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. F5WC4
SDG NOs. TO FOLLOW NA NA NA
MOD. REF. NO. NA
CONTRACT NO. EPW10018
SOW NO. S0M01.2

666723

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	3		✓
3. **SDG Cover Sheet/Traffic Report**	4	5	✓	✓
4. **Trace Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	6	7	✓	✓
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)	NA	NA	NA	
Method Blank Summary (Form IV VOA)	8	8	✓	✓
GC/MS Instrument Performance Check (Form V VOA)	9	10	✓	✓
Internal Standard Area and RT Summary (Form VIII VOA)	11	12	✓	✓
b. Sample Data	13	65	✓	✓
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)	66	117	✓	✓
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	118	121	✓	✓
Blank Data	122	143	✓	✓

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

CASE NO. 42562	SDG NO. F5WC4	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)				
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (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. F5WC4 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)	144	145	✓	✓
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)	146	146	✓	✓
GC/MS Instrument Performance Check (Form V SV)	147	147	✓	✓
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	148	155	✓	✓
b. Sample Data	156	209	✓	✓
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)	210	335	✓	✓
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	336	339	✓	✓
Blank Data	340	361	✓	✓
MS/MSD Data (if requested by USEPA Region)	NA	NA		
e. Raw GPC Data	NA	NA		

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

CASE NO. 42562	SDG NO. F5WC4	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. F5WC4	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. F5WC4 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	362	377	✓	✓
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)	378	378	✓	✓
Chain of Custody Records	379	379	✓	✓
Sample Tags	380	386	✓	✓
Sample Log-in Sheet (Lab & DC-1)	387	388	✓	✓
Miscellaneous Shipping/Receiving Records (describe or list)				
Custody Seals	389	389	✓	✓
	NA	NA	NA	

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

CASE NO. 42562 SDG NO. F5WC4 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	390	391	✔	✔
	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) RAMKISHORKOYYADA/QCSPECIALIST (Printed Name/Title) 06/01/2012 (Date)

Verified by: (CLP Lab) (Signature) LAXMI.TEERUPALLI/QA OFFICER (Printed Name/Title) 06/01/2012 (Date)

Audited by: ~~(USEPA)~~ ESAT (Signature) LINDA HOFFMAN/DATA REVIEWER (Printed Name/Title) 07/11/12 (Date)

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

Contract #: EPW10018	Case #: 42562	SDG #: F5WC4

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*
F5WC4	0015957-01	Water	5	05/16/12 09:45	SOM01.2 VOA TRACE	1st Sx
					SOM01.2 SVOA	
F5WC5	0015957-02	Water	5	05/16/12 09:45	SOM01.2 VOA TRACE	
					SOM01.2 SVOA	
F5WC6	0015957-03	Water	5	05/16/12 09:45	SOM01.2 VOA TRACE	
					SOM01.2 SVOA	
F5WC7	0015957-04	Water	3	05/16/12 09:45	SOM01.2 VOA TRACE	FIELD BLANK
F5WC8	0015957-05	Water	3	05/16/12 09:45	SOM01.2 VOA TRACE	TRIP BLANK
VHBLKQT	0015957-06	Water	2	05/16/12 09:45	SOM01.2 VOA TRACE	STORAGE BLANK

The cooler temperatures are listed against the coolers.

DATE RECEIVED	COOLER NO.	Temp (in °C)	Airbill No.
05/16/2012	COOLER # 1	4.0	899197816302

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

VOLATILES TRACE

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, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

All VOA samples had the pH characteristics verified. The reading is listed below.

Contract #: EPW10018	Case #: 42562	SDG #: F5WC4

EPA SAMPLE #	LAB SAMPLE #	pH
F5WC4	0015957-01	≤ 2
F5WC5	0015957-02	≤ 2
F5WC6	0015957-03	≤ 2
F5WC7	0015957-04	≤ 2
F5WC8	0015957-05	≤ 2

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

Compound	EPA Sample ID
Vinyl Chloride-d3	VBLK5B

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

Water samples and associated blanks were extracted by continuous liquid-liquid extraction method. No problems were encountered during 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.

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

Compound	EPA Sample ID
1,4-Dioxane-d8	SSTD0409N, SSTD0209N, SSTD0109N, SSTD0059, SSTD0209O, SSTD0209P, SSTD0209Q
Caprolactam	SSTD0409N, SSTD0809N, SSTD0209O, SSTD0209P, SSTD0209R
1,4-Dioxane	SSTD0409N, SSTD0209N, SSTD0809N, SSTD0059N, SSTD0209O, SSTD0209P, SSTD0209Q, SSTD0209R
2,4-Dinitrophenol	SSTD0209N, SSTD0109N, SSTD0209O, SSTD0209P, SSTD0209Q, SSTD0209R

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

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

Contract #: EPW10018	Case #: 42562	SDG #: F5WC4

Water (Low/Med, Trace & SIM):

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

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

$\overline{RRF}$ = Mean relative response factor from the initial calibration.
V_o = Total volume of water purged, in milliliters (mL).
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).
Df = Dilution Factor.

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

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

06/01/2012 — Signature & Date

SAMPLE DELIVERY GROUP (SDG)
COVER SHEET

SDG Number: F5WC4

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) F5WC4	7)	13)	19)
2) F5WC5	8)	14)	20)
3) F5WC6	9)	15)	21)
4) F5WC7	10)	16)	22)
5) F5WC8	11)	17)	23)
6)	12)	18)	24)

F5WC4	F5WC8
First Sample in SDG	Last Sample in SDG
05/16/2012	05/16/2012
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: Kish

Date: 5/21/12

USEPA CLP Organics COC (LAB COPY)

DateShipped: 5/15/2012
CarrierName: FedEx
AirbillNo: 899197816302

CHAIN OF CUSTODY RECORD

Case #: 42562 contract: EPW10018
Cooler #: 1 of 2 SDG: F5WC4

No: 6-051512-133540-0001

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
F5WC4	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456844 (HCL), 6-456851 (HCL), 6-456852 (HCL), 6-456853 (None), 6-456854 (None) (5)	GW-01	05/15/2012 11:27	MF5WC4	0015957-01 1st Sx in SDG#
F5WC5	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456859 (HCL), 6-456860 (HCL), 6-456861 (HCL), 6-456862 (None), 6-456863 (None) (5)	GW-02	05/15/2012 11:45	MF5WC5	-02
F5WC6	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456868 (HCL), 6-456869 (HCL), 6-456870 (HCL), 6-456871 (None), 6-456872 (None) (5)	GW-03	05/15/2012 10:14	MF5WC6	-03
F5WC7	Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456874 (HCL), 6-456875 (HCL), 6-456876 (HCL) (3)	FB-01	05/15/2012 13:30		-04
F5WC8	Water/ Craig Watts	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456877 (HCl), 6-456878 (HCl), 6-456879 (HCl) (3)	TB-01	05/11/2012 13:30		-05 Final Sx in SDG#

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP TVOA=CLP TCL Trace 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	5/15/12	RD	05/16/12	9:45						
			RD 05/16/12					RD 05/16/12			

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WC4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	F5WC4	116	143 *	92	80	98	93	105
02	F5WC5	101	143 *	91	90	102	97	106
03	F5WC6	125	153 *	95	84	101	96	107
04	F5WC7	118	131	86	80	98	94	105
05	F5WC8	115	134 *	99	84	102	97	106
06	VBLK5B	69	82	65	90	96	104	98
07	VHBLKQT	88	124	91	113	110	123	102
08								
09								
10								
11								
12								
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27								
28								
29								
30								

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

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

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WC4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	F5WC4	98	104	86	92		80	103	1
02	F5WC5	98	105	90	104		79	100	1
03	F5WC6	99	105	87	99		78	103	1
04	F5WC7	95	105	90	96		76	101	0
05	F5WC8	96	109	85	92		76	107	1
06	VBLK5B	97	93	95	103		90	100	0
07	VHBLKQT	98	99	100	115		98	105	0
08									
09									
10									
11									
12									
13									
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22									
23									
24									
25									
26									
27									
28									
29									
30									

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK5B

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Lab File ID: H3647.D Lab Sample ID: 2050160-BLK1

Instrument ID: H-5975

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/18/2012

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1300

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	F5WC4	0015957-01	H3648.D	1326
02	F5WC5	0015957-02	H3649.D	1352
03	F5WC6	0015957-03	H3650.D	1445
04	F5WC7	0015957-04	H3651.D	1511
05	F5WC8	0015957-05	H3652.D	1537
06	VHBLKQT	0015957-06	H3653.D	1603
07				
08				
09				
10				
11				
12				
13				
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16				
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25				
26				
27				
28				
29				
30				

COMMENTS:

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

EPA SAMPLE NO.

BFB3Y

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Lab File ID: H3395.D BFB Injection Date: 05/03/2012

Instrument ID: (H-5975 BFB Injection Time: 1243

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 80.0% of mass 95	47.2
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.8 (1.0)1
174	50.0 - 120% of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.8 (7.7)1
176	95.0 - 101% of mass 174	73.8 (98.5)1
177	5.0 - 9.0% of mass 176	4.8 (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	VSTD0053Y	2E04001-CAL3	H3396.D	05/03/2012	1542
02	VSTD0203Y	2E04001-CAL5	H3397.D	05/03/2012	1608
03	VSTD0103Y	2E04001-CAL4	H3398.D	05/03/2012	1635
04	VSTD0013Y	2E04001-CAL2	H3399.D	05/03/2012	1752
05	VSTD0.53Y	2E04001-CAL1	H3400.D	05/03/2012	1910
06	VSTD0053Z	2E04001-CCV1	H3408.D	05/03/2012	2236
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

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

EPA SAMPLE NO.

BFB5B

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Lab File ID: H3645.D BFB Injection Date: 05/18/2012

Instrument ID: (H-5975 BFB Injection Time: 0858

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 80.0% of mass 95	48.0
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	50.0 - 120% of mass 95	74.8
175	5.0 - 9.0% of mass 174	5.8 (7.7)1
176	95.0 - 101% of mass 174	74.3 (99.3)1
177	5.0 - 9.0% of mass 176	4.1 (5.6)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	VSTD0055B	2E21003-CCV1	H3646.D	05/18/2012	1057
02	VBLK5B	2050160-BLK1	H3647.D	05/18/2012	1300
03	F5WC4	0015957-01	H3648.D	05/18/2012	1326
04	F5WC5	0015957-02	H3649.D	05/18/2012	1352
05	F5WC6	0015957-03	H3650.D	05/18/2012	1445
06	F5WC7	0015957-04	H3651.D	05/18/2012	1511
07	F5WC8	0015957-05	H3652.D	05/18/2012	1537
08	VHBLKQT	0015957-06	H3653.D	05/18/2012	1603
09	VSTD0055C	2E21003-CCV2	H3655.D	05/18/2012	1654
10					
11					
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19					
20					
21					
22					

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.: F5WC4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Y Date Analyzed: 05/03/2012

Lab File ID (Standard): H3396.D Time Analyzed: 1542

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

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	162924	9.27	210203	5.37	63197	12.82
	UPPER LIMIT	228094	9.60	294284	5.70	88476	13.15
	LOWER LIMIT	97754	8.94	126122	5.04	37918	12.49
	EPA SAMPLE NO.						
01	VSTD0203Y	154612	9.26	195438	5.37	64116	12.82
02	VSTD0103Y	165711	9.26	208098	5.37	69057	12.82
03	VSTD0013Y	141429	9.26	182375	5.37	52047	12.82
04	VSTD0.53Y	123868	9.26	159280	5.37	45601	12.82
05	VSTD0053Z	140412	9.26	177888	5.37	53363	12.82
06							
07							
08							
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19							
20							
21							
22							

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.: F5WC4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055B Date Analyzed: 05/18/2012

Lab File ID (Standard): H3646.D Time Analyzed: 1057

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

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	92078	9.26	115369	5.37	37480	12.81
	UPPER LIMIT	128909	9.59	161517	5.70	52472	13.14
	LOWER LIMIT	55247	8.93	69221	5.04	22488	12.48
	EPA SAMPLE NO.						
01	VBLK5B	85078	9.26	111090	5.37	30725	12.82
02	F5WC4	90164	9.26	123839	5.37	30605	12.82
03	F5WC5	88117	9.26	118560	5.37	30929	12.82
04	F5WC6	90162	9.26	121924	5.37	31494	12.82
05	F5WC7	95877	9.26	131693	5.37	34495	12.82
06	F5WC8	86947	9.26	114624	5.37	29201	12.82
07	VHBLKQT	88233	9.26	103985	5.37	31841	12.82
08	VSTD0055C	83790	9.26	106471	5.37	34747	12.82
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3648.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3648.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3648.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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22					
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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\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	123839	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	90164	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	30605	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	11675	5.79 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 115.80%	
7) Chloroethane-d5	1.809	69	8097	7.16 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 143.20%#	
10) 1,1-Dichloroethene-d2	2.442	63	61382	4.59 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 91.80%	
20) 2-Butanone-d5	3.979	46	108357	39.79 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 79.58%	
24) Chloroform-d	4.333	84	68178	4.89 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 97.80%	
26) 1,2-Dichloroethane-d4	4.860	65	34638	4.66 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 93.20%	
32) Benzene-d6	4.889	84	152579	5.27 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 105.40%	
35) 1,2-Dichloropropane-d6	5.815	67	40048	4.88 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 97.60%	
41) Toluene-d8	7.201	98	130645	5.21 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 104.20%	
43) trans-1,3-Dichloroprop...	7.564	79	25056	4.32 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 86.40%	
47) 2-Hexanone-d5	8.175	63	64774	45.80 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 91.60%	
57) 1,1,2,2-Tetrachloroeth...	11.393	84	18084	3.99 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 79.80%	
63) 1,2-Dichlorobenzene-d4	13.229	152	30238	5.16 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 103.20%	
Target Compounds					Qvalue

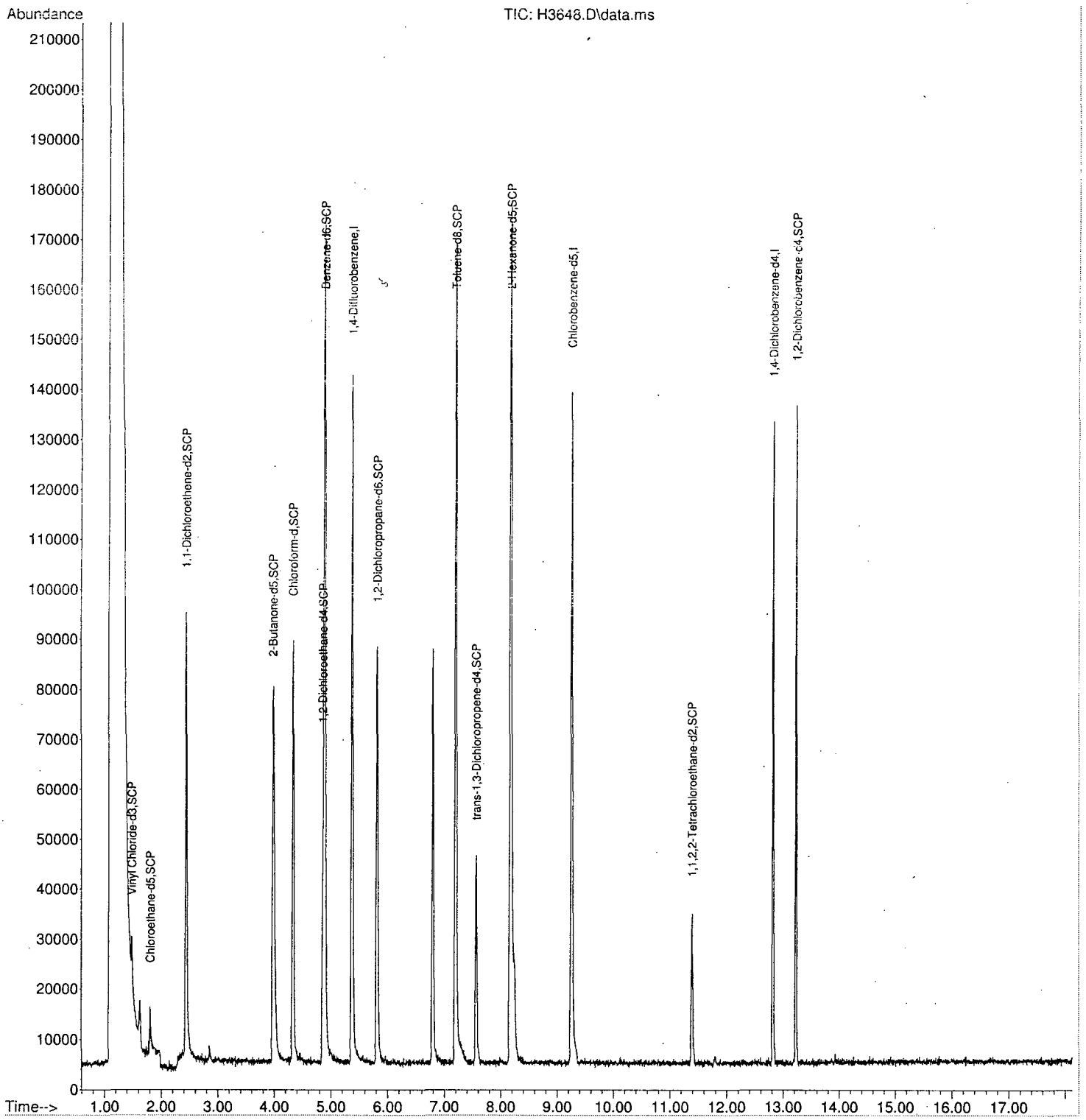
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3648.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	271	rBV	4032755	28601217	100.00%	90.446%
2	1.632	321	325	334	rVB3	9542	13204	0.05%	0.042%
3	1.786	371	373	375	rBV2	2641	1127	0.00%	0.004%
4	1.809	375	380	384	rBV2	8291	8622	0.03%	0.027%
5	2.095	467	469	475	rVB3	1389	1175	0.00%	0.004%
6	2.185	493	497	498	rBV2	1505	1009	0.00%	0.003%
7	2.442	567	577	596	rBV	87804	150760	0.53%	0.477%
8	2.854	699	705	709	rBV2	3105	2875	0.01%	0.009%
9	3.979	1043	1055	1056	rBV	72388	71740	0.25%	0.227%
10	4.069	1081	1083	1088	rVB3	2278	1360	0.00%	0.004%
11	4.333	1153	1165	1180	rBV	83845	160774	0.56%	0.508%
12	4.889	1316	1338	1353	rBV4	170385	428202	1.50%	1.354%
13	5.046	1383	1387	1390	rBV	1507	1198	0.00%	0.004%
14	5.371	1476	1488	1506	rBV	137183	279798	0.98%	0.885%
15	5.815	1610	1626	1645	rBV2	83559	177699	0.62%	0.562%
16	6.796	1918	1931	1945	rBV3	82960	164728	0.58%	0.521%
17	7.201	2043	2057	2076	rBV	164352	350443	1.23%	1.108%
18	7.567	2160	2171	2183	rBV3	41164	75491	0.26%	0.239%
19	8.175	2348	2360	2376	rBV3	171988	401748	1.40%	1.270%
20	9.262	2682	2698	2716	rBV	134383	282329	0.99%	0.893%
21	10.567	3099	3104	3106	rBV	1357	1016	0.00%	0.003%
22	11.397	3347	3362	3372	rBV3	30442	62550	0.22%	0.198%
23	12.229	3618	3621	3624	rVB	1338	1062	0.00%	0.003%
24	12.818	3794	3804	3816	rBV2	128996	191658	0.67%	0.606%
25	12.908	3828	3832	3836	rBV2	1269	1031	0.00%	0.003%
26	13.229	3922	3932	3942	rVB2	131851	185878	0.65%	0.588%
27	13.551	4029	4032	4036	rBV2	1440	1341	0.00%	0.004%
28	14.914	4453	4456	4460	rBV2	1670	1390	0.00%	0.004%
29	15.805	4728	4733	4735	rBV	1246	1072	0.00%	0.003%

Sum of corrected areas: 31622497

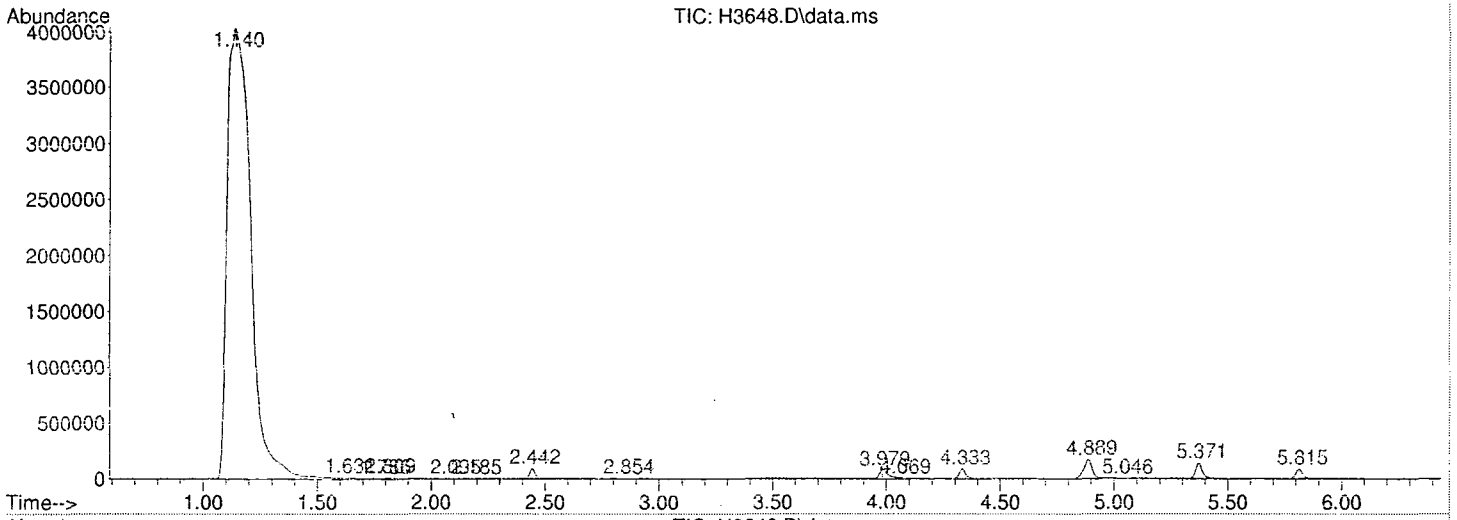
LSC Report - Integrated Chromatogram

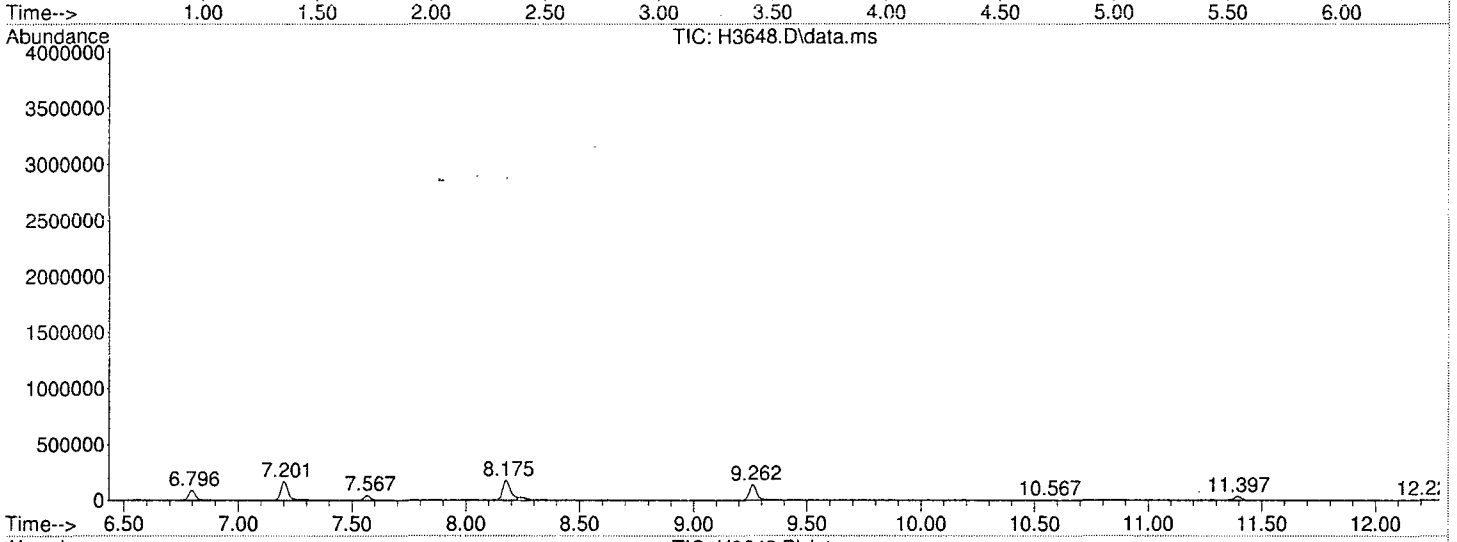
Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

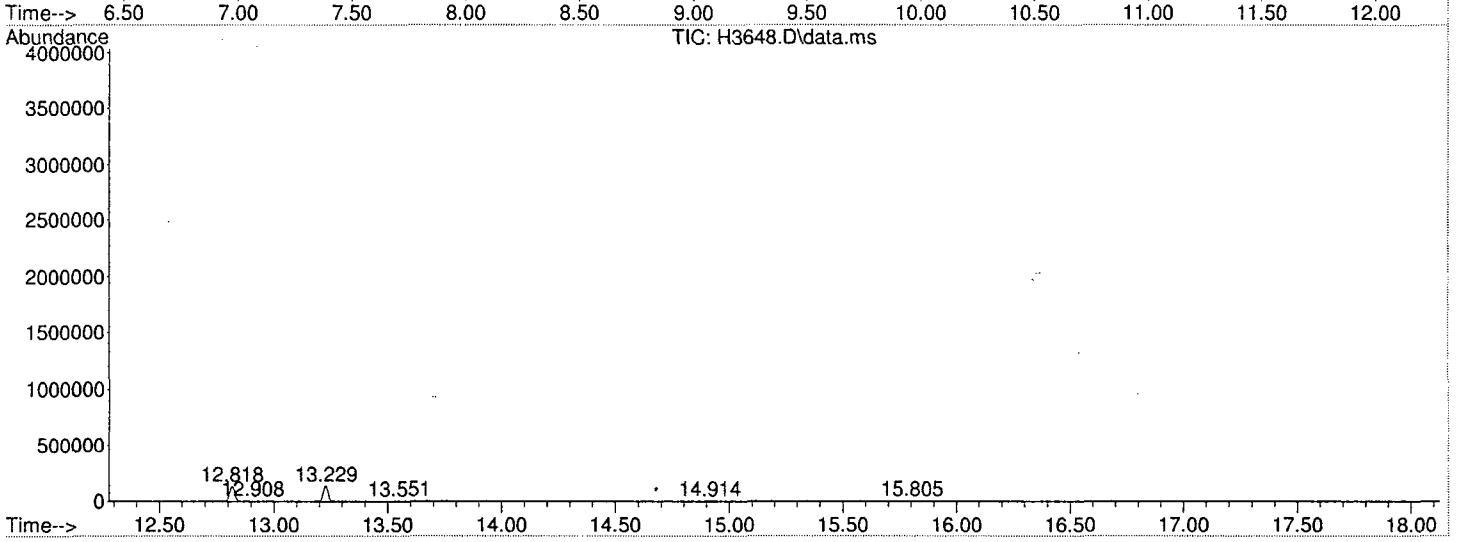
Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

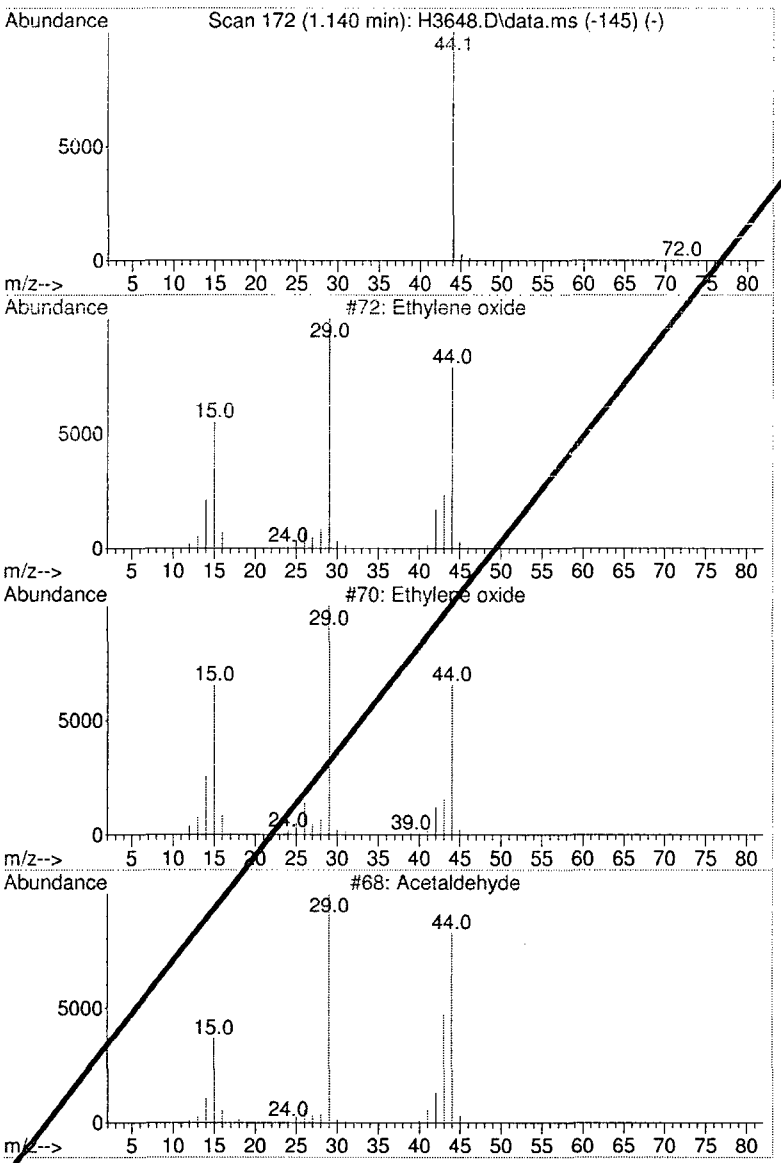
****

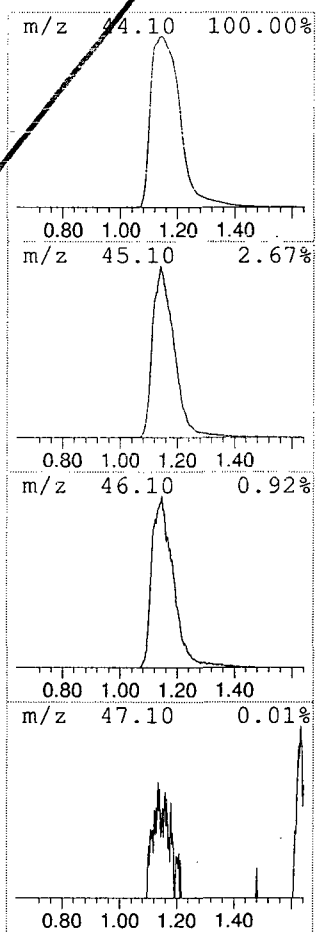
Peak Number 1 Ethylene oxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.140	511.11 ug/L	28601200	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	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3
5	Ethyne, fluoro-	44	C2HF	002713-09-9	3

Carbon dioxide





Library Search Compound Report

Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

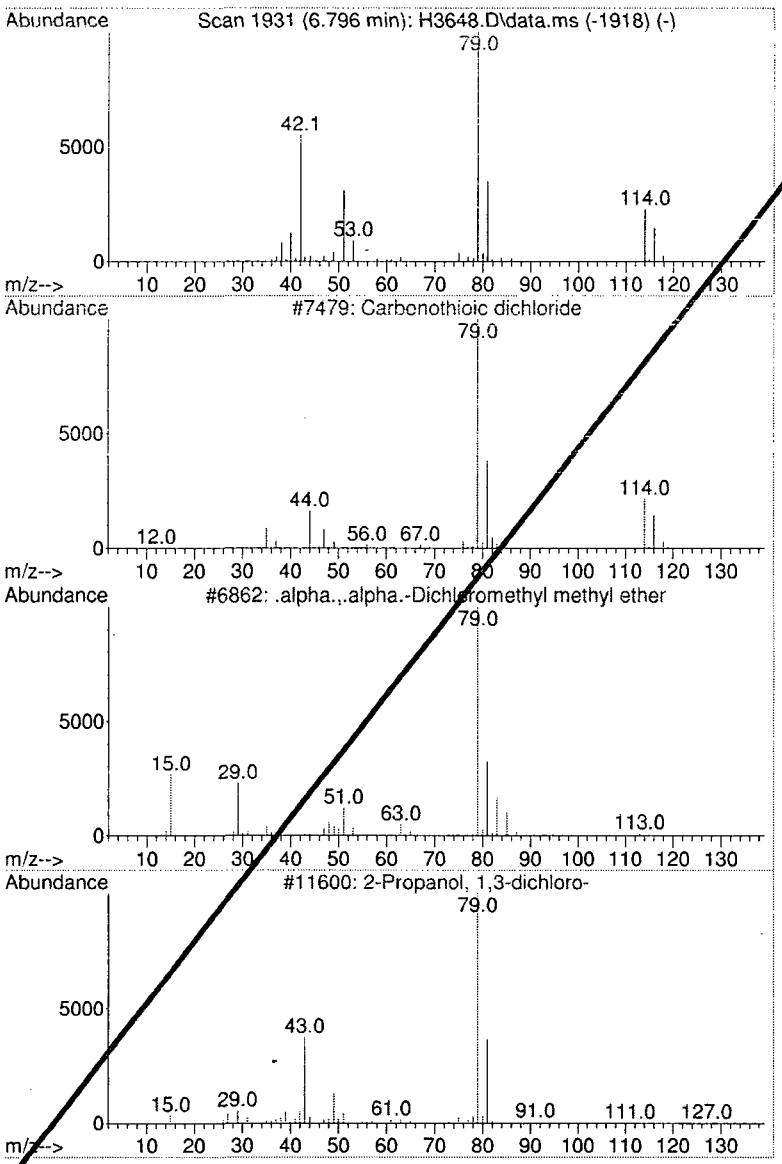
****

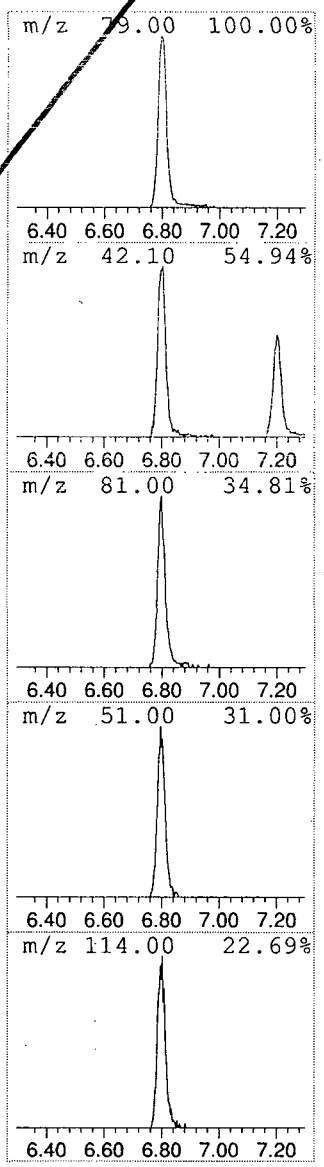
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.796	2.94 ug/L	164728	1,4-Difluorobenzene	5.374

