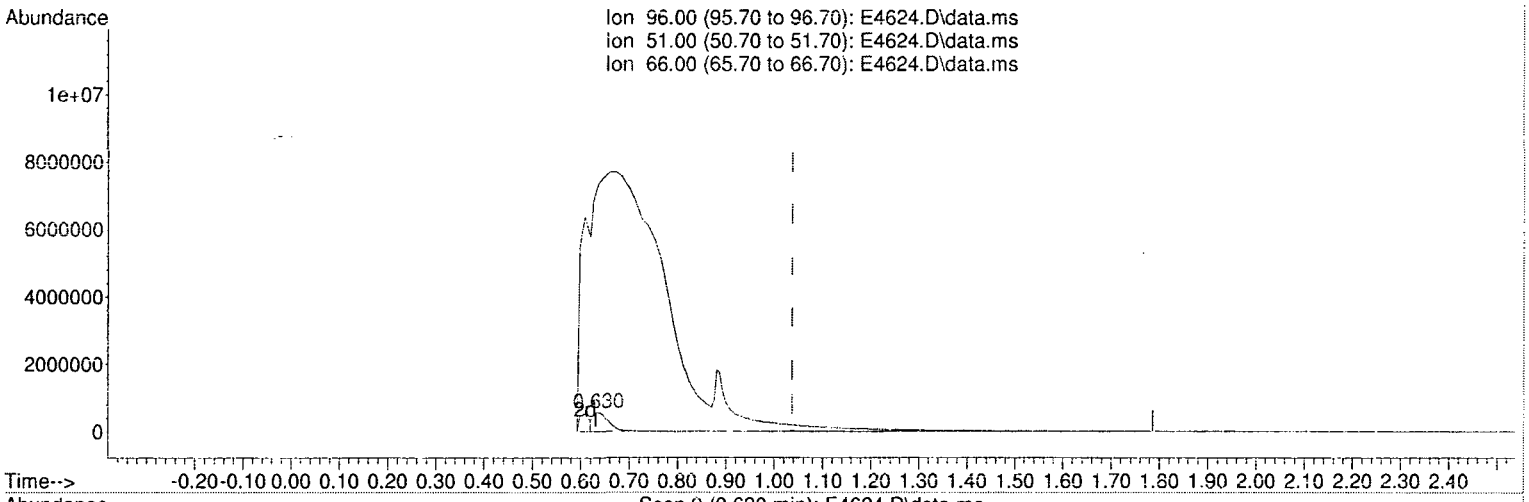
(#) = Out of Range SPCC's out = 0 CCC's out = 2

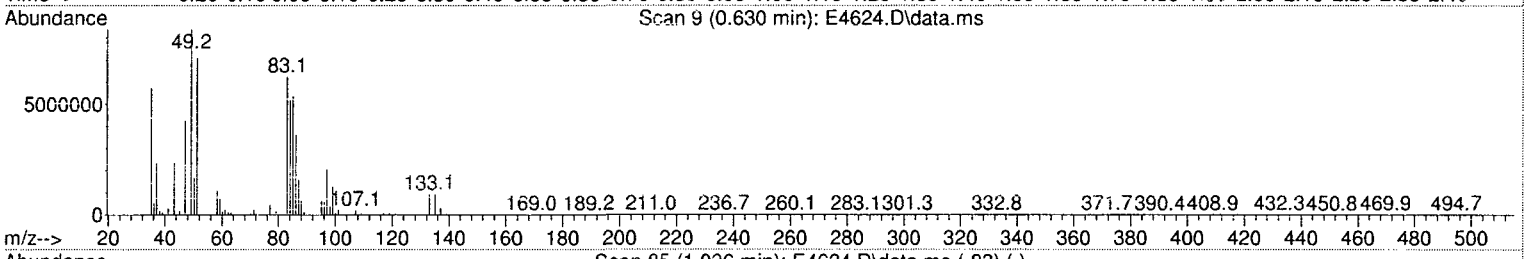
Quantitation Report (Qedit)

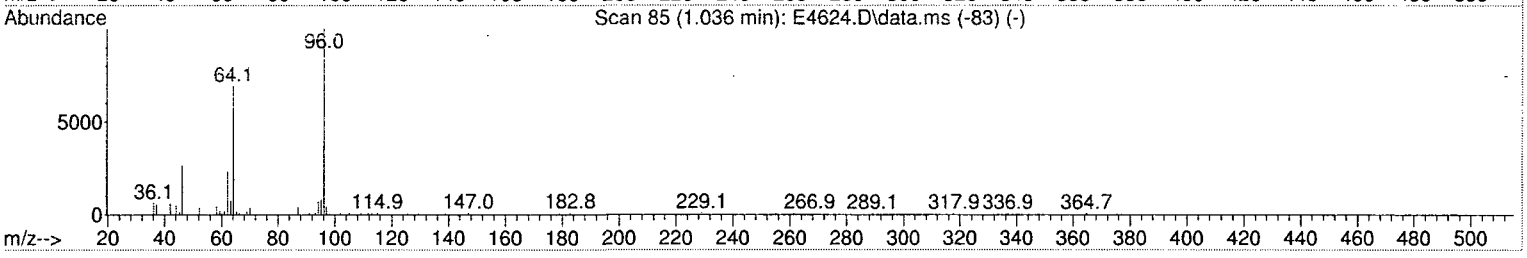
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.630min (-0.406) 1224.97 ug/mL**

**response 1324395**

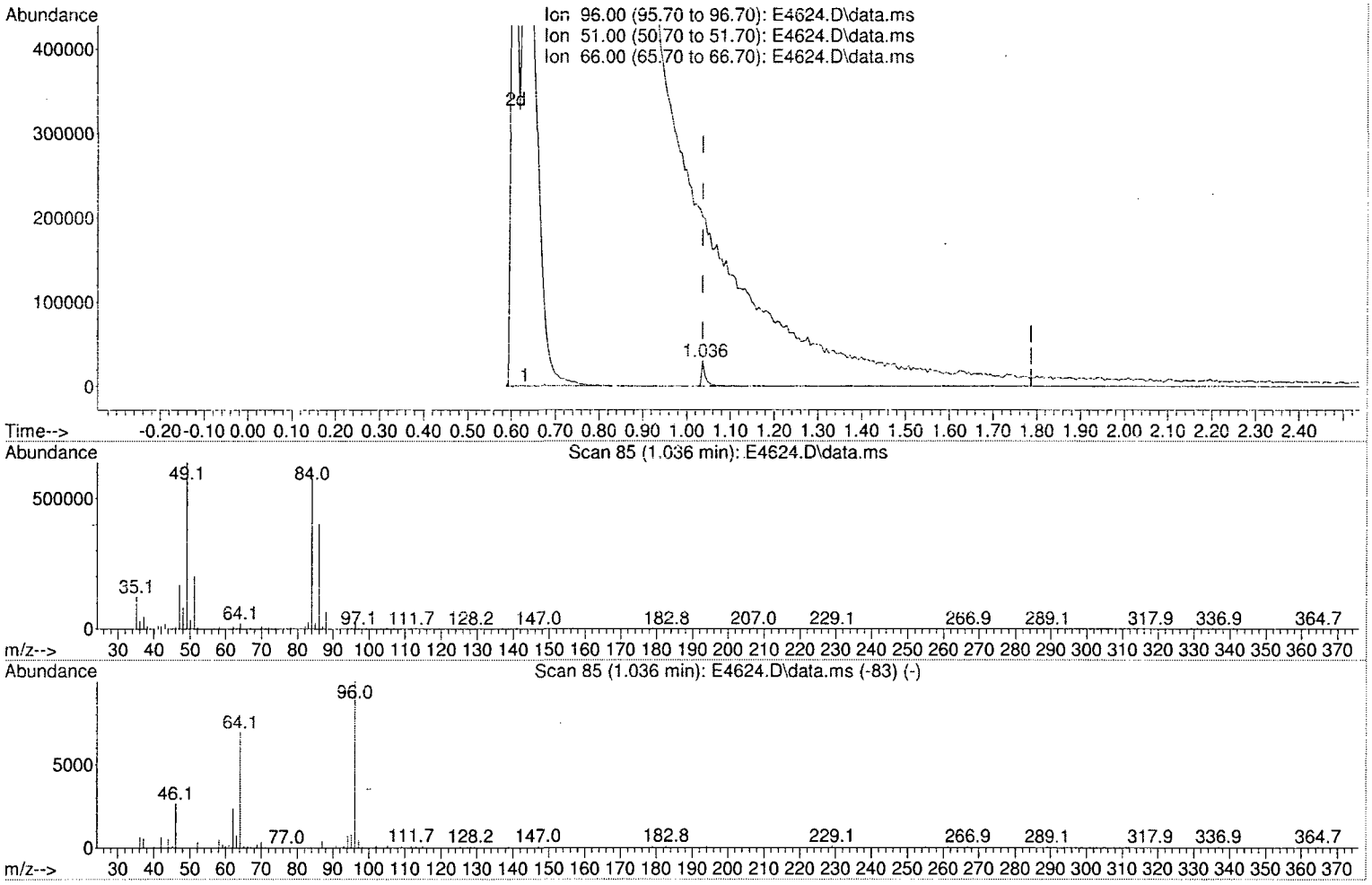
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.09# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min ( 0.000) 17.22 ug/mL m** RS 8/24

**response 18615**

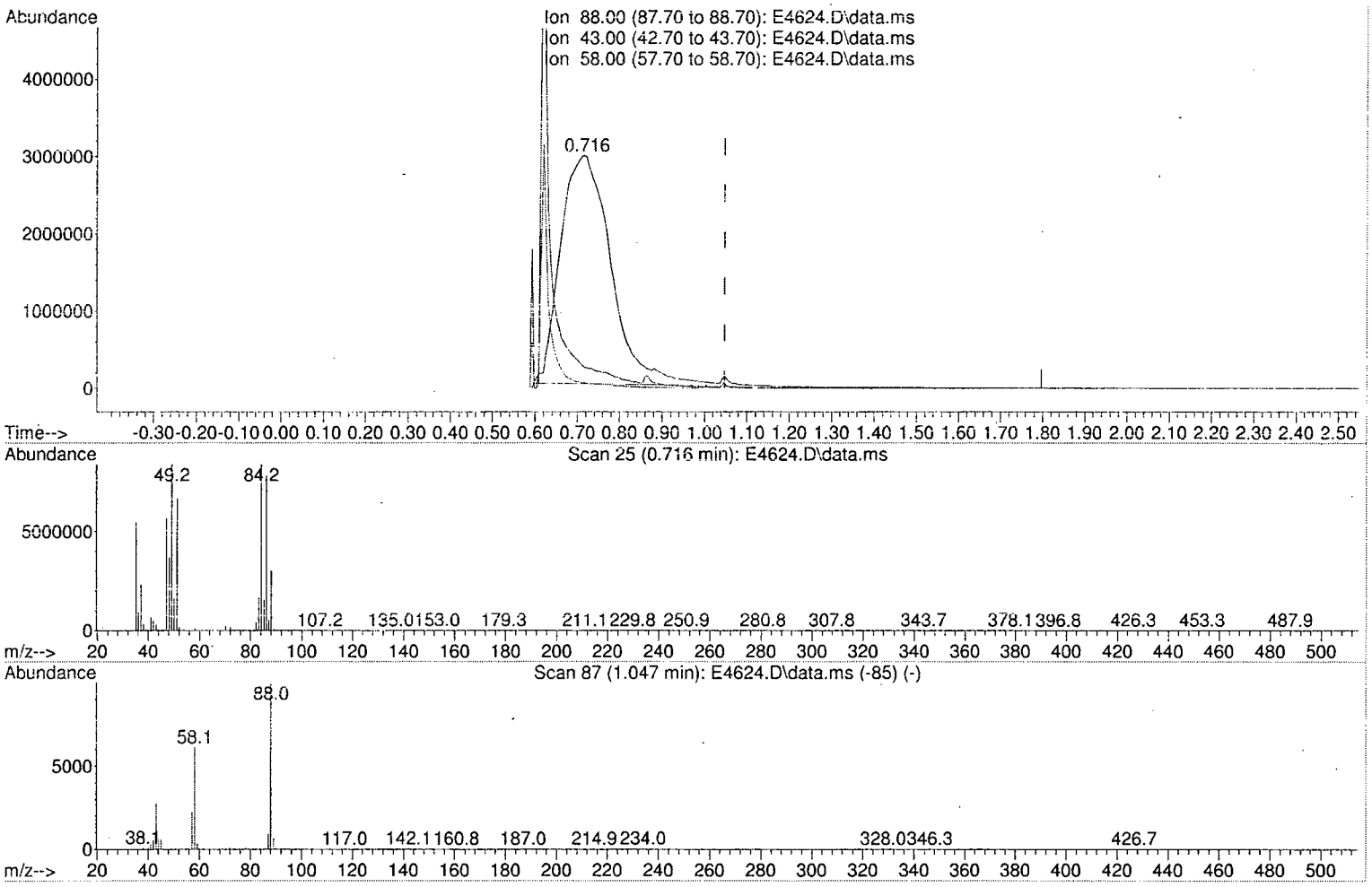
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 6.27# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.716min (-0.331) 3972.07 ug/mL**

**response 24484028**

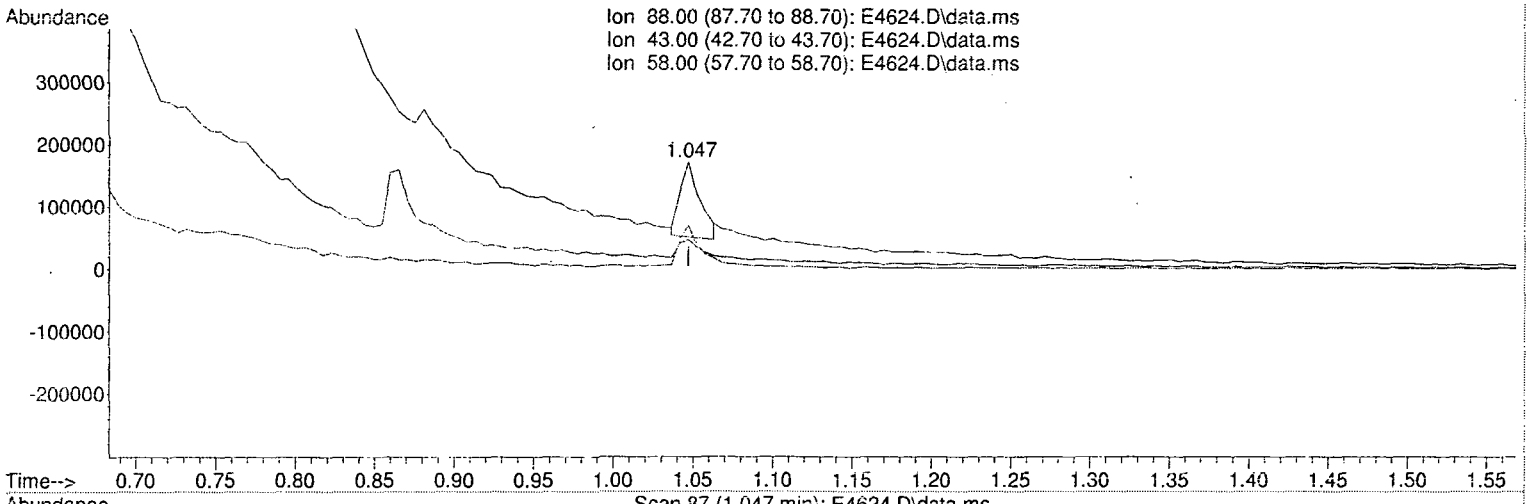
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

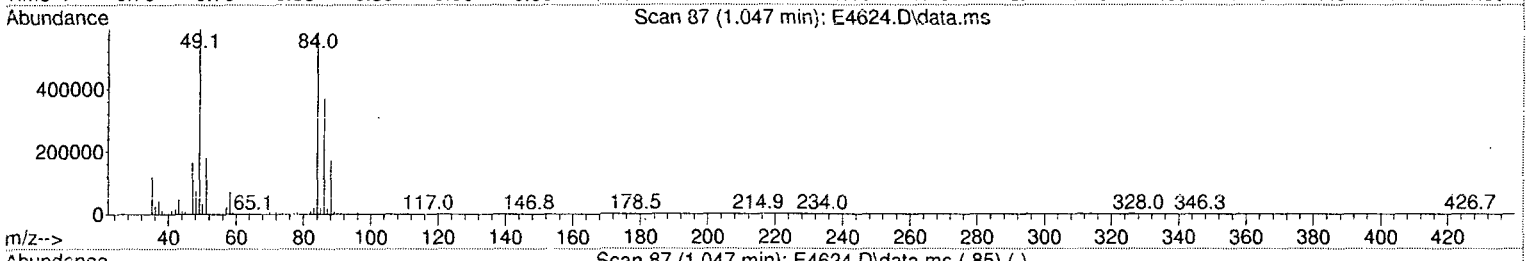
Quantitation Report (Qedit)

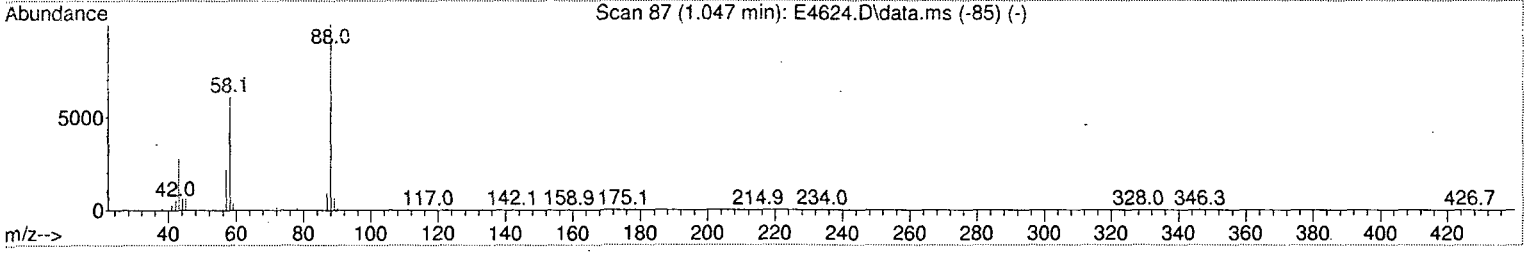
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min ( 0.000) 17.26 ug/mL m** RS 5/24

**response 106365**

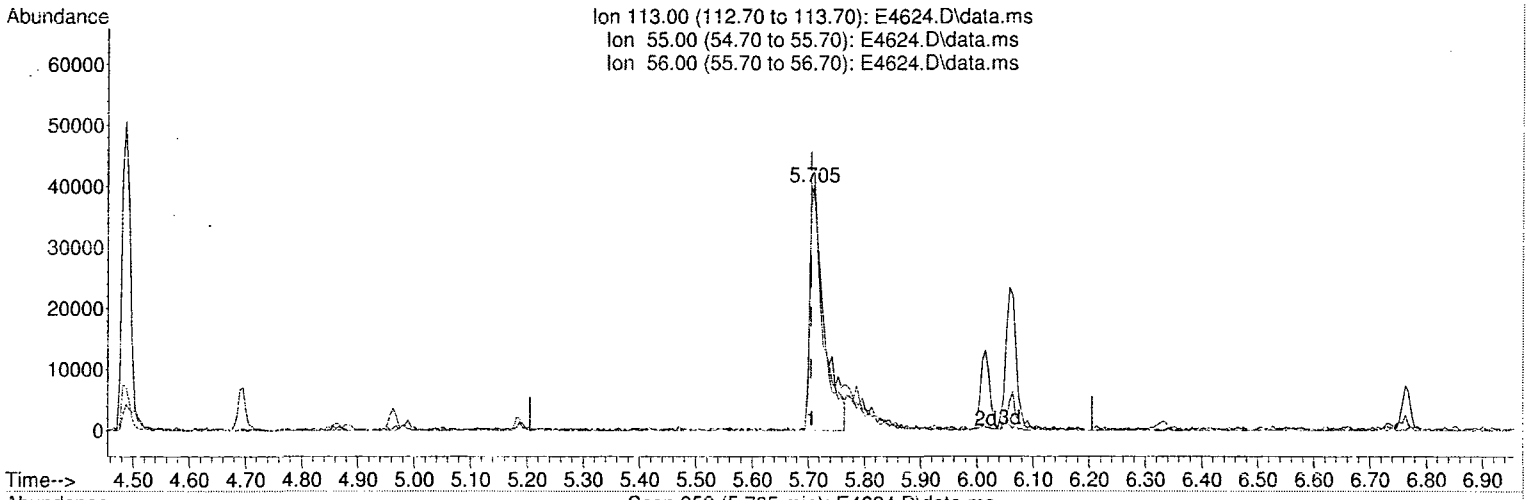
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

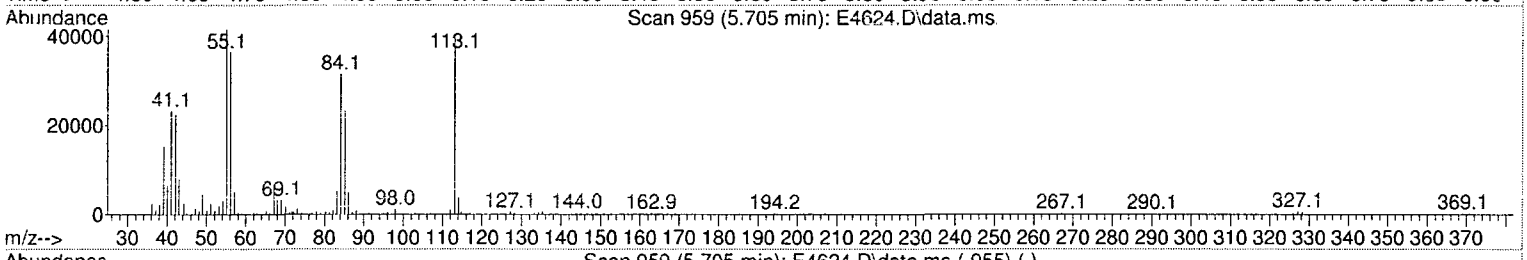
Quantitation Report (Qedit)

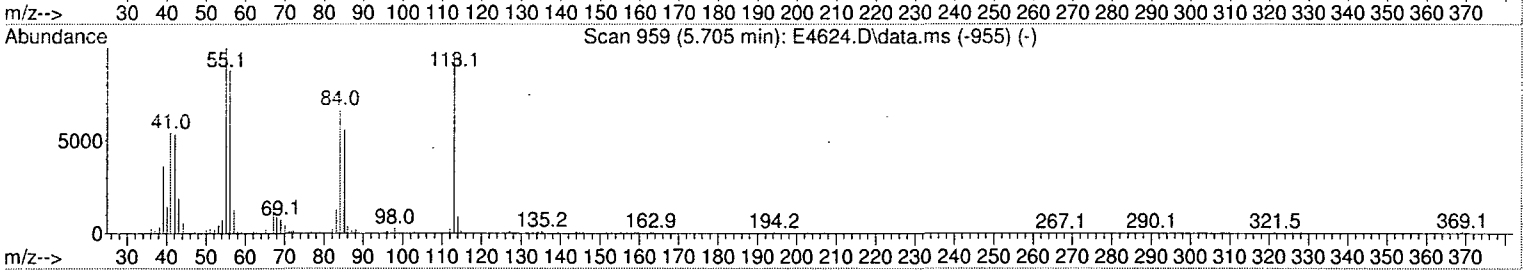
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(32) Caprolactam (PC)**

**5.705min ( 0.000) 16.62 ug/mL**

**response 70105**

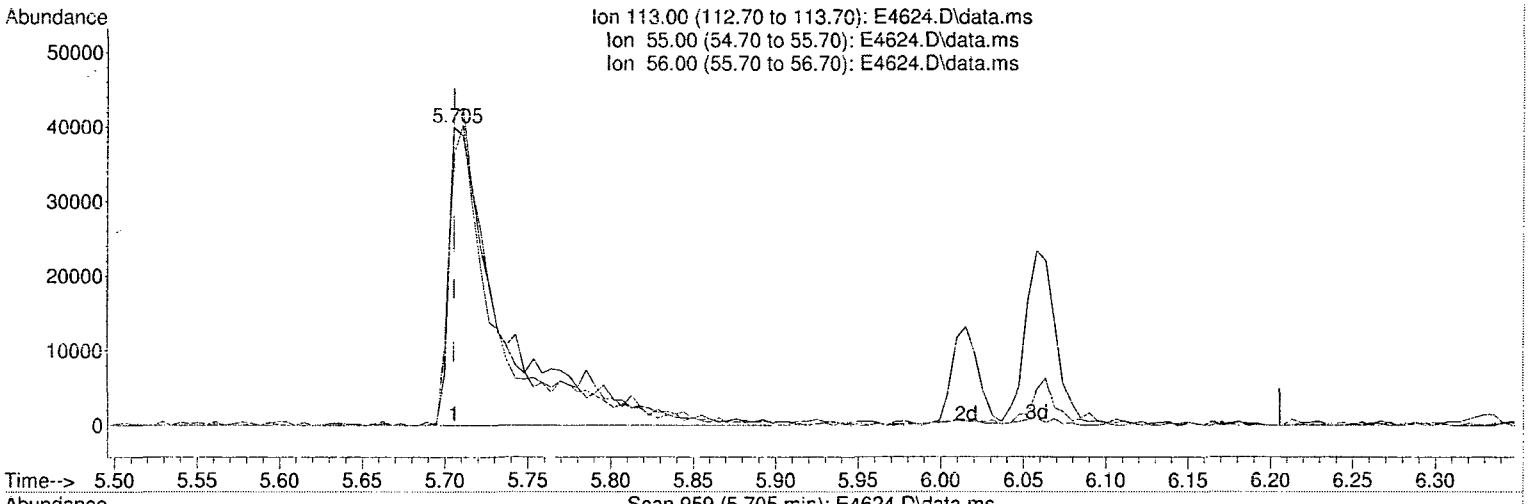
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 95.67 |
| 56.00 | 92.50 | 92.33 |
| 0.00 | 0.00 | 0.00 |

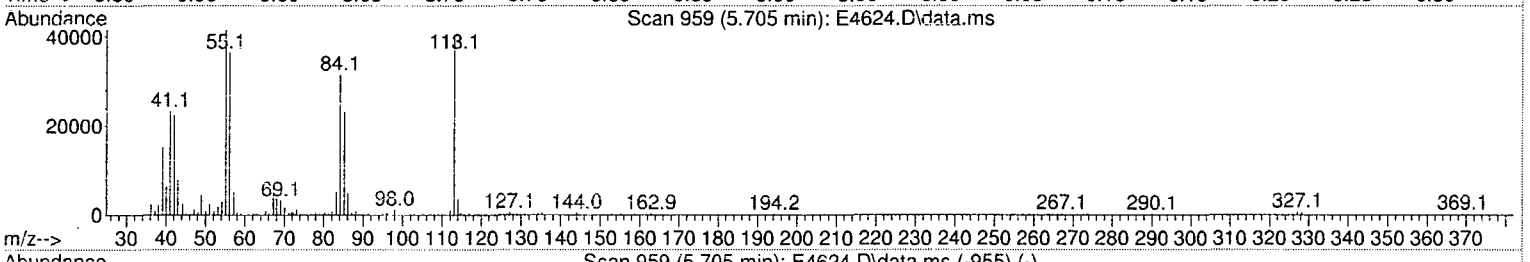
Quantitation Report (Qedit)

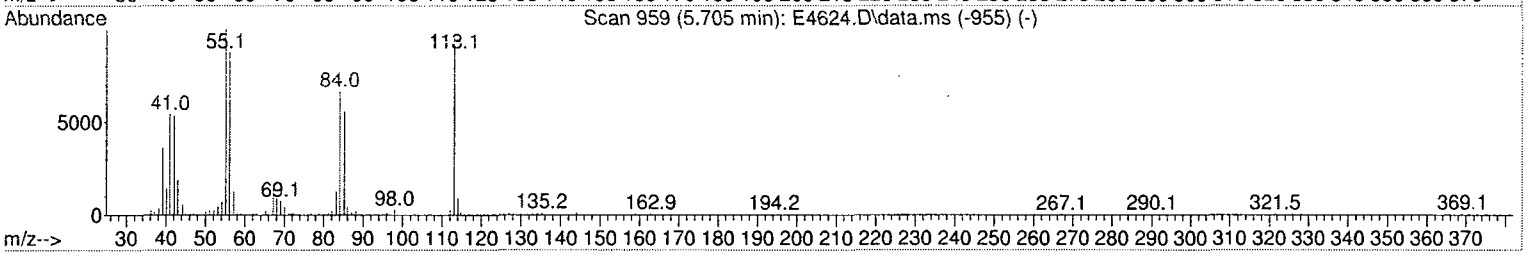
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(32) Caprolactam (PC)**

**5.705min ( 0.000) 20.85 ug/mL m** RS 8/24

**response 87960**

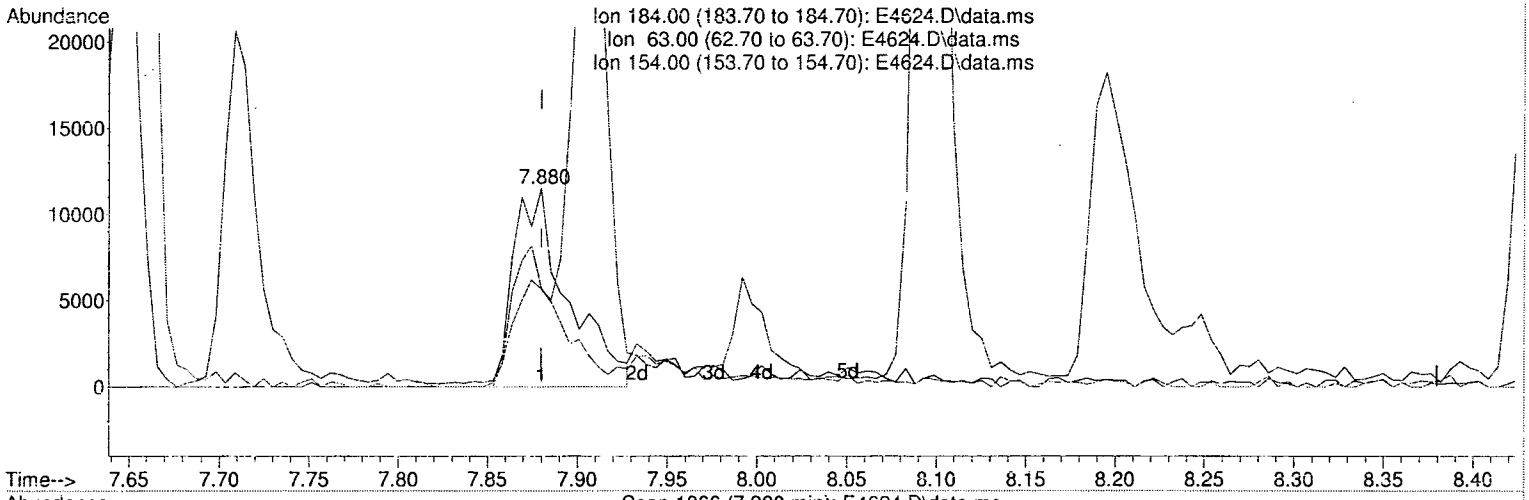
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 76.25# |
| 56.00 | 92.50 | 73.58 |
| 0.00 | 0.00 | 0.00 |

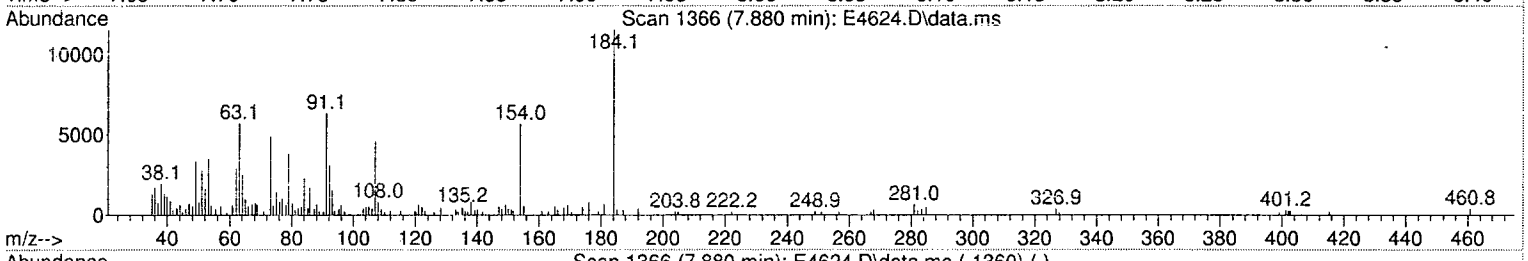
Quantitation Report (Qedit)

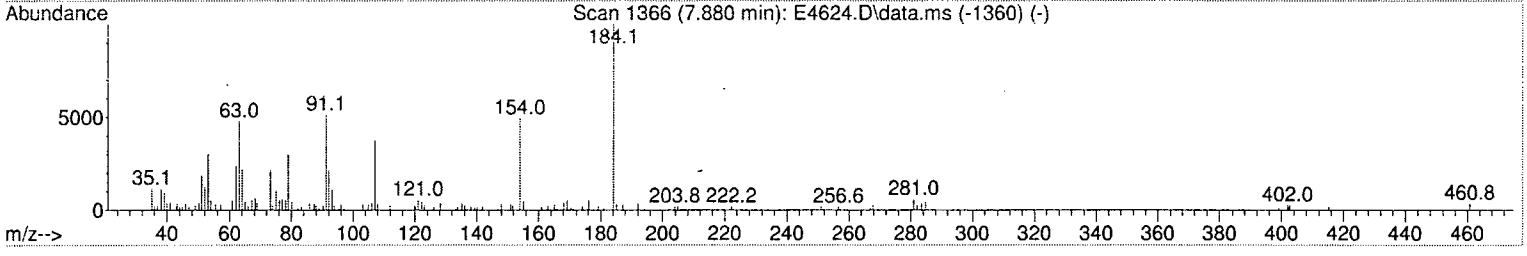
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.880min ( 0.000) 11.20 ug/mL**

**response 23838**

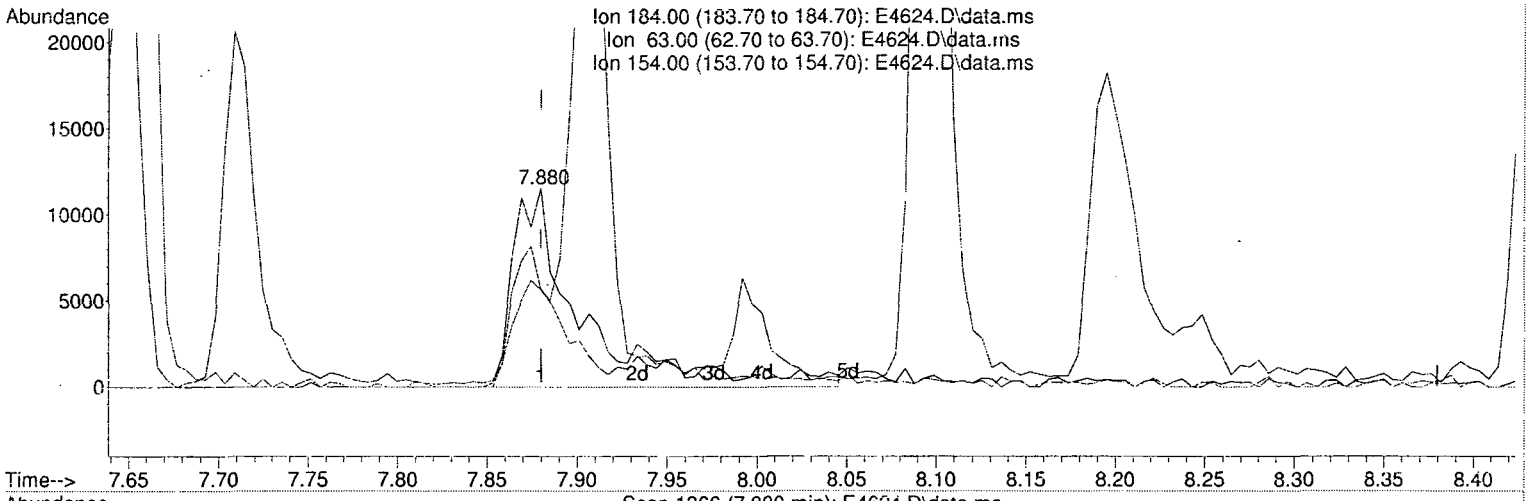
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 43.42# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

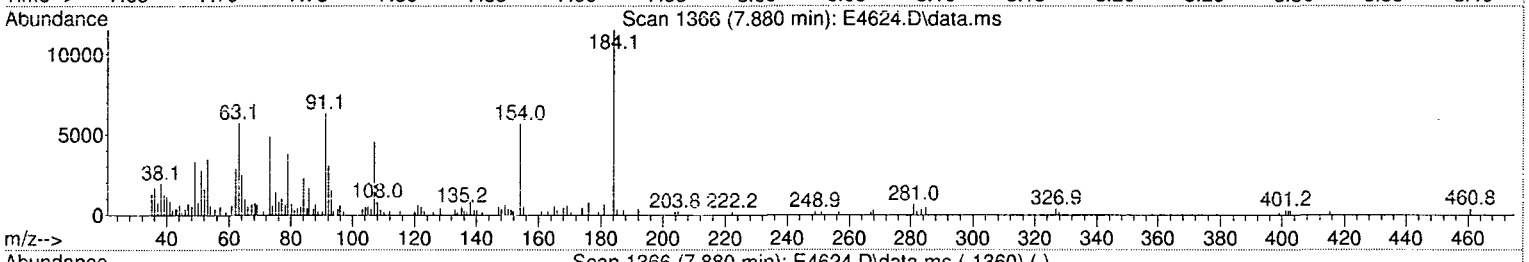
Quantitation Report (Qedit)

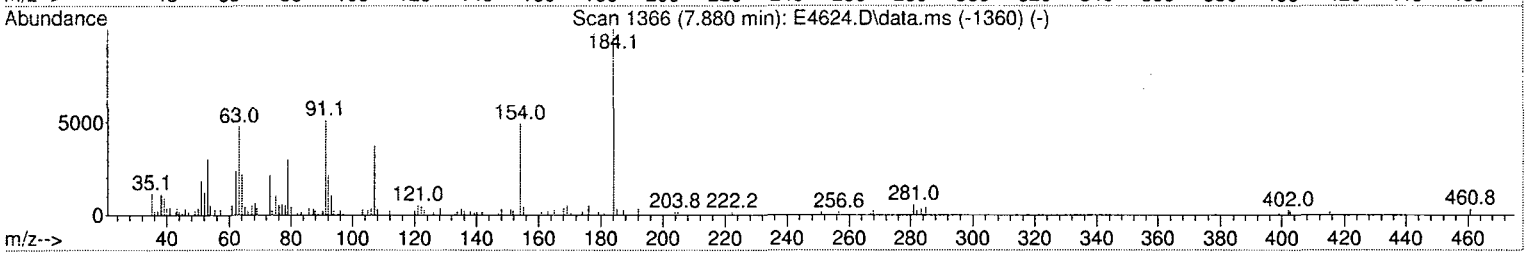
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:25:08 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration




TIC: E4624.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.880min ( 0.000) 14.49 ug/mL m** RS 8/24

**response 30843**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 33.56# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1650

Lab File ID: E4634.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209Q Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 3.174 | 2.993 | 0.010 | -5.7 | 40.0 |
| Phenol | 4.492 | 4.364 | 0.800 | -2.9 | 25.0 |
| Bis(2-chloroethyl)ether | 3.587 | 3.521 | 0.700 | -1.8 | 25.0 |
| 2-Chlorophenol | 3.507 | 3.614 | 0.800 | 3.0 | 25.0 |
| 2-Methylphenol | 3.316 | 3.371 | 0.700 | 1.6 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 3.382 | 2.993 | 0.010 | -11.5 | 40.0 |
| Acetophenone | 5.110 | 5.062 | 0.010 | -0.9 | 40.0 |
| 4-Methylphenol | 3.482 | 3.594 | 0.600 | 3.2 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.967 | 2.699 | 0.500 | -9.0 | 25.0 |
| Hexachloroethane | 1.616 | 1.586 | 0.300 | -1.8 | 25.0 |
| Nitrobenzene | 1.017 | 0.903 | 0.200 | -11.2 | 25.0 |
| Isophorone | 1.750 | 1.620 | 0.400 | -7.4 | 25.0 |
| 2-Nitrophenol | 0.437 | 0.449 | 0.100 | 2.6 | 25.0 |
| 2,4-Dimethylphenol | 0.962 | 0.930 | 0.200 | -3.3 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.960 | 0.898 | 0.300 | -6.5 | 25.0 |
| 2,4-Dichlorophenol | 0.685 | 0.702 | 0.200 | 2.6 | 25.0 |
| Naphthalene | 2.472 | 2.456 | 0.700 | -0.7 | 25.0 |
| 4-Chloroaniline | 0.613 | 0.795 | 0.010 | 29.8 | 40.0 |
| Hexachlorobutadiene | 0.419 | 0.433 | 0.010 | 3.4 | 40.0 |
| Caprolactam | 0.278 | 0.271 | 0.010 | -2.6 | 40.0 |
| 4-Chloro-3-methylphenol | 0.836 | 0.821 | 0.200 | -1.8 | 25.0 |
| 2-Methylnaphthalene | 1.663 | 1.675 | 0.400 | 0.7 | 25.0 |
| Hexachlorocyclopentadiene | 0.707 | 0.693 | 0.010 | -2.0 | 40.0 |
| 2,4,6-Trichlorophenol | 0.794 | 0.826 | 0.200 | 4.0 | 25.0 |
| 2,4,5-Trichlorophenol | 0.798 | 0.853 | 0.200 | 6.9 | 25.0 |
| 1,1'-Biphenyl | 3.309 | 3.183 | 0.010 | -3.8 | 40.0 |
| 2-Chloronaphthalene | 2.651 | 2.551 | 0.800 | -3.8 | 25.0 |
| 2-Nitroaniline | 0.885 | 0.754 | 0.010 | -14.8 | 40.0 |
| Dimethylphthalate | 3.209 | 3.105 | 0.010 | -3.3 | 40.0 |
| 2,6-Dinitrotoluene | 0.643 | 0.653 | 0.200 | 1.5 | 25.0 |
| Acenaphthylene | 4.201 | 4.064 | 0.900 | -3.3 | 25.0 |
| 3-Nitroaniline | 0.615 | 0.680 | 0.010 | 10.6 | 40.0 |
| Acenaphthene | 2.677 | 2.579 | 0.900 | -3.7 | 25.0 |
| 2,4-Dinitrophenol | 0.221 | 0.175 | 0.010 | -20.5 | 40.0 |
| 4-Nitrophenol | 0.507 | 0.435 | 0.010 | -14.2 | 40.0 |
| Dibenzofuran | 3.713 | 3.580 | 0.800 | -3.6 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1650

Lab File ID: E4634.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209Q Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.886 | 0.906 | 0.200 | 2.2 | 25.0 |
| Diethylphthalate | 3.314 | 3.155 | 0.010 | -4.8 | 40.0 |
| Fluorene | 3.212 | 3.056 | 0.900 | -4.8 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.387 | 1.367 | 0.400 | -1.4 | 25.0 |
| 4-Nitroaniline | 0.756 | 0.713 | 0.010 | -5.7 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.281 | 0.258 | 0.010 | -8.0 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.479 | 1.379 | 0.010 | -6.8 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.126 | 1.105 | 0.010 | -1.9 | 40.0 |
| 4-Bromophenyl-phenylether | 0.420 | 0.415 | 0.100 | -1.1 | 25.0 |
| Hexachlorobenzene | 0.413 | 0.412 | 0.100 | -0.2 | 25.0 |
| Atrazine | 0.489 | 0.476 | 0.010 | -2.8 | 40.0 |
| Pentachlorophenol | 0.203 | 0.198 | 0.050 | -2.7 | 25.0 |
| Phenanthrene | 2.500 | 2.401 | 0.700 | -4.0 | 25.0 |
| Anthracene | 2.580 | 2.492 | 0.700 | -3.4 | 25.0 |
| Carbazole | 2.493 | 2.390 | 0.010 | -4.1 | 40.0 |
| Di-n-butylphthalate | 3.151 | 2.958 | 0.010 | -6.1 | 40.0 |
| Fluoranthene | 2.754 | 2.651 | 0.600 | -3.8 | 25.0 |
| Pyrene | 2.912 | 2.739 | 0.600 | -5.9 | 25.0 |
| Butylbenzylphthalate | 1.412 | 1.276 | 0.010 | -9.6 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.679 | 0.733 | 0.010 | 7.8 | 40.0 |
| Benzo (a) anthracene | 2.464 | 2.333 | 0.800 | -5.3 | 25.0 |
| Chrysene | 2.364 | 2.229 | 0.700 | -5.7 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.900 | 1.753 | 0.010 | -7.7 | 40.0 |
| Di-n-octylphthalate | 3.758 | 3.399 | 0.010 | -9.5 | 40.0 |
| Benzo (b) fluoranthene | 2.731 | 2.401 | 0.700 | -12.1 | 25.0 |
| Benzo (k) fluoranthene | 2.705 | 2.699 | 0.700 | -0.2 | 25.0 |
| Benzo (a) pyrene | 2.673 | 2.508 | 0.700 | -6.2 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.060 | 2.048 | 0.500 | -0.6 | 25.0 |
| Dibenzo (a,h) anthracene | 2.137 | 2.095 | 0.400 | -2.0 | 25.0 |
| Benzo (g,h,i) perylene | 2.237 | 2.170 | 0.500 | -3.0 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.594 | 0.636 | 0.100 | 7.1 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/24/2012 Time: 1650

Lab File ID: E4634.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209Q Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.525 | 4.920 | 0.010 | 8.7 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.510 | 2.276 | 0.010 | -9.3 | 25.0 |
| 2-Chlorophenol-d4 | 4.006 | 4.128 | 0.010 | 3.1 | 25.0 |
| 4-Methylphenol-d8 | 3.363 | 3.456 | 0.010 | 2.8 | 25.0 |
| Nitrobenzene-d5 | 0.425 | 0.425 | 0.010 | 0.1 | 25.0 |
| 2-Nitrophenol-d4 | 0.473 | 0.500 | 0.010 | 5.8 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.789 | 0.843 | 0.010 | 6.8 | 25.0 |
| 4-Chloroaniline-d4 | 0.677 | 0.865 | 0.010 | 27.9 | 40.0 |
| Dimethylphthalate-d6 | 3.363 | 3.256 | 0.010 | -3.2 | 40.0 |
| Acenaphthylene-d8 | 4.340 | 4.178 | 0.010 | -3.7 | 25.0 |
| 4-Nitrophenol-d4 | 0.609 | 0.547 | 0.010 | -10.1 | 40.0 |
| Fluorene-d10 | 2.712 | 2.673 | 0.010 | -1.5 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.315 | 0.301 | 0.010 | -4.3 | 40.0 |
| Anthracene-d10 | 2.468 | 2.419 | 0.010 | -2.0 | 25.0 |
| Pyrene-d10 | 2.617 | 2.518 | 0.010 | -3.8 | 25.0 |
| Benzo (a) pyrene-d12 | 2.284 | 2.251 | 0.010 | -1.5 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/30/12

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

CASE: 42543 SDG: X0T49

S. Vakati

05/30/12

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 66863 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 299524 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 190727 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 347257 | 20.0000 | ug/mL | -0.01 |
| 80) Chrysene-d12 | 13.986 | 240 | 362505 | 20.0000 | ug/mL | -0.01 |
| 88) Perylene-d12 | 16.054 | 264 | 320814 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 19457m | 20.84 | ug/mL | 0.00 RS |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 104.20% | | | |
| 7) Phenol-d5 | 3.087 | 99 | 328940 | 21.75 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 54.37% | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 152213 | 18.14 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 45.35% | | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 276036 | 20.61 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 51.52% | | | |
| 20) 4-Methylphenol-d8 | 3.964 | 113 | 231052 | 20.55 | ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 51.38% | | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 127428 | 20.02 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 50.05% | | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 149863 | 21.15 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 52.87% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.856 | 165 | 252480 | 21.36 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 53.40% | | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 259174 | 25.57 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 63.92% | | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 796809 | 19.25 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.13% | | | |
| 63) 4-Nitrophenol-d4 | 8.168 | 143 | 104334 | 17.97 | ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 44.92% | | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 621054 | 19.37 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.43% | | | |
| 65) Fluorene-d10 | 8.387 | 176 | 509737 | 19.71 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 49.28% | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 104571 | 19.13 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 47.82% | | | |
| 79) Anthracene-d10 | 9.928 | 188 | 840068 | 19.61 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 49.02% | | | |
| 87) Pyrene-d10 | 12.031 | 212 | 912608 | 19.24 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.10%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 722049 | 19.70 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.25% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 501477 | 18.5032 | ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.047 | 88 | 77147m | 14.4899 | ug/mL | RS |
| 5) Benzaldehyde | 2.842 | 77 | 200151 | 18.8610 | ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 235440 | 19.6316 | ug/mL | 90 |
| 8) Phenol | 3.098 | 94 | 291776 | 19.4282 | ug/mL# | 60 |
| 9) 2-Chlorophenol | 3.125 | 128 | 241629 | 20.6082 | ug/mL | 100 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.739 | 45 | 200151 | 17.7046 | ug/mL# | 31 |
| 11) Aniline | 3.013 | 93 | 274655 | 23.0321 | ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.579 | 83 | 272738 | 18.1937 | ug/mL# | 100 |
| 13) Acetophenone | 3.862 | 105 | 338448 | 19.8125 | ug/mL | 95 |
| 14) 2-Methylphenol | 3.793 | 108 | 225388 | 20.3293 | ug/mL | 94 |
| 15) Hexachloroethane | 3.900 | 117 | 106072 | 19.6365 | ug/mL | 96 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 180447 | 18.1947 ug/mL | 94 |
| 17) 4-Methylphenol | 4.001 | 108 | 240302 | 20.6426 ug/mL | 96 |
| 23) Nitrobenzene | 4.070 | 77 | 270555 | 17.7632 ug/mL | 94 |
| 24) Isophorone | 4.391 | 82 | 485329 | 18.5172 ug/mL | 96 |
| 25) 2-Nitrophenol | 4.503 | 139 | 134432 | 20.5229 ug/mL | 93 |
| 26) 2,4-Dimethylphenol | 4.685 | 107 | 278569 | 19.3415 ug/mL | 97 |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 269021 | 18.7047 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 210391 | 20.5152 ug/mL | 97 |
| 29) Naphthalene | 4.984 | 128 | 735599 | 19.8696 ug/mL | 100 |
| 30) 4-Chloroaniline | 5.192 | 127 | 238180 | 25.9543 ug/mL | 97 |
| 31) Hexachlorobutadiene | 5.288 | 225 | 129663 | 20.6763 ug/mL | 99 |
| 32) Caprolactam | 5.662 | 113 | 81046 | 19.4867 ug/mL | 96 |
| 33) 4-Chloro-3-methylphenol | 6.052 | 107 | 245812 | 19.6412 ug/mL | 92 |
| 34) 2-Methylnaphthalene | 6.010 | 142 | 501723 | 20.1498 ug/mL | 100 |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 132203 | 19.6025 ug/mL | 100 |
| 40) 2,4,6-Trichlorophenol | 6.560 | 196 | 157578 | 20.8025 ug/mL | 97 |
| 41) 2,4,5-Trichlorophenol | 6.640 | 196 | 162704 | 21.3841 ug/mL | 95 |
| 42) 1,1'-Biphenyl | 6.758 | 154 | 607173 | 19.2415 ug/mL | 96 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 486557 | 19.2468 ug/mL | 98 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 224198 | 20.3352 ug/mL | 96 |
| 45) 2-Nitroaniline | 7.041 | 65 | 143788 | 17.0459 ug/mL | 91 |
| 46) Acenaphthylene | 7.356 | 152 | 775115 | 19.3484 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 592120 | 19.3482 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 124567 | 20.3093 ug/mL | 100 |
| 49) Acenaphthene | 7.644 | 153 | 491927 | 19.2665 ug/mL | 100 |
| 50) 3-Nitroaniline | 7.703 | 138 | 129634 | 22.1182 ug/mL | 87 |
| 51) 2,4-Dinitrophenol | 7.874 | 184 | 33467m | 15.8918 ug/mL | RS |
| 52) Dibenzofuran | 7.901 | 168 | 682844 | 19.2832 ug/mL | 96 |
| 53) Pentachlorobenzene | 9.242 | 250 | 140342 | 20.5577 ug/mL | 98 |
| 54) 2,4-Dinitrotoluene | 8.088 | 165 | 172863 | 20.4490 ug/mL | 90 |
| 55) 4-Nitrophenol | 8.179 | 109 | 82970 | 17.1557 ug/mL# | 87 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 121284 | 21.4211 ug/mL | 94 |
| 57) Fluorene | 8.430 | 166 | 582950 | 19.0325 ug/mL | 98 |
| 58) 4-Chlorophenyl-phenyle... | 8.505 | 204 | 260818 | 19.7145 ug/mL | 91 |
| 59) Diethylphthalate | 8.533 | 149 | 601742 | 19.0375 ug/mL | 99 |
| 60) 4-Nitroaniline | 8.665 | 138 | 135970 | 18.8650 ug/mL# | 85 |
| 61) 1,2,4,5 Tetrachloroben... | 6.325 | 216 | 210796 | 19.6287 ug/mL | 97 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 89648 | 18.3938 ug/mL | 99 |
| 68) N-Nitrosodiphenylamine... | 8.733 | 169 | 478900 | 18.6445 ug/mL | 99 |
| 69) 4-Bromophenyl-phenylether | 9.242 | 248 | 144090 | 19.7814 ug/mL | 90 |
| 70) Hexachlorobenzene | 9.390 | 284 | 142924 | 19.9506 ug/mL | 81 |
| 71) Atrazine | 9.716 | 200 | 165190 | 19.4443 ug/mL | 95 |
| 72) Pentachlorophenol | 9.750 | 266 | 68617 | 19.4699 ug/mL | 99 |
| 73) Phenanthrene | 9.882 | 178 | 833595 | 19.2057 ug/mL | 98 |
| 74) Anthracene | 9.950 | 178 | 865300 | 19.3164 ug/mL | 99 |
| 75) Carbazole | 10.305 | 167 | 829850 | 19.1752 ug/mL | 99 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 1027197 | 18.7750 ug/mL | 99 |
| 77) Fluoranthene | 11.734 | 202 | 920521 | 19.2483 ug/mL | 98 |
| 81) Pyrene | 12.054 | 202 | 992759 | 18.8106 ug/mL | 99 |
| 82) Butylbenzylphthalate | 13.397 | 149 | 462451 | 18.0702 ug/mL | 90 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 265582 | 21.5662 ug/mL | 99 |
| 84) Benzo (a) anthracene | 13.963 | 228 | 845812 | 18.9353 ug/mL | 99 |
| 85) Chrysene | 14.025 | 228 | 807996 | 18.8573 ug/mL | 99 |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 635384 | 18.4550 ug/mL | 99 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 1090433 | 18.0915 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 770362 | 17.5858 ug/mL | 96 |
| 91) Benzo (k) fluoranthene | 15.592 | 252 | 865826 | 19.9579 ug/mL | 94 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.974 | 252 | 804695 | 18.7691 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 657011 | 19.8861 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 672018 | 19.6070 ug/mL | 93 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 696160 | 19.3965 ug/mL | 92 |

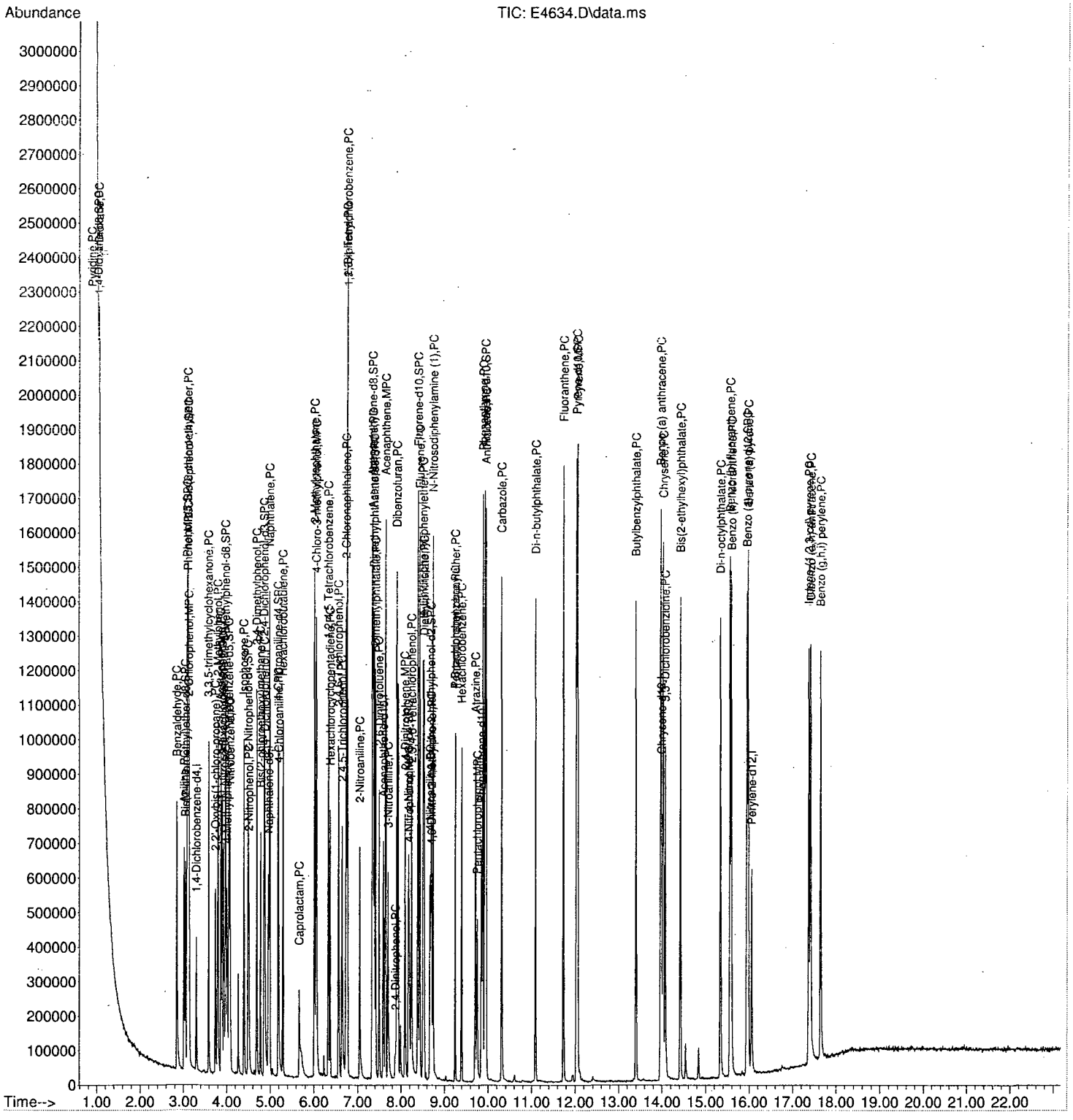
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration






00537

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 7.500 | 7.5 | 101 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.291 | -4.3# | 104 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.154 | 27.6# | 93 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 2.993 | 5.7 | 102 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.521 | 1.8 | 109 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.920 | -8.7 | 130 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.364 | 2.8 | 109 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.614 | -3.1 | 116 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 2.993 | 11.5 | 101 | 0.00 |
| 11 | PC | Aniline | 3.567 | 4.108 | -15.2 | 148 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 4.079 | 9.0 | 106 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 5.062 | 0.9 | 112 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.371 | -1.7 | 114 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.586 | 1.9 | 111 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.699 | 9.0 | 103 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.594 | -3.2 | 117 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.276 | 9.3 | 102 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 4.128 | -3.0 | 117 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.456 | -2.8 | 116 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 116 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.425 | 0.0 | 120 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 0.903 | 11.2 | 104 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.620 | 7.4 | 109 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.449 | -2.7 | 119 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.930 | 3.3 | 113 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.898 | 6.5 | 109 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.702 | -2.5 | 120 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.456 | 0.6 | 119 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.795 | -29.7 | 150 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.433 | -3.3 | 121 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.271 | 2.5 | 112 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.821 | 1.8 | 116 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.675 | -0.7 | 119 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.500 | -5.7 | 127 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.843 | -6.8 | 124 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.865 | -27.8 | 155# | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.693 | 2.0 | 119 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.826 | -4.0 | 127 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.853 | -6.9 | 128 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.183 | 3.8 | 119 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.551 | 3.8 | 120 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.175 | -1.6 | 125 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.754 | 14.8 | 106 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.064 | 3.3 | 119 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.105 | 3.2 | 119 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.653 | -1.6 | 123 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.579 | 3.7 | 120 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.680 | -10.6 | 142 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.175 | 20.8 | 104 | 0.00 |

# CASE:

42562

# SDG:

F5WB4

2 OF 2

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.580 | 3.6 | 118 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.736 | -2.8 | 128 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.906 | -2.3 | 125 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.435 | 14.2 | 110 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.636 | -7.1 | 130 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.056 | 4.9 | 118 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.367 | 1.4 | 122 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.155 | 4.8 | 115 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.713 | 5.7 | 115 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.105 | 1.9 | 121 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.178 | 3.7 | 118 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.547 | 10.2 | 115 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.256 | 3.2 | 119 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.673 | 1.4 | 123 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 120 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.258 | 8.2 | 118 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.379 | 6.8 | 117 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.415 | 1.2 | 124 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.412 | 0.2 | 127 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.476 | 2.7 | 117 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.198 | 2.5 | 132 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.401 | 4.0 | 118 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.492 | 3.4 | 119 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.390 | 4.1 | 115 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 2.958 | 6.1 | 113 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.651 | 3.7 | 120 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.301 | 4.4 | 125 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.419 | 2.0 | 120 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.739 | 5.9 | 120 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.276 | 9.6 | 111 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.733 | -8.0 | 131 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.333 | 5.3 | 118 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.229 | 5.7 | 120 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.753 | 7.7 | 113 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.518 | 3.8 | 122 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 126 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.399 | 9.6 | 112 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.401 | 12.1 | 112 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.699 | 0.2 | 130 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.508 | 6.2 | 119 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.048 | 0.6 | 126 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.095 | 2.0 | 127 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.170 | 3.0 | 122 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.251 | 1.4 | 125 | 0.00 |

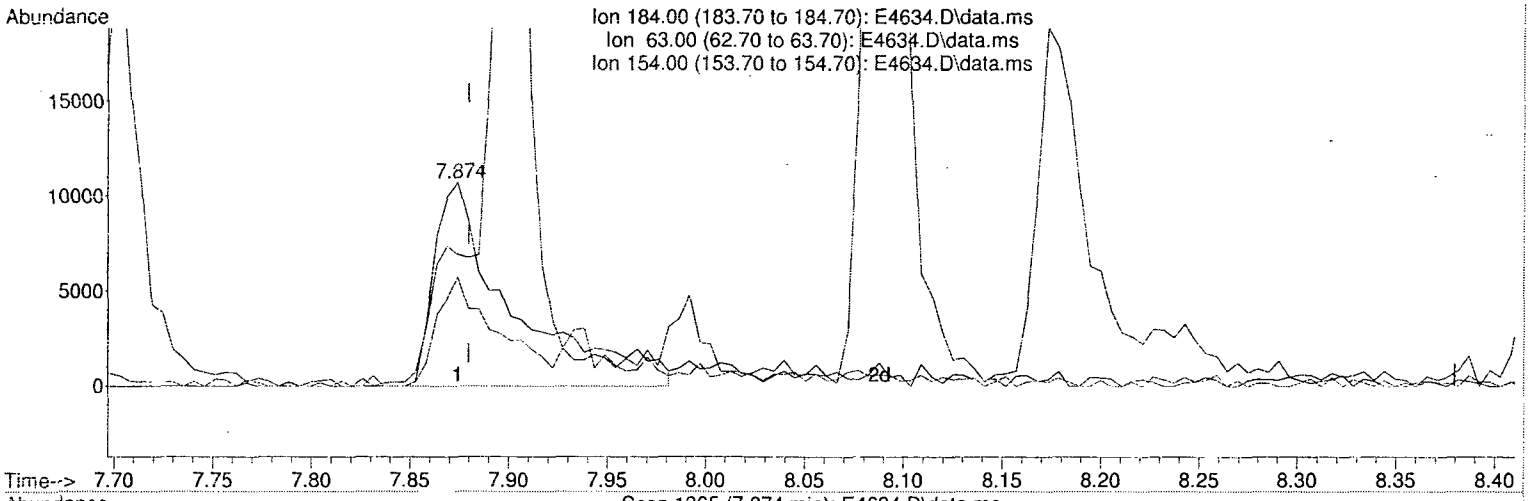
(#) = Out of Range SPCC's out = 0 CCC's out = 2

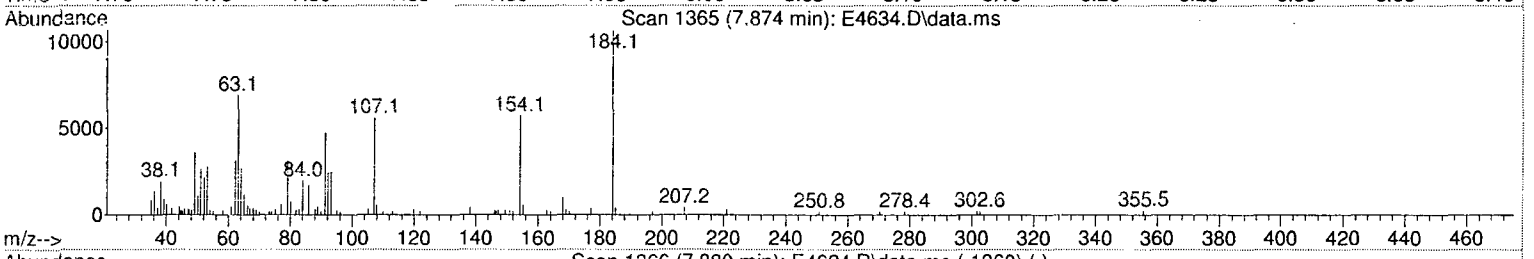
Quantitation Report (Qedit)

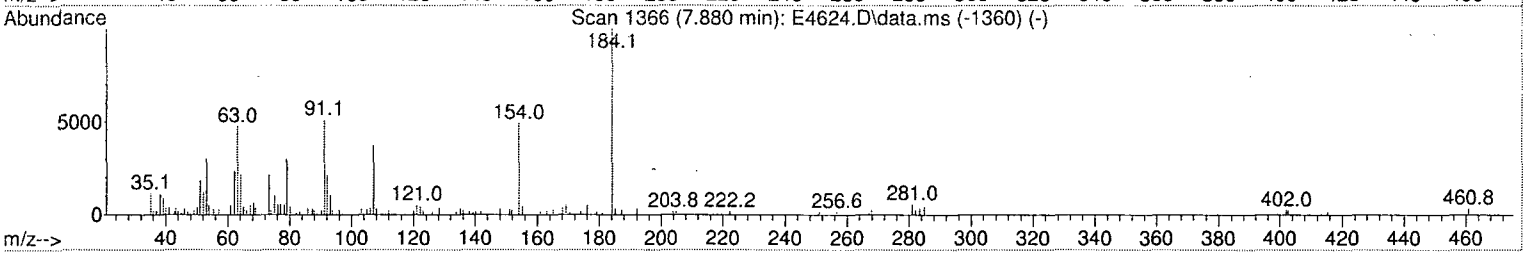
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.874min (-0.006) 14.04 ug/mL**

**response 29563**

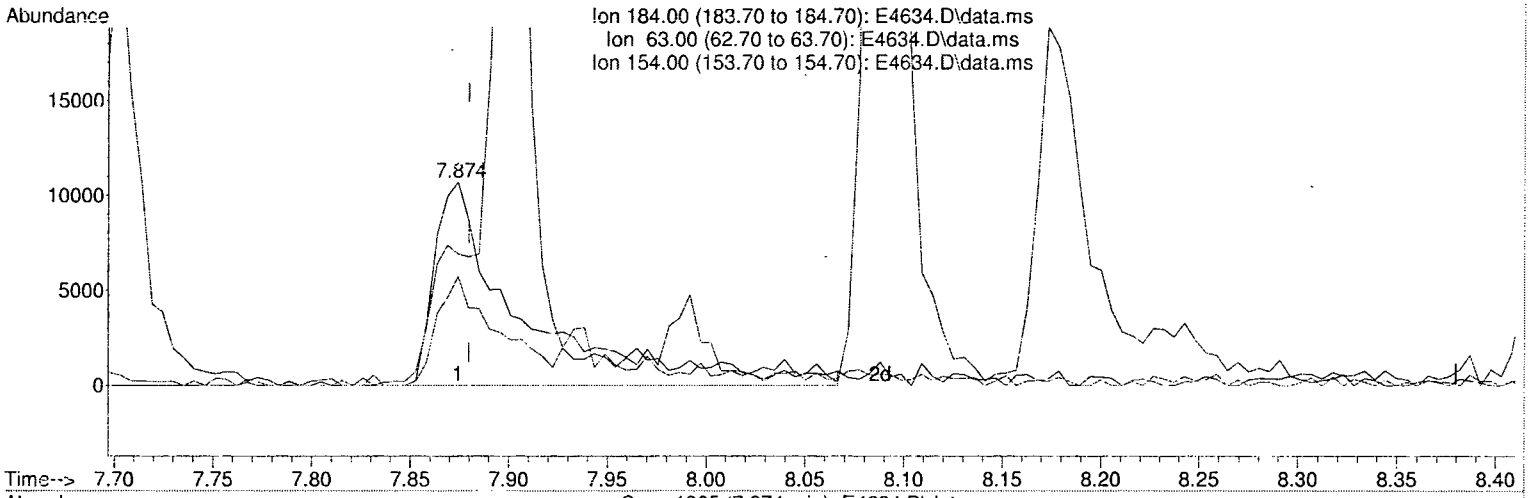
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 32.92# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

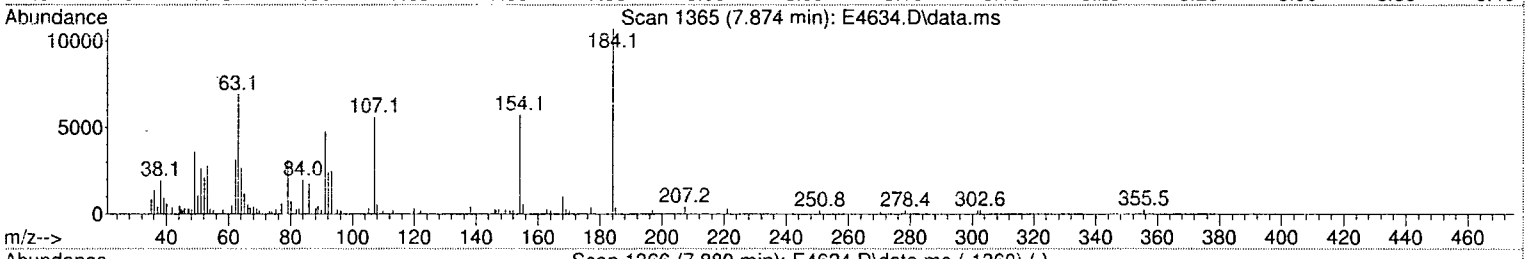
Quantitation Report (Qedit)

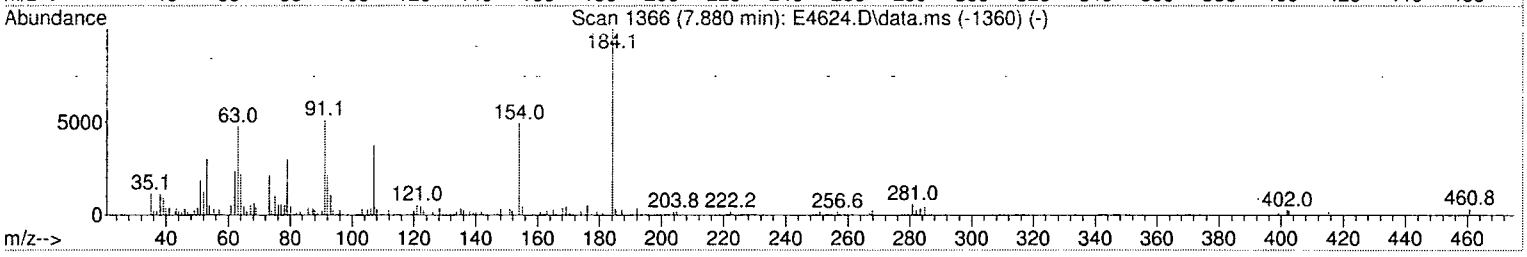
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.874min (-0.006) 15.89 ug/mL m** RS

**response 33467**

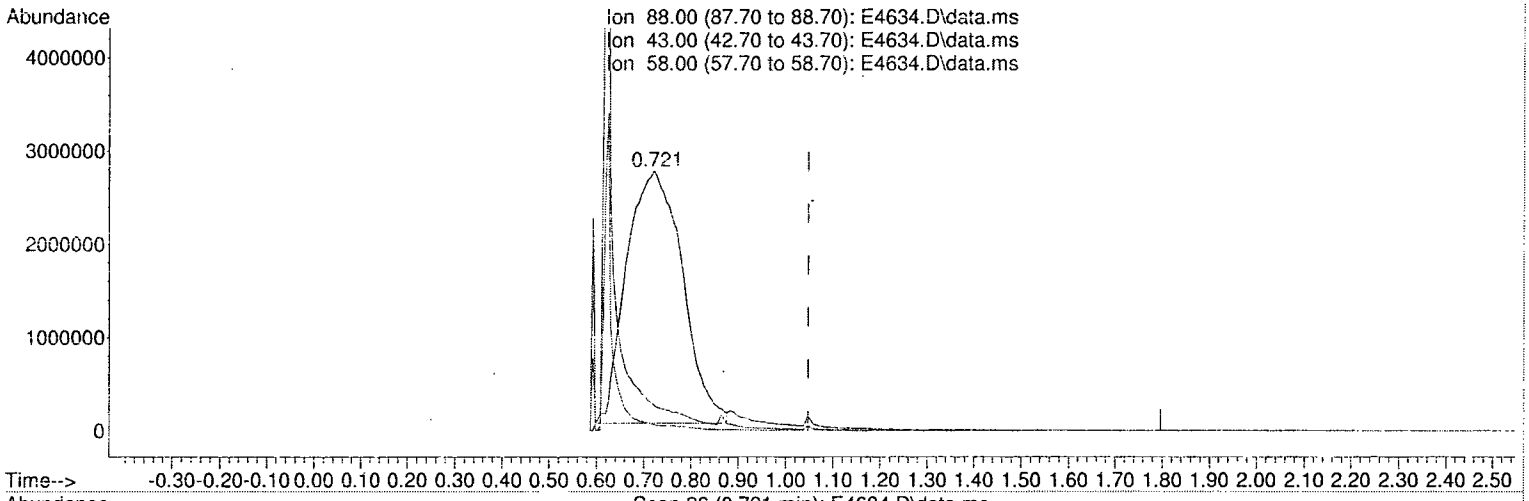
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 29.08# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

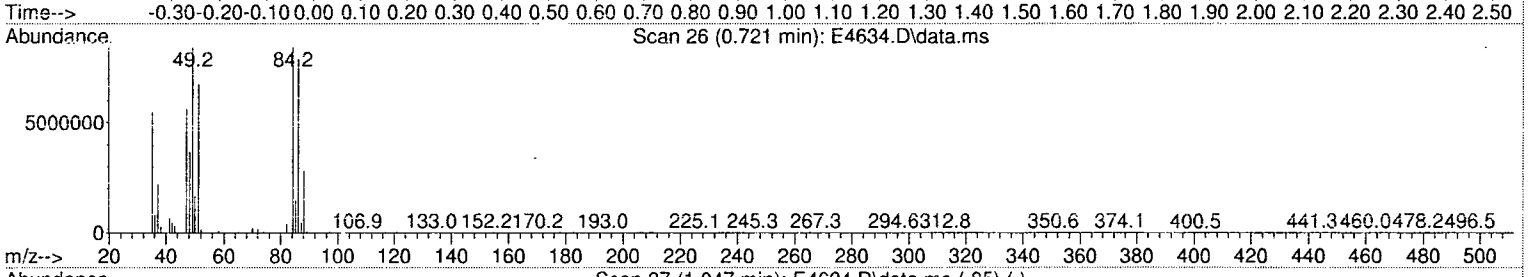
Quantitation Report (Qedit)

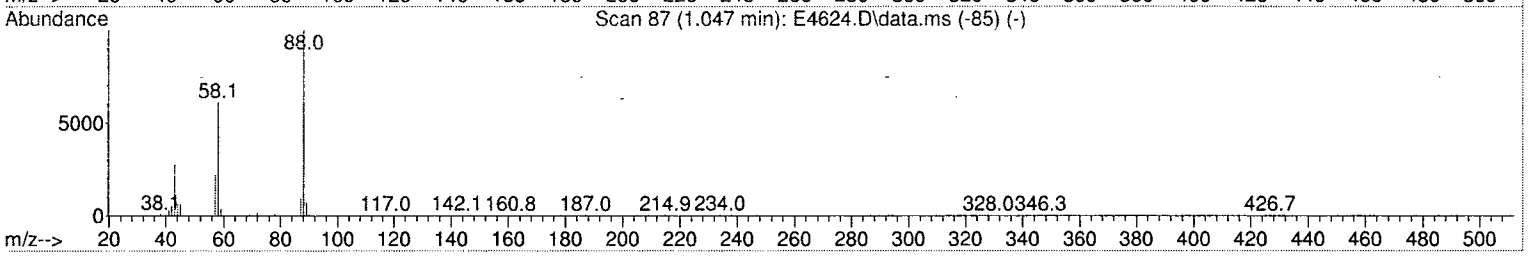
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.721min (-0.326) 4149.66 ug/mL**

**response 22093593**

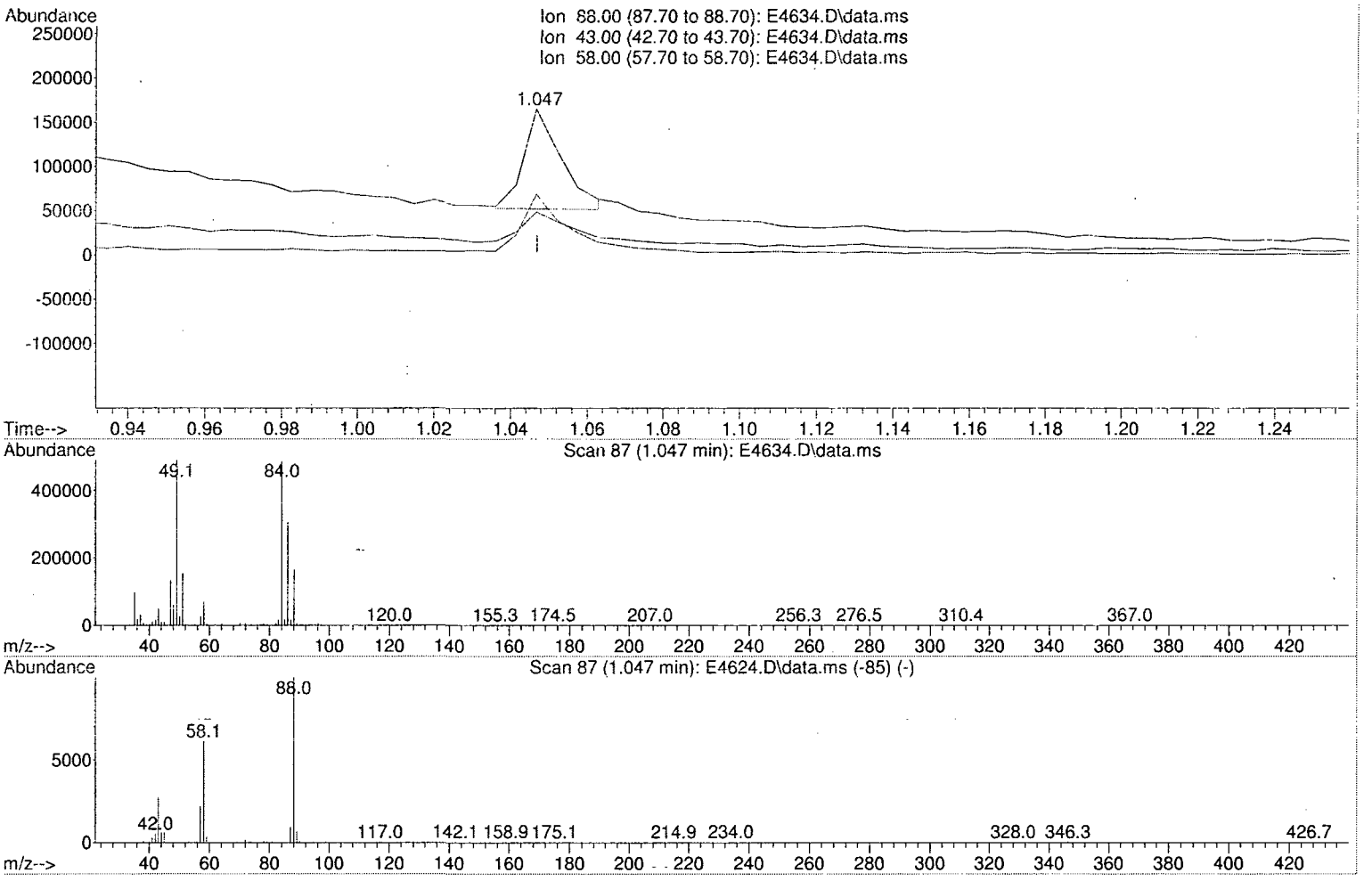
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min (-0.000) 14.49 ug/mL m** RS 8/24

**response 77147**

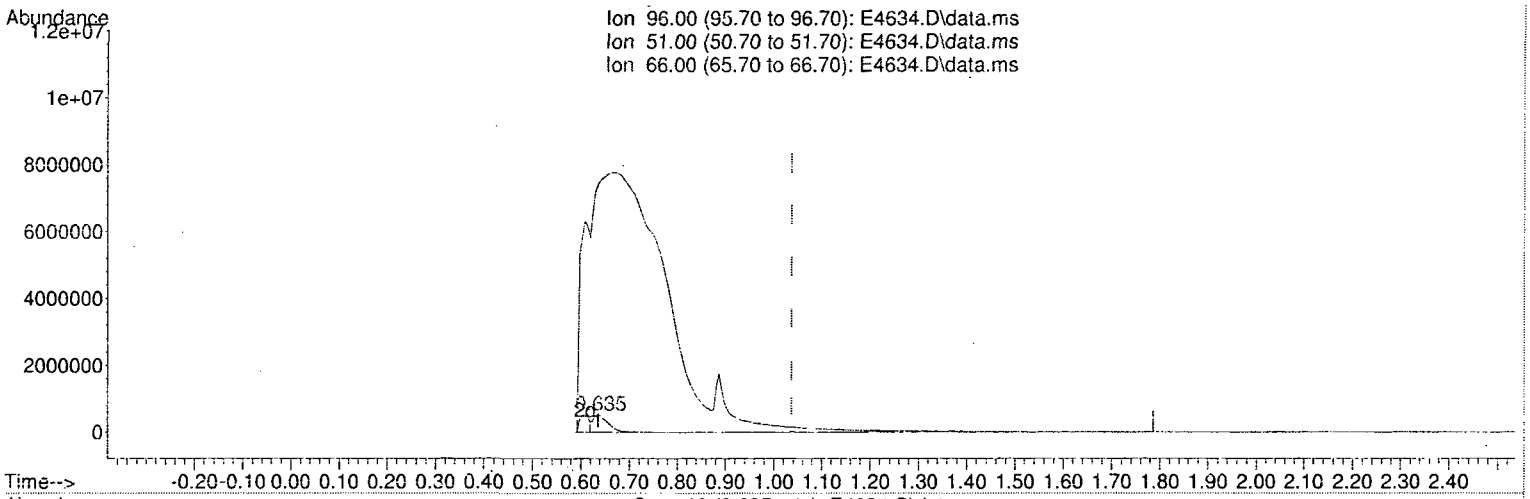
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

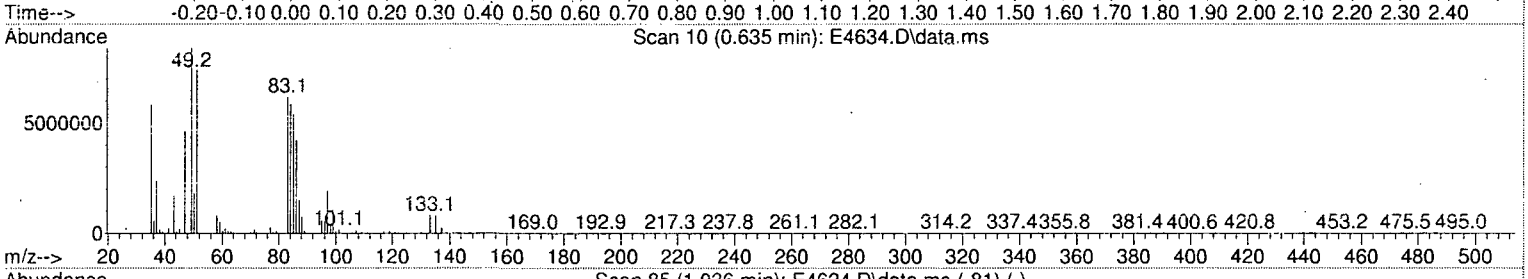
Quantitation Report (Qedit)

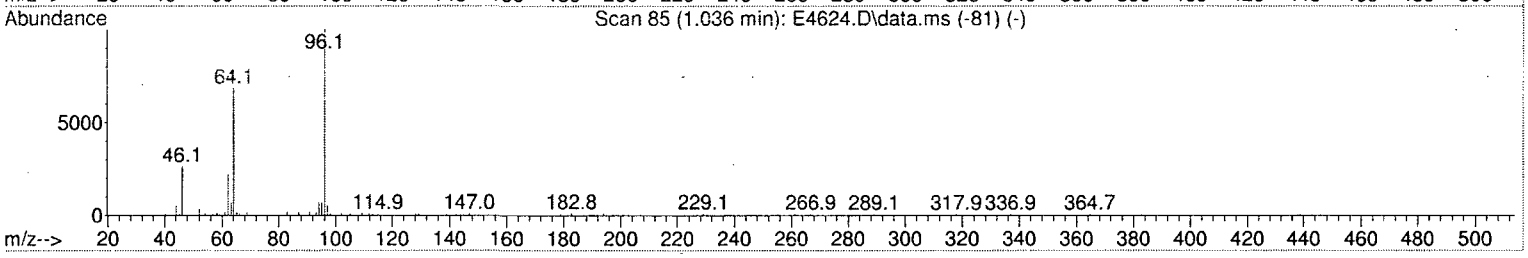
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.635min (-0.401) 1256.65 ug/mL**

**response 1173531**

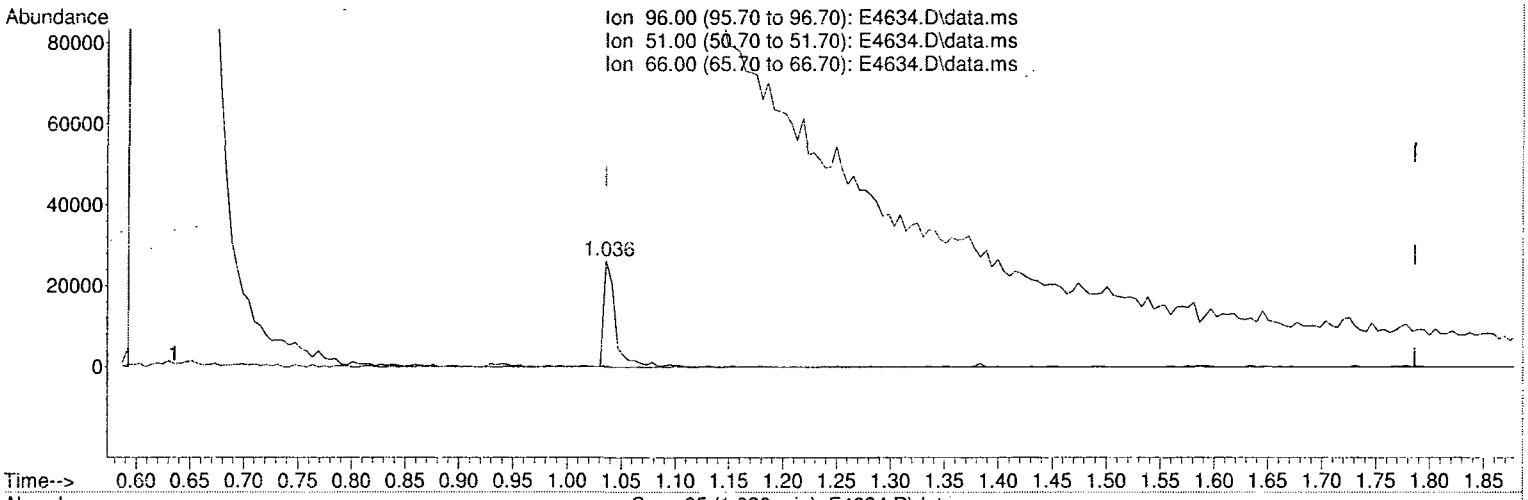
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.13# |
| 0.00 | 0.00 | 0.00 |

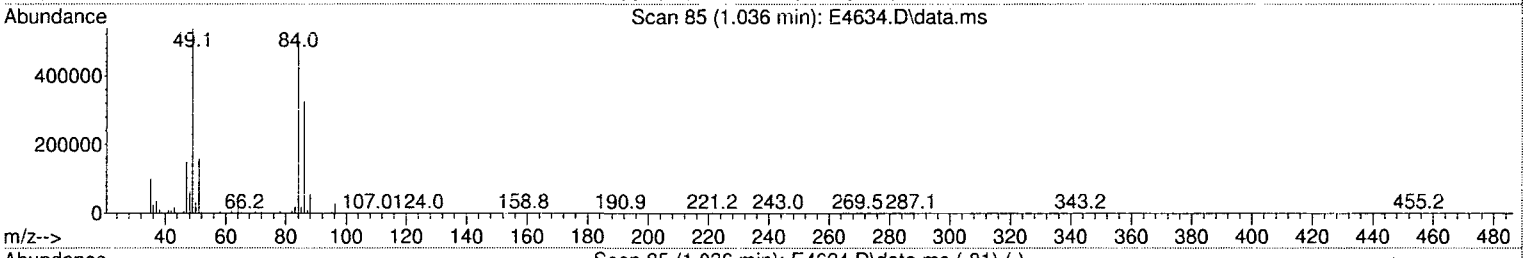
Quantitation Report (Qedit)

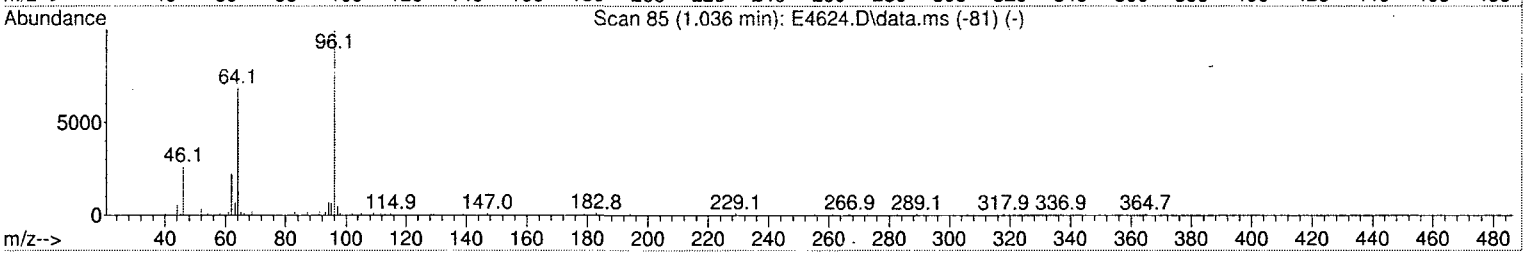
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min (-0.000) 20.84 ug/mL m** RS

**response 19457**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 7.65# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 0343

Lab File ID: E4653.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209R Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 3.174 | 2.752 | 0.010 | -13.3 | 50.0 |
| Phenol | 4.492 | 4.257 | 0.010 | -5.2 | 50.0 |
| Bis(2-chloroethyl)ether | 3.587 | 3.352 | 0.010 | -6.6 | 50.0 |
| 2-Chlorophenol | 3.507 | 3.432 | 0.010 | -2.1 | 50.0 |
| 2-Methylphenol | 3.316 | 3.147 | 0.010 | -5.1 | 50.0 |
| 2,2'-Oxybis(1-chloropropane) | 3.382 | 2.799 | 0.010 | -17.2 | 50.0 |
| Acetophenone | 5.110 | 4.719 | 0.010 | -7.7 | 50.0 |
| 4-Methylphenol | 3.482 | 3.270 | 0.010 | -6.1 | 50.0 |
| N-Nitroso-di-n-propylamine | 2.967 | 2.434 | 0.010 | -17.9 | 50.0 |
| Hexachloroethane | 1.616 | 1.517 | 0.010 | -6.1 | 50.0 |
| Nitrobenzene | 1.017 | 0.904 | 0.010 | -11.1 | 50.0 |
| Isophorone | 1.750 | 1.582 | 0.010 | -9.6 | 50.0 |
| 2-Nitrophenol | 0.437 | 0.459 | 0.010 | 4.9 | 50.0 |
| 2,4-Dimethylphenol | 0.962 | 0.899 | 0.010 | -6.5 | 50.0 |
| Bis(2-chloroethoxy)methane | 0.960 | 0.883 | 0.010 | -8.1 | 50.0 |
| 2,4-Dichlorophenol | 0.685 | 0.697 | 0.010 | 1.8 | 50.0 |
| Naphthalene | 2.472 | 2.441 | 0.010 | -1.3 | 50.0 |
| 4-Chloroaniline | 0.613 | 0.881 | 0.010 | 43.8 | 50.0 |
| Hexachlorobutadiene | 0.419 | 0.442 | 0.010 | 5.5 | 50.0 |
| Caprolactam | 0.278 | 0.282 | 0.010 | 1.4 | 50.0 |
| 4-Chloro-3-methylphenol | 0.836 | 0.792 | 0.010 | -5.2 | 50.0 |
| 2-Methylnaphthalene | 1.663 | 1.652 | 0.010 | -0.6 | 50.0 |
| Hexachlorocyclopentadiene | 0.707 | 0.759 | 0.010 | 7.3 | 50.0 |
| 2,4,6-Trichlorophenol | 0.794 | 0.805 | 0.010 | 1.3 | 50.0 |
| 2,4,5-Trichlorophenol | 0.798 | 0.813 | 0.010 | 1.9 | 50.0 |
| 1,1'-Biphenyl | 3.309 | 3.280 | 0.010 | -0.9 | 50.0 |
| 2-Chloronaphthalene | 2.651 | 2.544 | 0.010 | -4.0 | 50.0 |
| 2-Nitroaniline | 0.885 | 0.755 | 0.010 | -14.7 | 50.0 |
| Dimethylphthalate | 3.209 | 3.112 | 0.010 | -3.0 | 50.0 |
| 2,6-Dinitrotoluene | 0.643 | 0.686 | 0.010 | 6.7 | 50.0 |
| Acenaphthylene | 4.201 | 4.132 | 0.010 | -1.6 | 50.0 |
| 3-Nitroaniline | 0.615 | 0.714 | 0.010 | 16.1 | 50.0 |
| Acenaphthene | 2.677 | 2.573 | 0.010 | -3.9 | 50.0 |
| 2,4-Dinitrophenol | 0.221 | 0.214 | 0.010 | -3.0 | 50.0 |
| 4-Nitrophenol | 0.507 | 0.461 | 0.010 | -9.2 | 50.0 |
| Dibenzofuran | 3.713 | 3.584 | 0.010 | -3.5 | 50.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 0343

Lab File ID: E4653.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209R Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.886 | 0.914 | 0.010 | 3.1 | 50.0 |
| Diethylphthalate | 3.314 | 3.110 | 0.010 | -6.2 | 50.0 |
| Fluorene | 3.212 | 3.110 | 0.010 | -3.2 | 50.0 |
| 4-Chlorophenyl-phenylether | 1.387 | 1.387 | 0.010 | 0.0 | 50.0 |
| 4-Nitroaniline | 0.756 | 0.758 | 0.010 | 0.2 | 50.0 |
| 4,6-Dinitro-2-methylphenol | 0.281 | 0.286 | 0.010 | 1.8 | 50.0 |
| N-Nitrosodiphenylamine (1) | 1.479 | 1.418 | 0.010 | -4.1 | 50.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.126 | 1.136 | 0.010 | 0.9 | 50.0 |
| 4-Bromophenyl-phenylether | 0.420 | 0.419 | 0.010 | -0.2 | 50.0 |
| Hexachlorobenzene | 0.413 | 0.425 | 0.010 | 3.1 | 50.0 |
| Atrazine | 0.489 | 0.495 | 0.010 | 1.3 | 50.0 |
| Pentachlorophenol | 0.203 | 0.241 | 0.010 | 18.6 | 50.0 |
| Phenanthrene | 2.500 | 2.388 | 0.010 | -4.5 | 50.0 |
| Anthracene | 2.580 | 2.498 | 0.010 | -3.2 | 50.0 |
| Carbazole | 2.493 | 2.387 | 0.010 | -4.2 | 50.0 |
| Di-n-butylphthalate | 3.151 | 2.987 | 0.010 | -5.2 | 50.0 |
| Fluoranthene | 2.754 | 2.646 | 0.010 | -3.9 | 50.0 |
| Pyrene | 2.912 | 2.732 | 0.010 | -6.2 | 50.0 |
| Butylbenzylphthalate | 1.412 | 1.321 | 0.010 | -6.4 | 50.0 |
| 3,3'-Dichlorobenzidine | 0.679 | 0.757 | 0.010 | 11.4 | 50.0 |
| Benzo (a) anthracene | 2.464 | 2.368 | 0.010 | -3.9 | 50.0 |
| Chrysene | 2.364 | 2.270 | 0.010 | -4.0 | 50.0 |
| Bis(2-ethylhexyl)phthalate | 1.900 | 1.823 | 0.010 | -4.0 | 50.0 |
| Di-n-octylphthalate | 3.758 | 3.488 | 0.010 | -7.2 | 50.0 |
| Benzo (b) fluoranthene | 2.731 | 2.507 | 0.010 | -8.2 | 50.0 |
| Benzo (k) fluoranthene | 2.705 | 2.674 | 0.010 | -1.1 | 50.0 |
| Benzo (a) pyrene | 2.673 | 2.544 | 0.010 | -4.8 | 50.0 |
| Indeno (1,2,3-cd) pyrene | 2.060 | 2.036 | 0.010 | -1.2 | 50.0 |
| Dibenzo (a,h) anthracene | 2.137 | 2.242 | 0.010 | 4.9 | 50.0 |
| Benzo (g,h,i) perylene | 2.237 | 2.215 | 0.010 | -1.0 | 50.0 |
| 2,3,4,6-Tetrachlorophenol | 0.594 | 0.641 | 0.010 | 8.0 | 50.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 0343