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonothioic dichloride	114	CCl2S	000463-71-8	47
2	.alpha.,.alpha.-Dichloromethyl m...	114	C2H4Cl2O	004885-62-3	23
3	2-Propanol, 1,3-dichloro-	128	C3H6Cl2O	000096-23-1	23
4	Methane, oxybis[chloro-	114	C2H4Cl2O	000542-88-1	23
5	Cyclopropane	42	C3H6	000075-19-4	9

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3648.D
Acq On : 18 May 2012 13:26
Sample : 0015957-01
Misc : F5WC4 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:57:28 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	511.1	ug/L	28601200	1	5.374	279798	5.0
Carbonothioic d...	6.796	2.9	ug/L	164728	1	5.374	279798	5.0

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

EPA SAMPLE NO.
F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3649.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3649.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3649.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

Vial: 56
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	118560	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	88117	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	30929	5.0000 ug/L	# 0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	9757	5.05 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 101.00%	
7) Chloroethane-d5	1.812	69	7749	7.15 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 143.00%#	
10) 1,1-Dichloroethene-d2	2.442	63	57981	4.53 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 90.60%	
20) 2-Butanone-d5	3.985	46	117062	44.91 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 89.82%	
24) Chloroform-d	4.336	84	67907	5.08 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 101.60%	
26) 1,2-Dichloroethane-d4	4.863	65	34331	4.83 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 96.60%	
32) Benzene-d6	4.892	84	149271	5.28 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 105.60%	
35) 1,2-Dichloropropane-d6	5.815	67	39312	4.90 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 98.00%	
41) Toluene-d8	7.204	98	128914	5.26 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 105.20%	
43) trans-1,3-Dichloroprop...	7.567	79	25598	4.51 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 90.20%	
47) 2-Hexanone-d5	8.178	63	71933	52.05 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 104.10%	
57) 1,1,2,2-Tetrachloroeth...	11.397	84	17539	3.96 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 79.20%	
63) 1,2-Dichlorobenzene-d4	13.226	152	29716	5.01 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 100.20%	

Target Compounds Qvalue

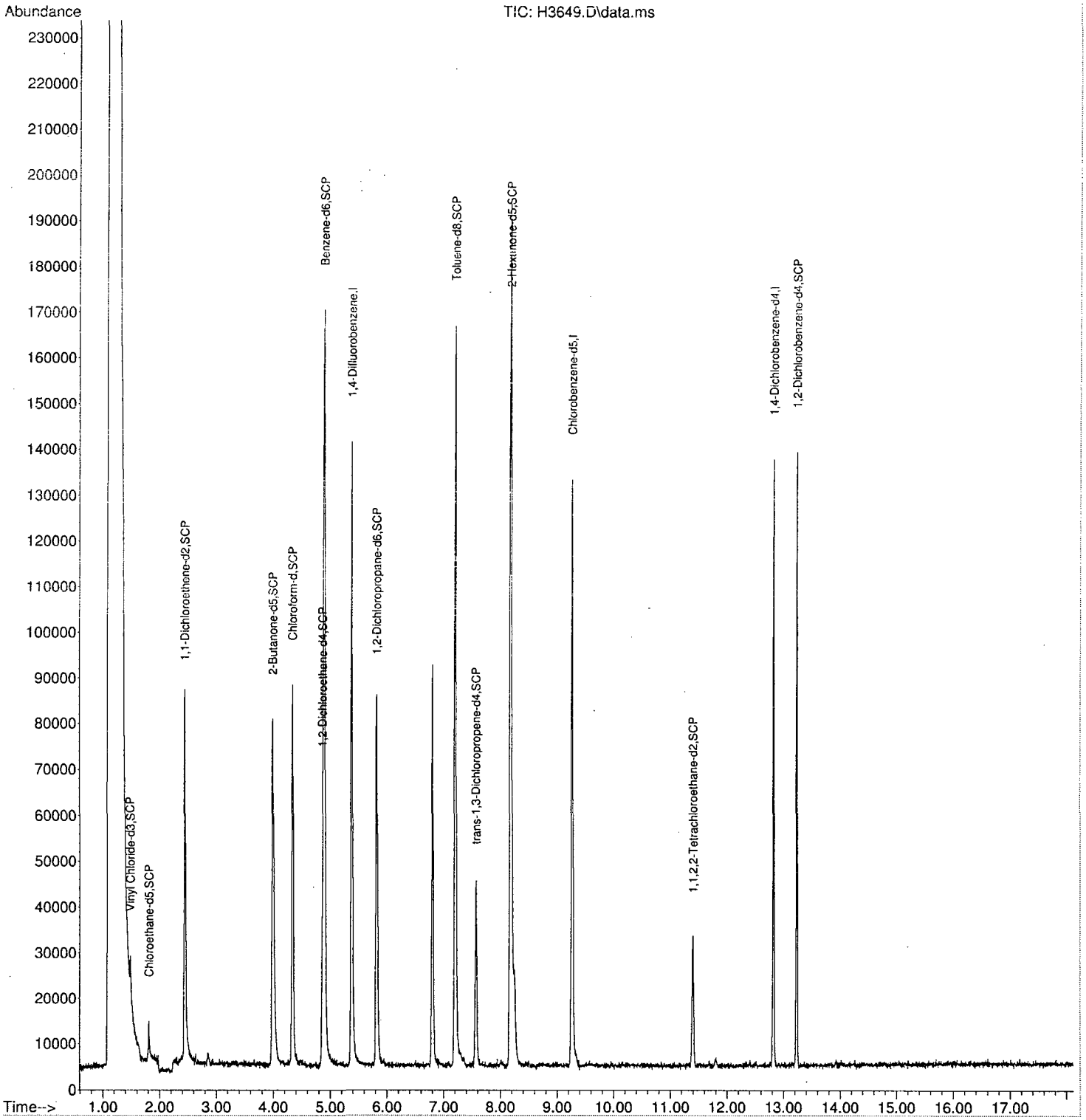
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

Vial: 56
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

Vial: 56
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3649.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	146	172	268	rBV	4145467	29742100	100.00%	90.504%
2	1.484	274	279	286	rVB3	10601	14904	0.05%	0.045%
3	1.812	371	381	392	rBV4	8859	14449	0.05%	0.044%
4	1.976	429	432	436	rVB	3429	2323	0.01%	0.007%
5	2.233	510	512	513	rBV	2142	1010	0.00%	0.003%
6	2.445	567	578	596	rBV	80658	141200	0.47%	0.430%
7	2.805	688	690	694	rBV	1226	1012	0.00%	0.003%
8	2.850	699	704	705	rVV2	2709	2007	0.01%	0.006%
9	2.860	705	707	714	rVB3	2073	2143	0.01%	0.007%
10	3.985	1043	1057	1078	rBV2	75808	188795	0.63%	0.574%
11	4.336	1153	1166	1181	rBV2	82763	159290	0.54%	0.485%
12	4.892	1315	1339	1361	rBV2	165535	424311	1.43%	1.291%
13	5.374	1476	1489	1504	rBV2	136403	271503	0.91%	0.826%
14	5.706	1589	1592	1597	rVB2	998	1034	0.00%	0.003%
15	5.818	1611	1627	1646	rBV2	81215	175371	0.59%	0.534%
16	6.799	1917	1932	1950	rBV2	88062	169870	0.57%	0.517%
17	7.204	2043	2058	2075	rBV2	161542	335361	1.13%	1.020%
18	7.571	2160	2172	2187	rBV4	40964	81573	0.27%	0.248%
19	8.178	2346	2361	2375	rBV	189749	422478	1.42%	1.286%
20	9.262	2683	2698	2714	rBV2	128544	272992	0.92%	0.831%
21	9.384	2733	2736	2740	rVB	2087	1450	0.00%	0.004%
22	10.098	2955	2958	2962	rVB	1369	1047	0.00%	0.003%
23	11.159	3283	3288	3291	rBV	1305	1127	0.00%	0.003%
24	11.394	3349	3361	3377	rBV5	29005	61208	0.21%	0.186%
25	11.792	3481	3485	3486	rBV	1454	1210	0.00%	0.004%
26	12.307	3644	3645	3652	rBV2	1247	1028	0.00%	0.003%
27	12.406	3673	3676	3679	rVB	1687	1047	0.00%	0.003%
28	12.818	3793	3804	3815	rBV	132833	184708	0.62%	0.562%
29	12.966	3847	3850	3854	rBV	1333	1022	0.00%	0.003%
30	13.226	3918	3931	3942	rBV2	134582	183025	0.62%	0.557%
31	17.081	5125	5130	5138	rBV2	1337	2213	0.01%	0.007%

Sum of corrected areas: 32862811

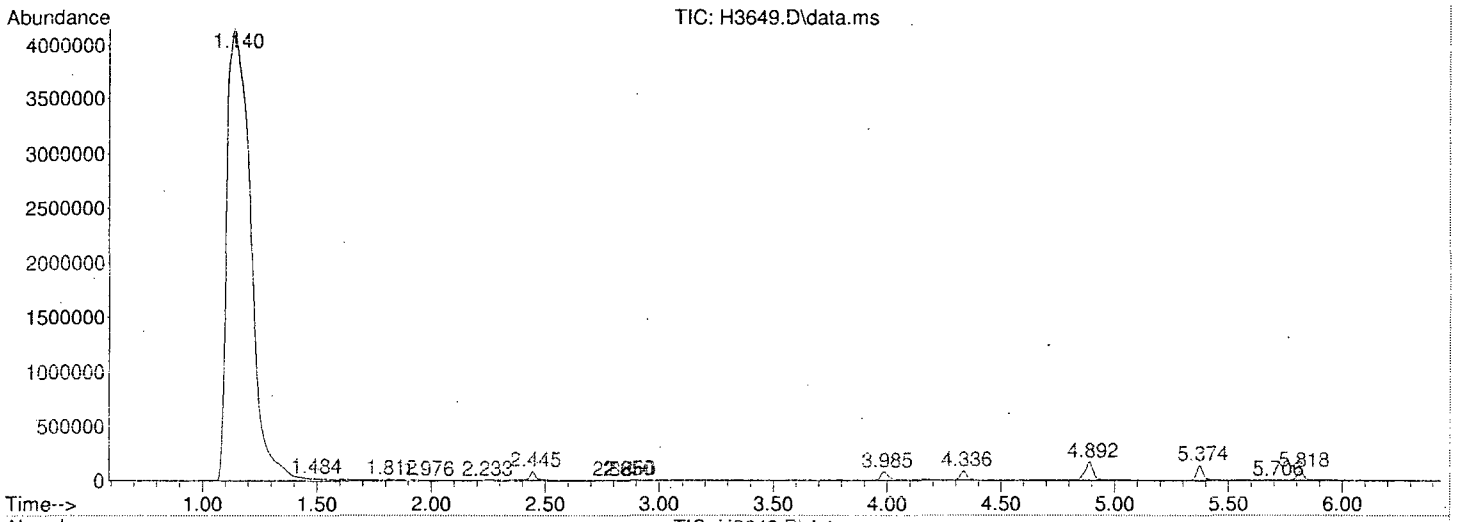
LSC Report - Integrated Chromatogram

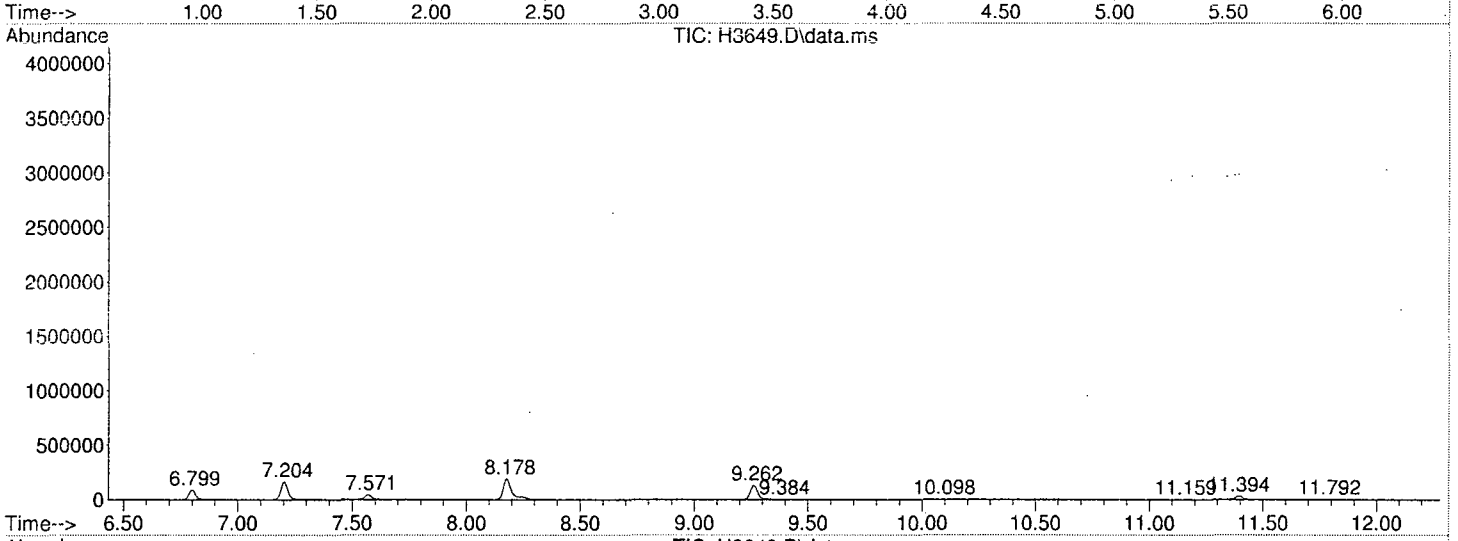
Data File : C:\msdchem\1\data\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

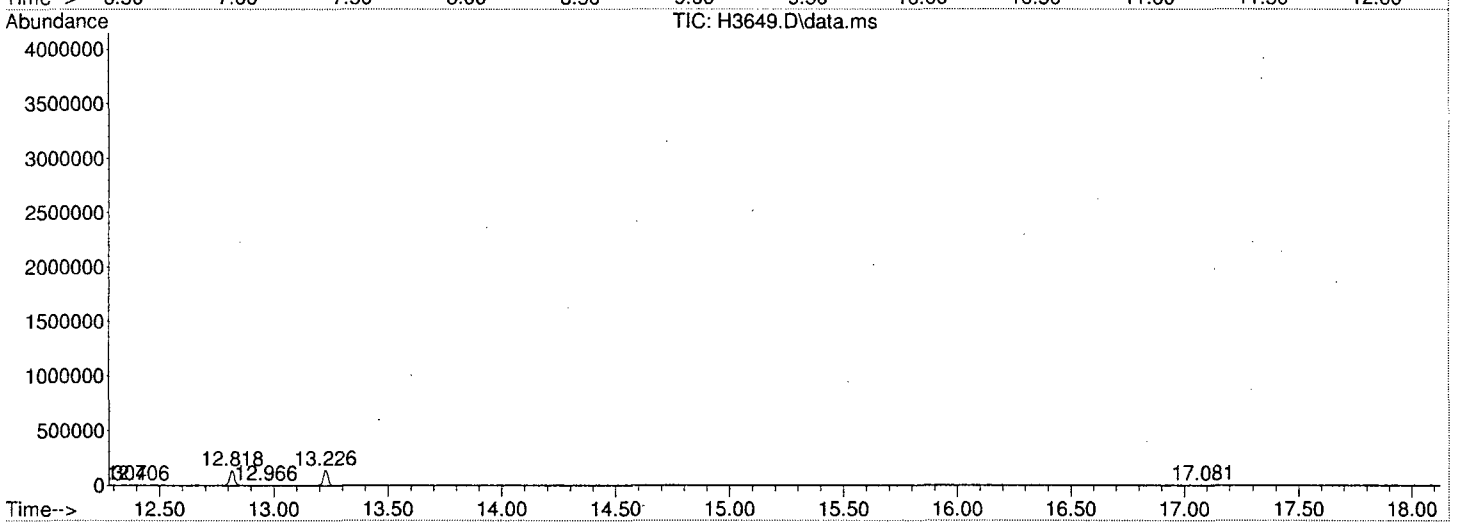
Vial: 56
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

Vial: 56
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Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

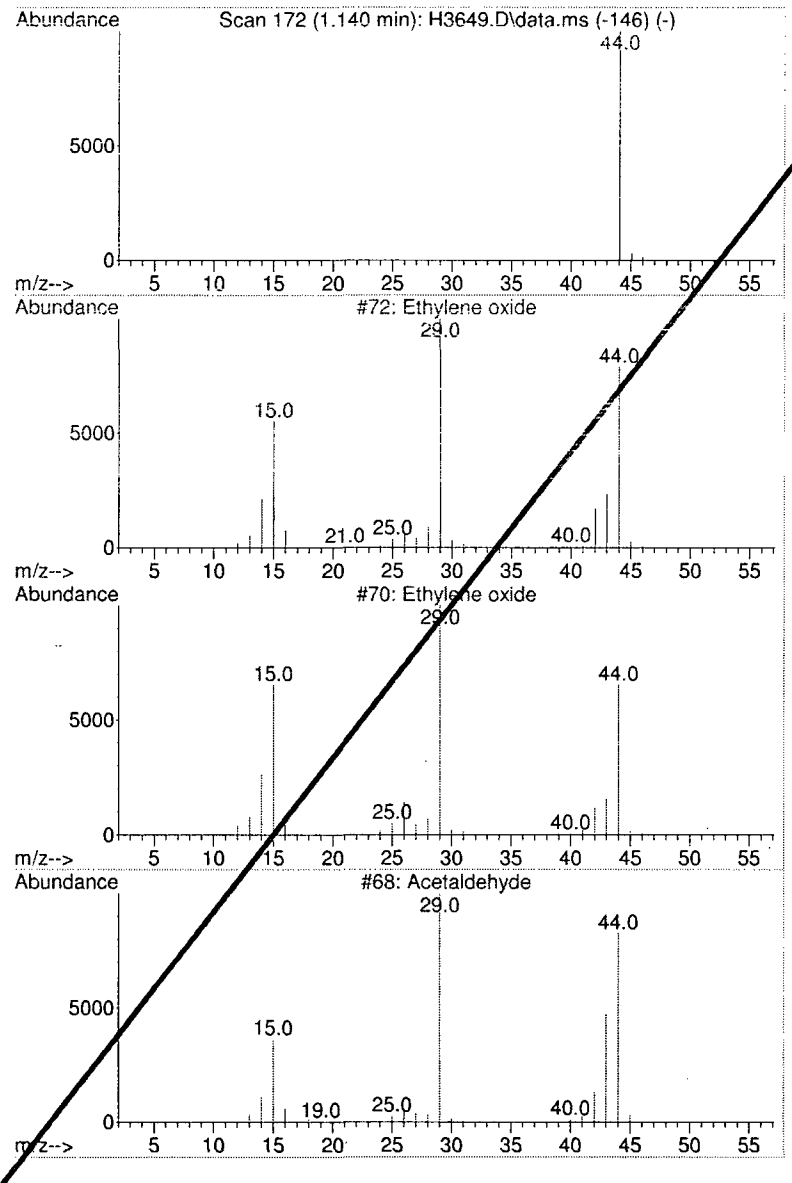
****

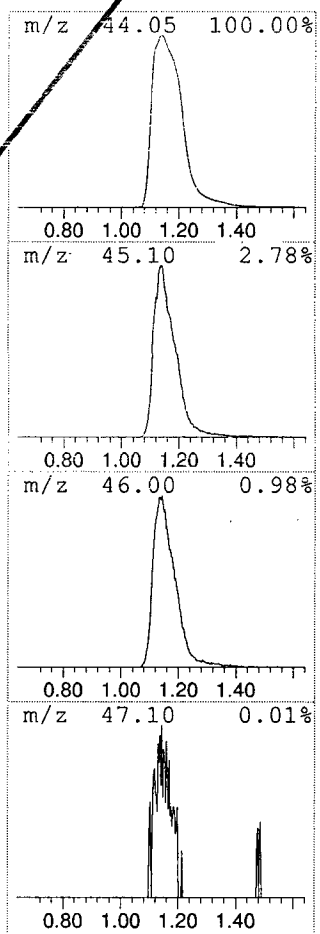
Peak Number 1 Ethylene oxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.140	547.73 ug/L	29742100	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	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3
5	Ethyne, fluoro-	44	C2HF	002713-09-9	3

Carbon dioxide





Library Search Compound Report

Data File : C:\msdchem\1\data\H3649.D
Acq On : 18 May 2012 13:52
Sample : 0015957-02
Misc : F5WC5 25ML
DataAcq Meth:VOAC.M

Vial: 56
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

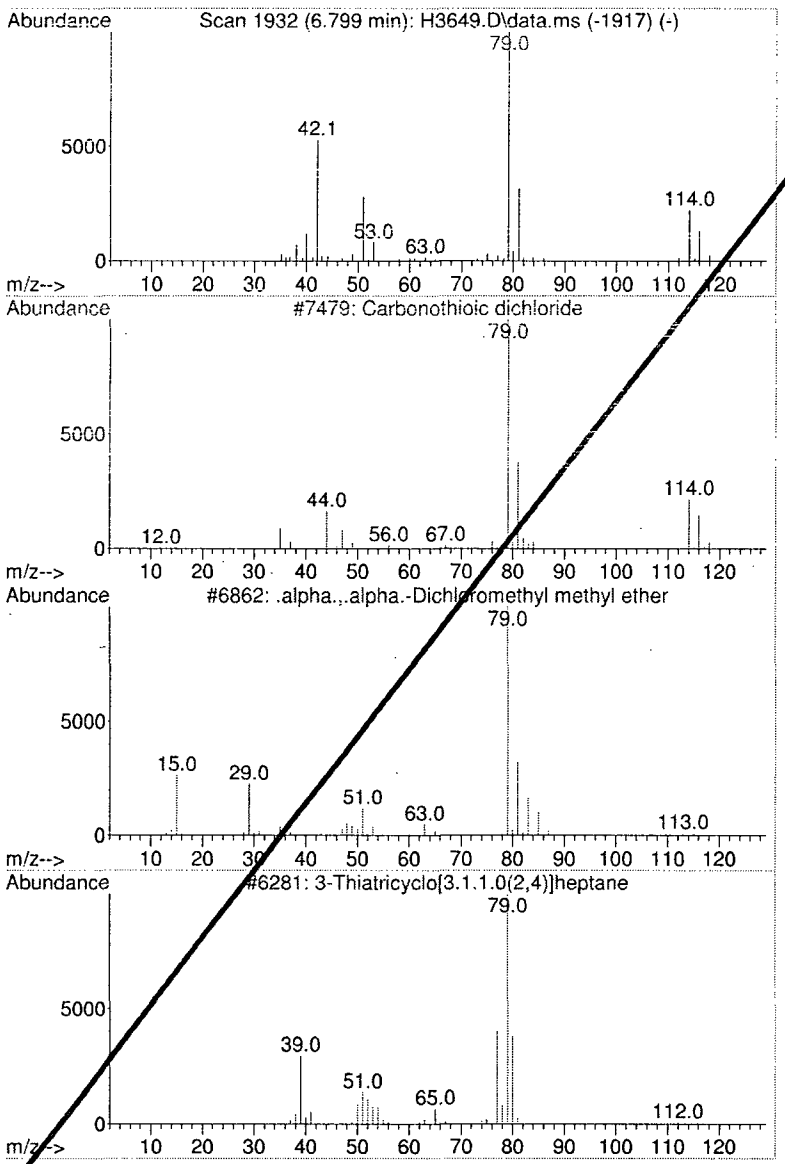
****

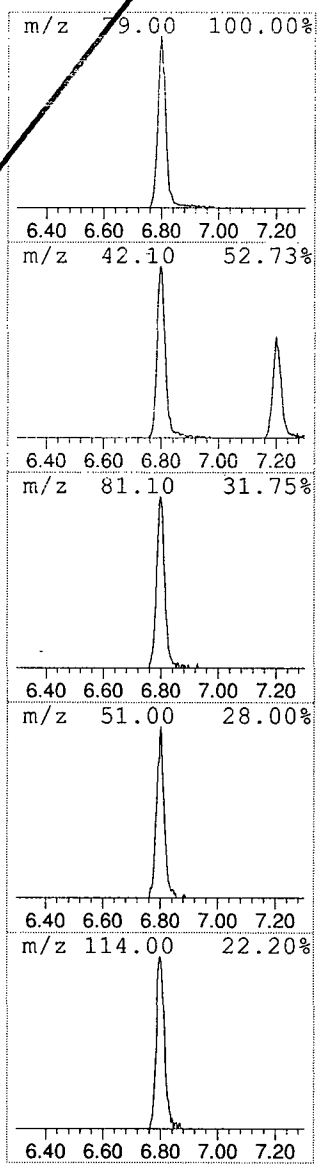
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.799	3.13 ug/L	169870	1,4-Difluorobenzene	5.374

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonothioic dichloride	114	CCl2S	000463-71-8	38
2	.alpha.,.alpha.-Dichloromethyl m...	114	C2H4Cl2O	004885-02-3	23
3	3-Thiatricyclo[3.1.1.0(2,4)]heptane	112	C6H8S	1000221-37-0	23
4	2-Propanol, 1,3-dichloro-	128	C3H6Cl2O	000096-23-1	17
5	Cyclopropane	42	C3H6	000075-19-4	9

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3649.D Vial: 56
Acq On : 18 May 2012 13:52 Operator: AC
Sample : 0015957-02 Inst : H-5975
Misc : F5WC5 25ML Multiplr: 1.00
DataAcq Meth:VOAC.M

Quant Time: May 21 10:58:35 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	547.7	ug/L	29742100	1	5.374	271503	5.0
Carbonothioic d...	6.799	3.1	ug/L	169870	1	5.374	271503	5.0

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

EPA SAMPLE NO.
F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3650.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.36	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3650.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3650.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	121924	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.258	117	90162	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	31494	5.0000 ug/L	# 0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.481	65	12398	6.24 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 124.80%	
7) Chloroethane-d5	1.812	69	8516	7.64 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 152.80%#	
10) 1,1-Dichloroethene-d2	2.445	63	62776	4.77 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 95.40%	
20) 2-Butanone-d5	3.982	46	113020	42.16 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 84.32%	
24) Chloroform-d	4.336	84	69558	5.06 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 101.20%	
26) 1,2-Dichloroethane-d4	4.857	65	34991	4.78 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 95.60%	
32) Benzene-d6	4.889	84	155349	5.37 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 107.40%	
35) 1,2-Dichloropropane-d6	5.815	67	40509	4.94 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 98.80%	
41) Toluene-d8	7.201	98	131141	5.23 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 104.60%	
43) trans-1,3-Dichloroprop...	7.567	79	25228	4.35 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 87.00%	
47) 2-Hexanone-d5	8.178	63	70007	49.50 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 99.00%	
57) 1,1,2,2-Tetrachloroeth...	11.393	84	17674	3.90 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 78.00%	
63) 1,2-Dichlorobenzene-d4	13.229	152	31163	5.16 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 103.20%	
Target Compounds					Qvalue
16) Methylene Chloride	2.853	84	2510	0.3581 ug/L	93

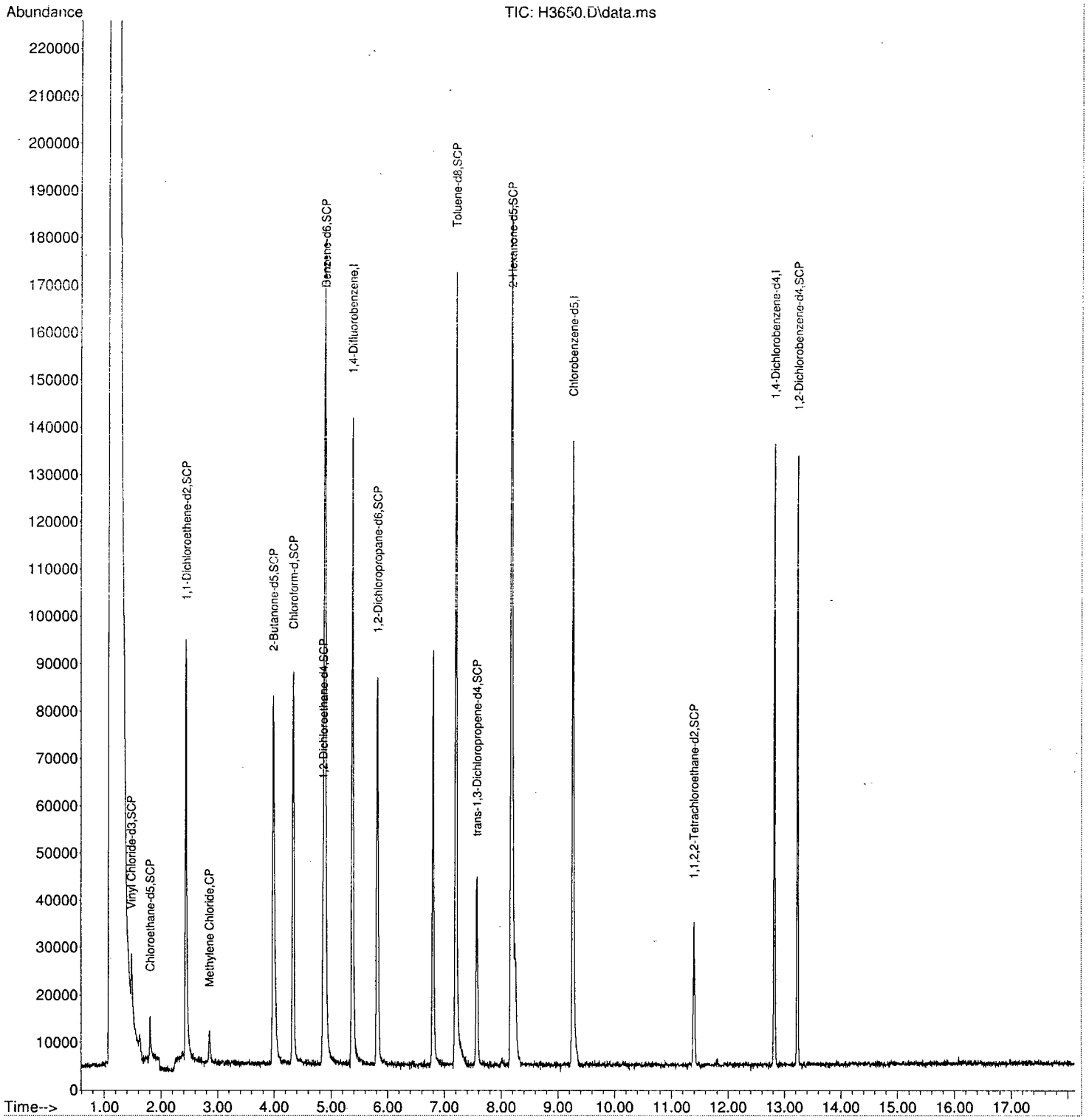
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

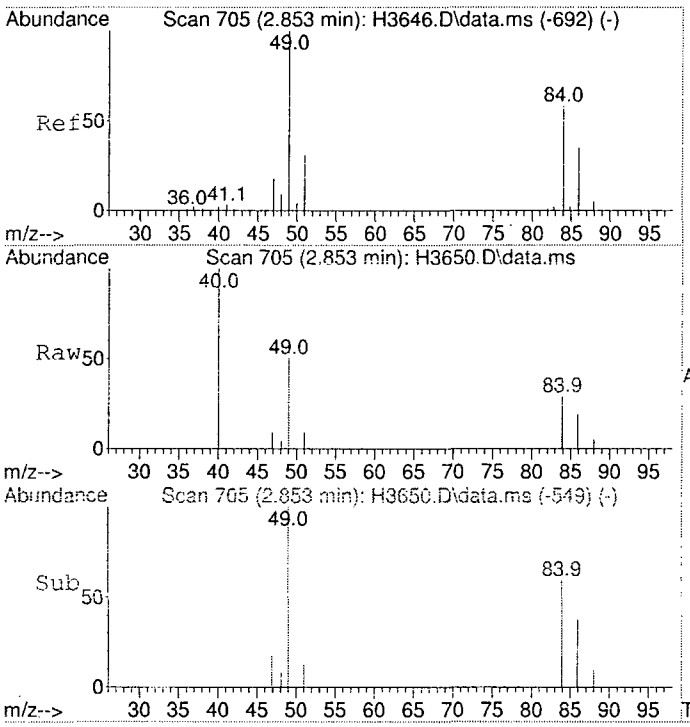


00037

Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
MS Integration Params: RTEINT.P

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

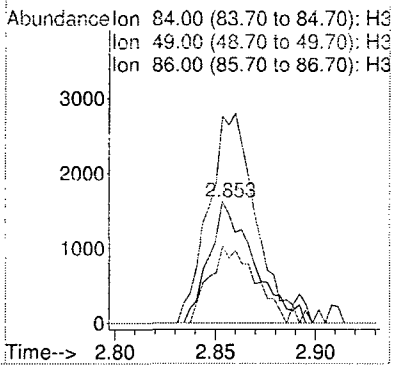
Method : C:\msdchem\1\methods\SOTH3646.M (RTE Integrator)
Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0



#16
Methylene Chloride
Concen: 0.3581 ug/L
RT: 2.85 min Scan# 705
Delta R.T. 0.00 min
Lab File: H3650.D
Acq: 18 May 2012 14:45

Tgt Ion: 84 Resp: 2510

Ion	Ratio	Lower	Upper
84	100		
49	185.7	153.1	193.1
86	64.8	44.9	84.9



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3650.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.040	137	141	142	rBV2	1206	1067	0.00%	0.004%
2	1.140	147	172	265	rBV	3843719	25814562	100.00%	88.926%
3	1.481	275	278	290	rVB2	12623	15830	0.06%	0.055%
4	1.812	374	381	387	rVV2	8951	12475	0.05%	0.043%
5	1.973	429	431	435	rVB2	2807	1591	0.01%	0.005%
6	2.243	512	515	517	rBV	1772	1441	0.01%	0.005%
7	2.442	566	577	594	rBV	88842	157419	0.61%	0.542%
8	2.857	701	706	714	rVB6	6185	9547	0.04%	0.033%
9	3.982	1044	1056	1085	rBV2	77790	196631	0.76%	0.677%
10	4.333	1152	1165	1179	rBV2	82835	166059	0.64%	0.572%
11	4.889	1318	1338	1355	rBV3	174019	436821	1.69%	1.505%
12	5.371	1475	1488	1505	rBV2	137304	281910	1.09%	0.971%
13	5.815	1612	1626	1641	rBV3	81887	176249	0.68%	0.607%
14	5.988	1678	1680	1684	rVB2	1444	1007	0.00%	0.003%
15	6.799	1920	1932	1947	rBV3	87555	168906	0.65%	0.582%
16	7.201	2042	2057	2076	rBV2	168285	356056	1.38%	1.227%
17	7.323	2094	2095	2104	rVB4	2108	1912	0.01%	0.007%
18	7.570	2157	2172	2186	rBV2	39909	78912	0.31%	0.272%
19	7.795	2239	2242	2244	rBV	1765	1097	0.00%	0.004%
20	8.178	2347	2361	2376	rBV2	183100	430403	1.67%	1.483%
21	8.696	2519	2522	2523	rBV	1969	1039	0.00%	0.004%
22	8.844	2566	2568	2573	rVB2	1257	1007	0.00%	0.003%
23	9.262	2684	2698	2713	rBV	131632	275096	1.07%	0.948%
24	10.355	3035	3038	3040	rBV	1531	1036	0.00%	0.004%
25	11.397	3348	3362	3374	rBV5	30602	62638	0.24%	0.216%
26	12.818	3793	3804	3820	rVB	131522	189057	0.73%	0.651%
27	13.229	3921	3932	3943	rVB2	128784	188413	0.73%	0.649%
28	13.818	4110	4115	4117	rBV2	1330	1114	0.00%	0.004%

Sum of corrected areas: 29029295

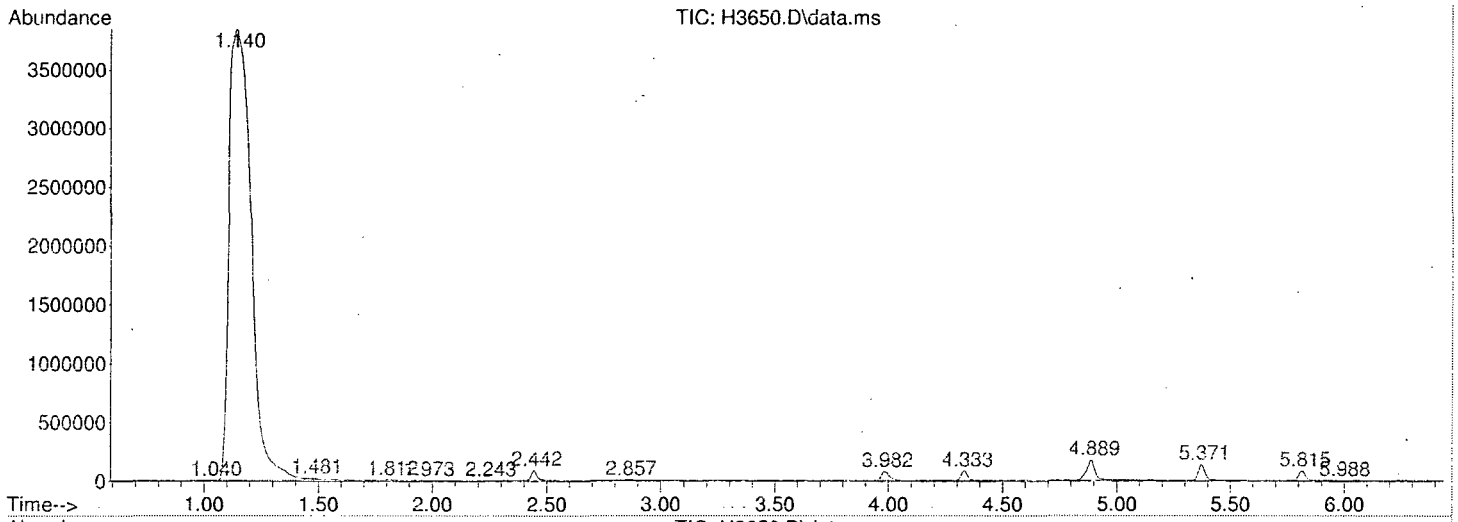
LSC Report - Integrated Chromatogram

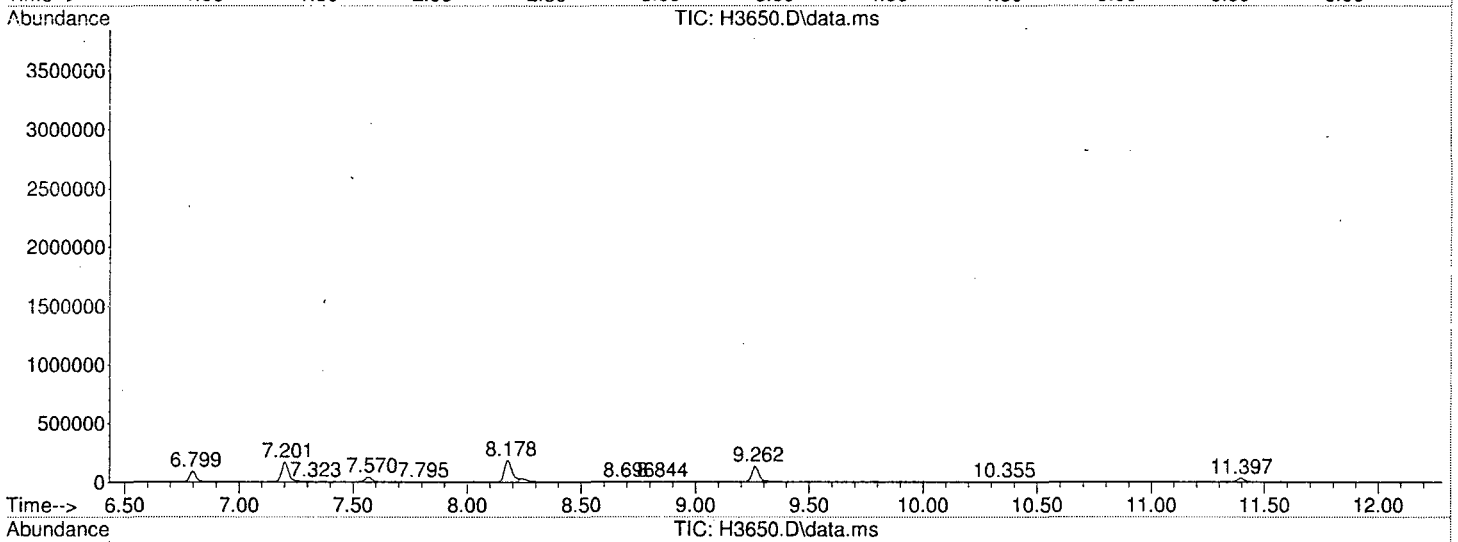
Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

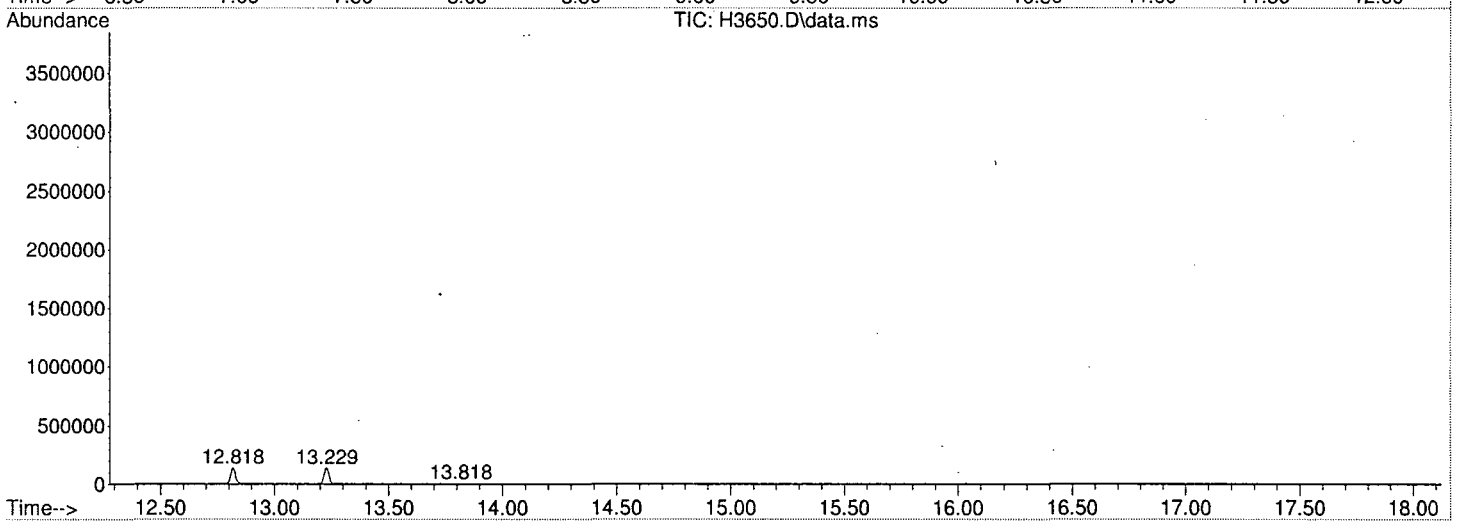
Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

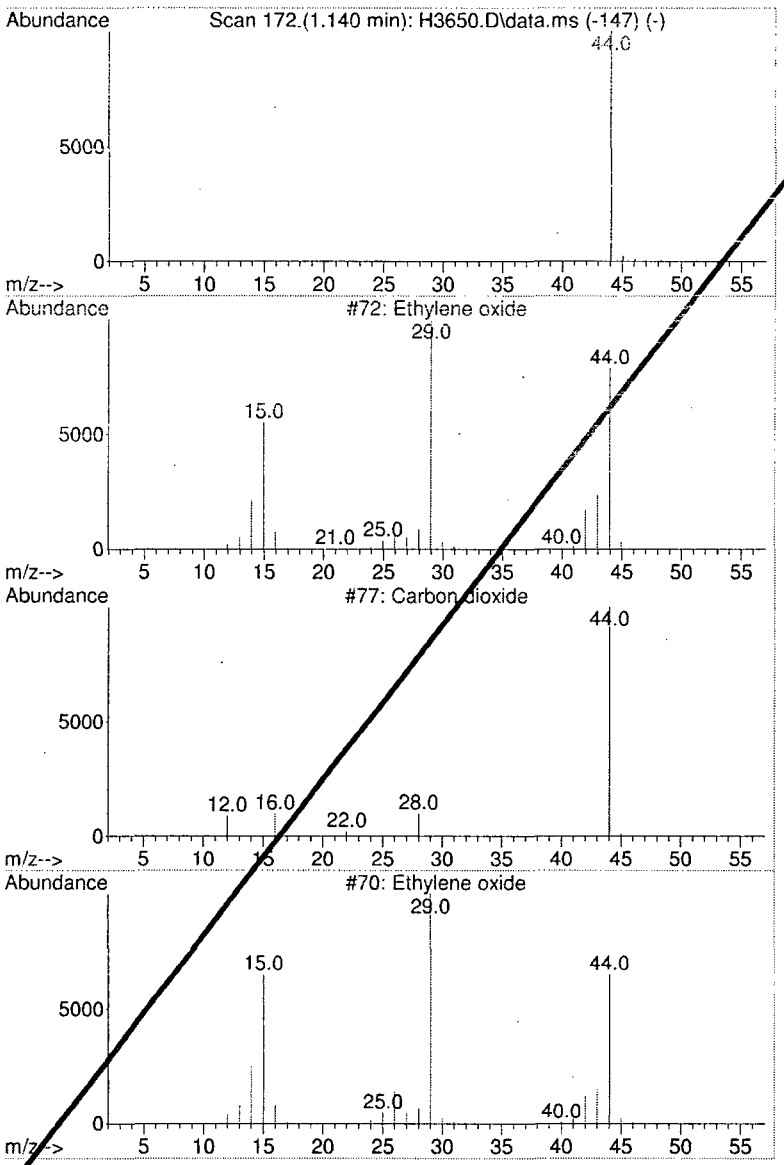
****

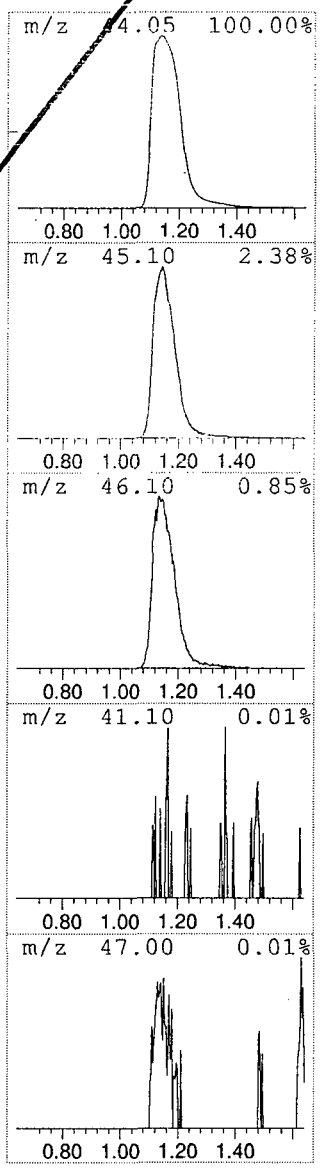
Peak Number 1 Ethylene oxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.140	457.85 ug/L	25814600	1,4-Difluorobenzene	5.371

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethylene oxide	44	C2H4O	000075-21-8	4
2	Carbon dioxide	44	CO2	000124-38-9	4
3	Ethylene oxide	44	C2H4O	000075-21-8	4
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\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

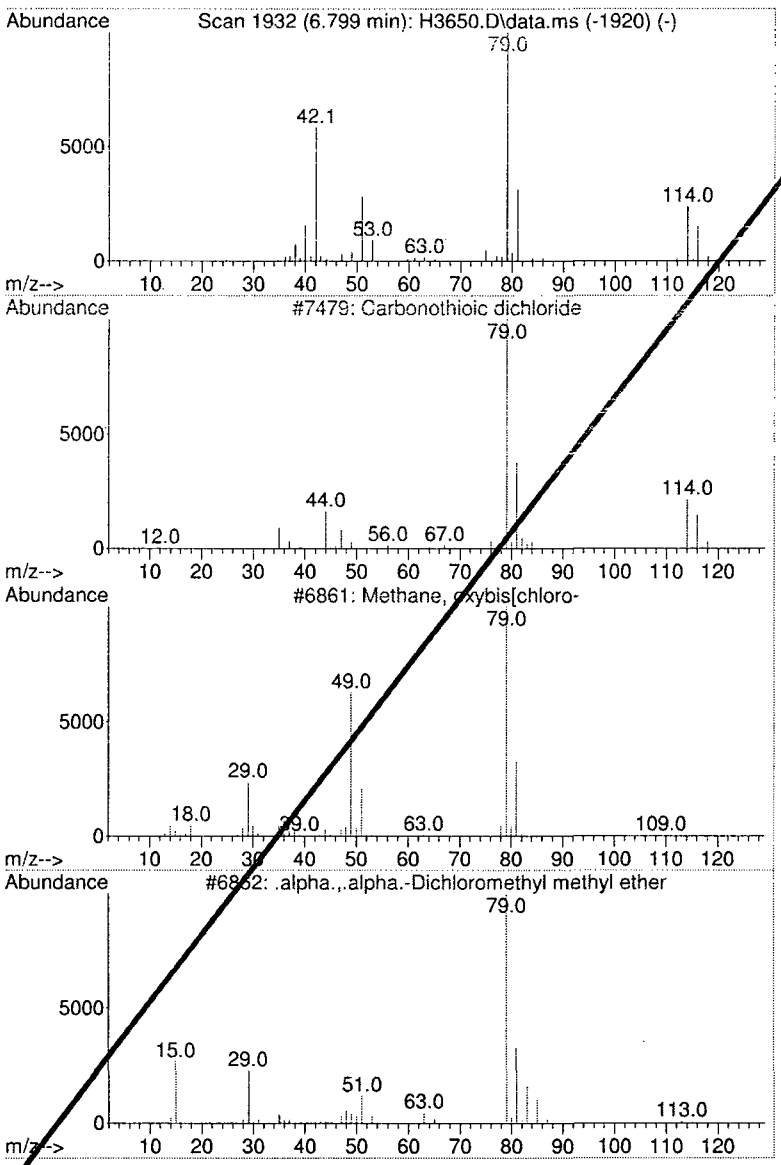
****

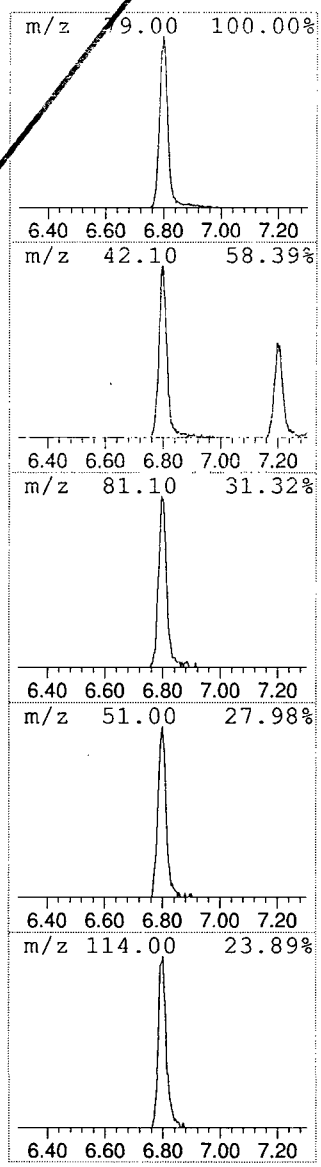
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.799	3.00 ug/L	168906	1,4-Difluorobenzene	5.371

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonothioic dichloride	114	CCl2S	000463-71-8	49
2	Methane, oxybis[chloro-	114	C2H4Cl2O	000542-88-1	25
3	.alpha.,.alpha.-Dichloromethyl m...	114	C2H4Cl2O	004885-02-3	23
4	3-Thiatricyclo[3.1.1.0(2,4)]heptane	112	C6H8S	1000221-37-0	9
5	Cyclopropane	42	C3H6	000075-19-4	9

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3650.D
Acq On : 18 May 2012 14:45
Sample : 0015957-03
Misc : F5WC6 25ML
DataAcq Meth:VOAC.M

Vial: 57
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:59:50 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	457.9	ug/L	25814600	1	5.371	281910	5.0
Carbonothioic d...	6.799	3.0	ug/L	168906	1	5.371	281910	5.0

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

EPA SAMPLE NO.

F5WC7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-04

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3651.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.34	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

F5WC7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-04

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3651.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.34	J
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
F5WC7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-04

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3651.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	131693	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	95877	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	34495	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.481	65	12600	5.88 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 117.60%	
7) Chloroethane-d5	1.809	69	7903	6.57 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 131.40%#	
10) 1,1-Dichloroethene-d2	2.445	63	61366	4.31 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 86.20%	
20) 2-Butanone-d5	3.982	46	116325	40.17 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 80.34%	
24) Chloroform-d	4.333	84	72445	4.88 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 97.60%	
26) 1,2-Dichloroethane-d4	4.860	65	37239	4.71 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 94.20%	
32) Benzene-d6	4.889	84	161709	5.26 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 105.20%	
35) 1,2-Dichloropropane-d6	5.812	67	41620	4.77 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 95.40%	
41) Toluene-d8	7.204	98	139439	5.23 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 104.60%	
43) trans-1,3-Dichloroprop...	7.567	79	27740	4.49 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 89.80%	
47) 2-Hexanone-d5	8.178	63	72395	48.14 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 96.28%	
57) 1,1,2,2-Tetrachloroeth...	11.393	84	18245	3.78 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 75.60%	
63) 1,2-Dichlorobenzene-d4	13.229	152	33408	5.05 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 101.00%	
Target Compounds					Qvalue
16) Methylene Chloride	2.860	84	2605	0.3441 ug/L	97
62) 1,4-Dichlorobenzene	12.850	146	4318	0.3394 ug/L	96

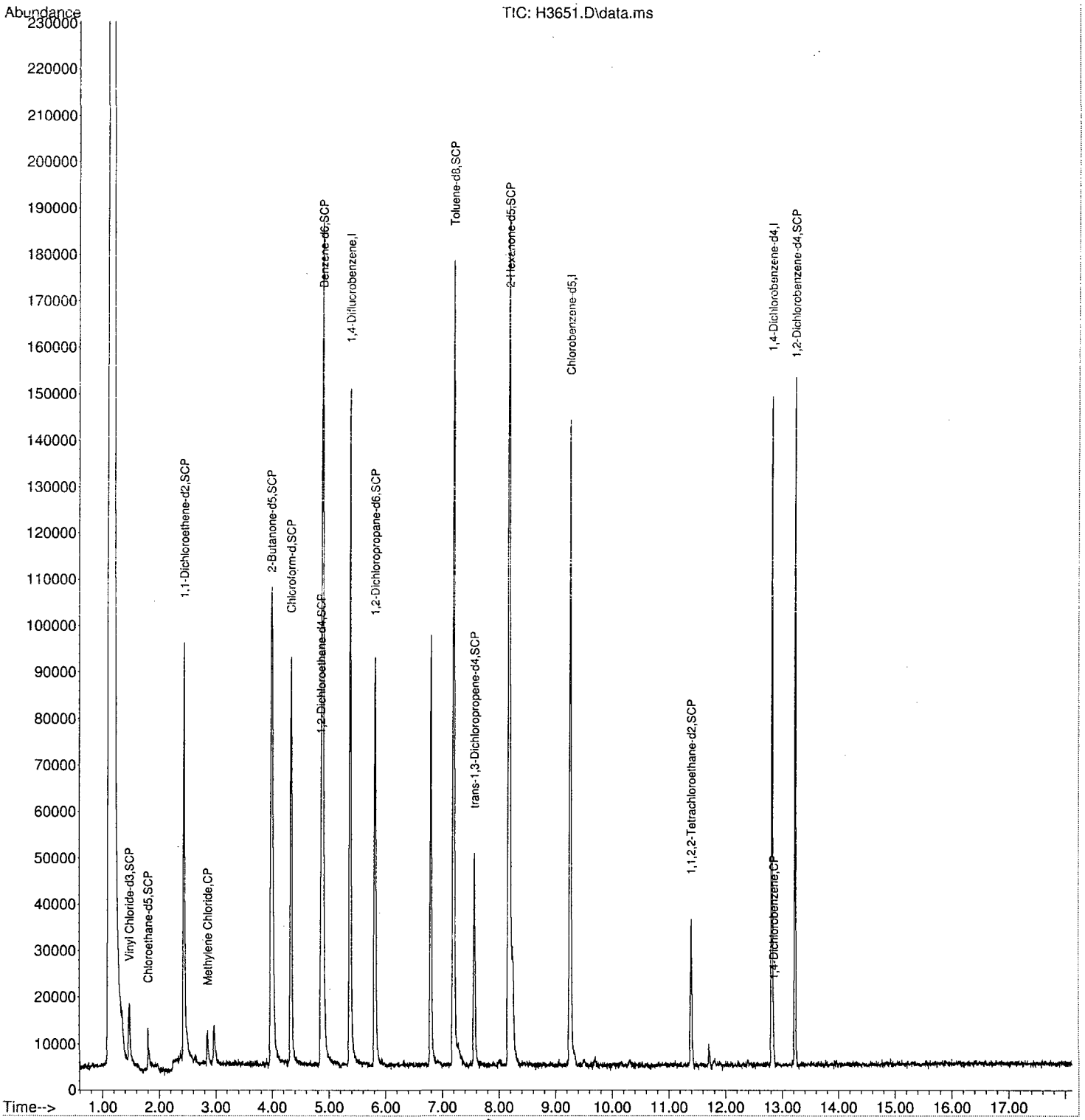
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

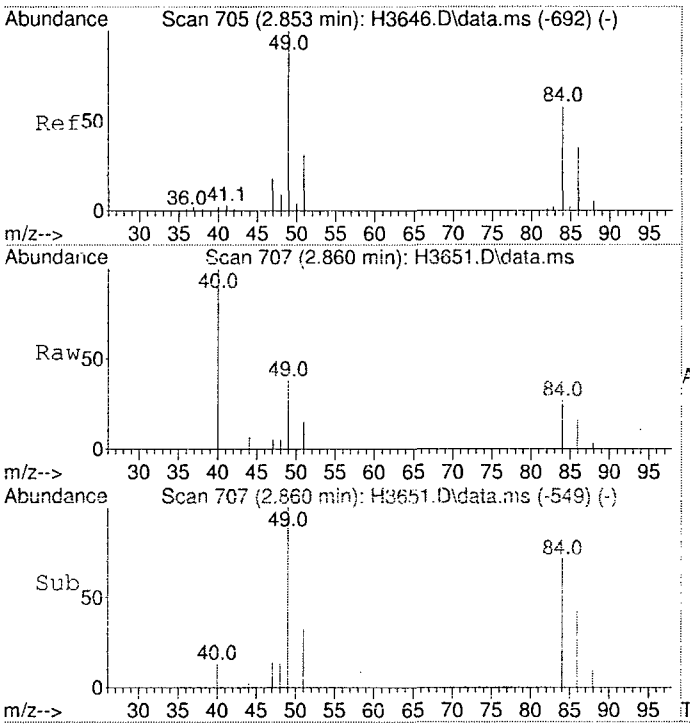
Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
MS Integration Params: RTEINT.P

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

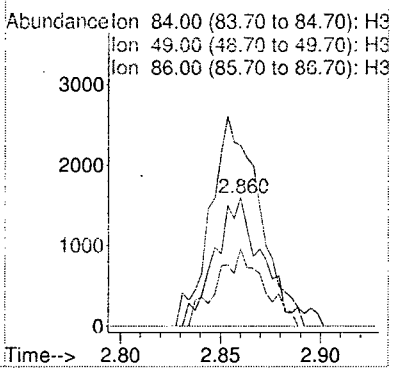
Method : C:\msdchem\1\methods\SOTH3646.M (RTE Integrator)
Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

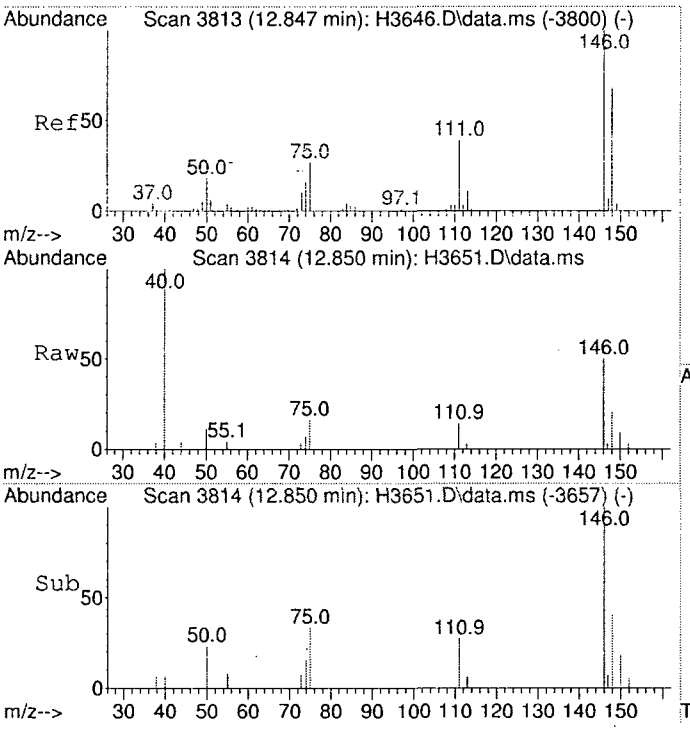


#16
Methylene Chloride
Concen: 0.3441 ug/L
RT: 2.86 min Scan# 707
Delta R.T. 0.01 min
Lab File: H3651.D
Acq: 18 May 2012 15:11

Tgt Ion: 84 Resp: 2605

Ion	Ratio	Lower	Upper
84	100		
49	175.0	153.1	193.1
86	59.9	44.9	84.9

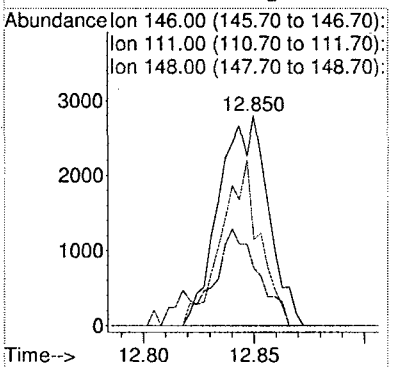




#62
1,4-Dichlorobenzene
Concen: 0.3394 ug/L
RT: 12.85 min Scan# 3814
Delta R.T. 0.00 min
Lab File: H3651.D
Acq: 18 May 2012 15:11

Tgt Ion:146 Resp: 4318

Ion	Ratio	Lower	Upper
146	100		
111	38.5	20.8	60.8
148	61.2	43.9	83.9



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3651.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	149	173	225	rBV	1938224	7325872	100.00%	67.827%
2	1.809	372	380	383	rBV4	8986	10054	0.14%	0.093%
3	2.239	509	514	515	rBV3	2588	1402	0.02%	0.013%
4	2.445	564	578	589	rBV	90001	153161	2.09%	1.418%
5	2.853	697	705	706	rBV4	7036	6872	0.09%	0.064%
6	2.969	734	741	742	rBV2	7280	5613	0.08%	0.052%
7	3.124	785	789	792	rVB2	1301	1101	0.02%	0.010%
8	3.937	1037	1042	1044	rBV	1293	1399	0.02%	0.013%
9	3.992	1044	1059	1082	rBV2	103061	298591	4.08%	2.765%
10	4.127	1098	1101	1105	rVB2	1675	1103	0.02%	0.010%
11	4.329	1150	1164	1181	rBV2	87466	175647	2.40%	1.626%
12	4.818	1311	1316	1318	rBV	1203	1002	0.01%	0.009%
13	4.889	1318	1338	1359	rBV2	181745	461897	6.31%	4.277%
14	5.374	1476	1489	1504	rBV2	144823	287315	3.92%	2.660%
15	5.699	1584	1590	1593	rBV2	1178	1077	0.01%	0.010%
16	5.815	1613	1626	1646	rBV2	88191	185913	2.54%	1.721%
17	6.795	1919	1931	1946	rBV3	92714	176510	2.41%	1.634%
18	7.201	2043	2057	2072	rBV2	173397	362265	4.95%	3.354%
19	7.287	2082	2084	2091	rVB4	2722	2207	0.03%	0.020%
20	7.567	2160	2171	2185	rBV3	45914	85437	1.17%	0.791%
21	8.178	2345	2361	2377	rBV3	186934	449202	6.13%	4.159%
22	8.654	2506	2509	2512	rBV2	1580	1365	0.02%	0.013%
23	9.262	2683	2698	2715	rBV3	139237	297223	4.06%	2.752%
24	10.689	3141	3142	3146	rBV	1473	1031	0.01%	0.010%
25	11.393	3349	3361	3373	rBV3	31516	62706	0.86%	0.581%
26	11.712	3453	3460	3468	rVB3	4841	6510	0.09%	0.060%
27	11.805	3488	3489	3498	rVB3	1840	1721	0.02%	0.016%
28	12.387	3665	3670	3673	rBV4	1897	2068	0.03%	0.019%
29	12.818	3791	3804	3822	rBV2	144592	224768	3.07%	2.081%
30	13.226	3922	3931	3943	rVB2	148546	203827	2.78%	1.887%
31	13.921	4144	4147	4152	rBV2	1871	1827	0.02%	0.017%
32	13.959	4157	4159	4166	rVB4	1738	2004	0.03%	0.019%
33	15.596	4664	4668	4669	rBV2	1257	1020	0.01%	0.009%
34	15.895	4757	4761	4764	rBV2	1226	1106	0.02%	0.010%