Lab File ID: E4653.D Init. Calib. Date(s): 05/23/2012 05/23/2012

EPA Sample No.(SSTD020##): SSTD0209R Init. Calib. Time(s): 1750 1955

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.525 | 4.353 | 0.010 | -3.8 | 50.0 |
| Bis(2-chloroethyl)ether-d8 | 2.510 | 2.146 | 0.010 | -14.5 | 50.0 |
| 2-Chlorophenol-d4 | 4.006 | 3.937 | 0.010 | -1.7 | 50.0 |
| 4-Methylphenol-d8 | 3.363 | 3.248 | 0.010 | -3.4 | 50.0 |
| Nitrobenzene-d5 | 0.425 | 0.439 | 0.010 | 3.3 | 50.0 |
| 2-Nitrophenol-d4 | 0.473 | 0.505 | 0.010 | 6.8 | 50.0 |
| 2,4-Dichlorophenol-d3 | 0.789 | 0.818 | 0.010 | 3.6 | 50.0 |
| 4-Chloroaniline-d4 | 0.677 | 0.953 | 0.010 | 40.8 | 50.0 |
| Dimethylphthalate-d6 | 3.363 | 3.289 | 0.010 | -2.2 | 50.0 |
| Acenaphthylene-d8 | 4.340 | 4.213 | 0.010 | -2.9 | 50.0 |
| 4-Nitrophenol-d4 | 0.609 | 0.613 | 0.010 | 0.7 | 50.0 |
| Fluorene-d10 | 2.712 | 2.630 | 0.010 | -3.0 | 50.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.315 | 0.332 | 0.010 | 5.3 | 50.0 |
| Anthracene-d10 | 2.468 | 2.450 | 0.010 | -0.7 | 50.0 |
| Pyrene-d10 | 2.617 | 2.510 | 0.010 | -4.1 | 50.0 |
| Benzo (a) pyrene-d12 | 2.284 | 2.218 | 0.010 | -2.9 | 50.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/26/12

S. Vokati

05/26/12

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 199263 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.957 | 136 | 830122 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 519004 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 933207 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.991 | 240 | 975310 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.055 | 264 | 868694 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.031 | 96 | 60008 | 21.56 ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 107.80% | | |
| 7) Phenol-d5 | 3.077 | 99 | 867466 | 19.24 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 48.10% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.040 | 67 | 427625 | 17.10 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 42.75% | | |
| 19) 2-Chlorophenol-d4 | 3.104 | 132 | 784561 | 19.66 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 49.15% | | |
| 20) 4-Methylphenol-d8 | 3.958 | 113 | 647185 | 19.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.30% | | |
| 22) Nitrobenzene-d5 | 4.044 | 128 | 364307 | 20.66 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 51.65% | | |
| 35) 2-Nitrophenol-d4 | 4.482 | 143 | 419223 | 21.35 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 53.38% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.851 | 165 | 678851 | 20.72 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 51.80% | | |
| 37) 4-Chloroaniline-d4 | 5.176 | 131 | 790789 | 28.15 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 70.38% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 2186681 | 19.41 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.52% | | |
| 63) 4-Nitrophenol-d4 | 8.157 | 143 | 318130 | 20.14 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 50.35% | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 1706795 | 19.56 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.90% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 1364928 | 19.39 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 48.48% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.693 | 200 | 309439 | 21.07 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 52.68% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 2286446 | 19.86 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 49.65% | | |
| 87) Pyrene-d10 | 12.031 | 212 | 2448469 | 19.18 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 47.95%# | | |
| 96) Benzo (a) pyrene-d12 | 15.952 | 264 | 1926747 | 19.42 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 48.55% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.887 | 79 | 1207675 | 14.9522 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.042 | 88 | 280268m | 17.6636 ug/mL | |
| 5) Benzaldehyde | 2.837 | 77 | 548347 | 17.3389 ug/mL | 95 |
| 6) Bis(2-chloroethyl)ether | 3.088 | 93 | 667838 | 18.6856 ug/mL | 90 |
| 8) Phenol | 3.088 | 94 | 848207 | 18.9515 ug/mL# | 47 |
| 9) 2-Chlorophenol | 3.120 | 128 | 683946 | 19.5737 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.739 | 45 | 557726 | 16.5542 ug/mL# | 30 |
| 11) Aniline | 3.007 | 93 | 896394 | 25.2234 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.579 | 83 | 749151 | 16.7688 ug/mL# | 100 |
| 13) Acetophenone | 3.862 | 105 | 940232 | 18.4689 ug/mL | 93 |
| 14) 2-Methylphenol | 3.787 | 108 | 627150 | 18.9811 ug/mL | 94 |
| 15) Hexachloroethane | 3.894 | 117 | 302240 | 18.7748 ug/mL | 96 |

RS 8RN

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 485066 | 16.4118 ug/mL | 94 | |
| 17) 4-Methylphenol | 3.990 | 108 | 651606 | 18.7824 ug/mL | 97 | |
| 23) Nitrobenzene | 4.065 | 77 | 750568 | 17.7805 ug/mL | 94 | |
| 24) Isophorone | 4.391 | 82 | 1313206 | 18.0785 ug/mL | 96 | |
| 25) 2-Nitrophenol | 4.498 | 139 | 380904 | 20.9817 ug/mL | 90 | |
| 26) 2,4-Dimethylphenol | 4.685 | 107 | 746530 | 18.7022 ug/mL | 97 | |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 732906 | 18.3867 ug/mL | 99 | |
| 28) 2,4- Dichlorophenol | 4.861 | 162 | 578803 | 20.3643 ug/mL | 97 | |
| 29) Naphthalene | 4.984 | 128 | 2026299 | 19.7488 ug/mL | 99 | |
| 30) 4-Chloroaniline | 5.187 | 127 | 731632 | 28.7665 ug/mL | 98 | |
| 31) Hexachlorobutadiene | 5.289 | 225 | 366574 | 21.0915 ug/mL | 98 | RS 8/21 |
| 32) Caprolactam | 5.668 | 113 | 233706m | 20.2752 ug/mL | | |
| 33) 4-Chloro-3-methylphenol | 6.047 | 107 | 657334 | 18.9514 ug/mL | 92 | |
| 34) 2-Methylnaphthalene | 6.010 | 142 | 1371426 | 19.8732 ug/mL | 99 | |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 393701 | 21.4525 ug/mL | 98 | |
| 40) 2,4,6-Trichlorophenol | 6.555 | 196 | 417719 | 20.2650 ug/mL | 98 | |
| 41) 2,4,5-Trichlorophenol | 6.635 | 196 | 422079 | 20.3858 ug/mL | 97 | |
| 42) 1,1'-Biphenyl | 6.758 | 154 | 1702341 | 19.8251 ug/mL | 96 | |
| 43) 2-Chloronaphthalene | 6.726 | 162 | 1320455 | 19.1951 ug/mL | 96 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.752 | 216 | 617837 | 20.5936 ug/mL | 96 | |
| 45) 2-Nitroaniline | 7.041 | 65 | 391785 | 17.0681 ug/mL | 89 | |
| 46) Acenaphthylene | 7.356 | 152 | 2144675 | 19.6735 ug/mL | 100 | |
| 47) Dimethylphthalate | 7.420 | 163 | 1615152 | 19.3948 ug/mL | 99 | |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 356275 | 21.3461 ug/mL | 94 | |
| 49) Acenaphthene | 7.645 | 153 | 1335637 | 19.2235 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.703 | 138 | 370342 | 23.2207 ug/mL | 89 | |
| 51) 2,4-Dinitrophenol | 7.858 | 184 | 111147m | 19.3952 ug/mL | | RS 8/21 |
| 52) Dibenzofuran | 7.901 | 168 | 1860231 | 19.3048 ug/mL | 98 | |
| 53) Pentachlorobenzene | 9.242 | 250 | 382099 | 20.5685 ug/mL | 99 | |
| 54) 2,4-Dinitrotoluene | 8.088 | 165 | 474361 | 20.6215 ug/mL | 86 | |
| 55) 4-Nitrophenol | 8.168 | 109 | 239020 | 18.1620 ug/mL# | 88 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.238 | 232 | 332845 | 21.6034 ug/mL | 94 | |
| 57) Fluorene | 8.430 | 166 | 1614024 | 19.3650 ug/mL | 100 | |
| 58) 4-Chlorophenyl-phenyle... | 8.505 | 204 | 719993 | 19.9995 ug/mL | 94 | |
| 59) Diethylphthalate | 8.533 | 149 | 1614201 | 18.7672 ug/mL | 99 | |
| 60) 4-Nitroaniline | 8.670 | 138 | 393205 | 20.0481 ug/mL | 91 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.325 | 216 | 589593 | 20.1755 ug/mL | 98 | |
| 67) 4,6-Dinitro-2-methylph... | 8.705 | 198 | 266587 | 20.3536 ug/mL | 99 | |
| 68) N-Nitrosodiphenylamine... | 8.739 | 169 | 1323506 | 19.1737 ug/mL | 97 | |
| 69) 4-Bromophenyl-phenylether | 9.242 | 248 | 390771 | 19.9627 ug/mL | 93 | |
| 70) Hexachlorobenzene | 9.396 | 284 | 397029 | 20.6228 ug/mL | 88 | |
| 71) Atrazine | 9.716 | 200 | 462362 | 20.2518 ug/mL | 96 | |
| 72) Pentachlorophenol | 9.751 | 266 | 224678 | 23.7228 ug/mL | 99 | |
| 73) Phenanthrene | 9.888 | 178 | 2228949 | 19.1094 ug/mL | 98 | |
| 74) Anthracene | 9.956 | 178 | 2331468 | 19.3670 ug/mL | 98 | |
| 75) Carbazole | 10.305 | 167 | 2227966 | 19.1567 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.094 | 149 | 2787784 | 18.9609 ug/mL | 99 | |
| 77) Fluoranthene | 11.734 | 202 | 2469181 | 19.2126 ug/mL | 97 | |
| 81) Pyrene | 12.060 | 202 | 2664293 | 18.7634 ug/mL | 98 | |
| 82) Butylbenzylphthalate | 13.397 | 149 | 1288865 | 18.7187 ug/mL | 90 | |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 737978 | 22.2736 ug/mL | 99 | |
| 84) Benzo (a) anthracene | 13.969 | 228 | 2309761 | 19.2192 ug/mL | 99 | |
| 85) Chrysene | 14.026 | 228 | 2214326 | 19.2080 ug/mL | 99 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 1778474 | 19.1997 ug/mL | 98 | |
| 89) Di-n-octylphthalate | 15.340 | 149 | 3030138 | 18.5662 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 2177766 | 18.3597 ug/mL | 95 | |
| 91) Benzo (k) fluoranthene | 15.597 | 252 | 2323224 | 19.7771 ug/mL | 94 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.980 | 252 | 2210153 | 19.0380 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.369 | 276 | 1768337 | 19.7664 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 1947214 | 20.9812 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.643 | 276 | 1923989 | 19.7972 ug/mL | 91 |

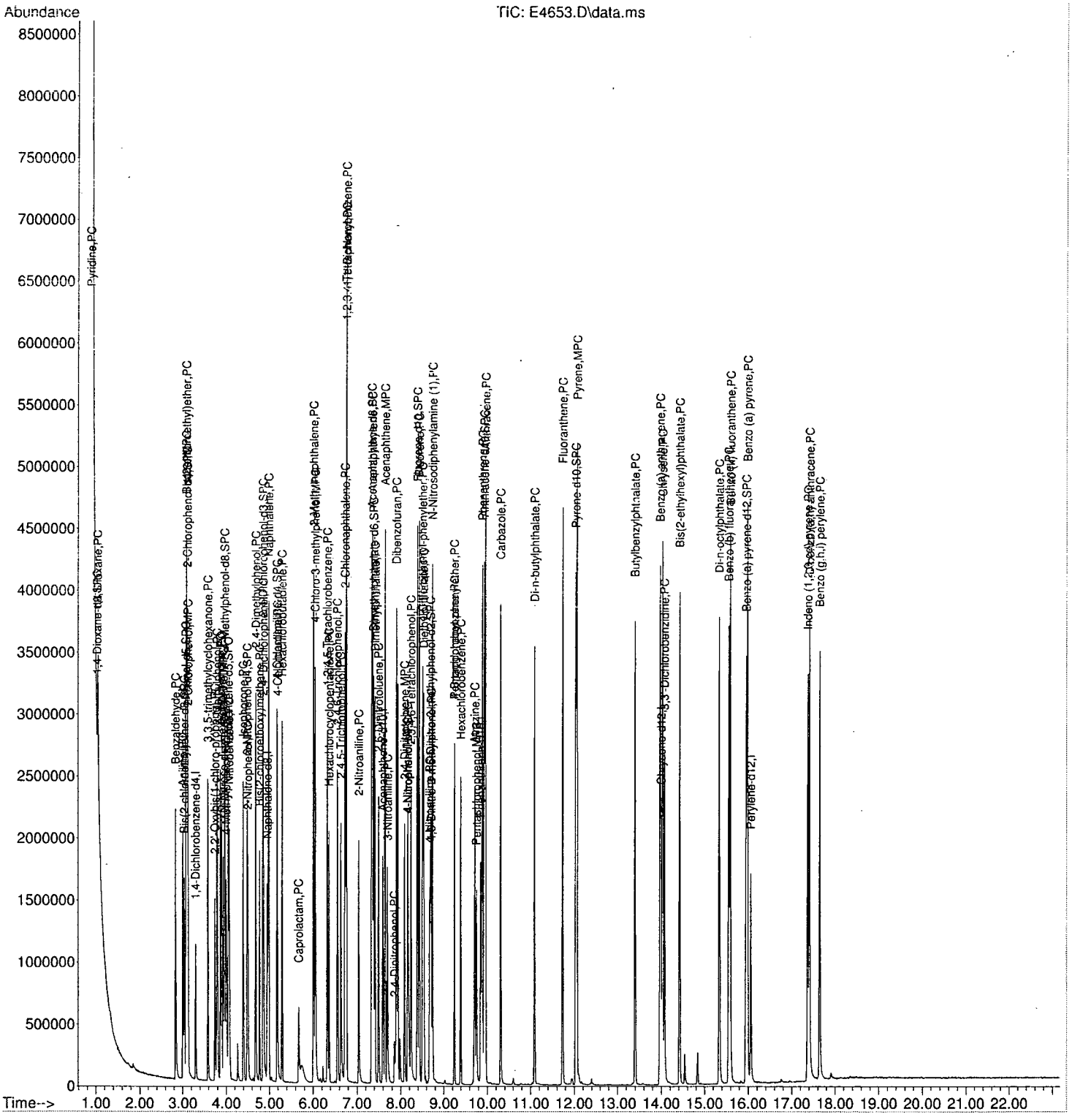
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration






00552

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 327# | 0.00 |
| 2 | PC | Pyridine | 8.107 | 6.061 | 25.2# | 243# | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.301 | -7.9# | 321# | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.407 | 11.7# | 338# | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 2.752 | 13.3 | 280# | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.352 | 6.6 | 310# | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.353 | 3.8 | 342# | -0.01 |
| 8 | MPC | Phenol | 4.492 | 4.257 | 5.2 | 316# | -0.01 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.432 | 2.1 | 327# | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 2.799 | 17.2 | 282# | 0.00 |
| 11 | PC | Aniline | 3.567 | 4.499 | -26.1 | 481# | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 3.760 | 16.1 | 292# | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 4.719 | 7.7 | 311# | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.147 | 5.1 | 317# | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.517 | 6.1 | 315# | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.434 | 18.0 | 276# | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.270 | 6.1 | 318# | -0.01 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.146 | 14.5 | 287# | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 3.937 | 1.7 | 333# | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.248 | 3.4 | 325# | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 323# | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.439 | -3.3 | 342# | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 0.904 | 11.1 | 288# | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.582 | 9.6 | 295# | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.459 | -5.0 | 337# | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.899 | 6.5 | 304# | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.883 | 8.0 | 297# | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.697 | -1.8 | 329# | -0.01 |
| 29 | PC | Naphthalene | 2.472 | 2.441 | 1.3 | 328# | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.881 | -43.7# | 461# | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.442 | -5.5 | 342# | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.282 | -1.4 | 323# | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.792 | 5.3 | 310# | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.652 | 0.7 | 325# | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.505 | -6.8 | 357# | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.818 | -3.7 | 334# | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.953 | -40.8# | 472# | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 321# | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.759 | -7.4 | 354# | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.805 | -1.4 | 338# | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.813 | -1.9 | 331# | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.280 | 0.9 | 334# | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.544 | 4.0 | 326# | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.190 | -2.9 | 345# | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.755 | 14.7 | 288# | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.132 | 1.6 | 330# | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.112 | 3.0 | 323# | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.686 | -6.7 | 353# | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.573 | 3.9 | 325# | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.714 | -16.1 | 405# | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.214 | 3.2 | 347# | -0.02 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
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Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.584 | 3.5 | 321# | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.736 | -2.8 | 350# | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.914 | -3.2 | 343# | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.461 | 9.1 | 316# | -0.01 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.641 | -7.9 | 357# | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.110 | 3.2 | 326# | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.387 | 0.0 | 336# | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.110 | 6.2 | 308# | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.758 | -0.3 | 332# | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.136 | -0.9 | 338# | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.213 | 2.9 | 324# | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.613 | -0.7 | 350# | -0.01 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.289 | 2.2 | 326# | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.630 | 3.0 | 328# | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 323# | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.286 | -1.8 | 351# | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.418 | 4.1 | 323# | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.419 | 0.2 | 338# | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.425 | -2.9 | 353# | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.495 | -1.2 | 327# | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.241 | -18.7 | 431# | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.388 | 4.5 | 317# | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.498 | 3.2 | 320# | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.387 | 4.3 | 309# | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 2.987 | 5.2 | 305# | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.646 | 3.9 | 323# | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.332 | -5.4 | 368# | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.450 | 0.7 | 326# | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 329# | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.732 | 6.2 | 321# | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.321 | 6.4 | 309# | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.757 | -11.5 | 365# | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.368 | 3.9 | 322# | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.270 | 4.0 | 329# | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.823 | 4.1 | 315# | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.510 | 4.1 | 327# | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 341# | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.488 | 7.2 | 312# | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.507 | 8.2 | 318# | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.674 | 1.1 | 348# | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.544 | 4.8 | 327# | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.036 | 1.2 | 340# | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.242 | -4.9 | 368# | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.215 | 1.0 | 338# | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.218 | 2.9 | 333# | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 5

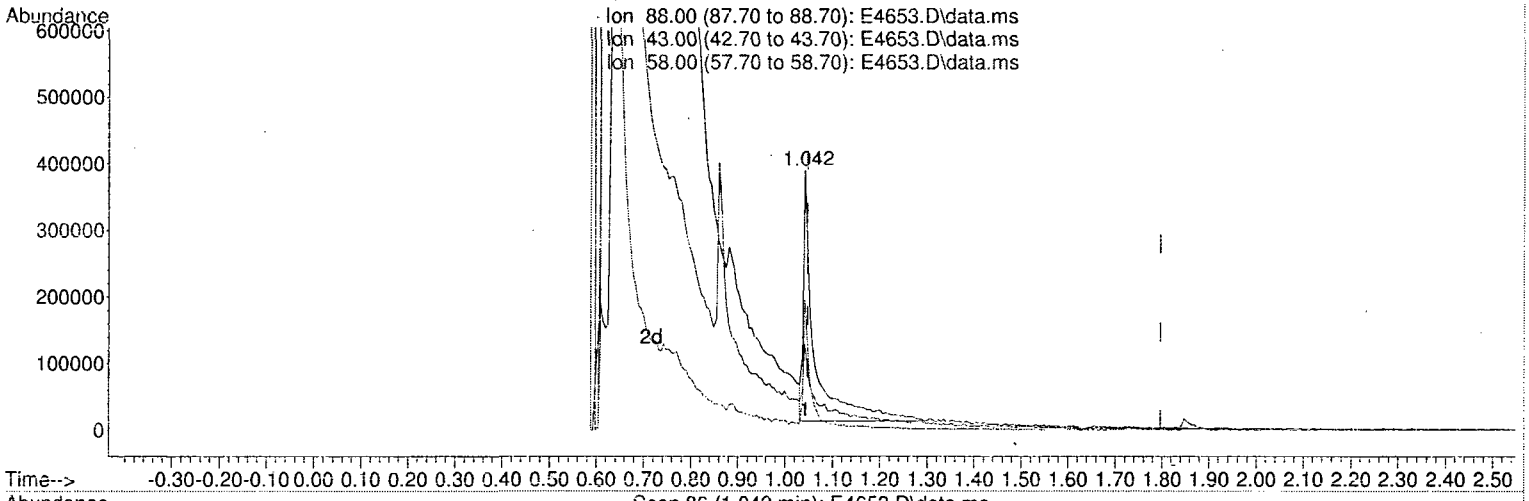
Quantitation Report (Qedit)

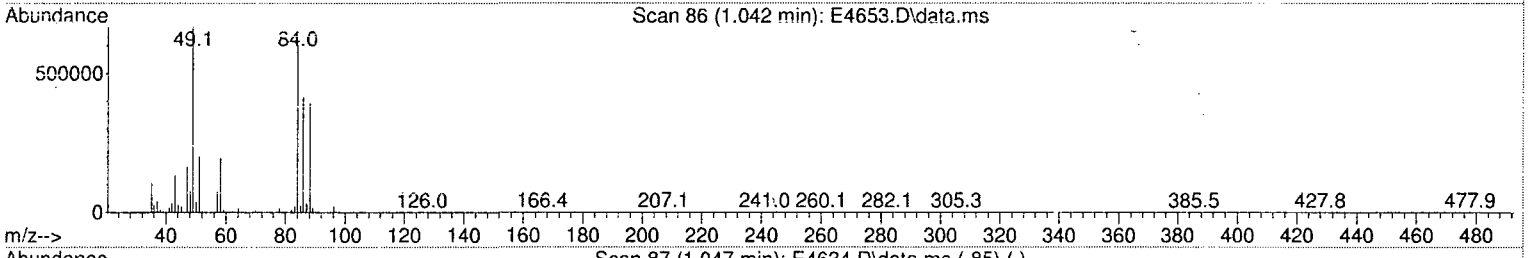
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

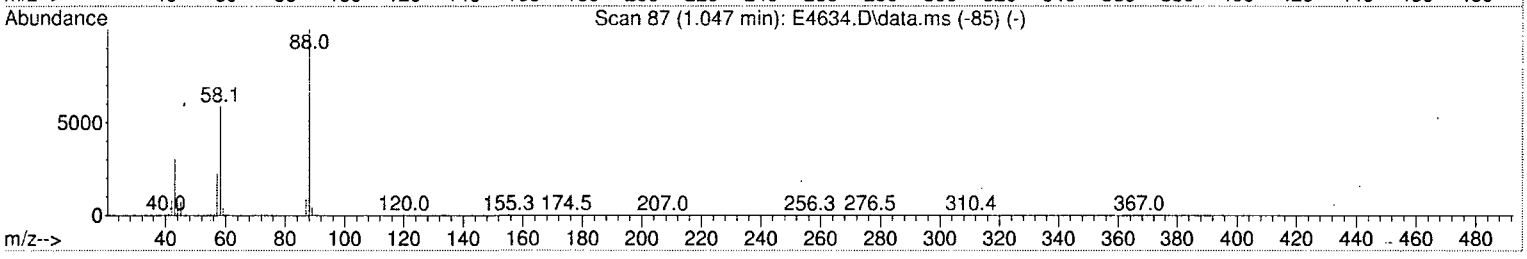
Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/26/12

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.042min (-0.005) 39.73 ug/mL**

**response 630446**

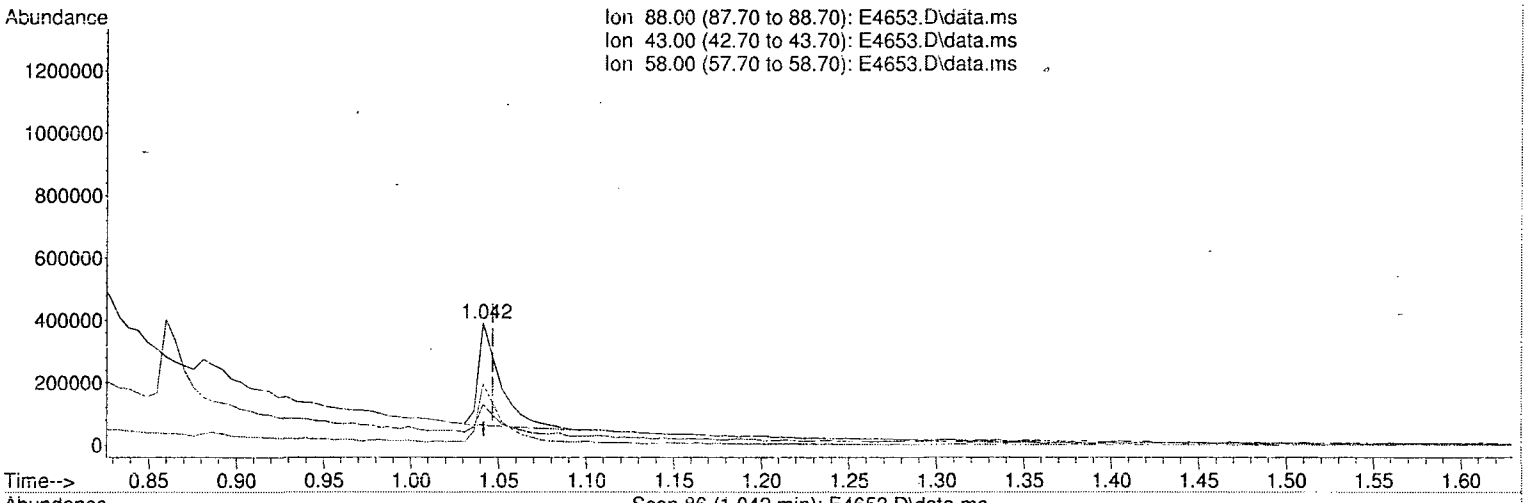
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 29.54# |
| 0.00 | 0.00 | 0.00 |

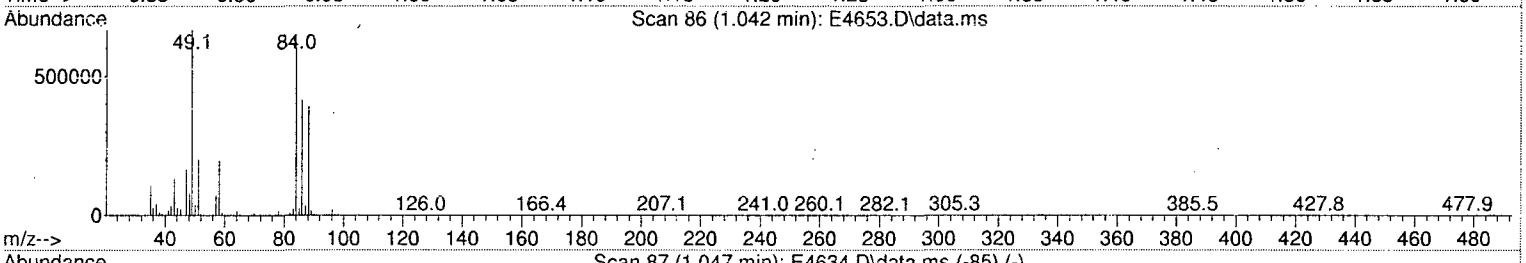
Quantitation Report (Qedit)

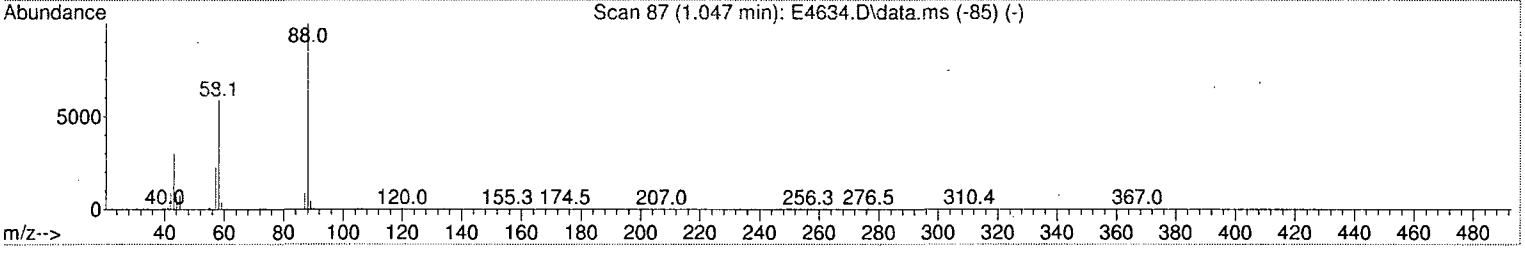
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.042min (-0.005) 17.66 ug/mL m** RS

**response 280268**

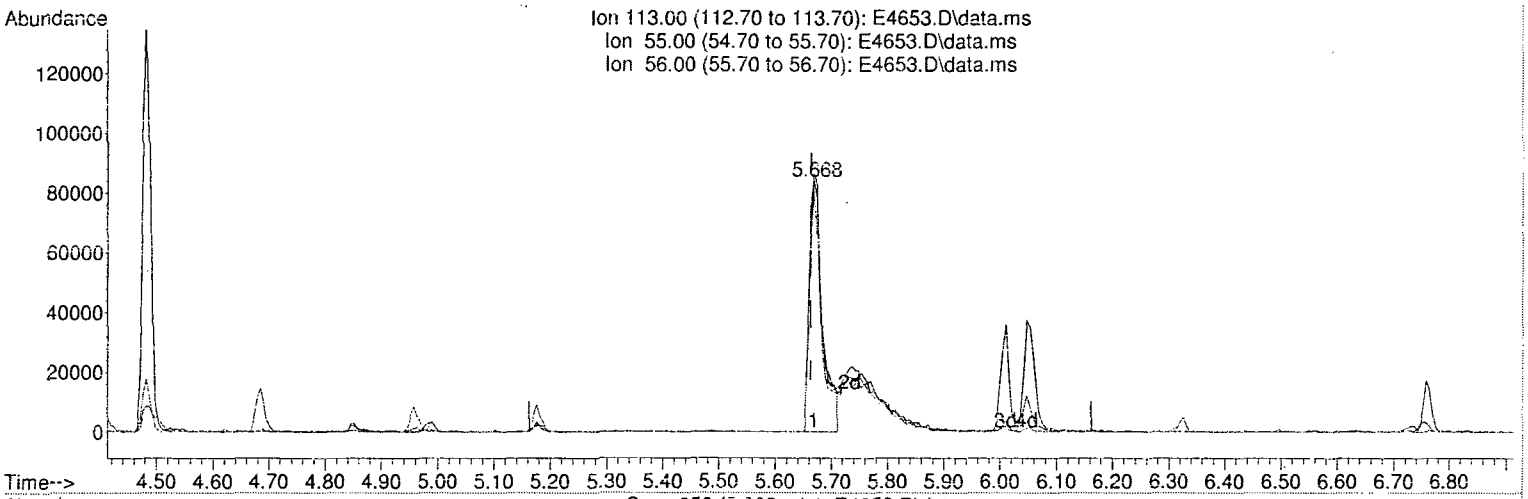
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 66.46# |
| 0.00 | 0.00 | 0.00 |

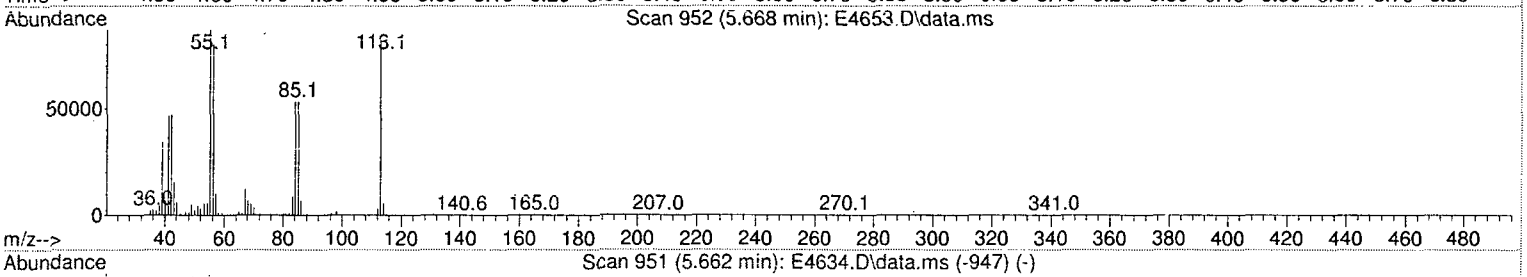
Quantitation Report (Qedit)

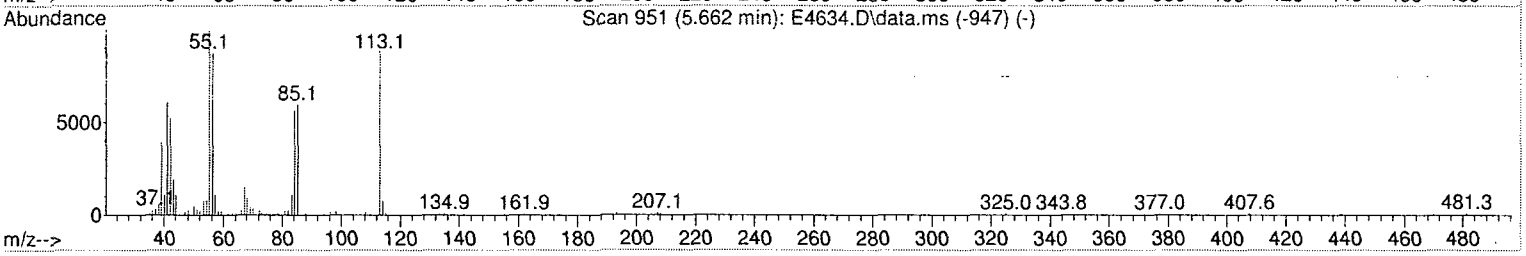
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(32) Caprolactam (PC)**

**5.668min (+ 0.005) 12.00 ug/mL**

**response 138345**

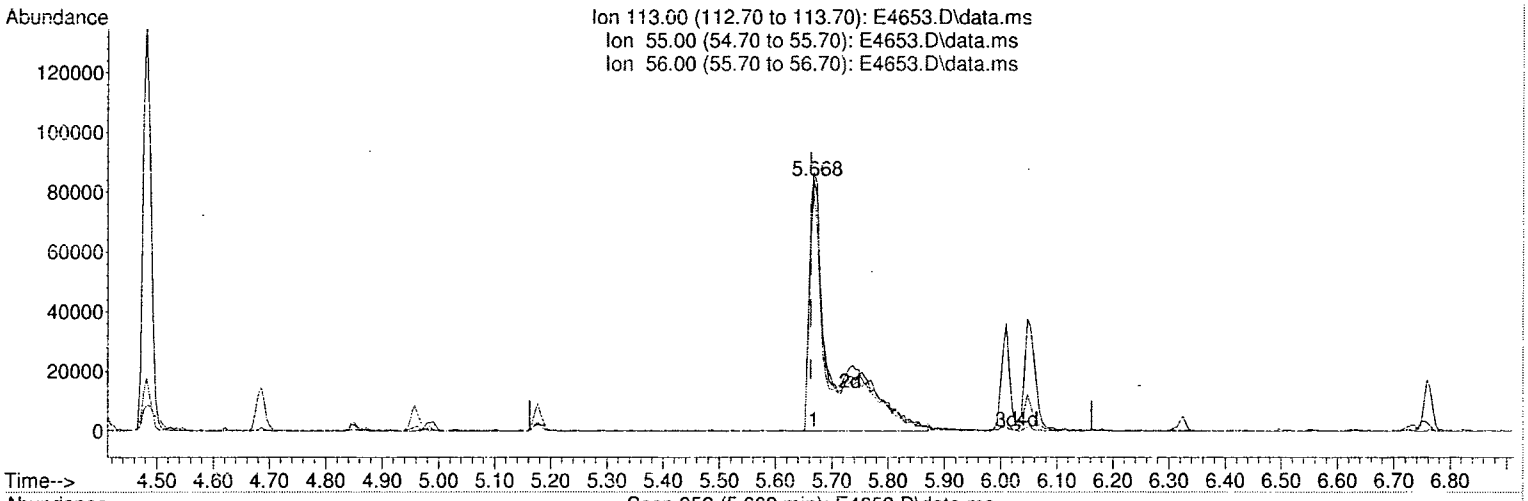
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 100.92 |
| 56.00 | 92.50 | 93.10 |
| 0.00 | 0.00 | 0.00 |

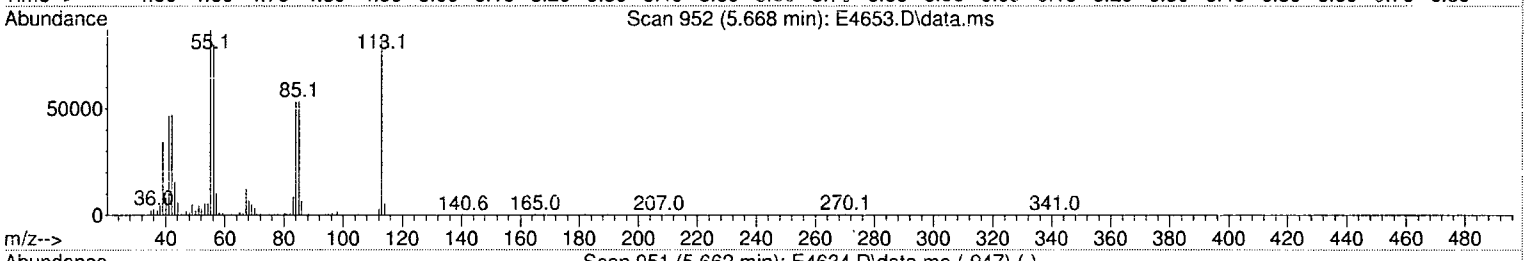
Quantitation Report (Qedit)

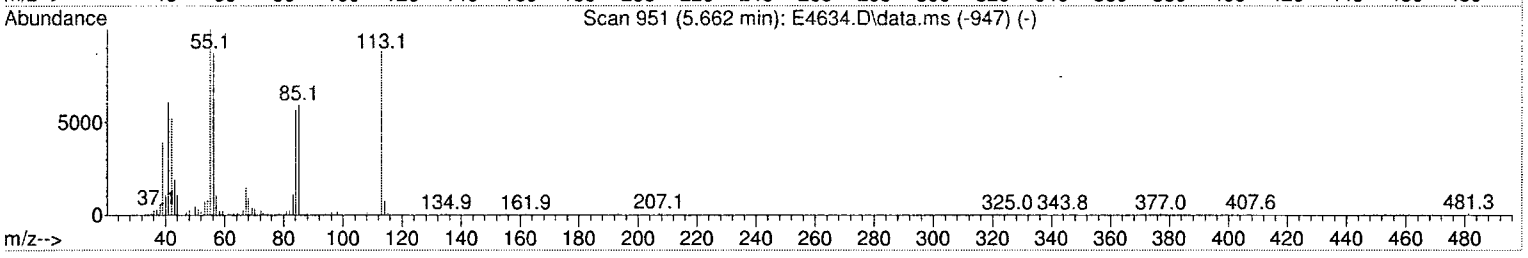
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(32) Caprolactam (PC)**

**5.668min (+ 0.005) 20.28 ug/mL m** RS

**response 233706**

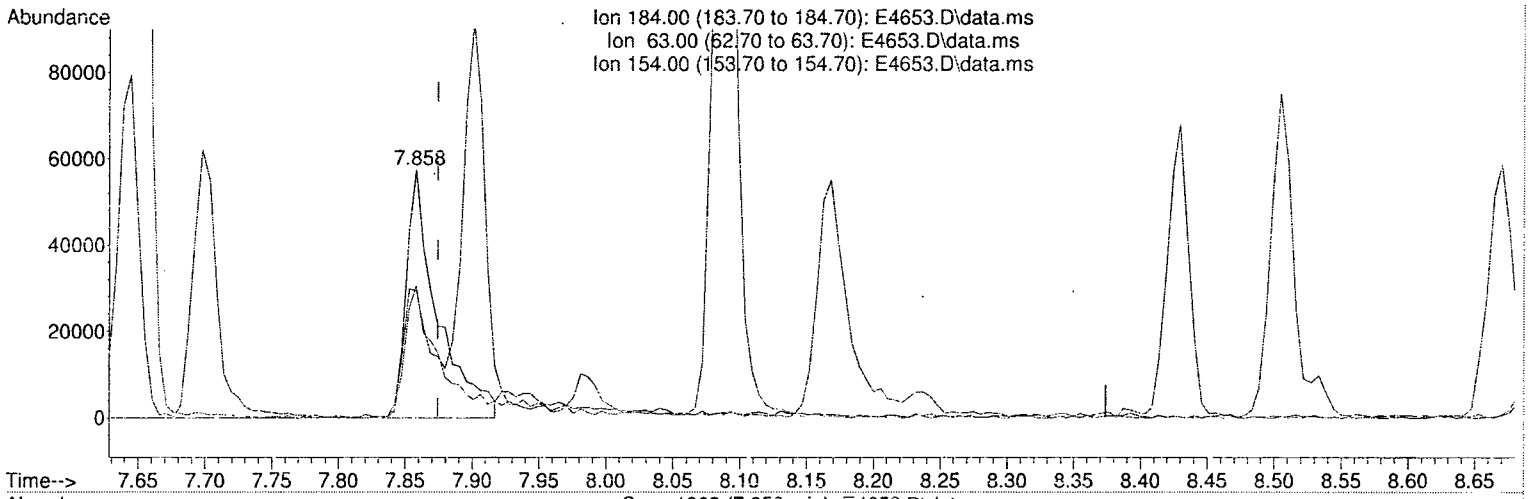
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 59.74# |
| 56.00 | 92.50 | 55.11# |
| 0.00 | 0.00 | 0.00 |

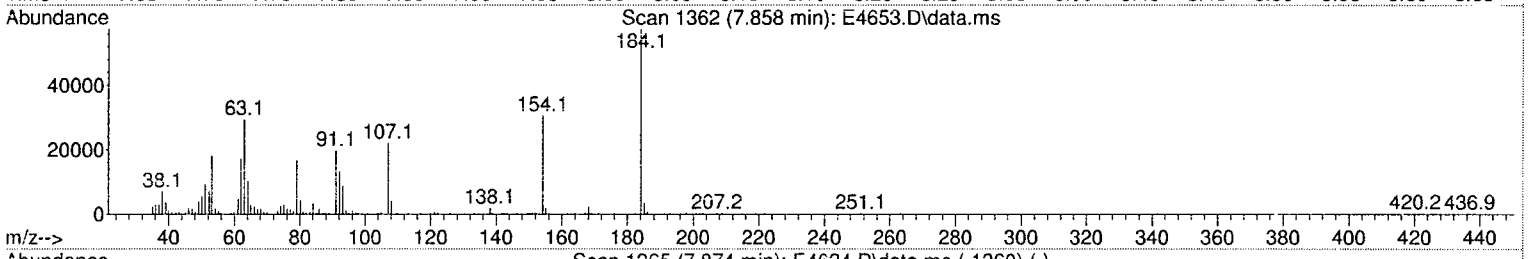
Quantitation Report (Qedit)

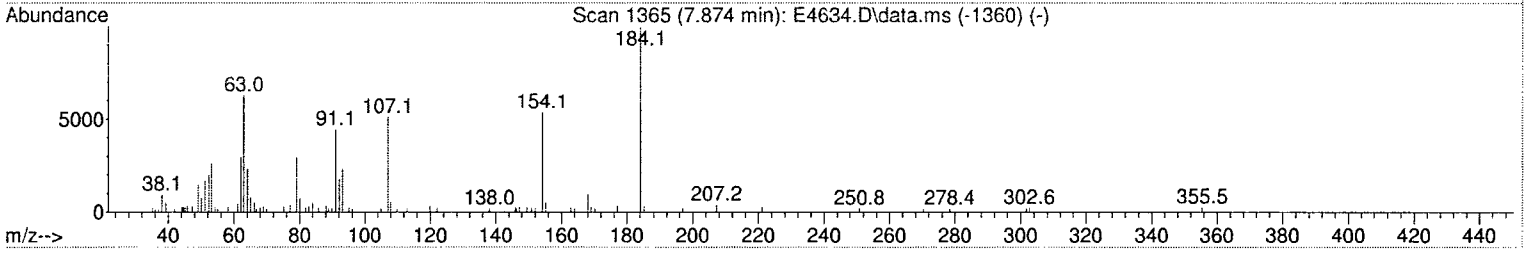
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.858min (-0.016) 15.96 ug/mL**

**response 91459**

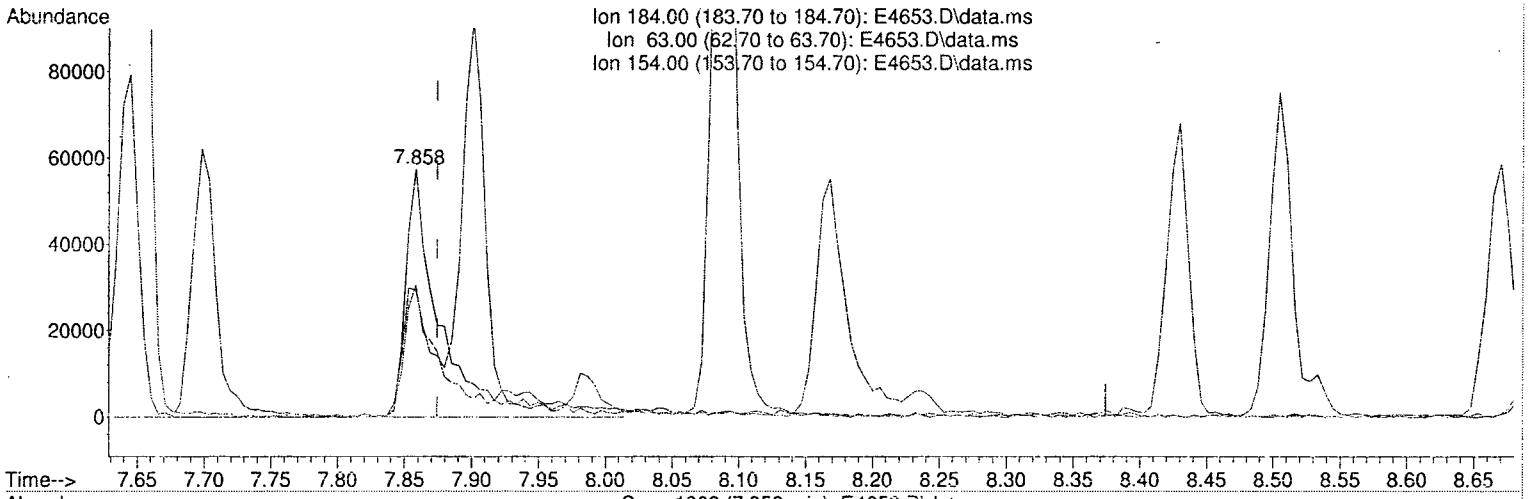
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 47.59# |
| 154.00 | 63.80 | 59.71 |
| 0.00 | 0.00 | 0.00 |

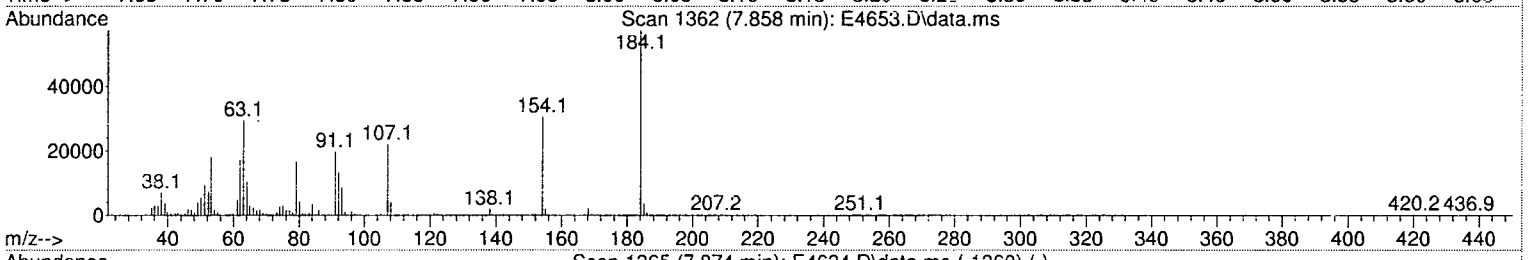
Quantitation Report (Qedit)

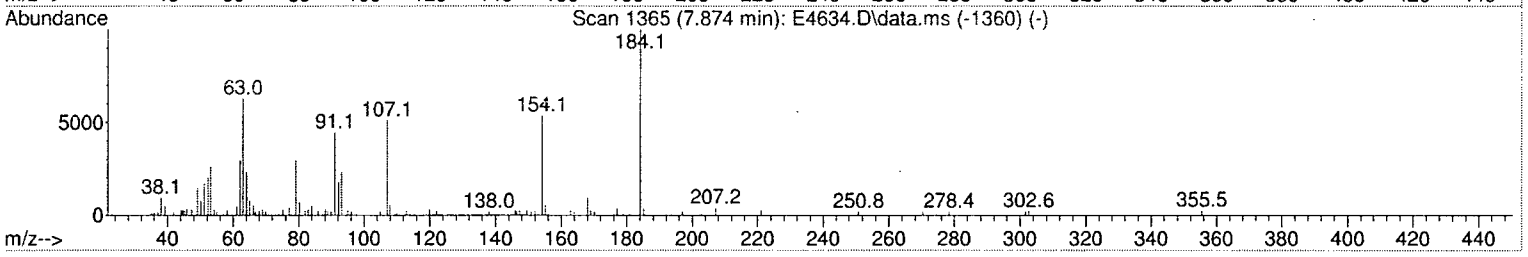
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 09:57:47 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration




TIC: E4653.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.858min (-0.016) 19.40 ug/mL m** RS 8RW

**response 111147**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 39.16# |
| 154.00 | 63.80 | 49.13 |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1128

Lab File ID: E4655.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209S Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 2.512 | 2.825 | 0.010 | 12.5 | 40.0 |
| Phenol | 4.389 | 4.327 | 0.800 | -1.4 | 25.0 |
| Bis(2-chloroethyl)ether | 3.395 | 3.356 | 0.700 | -1.2 | 25.0 |
| 2-Chlorophenol | 3.530 | 3.469 | 0.800 | -1.7 | 25.0 |
| 2-Methylphenol | 3.321 | 3.327 | 0.700 | 0.2 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 2.914 | 2.853 | 0.010 | -2.1 | 40.0 |
| Acetophenone | 5.004 | 4.977 | 0.010 | -0.5 | 40.0 |
| 4-Methylphenol | 3.521 | 3.470 | 0.600 | -1.4 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.661 | 2.625 | 0.500 | -1.4 | 25.0 |
| Hexachloroethane | 1.517 | 1.469 | 0.300 | -3.2 | 25.0 |
| Nitrobenzene | 0.927 | 0.876 | 0.200 | -5.4 | 25.0 |
| Isophorone | 1.662 | 1.622 | 0.400 | -2.4 | 25.0 |
| 2-Nitrophenol | 0.464 | 0.441 | 0.100 | -4.8 | 25.0 |
| 2,4-Dimethylphenol | 0.932 | 0.896 | 0.200 | -3.8 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.926 | 0.878 | 0.300 | -5.2 | 25.0 |
| 2,4-Dichlorophenol | 0.729 | 0.699 | 0.200 | -4.1 | 25.0 |
| Naphthalene | 2.513 | 2.403 | 0.700 | -4.4 | 25.0 |
| 4-Chloroaniline | 0.755 | 0.882 | 0.010 | 16.9 | 40.0 |
| Hexachlorobutadiene | 0.457 | 0.451 | 0.010 | -1.3 | 40.0 |
| Caprolactam | 0.286 | 0.300 | 0.010 | 5.0 | 40.0 |
| 4-Chloro-3-methylphenol | 0.827 | 0.797 | 0.200 | -3.7 | 25.0 |
| 2-Methylnaphthalene | 1.714 | 1.665 | 0.400 | -2.9 | 25.0 |
| Hexachlorocyclopentadiene | 0.750 | 0.757 | 0.010 | 0.8 | 40.0 |
| 2,4,6-Trichlorophenol | 0.826 | 0.790 | 0.200 | -4.4 | 25.0 |
| 2,4,5-Trichlorophenol | 0.857 | 0.834 | 0.200 | -2.7 | 25.0 |
| 1,1'-Biphenyl | 3.311 | 3.178 | 0.010 | -4.0 | 40.0 |
| 2-Chloronaphthalene | 2.590 | 2.514 | 0.800 | -2.9 | 25.0 |
| 2-Nitroaniline | 0.748 | 0.726 | 0.010 | -2.9 | 40.0 |
| Dimethylphthalate | 3.309 | 3.220 | 0.010 | -2.7 | 40.0 |
| 2,6-Dinitrotoluene | 0.684 | 0.693 | 0.200 | 1.4 | 25.0 |
| Acenaphthylene | 4.203 | 4.073 | 0.900 | -3.1 | 25.0 |
| 3-Nitroaniline | 0.675 | 0.769 | 0.010 | 14.0 | 40.0 |
| Acenaphthene | 2.668 | 2.608 | 0.900 | -2.2 | 25.0 |
| 2,4-Dinitrophenol | 0.284 | 0.290 | 0.010 | 2.1 | 40.0 |
| 4-Nitrophenol | 0.478 | 0.452 | 0.010 | -5.4 | 40.0 |
| Dibenzofuran | 3.769 | 3.701 | 0.800 | -1.8 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1128

Lab File ID: E4655.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209S Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.951 | 0.941 | 0.200 | -1.0 | 25.0 |
| Diethylphthalate | 3.454 | 3.463 | 0.010 | 0.3 | 40.0 |
| Fluorene | 3.294 | 3.174 | 0.900 | -3.6 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.498 | 1.449 | 0.400 | -3.3 | 25.0 |
| 4-Nitroaniline | 0.683 | 0.757 | 0.010 | 10.7 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.322 | 0.306 | 0.010 | -5.1 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.452 | 1.373 | 0.010 | -5.5 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.161 | 1.128 | 0.010 | -2.8 | 40.0 |
| 4-Bromophenyl-phenylether | 0.439 | 0.411 | 0.100 | -6.4 | 25.0 |
| Hexachlorobenzene | 0.448 | 0.434 | 0.100 | -3.1 | 25.0 |
| Atrazine | 0.527 | 0.522 | 0.010 | -1.0 | 40.0 |
| Pentachlorophenol | 0.258 | 0.235 | 0.050 | -9.1 | 25.0 |
| Phenanthrene | 2.533 | 2.425 | 0.700 | -4.3 | 25.0 |
| Anthracene | 2.617 | 2.491 | 0.700 | -4.8 | 25.0 |
| Carbazole | 2.507 | 2.446 | 0.010 | -2.4 | 40.0 |
| Di-n-butylphthalate | 3.199 | 3.080 | 0.010 | -3.7 | 40.0 |
| Fluoranthene | 2.878 | 2.847 | 0.600 | -1.0 | 25.0 |
| Pyrene | 2.755 | 2.594 | 0.600 | -5.8 | 25.0 |
| Butylbenzylphthalate | 1.325 | 1.257 | 0.010 | -5.2 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.745 | 0.802 | 0.010 | 7.7 | 40.0 |
| Benzo (a) anthracene | 2.474 | 2.333 | 0.800 | -5.7 | 25.0 |
| Chrysene | 2.434 | 2.273 | 0.700 | -6.6 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.864 | 1.782 | 0.010 | -4.4 | 40.0 |
| Di-n-octylphthalate | 3.442 | 3.163 | 0.010 | -8.1 | 40.0 |
| Benzo (b) fluoranthene | 2.708 | 2.698 | 0.700 | -0.4 | 25.0 |
| Benzo (k) fluoranthene | 2.759 | 2.510 | 0.700 | -9.0 | 25.0 |
| Benzo (a) pyrene | 2.711 | 2.596 | 0.700 | -4.3 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.114 | 2.191 | 0.500 | 3.6 | 25.0 |
| Dibenzo (a,h) anthracene | 2.247 | 2.310 | 0.400 | 2.8 | 25.0 |
| Benzo (g,h,i) perylene | 2.350 | 2.468 | 0.500 | 5.0 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.677 | 0.646 | 0.100 | -4.5 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1128

Lab File ID: E4655.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209S Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.242 | 3.896 | 0.010 | -8.2 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.203 | 2.217 | 0.010 | 0.6 | 25.0 |
| 2-Chlorophenol-d4 | 3.992 | 3.958 | 0.010 | -0.8 | 25.0 |
| 4-Methylphenol-d8 | 3.432 | 3.281 | 0.010 | -4.4 | 25.0 |
| Nitrobenzene-d5 | 0.443 | 0.422 | 0.010 | -4.8 | 25.0 |
| 2-Nitrophenol-d4 | 0.501 | 0.481 | 0.010 | -3.9 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.832 | 0.820 | 0.010 | -1.5 | 25.0 |
| 4-Chloroaniline-d4 | 0.826 | 0.962 | 0.010 | 16.4 | 40.0 |
| Dimethylphthalate-d6 | 3.521 | 3.424 | 0.010 | -2.7 | 40.0 |
| Acenaphthylene-d8 | 4.338 | 4.196 | 0.010 | -3.3 | 25.0 |
| 4-Nitrophenol-d4 | 0.646 | 0.633 | 0.010 | -2.0 | 40.0 |
| Fluorene-d10 | 2.770 | 2.672 | 0.010 | -3.5 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.367 | 0.351 | 0.010 | -4.3 | 40.0 |
| Anthracene-d10 | 2.551 | 2.421 | 0.010 | -5.1 | 25.0 |
| Pyrene-d10 | 2.531 | 2.341 | 0.010 | -7.5 | 25.0 |
| Benzo (a) pyrene-d12 | 2.383 | 2.250 | 0.010 | -5.6 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/26/12

ORIGINAL LOCATED IN
CASE: 42543 SDG: X0T49

S. Vitkati
05/26/12

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.264 | 152 | 58472 | 20.0000 ug/mL | -0.04 |
| 21) Naphthalene-d8 | 4.925 | 136 | 256510 | 20.0000 ug/mL | -0.04 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 166106 | 20.0000 ug/mL | -0.04 |
| 66) Phenanthrene-d10 | 9.808 | 188 | 318351 | 20.0000 ug/mL | -0.05 |
| 80) Chrysene-d12 | 13.934 | 240 | 377654 | 20.0000 ug/mL | -0.06 |
| 88) Perylene-d12 | 15.992 | 264 | 373109 | 20.0000 ug/mL | -0.07 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.015 | 96 | 14103m | 17.27 ug/mL | -0.02 RS RW |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 86.35% | | |
| 7) Phenol-d5 | 3.045 | 99 | 227815 | 17.22 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 43.05% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.013 | 67 | 129653 | 17.67 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 44.18% | | |
| 19) 2-Chlorophenol-d4 | 3.077 | 132 | 231455 | 19.76 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 49.40% | | |
| 20) 4-Methylphenol-d8 | 3.926 | 113 | 191835 | 19.51 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.77% | | |
| 22) Nitrobenzene-d5 | 4.012 | 128 | 108279 | 19.87 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.68% | | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 123506 | 20.36 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 50.90% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.819 | 165 | 210348 | 20.78 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 51.95% | | |
| 37) 4-Chloroaniline-d4 | 5.144 | 131 | 246708 | 28.42 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 71.05% | | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 696940 | 19.33 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.32% | | |
| 63) 4-Nitrophenol-d4 | 8.115 | 143 | 105156 | 20.80 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 52.00% | | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 568751 | 20.37 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 50.92% | | |
| 65) Fluorene-d10 | 8.344 | 176 | 443880 | 19.70 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 49.25% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.642 | 200 | 111673 | 22.28 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 55.70% | | |
| 79) Anthracene-d10 | 9.882 | 188 | 770757 | 19.62 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 49.05% | | |
| 87) Pyrene-d10 | 11.980 | 212 | 884050 | 17.89 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 44.73%# | | |
| 96) Benzo (a) pyrene-d12 | 15.883 | 264 | 839541 | 19.70 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.25% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.865 | 79 | 379352 | 16.0058 ug/mL# | 1 RS RW |
| 4) 1,4-Dioxane | 1.026 | 88 | 77719m | 16.6921 ug/mL | |
| 5) Benzaldehyde | 2.810 | 77 | 165170 | 17.7982 ug/mL | 94 |
| 6) Bis(2-chloroethyl)ether | 3.061 | 93 | 196209 | 18.7083 ug/mL | 93 |
| 8) Phenol | 3.061 | 94 | 252991 | 19.2631 ug/mL# | 66 |
| 9) 2-Chlorophenol | 3.093 | 128 | 202832 | 19.7818 ug/mL | 96 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.707 | 45 | 166817 | 16.8736 ug/mL# | 30 |
| 11) Aniline | 2.981 | 93 | 256424 | 24.5891 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 231420 | 17.6528 ug/mL# | 100 |
| 13) Acetophenone | 3.830 | 105 | 291009 | 19.4801 ug/mL | 93 |
| 14) 2-Methylphenol | 3.755 | 108 | 194528 | 20.0637 ug/mL | 94 |
| 15) Hexachloroethane | 3.862 | 117 | 85901 | 18.1844 ug/mL | 99 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:36 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.894 | 70 | 153481 | 17.6965 ug/mL | 94 |
| 17) 4-Methylphenol | 3.964 | 108 | 202925 | 19.9334 ug/mL | 94 |
| 23) Nitrobenzene | 4.033 | 77 | 224761 | 17.2311 ug/mL | 94 |
| 24) Isophorone | 4.354 | 82 | 416043 | 18.5355 ug/mL | 95 |
| 25) 2-Nitrophenol | 4.466 | 139 | 113229 | 20.1846 ug/mL | 92 |
| 26) 2,4-Dimethylphenol | 4.648 | 107 | 229935 | 18.6418 ug/mL | 95 |
| 27) Bis(2-chloroethoxy)met... | 4.738 | 93 | 225236 | 18.2865 ug/mL | 96 |
| 28) 2,4- Dichlorophenol | 4.835 | 162 | 179286 | 20.4137 ug/mL | 98 |
| 29) Naphthalene | 4.947 | 128 | 616446 | 19.4433 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.155 | 127 | 226291 | 28.7938 ug/mL | 98 |
| 31) Hexachlorobutadiene | 5.257 | 225 | 115680 | 21.5398 ug/mL | 97 |
| 32) Caprolactam | 5.614 | 113 | 76895 | 21.5890 ug/mL | 92 |
| 33) 4-Chloro-3-methylphenol | 6.010 | 107 | 204488 | 19.0792 ug/mL | 90 |
| 34) 2-Methylnaphthalene | 5.972 | 142 | 426968 | 20.0230 ug/mL | 98 |
| 39) Hexachlorocyclopentadiene | 6.330 | 237 | 125671 | 21.3960 ug/mL | 98 |
| 40) 2,4,6-Trichlorophenol | 6.517 | 196 | 131211 | 19.8892 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.597 | 196 | 138571 | 20.9118 ug/mL | 95 |
| 42) 1,1'-Biphenyl | 6.720 | 154 | 527836 | 19.2067 ug/mL | 96 |
| 43) 2-Chloronaphthalene | 6.688 | 162 | 417519 | 18.9640 ug/mL | 97 |
| 44) 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 194860 | 20.2940 ug/mL | 98 |
| 45) 2-Nitroaniline | 6.998 | 65 | 120665 | 16.4250 ug/mL | 92 |
| 46) Acenaphthylene | 7.313 | 152 | 676489 | 19.3894 ug/mL | 100 |
| 47) Dimethylphthalate | 7.377 | 163 | 534857 | 20.0675 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.452 | 165 | 115164 | 21.5594 ug/mL | 92 |
| 49) Acenaphthene | 7.602 | 153 | 433242 | 19.4832 ug/mL | 99 |
| 50) 3-Nitroaniline | 7.661 | 138 | 127815 | 25.0403 ug/mL# | 82 RS 8/21 |
| 51) 2,4-Dinitrophenol | 7.821 | 184 | 48122m | 26.2378 ug/mL | |
| 52) Dibenzofuran | 7.864 | 168 | 614820 | 19.9357 ug/mL | 98 |
| 53) Pentachlorobenzene | 9.202 | 250 | 127800 | 21.4953 ug/mL | 98 |
| 54) 2,4-Dinitrotoluene | 8.051 | 165 | 156360 | 21.2384 ug/mL | 84 |
| 55) 4-Nitrophenol | 8.120 | 109 | 75137 | 17.8389 ug/mL# | 85 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.195 | 232 | 107320 | 21.7643 ug/mL | 93 |
| 57) Fluorene | 8.387 | 166 | 527301 | 19.7674 ug/mL | 99 |
| 58) 4-Chlorophenyl-phenyle... | 8.467 | 204 | 240653 | 20.8866 ug/mL | 93 |
| 59) Diethylphthalate | 8.489 | 149 | 575302 | 20.8989 ug/mL | 100 |
| 60) 4-Nitroaniline | 8.613 | 138 | 125677 | 20.0215 ug/mL | 87 |
| 61) 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 187410 | 20.0378 ug/mL | 99 |
| 67) 4,6-Dinitro-2-methylph... | 8.653 | 198 | 97287 | 21.7736 ug/mL | 97 |
| 68) N-Nitrosodiphenylamine... | 8.693 | 169 | 437086 | 18.5617 ug/mL | 100 |
| 69) 4-Bromophenyl-phenylether | 9.202 | 248 | 130855 | 19.5956 ug/mL | 92 |
| 70) Hexachlorobenzene | 9.351 | 284 | 138117 | 21.0302 ug/mL | 87 |
| 71) Atrazine | 9.665 | 200 | 166074 | 21.3233 ug/mL | 93 |
| 72) Pentachlorophenol | 9.705 | 266 | 74676 | 23.1131 ug/mL | 98 |
| 73) Phenanthrene | 9.836 | 178 | 771920 | 19.3996 ug/mL | 98 |
| 74) Anthracene | 9.911 | 178 | 793018 | 19.3103 ug/mL | 98 |
| 75) Carbazole | 10.259 | 167 | 778528 | 19.6227 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.048 | 149 | 980663 | 19.5520 ug/mL | 99 |
| 77) Fluoranthene | 11.682 | 202 | 906483 | 20.6759 ug/mL | 98 |
| 81) Pyrene | 12.008 | 202 | 979718 | 17.8189 ug/mL | 100 |
| 82) Butylbenzylphthalate | 13.351 | 149 | 474605 | 17.8012 ug/mL | 90 |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 302883 | 23.6086 ug/mL | 96 |
| 84) Benzo (a) anthracene | 13.911 | 228 | 880965 | 18.9311 ug/mL | 99 |
| 85) Chrysene | 13.969 | 228 | 858533 | 19.2330 ug/mL | 96 |
| 86) Bis(2-ethylhexyl)phtha... | 14.369 | 149 | 673058 | 18.7650 ug/mL | 97 |
| 89) Di-n-octylphthalate | 15.289 | 149 | 1180067 | 16.8345 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.500 | 252 | 1006778 | 19.7615 ug/mL | 96 |
| 91) Benzo (k) fluoranthene | 15.529 | 252 | 936668 | 18.5647 ug/mL | 95 |

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Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

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Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.917 | 252 | 968578 | 19.4252 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.301 | 276 | 817424 | 21.2736 ug/mL | 93 |
| 94) Dibenzo (a,h) anthracene | 17.346 | 278 | 861995 | 21.6248 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.575 | 276 | 920947 | 22.0631 ug/mL | 93 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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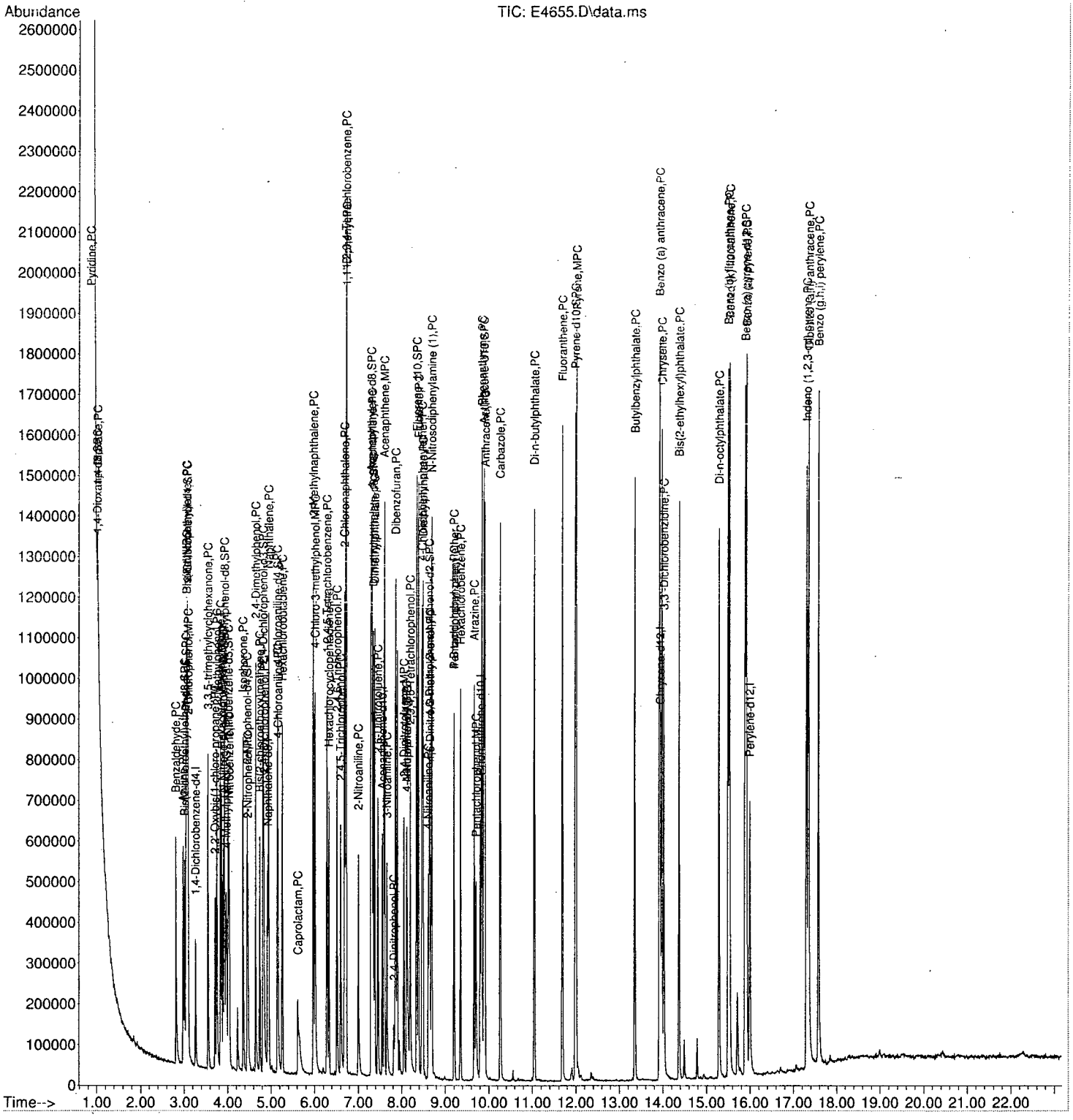

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Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | PC | Pyridine | 6.446 | 6.488 | -0.7 | 100 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.224 | 0.241 | -7.6# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.126 | 1.329 | -18.0# | 100 | 0.00 |
| 5 | PC | Benzaldehyde | 2.512 | 2.825 | -12.5 | 100 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.395 | 3.356 | 1.1 | 100 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.242 | 3.896 | 8.2 | 100 | 0.00 |
| 8 | MPC | Phenol | 4.389 | 4.327 | 1.4 | 100 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.530 | 3.469 | 1.7 | 100 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 2.914 | 2.853 | 2.1 | 100 | 0.00 |
| 11 | PC | Aniline | 3.810 | 4.385 | -15.1 | 100 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.104 | 3.958 | 3.6 | 100 | 0.00 |
| 13 | PC | Acetophenone | 5.004 | 4.977 | 0.5 | 100 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.321 | 3.327 | -0.2 | 100 | 0.00 |
| 15 | PC | Hexachloroethane | 1.517 | 1.469 | 3.2 | 100 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.661 | 2.625 | 1.4 | 100 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.521 | 3.470 | 1.4 | 100 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.203 | 2.217 | -0.6 | 100 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 3.992 | 3.958 | 0.9 | 100 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.432 | 3.281 | 4.4 | 100 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.443 | 0.422 | 4.7 | 100 | 0.00 |
| 23 | PC | Nitrobenzene | 0.927 | 0.876 | 5.5 | 100 | 0.00 |
| 24 | PC | Isophorone | 1.662 | 1.622 | 2.4 | 100 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.464 | 0.441 | 5.0 | 100 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.932 | 0.896 | 3.9 | 100 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.926 | 0.878 | 5.2 | 100 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.729 | 0.699 | 4.1 | 100 | 0.00 |
| 29 | PC | Naphthalene | 2.513 | 2.403 | 4.4 | 100 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.755 | 0.882 | -16.8 | 100 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.457 | 0.451 | 1.3 | 100 | 0.00 |
| 32 | PC | Caprolactam | 0.286 | 0.300 | -4.9 | 100 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.827 | 0.797 | 3.6 | 100 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.714 | 1.665 | 2.9 | 100 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.501 | 0.481 | 4.0 | 100 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.832 | 0.820 | 1.4 | 100 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.826 | 0.962 | -16.5 | 100 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.750 | 0.757 | -0.9 | 100 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.826 | 0.790 | 4.4 | 100 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.857 | 0.834 | 2.7 | 100 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.311 | 3.178 | 4.0 | 100 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.590 | 2.514 | 2.9 | 100 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.206 | 1.173 | 2.7 | 100 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.748 | 0.726 | 2.9 | 100 | 0.00 |
| 46 | PC | Acenaphthylene | 4.203 | 4.073 | 3.1 | 100 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.309 | 3.220 | 2.7 | 100 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.684 | 0.693 | -1.3 | 100 | 0.00 |
| 49 | MPC | Acenaphthene | 2.668 | 2.608 | 2.2 | 100 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.675 | 0.769 | -13.9 | 100 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.284 | 0.290 | -2.1 | 100 | 0.00 |

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Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.769 | 3.701 | 1.8 | 100 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.795 | 0.769 | 3.3 | 100 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.951 | 0.941 | 1.1 | 100 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.478 | 0.452 | 5.4 | 100 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.677 | 0.646 | 4.6 | 100 | 0.00 |
| 57 | PC | Fluorene | 3.294 | 3.174 | 3.6 | 100 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.498 | 1.449 | 3.3 | 100 | 0.00 |
| 59 | PC | Diethylphthalate | 3.454 | 3.463 | -0.3 | 100 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.683 | 0.757 | -10.8 | 100 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.161 | 1.128 | 2.8 | 100 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.338 | 4.196 | 3.3 | 100 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.646 | 0.633 | 2.0 | 100 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.521 | 3.424 | 2.8 | 100 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.770 | 2.672 | 3.5 | 100 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.322 | 0.306 | 5.0 | 100 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.452 | 1.373 | 5.4 | 100 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.439 | 0.411 | 6.4 | 100 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.448 | 0.434 | 3.1 | 100 | 0.00 |
| 71 | PC | Atrazine | 0.527 | 0.522 | 0.9 | 100 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.258 | 0.235 | 8.9 | 100 | 0.00 |
| 73 | PC | Phenanthrene | 2.533 | 2.425 | 4.3 | 100 | 0.00 |
| 74 | PC | Anthracene | 2.617 | 2.491 | 4.8 | 100 | 0.00 |
| 75 | PC | Carbazole | 2.507 | 2.446 | 2.4 | 100 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.199 | 3.080 | 3.7 | 100 | 0.00 |
| 77 | PC | Fluoranthene | 2.878 | 2.847 | 1.1 | 100 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.367 | 0.351 | 4.4 | 100 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.551 | 2.421 | 5.1 | 100 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 81 | MPC | Pyrene | 2.755 | 2.594 | 5.8 | 100 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.325 | 1.257 | 5.1 | 100 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.745 | 0.802 | -7.7 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.474 | 2.333 | 5.7 | 100 | 0.00 |
| 85 | PC | Chrysene | 2.434 | 2.273 | 6.6 | 100 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.864 | 1.782 | 4.4 | 100 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.531 | 2.341 | 7.5 | 100 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.442 | 3.163 | 8.1 | 100 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.708 | 2.698 | 0.4 | 100 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.759 | 2.510 | 9.0 | 100 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.711 | 2.596 | 4.2 | 100 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.114 | 2.191 | -3.6 | 100 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.247 | 2.310 | -2.8 | 100 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.350 | 2.468 | -5.0 | 100 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.383 | 2.250 | 5.6 | 100 | 0.00 |

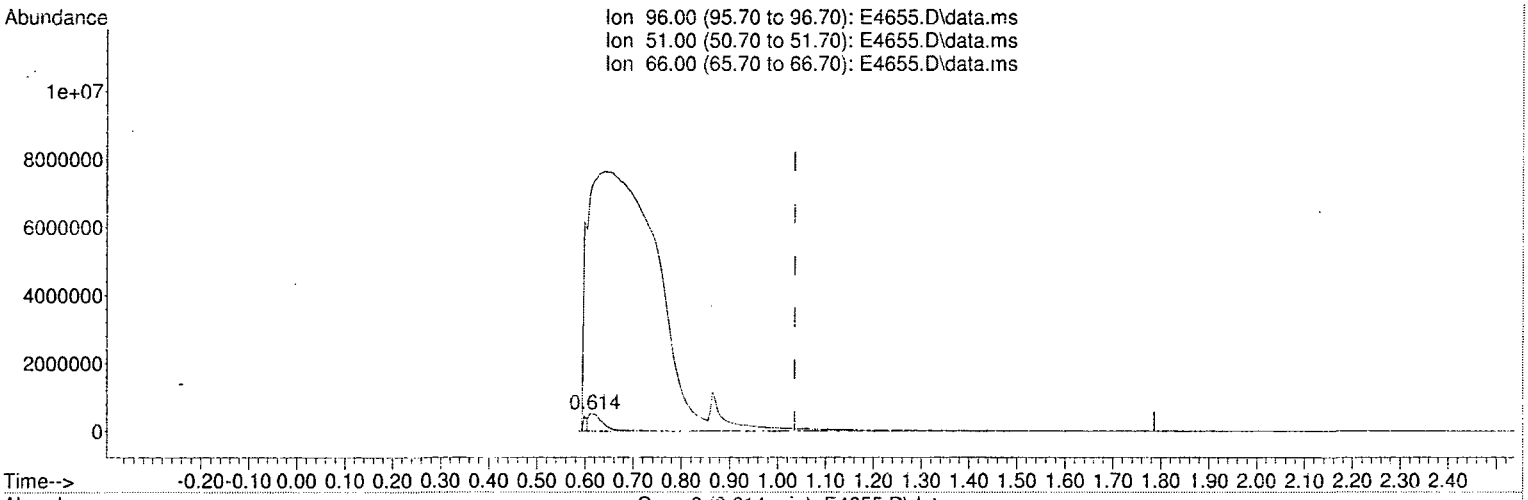
(#) = Out of Range SPCC's out = 0 CCC's out = 2

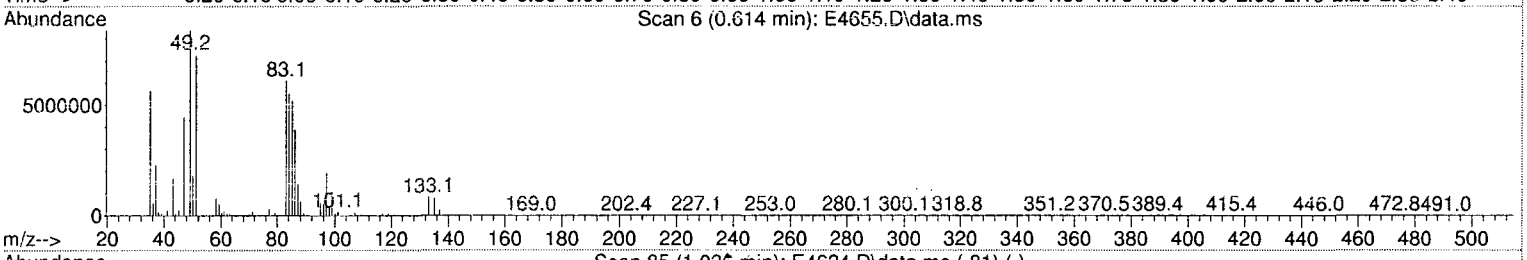
Quantitation Report (Qedit)

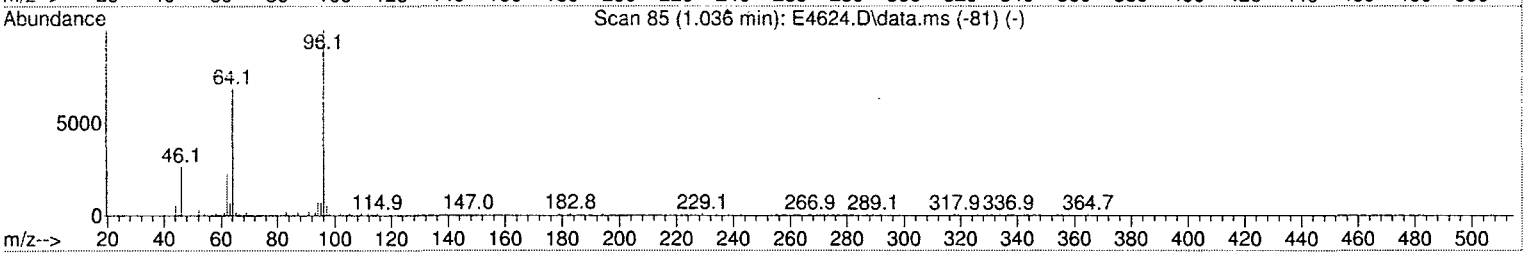
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.614min (-0.422) 1292.04 ug/mL**

**response 1055165**

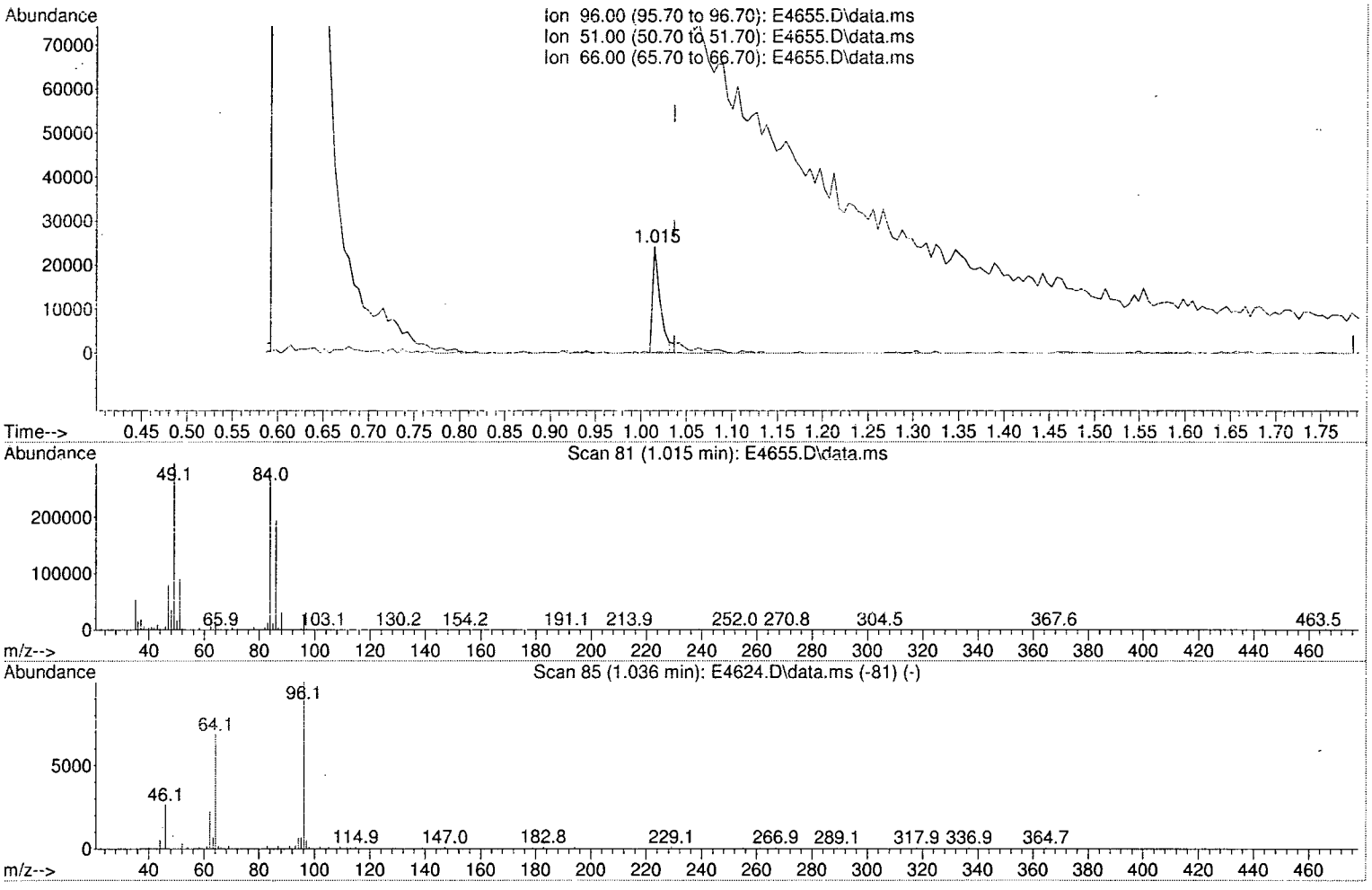
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.15# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.015min (-0.021) 17.27 ug/mL m** RS [illegible]

**response 14103**

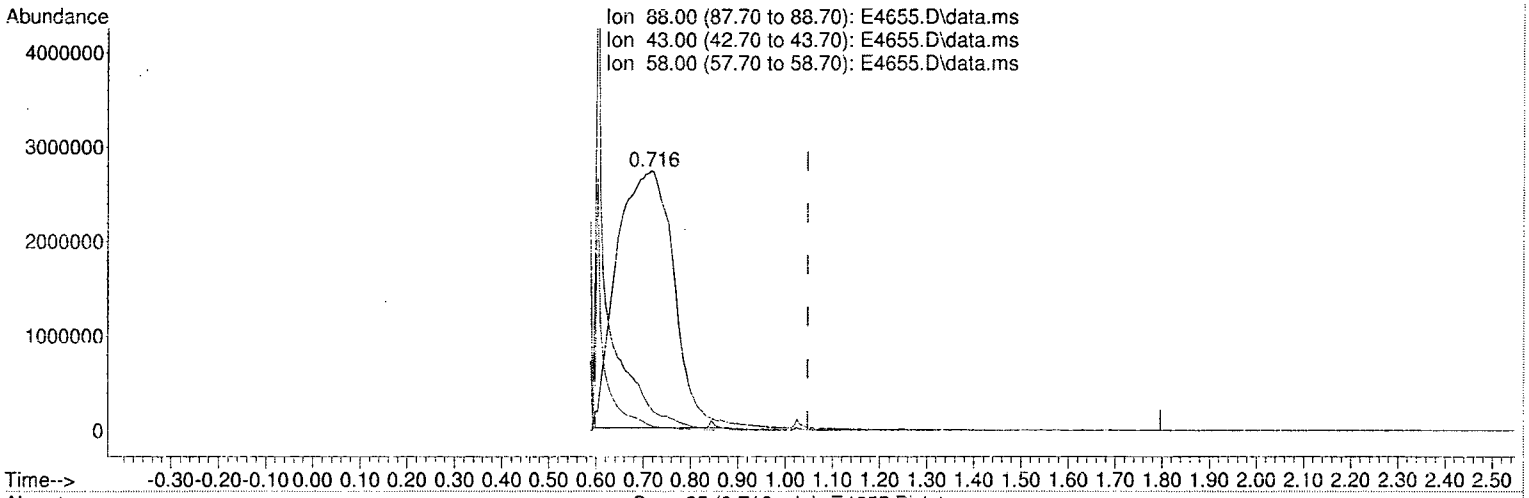
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 11.59# |
| 0.00 | 0.00 | 0.00 |

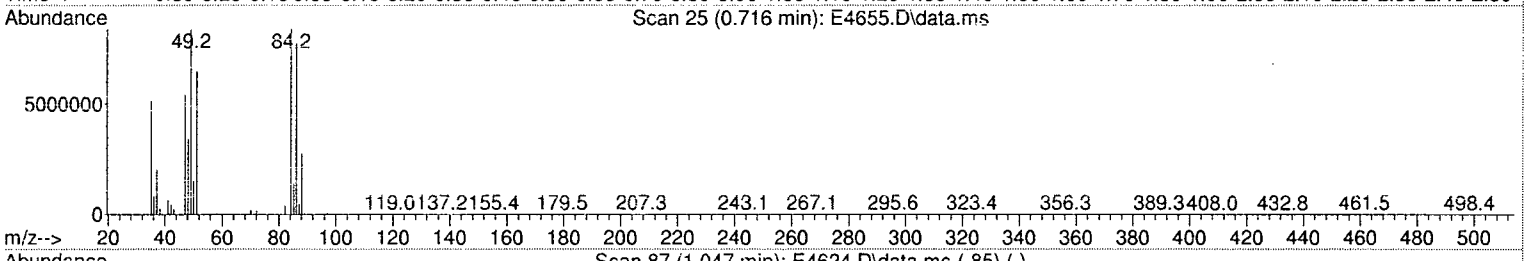
Quantitation Report (Qedit)

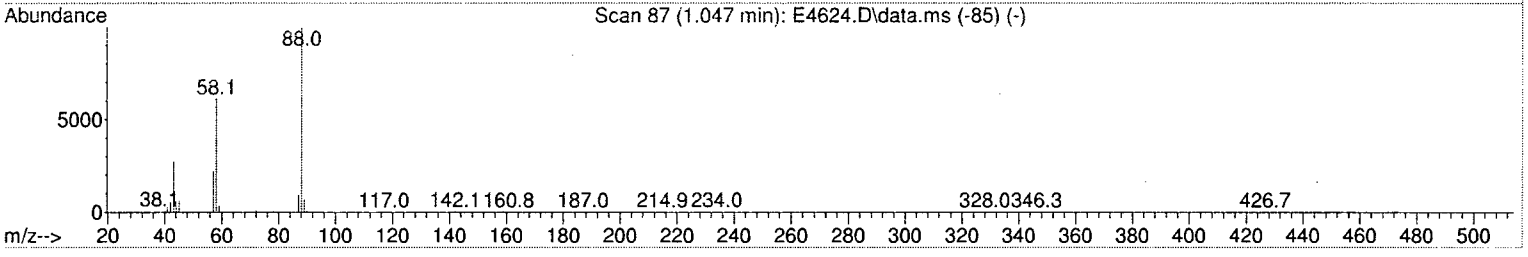
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.716min (-0.331) 4897.97 ug/mL**

**response 22805140**

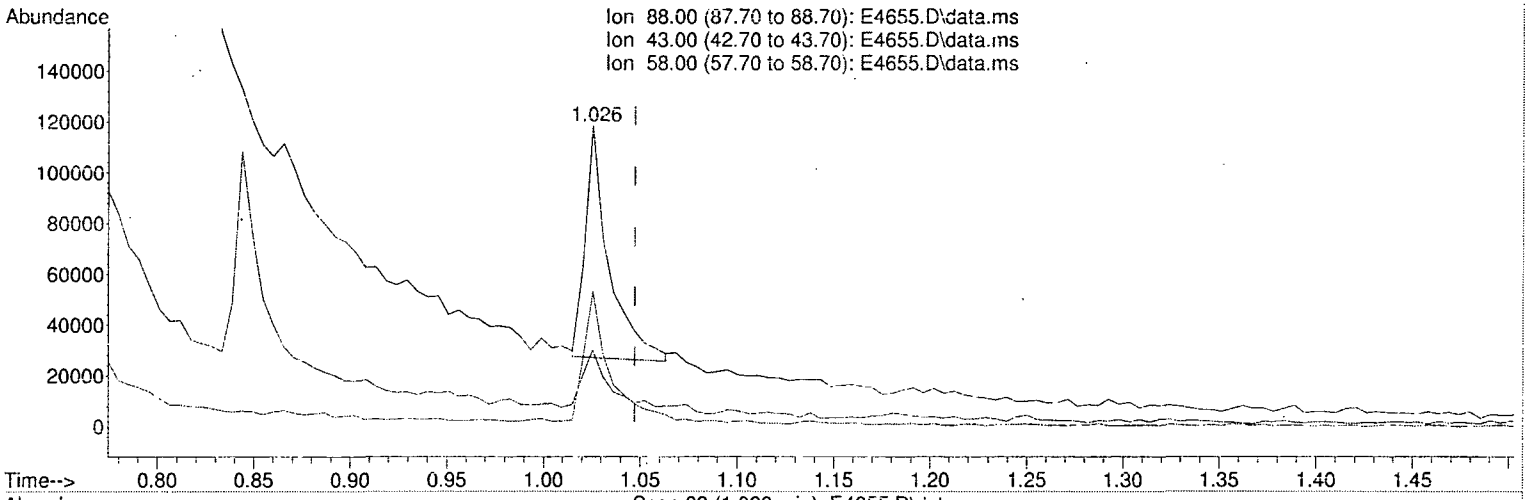
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

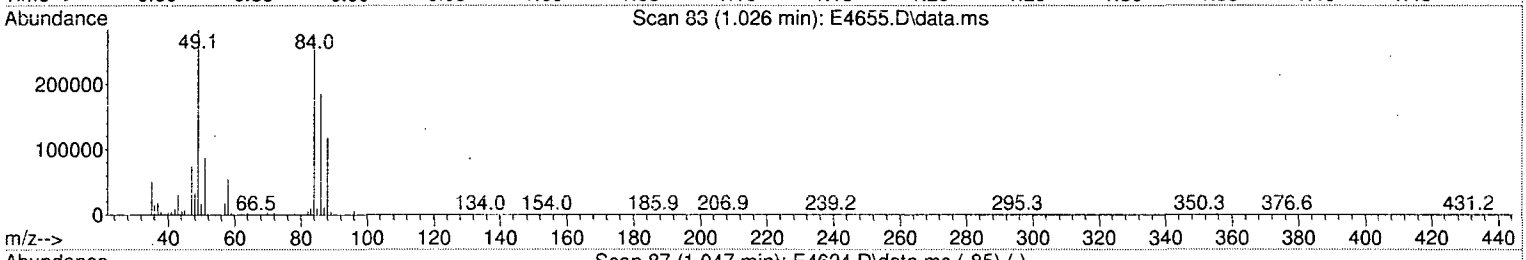
Quantitation Report (Qedit)

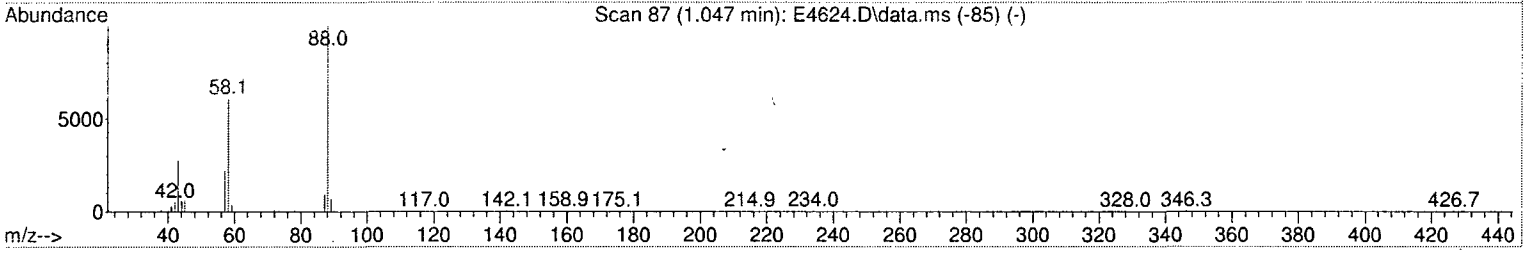
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 12:58:34 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.026min (-0.021) 16.69 ug/mL m** RS 5/25

**response 77719**

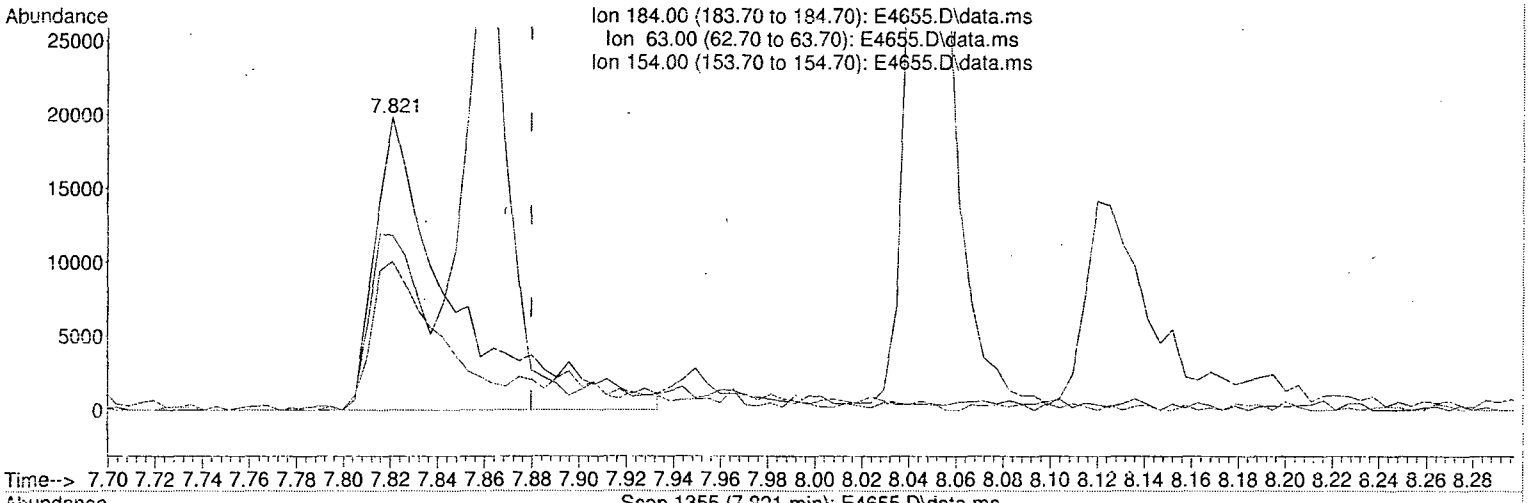
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