Sum of corrected areas: 10800816

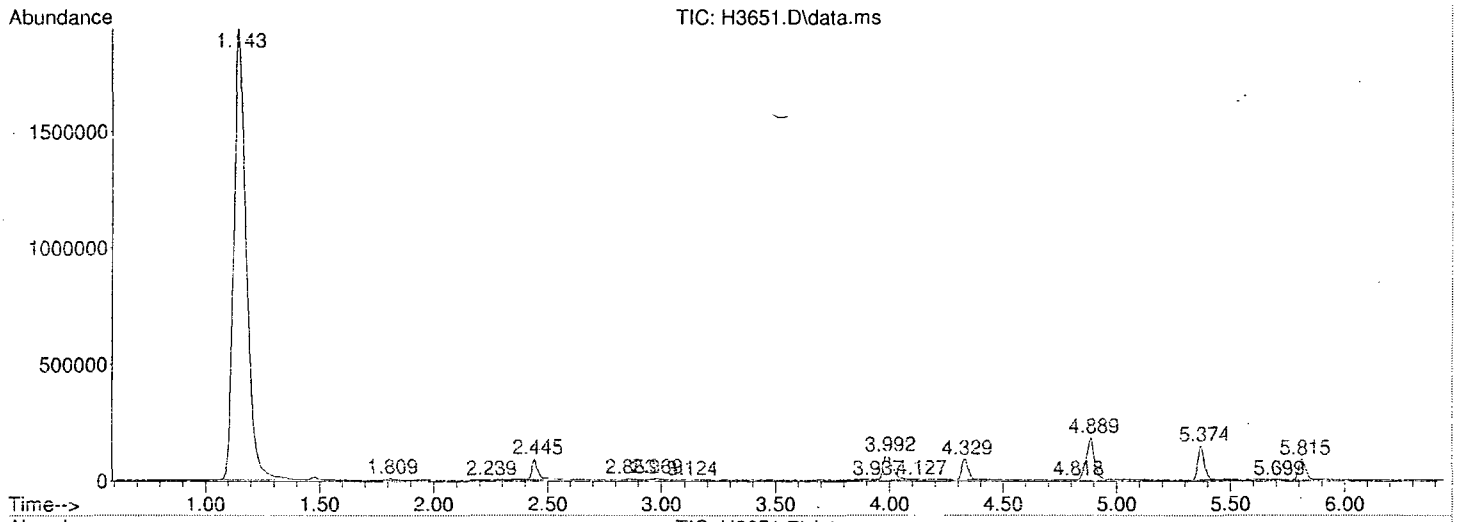
LSC Report - Integrated Chromatogram

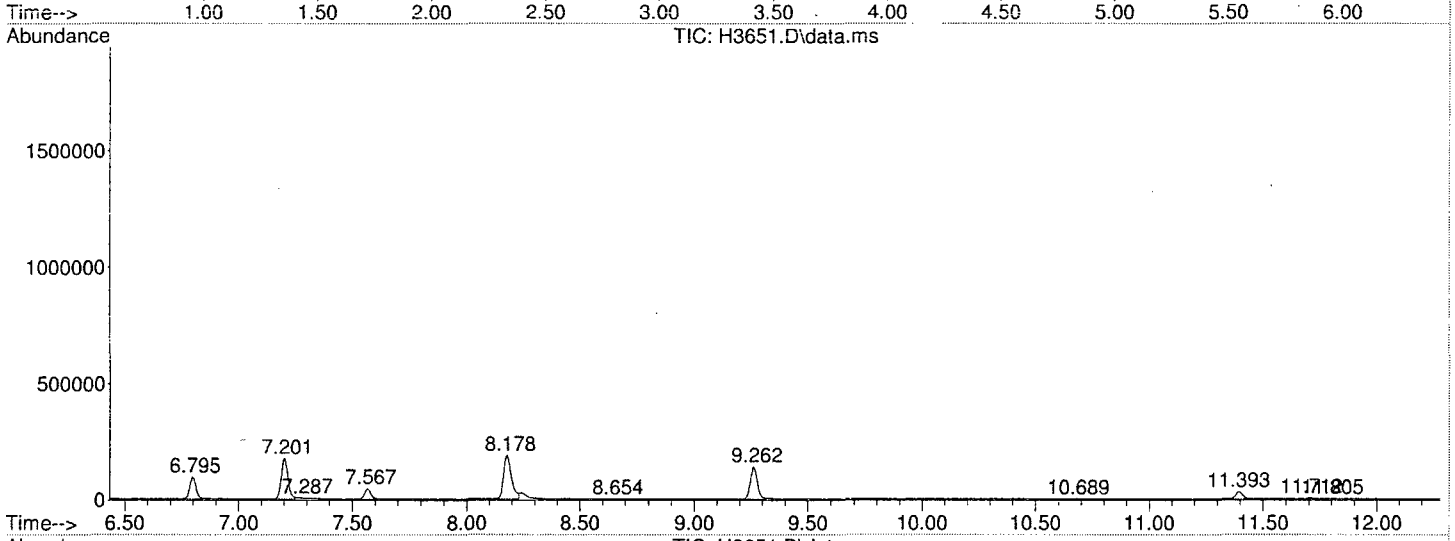
Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

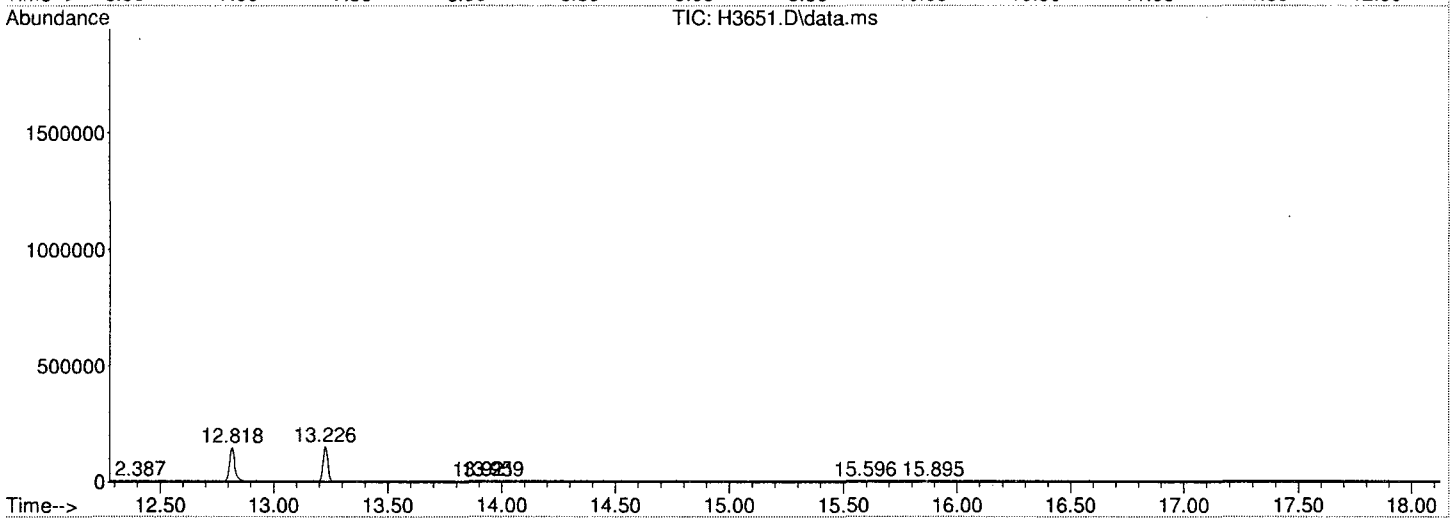
Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

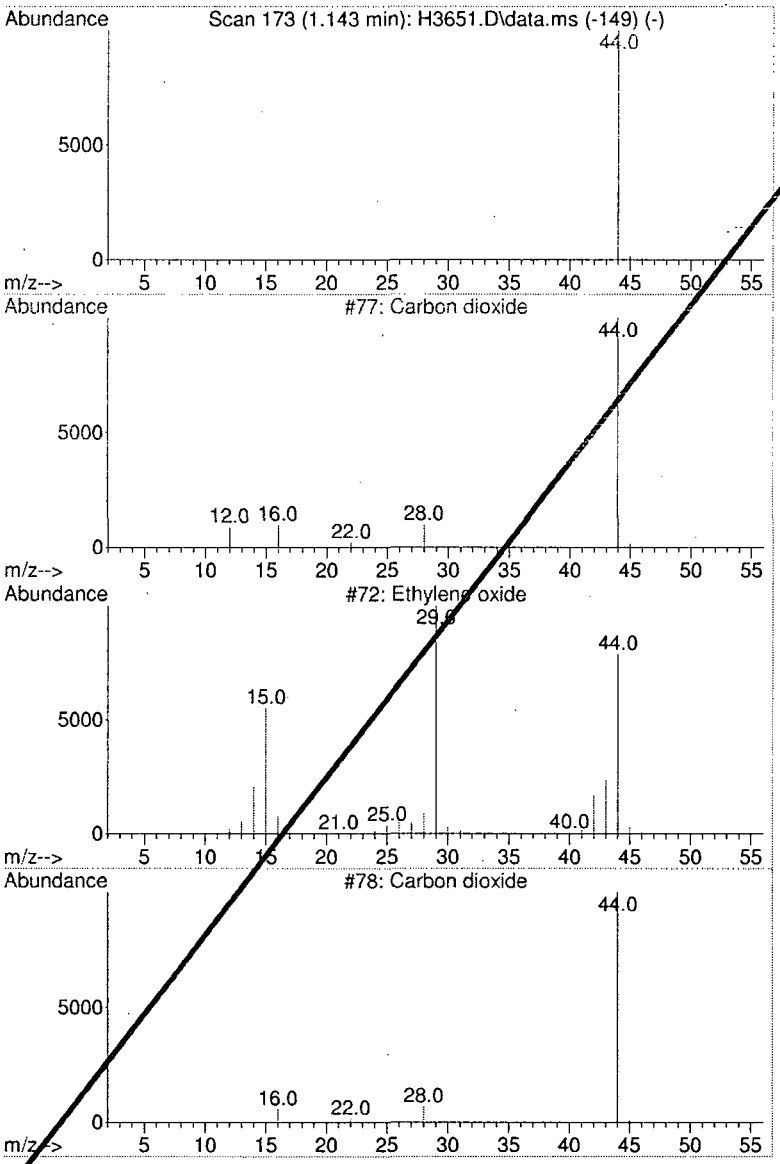
****

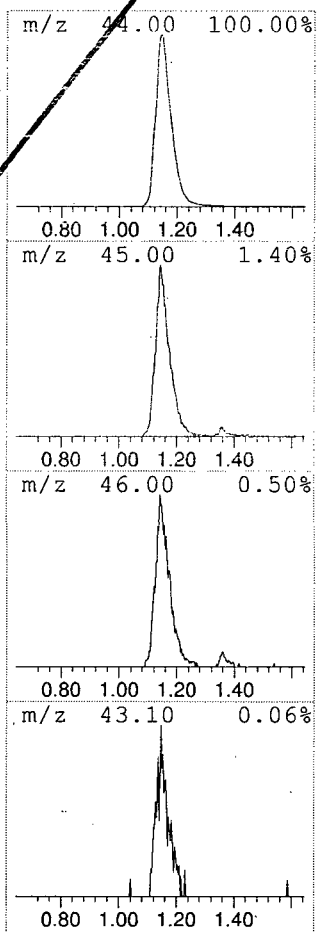
Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.143	127.49 ug/L	7325870	1,4-Difluorobenzene	5.374

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	Nitrous Oxide	44	N2O	010024-97-2	3
5	Nitrous Oxide	44	N2O	010024-97-2	3

Carbon dioxide





Library Search Compound Report

Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

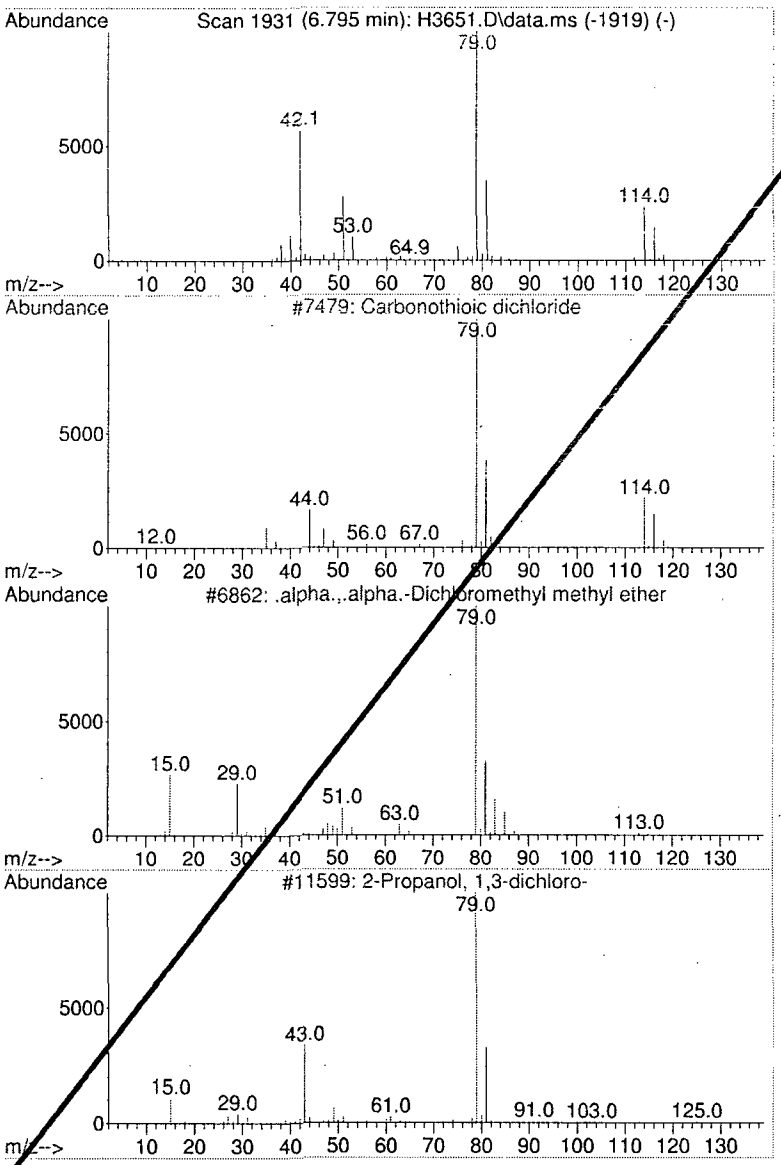
****

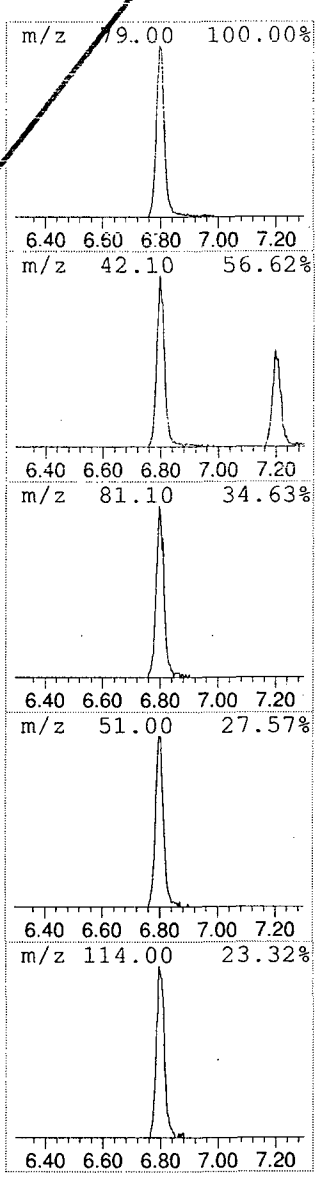
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.795	3.07 ug/L	176510	1,4-Difluorobenzene	5.374

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonothioic dichloride	114	CCl2S	000463-71-8	47
2	.alpha.,.alpha.-Dichloromethyl m...	114	C2H4Cl2O	004885-02-3	23
3	2-Propanol, 1,3-dichloro-	128	C3H6Cl2O	000096-23-1	12
4	3-Thiatricyclo[3.1.1.0(2,4)]heptane	112	C6H8S	1000221-37-0	9
5	n-Propyl chloride	78	C3H7Cl	000540-54-5	9

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3651.D
Acq On : 18 May 2012 15:11
Sample : 0015957-04
Misc : F5WC7 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:01:42 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	127.5	ug/L	7325870	1	5.374	287315	5.0
Carbonothioic d...	6.795	3.1	ug/L	176510	1	5.374	287315	5.0

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

EPA SAMPLE NO.
F5WC8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-05

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3652.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

F5WC8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-05

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3652.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
F5WC8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-05

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3652.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/16/2012

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

05/22/12

Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	114624	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.259	117	86947	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	29201	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.487	65	10769	5.77 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 115.40%	
7) Chloroethane-d5	1.809	69	6994	6.68 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 133.60%#	
10) 1,1-Dichloroethene-d2	2.442	63	61434	4.96 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 99.20%	
20) 2-Butanone-d5	3.982	46	105296	41.78 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 83.56%	
24) Chloroform-d	4.329	84	65808	5.10 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 102.00%	
26) 1,2-Dichloroethane-d4	4.860	65	33289	4.84 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 96.80%	
32) Benzene-d6	4.889	84	147815	5.30 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 106.00%	
35) 1,2-Dichloropropane-d6	5.815	67	37889	4.79 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 95.80%	
41) Toluene-d8	7.201	98	132230	5.47 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 109.40%	
43) trans-1,3-Dichloroprop...	7.567	79	23771	4.25 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 85.00%	
47) 2-Hexanone-d5	8.175	63	63069	46.25 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 92.50%	
57) 1,1,2,2-Tetrachloroeth...	11.390	84	16612	3.80 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 76.00%	
63) 1,2-Dichlorobenzene-d4	13.226	152	29822	5.33 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 106.60%	
Target Compounds					Qvalue
13) Acetone	2.497	43	24309	19.4552 ug/L	97

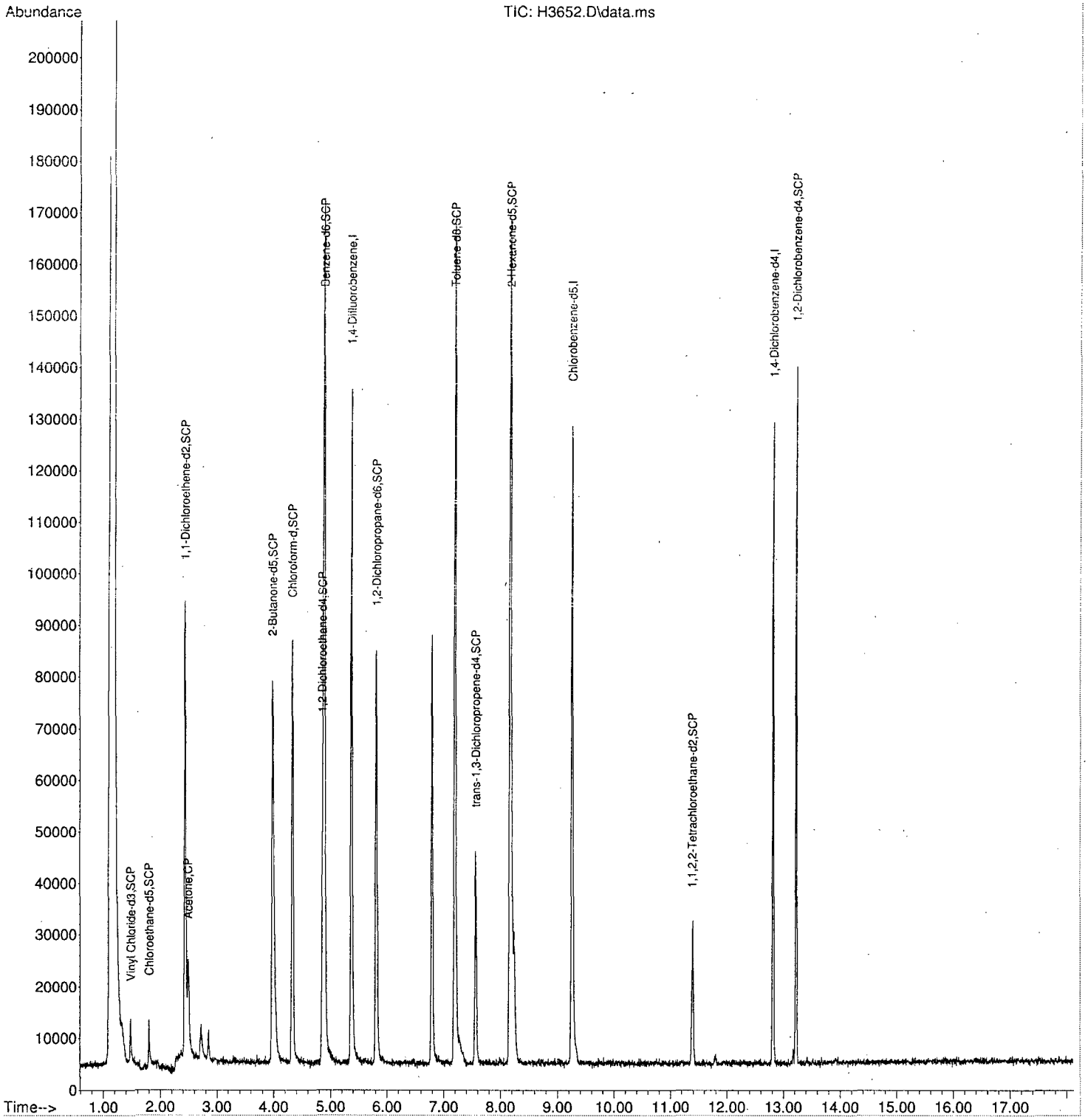
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

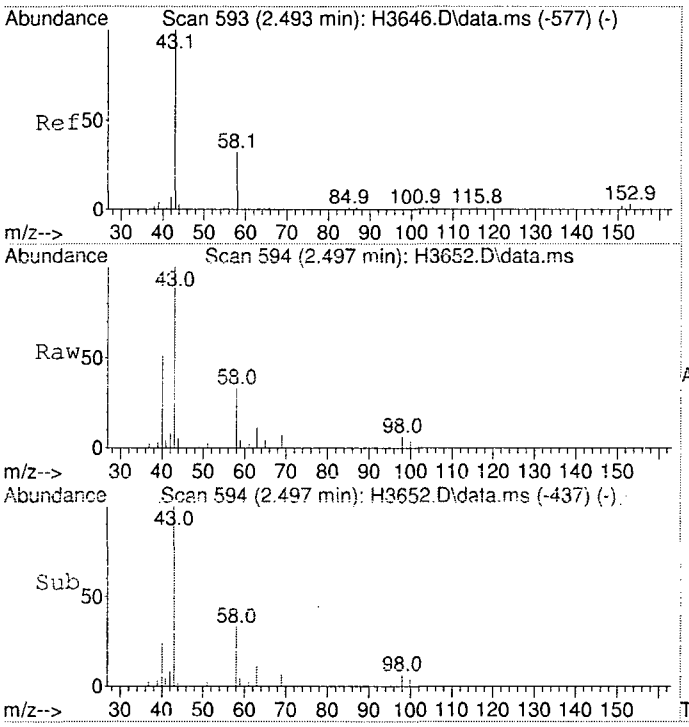
Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
MS Integration Params: RTEINT.P

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

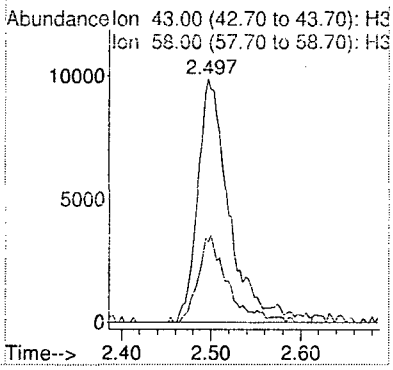
Method : C:\msdchem\1\methods\SOTH3646.M (RTE Integrator)
Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0



#13
Acetone
Concen: 19.4552 ug/L
RT: 2.50 min Scan# 594
Delta R.T. 0.00 min
Lab File: H3652.D
Acq: 18 May 2012 15:37

Tgt Ion: 43 Resp: 24309

Ion	Ratio	Lower	Upper
43	100		
58	32.0	13.5	53.5



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3652.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.146	147	174	220	rBV	1011555	3694536	100.00%	54.340%
2	1.484	272	279	285	rBV2	8236	10318	0.28%	0.152%
3	1.809	372	380	386	rBV3	9325	12747	0.35%	0.187%
4	1.963	426	428	434	rVB4	1359	1121	0.03%	0.016%
5	2.275	521	525	526	rBV2	2122	1414	0.04%	0.021%
6	2.445	567	578	589	rBV	87317	150333	4.07%	2.211%
7	2.494	590	593	606	rVB3	16095	27510	0.74%	0.405%
8	2.719	656	663	664	rBV	5933	5618	0.15%	0.083%
9	2.857	701	706	718	rVB2	5775	7574	0.21%	0.111%
10	3.982	1045	1056	1083	rBV3	73187	194706	5.27%	2.864%
11	4.333	1152	1165	1183	rBV	81752	161915	4.38%	2.381%
12	4.529	1222	1226	1228	rVB	1669	1279	0.03%	0.019%
13	4.889	1318	1338	1361	rBV3	167977	425962	11.53%	6.265%
14	5.018	1376	1378	1382	rVB3	1805	1020	0.03%	0.015%
15	5.371	1476	1488	1506	rBV2	130570	264425	7.16%	3.889%
16	5.815	1613	1626	1642	rBV2	79696	169066	4.58%	2.487%
17	6.799	1920	1932	1948	rBV3	82760	160393	4.34%	2.359%
18	7.201	2041	2057	2075	rBV2	164625	344048	9.31%	5.060%
19	7.567	2159	2171	2183	rBV3	41176	74415	2.01%	1.095%
20	8.178	2347	2361	2376	rBV2	162914	388576	10.52%	5.715%
21	8.587	2486	2488	2493	rBV	1290	1052	0.03%	0.015%
22	9.075	2638	2640	2646	rBV	1384	1275	0.03%	0.019%
23	9.259	2683	2697	2716	rBV3	123405	267908	7.25%	3.940%
24	10.146	2969	2973	2975	rBV	1578	1308	0.04%	0.019%
25	11.397	3349	3362	3376	rVB4	27784	56819	1.54%	0.836%
26	11.779	3476	3481	3483	rVV	1433	1093	0.03%	0.016%
27	11.805	3487	3489	3494	rVB3	1693	1233	0.03%	0.018%
28	12.818	3794	3804	3817	rVV3	124492	180752	4.89%	2.659%
29	12.901	3826	3830	3835	rBV	1428	1194	0.03%	0.018%
30	13.178	3912	3916	3922	rBV4	2913	2901	0.08%	0.043%
31	13.226	3922	3931	3944	rVV	135041	181868	4.92%	2.675%
32	13.966	4158	4161	4164	rBV3	1571	1141	0.03%	0.017%
33	14.699	4387	4389	4393	rBV	1300	1149	0.03%	0.017%
34	16.001	4791	4794	4798	rBV	1129	1135	0.03%	0.017%
35	16.062	4812	4813	4817	rBV	1698	1121	0.03%	0.016%

Sum of corrected areas: 6798925

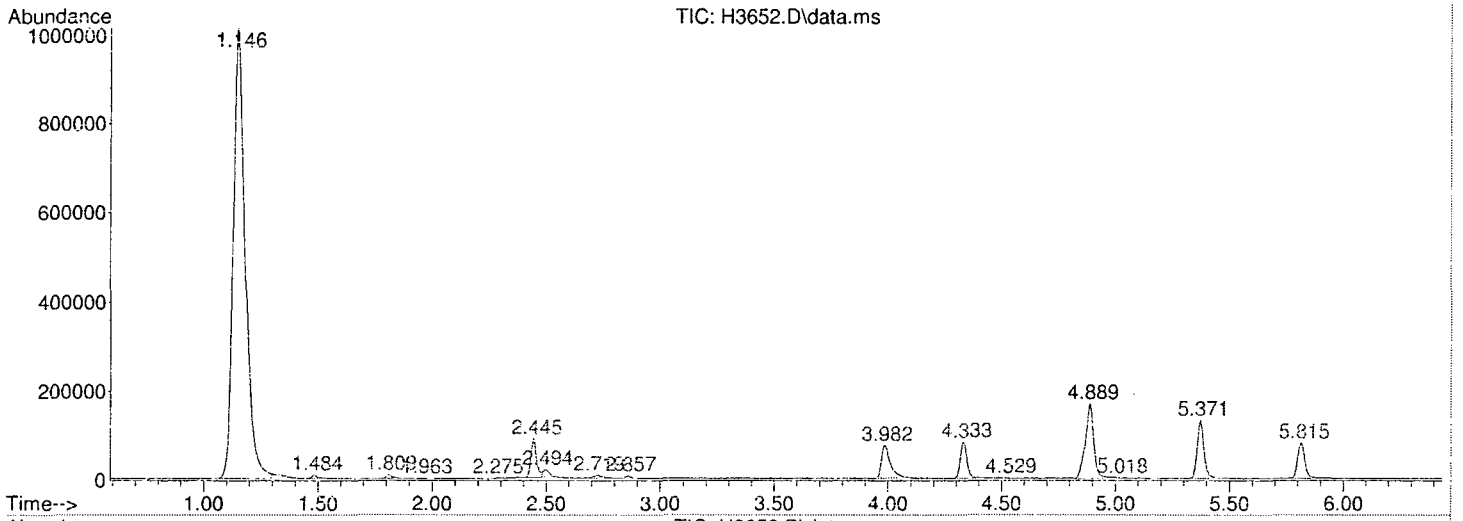
LSC Report - Integrated Chromatogram

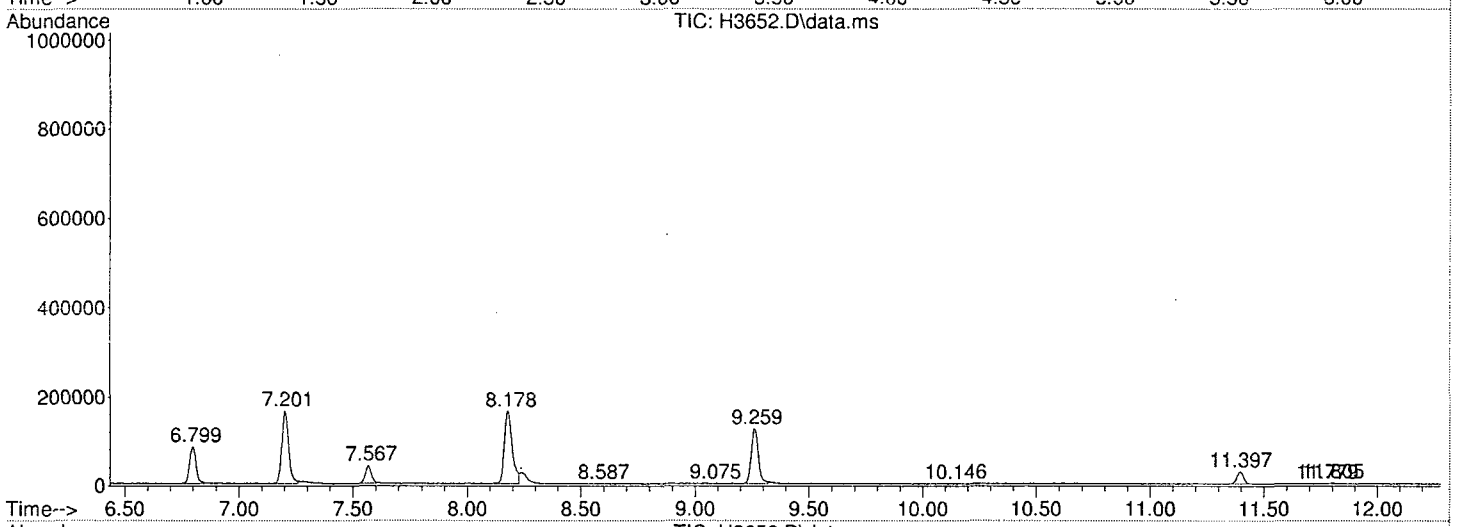
Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

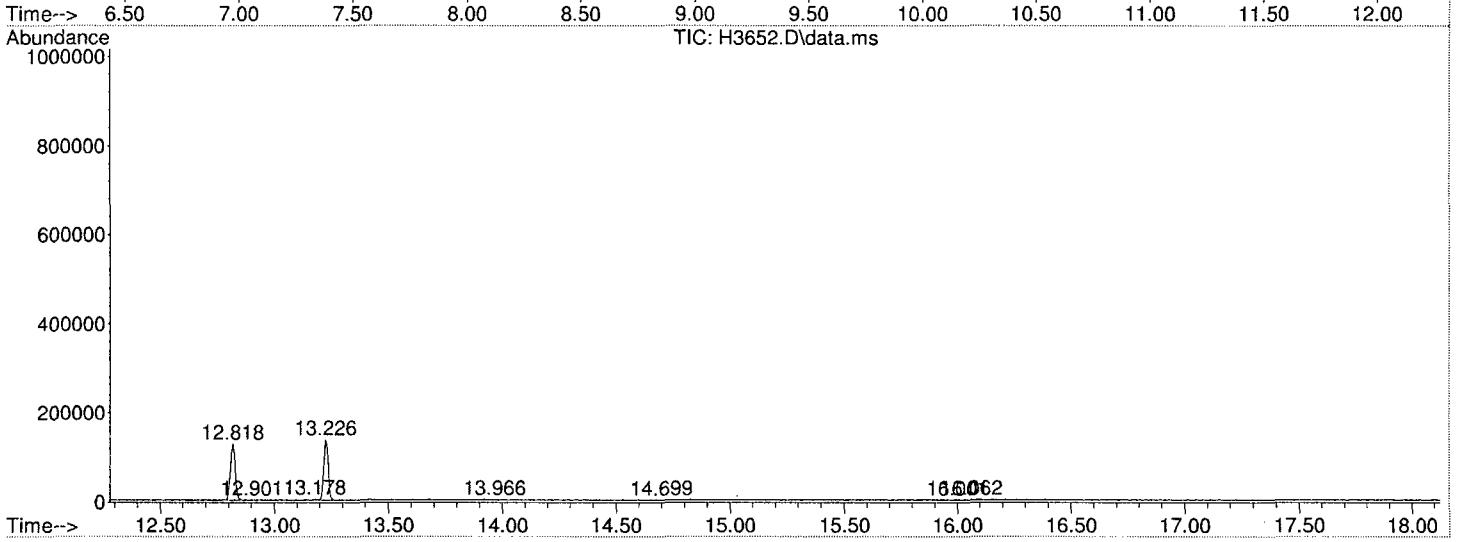
Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
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Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

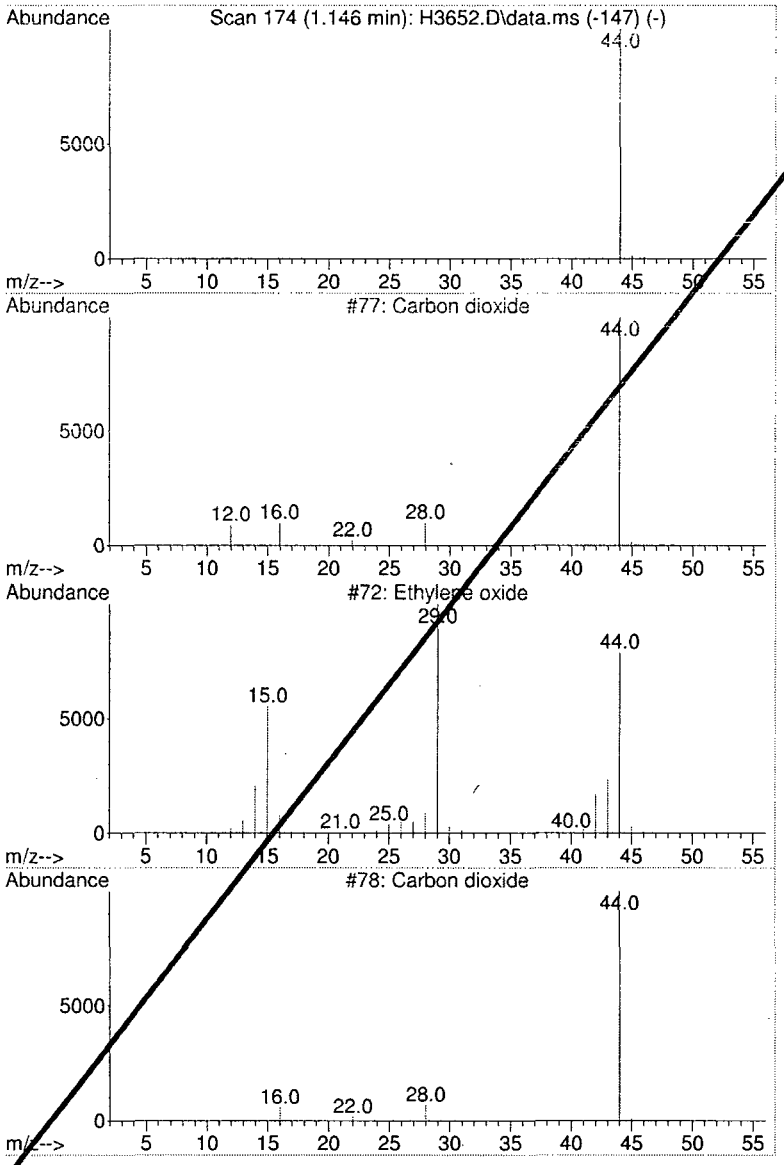
****

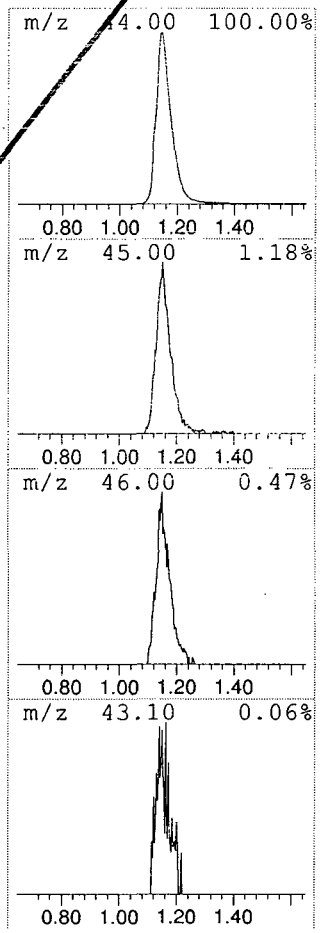
Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.146	69.86 ug/L	3694540	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	Nitrous Oxide	44	N2O	010024-97-2	3
5	Nitrous Oxide	44	N2O	010024-97-2	3

Carbon dioxide





Library Search Compound Report

Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

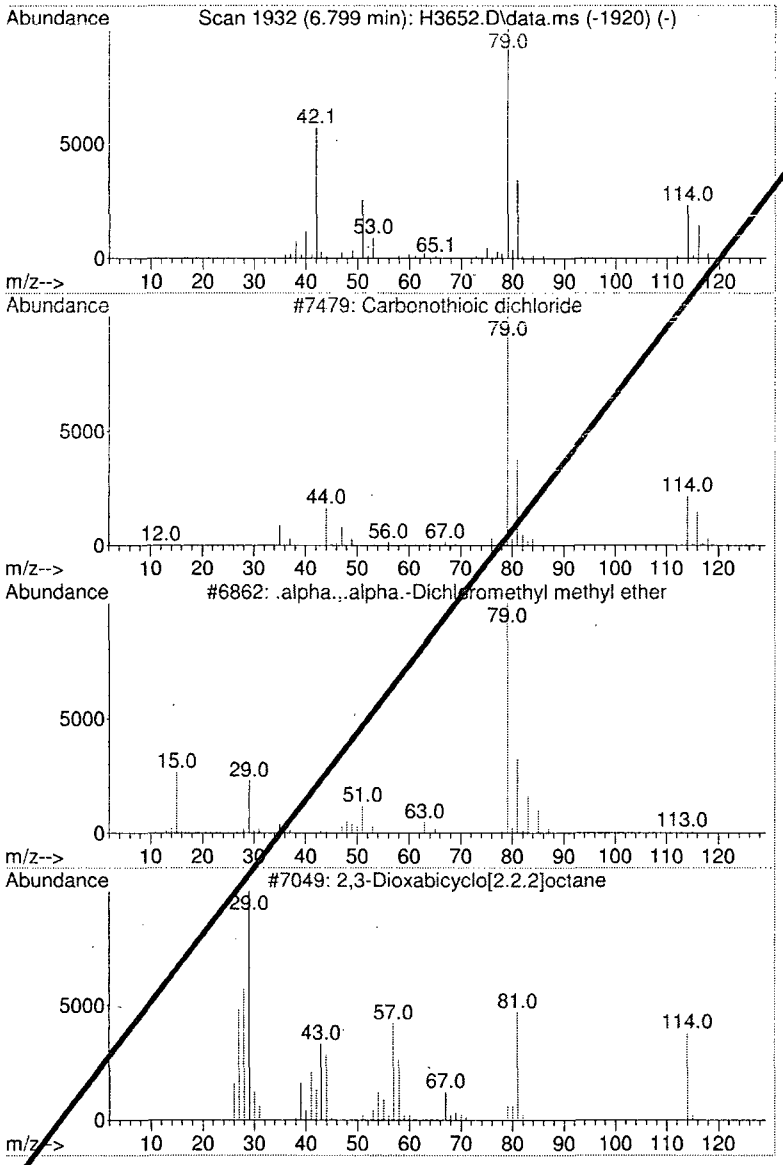
****

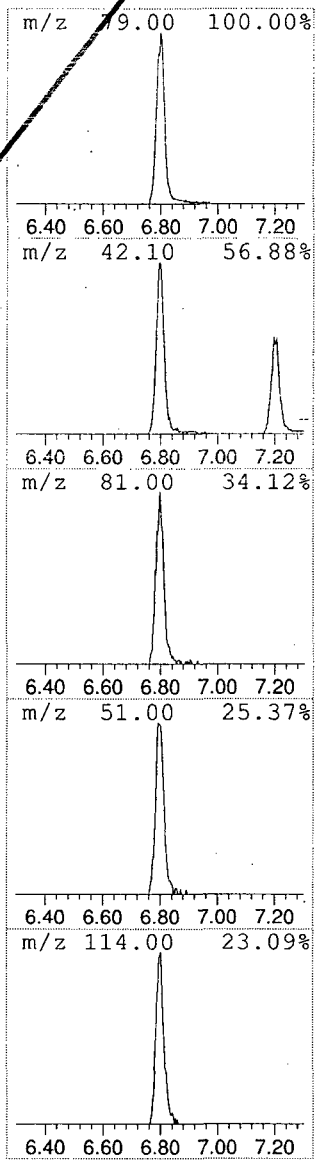
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.799	3.03 ug/L	160393	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	004885-02-3	25
3	2,3-Dioxabicyclo[2.2.2]octane	114	C6H10O2	000280-53-5	9
4	3-Thiatricyclo[3.1.1.0(2,4)]heptane	112	C6H8S	1000221-37-0	9
5	n-Propyl chloride	78	C3H7Cl	000540-54-5	9

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3652.D
Acq On : 18 May 2012 15:37
Sample : 0015957-05
Misc : F5WC8 25ML
DataAcq Meth:VOAC.M

Vial: 59
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:03:48 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	1.146	69.9	ug/L	3694540	1	5.371	264425	5.0
Carbonothioic d...	6.799	3.0	ug/L	160393	1	5.371	264425	5.0

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.: F5WC4

Instrument ID: H-5975 Calibration Date(s): 05/03/2012 05/03/2012

Heated Purge: (Y/N) N Calibration Time(s): 1542 1910

Purge Volume: 25.0 (mL)

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

LAB FILE ID: _____ RRF0.5= H3400.D RRF1= H3399.D

RRF5= H3396.D RRF10= H3398.D RRF20= H3397.D

COMPOUND	RRF0.5	RRF1	RRF5	RRF10	RRF20	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.053	0.134	0.138	0.124	0.132	0.116	30.7
Chloromethane	0.181	0.223	0.211	0.352	0.291	0.252	27.5
Vinyl chloride	0.052	0.118	0.127	0.107	0.131	0.107	30.0
Bromomethane	0.041	0.074	0.069	0.054	0.039	0.055	29.0
Chloroethane	0.040	0.072	0.060	0.046	0.041	0.052	26.2
Trichlorofluoromethane	0.168	0.226	0.242	0.187	0.201	0.205	14.6
1,1-Dichloroethene	0.217	0.257	0.278	0.212	0.249	0.242	11.5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.171	0.160	0.187	0.141	0.180	0.168	10.7
Acetone	0.055	0.062	0.052	0.053	0.050	0.055	8.6
Carbon disulfide	0.515	0.691	0.787	0.707	0.821	0.704	16.9
Methyl acetate	0.139	0.170	0.134	0.140	0.141	0.145	9.8
Methylene chloride	0.263	0.443	0.267	0.241	0.224	0.287	30.8
trans-1,2-Dichloroethene	0.279	0.337	0.325	0.305	0.320	0.313	7.1
Methyl tert-butyl ether	0.243	0.255	0.219	0.215	0.217	0.230	8.0
1,1-Dichloroethane	0.513	0.698	0.627	0.617	0.617	0.614	10.7
cis-1,2-Dichloroethene	0.276	0.368	0.333	0.326	0.318	0.324	10.2
2-Butanone	0.084	0.100	0.083	0.090	0.077	0.087	9.8
Bromochloromethane	0.126	0.148	0.134	0.131	0.128	0.133	6.6
Chloroform	0.519	0.832	0.589	0.569	0.558	0.613	20.4
1,1,1-Trichloroethane	0.371	0.468	0.492	0.476	0.542	0.470	13.3
Cyclohexane	0.604	0.729	0.838	0.775	0.913	0.772	15.1
Carbon tetrachloride	0.227	0.311	0.320	0.348	0.377	0.317	17.8
Benzene	1.459	1.901	1.695	1.656	1.631	1.668	9.5
1,2-Dichloroethane	0.383	0.445	0.388	0.377	0.384	0.395	7.1
Trichloroethene	0.387	0.481	0.442	0.414	0.436	0.432	8.1
Methylcyclohexane	0.483	0.682	0.679	0.697	0.746	0.657	15.4

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.: F5WC4

Instrument ID: H-5975 Calibration Date(s): 05/03/2012 05/03/2012

Heated Purge: (Y/N) N Calibration Time(s): 1542 1910

Purge Volume: 25.0 (mL)

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

LAB FILE ID: RRF0.5= H3400.D RRF1= H3399.D

RRF5= H3396.D RRF10= H3398.D RRF20= H3397.D

COMPOUND	RRF0.5	RRF1	RRF5	RRF10	RRF20	$\overline{RRF}$	% RSD
1,2-Dichloropropane	0.412	0.499	0.446	0.441	0.435	0.447	7.1
Bromodichloromethane	0.369	0.474	0.436	0.432	0.443	0.431	8.9
cis-1,3-Dichloropropene	0.372	0.520	0.511	0.509	0.540	0.490	13.7
4-Methyl-2-pentanone	0.199	0.239	0.202	0.233	0.201	0.215	9.1
Toluene	1.402	1.802	1.643	1.679	1.700	1.645	9.0
trans-1,3-Dichloropropene	0.242	0.359	0.373	0.407	0.408	0.358	19.0
1,1,2-Trichloroethane	0.221	0.272	0.245	0.254	0.239	0.246	7.6
Tetrachloroethene	0.278	0.358	0.337	0.336	0.351	0.332	9.4
2-Hexanone	0.155	0.187	0.152	0.182	0.144	0.164	11.7
Dibromochloromethane	0.198	0.262	0.262	0.275	0.274	0.254	12.7
1,2-Dibromoethane	0.238	0.268	0.229	0.249	0.235	0.244	6.3
Chlorobenzene	1.047	1.217	1.121	1.108	1.077	1.114	5.7
Ethylbenzene	1.369	1.751	1.733	1.724	1.768	1.669	10.1
o-Xylene	0.495	0.641	0.653	0.659	0.659	0.621	11.4
m,p-Xylene	0.492	0.713	0.688	0.688	0.706	0.658	14.1
Styrene	0.862	1.017	0.995	1.034	1.015	0.985	7.1
Bromoform	0.211	0.249	0.294	0.308	0.312	0.275	15.9
Isopropylbenzene	1.000	1.408	1.518	1.565	1.640	1.426	17.7
1,1,2,2-Tetrachloroethane	0.229	0.269	0.237	0.256	0.228	0.244	7.3
1,3-Dichlorobenzene	1.643	1.991	1.720	1.752	1.710	1.763	7.6
1,4-Dichlorobenzene	2.127	2.024	1.725	1.704	1.639	1.844	11.8
1,2-Dichlorobenzene	1.609	1.908	1.548	1.552	1.466	1.617	10.6
1,2-Dibromo-3-chloropropane	0.061	0.062	0.066	0.077	0.070	0.067	10.0
1,2,4-Trichlorobenzene	0.866	0.948	0.743	0.838	0.772	0.833	9.7
1,2,3-Trichlorobenzene	0.797	0.813	0.608	0.693	0.618	0.706	13.6

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.: F5WC4

Instrument ID: H-5975 Calibration Date(s): 05/03/2012 05/03/2012

Heated Purge: (Y/N) N Calibration Time(s): 1542 1910

Purge Volume: 25.0 (mL)

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

LAB FILE ID: RRF0.5= H3400.D RRF1= H3399.D

RRF5= H3396.D RRF10= H3398.D RRF20= H3397.D

COMPOUND	RRF0.5	RRF1	RRF5	RRF10	RRF20	$\overline{RRF}$	% RSD
Vinyl chloride-d3	0.037	0.102	0.097	0.082	0.088	0.081	31.7
Chloroethane-d5	0.030	0.061	0.055	0.044	0.038	0.046	28.0
1,1-Dichloroethene-d2	0.458	0.634	0.582	0.489	0.539	0.540	13.1
2-Butanone-d5	0.099	0.114	0.104	0.123	0.109	0.110	8.3
Chloroform-d	0.521	0.680	0.541	0.519	0.555	0.563	11.9
1,2-Dichloroethane-d4	0.271	0.375	0.283	0.281	0.289	0.300	14.2
Benzene-d6	1.391	1.968	1.590	1.476	1.599	1.605	13.7
1,2-Dichloropropane-d6	0.415	0.562	0.432	0.422	0.445	0.455	13.3
Toluene-d8	1.123	1.659	1.375	1.355	1.439	1.390	13.8
trans-1,3-Dichloropropene-d4	0.236	0.349	0.309	0.349	0.366	0.322	16.2
2-Hexanone-d5	0.066	0.076	0.075	0.095	0.081	0.078	13.6
1,1,2,2-Tetrachloroethane-d2	0.261	0.304	0.221	0.239	0.233	0.252	13.0
1,2-Dichlorobenzene-d4	0.932	1.142	0.915	0.883	0.919	0.958	10.9

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

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y8AS0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	210203	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.265	117	162924	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.815	152	63197	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	20452	8.19 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 163.80%#	
7) Chloroethane-d5	1.805	69	11658	6.56 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 131.20%#	
10) 1,1-Dichloroethene-d2	2.445	63	122247	5.71 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 114.20%#	
20) 2-Butanone-d5	3.979	46	219167	33.64 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 67.28%	
24) Chloroform-d	4.333	84	113702	4.58 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 91.60%	
26) 1,2-Dichloroethane-d4	4.860	65	59488	4.09 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 81.80%	
32) Benzene-d6	4.889	84	259049	4.89 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 97.80%	
35) 1,2-Dichloropropane-d6	5.815	67	70392	4.55 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 91.00%	
41) Toluene-d8	7.201	98	223958	4.91 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 98.20%	
43) trans-1,3-Dichloroprop...	7.567	79	50330	4.69 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 93.80%	
47) 2-Hexanone-d5	8.175	63	121786	32.71 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 65.42%	
57) 1,1,2,2-Tetrachloroeth...	11.397	84	36061	3.91 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 78.20%	
64) 1,2-Dichlorobenzene-d4	13.229	152	57840	4.36 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 87.20%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	28943	7.8315 ug/L	93
3) Chloromethane	1.397	50	44370	4.7278 ug/L	96
5) Vinyl Chloride	1.490	62	26733	6.4313 ug/L	97
6) Bromomethane	1.748	94	14479	4.9328 ug/L	95
8) Chloroethane	1.828	64	12586	5.0171 ug/L	89
9) Trichlorofluoromethane	2.040	101	50953	5.5412 ug/L	98
11) 1,1-Dichloroethene	2.455	96	58427	5.7430 ug/L	94
12) 1,1,2-Trichloro-1,2,2-...	2.468	101	39234	6.1592 ug/L	99
13) Acetone	2.494	43	109162	39.5044 ug/L	99
14) Carbon Disulfide	2.629	76	165352	5.7147 ug/L	99
15) Methyl Acetate	2.780	43	28202	3.4039 ug/L	94
16) Methylene Chloride	2.860	84	56035	4.8560 ug/L	94
17) trans-1,2-Dichloroethene	3.104	96	68417	4.8563 ug/L	98
18) Methyl tert-Butyl Ether	3.104	73	45931	3.2067 ug/L	98
19) 1,1-Dichloroethane	3.474	63	131802	4.5532 ug/L	99
21) cis-1,2-Dichloroethene	4.027	96	69932	4.4553 ug/L	98
22) 2-Butanone	4.040	43	173505	37.7488 ug/L	98
23) Bromochloromethane	4.262	128	28245	4.3639 ug/L #	92
25) Chloroform	4.352	83	123789	4.6621 ug/L	99
27) 1,2-Dichloroethane	4.944	62	81555	3.9745 ug/L	99
29) 1,1,1-Trichloroethane	4.538	97	80130	4.6963 ug/L	98
30) Cyclohexane	4.606	56	136478	5.5088 ug/L	100
31) Carbon Tetrachloride	4.715	117	52176	4.2180 ug/L	98

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	276205	4.5027 ug/L	100
34) Trichloroethene	5.667	95	72080	4.8968 ug/L	96
36) Methylcyclohexane	5.899	83	110596	5.0798 ug/L	94
37) 1,2-Dichloropropane	5.918	63	72705	4.4031 ug/L	98
38) Bromodichloromethane	6.268	83	71017	4.5810 ug/L	98
39) cis-1,3-Dichloropropene	6.847	75	83264	4.8403 ug/L	99
40) 4-Methyl-2-Pentanone	7.066	43	329350	34.7663 ug/L	98
42) Toluene	7.291	91	267606	4.4480 ug/L	97
44) trans-1,3-Dichloropropene	7.609	75	60762	4.7552 ug/L	99
45) 1,1,2-Trichloroethane	7.850	97	39952	4.0529 ug/L	97
46) Tetrachloroethene	8.050	164	54967	5.6339 ug/L	99
48) 2-Hexanone	8.246	43	247960	34.8395 ug/L	99
49) Dibromochloromethane	8.397	129	42766	4.8642 ug/L	99
50) 1,2-Dibromoethane	8.535	107	37290	4.0154 ug/L	97
51) Chlorobenzene	9.304	112	182673	4.4340 ug/L	98
52) Ethylbenzene	9.506	91	282312	4.7907 ug/L	98
53) m,p-Xylene	9.699	106	112082	4.8260 ug/L	97
54) o-Xylene	10.307	106	106325	4.8625 ug/L	97
55) Styrene	10.339	104	162054	4.5445 ug/L	99
56) Isopropylbenzene	10.931	105	247391	5.0460 ug/L	100
58) 1,1,2,2-Tetrachloroethane	11.435	83	38666	3.8380 ug/L	97
59) 1,2,3-Trichloropropane	11.467	TIC	262216	18.8955 ug/L	100
61) Bromoform	10.583	173	18599	5.3102 ug/L	97
62) 1,3-Dichlorobenzene	12.734	146	108716	4.2669 ug/L	97
63) 1,4-Dichlorobenzene	12.844	146	109031	4.1267 ug/L	99
65) 1,2-Dichlorobenzene	13.249	146	97832	4.0586 ug/L	99
66) 1,2-Dibromo-3-chloropr...	14.014	75	4156	4.2098 ug/L	98
67) 1,2,4-Trichlorobenzene	14.731	180	46962	3.4450 ug/L	97
68) 1,2,3-Trichlorobenzene	15.107	180	38416	3.3106 ug/L	99

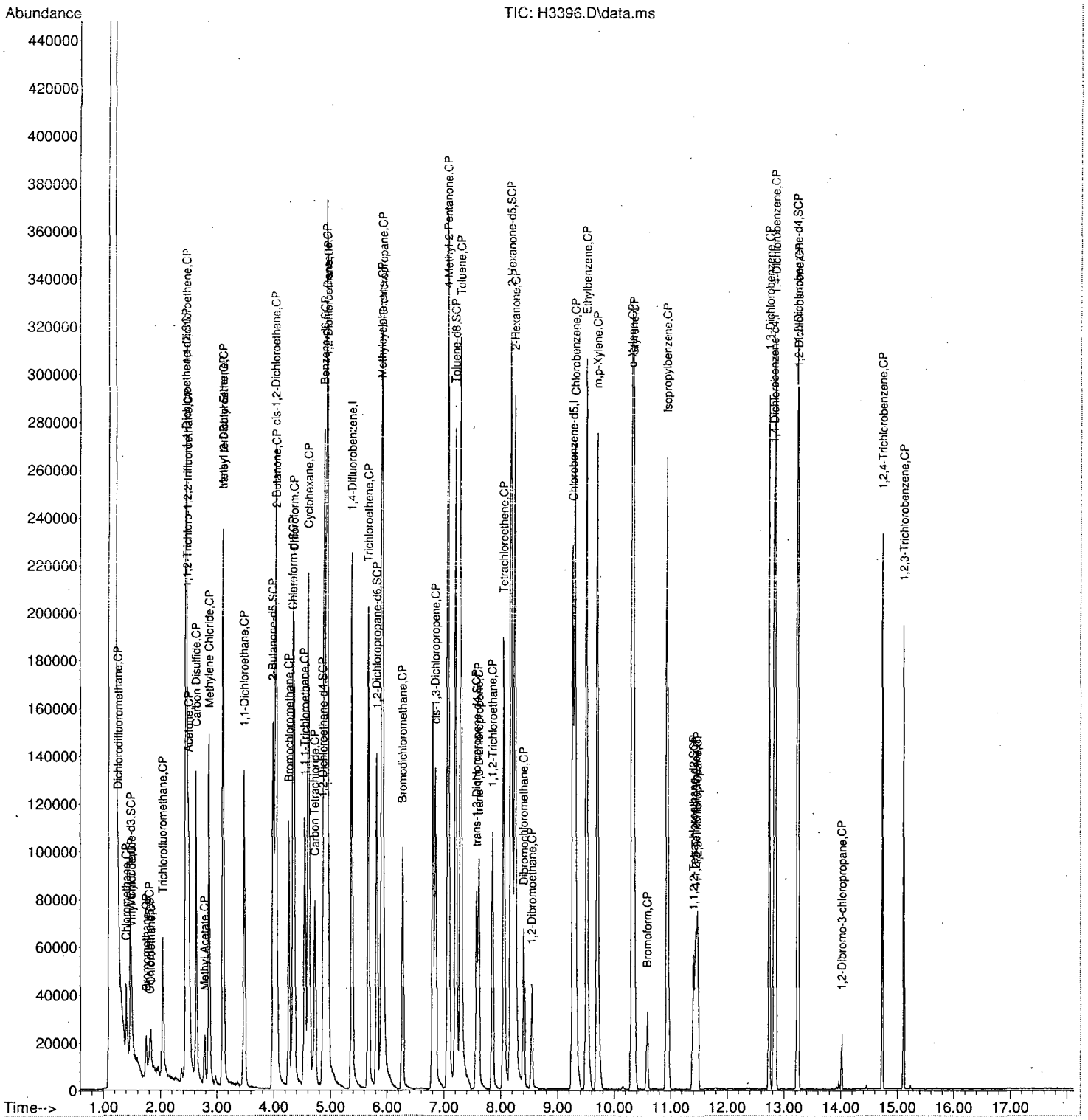
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration



00071

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 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	0.116	0.138	-19.0	100	0.00
3	CP	Chloromethane	0.252	0.211	16.3	100	0.00
4	SCP	Vinyl Chloride-d3	0.081	0.097	-19.8	100	0.00
5	CP	Vinyl Chloride	0.107	0.127	-18.7	100	0.00
6	CP	Bromomethane	0.055	0.069#	-25.5	100	0.00
7	SCP	Chloroethane-d5	0.046	0.055	-19.6	100	0.00
8	CP	Chloroethane	0.052	0.060	-15.4	100	0.00
9	CP	Trichlorofluoromethane	0.205	0.242	-18.0	100	0.00
10	SCP	1,1-Dichloroethene-d2	0.540	0.582	-7.8	100	0.00
11	CP	1,1-Dichloroethene	0.242	0.278	-14.9	100	0.00
12	CP	1,1,2-Trichloro-1,2,2-trifl	0.168	0.187	-11.3	100	0.00
13	CP	Acetone	0.055	0.052	5.5	100	0.00
14	CP	Carbon Disulfide	0.704	0.787	-11.8	100	0.00
15	CP	Methyl Acetate	0.145	0.134	7.6	100	0.00
16	CP	Methylene Chloride	0.287	0.267	7.0	100	0.00
17	CP	trans-1,2-Dichloroethene	0.313	0.325	-3.8	100	0.00
18	CP	Methyl tert-Butyl Ether	0.230	0.219	4.8	100	0.00
19	CP	1,1-Dichloroethane	0.614	0.627	-2.1	100	0.00
20	SCP	2-Butanone-d5	0.110	0.104	5.5	100	0.00
21	CP	cis-1,2-Dichloroethene	0.324	0.333	-2.8	100	0.00
22	CP	2-Butanone	0.087	0.083	4.6	100	0.00
23	CP	Bromochloromethane	0.133	0.134	-0.8	100	0.00
24	SCP	Chloroform-d	0.563	0.541	3.9	100	0.00
25	CP	Chloroform	0.613	0.589	3.9	100	0.00
26	SCP	1,2-Dichloroethane-d4	0.300	0.283	5.7	100	0.00
27	CP	1,2-Dichloroethane	0.395	0.388	1.8	100	0.00
28	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
29	CP	1,1,1-Trichloroethane	0.470	0.492	-4.7	100	0.00
30	CP	Cyclohexane	0.772	0.838	-8.5	100	0.00
31	CP	Carbon Tetrachloride	0.317	0.320	-0.9	100	0.00
32	SCP	Benzene-d6	1.605	1.590	0.9	100	0.00
33	CP	Benzene	1.668	1.695	-1.6	100	0.00
34	CP	Trichloroethene	0.432	0.442	-2.3	100	0.00
35	SCP	1,2-Dichloropropane-d6	0.455	0.432	5.1	100	0.00
36	CP	Methylcyclohexane	0.657	0.679	-3.3	100	0.00
37	CP	1,2-Dichloropropane	0.447	0.446	0.2	100	0.00
38	CP	Bromodichloromethane	0.431	0.436	-1.2	100	0.00
39	CP	cis-1,3-Dichloropropene	0.490	0.511	-4.3	100	0.00
40	CP	4-Methyl-2-Pentanone	0.215	0.202	6.0	100	0.00
41	SCP	Toluene-d8	1.390	1.375	1.1	100	0.00
42	CP	Toluene	1.645	1.643	0.1	100	0.00
43	SCP	trans-1,3-Dichloropropene-d	0.322	0.309	4.0	100	0.00
44	CP	trans-1,3-Dichloropropene	0.358	0.373	-4.2	100	0.00
45	CP	1,1,2-Trichloroethane	0.246	0.245	0.4	100	0.00
46	CP	Tetrachloroethene	0.332	0.337	-1.5	100	0.00

47	SCP	2-Hexanone-d5	0.078	0.075	3.8	100	0.00
48	CP	2-Hexanone	0.164	0.152	7.3	100	0.00
49	CP	Dibromochloromethane	0.254	0.262	-3.1	100	0.00
50	CP	1,2-Dibromoethane	0.244	0.229	6.1	100	0.00
51	CP	Chlorobenzene	1.114	1.121	-0.6	100	0.00
52	CP	Ethylbenzene	1.669	1.733	-3.8	100	0.00
53	CP	m,p-Xylene	0.658	0.688	-4.6	100	0.00
54	CP	o-Xylene	0.621	0.653	-5.2	100	0.00
55	CP	Styrene	0.985	0.995	-1.0	100	0.00
56	CP	Isopropylbenzene	1.426	1.518	-6.5	100	0.00
57	SCP	1,1,2,2-Tetrachloroethane-d	0.252	0.221	12.3	100	0.00
58	CP	1,1,2,2-Tetrachloroethane	0.244	0.237	2.9	100	0.00
59	CP	1,2,3-Trichloropropane	1.344	1.609	-19.7#	100	0.00
60	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
61	CP	Bromoform	0.275	0.294	-6.9	100	0.00
62	CP	1,3-Dichlorobenzene	1.763	1.720	2.4	100	0.00
63	CP	1,4-Dichlorobenzene	1.844	1.725	6.5	100	0.00
64	SCP	1,2-Dichlorobenzene-d4	0.958	0.915	4.5	100	0.00
65	CP	1,2-Dichlorobenzene	1.617	1.548	4.3	100	0.00
66	CP	1,2-Dibromo-3-chloropropane	0.067	0.066	1.5	100	0.00
67	CP	1,2,4-Trichlorobenzene	0.833	0.743	10.8	100	0.00
68	CP	1,2,3-Trichlorobenzene	0.706	0.608	13.9	100	0.00

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

SOTH3396.M Fri May 04 10:03:19 2012

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3397.D
Acq On : 3 May 2012 16:08
Sample : 2E04001-CAL5
Misc : VSTD0203Y 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 16:32:45 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	195438	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	154612	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.818	152	64116	5.0000 ug/L	# 0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.481	65	68737	29.61 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 592.20%#		
7) Chloroethane-d5	1.799	69	29850	18.07 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 361.40%#		
10) 1,1-Dichloroethene-d2	2.442	63	421181	21.16 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 423.20%#		
20) 2-Butanone-d5	3.982	46	852735	140.79 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 281.58%#		
24) Chloroform-d	4.329	84	433833	18.78 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 375.60%#		
26) 1,2-Dichloroethane-d4	4.860	65	226180	16.75 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 335.00%#		
32) Benzene-d6	4.889	84	988616	19.67 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 393.40%#		
35) 1,2-Dichloropropane-d6	5.815	67	275022	18.73 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 374.60%#		
41) Toluene-d8	7.201	98	889904	20.57 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 411.40%#		
43) trans-1,3-Dichloroprop...	7.567	79	226434	22.26 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 445.20%#		
47) 2-Hexanone-d5	8.175	63	502012	142.09 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 284.18%#		
57) 1,1,2,2-Tetrachloroeth...	11.397	84	143988	16.45 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 329.00%#		
64) 1,2-Dichlorobenzene-d4	13.226	152	235684	17.51 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 350.20%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.255	85	103160	30.0224 ug/L	96
3) Chloromethane	1.394	50	227677	26.0926 ug/L	93
5) Vinyl Chloride	1.487	62	102312	26.4731 ug/L	98
6) Bromomethane	1.738	94	30202	11.0667 ug/L	78
8) Chloroethane	1.821	64	32302	13.8493 ug/L	97
9) Trichlorofluoromethane	2.034	101	157370	18.4070 ug/L	94
11) 1,1-Dichloroethene	2.452	96	194650	20.5784 ug/L	97
12) 1,1,2-Trichloro-1,2,2-...	2.464	101	140437	23.7124 ug/L	98
13) Acetone	2.500	43	388497	151.2140 ug/L	98
14) Carbon Disulfide	2.622	76	641706	23.8536 ug/L	99
15) Methyl Acetate	2.780	43	110014	14.2815 ug/L	99
16) Methylene Chloride	2.853	84	174862	16.2983 ug/L	93
17) trans-1,2-Dichloroethene	3.098	96	250460	19.1210 ug/L	96
18) Methyl tert-Butyl Ether	3.111	73	169327	12.7147 ug/L	98
19) 1,1-Dichloroethane	3.474	63	481966	17.9078 ug/L	98
21) cis-1,2-Dichloroethene	4.030	96	248522	17.0291 ug/L	99
22) 2-Butanone	4.040	43	605564	141.7035 ug/L	97
23) Bromochloromethane	4.259	128	100249	16.6587 ug/L	93
25) Chloroform	4.352	83	436180	17.6685 ug/L	97
27) 1,2-Dichloroethane	4.943	62	299918	15.7205 ug/L	100
29) 1,1,1-Trichloroethane	4.538	97	335036	20.6916 ug/L	97
30) Cyclohexane	4.603	56	564944	24.0292 ug/L	98
31) Carbon Tetrachloride	4.715	117	233130	19.8599 ug/L	97