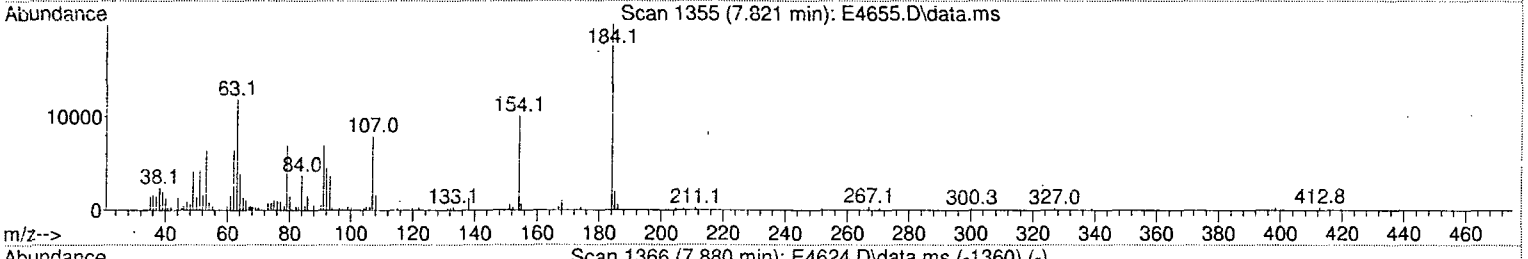
Quantitation Report (Qedit)

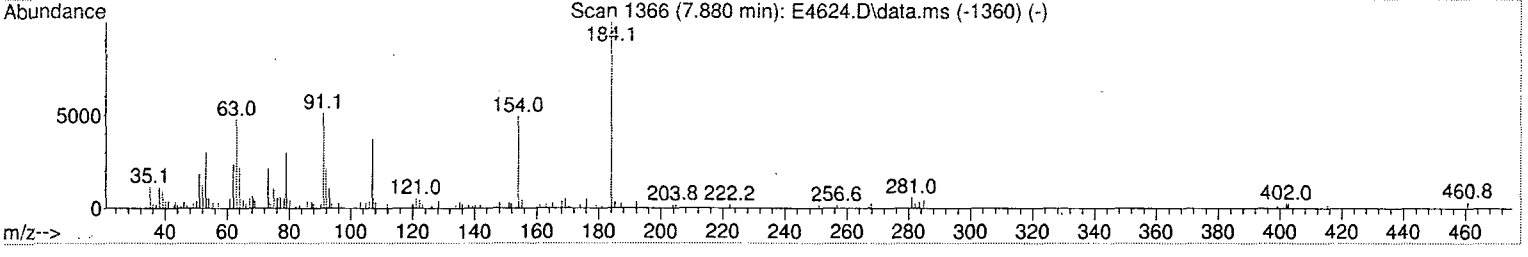
Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:10 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.821min (-0.059) 24.42 ug/mL**

**response 44789**

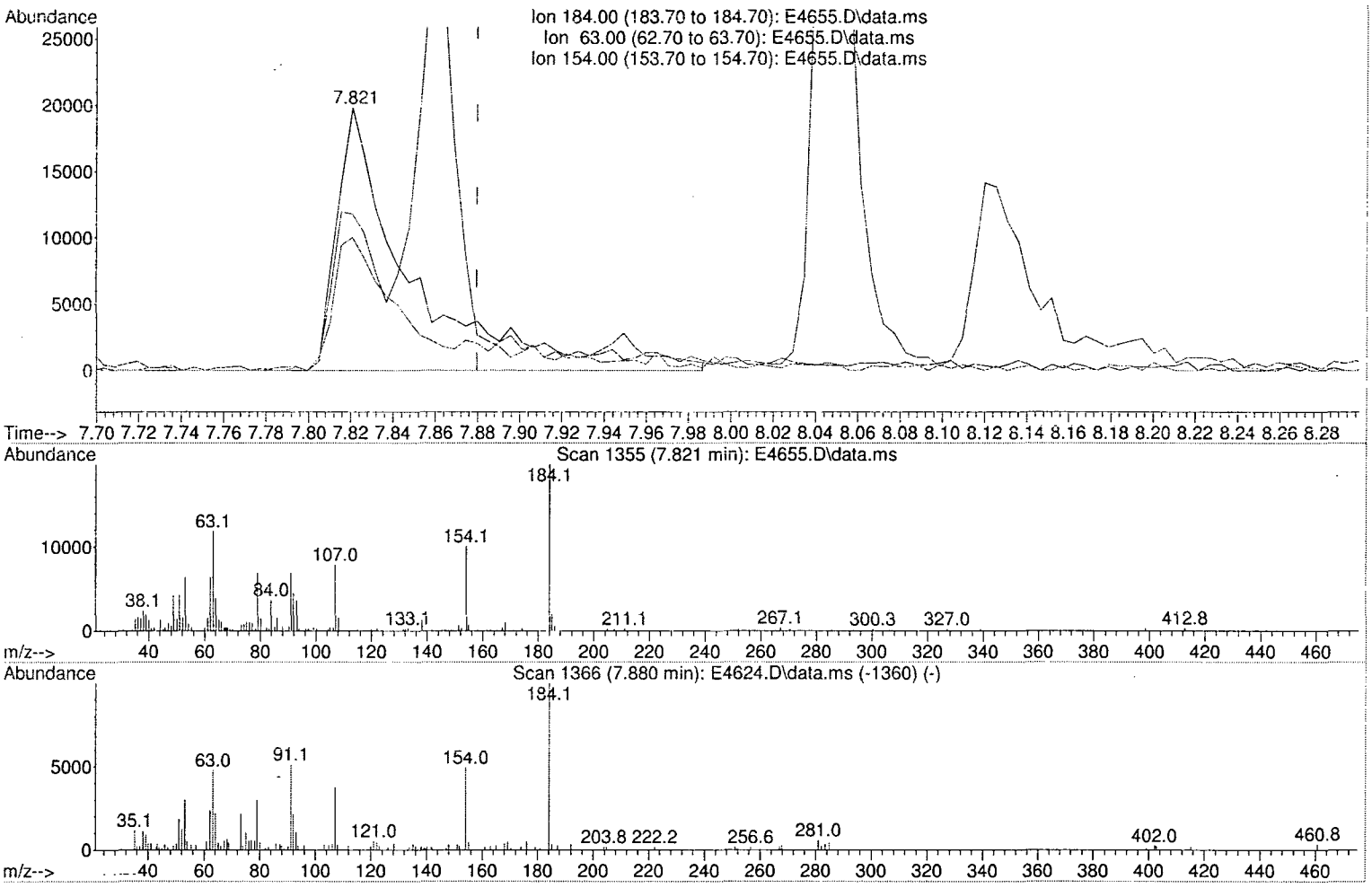
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 38.96# |
| 154.00 | 63.80 | 44.59 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4655.D
Acq On : 25 May 2012 11:28
Sample : 2E25002-CAL3
Misc : SSTD0209S
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 13:00:10 2012
Quant Results File: SOME4655.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4655.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4655.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.821min (-0.059) 26.24 ug/mL m** RS 8/24

**response 48122**

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 36.26# |
| 154.00 | 63.80 | 41.50# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1948

Lab File ID: E4671.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209T Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 2.512 | 2.732 | 0.010 | 8.8 | 40.0 |
| Phenol | 4.389 | 4.202 | 0.800 | -4.3 | 25.0 |
| Bis(2-chloroethyl)ether | 3.395 | 3.230 | 0.700 | -4.9 | 25.0 |
| 2-Chlorophenol | 3.530 | 3.337 | 0.800 | -5.5 | 25.0 |
| 2-Methylphenol | 3.321 | 3.222 | 0.700 | -3.0 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 2.914 | 2.882 | 0.010 | -1.1 | 40.0 |
| Acetophenone | 5.004 | 4.883 | 0.010 | -2.4 | 40.0 |
| 4-Methylphenol | 3.521 | 3.366 | 0.600 | -4.4 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.661 | 2.574 | 0.500 | -3.3 | 25.0 |
| Hexachloroethane | 1.517 | 1.475 | 0.300 | -2.7 | 25.0 |
| Nitrobenzene | 0.927 | 0.845 | 0.200 | -8.8 | 25.0 |
| Isophorone | 1.662 | 1.554 | 0.400 | -6.5 | 25.0 |
| 2-Nitrophenol | 0.464 | 0.450 | 0.100 | -2.9 | 25.0 |
| 2,4-Dimethylphenol | 0.932 | 0.902 | 0.200 | -3.2 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.926 | 0.881 | 0.300 | -4.8 | 25.0 |
| 2,4-Dichlorophenol | 0.729 | 0.679 | 0.200 | -6.8 | 25.0 |
| Naphthalene | 2.513 | 2.402 | 0.700 | -4.4 | 25.0 |
| 4-Chloroaniline | 0.755 | 0.908 | 0.010 | 20.3 | 40.0 |
| Hexachlorobutadiene | 0.457 | 0.423 | 0.010 | -7.4 | 40.0 |
| Caprolactam | 0.286 | 0.282 | 0.010 | -1.2 | 40.0 |
| 4-Chloro-3-methylphenol | 0.827 | 0.804 | 0.200 | -2.8 | 25.0 |
| 2-Methylnaphthalene | 1.714 | 1.647 | 0.400 | -3.9 | 25.0 |
| Hexachlorocyclopentadiene | 0.750 | 0.616 | 0.010 | -17.8 | 40.0 |
| 2,4,6-Trichlorophenol | 0.826 | 0.804 | 0.200 | -2.7 | 25.0 |
| 2,4,5-Trichlorophenol | 0.857 | 0.806 | 0.200 | -5.9 | 25.0 |
| 1,1'-Biphenyl | 3.311 | 3.161 | 0.010 | -4.5 | 40.0 |
| 2-Chloronaphthalene | 2.590 | 2.470 | 0.800 | -4.6 | 25.0 |
| 2-Nitroaniline | 0.748 | 0.714 | 0.010 | -4.5 | 40.0 |
| Dimethylphthalate | 3.309 | 3.027 | 0.010 | -8.5 | 40.0 |
| 2,6-Dinitrotoluene | 0.684 | 0.662 | 0.200 | -3.2 | 25.0 |
| Acenaphthylene | 4.203 | 3.989 | 0.900 | -5.1 | 25.0 |
| 3-Nitroaniline | 0.675 | 0.716 | 0.010 | 6.1 | 40.0 |
| Acenaphthene | 2.668 | 2.527 | 0.900 | -5.3 | 25.0 |
| 2,4-Dinitrophenol | 0.284 | 0.334 | 0.010 | 17.7 | 40.0 |
| 4-Nitrophenol | 0.478 | 0.449 | 0.010 | -6.2 | 40.0 |
| Dibenzofuran | 3.769 | 3.557 | 0.800 | -5.6 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1948

Lab File ID: E4671.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209T Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.951 | 0.928 | 0.200 | -2.4 | 25.0 |
| Diethylphthalate | 3.454 | 3.190 | 0.010 | -7.6 | 40.0 |
| Fluorene | 3.294 | 3.072 | 0.900 | -6.8 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.498 | 1.402 | 0.400 | -6.4 | 25.0 |
| 4-Nitroaniline | 0.683 | 0.742 | 0.010 | 8.6 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.322 | 0.319 | 0.010 | -1.1 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.452 | 1.365 | 0.010 | -6.0 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.161 | 1.090 | 0.010 | -6.1 | 40.0 |
| 4-Bromophenyl-phenylether | 0.439 | 0.422 | 0.100 | -4.0 | 25.0 |
| Hexachlorobenzene | 0.448 | 0.444 | 0.100 | -0.9 | 25.0 |
| Atrazine | 0.527 | 0.504 | 0.010 | -4.3 | 40.0 |
| Pentachlorophenol | 0.258 | 0.238 | 0.050 | -7.9 | 25.0 |
| Phenanthrene | 2.533 | 2.494 | 0.700 | -1.5 | 25.0 |
| Anthracene | 2.617 | 2.572 | 0.700 | -1.7 | 25.0 |
| Carbazole | 2.507 | 2.463 | 0.010 | -1.8 | 40.0 |
| Di-n-butylphthalate | 3.199 | 3.043 | 0.010 | -4.9 | 40.0 |
| Fluoranthene | 2.878 | 2.787 | 0.600 | -3.2 | 25.0 |
| Pyrene | 2.755 | 2.770 | 0.600 | 0.5 | 25.0 |
| Butylbenzylphthalate | 1.325 | 1.359 | 0.010 | 2.5 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.745 | 0.762 | 0.010 | 2.3 | 40.0 |
| Benzo (a) anthracene | 2.474 | 2.354 | 0.800 | -4.9 | 25.0 |
| Chrysene | 2.434 | 2.232 | 0.700 | -8.3 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.864 | 1.848 | 0.010 | -0.8 | 40.0 |
| Di-n-octylphthalate | 3.442 | 3.974 | 0.010 | 15.4 | 40.0 |
| Benzo (b) fluoranthene | 2.708 | 2.551 | 0.700 | -5.8 | 25.0 |
| Benzo (k) fluoranthene | 2.759 | 2.525 | 0.700 | -8.5 | 25.0 |
| Benzo (a) pyrene | 2.711 | 2.462 | 0.700 | -9.2 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.114 | 1.897 | 0.500 | -10.2 | 25.0 |
| Dibenzo (a,h) anthracene | 2.247 | 2.012 | 0.400 | -10.4 | 25.0 |
| Benzo (g,h,i) perylene | 2.350 | 2.114 | 0.500 | -10.0 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.677 | 0.653 | 0.100 | -3.4 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/25/2012 Time: 1948

Lab File ID: E4671.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209T Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.242 | 4.339 | 0.010 | 2.3 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.203 | 2.055 | 0.010 | -6.7 | 25.0 |
| 2-Chlorophenol-d4 | 3.992 | 3.791 | 0.010 | -5.0 | 25.0 |
| 4-Methylphenol-d8 | 3.432 | 3.343 | 0.010 | -2.6 | 25.0 |
| Nitrobenzene-d5 | 0.443 | 0.413 | 0.010 | -6.8 | 25.0 |
| 2-Nitrophenol-d4 | 0.501 | 0.488 | 0.010 | -2.6 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.832 | 0.813 | 0.010 | -2.3 | 25.0 |
| 4-Chloroaniline-d4 | 0.826 | 0.984 | 0.010 | 19.2 | 40.0 |
| Dimethylphthalate-d6 | 3.521 | 3.220 | 0.010 | -8.5 | 40.0 |
| Acenaphthylene-d8 | 4.338 | 4.115 | 0.010 | -5.1 | 25.0 |
| 4-Nitrophenol-d4 | 0.646 | 0.612 | 0.010 | -5.3 | 40.0 |
| Fluorene-d10 | 2.770 | 2.663 | 0.010 | -3.9 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.367 | 0.359 | 0.010 | -2.1 | 40.0 |
| Anthracene-d10 | 2.551 | 2.479 | 0.010 | -2.8 | 25.0 |
| Pyrene-d10 | 2.531 | 2.478 | 0.010 | -2.1 | 25.0 |
| Benzo (a) pyrene-d12 | 2.383 | 2.137 | 0.010 | -10.3 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42543 SDG: X0T49

05/28/12

S. Vokati
05/28/12

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.269 | 152 | 83540 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.925 | 136 | 366691 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.559 | 164 | 242914 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.808 | 188 | 447602 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.934 | 240 | 481864 | 20.0000 | ug/mL | 0.00 |
| 88) Perylene-d12 | 15.997 | 264 | 387879 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 1.020 | 96 | 18602m | 19.87 | ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 99.35% | | | |
| 7) Phenol-d5 | 3.045 | 99 | 362505 | 20.46 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 51.15% | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.013 | 67 | 171700 | 18.66 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 46.65% | | | |
| 19) 2-Chlorophenol-d4 | 3.077 | 132 | 316726 | 19.00 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 47.50% | | | |
| 20) 4-Methylphenol-d8 | 3.926 | 113 | 279250 | 19.48 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.70% | | | |
| 22) Nitrobenzene-d5 | 4.012 | 128 | 151495 | 18.64 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 46.60% | | | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 179032 | 19.48 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 48.70% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.813 | 165 | 298289 | 19.55 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 48.88% | | | |
| 37) 4-Chloroaniline-d4 | 5.139 | 131 | 360924 | 23.83 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 59.58% | | | |
| 62) Acenaphthylene-d8 | 7.297 | 160 | 999576 | 18.97 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 47.42% | | | |
| 63) 4-Nitrophenol-d4 | 8.115 | 143 | 148676 | 18.94 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 47.35% | | | |
| 64) Dimethylphthalate-d6 | 7.345 | 166 | 782211 | 18.29 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 45.73%# | | | |
| 65) Fluorene-d10 | 8.344 | 176 | 646875 | 19.23 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 48.08% | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.642 | 200 | 160695 | 19.59 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 48.98% | | | |
| 79) Anthracene-d10 | 9.882 | 188 | 1109702 | 19.44 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 48.60% | | | |
| 87) Pyrene-d10 | 11.985 | 212 | 1194254 | 19.58 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.95%# | | | |
| 96) Benzo (a) pyrene-d12 | 15.889 | 264 | 828898 | 17.94 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 44.85% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 0.871 | 79 | 504959 | 18.7541 | ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.025 | 88 | 113411m | 24.1147 | ug/mL | |
| 5) Benzaldehyde | 2.810 | 77 | 228234 | 21.7555 | ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.061 | 93 | 269870 | 19.0289 | ug/mL | 91 |
| 8) Phenol | 3.055 | 94 | 351073 | 19.1500 | ug/mL# | 68 |
| 9) 2-Chlorophenol | 3.093 | 128 | 278748 | 18.9022 | ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.707 | 45 | 240779 | 19.7785 | ug/mL# | 29 |
| 11) Aniline | 2.975 | 93 | 369406 | 23.2102 | ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.547 | 83 | 328867 | 19.1857 | ug/mL# | 100 |
| 13) Acetophenone | 3.830 | 105 | 407927 | 19.5164 | ug/mL | 92 |
| 14) 2-Methylphenol | 3.755 | 108 | 269164 | 19.4047 | ug/mL | 94 |
| 15) Hexachloroethane | 3.862 | 117 | 123259 | 19.4522 | ug/mL | 97 |

RS 8/21

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.894 | 70 | 215037 | 19.3452 ug/mL | 94 | |
| 17) 4-Methylphenol | 3.958 | 108 | 281202 | 19.1182 ug/mL | 100 | |
| 23) Nitrobenzene | 4.033 | 77 | 309779 | 18.2329 ug/mL | 91 | |
| 24) Isophorone | 4.354 | 82 | 569660 | 18.6953 ug/mL | 96 | |
| 25) 2-Nitrophenol | 4.466 | 139 | 165053 | 19.4161 ug/mL | 87 | |
| 26) 2,4-Dimethylphenol | 4.647 | 107 | 330646 | 19.3534 ug/mL | 96 | |
| 27) Bis(2-chloroethoxy)met... | 4.744 | 93 | 323222 | 19.0416 ug/mL | 97 | |
| 28) 2,4- Dichlorophenol | 4.829 | 162 | 249126 | 18.6474 ug/mL | 96 | |
| 29) Naphthalene | 4.947 | 128 | 880685 | 19.1116 ug/mL | 99 | |
| 30) 4-Chloroaniline | 5.155 | 127 | 333060 | 24.0686 ug/mL | 100 | |
| 31) Hexachlorobutadiene | 5.257 | 225 | 155039 | 18.5150 ug/mL | 99 | |
| 32) Caprolactam | 5.620 | 113 | 103417m | 19.7549 ug/mL | | RSQN |
| 33) 4-Chloro-3-methylphenol | 6.004 | 107 | 294980 | 19.4436 ug/mL | 91 | |
| 34) 2-Methylnaphthalene | 5.972 | 142 | 603922 | 19.2133 ug/mL | 99 | |
| 39) Hexachlorocyclopentadiene | 6.330 | 237 | 149741 | 16.4337 ug/mL | 100 | |
| 40) 2,4,6-Trichlorophenol | 6.517 | 196 | 195266 | 19.4582 ug/mL | 99 | |
| 41) 2,4,5-Trichlorophenol | 6.592 | 196 | 195900 | 18.8189 ug/mL | 99 | |
| 42) 1,1'-Biphenyl | 6.720 | 154 | 767758 | 19.0911 ug/mL | 95 | |
| 43) 2-Chloronaphthalene | 6.688 | 162 | 600054 | 19.0785 ug/mL | 97 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.715 | 216 | 272769 | 18.6206 ug/mL | 95 | |
| 45) 2-Nitroaniline | 6.998 | 65 | 173523 | 19.0918 ug/mL | 91 | |
| 46) Acenaphthylene | 7.313 | 152 | 968940 | 18.9829 ug/mL | 99 | |
| 47) Dimethylphthalate | 7.377 | 163 | 735223 | 18.2944 ug/mL | 98 | |
| 48) 2,6-Dinitrotoluene | 7.452 | 165 | 160730 | 19.3505 ug/mL | 94 | |
| 49) Acenaphthene | 7.602 | 153 | 613907 | 18.9473 ug/mL | 98 | |
| 50) 3-Nitroaniline | 7.661 | 138 | 173985 | 21.2244 ug/mL | 89 | |
| 51) 2,4-Dinitrophenol | 7.815 | 184 | 81179m | 23.5492 ug/mL | | RSQN |
| 52) Dibenzofuran | 7.864 | 168 | 864014 | 18.8753 ug/mL | 98 | |
| 53) Pentachlorobenzene | 9.202 | 250 | 184408 | 19.1007 ug/mL | 98 | |
| 54) 2,4-Dinitrotoluene | 8.045 | 165 | 225309 | 19.5121 ug/mL | 83 | |
| 55) 4-Nitrophenol | 8.120 | 109 | 109030 | 18.7673 ug/mL# | 85 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.195 | 232 | 158736 | 19.3114 ug/mL | 94 | |
| 57) Fluorene | 8.387 | 166 | 746130 | 18.6470 ug/mL | 98 | |
| 58) 4-Chlorophenyl-phenyle... | 8.467 | 204 | 340649 | 18.7269 ug/mL | 93 | |
| 59) Diethylphthalate | 8.494 | 149 | 774795 | 18.4704 ug/mL | 98 | |
| 60) 4-Nitroaniline | 8.619 | 138 | 180233 | 21.7109 ug/mL | 90 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.288 | 216 | 264753 | 18.7780 ug/mL | 97 | |
| 67) 4,6-Dinitro-2-methylph... | 8.653 | 198 | 142585 | 19.7766 ug/mL | 97 | |
| 68) N-Nitrosodiphenylamine... | 8.693 | 169 | 611132 | 18.8011 ug/mL | 100 | |
| 69) 4-Bromophenyl-phenylether | 9.202 | 248 | 188754 | 19.2093 ug/mL | 93 | |
| 70) Hexachlorobenzene | 9.350 | 284 | 198621 | 19.8284 ug/mL | 88 | |
| 71) Atrazine | 9.671 | 200 | 225697 | 19.1467 ug/mL | 96 | |
| 72) Pentachlorophenol | 9.705 | 266 | 106399 | 18.4260 ug/mL | 97 | |
| 73) Phenanthrene | 9.842 | 178 | 1116286 | 19.6916 ug/mL | 99 | |
| 74) Anthracene | 9.911 | 178 | 1151367 | 19.6565 ug/mL | 100 | |
| 75) Carbazole | 10.259 | 167 | 1102254 | 19.6492 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.048 | 149 | 1362212 | 19.0273 ug/mL | 99 | |
| 77) Fluoranthene | 11.688 | 202 | 1247256 | 19.3676 ug/mL | 97 | |
| 81) Pyrene | 12.008 | 202 | 1334679 | 20.1057 ug/mL | 98 | |
| 82) Butylbenzylphthalate | 13.351 | 149 | 654654 | 20.5054 ug/mL | 90 | |
| 83) 3,3'-Dichlorobenzidine | 14.020 | 252 | 367117 | 20.4578 ug/mL | 99 | |
| 84) Benzo (a) anthracene | 13.911 | 228 | 1134196 | 19.0279 ug/mL | 100 | |
| 85) Chrysene | 13.974 | 228 | 1075521 | 18.3394 ug/mL | 97 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.374 | 149 | 890654 | 19.8339 ug/mL | 98 | |
| 89) Di-n-octylphthalate | 15.289 | 149 | 1541277 | 23.0894 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.500 | 252 | 989399 | 18.8399 ug/mL | 97 | |
| 91) Benzo (k) fluoranthene | 15.534 | 252 | 979234 | 18.3037 ug/mL | 93 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.917 | 252 | 954877 | 18.1584 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.306 | 276 | 735972 | 17.9507 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.346 | 278 | 780319 | 17.9100 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.581 | 276 | 819956 | 17.9913 ug/mL | 92 |

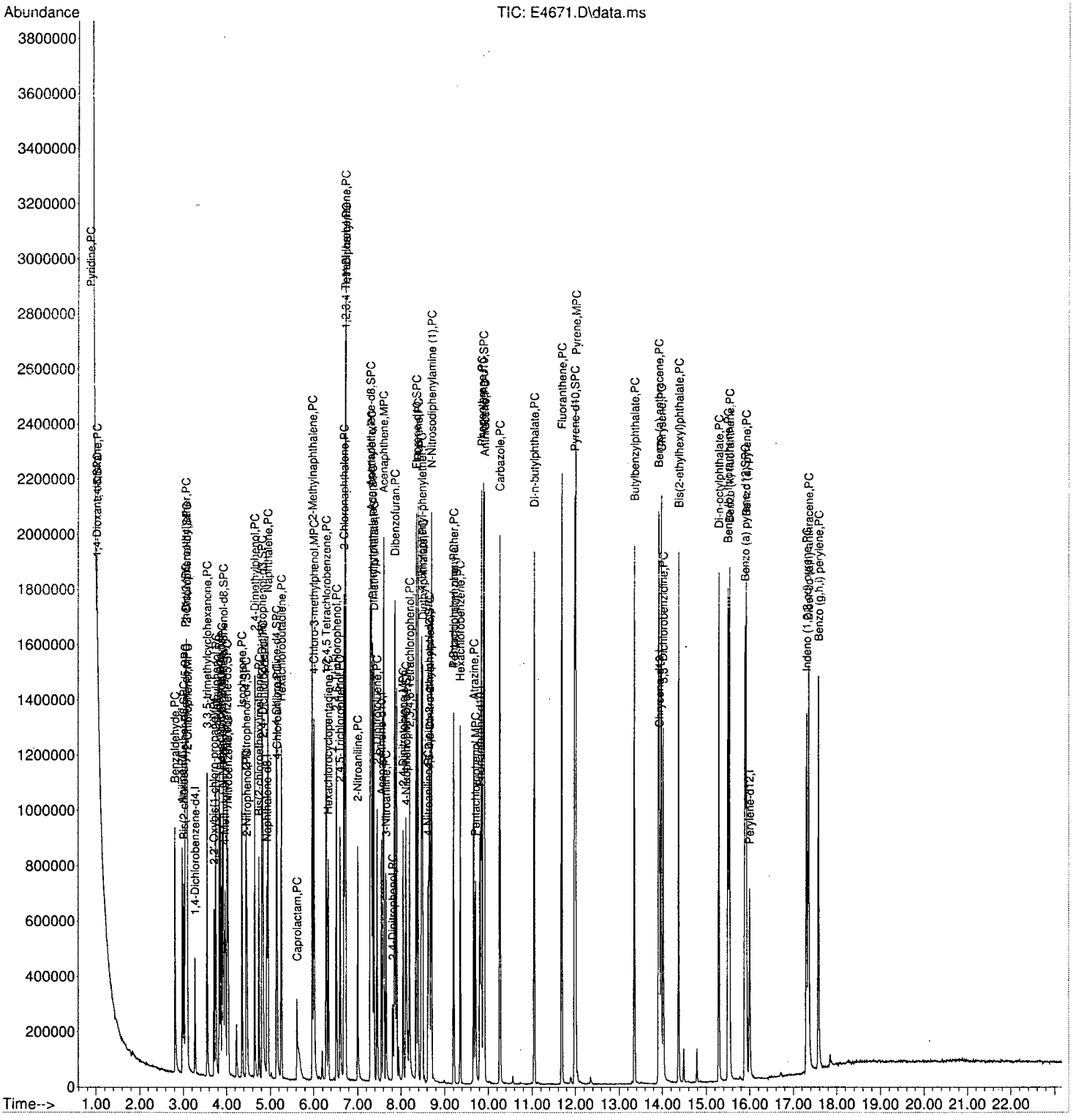
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 143 | 0.00 |
| 2 | PC | Pyridine | 6.446 | 6.045 | 6.2 | 133 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.224 | 0.223 | 0.4# | 132 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.126 | 1.358 | -20.6# | 146 | 0.00 |
| 5 | PC | Benzaldehyde | 2.512 | 2.732 | -8.8 | 138 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.395 | 3.230 | 4.9 | 138 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.242 | 4.339 | -2.3 | 159# | 0.00 |
| 8 | MPC | Phenol | 4.389 | 4.202 | 4.3 | 139 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.530 | 3.337 | 5.5 | 137 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 2.914 | 2.882 | 1.1 | 144 | 0.00 |
| 11 | PC | Aniline | 3.810 | 4.422 | -16.1 | 144 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.104 | 3.937 | 4.1 | 142 | 0.00 |
| 13 | PC | Acetophenone | 5.004 | 4.883 | 2.4 | 140 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.321 | 3.222 | 3.0 | 138 | 0.00 |
| 15 | PC | Hexachloroethane | 1.517 | 1.475 | 2.8 | 143 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.661 | 2.574 | 3.3 | 140 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.521 | 3.366 | 4.4 | 139 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.203 | 2.055 | 6.7 | 132 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 3.992 | 3.791 | 5.0 | 137 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.432 | 3.343 | 2.6 | 146 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 143 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.443 | 0.413 | 6.8 | 140 | 0.00 |
| 23 | PC | Nitrobenzene | 0.927 | 0.845 | 8.8 | 138 | 0.00 |
| 24 | PC | Isophorone | 1.662 | 1.554 | 6.5 | 137 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.464 | 0.450 | 3.0 | 146 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.932 | 0.902 | 3.2 | 144 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.926 | 0.881 | 4.9 | 144 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.729 | 0.679 | 6.9 | 139 | 0.00 |
| 29 | PC | Naphthalene | 2.513 | 2.402 | 4.4 | 143 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.755 | 0.908 | -20.3 | 147 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.457 | 0.423 | 7.4 | 134 | 0.00 |
| 32 | PC | Caprolactam | 0.286 | 0.282 | 1.4 | 134 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.827 | 0.804 | 2.8 | 144 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.714 | 1.647 | 3.9 | 141 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.501 | 0.488 | 2.6 | 145 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.832 | 0.813 | 2.3 | 142 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.826 | 0.984 | -19.1 | 146 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 146 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.750 | 0.616 | 17.9 | 119 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.826 | 0.804 | 2.7 | 149 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.857 | 0.806 | 6.0 | 141 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.311 | 3.161 | 4.5 | 145 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.590 | 2.470 | 4.6 | 144 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.206 | 1.123 | 6.9 | 140 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.748 | 0.714 | 4.5 | 144 | 0.00 |
| 46 | PC | Acenaphthylene | 4.203 | 3.989 | 5.1 | 143 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.309 | 3.027 | 8.5 | 137 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.684 | 0.662 | 3.2 | 140 | 0.00 |
| 49 | MPC | Acenaphthene | 2.668 | 2.527 | 5.3 | 142 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.675 | 0.716 | -6.1 | 136 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.284 | 0.334 | -17.6 | 169# | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:33:46 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.769 | 3.557 | 5.6 | 141 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.795 | 0.759 | 4.5 | 144 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.951 | 0.928 | 2.4 | 144 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.478 | 0.449 | 6.1 | 145 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.677 | 0.653 | 3.5 | 148 | 0.00 |
| 57 | PC | Fluorene | 3.294 | 3.072 | 6.7 | 141 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.498 | 1.402 | 6.4 | 142 | 0.00 |
| 59 | PC | Diethylphthalate | 3.454 | 3.190 | 7.6 | 135 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.683 | 0.742 | -8.6 | 143 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.161 | 1.090 | 6.1 | 141 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.338 | 4.115 | 5.1 | 143 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.646 | 0.612 | 5.3 | 141 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.521 | 3.220 | 8.5 | 138 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.770 | 2.663 | 3.9 | 146 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 141 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.322 | 0.319 | 0.9 | 147 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.452 | 1.365 | 6.0 | 140 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.439 | 0.422 | 3.9 | 144 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.448 | 0.444 | 0.9 | 144 | 0.00 |
| 71 | PC | Atrazine | 0.527 | 0.504 | 4.4 | 136 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.258 | 0.238 | 7.8 | 142 | 0.00 |
| 73 | PC | Phenanthrene | 2.533 | 2.494 | 1.5 | 145 | 0.00 |
| 74 | PC | Anthracene | 2.617 | 2.572 | 1.7 | 145 | 0.00 |
| 75 | PC | Carbazole | 2.507 | 2.463 | 1.8 | 142 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.199 | 3.043 | 4.9 | 139 | 0.00 |
| 77 | PC | Fluoranthene | 2.878 | 2.787 | 3.2 | 138 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.367 | 0.359 | 2.2 | 144 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.551 | 2.479 | 2.8 | 144 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 128 | 0.00 |
| 81 | MPC | Pyrene | 2.755 | 2.770 | -0.5 | 136 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.325 | 1.359 | -2.6 | 138 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.745 | 0.762 | -2.3 | 121 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.474 | 2.354 | 4.9 | 129 | 0.00 |
| 85 | PC | Chrysene | 2.434 | 2.232 | 8.3 | 125 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.864 | 1.848 | 0.9 | 132 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.531 | 2.478 | 2.1 | 135 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.442 | 3.974 | -15.5 | 131 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.708 | 2.551 | 5.8 | 98 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.759 | 2.525 | 8.5 | 105 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.711 | 2.462 | 9.2 | 99 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.114 | 1.897 | 10.3 | 90 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.247 | 2.012 | 10.5 | 91 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.350 | 2.114 | 10.0 | 89 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.383 | 2.137 | 10.3 | 99 | 0.00 |

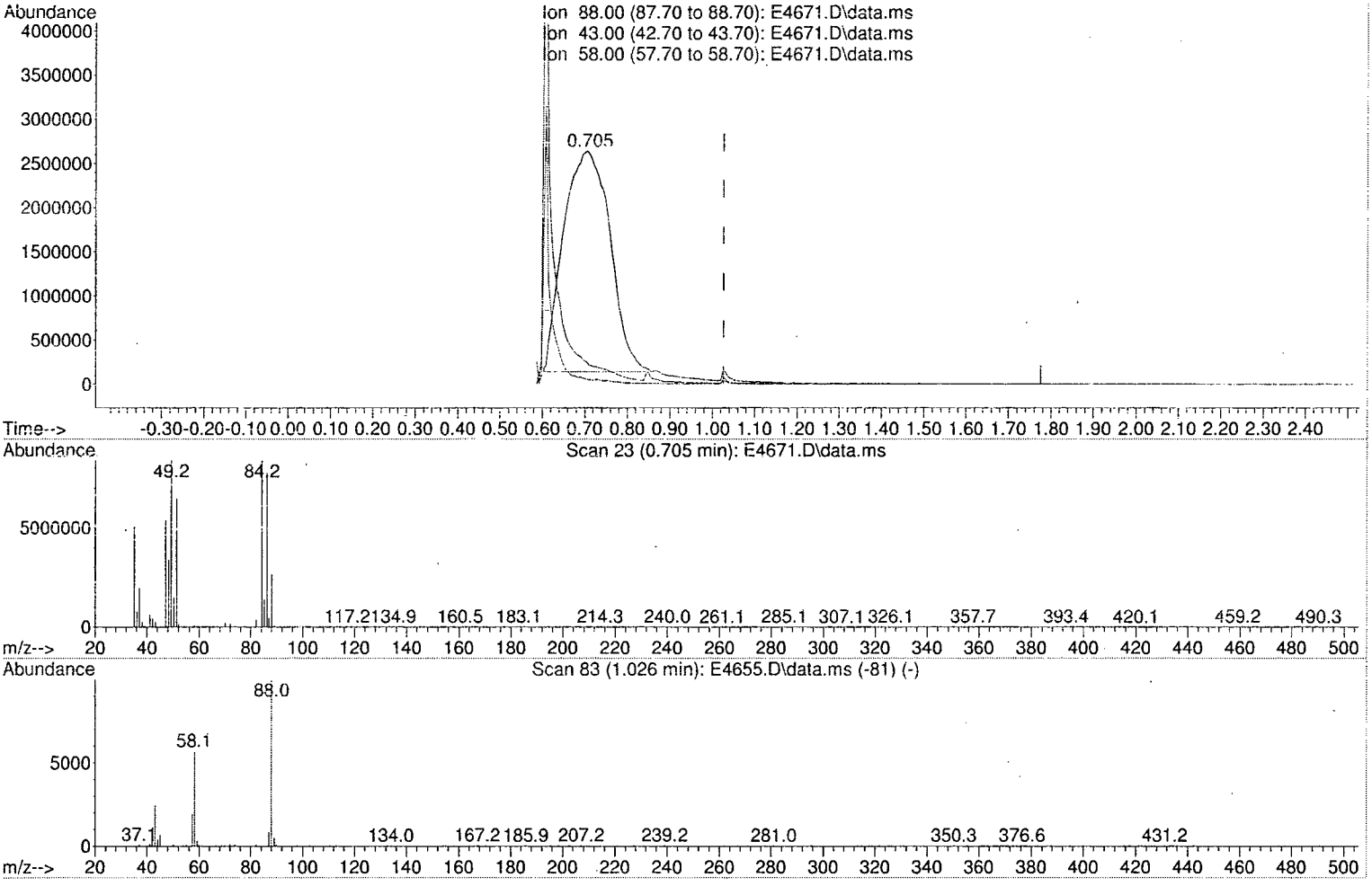
(#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.705min (-0.321) 4015.09 ug/mL**

**response 18882910**

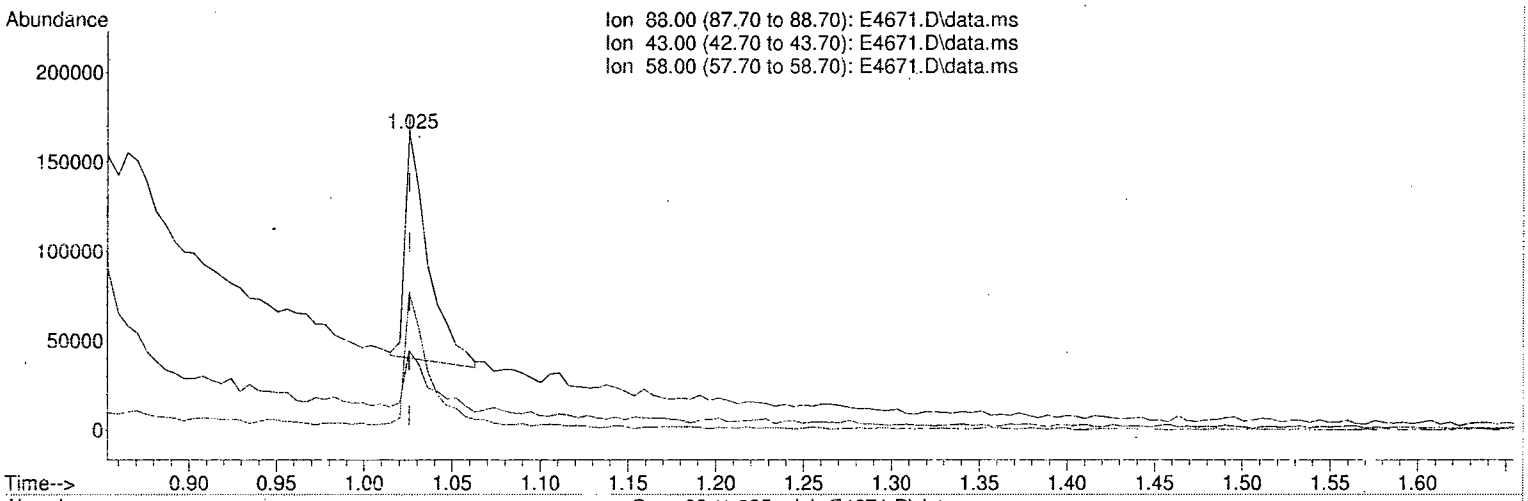
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

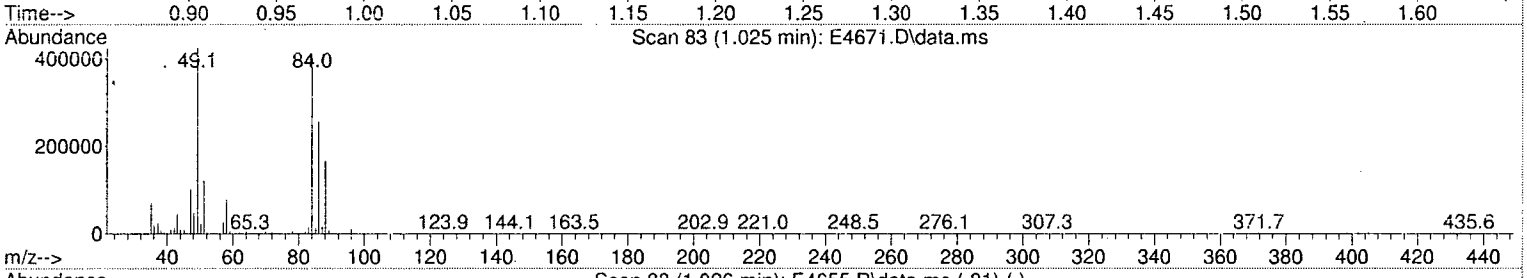
Quantitation Report (Qedit)

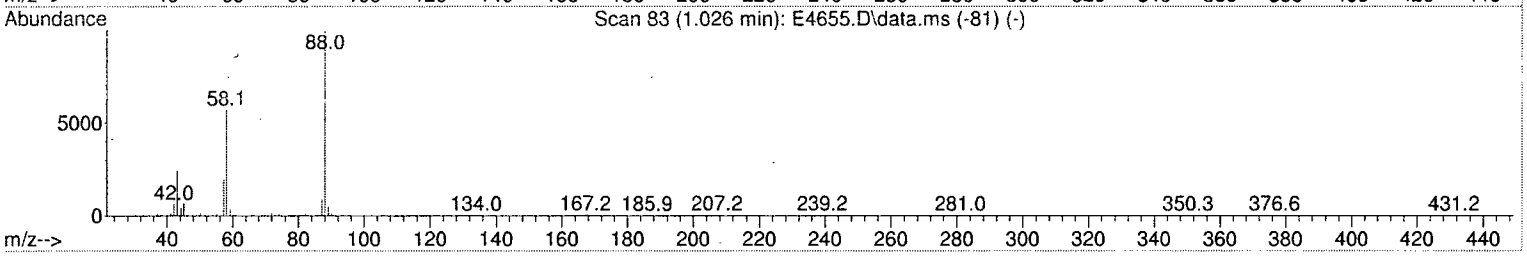
Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.025min (-0.000) 24.11 ug/mL m** RS

**response 113411**

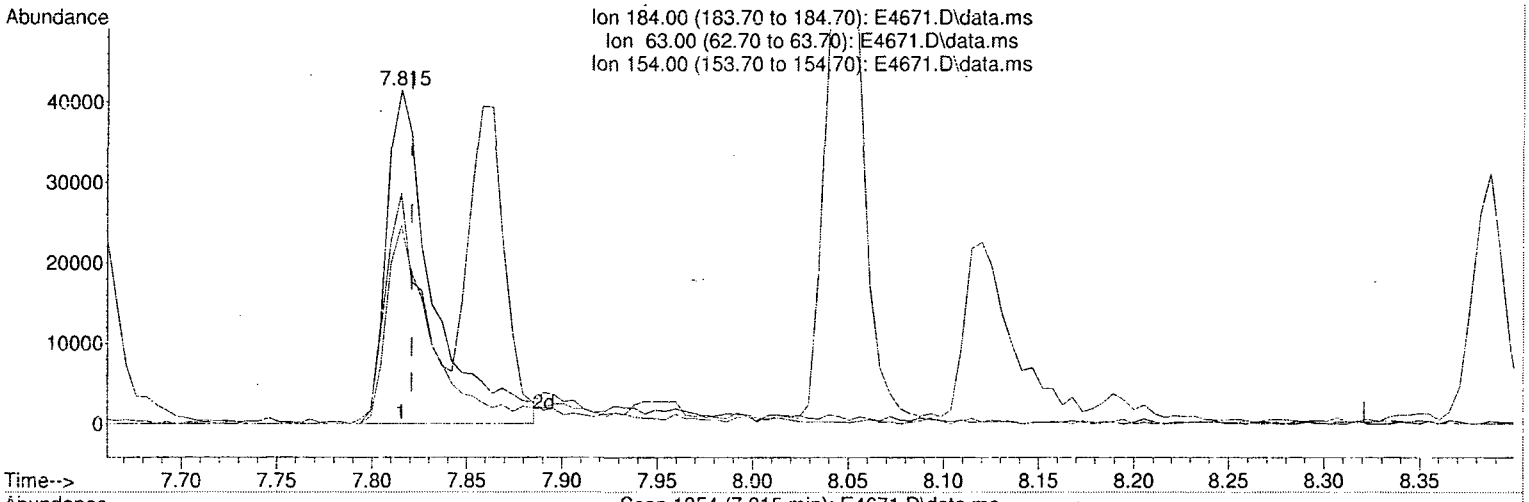
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

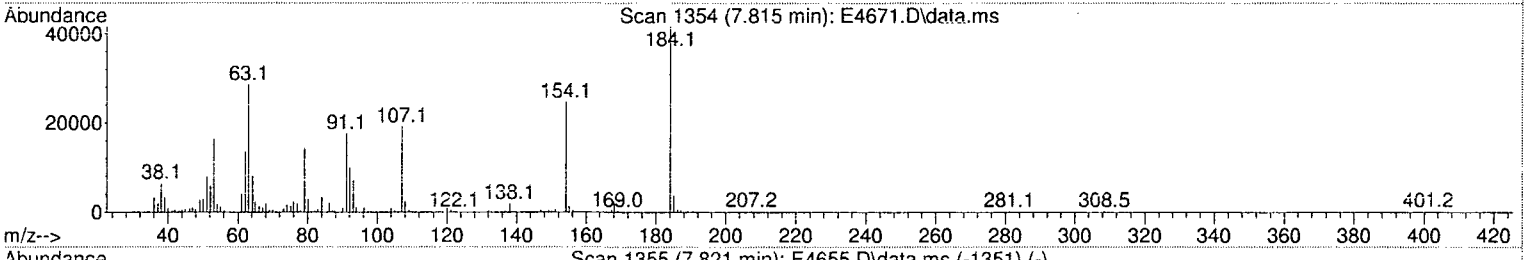
Quantitation Report (Qedit)

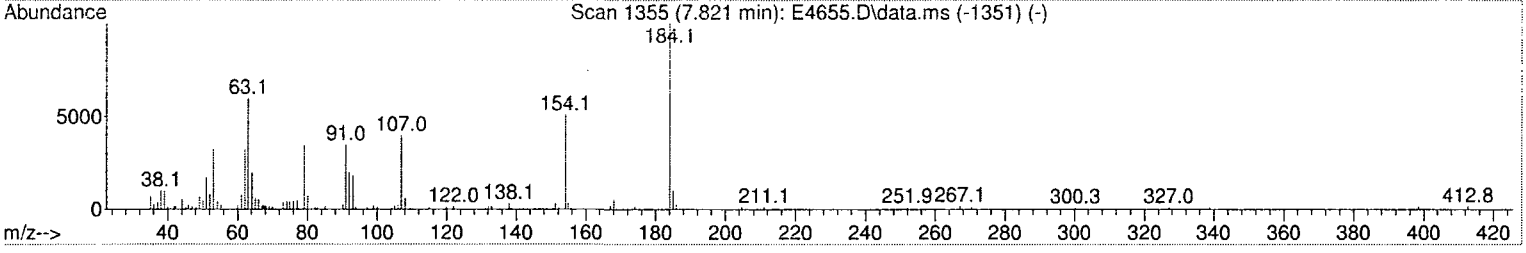
Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.815min (-0.005) 20.26 ug/mL**

**response 69854**

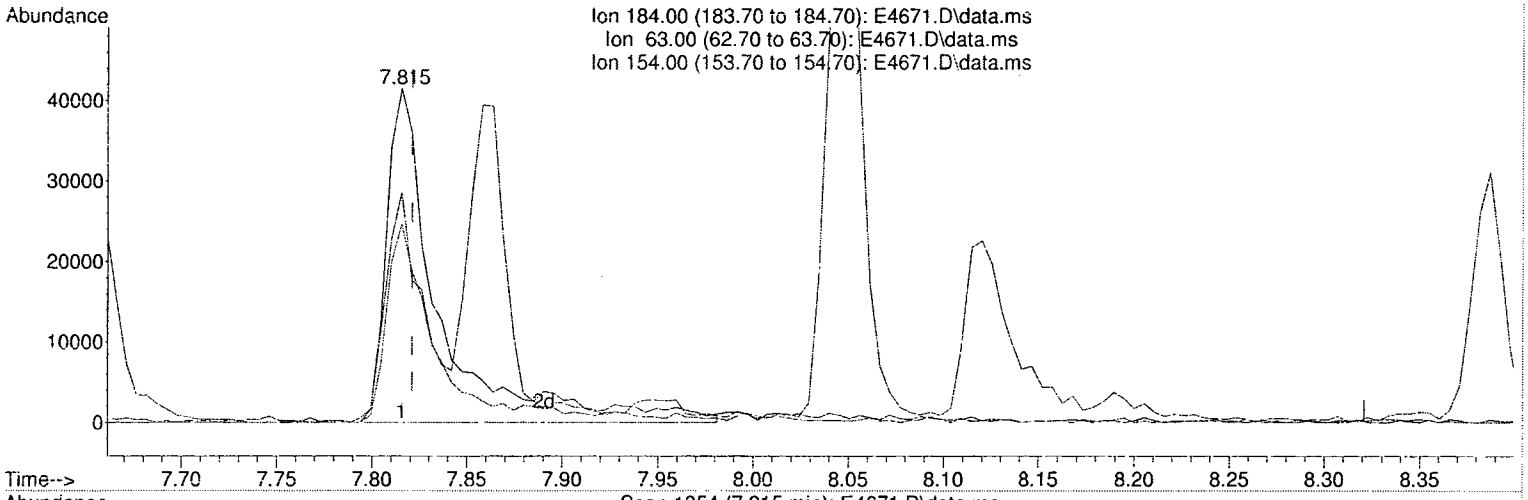
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 56.23 |
| 154.00 | 63.80 | 57.29 |
| 0.00 | 0.00 | 0.00 |

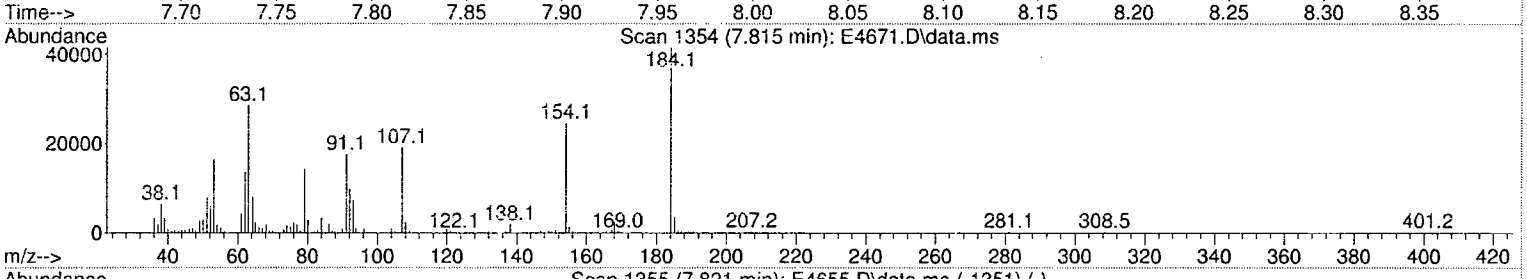
Quantitation Report (Qedit)

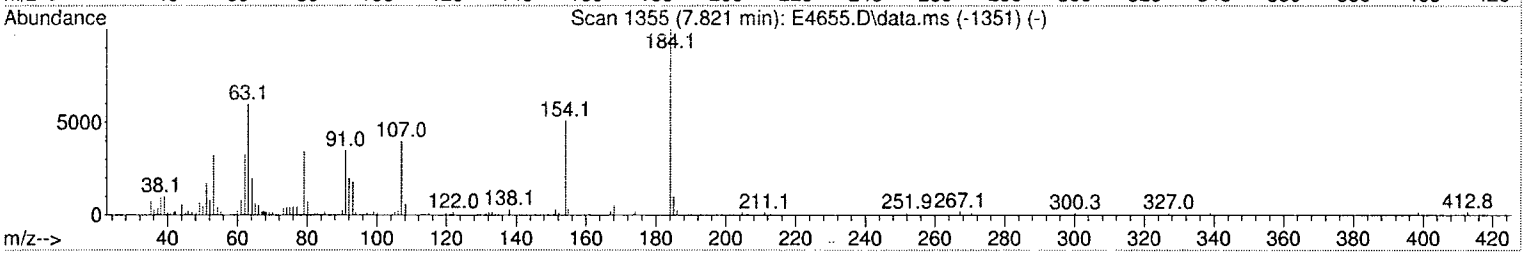
Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.815min (-0.005) 23.55 ug/mL m** RS 6/1

**response 81179**

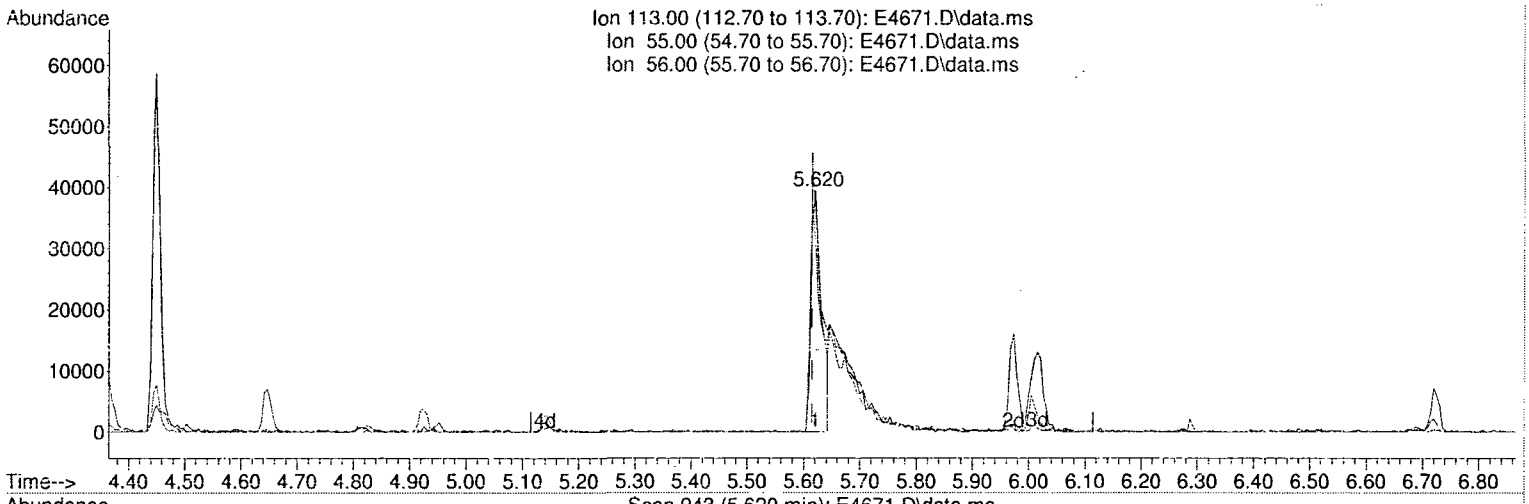
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 48.39# |
| 154.00 | 63.80 | 49.30 |
| 0.00 | 0.00 | 0.00 |

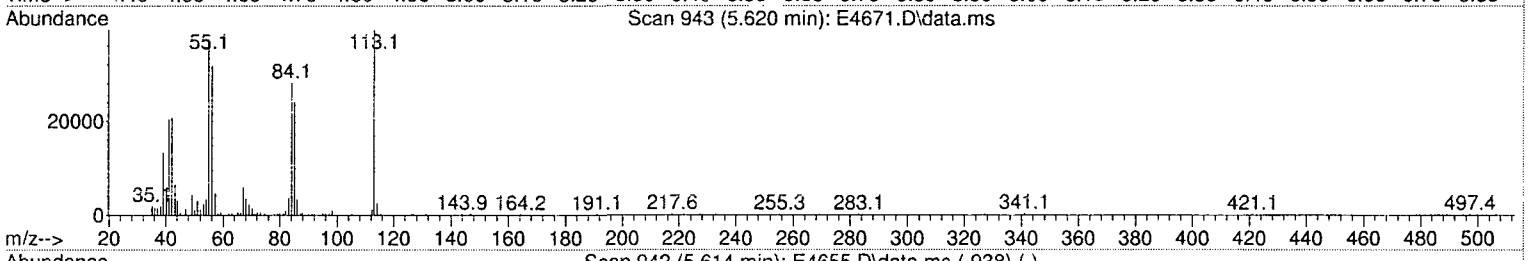
Quantitation Report (Qedit)

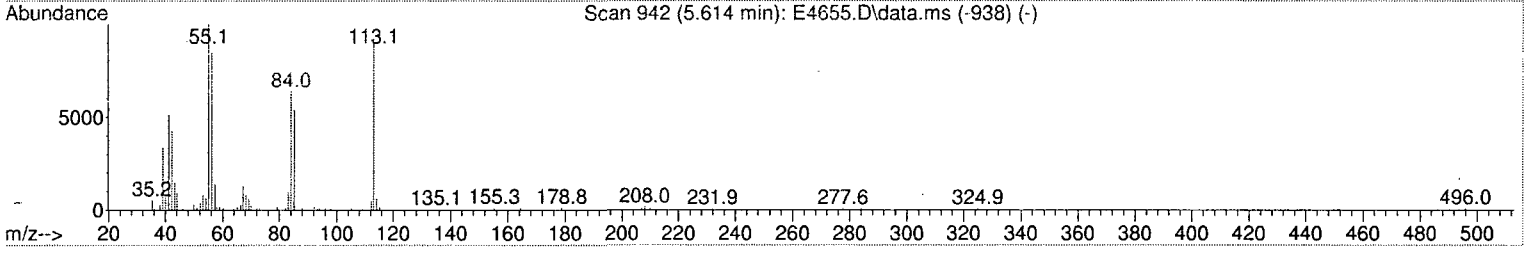
Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(32) Caprolactam (PC)**

**5.620min (+ 0.005) 9.81 ug/mL**

**response 51367**

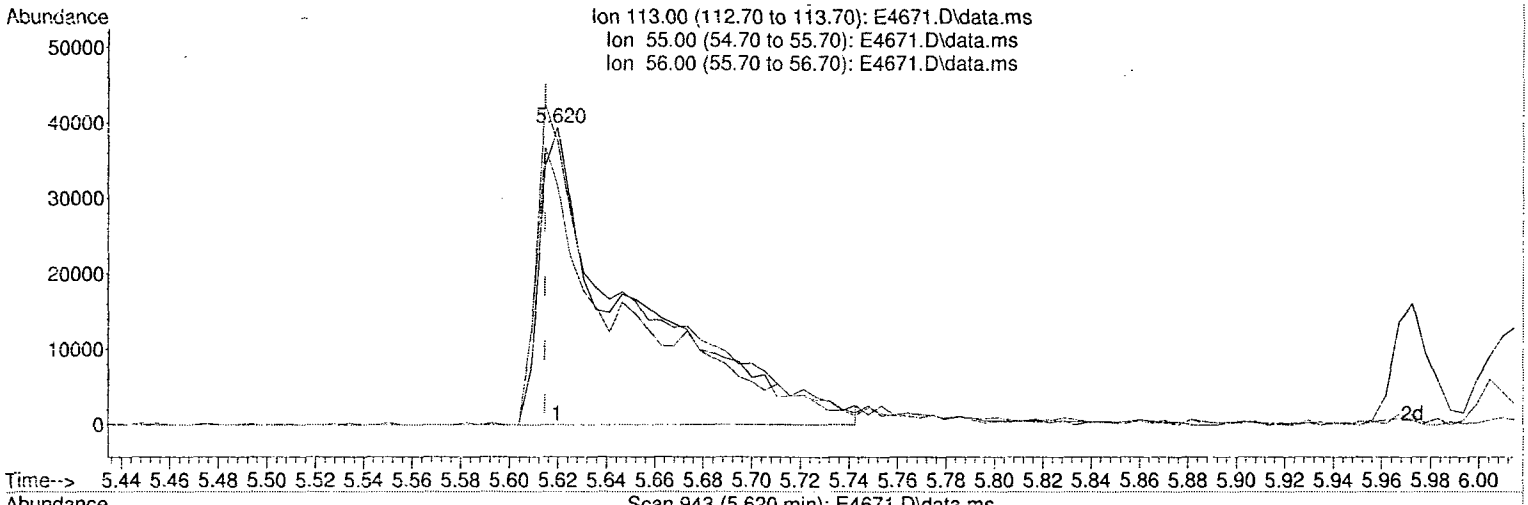
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 216.25# |
| 56.00 | 92.50 | 93.25 |
| 0.00 | 0.00 | 0.00 |

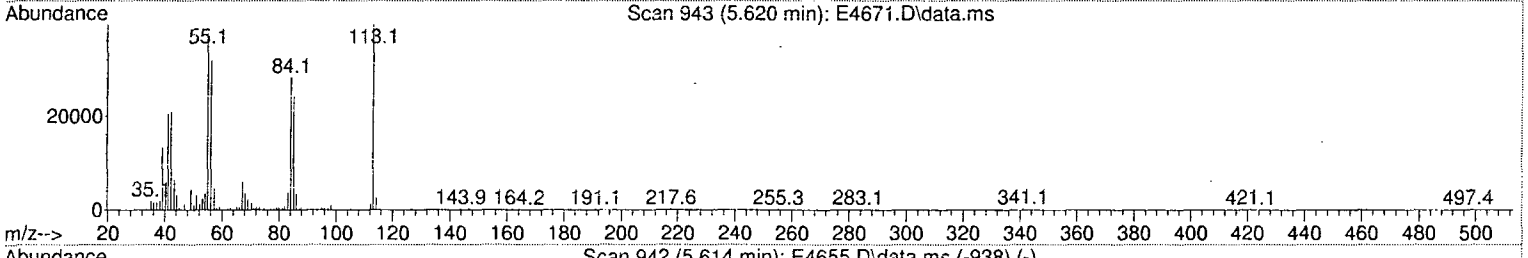
Quantitation Report (Qedit)

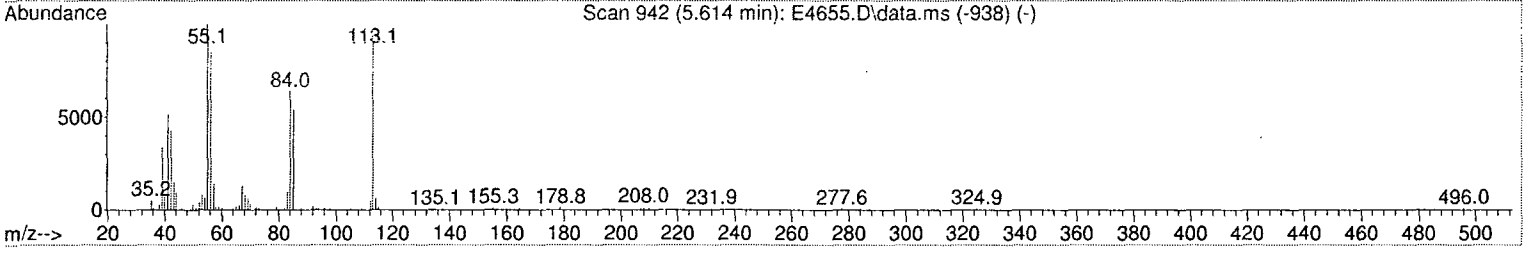
Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(32) Caprolactam (PC)**

**5.620min (+ 0.005) 19.75 ug/mL m** RS 8/21

**response 103417**

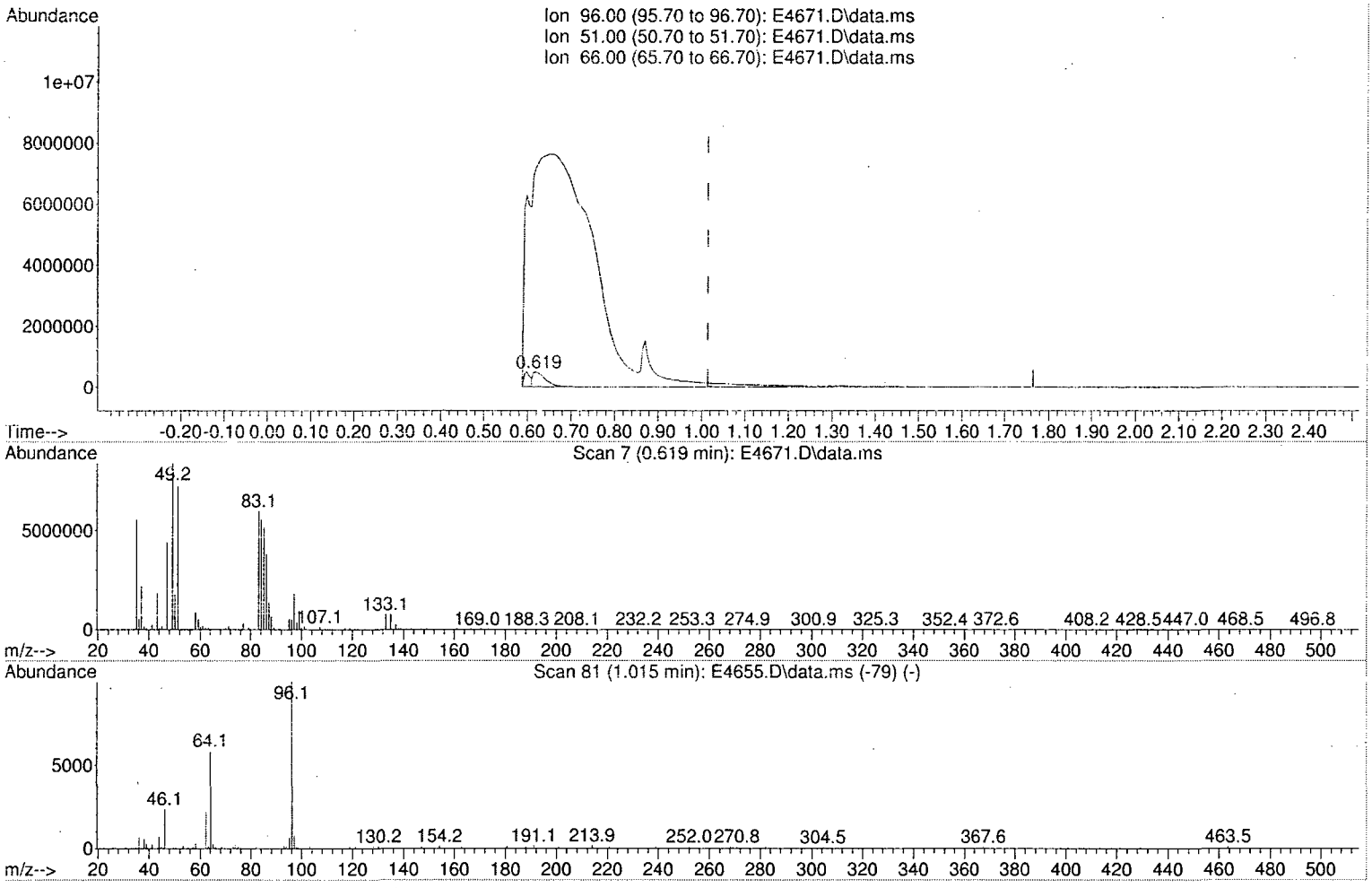
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 107.41 |
| 56.00 | 92.50 | 46.32# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.619min (-0.395) 1074.19 ug/mL**

**response 1005518**

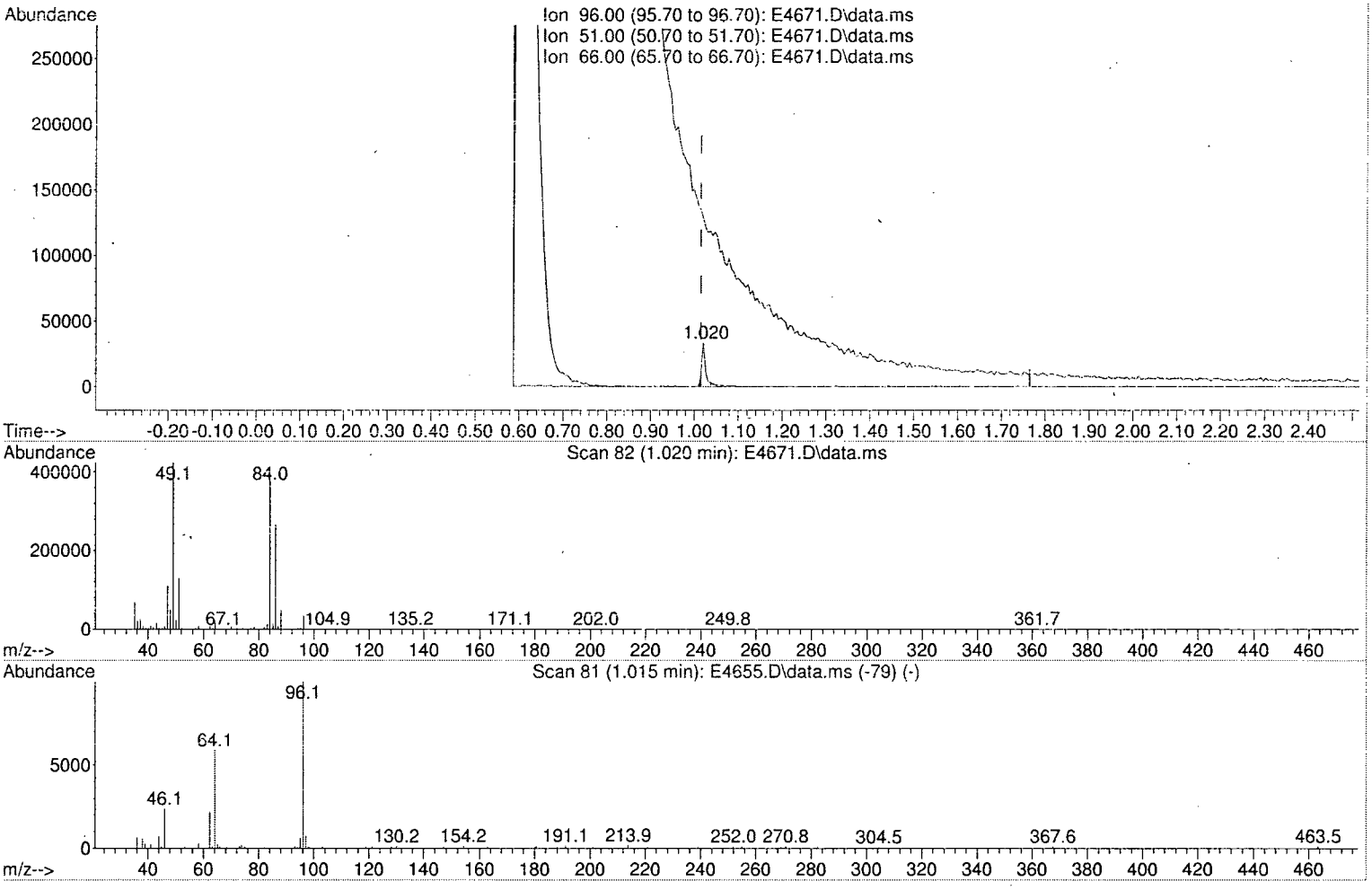
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.14# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4671.D
Acq On : 25 May 2012 19:48
Sample : 2E25002-CCV1
Misc : SSTD0209T
DataAcq Meth:CLPACQ.M

Vial: 18
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 25 20:32:37 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 14:00:59 2012
Response via : Initial Calibration




TIC: E4671.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.020min (+ 0.005) 19.87 ug/mL m** RS 5/25

**response 18602**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 7.50# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 0703

Lab File ID: E4685.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209U Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 2.512 | 2.787 | 0.010 | 11.0 | 40.0 |
| Phenol | 4.389 | 4.148 | 0.800 | -5.5 | 25.0 |
| Bis(2-chloroethyl)ether | 3.395 | 3.220 | 0.700 | -5.1 | 25.0 |
| 2-Chlorophenol | 3.530 | 3.404 | 0.800 | -3.6 | 25.0 |
| 2-Methylphenol | 3.321 | 3.164 | 0.700 | -4.7 | 25.0 |
| 2,2'-Oxybis(1-chloropropane) | 2.914 | 2.834 | 0.010 | -2.8 | 40.0 |
| Acetophenone | 5.004 | 4.692 | 0.010 | -6.2 | 40.0 |
| 4-Methylphenol | 3.521 | 3.326 | 0.600 | -5.5 | 25.0 |
| N-Nitroso-di-n-propylamine | 2.661 | 2.515 | 0.500 | -5.5 | 25.0 |
| Hexachloroethane | 1.517 | 1.454 | 0.300 | -4.2 | 25.0 |
| Nitrobenzene | 0.927 | 0.867 | 0.200 | -6.5 | 25.0 |
| Isophorone | 1.662 | 1.592 | 0.400 | -4.2 | 25.0 |
| 2-Nitrophenol | 0.464 | 0.456 | 0.100 | -1.6 | 25.0 |
| 2,4-Dimethylphenol | 0.932 | 0.894 | 0.200 | -4.1 | 25.0 |
| Bis(2-chloroethoxy)methane | 0.926 | 0.891 | 0.300 | -3.8 | 25.0 |
| 2,4-Dichlorophenol | 0.729 | 0.708 | 0.200 | -2.8 | 25.0 |
| Naphthalene | 2.513 | 2.426 | 0.700 | -3.5 | 25.0 |
| 4-Chloroaniline | 0.755 | 0.897 | 0.010 | 18.9 | 40.0 |
| Hexachlorobutadiene | 0.457 | 0.439 | 0.010 | -3.8 | 40.0 |
| Caprolactam | 0.286 | 0.274 | 0.010 | -4.0 | 40.0 |
| 4-Chloro-3-methylphenol | 0.827 | 0.754 | 0.200 | -8.8 | 25.0 |
| 2-Methylnaphthalene | 1.714 | 1.638 | 0.400 | -4.4 | 25.0 |
| Hexachlorocyclopentadiene | 0.750 | 0.784 | 0.010 | 4.5 | 40.0 |
| 2,4,6-Trichlorophenol | 0.826 | 0.829 | 0.200 | 0.3 | 25.0 |
| 2,4,5-Trichlorophenol | 0.857 | 0.845 | 0.200 | -1.4 | 25.0 |
| 1,1'-Biphenyl | 3.311 | 3.193 | 0.010 | -3.6 | 40.0 |
| 2-Chloronaphthalene | 2.590 | 2.508 | 0.800 | -3.2 | 25.0 |
| 2-Nitroaniline | 0.748 | 0.729 | 0.010 | -2.5 | 40.0 |
| Dimethylphthalate | 3.309 | 3.070 | 0.010 | -7.2 | 40.0 |
| 2,6-Dinitrotoluene | 0.684 | 0.659 | 0.200 | -3.6 | 25.0 |
| Acenaphthylene | 4.203 | 4.015 | 0.900 | -4.5 | 25.0 |
| 3-Nitroaniline | 0.675 | 0.738 | 0.010 | 9.3 | 40.0 |
| Acenaphthene | 2.668 | 2.483 | 0.900 | -6.9 | 25.0 |
| 2,4-Dinitrophenol | 0.284 | 0.231 | 0.010 | -18.7 | 40.0 |
| 4-Nitrophenol | 0.478 | 0.476 | 0.010 | -0.5 | 40.0 |
| Dibenzofuran | 3.769 | 3.592 | 0.800 | -4.7 | 25.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 0703

Lab File ID: E4685.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209U Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.951 | 0.908 | 0.200 | -4.5 | 25.0 |
| Diethylphthalate | 3.454 | 3.180 | 0.010 | -7.9 | 40.0 |
| Fluorene | 3.294 | 3.076 | 0.900 | -6.6 | 25.0 |
| 4-Chlorophenyl-phenylether | 1.498 | 1.419 | 0.400 | -5.2 | 25.0 |
| 4-Nitroaniline | 0.683 | 0.719 | 0.010 | 5.2 | 40.0 |
| 4,6-Dinitro-2-methylphenol | 0.322 | 0.310 | 0.010 | -3.6 | 40.0 |
| N-Nitrosodiphenylamine (1) | 1.452 | 1.418 | 0.010 | -2.4 | 40.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.161 | 1.130 | 0.010 | -2.7 | 40.0 |
| 4-Bromophenyl-phenylether | 0.439 | 0.428 | 0.100 | -2.5 | 25.0 |
| Hexachlorobenzene | 0.448 | 0.445 | 0.100 | -0.6 | 25.0 |
| Atrazine | 0.527 | 0.494 | 0.010 | -6.2 | 40.0 |
| Pentachlorophenol | 0.258 | 0.266 | 0.050 | 3.0 | 25.0 |
| Phenanthrene | 2.533 | 2.409 | 0.700 | -4.9 | 25.0 |
| Anthracene | 2.617 | 2.470 | 0.700 | -5.6 | 25.0 |
| Carbazole | 2.507 | 2.414 | 0.010 | -3.7 | 40.0 |
| Di-n-butylphthalate | 3.199 | 3.009 | 0.010 | -5.9 | 40.0 |
| Fluoranthene | 2.878 | 2.674 | 0.600 | -7.1 | 25.0 |
| Pyrene | 2.755 | 2.751 | 0.600 | -0.2 | 25.0 |
| Butylbenzylphthalate | 1.325 | 1.359 | 0.010 | 2.5 | 40.0 |
| 3,3'-Dichlorobenzidine | 0.745 | 0.788 | 0.010 | 5.8 | 40.0 |
| Benzo (a) anthracene | 2.474 | 2.357 | 0.800 | -4.7 | 25.0 |
| Chrysene | 2.434 | 2.194 | 0.700 | -9.8 | 25.0 |
| Bis(2-ethylhexyl)phthalate | 1.864 | 1.948 | 0.010 | 4.5 | 40.0 |
| Di-n-octylphthalate | 3.442 | 3.592 | 0.010 | 4.4 | 40.0 |
| Benzo (b) fluoranthene | 2.708 | 2.550 | 0.700 | -5.8 | 25.0 |
| Benzo (k) fluoranthene | 2.759 | 2.498 | 0.700 | -9.4 | 25.0 |
| Benzo (a) pyrene | 2.711 | 2.452 | 0.700 | -9.6 | 25.0 |
| Indeno (1,2,3-cd) pyrene | 2.114 | 2.025 | 0.500 | -4.2 | 25.0 |
| Dibenzo (a,h) anthracene | 2.247 | 2.083 | 0.400 | -7.3 | 25.0 |
| Benzo (g,h,i) perylene | 2.350 | 2.160 | 0.500 | -8.1 | 25.0 |
| 2,3,4,6-Tetrachlorophenol | 0.677 | 0.666 | 0.100 | -1.6 | 25.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 0703

Lab File ID: E4685.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209U Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.242 | 3.900 | 0.010 | -8.1 | 25.0 |
| Bis(2-chloroethyl)ether-d8 | 2.203 | 2.153 | 0.010 | -2.3 | 25.0 |
| 2-Chlorophenol-d4 | 3.992 | 3.897 | 0.010 | -2.4 | 25.0 |
| 4-Methylphenol-d8 | 3.432 | 3.259 | 0.010 | -5.1 | 25.0 |
| Nitrobenzene-d5 | 0.443 | 0.426 | 0.010 | -3.8 | 25.0 |
| 2-Nitrophenol-d4 | 0.501 | 0.511 | 0.010 | 2.0 | 25.0 |
| 2,4-Dichlorophenol-d3 | 0.832 | 0.808 | 0.010 | -2.9 | 25.0 |
| 4-Chloroaniline-d4 | 0.826 | 0.991 | 0.010 | 20.0 | 40.0 |
| Dimethylphthalate-d6 | 3.521 | 3.244 | 0.010 | -7.9 | 40.0 |
| Acenaphthylene-d8 | 4.338 | 4.160 | 0.010 | -4.1 | 25.0 |
| 4-Nitrophenol-d4 | 0.646 | 0.628 | 0.010 | -2.9 | 40.0 |
| Fluorene-d10 | 2.770 | 2.632 | 0.010 | -5.0 | 25.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.367 | 0.358 | 0.010 | -2.3 | 40.0 |
| Anthracene-d10 | 2.551 | 2.410 | 0.010 | -5.5 | 25.0 |
| Pyrene-d10 | 2.531 | 2.499 | 0.010 | -1.3 | 25.0 |
| Benzo (a) pyrene-d12 | 2.383 | 2.123 | 0.010 | -10.9 | 25.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

ORIGINAL LOCATED IN
CASE: 42543 SDG: X0T49

05/31/12
S. Vokati
05/31/12

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 82133 | 20.0000 ug/mL | -0.03 |
| 21) Naphthalene-d8 | 4.893 | 136 | 346159 | 20.0000 ug/mL | -0.03 |
| 38) Acenaphthene-d10 | 7.527 | 164 | 217953 | 20.0000 ug/mL | -0.03 |
| 66) Phenanthrene-d10 | 9.773 | 188 | 387598 | 20.0000 ug/mL | -0.03 |
| 80) Chrysene-d12 | 13.900 | 240 | 396968 | 20.0000 ug/mL | -0.03 |
| 88) Perylene-d12 | 15.963 | 264 | 358299 | 20.0000 ug/mL | -0.03 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.010 | 96 | 22528m | 24.48 ug/mL | -0.01 RS RW |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 122.40% | | |
| 7) Phenol-d5 | 3.018 | 99 | 320325 | 18.39 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 45.98% | | |
| 18) Bis(2-chloroethyl)ethe... | 2.986 | 67 | 176801 | 19.54 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 48.85% | | |
| 19) 2-Chlorophenol-d4 | 3.050 | 132 | 320055 | 19.52 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 48.80% | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 267648 | 18.99 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 47.47% | | |
| 22) Nitrobenzene-d5 | 3.985 | 128 | 147594 | 19.24 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 48.10% | | |
| 35) 2-Nitrophenol-d4 | 4.423 | 143 | 176911 | 20.40 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 51.00% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.786 | 165 | 279820 | 19.42 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 48.55% | | |
| 37) 4-Chloroaniline-d4 | 5.112 | 131 | 343085 | 24.00 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 60.00% | | |
| 62) Acenaphthylene-d8 | 7.265 | 160 | 906785 | 19.18 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 47.95% | | |
| 63) 4-Nitrophenol-d4 | 8.083 | 143 | 136838 | 19.43 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 48.58% | | |
| 64) Dimethylphthalate-d6 | 7.313 | 166 | 707119 | 18.43 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 46.08%# | | |
| 65) Fluorene-d10 | 8.312 | 176 | 573694 | 19.01 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 47.53% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.613 | 200 | 138879 | 19.55 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 48.88% | | |
| 79) Anthracene-d10 | 9.848 | 188 | 934294 | 18.90 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 47.25% | | |
| 87) Pyrene-d10 | 11.951 | 212 | 992023 | 19.74 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 49.35%# | | |
| 96) Benzo (a) pyrene-d12 | 15.855 | 264 | 760649 | 17.82 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 44.55% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.860 | 79 | 557741 | 21.0692 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.015 | 88 | 111053m | 24.0178 ug/mL | RS RW |
| 5) Benzaldehyde | 2.783 | 77 | 228872 | 22.1900 ug/mL | 97 |
| 6) Bis(2-chloroethyl)ether | 3.034 | 93 | 264506 | 18.9702 ug/mL | 87 |
| 8) Phenol | 3.034 | 94 | 340663 | 18.9005 ug/mL# | 65 |
| 9) 2-Chlorophenol | 3.066 | 128 | 279542 | 19.2808 ug/mL | 98 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.681 | 45 | 232764 | 19.4477 ug/mL# | 31 |
| 11) Aniline | 2.954 | 93 | 379467 | 24.2508 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.520 | 83 | 312787 | 18.5602 ug/mL# | 100 |
| 13) Acetophenone | 3.804 | 105 | 385341 | 18.7516 ug/mL | 92 |
| 14) 2-Methylphenol | 3.723 | 108 | 259889 | 19.0570 ug/mL | 95 |
| 15) Hexachloroethane | 3.836 | 117 | 119390 | 19.1644 ug/mL | 98 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|---|
| 16) | N-Nitroso-di-n-propyla... | 3.868 | 70 | 206537 | 18.8989 ug/mL | 93 | |
| 17) | 4-Methylphenol | 3.937 | 108 | 273206 | 18.8928 ug/mL | 97 | |
| 23) | Nitrobenzene | 4.007 | 77 | 300083 | 18.7098 ug/mL | 92 | |
| 24) | Isophorone | 4.327 | 82 | 551102 | 19.1590 ug/mL | 96 | |
| 25) | 2-Nitrophenol | 4.439 | 139 | 157850 | 19.6702 ug/mL | 90 | |
| 26) | 2,4-Dimethylphenol | 4.621 | 107 | 309464 | 19.1880 ug/mL | 96 | |
| 27) | Bis(2-chloroethoxy)met... | 4.712 | 93 | 308331 | 19.2417 ug/mL | 98 | |
| 28) | 2,4- Dichlorophenol | 4.803 | 162 | 245146 | 19.4378 ug/mL | 96 | |
| 29) | Naphthalene | 4.920 | 128 | 839647 | 19.3018 ug/mL | 100 | |
| 30) | 4-Chloroaniline | 5.123 | 127 | 310596 | 23.7766 ug/mL | 98 | |
| 31) | Hexachlorobutadiene | 5.230 | 225 | 152017 | 19.2309 ug/mL | 99 | |
| 32) | Caprolactam | 5.609 | 113 | 101435m | 20.5255 ug/mL | | RS RW |
| 33) | 4-Chloro-3-methylphenol | 5.972 | 107 | 261144 | 18.2343 ug/mL | 88 | |
| 34) | 2-Methylnaphthalene | 5.940 | 142 | 567121 | 19.1127 ug/mL | 99 | |
| 39) | Hexachlorocyclopentadiene | 6.304 | 237 | 170791 | 20.8905 ug/mL | 100 | |
| 40) | 2,4,6-Trichlorophenol | 6.485 | 196 | 180604 | 20.0583 ug/mL | 98 | |
| 41) | 2,4,5-Trichlorophenol | 6.560 | 196 | 184205 | 19.7220 ug/mL | 99 | |
| 42) | 1,1'-Biphenyl | 6.694 | 154 | 695897 | 19.2859 ug/mL | 96 | |
| 43) | 2-Chloronaphthalene | 6.656 | 162 | 546580 | 19.3686 ug/mL | 97 | |
| 44) | 1,2,3,4-Tetrachloroben... | 6.683 | 216 | 251593 | 19.1420 ug/mL | 95 | |
| 45) | 2-Nitroaniline | 6.966 | 65 | 158978 | 19.4947 ug/mL | 88 | |
| 46) | Acenaphthylene | 7.281 | 152 | 874983 | 19.1054 ug/mL | 99 | |
| 47) | Dimethylphthalate | 7.345 | 163 | 669121 | 18.5563 ug/mL | 98 | |
| 48) | 2,6-Dinitrotoluene | 7.420 | 165 | 143703 | 19.2819 ug/mL | 94 | |
| 49) | Acenaphthene | 7.570 | 153 | 541154 | 18.6146 ug/mL | 98 | |
| 50) | 3-Nitroaniline | 7.623 | 138 | 160751 | 21.8558 ug/mL | 84 | |
| 51) | 2,4-Dinitrophenol | 7.789 | 184 | 51396m | 16.6169 ug/mL | | RS RW |
| 52) | Dibenzofuran | 7.832 | 168 | 782904 | 19.0621 ug/mL | 98 | |
| 53) | Pentachlorobenzene | 9.168 | 250 | 161238 | 18.6135 ug/mL | 98 | |
| 54) | 2,4-Dinitrotoluene | 8.013 | 165 | 197809 | 19.0924 ug/mL | 85 | |
| 55) | 4-Nitrophenol | 8.088 | 109 | 103731 | 19.9001 ug/mL# | 87 | |
| 56) | 2,3,4,6-Tetrachlorophenol | 8.163 | 232 | 145138 | 19.6793 ug/mL | 91 | |
| 57) | Fluorene | 8.355 | 166 | 670424 | 18.6739 ug/mL | 99 | |
| 58) | 4-Chlorophenyl-phenyle... | 8.435 | 204 | 309327 | 18.9525 ug/mL | 95 | |
| 59) | Diethylphthalate | 8.462 | 149 | 693165 | 18.4169 ug/mL | 98 | |
| 60) | 4-Nitroaniline | 8.579 | 138 | 156708 | 21.0390 ug/mL | 86 | |
| 61) | 1,2,4,5 Tetrachloroben... | 6.256 | 216 | 246299 | 19.4697 ug/mL | 98 | |
| 67) | 4,6-Dinitro-2-methylph... | 8.625 | 198 | 120316 | 19.2713 ug/mL | 98 | |
| 68) | N-Nitrosodiphenylamine... | 8.659 | 169 | 549448 | 19.5202 ug/mL | 98 | |
| 69) | 4-Bromophenyl-phenylether | 9.168 | 248 | 165852 | 19.4916 ug/mL | 93 | |
| 70) | Hexachlorobenzene | 9.322 | 284 | 172404 | 19.8756 ug/mL | 90 | |
| 71) | Atrazine | 9.642 | 200 | 191528 | 18.7633 ug/mL | 95 | |
| 72) | Pentachlorophenol | 9.671 | 266 | 102994 | 20.5975 ug/mL | 97 | |
| 73) | Phenanthrene | 9.802 | 178 | 933880 | 19.0242 ug/mL | 98 | |
| 74) | Anthracene | 9.876 | 178 | 957538 | 18.8781 ug/mL | 100 | |
| 75) | Carbazole | 10.225 | 167 | 935551 | 19.2593 ug/mL | 100 | |
| 76) | Di-n-butylphthalate | 11.019 | 149 | 1166409 | 18.8145 ug/mL | 99 | |
| 77) | Fluoranthene | 11.648 | 202 | 1036425 | 18.5852 ug/mL | 97 | |
| 81) | Pyrene | 11.974 | 202 | 1092109 | 19.9700 ug/mL | 99 | |
| 82) | Butylbenzylphthalate | 13.317 | 149 | 539435 | 20.5100 ug/mL | 90 | |
| 83) | 3,3'-Dichlorobenzidine | 13.986 | 252 | 312907 | 21.1660 ug/mL | 99 | |
| 84) | Benzo (a) anthracene | 13.877 | 228 | 935671 | 19.0544 ug/mL | 99 | |
| 85) | Chrysene | 13.934 | 228 | 871122 | 18.0307 ug/mL | 97 | |
| 86) | Bis(2-ethylhexyl)phtha... | 14.340 | 149 | 773434 | 20.9069 ug/mL | 97 | |
| 89) | Di-n-octylphthalate | 15.254 | 149 | 1287133 | 20.8740 ug/mL | 100 | |
| 90) | Benzo (b) fluoranthene | 15.466 | 252 | 913548 | 18.8317 ug/mL | 96 | |
| 91) | Benzo (k) fluoranthene | 15.500 | 252 | 894992 | 18.1102 ug/mL | 95 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.883 | 252 | 878542 | 18.0860 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.272 | 276 | 725446 | 19.1547 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.312 | 278 | 746422 | 18.5464 ug/mL | 94 |
| 95) Benzo (g,h,i) perylene | 17.541 | 276 | 773994 | 18.3849 ug/mL | 90 |

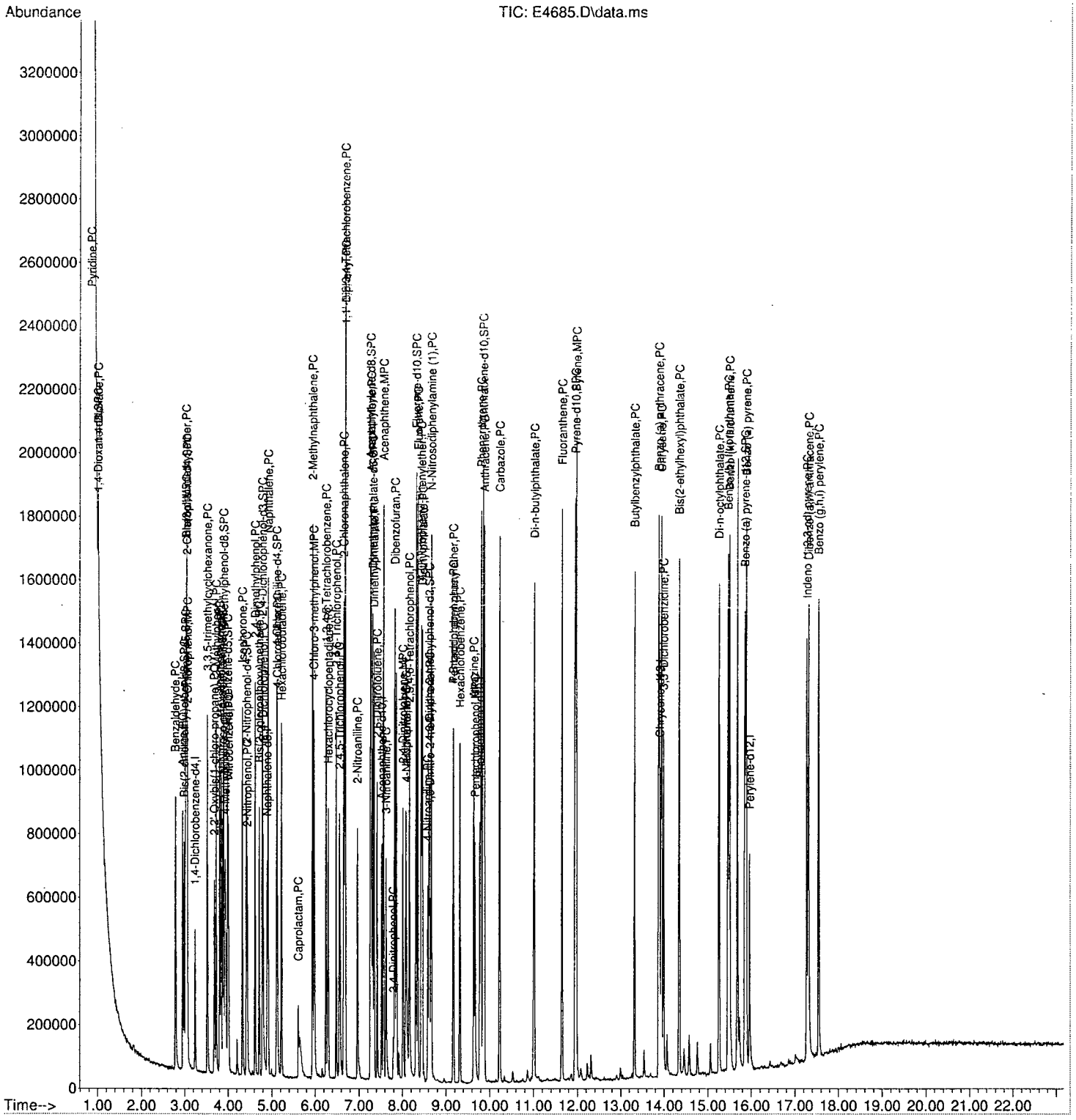
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration