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3397.D
Acq On : 3 May 2012 16:08
Sample : 2E04001-CAL5
Misc : VSTD0203Y 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:32:45 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) Benzene	4.931	78	1008382	17.3222	ug/L	100
34) Trichloroethene	5.667	95	269392	19.2853	ug/L	98
36) Methylcyclohexane	5.902	83	461640	22.3434	ug/L	99
37) 1,2-Dichloropropane	5.918	63	268958	17.1641	ug/L	99
38) Bromodichloromethane	6.268	83	273783	18.6098	ug/L	97
39) cis-1,3-Dichloropropene	6.847	75	333807	20.4482	ug/L	100
40) 4-Methyl-2-Pentanone	7.069	43	1242131	138.1690	ug/L	98
42) Toluene	7.291	91	1051245	18.4126	ug/L	100
44) trans-1,3-Dichloropropene	7.606	75	252158	20.7948	ug/L	99
45) 1,1,2-Trichloroethane	7.850	97	147657	15.7841	ug/L	98
46) Tetrachloroethene	8.053	164	216881	23.4246	ug/L	100
48) 2-Hexanone	8.246	43	891067	131.9297	ug/L	96
49) Dibromochloromethane	8.400	129	169750	20.3452	ug/L	100
50) 1,2-Dibromoethane	8.541	107	145427	16.5017	ug/L	98
51) Chlorobenzene	9.303	112	665923	17.0330	ug/L	99
52) Ethylbenzene	9.506	91	1093536	19.5546	ug/L	98
53) m,p-Xylene	9.699	106	436704	19.8144	ug/L	97
54) o-Xylene	10.313	106	407365	19.6314	ug/L	97
55) Styrene	10.335	104	627981	18.5572	ug/L	100
56) Isopropylbenzene	10.934	105	1014407	21.8030	ug/L	100
58) 1,1,2,2-Tetrachloroethane	11.432	83	141118	14.7604	ug/L	98
59) 1,2,3-Trichloropropane	11.464	TIC	892658	67.7838	ug/L	100
61) Bromoform	10.586	173	80011	22.5166	ug/L	99
62) 1,3-Dichlorobenzene	12.734	146	438508	16.9640	ug/L	99
63) 1,4-Dichlorobenzene	12.843	146	420443	15.6850	ug/L	98
65) 1,2-Dichlorobenzene	13.249	146	375915	15.3716	ug/L	99
66) 1,2-Dibromo-3-chloropr...	14.011	75	18047	18.0185	ug/L	96
67) 1,2,4-Trichlorobenzene	14.728	180	197998	14.3166	ug/L	99
68) 1,2,3-Trichlorobenzene	15.107	180	158617	13.4733	ug/L	99

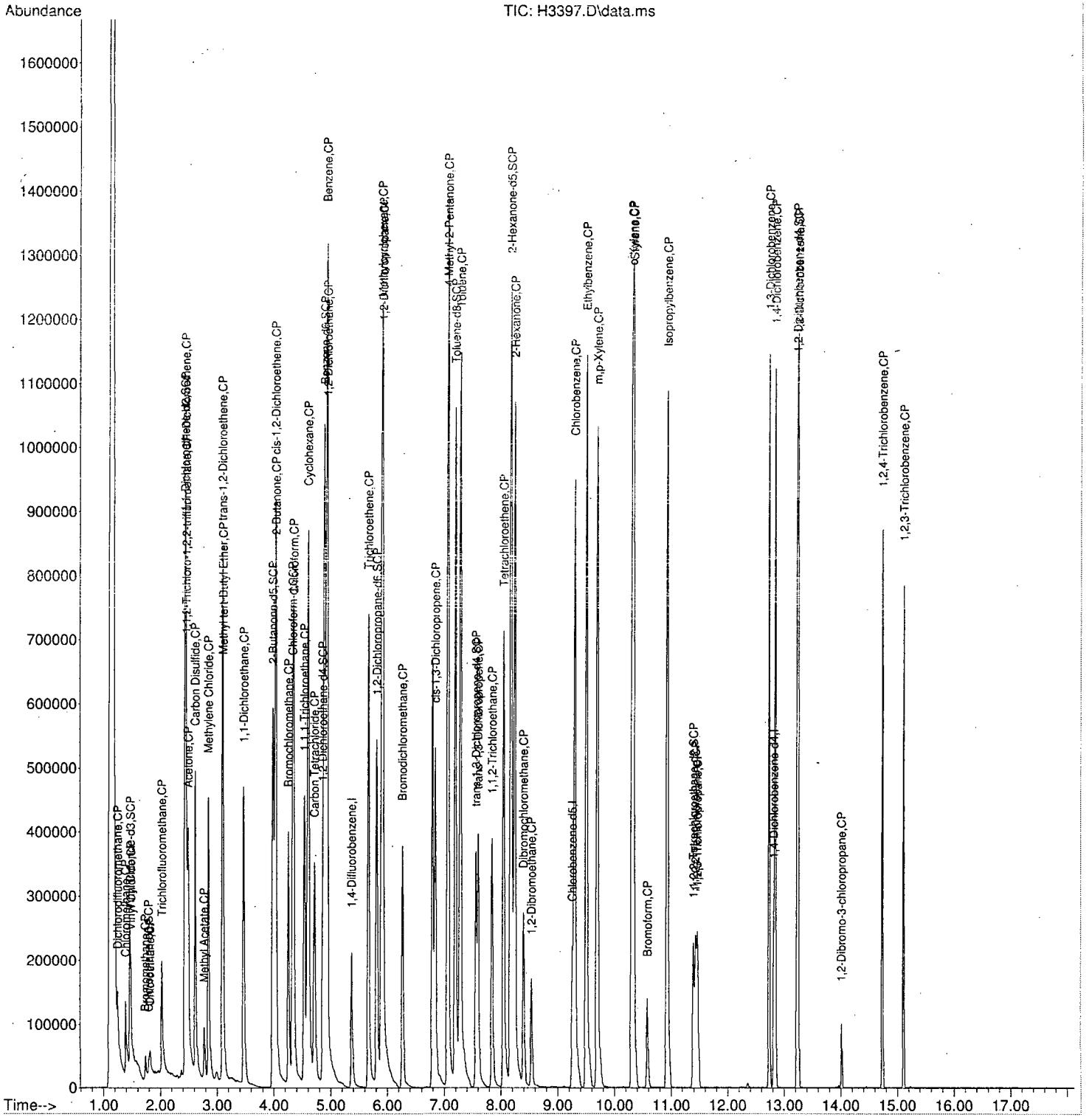
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3397.D
Acq On : 3 May 2012 16:08
Sample : 2E04001-CAL5
Misc : VSTD0203Y 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:32:45 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3398.D
Acq On : 3 May 2012 16:35
Sample : 2E04001-CAL4
Misc : VSTD0103Y 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 16:54:37 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	208098	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.259	117	165711	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.818	152	69057	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.481	65	34293	13.87 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 277.40%#		
7) Chloroethane-d5	1.802	69	18110	10.30 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 206.00%#		
10) 1,1-Dichloroethene-d2	2.442	63	203387	9.60 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 192.00%#		
20) 2-Butanone-d5	3.982	46	512695	79.50 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 159.00%#		
24) Chloroform-d	4.333	84	215995	8.78 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 175.60%#		
26) 1,2-Dichloroethane-d4	4.863	65	117105	8.14 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 162.80%#		
32) Benzene-d6	4.889	84	489083	9.08 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 181.60%#		
35) 1,2-Dichloropropane-d6	5.812	67	139944	8.89 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 177.80%#		
41) Toluene-d8	7.201	98	448982	9.68 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 193.60%#		
43) trans-1,3-Dichloroprop...	7.567	79	115771	10.62 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 212.40%#		
47) 2-Hexanone-d5	8.175	63	313699	82.84 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 165.68%#		
57) 1,1,2,2-Tetrachloroeth...	11.394	84	79104	8.43 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 168.60%#		
64) 1,2-Dichlorobenzene-d4	13.230	152	121898	8.41 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 168.20%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	51477	14.0698 ug/L	97
3) Chloromethane	1.394	50	146620	15.7809 ug/L	88
5) Vinyl Chloride	1.487	62	44648	10.8498 ug/L	96
6) Bromomethane	1.744	94	22451	7.7261 ug/L	90
8) Chloroethane	1.828	64	19321	7.7798 ug/L	92
9) Trichlorofluoromethane	2.040	101	78006	8.5690 ug/L	93
11) 1,1-Dichloroethene	2.452	96	88216	8.7588 ug/L	96
12) 1,1,2-Trichloro-1,2,2-...	2.461	101	58668	9.3033 ug/L	99
13) Acetone	2.500	43	222508	81.3375 ug/L	100
14) Carbon Disulfide	2.629	76	294384	10.2771 ug/L	100
15) Methyl Acetate	2.780	43	58119	7.0857 ug/L	95
16) Methylene Chloride	2.854	84	100206	8.7716 ug/L	92
17) trans-1,2-Dichloroethene	3.101	96	127021	9.1073 ug/L	99
18) Methyl tert-Butyl Ether	3.111	73	89394	6.3042 ug/L	99
19) 1,1-Dichloroethane	3.474	63	256760	8.9597 ug/L	98
21) cis-1,2-Dichloroethene	4.031	96	135507	8.7203 ug/L	99
22) 2-Butanone	4.040	43	375592	82.5426 ug/L	98
23) Bromochloromethane	4.262	128	54421	8.4932 ug/L	94
25) Chloroform	4.355	83	236634	9.0023 ug/L	99
27) 1,2-Dichloroethane	4.944	62	156772	7.7174 ug/L	98
29) 1,1,1-Trichloroethane	4.539	97	157907	9.0990 ug/L	98
30) Cyclohexane	4.606	56	256900	10.1951 ug/L	99
31) Carbon Tetrachloride	4.715	117	115490	9.1794 ug/L	98

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3398.D
Acq On : 3 May 2012 16:35
Sample : 2E04001-CAL4
Misc : VSTD0103Y 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:54:37 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	548986	8.7990 ug/L	100
34) Trichloroethene	5.667	95	137364	9.1750 ug/L	98
36) Methylcyclohexane	5.905	83	231050	10.4338 ug/L	94
37) 1,2-Dichloropropane	5.921	63	146283	8.7101 ug/L	99
38) Bromodichloromethane	6.268	83	143031	9.0710 ug/L	99
39) cis-1,3-Dichloropropene	6.847	75	168637	9.6384 ug/L	100
40) 4-Methyl-2-Pentanone	7.069	43	773810	80.3099 ug/L	97
42) Toluene	7.294	91	556528	9.0947 ug/L	98
44) trans-1,3-Dichloropropene	7.606	75	134902	10.3799 ug/L	97
45) 1,1,2-Trichloroethane	7.850	97	84109	8.3888 ug/L	98
46) Tetrachloroethene	8.053	164	111418	11.2279 ug/L	99
48) 2-Hexanone	8.246	43	603987	83.4356 ug/L	96
49) Dibromochloromethane	8.403	129	91205	10.1991 ug/L	100
50) 1,2-Dibromoethane	8.542	107	82521	8.7365 ug/L	99
51) Chlorobenzene	9.304	112	367353	8.7668 ug/L	99
52) Ethylbenzene	9.506	91	571281	9.5314 ug/L	98
53) m,p-Xylene	9.699	106	228141	9.6581 ug/L	98
54) o-Xylene	10.310	106	218354	9.8179 ug/L	96
55) Styrene	10.339	104	342526	9.4439 ug/L	100
56) Isopropylbenzene	10.934	105	518534	10.3985 ug/L	100
58) 1,1,2,2-Tetrachloroethane	11.439	83	84705	8.2664 ug/L	99
59) 1,2,3-Trichloropropane	11.464	TIC	524528	37.1622 ug/L	100
61) Bromoform	10.580	173	42570	11.1229 ug/L	99
62) 1,3-Dichlorobenzene	12.734	146	241985	8.6916 ug/L	99
63) 1,4-Dichlorobenzene	12.844	146	235410	8.1538 ug/L	99
65) 1,2-Dichlorobenzene	13.249	146	214285	8.1354 ug/L	99
66) 1,2-Dibromo-3-chloropr...	14.014	75	10635	9.8585 ug/L	97
67) 1,2,4-Trichlorobenzene	14.731	180	115674	7.7656 ug/L	99
68) 1,2,3-Trichlorobenzene	15.107	180	95646	7.5431 ug/L	99

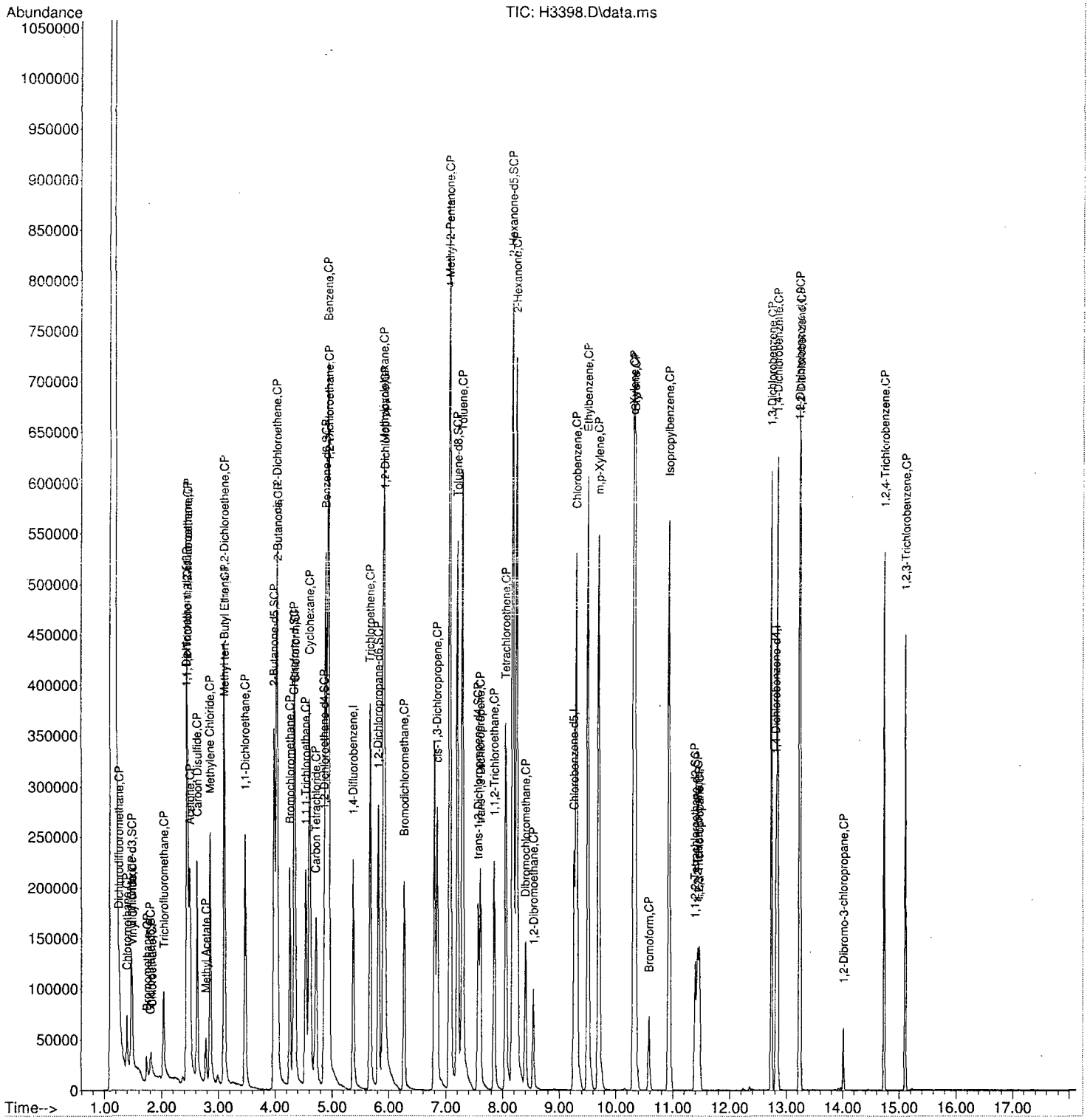
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3398.D
Acq On : 3 May 2012 16:35
Sample : 2E04001-CAL4
Misc : VSTD0103Y 25ML
DataAcq Meth:VOAC.M

Vial: 55
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:54:37 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration



00079

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3399.D
Acq On : 3 May 2012 17:52
Sample : 2E04001-CAL2
Misc : VSTD0013Y 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 18:15:48 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 18:03:53 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	182375	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	141429	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.818	152	52047	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	3724	1.10 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 22.00%#		
7) Chloroethane-d5	1.809	69	2239	1.24 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 24.80%#		
10) 1,1-Dichloroethene-d2	2.448	63	23115	1.13 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 22.60%#		
20) 2-Butanone-d5	3.982	46	41484	10.10 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 20.20%#		
24) Chloroform-d	4.333	84	24820	1.19 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 23.80%#		
26) 1,2-Dichloroethane-d4	4.857	65	13692	1.22 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 24.40%#		
32) Benzene-d6	4.889	84	55662	1.19 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 23.80%#		
35) 1,2-Dichloropropane-d6	5.815	67	15884	1.21 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 24.20%#		
41) Toluene-d8	7.204	98	46913	1.14 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 22.80%#		
43) trans-1,3-Dichloroprop...	7.564	79	9863	1.02 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 20.40%#		
47) 2-Hexanone-d5	8.175	63	21481	9.30 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 18.60%#		
57) 1,1,2,2-Tetrachloroeth...	11.397	84	8599	1.32 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 26.40%#		
64) 1,2-Dichlorobenzene-d4	13.229	152	11885	1.26 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 25.20%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	4892	1.0171 ug/L	89
3) Chloromethane	1.394	50	8133	0.8277 ug/L	97
5) Vinyl Chloride	1.493	62	4314	0.9783 ug/L	96
6) Bromomethane	1.744	94	2716	1.2625 ug/L	88
8) Chloroethane	1.834	64	2614	1.3073 ug/L	94
9) Trichlorofluoromethane	2.040	101	8234	1.0538 ug/L	91
11) 1,1-Dichloroethene	2.455	96	9360	1.0311 ug/L #	91
12) 1,1,2-Trichloro-1,2,2-...	2.471	101	5850	0.9609 ug/L	97
13) Acetone	2.497	43	22614	11.4237 ug/L	97
14) Carbon Disulfide	2.628	76	25195	0.9193 ug/L	96
15) Methyl Acetate	2.786	43	6183	1.1610 ug/L	94
16) Methylene Chloride	2.857	84	16146	1.5086 ug/L	94
17) trans-1,2-Dichloroethene	3.104	96	12282	1.0459 ug/L	98
18) Methyl tert-Butyl Ether	3.104	73	9314	1.1283 ug/L	97
19) 1,1-Dichloroethane	3.477	63	25463	1.0914 ug/L	99
21) cis-1,2-Dichloroethene	4.027	96	13425	1.0952 ug/L	98
22) 2-Butanone	4.043	43	36319	11.3855 ug/L	99
23) Bromochloromethane	4.262	128	5399	1.0936 ug/L	96
25) Chloroform	4.352	83	30354	1.3066 ug/L	98
27) 1,2-Dichloroethane	4.940	62	16246	1.1179 ug/L	100
29) 1,1,1-Trichloroethane	4.535	97	13242	0.9466 ug/L	99
30) Cyclohexane	4.606	56	20627	0.8960 ug/L	98
31) Carbon Tetrachloride	4.722	117	8783	0.9158 ug/L	100

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3399.D
Acq On : 3 May 2012 17:52
Sample : 2E04001-CAL2
Misc : VSTD0013Y 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 18:15:48 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 18:03:53 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	53763	1.1046 ug/L	100
34) Trichloroethene	5.670	95	13609	1.0851 ug/L	97
36) Methylcyclohexane	5.905	83	19288	0.9726 ug/L	94
37) 1,2-Dichloropropane	5.918	63	14102	1.0951 ug/L	97
38) Bromodichloromethane	6.271	83	13403	1.0624 ug/L	99
39) cis-1,3-Dichloropropene	6.850	75	14707	1.0001 ug/L	100
40) 4-Methyl-2-Pentanone	7.072	43	67553	10.9139 ug/L	98
42) Toluene	7.291	91	50977	1.0564 ug/L	97
44) trans-1,3-Dichloropropene	7.609	75	10151	0.9282 ug/L	99
45) 1,1,2-Trichloroethane	7.853	97	7698	1.0779 ug/L	94
46) Tetrachloroethene	8.053	164	10120	1.0355 ug/L	98
48) 2-Hexanone	8.249	43	52870	11.2357 ug/L	99
49) Dibromochloromethane	8.403	129	7398	0.9744 ug/L	97
50) 1,2-Dibromoethane	8.538	107	7585	1.0932 ug/L #	94
51) Chlorobenzene	9.303	112	34410	1.0759 ug/L	92
52) Ethylbenzene	9.506	91	49529	1.0041 ug/L	99
53) m,p-Xylene	9.696	106	20164	1.0201 ug/L	90
54) o-Xylene	10.313	106	18136	0.9821 ug/L	99
55) Styrene	10.336	104	28758	1.0016 ug/L	97
56) Isopropylbenzene	10.934	105	39822	0.8942 ug/L	99
58) 1,1,2,2-Tetrachloroethane	11.435	83	7605	1.1186 ug/L	97
59) 1,2,3-Trichloropropane	11.432	TIC	45939	1.0511 ug/L	100
61) Bromoform	10.583	173	2595	0.8178 ug/L #	88
62) 1,3-Dichlorobenzene	12.737	146	20722	1.1524 ug/L	100
63) 1,4-Dichlorobenzene	12.844	146	21067	1.1978 ug/L	97
65) 1,2-Dichlorobenzene	13.245	146	19865	1.2540 ug/L	99
66) 1,2-Dibromo-3-chloropr...	14.011	75	644	0.8708 ug/L	98
67) 1,2,4-Trichlorobenzene	14.731	180	9863	1.2082 ug/L	96
68) 1,2,3-Trichlorobenzene	15.107	180	8459	1.2705 ug/L	94

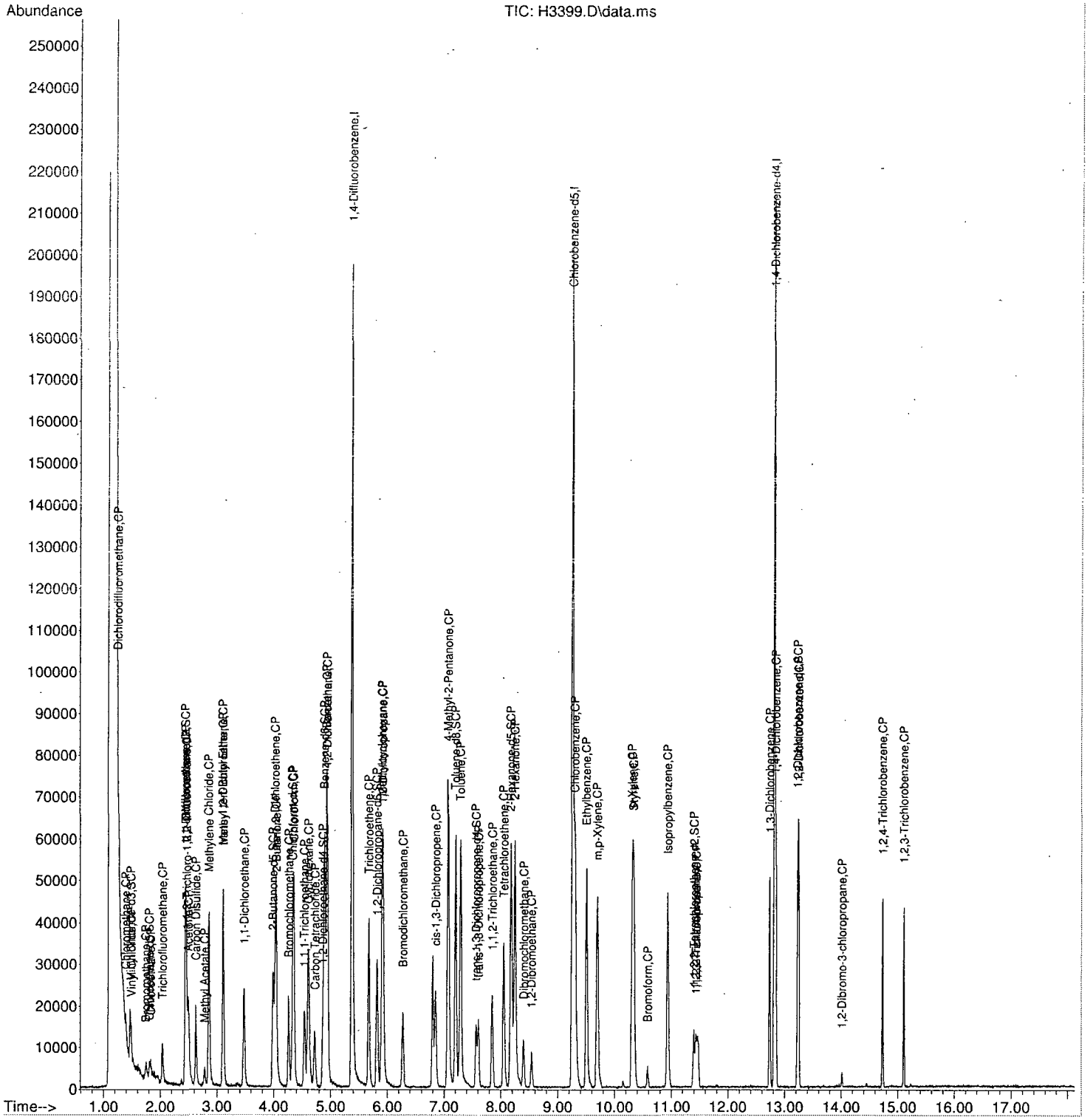
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3399.D
Acq On : 3 May 2012 17:52
Sample : 2E04001-CAL2
Misc : VSTD0013Y 25ML
DataAcq Meth:VOAC.M

Vial: 58
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 18:15:48 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 18:03:53 2012
Response via : Initial Calibration



00082

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3400.D
Acq On : 3 May 2012 19:10
Sample : 2E04001-CAL1
Misc : VSTD0.53Y 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 19:28:35 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:25:36 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	159280	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	123868	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.818	152	45601	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	596	0.23 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 4.60%#		
7) Chloroethane-d5	1.809	69	476	0.33 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 6.60%#		
10) 1,1-Dichloroethene-d2	2.445	63	7293	0.42 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 8.40%#		
20) 2-Butanone-d5	3.985	46	15836	4.52 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 9.04%#		
24) Chloroform-d	4.336	84	8295	0.46 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 9.20%#		
26) 1,2-Dichloroethane-d4	4.866	65	4316	0.45 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 9.00%#		
32) Benzene-d6	4.886	84	17230	0.43 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 8.60%#		
35) 1,2-Dichloropropane-d6	5.815	67	5145	0.46 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 9.20%#		
41) Toluene-d8	7.201	98	13908	0.40 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 8.00%#		
43) trans-1,3-Dichloroprop...	7.567	79	2926	0.37 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 7.40%#		
47) 2-Hexanone-d5	8.175	63	8127	4.18 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 8.36%#		
57) 1,1,2,2-Tetrachloroeth...	11.397	84	3233	0.52 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 10.40%#		
64) 1,2-Dichlorobenzene-d4	13.226	152	4250	0.49 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 9.80%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	844	0.2282 ug/L #	41
3) Chloromethane	1.397	50	2888	0.3601 ug/L	97
5) Vinyl Chloride	1.490	62	828	0.2427 ug/L	87
6) Bromomethane	1.748	94	656	0.3716 ug/L	94
8) Chloroethane	1.828	64	638	0.3861 ug/L	80
9) Trichlorofluoromethane	2.037	101	2668	0.4088 ug/L	96
11) 1,1-Dichloroethene	2.455	96	3451	0.4468 ug/L	97
12) 1,1,2-Trichloro-1,2,2-...	2.471	101	2727	0.5102 ug/L	97
13) Acetone	2.494	43	8829	5.0850 ug/L	99
14) Carbon Disulfide	2.629	76	8199	0.3656 ug/L	97
15) Methyl Acetate	2.783	43	2210	0.4799 ug/L	95
16) Methylene Chloride	2.860	84	4196	0.4583 ug/L	96
17) trans-1,2-Dichloroethene	3.101	96	4450	0.4457 ug/L	93
18) Methyl tert-Butyl Ether	3.108	73	3877	0.5298 ug/L	78
19) 1,1-Dichloroethane	3.471	63	8178	0.4178 ug/L	96
21) cis-1,2-Dichloroethene	4.030	96	4398	0.4260 ug/L	92
22) 2-Butanone	4.047	43	13414	4.8508 ug/L	94
23) Bromochloromethane	4.262	128	2003	0.4712 ug/L #	88
25) Chloroform	4.352	83	8266	0.4231 ug/L	98
27) 1,2-Dichloroethane	4.940	62	6104	0.4846 ug/L	88
29) 1,1,1-Trichloroethane	4.535	97	4593	0.3946 ug/L	94
30) Cyclohexane	4.600	56	7483	0.3913 ug/L	91
31) Carbon Tetrachloride	4.712	117	2817	0.3590 ug/L	99

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3400.D
Acq On : 3 May 2012 19:10
Sample : 2E04001-CAL1
Misc : VSTD0.53Y 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 19:28:35 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:25:36 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	18078	0.4374 ug/L	100
34) Trichloroethene	5.670	95	4790	0.4475 ug/L	97
36) Methylcyclohexane	5.905	83	5980	0.3672 ug/L #	86
37) 1,2-Dichloropropane	5.924	63	5102	0.4611 ug/L #	89
38) Bromodichloromethane	6.265	83	4572	0.4286 ug/L #	96
39) cis-1,3-Dichloropropene	6.844	75	4607	0.3793 ug/L	84
40) 4-Methyl-2-Pentanone	7.072	43	24704	4.6392 ug/L	99
42) Toluene	7.294	91	17371	0.4262 ug/L	99
44) trans-1,3-Dichloropropene	7.603	75	3000	0.3385 ug/L	93
45) 1,1,2-Trichloroethane	7.844	97	2739	0.4491 ug/L	92
46) Tetrachloroethene	8.053	164	3448	0.4191 ug/L	93
48) 2-Hexanone	8.252	43	19197	4.7226 ug/L	99
49) Dibromochloromethane	8.397	129	2447	0.3885 ug/L	97
50) 1,2-Dibromoethane	8.542	107	2948	0.4880 ug/L #	90
51) Chlorobenzene	9.304	112	12974	0.4701 ug/L	92
52) Ethylbenzene	9.506	91	16958	0.4101 ug/L	95
53) m,p-Xylene	9.699	106	6100	0.3745 ug/L	95
54) o-Xylene	10.307	106	6134	0.3985 ug/L	96
55) Styrene	10.332	104	10682	0.4380 ug/L	93
56) Isopropylbenzene	10.940	105	12384	0.3505 ug/L	96
58) 1,1,2,2-Tetrachloroethane	11.432	83	2841	0.4703 ug/L #	92
59) 1,2,3-Trichloropropane	11.464	TIC	5686	0.1708 ug/L	100
61) Bromoform	10.583	173	960	0.3830 ug/L #	56
62) 1,3-Dichlorobenzene	12.734	146	7494	0.4660 ug/L	99
63) 1,4-Dichlorobenzene	12.847	146	9700	0.5768 ug/L	95
65) 1,2-Dichlorobenzene	13.246	146	7338	0.4977 ug/L	94
66) 1,2-Dibromo-3-chloropr...	14.011	75	276	0.4510 ug/L #	80
67) 1,2,4-Trichlorobenzene	14.734	180	3947	0.5194 ug/L	94
68) 1,2,3-Trichlorobenzene	15.110	180	3634	0.5646 ug/L	98