00599

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 140 | -0.03 |
| 2 | PC | Pyridine | 6.446 | 6.791 | -5.4 | 147 | -0.01 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.224 | 0.274 | -22.3# | 160# | -0.01 |
| 4 | PC | 1,4-Dioxane | 1.126 | 1.352 | -20.1# | 143 | -0.01 |
| 5 | PC | Benzaldehyde | 2.512 | 2.787 | -10.9 | 139 | -0.03 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.395 | 3.220 | 5.2 | 135 | -0.03 |
| 7 | SPC | Phenol-d5 | 4.242 | 3.900 | 8.1 | 141 | -0.03 |
| 8 | MPC | Phenol | 4.389 | 4.148 | 5.5 | 135 | -0.02 |
| 9 | MPC | 2-Chlorophenol | 3.530 | 3.404 | 3.6 | 138 | -0.03 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 2.914 | 2.834 | 2.7 | 140 | -0.03 |
| 11 | PC | Aniline | 3.810 | 4.620 | -21.3 | 148 | -0.02 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.104 | 3.808 | 7.2 | 135 | -0.03 |
| 13 | PC | Acetophenone | 5.004 | 4.692 | 6.2 | 132 | -0.03 |
| 14 | PC | 2-Methylphenol | 3.321 | 3.164 | 4.7 | 134 | -0.03 |
| 15 | PC | Hexachloroethane | 1.517 | 1.454 | 4.2 | 139 | -0.03 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.661 | 2.515 | 5.5 | 135 | -0.03 |
| 17 | PC | 4-Methylphenol | 3.521 | 3.326 | 5.5 | 135 | -0.02 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.203 | 2.153 | 2.3 | 136 | -0.03 |
| 19 | SPC | 2-Chlorophenol-d4 | 3.992 | 3.897 | 2.4 | 138 | -0.03 |
| 20 | SPC | 4-Methylphenol-d8 | 3.432 | 3.259 | 5.0 | 140 | -0.03 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 135 | -0.03 |
| 22 | SPC | Nitrobenzene-d5 | 0.443 | 0.426 | 3.8 | 136 | -0.03 |
| 23 | PC | Nitrobenzene | 0.927 | 0.867 | 6.5 | 134 | -0.03 |
| 24 | PC | Isophorone | 1.662 | 1.592 | 4.2 | 132 | -0.03 |
| 25 | PC | 2-Nitrophenol | 0.464 | 0.456 | 1.7 | 139 | -0.03 |
| 26 | PC | 2,4-Dimethylphenol | 0.932 | 0.894 | 4.1 | 135 | -0.03 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.926 | 0.891 | 3.8 | 137 | -0.03 |
| 28 | PC | 2,4- Dichlorophenol | 0.729 | 0.708 | 2.9 | 137 | -0.03 |
| 29 | PC | Naphthalene | 2.513 | 2.426 | 3.5 | 136 | -0.03 |
| 30 | PC | 4-Chloroaniline | 0.755 | 0.897 | -18.8 | 137 | -0.03 |
| 31 | PC | Hexachlorobutadiene | 0.457 | 0.439 | 3.9 | 131 | -0.03 |
| 32 | PC | Caprolactam | 0.286 | 0.293 | -2.4 | 132 | -0.01 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.827 | 0.754 | 8.8 | 128 | -0.03 |
| 34 | PC | 2-Methylnaphthalene | 1.714 | 1.638 | 4.4 | 133 | -0.03 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.501 | 0.511 | -2.0 | 143 | -0.03 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.832 | 0.808 | 2.9 | 133 | -0.03 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.826 | 0.991 | -20.0 | 139 | -0.03 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 131 | -0.03 |
| 39 | PC | Hexachlorocyclopentadiene | 0.750 | 0.784 | -4.5 | 136 | -0.03 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.826 | 0.829 | -0.4 | 138 | -0.03 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.857 | 0.845 | 1.4 | 133 | -0.03 |
| 42 | PC | 1,1'-Biphenyl | 3.311 | 3.193 | 3.6 | 132 | -0.03 |
| 43 | PC | 2-Chloronaphthalene | 2.590 | 2.508 | 3.2 | 131 | -0.03 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.206 | 1.154 | 4.3 | 129 | -0.03 |
| 45 | PC | 2-Nitroaniline | 0.748 | 0.729 | 2.5 | 132 | -0.03 |
| 46 | PC | Acenaphthylene | 4.203 | 4.015 | 4.5 | 129 | -0.03 |
| 47 | PC | Dimethylphthalate | 3.309 | 3.070 | 7.2 | 125 | -0.03 |
| 48 | PC | 2,6-Dinitrotoluene | 0.684 | 0.659 | 3.7 | 125 | -0.03 |
| 49 | MPC | Acenaphthene | 2.668 | 2.483 | 6.9 | 125 | -0.03 |
| 50 | PC | 3-Nitroaniline | 0.675 | 0.738 | -9.3 | 126 | -0.04 |
| 51 | PC | 2,4-Dinitrophenol | 0.284 | 0.236 | 16.9 | 107 | -0.03 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:45:42 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.769 | 3.592 | 4.7 | 127 | -0.03 |
| 53 | PC | Pentachlorobenzene | 0.795 | 0.740 | 6.9 | 126 | -0.03 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.951 | 0.908 | 4.5 | 127 | -0.03 |
| 55 | MPC | 4-Nitrophenol | 0.478 | 0.476 | 0.4 | 138 | -0.03 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.677 | 0.666 | 1.6 | 135 | -0.03 |
| 57 | PC | Fluorene | 3.294 | 3.076 | 6.6 | 127 | -0.03 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.498 | 1.419 | 5.3 | 129 | -0.03 |
| 59 | PC | Diethylphthalate | 3.454 | 3.180 | 7.9 | 120 | -0.03 |
| 60 | PC | 4-Nitroaniline | 0.683 | 0.719 | -5.3 | 125 | -0.04 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.161 | 1.130 | 2.7 | 131 | -0.03 |
| 62 | SPC | Acenaphthylene-d8 | 4.338 | 4.160 | 4.1 | 130 | -0.03 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.646 | 0.628 | 2.8 | 130 | -0.03 |
| 64 | SPC | Dimethylphthalate-d6 | 3.521 | 3.244 | 7.9 | 124 | -0.03 |
| 65 | SPC | Fluorene-d10 | 2.770 | 2.632 | 5.0 | 129 | -0.03 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 122 | -0.03 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.322 | 0.310 | 3.7 | 124 | -0.03 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.452 | 1.418 | 2.3 | 126 | -0.03 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.439 | 0.428 | 2.5 | 127 | -0.03 |
| 70 | PC | Hexachlorobenzene | 0.448 | 0.445 | 0.7 | 125 | -0.03 |
| 71 | PC | Atrazine | 0.527 | 0.494 | 6.3 | 115 | -0.03 |
| 72 | MPC | Pentachlorophenol | 0.258 | 0.266 | -3.1 | 138 | -0.03 |
| 73 | PC | Phenanthrene | 2.533 | 2.409 | 4.9 | 121 | -0.04 |
| 74 | PC | Anthracene | 2.617 | 2.470 | 5.6 | 121 | -0.03 |
| 75 | PC | Carbazole | 2.507 | 2.414 | 3.7 | 120 | -0.03 |
| 76 | PC | Di-n-butylphthalate | 3.199 | 3.009 | 5.9 | 119 | -0.03 |
| 77 | PC | Fluoranthene | 2.878 | 2.674 | 7.1 | 114 | -0.04 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.367 | 0.358 | 2.5 | 124 | -0.03 |
| 79 | SPC | Anthracene-d10 | 2.551 | 2.410 | 5.5 | 121 | -0.03 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 105 | -0.03 |
| 81 | MPC | Pyrene | 2.755 | 2.751 | 0.1 | 111 | -0.03 |
| 82 | PC | Butylbenzylphthalate | 1.325 | 1.359 | -2.6 | 114 | -0.03 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.745 | 0.788 | -5.8 | 103 | -0.03 |
| 84 | PC | Benzo (a) anthracene | 2.474 | 2.357 | 4.7 | 106 | -0.03 |
| 85 | PC | Chrysene | 2.434 | 2.194 | 9.9 | 101 | -0.04 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.864 | 1.948 | -4.5 | 115 | -0.03 |
| 87 | SPC | Pyrene-d10 | 2.531 | 2.499 | 1.3 | 112 | -0.03 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 96 | -0.03 |
| 89 | PC | Di-n-octylphthalate | 3.442 | 3.592 | -4.4 | 109 | -0.03 |
| 90 | PC | Benzo (b) fluoranthene | 2.708 | 2.550 | 5.8 | 91 | -0.03 |
| 91 | PC | Benzo (k) fluoranthene | 2.759 | 2.498 | 9.5 | 96 | -0.03 |
| 92 | PC | Benzo (a) pyrene | 2.711 | 2.452 | 9.6 | 91 | -0.03 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.114 | 2.025 | 4.2 | 89 | -0.03 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.247 | 2.083 | 7.3 | 87 | -0.03 |
| 95 | PC | Benzo (g,h,i) perylene | 2.350 | 2.160 | 8.1 | 84 | -0.04 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.383 | 2.123 | 10.9 | 91 | -0.03 |

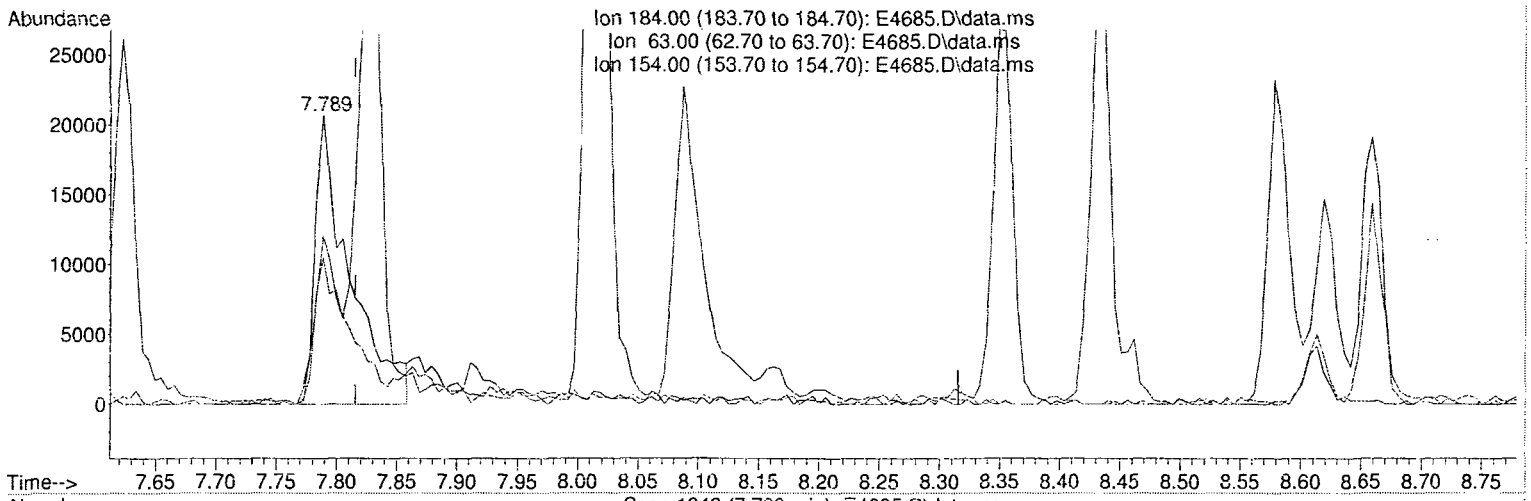
(#) = Out of Range SPCC's out = 0 CCC's out = 2

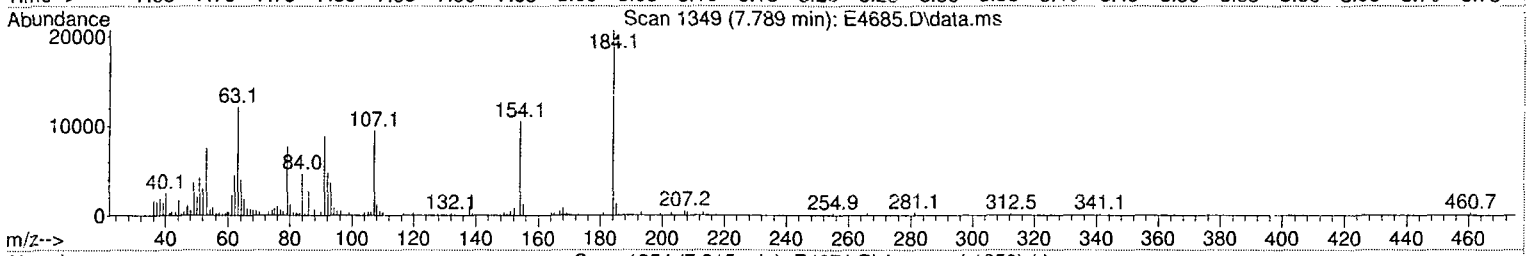
Quantitation Report (Qedit)

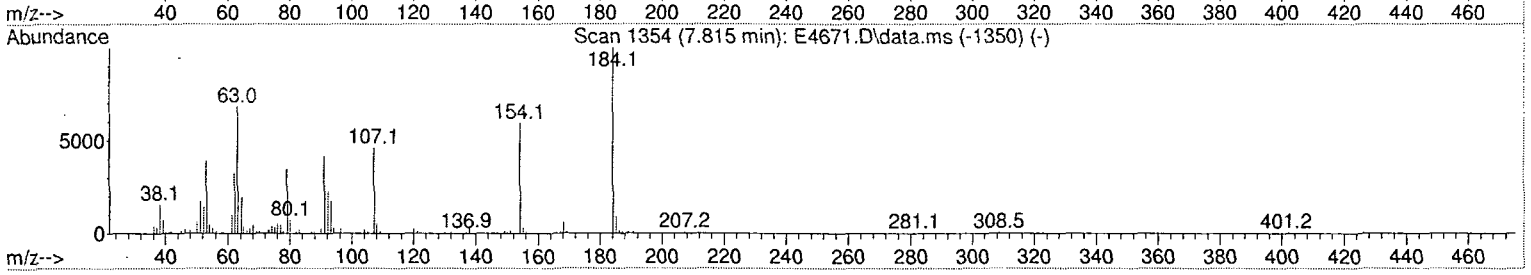
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.789min (-0.027) 13.19 ug/mL**

**response 40792**

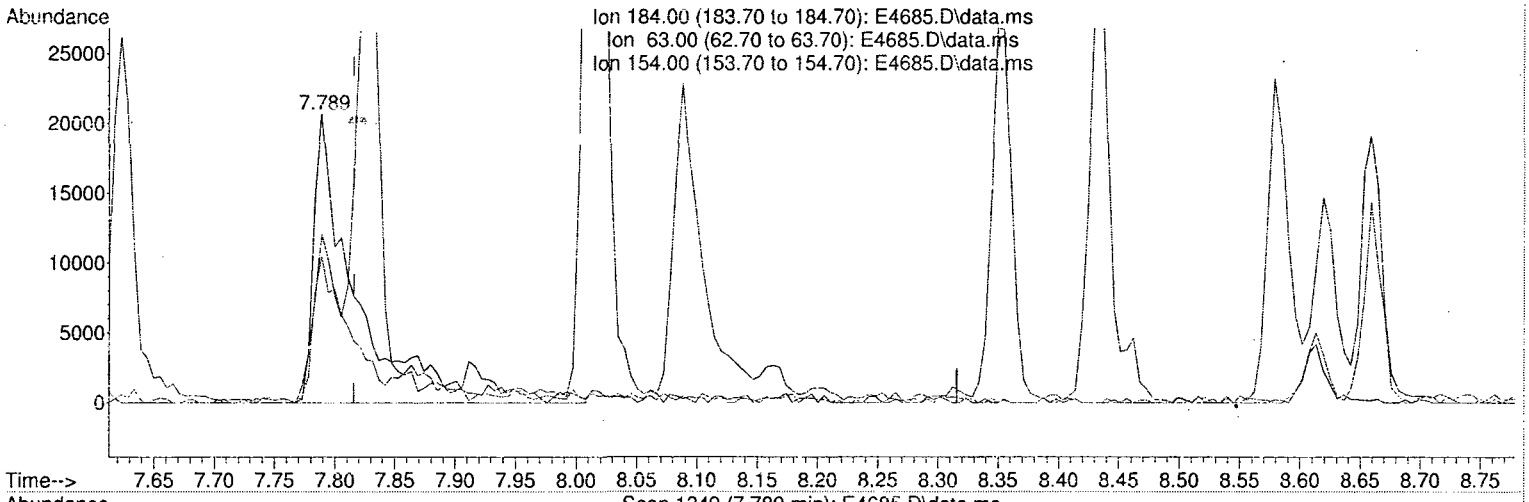
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 36.76# |
| 154.00 | 63.80 | 51.66 |
| 0.00 | 0.00 | 0.00 |

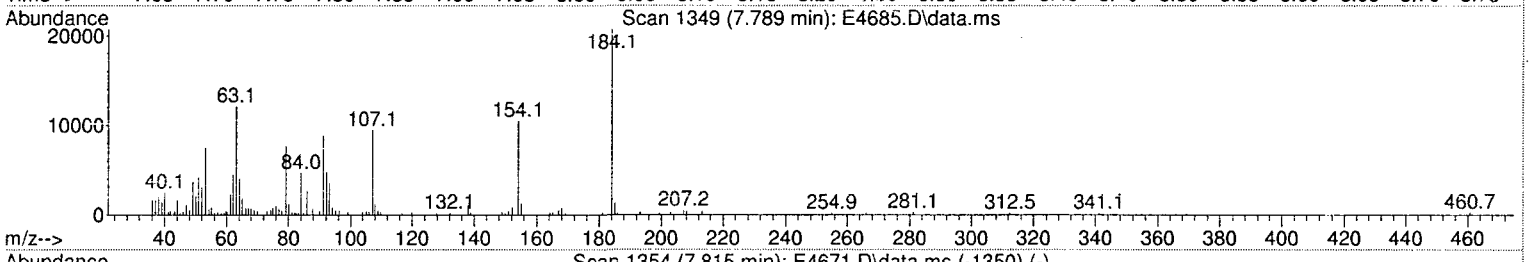
Quantitation Report (Qedit)

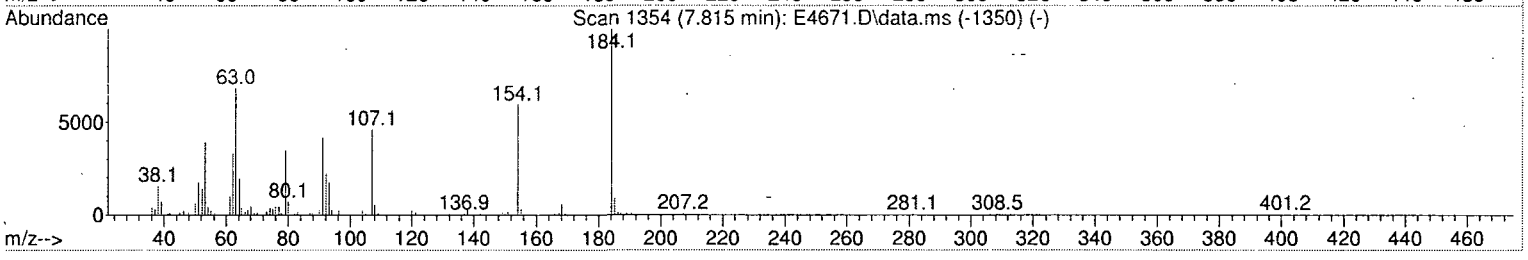
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.789min (-0.027) 16.62 ug/mL m** RS 5/26

**response 51396**

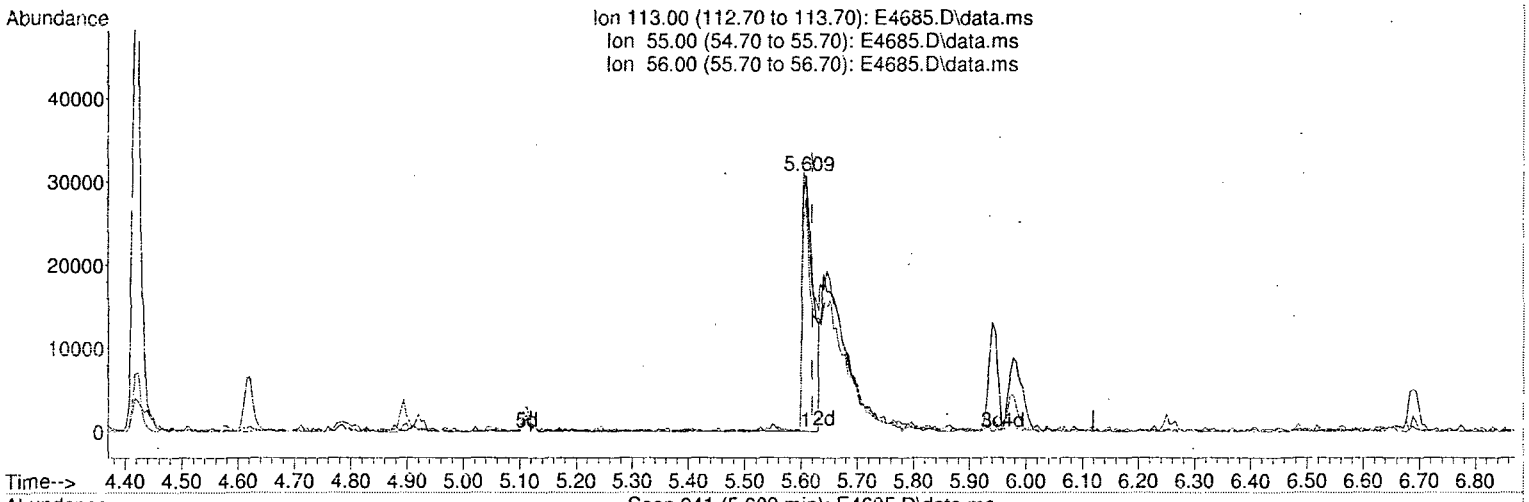
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 29.18# |
| 154.00 | 63.80 | 41.00# |
| 0.00 | 0.00 | 0.00 |

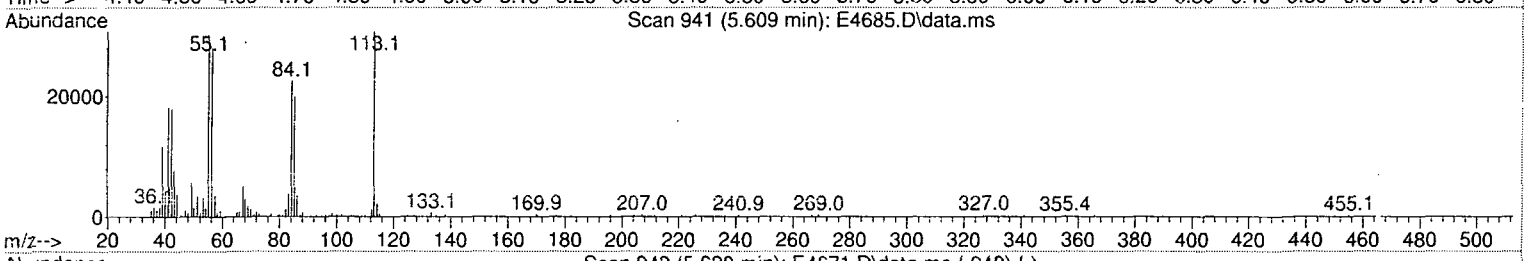
Quantitation Report (Qedit)

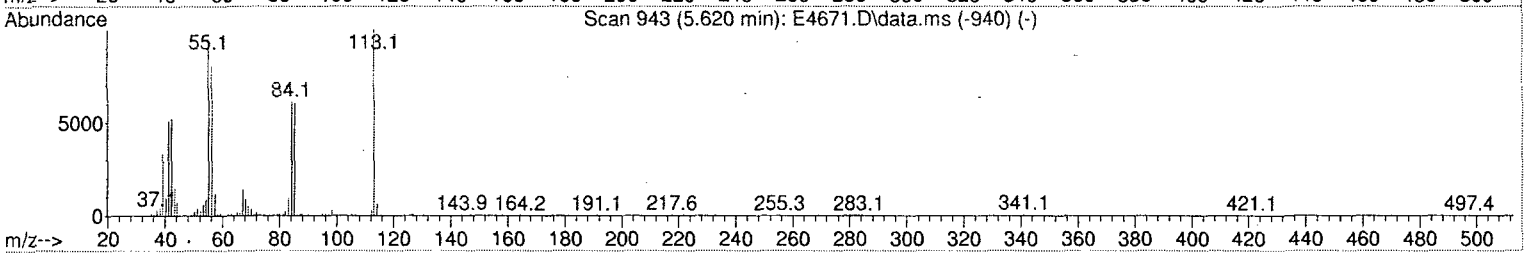
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(32) Caprolactam (PC)**

**5.609min (-0.011) 8.47 ug/mL**

**response 41855**

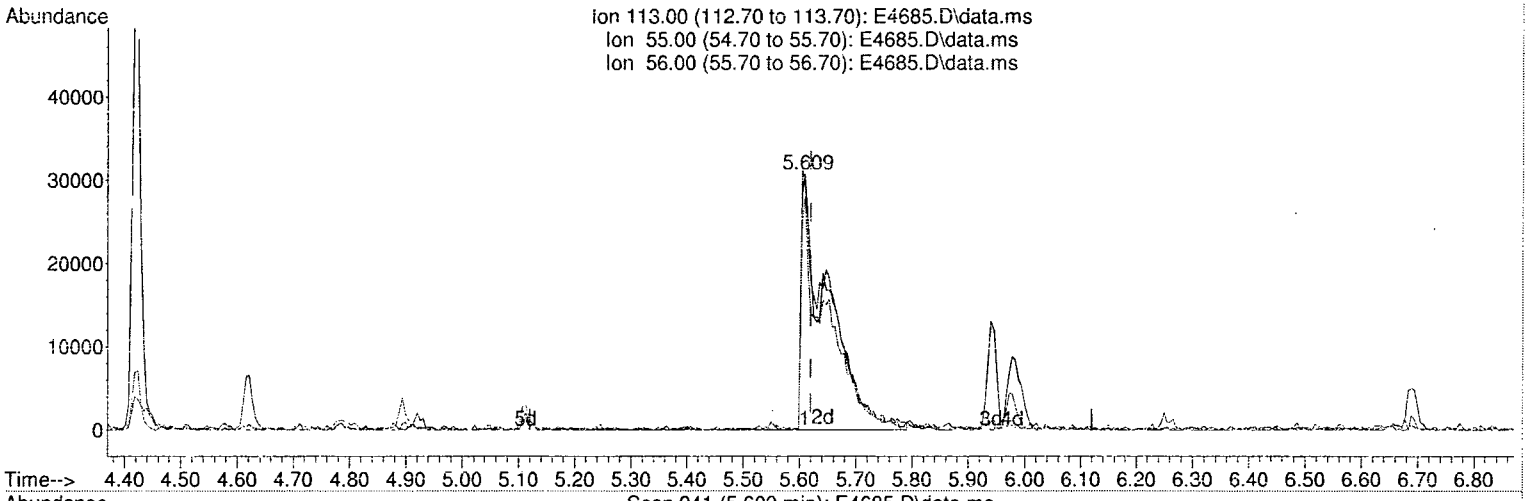
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 101.76 |
| 56.00 | 92.50 | 96.98 |
| 0.00 | 0.00 | 0.00 |

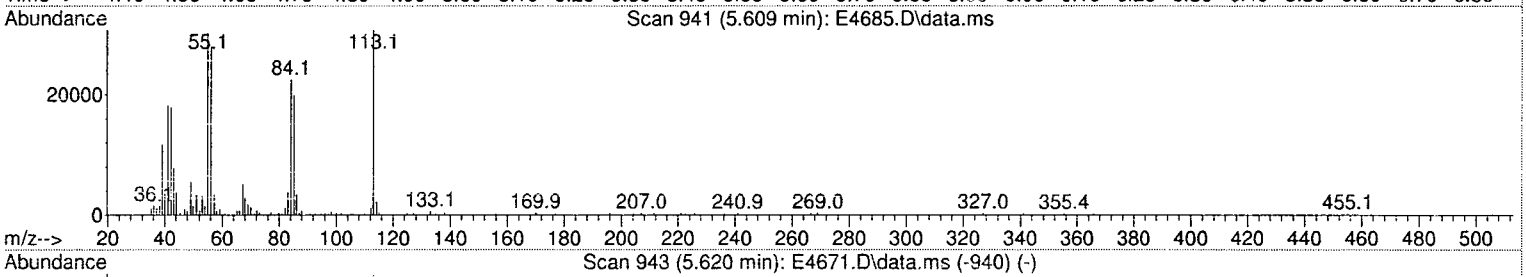
Quantitation Report (Qedit)

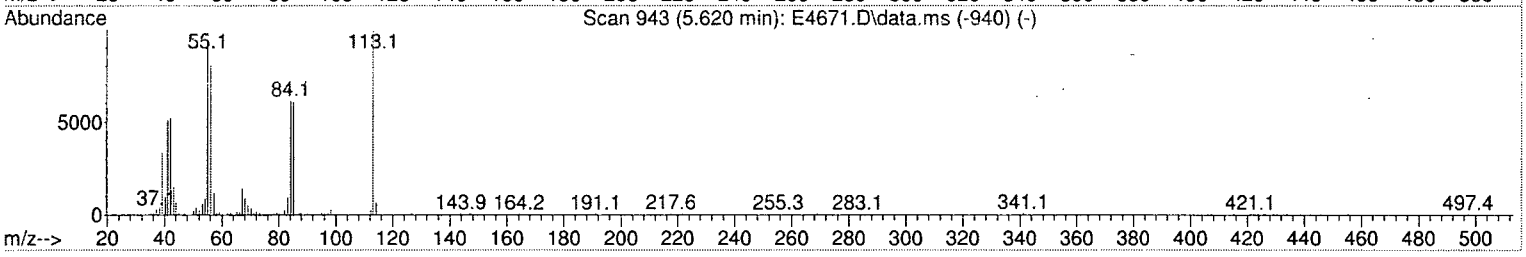
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(32) Caprolactam (PC)**

**5.609min (-0.011) 20.53 ug/mL m** RS 8/2

**response 101435**

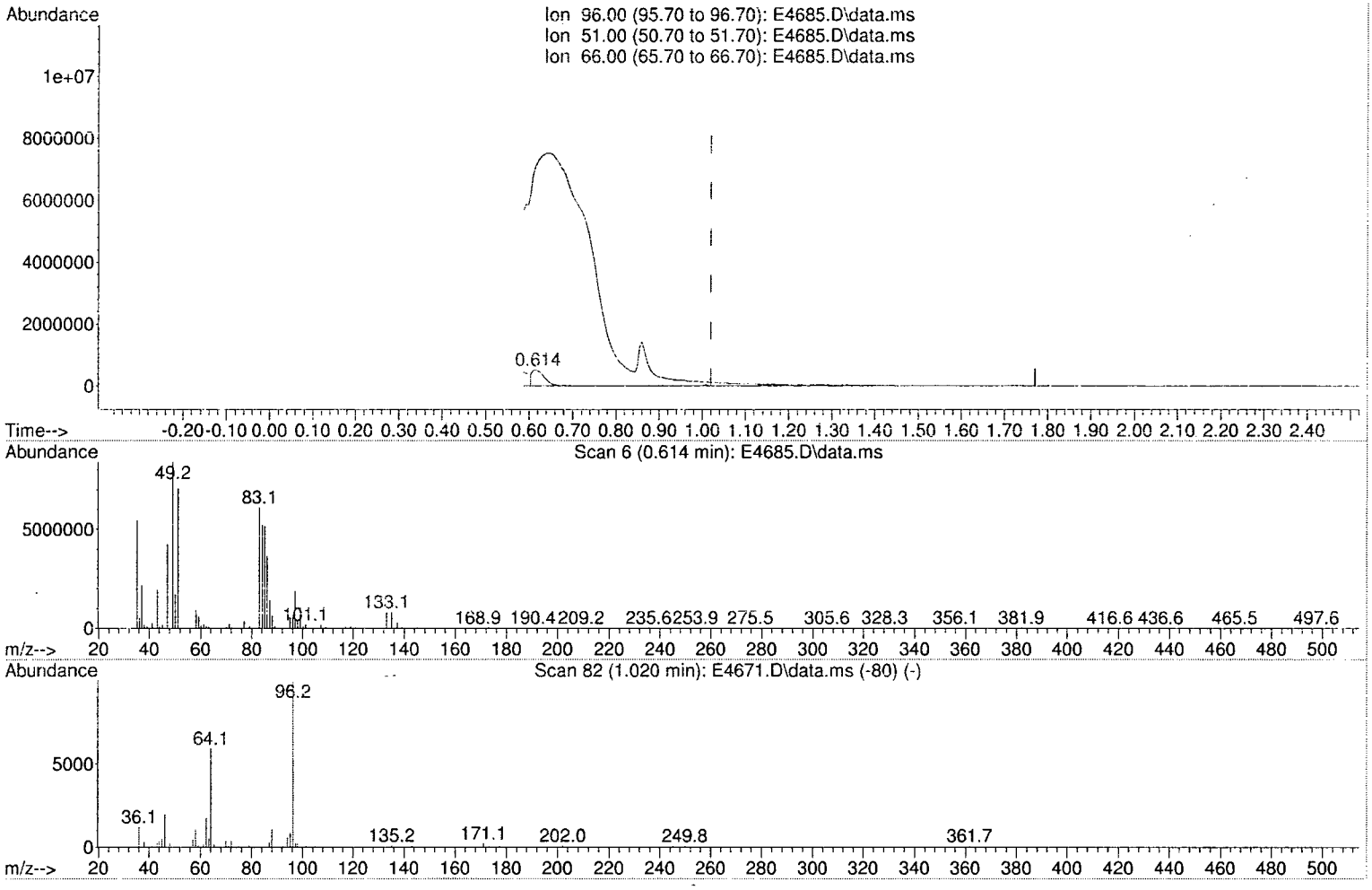
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 41.99# |
| 56.00 | 92.50 | 40.02# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.614min (-0.406) 1127.16 ug/mL**

**response 1037334**

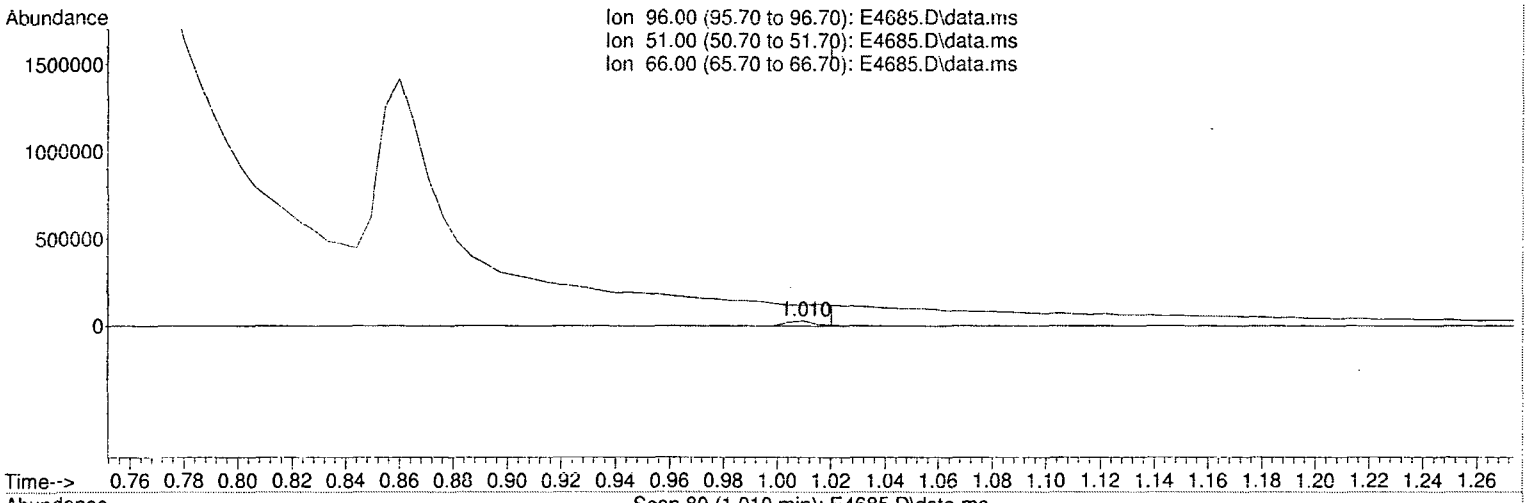
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.11# |
| 0.00 | 0.00 | 0.00 |

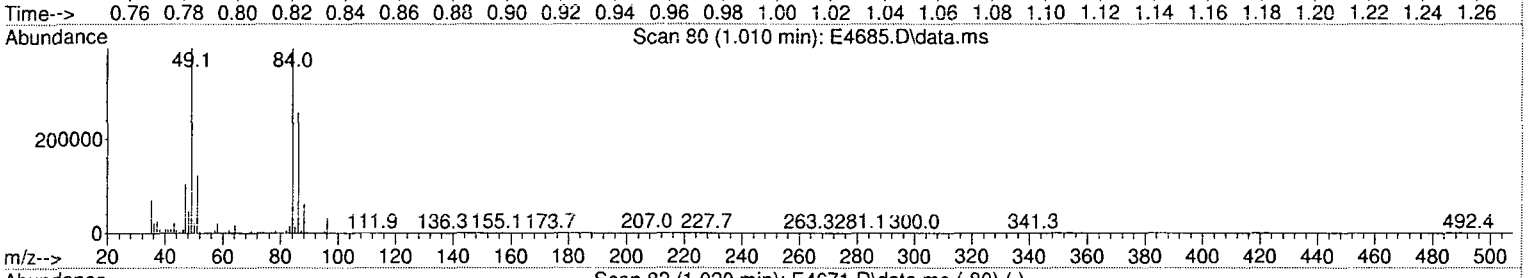
Quantitation Report (Qedit)

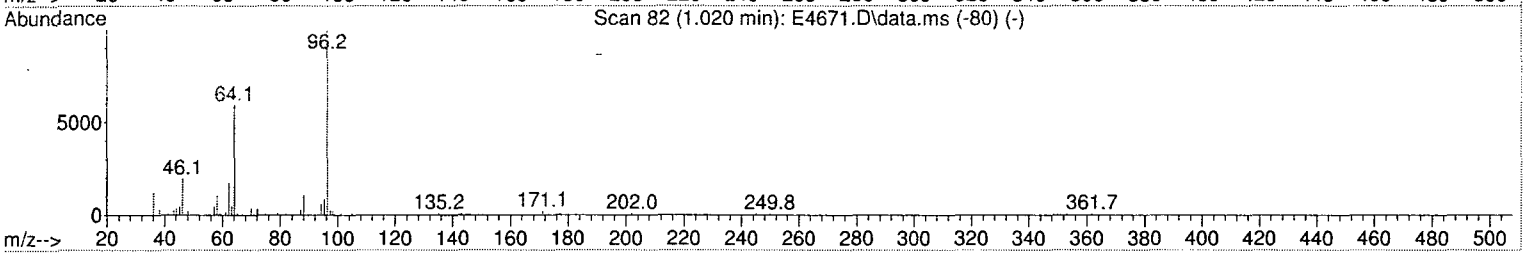
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

(3) 1,4-Dioxane-d8 (SPC)

1.010min (-0.011) 24.48 ug/mL m RS RW

response 22528

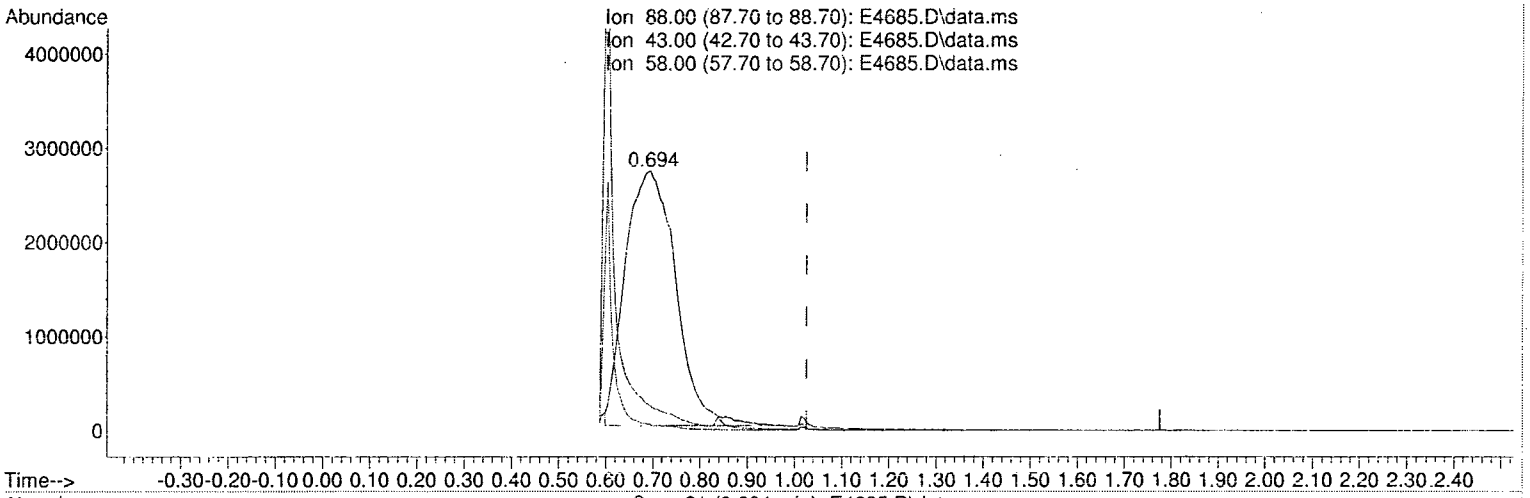
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 4.86# |
| 0.00 | 0.00 | 0.00 |

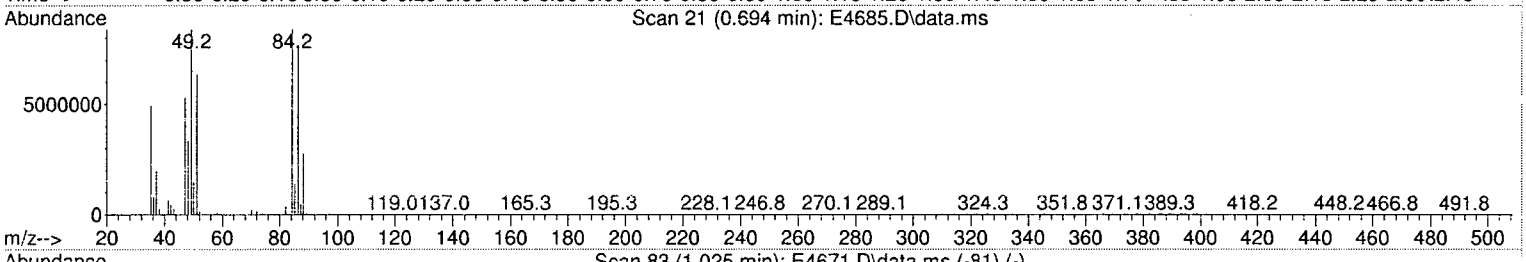
Quantitation Report (Qedit)

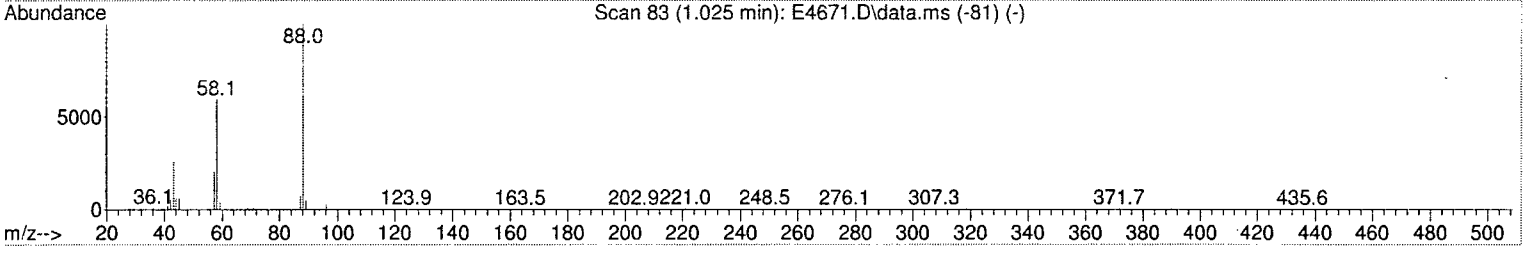
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.694min (-0.331) 4375.32 ug/mL**

**response 20230491**

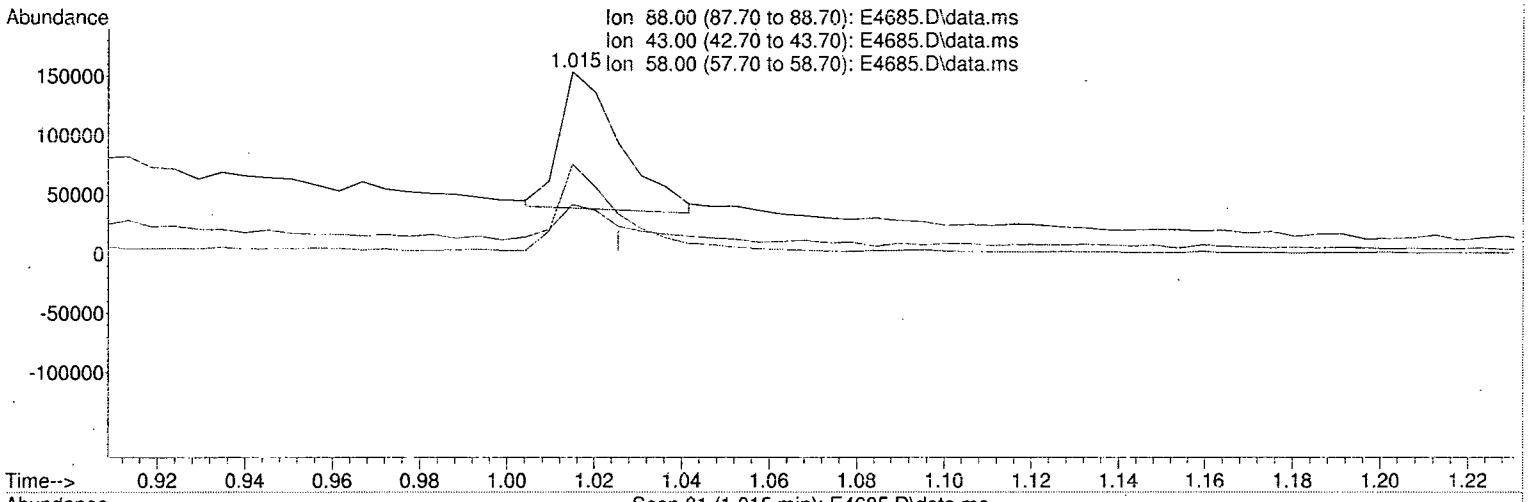
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

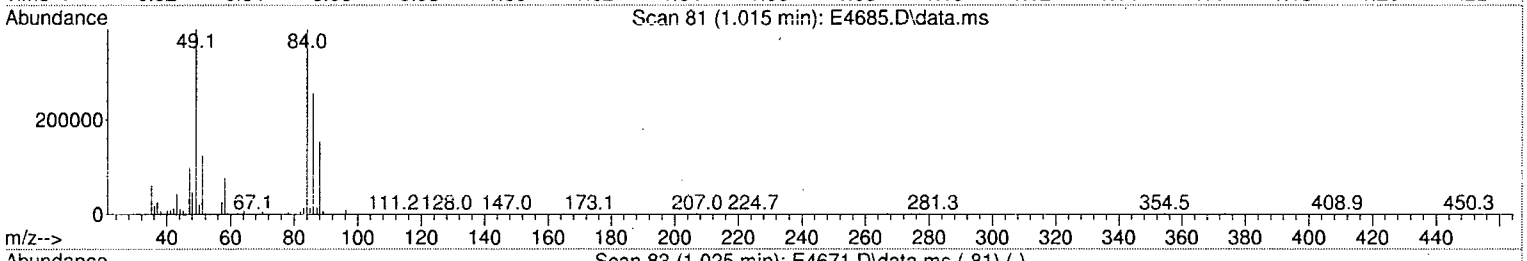
Quantitation Report (Qedit)

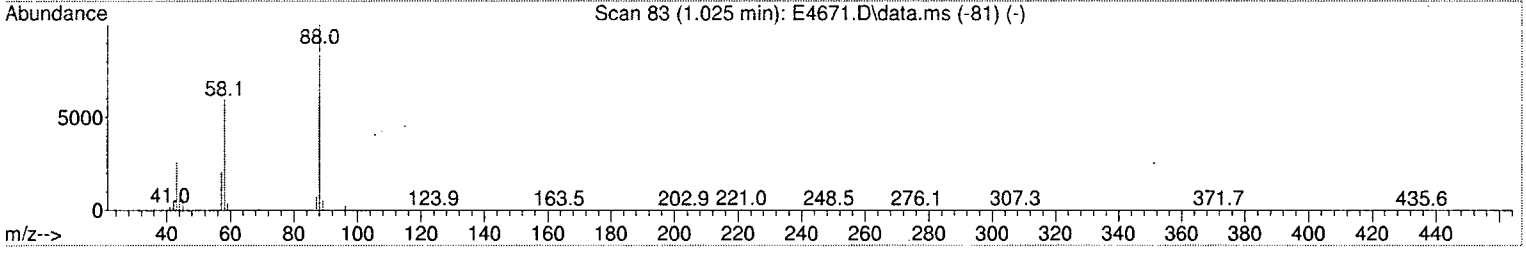
Data File : C:\msdchem\1\data\E4685.D
Acq On : 26 May 2012 7:03
Sample : 2E25002-CCV2
Misc : SSTD0209U
DataAcq Meth:CLPACQ.M

Vial: 29
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 07:44:51 2012
Quant Results File: SOME4671.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4671.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Fri May 25 20:34:14 2012
Response via : Initial Calibration




TIC: E4685.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.015min (-0.011) 24.02 ug/mL m** RS

**response 111053**

| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 1809

Lab File ID: E4696.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209V Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Benzaldehyde | 2.512 | 2.647 | 0.010 | 5.4 | 50.0 |
| Phenol | 4.389 | 4.110 | 0.010 | -6.4 | 50.0 |
| Bis(2-chloroethyl)ether | 3.395 | 3.248 | 0.010 | -4.4 | 50.0 |
| 2-Chlorophenol | 3.530 | 3.377 | 0.010 | -4.4 | 50.0 |
| 2-Methylphenol | 3.321 | 3.206 | 0.010 | -3.5 | 50.0 |
| 2,2'-Oxybis(1-chloropropane) | 2.914 | 2.799 | 0.010 | -4.0 | 50.0 |
| Acetophenone | 5.004 | 4.688 | 0.010 | -6.3 | 50.0 |
| 4-Methylphenol | 3.521 | 3.361 | 0.010 | -4.5 | 50.0 |
| N-Nitroso-di-n-propylamine | 2.661 | 2.448 | 0.010 | -8.0 | 50.0 |
| Hexachloroethane | 1.517 | 1.483 | 0.010 | -2.2 | 50.0 |
| Nitrobenzene | 0.927 | 0.884 | 0.010 | -4.6 | 50.0 |
| Isophorone | 1.662 | 1.580 | 0.010 | -5.0 | 50.0 |
| 2-Nitrophenol | 0.464 | 0.460 | 0.010 | -0.8 | 50.0 |
| 2,4-Dimethylphenol | 0.932 | 0.875 | 0.010 | -6.0 | 50.0 |
| Bis(2-chloroethoxy)methane | 0.926 | 0.891 | 0.010 | -3.8 | 50.0 |
| 2,4-Dichlorophenol | 0.729 | 0.710 | 0.010 | -2.5 | 50.0 |
| Naphthalene | 2.513 | 2.461 | 0.010 | -2.1 | 50.0 |
| 4-Chloroaniline | 0.755 | 0.980 | 0.010 | 29.8 | 50.0 |
| Hexachlorobutadiene | 0.457 | 0.450 | 0.010 | -1.4 | 50.0 |
| Caprolactam | 0.286 | 0.296 | 0.010 | 3.8 | 50.0 |
| 4-Chloro-3-methylphenol | 0.827 | 0.793 | 0.010 | -4.1 | 50.0 |
| 2-Methylnaphthalene | 1.714 | 1.689 | 0.010 | -1.5 | 50.0 |
| Hexachlorocyclopentadiene | 0.750 | 0.589 | 0.010 | -21.4 | 50.0 |
| 2,4,6-Trichlorophenol | 0.826 | 0.827 | 0.010 | 0.1 | 50.0 |
| 2,4,5-Trichlorophenol | 0.857 | 0.839 | 0.010 | -2.1 | 50.0 |
| 1,1'-Biphenyl | 3.311 | 3.144 | 0.010 | -5.0 | 50.0 |
| 2-Chloronaphthalene | 2.590 | 2.442 | 0.010 | -5.7 | 50.0 |
| 2-Nitroaniline | 0.748 | 0.737 | 0.010 | -1.5 | 50.0 |
| Dimethylphthalate | 3.309 | 3.039 | 0.010 | -8.2 | 50.0 |
| 2,6-Dinitrotoluene | 0.684 | 0.678 | 0.010 | -0.8 | 50.0 |
| Acenaphthylene | 4.203 | 4.014 | 0.010 | -4.5 | 50.0 |
| 3-Nitroaniline | 0.675 | 0.752 | 0.010 | 11.4 | 50.0 |
| Acenaphthene | 2.668 | 2.506 | 0.010 | -6.1 | 50.0 |
| 2,4-Dinitrophenol | 0.284 | 0.164 | 0.010 | -42.4 | 50.0 |
| 4-Nitrophenol | 0.478 | 0.478 | 0.010 | 0.0 | 50.0 |
| Dibenzofuran | 3.769 | 3.534 | 0.010 | -6.2 | 50.0 |

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 1809

Lab File ID: E4696.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209V Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 0.951 | 0.921 | 0.010 | -3.1 | 50.0 |
| Diethylphthalate | 3.454 | 3.177 | 0.010 | -8.0 | 50.0 |
| Fluorene | 3.294 | 3.099 | 0.010 | -5.9 | 50.0 |
| 4-Chlorophenyl-phenylether | 1.498 | 1.408 | 0.010 | -6.0 | 50.0 |
| 4-Nitroaniline | 0.683 | 0.778 | 0.010 | 13.9 | 50.0 |
| 4,6-Dinitro-2-methylphenol | 0.322 | 0.264 | 0.010 | -18.2 | 50.0 |
| N-Nitrosodiphenylamine (1) | 1.452 | 1.397 | 0.010 | -3.8 | 50.0 |
| 1,2,4,5-Tetrachlorobenzene | 1.161 | 1.104 | 0.010 | -4.9 | 50.0 |
| 4-Bromophenyl-phenylether | 0.439 | 0.425 | 0.010 | -3.1 | 50.0 |
| Hexachlorobenzene | 0.448 | 0.446 | 0.010 | -0.3 | 50.0 |
| Atrazine | 0.527 | 0.507 | 0.010 | -3.8 | 50.0 |
| Pentachlorophenol | 0.258 | 0.292 | 0.010 | 13.3 | 50.0 |
| Phenanthrene | 2.533 | 2.436 | 0.010 | -3.8 | 50.0 |
| Anthracene | 2.617 | 2.552 | 0.010 | -2.5 | 50.0 |
| Carbazole | 2.507 | 2.445 | 0.010 | -2.5 | 50.0 |
| Di-n-butylphthalate | 3.199 | 2.993 | 0.010 | -6.4 | 50.0 |
| Fluoranthene | 2.878 | 2.715 | 0.010 | -5.6 | 50.0 |
| Pyrene | 2.755 | 2.733 | 0.010 | -0.8 | 50.0 |
| Butylbenzylphthalate | 1.325 | 1.334 | 0.010 | 0.7 | 50.0 |
| 3,3'-Dichlorobenzidine | 0.745 | 0.827 | 0.010 | 11.0 | 50.0 |
| Benzo (a) anthracene | 2.474 | 2.439 | 0.010 | -1.4 | 50.0 |
| Chrysene | 2.434 | 2.276 | 0.010 | -6.5 | 50.0 |
| Bis(2-ethylhexyl)phthalate | 1.864 | 1.800 | 0.010 | -3.4 | 50.0 |
| Di-n-octylphthalate | 3.442 | 3.480 | 0.010 | 1.1 | 50.0 |
| Benzo (b) fluoranthene | 2.708 | 2.521 | 0.010 | -6.9 | 50.0 |
| Benzo (k) fluoranthene | 2.759 | 2.651 | 0.010 | -3.9 | 50.0 |
| Benzo (a) pyrene | 2.711 | 2.586 | 0.010 | -4.6 | 50.0 |
| Indeno (1,2,3-cd) pyrene | 2.114 | 2.069 | 0.010 | -2.1 | 50.0 |
| Dibenzo (a,h) anthracene | 2.247 | 2.274 | 0.010 | 1.2 | 50.0 |
| Benzo (g,h,i) perylene | 2.350 | 2.216 | 0.010 | -5.7 | 50.0 |
| 2,3,4,6-Tetrachlorophenol | 0.677 | 0.706 | 0.010 | 4.3 | 50.0 |

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WB4

Instrument ID: E-5973 Calibration Date: 05/26/2012 Time: 1809

Lab File ID: E4696.D Init. Calib. Date(s): 05/25/2012 05/25/2012

EPA Sample No.(SSTD020##): SSTD0209V Init. Calib. Time(s): 1128 1333

GC Column: HP-5MS ID: 0.25 (mm)

| COMPOUND | $\overline{RRF}$ | RRF20 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Phenol-d5 | 4.242 | 4.319 | 0.010 | 1.8 | 50.0 |
| Bis(2-chloroethyl)ether-d8 | 2.203 | 2.124 | 0.010 | -3.6 | 50.0 |
| 2-Chlorophenol-d4 | 3.992 | 3.898 | 0.010 | -2.3 | 50.0 |
| 4-Methylphenol-d8 | 3.432 | 3.639 | 0.010 | 6.0 | 50.0 |
| Nitrobenzene-d5 | 0.443 | 0.435 | 0.010 | -1.9 | 50.0 |
| 2-Nitrophenol-d4 | 0.501 | 0.516 | 0.010 | 2.9 | 50.0 |
| 2,4-Dichlorophenol-d3 | 0.832 | 0.841 | 0.010 | 1.1 | 50.0 |
| 4-Chloroaniline-d4 | 0.826 | 1.067 | 0.010 | 29.1 | 50.0 |
| Dimethylphthalate-d6 | 3.521 | 3.179 | 0.010 | -9.7 | 50.0 |
| Acenaphthylene-d8 | 4.338 | 4.121 | 0.010 | -5.0 | 50.0 |
| 4-Nitrophenol-d4 | 0.646 | 0.679 | 0.010 | 5.1 | 50.0 |
| Fluorene-d10 | 2.770 | 2.606 | 0.010 | -5.9 | 50.0 |
| 4,6-Dinitro-2-methylphenol-d2 | 0.367 | 0.298 | 0.010 | -18.6 | 50.0 |
| Anthracene-d10 | 2.551 | 2.436 | 0.010 | -4.5 | 50.0 |
| Pyrene-d10 | 2.531 | 2.502 | 0.010 | -1.2 | 50.0 |
| Benzo (a) pyrene-d12 | 2.383 | 2.200 | 0.010 | -7.7 | 50.0 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

ORIGINAL LOCATED IN
CASE: 42543 SDG: X0T49

05/30/12

S. Vokati

05/30/12

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.237 | 152 | 153125 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.893 | 136 | 642778 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.532 | 164 | 426537 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.785 | 188 | 765502 | 20.0000 ug/mL | 0.01 |
| 80) Chrysene-d12 | 13.928 | 240 | 809416 | 20.0000 ug/mL | 0.03 |
| 88) Perylene-d12 | 16.003 | 264 | 737199 | 20.0000 ug/mL | 0.04 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.004 | 96 | 37006 | 21.57 ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 107.85% | | |
| 7) Phenol-d5 | 3.013 | 99 | 661386 | 20.36 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 50.90% | | |
| 18) Bis(2-chloroethyl)ethe... | 2.981 | 67 | 325214 | 19.28 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 48.20% | | |
| 19) 2-Chlorophenol-d4 | 3.045 | 132 | 596894 | 19.53 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 48.83% | | |
| 20) 4-Methylphenol-d8 | 3.894 | 113 | 557202 | 21.20 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 53.00% | | |
| 22) Nitrobenzene-d5 | 3.980 | 128 | 279462 | 19.62 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.05% | | |
| 35) 2-Nitrophenol-d4 | 4.418 | 143 | 331461 | 20.58 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 51.45% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.781 | 165 | 540718 | 20.21 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 50.52% | | |
| 37) 4-Chloroaniline-d4 | 5.112 | 131 | 685596 | 25.83 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 64.57% | | |
| 62) Acenaphthylene-d8 | 7.270 | 160 | 1757927 | 19.00 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 47.50% | | |
| 63) 4-Nitrophenol-d4 | 8.082 | 143 | 289644 | 21.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 52.52% | | |
| 64) Dimethylphthalate-d6 | 7.318 | 166 | 1355899 | 18.06 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 45.15%# | | |
| 65) Fluorene-d10 | 8.323 | 176 | 1111443 | 18.81 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 47.02% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.630 | 200 | 228376 | 16.28 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 40.70% | | |
| 79) Anthracene-d10 | 9.865 | 188 | 1864731 | 19.10 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 47.75% | | |
| 87) Pyrene-d10 | 11.968 | 212 | 2025194 | 19.77 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 49.42%# | | |
| 96) Benzo (a) pyrene-d12 | 15.894 | 264 | 1621796 | 18.46 ug/mL | 0.04 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 46.15% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.860 | 79 | 814599 | 16.5056 ug/mL# | 1 |
| 4) 1,4-Dioxane | 1.015 | 88 | 212587m | 24.6611 ug/mL | |
| 5) Benzaldehyde | 2.783 | 77 | 405383 | 21.0816 ug/mL | 94 |
| 6) Bis(2-chloroethyl)ether | 3.034 | 93 | 497279 | 19.1297 ug/mL | 89 |
| 8) Phenol | 3.029 | 94 | 629298 | 18.7273 ug/mL# | 63 |
| 9) 2-Chlorophenol | 3.061 | 128 | 517031 | 19.1278 ug/mL | 95 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.680 | 45 | 428596 | 19.2076 ug/mL# | 30 |
| 11) Aniline | 2.949 | 93 | 703381 | 24.1109 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.520 | 83 | 574595 | 18.2881 ug/mL# | 100 |
| 13) Acetophenone | 3.798 | 105 | 717774 | 18.7349 ug/mL | 92 |
| 14) 2-Methylphenol | 3.723 | 108 | 490909 | 19.3081 ug/mL | 94 |
| 15) Hexachloroethane | 3.835 | 117 | 227072 | 19.5507 ug/mL | 96 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.867 | 70 | 374788 | 18.3948 ug/mL | 82 | |
| 17) 4-Methylphenol | 3.932 | 108 | 514687 | 19.0906 ug/mL | 98 | |
| 23) Nitrobenzene | 4.006 | 77 | 568168 | 19.0774 ug/mL | 94 | |
| 24) Isophorone | 4.327 | 82 | 1015328 | 19.0091 ug/mL | 96 | |
| 25) 2-Nitrophenol | 4.434 | 139 | 295522 | 19.8321 ug/mL | 91 | |
| 26) 2,4-Dimethylphenol | 4.621 | 107 | 562747 | 18.7909 ug/mL | 95 | |
| 27) Bis(2-chloroethoxy)met... | 4.711 | 93 | 572777 | 19.2498 ug/mL | 98 | |
| 28) 2,4- Dichlorophenol | 4.797 | 162 | 456463 | 19.4914 ug/mL | 97 | |
| 29) Naphthalene | 4.920 | 128 | 1582130 | 19.5866 ug/mL | 100 | |
| 30) 4-Chloroaniline | 5.123 | 127 | 629673 | 25.9587 ug/mL | 99 | |
| 31) Hexachlorobutadiene | 5.230 | 225 | 289407 | 19.7166 ug/mL | 99 | |
| 32) Caprolactam | 5.598 | 113 | 190428m | 20.7516 ug/mL | | RS RLV |
| 33) 4-Chloro-3-methylphenol | 5.978 | 107 | 509996 | 19.1775 ug/mL | 92 | |
| 34) 2-Methylnaphthalene | 5.946 | 142 | 1085466 | 19.7005 ug/mL | 100 | |
| 39) Hexachlorocyclopentadiene | 6.303 | 237 | 251374 | 15.7112 ug/mL | 95 | |
| 40) 2,4,6-Trichlorophenol | 6.490 | 196 | 352946 | 20.0300 ug/mL | 99 | |
| 41) 2,4,5-Trichlorophenol | 6.565 | 196 | 357744 | 19.5717 ug/mL | 98 | |
| 42) 1,1'-Biphenyl | 6.699 | 154 | 1341235 | 18.9936 ug/mL | 97 | |
| 43) 2-Chloronaphthalene | 6.661 | 162 | 1041803 | 18.8641 ug/mL | 96 | |
| 44) 1,2,3,4-Tetrachloroben... | 6.688 | 216 | 487501 | 18.9527 ug/mL | 95 | |
| 45) 2-Nitroaniline | 6.971 | 65 | 314348 | 19.6969 ug/mL | 89 | |
| 46) Acenaphthylene | 7.286 | 152 | 1711926 | 19.1006 ug/mL | 100 | |
| 47) Dimethylphthalate | 7.356 | 163 | 1296274 | 18.3692 ug/mL | 99 | |
| 48) 2,6-Dinitrotoluene | 7.431 | 165 | 289334 | 19.8376 ug/mL | 92 | |
| 49) Acenaphthene | 7.580 | 153 | 1068864 | 18.7872 ug/mL | 99 | |
| 50) 3-Nitroaniline | 7.628 | 138 | 320829 | 22.2891 ug/mL | 89 | |
| 51) 2,4-Dinitrophenol | 7.794 | 184 | 69740m | 11.5215 ug/mL | | RS RLV |
| 52) Dibenzofuran | 7.837 | 168 | 1507548 | 18.7559 ug/mL | 99 | |
| 53) Pentachlorobenzene | 9.179 | 250 | 319256 | 18.8324 ug/mL | 99 | |
| 54) 2,4-Dinitrotoluene | 8.024 | 165 | 392914 | 19.3785 ug/mL | 83 | |
| 55) 4-Nitrophenol | 8.093 | 109 | 204086 | 20.0062 ug/mL# | 86 | |
| 56) 2,3,4,6-Tetrachlorophenol | 8.173 | 232 | 301112 | 20.8623 ug/mL | 94 | |
| 57) Fluorene | 8.366 | 166 | 1321687 | 18.8113 ug/mL | 99 | |
| 58) 4-Chlorophenyl-phenyle... | 8.446 | 204 | 600666 | 18.8056 ug/mL | 96 | |
| 59) Diethylphthalate | 8.472 | 149 | 1354931 | 18.3952 ug/mL | 100 | |
| 60) 4-Nitroaniline | 8.602 | 138 | 331927 | 22.7710 ug/mL | 92 | |
| 61) 1,2,4,5 Tetrachloroben... | 6.261 | 216 | 471104 | 19.0292 ug/mL | 98 | |
| 67) 4,6-Dinitro-2-methylph... | 8.642 | 198 | 201737 | 16.3610 ug/mL | 99 | |
| 68) N-Nitrosodiphenylamine... | 8.670 | 169 | 1069774 | 19.2436 ug/mL | 97 | |
| 69) 4-Bromophenyl-phenylether | 9.179 | 248 | 325607 | 19.3756 ug/mL | 93 | |
| 70) Hexachlorobenzene | 9.333 | 284 | 341537 | 19.9363 ug/mL | 91 | |
| 71) Atrazine | 9.653 | 200 | 387755 | 19.2340 ug/mL | 96 | |
| 72) Pentachlorophenol | 9.688 | 266 | 223761 | 22.6580 ug/mL | 98 | |
| 73) Phenanthrene | 9.819 | 178 | 1864647 | 19.2330 ug/mL | 98 | |
| 74) Anthracene | 9.888 | 178 | 1953386 | 19.4996 ug/mL | 100 | |
| 75) Carbazole | 10.242 | 167 | 1871751 | 19.5100 ug/mL | 99 | |
| 76) Di-n-butylphthalate | 11.036 | 149 | 2290923 | 18.7106 ug/mL | 99 | |
| 77) Fluoranthene | 11.671 | 202 | 2078481 | 18.8717 ug/mL | 97 | |
| 81) Pyrene | 11.997 | 202 | 2211782 | 19.8352 ug/mL | 98 | |
| 82) Butylbenzylphthalate | 13.345 | 149 | 1079802 | 20.1351 ug/mL | 89 | |
| 83) 3,3'-Dichlorobenzidine | 14.008 | 252 | 669433 | 22.2082 ug/mL | 99 | |
| 84) Benzo (a) anthracene | 13.905 | 228 | 1974476 | 19.7200 ug/mL | 99 | |
| 85) Chrysene | 13.968 | 228 | 1841922 | 18.6977 ug/mL | 97 | |
| 86) Bis(2-ethylhexyl)phtha... | 14.368 | 149 | 1457125 | 19.3174 ug/mL | 97 | |
| 89) Di-n-octylphthalate | 15.294 | 149 | 2565599 | 20.2224 ug/mL | 100 | |
| 90) Benzo (b) fluoranthene | 15.500 | 252 | 1858837 | 18.6235 ug/mL | 96 | |
| 91) Benzo (k) fluoranthene | 15.540 | 252 | 1954556 | 19.2226 ug/mL | 94 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.923 | 252 | 1906433 | 19.0749 ug/mL | 98 |
| 93) Indeno (1,2,3-cd) pyrene | 17.317 | 276 | 1524972 | 19.5701 ug/mL | 93 |
| 94) Dibenzo (a,h) anthracene | 17.363 | 278 | 1676047 | 20.2405 ug/mL | 95 |
| 95) Benzo (g,h,i) perylene | 17.592 | 276 | 1633897 | 18.8629 ug/mL | 92 |

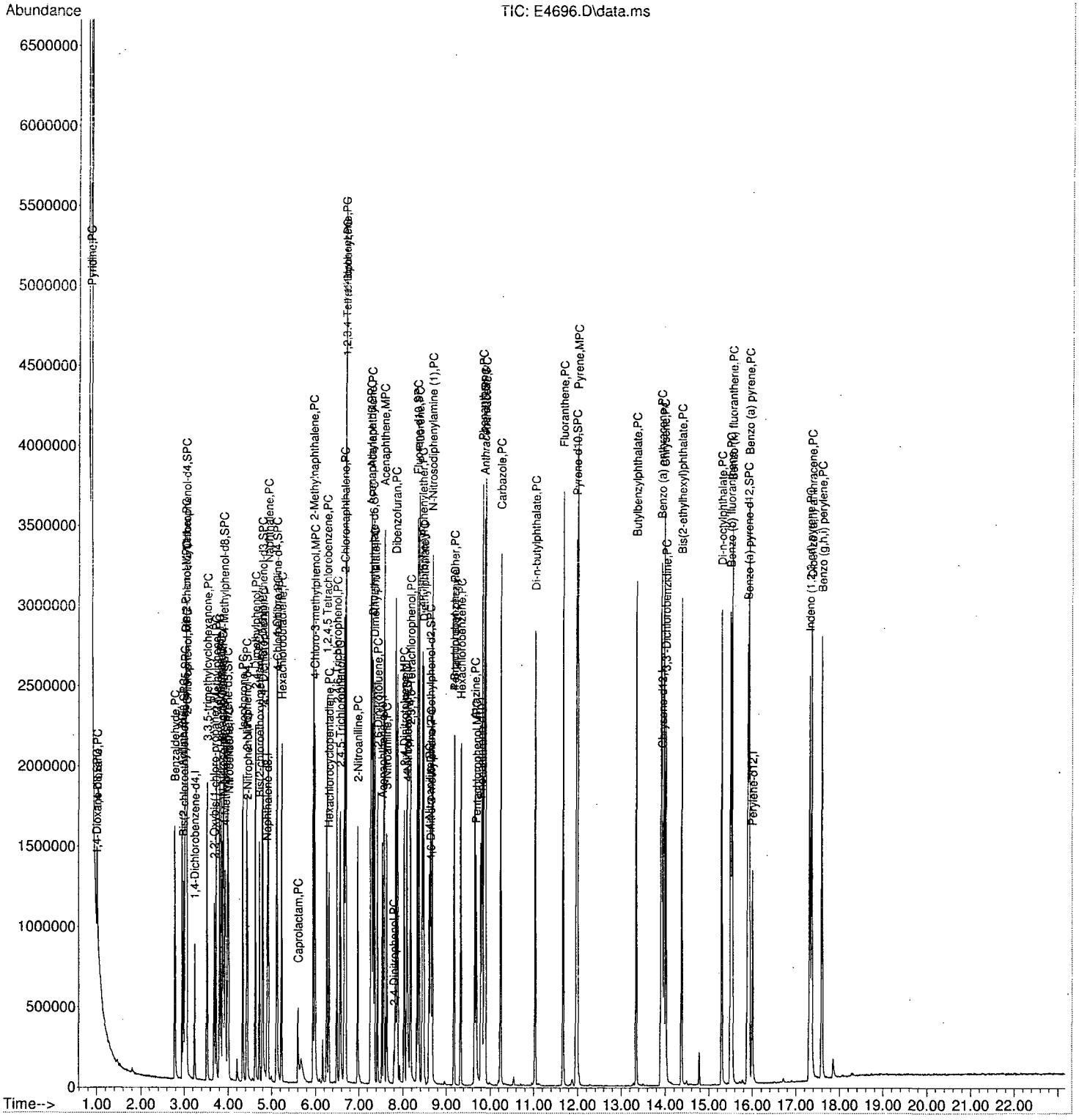
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration






00616

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 262# | 0.00 |
| 2 | PC | Pyridine | 6.446 | 5.320 | 17.5 | 215# | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.224 | 0.242 | -8.0# | 262# | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.126 | 1.388 | -23.3# | 274# | 0.00 |
| 5 | PC | Benzaldehyde | 2.512 | 2.647 | -5.4 | 245# | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.395 | 3.248 | 4.3 | 253# | 0.00 |
| 7 | SPC | Phenol-d5 | 4.242 | 4.319 | -1.8 | 290# | 0.00 |
| 8 | MPC | Phenol | 4.389 | 4.110 | 6.4 | 249# | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.530 | 3.377 | 4.3 | 255# | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 2.914 | 2.799 | 3.9 | 257# | 0.00 |
| 11 | PC | Aniline | 3.810 | 4.594 | -20.6 | 274# | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.104 | 3.752 | 8.6 | 248# | 0.00 |
| 13 | PC | Acetophenone | 5.004 | 4.688 | 6.3 | 247# | 0.00 |
| 14 | PC | 2-Methylphenol | 3.321 | 3.206 | 3.5 | 252# | 0.00 |
| 15 | PC | Hexachloroethane | 1.517 | 1.483 | 2.2 | 264# | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.661 | 2.448 | 8.0 | 244# | 0.00 |
| 17 | PC | 4-Methylphenol | 3.521 | 3.361 | 4.5 | 254# | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.203 | 2.124 | 3.6 | 251# | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 3.992 | 3.898 | 2.4 | 258# | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.432 | 3.639 | -6.0 | 290# | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 251# | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.443 | 0.435 | 1.8 | 258# | 0.00 |
| 23 | PC | Nitrobenzene | 0.927 | 0.884 | 4.6 | 253# | 0.00 |
| 24 | PC | Isophorone | 1.662 | 1.580 | 4.9 | 244# | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.464 | 0.460 | 0.9 | 261# | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.932 | 0.875 | 6.1 | 245# | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.926 | 0.891 | 3.8 | 254# | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.729 | 0.710 | 2.6 | 255# | 0.00 |
| 29 | PC | Naphthalene | 2.513 | 2.461 | 2.1 | 257# | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.755 | 0.980 | -29.8 | 278# | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.457 | 0.450 | 1.5 | 250# | 0.00 |
| 32 | PC | Caprolactam | 0.286 | 0.296 | -3.5 | 248# | -0.01 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.827 | 0.793 | 4.1 | 249# | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.714 | 1.689 | 1.5 | 254# | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.501 | 0.516 | -3.0 | 268# | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.832 | 0.841 | -1.1 | 257# | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.826 | 1.067 | -29.2 | 278# | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 257# | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.750 | 0.589 | 21.5 | 200# | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.826 | 0.827 | -0.1 | 269# | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.857 | 0.839 | 2.1 | 258# | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.311 | 3.144 | 5.0 | 254# | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.590 | 2.442 | 5.7 | 250# | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.206 | 1.143 | 5.2 | 250# | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.748 | 0.737 | 1.5 | 261# | 0.00 |
| 46 | PC | Acenaphthylene | 4.203 | 4.014 | 4.5 | 253# | 0.00 |
| 47 | PC | Dimethylphthalate | 3.309 | 3.039 | 8.2 | 242# | 0.01 |
| 48 | PC | 2,6-Dinitrotoluene | 0.684 | 0.678 | 0.9 | 251# | 0.01 |
| 49 | MPC | Acenaphthene | 2.668 | 2.506 | 6.1 | 247# | 0.01 |
| 50 | PC | 3-Nitroaniline | 0.675 | 0.752 | -11.4 | 251# | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.284 | 0.164 | 42.3# | 145 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:12:00 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.769 | 3.534 | 6.2 | 245# | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.795 | 0.748 | 5.9 | 250# | 0.01 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.951 | 0.921 | 3.2 | 251# | 0.01 |
| 55 | MPC | 4-Nitrophenol | 0.478 | 0.478 | 0.0 | 272# | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.677 | 0.706 | -4.3 | 281# | 0.01 |
| 57 | PC | Fluorene | 3.294 | 3.099 | 5.9 | 251# | 0.01 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.498 | 1.408 | 6.0 | 250# | 0.01 |
| 59 | PC | Diethylphthalate | 3.454 | 3.177 | 8.0 | 236# | 0.01 |
| 60 | PC | 4-Nitroaniline | 0.683 | 0.778 | -13.9 | 264# | 0.02 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.161 | 1.104 | 4.9 | 251# | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.338 | 4.121 | 5.0 | 252# | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.646 | 0.679 | -5.1 | 275# | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.521 | 3.179 | 9.7 | 238# | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.770 | 2.606 | 5.9 | 250# | 0.01 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 240# | 0.01 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.322 | 0.264 | 18.0 | 207# | 0.02 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.452 | 1.397 | 3.8 | 245# | 0.01 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.439 | 0.425 | 3.2 | 249# | 0.01 |
| 70 | PC | Hexachlorobenzene | 0.448 | 0.446 | 0.4 | 247# | 0.01 |
| 71 | PC | Atrazine | 0.527 | 0.507 | 3.8 | 233# | 0.01 |
| 72 | MPC | Pentachlorophenol | 0.258 | 0.292 | -13.2 | 300# | 0.02 |
| 73 | PC | Phenanthrene | 2.533 | 2.436 | 3.8 | 242# | 0.02 |
| 74 | PC | Anthracene | 2.617 | 2.552 | 2.5 | 246# | 0.01 |
| 75 | PC | Carbazole | 2.507 | 2.445 | 2.5 | 240# | 0.02 |
| 76 | PC | Di-n-butylphthalate | 3.199 | 2.993 | 6.4 | 234# | 0.02 |
| 77 | PC | Fluoranthene | 2.878 | 2.715 | 5.7 | 229# | 0.02 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.367 | 0.298 | 18.8 | 205# | 0.02 |
| 79 | SPC | Anthracene-d10 | 2.551 | 2.436 | 4.5 | 242# | 0.02 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 214# | 0.03 |
| 81 | MPC | Pyrene | 2.755 | 2.733 | 0.8 | 226# | 0.02 |
| 82 | PC | Butylbenzylphthalate | 1.325 | 1.334 | -0.7 | 228# | 0.03 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.745 | 0.827 | -11.0 | 221# | 0.02 |
| 84 | PC | Benzo (a) anthracene | 2.474 | 2.439 | 1.4 | 224# | 0.03 |
| 85 | PC | Chrysene | 2.434 | 2.276 | 6.5 | 215# | 0.03 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.864 | 1.800 | 3.4 | 216# | 0.03 |
| 87 | SPC | Pyrene-d10 | 2.531 | 2.502 | 1.1 | 229# | 0.02 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 198# | 0.04 |
| 89 | PC | Di-n-octylphthalate | 3.442 | 3.480 | -1.1 | 217# | 0.04 |
| 90 | PC | Benzo (b) fluoranthene | 2.708 | 2.521 | 6.9 | 185# | 0.03 |
| 91 | PC | Benzo (k) fluoranthene | 2.759 | 2.651 | 3.9 | 209# | 0.04 |
| 92 | PC | Benzo (a) pyrene | 2.711 | 2.586 | 4.6 | 197# | 0.04 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.114 | 2.069 | 2.1 | 187# | 0.05 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.247 | 2.274 | -1.2 | 194# | 0.05 |
| 95 | PC | Benzo (g,h,i) perylene | 2.350 | 2.216 | 5.7 | 177# | 0.05 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.383 | 2.200 | 7.7 | 193# | 0.04 |

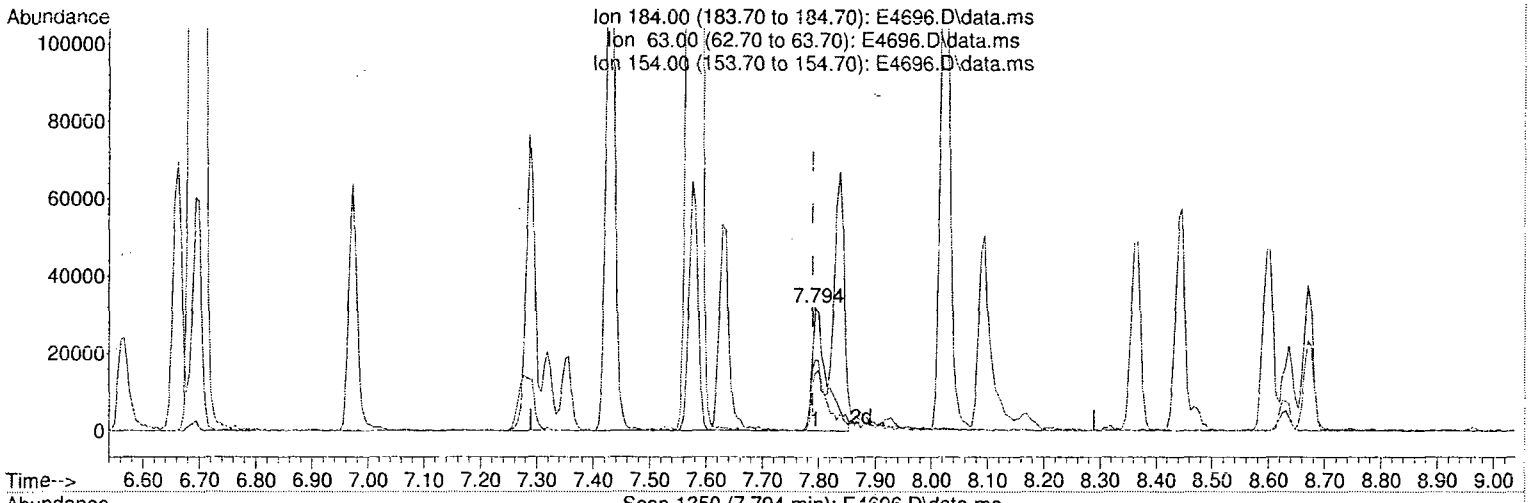
(#) = Out of Range SPCC's out = 0 CCC's out = 3

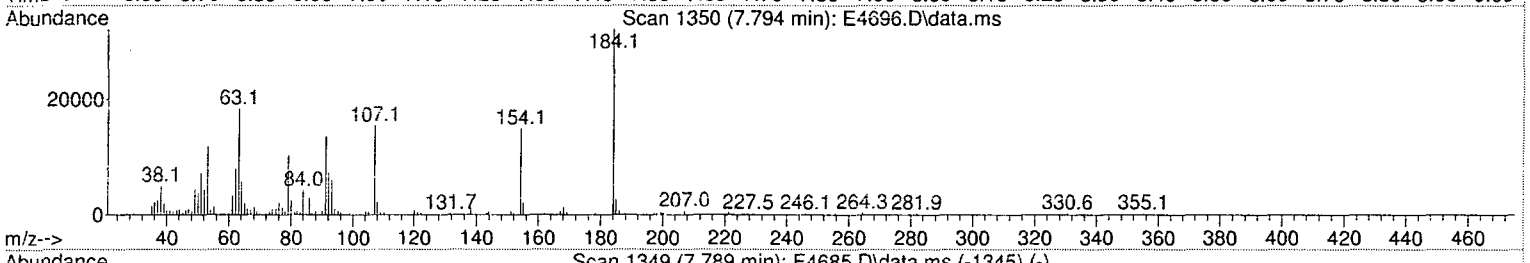
Quantitation Report (Qedit)

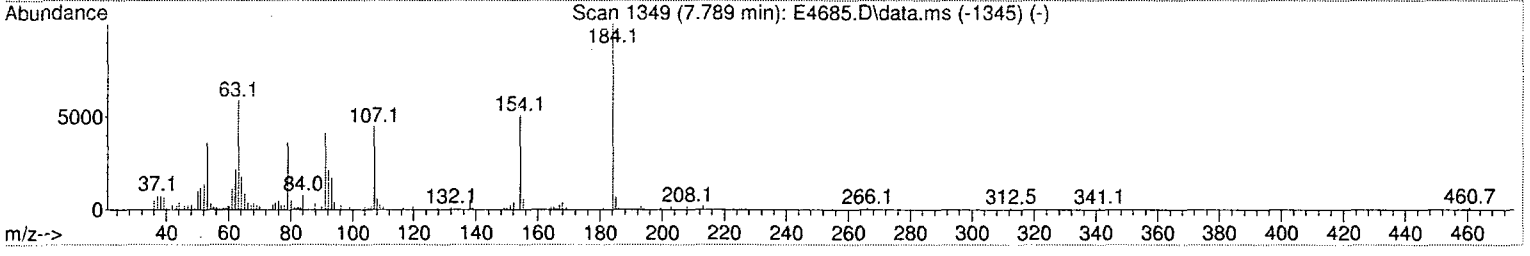
Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:09:15 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.794min (+ 0.005) 9.53 ug/mL**

**response 57708**

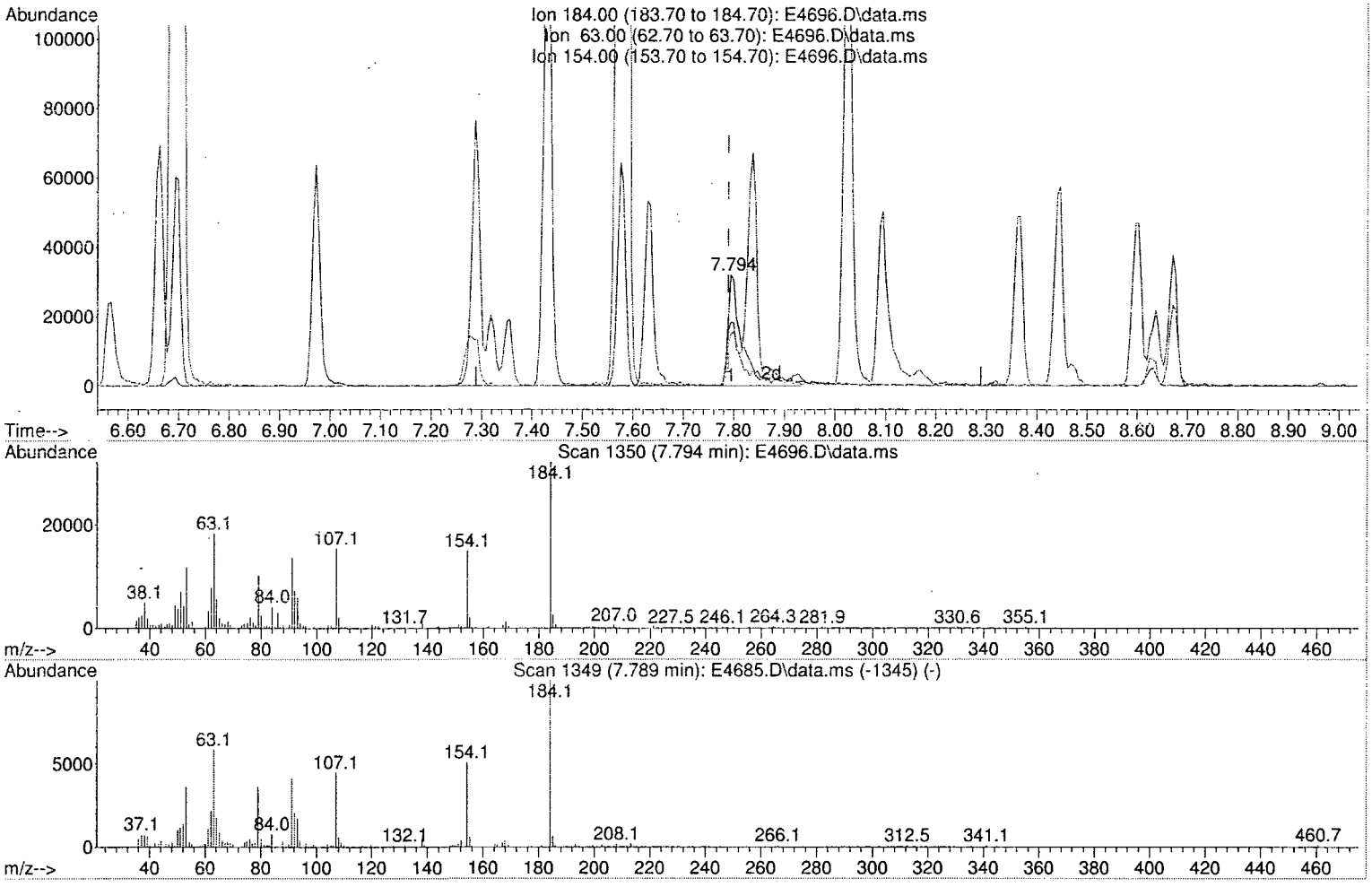
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 43.63# |
| 154.00 | 63.80 | 54.71 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:09:15 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.794min (+ 0.005) 11.52 ug/mL m** RS 8/21

**response 69740**

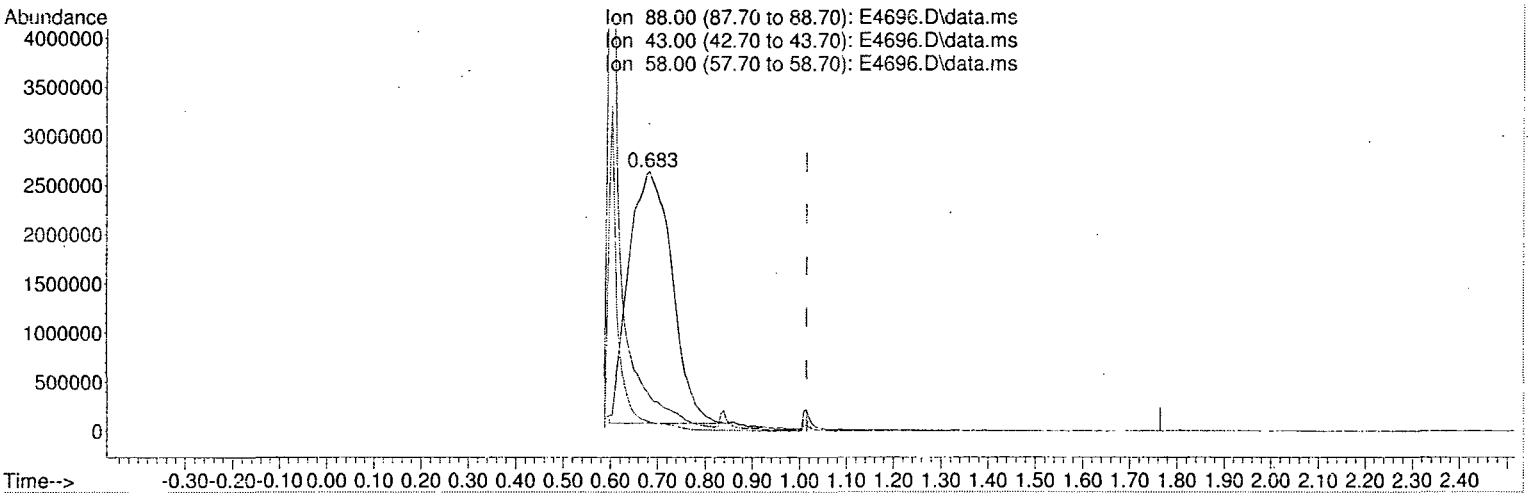
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 36.10# |
| 154.00 | 63.80 | 45.27 |
| 0.00 | 0.00 | 0.00 |

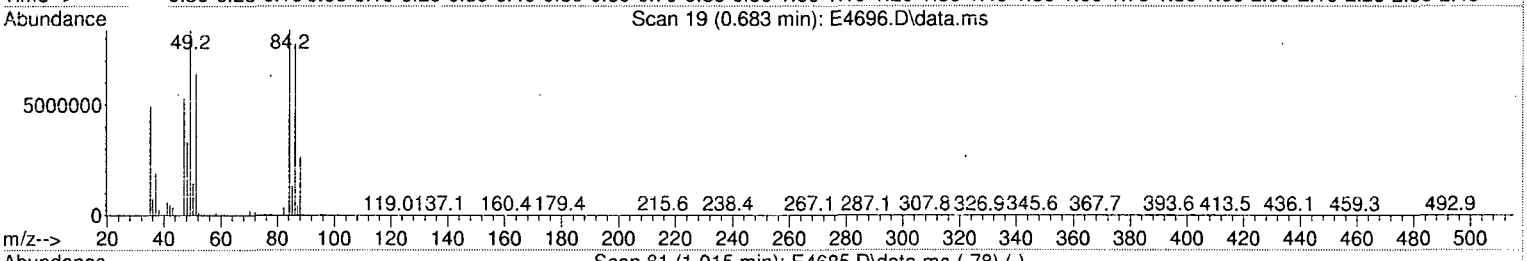
Quantitation Report (Qedit)

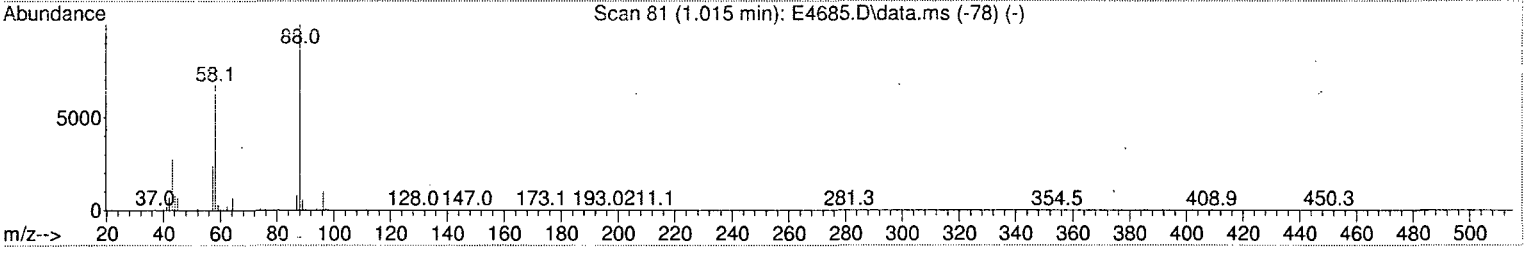
Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:09:15 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.683min (-0.331) 1896.41 ug/mL**

**response 16347697**

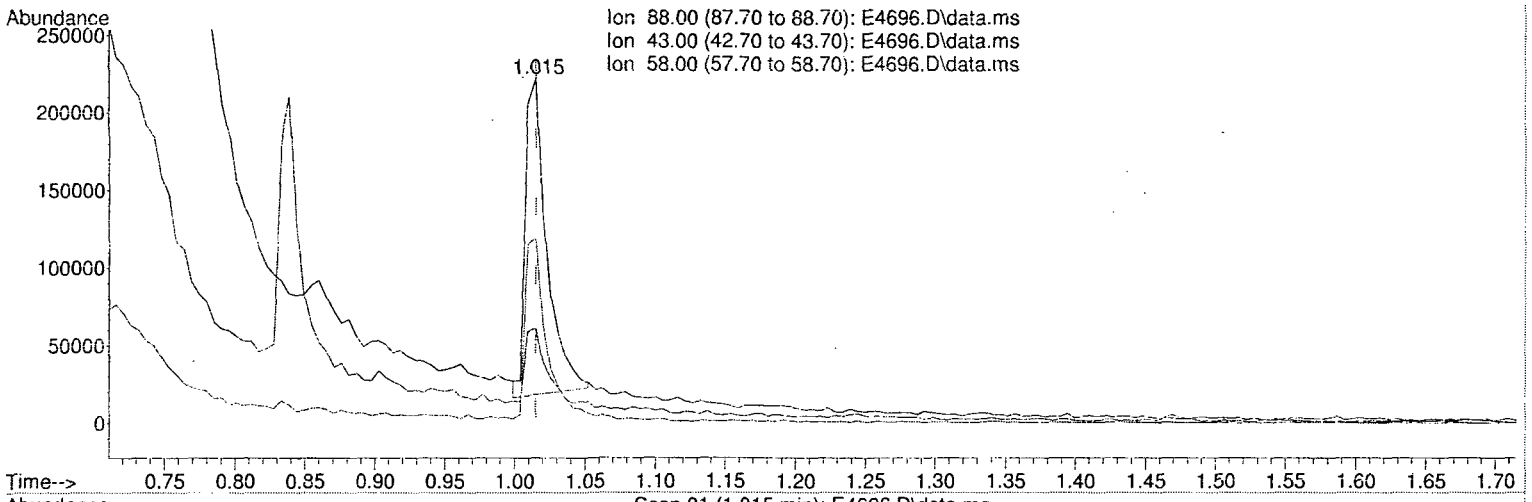
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

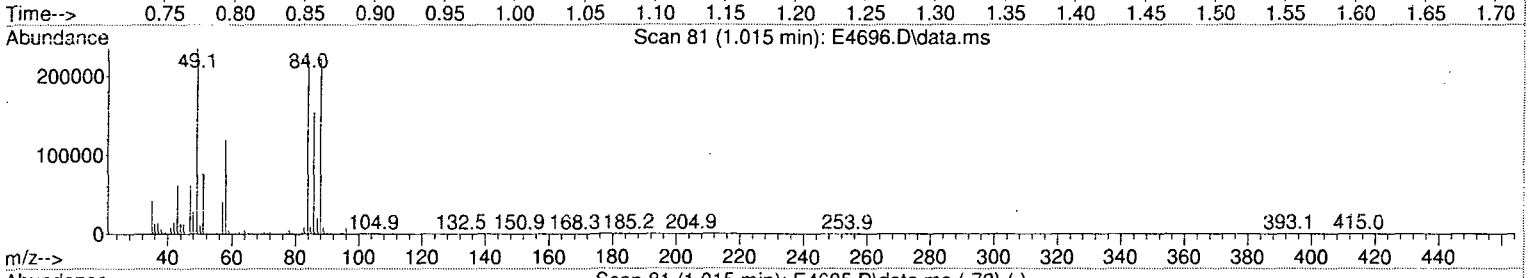
Quantitation Report (Qedit)

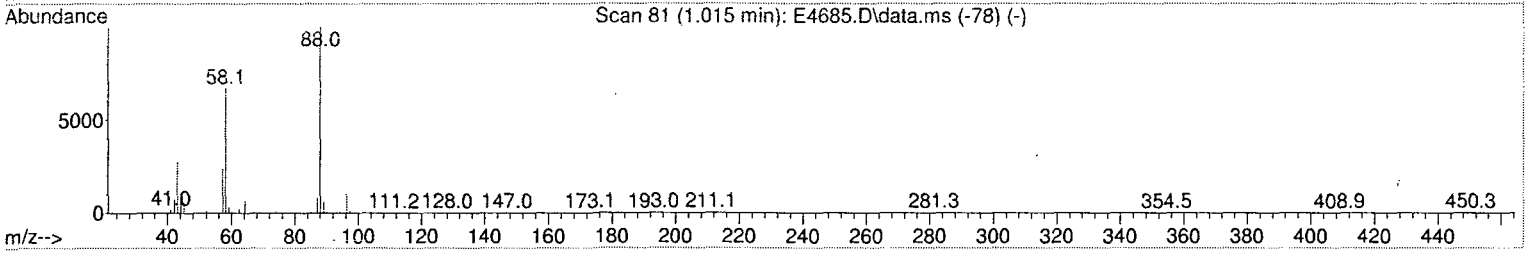
Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:09:15 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.015min (-0.000) 24.66 ug/mL m** RS 8RW

**response 212587**

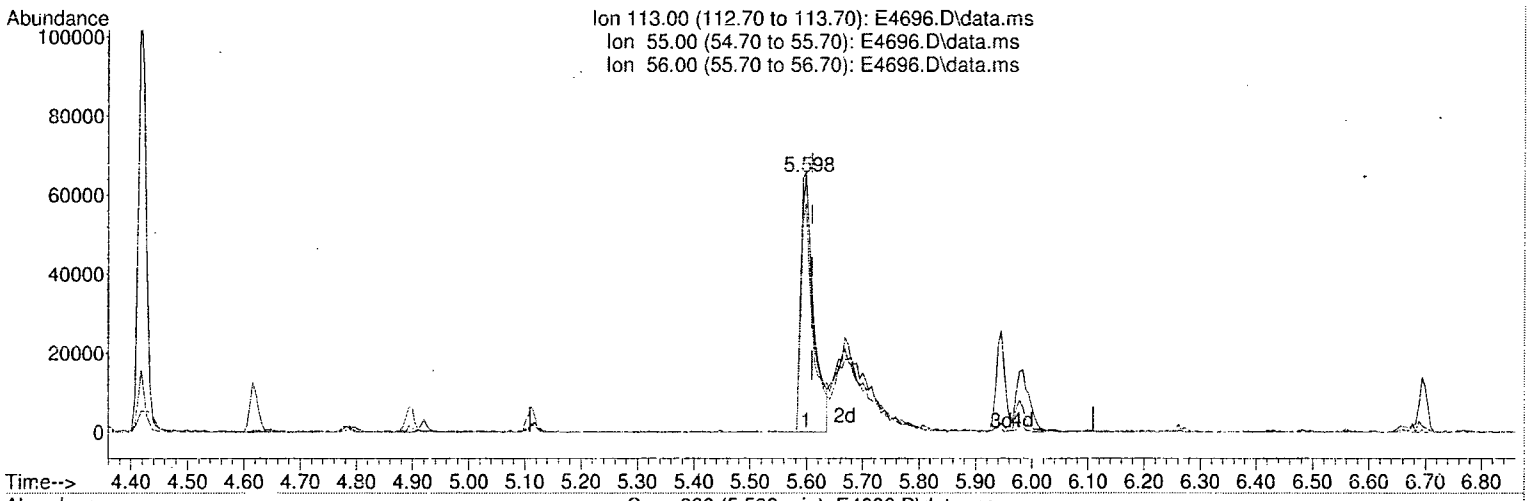
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

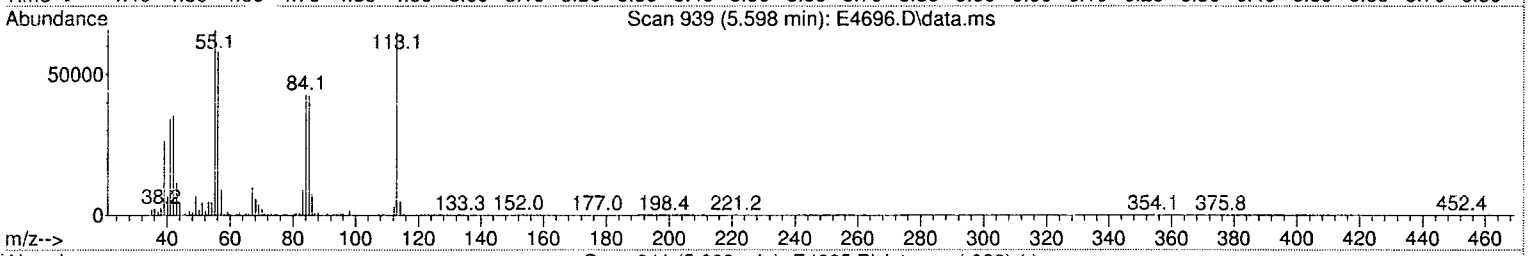
Quantitation Report (Qedit)

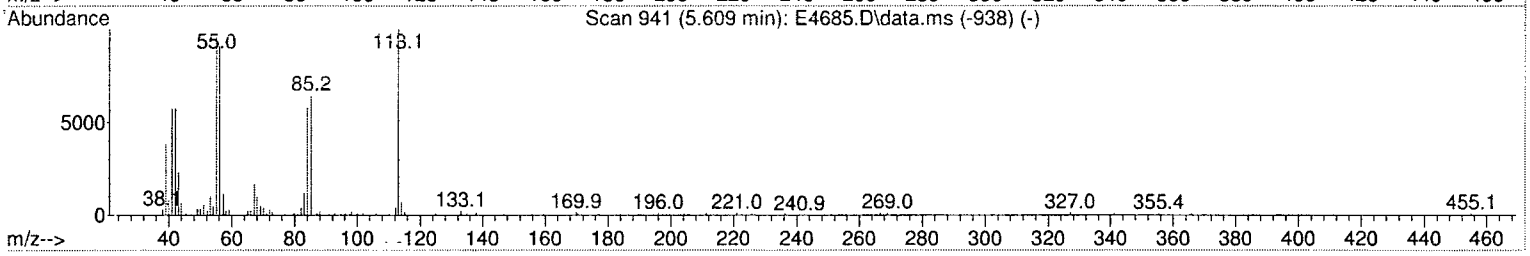
Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:11:05 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(32) Caprolactam (PC)**

**5.598min (-0.011) 10.88 ug/mL**

**response 99818**

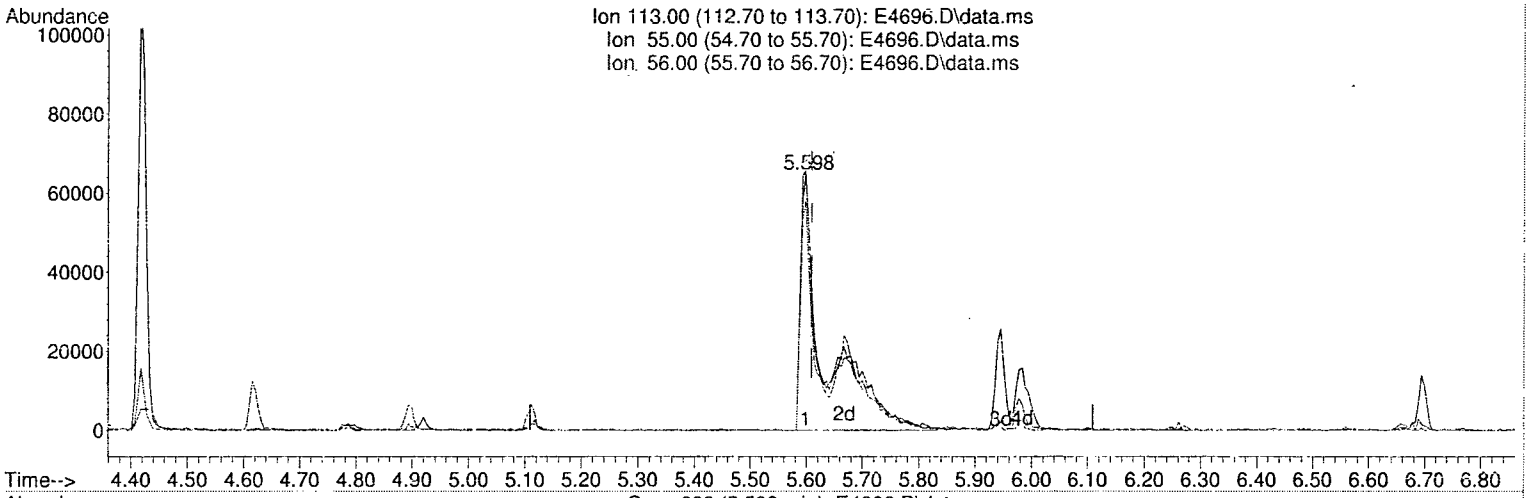
| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 105.40 |
| 56.00 | 92.50 | 88.63 |
| 0.00 | 0.00 | 0.00 |

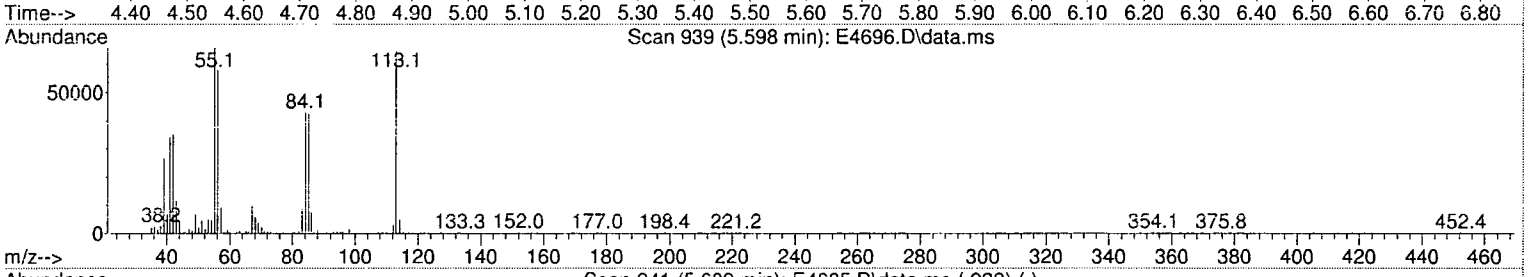
Quantitation Report (Qedit)

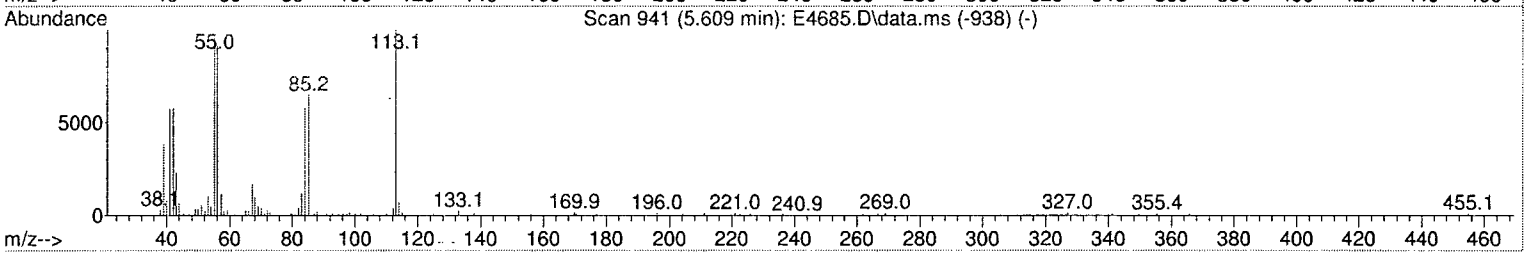
Data File : C:\msdchem\1\data\E4696.D
Acq On : 26 May 2012 18:09
Sample : 2E25002-CCV3
Misc : SSTD0209V
DataAcq Meth:CLPACQ.M

Vial: 10
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 12:11:05 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4685.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration




TIC: E4696.D\data.ms

**(32) Caprolactam (PC)**

**5.598min (-0.011) 20.75 ug/mL m** RS 8/31

**response 190428**

| Ion | Exp% | Act% |
|---|---|---|
| 113.00 | 100.00 | 100.00 |
| 55.00 | 110.10 | 55.25# |
| 56.00 | 92.50 | 46.46# |
| 0.00 | 0.00 | 0.00 |

DFTPP

Data File : C:\msdchem\1\data\E4601.D
Acq On : 23 May 2012 16:26
Sample : 2E23005-TUN1
Misc : DFTPP9N
DataAcq Meth:DFTPP.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 14:09:18 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Thu May 24 13:06:19 2012
Response via : Initial Calibration

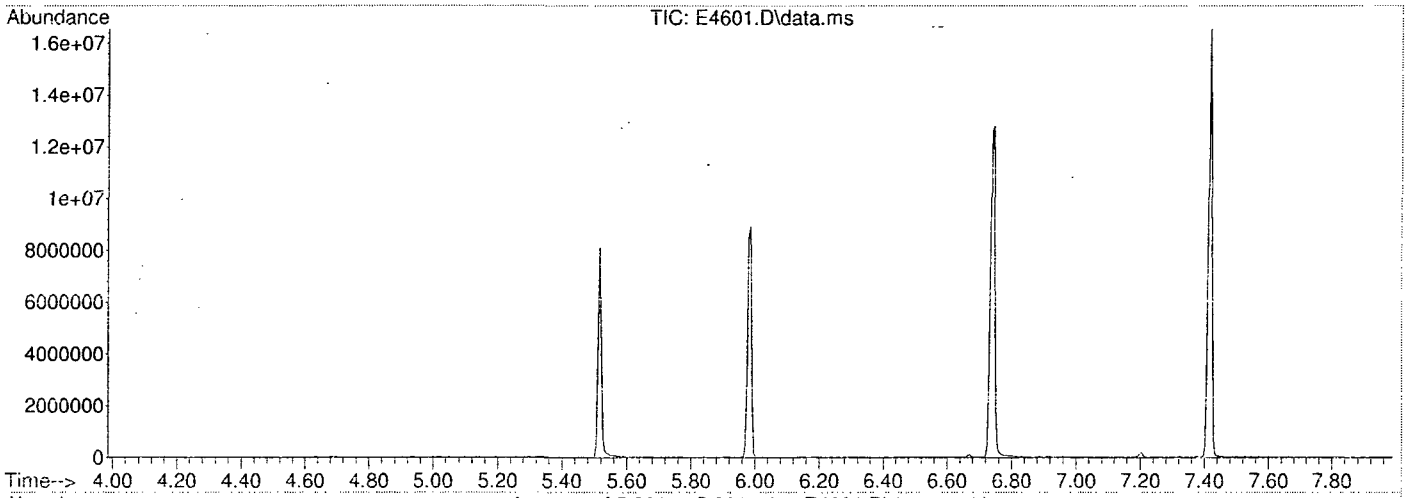
**ORIGINAL LOCATED IN**

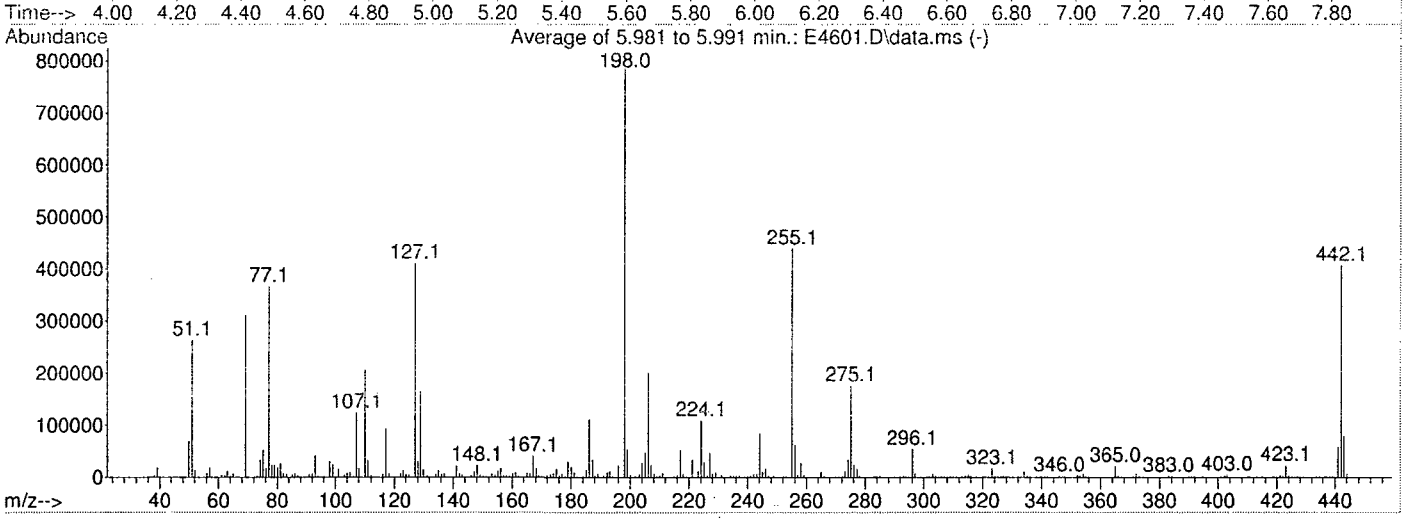
**CASE:** 42543 **SDG:** X0T49

05/25/12

S. Vitkati

05/25/12




AutoFind: Scans 917, 918, 919; Background Corrected with Scan 911

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 33.5 | 262966 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 69 | 198 | 0.10 | 100 | 39.5 | 310224 | PASS |
| 70 | 69 | 0.00 | 2 | 0.5 | 1612 | PASS |
| 127 | 198 | 10 | 80 | 52.2 | 410285 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 785301 | PASS |
| 199 | 198 | 5 | 9 | 6.7 | 53005 | PASS |
| 275 | 198 | 10 | 60 | 22.4 | 175675 | PASS |
| 365 | 198 | 2 | 100 | 2.7 | 21265 | PASS |
| 441 | 443 | 0.10 | 99 | 74.0 | 58400 | PASS |
| 442 | 198 | 50 | 100 | 51.8 | 407168 | PASS |
| 443 | 442 | 15 | 24 | 19.4 | 78877 | PASS |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 35.95 | 282 | 45.20 | 295 | 56.10 | 7830 | 65.10 | 6107 |
| 36.50 | 52 | 45.70 | 75 | 57.10 | 18125 | 66.00 | 311 |
| 37.00 | 947 | 47.10 | 265 | 58.00 | 755 | 66.20 | 65 |
| 37.20 | 264 | 48.10 | 296 | 59.00 | 114 | 66.90 | 116 |
| 38.10 | 3014 | 49.10 | 1764 | 59.20 | 167 | 69.10 | 310224 |
| 39.15 | 18893 | 50.05 | 68416 | 60.05 | 254 | 70.10 | 1612 |
| 40.15 | 1421 | 51.10 | 262966 | 61.05 | 3655 | 70.30 | 169 |
| 41.20 | 842 | 52.10 | 13428 | 62.10 | 3758 | 71.05 | 246 |
| 43.10 | 71 | 53.25 | 505 | 62.30 | 229 | 72.25 | 389 |
| 44.05 | 156 | 55.00 | 505 | 63.10 | 11583 | 73.15 | 2273 |
| 44.95 | 182 | 55.20 | 631 | 64.15 | 1860 | 74.10 | 32785 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 75.05 | 51914 | 87.10 | 3172 | 96.85 | 26 | 108.10 | 17034 |
| 76.15 | 17665 | 88.05 | 1590 | 98.10 | 30617 | 109.10 | 269 |
| 77.10 | 366019 | 89.00 | 256 | 99.10 | 24262 | 110.10 | 206920 |
| 78.05 | 23639 | 89.20 | 310 | 100.00 | 2081 | 111.05 | 32461 |
| 79.10 | 24383 | 90.20 | 168 | 101.10 | 15013 | 112.05 | 3589 |
| 80.10 | 18142 | 91.00 | 5224 | 102.00 | 960 | 113.05 | 1377 |
| 81.10 | 26342 | 92.10 | 6570 | 103.15 | 4886 | 113.90 | 142 |
| 82.10 | 6677 | 93.05 | 41850 | 104.05 | 8512 | 114.50 | 165 |
| 83.10 | 5877 | 94.00 | 2369 | 105.10 | 8976 | 115.10 | 28 |
| 85.10 | 5175 | 95.00 | 875 | 106.10 | 1708 | 116.10 | 6483 |
| 86.00 | 7264 | 96.20 | 2217 | 107.10 | 123781 | 117.10 | 92544 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 118.10 | 6491 | 129.05 | 163558 | 139.00 | 610 | 149.10 | 4669 |
| 119.05 | 1211 | 130.05 | 14698 | 139.90 | 518 | 150.10 | 1258 |
| 120.00 | 1602 | 131.15 | 2745 | 140.15 | 1726 | 150.40 | 106 |
| 121.05 | 648 | 131.95 | 1710 | 141.05 | 21459 | 151.10 | 2430 |
| 122.10 | 7332 | 133.05 | 625 | 142.10 | 6887 | 151.90 | 1739 |
| 123.05 | 12906 | 134.05 | 4827 | 143.05 | 4362 | 153.10 | 6842 |
| 124.05 | 5392 | 135.10 | 12999 | 144.10 | 1533 | 154.10 | 5285 |
| 125.05 | 4484 | 136.10 | 5463 | 145.05 | 1127 | 155.10 | 11340 |
| 125.90 | 167 | 137.10 | 6287 | 146.10 | 3374 | 156.10 | 16302 |
| 127.10 | 410285 | 137.90 | 694 | 147.05 | 10200 | 157.05 | 2778 |
| 128.10 | 30337 | 138.20 | 849 | 148.05 | 22428 | 158.00 | 3469 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 159.10 | 2710 | 166.10 | 6049 | 176.10 | 3350 | 186.10 | 111555 |
| 160.05 | 6407 | 167.05 | 40515 | 177.05 | 6926 | 187.10 | 33518 |
| 161.10 | 9168 | 168.10 | 16709 | 178.05 | 2372 | 188.10 | 3403 |
| 162.00 | 1348 | 169.10 | 3472 | 179.00 | 30830 | 189.05 | 7129 |
| 162.20 | 1590 | 170.10 | 1334 | 180.10 | 19691 | 190.10 | 698 |
| 162.80 | 85 | 171.10 | 1661 | 181.10 | 9554 | 191.00 | 3659 |
| 163.05 | 687 | 172.00 | 4082 | 182.00 | 1438 | 192.10 | 9899 |
| 163.50 | 105 | 173.10 | 5499 | 182.20 | 97 | 193.10 | 11512 |
| 163.90 | 243 | 174.10 | 8258 | 182.85 | 684 | 194.10 | 2255 |
| 164.20 | 651 | 175.10 | 16531 | 184.10 | 2375 | 195.00 | 734 |
| 165.05 | 8146 | 175.90 | 456 | 185.10 | 14330 | 196.05 | 22031 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 198.00 | 785301 | 206.10 | 202061 | 214.05 | 293 | 225.10 | 29013 |
| 199.05 | 53005 | 207.05 | 24207 | 215.05 | 2300 | 226.20 | 3609 |
| 200.10 | 4773 | 208.10 | 6536 | 216.10 | 4439 | 227.05 | 46792 |
| 200.70 | 156 | 209.10 | 1824 | 217.10 | 52344 | 228.10 | 6694 |
| 201.00 | 161 | 209.80 | 406 | 218.05 | 7062 | 229.10 | 9875 |
| 201.60 | 2703 | 210.10 | 3433 | 219.10 | 957 | 230.10 | 1104 |
| 201.80 | 263 | 210.40 | 456 | 220.20 | 587 | 231.05 | 3763 |
| 202.10 | 753 | 211.05 | 8529 | 221.10 | 33701 | 232.15 | 629 |
| 203.10 | 5512 | 212.10 | 349 | 221.90 | 692 | 233.05 | 895 |
| 204.10 | 28085 | 213.15 | 557 | 223.10 | 11511 | 234.10 | 2636 |
| 205.10 | 46914 | 213.80 | 214 | 224.10 | 109061 | 235.05 | 3351 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms

2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 236.10 | 2447 | 246.10 | 16637 | 256.10 | 61747 | 266.05 | 2172 |
| 237.10 | 3846 | 247.05 | 3321 | 257.10 | 4200 | 266.90 | 74 |
| 238.00 | 300 | 248.00 | 771 | 258.10 | 27574 | 267.20 | 161 |
| 238.15 | 237 | 248.20 | 119 | 259.05 | 4267 | 267.95 | 93 |
| 239.10 | 1620 | 249.00 | 2698 | 260.15 | 778 | 268.30 | 61 |
| 240.00 | 1240 | 250.00 | 356 | 261.10 | 1014 | 270.05 | 665 |
| 241.05 | 2966 | 250.20 | 267 | 262.10 | 70 | 270.80 | 227 |
| 242.10 | 5770 | 251.10 | 756 | 263.05 | 392 | 271.10 | 828 |
| 243.10 | 6027 | 252.15 | 1261 | 263.85 | 439 | 272.10 | 1546 |
| 244.10 | 83763 | 253.05 | 2201 | 264.20 | 432 | 273.10 | 11749 |
| 245.10 | 10173 | 255.10 | 438763 | 265.00 | 10702 | 274.10 | 33500 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 275.10 | 175675 | 285.10 | 2819 | 295.05 | 1073 | 305.80 | 65 |
| 276.10 | 23963 | 286.15 | 448 | 296.10 | 53784 | 306.20 | 74 |
| 277.10 | 15586 | 287.20 | 81 | 297.10 | 7570 | 307.20 | 99 |
| 278.05 | 2641 | 288.20 | 260 | 297.95 | 456 | 308.10 | 852 |
| 279.10 | 340 | 289.10 | 568 | 299.05 | 158 | 309.00 | 224 |
| 280.00 | 51 | 290.10 | 473 | 300.10 | 78 | 309.20 | 274 |
| 281.25 | 220 | 291.10 | 439 | 301.00 | 635 | 310.10 | 835 |
| 281.95 | 419 | 292.10 | 882 | 302.05 | 1087 | 311.20 | 238 |
| 282.20 | 112 | 293.10 | 3300 | 303.10 | 6714 | 312.00 | 142 |
| 283.10 | 1884 | 293.90 | 186 | 304.10 | 1889 | 313.00 | 394 |
| 284.15 | 1239 | 294.10 | 643 | 305.15 | 262 | 313.20 | 87 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 314.10 | 2784 | 324.90 | 116 | 333.05 | 1286 | 346.00 | 2772 |
| 315.10 | 5199 | 325.15 | 209 | 334.10 | 10225 | 347.10 | 663 |
| 316.10 | 2925 | 326.00 | 153 | 335.10 | 2472 | 347.80 | 60 |
| 317.10 | 568 | 326.20 | 95 | 336.00 | 298 | 348.10 | 70 |
| 317.80 | 86 | 327.05 | 2906 | 339.05 | 211 | 350.10 | 171 |
| 320.00 | 128 | 328.05 | 1256 | 339.90 | 63 | 350.90 | 68 |
| 320.30 | 61 | 328.80 | 124 | 340.10 | 254 | 352.10 | 4397 |
| 321.05 | 1237 | 329.15 | 274 | 340.95 | 622 | 353.10 | 2943 |
| 321.95 | 574 | 330.10 | 72 | 341.20 | 948 | 354.10 | 4817 |
| 323.10 | 16626 | 331.20 | 144 | 342.05 | 732 | 355.00 | 733 |
| 324.10 | 2309 | 332.05 | 1446 | 342.95 | 159 | 355.30 | 217 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 355.80 | 75 | 369.20 | 93 | 384.40 | 64 | 394.50 | 56 |
| 356.40 | 51 | 369.95 | 155 | 384.90 | 147 | 394.80 | 57 |
| 357.10 | 74 | 371.15 | 1569 | 385.20 | 89 | 395.10 | 59 |
| 357.80 | 74 | 372.10 | 7010 | 388.30 | 61 | 396.70 | 88 |
| 359.10 | 455 | 373.00 | 775 | 389.95 | 909 | 397.10 | 107 |
| 359.60 | 71 | 373.15 | 1376 | 390.80 | 111 | 400.80 | 109 |
| 361.20 | 79 | 374.15 | 394 | 391.15 | 454 | 401.15 | 329 |
| 365.00 | 21265 | 374.80 | 94 | 391.80 | 86 | 402.15 | 3099 |
| 366.05 | 2747 | 383.00 | 1905 | 392.00 | 202 | 403.00 | 4448 |
| 366.90 | 79 | 383.90 | 133 | 392.20 | 230 | 404.00 | 1124 |
| 367.20 | 184 | 384.10 | 466 | 393.05 | 263 | 405.20 | 65 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 410.00 | 56 | 422.05 | 2911 | 428.30 | 88 | 434.60 | 192 |
| 410.85 | 128 | 423.05 | 22875 | 429.00 | 93 | 434.85 | 301 |
| 413.10 | 60 | 423.90 | 1568 | 429.20 | 138 | 435.50 | 141 |
| 415.00 | 348 | 424.10 | 3259 | 430.10 | 91 | 436.10 | 324 |
| 415.30 | 173 | 425.15 | 651 | 430.60 | 197 | 436.60 | 120 |
| 416.40 | 121 | 425.40 | 83 | 430.90 | 75 | 436.90 | 250 |
| 418.35 | 210 | 426.20 | 94 | 431.40 | 209 | 437.30 | 422 |
| 418.80 | 68 | 426.40 | 94 | 431.65 | 199 | 438.00 | 251 |
| 419.10 | 97 | 426.90 | 107 | 432.40 | 215 | 438.50 | 56 |
| 419.70 | 177 | 427.20 | 123 | 433.35 | 448 | 439.10 | 199 |
| 421.05 | 3634 | 427.80 | 207 | 433.80 | 244 | 439.60 | 252 |

Average of 5.981 to 5.991 min.: E4601.D\data.ms
2E23005-TUN1

Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 441.05 | 58400 | | | | | | |
| 442.10 | 407168 | | | | | | |
| 443.05 | 78877 | | | | | | |
| 444.10 | 6540 | | | | | | |
| 445.00 | 190 | | | | | | |
| 445.25 | 339 | | | | | | |

DFTPP

Data File : C:\msdchem\1\data\E4654.D
Acq On : 25 May 2012 11:09
Sample : 2E25002-TUN1
Misc : DFTPP9S
DataAcq Meth:DFTPP.M

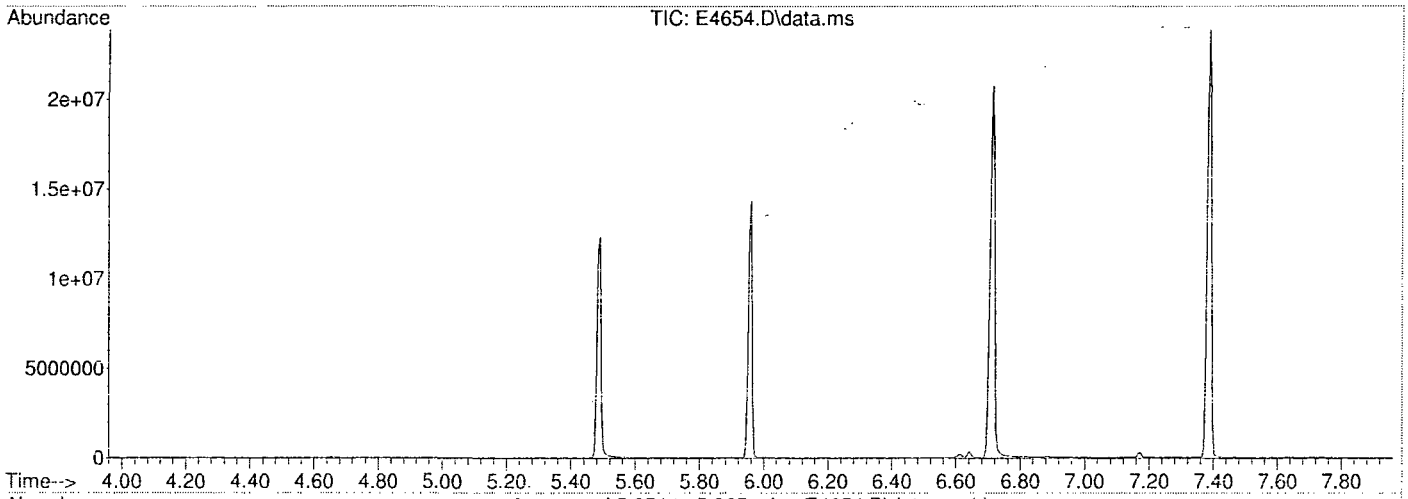
Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

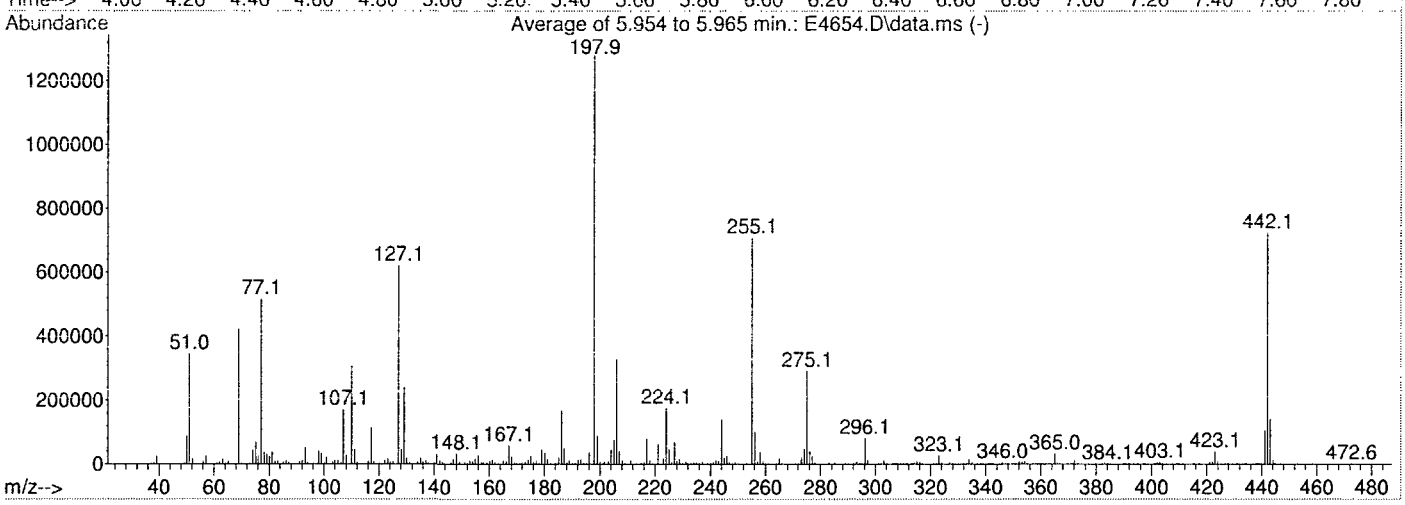
06/01/12

Quant Time: May 29 12:05:26 2012
Quant Results File: SOME4685.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Tue May 29 12:06:37 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42583 SDG: H3200

S. Vokati
06/01/12




AutoFind: Scans 912, 913, 914; Background Corrected with Scan 906

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 26.9 | 343929 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 69 | 198 | 0.10 | 100 | 32.9 | 421251 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 2478 | PASS |
| 127 | 198 | 10 | 80 | 48.5 | 620638 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 1279254 | PASS |
| 199 | 198 | 5 | 9 | 6.8 | 87253 | PASS |
| 275 | 198 | 10 | 60 | 22.7 | 290517 | PASS |
| 365 | 198 | 2 | 100 | 2.5 | 31885 | PASS |
| 441 | 443 | 0.10 | 99 | 74.5 | 104355 | PASS |
| 442 | 198 | 50 | 100 | 56.5 | 723157 | PASS |
| 443 | 442 | 15 | 24 | 19.4 | 140080 | PASS |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 36.00 | 713 | 49.10 | 3171 | 59.05 | 381 | 70.10 | 2478 |
| 37.05 | 1246 | 50.10 | 87712 | 60.05 | 299 | 71.15 | 157 |
| 38.05 | 4220 | 51.05 | 343929 | 61.00 | 2348 | 71.80 | 93 |
| 39.10 | 23678 | 52.10 | 16568 | 61.20 | 2088 | 72.10 | 124 |
| 40.05 | 1797 | 53.15 | 840 | 62.05 | 5291 | 73.10 | 2979 |
| 41.15 | 1176 | 53.90 | 60 | 63.10 | 15758 | 74.10 | 42933 |
| 43.30 | 66 | 55.00 | 1258 | 64.15 | 2140 | 75.10 | 68451 |
| 44.00 | 165 | 55.20 | 229 | 65.15 | 8085 | 76.10 | 24773 |
| 45.10 | 544 | 56.10 | 9197 | 66.15 | 587 | 77.10 | 515909 |
| 46.00 | 141 | 57.10 | 24592 | 66.95 | 409 | 78.10 | 36623 |
| 47.00 | 157 | 57.95 | 1181 | 69.00 | 421251 | 79.10 | 30354 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 80.10 | 23632 | 91.00 | 7411 | 101.00 | 20847 | 113.00 | 1556 |
| 81.05 | 37857 | 92.05 | 9332 | 102.10 | 891 | 113.20 | 52 |
| 82.10 | 8472 | 93.10 | 51510 | 103.10 | 6485 | 114.40 | 636 |
| 83.05 | 7887 | 93.80 | 282 | 104.00 | 12389 | 114.95 | 426 |
| 84.00 | 1474 | 94.05 | 3976 | 105.10 | 11965 | 115.20 | 182 |
| 85.10 | 6313 | 94.30 | 171 | 106.10 | 4407 | 116.05 | 8693 |
| 86.05 | 9355 | 95.10 | 1163 | 107.05 | 169652 | 117.05 | 113163 |
| 87.10 | 4188 | 96.10 | 2599 | 108.10 | 26901 | 118.05 | 7627 |
| 88.10 | 1015 | 98.10 | 40277 | 110.05 | 306480 | 119.00 | 1015 |
| 89.00 | 929 | 99.00 | 32692 | 111.10 | 44718 | 120.10 | 2020 |
| 89.90 | 54 | 100.10 | 2837 | 112.10 | 5202 | 120.70 | 87 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 121.00 | 422 | 132.05 | 1629 | 142.10 | 9839 | 152.00 | 2301 |
| 121.20 | 387 | 132.90 | 1030 | 143.00 | 6399 | 153.00 | 9639 |
| 122.05 | 9817 | 134.00 | 5914 | 144.00 | 2187 | 154.10 | 7843 |
| 123.10 | 16859 | 135.10 | 19025 | 145.10 | 1623 | 155.10 | 16579 |
| 124.10 | 7189 | 136.00 | 7088 | 145.30 | 187 | 156.10 | 25450 |
| 125.05 | 6580 | 137.10 | 9308 | 146.10 | 4891 | 157.15 | 4276 |
| 127.05 | 620638 | 138.05 | 1518 | 147.05 | 14959 | 157.40 | 305 |
| 128.10 | 45031 | 138.30 | 117 | 148.05 | 31350 | 158.00 | 4610 |
| 129.10 | 238216 | 139.05 | 969 | 149.10 | 6036 | 159.05 | 4005 |
| 130.10 | 17745 | 140.10 | 3102 | 150.05 | 1357 | 160.05 | 9643 |
| 131.05 | 4185 | 141.05 | 27690 | 151.15 | 3986 | 161.10 | 13424 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 162.00 | 5001 | 172.00 | 5514 | 182.50 | 152 | 191.20 | 2361 |
| 163.15 | 1261 | 173.10 | 6272 | 182.95 | 1532 | 192.10 | 14153 |
| 164.10 | 1308 | 174.10 | 13605 | 183.80 | 312 | 193.10 | 15228 |
| 164.30 | 147 | 175.10 | 23881 | 184.10 | 3305 | 194.10 | 3407 |
| 165.10 | 10855 | 176.10 | 6983 | 185.10 | 20846 | 195.15 | 2640 |
| 166.05 | 8659 | 177.05 | 10604 | 186.10 | 167987 | 196.10 | 35799 |
| 167.05 | 57645 | 178.10 | 3723 | 187.10 | 48585 | 197.95 | 1.27925e+006 |
| 168.10 | 22726 | 179.05 | 43746 | 188.10 | 4542 | 199.00 | 87253 |
| 169.05 | 4449 | 180.10 | 34154 | 189.05 | 9635 | 200.10 | 6734 |
| 170.00 | 2245 | 181.10 | 14864 | 190.00 | 2201 | 201.00 | 1061 |
| 171.05 | 2549 | 182.10 | 2386 | 190.95 | 2071 | 201.60 | 6193 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 203.05 | 8112 | 213.95 | 399 | 226.10 | 4446 | 236.15 | 2681 |
| 204.10 | 45276 | 215.05 | 3017 | 227.10 | 69536 | 237.10 | 5972 |
| 205.10 | 74208 | 216.05 | 5676 | 228.05 | 9119 | 237.80 | 52 |
| 206.10 | 327637 | 217.00 | 79224 | 229.00 | 15082 | 238.10 | 493 |
| 207.05 | 39779 | 218.10 | 10631 | 230.05 | 2134 | 239.05 | 2577 |
| 208.05 | 9810 | 219.10 | 1251 | 231.10 | 6235 | 240.10 | 2355 |
| 209.05 | 3033 | 221.10 | 61159 | 232.05 | 1295 | 241.10 | 4130 |
| 210.10 | 401 | 222.00 | 1220 | 232.80 | 175 | 242.05 | 9865 |
| 211.05 | 11414 | 223.10 | 17172 | 233.10 | 1270 | 243.10 | 9286 |
| 211.90 | 1806 | 224.10 | 174592 | 234.05 | 3748 | 244.10 | 138381 |
| 213.10 | 1110 | 225.10 | 45924 | 235.05 | 4266 | 245.10 | 18191 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms

2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 246.10 | 25015 | 257.10 | 7794 | 268.90 | 57 | 279.05 | 1002 |
| 247.00 | 5234 | 258.10 | 37663 | 269.10 | 117 | 279.70 | 131 |
| 248.00 | 1026 | 259.10 | 6980 | 270.00 | 972 | 281.15 | 232 |
| 249.10 | 4964 | 260.05 | 1088 | 271.10 | 1468 | 282.10 | 501 |
| 249.90 | 246 | 261.05 | 1146 | 272.15 | 1609 | 283.10 | 3614 |
| 250.15 | 929 | 263.10 | 439 | 273.10 | 21058 | 284.10 | 1392 |
| 251.15 | 996 | 264.05 | 1261 | 274.10 | 46227 | 285.10 | 4416 |
| 252.05 | 1505 | 265.10 | 15921 | 275.10 | 290517 | 286.15 | 830 |
| 253.05 | 3118 | 266.05 | 2806 | 276.10 | 39126 | 286.80 | 80 |
| 255.10 | 707115 | 266.80 | 305 | 277.10 | 24506 | 287.10 | 56 |
| 256.10 | 99515 | 267.20 | 164 | 278.00 | 4041 | 287.80 | 50 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 288.00 | 215 | 294.05 | 1270 | 305.00 | 457 | 312.90 | 241 |
| 288.80 | 238 | 295.05 | 1528 | 306.30 | 68 | 313.20 | 420 |
| 289.05 | 1196 | 296.10 | 79915 | 306.70 | 105 | 314.15 | 4014 |
| 290.00 | 405 | 297.05 | 11870 | 307.20 | 197 | 315.05 | 8720 |
| 290.15 | 634 | 298.10 | 783 | 308.00 | 978 | 316.05 | 5674 |
| 290.70 | 50 | 298.90 | 139 | 308.20 | 144 | 317.10 | 1069 |
| 291.10 | 619 | 300.20 | 229 | 309.05 | 911 | 318.60 | 59 |
| 292.00 | 229 | 301.15 | 1045 | 310.10 | 1597 | 319.00 | 206 |
| 292.10 | 1145 | 302.10 | 1738 | 311.10 | 149 | 320.00 | 307 |
| 293.10 | 5964 | 303.10 | 10327 | 311.85 | 271 | 321.10 | 2279 |
| 293.80 | 320 | 304.15 | 3234 | 312.10 | 281 | 322.05 | 1177 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 323.05 | 25506 | 332.20 | 1098 | 342.15 | 723 | 352.10 | 7153 |
| 324.10 | 4252 | 333.10 | 1658 | 342.60 | 90 | 353.10 | 5098 |
| 325.00 | 666 | 333.30 | 507 | 343.00 | 158 | 354.10 | 7741 |
| 326.00 | 823 | 334.10 | 14963 | 346.00 | 4424 | 355.15 | 1552 |
| 327.05 | 4796 | 335.10 | 4357 | 347.05 | 1081 | 357.10 | 99 |
| 328.05 | 2829 | 336.10 | 293 | 347.85 | 258 | 358.20 | 373 |
| 329.05 | 341 | 336.90 | 99 | 348.20 | 143 | 359.00 | 358 |
| 329.40 | 57 | 338.95 | 492 | 348.40 | 201 | 359.90 | 125 |
| 330.20 | 124 | 340.05 | 393 | 349.10 | 57 | 360.25 | 218 |
| 331.20 | 83 | 341.05 | 2657 | 350.05 | 406 | 360.90 | 72 |
| 332.00 | 604 | 342.00 | 227 | 351.00 | 379 | 363.40 | 233 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 365.00 | 31885 | 385.05 | 249 | 397.30 | 52 | 414.30 | 85 |
| 366.00 | 3542 | 389.90 | 466 | 401.00 | 171 | 414.90 | 78 |
| 366.95 | 426 | 390.05 | 1107 | 401.20 | 517 | 415.20 | 330 |
| 370.00 | 927 | 391.00 | 442 | 402.10 | 4392 | 416.30 | 60 |
| 371.10 | 1655 | 391.25 | 865 | 403.05 | 5713 | 417.10 | 200 |
| 372.10 | 11960 | 391.90 | 171 | 404.05 | 2546 | 417.40 | 125 |
| 373.15 | 2408 | 392.15 | 551 | 405.15 | 377 | 421.05 | 6509 |
| 373.95 | 258 | 393.05 | 246 | 407.20 | 219 | 422.10 | 4939 |
| 377.10 | 283 | 395.30 | 69 | 409.20 | 105 | 423.10 | 38664 |
| 383.05 | 3698 | 395.80 | 78 | 409.80 | 113 | 424.10 | 7397 |
| 384.15 | 893 | 396.30 | 71 | 411.35 | 204 | 424.90 | 270 |

Average of 5.954 to 5.965 min.: E4654.D\data.ms
2E25002-TUN1
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 425.25 | 418 | 431.80 | 146 | 437.15 | 437 | 445.10 | 728 |
| 426.20 | 100 | 432.05 | 390 | 438.00 | 111 | 446.15 | 114 |
| 426.70 | 105 | 432.90 | 288 | 438.20 | 201 | 466.60 | 56 |
| 427.25 | 152 | 433.30 | 240 | 438.80 | 91 | 472.60 | 94 |
| 427.50 | 54 | 433.90 | 74 | 439.10 | 163 | | |
| 428.20 | 142 | 434.25 | 552 | 439.70 | 285 | | |
| 429.35 | 150 | 434.50 | 136 | 441.10 | 104355 | | |
| 429.60 | 92 | 435.05 | 533 | 442.10 | 723157 | | |
| 430.30 | 139 | 435.90 | 258 | 443.10 | 140080 | | |
| 431.00 | 199 | 436.55 | 605 | 444.10 | 12291 | | |
| 431.25 | 291 | 436.90 | 165 | 444.90 | 322 | | |

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SBLK6Q

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050165-BLK1

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4642.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 100-52-7 | Benzaldehyde | 170 | U |
| 108-95-2 | Phenol | 170 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | 170 | U |
| 95-57-8 | 2-Chlorophenol | 170 | U |
| 95-48-7 | 2-Methylphenol | 170 | U |
| 108-60-1 | 2,2'-Oxybis(1-chloropropane) | 170 | U |
| 98-86-2 | Acetophenone | 170 | U |
| 106-44-5 | 4-Methylphenol | 170 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 170 | U |
| 67-72-1 | Hexachloroethane | 170 | U |
| 98-95-3 | Nitrobenzene | 170 | U |
| 78-59-1 | Isophorone | 170 | U |
| 88-75-5 | 2-Nitrophenol | 170 | U |
| 105-67-9 | 2,4-Dimethylphenol | 170 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | 170 | U |
| 120-83-2 | 2,4-Dichlorophenol | 170 | U |
| 91-20-3 | Naphthalene | 170 | U |
| 106-47-8 | 4-Chloroaniline | 170 | U |
| 87-68-3 | Hexachlorobutadiene | 170 | U |
| 105-60-2 | Caprolactam | 170 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 170 | U |
| 91-57-6 | 2-Methylnaphthalene | 170 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 170 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 170 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 170 | U |
| 92-52-4 | 1,1'-Biphenyl | 170 | U |
| 91-58-7 | 2-Chloronaphthalene | 170 | U |
| 88-74-4 | 2-Nitroaniline | 330 | U |
| 131-11-3 | Dimethylphthalate | 170 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 170 | U |
| 208-96-8 | Acenaphthylene | 170 | U |
| 99-09-2 | 3-Nitroaniline | 330 | U |
| 83-32-9 | Acenaphthene | 170 | U |

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SBLK6Q

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050165-BLK1

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4642.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 330 | U |
| 100-02-7 | 4-Nitrophenol | 330 | U |
| 132-64-9 | Dibenzofuran | 170 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 170 | U |
| 84-66-2 | Diethylphthalate | 17 | J |
| 86-73-7 | Fluorene | 170 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 170 | U |
| 100-01-6 | 4-Nitroaniline | 330 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 330 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 170 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 170 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 170 | U |
| 118-74-1 | Hexachlorobenzene | 170 | U |
| 1912-24-9 | Atrazine | 170 | U |
| 87-86-5 | Pentachlorophenol | 330 | U |
| 85-01-8 | Phenanthrene | 170 | U |
| 120-12-7 | Anthracene | 170 | U |
| 86-74-8 | Carbazole | 170 | U |
| 84-74-2 | Di-n-butylphthalate | 33 | J |
| 206-44-0 | Fluoranthene | 170 | U |
| 129-00-0 | Pyrene | 170 | U |
| 85-68-7 | Butylbenzylphthalate | 170 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 170 | U |
| 56-55-3 | Benzo (a) anthracene | 170 | U |
| 218-01-9 | Chrysene | 170 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 170 | U |
| 117-84-0 | Di-n-octylphthalate | 170 | U |
| 205-99-2 | Benzo (b) fluoranthene | 170 | U |
| 207-08-9 | Benzo (k) fluoranthene | 170 | U |
| 50-32-8 | Benzo (a) pyrene | 170 | U |
| 193-39-5 | Indeno (1,2,3-cd) pyrene | 170 | U |
| 53-70-3 | Dibenzo (a,h) anthracene | 170 | U |
| 191-24-2 | Benzo (g,h,i) perylene | 170 | U |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | 170 | U |

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
SBLK6Q

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WB4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 2050165-BLK1

Sample wt/vol: 30.0 (g/mL) g Lab File ID: E4642.D

Level: (LOW/MED) LOW Extraction: (Type): SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | Unknown-01 (1 3.296) | 1.84 | 120 | J |
| 02 | 000079-34-5 | Ethane, 1,1,2,2-tetrachloro- | 2.40 | 290 | JN |
| 03 | | Unknown-02 (2 4.957) | 4.43 | 93 | J |
| 04 | | Unknown-03 (2 4.957) | 5.83 | 120 | J |
| 05 | | Unknown-04 (3 7.596) | 6.53 | 140 | J |
| 06 | | Unknown-05 (3 7.596) | 6.71 | 130 | J |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
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| 20 | | | | | |
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| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[2] | Total Alkanes | N/A | | |

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vitkati
05/28/12

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 81812 | 20.0000 | ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.957 | 136 | 339282 | 20.0000 | ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 234275 | 20.0000 | ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 450622 | 20.0000 | ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.986 | 240 | 456147 | 20.0000 | ug/mL | 0.00 |
| 88) Perylene-d12 | 16.049 | 264 | 431796 | 20.0000 | ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0d | 0.00 | ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 0.00%# | | | |
| 7) Phenol-d5 | 3.077 | 99 | 546830 | 29.54 | ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 17 - 103 | | Recovery = 73.85% | | | |
| 18) Bis(2-chloroethyl)ethe... | 3.039 | 67 | 305065 | 29.71 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 12 - 98 | | Recovery = 74.28% | | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 492911 | 30.08 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 13 - 101 | | Recovery = 75.20% | | | |
| 20) 4-Methylphenol-d8 | 3.958 | 113 | 407138 | 29.60 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 8 - 100 | | Recovery = 74.00% | | | |
| 22) Nitrobenzene-d5 | 4.044 | 128 | 248633 | 34.49 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 103 | | Recovery = -86.23% | | | |
| 35) 2-Nitrophenol-d4 | 4.482 | 143 | 277432 | 34.57 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 16 - 104 | | Recovery = 86.42% | | | |
| 36) 2,4-Dichlorophenol-d3 | 4.850 | 165 | 428807 | 32.03 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 23 - 104 | | Recovery = 80.08% | | | |
| 37) 4-Chloroaniline-d4 | 5.176 | 131 | 604368 | 52.64 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 131.60% | | | |
| 62) Acenaphthylene-d8 | 7.335 | 160 | 1588421 | 31.24 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 20 - 97 | | Recovery = 78.10% | | | |
| 63) 4-Nitrophenol-d4 | 8.157 | 143 | 236924 | 33.23 | ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 16 - 166 | | Recovery = 83.07% | | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 1291660 | 32.79 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 81.97% | | | |
| 65) Fluorene-d10 | 8.387 | 176 | 1067707 | 33.60 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 84.00% | | | |
| 78) 4,6-Dinitro-2-methylph... | 8.682 | 200 | 187775 | 26.47 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 121 | | Recovery = 66.17% | | | |
| 79) Anthracene-d10 | 9.928 | 188 | 1807384 | 32.51 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 98 | | Recovery = 81.27% | | | |
| 87) Pyrene-d10 | 12.031 | 212 | 2154543 | 36.10 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 51 - 120 | | Recovery = 90.25% | | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 1767653 | 35.84 | ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 111 | | Recovery = 89.60% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 59) Diethylphthalate | 8.527 | 149 | 20126 | 0.5184 | ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.088 | 149 | 70340 | 0.9908 | ug/mL | 99 |

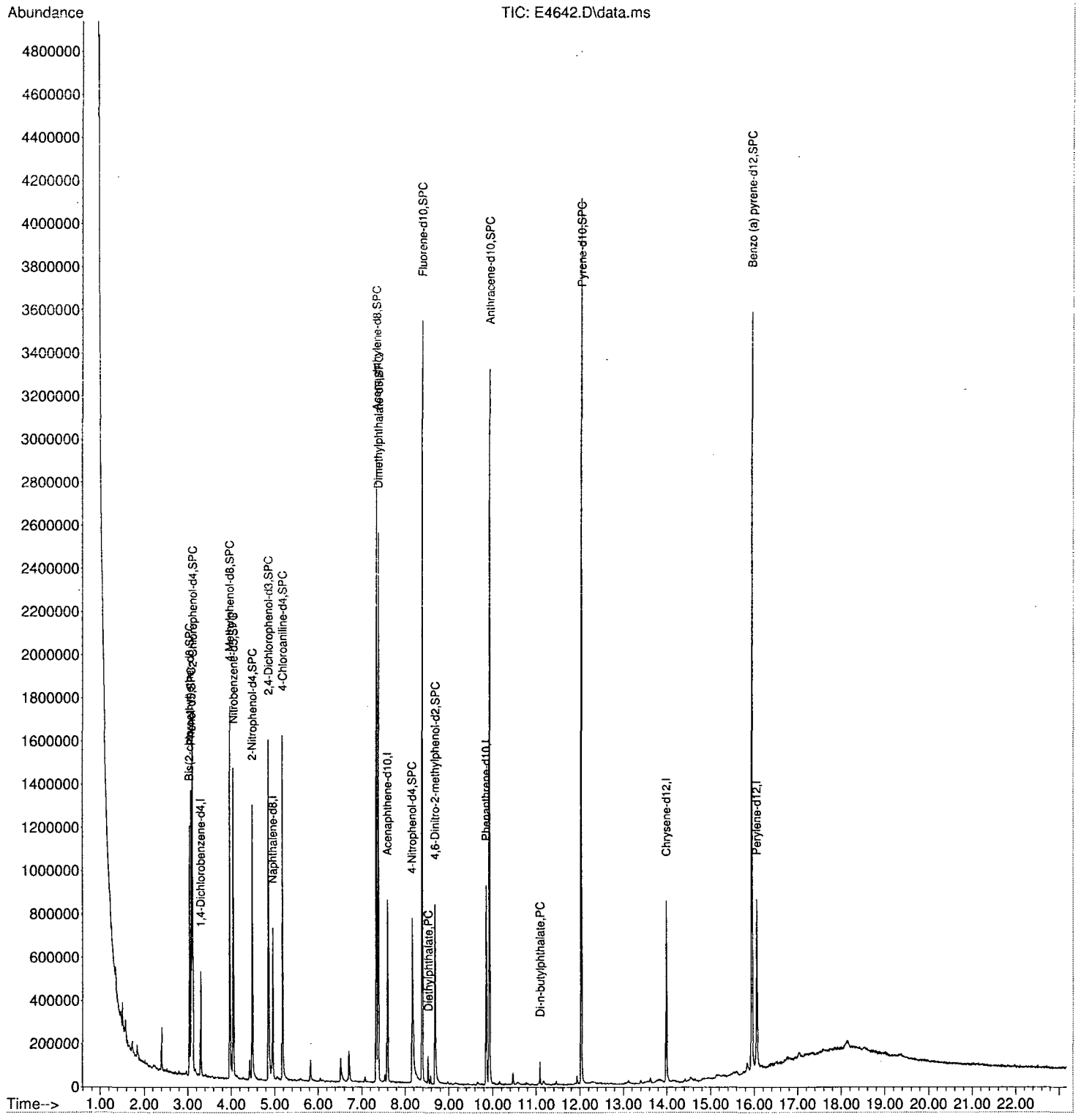
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

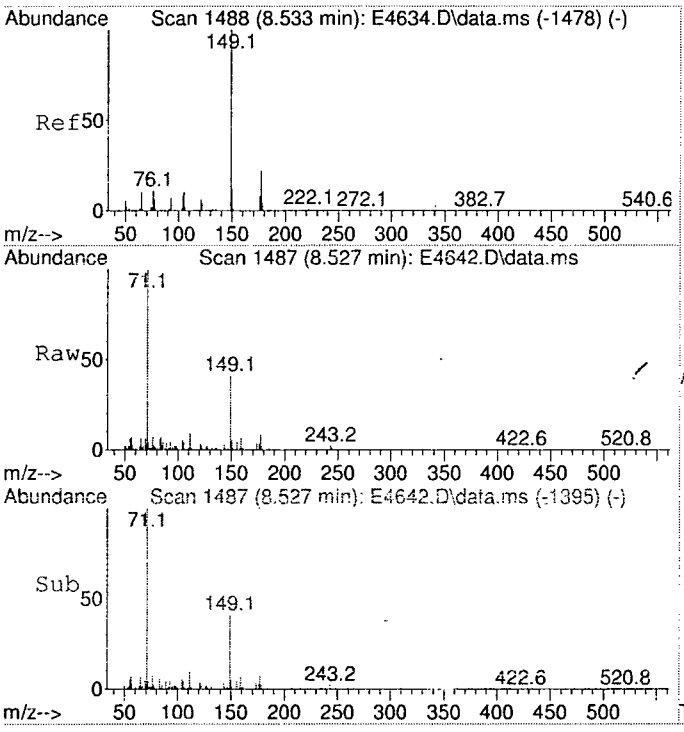
Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
MS Integration Params: RTEINT.P

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

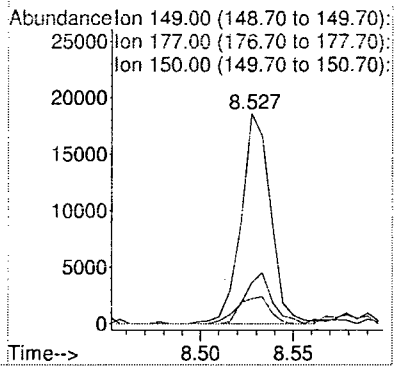
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

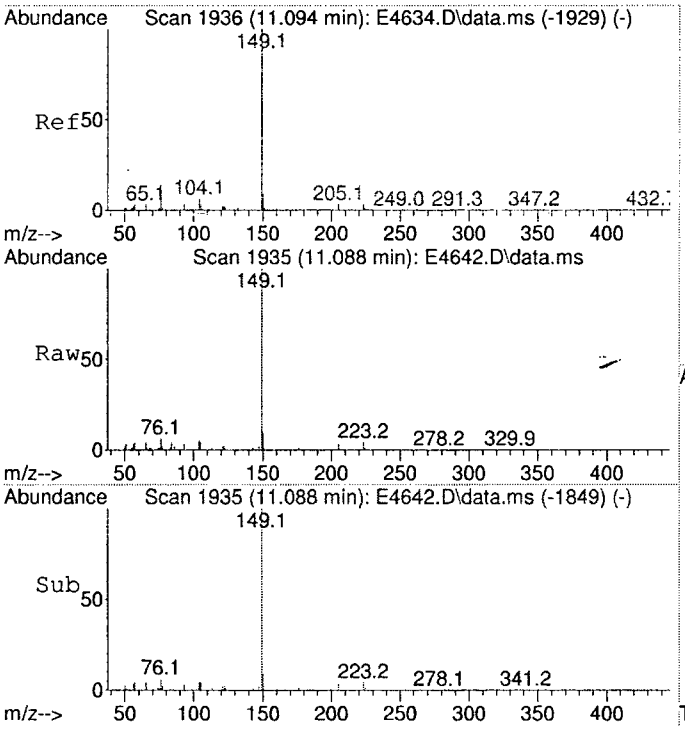



#59
Diethylphthalate
Concen: 0.5184 ug/mL
RT: 8.53 min Scan# 1487
Delta R.T. -0.01 min
Lab File: E4642.D
Acq: 24 May 2012 22:00

Tgt Ion:149 Resp: 20126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 23.6 | 2.5 | 42.5 |
| 150 | 13.1 | 0.0 | 32.2 |

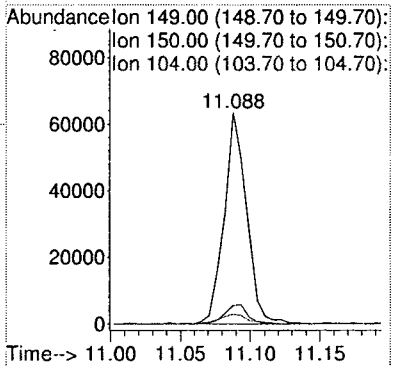



#76
Di-n-butylphthalate
Concen: 0.9908 ug/mL
RT: 11.09 min Scan# 1935
Delta R.T. -0.01 min
Lab File: E4642.D
Acq: 24 May 2012 22:00

Tgt Ion:149 Resp: 70340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.4 | 0.0 | 29.0 |
| 104 | 5.9 | 0.0 | 26.3 |



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

Signal : TIC: E4642.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.843 | 235 | 236 | 244 | rVB5 | 70094 | 96766 | 1.84% | 0.196% |
| 2 | 2.404 | 338 | 341 | 352 | rVB | 204066 | 246367 | 4.70% | 0.499% |
| 3 | 3.039 | 457 | 460 | 464 | rBV | 1146182 | 1116977 | 21.29% | 2.263% |
| 4 | 3.077 | 464 | 467 | 470 | rVV | 1306771 | 1409965 | 26.87% | 2.856% |
| 5 | 3.109 | 470 | 473 | 482 | rVB | 1663339 | 2097872 | 39.98% | 4.250% |
| 6 | 3.296 | 504 | 508 | 519 | rVB | 482412 | 557242 | 10.62% | 1.129% |
| 7 | 3.958 | 628 | 632 | 644 | rBV | 1721886 | 1978341 | 37.71% | 4.008% |
| 8 | 4.044 | 644 | 648 | 660 | rVB | 1427083 | 1617039 | 30.82% | 3.276% |
| 9 | 4.428 | 715 | 720 | 726 | rBV3 | 85000 | 102054 | 1.95% | 0.207% |
| 10 | 4.482 | 726 | 730 | 749 | rVB | 1263840 | 1468387 | 27.99% | 2.975% |
| 11 | 4.850 | 795 | 799 | 811 | rBV | 1570405 | 1991551 | 37.96% | 4.034% |
| 12 | 4.931 | 812 | 814 | 816 | rVV3 | 61737 | 67744 | 1.29% | 0.137% |
| 13 | 4.957 | 816 | 819 | 829 | rVB | 696740 | 733060 | 13.97% | 1.485% |
| 14 | 5.176 | 856 | 860 | 877 | rBV | 1587728 | 1874940 | 35.74% | 3.798% |
| 15 | 5.828 | 977 | 982 | 988 | rBV3 | 96794 | 129546 | 2.47% | 0.262% |
| 16 | 6.052 | 1022 | 1024 | 1029 | rVB5 | 15134 | 16411 | 0.31% | 0.033% |
| 17 | 6.181 | 1045 | 1048 | 1049 | rBV3 | 7114 | 7235 | 0.14% | 0.015% |
| 18 | 6.223 | 1054 | 1056 | 1058 | rBV3 | 5726 | 3982 | 0.08% | 0.008% |
| 19 | 6.309 | 1068 | 1072 | 1074 | rBV5 | 9868 | 14344 | 0.27% | 0.029% |
| 20 | 6.528 | 1108 | 1113 | 1126 | rBV | 107452 | 203369 | 3.88% | 0.412% |
| 21 | 6.677 | 1138 | 1141 | 1143 | rBV3 | 11516 | 13813 | 0.26% | 0.028% |
| 22 | 6.710 | 1143 | 1147 | 1155 | rVB | 135597 | 189243 | 3.61% | 0.383% |
| 23 | 6.934 | 1187 | 1189 | 1191 | rVB2 | 5249 | 4137 | 0.08% | 0.008% |
| 24 | 7.073 | 1211 | 1215 | 1220 | rBV4 | 27332 | 41795 | 0.80% | 0.085% |
| 25 | 7.233 | 1243 | 1245 | 1248 | rVB4 | 5148 | 4704 | 0.09% | 0.010% |
| 26 | 7.297 | 1256 | 1257 | 1259 | rBV2 | 6826 | 4941 | 0.09% | 0.010% |
| 27 | 7.335 | 1259 | 1264 | 1269 | rVV | 2904833 | 3360178 | 64.04% | 6.807% |
| 28 | 7.383 | 1269 | 1273 | 1287 | rVB | 2540189 | 2887314 | 55.03% | 5.849% |
| 29 | 7.538 | 1298 | 1302 | 1307 | rVV7 | 34736 | 42756 | 0.81% | 0.087% |
| 30 | 7.596 | 1308 | 1313 | 1327 | rVB | 843737 | 974454 | 18.57% | 1.974% |
| 31 | 7.698 | 1330 | 1332 | 1334 | rBV3 | 6804 | 6700 | 0.13% | 0.014% |
| 32 | 7.725 | 1336 | 1337 | 1343 | rVB6 | 7359 | 9239 | 0.18% | 0.019% |
| 33 | 7.896 | 1367 | 1369 | 1372 | rBV3 | 6474 | 6305 | 0.12% | 0.013% |
| 34 | 8.157 | 1414 | 1418 | 1443 | rBV | 757608 | 1543506 | 29.42% | 3.127% |
| 35 | 8.387 | 1455 | 1461 | 1473 | rVB | 3519447 | 4078934 | 77.74% | 8.263% |
| 36 | 8.527 | 1483 | 1487 | 1492 | rVB | 129187 | 154049 | 2.94% | 0.312% |
| 37 | 8.579 | 1492 | 1496 | 1501 | rVB3 | 39266 | 50217 | 0.96% | 0.102% |
| 38 | 8.682 | 1509 | 1514 | 1534 | rBV | 831023 | 1201590 | 22.90% | 2.434% |
| 39 | 8.967 | 1561 | 1564 | 1568 | rBV5 | 10455 | 11384 | 0.22% | 0.023% |
| 40 | 9.042 | 1575 | 1577 | 1581 | rVB4 | 5787 | 6689 | 0.13% | 0.014% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 9.133 | 1588 | 1593 | 1595 | rBV5 | 7423 | 12795 | 0.24% | 0.026% |
| 42 | 9.196 | 1603 | 1604 | 1607 | rVB3 | 5470 | 4136 | 0.08% | 0.008% |
| 43 | 9.219 | 1607 | 1608 | 1614 | rVB5 | 5308 | 6492 | 0.12% | 0.013% |
| 44 | 9.305 | 1622 | 1623 | 1627 | rVB4 | 4286 | 5085 | 0.10% | 0.010% |
| 45 | 9.345 | 1627 | 1630 | 1631 | rBV3 | 5238 | 4801 | 0.09% | 0.010% |
| 46 | 9.659 | 1679 | 1685 | 1686 | rBV4 | 13851 | 17053 | 0.33% | 0.035% |
| 47 | 9.745 | 1697 | 1700 | 1703 | rBV4 | 8941 | 9558 | 0.18% | 0.019% |
| 48 | 9.790 | 1706 | 1708 | 1710 | rBV3 | 3799 | 4038 | 0.08% | 0.008% |
| 49 | 9.848 | 1713 | 1718 | 1726 | rBV | 919869 | 1155633 | 22.03% | 2.341% |
| 50 | 9.928 | 1726 | 1732 | 1746 | rVV | 3313418 | 4389437 | 83.66% | 8.892% |
| 51 | 10.031 | 1746 | 1750 | 1753 | rVB3 | 7754 | 11593 | 0.22% | 0.023% |
| 52 | 10.128 | 1766 | 1767 | 1769 | rBV2 | 7411 | 4016 | 0.08% | 0.008% |
| 53 | 10.156 | 1769 | 1772 | 1777 | rVV4 | 15583 | 20579 | 0.39% | 0.042% |
| 54 | 10.213 | 1780 | 1782 | 1786 | rBV4 | 4552 | 5532 | 0.11% | 0.011% |
| 55 | 10.271 | 1791 | 1792 | 1794 | rBV2 | 7200 | 6212 | 0.12% | 0.013% |
| 56 | 10.402 | 1814 | 1815 | 1819 | rBV4 | 3384 | 3965 | 0.08% | 0.008% |
| 57 | 10.471 | 1822 | 1827 | 1832 | rVV | 53105 | 65706 | 1.25% | 0.133% |
| 58 | 10.562 | 1840 | 1843 | 1844 | rBV3 | 8132 | 7190 | 0.14% | 0.015% |
| 59 | 10.625 | 1853 | 1854 | 1859 | rVB4 | 6483 | 6759 | 0.13% | 0.014% |
| 60 | 10.659 | 1859 | 1860 | 1864 | rBV4 | 3838 | 4586 | 0.09% | 0.009% |
| 61 | 10.716 | 1868 | 1870 | 1872 | rBV2 | 3413 | 4108 | 0.08% | 0.008% |
| 62 | 10.739 | 1872 | 1874 | 1876 | rVV2 | 7797 | 5918 | 0.11% | 0.012% |
| 63 | 10.779 | 1876 | 1881 | 1884 | rVV3 | 13726 | 19411 | 0.37% | 0.039% |
| 64 | 10.819 | 1886 | 1888 | 1895 | rVB7 | 8476 | 10894 | 0.21% | 0.022% |
| 65 | 10.916 | 1902 | 1905 | 1906 | rBV3 | 3784 | 4131 | 0.08% | 0.008% |
| 66 | 11.048 | 1924 | 1928 | 1929 | rBV3 | 7207 | 8815 | 0.17% | 0.018% |
| 67 | 11.088 | 1929 | 1935 | 1940 | rVV | 103070 | 116567 | 2.22% | 0.236% |
| 68 | 11.174 | 1944 | 1950 | 1956 | rBV6 | 19762 | 42786 | 0.82% | 0.087% |
| 69 | 11.248 | 1961 | 1963 | 1966 | rVB4 | 5296 | 4355 | 0.08% | 0.009% |
| 70 | 11.419 | 1989 | 1993 | 1995 | rVB4 | 5606 | 7148 | 0.14% | 0.014% |
| 71 | 11.459 | 1995 | 2000 | 2004 | rBV6 | 18926 | 27103 | 0.52% | 0.055% |
| 72 | 11.637 | 2027 | 2031 | 2032 | rBV2 | 6212 | 7032 | 0.13% | 0.014% |
| 73 | 11.688 | 2038 | 2040 | 2043 | rBV4 | 3630 | 3974 | 0.08% | 0.008% |
| 74 | 11.734 | 2045 | 2048 | 2053 | rBV4 | 3236 | 7165 | 0.14% | 0.015% |
| 75 | 11.814 | 2059 | 2062 | 2066 | rVB4 | 4194 | 5616 | 0.11% | 0.011% |
| 76 | 11.865 | 2066 | 2071 | 2072 | rBV4 | 4529 | 5862 | 0.11% | 0.012% |
| 77 | 11.934 | 2080 | 2083 | 2088 | rVB | 36107 | 41526 | 0.79% | 0.084% |
| 78 | 12.031 | 2094 | 2100 | 2112 | rBV | 4098999 | 5246785 | 100.00% | 10.629% |
| 79 | 12.254 | 2135 | 2139 | 2140 | rBV4 | 5142 | 6774 | 0.13% | 0.014% |
| 80 | 12.414 | 2165 | 2167 | 2171 | rVB5 | 6695 | 6680 | 0.13% | 0.014% |
| 81 | 12.454 | 2171 | 2174 | 2179 | rVV7 | 6808 | 11482 | 0.22% | 0.023% |
| 82 | 12.494 | 2179 | 2181 | 2184 | rVB4 | 7471 | 7464 | 0.14% | 0.015% |
| 83 | 12.574 | 2194 | 2195 | 2199 | rVB4 | 6313 | 5163 | 0.10% | 0.010% |

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.02

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 12.711 | 2215 | 2219 | 2220 | rBV4 | 4910 | 5610 | 0.11% | 0.011% |
| 85 | 13.042 | 2272 | 2277 | 2278 | rBV4 | 7718 | 10292 | 0.20% | 0.021% |
| 86 | 13.054 | 2278 | 2279 | 2284 | rBV5 | 4779 | 7394 | 0.14% | 0.015% |
| 87 | 13.117 | 2284 | 2290 | 2294 | rVV9 | 15202 | 23844 | 0.45% | 0.048% |
| 88 | 13.403 | 2335 | 2340 | 2345 | rBV6 | 16595 | 25957 | 0.49% | 0.053% |
| 89 | 13.488 | 2351 | 2355 | 2356 | rBV3 | 6603 | 6537 | 0.12% | 0.013% |
| 90 | 13.545 | 2363 | 2365 | 2368 | rBV3 | 6897 | 5660 | 0.11% | 0.011% |
| 91 | 13.625 | 2376 | 2379 | 2384 | rVB4 | 24406 | 32462 | 0.62% | 0.066% |
| 92 | 13.814 | 2411 | 2412 | 2414 | rBV | 8878 | 5383 | 0.10% | 0.011% |
| 93 | 13.986 | 2436 | 2442 | 2460 | rBV | 836968 | 1238984 | 23.61% | 2.510% |
| 94 | 14.134 | 2464 | 2468 | 2472 | rBV6 | 10652 | 15236 | 0.29% | 0.031% |
| 95 | 14.380 | 2509 | 2511 | 2513 | rBV3 | 4946 | 4947 | 0.09% | 0.010% |
| 96 | 14.414 | 2516 | 2517 | 2522 | rVB5 | 13163 | 17173 | 0.33% | 0.035% |
| 97 | 14.637 | 2554 | 2556 | 2557 | rBV2 | 8605 | 8475 | 0.16% | 0.017% |
| 98 | 14.740 | 2571 | 2574 | 2577 | rBV5 | 9105 | 14179 | 0.27% | 0.029% |
| 99 | 15.946 | 2778 | 2785 | 2798 | rBV | 3504872 | 5126610 | 97.71% | 10.385% |
| 100 | 16.049 | 2798 | 2803 | 2812 | rVV | 762766 | 1137434 | 21.68% | 2.304% |

Sum of corrected areas: 49363242

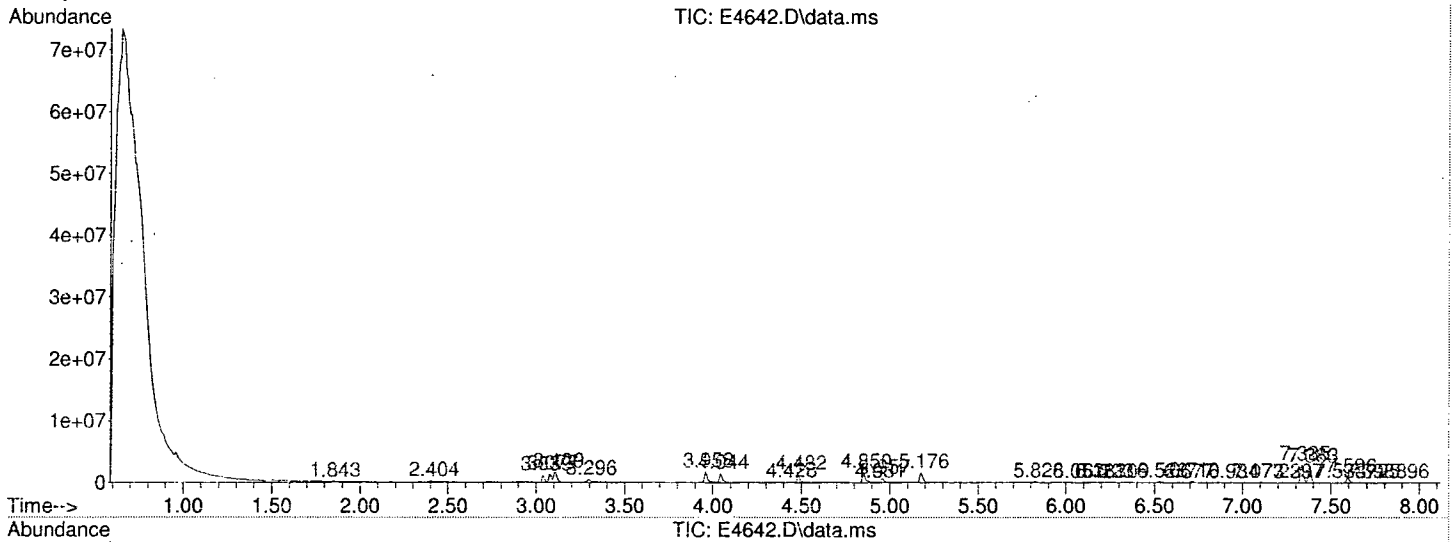
LSC Report - Integrated Chromatogram

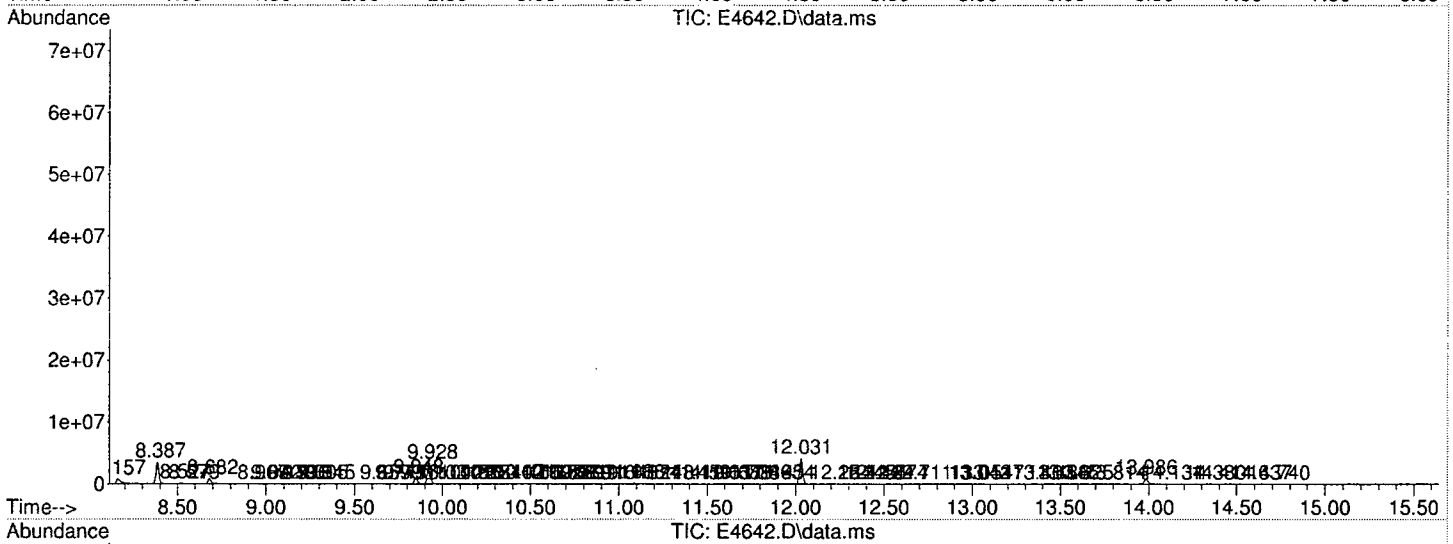
Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

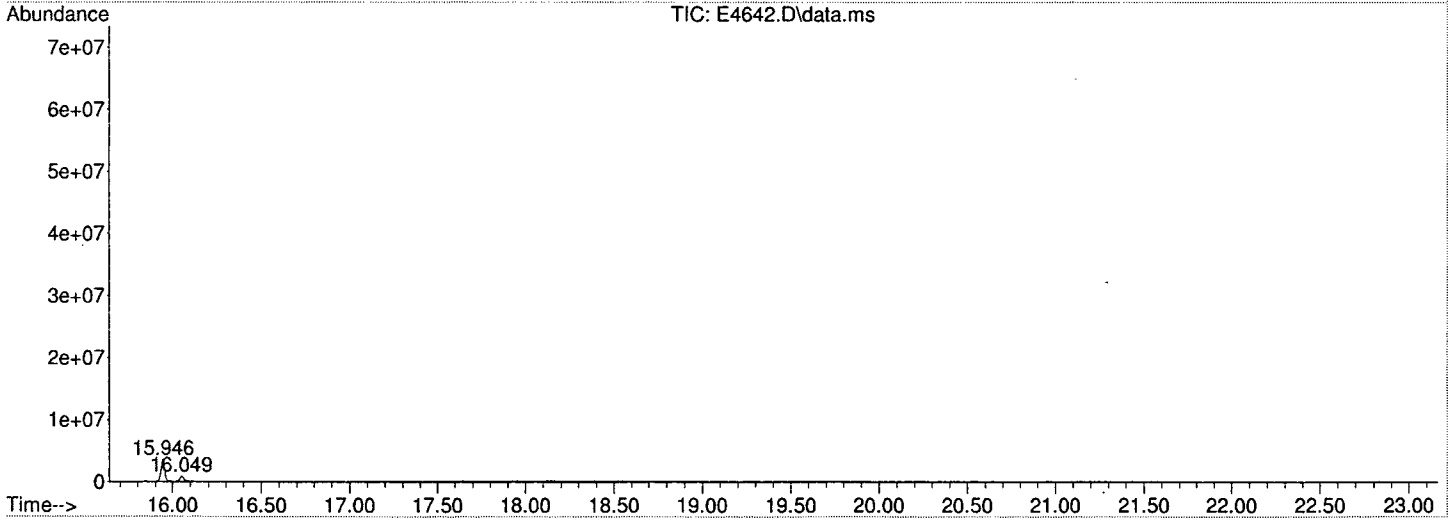
Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

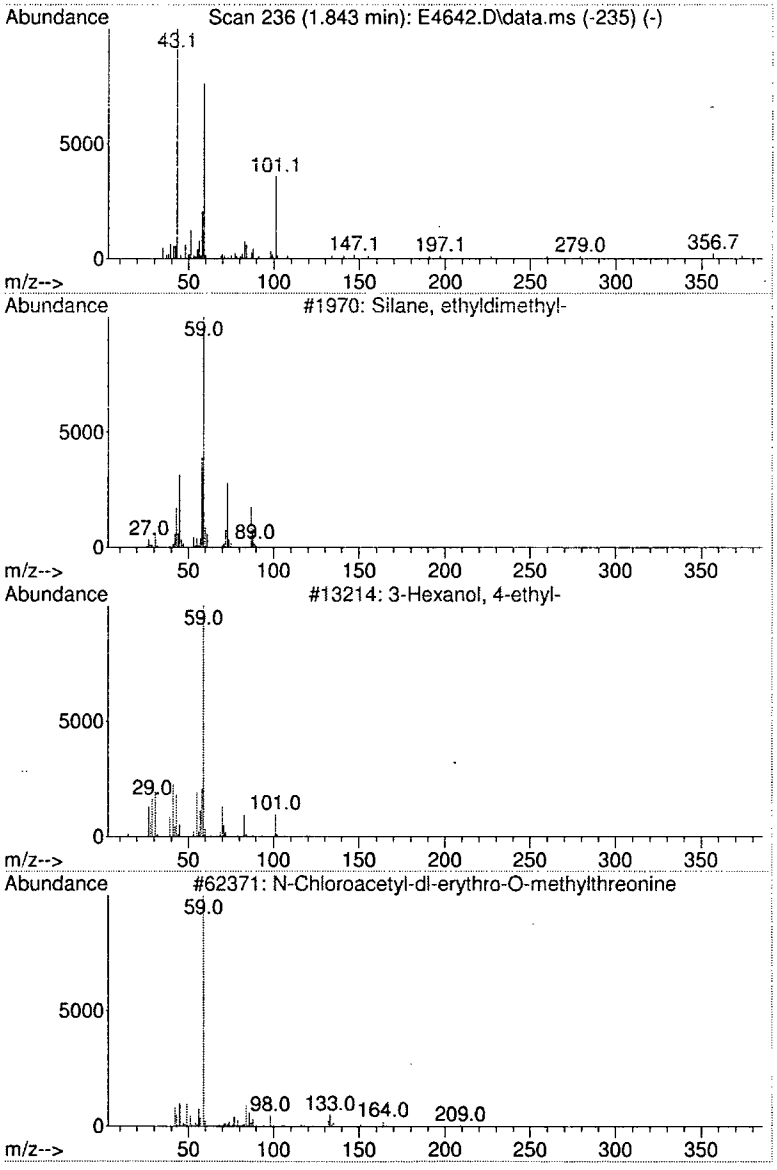
**********

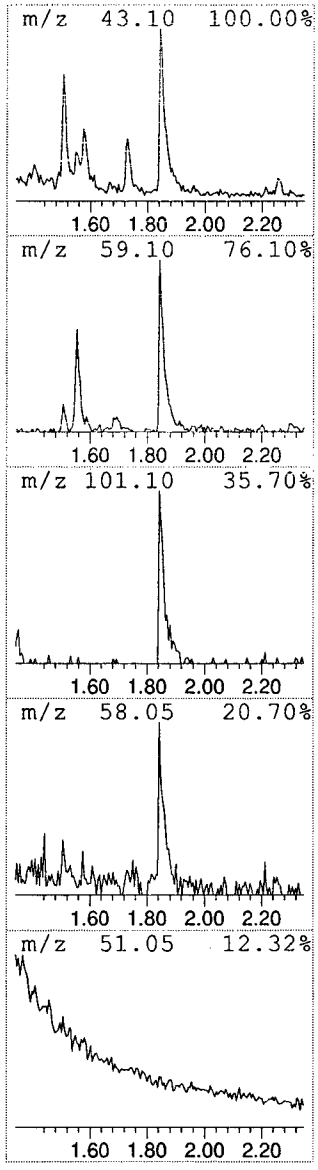
Peak Number 1 Silane, ethyldimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.843 | 3.47 ug/mL | 96766 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Silane, ethyldimethyl- | 88 | C4H12Si | 000758-21-4 | 40 |
| 2 | 3-Hexanol, 4-ethyl- | 130 | C8H18O | 019780-44-0 | 33 |
| 3 | N-Chloroacetyl-dl-erythro-O-meth... | 209 | C7H12ClNO4 | 1000214-48-1 | 28 |
| 4 | 3-Decanol, 6-ethyl-, | 186 | C12H26O | 019780-31-5 | 25 |
| 5 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 25 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

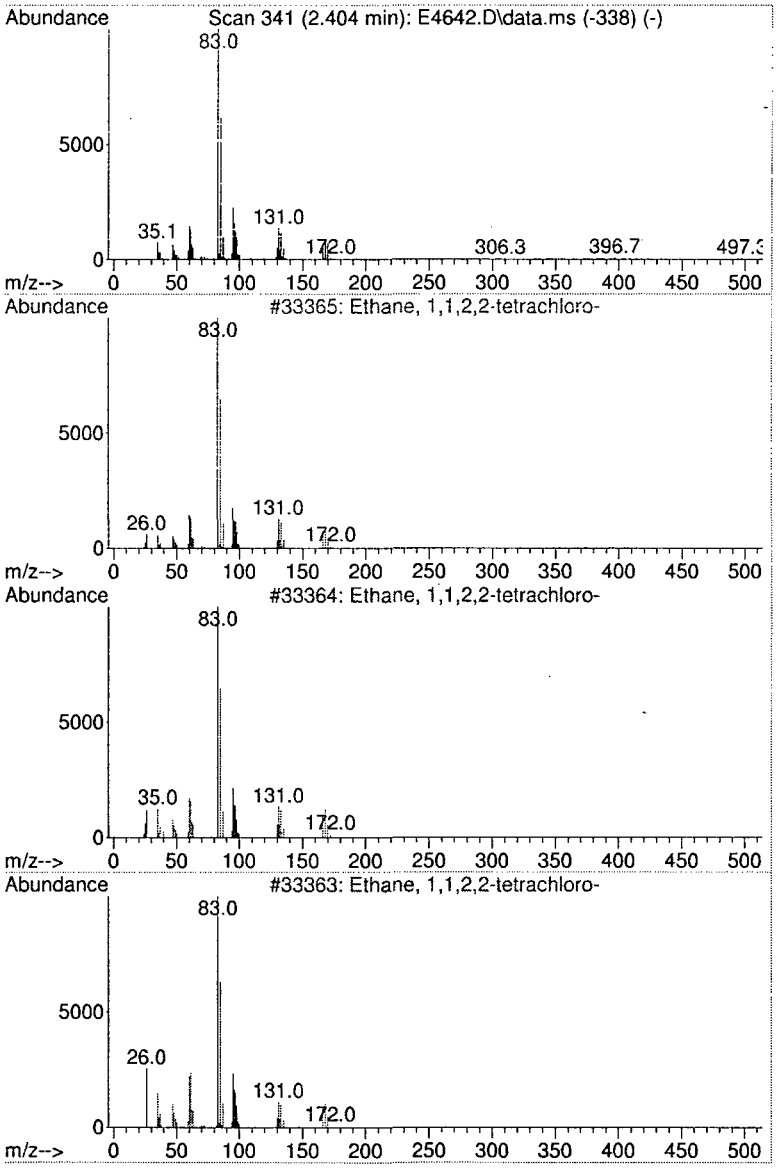
Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

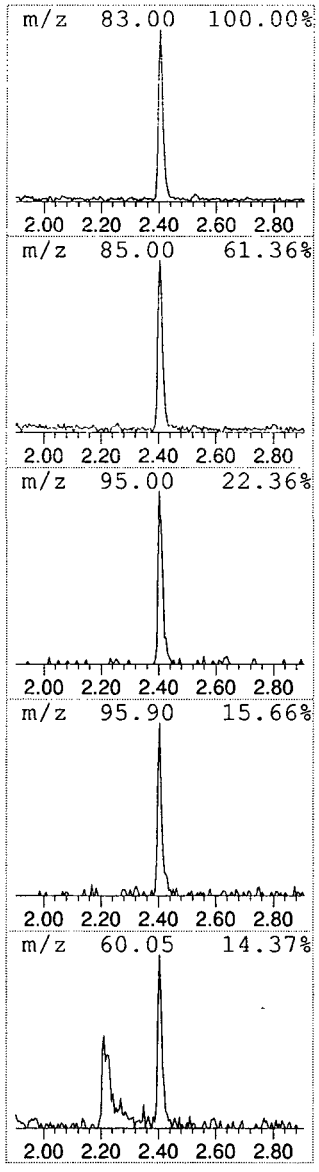
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.404 | 8.84 ug/mL | 246367 | 1,4-Dichlorobenzene-d4 | 3.296 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 98 ✓ |
| 2 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 97 |
| 3 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 96 |
| 4 | Ethane, 1,1,2,2-tetrachloro- | 166 | C2H2Cl4 | 000079-34-5 | 90 |
| 5 | Ethane, 2,2-dichloro-1,1,1-trifl... | 152 | C2HCl2F3 | 000306-83-2 | 53 |



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

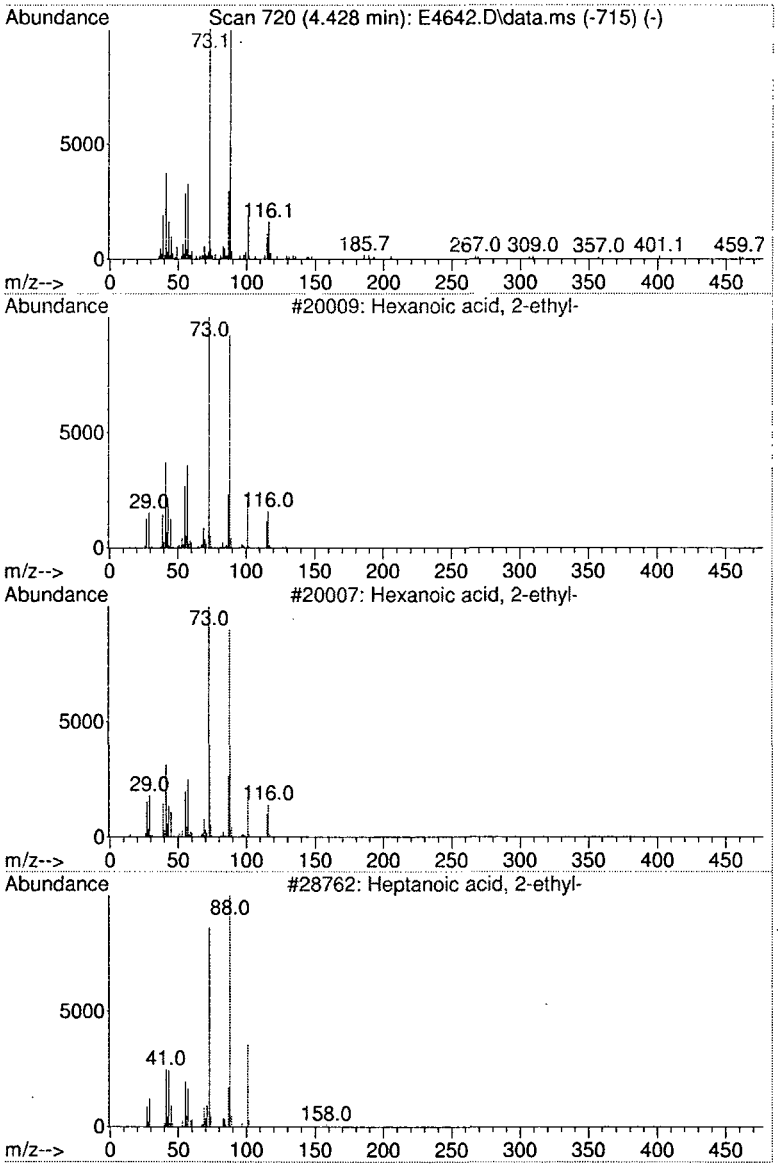
**********

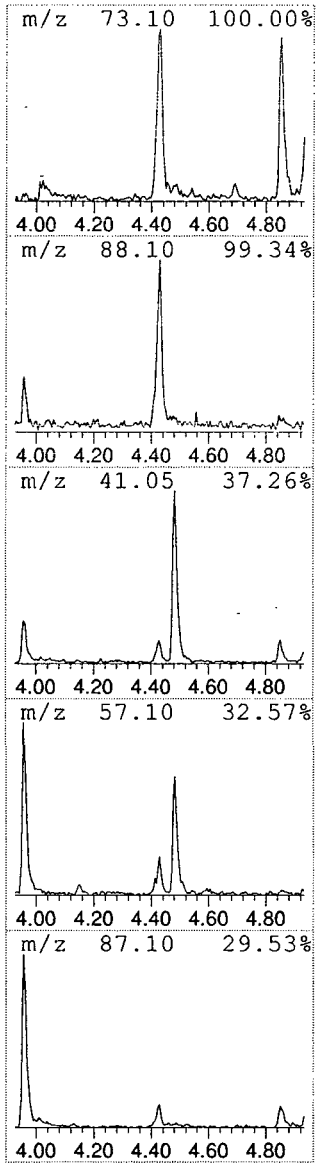
Peak Number 3 Hexanoic acid, 2-ethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.428 | 2.78 ug/mL | 102054 | Naphthalene-d8 | 4.957 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-ethyl- | 144 | C8H16O2 | 000149-57-5 | 72 |
| 2 | Hexanoic acid, 2-ethyl- | 144 | C8H16O2 | 000149-57-5 | 64 |
| 3 | Heptanoic acid, 2-ethyl- | 158 | C9H18O2 | 003274-29-1 | 59 |
| 4 | Butanoic acid, 2-ethyl-, 1,2,3-p... | 386 | C21H38O6 | 056554-54-2 | 59 |
| 5 | Hexanoic acid, 2-ethyl- | 144 | C8H16O2 | 000149-57-5 | 45 |

Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

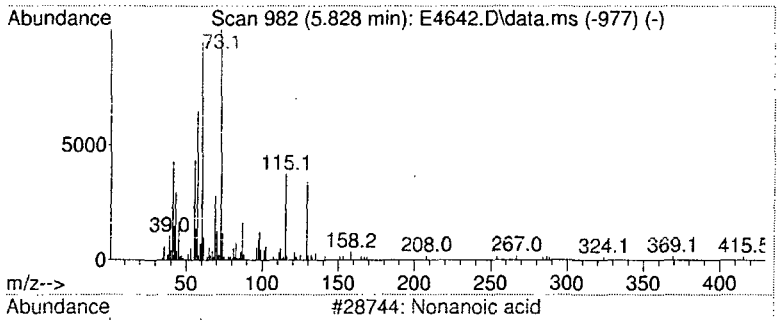
**********

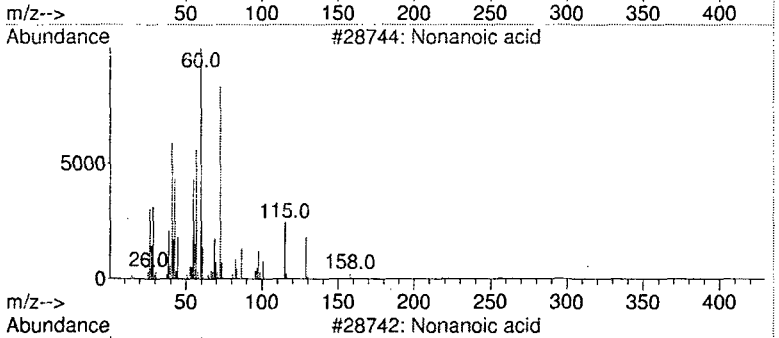
Peak Number 4 Nonanoic acid Concentration Rank 4

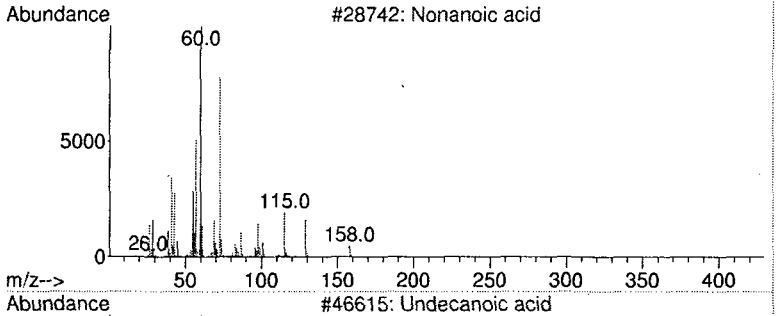
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.828 | 3.53 ug/mL | 129546 | Naphthalene-d8 | 4.957 |

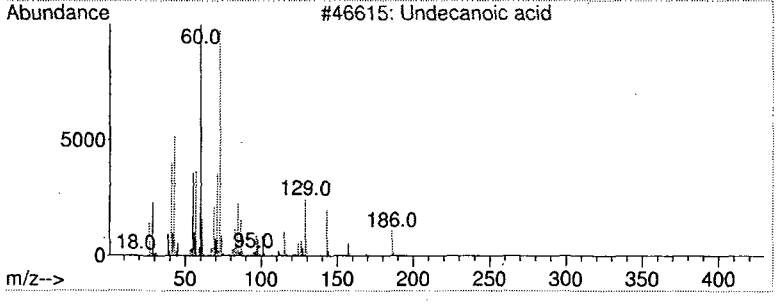
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonanoic acid | 158 | C9H18O2 | 000112-05-0 | 83 |
| 2 | Nonanoic acid | 158 | C9H18O2 | 000112-05-0 | 64 |
| 3 | Undecanoic acid | 186 | C11H22O2 | 000112-37-8 | 56 |
| 4 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 56 |
| 5 | Hexanoic acid | 116 | C6H12O2 | 000142-62-1 | 50 |