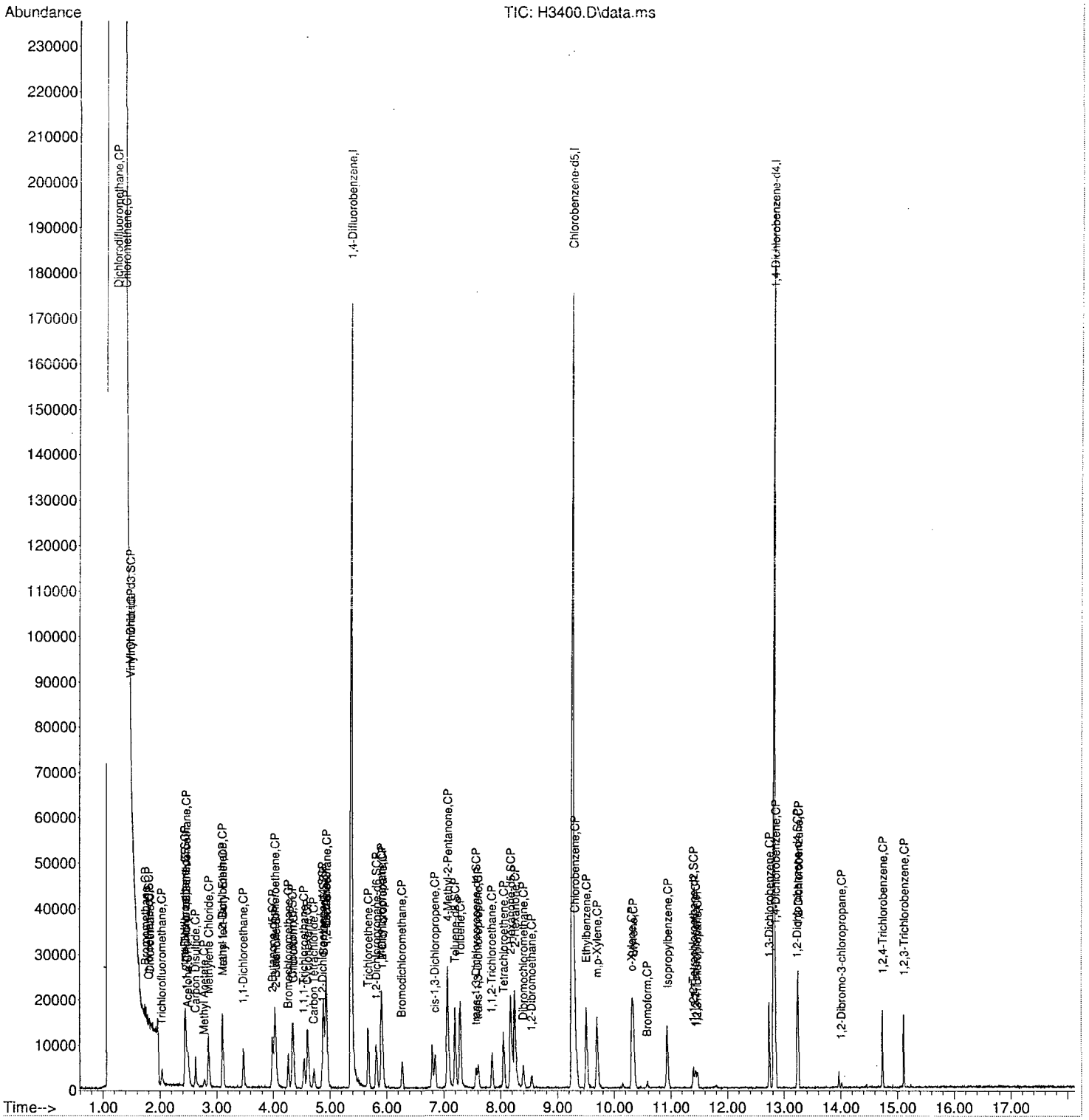
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3400.D
Acq On : 3 May 2012 19:10
Sample : 2E04001-CAL1
Misc : VSTD0.53Y 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 19:28:35 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:25:36 2012
Response via : Initial Calibration



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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 1542

Lab File ID: H3396.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Y Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.116	0.138	0.010	18.6	40.0
Chloromethane	0.252	0.211	0.010	-16.2	40.0
Vinyl chloride	0.107	0.127	0.100	18.7	30.0
Bromomethane	0.055	0.069	0.100	24.3	30.0
Chloroethane	0.052	0.060	0.010	15.4	40.0
Trichlorofluoromethane	0.205	0.242	0.010	18.3	40.0
1,1-Dichloroethene	0.242	0.278	0.100	14.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.168	0.187	0.010	11.3	40.0
Acetone	0.055	0.052	0.010	-4.7	40.0
Carbon disulfide	0.704	0.787	0.010	11.7	40.0
Methyl acetate	0.145	0.134	0.010	-7.2	40.0
Methylene chloride	0.287	0.267	0.010	-7.3	40.0
trans-1,2-Dichloroethene	0.313	0.325	0.010	3.8	40.0
Methyl tert-butyl ether	0.230	0.219	0.010	-4.9	40.0
1,1-Dichloroethane	0.614	0.627	0.200	2.1	30.0
cis-1,2-Dichloroethene	0.324	0.333	0.010	2.7	40.0
2-Butanone	0.087	0.083	0.010	-4.9	40.0
Bromochloromethane	0.133	0.134	0.050	0.7	30.0
Chloroform	0.613	0.589	0.200	-4.0	30.0
1,1,1-Trichloroethane	0.470	0.492	0.100	4.7	30.0
Cyclohexane	0.772	0.838	0.010	8.5	40.0
Carbon tetrachloride	0.317	0.320	0.100	1.1	30.0
Benzene	1.668	1.695	0.400	1.6	30.0
1,2-Dichloroethane	0.395	0.388	0.100	-1.9	30.0
Trichloroethene	0.432	0.442	0.300	2.4	30.0
Methylcyclohexane	0.657	0.679	0.010	3.3	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 1542

Lab File ID: H3396.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Y Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.447	0.446	0.010	-0.1	40.0
Bromodichloromethane	0.431	0.436	0.200	1.2	30.0
cis-1,3-Dichloropropene	0.490	0.511	0.200	4.2	30.0
4-Methyl-2-pentanone	0.215	0.202	0.010	-6.0	40.0
Toluene	1.645	1.643	0.400	-0.2	30.0
trans-1,3-Dichloropropene	0.358	0.373	0.100	4.2	30.0
1,1,2-Trichloroethane	0.246	0.245	0.100	-0.4	30.0
Tetrachloroethene	0.332	0.337	0.100	1.6	30.0
2-Hexanone	0.164	0.152	0.010	-7.2	40.0
Dibromochloromethane	0.254	0.262	0.100	3.2	30.0
1,2-Dibromoethane	0.244	0.229	0.010	-6.1	40.0
Chlorobenzene	1.114	1.121	0.500	0.6	30.0
Ethylbenzene	1.669	1.733	0.100	3.8	30.0
o-Xylene	0.621	0.653	0.300	5.0	30.0
m,p-Xylene	0.658	0.688	0.300	4.6	30.0
Styrene	0.985	0.995	0.300	1.0	30.0
Bromoform	0.275	0.294	0.050	7.1	30.0
Isopropylbenzene	1.426	1.518	0.010	6.5	40.0
1,1,2,2-Tetrachloroethane	0.244	0.237	0.100	-2.7	30.0
1,3-Dichlorobenzene	1.763	1.720	0.400	-2.4	30.0
1,4-Dichlorobenzene	1.844	1.725	0.400	-6.4	30.0
1,2-Dichlorobenzene	1.617	1.548	0.400	-4.2	30.0
1,2-Dibromo-3-chloropropane	0.067	0.066	0.010	-2.0	40.0
1,2,4-Trichlorobenzene	0.833	0.743	0.200	-10.8	30.0
1,2,3-Trichlorobenzene	0.706	0.608	0.200	-13.9	30.0

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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 1542

Lab File ID: H3396.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Y Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.081	0.097	0.010	19.5	30.0
Chloroethane-d5	0.046	0.055	0.010	21.4	40.0
1,1-Dichloroethene-d2	0.540	0.582	0.010	7.7	30.0
2-Butanone-d5	0.110	0.104	0.010	-5.2	40.0
Chloroform-d	0.563	0.541	0.010	-4.0	30.0
1,2-Dichloroethane-d4	0.300	0.283	0.010	-5.7	30.0
Benzene-d6	1.605	1.590	0.010	-0.9	30.0
1,2-Dichloropropane-d6	0.455	0.432	0.010	-5.1	40.0
Toluene-d8	1.390	1.375	0.010	-1.1	30.0
trans-1,3-Dichloropropene-d4	0.322	0.309	0.010	-4.0	30.0
2-Hexanone-d5	0.078	0.075	0.010	-4.7	40.0
1,1,2,2-Tetrachloroethane-d2	0.252	0.221	0.010	-12.0	30.0
1,2-Dichlorobenzene-d4	0.958	0.915	0.010	-4.5	30.0

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

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/05/12

05/05/12

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	210203	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.265	117	162924	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.815	152	63197	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	20452	8.19 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 163.80%#	
7) Chloroethane-d5	1.805	69	11658	6.56 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 131.20%#	
10) 1,1-Dichloroethene-d2	2.445	63	122247	5.71 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 114.20%#	
20) 2-Butanone-d5	3.979	46	219167	33.64 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 67.28%	
24) Chloroform-d	4.333	84	113702	4.58 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 91.60%	
26) 1,2-Dichloroethane-d4	4.860	65	59488	4.09 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 81.80%	
32) Benzene-d6	4.889	84	259049	4.89 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 97.80%	
35) 1,2-Dichloropropane-d6	5.815	67	70392	4.55 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 91.00%	
41) Toluene-d8	7.201	98	223958	4.91 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 98.20%	
43) trans-1,3-Dichloroprop...	7.567	79	50330	4.69 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 93.80%	
47) 2-Hexanone-d5	8.175	63	121786	32.71 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 65.42%	
57) 1,1,2,2-Tetrachloroeth...	11.397	84	36061	3.91 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 78.20%	
64) 1,2-Dichlorobenzene-d4	13.229	152	57840	4.36 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 87.20%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	28943	7.8315 ug/L	93
3) Chloromethane	1.397	50	44370	4.7278 ug/L	96
5) Vinyl Chloride	1.490	62	26733	6.4313 ug/L	97
6) Bromomethane	1.748	94	14479	4.9328 ug/L	95
8) Chloroethane	1.828	64	12586	5.0171 ug/L	89
9) Trichlorofluoromethane	2.040	101	50953	5.5412 ug/L	98
11) 1,1-Dichloroethene	2.455	96	58427	5.7430 ug/L	94
12) 1,1,2-Trichloro-1,2,2-...	2.468	101	39234	6.1592 ug/L	99
13) Acetone	2.494	43	109162	39.5044 ug/L	99
14) Carbon Disulfide	2.629	76	165352	5.7147 ug/L	99
15) Methyl Acetate	2.780	43	28202	3.4039 ug/L	94
16) Methylene Chloride	2.860	84	56035	4.8560 ug/L	94
17) trans-1,2-Dichloroethene	3.104	96	68417	4.8563 ug/L	98
18) Methyl tert-Butyl Ether	3.104	73	45931	3.2067 ug/L	98
19) 1,1-Dichloroethane	3.474	63	131802	4.5532 ug/L	99
21) cis-1,2-Dichloroethene	4.027	96	69932	4.4553 ug/L	98
22) 2-Butanone	4.040	43	173505	37.7488 ug/L	98
23) Bromochloromethane	4.262	128	28245	4.3639 ug/L #	92
25) Chloroform	4.352	83	123789	4.6621 ug/L	99
27) 1,2-Dichloroethane	4.944	62	81555	3.9745 ug/L	99
29) 1,1,1-Trichloroethane	4.538	97	80130	4.6963 ug/L	98
30) Cyclohexane	4.606	56	136478	5.5088 ug/L	100
31) Carbon Tetrachloride	4.715	117	52176	4.2180 ug/L	98

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	276205	4.5027 ug/L	100
34) Trichloroethene	5.667	95	72080	4.8968 ug/L	96
36) Methylcyclohexane	5.899	83	110596	5.0798 ug/L	94
37) 1,2-Dichloropropane	5.918	63	72705	4.4031 ug/L	98
38) Bromodichloromethane	6.268	83	71017	4.5810 ug/L	98
39) cis-1,3-Dichloropropene	6.847	75	83264	4.8403 ug/L	99
40) 4-Methyl-2-Pentanone	7.066	43	329350	34.7663 ug/L	98
42) Toluene	7.291	91	267606	4.4480 ug/L	97
44) trans-1,3-Dichloropropene	7.609	75	60762	4.7552 ug/L	99
45) 1,1,2-Trichloroethane	7.850	97	39952	4.0529 ug/L	97
46) Tetrachloroethene	8.050	164	54967	5.6339 ug/L	99
48) 2-Hexanone	8.246	43	247960	34.8395 ug/L	99
49) Dibromochloromethane	8.397	129	42766	4.8642 ug/L	99
50) 1,2-Dibromoethane	8.535	107	37290	4.0154 ug/L	97
51) Chlorobenzene	9.304	112	182673	4.4340 ug/L	98
52) Ethylbenzene	9.506	91	282312	4.7907 ug/L	98
53) m,p-Xylene	9.699	106	112082	4.8260 ug/L	97
54) o-Xylene	10.307	106	106325	4.8625 ug/L	97
55) Styrene	10.339	104	162054	4.5445 ug/L	99
56) Isopropylbenzene	10.931	105	247391	5.0460 ug/L	100
58) 1,1,2,2-Tetrachloroethane	11.435	83	38666	3.8380 ug/L	97
59) 1,2,3-Trichloropropane	11.467	TIC	262216	18.8955 ug/L	100
61) Bromoform	10.583	173	18599	5.3102 ug/L	97
62) 1,3-Dichlorobenzene	12.734	146	108716	4.2669 ug/L	97
63) 1,4-Dichlorobenzene	12.844	146	109031	4.1267 ug/L	99
65) 1,2-Dichlorobenzene	13.249	146	97832	4.0586 ug/L	99
66) 1,2-Dibromo-3-chloropr...	14.014	75	4156	4.2098 ug/L	98
67) 1,2,4-Trichlorobenzene	14.731	180	46962	3.4450 ug/L	97
68) 1,2,3-Trichlorobenzene	15.107	180	38416	3.3106 ug/L	99

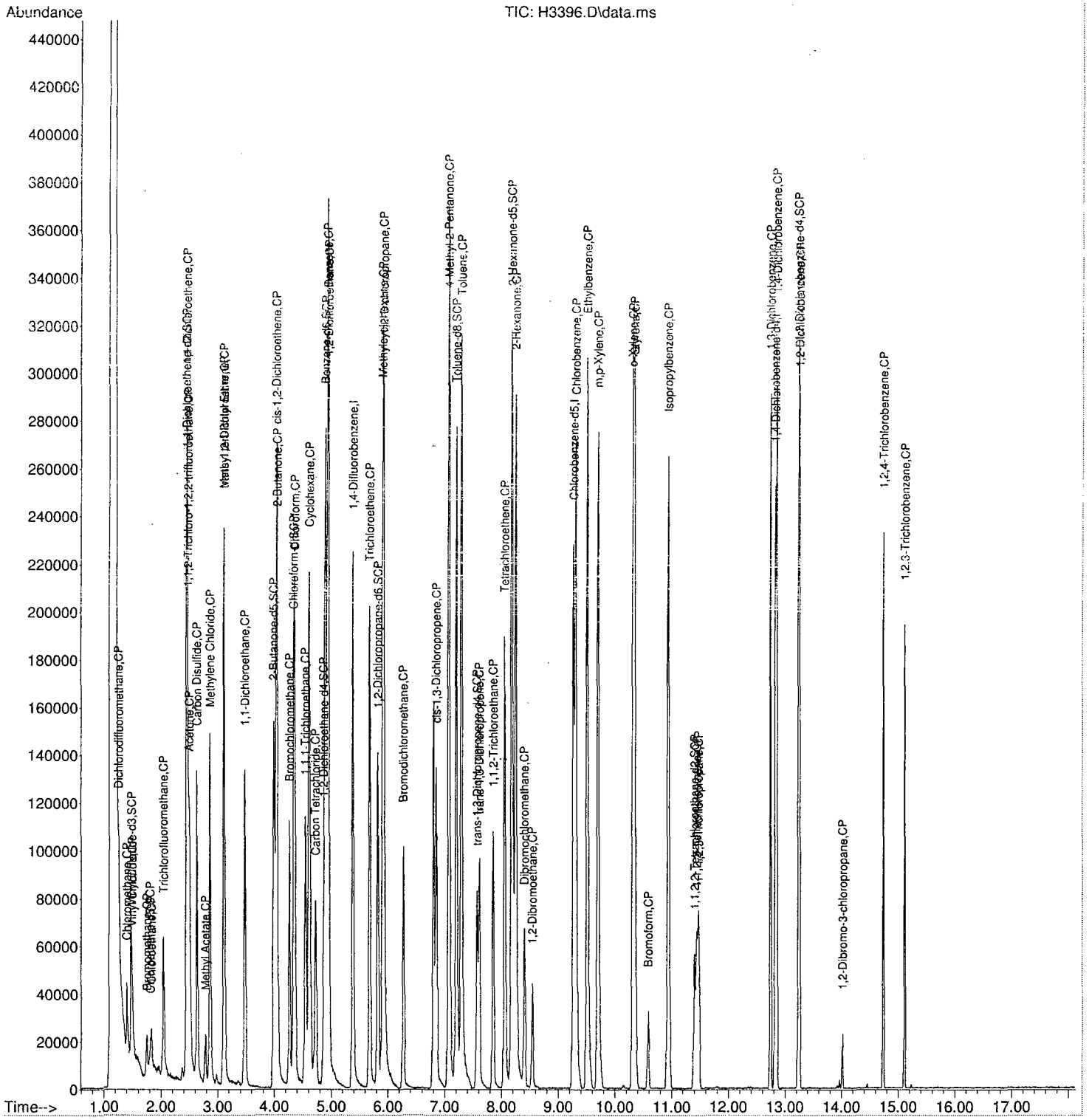
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3396.D
Acq On : 3 May 2012 15:42
Sample : 2E04001-CAL3
Misc : VSTD0053Y 25ML
DataAcq Meth:VOAC.M

Vial: 53
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 03 16:14:41 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 16:12:27 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	0.116	0.138	-19.0	100	0.00
3	CP	Chloromethane	0.252	0.211	16.3	100	0.00
4	SCP	Vinyl Chloride-d3	0.081	0.097	-19.8	100	0.00
5	CP	Vinyl Chloride	0.107	0.127	-18.7	100	0.00
6	CP	Bromomethane	0.055	0.069#	-25.5	100	0.00
7	SCP	Chloroethane-d5	0.046	0.055	-19.6	100	0.00
8	CP	Chloroethane	0.052	0.060	-15.4	100	0.00
9	CP	Trichlorofluoromethane	0.205	0.242	-18.0	100	0.00
10	SCP	1,1-Dichloroethene-d2	0.540	0.582	-7.8	100	0.00
11	CP	1,1-Dichloroethene	0.242	0.278	-14.9	100	0.00
12	CP	1,1,2-Trichloro-1,2,2-trifl	0.168	0.187	-11.3	100	0.00
13	CP	Acetone	0.055	0.052	5.5	100	0.00
14	CP	Carbon Disulfide	0.704	0.787	-11.8	100	0.00
15	CP	Methyl Acetate	0.145	0.134	7.6	100	0.00
16	CP	Methylene Chloride	0.287	0.267	7.0	100	0.00
17	CP	trans-1,2-Dichloroethene	0.313	0.325	-3.8	100	0.00
18	CP	Methyl tert-Butyl Ether	0.230	0.219	4.8	100	0.00
19	CP	1,1-Dichloroethane	0.614	0.627	-2.1	100	0.00
20	SCP	2-Butanone-d5	0.110	0.104	5.5	100	0.00
21	CP	cis-1,2-Dichloroethene	0.324	0.333	-2.8	100	0.00
22	CP	2-Butanone	0.087	0.083	4.6	100	0.00
23	CP	Bromochloromethane	0.133	0.134	-0.8	100	0.00
24	SCP	Chloroform-d	0.563	0.541	3.9	100	0.00
25	CP	Chloroform	0.613	0.589	3.9	100	0.00
26	SCP	1,2-Dichloroethane-d4	0.300	0.283	5.7	100	0.00
27	CP	1,2-Dichloroethane	0.395	0.388	1.8	100	0.00
28	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
29	CP	1,1,1-Trichloroethane	0.470	0.492	-4.7	100	0.00
30	CP	Cyclohexane	0.772	0.838	-8.5	100	0.00
31	CP	Carbon Tetrachloride	0.317	0.320	-0.9	100	0.00
32	SCP	Benzene-d6	1.605	1.590	0.9	100	0.00
33	CP	Benzene	1.668	1.695	-1.6	100	0.00
34	CP	Trichloroethene	0.432	0.442	-2.3	100	0.00
35	SCP	1,2-Dichloropropane-d6	0.455	0.432	5.1	100	0.00
36	CP	Methylcyclohexane	0.657	0.679	-3.3	100	0.00
37	CP	1,2-Dichloropropane	0.447	0.446	0.2	100	0.00
38	CP	Bromodichloromethane	0.431	0.436	-1.2	100	0.00
39	CP	cis-1,3-Dichloropropene	0.490	0.511	-4.3	100	0.00
40	CP	4-Methyl-2-Pentanone	0.215	0.202	6.0	100	0.00
41	SCP	Toluene-d8	1.390	1.375	1.1	100	0.00
42	CP	Toluene	1.645	1.643	0.1	100	0.00
43	SCP	trans-1,3-Dichloropropene-d	0.322	0.309	4.0	100	0.00
44	CP	trans-1,3-Dichloropropene	0.358	0.373	-4.2	100	0.00
45	CP	1,1,2-Trichloroethane	0.246	0.245	0.4	100	0.00
46	CP	Tetrachloroethene	0.332	0.337	-1.5	100	0.00

47	SCP	2-Hexanone-d5	0.078	0.075	3.8	100	0.00
48	CP	2-Hexanone	0.164	0.152	7.3	100	0.00
49	CP	Dibromochloromethane	0.254	0.262	-3.1	100	0.00
50	CP	1,2-Dibromoethane	0.244	0.229	6.1	100	0.00
51	CP	Chlorobenzene	1.114	1.121	-0.6	100	0.00
52	CP	Ethylbenzene	1.669	1.733	-3.8	100	0.00
53	CP	m,p-Xylene	0.658	0.688	-4.6	100	0.00
54	CP	o-Xylene	0.621	0.653	-5.2	100	0.00
55	CP	Styrene	0.985	0.995	-1.0	100	0.00
56	CP	Isopropylbenzene	1.426	1.518	-6.5	100	0.00
57	SCP	1,1,2,2-Tetrachloroethane-d	0.252	0.221	12.3	100	0.00
58	CP	1,1,2,2-Tetrachloroethane	0.244	0.237	2.9	100	0.00
59	CP	1,2,3-Trichloropropane	1.344	1.609	-19.7#	100	0.00
60	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
61	CP	Bromoform	0.275	0.294	-6.9	100	0.00
62	CP	1,3-Dichlorobenzene	1.763	1.720	2.4	100	0.00
63	CP	1,4-Dichlorobenzene	1.844	1.725	6.5	100	0.00
64	SCP	1,2-Dichlorobenzene-d4	0.958	0.915	4.5	100	0.00
65	CP	1,2-Dichlorobenzene	1.617	1.548	4.3	100	0.00
66	CP	1,2-Dibromo-3-chloropropane	0.067	0.066	1.5	100	0.00
67	CP	1,2,4-Trichlorobenzene	0.833	0.743	10.8	100	0.00
68	CP	1,2,3-Trichlorobenzene	0.706	0.608	13.9	100	0.00

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

SOTH3396.M Fri May 04 10:03:19 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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 2236

Lab File ID: H3408.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Z Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.116	0.123	0.010	5.9	50.0
Chloromethane	0.252	0.320	0.010	26.9	50.0
Vinyl chloride	0.107	0.121	0.010	13.0	50.0
Bromomethane	0.055	0.072	0.010	29.8	50.0
Chloroethane	0.052	0.058	0.010	11.2	50.0
Trichlorofluoromethane	0.205	0.243	0.010	18.4	50.0
1,1-Dichloroethene	0.242	0.272	0.010	12.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.168	0.207	0.010	23.7	50.0
Acetone	0.055	0.046	0.010	-15.8	50.0
Carbon disulfide	0.704	0.778	0.010	10.5	50.0
Methyl acetate	0.145	0.124	0.010	-14.2	50.0
Methylene chloride	0.287	0.272	0.010	-5.3	50.0
trans-1,2-Dichloroethene	0.313	0.321	0.010	2.3	50.0
Methyl tert-butyl ether	0.230	0.220	0.010	-4.4	50.0
1,1-Dichloroethane	0.614	0.647	0.010	5.2	50.0
cis-1,2-Dichloroethene	0.324	0.338	0.010	4.2	50.0
2-Butanone	0.087	0.073	0.010	-16.5	50.0
Bromochloromethane	0.133	0.125	0.010	-6.5	50.0
Chloroform	0.613	0.611	0.010	-0.4	50.0
1,1,1-Trichloroethane	0.470	0.477	0.010	1.5	50.0
Cyclohexane	0.772	0.862	0.010	11.7	50.0
Carbon tetrachloride	0.317	0.327	0.010	3.2	50.0
Benzene	1.668	1.688	0.010	1.2	50.0
1,2-Dichloroethane	0.395	0.384	0.010	-2.8	50.0
Trichloroethene	0.432	0.433	0.010	0.2	50.0
Methylcyclohexane	0.657	0.711	0.010	8.2	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 2236

Lab File ID: H3408.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Z Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.447	0.432	0.010	-3.2	50.0
Bromodichloromethane	0.431	0.420	0.010	-2.6	50.0
cis-1,3-Dichloropropene	0.490	0.470	0.010	-4.0	50.0
4-Methyl-2-pentanone	0.215	0.183	0.010	-14.7	50.0
Toluene	1.645	1.741	0.010	5.8	50.0
trans-1,3-Dichloropropene	0.358	0.346	0.010	-3.4	50.0
1,1,2-Trichloroethane	0.246	0.228	0.010	-7.5	50.0
Tetrachloroethene	0.332	0.333	0.010	0.3	50.0
2-Hexanone	0.164	0.142	0.010	-13.2	50.0
Dibromochloromethane	0.254	0.238	0.010	-6.5	50.0
1,2-Dibromoethane	0.244	0.220	0.010	-9.6	50.0
Chlorobenzene	1.114	1.107	0.010	-0.7	50.0
Ethylbenzene	1.669	1.707	0.010	2.3	50.0
o-Xylene	0.621	0.653	0.010	5.1	50.0
m,p-Xylene	0.658	0.670	0.010	1.9	50.0
Styrene	0.985	0.973	0.010	-1.2	50.0
Bromoform	0.275	0.262	0.010	-4.6	50.0
Isopropylbenzene	1.426	1.487	0.010	4.3	50.0
1,1,2,2-Tetrachloroethane	0.244	0.218	0.010	-10.5	50.0
1,3-Dichlorobenzene	1.763	1.709	0.010	-3.1	50.0
1,4-Dichlorobenzene	1.844	1.722	0.010	-6.6	50.0
1,2-Dichlorobenzene	1.617	1.523	0.010	-5.8	50.0
1,2-Dibromo-3-chloropropane	0.067	0.058	0.010	-14.1	50.0
1,2,4-Trichlorobenzene	0.833	0.709	0.010	-14.9	50.0
1,2,3-Trichlorobenzene	0.706	0.586	0.010	-16.9	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/03/2012 Time: 2236

Lab File ID: H3408.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0053Z Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.081	0.090	0.010	10.0	50.0
Chloroethane-d5	0.046	0.054	0.010	19.2	50.0
1,1-Dichloroethene-d2	0.540	0.602	0.010	11.5	50.0
2-Butanone-d5	0.110	0.098	0.010	-10.9	50.0
Chloroform-d	0.563	0.550	0.010	-2.4	50.0
1,2-Dichloroethane-d4	0.300	0.283	0.010	-5.7	50.0
Benzene-d6	1.605	1.593	0.010	-0.7	50.0
1,2-Dichloropropane-d6	0.455	0.437	0.010	-4.0	50.0
Toluene-d8	1.390	1.369	0.010	-1.5	50.0
trans-1,3-Dichloropropene-d4	0.322	0.285	0.010	-11.3	50.0
2-Hexanone-d5	0.078	0.070	0.010	-10.8	50.0
1,1,2,2-Tetrachloroethane-d2	0.252	0.209	0.010	-16.8	50.0
1,2-Dichlorobenzene-d4	0.958	0.925	0.010	-3.4	50.0

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

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3408.D
Acq On : 3 May 2012 22:36
Sample : 2E04001-CCV1
Misc : VSTD0053Z 25ML
DataAcq Meth:VOAC.M

Vial: 69
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/11/12

05/11/12

Quant Time: May 04 09:11:01 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:29:26 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	177888	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.259	117	140412	5.0000 ug/L	0.00
60) 1,4-Dichlorobenzene-d4	12.815	152	53363	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	15932	5.50 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 110.00%	
7) Chloroethane-d5	1.806	69	9686	5.96 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 119.20%	
10) 1,1-Dichloroethene-d2	2.445	63	107160	5.58 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 111.60%#	
20) 2-Butanone-d5	3.979	46	174282	44.56 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 89.12%	
24) Chloroform-d	4.333	84	97801	4.88 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 97.60%	
26) 1,2-Dichloroethane-d4	4.860	65	50336	4.72 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 94.40%	
32) Benzene-d6	4.889	84	223689	4.96 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 99.20%	
35) 1,2-Dichloropropane-d6	5.815	67	61357	4.80 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 96.00%	
41) Toluene-d8	7.201	98	192192	4.92 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 98.40%	
43) trans-1,3-Dichloroprop...	7.567	79	40077	4.43 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 88.60%	
47) 2-Hexanone-d5	8.175	63	98244	44.61 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 89.22%	
57) 1,1,2,2-Tetrachloroeth...	11.397	84	29402	4.16 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 83.20%	
64) 1,2-Dichlorobenzene-d4	13.226	152	49378	4.83 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 96.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	21878	5.2971 ug/L	89
3) Chloromethane	1.397	50	56852	6.3467 ug/L	84
5) Vinyl Chloride	1.490	62	21536	5.6511 ug/L	90
6) Bromomethane	1.748	94	12795	6.4892 ug/L	81
8) Chloroethane	1.831	64	10263	5.5616 ug/L	95
9) Trichlorofluoromethane	2.040	101	43140	5.9185 ug/L	98
11) 1,1-Dichloroethene	2.455	96	48405	5.6120 ug/L	94
12) 1,1,2-Trichloro-1,2,2-...	2.471	101	36905	6.1830 ug/L	95
13) Acetone	2.497	43	81671	42.1177 ug/L	99
14) Carbon Disulfide	2.629	76	138399	5.5252 ug/L	99
15) Methyl Acetate	2.783	43	22076	4.2924 ug/L	94
16) Methylene Chloride	2.857	84	48437	4.7367 ug/L	99
17) trans-1,2-Dichloroethene	3.101	96	57046	5.1157 ug/L	97
18) Methyl tert-Butyl Ether	3.108	73	39070	4.7802 ug/L	98
19) 1,1-Dichloroethane	3.474	63	115009	5.2614 ug/L	100
21) cis-1,2-Dichloroethene	4.031	96	60094	5.2121 ug/L	98
22) 2-Butanone	4.037	43	129013	41.7734 ug/L	99
23) Bromochloromethane	4.259	128	22184	4.6732 ug/L	92
25) Chloroform	4.349	83	108637	4.9787 ug/L	100
27) 1,2-Dichloroethane	4.944	62	68355	4.8593 ug/L	100
29) 1,1,1-Trichloroethane	4.539	97	66974	5.0765 ug/L	97
30) Cyclohexane	4.606	56	121074	5.5852 ug/L	98
31) Carbon Tetrachloride	4.715	117	45915	5.1623 ug/L	98

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3408.D
Acq On : 3 May 2012 22:36
Sample : 2E04001-CCV1
Misc : VSTD0053Z 25ML
DataAcq Meth:VOAC.M

Vial: 69
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 04 09:11:01 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:29:26 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	236979	5.0577 ug/L	100
34) Trichloroethene	5.670	95	60800	5.0110 ug/L	99
36) Methylcyclohexane	5.905	83	99852	5.4086 ug/L	99
37) 1,2-Dichloropropane	5.918	63	60694	4.8395 ug/L	99
38) Bromodichloromethane	6.268	83	58904	4.8710 ug/L	98
39) cis-1,3-Dichloropropene	6.847	75	66061	4.7979 ug/L	97
40) 4-Methyl-2-Pentanone	7.069	43	257305	42.6266 ug/L	99
42) Toluene	7.291	91	244520	5.2924 ug/L	98
44) trans-1,3-Dichloropropene	7.606	75	48540	4.8315 ug/L	100
45) 1,1,2-Trichloroethane	7.847	97	31977	4.6249 ug/L	98
46) Tetrachloroethene	8.053	164	46749	5.0130 ug/L	98
48) 2-Hexanone	8.243	43	200079	43.4217 ug/L	98
49) Dibromochloromethane	8.397	129	33395	4.6772 ug/L	97
50) 1,2-Dibromoethane	8.538	107	30960	4.5214 ug/L	96
51) Chlorobenzene	9.304	112	155404	4.9673 ug/L	98
52) Ethylbenzene	9.506	91	239619	5.1126 ug/L	99
53) m,p-Xylene	9.699	106	94112	5.0966 ug/L	99
54) o-Xylene	10.310	106	91669	5.2539 ug/L	98
55) Styrene	10.336	104	136582	4.9400 ug/L	100
56) Isopropylbenzene	10.931	105	208816	5.2138 ug/L	99
58) 1,1,2,2-Tetrachloroethane	11.435	83	30643	4.4746 ug/L	98
59) 1,2,3-Trichloropropane	11.442	TIC	198713	5.2660 ug/L	97
61) Bromoform	10.587	173	13986	4.7677 ug/L #	37
62) 1,3-Dichlorobenzene	12.734	146	91209	4.8468 ug/L	99
63) 1,4-Dichlorobenzene	12.844	146	91866	4.6679 ug/L	99
65) 1,2-Dichlorobenzene	13.249	146	81294	4.7119 ug/L	100
66) 1,2-Dibromo-3-chloropr...	14.011	75	3076	4.2950 ug/L	96
67) 1,2,4-Trichlorobenzene	14.731	180	37814	4.2527 ug/L	97
68) 1,2,3-Trichlorobenzene	15.110	180	31292	4.1548 ug/L	99