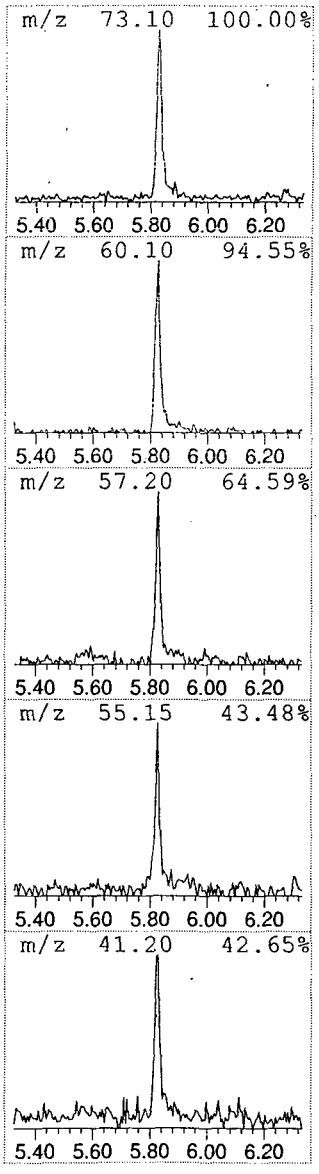
Unknown



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

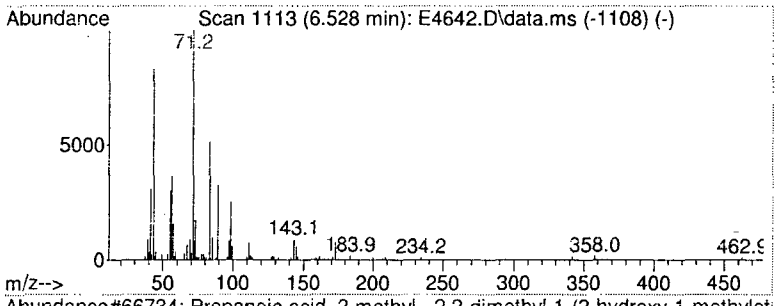
**********

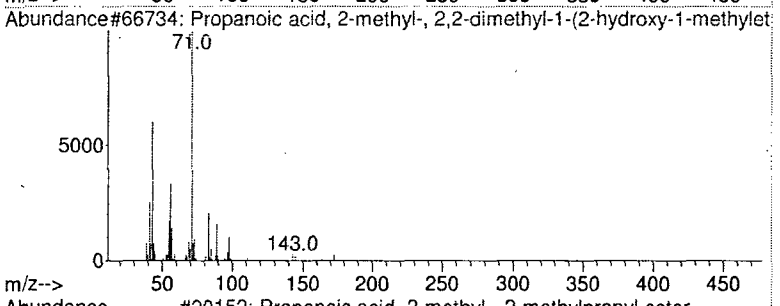
Peak Number 5 Propanoic acid, 2-methyl-, ... Concentration Rank 2

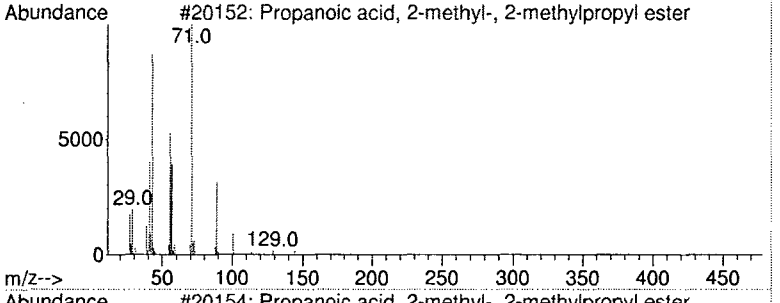
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.528 | 4.17 ug/mL | 203369 | Acenaphthene-d10 | 7.596 |

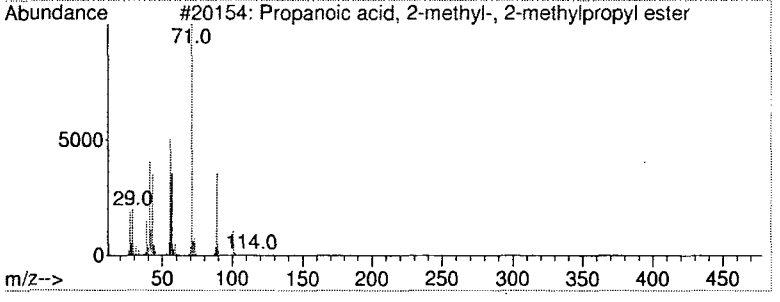
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propanoic acid, 2-methyl-, 2,2-d... | 216 | C12H24O3 | 074367-33-2 | 50 |
| 2 | Propanoic acid, 2-methyl-, 2-met... | 144 | C8H16O2 | 000097-85-8 | 47 |
| 3 | Propanoic acid, 2-methyl-, 2-met... | 144 | C8H16O2 | 000097-85-8 | 38 |
| 4 | Propanoic acid, 2-methyl-, 3-hyd... | 216 | C12H24O3 | 074367-34-3 | 38 |
| 5 | Butyric acid, 4-pentadecyl ester | 298 | C19H38O2 | 1000280-57-4 | 35 |

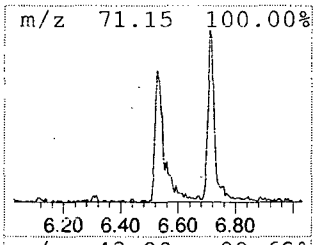
Unknown

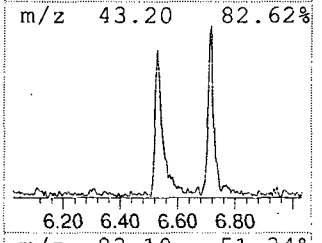


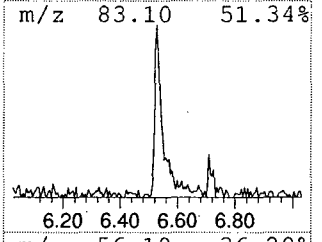



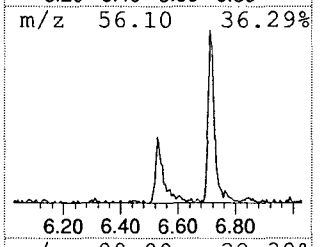



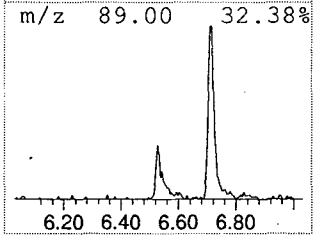



Library Search Compound Report

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

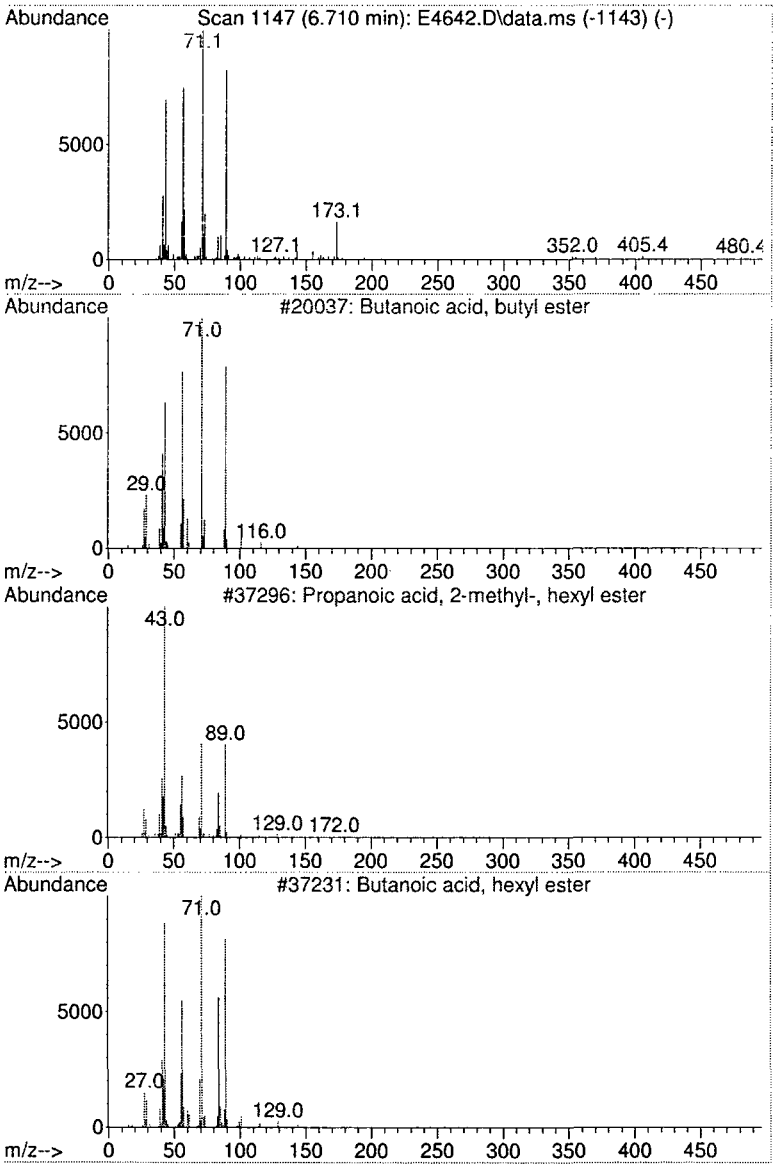
**********

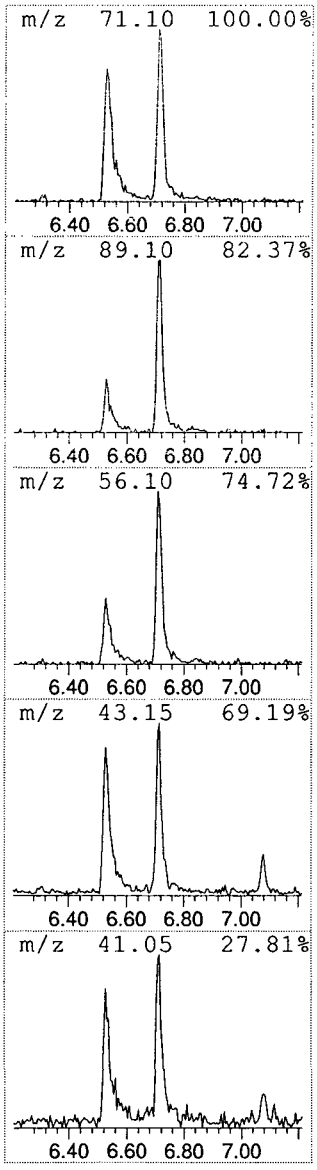
Peak Number 6 Butanoic acid, butyl ester Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.710 | 3.88 ug/mL | 189243 | Acenaphthene-d10 | 7.596 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butanoic acid, butyl ester | 144 | C8H16O2 | 000109-21-7 | 78 |
| 2 | Propanoic acid, 2-methyl-, hexyl... | 172 | C10H20O2 | 002349-07-7 | 72 |
| 3 | Butanoic acid, hexyl ester | 172 | C10H20O2 | 002639-63-6 | 64 |
| 4 | Propanoic acid, 2-methyl-, butyl... | 144 | C8H16O2 | 000097-87-0 | 64 |
| 5 | Propanoic acid, 2-methyl-, 2-eth... | 216 | C12H24O3 | 074367-31-0 | 64 |

Unknown



Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4642.D
Acq On : 24 May 2012 22:00
Sample : 2050165-BLK1
Misc : SBLK6Q 30GM/0.5ML GPC SOIL
DataAcq Meth:CLPACQ.M

Vial: 8
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 02:11:55 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | \|--Internal Standard---\| # | RT | Resp | Conc\| |
|---|---|---|---|---|---|---|---|---|
| Silane, ethyldi... | 1.843 | 3.5 | ug/mL | 96766 | 1 | 3.296 | 557242 | 20.0 |
| Ethane, 1,1,2,2... | 2.404 | 8.8 | ug/mL | 246367 | 1 | 3.296 | 557242 | 20.0 |
| Hexanoic acid, ... | 4.428 | 2.8 | ug/mL | 102054 | 2 | 4.957 | 733060 | 20.0 |
| Nonanoic acid | 5.828 | 3.5 | ug/mL | 129546 | 2 | 4.957 | 733060 | 20.0 |
| Propanoic acid,... | 6.528 | 4.2 | ug/mL | 203369 | 3 | 7.596 | 974454 | 20.0 |
| Butanoic acid, ... | 6.710 | 3.9 | ug/mL | 189243 | 3 | 7.596 | 974454 | 20.0 |

| | Name | Date |
|---|---|---|
| Approval 1: | | |
| Approval 2: | | |


**A4 SCIENTIFIC, INC.**
THE WOODLANDS,TX 77380
Phone: 281-292-5277
Fax: 281-292-2481
WWW:


BNA

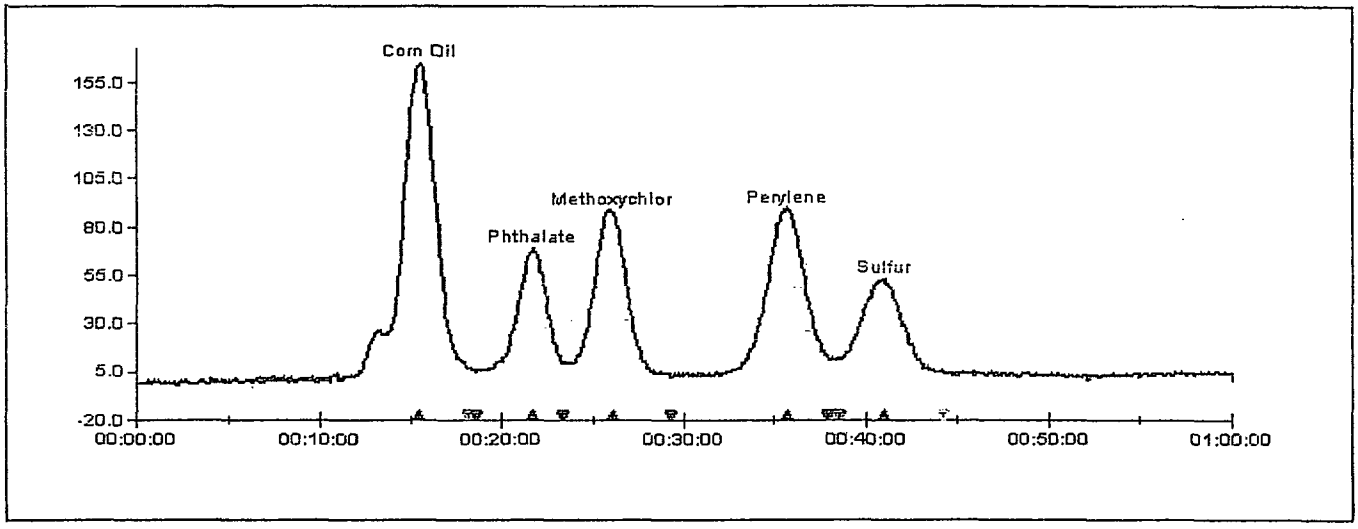
05/15/12 05/17/12

| | | | |
|---|---|---|---|
| Sequence: | GPCCAL | Date of Calibration: | 5/15/2012 8:42:40AM |
| Operator: | Administrator | Calibration Results: | Completed run |
| Sample ID: | GPCB05152012 | Calibration Pass/Fail: | PASSED |

**Configuration Details:**

| | | | |
|---|---|---|---|
| Syringe Size (mL): | 10.00 | Sample Tray: | 60 16 * 100 mm tubes |
| Loop Size (mL): | 5.00 | Collect Tray: | 56 39 mm tubes |
| Plotting UV Data: | Yes | Solvent Type: | Methylene chloride |
| Bypass Valve: | Yes | Column Type: | A4-2005 |
| Using UV Detector: | Yes | Detector Type: | OI UV-1000 254 nm |
| Set Flow Rate (mL/min): | 5.00 | Obs. Flow Rate (mL/min): | not measured |

**Calibration Details:**




**Peak Resolution:**

| Peaks | Resolution (%) | Criteria (%) | Pass/Fail | Delta (%) | Criteria (%) | Pass/Fail |
|---|---|---|---|---|---|---|
| 1 - 2 | 97.0 | 85 | Pass | -1 | 15 | Pass |
| 2 - 3 | 88.0 | 85 | Pass | -4 | 15 | Pass |
| 3 - 4 | 99.0 | 85 | Pass | -1 | 15 | Pass |
| 4 - 5 | 90.0 | 90 | Pass | 0 | 10 | Pass |

**Peak Retention:**

| Peaks | Time | % Delta | Criteria (%) | Pass/Fail |
|---|---|---|---|---|
| 1 | 15:30 | 1 | 5 | Pass |
| 2 | 21:40 | 0 | 5 | Pass |
| 3 | 26:05 | 1 | 5 | Pass |
| 4 | 35:40 | 1 | 5 | Pass |
| 5 | 41:00 | 1 | 5 | Pass |

**Calculated Run Times:**

| Cycle | Time (min:sec) |
|---|---|
| Dump | 18:09 |
| Collect | 20:24 |
| Wash | 15:39 |

Date Printed: 5/15/2012 9:46:03AM



Initials:

00649

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Instrument Run Log – GPC

Instrument ID: B-AP200

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/15/12 CALIBRATION ID: N/A

START DATE: 05/15/12 START TIME: 8:42 START FLOW RATE: 5ml

END DATE: 05/16/12 END TIME: 4:50 END FLOW RATE: 5ml

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 1 | GPCB0515 2012 | GPCB0515 2012 | BNA | 5 | 115 | 931-130-12 |
| 2 | -ABLK | | | | 90 | Mem A204604 |
| 3 | -SBLK | | | | | |
| 4 | -PBLK | | | | 115 | |
| 5 | | | | | 90 | 931-131-12 |
| 6 | 0015901-01 | BA191 | BEST | 5 | 90 | |
| 7 | 5911-01 | 92 | | | | |
| 8 | 5919-01 | 93 | | | | |
| 9 | 5931-01 | 94 | | | | |
| 10 | 2050101-BLK | PBLKLX | | | | |
| 11 | -BS1 | PLCSLX | | | | |
| 12 | -MS1 | BA193MS | | | | |
| 13 | -MSD1 | MSD | | | | |
| 14 | 0015901-01 | BA191 | BNA | 5 | 115 | |
| 15 | 5911-01 | 92 | | | | |
| 16 | 5919-01 | 93 | | | | |
| 17 | 5931-01 | 94 | | | | |
| 18 | 2050085-BLK1 | SBLK6D | | | | |
| 19 | 2050073-BLK1 | SBLK52 | | | | |
| | | | | | | |

PS 5/17/12

NOTES: N/A

ANALYST/DATE: PS 05/15/12 REVIEWER/DATE: PS 5/17/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GPC**<br>Instrument ID: **B-AP200** | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| **18-Oct-2010** | **SVOA** | **FORM** | **4FORM04-A** | **933-09152011** |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/15/12 CALIBRATION ID: N/A

START DATE: 05/21/12 START TIME: 11:00 START FLOW RATE: 5ml

END DATE: 05/22/12 END TIME: 8:00 END FLOW RATE: 5ml

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 1 | 0015970-02 | -X OT56 | BNA | 5 | 75 | |
| 2 | 2050147-BLK1 | SBLKCM | | | | |
| 3 | 0015970-03 | XOT57 | | | | |
| 4 | 2050148-BLK1 | SBLKCN | | | | |
| 5 | 0015956-01 | F5WAY | | | | |
| 6 | -02 | A5 | | | | |
| 7 | -03 | A6 | | | | |
| 8 | -04 | A7 | | | | |
| 9 | -05 | A8 | | | | |
| 10 | -06 | B0 | | | | |
| 11 | 0015968-01 | A0 | | | | |
| 12 | -02 | A1 | | | | |
| 13 | -03 | A2 | | | | |
| 14 | -04 | A3 | | | | |
| 15 | -05 | A9 | | | | |
| 16 | -06 | B1 | | | | |
| 17 | -07 | B2 | | | | |
| 18 | -08 | B3 | | | | |
| 19 | -09 | B6 | | | | |
| 20 | -10 | B7 | | | | |

NOTES: N/A

ANALYST/DATE: [illegible] 05/21/12 REVIEWER/DATE: [illegible]

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Instrument Run Log – GPC<br>Instrument ID: B-AP200 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/15/12 CALIBRATION ID: N/A

START DATE: 05/21/12 START TIME: 11:00 START FLOW RATE: 5mL

END DATE: 05/22/12 END TIME: 8:00 END FLOW RATE: 5mL

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 21 | 2050139 | BW1 SB4.65 | BNA | 5 | 115 | |
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05/22/12

NOTES: N/A

ANALYST/DATE: 05/21/12 REVIEWER/DATE: 5/21/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: G-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 973-03302012 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050086 SEQUENCE: 2E15008 CALIBRATION: AD23007

ACQ. METHOD(s): CUPALQ PROCESSING METHOD(S): SOM G9670.M.

EMV: 1729 INTERNAL STD. ID: 989-031-12. START DATE: 05/16/12

ANALYTICAL METHOD: SOM01.2 (0564.M) SOP: 4SOP02-R.

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| G9069. | 2E15008-TUN1 | DFTPP1M | 1x | 939-022-12 |
| 70 | -CCN1 | SSTD050 1M | | 939-028-12 |
| 71 | 2050086-BLK1 | SBLKGE | | |
| 72 | 0015885-01 | BA189 | 10x | |
| 73 | 0015901-01 | 91 | | |
| 74 | 0015911-01 | 92 | | |
| 75 | 0015919-01 | 93 | 1x | |
| 76 | 0015931-01 | 94 | 1x | |
| 77 | 0015926-04 | BA245 | 05/16/12 | |
| 78 | -02 | BA ~~245~~ 1P5 | | |
| 79 | -03 | BA244 | | |
| 80 | 2050085-BLK1 | SBLKGD | 1x | |
| 81 | 2050073-BLK1 | SBLK52 | | |
| 82 | GPCB05152012 | GPCB05152012 | | |
| 83 | 2E15008-CCV2 | SSTD050IN | | 939-028-12 |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |
| | | | | |

NOTES: N/A

ANALYST/DATE: 05/16/12 REVIEWER/DATE: 5/17/12

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9082.D
Acq On : 16 May 2012 19:07
Sample : GPCB05152012
Misc : GPCB05152012
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : G-5973
Multiplr: 1.00

05/17/12

Quant Time: May 17 11:42:41 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.391 | 152 | 14484 | 20.0000 ug/mL | 0.00 |
| 19) Naphthalene-d8 | 6.154 | 136 | 64001 | 20.0000 ug/mL | 0.00 |
| 36) Acenaphthene-d10 | 8.868 | 164 | 38572 | 20.0000 ug/mL | 0.00 |
| 64) Phenanthrene-d10 | 11.170 | 188 | 76528 | 20.0000 ug/mL | 0.00 |
| 78) Chrysene-d12 | 15.385 | 240 | 73291 | 20.0000 ug/mL | 0.00 |
| 86) Perylene-d12 | 17.496 | 264 | 63523 | 20.0000 ug/mL | 0.00 |
| System Monitoring Compounds | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0d | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery | = 0.00%# | |
| 7) Phenol-d5 | 0.000 | 99 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery | = 0.00%# | |
| 16) Bis(2-chloroethyl)ethe... | 0.000 | 67 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery | = 0.00%# | |
| 17) 2-Chlorophenol-d4 | 0.000 | 132 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery | = 0.00%# | |
| 18) 4-Methylphenol-d8 | 0.000 | 113 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery | = 0.00%# | |
| 20) Nitrobenzene-d5 | 0.000 | 128 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery | = 0.00%# | |
| 33) 2-Nitrophenol-d4 | 0.000 | 143 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery | = 0.00%# | |
| 34) 2,4-Dichlorophenol-d3 | 0.000 | 165 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery | = 0.00%# | |
| 35) 4-Chloroaniline-d4 | 0.000 | 131 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery | = 0.00%# | |
| 60) Acenaphthylene-d8 | 0.000 | 160 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery | = 0.00%# | |
| 61) 4-Nitrophenol-d4 | 0.000 | 143 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery | = 0.00%# | |
| 62) Dimethylphthalate-d6 | 0.000 | 166 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery | = 0.00%# | |
| 63) Fluorene-d10 | 0.000 | 176 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery | = 0.00%# | |
| 76) 4,6-Dinitro-2-methylph... | 0.000 | 200 | 0 | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery | = 0.00%# | |
| 77) Anthracene-d10 | 0.000 | 188 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery | = 0.00%# | |
| 85) Pyrene-d10 | 0.000 | 212 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery | = 0.00%# | |
| 94) Benzo (a) pyrene-d12 | 0.000 | 264 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery | = 0.00%# | |

Target Compounds Qvalue

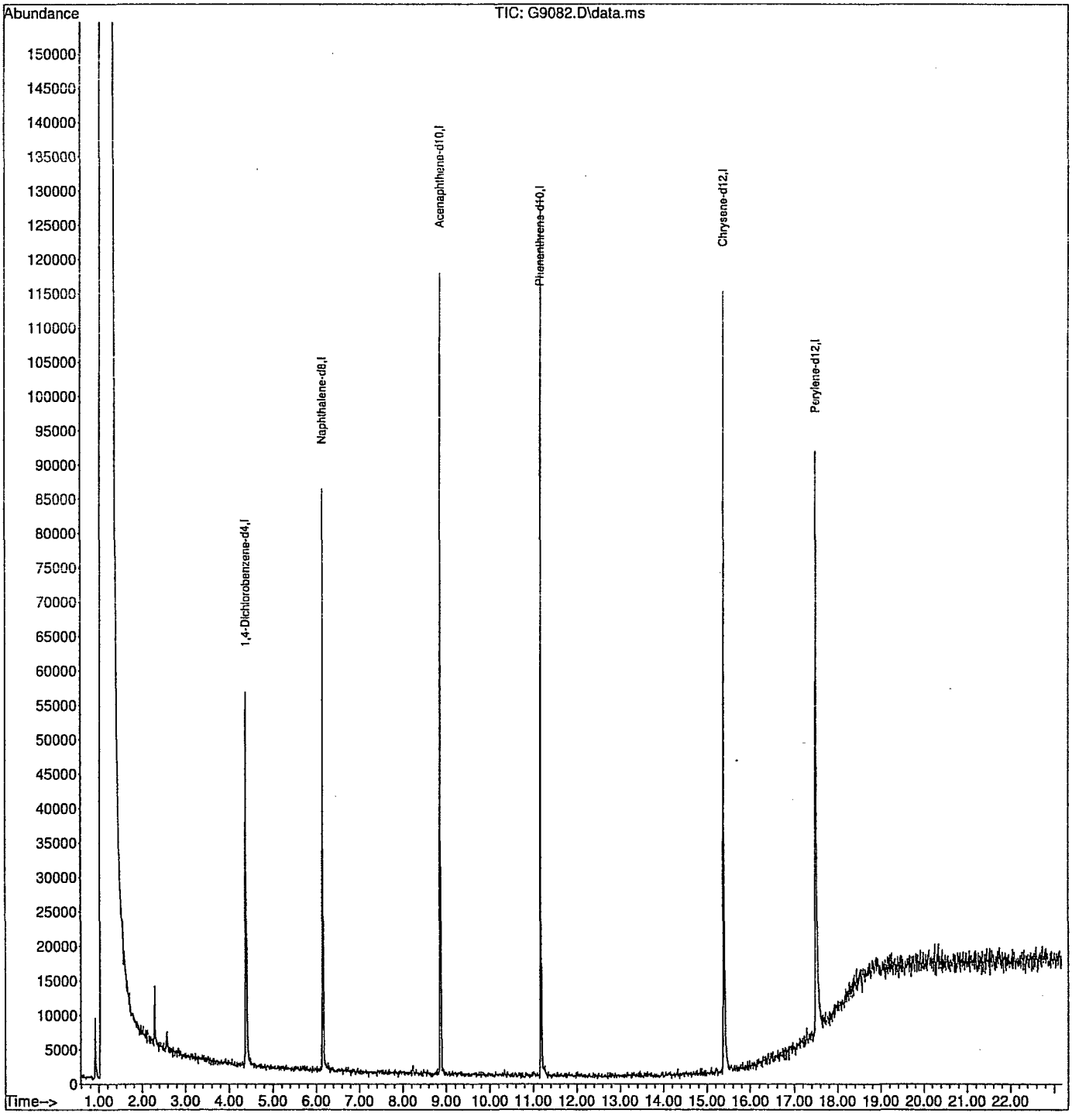
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9082.D
Acq On : 16 May 2012 19:07
Sample : GPCB05152012
Misc : GPCB05152012
DataAcq Meth:CLPACQ.M

Vial: 13
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:42:41 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

05/17/12

S. Vitkati

05/17/12

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.391 | 152 | 17077 | 20.0000 ug/mL | -0.05 |
| 19) Naphthalene-d8 | 6.149 | 136 | 66932 | 20.0000 ug/mL | -0.06 |
| 36) Acenaphthene-d10 | 8.868 | 164 | 37887 | 20.0000 ug/mL | -0.06 |
| 64) Phenanthrene-d10 | 11.176 | 188 | 71558 | 20.0000 ug/mL | -0.06 |
| 78) Chrysene-d12 | 15.385 | 240 | 71454 | 20.0000 ug/mL | -0.07 |
| 86) Perylene-d12 | 17.495 | 264 | 67155 | 20.0000 ug/mL | -0.07 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.688 | 96 | 4547 | 20.52 ug/mL | -0.03 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 102.60% | | |
| 7) Phenol-d5 | 4.049 | 99 | 57039 | 16.57 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 41.42% | | |
| 16) Bis(2-chloroethyl)ethe... | 4.070 | 67 | 38385 | 18.28 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 45.70% | | |
| 17) 2-Chlorophenol-d4 | 4.156 | 132 | 56444 | 18.35 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 45.88% | | |
| 18) 4-Methylphenol-d8 | 4.995 | 113 | 53470 | 21.01 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 52.52% | | |
| 20) Nitrobenzene-d5 | 5.171 | 128 | 29336 | 18.50 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 46.25% | | |
| 33) 2-Nitrophenol-d4 | 5.630 | 143 | 30754 | 18.95 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 47.38% | | |
| 34) 2,4-Dichlorophenol-d3 | 5.994 | 165 | 47116 | 18.30 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 45.75% | | |
| 35) 4-Chloroaniline-d4 | 6.330 | 131 | 55765 | 14.85 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 37.13% | | |
| 60) Acenaphthylene-d8 | 8.601 | 160 | 174524 | 18.40 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 46.00% | | |
| 61) 4-Nitrophenol-d4 | 9.268 | 143 | 24652 | 20.24 ug/mL | -0.05 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 50.60% | | |
| 62) Dimethylphthalate-d6 | 8.574 | 166 | 122605 | 18.06 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 45.15%# | | |
| 63) Fluorene-d10 | 9.669 | 176 | 106717 | 18.34 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 45.85% | | |
| 76) 4,6-Dinitro-2-methylph... | 9.931 | 200 | 12619 | 14.67 ug/mL | -0.06 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 36.68% | | |
| 77) Anthracene-d10 | 11.250 | 188 | 181629 | 18.40 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 46.00% | | |
| 85) Pyrene-d10 | 13.409 | 212 | 189383 | 18.24 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 45.60%# | | |
| 94) Benzo (a) pyrene-d12 | 17.383 | 264 | 136733 | 17.66 ug/mL | -0.07 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 44.15% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 1.479 | 79 | 111735 | 20.2374 ug/mL | 96 |
| 4) 1,4-Dioxane | 1.704 | 88 | 23611m | 18.6343 ug/mL | |
| 5) Benzaldehyde | 3.878 | 77 | 32269 | 14.5660 ug/mL | 98 |
| 6) Bis(2-chloroethyl)ether | 4.124 | 93 | 52737 | 18.0947 ug/mL | 97 |
| 8) Phenol | 4.065 | 94 | 62504 | 17.4209 ug/mL | 98 |
| 9) 2-Chlorophenol | 4.177 | 128 | 58456 | 18.3281 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 4.829 | 45 | 57979 | 17.9910 ug/mL# | 29 |
| 11) Acetophenone | 4.968 | 105 | 73894 | 17.9078 ug/mL# | 74 |
| 12) 2-Methylphenol | 4.824 | 108 | 50452 | 18.1623 ug/mL | 96 |
| 13) Hexachloroethane | 5.043 | 117 | 22731 | 18.5713 ug/mL | 97 |
| 14) N-Nitroso-di-n-propyla... | 5.016 | 70 | 34726 | 17.7427 ug/mL | 95 |
| 15) 4-Methylphenol | 5.037 | 108 | 54141 | 18.2415 ug/mL | 98 |

RS 5/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) | |
|---|---|---|---|---|---|---|---|
| 21) | Nitrobenzene | 5.198 | 77 | 51506 | 18.2117 ug/mL | 98 | |
| 22) | Isophorone | 5.524 | 82 | 91285 | 17.7977 ug/mL | 98 | |
| 23) | 2-Nitrophenol | 5.652 | 139 | 31524 | 18.2491 ug/mL | 93 | |
| 24) | 2,4-Dimethylphenol | 5.769 | 107 | 51861 | 18.3531 ug/mL | 96 | |
| 25) | Bis(2-chloroethoxy)met... | 5.892 | 93 | 63170 | 18.1752 ug/mL | 99 | |
| 26) | 2,4- Dichlorophenol | 6.010 | 162 | 45100 | 18.5854 ug/mL | 97 | |
| 27) | Naphthalene | 6.181 | 128 | 167972 | 18.1866 ug/mL | 99 | |
| 28) | 4-Chloroaniline | 6.341 | 127 | 49987 | 14.8433 ug/mL | 97 | |
| 29) | Hexachlorobutadiene | 6.480 | 225 | 20229 | 16.7920 ug/mL | 95 | |
| 30) | Caprolactam | 6.779 | 113 | 18000 | 17.6351 ug/mL | 89 | |
| 31) | 4-Chloro-3-methylphenol | 7.153 | 107 | 44869 | 18.5998 ug/mL | 96 | |
| 32) | 2-Methylnaphthalene | 7.233 | 142 | 112658 | 18.3100 ug/mL | 99 | |
| 37) | Hexachlorocyclopentadiene | 7.596 | 237 | 13750 | 19.0658 ug/mL | 97 | |
| 38) | 2,4,6-Trichlorophenol | 7.751 | 196 | 28773 | 18.2003 ug/mL | 98 | |
| 39) | 2,4,5-Trichlorophenol | 7.826 | 196 | 31754 | 19.6166 ug/mL | 92 | |
| 40) | 1,1'-Biphenyl | 7.986 | 154 | 132932 | 18.4307 ug/mL | 99 | |
| 41) | 2-Chloronaphthalene | 7.976 | 162 | 98620 | 18.3664 ug/mL | 97 | |
| 42) | 1,2,3,4-Tetrachloroben... | 7.559 | 216 | 42234 | 18.1360 ug/mL | 98 | |
| 43) | 2-Nitroaniline | 8.237 | 65 | 23240 | 18.1655 ug/mL | 93 | |
| 44) | Acenaphthylene | 8.622 | 152 | 165158 | 18.5652 ug/mL | 99 | |
| 45) | Dimethylphthalate | 8.606 | 163 | 112589 | 18.2832 ug/mL | 98 | |
| 46) | 2,6-Dinitrotoluene | 8.697 | 165 | 24262 | 18.7644 ug/mL | 94 | |
| 47) | Acenaphthene | 8.916 | 153 | 105530 | 18.1819 ug/mL | 100 | |
| 48) | 3-Nitroaniline | 8.905 | 138 | 28728 | 18.6944 ug/mL | 90 | |
| 49) | 2,4-Dinitrophenol | 9.119 | 184 | 7408m | 21.1262 ug/mL | | RS |
| 50) | Dibenzofuran | 9.172 | 168 | 140843 | 18.1816 ug/mL | 72 | |
| 52) | 2,4-Dinitrotoluene | 9.311 | 165 | 34883 | 18.6914 ug/mL | 98 | |
| 53) | 4-Nitrophenol | 9.274 | 109 | 10141 | 16.4889 ug/mL# | 9 | |
| 54) | 2,3,4,6-Tetrachlorophenol | 9.477 | 232 | 23018 | 18.1132 ug/mL | 96 | |
| 55) | Fluorene | 9.712 | 166 | 124783 | 18.8349 ug/mL | 97 | |
| 56) | 4-Chlorophenyl-phenyle... | 9.765 | 204 | 51711 | 18.2451 ug/mL | 97 | |
| 57) | Diethylphthalate | 9.739 | 149 | 114889 | 18.1733 ug/mL | 100 | |
| 58) | 4-Nitroaniline | 9.872 | 138 | 31233 | 19.8336 ug/mL | 92 | |
| 59) | 1,2,4,5 Tetrachloroben... | 7.559 | 216 | 42234 | 18.1360 ug/mL | 94 | |
| 65) | 4,6-Dinitro-2-methylph... | 9.936 | 198 | 12718 | 15.5424 ug/mL | 85 | |
| 66) | N-Nitrosodiphenylamine... | 9.974 | 169 | 103152 | 18.6469 ug/mL | 99 | |
| 67) | 4-Bromophenyl-phenylether | 10.519 | 248 | 26334 | 18.2215 ug/mL | 96 | |
| 68) | Hexachlorobenzene | 10.705 | 284 | 28753 | 17.7258 ug/mL | 99 | |
| 69) | Atrazine | 10.925 | 200 | 34102 | 17.5913 ug/mL | 100 | |
| 70) | Pentachlorophenol | 11.031 | 266 | 13097 | 16.4569 ug/mL | 97 | |
| 71) | Phenanthrene | 11.208 | 178 | 180435 | 18.4180 ug/mL | 99 | |
| 72) | Anthracene | 11.277 | 178 | 183036 | 18.3498 ug/mL | 99 | |
| 73) | Carbazole | 11.587 | 167 | 179960 | 19.1810 ug/mL | 99 | |
| 74) | Di-n-butylphthalate | 12.335 | 149 | 207332 | 18.4709 ug/mL | 99 | |
| 75) | Fluoranthene | 13.099 | 202 | 190141 | 18.7612 ug/mL | 97 | |
| 79) | Pyrene | 13.435 | 202 | 199939 | 18.0726 ug/mL | 99 | |
| 80) | Butylbenzylphthalate | 14.691 | 149 | 96709 | 18.2290 ug/mL | 97 | |
| 81) | 3,3'-Dichlorobenzidine | 15.412 | 252 | 55754 | 17.2723 ug/mL | 98 | |
| 82) | Benzo (a) anthracene | 15.364 | 228 | 157505 | 17.1993 ug/mL | 99 | |
| 83) | Chrysene | 15.423 | 228 | 178338 | 18.3636 ug/mL | 99 | |
| 84) | Bis(2-ethylhexyl)phtha... | 15.695 | 149 | 130931 | 17.8744 ug/mL | 98 | |
| 87) | Di-n-octylphthalate | 16.625 | 149 | 204490 | 17.6999 ug/mL | 100 | |
| 88) | Benzo (b) fluoranthene | 16.983 | 252 | 121234 | 16.2526 ug/mL | 93 | |
| 89) | Benzo (k) fluoranthene | 17.015 | 252 | 188834 | 18.6880 ug/mL | 95 | |
| 90) | Benzo (a) pyrene | 17.415 | 252 | 150820 | 17.1505 ug/mL | 97 | |
| 91) | Indeno (1,2,3-cd) pyrene | 18.884 | 276 | 83442m | 16.4334 ug/mL | | RS |
| 92) | Dibenzo (a,h) anthracene | 18.917 | 278 | 102764 | 15.2688 ug/mL | 93 | |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 93) Benzo (g,h,i) perylene | 19.242 | 276 | 124583 | 15.9769 ug/mL | 95 |

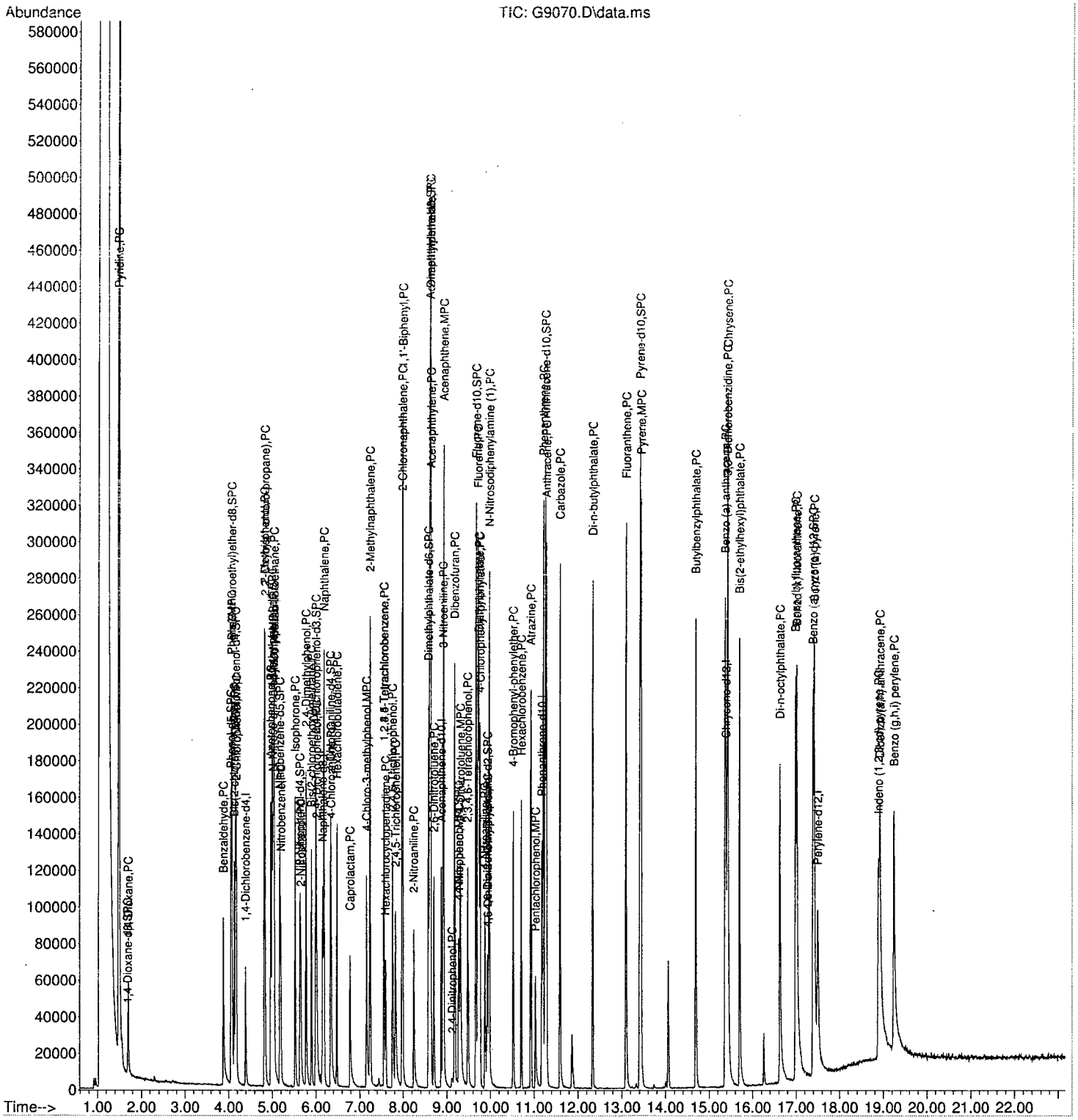
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration






00659

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 2 | PC | Pyridine | 6.466 | 6.543 | -1.2 | 105 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.260 | 0.266 | -2.3# | 106 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.484 | 1.383 | 6.8# | 101 | 0.00 |
| 5 | PC | Benzaldehyde | 2.595 | 1.890 | 27.2 | 74 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.413 | 3.088 | 9.5 | 98 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.032 | 3.340 | 17.2 | 86 | 0.00 |
| 8 | MPC | Phenol | 4.202 | 3.660 | 12.9 | 92 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.735 | 3.423 | 8.4 | 99 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.774 | 3.395 | 10.0 | 97 | 0.00 |
| 11 | PC | Acetophenone | 4.833 | 4.327 | 10.5 | 97 | 0.00 |
| 12 | PC | 2-Methylphenol | 3.253 | 2.954 | 9.2 | 97 | 0.00 |
| 13 | PC | Hexachloroethane | 1.433 | 1.331 | 7.1 | 98 | 0.00 |
| 14 | MPC | N-Nitroso-di-n-propylamine | 2.292 | 2.033 | 11.3 | 96 | 0.00 |
| 15 | PC | 4-Methylphenol | 3.476 | 3.170 | 8.8 | 95 | 0.00 |
| 16 | SPC | Bis(2-chloroethyl)ether-d8 | 2.459 | 2.248 | 8.6 | 96 | 0.00 |
| 17 | SPC | 2-Chlorophenol-d4 | 3.603 | 3.305 | 8.3 | 98 | 0.00 |
| 18 | SPC | 4-Methylphenol-d8 | 2.980 | 3.131 | -5.1 | 109 | 0.00 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 20 | SPC | Nitrobenzene-d5 | 0.474 | 0.438 | 7.6 | 94 | 0.00 |
| 21 | PC | Nitrobenzene | 0.845 | 0.770 | 8.9 | 97 | 0.00 |
| 22 | PC | Isophorone | 1.533 | 1.364 | 11.0 | 95 | 0.00 |
| 23 | PC | 2-Nitrophenol | 0.516 | 0.471 | 8.7 | 96 | 0.00 |
| 24 | PC | 2,4-Dimethylphenol | 0.844 | 0.775 | 8.2 | 94 | 0.00 |
| 25 | PC | Bis(2-chloroethoxy)methane | 1.039 | 0.944 | 9.1 | 95 | 0.00 |
| 26 | PC | 2,4- Dichlorophenol | 0.725 | 0.674 | 7.0 | 96 | 0.00 |
| 27 | PC | Naphthalene | 2.760 | 2.510 | 9.1 | 96 | 0.00 |
| 28 | PC | 4-Chloroaniline | 1.006 | 0.747 | 25.7 | 74 | 0.00 |
| 29 | PC | Hexachlorobutadiene | 0.360 | 0.302 | 16.1 | 90 | 0.00 |
| 30 | PC | Caprolactam | 0.305 | 0.269 | 11.8 | 89 | 0.00 |
| 31 | MPC | 4-Chloro-3-methylphenol | 0.721 | 0.670 | 7.1 | 94 | 0.00 |
| 32 | PC | 2-Methylnaphthalene | 1.839 | 1.683 | 8.5 | 98 | 0.00 |
| 33 | SPC | 2-Nitrophenol-d4 | 0.485 | 0.459 | 5.4 | 98 | 0.00 |
| 34 | SPC | 2,4-Dichlorophenol-d3 | 0.770 | 0.704 | 8.6 | 96 | 0.00 |
| 35 | SPC | 4-Chloroaniline-d4 | 1.122 | 0.833 | 25.8 | 77 | 0.00 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 37 | PC | Hexachlorocyclopentadiene | 0.381 | 0.363 | 4.7 | 91 | 0.00 |
| 38 | PC | 2,4,6-Trichlorophenol | 0.835 | 0.759 | 9.1 | 93 | 0.00 |
| 39 | PC | 2,4,5-Trichlorophenol | 0.855 | 0.838 | 2.0 | 105 | 0.00 |
| 40 | PC | 1,1'-Biphenyl | 3.807 | 3.509 | 7.8 | 94 | 0.00 |
| 41 | PC | 2-Chloronaphthalene | 2.835 | 2.603 | 8.2 | 94 | 0.00 |
| 42 | PC | 1,2,3,4-Tetrachlorobenzene | 1.229 | 1.115 | 9.3 | 92 | 0.00 |
| 43 | PC | 2-Nitroaniline | 0.675 | 0.613 | 9.2 | 93 | 0.00 |
| 44 | PC | Acenaphthylene | 4.696 | 4.359 | 7.2 | 94 | 0.00 |
| 45 | PC | Dimethylphthalate | 3.251 | 2.972 | 8.6 | 92 | 0.00 |
| 46 | PC | 2,6-Dinitrotoluene | 0.683 | 0.640 | 6.3 | 92 | 0.00 |
| 47 | MPC | Acenaphthene | 3.064 | 2.785 | 9.1 | 93 | 0.00 |
| 48 | PC | 3-Nitroaniline | 0.811 | 0.758 | 6.5 | 92 | 0.00 |
| 49 | PC | 2,4-Dinitrophenol | 0.185 | 0.196 | -5.9 | 119 | 0.00 |
| 50 | PC | Dibenzofuran | 4.089 | 3.717 | 9.1 | 92 | 0.00 |
| 51 | PC | Pentachlorobenzene | 0.002 | 0.000 | 100.0 | 0# | -9.28# |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | MPC | 2,4-Dinitrotoluene | 0.985 | 0.921 | 6.5 | 94 | 0.00 |
| 53 | MPC | 4-Nitrophenol | 0.325 | 0.268 | 17.5 | 81 | 0.00 |
| 54 | PC | 2,3,4,6-Tetrachlorophenol | 0.671 | 0.608 | 9.4 | 91 | 0.00 |
| 55 | PC | Fluorene | 3.497 | 3.294 | 5.8 | 95 | 0.00 |
| 56 | PC | 4-Chlorophenyl-phenylether | 1.496 | 1.365 | 8.8 | 92 | 0.00 |
| 57 | PC | Diethylphthalate | 3.337 | 3.032 | 9.1 | 93 | 0.00 |
| 58 | PC | 4-Nitroaniline | 0.831 | 0.824 | 0.8 | 98 | 0.00 |
| 59 | PC | 1,2,4,5 Tetrachlorobenzene | 1.229 | 1.115 | 9.3 | 92 | 0.00 |
| 60 | SPC | Acenaphthylene-d8 | 5.008 | 4.606 | 8.0 | 94 | 0.00 |
| 61 | SPC | 4-Nitrophenol-d4 | 0.643 | 0.651 | -1.2 | 105 | 0.00 |
| 62 | SPC | Dimethylphthalate-d6 | 3.583 | 3.236 | 9.7 | 92 | 0.00 |
| 63 | SPC | Fluorene-d10 | 3.072 | 2.817 | 8.3 | 93 | 0.00 |
| 64 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 65 | PC | 4,6-Dinitro-2-methylphenol | 0.229 | 0.178 | 22.3 | 80 | 0.00 |
| 66 | PC | N-Nitrosodiphenylamine (1) | 1.546 | 1.442 | 6.7 | 94 | 0.00 |
| 67 | PC | 4-Bromophenyl-phenylether | 0.404 | 0.368 | 8.9 | 94 | 0.00 |
| 68 | PC | Hexachlorobenzene | 0.453 | 0.402 | 11.3 | 92 | 0.00 |
| 69 | PC | Atrazine | 0.542 | 0.477 | 12.0 | 90 | 0.00 |
| 70 | MPC | Pentachlorophenol | 0.222 | 0.183 | 17.6 | 82 | 0.00 |
| 71 | PC | Phenanthrene | 2.738 | 2.522 | 7.9 | 94 | 0.00 |
| 72 | PC | Anthracene | 2.788 | 2.558 | 8.2 | 94 | 0.00 |
| 73 | PC | Carbazole | 2.622 | 2.515 | 4.1 | 97 | 0.00 |
| 74 | PC | Di-n-butylphthalate | 3.137 | 2.897 | 7.7 | 93 | 0.00 |
| 75 | PC | Fluoranthene | 2.833 | 2.657 | 6.2 | 97 | 0.00 |
| 76 | SPC | 4,6-Dinitro-2-methylphenol- | 0.240 | 0.176 | 26.7 | 74 | 0.00 |
| 77 | SPC | Anthracene-d10 | 2.758 | 2.538 | 8.0 | 93 | 0.00 |
| 78 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 79 | MPC | Pyrene | 3.097 | 2.798 | 9.7 | 96 | 0.00 |
| 80 | PC | Butylbenzylphthalate | 1.485 | 1.353 | 8.9 | 98 | 0.00 |
| 81 | PC | 3,3'-Dichlorobenzidine | 0.904 | 0.780 | 13.7 | 94 | 0.00 |
| 82 | PC | Benzo (a) anthracene | 2.563 | 2.204 | 14.0 | 95 | 0.00 |
| 83 | PC | Chrysene | 2.718 | 2.496 | 8.2 | 98 | 0.00 |
| 84 | PC | Bis(2-ethylhexyl)phthalate | 2.050 | 1.832 | 10.6 | 97 | 0.00 |
| 85 | SPC | Pyrene-d10 | 2.906 | 2.650 | 8.8 | 97 | 0.00 |
| 86 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 87 | PC | Di-n-octylphthalate | 3.441 | 3.045 | 11.5 | 94 | 0.00 |
| 88 | PC | Benzo (b) fluoranthene | 2.222 | 1.805 | 18.8 | 88 | 0.00 |
| 89 | PC | Benzo (k) fluoranthene | 3.009 | 2.812 | 6.5 | 94 | 0.00 |
| 90 | PC | Benzo (a) pyrene | 2.619 | 2.246 | 14.2 | 87 | 0.00 |
| 91 | PC | Indeno (1,2,3-cd) pyrene | 1.512 | 1.243 | 17.8 | 95 | 0.00 |
| 92 | PC | Dibenzo (a,h) anthracene | 2.004 | 1.530 | 23.7 | 80 | 0.00 |
| 93 | PC | Benzo (g,h,i) perylene | 2.322 | 1.855 | 20.1 | 85 | 0.00 |
| 94 | SPC | Benzo (a) pyrene-d12 | 2.306 | 2.036 | 11.7 | 92 | 0.00 |

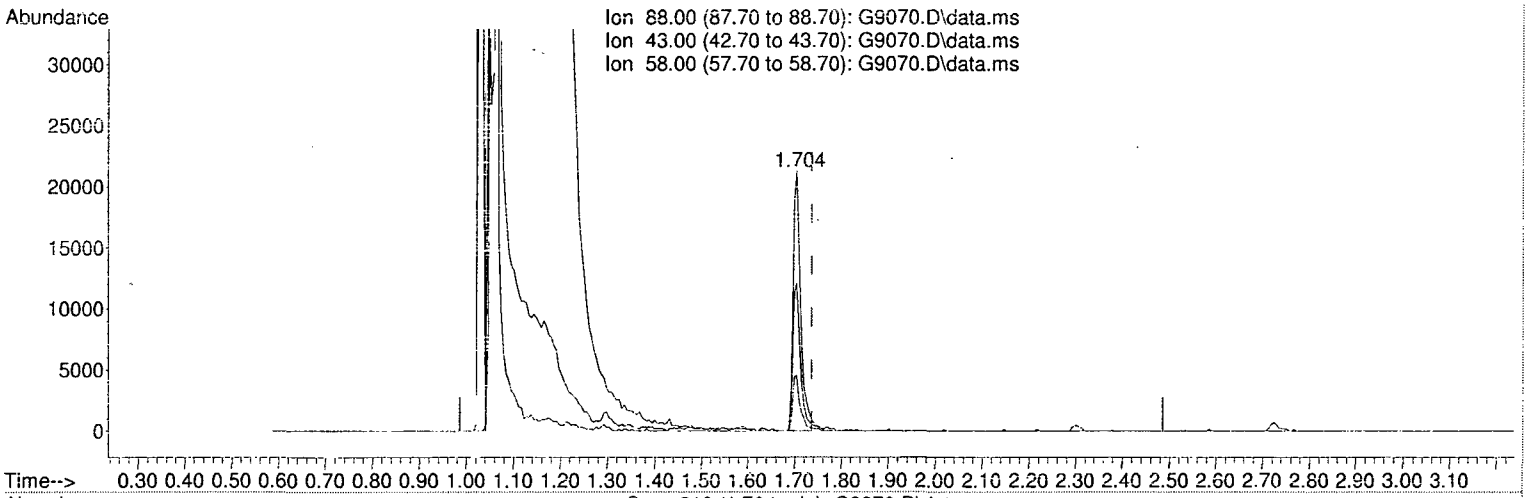
(#) = Out of Range SPCC's out = 0 CCC's out = 2

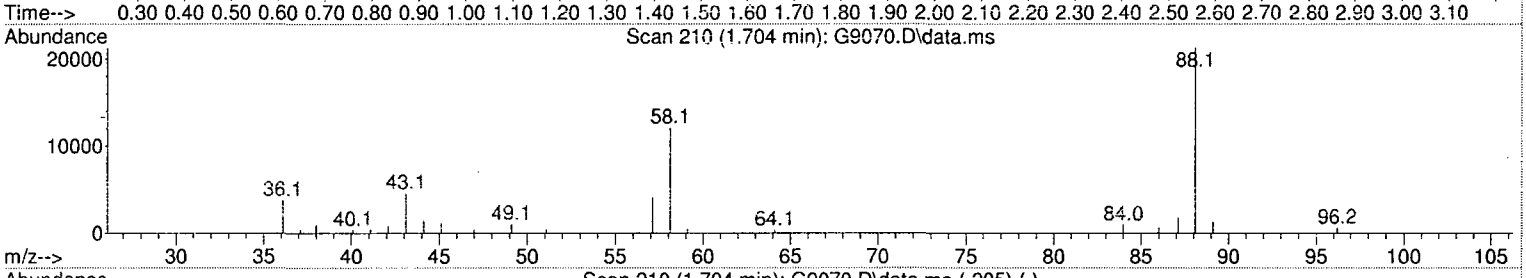
Quantitation Report (Qedit)

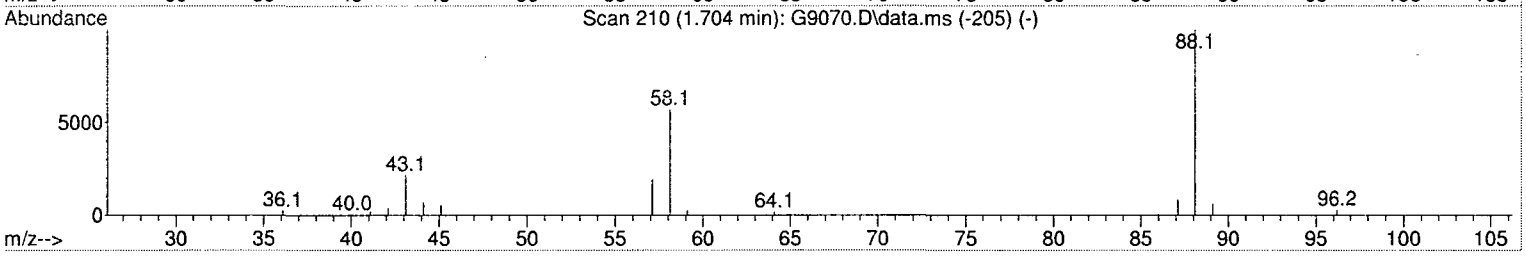
Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration




TIC: G9070.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.704min (-0.032) 18.63 ug/mL m** RS 8/21

**response 23611**

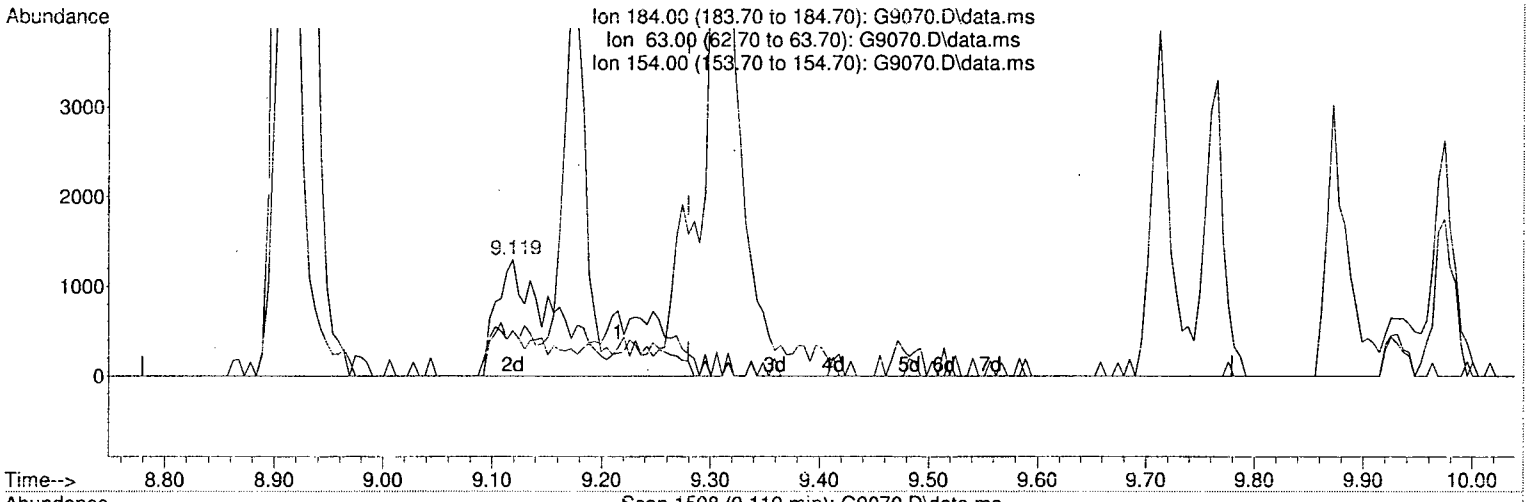
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 24.20 | 0.00# |
| 58.00 | 64.60 | 0.00# |
| 0.00 | 0.00 | 0.00 |

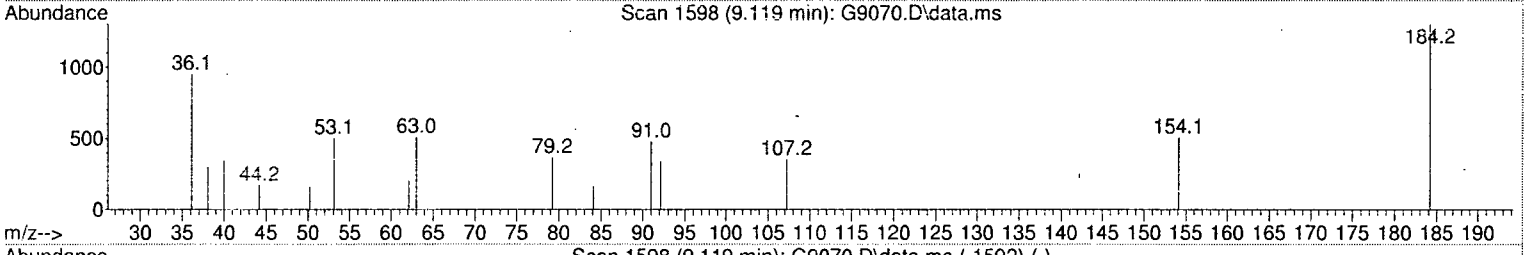
Quantitation Report (Qedit)

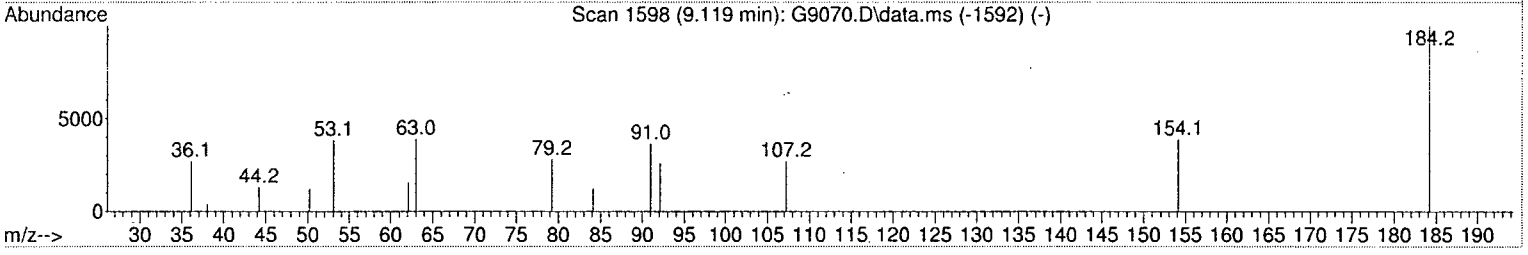
Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration




TIC: G9070.D\data.ms

**(49) 2,4-Dinitrophenol (PC)**

**9.119min (-0.160) 21.13 ug/mL m** RS 5/21

**response 7408**

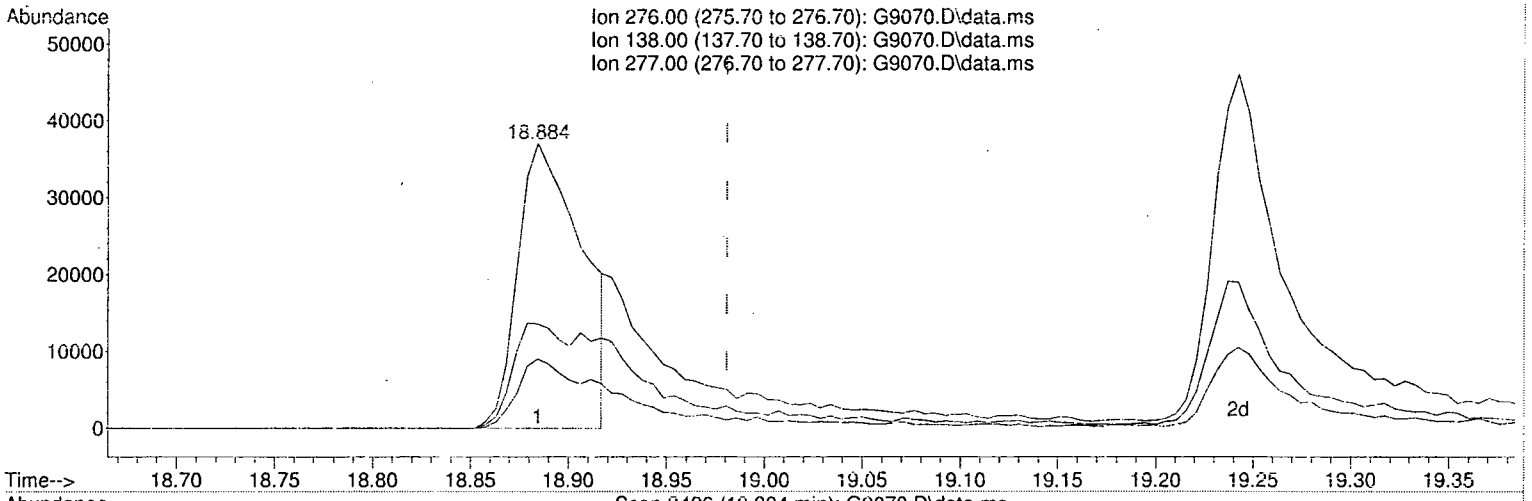
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 52.40 | 77.82# |
| 154.00 | 45.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |

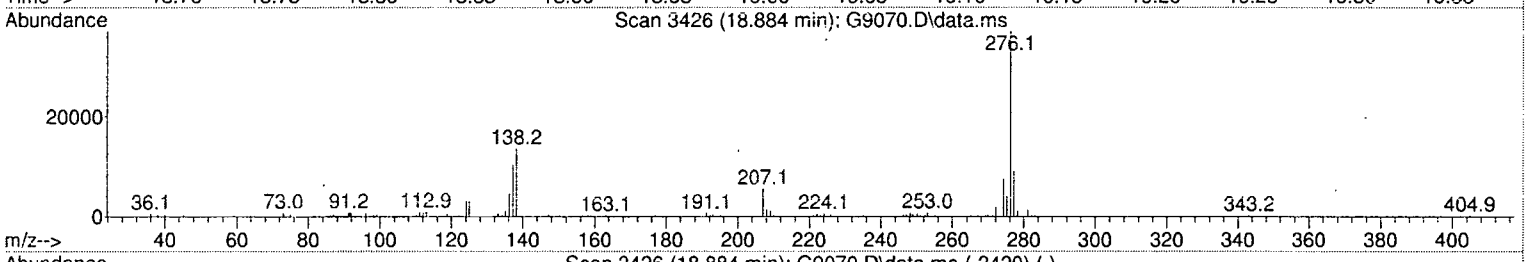
Quantitation Report (Qedit)

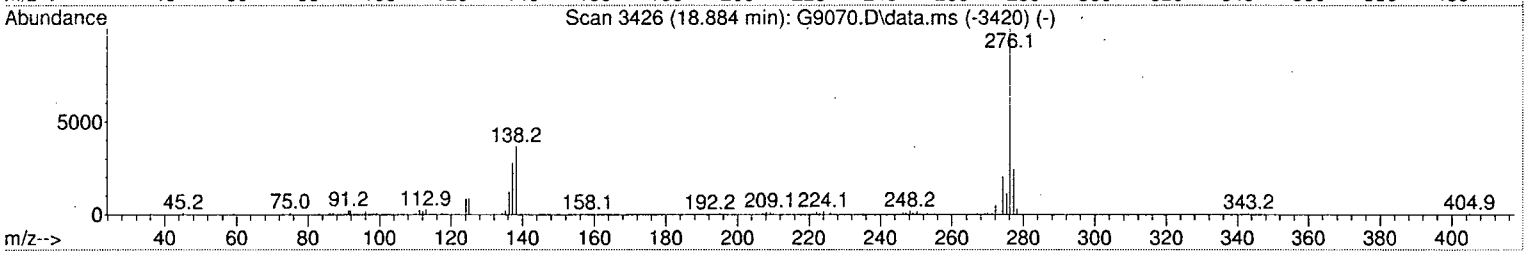
Data File : C:\msdchem\1\data\G9070.D
Acq On : 16 May 2012 12:21
Sample : 2E15008-CCV1
Misc : SSTD0201M
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 12:50:22 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 10 14:34:26 2012
Response via : Initial Calibration




TIC: G9070.D\data.ms

**(91) Indeno (1,2,3-cd) pyrene (PC)**

**18.884min (-0.096) 16.43 ug/mL m** RS

**response 83442**

| Ion | Exp% | Act% |
|---|---|---|
| 276.00 | 100.00 | 100.00 |
| 138.00 | 36.40 | 30.34 |
| 277.00 | 36.40 | 36.39 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

05/18/12

S. Vokati
05/18/12

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.391 | 152 | 16779 | 20.0000 ug/mL | 0.00 |
| 19) Naphthalene-d8 | 6.149 | 136 | 68809 | 20.0000 ug/mL | 0.00 |
| 36) Acenaphthene-d10 | 8.868 | 164 | 39438 | 20.0000 ug/mL | 0.00 |
| 64) Phenanthrene-d10 | 11.170 | 188 | 72554 | 20.0000 ug/mL | 0.00 |
| 78) Chrysene-d12 | 15.385 | 240 | 72386 | 20.0000 ug/mL | 0.00 |
| 86) Perylene-d12 | 17.496 | 264 | 65095 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.688 | 96 | 4370 | 20.07 ug/mL | 0.00 |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 100.35% | | |
| 7) Phenol-d5 | 4.049 | 99 | 60155 | 17.78 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 44.45% | | |
| 16) Bis(2-chloroethyl)ethe... | 4.070 | 67 | 38369 | 18.60 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 46.50% | | |
| 17) 2-Chlorophenol-d4 | 4.156 | 132 | 58415 | 19.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 48.30% | | |
| 18) 4-Methylphenol-d8 | 4.995 | 113 | 53558 | 21.42 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 53.55% | | |
| 20) Nitrobenzene-d5 | 5.171 | 128 | 30308 | 18.59 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 46.48% | | |
| 33) 2-Nitrophenol-d4 | 5.630 | 143 | 31091 | 18.64 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 46.60% | | |
| 34) 2,4-Dichlorophenol-d3 | 5.988 | 165 | 47095 | 17.79 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 44.47% | | |
| 35) 4-Chloroaniline-d4 | 6.330 | 131 | 56117 | 14.53 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 36.32% | | |
| 60) Acenaphthylene-d8 | 8.601 | 160 | 178466 | 18.07 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 45.17% | | |
| 61) 4-Nitrophenol-d4 | 9.263 | 143 | 26129 | 20.61 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 51.52% | | |
| 62) Dimethylphthalate-d6 | 8.574 | 166 | 124728 | 17.65 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 44.13%# | | |
| 63) Fluorene-d10 | 9.669 | 176 | 108611 | 17.93 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 44.82% | | |
| 76) 4,6-Dinitro-2-methylph... | 9.926 | 200 | 14945 | 17.14 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 42.85% | | |
| 77) Anthracene-d10 | 11.250 | 188 | 185857 | 18.57 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 46.42% | | |
| 85) Pyrene-d10 | 13.409 | 212 | 196540 | 18.69 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 46.73%# | | |
| 94) Benzo (a) pyrene-d12 | 17.383 | 264 | 147616 | 19.67 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.18% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 1.479 | 79 | 114028 | 21.0195 ug/mL | 95 |
| 4) 1,4-Dioxane | 1.704 | 88 | 24030m | 19.3018 ug/mL | |
| 5) Benzaldehyde | 3.878 | 77 | 31450 | 14.4485 ug/mL | 93 |
| 6) Bis(2-chloroethyl)ether | 4.124 | 93 | 53030 | 18.5183 ug/mL | 96 |
| 8) Phenol | 4.065 | 94 | 64987 | 18.4347 ug/mL | 97 |
| 9) 2-Chlorophenol | 4.172 | 128 | 59860 | 19.1016 ug/mL | 97 |
| 10) 2,2'-Oxybis(1-chloro-p... | 4.829 | 45 | 58274 | 18.4037 ug/mL# | 29 |
| 11) Acetophenone | 4.968 | 105 | 73519 | 18.1334 ug/mL# | 75 |
| 12) 2-Methylphenol | 4.824 | 108 | 51567 | 18.8933 ug/mL | 100 |
| 13) Hexachloroethane | 5.043 | 117 | 22892 | 19.0350 ug/mL | 95 |
| 14) N-Nitroso-di-n-propyla... | 5.016 | 70 | 35647 | 18.5367 ug/mL | 96 |
| 15) 4-Methylphenol | 5.032 | 108 | 55566 | 19.0542 ug/mL | 95 |

RS 5/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 21) Nitrobenzene | 5.192 | 77 | 50174 | 17.2568 ug/mL | 95 |
| 22) Isophorone | 5.524 | 82 | 93630 | 17.7569 ug/mL | 98 |
| 23) 2-Nitrophenol | 5.646 | 139 | 32742 | 18.4371 ug/mL | 92 |
| 24) 2,4-Dimethylphenol | 5.769 | 107 | 51825 | 17.8401 ug/mL | 97 |
| 25) Bis(2-chloroethoxy)met... | 5.892 | 93 | 63363 | 17.7334 ug/mL | 99 |
| 26) 2,4- Dichlorophenol | 6.004 | 162 | 45213 | 18.1238 ug/mL | 98 |
| 27) Naphthalene | 6.175 | 128 | 171021 | 18.0116 ug/mL | 99 |
| 28) 4-Chloroaniline | 6.341 | 127 | 50408 | 14.5600 ug/mL | 97 |
| 29) Hexachlorobutadiene | 6.480 | 225 | 22281 | 17.9908 ug/mL | 97 |
| 30) Caprolactam | 6.779 | 113 | 18139 | 17.2865 ug/mL | 95 |
| 31) 4-Chloro-3-methylphenol | 7.148 | 107 | 46527 | 18.7609 ug/mL | 96 |
| 32) 2-Methylnaphthalene | 7.233 | 142 | 112865 | 17.8432 ug/mL | 100 |
| 37) Hexachlorocyclopentadiene | 7.596 | 237 | 11561 | 15.4001 ug/mL | 99 |
| 38) 2,4,6-Trichlorophenol | 7.751 | 196 | 30636 | 18.6166 ug/mL | 97 |
| 39) 2,4,5-Trichlorophenol | 7.821 | 196 | 31113 | 18.4647 ug/mL | 98 |
| 40) 1,1'-Biphenyl | 7.986 | 154 | 136007 | 18.1154 ug/mL | 98 |
| 41) 2-Chloronaphthalene | 7.976 | 162 | 100932 | 18.0577 ug/mL | 100 |
| 42) 1,2,3,4-Tetrachloroben... | 7.559 | 216 | 43769 | 18.0560 ug/mL | 98 |
| 43) 2-Nitroaniline | 8.237 | 65 | 23260 | 17.4661 ug/mL | 91 |
| 44) Acenaphthylene | 8.622 | 152 | 168627 | 18.2096 ug/mL | 99 |
| 45) Dimethylphthalate | 8.606 | 163 | 112012 | 17.4741 ug/mL | 99 |
| 46) 2,6-Dinitrotoluene | 8.697 | 165 | 25354 | 18.8378 ug/mL | 95 |
| 47) Acenaphthene | 8.916 | 153 | 108909 | 18.0262 ug/mL | 99 |
| 48) 3-Nitroaniline | 8.900 | 138 | 29147 | 18.2211 ug/mL | 94 |
| 49) 2,4-Dinitrophenol | 9.097 | 184 | 7836m | 21.4679 ug/mL | RS |
| 50) Dibenzofuran | 9.172 | 168 | 146171 | 18.1273 ug/mL | 73 |
| 52) 2,4-Dinitrotoluene | 9.306 | 165 | 36027 | 18.5452 ug/mL | 99 |
| 53) 4-Nitrophenol | 9.268 | 109 | 11067 | 17.2868 ug/mL# | 1 |
| 54) 2,3,4,6-Tetrachlorophenol | 9.477 | 232 | 24571 | 18.5748 ug/mL | 97 |
| 55) Fluorene | 9.712 | 166 | 125001 | 18.1257 ug/mL | 98 |
| 56) 4-Chlorophenyl-phenyle... | 9.760 | 204 | 53221 | 18.0393 ug/mL | 96 |
| 57) Diethylphthalate | 9.733 | 149 | 117324 | 17.8286 ug/mL | 98 |
| 58) 4-Nitroaniline | 9.872 | 138 | 30980 | 18.8993 ug/mL | 88 |
| 59) 1,2,4,5 Tetrachloroben... | 7.559 | 216 | 43769 | 18.0560 ug/mL | 97 |
| 65) 4,6-Dinitro-2-methylph... | 9.936 | 198 | 15333 | 18.4809 ug/mL | 85 |
| 66) N-Nitrosodiphenylamine... | 9.974 | 169 | 103032 | 18.3695 ug/mL | 99 |
| 67) 4-Bromophenyl-phenylether | 10.519 | 248 | 27712 | 18.9118 ug/mL | 95 |
| 68) Hexachlorobenzene | 10.706 | 284 | 29426 | 17.8917 ug/mL | 98 |
| 69) Atrazine | 10.919 | 200 | 36171 | 18.4025 ug/mL | 97 |
| 70) Pentachlorophenol | 11.026 | 266 | 15068 | 18.6736 ug/mL | 97 |
| 71) Phenanthrene | 11.208 | 178 | 183087 | 18.4322 ug/mL | 100 |
| 72) Anthracene | 11.277 | 178 | 188372 | 18.6255 ug/mL | 100 |
| 73) Carbazole | 11.587 | 167 | 184088 | 19.3516 ug/mL | 99 |
| 74) Di-n-butylphthalate | 12.335 | 149 | 211357 | 18.5710 ug/mL | 100 |
| 75) Fluoranthene | 13.099 | 202 | 195994 | 19.0733 ug/mL | 99 |
| 79) Pyrene | 13.435 | 202 | 206705 | 18.4436 ug/mL | 99 |
| 80) Butylbenzylphthalate | 14.691 | 149 | 100444 | 18.6893 ug/mL | 97 |
| 81) 3,3'-Dichlorobenzidine | 15.412 | 252 | 61860 | 18.9172 ug/mL | 95 |
| 82) Benzo (a) anthracene | 15.364 | 228 | 171697 | 18.5076 ug/mL | 99 |
| 83) Chrysene | 15.423 | 228 | 184635 | 18.7672 ug/mL | 99 |
| 84) Bis(2-ethylhexyl)phtha... | 15.695 | 149 | 138950 | 18.7249 ug/mL | 100 |
| 87) Di-n-octylphthalate | 16.619 | 149 | 240130 | 21.4425 ug/mL | 100 |
| 88) Benzo (b) fluoranthene | 16.983 | 252 | 145650 | 20.1437 ug/mL | 93 |
| 89) Benzo (k) fluoranthene | 17.015 | 252 | 178669 | 18.2415 ug/mL | 87 |
| 90) Benzo (a) pyrene | 17.410 | 252 | 164609 | 19.3109 ug/mL | 95 |
| 91) Indeno (1,2,3-cd) pyrene | 18.884 | 276 | 92118m | 18.7162 ug/mL | RS |
| 92) Dibenzo (a,h) anthracene | 18.917 | 278 | 131716 | 20.1899 ug/mL | 98 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 93) Benzo (g,h,i) perylene | 19.242 | 276 | 144647 | 19.1370 ug/mL | 99 |

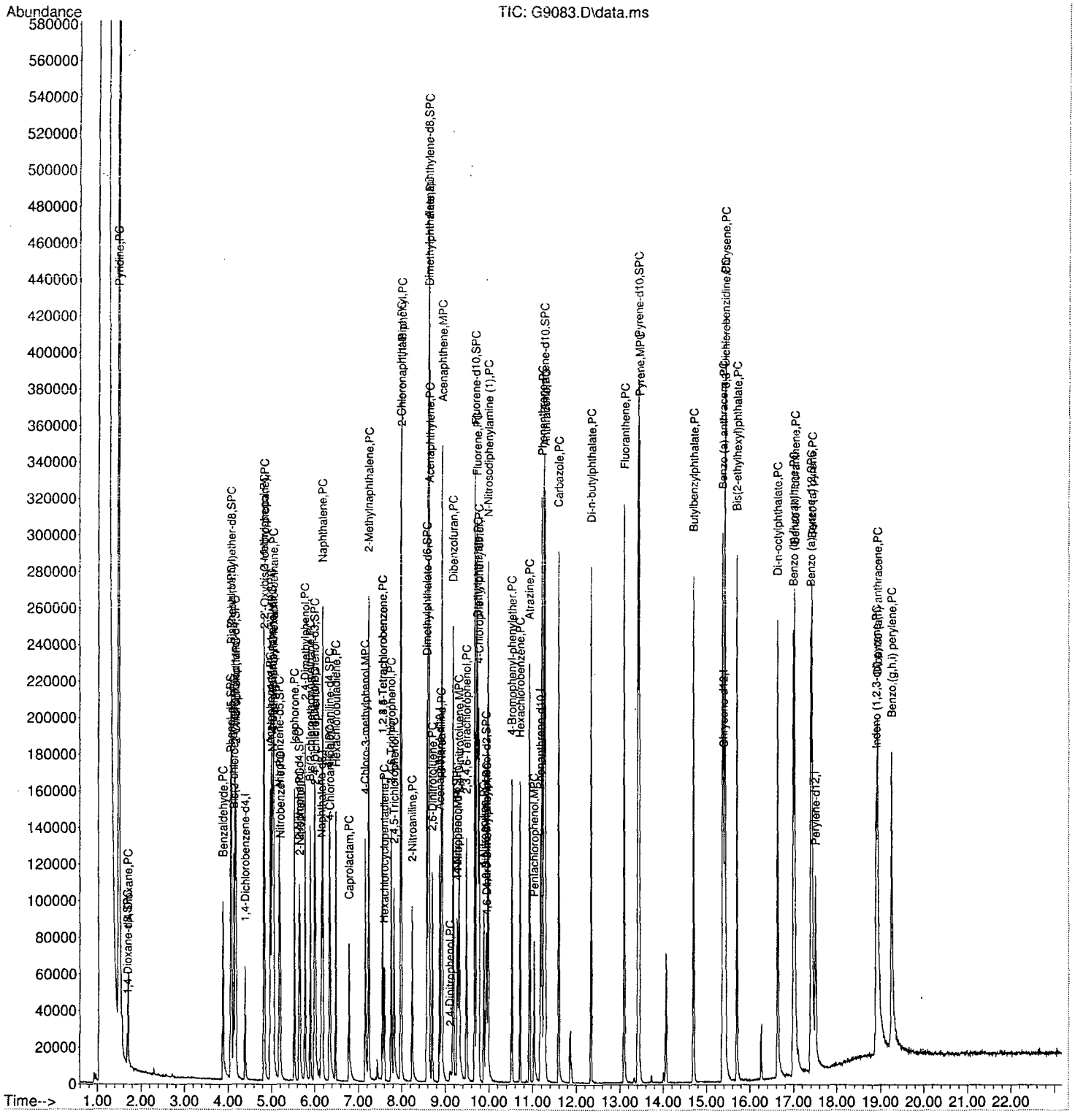
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 2 | PC | Pyridine | 6.466 | 6.796 | -5.1 | 107 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.260 | 0.260 | 0.0 | 102 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.484 | 1.432 | 3.5# | 103 | 0.00 |
| 5 | PC | Benzaldehyde | 2.595 | 1.874 | 27.8 | 72 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.413 | 3.160 | 7.4 | 99 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.032 | 3.585 | 11.1 | 91 | 0.00 |
| 8 | MPC | Phenol | 4.202 | 3.873 | 7.8 | 95 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.735 | 3.568 | 4.5 | 102 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.774 | 3.473 | 8.0 | 98 | 0.00 |
| 11 | PC | Acetophenone | 4.833 | 4.382 | 9.3 | 97 | 0.00 |
| 12 | PC | 2-Methylphenol | 3.253 | 3.073 | 5.5 | 99 | 0.00 |
| 13 | PC | Hexachloroethane | 1.433 | 1.364 | 4.8 | 98 | 0.00 |
| 14 | MPC | N-Nitroso-di-n-propylamine | 2.292 | 2.125 | 7.3 | 98 | 0.00 |
| 15 | PC | 4-Methylphenol | 3.476 | 3.312 | 4.7 | 98 | 0.00 |
| 16 | SPC | Bis(2-chloroethyl)ether-d8 | 2.459 | 2.287 | 7.0 | 96 | 0.00 |
| 17 | SPC | 2-Chlorophenol-d4 | 3.603 | 3.481 | 3.4 | 101 | 0.00 |
| 18 | SPC | 4-Methylphenol-d8 | 2.980 | 3.192 | -7.1 | 109 | 0.00 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 20 | SPC | Nitrobenzene-d5 | 0.474 | 0.440 | 7.2 | 98 | 0.00 |
| 21 | PC | Nitrobenzene | 0.845 | 0.729 | 13.7 | 94 | 0.00 |
| 22 | PC | Isophorone | 1.533 | 1.361 | 11.2 | 97 | 0.00 |
| 23 | PC | 2-Nitrophenol | 0.516 | 0.476 | 7.8 | 100 | 0.00 |
| 24 | PC | 2,4-Dimethylphenol | 0.844 | 0.753 | 10.8 | 94 | 0.00 |
| 25 | PC | Bis(2-chloroethoxy)methane | 1.039 | 0.921 | 11.4 | 95 | 0.00 |
| 26 | PC | 2,4- Dichlorophenol | 0.725 | 0.657 | 9.4 | 96 | 0.00 |
| 27 | PC | Naphthalene | 2.760 | 2.485 | 10.0 | 98 | 0.00 |
| 28 | PC | 4-Chloroaniline | 1.006 | 0.733 | 27.1 | 75 | 0.00 |
| 29 | PC | Hexachlorobutadiene | 0.360 | 0.324 | 10.0 | 99 | 0.00 |
| 30 | PC | Caprolactam | 0.305 | 0.264 | 13.4 | 90 | 0.00 |
| 31 | MPC | 4-Chloro-3-methylphenol | 0.721 | 0.676 | 6.2 | 98 | 0.00 |
| 32 | PC | 2-Methylnaphthalene | 1.839 | 1.640 | 10.8 | 99 | 0.00 |
| 33 | SPC | 2-Nitrophenol-d4 | 0.485 | 0.452 | 6.8 | 100 | 0.00 |
| 34 | SPC | 2,4-Dichlorophenol-d3 | 0.770 | 0.684 | 11.2 | 96 | 0.00 |
| 35 | SPC | 4-Chloroaniline-d4 | 1.122 | 0.816 | 27.3 | 77 | 0.00 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 107 | 0.00 |
| 37 | PC | Hexachlorocyclopentadiene | 0.381 | 0.293 | 23.1 | 76 | 0.00 |
| 38 | PC | 2,4,6-Trichlorophenol | 0.835 | 0.777 | 6.9 | 99 | 0.00 |
| 39 | PC | 2,4,5-Trichlorophenol | 0.855 | 0.789 | 7.7 | 103 | 0.00 |
| 40 | PC | 1,1'-Biphenyl | 3.807 | 3.449 | 9.4 | 96 | 0.00 |
| 41 | PC | 2-Chloronaphthalene | 2.835 | 2.559 | 9.7 | 97 | 0.00 |
| 42 | PC | 1,2,3,4-Tetrachlorobenzene | 1.229 | 1.110 | 9.7 | 95 | 0.00 |
| 43 | PC | 2-Nitroaniline | 0.675 | 0.590 | 12.6 | 93 | 0.00 |
| 44 | PC | Acenaphthylene | 4.696 | 4.276 | 8.9 | 96 | 0.00 |
| 45 | PC | Dimethylphthalate | 3.251 | 2.840 | 12.6 | 92 | 0.00 |
| 46 | PC | 2,6-Dinitrotoluene | 0.683 | 0.643 | 5.9 | 96 | 0.00 |
| 47 | MPC | Acenaphthene | 3.064 | 2.762 | 9.9 | 96 | 0.00 |
| 48 | PC | 3-Nitroaniline | 0.811 | 0.739 | 8.9 | 93 | 0.00 |
| 49 | PC | 2,4-Dinitrophenol | 0.185 | 0.199 | -7.6 | 126 | -0.02 |
| 50 | PC | Dibenzofuran | 4.089 | 3.706 | 9.4 | 95 | 0.00 |
| 51 | PC | Pentachlorobenzene | 0.002 | 0.000 | 100.0 | 0# | -9.28# |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 17 11:43:27 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | MPC | 2,4-Dinitrotoluene | 0.985 | 0.914 | 7.2 | 97 | 0.00 |
| 53 | MPC | 4-Nitrophenol | 0.325 | 0.281 | 13.5 | 89 | 0.00 |
| 54 | PC | 2,3,4,6-Tetrachlorophenol | 0.671 | 0.623 | 7.2 | 97 | 0.00 |
| 55 | PC | Fluorene | 3.497 | 3.170 | 9.4 | 95 | 0.00 |
| 56 | PC | 4-Chlorophenyl-phenylether | 1.496 | 1.349 | 9.8 | 95 | 0.00 |
| 57 | PC | Diethylphthalate | 3.337 | 2.975 | 10.8 | 95 | 0.00 |
| 58 | PC | 4-Nitroaniline | 0.831 | 0.786 | 5.4 | 97 | 0.00 |
| 59 | PC | 1,2,4,5 Tetrachlorobenzene | 1.229 | 1.110 | 9.7 | 95 | 0.00 |
| 60 | SPC | Acenaphthylene-d8 | 5.008 | 4.525 | 9.6 | 96 | 0.00 |
| 61 | SPC | 4-Nitrophenol-d4 | 0.643 | 0.663 | -3.1 | 111 | 0.00 |
| 62 | SPC | Dimethylphthalate-d6 | 3.583 | 3.163 | 11.7 | 94 | 0.00 |
| 63 | SPC | Fluorene-d10 | 3.072 | 2.754 | 10.4 | 95 | 0.00 |
| 64 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 65 | PC | 4,6-Dinitro-2-methylphenol | 0.229 | 0.211 | 7.9 | 97 | 0.00 |
| 66 | PC | N-Nitrosodiphenylamine (1) | 1.546 | 1.420 | 8.2 | 94 | 0.00 |
| 67 | PC | 4-Bromophenyl-phenylether | 0.404 | 0.382 | 5.4 | 99 | 0.00 |
| 68 | PC | Hexachlorobenzene | 0.453 | 0.406 | 10.4 | 94 | 0.00 |
| 69 | PC | Atrazine | 0.542 | 0.499 | 7.9 | 95 | 0.00 |
| 70 | MPC | Pentachlorophenol | 0.222 | 0.208 | 6.3 | 94 | 0.00 |
| 71 | PC | Phenanthrene | 2.738 | 2.523 | 7.9 | 96 | 0.00 |
| 72 | PC | Anthracene | 2.788 | 2.596 | 6.9 | 97 | 0.00 |
| 73 | PC | Carbazole | 2.622 | 2.537 | 3.2 | 100 | 0.00 |
| 74 | PC | Di-n-butylphthalate | 3.137 | 2.913 | 7.1 | 95 | 0.00 |
| 75 | PC | Fluoranthene | 2.833 | 2.701 | 4.7 | 100 | 0.00 |
| 76 | SPC | 4,6-Dinitro-2-methylphenol- | 0.240 | 0.206 | 14.2 | 88 | 0.00 |
| 77 | SPC | Anthracene-d10 | 2.758 | 2.562 | 7.1 | 95 | 0.00 |
| 78 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 79 | MPC | Pyrene | 3.097 | 2.856 | 7.8 | 99 | 0.00 |
| 80 | PC | Butylbenzylphthalate | 1.485 | 1.388 | 6.5 | 102 | 0.00 |
| 81 | PC | 3,3'-Dichlorobenzidine | 0.904 | 0.855 | 5.4 | 105 | 0.00 |
| 82 | PC | Benzo (a) anthracene | 2.563 | 2.372 | 7.5 | 104 | 0.00 |
| 83 | PC | Chrysene | 2.718 | 2.551 | 6.1 | 101 | 0.00 |
| 84 | PC | Bis(2-ethylhexyl)phthalate | 2.050 | 1.920 | 6.3 | 103 | 0.00 |
| 85 | SPC | Pyrene-d10 | 2.906 | 2.715 | 6.6 | 100 | 0.00 |
| 86 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 87 | PC | Di-n-octylphthalate | 3.441 | 3.689 | -7.2 | 110 | 0.00 |
| 88 | PC | Benzo (b) fluoranthene | 2.222 | 2.237 | -0.7 | 106 | 0.00 |
| 89 | PC | Benzo (k) fluoranthene | 3.009 | 2.745 | 8.8 | 89 | 0.00 |
| 90 | PC | Benzo (a) pyrene | 2.619 | 2.529 | 3.4 | 95 | 0.00 |
| 91 | PC | Indeno (1,2,3-cd) pyrene | 1.512 | 1.415 | 6.4 | 105 | 0.00 |
| 92 | PC | Dibenzo (a,h) anthracene | 2.004 | 2.023 | -0.9 | 103 | 0.00 |
| 93 | PC | Benzo (g,h,i) perylene | 2.322 | 2.222 | 4.3 | 98 | 0.00 |
| 94 | SPC | Benzo (a) pyrene-d12 | 2.306 | 2.268 | 1.6 | 99 | 0.00 |

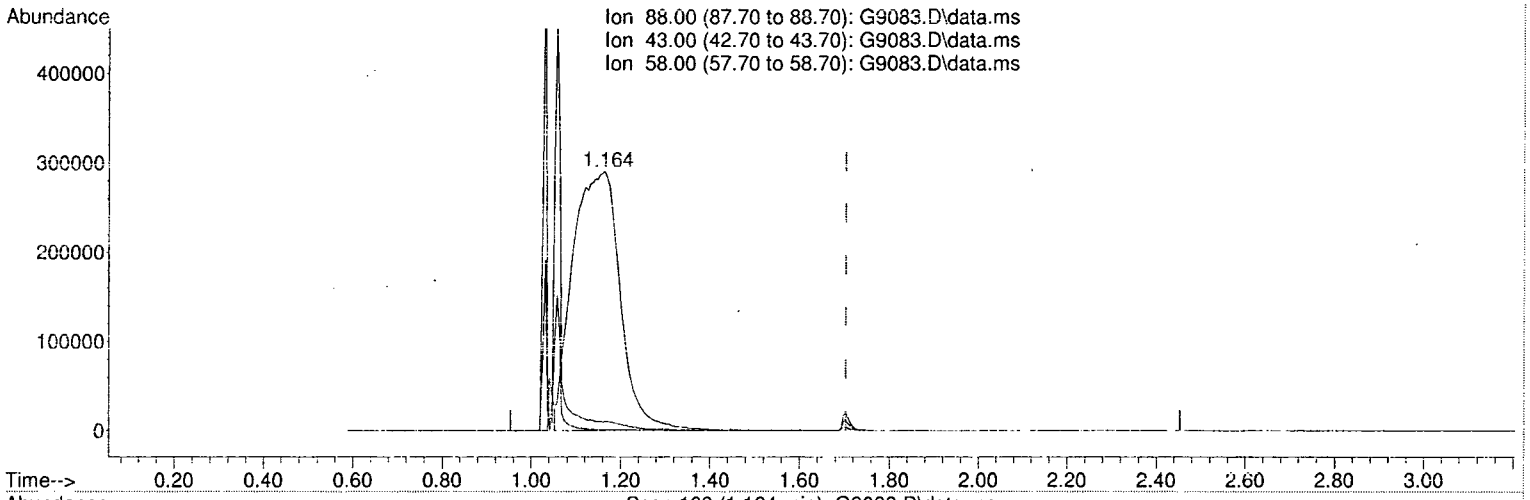
(#) = Out of Range SPCC's out = 0 CCC's out = 1

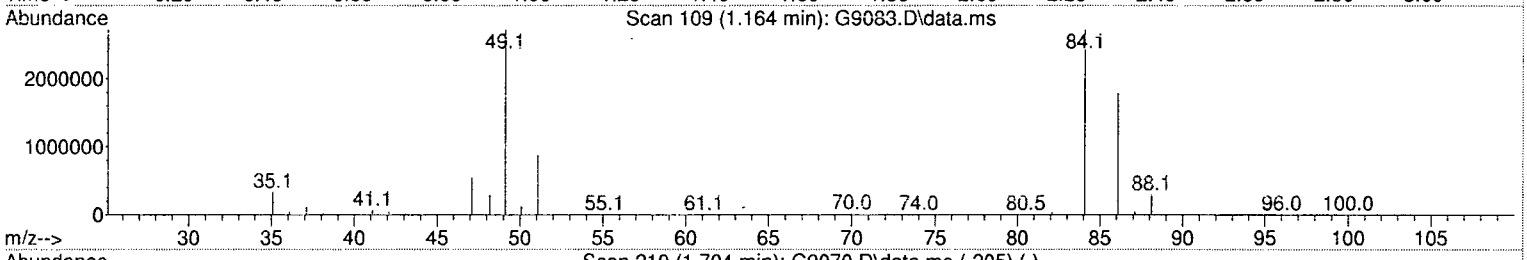
Quantitation Report (Qedit)

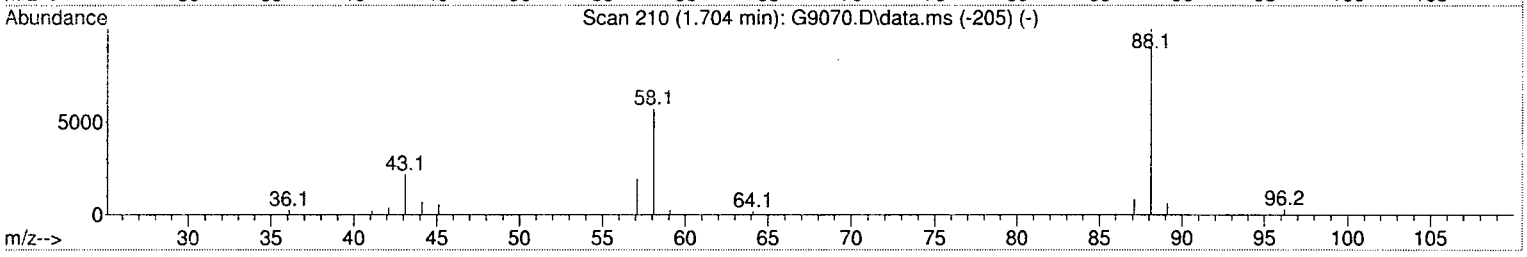
Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.164min (-0.540) 1716.35 ug/mL**

**response 2136790**

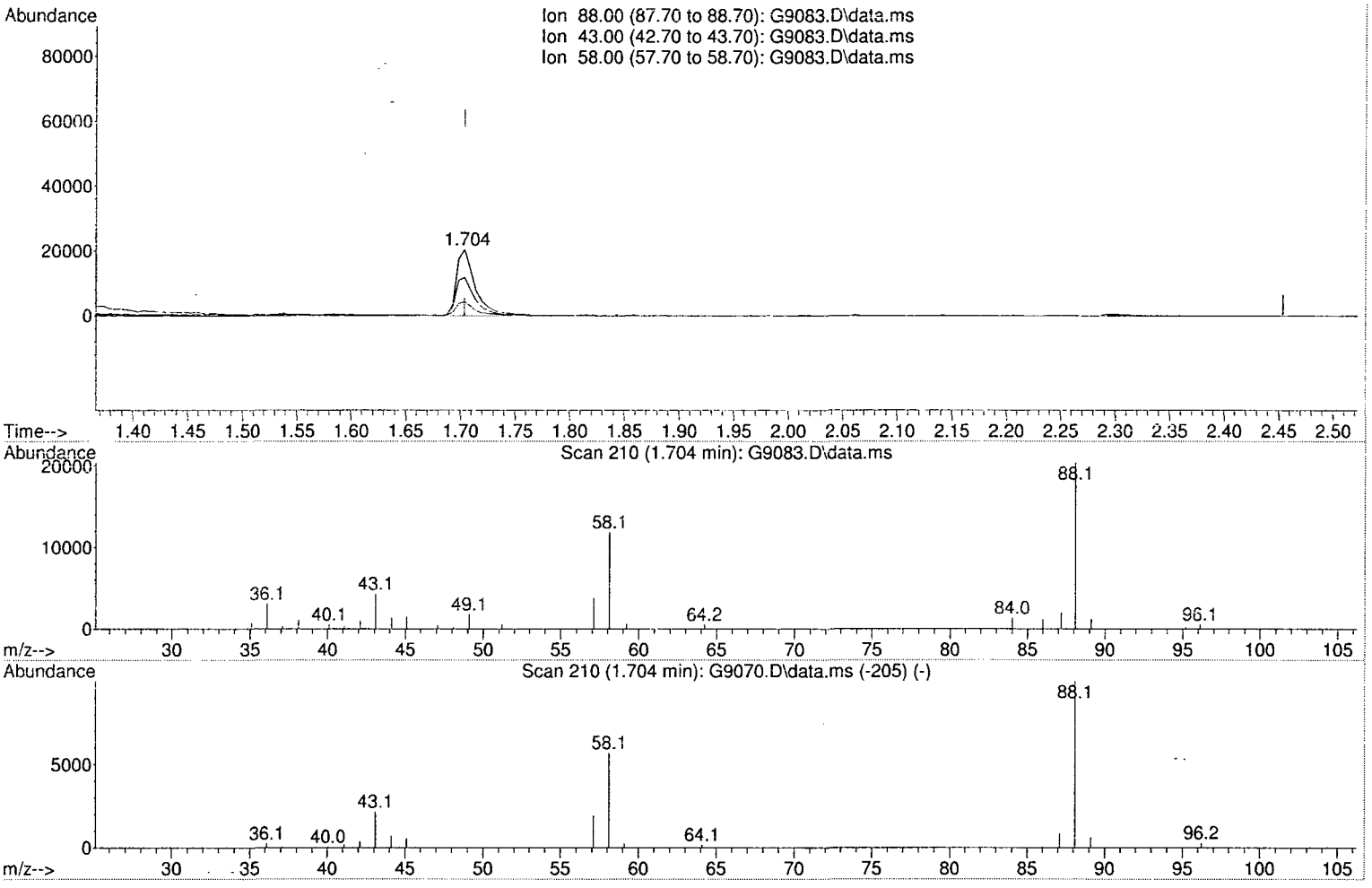
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 24.20 | 0.00# |
| 58.00 | 64.60 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.704min ( 0.000) 19.30 ug/mL m** RS 8/21

**response 24030**

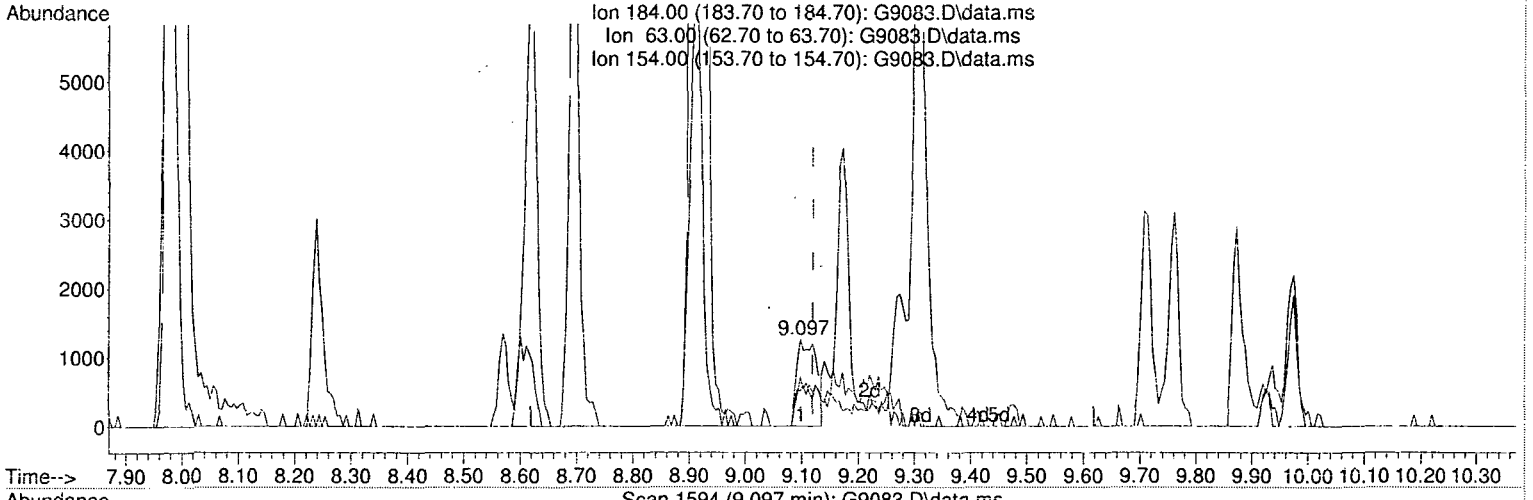
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 24.20 | 0.00# |
| 58.00 | 64.60 | 0.00# |
| 0.00 | 0.00 | 0.00 |

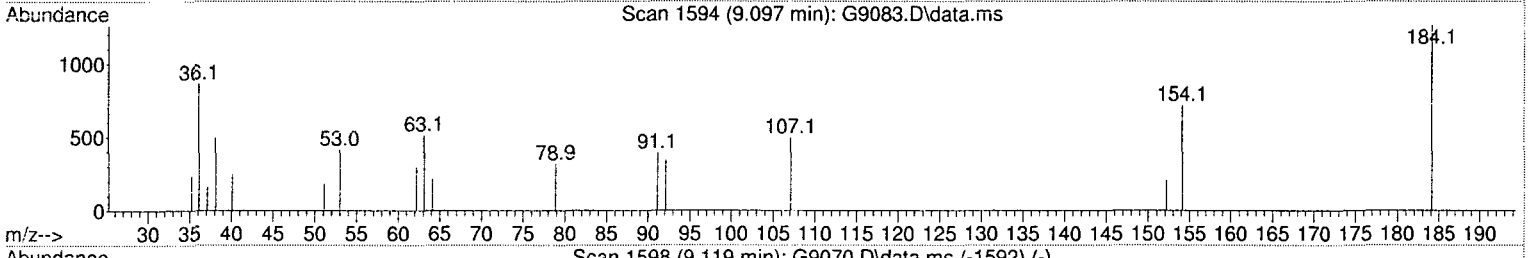
Quantitation Report (Qedit)

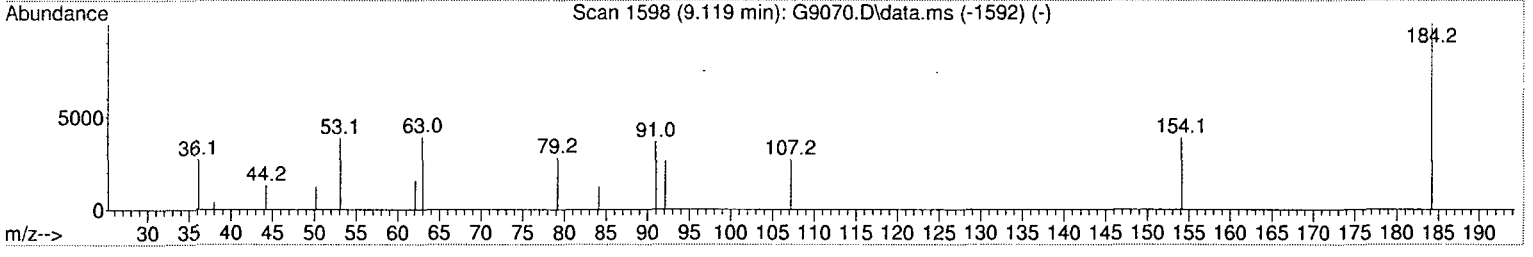
Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(49) 2,4-Dinitrophenol (PC)**

**9.097min (-0.021) 8.44 ug/mL**

**response 3079**

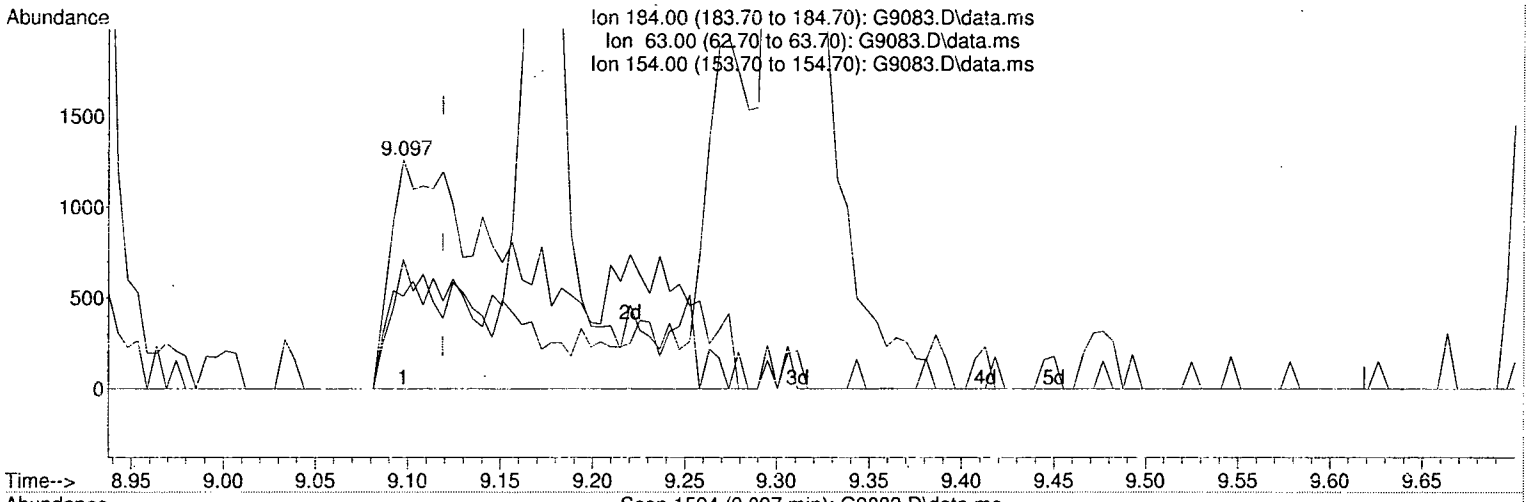
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 52.40 | 25.14# |
| 154.00 | 45.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |

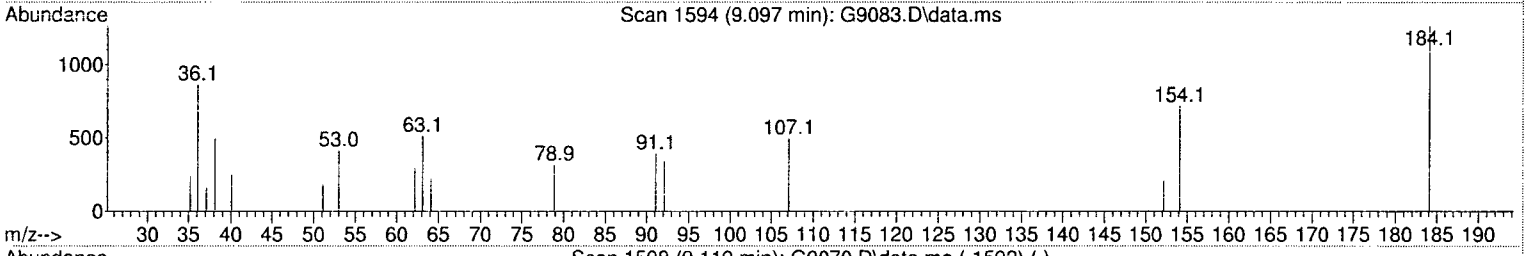
Quantitation Report (Qedit)

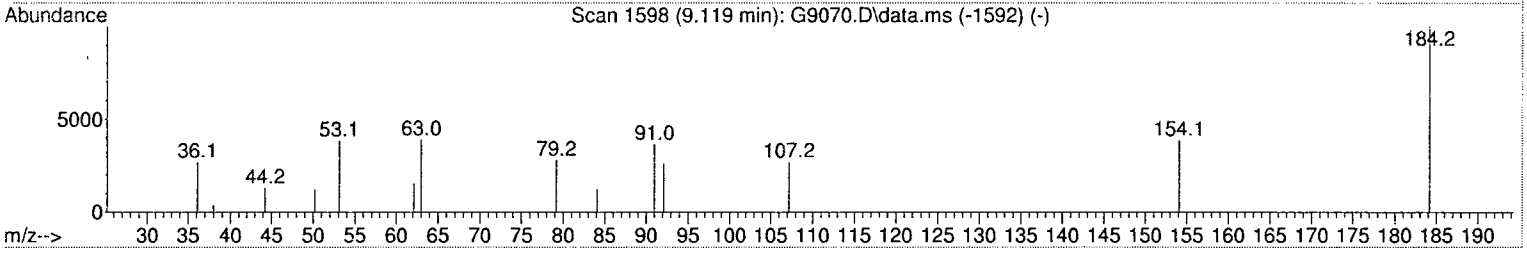
Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(49) 2,4-Dinitrophenol (PC)**

**9.097min (-0.021) 21.47 ug/mL m** RS 8/21

**response 7836**

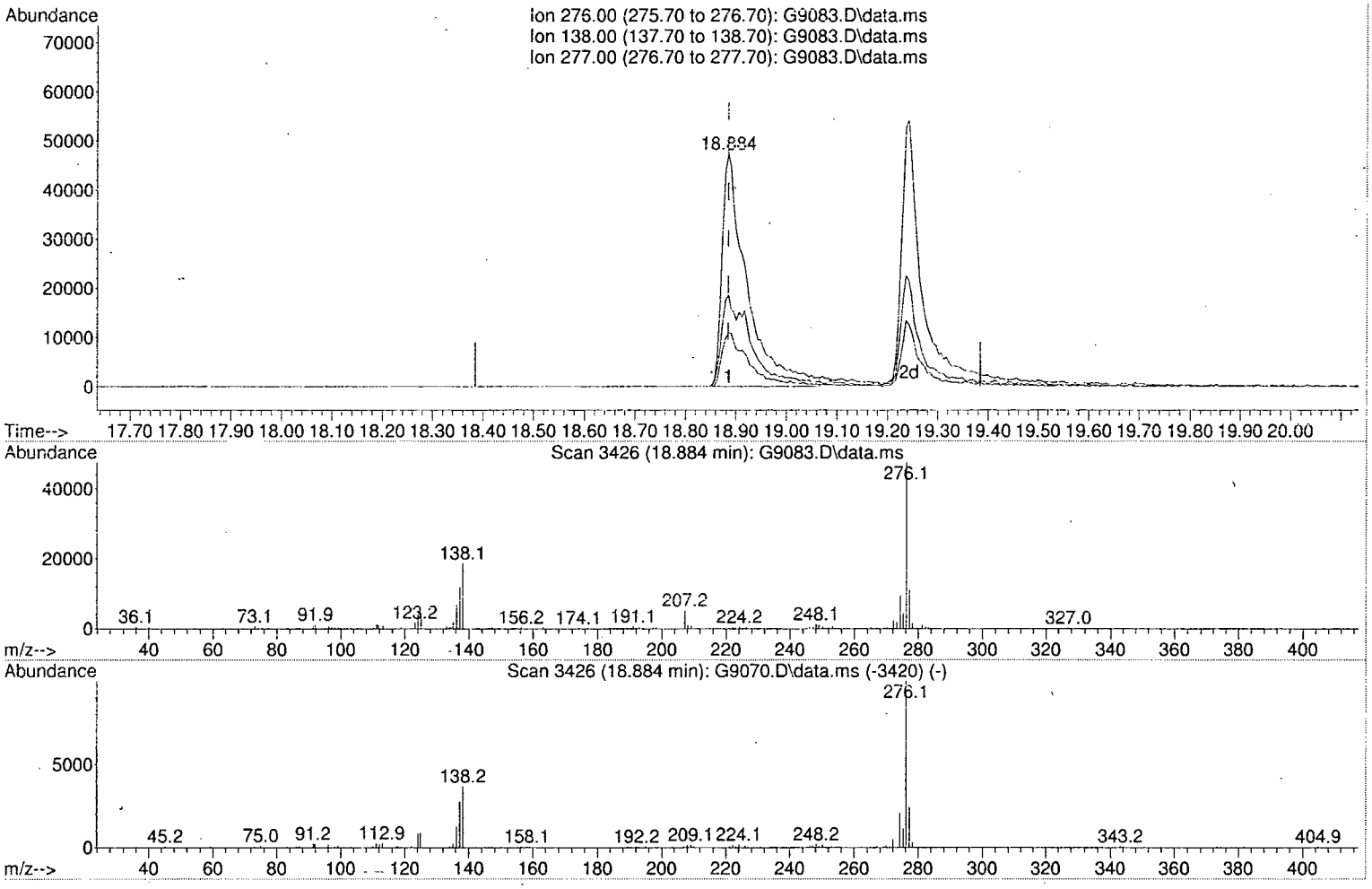
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 52.40 | 9.88# |
| 154.00 | 45.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(91) Indeno (1,2,3-cd) pyrene (PC)**

**18.884min (+ 0.000) 32.78 ug/mL**

**response 161331**

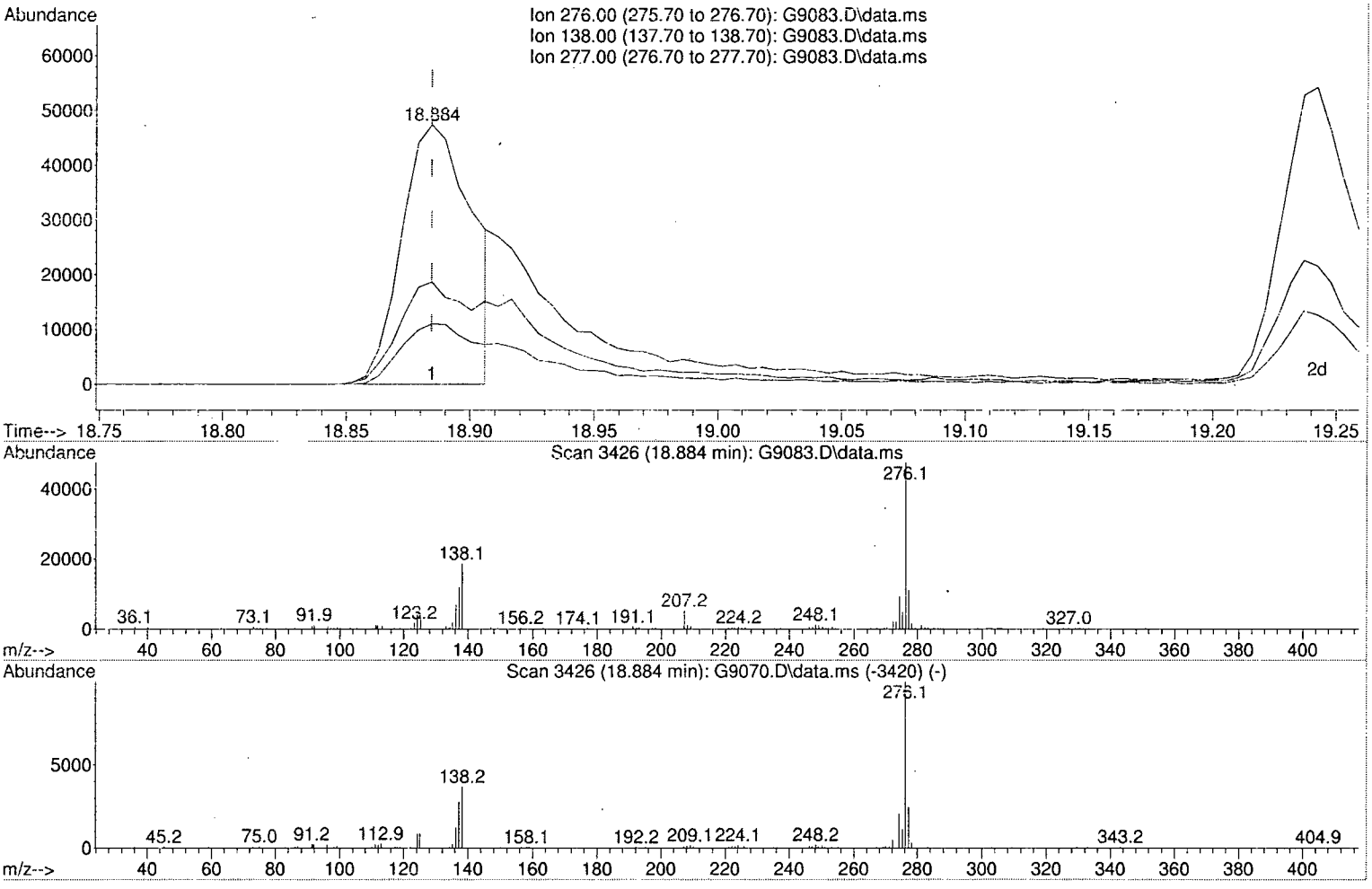
| Ion | Exp% | Act% |
|---|---|---|
| 276.00 | 100.00 | 100.00 |
| 138.00 | 36.40 | 21.10 |
| 277.00 | 36.40 | 23.94 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\G9083.D
Acq On : 16 May 2012 19:39
Sample : 2E15008-CCV2
Misc : SSTD0201N
DataAcq Meth:CLPACQ.M

Vial: 14
Operator: RS
Inst : G-5973
Multiplr: 1.00

Quant Time: May 16 20:02:53 2012
Quant Results File: SOMG9070.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOMG9070.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Wed May 16 12:50:45 2012
Response via : Initial Calibration




TIC: G9083.D\data.ms

**(91) Indeno (1,2,3-cd) pyrene (PC)**

**18.884min (+ 0.000) 18.72 ug/mL m** RS 5/21

**response 92118**

| Ion | Exp% | Act% |
|---|---|---|
| 276.00 | 100.00 | 100.00 |
| 138.00 | 36.40 | 36.96 |
| 277.00 | 36.40 | 41.93 |
| 0.00 | 0.00 | 0.00 |

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-028-12 | **Analyst:** RS. |
| **Standard/Reagent Name:** SVOA SCAN STD-3 | |
| **Dilution Solvent Name:** Mech | **Dilution Solvent ID #:** A103119 |
| **Prep Date:** 03/26/12 | **Total Vol. (ml):** 1.0ml. |
| **Expiration Date:** 04/25/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| AY | 1,4 d8 + 1,4 dioxane stock | – | 939-025-12 | 1000 | 20 | 20 |
| " | SCAN Stock std | – | 939-022-12 | ~~200~~ 1000 RS 03/26/12 | 200 | 20 |
| Restek | SV Internal std | 31256 | A156024 | 2000 | 10 | 20 |
| | | | | | | |
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NOTES NR

REVIEWER: RS DATE: 04/09/12

| | Name | Date |
|---|---|---|
| Approval 1: | | |
| Approval 2: | | |


**A4 SCIENTIFIC, INC.**
THE WOODLANDS,TX 77380
Phone: 281-292-5277
Fax: 281-292-2481
WWW:


BSHATIL SUBTA SCAN

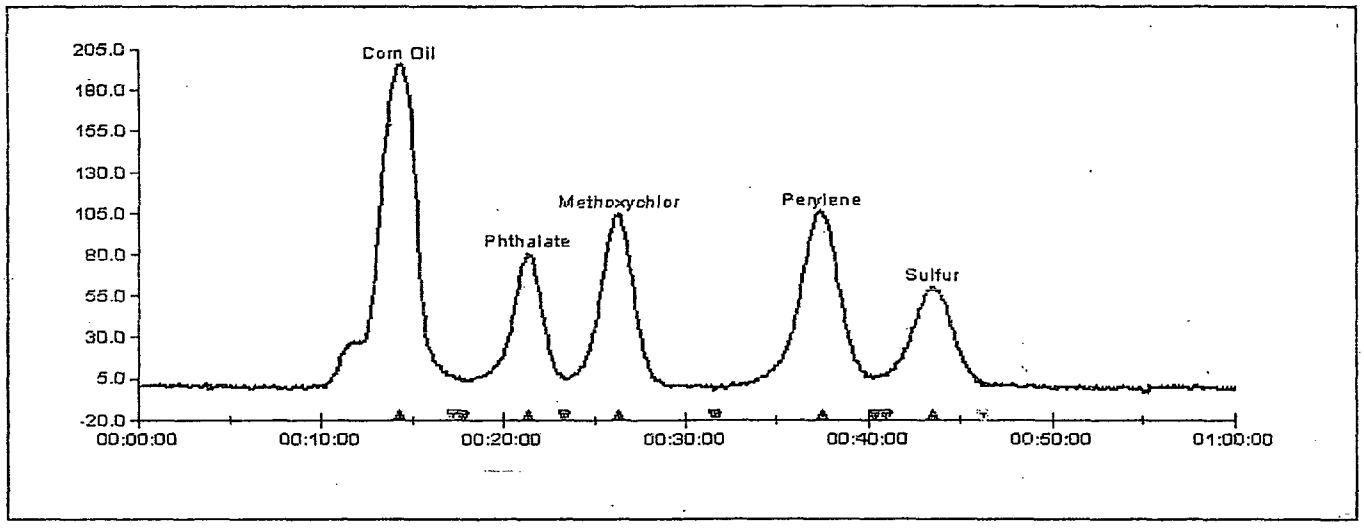
B 5/24/12

| | | | |
|---|---|---|---|
| Sequence: | GPCCAL | Date of Calibration: | 5/22/2012 3:37:37PM |
| Operator: | Administrator | Calibration Results: | Completed run |
| Sample ID: | GPCB05222012 | Calibration Pass/Fail: | ~~FAILED~~ PASSED |

**Configuration Details:**

| | | | |
|---|---|---|---|
| Syringe Size (mL): | 10.00 | Sample Tray: | 60 16 * 100 mm tubes |
| Loop Size (mL): | 5.00 | Collect Tray: | 56 39 mm tubes |
| Plotting UV Data: | Yes | Solvent Type: | Methylene chloride |
| Bypass Valve: | Yes | Column Type: | A4-2005 |
| Using UV Detector: | Yes | Detector Type: | OI UV-1000 254 nm |
| Set Flow Rate (mL/min): | 5.00 | Obs. Flow Rate (mL/min): | not measured |

**Calibration Details:**




**Peak Resolution:**

| Peaks | Resolution (%) | Criteria (%) | Pass/Fail | Delta (%) | Criteria (%) | Pass/Fail |
|---|---|---|---|---|---|---|
| 1 - 2 | 98.0 | 85 | Pass | 10 | 15 | Pass |
| 2 - 3 | 95.0 | 85 | Pass | -5 | 15 | Pass |
| 3 - 4 | 100.0 | 85 | Pass | 0 | 15 | Pass |
| 4 - 5 | 95.0 | 90 | Pass | -5 | 10 | Pass |

**Peak Retention:**

| Peaks | Time | % Delta | Criteria (%) | Pass/Fail |
|---|---|---|---|---|
| 1 | 14:20 | 73 | 5 | Fail |
| 2 | 21:20 | 75 | 5 | Fail |
| 3 | 26:20 | 46 | 5 | Fail |
| 4 | 37:30 | 28 | 5 | Fail |
| 5 | 43:30 | 21 | 5 | Fail |

**Calculated Run Times:**

| Cycle | Time (min:sec) |
|---|---|
| Dump | 17:14 |
| Collect | 23:44 |
| Wash | 15:14 |

Date Printed: 5/22/2012 4:40:24PM



Initials:

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GPC**<br>Instrument ID: B-AP200 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/22/12 CALIBRATION ID: N/A

START DATE: 5/22/12 START TIME: 17:37 START FLOW RATE: 5ml

END DATE: 5/23/12 END TIME: 21:37 END FLOW RATE: 5ml

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 1 | GPCB052212 | GPCB052212 | BNA | 5 | 115 | 931-130-12 |
| 2 | -ABLK | | | | 90 | Mech A204004 |
| 3 | -SBLK | | | | | RS 05/22/12 |
| 4 | -PBLK | | | | 115 | ~~931-131-12~~ Mech |
| 5 | | | | | 90 | 931-131-12 |
| 6 | 0015964-01 | BA159 ~~BNA~~ | BNA | ~~115~~ 5 | RS 05/22/12 115 | RS 05/22/12 |
| 7 | 5971-01 | BA170 | | | | |
| 8 | -02 | T1 | | | | |
| 9 | 5978-01 | T2 | | | | |
| 10 | -02 | T3 | | | | |
| 11 | 2050146-BLK | SBLKGL | BNA | 5 | 115 | |
| 12 | 0015977-01 | F5WB4 | | | | |
| 13 | -02 | B8 | | | | |
| 14 | -03 | B9 | | | | |
| 15 | -04 | C0 | | | | |
| 16 | -05 | C1 | | | | |
| 17 | -06 | C2 | | | | |
| 18 | -07 | C3 | | | | |
| 19 | 2050165-BLK | SBLK6Q | | | | |
| 20 | 0015964-01 | BA159 | PEST | 5 | 90 | |

NOTES: N/A

ANALYST/DATE: RS 05/22/12 REVIEWER/DATE: [illegible] 5/24/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GPC**<br>Instrument ID: **B-AP200** | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): _____

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/22/12 CALIBRATION ID: —

START DATE: 05/22/12 START TIME: 17:37 START FLOW RATE: 5ml

END DATE: 5/23/12 END TIME: 21:37 END FLOW RATE: 5ml

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 22 | 0015978-01 | BAITO | PEST | 5 | 90 | |
| 22 | -02 | T1 | | | | |
| 23 | 0015978-01 | T2 | | | | |
| 24 | -02 | T3 | | | | |
| 25 | 2050167-BLK1 | PBLKMA | | | | |
| 26 | -BS1 | PLCSMA | | | | |
| 27 | -MS1 | BAIT2MS | | | | |
| 28 | -MSD1 | MSD | | | | |
| | | | | | | Jk 5/24/12 |

NOTES: N/A

ANALYST/DATE: RM 05/22/12 REVIEWER/DATE: Jk 5/24/12

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Instrument Run Log – GPC

Instrument ID: B-AP200

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/29/12 CALIBRATION ID: ——

START DATE: 5/24/12 START TIME: 15:00 START FLOW RATE: 5 ml

END DATE: 5/26/12 END TIME: 8:00 END FLOW RATE: 5 ml.

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 1 | B016002-01 | H3200 | PE59 | 5 | 90 | |
| 2 | -02 | 01 | | | | |
| 3 | -03 | 02 | | | | |
| 4 | -04 | 03 | | | | |
| 5 | -05 | 04 | | | | |
| 6 | -06 | 05 | | | | |
| 7 | -07 | 06 | | | | |
| 8 | -08 | 07 | | | | |
| 9 | -09 | 08 | | | | |
| 10 | -10 | 09 | | | | |
| 11 | -11 | 10 | | | | |
| 12 | -12 | 11 | | | | |
| 13 | -13 | 12 | | | | |
| 14 | -14 | 13 | | | | |
| 15 | 2050209-BLK1 | PBLKME | | | | |
| 16 | BS1 | PLCSME | | | | |
| 17 | MS1 | H3205MS | | | | |
| 18 | MSD1 | MSD | | | | |
| 19 | B016002-01 | H3200 | BNA | 5 | 115 | |
| 20 | -02 | 01 | | | | |

NOTES: N/A

ANALYST/DATE: RS 05/24/12 REVIEWER/DATE: [illegible] 5/29/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GPC**<br>Instrument ID: B-AP200 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 18-Oct-2010 | SVOA | FORM | 4FORM04-A | 933-09152011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/22/12 CALIBRATION ID: N/A

START DATE: 5/24/12 START TIME: 15:00 START FLOW RATE: 5 ml

END DATE: 5/26/12 END TIME: 8:00 END FLOW RATE: 5 ml

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 21 | 0016002-03 | H3202 | BN | | 15 | |
| 22 | -04 | 03 | | | | |
| 23 | -05 | 04 | | | | |
| 24 | -06 | 05 | | | | |
| 25 | -07 | -06 | | | | |
| 26 | -08 | -07 | | | | |
| 27 | -09 | -08 | | | | |
| 28 | -10 | -09 | | | | |
| 29 | -11 | 10 | | | | |
| 30 | -12 | 11 | | | | |
| 31 | -13 | 12 | | | | |
| 32 | -14 | 13 | | | | |
| 33 | 2050211-BW1 | SBLK 6 V | | | | SCAN BLK |
| 34 | -MS1 | H3205MS | | | | SCAN MS |
| 35 | -MSD1 | MSD | | | | MSD |
| 36 | 2050212-BW1 | SBLK6W | | | | SIM BLK |
| 37 | -MS1 | H3205MS | | | | SIM MS |
| 38 | -MSD1 | MSD | | | | MSD |
| 39 | 0015970-04 | XOT 58 | PEST | 5 | 90 | |
| 40 | 2050170-BW | 2 BLK MD | | | | |

NOTES: NM

ANALYST/DATE: 05/24/12 REVIEWER/DATE: 5/29/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GPC**<br>Instrument ID: **B-AP200** | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| **18-Oct-2010** | **SVOA** | **FORM** | **4FORM04-A** | **933-09152011** |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): _____

CLEANUP BATCHES(S): N/A

GPC CALIBRATION DATE:: 05/22/12 CALIBRATION ID: N/A

START DATE: 5/24/12 START TIME: 15:00 START FLOW RATE: 5mL

END DATE: 5/26/12 END TIME: 8:00 END FLOW RATE: 5mL

| No. | LAB SAMPLE ID | CLIENT SAMPLE ID | GPC METHOD | EXTRACT VOLUME FOR GPC (ML) | GPC ELUENT VOL (ML) | STANDARD IDs & COMMENTS |
|---|---|---|---|---|---|---|
| 41 | 2050170-8J | PLCSMD | PEST | 5 | 90 | |
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NOTES: N/A

ANALYST/DATE: RN 05/24/12 REVIEWER/DATE: Jale 5/29/12

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Instrument Run Log – GC/MS Extractables

Instrument ID: E-5973

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): Changed Cold scan, Turned Cold, Changed line

BATCHES(S): 2050149 SEQUENCE: 2E23005 CALIBRATION:

ACQ. METHOD(s): CLPALQ PROCESSING METHOD(S): SOM E4605.M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/23/12

ANALYTICAL METHOD: SOM01.2 (SCAN + 1564.M) SOP: 4SOP02-B

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | | STANDARDS ID & COMMENTS |
|---|---|---|---|---|---|
| E4601 | 2E23005-TUN1 | DFTPP9N | 1x | ✓ | 939-022-12 |
| 02 | -CAL1 | SSTD0059N | | x | Rerun level 1 & 5 |
| 03 | -CAL5 | 0309N | | x | Changing Solvent Delay |
| 04 | -CAL4 | 0409N | | ✓ | 939-076-12 M |
| 05 | -CAL3 | 0209N | | ✓ | -075-12 |
| 06 | -CAL2 | 0109N | | ✓ | -074-12 |
| 07 | -CAL5 | 0809N | | ✓ | -077-12 |
| 08 | -CAL1 | 0059N | | ✓ | -073-12 |
| 09 | ZZZZZ | ZZZZZ | | x | |
| 10 | | | | x | |
| 11 | | | | x | |
| 12 | | | | x | |
| 13 | | | | x | |
| 14 | | | | x | |
| 15 | GPCB | GPCB | | ✓ | |
| 16 | 2E23005-CW1 | SSTD0209O | | x | |
| 17 | | | | x | |
| 18 | | | | ✓ | 939-085-12 |
| 19 | 0015929-01 | F5MPO | 10x | ✓ | |
| 20 | -02 | P1 | 20x | ✓ | |
| 21 | -03 | P2 | 10x | ✓ | |

NOTES: N/A

ANALYST/DATE: 04/29/12 REVIEWER/DATE:

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050147 SEQUENCE: 2E23005 CALIBRATION:
ACQ. METHOD(s): CLP ALL PROCESSING METHOD(S): SOME 4618.M
EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/20/19
ANALYTICAL METHOD: SOM01.2 (LSCAN 1564.K) SOP: 4.1 SP02-A

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4622 | 0015929-04 | FSMP3 | 10x ✓ | |
| 23 | ↓ -17 | Q4 | 10x ✓ | |
| 24 | 2E23005-CCV2 | SSTD020QP | 1x ✓ | 939-075-12 |
| 25 | 2050149-BLK1 | SBLK 60 | ✓ | |
| 26 | 0015969-03 | X0T51 | ✓ | |
| 27 | 0015970-02 | 56 | ✓ | |
| 28 | 2050147-BLK1 | SBLK6MG | ↓ | |
| 29 | 0015929-01RE1 | FSMP0DL | 50x ✓ | |
| 30 | -04RE1 | P3DL | 20x ✓ | |
| 31 | ↓ -17RE1 | Q4DL | 50x | |
| 32 | 2050147-BLK1 | SBLK6M. | 1x | |
| 33 | GPCB052220-12 | GPCB052220-12 | ↓ | |
| 34 | 2E23005-CCV3 | SSTD020QQ | ↓ | 939-075-12 |
| 35 | 2050147-BLK1 | SBLK6K | 1x ✓ | |
| 36 | 0015951-01 | FSWC4 | ↓ | |
| 37 | ↓ -02 | C5 | ✓ | |
| 38 | ↓ -03 | C6 | ✓ | |
| 39 | 2050146-BLK1 | SBLK0L | ✓ | |
| 40 | 0015971-02 | BAIT1 | ✗ IST | |
| 41 | 0015978-01 | BAIT2 | ✗ IS NOT SPIKED ACCIDENTALLY | |
| 42 | 2050165-BLK1 | SBLK6Q | ✓ | |

NOTES: N/A

ANALYST/DATE: 05/24/19 REVIEWER/DATE:

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4633.D
Acq On : 24 May 2012 16:19
Sample : GPCB05222012
Misc : GPCB05222012
DataAcq Meth:CLPACQ.M

Vial: 11
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/29/12

Quant Time: May 29 17:30:12 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 71574 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 303476 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 194298 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 362076 | 20.0000 ug/mL | -0.01 |
| 80) Chrysene-d12 | 13.986 | 240 | 360417 | 20.0000 ug/mL | -0.01 |
| 88) Perylene-d12 | 16.049 | 264 | 337623 | 20.0000 ug/mL | -0.01 |
| System Monitoring Compounds | | | | | |
| 3) 1,4-Dioxane-d8 | 0.000 | 96 | 0d | 0.00 ug/mL | |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = | 0.00%# | |
| 7) Phenol-d5 | 3.066 | 99 | 57 | 0.00 ug/mL | -0.03 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = | 0.00%# | |
| 18) Bis(2-chloroethyl)ethe... | 3.029 | 67 | 57 | 0.01 ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = | 0.03%# | |
| 19) 2-Chlorophenol-d4 | 3.248 | 132 | 53 | 0.00 ug/mL | 0.14 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = | 0.00%# | |
| 20) 4-Methylphenol-d8 | 3.937 | 113 | 94 | 0.01 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = | 0.03%# | |
| 22) Nitrobenzene-d5 | 4.060 | 128 | 100 | 0.02 ug/mL | 0.01 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = | 0.05%# | |
| 35) 2-Nitrophenol-d4 | 4.450 | 143 | 57 | 0.01 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = | 0.03%# | |
| 36) 2,4-Dichlorophenol-d3 | 4.824 | 165 | 66 | 0.01 ug/mL | -0.04 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = | 0.03%# | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 55 | 0.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = | 0.03%# | |
| 62) Acenaphthylene-d8 | 0.000 | 160 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = | 0.00%# | |
| 63) 4-Nitrophenol-d4 | 8.195 | 143 | 70 | 0.01 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = | 0.03%# | |
| 64) Dimethylphthalate-d6 | 7.388 | 166 | 721 | 0.02 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = | 0.05%# | |
| 65) Fluorene-d10 | 8.376 | 176 | 88 | 0.00 ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = | 0.00%# | |
| 78) 4,6-Dinitro-2-methylph... | 8.842 | 200 | 58 | 0.01 ug/mL | 0.15 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = | 0.03%# | |
| 79) Anthracene-d10 | 0.000 | 188 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = | 0.00%# | |
| 87) Pyrene-d10 | 12.054 | 212 | 1370 | 0.03 ug/mL | 0.02 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = | 0.07%# | |
| 96) Benzo (a) pyrene-d12 | 0.000 | 264 | 0d | 0.00 ug/mL | |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = | 0.00%# | |

Target Compounds Qvalue

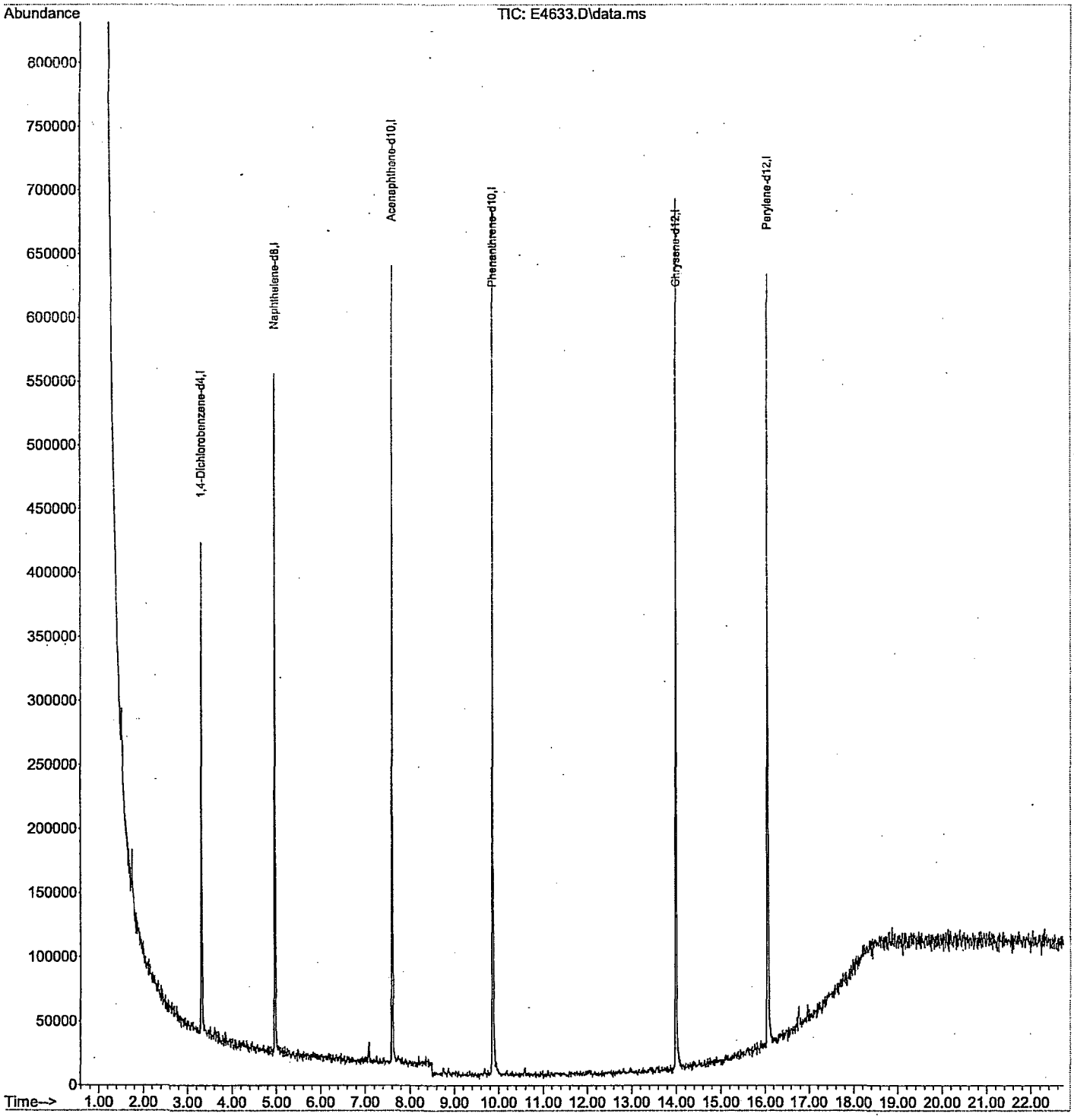
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4633.D
Acq On : 24 May 2012 16:19
Sample : GPCB05222012
Misc : GPCB05222012
DataAcq Meth:CLPACQ.M

Vial: 11
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 29 17:30:12 2012
Quant Results File: SOME4624.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4624.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**
CASE: 42543 SDG: X0T49

05/25/12

S. Vitkati

05/25/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.301 | 152 | 60991 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 257252 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.602 | 164 | 161819 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.853 | 188 | 288993 | 20.0000 ug/mL | 0.00 |
| 80) Chrysene-d12 | 13.985 | 240 | 296748 | 20.0000 ug/mL | 0.00 |
| 88) Perylene-d12 | 16.054 | 264 | 254534 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 18696m | 37.85 ug/mL | 0.00 RS PRV |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 189.25%# | | |
| 7) Phenol-d5 | 3.087 | 99 | 253513 | 18.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 46.35% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 149154 | 19.98 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 49.95% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 235384 | 19.17 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 47.93% | | |
| 20) 4-Methylphenol-d8 | 3.969 | 113 | 199258 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 48.88% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 106481 | 19.70 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 49.25% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 117548 | 19.15 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 47.87% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.861 | 165 | 203068 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 49.38% | | |
| 37) 4-Chloroaniline-d4 | 5.187 | 131 | 167453 | 19.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 49.38% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 675534 | 19.23 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.08% | | |
| 63) 4-Nitrophenol-d4 | 8.173 | 143 | 90911 | 18.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 46.77% | | |
| 64) Dimethylphthalate-d6 | 7.388 | 166 | 523897 | 19.54 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.85% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 415520 | 19.04 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 47.60% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 83983 | 18.32 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 45.80% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 701597 | 19.53 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 48.83% | | |
| 87) Pyrene-d10 | 12.037 | 212 | 749601 | 19.41 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.52%# | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 579395 | 19.55 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 48.88% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 496748 | 32.6178 ug/mL# | 1 RS PRV |
| 4) 1,4-Dioxane | 1.047 | 88 | 82987m | 24.6937 ug/mL | |
| 5) Benzaldehyde | 2.847 | 77 | 196031 | 20.3980 ug/mL | 95 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 215110 | 19.8774 ug/mL | 89 |
| 8) Phenol | 3.098 | 94 | 268060 | 19.5707 ug/mL# | 51 |
| 9) 2-Chlorophenol | 3.130 | 128 | 208845 | 19.7026 ug/mL | 91 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.745 | 45 | 197982 | 19.8412 ug/mL# | 30 |
| 11) Aniline | 3.013 | 93 | 186169 | 17.4881 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.584 | 83 | 256241 | 18.9820 ug/mL# | 100 |
| 13) Acetophenone | 3.867 | 105 | 302327 | 19.8003 ug/mL | 96 |
| 14) 2-Methylphenol | 3.798 | 108 | 197611 | 19.6318 ug/mL | 96 |
| 15) Hexachloroethane | 3.899 | 117 | 95810 | 19.5398 ug/mL | 87 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 175909 | 19.9964 ug/mL | 94 |
| 17) 4-Methylphenol | 4.006 | 108 | 204588 | 19.5353 ug/mL | 97 |
| 23) Nitrobenzene | 4.070 | 77 | 260542 | 20.0731 ug/mL | 98 |
| 24) Isophorone | 4.391 | 82 | 445565 | 19.7119 ug/mL | 98 |
| 25) 2-Nitrophenol | 4.503 | 139 | 113095 | 19.9157 ug/mL | 98 |
| 26) 2,4-Dimethylphenol | 4.690 | 107 | 245967 | 19.7276 ug/mL | 99 |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 246506 | 20.1250 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 175798 | 19.5598 ug/mL | 100 |
| 29) Naphthalene | 4.989 | 128 | 617927 | 19.3572 ug/mL | 99 |
| 30) 4-Chloroaniline | 5.198 | 127 | 158799 | 20.9169 ug/mL | 100 |
| 31) Hexachlorobutadiene | 5.294 | 225 | 107111 | 19.4581 ug/mL | 98 |
| 32) Caprolactam | 5.662 | 113 | 72305 | 20.4258 ug/mL | 94 |
| 33) 4-Chloro-3-methylphenol | 6.058 | 107 | 212199 | 19.6938 ug/mL | 94 |
| 34) 2-Methylnaphthalene | 6.015 | 142 | 421479 | 19.5200 ug/mL | 93 |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 111245 | 19.0507 ug/mL | 98 |
| 40) 2,4,6-Trichlorophenol | 6.565 | 196 | 123710 | 19.2058 ug/mL | 99 |
| 41) 2,4,5-Trichlorophenol | 6.645 | 196 | 127583 | 19.6154 ug/mL | 96 |
| 42) 1,1'-Biphenyl | 6.763 | 154 | 510218 | 19.0673 ug/mL | 98 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 404659 | 19.0713 ug/mL | 99 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 179060 | 18.9905 ug/mL | 98 |
| 45) 2-Nitroaniline | 7.046 | 65 | 136089 | 19.1174 ug/mL | 94 |
| 46) Acenaphthylene | 7.356 | 152 | 650802 | 19.0954 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 499343 | 19.4175 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 100875 | 19.2717 ug/mL | 89 |
| 49) Acenaphthene | 7.644 | 153 | 411488 | 19.2658 ug/mL | 98 |
| 50) 3-Nitroaniline | 7.703 | 138 | 91354 | 19.0192 ug/mL | 99 |
| 51) 2,4-Dinitrophenol | 7.869 | 184 | 32046m | 18.0672 ug/mL | |
| 52) Dibenzofuran | 7.906 | 168 | 578903 | 19.2852 ug/mL | 94 |
| 53) Pentachlorobenzene | 9.247 | 250 | 109310 | 18.6598 ug/mL | 95 |
| 54) 2,4-Dinitrotoluene | 8.093 | 165 | 138373 | 19.4693 ug/mL | 98 |
| 55) 4-Nitrophenol | 8.179 | 109 | 75634 | 18.3961 ug/mL | 95 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 93145 | 19.0141 ug/mL | 87 |
| 57) Fluorene | 8.430 | 166 | 495231 | 19.2564 ug/mL | 100 |
| 58) 4-Chlorophenyl-phenyle... | 8.510 | 204 | 214341 | 19.0478 ug/mL | 90 |
| 59) Diethylphthalate | 8.533 | 149 | 524810 | 19.6775 ug/mL | 97 |
| 60) 4-Nitroaniline | 8.665 | 138 | 118553 | 19.4062 ug/mL# | 84 |
| 61) 1,2,4,5 Tetrachloroben... | 6.330 | 216 | 174396 | 18.9017 ug/mL | 94 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 76009 | 18.4477 ug/mL | 87 |
| 68) N-Nitrosodiphenylamine... | 8.739 | 169 | 409938 | 19.1515 ug/mL | 98 |
| 69) 4-Bromophenyl-phenylether | 9.247 | 248 | 115754 | 18.7357 ug/mL# | 82 |
| 70) Hexachlorobenzene | 9.396 | 284 | 112595 | 18.6346 ug/mL# | 74 |
| 71) Atrazine | 9.716 | 200 | 141182 | 19.5066 ug/mL | 95 |
| 72) Pentachlorophenol | 9.756 | 266 | 52161 | 17.4912 ug/mL | 94 |
| 73) Phenanthrene | 9.888 | 178 | 703700 | 19.4385 ug/mL | 98 |
| 74) Anthracene | 9.956 | 178 | 729200 | 19.5755 ug/mL | 99 |
| 75) Carbazole | 10.310 | 167 | 720384 | 20.0354 ug/mL | 98 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 913011 | 19.9930 ug/mL | 100 |
| 77) Fluoranthene | 11.734 | 202 | 765122 | 19.1646 ug/mL | 95 |
| 81) Pyrene | 12.059 | 202 | 830147 | 19.2054 ug/mL | 96 |
| 82) Butylbenzylphthalate | 13.402 | 149 | 416629 | 19.8215 ug/mL | 95 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 202463 | 20.0177 ug/mL | 96 |
| 84) Benzo (a) anthracene | 13.968 | 228 | 716391 | 19.2827 ug/mL | 99 |
| 85) Chrysene | 14.025 | 228 | 673345 | 19.1954 ug/mL | 98 |
| 86) Bis(2-ethylhexyl)phtha... | 14.426 | 149 | 564422 | 20.0422 ug/mL | 98 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 972233 | 20.1668 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 685868 | 18.8432 ug/mL | 95 |
| 91) Benzo (k) fluoranthene | 15.591 | 252 | 668319 | 20.0452 ug/mL | 94 |

RS 8/21

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.974 | 252 | 675645 | 19.5649 ug/mL | 96 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 520203 | 19.3268 ug/mL | 89 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 528941 | 18.9165 ug/mL | 93 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 568764 | 19.6532 ug/mL | 91 |

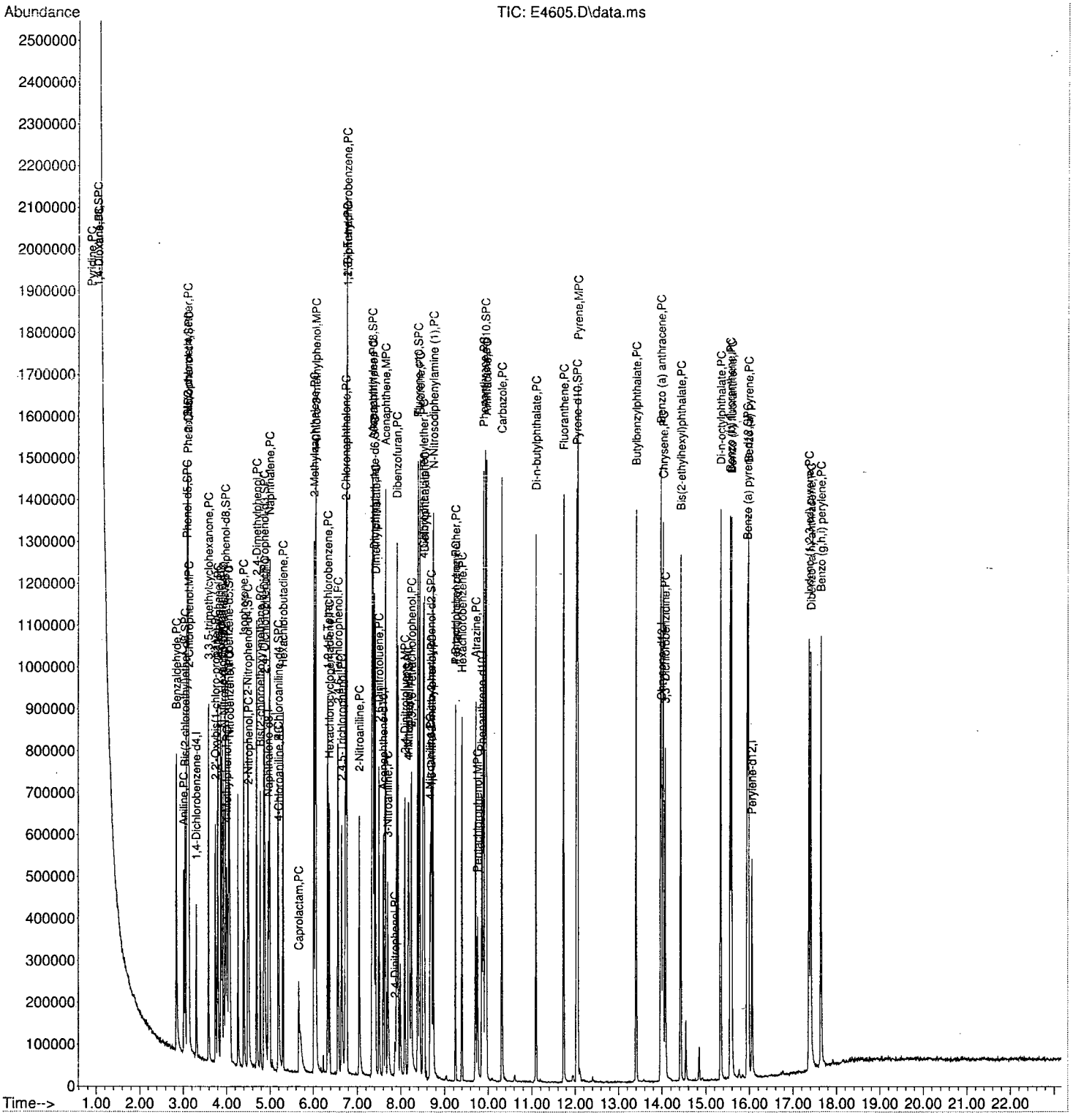
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration






00691

# Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 8.145 | -0.5 | 100 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.307 | -10.0# | 100 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.361 | 14.6# | 100 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 3.214 | -1.3 | 100 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.527 | 1.7 | 100 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.157 | 8.1 | 100 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.395 | 2.2 | 100 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.424 | 2.4 | 100 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 3.246 | 4.0 | 100 | 0.00 |
| 11 | PC | Aniline | 3.567 | 3.052 | 14.4 | 100 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 4.201 | 6.3 | 100 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 4.957 | 3.0 | 100 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.240 | 2.3 | 100 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.571 | 2.8 | 100 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.884 | 2.8 | 100 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.354 | 3.7 | 100 | 0.00 |
| 18 | SPC | Bis(2-chloroethyl)ether-d8 | 2.510 | 2.446 | 2.5 | 100 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 3.859 | 3.7 | 100 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.267 | 2.9 | 100 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.414 | 2.6 | 100 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 1.013 | 0.4 | 100 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.732 | 1.0 | 100 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.440 | -0.7 | 100 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.956 | 0.6 | 100 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.958 | 0.2 | 100 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.683 | 0.3 | 100 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.402 | 2.8 | 100 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.617 | -0.7 | 100 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.416 | 0.7 | 100 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.281 | -1.1 | 100 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.825 | 1.3 | 100 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.638 | 1.5 | 100 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.457 | 3.4 | 100 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.789 | 0.0 | 100 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.651 | 3.8 | 100 | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.687 | 2.8 | 100 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.764 | 3.8 | 100 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.788 | 1.3 | 100 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.153 | 4.7 | 100 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.501 | 5.7 | 100 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.107 | 4.2 | 100 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.841 | 5.0 | 100 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.022 | 4.3 | 100 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.086 | 3.8 | 100 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.623 | 3.1 | 100 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.543 | 5.0 | 100 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.565 | 8.1 | 100 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.198 | 10.4 | 100 | 0.00 |

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:51:35 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.577 | 3.7 | 100 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.676 | 5.6 | 100 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.855 | 3.5 | 100 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.467 | 7.9 | 100 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.576 | 3.0 | 100 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.060 | 4.7 | 100 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.325 | 4.5 | 100 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.243 | 2.1 | 100 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.733 | 3.0 | 100 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.078 | 4.3 | 100 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.175 | 3.8 | 100 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.562 | 7.7 | 100 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.238 | 3.7 | 100 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.568 | 5.3 | 100 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.263 | 6.4 | 100 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.419 | 4.1 | 100 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.401 | 4.5 | 100 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.390 | 5.6 | 100 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.489 | 0.0 | 100 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.180 | 11.3 | 100 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.435 | 2.6 | 100 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.523 | 2.2 | 100 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.493 | 0.0 | 100 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 3.159 | -0.3 | 100 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.648 | 3.8 | 100 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.291 | 7.6 | 100 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.428 | 1.6 | 100 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.797 | 3.9 | 100 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.404 | 0.6 | 100 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.682 | -0.4 | 100 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.414 | 2.0 | 100 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.269 | 4.0 | 100 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.902 | -0.1 | 100 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.526 | 3.5 | 100 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.820 | -1.6 | 100 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.695 | 1.3 | 100 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.626 | 2.9 | 100 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.654 | 0.7 | 100 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.044 | 0.8 | 100 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.078 | 2.8 | 100 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.235 | 0.1 | 100 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.276 | 0.4 | 100 | 0.00 |

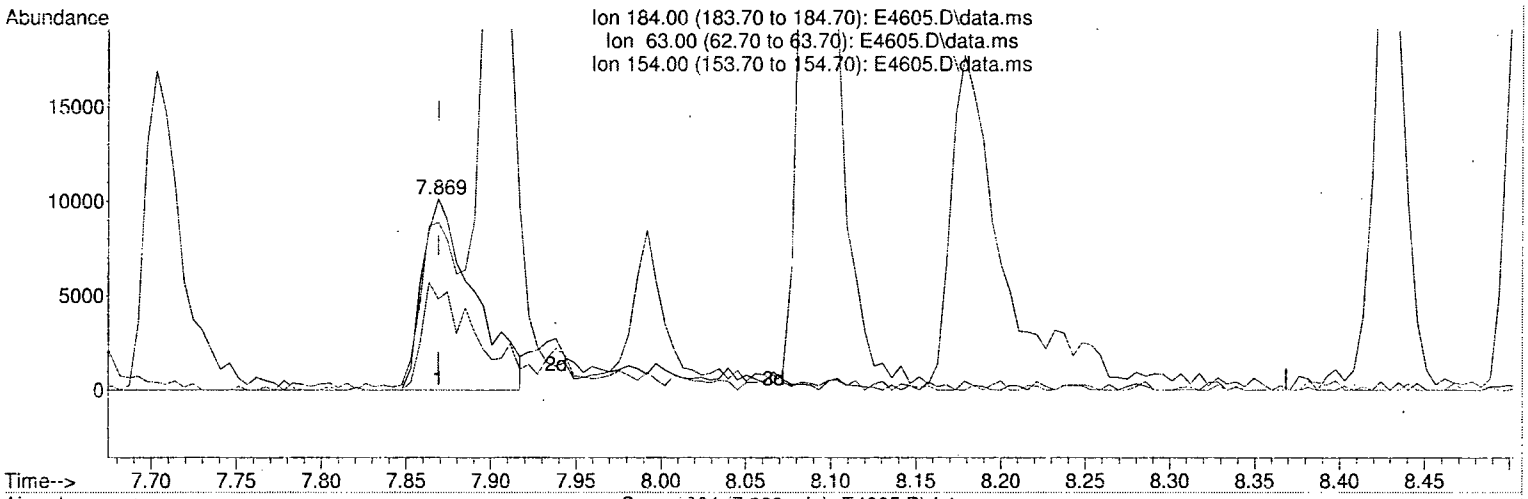
(#) = Out of Range SPCC's out = 0 CCC's out = 2

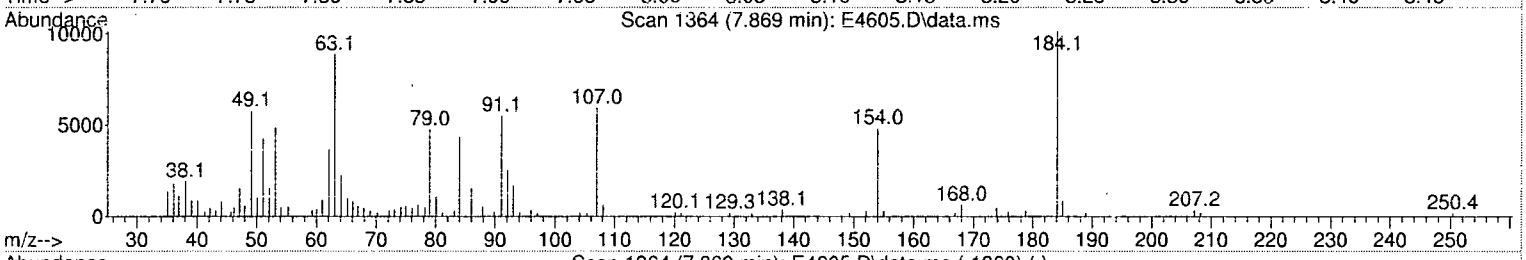
Quantitation Report (Qedit)

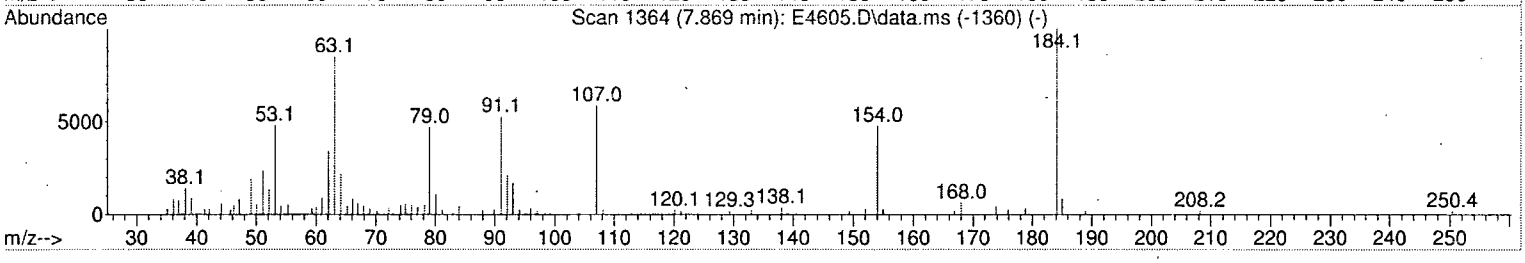
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 12.00 ug/mL**

**response 21289**

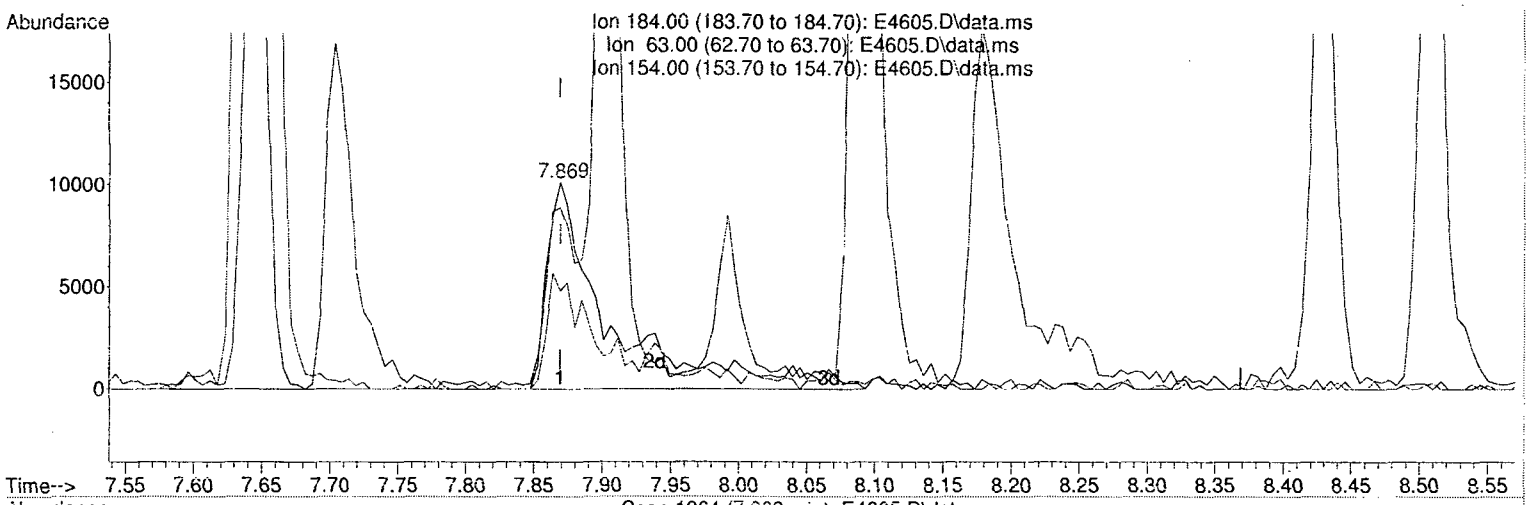
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 55.73 |
| 154.00 | 63.80 | 60.55 |
| 0.00 | 0.00 | 0.00 |

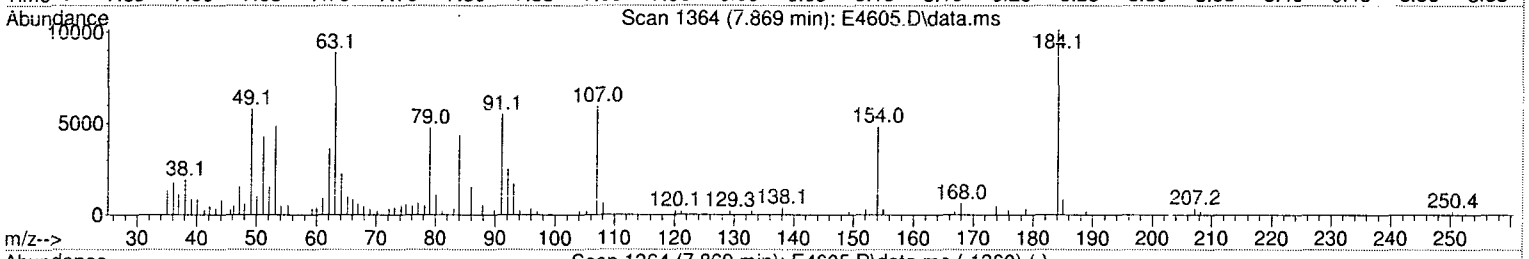
Quantitation Report (Qedit)

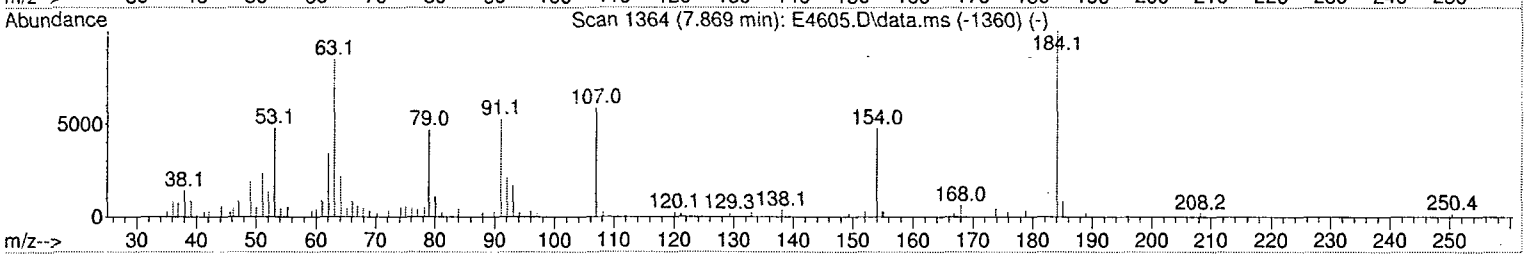
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.869min ( 0.000) 18.07 ug/mL m** RS 8RW

**response 32046**

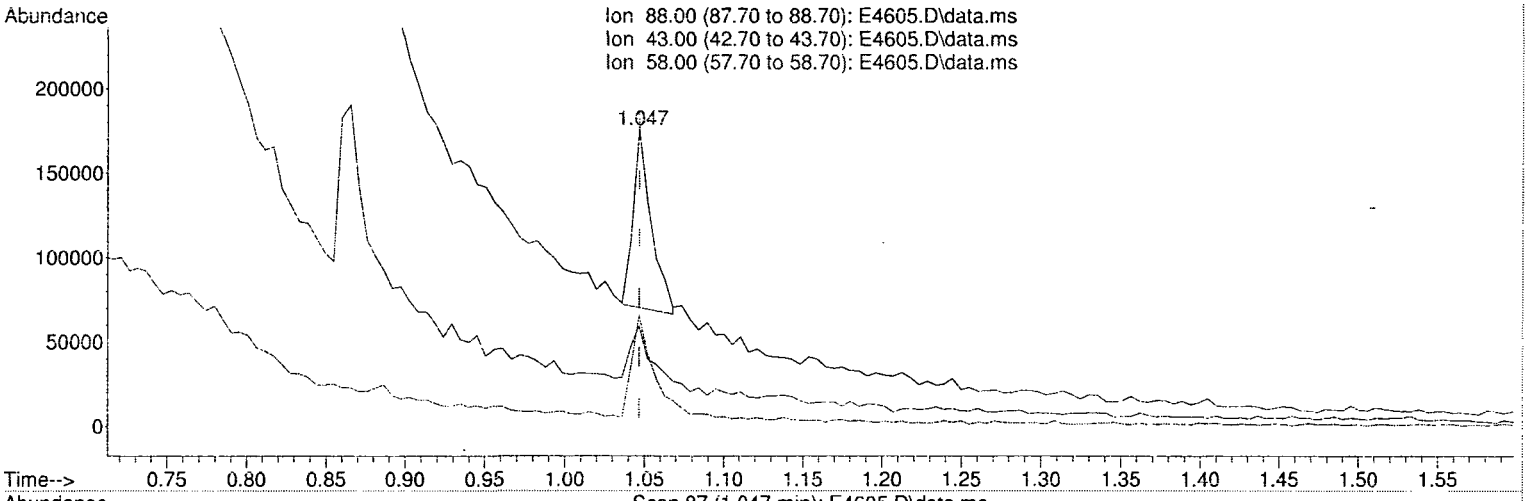
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 37.02# |
| 154.00 | 63.80 | 40.22# |
| 0.00 | 0.00 | 0.00 |

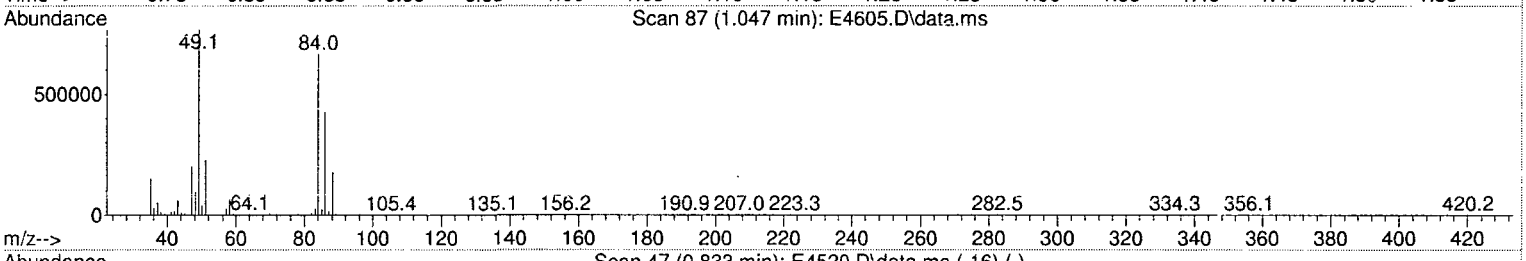
Quantitation Report (Qedit)

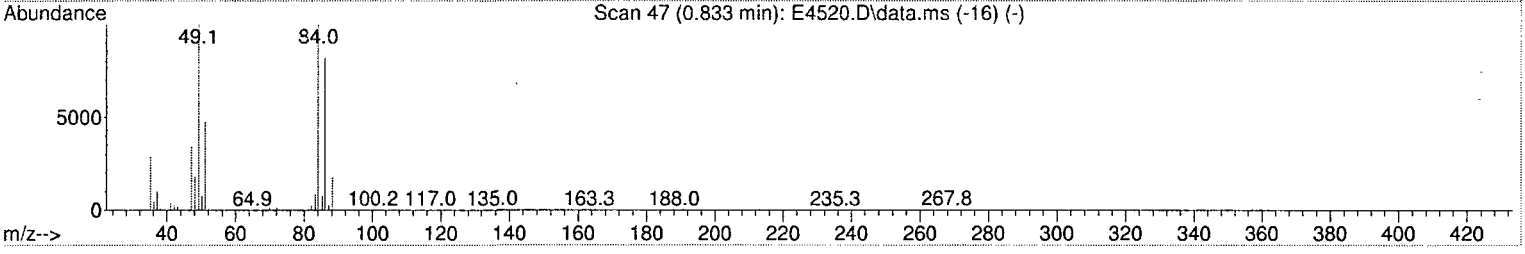
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min ( 0.000) 24.69 ug/mL m** RS 8/24

**response 82987**

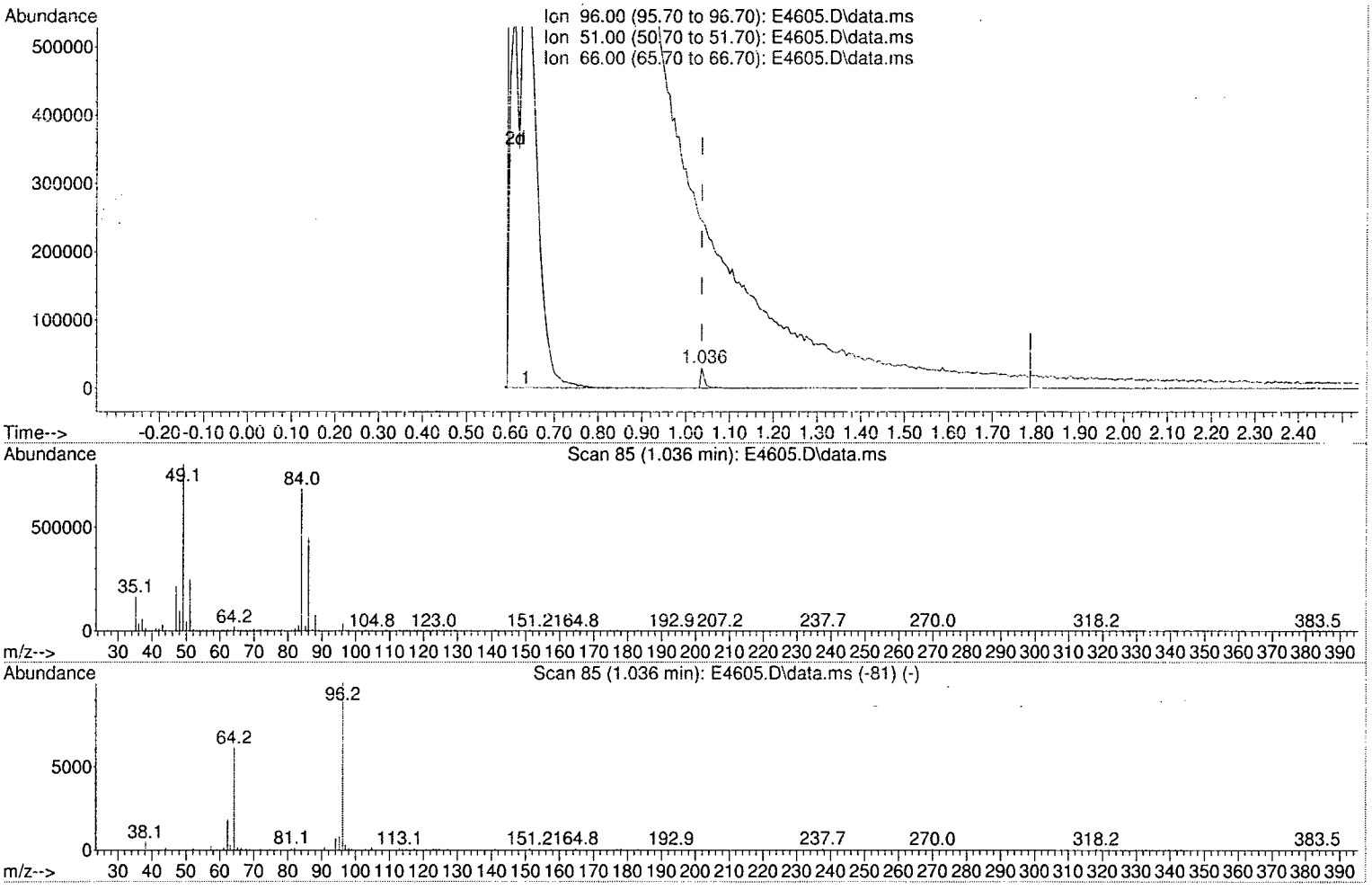
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

Vial: 5
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 12:40:52 2012
Quant Results File: SOME4605.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4605.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 10:25:14 2012
Response via : Initial Calibration




TIC: E4605.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**1.036min ( 0.000) 37.85 ug/mL m** RSPLN

**response 18696**

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 8.10# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/30/12

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

**ORIGINAL LOCATED IN**

**CASE:** 42543 **SDG:** X0T49

S. Vakati
05/30/12

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| **Internal Standards** | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 3.296 | 152 | 66863 | 20.0000 ug/mL | 0.00 |
| 21) Naphthalene-d8 | 4.963 | 136 | 299524 | 20.0000 ug/mL | 0.00 |
| 38) Acenaphthene-d10 | 7.596 | 164 | 190727 | 20.0000 ug/mL | 0.00 |
| 66) Phenanthrene-d10 | 9.848 | 188 | 347257 | 20.0000 ug/mL | -0.01 |
| 80) Chrysene-d12 | 13.986 | 240 | 362505 | 20.0000 ug/mL | -0.01 |
| 88) Perylene-d12 | 16.054 | 264 | 320814 | 20.0000 ug/mL | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 3) 1,4-Dioxane-d8 | 1.036 | 96 | 19457m | 20.84 ug/mL | 0.00 RS |
| Spiked Amount 20.000 | Range 40 - 150 | | Recovery = 104.20% | | |
| 7) Phenol-d5 | 3.087 | 99 | 328940 | 21.75 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 39 - 106 | | Recovery = 54.37% | | |
| 18) Bis(2-chloroethyl)ethe... | 3.045 | 67 | 152213 | 18.14 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 105 | | Recovery = 45.35% | | |
| 19) 2-Chlorophenol-d4 | 3.109 | 132 | 276036 | 20.61 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 106 | | Recovery = 51.52% | | |
| 20) 4-Methylphenol-d8 | 3.964 | 113 | 231052 | 20.55 ug/mL | -0.01 |
| Spiked Amount 40.000 | Range 25 - 111 | | Recovery = 51.38% | | |
| 22) Nitrobenzene-d5 | 4.049 | 128 | 127428 | 20.02 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 43 - 108 | | Recovery = 50.05% | | |
| 35) 2-Nitrophenol-d4 | 4.487 | 143 | 149863 | 21.15 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 40 - 108 | | Recovery = 52.87% | | |
| 36) 2,4-Dichlorophenol-d3 | 4.856 | 165 | 252480 | 21.36 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 37 - 105 | | Recovery = 53.40% | | |
| 37) 4-Chloroaniline-d4 | 5.182 | 131 | 259174 | 25.57 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 1 - 145 | | Recovery = 63.92% | | |
| 62) Acenaphthylene-d8 | 7.340 | 160 | 796809 | 19.25 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 41 - 107 | | Recovery = 48.13% | | |
| 63) 4-Nitrophenol-d4 | 8.168 | 143 | 104334 | 17.97 ug/mL | -0.02 |
| Spiked Amount 40.000 | Range 33 - 116 | | Recovery = 44.92% | | |
| 64) Dimethylphthalate-d6 | 7.383 | 166 | 621054 | 19.37 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 47 - 114 | | Recovery = 48.43% | | |
| 65) Fluorene-d10 | 8.387 | 176 | 509737 | 19.71 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 42 - 111 | | Recovery = 49.28% | | |
| 78) 4,6-Dinitro-2-methylph... | 8.687 | 200 | 104571 | 19.13 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 22 - 104 | | Recovery = 47.82% | | |
| 79) Anthracene-d10 | 9.928 | 188 | 840068 | 19.61 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 44 - 110 | | Recovery = 49.02% | | |
| 87) Pyrene-d10 | 12.031 | 212 | 912608 | 19.24 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 52 - 119 | | Recovery = 48.10%# | | |
| 96) Benzo (a) pyrene-d12 | 15.946 | 264 | 722049 | 19.70 ug/mL | 0.00 |
| Spiked Amount 40.000 | Range 32 - 121 | | Recovery = 49.25% | | |
| **Target Compounds** | | | | | Qvalue |
| 2) Pyridine | 0.886 | 79 | 501477 | 18.5032 ug/mL# | 1 RS |
| 4) 1,4-Dioxane | 1.047 | 88 | 77147m | 14.4899 ug/mL | |
| 5) Benzaldehyde | 2.842 | 77 | 200151 | 18.8610 ug/mL | 96 |
| 6) Bis(2-chloroethyl)ether | 3.093 | 93 | 235440 | 19.6316 ug/mL | 90 |
| 8) Phenol | 3.098 | 94 | 291776 | 19.4282 ug/mL# | 60 |
| 9) 2-Chlorophenol | 3.125 | 128 | 241629 | 20.6082 ug/mL | 100 |
| 10) 2,2'-Oxybis(1-chloro-p... | 3.739 | 45 | 200151 | 17.7046 ug/mL# | 31 |
| 11) Aniline | 3.013 | 93 | 274655 | 23.0321 ug/mL# | 100 |
| 12) 3,3,5-trimethylcyclohe... | 3.579 | 83 | 272738 | 18.1937 ug/mL# | 100 |
| 13) Acetophenone | 3.862 | 105 | 338448 | 19.8125 ug/mL | 95 |
| 14) 2-Methylphenol | 3.793 | 108 | 225388 | 20.3293 ug/mL | 94 |
| 15) Hexachloroethane | 3.900 | 117 | 106072 | 19.6365 ug/mL | 96 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 16) N-Nitroso-di-n-propyla... | 3.932 | 70 | 180447 | 18.1947 ug/mL | 94 |
| 17) 4-Methylphenol | 4.001 | 108 | 240302 | 20.6426 ug/mL | 96 |
| 23) Nitrobenzene | 4.070 | 77 | 270555 | 17.7632 ug/mL | 94 |
| 24) Isophorone | 4.391 | 82 | 485329 | 18.5172 ug/mL | 96 |
| 25) 2-Nitrophenol | 4.503 | 139 | 134432 | 20.5229 ug/mL | 93 |
| 26) 2,4-Dimethylphenol | 4.685 | 107 | 278569 | 19.3415 ug/mL | 97 |
| 27) Bis(2-chloroethoxy)met... | 4.776 | 93 | 269021 | 18.7047 ug/mL | 99 |
| 28) 2,4- Dichlorophenol | 4.872 | 162 | 210391 | 20.5152 ug/mL | 97 |
| 29) Naphthalene | 4.984 | 128 | 735599 | 19.8696 ug/mL | 100 |
| 30) 4-Chloroaniline | 5.192 | 127 | 238180 | 25.9543 ug/mL | 97 |
| 31) Hexachlorobutadiene | 5.288 | 225 | 129663 | 20.6763 ug/mL | 99 |
| 32) Caprolactam | 5.662 | 113 | 81046 | 19.4867 ug/mL | 96 |
| 33) 4-Chloro-3-methylphenol | 6.052 | 107 | 245812 | 19.6412 ug/mL | 92 |
| 34) 2-Methylnaphthalene | 6.010 | 142 | 501723 | 20.1498 ug/mL | 100 |
| 39) Hexachlorocyclopentadiene | 6.368 | 237 | 132203 | 19.6025 ug/mL | 100 |
| 40) 2,4,6-Trichlorophenol | 6.560 | 196 | 157578 | 20.8025 ug/mL | 97 |
| 41) 2,4,5-Trichlorophenol | 6.640 | 196 | 162704 | 21.3841 ug/mL | 95 |
| 42) 1,1'-Biphenyl | 6.758 | 154 | 607173 | 19.2415 ug/mL | 96 |
| 43) 2-Chloronaphthalene | 6.731 | 162 | 486557 | 19.2468 ug/mL | 98 |
| 44) 1,2,3,4-Tetrachloroben... | 6.758 | 216 | 224198 | 20.3352 ug/mL | 96 |
| 45) 2-Nitroaniline | 7.041 | 65 | 143788 | 17.0459 ug/mL | 91 |
| 46) Acenaphthylene | 7.356 | 152 | 775115 | 19.3484 ug/mL | 99 |
| 47) Dimethylphthalate | 7.420 | 163 | 592120 | 19.3482 ug/mL | 99 |
| 48) 2,6-Dinitrotoluene | 7.495 | 165 | 124567 | 20.3093 ug/mL | 100 |
| 49) Acenaphthene | 7.644 | 153 | 491927 | 19.2665 ug/mL | 100 |
| 50) 3-Nitroaniline | 7.703 | 138 | 129634 | 22.1182 ug/mL | 87 |
| 51) 2,4-Dinitrophenol | 7.874 | 184 | 33467m | 15.8918 ug/mL | RS RW |
| 52) Dibenzofuran | 7.901 | 168 | 682844 | 19.2832 ug/mL | 96 |
| 53) Pentachlorobenzene | 9.242 | 250 | 140342 | 20.5577 ug/mL | 98 |
| 54) 2,4-Dinitrotoluene | 8.088 | 165 | 172863 | 20.4490 ug/mL | 90 |
| 55) 4-Nitrophenol | 8.179 | 109 | 82970 | 17.1557 ug/mL# | 87 |
| 56) 2,3,4,6-Tetrachlorophenol | 8.243 | 232 | 121284 | 21.4211 ug/mL | 94 |
| 57) Fluorene | 8.430 | 166 | 582950 | 19.0325 ug/mL | 98 |
| 58) 4-Chlorophenyl-phenyle... | 8.505 | 204 | 260818 | 19.7145 ug/mL | 91 |
| 59) Diethylphthalate | 8.533 | 149 | 601742 | 19.0375 ug/mL | 99 |
| 60) 4-Nitroaniline | 8.665 | 138 | 135970 | 18.8650 ug/mL# | 85 |
| 61) 1,2,4,5 Tetrachloroben... | 6.325 | 216 | 210796 | 19.6287 ug/mL | 97 |
| 67) 4,6-Dinitro-2-methylph... | 8.699 | 198 | 89648 | 18.3938 ug/mL | 99 |
| 68) N-Nitrosodiphenylamine... | 8.733 | 169 | 478900 | 18.6445 ug/mL | 99 |
| 69) 4-Bromophenyl-phenylether | 9.242 | 248 | 144090 | 19.7814 ug/mL | 90 |
| 70) Hexachlorobenzene | 9.390 | 284 | 142924 | 19.9506 ug/mL | 81 |
| 71) Atrazine | 9.716 | 200 | 165190 | 19.4443 ug/mL | 95 |
| 72) Pentachlorophenol | 9.750 | 266 | 68617 | 19.4699 ug/mL | 99 |
| 73) Phenanthrene | 9.882 | 178 | 833595 | 19.2057 ug/mL | 98 |
| 74) Anthracene | 9.950 | 178 | 865300 | 19.3164 ug/mL | 99 |
| 75) Carbazole | 10.305 | 167 | 829850 | 19.1752 ug/mL | 99 |
| 76) Di-n-butylphthalate | 11.094 | 149 | 1027197 | 18.7750 ug/mL | 99 |
| 77) Fluoranthene | 11.734 | 202 | 920521 | 19.2483 ug/mL | 98 |
| 81) Pyrene | 12.054 | 202 | 992759 | 18.8106 ug/mL | 99 |
| 82) Butylbenzylphthalate | 13.397 | 149 | 462451 | 18.0702 ug/mL | 90 |
| 83) 3,3'-Dichlorobenzidine | 14.071 | 252 | 265582 | 21.5662 ug/mL | 99 |
| 84) Benzo (a) anthracene | 13.963 | 228 | 845812 | 18.9353 ug/mL | 99 |
| 85) Chrysene | 14.025 | 228 | 807996 | 18.8573 ug/mL | 99 |
| 86) Bis(2-ethylhexyl)phtha... | 14.420 | 149 | 635384 | 18.4550 ug/mL | 99 |
| 89) Di-n-octylphthalate | 15.340 | 149 | 1090433 | 18.0915 ug/mL | 100 |
| 90) Benzo (b) fluoranthene | 15.557 | 252 | 770362 | 17.5858 ug/mL | 96 |
| 91) Benzo (k) fluoranthene | 15.592 | 252 | 865826 | 19.9579 ug/mL | 94 |

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 92) Benzo (a) pyrene | 15.974 | 252 | 804695 | 18.7691 ug/mL | 97 |
| 93) Indeno (1,2,3-cd) pyrene | 17.363 | 276 | 657011 | 19.8861 ug/mL | 92 |
| 94) Dibenzo (a,h) anthracene | 17.409 | 278 | 672018 | 19.6070 ug/mL | 93 |
| 95) Benzo (g,h,i) perylene | 17.638 | 276 | 696160 | 19.3965 ug/mL | 92 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
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DataAcq Meth:CLPACQ.M

Vial: 12
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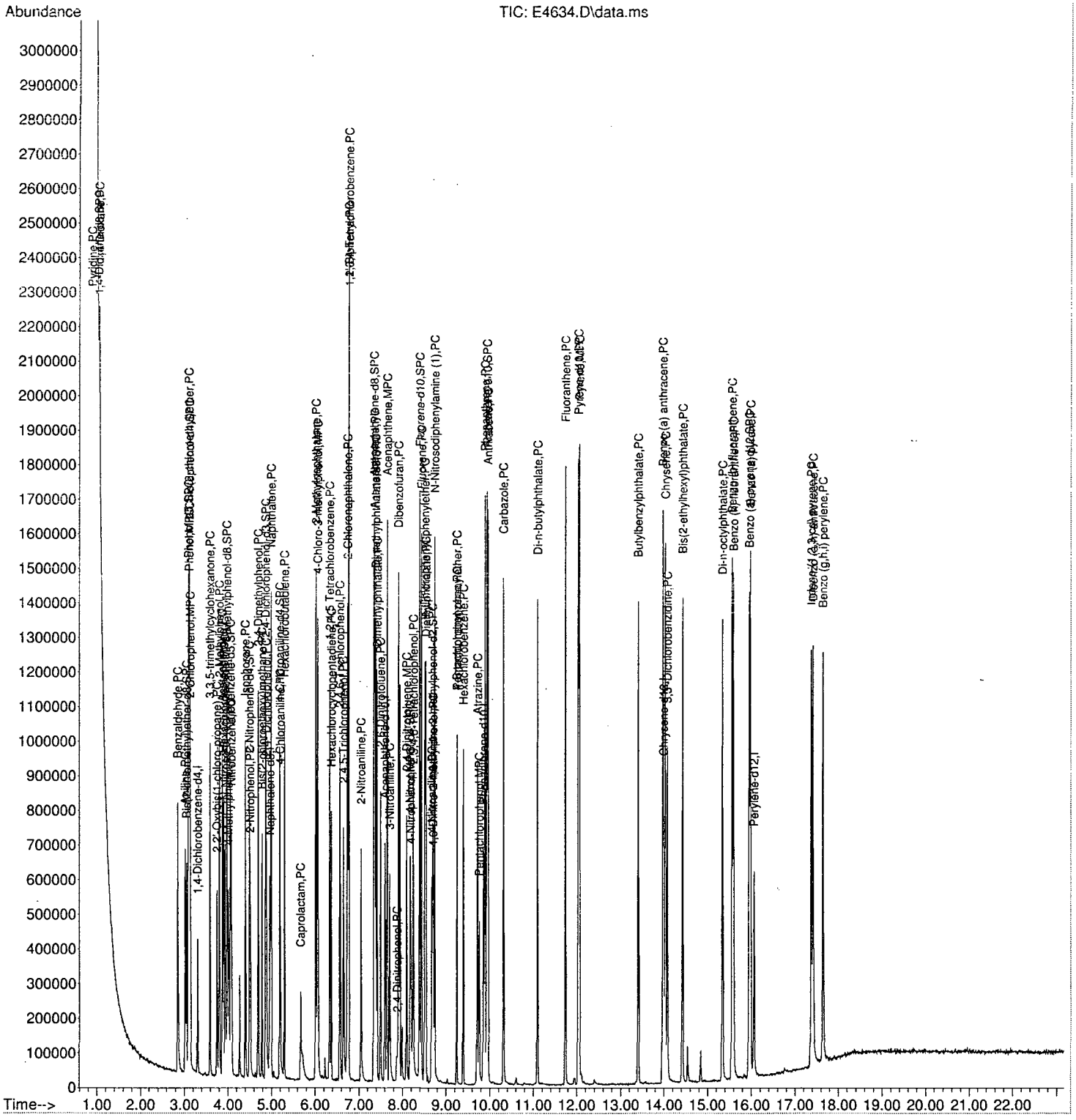
Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration





00701

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:33:09 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 2 | PC | Pyridine | 8.107 | 7.500 | 7.5 | 101 | 0.00 |
| 3 | SPC | 1,4-Dioxane-d8 | 0.279 | 0.291 | -4.3# | 104 | 0.00 |
| 4 | PC | 1,4-Dioxane | 1.593 | 1.154 | 27.6# | 93 | 0.00 |
| 5 | PC | Benzaldehyde | 3.174 | 2.993 | 5.7 | 102 | 0.00 |
| 6 | PC | Bis(2-chloroethyl)ether | 3.587 | 3.521 | 1.8 | 109 | 0.00 |
| 7 | SPC | Phenol-d5 | 4.525 | 4.920 | -8.7 | 130 | 0.00 |
| 8 | MPC | Phenol | 4.492 | 4.364 | 2.8 | 109 | 0.00 |
| 9 | MPC | 2-Chlorophenol | 3.507 | 3.614 | -3.1 | 116 | 0.00 |
| 10 | PC | 2,2'-Oxybis(1-chloro-propan | 3.382 | 2.993 | 11.5 | 101 | 0.00 |
| 11 | PC | Aniline | 3.567 | 4.108 | -15.2 | 148 | 0.00 |
| 12 | PC | 3,3,5-trimethylcyclohexanon | 4.484 | 4.079 | 9.0 | 106 | 0.00 |
| 13 | PC | Acetophenone | 5.110 | 5.062 | 0.9 | 112 | 0.00 |
| 14 | PC | 2-Methylphenol | 3.316 | 3.371 | -1.7 | 114 | 0.00 |
| 15 | PC | Hexachloroethane | 1.616 | 1.586 | 1.9 | 111 | 0.00 |
| 16 | MPC | N-Nitroso-di-n-propylamine | 2.967 | 2.699 | 9.0 | 103 | 0.00 |
| 17 | PC | 4-Methylphenol | 3.482 | 3.594 | -3.2 | 117 | 0.00 |
| 18 | SPC | Bis(2-chlorocthyl)ether-d8 | 2.510 | 2.276 | 9.3 | 102 | 0.00 |
| 19 | SPC | 2-Chlorophenol-d4 | 4.006 | 4.128 | -3.0 | 117 | 0.00 |
| 20 | SPC | 4-Methylphenol-d8 | 3.363 | 3.456 | -2.8 | 116 | 0.00 |
| 21 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 116 | 0.00 |
| 22 | SPC | Nitrobenzene-d5 | 0.425 | 0.425 | 0.0 | 120 | 0.00 |
| 23 | PC | Nitrobenzene | 1.017 | 0.903 | 11.2 | 104 | 0.00 |
| 24 | PC | Isophorone | 1.750 | 1.620 | 7.4 | 109 | 0.00 |
| 25 | PC | 2-Nitrophenol | 0.437 | 0.449 | -2.7 | 119 | 0.00 |
| 26 | PC | 2,4-Dimethylphenol | 0.962 | 0.930 | 3.3 | 113 | 0.00 |
| 27 | PC | Bis(2-chloroethoxy)methane | 0.960 | 0.898 | 6.5 | 109 | 0.00 |
| 28 | PC | 2,4- Dichlorophenol | 0.685 | 0.702 | -2.5 | 120 | 0.00 |
| 29 | PC | Naphthalene | 2.472 | 2.456 | 0.6 | 119 | 0.00 |
| 30 | PC | 4-Chloroaniline | 0.613 | 0.795 | -29.7 | 150 | 0.00 |
| 31 | PC | Hexachlorobutadiene | 0.419 | 0.433 | -3.3 | 121 | 0.00 |
| 32 | PC | Caprolactam | 0.278 | 0.271 | 2.5 | 112 | 0.00 |
| 33 | MPC | 4-Chloro-3-methylphenol | 0.836 | 0.821 | 1.8 | 116 | 0.00 |
| 34 | PC | 2-Methylnaphthalene | 1.663 | 1.675 | -0.7 | 119 | 0.00 |
| 35 | SPC | 2-Nitrophenol-d4 | 0.473 | 0.500 | -5.7 | 127 | 0.00 |
| 36 | SPC | 2,4-Dichlorophenol-d3 | 0.789 | 0.843 | -6.8 | 124 | 0.00 |
| 37 | SPC | 4-Chloroaniline-d4 | 0.677 | 0.865 | -27.8 | 155# | 0.00 |
| 38 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 39 | PC | Hexachlorocyclopentadiene | 0.707 | 0.693 | 2.0 | 119 | 0.00 |
| 40 | PC | 2,4,6-Trichlorophenol | 0.794 | 0.826 | -4.0 | 127 | 0.00 |
| 41 | PC | 2,4,5-Trichlorophenol | 0.798 | 0.853 | -6.9 | 128 | 0.00 |
| 42 | PC | 1,1'-Biphenyl | 3.309 | 3.183 | 3.8 | 119 | 0.00 |
| 43 | PC | 2-Chloronaphthalene | 2.651 | 2.551 | 3.8 | 120 | 0.00 |
| 44 | PC | 1,2,3,4-Tetrachlorobenzene | 1.156 | 1.175 | -1.6 | 125 | 0.00 |
| 45 | PC | 2-Nitroaniline | 0.885 | 0.754 | 14.8 | 106 | 0.00 |
| 46 | PC | Acenaphthylene | 4.201 | 4.064 | 3.3 | 119 | 0.00 |
| 47 | PC | Dimethylphthalate | 3.209 | 3.105 | 3.2 | 119 | 0.00 |
| 48 | PC | 2,6-Dinitrotoluene | 0.643 | 0.653 | -1.6 | 123 | 0.00 |
| 49 | MPC | Acenaphthene | 2.677 | 2.579 | 3.7 | 120 | 0.00 |
| 50 | PC | 3-Nitroaniline | 0.615 | 0.680 | -10.6 | 142 | 0.00 |
| 51 | PC | 2,4-Dinitrophenol | 0.221 | 0.175 | 20.8 | 104 | 0.00 |

Evaluate Continuing Calibration Report

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Acq On : 24 May 2012 16:50
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DataAcq Meth:CLPACQ.M

Vial: 12
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Quant Time: May 24 17:33:09 2012
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Integration File: RTEINT.P
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Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 52 | PC | Dibenzofuran | 3.713 | 3.580 | 3.6 | 118 | 0.00 |
| 53 | PC | Pentachlorobenzene | 0.716 | 0.736 | -2.8 | 128 | 0.00 |
| 54 | MPC | 2,4-Dinitrotoluene | 0.886 | 0.906 | -2.3 | 125 | 0.00 |
| 55 | MPC | 4-Nitrophenol | 0.507 | 0.435 | 14.2 | 110 | 0.00 |
| 56 | PC | 2,3,4,6-Tetrachlorophenol | 0.594 | 0.636 | -7.1 | 130 | 0.00 |
| 57 | PC | Fluorene | 3.212 | 3.056 | 4.9 | 118 | 0.00 |
| 58 | PC | 4-Chlorophenyl-phenylether | 1.387 | 1.367 | 1.4 | 122 | 0.00 |
| 59 | PC | Diethylphthalate | 3.314 | 3.155 | 4.8 | 115 | 0.00 |
| 60 | PC | 4-Nitroaniline | 0.756 | 0.713 | 5.7 | 115 | 0.00 |
| 61 | PC | 1,2,4,5 Tetrachlorobenzene | 1.126 | 1.105 | 1.9 | 121 | 0.00 |
| 62 | SPC | Acenaphthylene-d8 | 4.340 | 4.178 | 3.7 | 118 | 0.00 |
| 63 | SPC | 4-Nitrophenol-d4 | 0.609 | 0.547 | 10.2 | 115 | 0.00 |
| 64 | SPC | Dimethylphthalate-d6 | 3.363 | 3.256 | 3.2 | 119 | 0.00 |
| 65 | SPC | Fluorene-d10 | 2.712 | 2.673 | 1.4 | 123 | 0.00 |
| 66 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 120 | 0.00 |
| 67 | PC | 4,6-Dinitro-2-methylphenol | 0.281 | 0.258 | 8.2 | 118 | 0.00 |
| 68 | PC | N-Nitrosodiphenylamine (1) | 1.479 | 1.379 | 6.8 | 117 | 0.00 |
| 69 | PC | 4-Bromophenyl-phenylether | 0.420 | 0.415 | 1.2 | 124 | 0.00 |
| 70 | PC | Hexachlorobenzene | 0.413 | 0.412 | 0.2 | 127 | 0.00 |
| 71 | PC | Atrazine | 0.489 | 0.476 | 2.7 | 117 | 0.00 |
| 72 | MPC | Pentachlorophenol | 0.203 | 0.198 | 2.5 | 132 | 0.00 |
| 73 | PC | Phenanthrene | 2.500 | 2.401 | 4.0 | 118 | 0.00 |
| 74 | PC | Anthracene | 2.580 | 2.492 | 3.4 | 119 | 0.00 |
| 75 | PC | Carbazole | 2.493 | 2.390 | 4.1 | 115 | 0.00 |
| 76 | PC | Di-n-butylphthalate | 3.151 | 2.958 | 6.1 | 113 | 0.00 |
| 77 | PC | Fluoranthene | 2.754 | 2.651 | 3.7 | 120 | 0.00 |
| 78 | SPC | 4,6-Dinitro-2-methylphenol- | 0.315 | 0.301 | 4.4 | 125 | 0.00 |
| 79 | SPC | Anthracene-d10 | 2.468 | 2.419 | 2.0 | 120 | 0.00 |
| 80 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 81 | MPC | Pyrene | 2.912 | 2.739 | 5.9 | 120 | 0.00 |
| 82 | PC | Butylbenzylphthalate | 1.412 | 1.276 | 9.6 | 111 | 0.00 |
| 83 | PC | 3,3'-Dichlorobenzidine | 0.679 | 0.733 | -8.0 | 131 | 0.00 |
| 84 | PC | Benzo (a) anthracene | 2.464 | 2.333 | 5.3 | 118 | 0.00 |
| 85 | PC | Chrysene | 2.364 | 2.229 | 5.7 | 120 | 0.00 |
| 86 | PC | Bis(2-ethylhexyl)phthalate | 1.900 | 1.753 | 7.7 | 113 | 0.00 |
| 87 | SPC | Pyrene-d10 | 2.617 | 2.518 | 3.8 | 122 | 0.00 |
| 88 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 126 | 0.00 |
| 89 | PC | Di-n-octylphthalate | 3.758 | 3.399 | 9.6 | 112 | 0.00 |
| 90 | PC | Benzo (b) fluoranthene | 2.731 | 2.401 | 12.1 | 112 | 0.00 |
| 91 | PC | Benzo (k) fluoranthene | 2.705 | 2.699 | 0.2 | 130 | 0.00 |
| 92 | PC | Benzo (a) pyrene | 2.673 | 2.508 | 6.2 | 119 | 0.00 |
| 93 | PC | Indeno (1,2,3-cd) pyrene | 2.060 | 2.048 | 0.6 | 126 | 0.00 |
| 94 | PC | Dibenzo (a,h) anthracene | 2.137 | 2.095 | 2.0 | 127 | 0.00 |
| 95 | PC | Benzo (g,h,i) perylene | 2.237 | 2.170 | 3.0 | 122 | 0.00 |
| 96 | SPC | Benzo (a) pyrene-d12 | 2.284 | 2.251 | 1.4 | 125 | 0.00 |

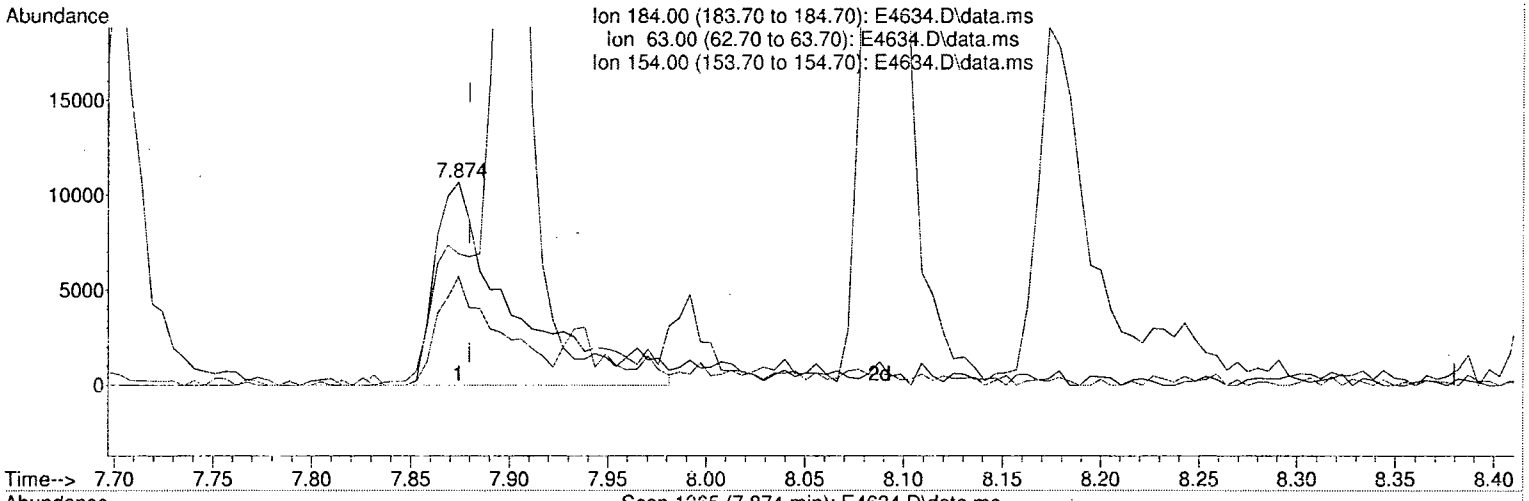
(#) = Out of Range SPCC's out = 0 CCC's out = 2

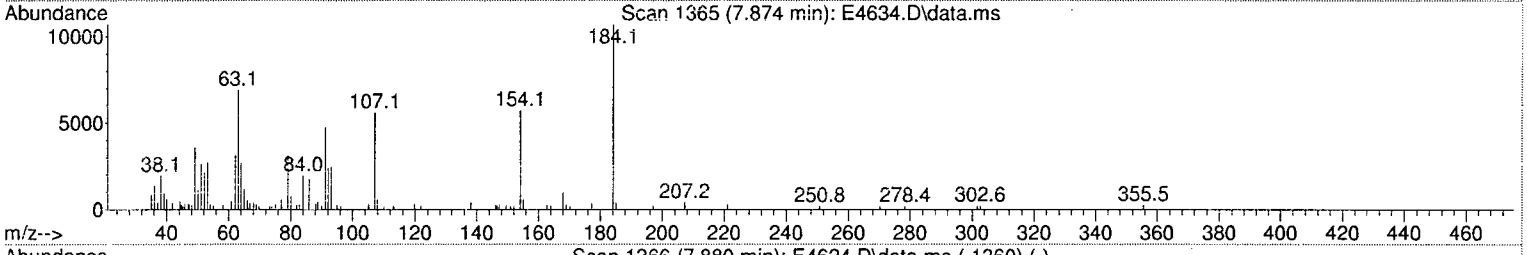
Quantitation Report (Qedit)

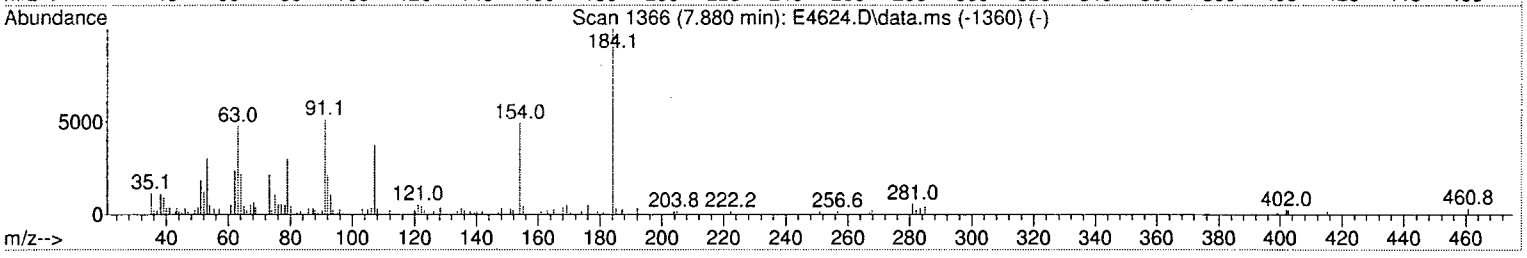
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.874min (-0.006) 14.04 ug/mL**

**response 29563**

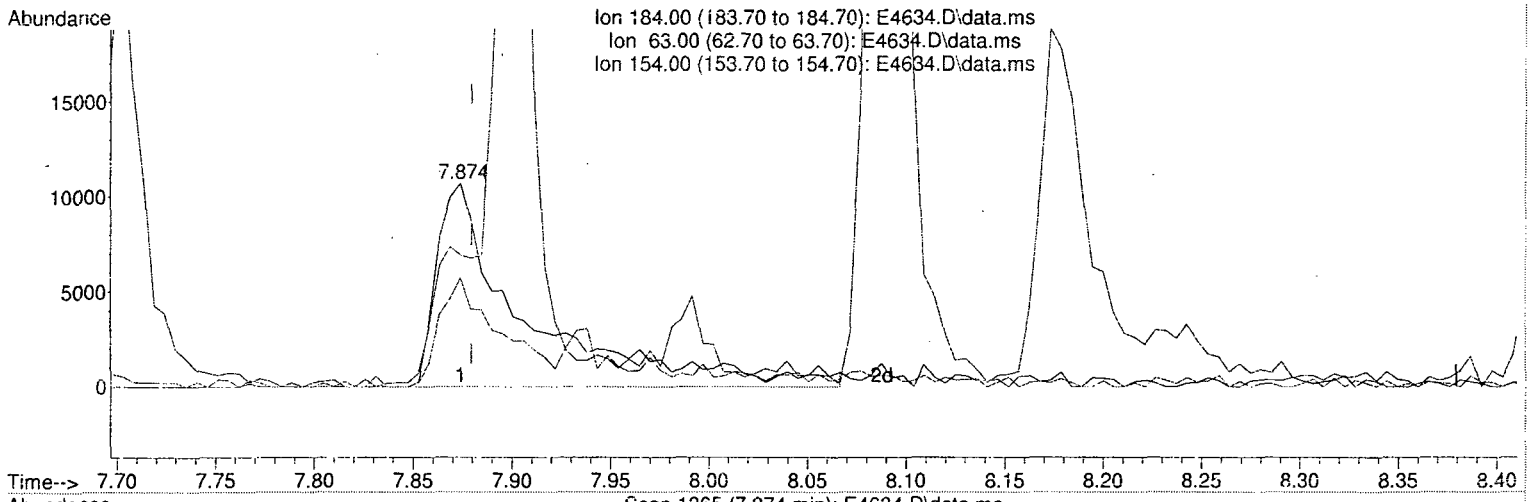
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 32.92# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

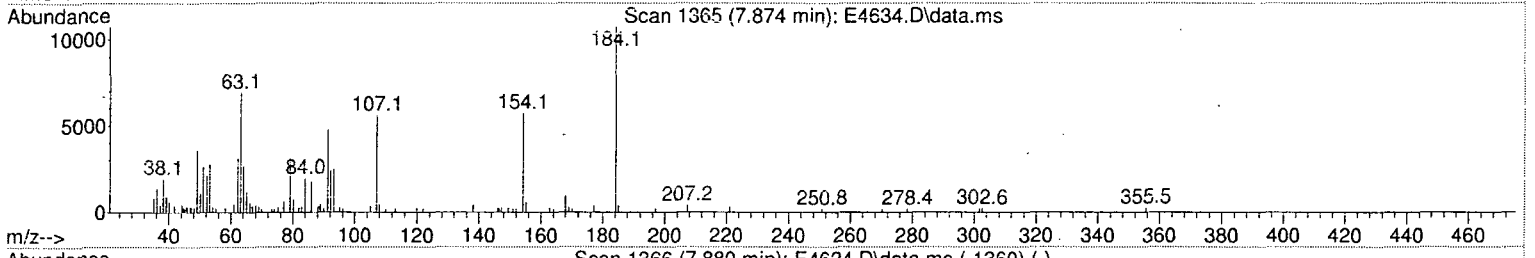
Quantitation Report (Qedit)

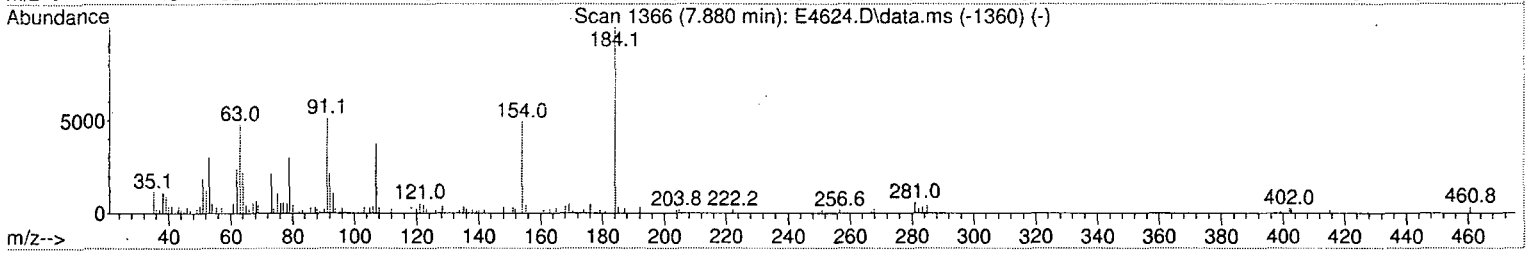
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(51) 2,4-Dinitrophenol (PC)**

**7.874min (-0.006) 15.89 ug/mL m** RS 5/24

**response 33467**

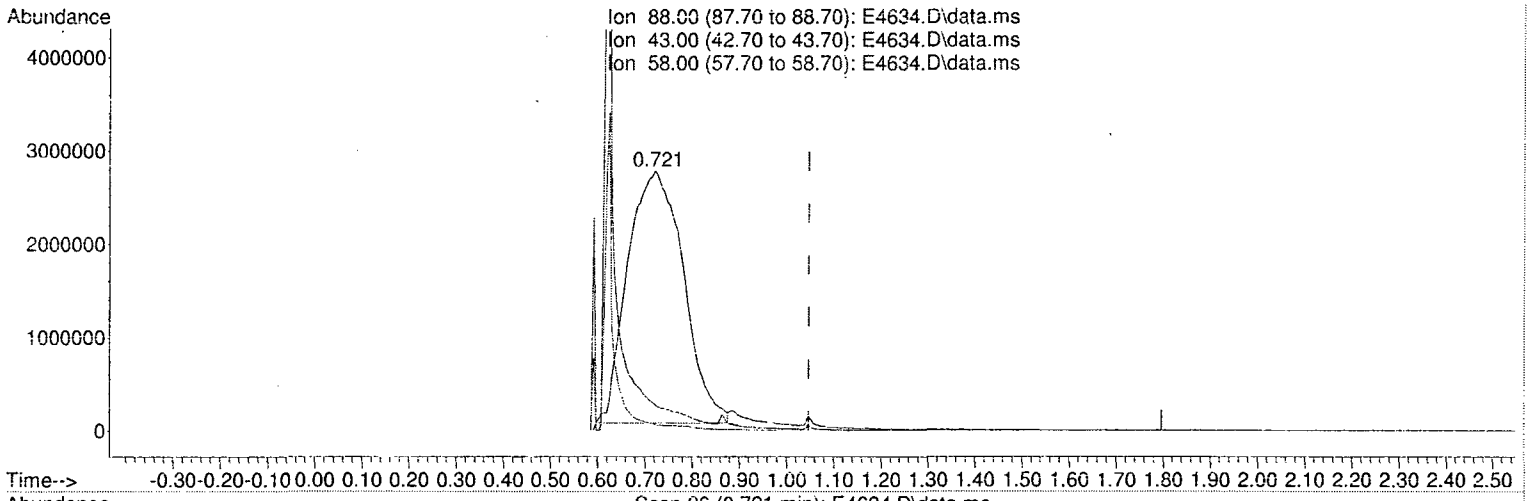
| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100.00 | 100.00 |
| 63.00 | 70.10 | 29.08# |
| 154.00 | 63.80 | 0.00# |
| 0.00 | 0.00 | 0.00 |

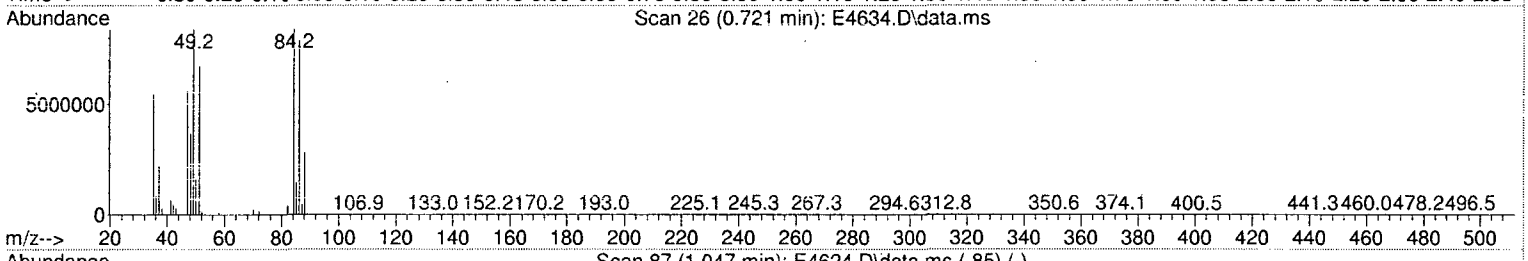
Quantitation Report (Qedit)

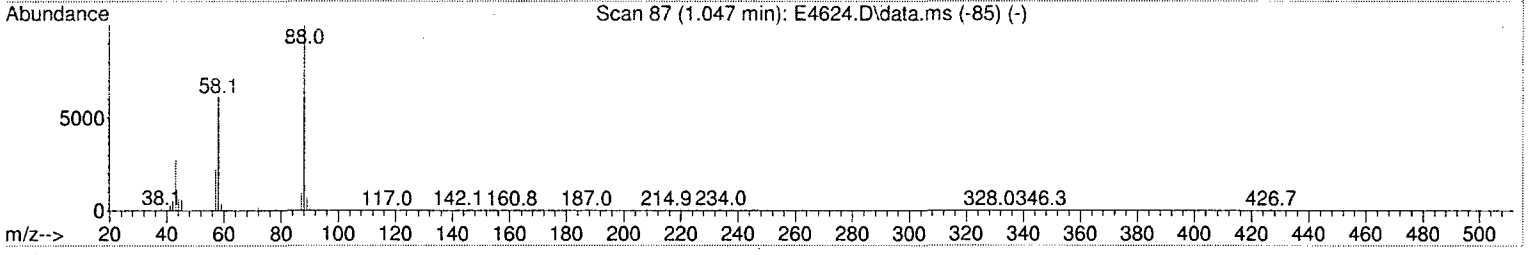
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(4) 1,4-Dioxane (PC)**

**0.721min (-0.326) 4149.66 ug/mL**

**response 22093593**

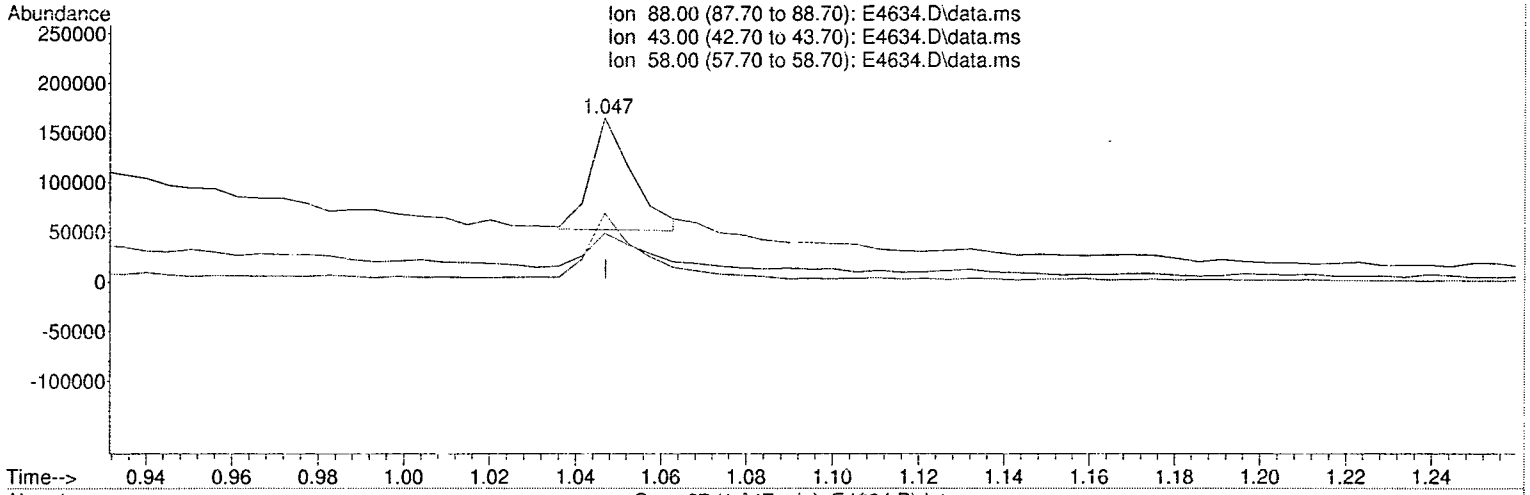
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

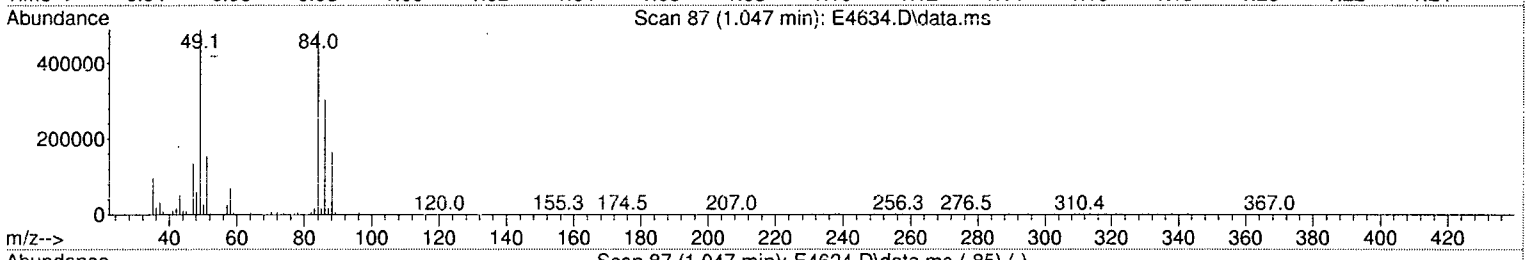
Quantitation Report (Qedit)

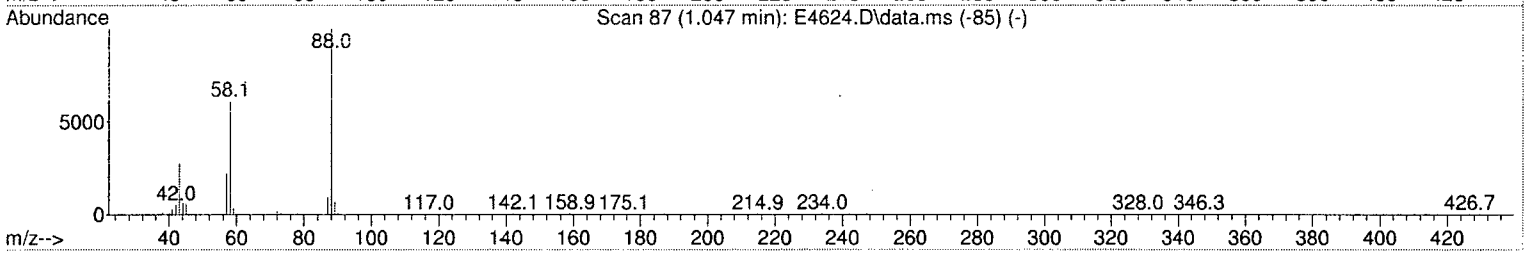
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(4) 1,4-Dioxane (PC)**

**1.047min (-0.000) 14.49 ug/mL m** RS 8/24

**response 77147**

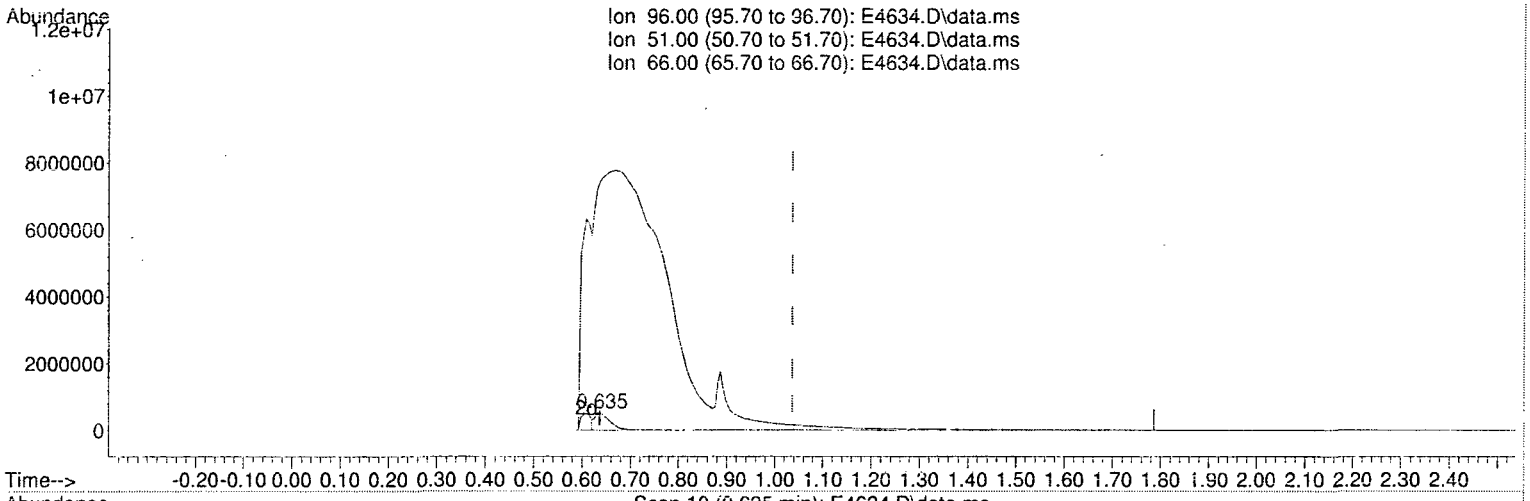
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100.00 | 100.00 |
| 43.00 | 23.00 | 0.00# |
| 58.00 | 46.00 | 0.00# |
| 0.00 | 0.00 | 0.00 |

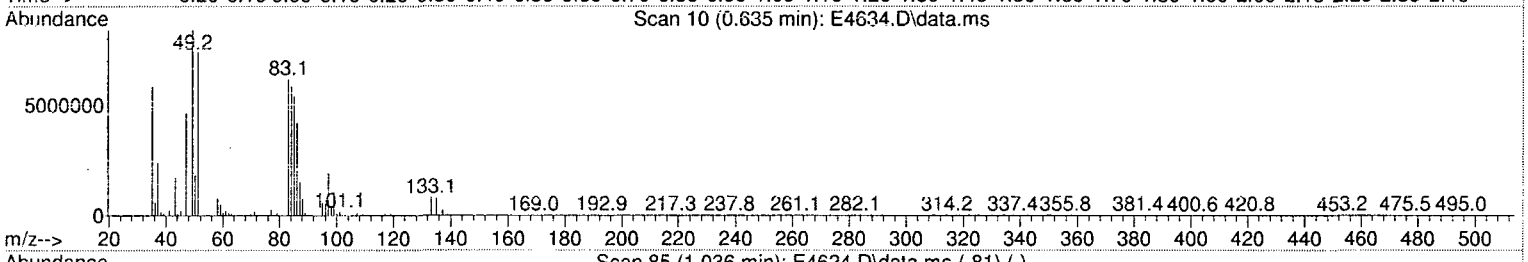
Quantitation Report (Qedit)

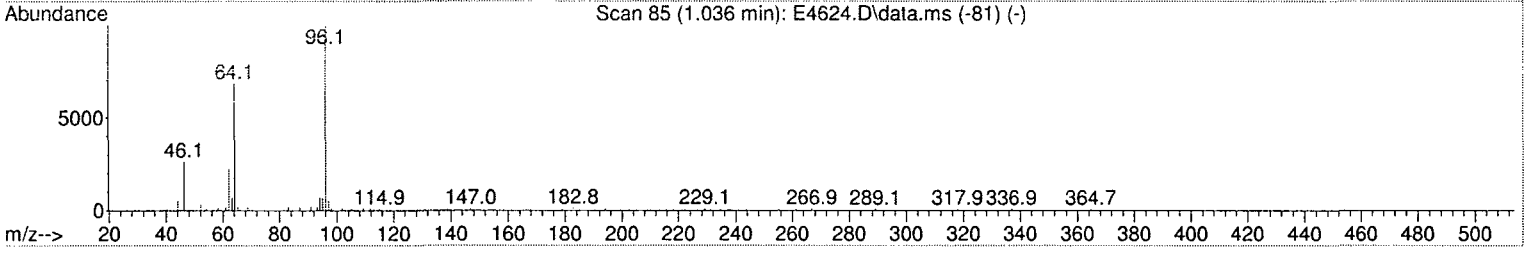
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

**(3) 1,4-Dioxane-d8 (SPC)**

**0.635min (-0.401) 1256.65 ug/mL**

**response 1173531**

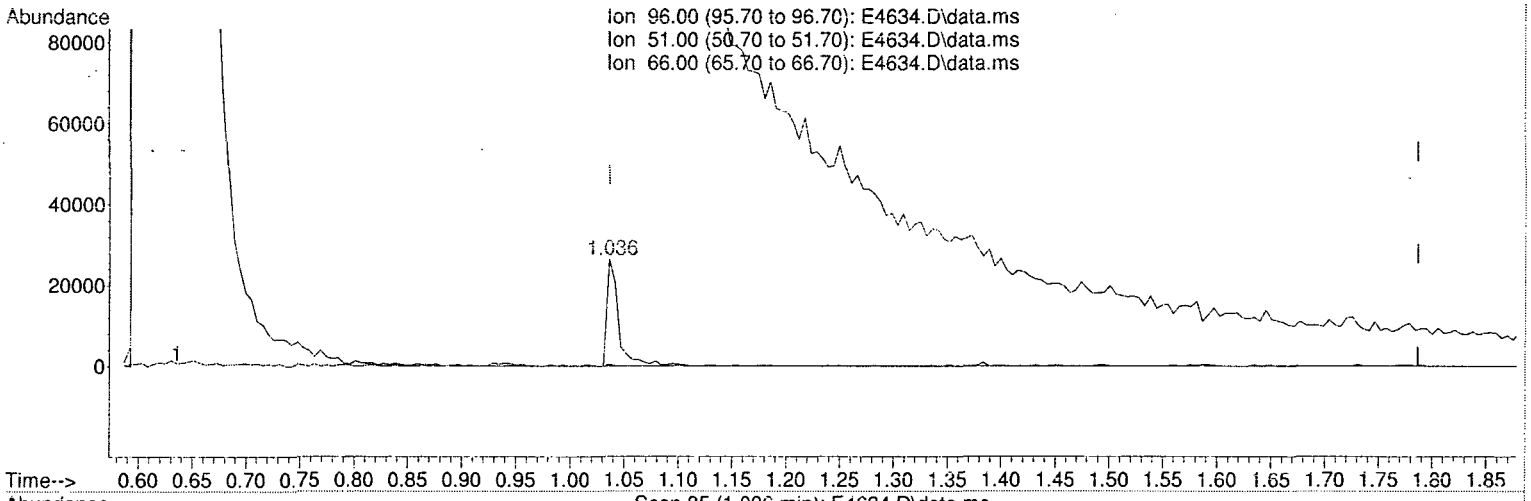
| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 0.13# |
| 0.00 | 0.00 | 0.00 |

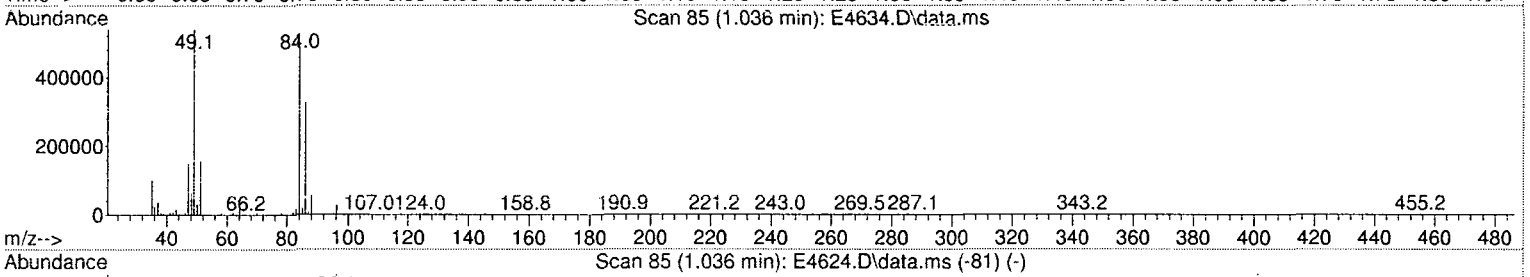
Quantitation Report (Qedit)

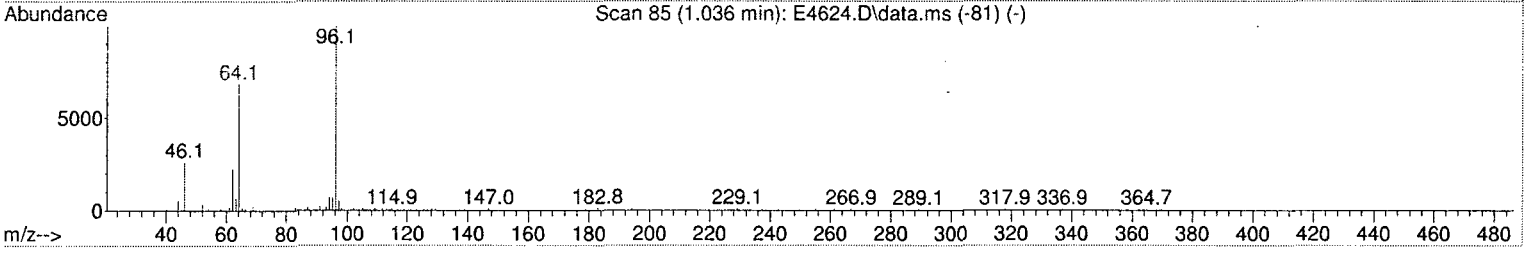
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

Vial: 12
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 24 17:32:08 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 14:27:00 2012
Response via : Initial Calibration




TIC: E4634.D\data.ms

(3) 1,4-Dioxane-d8 (SPC)

1.036min (-0.000) 20.84 ug/mL m RS

response 19457

| Ion | Exp% | Act% |
|---|---|---|
| 96.00 | 100.00 | 100.00 |
| 51.00 | 0.00 | 0.00 |
| 66.00 | 1.70 | 7.65# |
| 0.00 | 0.00 | 0.00 |

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-075-12 | **Analyst:** [illegible] |
| **Standard/Reagent Name:** CLP SOM01.2 STD-3. SCAN | |
| **Dilution Solvent Name:** Meoh | **Dilution Solvent ID #:** A204004 |
| **Prep Date:** 05/23/12 | **Total Vol. (ml):** 1.0 ml. |
| **Expiration Date:** 11/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| AY | 1,4 dio & 1,4 dioxane-d8 | — | 939-072-12 | 1000 | 20 | 20 |
| S | SCAN Stock Std | — | 939-070-12 | 1000 | 20 | 20 |
| Restek | SV Internal Std | 31206 | A106024 | 2000 | 10 | 20 |
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NOTES _____

REVIEWER: _____ DATE: 5/23/12

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

# BENCH SHEET - ORGANIC EXTRACTION

BATCH - 2050165

BATCH_2050165

SOM01.2 SVOA by Sonication Extraction(4SOP01-C)

Start Date: 05-22-12 Start Time: 10:00 End Date: 05-24-12 End Time: 15:30

Methy. Chloride ID: A204504
Hexane ID: N/A
Acetone ID: ↓
Sodium Sulfate ID: A811032
H2SO4 (1:1) ID: N/A

Surrogate Sol. ID: 939-061-12
LCS Sol. ID: N/A
Matrix Spike Sol. ID: ↓
Florisil Lot ID: ↓
NaOH ID:

Cleanup:
GPC ✓
Florisil N/A
Acid ↓
Sulfur ↓
Other ↓

Extracted Leader: CL
Extraction Assistants: NP
Spiked By: M.

| Lab Sample ID | Client Sample ID | Matrix | Initial pH | Adjusted pH | Sample Amount (g) | Solvent Added (mL) | Conc. Volume (mL) | Surr. Added (uL) | Spike Added (uL) | Vol for GPC (mL) | GPC Final Conc. Vol (mL) | Vol for Florisil (mL) | Florisil Final Conc. Vol (mL) | Analysis | Extraction Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0015977-01 | F5WB4 | Soil | 7.3 | N/A | 30.4 | 300 | 0.5 | 1000 | N/A | 10.0 | 0.5 | N/A | N/A | SCAN | |
| 0015977-02 | F5WB8 | Soil | 7.1 | ↓ | 30.1 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 0015977-03 | F5WB9 | Soil | 7.4 | | 30.4 | | | | | | | | | | |
| 0015977-04 | F5WC0 | Soil | 7.2 | | 30.2 | | | | | | | | | | |
| 0015977-05 | F5WC1 | Soil | 7.0 | | 30.0 | | | | | | | | | | |
| 0015977-06 | F5WC2 | Soil | 7.2 | | 30.3 | | | | | | | | | | |
| 0015977-07 | F5WC3 | Soil | 7.1 | | 30.0 | | | | | | | | | | |
| 2050165-BLK1 | SBLK6Q | Soil | 7.0 | | 30.0 | | | | | | | | | | |

Notes: Extracted by 05/28/12

RS 05/24/12 16:00
Received for Analysis by / Date&Time

RS 05/24/12 16:15
Reviewed by / Date&Time

00711

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Instrument Run Log – GC/MS Purgeables

Instrument ID: H-5975

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 03-Feb-2010 | VOA | FORM | 3FORM02-A | 940-12062011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N.A

BATCHES(S): 2050161 SEQUENCE: 2E21002 CALIBRATION: AE22102
ACQ. METHOD(s): VOA-C.M PROCESSING METHOD(S): SOSH3658.M
EMV: 1094 INTERNAL STD. ID: 929-110-12 SURROGATE STD. ID: 929-111-12
ANALYTICAL METHOD: LIM Soil SOP: 3SOP03B START DATE: 5/19/12

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | SAMPLE WT/VOL | DIL. | pH | STANDARDS ID & COMMENTS |
|---|---|---|---|---|---|---|
| H3656 | 2E21002-TUN1 | BFB 5D | 5.0NG | — | — | 929-105-12 |
| 57 | 222 | 222 | — | — | — | |
| 58 | 2E21002-CAL3 | VSTD025 5D | 5GM | — | — | 929-110 to 114-12 |
| 59 | —CAL5 | VSTD100 5D | | | | |
| 60 | —CAL4 | VSTD050 5D | | | | |
| 61 | —CAL2 | VSTD005 5D | | | | |
| 62 | —CAL1 | VSTD2.5 5D | | | | |
| 63 | 2050161-BLK1 | VBLK 5D | | | | |
| 64 | 001 5956-01 | F5WA4 | 5.88GM | | | |
| 65 | —02 | F5WA5 | 5.92 | | | x Tailed |
| 66 | —03 | A6 | 5.78 | | | |
| 67 | —04 | A7 | 5.84 | | | |
| 68 | —05 | A8 | 5.69 | | | |
| 69 | —06 | B0 | 5.72 | | | |
| 70 | 001 5968-01 | A0 | 5.68 | | | |
| 71 | —02 | A1 | 5.82 | | | |
| 72 | —03 | A2 | 5.85 | | | |
| 73 | —04 | A3 | 5.72 | | | |
| 74 | —05 | A9 | 5.86 | | | |
| 75 | —06 | B1 | 5.67 | | | |
| 76 | —07 | B2 | 5.83 | | | |

NOTES:

ANALYST/DATE: 5/19/12 REVIEWER/DATE: 5-19-12



00712

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Purgeables**<br>Instrument ID: H-5975 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | VOA | FORM | 3FORM02-A | 940-12062011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N.A

BATCHES(S): 2050161 SEQUENCE: 2E21002 CALIBRATION: AE22102
ACQ. METHOD(s): VOAC-M PROCESSING METHOD(S): SOSH 3658.M
EMV: 1694 INTERNAL STD. ID: 929-110-12 SURROGATE STD. ID: 929-111-12
ANALYTICAL METHOD: L/M Soil SOP: 3Sop03B START DATE: 5/19/12

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | SAMPLE WT/VOL | DIL. | pH | STANDARDS ID & COMMENTS |
|---|---|---|---|---|---|---|
| H3677 | 2E21002-CCV1 | VSTD025SE | 5GM | — | — | 929-110to114-12 |

5/19/12

NOTES:

ANALYST/DATE: 5/19/12 REVIEWER/DATE: 5-19-22

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Instrument Run Log – GC/MS Purgeables

Instrument ID: H-5975

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 03-Feb-2010 | VOA | FORM | 3FORM02-A | 940-12062011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N.A

BATCHES(S): 2050163 SEQUENCE: 2E21006 CALIBRATION: AE22102
ACQ. METHOD(s): VOAc-M PROCESSING METHOD(S): SOSH3679.M
EMV: 1094 INTERNAL STD. ID: 929-110-12 SURROGATE STD. ID: 929-111-12
ANALYTICAL METHOD: LIMS01 SOP: 3SOP03B START DATE: 5/21/12

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | SAMPLE WT/VOL | DIL. | pH | STANDARDS ID & COMMENTS |
|---|---|---|---|---|---|---|
| H3678 | 2E21006-TW1 | BFB5F | 50NG | — | — | 929-105-12 |
| 79 | ↓ -CCV1 | VSTD025 5F | 5GM | — | — | 929-110 to 114-12 |
| 80 | 2050163-BLK1 | VBLK5F | ↓ | — | — | |
| 81 | 0015956-02 | FSWA5 | 5.87 | | | 5/22/12 |
| 82 | 0015968-08 | FSWB3 | 5.66 | | | |
| 83 | -09 | B6 | 5.94 | | | *DMC failed |
| 84 | -10 | B7 | 5.78 | | | * |
| 85 | 0015977-01 | B4 | 6.12 | | | |
| 86 | -02 | B8 | 6.22 | | | |
| 87 | -03 | B9 | 6.18 | | | |
| 88 | -04 | C0 | 6.24 | | | * |
| 89 | -05 | C1 | 6.31 | | | |
| 90 | -06 | C2 | 6.19 | | | |
| 91 | -07 | C3 | 6.29 | | | 5/22/12 |
| 92 | -04 | C0 | 6.13 | | | |
| 93 | 0015968-~~10~~09 | ~~A3~~ B6 | 5.86 | | | |
| 94 | 0015956-07 | VHBLKQS | 5.00 | | | |
| 95 | 0015977-08 | VHBLKQW | 5.00 | | | |
| 96 | 2E21006-CCV2 | VSTD025 5G | 5.00 | | | 929-110 to 114-12 |
| | | | 5/22/12 | | | |

NOTES:

ANALYST/DATE: 5/22/12 REVIEWER/DATE: 5-22-12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Instrument Run Log – GC/MS Extractables<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): Changed Cold stat, Trimmed Column, Changed line

BATCHES(S): 2050149 SEQUENCE: 2E23005 CALIBRATION:

ACQ. METHOD(s): CUALQ PROCESSING METHOD(S): Som E4605.M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/23/12

ANALYTICAL METHOD: Som 01.2 (SCAN + 1564.M) SOP: 4SOP02-B

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4601 | 2E23005-TUN1 | DFTPP9N | 1x | 939-022-12 |
| 02 | -CAL1 | SSTD0059N | | Rerun level 1 & 5 |
| 03 | -CAL5 | 0309N | | Changing Solvent Delay |
| 04 | -CAL4 | 0409N | | 939-076-12 |
| 05 | -CAL3 | 0209N | | -075-12 |
| 06 | -CAL2 | 0109N | | -074-12 |
| 07 | -CAL5 | 0809N | | -077-12 |
| 08 | -CAL1 | 0059N | | -073-12 |
| 09 | 22222 | 22222 | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | GPCB | GPCB | | |
| 16 | 2E23005-CW1 | SSTD0290 | | |
| 17 | | | | |
| 18 | | | | 939-045-12 |
| 19 | 0015929-01 | F5MPO | 10x | |
| 20 | -02 | P1 | 20x | |
| 21 | -03 | P2 | 10x | |

NOTES: N/A

ANALYST/DATE: 05/29/12 REVIEWER/DATE: 5/25/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Instrument Run Log – GC/MS Extractables<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050147 SEQUENCE: 2E23005 CALIBRATION:
ACQ. METHOD(s): CLP ALG PROCESSING METHOD(S): SOM E 4 618 M
EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/22/12
ANALYTICAL METHOD: SOM01.2 (SCAN 1564-K) SOP: 4JSOP02-B.

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4622 | 0015929-04 | F5MP3 | 10x | |
| 23 | -17 | Q4 | 10x | |
| 24 | 2E23005-CW2 | STD020QP | 1x | 939-075-12 |
| 25 | 2050149-BLK1 | SBLK 60 | | |
| 26 | 0015969-03 | X0T51 | | |
| 27 | 0015970-02 | 56 | | |
| 28 | 2050147-BLK1 | SBLK6MG | | |
| 29 | 0015929-01RE1 | F5MP0DL | 50x | |
| 30 | -04RE1 | P3DL | 20x | |
| 31 | -17RE1 | Q4DL | 50x | |
| 32 | 2050147-BLK1 | SBLK6M. | 1x | |
| 33 | GPCB052212012 | GPCB052212012 | | |
| 34 | 2E23005-CW3 | STD020QQ | | 939-075-12 |
| 35 | 2050147-BLK1 | SBLK6K | 1x | |
| 36 | 0015957-01 | F5WC4 | | |
| 37 | -02 | C5 | | |
| 38 | -03 | C6 | | |
| 39 | 2050146-BLK1 | SBLK6L | | |
| 40 | 0015971-02 | BAIT1 | | * IST |
| 41 | 0015978-01 | BAIT2 | | * IS NOT SPIKED ACCIDENT |
| 42 | 2060165-BLK1 | SBLK6Q | | |

NOTES: N/A

ANALYST/DATE: 05/24/12 REVIEWER/DATE: 5/25/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050139 SEQUENCE: 2E23005 CALIBRATION:

ACQ. METHOD(s): CLPALQ PROCESSING METHOD(S): SOME4634.M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/23/12

ANALYTICAL METHOD: SOM01.2 SOP: 45OP02-B

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4643 | 2220015977-01 | FSWB4 | 1x | ✗ IS ↓ |
| 44 | 0015977-02 | B8 | 1x | ✓ |
| 45 | 0015977-03 | B9 | 10x | ✗ RE 1x |
| 46 | ↓ -05 | C1 | 1x | ✗ IS DRIED UP AT NIGHT |
| 47 | -06 | C2 | | ✓ |
| 48 | 0015968-06 | B1 | | ✓ |
| 49 | 0015968-01 | WA4 | | ✓ |
| 50 | 0015968-03 | WA2 | | ✓ |
| 51 | 2050139-BLK1 | SBLKT | | ✓ |
| 52 | 2E23005-CW4 | SSTDRQPR | | ✗ |
| 53 | ↓ | ↓ | | ✓ 939-075-12 |

05/25/12

NOTES: N/A

ANALYST/DATE: 05/25/12 REVIEWER/DATE: 5/25/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A.

BATCHES(S): 2050211 SEQUENCE: 2E2500R CALIBRATION: AE229R
ACQ. METHOD(s): CLPA1R PROCESSING METHOD(S): Som E4655.m.
EMV: 1553- INTERNAL STD. ID: 939-084-12 START DATE: 05/25/12
ANALYTICAL METHOD: Som 01.2 SOP: 4SOP02-A.

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4654 | 2E25002-TUN1 | DFTPP9S | 1x ✓ | 939-022-12 |
| 55 | -CAL3 | SSTD0209S | ✓ | 1-075-12 |
| 56 | -CAL2 | 0109S | ✓ | -074-12 |
| 57 | -CAL4 | 0409S | ✓ | -076-12 |
| 58 | -CAL5 | 0809S | ✓ | -077-12 |
| 59 | -CAL1 | 0059S | ✓ | -073-12 |
| 60 | 22222 | 22222 | ✗ | Instrument Error. |
| 61 | ↓ | ↓ | ✗ | ↓ |
| 62 | 0016002-02 | H3201 | ✓ | |
| 63 | -03 | 2 | ✓ | |
| 64 | -04 | 3 | ✓ | |
| 65 | -05 | 4 | ✓ | |
| 66 | -06 | 5 | ✓ | |
| 67 | 2D50211-MS1 | H3205MS | ✓ | |
| 68 | -MSD1 | MSD | ✓ | |
| 69 | 0016002-07 | H3206 | ✓ | |
| 70 | 2050211-RL1 | SRL6V | ✓ | |
| 71 | -CCV1 | SITD0209T | ✓ | 939-075-12 |
| 72 | 0016002-08 | H3207 | ✓ | |
| 73 | -09 | 08 | ✗ | RL1S ✓ |
| 74 | -10 | 09 | ✓ | |

NOTES: N/A

ANALYST/DATE: 05/25/12 REVIEWER/DATE: 05/26/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050211 SEQUENCE: 2E25002 CALIBRATION: AE22902

ACQ. METHOD(s): CCPACQ PROCESSING METHOD(S): SOME4671.M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/25/12

ANALYTICAL METHOD: SOM01.2 (SCAN415 64.m) SOP: 4SOP02-B

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4674 | 0016002-10 | H3209 | 1x | ✓ |
| 75 | ↓ -11 | ↓ 10 | 5x | ✓ |
| 76 | GPCB | GPCB | 1x | ✓ |
| 77 | 2E25002-CW2 | SSTD0209V | 1x | ✗ |
| 78 | 0016002-12 | H3211 | | ✓ |
| 79 | -13 | 12 | | ✓ |
| 80 | -09 | 08 | | ✓ |
| 81 | -14 | 13 | | ✓ |
| 82 | -01 | 00 | | ✓ |
| 83 | 2E25002-CW2 | SSTD0209V | | ✗ |
| 84 | ↓ | ↓ | | ✗ |
| 85 | ↓ | ↓ | | ✓ 939-075-12 |
| 86 | 0015977-01 | F5WB4 | | ✓ |
| 87 | -03 | B9 | | ✓ |
| 88 | -04 | C0 | | ✓ |
| 89 | -05 | C1 | | ✓ |
| 90 | -07 | C3 | | ✓ |
| 91 | -BLK | BLK | | ✓ |
| 92 | BLK | BLK | | ✓ |
| 93 | 2E25002-CW3 | SSTD0209V | | ✗ |
| 94 | ↓ | ↓ | | ✗ |

NOTES: N/A

ANALYST/DATE: 05/27/12 REVIEWER/DATE: 05/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | **Instrument Run Log – GC/MS Extractables**<br>Instrument ID: E-5973 | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 03-Feb-2010 | SVOA | FORM | 4FORM02-A | 928-07132011 |

ROUTINE MAINTENANCE (record major maintenance in the Maintenance Logbook): N/A

BATCHES(S): 2050211 SEQUENCE: 2E25002 CALIBRATION: AE22902

ACQ. METHOD(s): CLPALQ PROCESSING METHOD(S): SOM E4685.M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/25/12

ANALYTICAL METHOD: SOM 01.2 (SCAN+1564.M) SOP: 4S0P02-B.

| FILE ID | LAB SAMPLE ID | CLIENT SAMPLE ID | DIL. | STANDARDS ID & COMMENTS |
|---|---|---|---|---|
| E4695 | 2E25002-CW3 | SSTD0009V | 1x | X |
| ↓ 96 | ↓ | ↓ | ↓ | 939-085-12. |
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NOTES: N/A

ANALYST/DATE: 05/27/12 REVIEWER/DATE: CRS 05/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | |
|---|---|
| Standard/Reagent ID: 929-105-12 | Analyst: SP |
| Standard/Reagent Name: BFB Tuning Compound | |
| Dilution Solvent Name: MeOH | Dilution Solvent ID #: A202045 |
| Prep Date: 03/27/12 | Total Vol. (ml): 1ml |
| Expiration Date: 07/26/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Restek | VOA tuning compound | 30003 | A005017 | 5000 | 10 | 50 |
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03/27/12

NOTES

REVIEWER: [signature] DATE: 3/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | |
|---|---|
| **Standard/Reagent ID:** 929-110-12 | **Analyst:** SP |
| **Standard/Reagent Name:** 04/23/12 (L/M) Internal Standard | |
| **Dilution Solvent Name:** MeOH | **Dilution Solvent ID #:** A202045 |
| **Prep Date:** 04/23/12 | **Total Vol. (ml):** 1ml |
| **Expiration Date:** 05/23/12 04/23/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Restek | L/C VOA Internal Standard mix | 30091 | A202037 | 2500 | 10 | 25 |
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SP 04/23/12

NOTES

REVIEWER: [signature] DATE: 04/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | | | |
|---|---|---|---|
| Standard/Reagent ID: | 929-111-12 | Analyst: | SP |
| Standard/Reagent Name: | (4M) DMC-I | | |
| Dilution Solvent Name: | MeOH | Dilution Solvent ID #: | A202045 |
| Prep Date: | 04/23/12 | Total Vol. (ml): | 1ml |
| Expiration Date: | 05/24/12 / 04/22/12 | | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Absolute Standards | CLP DMC liquids | 94155 | A202005 | 2000 | 12.5 | 25 |
| ↓ | CLP DMC Gases | 94156 | A202006 | 2000 | 12.5 | 25 |
| Cambridge | 2-Hexanone-d5 | 1249 | 860-26-10 | 50,000 | 1 | 50 |
| ↓ | 2-Butanone-d5 | CS-124 | 860-26-10 | 50,000 | 1 | 50 |

04/23/12

NOTES

REVIEWER: [signature] DATE: 04/27/12



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00523

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | |
|---|---|
| **Standard/Reagent ID:** 929-112-12 | **Analyst:** SP |
| **Standard/Reagent Name:** (LM) STD-I | |
| **Dilution Solvent Name:** MeOH | **Dilution Solvent ID #:** A202045 |
| **Prep Date:** 04/23/12 | **Total Vol. (ml):** 1ml |
| **Expiration Date:** 05/23/12 } 04/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Restek | VOA Calibration mix #1 | 30006 | A109037 | 5000 | 10 | 50 |
| | 502.2 Calibration mix #1 | 30042 | A109038 | 2000 | 12.5 | 25 |
| | 624.2 VOA mega mix | 30492 | A109035 | 2000 | 12.5 | 25 |

04/23/12

NOTES

REVIEWER: [illegible] DATE: 04/27/12



724

00388

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | |
|---|---|
| Standard/Reagent ID: 929-113-12 | Analyst: SP |
| Standard/Reagent Name: (L/M) DMC-II | |
| Dilution Solvent Name: MeOH | Dilution Solvent ID #: A202045 |
| Prep Date: 04/23/12 } SP | Total Vol. (ml): 1ml |
| Expiration Date: 05/23/12 } 04/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| CIL | 1,4-Dioxane-d8 | DLM-285 | 880-127-11 | 50,000 | 10 | 500 |
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SP 04/22/12

NOTES

REVIEWER: [signature] DATE: 04/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: VOA | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 929-08152011 |

| | |
|---|---|
| **Standard/Reagent ID:** 929-114-12 | **Analyst:** SP |
| **Standard/Reagent Name:** (4M) STD-II | |
| **Dilution Solvent Name:** MeOH | **Dilution Solvent ID #:** A202045 |
| **Prep Date:** 04/22/12 | **Total Vol. (ml):** 1ml |
| **Expiration Date:** 05/22/12 / 04/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Accu standard | 1,4-Dioxane | M-8015B/ 503.1-10 | A111042 | 10,000 | 50 | 500 |
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NOTES

REVIEWER: [illegible] DATE: 04/27/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-022-12 | **Analyst:** [illegible] |
| **Standard/Reagent Name:** SVOA GCMS TUNE STD | |
| **Dilution Solvent Name:** Meoh | **Dilution Solvent ID #:** A10 3119 |
| **Prep Date:** 03/26/12 | **Total Vol. (ml):** 2ml. |
| **Expiration Date:** 09/25/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| Restek | GCMS Tuning | 31615 | A008041 | 1000 | 400 | 50 |
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NOTES

REVIEWER: [illegible] DATE: 3/26/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS . | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | | | |
|---|---|---|---|
| Standard/Reagent ID: | 939-073-12 | Analyst: | R. |
| Standard/Reagent Name: | CLP SOM 01.2 SCAN STD-1 | | |
| Dilution Solvent Name: | Meoh | Dilution Solvent ID #: | A204004 |
| Prep Date: | 05/23/12 | Total Vol. (ml): | 0.5 ml. |
| Expiration Date: | 11/22/12 | | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| AY | 1,4 d 8+1,4 Dioxane std | – | 939-072-12 | 1000 | 1 | 2 |
| ↓ | SCANSTOK STD | – | 939-070-12 | 100 | 25 | 5 |
| Restek | SV Internal std | 31206 | A106024 | 2000 | 5 | 20 |
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RR 05/23/12

NOTES

REVIEWER: R DATE: 5/23/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-074-12 | **Analyst:** R. |
| **Standard/Reagent Name:** CLP SOM 01-2 STD-2 SCAN | |
| **Dilution Solvent Name:** Meth | **Dilution Solvent ID #:** A204004 |
| **Prep Date:** 05/23/12 | **Total Vol. (ml):** 0.5ml. |
| **Expiration Date:** 11/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| A4 | 1,4 d/8-+1,4dioxane std | – | 939-072-12 | 1000 | 2 | 4 |
| ↓ | SCAN stock std. | – | 939-070-12 | 100 | 50 | 10 |
| Restek | SV Internal Std. | 31206 | A106024 | 2000 | 5 | 20 |
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NOTES N/A

REVIEWER: [signature] DATE: 5/23/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS . | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-075-12 | **Analyst:** [illegible] |
| **Standard/Reagent Name:** CLP SOM01.2 STD-3. SCAN | |
| **Dilution Solvent Name:** Meck | **Dilution Solvent ID #:** A204004 |
| **Prep Date:** 05/23/12 | **Total Vol. (ml):** 1.0 ml. |
| **Expiration Date:** 11/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| AY | 1,4 dB+ 1,4 dioxane std | — | 939-072-12 | 1000 | 20 | 20 |
| L | SCAN Stock Std | — | 939-070-12 | 1250 | 20 | 20 |
| Restek | SV Internal Std | 31206 | A106024 | 2000 | 10 | 20 |
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NOTES N/A

REVIEWER: [illegible] DATE: 5/23/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-076-12 | **Analyst:** Rs. |
| **Standard/Reagent Name:** Cal SOM 0.1.2 SCAN STD-4 | |
| **Dilution Solvent Name:** Mech | **Dilution Solvent ID #:** A204004 |
| **Prep Date:** 05/23/12 | **Total Vol. (ml):** 0.5 |
| **Expiration Date:** 11/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| A4 | 1,4 d8 + 1,4 dioxane std | – | 939-072-12 | 1000 | 20 | 40 |
| ↓ | SCAN Stock std | – | 939-070-12 | 100 | 200 | 40 |
| Restek | SV Internal Std | 31204 | A106024 | 2000 | 5 | 20 |

Rs 05/23/12

NOTES N/A

REVIEWER: [signature] DATE: 5/23/12

| A4 Scientific<br>1544 Sawdust Road, Suite 505<br>The Woodlands, TX 77380<br>281-292-5277 | Standard/Reagent Preparation Logbook<br>Department: ORGANICS | | | |
|---|---|---|---|---|
| Effective | Area | Type | Number-Version | RCN |
| 3-Mar-2009 | QA | FORM | 6FORM15-A | 939-12062011 |

| | |
|---|---|
| **Standard/Reagent ID:** 939-077-12 | **Analyst:** Pr. |
| **Standard/Reagent Name:** CLP SOM01.2 SCAN STD-5 | |
| **Dilution Solvent Name:** Meth | **Dilution Solvent ID #:** A204004 |
| **Prep Date:** 05/23/12 | **Total Vol. (ml):** 0.5 |
| **Expiration Date:** 11/22/12 | |

| Manufacturer | Standard Name | Mfg. Cat # | Lab ID | Initial Conc. (mg/L or µg/L) | Aliquot (mL or µL) | Final Conc. (mg/L or µg/L) |
|---|---|---|---|---|---|---|
| A4 | 1,4,018+1,4 diane Std. | – | 939-072-12 | 1000 | 40 | 80 |
| ↓ | SCAN Stock Std. | – | 939-070-12 | 100 | 400 | 80 |
| Restek | SV Internal Std | 31200 | A106024 | 2000 | 5 | 20 |
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Pr 05/23/12

NOTES n/a

REVIEWER: [signature] DATE: 5/23/12

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

# BENCH SHEET - PERCENT SOLIDS

BATCH - 2050152

BATCH_2050152

Percent Solids [5SOP03-B] - ASTMD2216-92 / SM2540G / ISM01.2 / SOM01.2 / OTHER _____

OVEN ID: A THERMOMETER ID: SPER-1

DATE IN: 05-21-12 TIME IN: 16:00 TEMP IN: 104° ANALYST: RD
DATE OUT (1): 05-22-12 TIME OUT(1): 9:00 TEMP OUT(1): 104° ANALYST: RD
DATE OUT (2): — TIME OUT(2): — TEMP OUT(2): — ANALYST: —
DATE OUT (3): — TIME OUT(3): — TEMP OUT(3): — ANALYST: —

| Lab Sample ID | Client Sample ID | Pan # | Pan Weight (g) | Pan + Wet Sample (g) | (1) Pan+Dry Sample (g) | (2) Pan+Dry Sample (g) | (3) Pan+Dry Sample (g) | Comments |
|---|---|---|---|---|---|---|---|---|
| 0015977-01 | F5WB4 | 326 | 1.858 | 8.688 | 7.226 | NA | NA | |
| 0015977-02 | F5WB8 | 319 | 1.827 | 8.236 | 6.591 | | | |
| 0015977-03 | F5WB9 | 318 | 1.820 | 8.336 | 6.596 | | | |
| 0015977-04 | F5WC0 | 329 | 1.800 | 8.106 | 7.168 | | | RD 05/22/12 |
| 0015977-05 | F5WC1 | 08 | 1.851 | 8.253 | 6.894 | | | |
| 0015977-06 | F5WC2 | 01 | 1.866 | 8.104 | 6.704 | | | |
| 0015977-07 | F5WC3 | 07 | 1.831 | 8.108 | 6.794 | | | |
| 2050152-BLK1 | PMBLK10 | 527 | 1.822 | 1.823 | 1.823 | | | |
| 2050152-DUP1 | F5WB4D | 320 | 1.843 | 8.013 | 6.727 | | | 0015977-01 |

Notes: _____

05-22-2012 11:00
Reviewed by / Date&Time

See LIMS report for the Percent Solids results.

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

# RESULTS - PERCENT SOLIDS

BATCH - 2050152

BATCH_2050152

| *Lab Sample ID* | *Client Sample ID* | *Percent Solids* | *Percent Moisture* | *RPD* | *Analyzed* | *Comments* |
|---|---|---|---|---|---|---|
| 0015977-01 | F5WB4 | 78.59 | 21.41 | | 05/21/2012 | |
| 0015977-02 | F5WB8 | 74.33 | 25.67 | | 05/21/2012 | |
| 0015977-03 | F5WB9 | 73.30 | 26.70 | | 05/21/2012 | |
| 0015977-04 | F5WC0 | 85.13 | 14.87 | | 05/21/2012 | |
| 0015977-05 | F5WC1 | 78.77 | 21.23 | | 05/21/2012 | |
| 0015977-06 | F5WC2 | 77.56 | 22.44 | | 05/21/2012 | |
| 0015977-07 | F5WC3 | 79.07 | 20.93 | | 05/21/2012 | |
| 2050152-BLK1 | Blank | 100.00 | 0.00 | | 05/21/2012 | |
| 2050152-DUP1 | Duplicate | 79.16 | 20.84 | 0.7 | 05/21/2012 | 0015977-01 |

00735

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8987 3538 6568

0007 A4 #1

Form ID No. 0200 **Recipient's Copy**

**1 From**

Date 5/17/12 [redacted]

Sender's Name Craig Wat[redacted] Phone 512 731-2[redacted]

Company TCEQ

Address 12100 Park 35 Circle MC-136

Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

**2 Your Internal Billing Reference** 12-10479/4441/70635

**3 To**

Recipient's Name Laxmi Teerupalli Phone

Company

J[redacted]ze Phone: 281-292-5277

Address A4
We cannot deliver

1544 Sawdust Road, Suite 505

Address The Woodlands, TX 77380
Use this line for th

City State ZIP

HOLD Weekday
FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. ***Available ONLY for*** FedEx Priority Overnight and FedEx 2Day to select locations.

8987 3538 6568

05/18/12 10:20

**4 Express Package Service** * To most locations.

**NOTE: Service order has changed. Please select carefully.**

***Packages up to 150 lbs.***
*For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

**Next Business Day**

- [ ] FedEx First Overnight — *Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.*
- [x] FedEx Priority Overnight — *Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.*
- [ ] FedEx Standard Overnight — *Next business afternoon.* Saturday Delivery NOT available.*

**2 or 3 Business Days**

- [ ] **NEW** FedEx 2Day A.M. — *Second business morning.* Saturday Delivery NOT available.*
- [ ] FedEx 2Day — *Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.*
- [ ] FedEx Express Saver — *Third business day.* Saturday Delivery NOT available.*

**5 Packaging** * Declared value limit $500.

- [ ] *FedEx Envelope**
- [ ] *FedEx Pak**
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

**6 Special Handling and Delivery Signature Options**

- [ ] SATURDAY Delivery — **NOT available for** FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. ***Fee applies.***
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. ***Fee applies.***

**Does this shipment contain dangerous goods?**

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

**7 Payment** *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages 1 Total Weight 46 lbs. Total Declared Value† $ 0 .00 Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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fedex.com 1.800.GoFedEx 1.800.463.3339

159777-A

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8987 3538 6579

0009 A4 #2

Form ID No. 0200 **Recipient's Copy**

**1 From**

Date 5/17/12 [redacted]

Sender's Name Craig Watts Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle MC-136 Dept/Floor/Suite/Room

City Austin State TX ZIP 78753

**2 Your Internal Billing Reference** 12-10479/4441/70635

**3 To**

Recipient's Name Laxmi Teerupalli Phone

Company J[redacted]ze Phone: 281-292-5277

Address A4
We cannot de 1544 Sawdust Road, Suite 505 r/Suite/Room
The Woodlands, TX 77380

Address
Use this line fo

City State ZIP

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

L

8987 3538 6579

ATV 02.01 21/81/50

**4 Express Package Service** * To most locations.

NOTE: Service order has changed. Please select carefully.

*Packages up to 150 lbs.*
*For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

**Next Business Day**

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

**2 or 3 Business Days**

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

**5 Packaging** * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

**6 Special Handling and Delivery Signature Options**

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

**Does this shipment contain dangerous goods?**

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 _____ x _____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

**7 Payment** *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

| Total Packages | Total Weight | Total Declared Value† | Credit Card Auth. |
|---|---|---|---|
| 1 | 51 lbs. | $ 0 .00 | |

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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15977-8

00136

**USEPA CLP Organics COC (LAB COPY)**

DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386568

**CHAIN OF CUSTODY RECORD**

Case #: 42562 Contract: EPW10018
Cooler #: 1 of 2 SDG: F5WB4

**No: 6-051712-104047-0007**

Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|
| F5WB4 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456790 (None), 6-456791 (None), 6-456792 (None), 6-456793 (None), 6-456794 (None) (5) | SO-15 | 05/17/2012 10:26 | MF5WB4 | 0015977-01 1st Sx in SDG |
| F5WB8 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456814 (None), 6-456815 (None), 6-456816 (None), 6-456817 (None), 6-456818 (None) (5) | SO-19 | 05/17/2012 09:20 | MF5WB8 | -02 |
| F5WB9 | Soil/ Gary Hazelwood | Composite | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456820 (None), 6-456821 (None), 6-456822 (None), 6-456823 (None), 6-456824 (None) (5) | SO-20 | 05/17/2012 09:40 | MF5WB9 | -03 |
| F5WC0 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456826 (None), 6-456827 (None), 6-456828 (None), 6-456829 (None), 6-456830 (None) (5) | SO-21 | 05/17/2012 11:37 | MF5WC0 | -04 |

Special Instructions: F5WB9 VOA samples are grab samples. F5WB9 SVOA samples are composite.

**Shipment for Case Complete? Y**

**Samples Transferred From Chain of Custody #**

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Clay Witt | 5/17/12 | [illegible] | 05/18/12 | 10:20 | | | | | | |
| | | KD 05/18/12 | | | | | KD | 05/18/12 | | | |
| | | | | | | | | | | | |

**USEPA CLP Organics COC (LAB COPY)**

DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386579

**CHAIN OF CUSTODY RECORD**

Case #: 42562
Cooler #: 2 of 2

contract CFW10018
SDG: F5WB4

**No: 6-051712-104738-0009**

Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|
| F5WC1 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456832 (None), 6-456833 (None), 6-456834 (None), 6-456835 (None), 6-456836 (None) (5) | SO-22 | 05/17/2012 11:06 | MF5WC1 | 0015977-05 |
| F5WC2 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456838 (None), 6-456839 (None), 6-456840 (None), 6-456841 (None), 6-456842 (None) (5) | SO-23 | 05/17/2012 12:04 | MF5WC2 | -06 |
| F5WC3 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456706 (None), 6-456707 (None), 6-456708 (None), 6-456709 (None), 6-456710 (None) (5) | SO-24 | 05/17/2012 12:30 | MF5WC3 | -07 Final Sx in SDG* |

Special Instructions:

**Shipment for Case Complete? Y**

**Samples Transferred From Chain of Custody #**

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | [illegible] | 5/17/12 | [illegible] | 05/18/12 | 10:20 | | | | | | |
| | | | | | | | | RD 05/18/12 | | | |
| | | | RD 05/18/12 | | | | | | | | |

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 10:26 | | |

Station Location

Samplers (Signatures) Gary Hyelwood

Tag Number 6 456791

Lab Sample No.

Concentration: ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WB4**
Station Location: SO-15

15977-01

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456791

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 10:26 | | |

Station Location

Samplers (Signatures) Gary Hyelwood

Tag Number 6 456792

Lab Sample No.

Concentration: ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WB4**
Station Location: SO-15

15977-01

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456792

Preservative: ☐ ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 10:26 | | |

Station Location

Samplers (Signatures) Gary Hyelwood

Tag Number 6 456793

Lab Sample No.

Concentration: ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WB4**
Station Location: SO-15

15977-01

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456793

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 10:26 | | |

Tag Number: 456790

Station Location

Samplers (Signatures): Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB4**
Station Location: SO-15

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456790

15977-01

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 10:26 | | |

Tag Number: 456794

Station Location

Samplers (Signatures): Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB4**
Station Location: SO-15

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456794

15977-01

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:20 | | |

Tag Number: 456816

Station Location

Samplers (Signatures): Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB8**
Station Location: SO-19

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456816

15977-02

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:20 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456817

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB8**
Station Location: SO-19

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456817

15977-02

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:20 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456815

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB8**
Station Location: SO-19

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456815

15977-02

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:20 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456814

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB8**
Station Location: SO-19

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456814

15977-02

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:20 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456818

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Preservative:

Case: 42562

**CLP Sample: F5WB8**
Station Location: SO-19

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456818

15977-02

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:40 | | X |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456822

☐ L ☐ M ☐ H

Lab Sample No.

Preservative: Yes ☐ No ☐

Case: 42562

**CLP Sample: F5WB9**
Station Location: SO-20

Analyses: CLP TCL Volatiles
~~Composite Sample~~ Preservative: None
Tag No. 456822 CW 5/16/12

15977-03

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 09:40 | | X |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456820

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Preservative: Yes ☐ No ☐

Case: 42562

**CLP Sample: F5WB9**
Station Location: SO-20

Analyses: CLP TCL Volatiles
~~Composite Sample~~ Preservative: None
Tag No. 456820 CW 5/16/12

15977-03

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:40 | | X |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456821

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB9**
Station Location: SO-20

15977-03

Analyses: CLP TCL Volatiles
~~Composite Sample~~ Preservative: None
Tag No. 456821 CW 5/16/12

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:40 | | X |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456823

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB9**
Station Location: SO-20

15977-03

Analyses: CLP TCL Volatiles
~~Composite Sample~~ Preservative: None
Tag No. 456823 CW 5/16/12

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 9:40 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456824

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WB9**
Station Location: SO-20

15977-03

Analyses: CLP TCL Semivolatiles
Composite Sample Preservative: None
Tag No. 456824

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1137 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456830

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC0**
Station Location: SO-21

15977-04

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456830

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-768

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1137 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456828

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC0**
Station Location: SO-21

15977-04

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456828

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1137 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456827

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC0**
Station Location: SO-21

15977-04

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456827

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1137 | | |

Tag Number 456829

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC0**
Station Location: SO-21

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456829

15977-04

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1137 | | |

Tag Number 456826

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC0**
Station Location: SO-21

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456826

15977-04

Preservative: ☐ ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1106 | | |

Tag Number 456835

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC1**
Station Location: SO-22

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456835

15977-05

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1106 | | |

Tag Number 6- 456836

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC1**
Station Location: SO-22

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456836

15977-05

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1106 | | |

Tag Number 6- 456832

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC1**
Station Location: SO-22

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456832

15977-05

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1106 | | |

Tag Number 6- 456834

Station Location

Samplers (Signatures) Gary Hazlewood

☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC1**
Station Location: SO-22

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456834

15977-05

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: | |
|---|---|---|---|---|---|
| | | 5/17/12 | 1106 | Comp. | Grab. |

Tag Number: 456833

Station Location

Samplers (Signatures): Gary Hazlewood

Case: 42562

**CLP Sample: F5WC1**
Station Location: SO-22

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456833

15977-05

Preservative: Yes ☐ No ☐

Lab Sample No. ☐ L ☐ M ☐ H

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: | |
|---|---|---|---|---|---|
| | | 5/17/12 | 1204 | Comp. | Grab |

Tag Number: 456842

Station Location

Samplers (Signatures): Gary Hazlewood

Case: 42562

**CLP Sample: F5WC2**
Station Location: SO-23

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456842

15977-06

Preservative:

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: | |
|---|---|---|---|---|---|
| | | 5/17/12 | 1204 | Comp. | Grab |

Tag Number: 456838

Station Location

Samplers (Signatures): Gary Hazlewood

Case: 42562

**CLP Sample: F5WC2**
Station Location: SO-23

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456838

15977-06

Preservative:

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1204 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456840

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC2**
Station Location: SO-23

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456840

15977-06

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1204 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456841

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC2**
Station Location: SO-23

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456841

15977-06

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1204 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456839

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Case: 42562

**CLP Sample: F5WC2**
Station Location: SO-23

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456839

15977-06

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1230 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456707

Lab Sample No. ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WC3**
Station Location: SO-24

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456707

15977-07

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1230 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456708

Lab Sample No. ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WC3**
Station Location: SO-24

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456708

15977-07

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: Comp. | Designate: Grab |
|---|---|---|---|---|---|
| | | 5/17/12 | 1230 | | |

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456706

Lab Sample No. ☐ L ☐ M ☐ H

Case: 42562

**CLP Sample: F5WC3**
Station Location: SO-24

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456706

15977-07

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: | |
|---|---|---|---|---|---|
| | | 5/17/12 | 1230 | Comp. | Grab |

Tag Number 6- 456709

Station Location

Samplers (Signatures) Gary Hazelwood

Case: 42562

**CLP Sample: F5WC3**
Station Location: SO-24

Analyses: CLP TCL Volatiles
Grab Sample Preservative: None
Tag No. 456709

15977-07

Volatile Organic Analysis

Preservative: Yes ☐ No ☐

Lab Sample No. ☐L ☐M ☐H

G:O: U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

| Project Code CLP Case No. | Station No. | Month/Day/Year | Time | Designate: | |
|---|---|---|---|---|---|
| | | 5/17/12 | 1230 | Comp. | Grab |

Tag Number 6- 456710

Station Location

Samplers (Signatures) Gary Hazelwood

Case: 42562

**CLP Sample: F5WC3**
Station Location: SO-24

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456710

15977-07

Preservative: Yes ☐ No ☐

Lab Sample No. ☐L ☐M ☐H

G:O: U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

15977-A

SAMPLE LOG-IN SHEET
FORM DC-1

| | | |
|---|---|---|
| Lab Name: A4 SCIENTIFIC, INC | | Page 1 of 2 |
| Received By (Print Name): Ryan Dutko | | Log-in Date 05/18/12 |
| Received By (Signature) RD | | |
| Case Number 42562 | Sample Delivery Group No. F5WB4 | Mod. Ref. No. NA |

| Remarks: | |
|---|---|
| 1. Custody Seal(s) | Present/Absent* Intact/Broken |
| 2. Custody Seal NOs. | NA |
| 3. Traffic Reports/Chain of Custody Records or Packing Lists | Present/Absent* |
| 4. Airbill | Airbill/Sticker Present/Absent* |
| 5. Airbill No. | 8987 3538 6568 |
| 6. Sample Tags | Present/Absent* |
| Sample Tag Numbers | Listed/Not Listed on Traffic Report/Chain of Custody Record |
| 7. Sample Condition | Intact/Broken*/Leaking |
| 8. Cooler Temperature Indicator Bottle | Present/Absent* |
| 9. Cooler Temperature | 4°C |
| 10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree? | Yes/No* |
| 11. Date Received at Lab | 05/18/12 |
| 12. Time Received | 10:20 |

| | EPA Sample # | Corresponding Sample Tag # | Corresponding Assigned Lab # | Remarks: Condition of Sample Shipment, etc. |
|---|---|---|---|---|
| 1 | F5WB4 | 6-456790 to 94 | 0015977-01 | 3-Encore, 1-4oz Jar 1-8oz Jar, Intact |
| 2 | B8 | 6-456814 to 18 | -02 | |
| 3 | B9 | 6-456820 to 24 | -03 | |
| 4 | C0 | 6-456826 to 30 | -04 | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | RD 05/18/12 | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |

| Sample Transfer | |
|---|---|
| Fraction Extractables | Fraction Volatiles |
| Area# Cooler-A | Area# freezer-F |
| By RD | By RD |
| On 05/18/12 | On 05/18/12 |

* Contact SMO and attach record of resolution

| | |
|---|---|
| Reviewed By Kirk | Logbook No. N/A |
| Date 5/18/12 | Logbook Page No. N/A |

1597T-B

SAMPLE LOG-IN SHEET
FORM DC-1

| | | |
|---|---|---|
| Lab Name: A4 SCIENTIFIC, INC | | Page 2 of 2 |
| Received By (Print Name): Ryan Dutko | | Log-in Date 05/18/12 |
| Received By (Signature) RD | | |
| Case Number 42562 | Sample Delivery Group No. F5WB4 | Mod. Ref. No. NA |

| Remarks: | |
|---|---|
| 1. Custody Seal(s) | Present/Absent* Intact/Broken |
| 2. Custody Seal NOs. | NA |
| 3. Traffic Reports/Chain of Custody Records or Packing Lists | Present/Absent* |
| 4. Airbill | Airbill/Sticker Present/Absent* |
| 5. Airbill No. | 8987 3538 6579 |
| 6. Sample Tags | Present/Absent* |
| Sample Tag Numbers | Listed/Not Listed on Traffic Report/Chain of Custody Record |
| 7. Sample Condition | Intact/Broken*/Leaking |
| 8. Cooler Temperature Indicator Bottle | Present/Absent* |
| 9. Cooler Temperature | 4°C |
| 10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree? | Yes/No* |
| 11. Date Received at Lab | 05/18/12 |
| 12. Time Received | 10:20 |

| | EPA Sample # | Corresponding Sample Tag # | Corresponding Assigned Lab # | Remarks: Condition of Sample Shipment, etc. |
|---|---|---|---|---|
| 1 | F5WC1 | 6-456832 to 36 | 0015977-05 | 3 Encore, 1-4oz Jar 1-8oz Jar Intact |
| 2 | C2 | 6-456838 to 42 | -06 | |
| 3 | C3 | 6-456706 to 710 | -07 | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | RD 05/18/12 | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |

| Sample Transfer | |
|---|---|
| Fraction Extractables | Fraction Volatiles |
| Area# Cooler-A | Area# freezer-F |
| By RD | By RD |
| On 05/18/12 | On 05/18/12 |

* Contact SMO and attach record of resolution

| | |
|---|---|
| Reviewed By [signature] | Logbook No. N/A |
| Date 5/18/12 | Logbook Page No. N/A |

SOM01.2 (08/2007)

00752

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

# WORK ORDER LOG-IN REPORT

**WORK ORDER = 0015977**

`WORKORDER_0015977~

Printed: 5/19/2012 11:12:13AM

**Client :** NAZY ABOUSAEEDI
COMPUTER SCIENCES CORPORATION
15000 CONFERENCE CENTER DRIVE
CHANTILLY VA 201513819

**Project :** SOM01.2-EPW10018
**Project Number :** SOM01.2-EPW10018
**Courier/Airbill # :** Fed Ex / 898735386568
**COC/TR # :** 6-051712-104047-0007

| Lab Sample | Client Sample | Matrix | #Cont. | Case | SDG | Sampled | Received | Analysis | TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 0015977-01 | F5WB4 | Soil | 5 | 42562 | F5WB4 | 05/17/12 10:26 | 05/18/12 10:20 | Solids, Dry Weight | 21 | 1st Sx |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-02 | F5WB8 | Soil | 5 | 42562 | F5WB4 | 05/17/12 09:20 | 05/18/12 10:20 | Solids, Dry Weight | 21 | |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-03 | F5WB9 | Soil | 5 | 42562 | F5WB4 | 05/17/12 09:40 | 05/18/12 10:20 | Solids, Dry Weight | 21 | |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-04 | F5WC0 | Soil | 5 | 42562 | F5WB4 | 05/17/12 11:37 | 05/18/12 10:20 | Solids, Dry Weight | 21 | |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-05 | F5WC1 | Soil | 5 | 42562 | F5WB4 | 05/17/12 11:06 | 05/18/12 10:20 | Solids, Dry Weight | 21 | |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-06 | F5WC2 | Soil | 5 | 42562 | F5WB4 | 05/17/12 12:04 | 05/18/12 10:20 | Solids, Dry Weight | 21 | |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-07 | F5WC3 | Soil | 5 | 42562 | F5WB4 | 05/17/12 12:30 | 05/18/12 10:20 | Solids, Dry Weight | 21 | Last Sx |
| | | Soil | | | | | | SOM01.2 SVOA | 21 | |
| | | Soil | | | | | | SOM01.2 VOA LOW | 21 | |
| 0015977-08 | VHBLKQW | Soil | 2 | 42562 | F5WB4 | 05/18/12 00:00 | 05/18/12 10:20 | SOM01.2 VOA LOW | 21 | STORAGE BLANK |

**Work Order Comments and Special Instructions:**

VOA/SVOA
NO QC REQUIRED

00753

Reviewed By

5/19/12
Date

TEXAS NATURAL RESOURCES CONSERVATION COMMISSION

Signature

Date

TEXAS NATURAL RESOURCES CONSERVATION COMMISSION

Signature

Date 5/17/12

TNRCC-10058 (2/93)

159777-A

00204

35100

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature Craig Fields

Date 5/17/12 cooler

15977-B

09/18/50

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature Craig Fields

Date 5/17/12 cooler

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Sample Custody Logbook

**Freezer F**

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 26-Aug-2009 | QA | FORM | 6FORM06-A | 899-05152011 |

Login Thermometer ID: T70197 Work Order: 0015977

***Sample Custodian Check in:***

| SAMPLE ID | CONTAINER TYPE & NO. | DATE/TIME SIGNED IN | SIGNED IN BY | SAMPLE ID | CONTAINER TYPE & NO. | DATE/ TIME SIGNED IN | SIGNED IN BY |
|---|---|---|---|---|---|---|---|
| 0015977-01 to-07 | 3-Encore 1-4oz Jar | 05/18/12 13:00 | RD | | | | |
| ↓ -08 | 2-40ml | ↓ | ↓ | | | RD | 5/18/12 |
| | | | | | | | |

***Analyst Checkout/Check in:***

| SAMPLE ID | CONTAINER TYPE | QUANTITY | SIGNED OUT BY | DATE/ TIME SIGNED OUT | PREP OR ANALYSIS | SIGNED IN BY | DATE/ TIME SIGNED IN | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0015977-01 | 40ml | 1 | [illegible] | 5/21/12 9:00 | VOA | [illegible] | 5/21/12 12:00 | [illegible] |
| ↓ to | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | [illegible] |
| ↓ -08 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | 5/21/12 |
| | | | | | | | | |
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| | | | | | | | | |
| | | | [illegible] | | | | | |
| | | | | 5/21/12 | | | | |
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| | | | | | | | | |

**Container type:** 40ml, 2WM, 4WM, 8WM, 16WM, 32WM, 1L Amber, 80 Amber, 1L Poly, 16 Poly, Other:

Empty containers must be returned to the SAMPLE CUSTODIAN and documented as empty.

Reviewer: [illegible] Date: 5-21-12

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

# Encore Sample Transfer Logbook

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 03-Feb-2010 | VOA | FORM | 6FORM05-A | 826-0203 |

WORK ORDER:

| Date/Time Transferred | Lab Sample ID | Client Sample ID | No. of Vials | Effervescence With Sod. Bisulfate (Yes/No) | Sod. Bisulfate Added (Yes/No) | Weights (gm) 1 | 2 | 3 | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 5-18-12 12:00 | 0015977-01 | F5WB4 | 3 | NO | NO | 6.12 | 6.00 | 6.22 | |
| | -02 | B8 | | | | 6.22 | 5.98 | 6.16 | |
| | -03 | B9 | | | | 6.18 | 5.92 | 6.14 | |
| | -04 | C0 | | | | 6.24 | 6.13 | 6.00 | 5/18/12 |
| | -05 | C1 | | | | 6.31 | 6.15 | 5.98 | |
| | -06 | C2 | | | | 6.19 | 6.24 | 5.94 | |
| | -07 | C3 | | | | 6.29 | 6.18 | 5.93 | |

5/18/12

NOTES:

Analyst (Sign and date): 5/18/12 Reviewer (Sign and Date): 5-18-12



00757

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

# Sample Custody Logbook
## COOLER A

| Effective | Area | Type | Number-Version | RCN |
|---|---|---|---|---|
| 26-Aug-2009 | QA | FORM | 6FORM06-A | 980-05072012 |

Login Thermometer ID: T70197 Work Order: 0015977 Shelf: B-3

*Sample Custodian Check in:*

| SAMPLE ID | CONTAINER TYPE & NO. | DATE/TIME SIGNED IN | SIGNED IN BY | SAMPLE ID | CONTAINER TYPE & NO. | DATE/ TIME SIGNED IN | SIGNED IN BY |
|---|---|---|---|---|---|---|---|
| 0015977-01 to-07 | 1-8oz Jar | 05/18/12 12:00 | RD | | | | |
| | | RD 05/18/12 | | | RD | 05/18/12 | |
| | | | | | | | |

*Analyst Checkout/Check in:*

| SAMPLE ID | CONTAINER TYPE | QUANTITY | SIGNED OUT BY | DATE/ TIME SIGNED OUT | PREP OR ANALYSIS | SIGNED IN BY | DATE/ TIME SIGNED IN | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 15977-01 to-07 | 8oz | 7 | RD | 05-21-12 12:00 | % solid | RD | 05-21-12 13:00 | |
| 15977 01 07 | 8oz | 7 | NP | 05-22-12 10:00 | SVOA | NP | 05-22-12 10:30 | |
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Container type: 40ml, 2WM, 4WM, 8WM, 16WM, 32WM, 1L Amber, 1gal Amber, 1L Poly, 16 Poly, other:

Empty containers must be returned to the SAMPLE CUSTODIAN and documented as empty.

Reviewer: [signature] Date: 6/1/12

P-0045

**USEPA CLP Organics COC (REGION COPY)**
DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386568

**CHAIN OF CUSTODY RECORD**
MSI
Case #: 42562
Cooler #: 1 of 2

**No: 6-051712-104047-0007**
Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | Sample Type |
|---|---|---|---|---|---|---|---|---|
| F5WB4 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456790 (None), 6-456791 (None), 6-456792 (None), 6-456793 (None), 6-456794 (None) (5) | SO-15 | 05/17/2012 10:26 | MF5WB4 | Field Sample |
| F5WB8 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456814 (None), 6-456815 (None), 6-456816 (None), 6-456817 (None), 6-456818 (None) (5) | SO-19 | 05/17/2012 09:20 | MF5WB8 | Field Sample |
| F5WB9 | Soil/ Gary Hazelwood | Composite | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456820 (None), 6-456821 (None), 6-456822 (None), 6-456823 (None), 6-456824 (None) (5) | SO-20 | 05/17/2012 09:40 | MF5WB9 | Field Sample |
| F5WC0 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456826 (None), 6-456827 (None), 6-456828 (None), 6-456829 (None), 6-456830 (None) (5) | SO-21 | 05/17/2012 11:37 | MF5WC0 | Field Sample |
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Special Instructions: F5WB9 VOA samples are grab samples. F5WB9 SVOA samples are composite.

**Shipment for Case Complete? Y**

**Samples Transferred From Chain of Custody #**

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Craig Wolf | 5/17/12 | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

**USEPA CLP Organics COC (REGION COPY)**

DateShipped: 5/17/2012
CarrierName: FedEx
AirbillNo: 898735386579

**CHAIN OF CUSTODY RECORD**

MSI
Case #: 42562
Cooler #: 2 of 2

**No: 6-051712-104738-0009**

Lab: A4 Scientific
Lab Contact: Laxmi Teerupalli
Lab Phone: 281-292-5277

| Organic Sample # | Matrix/Sampler | Coll. Method | Analysis/Turnaround | Tag/Preservative/Bottles | Station Location | Collected | Inorganic Sample # | Sample Type |
|---|---|---|---|---|---|---|---|---|
| F5WC1 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456832 (None), 6-456833 (None), 6-456834 (None), 6-456835 (None), 6-456836 (None) (5) | SO-22 | 05/17/2012 11:06 | MF5WC1 | Field Sample |
| F5WC2 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456838 (None), 6-456839 (None), 6-456840 (None), 6-456841 (None), 6-456842 (None) (5) | SO-23 | 05/17/2012 12:04 | MF5WC2 | Field Sample |
| F5WC3 | Soil/ Gary Hazelwood | Grab | CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP VOA(21), CLP SVOA(21) | 6-456706 (None), 6-456707 (None), 6-456708 (None), 6-456709 (None), 6-456710 (None) (5) | SO-24 | 05/17/2012 12:30 | MF5WC3 | Field Sample |
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| Special Instructions: | **Shipment for Case Complete? Y** |
|---|---|
| | **Samples Transferred From Chain of Custody #** |

Analysis Key: CLP VOA=CLP TCL Volatiles, CLP SVOA=CLP TCL Semivolatiles

| Items/Reason | Relinquished by | Date | Received by | Date | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Craig Watts | 5/17/12 1144 | | | | | | | | | |
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