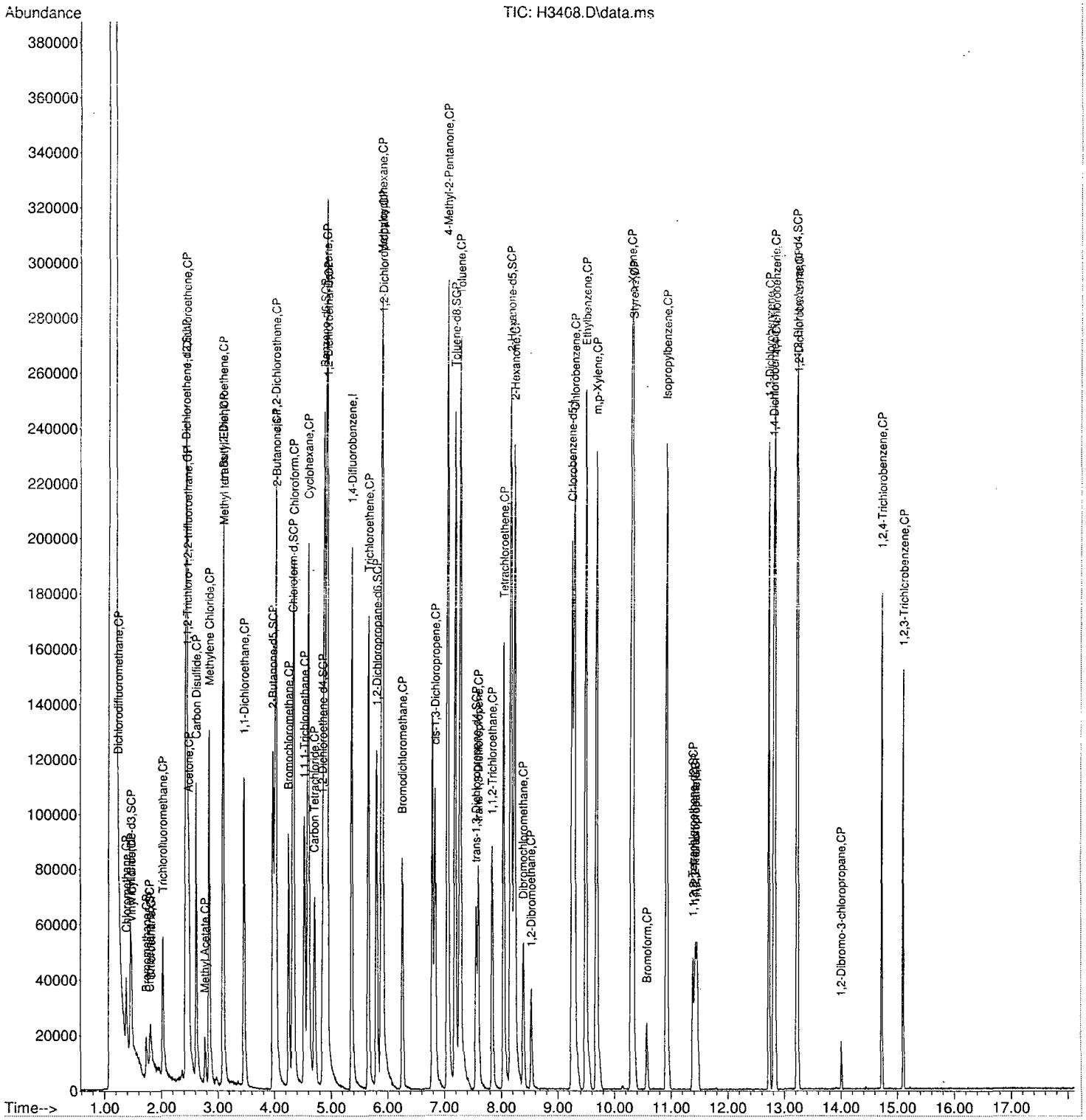
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3408.D
Acq On : 3 May 2012 22:36
Sample : 2E04001-CCV1
Misc : VSTD0053Z 25ML
DataAcq Meth:VOAC.M

Vial: 69
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 04 09:11:01 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:29:26 2012
Response via : Initial Calibration



00099

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3408.D
Acq On : 3 May 2012 22:36
Sample : 2E04001-CCV1
Misc : VSTD0053Z 25ML
DataAcq Meth:VOAC.M

Vial: 69
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 04 09:11:01 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3396.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Thu May 03 19:29:26 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-Difluorobenzene	1.000	1.000	0.0	85	0.00
2	CP	Dichlorodifluoromethane	0.116	0.123	-6.0	76	0.00
3	CP	Chloromethane	0.252	0.320	-27.0	128	0.00
4	SCP	Vinyl Chloride-d3	0.081	0.090	-11.1	78	0.00
5	CP	Vinyl Chloride	0.107	0.121	-13.1	81	0.00
6	CP	Bromomethane	0.055	0.072#	-30.9#	88	0.00
7	SCP	Chloroethane-d5	0.046	0.054	-17.4	83	0.00
8	CP	Chloroethane	0.052	0.058	-11.5	82	0.00
9	CP	Trichlorofluoromethane	0.205	0.243	-18.5	85	0.00
10	SCP	1,1-Dichloroethene-d2	0.540	0.602	-11.5	88	0.00
11	CP	1,1-Dichloroethene	0.242	0.272	-12.4	83	0.00
12	CP	1,1,2-Trichloro-1,2,2-trifl	0.168	0.207	-23.2	94	0.00
13	CP	Acetone	0.055	0.046	16.4	75	0.00
14	CP	Carbon Disulfide	0.704	0.778	-10.5	84	0.00
15	CP	Methyl Acetate	0.145	0.124	14.5	78	0.00
16	CP	Methylene Chloride	0.287	0.272	5.2	86	0.00
17	CP	trans-1,2-Dichloroethene	0.313	0.321	-2.6	83	0.00
18	CP	Methyl tert-Butyl Ether	0.230	0.220	4.3	85	0.00
19	CP	1,1-Dichloroethane	0.614	0.647	-5.4	87	0.00
20	SCP	2-Butanone-d5	0.110	0.098	10.9	80	0.00
21	CP	cis-1,2-Dichloroethene	0.324	0.338	-4.3	86	0.00
22	CP	2-Butanone	0.087	0.073	16.1	74	0.00
23	CP	Bromochloromethane	0.133	0.125	6.0	79	0.00
24	SCP	Chloroform-d	0.563	0.550	2.3	86	0.00
25	CP	Chloroform	0.613	0.611	0.3	88	0.00
26	SCP	1,2-Dichloroethane-d4	0.300	0.283	5.7	85	0.00
27	CP	1,2-Dichloroethane	0.395	0.384	2.8	84	0.00
28	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
29	CP	1,1,1-Trichloroethane	0.470	0.477	-1.5	84	0.00
30	CP	Cyclohexane	0.772	0.862	-11.7	89	0.00
31	CP	Carbon Tetrachloride	0.317	0.327	-3.2	88	0.00
32	SCP	Benzene-d6	1.605	1.593	0.7	86	0.00
33	CP	Benzene	1.668	1.688	-1.2	86	0.00
34	CP	Trichloroethene	0.432	0.433	-0.2	84	0.00
35	SCP	1,2-Dichloropropane-d6	0.455	0.437	4.0	87	0.00
36	CP	Methylcyclohexane	0.657	0.711	-8.2	90	0.00
37	CP	1,2-Dichloropropane	0.447	0.432	3.4	83	0.00
38	CP	Bromodichloromethane	0.431	0.420	2.6	83	0.00
39	CP	cis-1,3-Dichloropropene	0.490	0.470	4.1	79	0.00
40	CP	4-Methyl-2-Pentanone	0.215	0.183	14.9	78	0.00
41	SCP	Toluene-d8	1.390	1.369	1.5	86	0.00
42	CP	Toluene	1.645	1.741	-5.8	91	0.00
43	SCP	trans-1,3-Dichloropropene-d	0.322	0.285	11.5	80	0.00
44	CP	trans-1,3-Dichloropropene	0.358	0.346	3.4	80	0.00
45	CP	1,1,2-Trichloroethane	0.246	0.228	7.3	80	0.00
46	CP	Tetrachloroethene	0.332	0.333	-0.3	85	0.00

47	SCP	2-Hexanone-d5	0.078	0.070	10.3	81	0.00
48	CP	2-Hexanone	0.164	0.142	13.4	81	0.00
49	CP	Dibromochloromethane	0.254	0.238	6.3	78	0.00
50	CP	1,2-Dibromoethane	0.244	0.220	9.8	83	0.00
51	CP	Chlorobenzene	1.114	1.107	0.6	85	0.00
52	CP	Ethylbenzene	1.669	1.707	-2.3	85	0.00
53	CP	m,p-Xylene	0.658	0.670	-1.8	84	0.00
54	CP	o-Xylene	0.621	0.653	-5.2	86	0.00
55	CP	Styrene	0.985	0.973	1.2	84	0.00
56	CP	Isopropylbenzene	1.426	1.487	-4.3	84	0.00
57	SCP	1,1,2,2-Tetrachloroethane-d	0.252	0.209	17.1	82	0.00
58	CP	1,1,2,2-Tetrachloroethane	0.244	0.218	10.7	79	0.00
59	CP	1,2,3-Trichloropropane	1.344	1.415	-5.3#	76	-0.03
60	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	0.00
61	CP	Bromoform	0.275	0.262	4.7	75	0.00
62	CP	1,3-Dichlorobenzene	1.763	1.709	3.1	84	0.00
63	CP	1,4-Dichlorobenzene	1.844	1.722	6.6	84	0.00
64	SCP	1,2-Dichlorobenzene-d4	0.958	0.925	3.4	85	0.00
65	CP	1,2-Dichlorobenzene	1.617	1.523	5.8	83	0.00
66	CP	1,2-Dibromo-3-chloropropane	0.067	0.058	13.4	74	0.00
67	CP	1,2,4-Trichlorobenzene	0.833	0.709	14.9	81	0.00
68	CP	1,2,3-Trichlorobenzene	0.706	0.586	17.0	81	0.00

(#) = Out of Range SPCC's out = 1 CCC's out = 2

SOTH3396.M Tue May 08 11:13:18 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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1057

Lab File ID: H3646.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055B Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.116	0.087	0.010	-25.3	40.0
Chloromethane	0.252	0.207	0.010	-17.8	40.0
Vinyl chloride	0.107	0.090	0.100	-16.4	30.0
Bromomethane	0.055	0.064	0.100	16.3	30.0
Chloroethane	0.052	0.049	0.010	-5.5	40.0
Trichlorofluoromethane	0.205	0.201	0.010	-2.1	40.0
1,1-Dichloroethene	0.242	0.256	0.100	5.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.168	0.126	0.010	-24.9	40.0
Acetone	0.055	0.059	0.010	7.8	40.0
Carbon disulfide	0.704	0.692	0.010	-1.8	40.0
Methyl acetate	0.145	0.165	0.010	14.2	40.0
Methylene chloride	0.287	0.250	0.010	-13.1	40.0
trans-1,2-Dichloroethene	0.313	0.338	0.010	8.0	40.0
Methyl tert-butyl ether	0.230	0.252	0.010	9.8	40.0
1,1-Dichloroethane	0.614	0.681	0.200	10.8	30.0
cis-1,2-Dichloroethene	0.324	0.364	0.010	12.4	40.0
2-Butanone	0.087	0.091	0.010	4.6	40.0
Bromochloromethane	0.133	0.145	0.050	8.6	30.0
Chloroform	0.613	0.629	0.200	2.6	30.0
1,1,1-Trichloroethane	0.470	0.496	0.100	5.5	30.0
Cyclohexane	0.772	0.689	0.010	-10.7	40.0
Carbon tetrachloride	0.317	0.346	0.100	9.4	30.0
Benzene	1.668	1.832	0.400	9.8	30.0
1,2-Dichloroethane	0.395	0.473	0.100	19.5	30.0
Trichloroethene	0.432	0.439	0.300	1.7	30.0
Methylcyclohexane	0.657	0.591	0.010	-10.1	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1057

Lab File ID: H3646.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055B Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.447	0.487	0.010	9.1	40.0
Bromodichloromethane	0.431	0.481	0.200	11.6	30.0
cis-1,3-Dichloropropene	0.490	0.554	0.200	13.0	30.0
4-Methyl-2-pentanone	0.215	0.251	0.010	16.5	40.0
Toluene	1.645	1.832	0.400	11.3	30.0
trans-1,3-Dichloropropene	0.358	0.431	0.100	20.5	30.0
1,1,2-Trichloroethane	0.246	0.271	0.100	10.2	30.0
Tetrachloroethene	0.332	0.351	0.100	5.7	30.0
2-Hexanone	0.164	0.200	0.010	21.7	40.0
Dibromochloromethane	0.254	0.284	0.100	11.8	30.0
1,2-Dibromoethane	0.244	0.263	0.010	7.9	40.0
Chlorobenzene	1.114	1.216	0.500	9.1	30.0
Ethylbenzene	1.669	1.834	0.100	9.9	30.0
o-Xylene	0.621	0.684	0.300	10.1	30.0
m,p-Xylene	0.658	0.704	0.300	7.0	30.0
Styrene	0.985	1.056	0.300	7.3	30.0
Bromoform	0.275	0.300	0.050	9.3	30.0
Isopropylbenzene	1.426	1.584	0.010	11.0	40.0
1,1,2,2-Tetrachloroethane	0.244	0.269	0.100	10.3	30.0
1,3-Dichlorobenzene	1.763	1.861	0.400	5.5	30.0
1,4-Dichlorobenzene	1.844	1.847	0.400	0.1	30.0
1,2-Dichlorobenzene	1.617	1.703	0.400	5.4	30.0
1,2-Dibromo-3-chloropropane	0.067	0.080	0.010	19.3	40.0
1,2,4-Trichlorobenzene	0.833	0.921	0.200	10.5	30.0
1,2,3-Trichlorobenzene	0.706	0.757	0.200	7.3	30.0

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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1057

Lab File ID: H3646.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055B Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.081	0.064	0.010	-21.9	30.0
Chloroethane-d5	0.046	0.039	0.010	-14.2	40.0
1,1-Dichloroethene-d2	0.540	0.516	0.010	-4.6	30.0
2-Butanone-d5	0.110	0.127	0.010	15.9	40.0
Chloroform-d	0.563	0.585	0.010	3.9	30.0
1,2-Dichloroethane-d4	0.300	0.319	0.010	6.3	30.0
Benzene-d6	1.605	1.572	0.010	-2.1	30.0
1,2-Dichloropropane-d6	0.455	0.432	0.010	-5.0	40.0
Toluene-d8	1.390	1.363	0.010	-1.9	30.0
trans-1,3-Dichloropropene-d4	0.322	0.341	0.010	5.8	30.0
2-Hexanone-d5	0.078	0.106	0.010	34.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.252	0.243	0.010	-3.4	30.0
1,2-Dichlorobenzene-d4	0.958	0.918	0.010	-4.2	30.0

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

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3646.D
Acq On : 18 May 2012 10:57
Sample : 2E21003-CCV1
Misc : VSTD0055B 25ML
DataAcq Meth:VOAC.M

Vial: 50
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

Quant Time: May 18 11:38:06 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Wed May 16 15:41:19 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WC4

05/22/12

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.368	114	115369	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	92078	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.814	152	37480	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.480	65	7335	3.90 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 78.00%		
7) Chloroethane-d5	1.808	69	4524	4.29 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 85.80%		
10) 1,1-Dichloroethene-d2	2.445	63	59474	4.77 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 95.40%		
20) 2-Butanone-d5	3.979	46	146942	57.93 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 115.86%		
24) Chloroform-d	4.332	84	67494	5.19 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 103.80%		
26) 1,2-Dichloroethane-d4	4.860	65	36809	5.32 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 106.40%		
32) Benzene-d6	4.889	84	144703	4.90 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 98.00%		
35) 1,2-Dichloropropane-d6	5.818	67	39810	4.75 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 95.00%		
41) Toluene-d8	7.197	98	125489	4.90 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 98.00%		
43) trans-1,3-Dichloroprop...	7.564	79	31358	5.29 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 105.80%		
47) 2-Hexanone-d5	8.175	63	97393	67.43 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 134.86%		
57) 1,1,2,2-Tetrachloroeth...	11.396	84	22371	4.83 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 96.60%		
63) 1,2-Dichlorobenzene-d4	13.226	152	34412	4.79 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 95.80%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.252	85	10008	3.7363 ug/L	86
3) Chloromethane	1.390	50	23882	4.1108 ug/L	98
5) Vinyl Chloride	1.487	62	10329	4.1791 ug/L	96
6) Bromomethane	1.751	94	7438	5.8165 ug/L	99
8) Chloroethane	1.828	64	5655	4.7251 ug/L	91
9) Trichlorofluoromethane	2.034	101	23132	4.8933 ug/L	95
11) 1,1-Dichloroethene	2.455	96	29590	5.2897 ug/L	97
12) 1,1,2-Trichloro-1,2,2-...	2.471	101	14541	3.7563 ug/L	96
13) Acetone	2.493	43	67801	53.9126 ug/L	97
14) Carbon Disulfide	2.625	76	79789	4.9115 ug/L	100
15) Methyl Acetate	2.783	43	19048	5.7106 ug/L	92
16) Methylene Chloride	2.853	84	28832	4.3474 ug/L	97
17) trans-1,2-Dichloroethene	3.098	96	39036	5.3976 ug/L	98
18) Methyl tert-Butyl Ether	3.111	73	29092	5.4883 ug/L	98
19) 1,1-Dichloroethane	3.471	63	78519	5.5387 ug/L	99
21) cis-1,2-Dichloroethene	4.027	96	42032	5.6211 ug/L	98
22) 2-Butanone	4.037	43	104799	52.3216 ug/L	99
23) Bromochloromethane	4.259	128	16719	5.4306 ug/L	94
25) Chloroform	4.352	83	72586	5.1292 ug/L	99
27) 1,2-Dichloroethane	4.943	62	54525	5.9766 ug/L	99
29) 1,1,1-Trichloroethane	4.538	97	45654	5.2770 ug/L	99
30) Cyclohexane	4.609	56	63486	4.4659 ug/L	98
31) Carbon Tetrachloride	4.715	117	31890	5.4675 ug/L	99

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3646.D
Acq On : 18 May 2012 10:57
Sample : 2E21003-CCV1
Misc : VSTD0055B 25ML
DataAcq Meth:VOAC.M

Vial: 50
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 11:38:06 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Wed May 16 15:41:19 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	168657	5.4890 ug/L	100
34) Trichloroethene	5.670	95	40447	5.0834 ug/L	97
36) Methylcyclohexane	5.905	83	54402	4.4935 ug/L	94
37) 1,2-Dichloropropane	5.918	63	44883	5.4574 ug/L	99
38) Bromodichloromethane	6.271	83	44267	5.5821 ug/L	98
39) cis-1,3-Dichloropropene	6.847	75	51034	5.6521 ug/L	97
40) 4-Methyl-2-Pentanone	7.065	43	230671	58.2739 ug/L	99
42) Toluene	7.291	91	168672	5.5671 ug/L	97
44) trans-1,3-Dichloropropene	7.606	75	39685	6.0236 ug/L	98
45) 1,1,2-Trichloroethane	7.847	97	24976	5.5086 ug/L	99
46) Tetrachloroethene	8.053	164	32322	5.2854 ug/L	98
48) 2-Hexanone	8.245	43	183922	60.8678 ug/L	98
49) Dibromochloromethane	8.403	129	26181	5.5916 ug/L	99
50) 1,2-Dibromoethane	8.535	107	24225	5.3949 ug/L	98
51) Chlorobenzene	9.303	112	111922	5.4553 ug/L	98
52) Ethylbenzene	9.509	91	168896	5.4953 ug/L	99
53) m,p-Xylene	9.696	106	64800	5.3513 ug/L	96
54) o-Xylene	10.313	106	62977	5.5042 ug/L	97
55) Styrene	10.335	104	97244	5.3635 ug/L	99
56) Isopropylbenzene	10.930	105	145819	5.5521 ug/L	100
58) 1,1,2,2-Tetrachloroethane	11.432	83	24763	5.5141 ug/L	98
60) Bromoform	10.580	173	11258	5.4640 ug/L	97
61) 1,3-Dichlorobenzene	12.734	146	69747	5.2769 ug/L	99
62) 1,4-Dichlorobenzene	12.847	146	69211	5.0070 ug/L	99
64) 1,2-Dichlorobenzene	13.245	146	63835	5.2679 ug/L	99
65) 1,2-Dibromo-3-chloropr...	14.014	75	3001	5.9660 ug/L	100
66) 1,2,4-Trichlorobenzene	14.731	180	34513	5.5263 ug/L	99
67) 1,2,3-Trichlorobenzene	15.110	180	28381	5.3652 ug/L	98

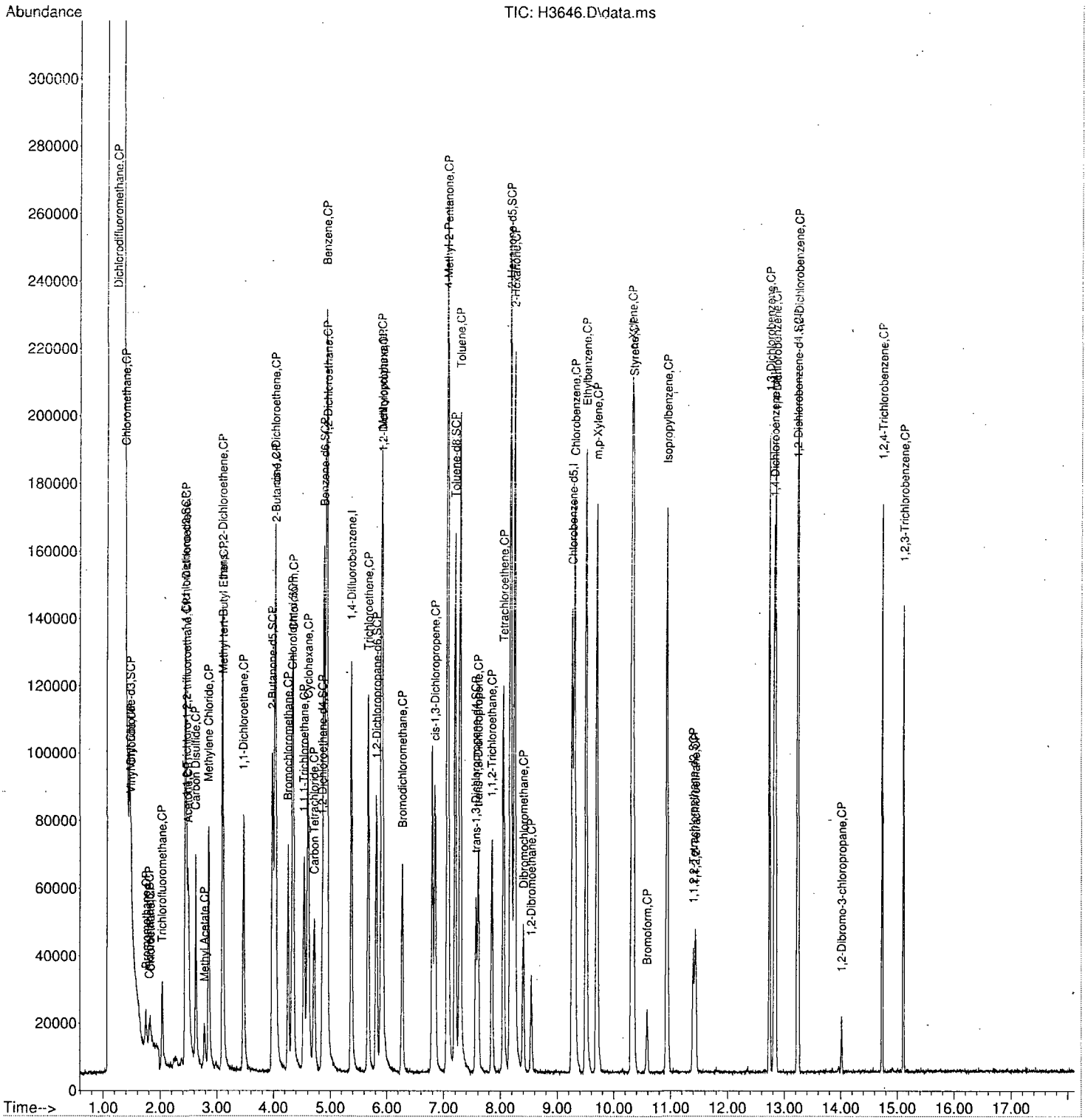
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3646.D
Acq On : 18 May 2012 10:57
Sample : 2E21003-CCV1
Misc : VSTD0055B 25ML
DataAcq Meth:VOAC.M

Vial: 50
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 11:38:06 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Wed May 16 15:41:19 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3646.D
Acq On : 18 May 2012 10:57
Sample : 2E21003-CCV1
Misc : VSTD0055B 25ML
DataAcq Meth:VOAC.M

Vial: 50
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 11:38:06 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Wed May 16 15:41:19 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-Difluorobenzene	1.000	1.000	0.0	55	0.00
2	CP	Dichlorodifluoromethane	0.116	0.087	25.0	35#	0.00
3	CP	Chloromethane	0.252	0.207	17.9	54	0.00
4	SCP	Vinyl Chloride-d3	0.081	0.064	21.0	36#	0.00
5	CP	Vinyl Chloride	0.107	0.090#	15.9	39#	0.00
6	CP	Bromomethane	0.055	0.064#	-16.4	51	0.00
7	SCP	Chloroethane-d5	0.046	0.039	15.2	39#	0.00
8	CP	Chloroethane	0.052	0.049	5.8	45#	0.00
9	CP	Trichlorofluoromethane	0.205	0.201	2.0	45#	0.00
10	SCP	1,1-Dichloroethene-d2	0.540	0.516	4.4	49#	0.00
11	CP	1,1-Dichloroethene	0.242	0.256	-5.8	51	0.00
12	CP	1,1,2-Trichloro-1,2,2-trifl	0.168	0.126	25.0	37#	0.00
13	CP	Acetone	0.055	0.059	-7.3	62	0.00
14	CP	Carbon Disulfide	0.704	0.692	1.7	48#	0.00
15	CP	Methyl Acetate	0.145	0.165	-13.8	68	0.00
16	CP	Methylene Chloride	0.287	0.250	12.9	51	0.00
17	CP	trans-1,2-Dichloroethene	0.313	0.338	-8.0	57	0.00
18	CP	Methyl tert-Butyl Ether	0.230	0.252	-9.6	63	0.00
19	CP	1,1-Dichloroethane	0.614	0.681	-10.9	60	0.00
20	SCP	2-Butanone-d5	0.110	0.127	-15.5	67	0.00
21	CP	cis-1,2-Dichloroethene	0.324	0.364	-12.3	60	0.00
22	CP	2-Butanone	0.087	0.091	-4.6	60	0.00
23	CP	Bromochloromethane	0.133	0.145	-9.0	59	0.00
24	SCP	Chloroform-d	0.563	0.585	-3.9	59	0.00
25	CP	Chloroform	0.613	0.629	-2.6	59	0.00
26	SCP	1,2-Dichloroethane-d4	0.300	0.319	-6.3	62	0.00
27	CP	1,2-Dichloroethane	0.395	0.473	-19.7	67	0.00
28	I	Chlorobenzene-d5	1.000	1.000	0.0	57	0.00
29	CP	1,1,1-Trichloroethane	0.470	0.496	-5.5	57	0.00
30	CP	Cyclohexane	0.772	0.689	10.8	47#	0.00
31	CP	Carbon Tetrachloride	0.317	0.346	-9.1	61	0.00
32	SCP	Benzene-d6	1.605	1.572	2.1	56	0.00
33	CP	Benzene	1.668	1.832	-9.8	61	0.00
34	CP	Trichloroethene	0.432	0.439	-1.6	56	0.00
35	SCP	1,2-Dichloropropane-d6	0.455	0.432	5.1	57	0.00
36	CP	Methylcyclohexane	0.657	0.591	10.0	49#	0.00
37	CP	1,2-Dichloropropane	0.447	0.487	-8.9	62	0.00
38	CP	Bromodichloromethane	0.431	0.481	-11.6	62	0.00
39	CP	cis-1,3-Dichloropropene	0.490	0.554	-13.1	61	0.00
40	CP	4-Methyl-2-Pentanone	0.215	0.251	-16.7	70	0.00
41	SCP	Toluene-d8	1.390	1.363	1.9	56	0.00
42	CP	Toluene	1.645	1.832	-11.4	63	0.00
43	SCP	trans-1,3-Dichloropropene-d	0.322	0.341	-5.9	62	0.00
44	CP	trans-1,3-Dichloropropene	0.358	0.431	-20.4	65	0.00
45	CP	1,1,2-Trichloroethane	0.246	0.271	-10.2	63	0.00
46	CP	Tetrachloroethene	0.332	0.351	-5.7	59	0.00

47	SCP	2-Hexanone-d5	0.078	0.106	-35.9	80	0.00
48	CP	2-Hexanone	0.164	0.200	-22.0	74	0.00
49	CP	Dibromochloromethane	0.254	0.284	-11.8	61	0.00
50	CP	1,2-Dibromoethane	0.244	0.263	-7.8	65	0.00
51	CP	Chlorobenzene	1.114	1.216	-9.2	61	0.00
52	CP	Ethylbenzene	1.669	1.834	-9.9	60	0.00
53	CP	m,p-Xylene	0.658	0.704	-7.0	58	0.00
54	CP	o-Xylene	0.621	0.684	-10.1	59	0.00
55	CP	Styrene	0.985	1.056	-7.2	60	0.00
56	CP	Isopropylbenzene	1.426	1.584	-11.1	59	0.00
57	SCP	1,1,2,2-Tetrachloroethane-d	0.252	0.243	3.6	62	0.00
58	CP	1,1,2,2-Tetrachloroethane	0.244	0.269	-10.2	64	0.00
59	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	59	0.00
60	CP	Bromoform	0.275	0.300	-9.1	61	0.00
61	CP	1,3-Dichlorobenzene	1.763	1.861	-5.6	64	0.00
62	CP	1,4-Dichlorobenzene	1.844	1.847	-0.2	63	0.00
63	SCP	1,2-Dichlorobenzene-d4	0.958	0.918	4.2	59	0.00
64	CP	1,2-Dichlorobenzene	1.617	1.703	-5.3	65	0.00
65	CP	1,2-Dibromo-3-chloropropane	0.067	0.080	-19.4	72	0.00
66	CP	1,2,4-Trichlorobenzene	0.833	0.921	-10.6	73	0.00
67	CP	1,2,3-Trichlorobenzene	0.706	0.757	-7.2	74	0.00

(#) = Out of Range SPCC's out = 2 CCC's out = 0

SOTH3646.M Mon May 21 11:07:18 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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1654

Lab File ID: H3655.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055C Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.116	0.103	0.010	-11.7	50.0
Chloromethane	0.252	0.221	0.010	-12.1	50.0
Vinyl chloride	0.107	0.103	0.010	-4.0	50.0
Bromomethane	0.055	0.066	0.010	18.7	50.0
Chloroethane	0.052	0.053	0.010	2.7	50.0
Trichlorofluoromethane	0.205	0.267	0.010	30.2	50.0
1,1-Dichloroethene	0.242	0.294	0.010	21.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.168	0.202	0.010	20.1	50.0
Acetone	0.055	0.049	0.010	-9.5	50.0
Carbon disulfide	0.704	0.789	0.010	12.1	50.0
Methyl acetate	0.145	0.138	0.010	-4.7	50.0
Methylene chloride	0.287	0.248	0.010	-13.7	50.0
trans-1,2-Dichloroethene	0.313	0.343	0.010	9.3	50.0
Methyl tert-butyl ether	0.230	0.246	0.010	7.2	50.0
1,1-Dichloroethane	0.614	0.697	0.010	13.4	50.0
cis-1,2-Dichloroethene	0.324	0.365	0.010	12.7	50.0
2-Butanone	0.087	0.081	0.010	-6.4	50.0
Bromochloromethane	0.133	0.140	0.010	5.3	50.0
Chloroform	0.613	0.644	0.010	4.9	50.0
1,1,1-Trichloroethane	0.470	0.563	0.010	19.9	50.0
Cyclohexane	0.772	0.943	0.010	22.2	50.0
Carbon tetrachloride	0.317	0.392	0.010	23.9	50.0
Benzene	1.668	1.861	0.010	11.6	50.0
1,2-Dichloroethane	0.395	0.470	0.010	18.9	50.0
Trichloroethene	0.432	0.467	0.010	8.0	50.0
Methylcyclohexane	0.657	0.814	0.010	23.8	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1654

Lab File ID: H3655.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055C Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.447	0.482	0.010	7.9	50.0
Bromodichloromethane	0.431	0.481	0.010	11.6	50.0
cis-1,3-Dichloropropene	0.490	0.526	0.010	7.2	50.0
4-Methyl-2-pentanone	0.215	0.223	0.010	3.7	50.0
Toluene	1.645	1.934	0.010	17.5	50.0
trans-1,3-Dichloropropene	0.358	0.398	0.010	11.3	50.0
1,1,2-Trichloroethane	0.246	0.263	0.010	6.9	50.0
Tetrachloroethene	0.332	0.381	0.010	14.8	50.0
2-Hexanone	0.164	0.173	0.010	5.3	50.0
Dibromochloromethane	0.254	0.276	0.010	8.6	50.0
1,2-Dibromoethane	0.244	0.249	0.010	2.0	50.0
Chlorobenzene	1.114	1.218	0.010	9.3	50.0
Ethylbenzene	1.669	1.928	0.010	15.5	50.0
o-Xylene	0.621	0.712	0.010	14.6	50.0
m,p-Xylene	0.658	0.752	0.010	14.3	50.0
Styrene	0.985	1.067	0.010	8.4	50.0
Bromoform	0.275	0.266	0.010	-3.1	50.0
Isopropylbenzene	1.426	1.693	0.010	18.7	50.0
1,1,2,2-Tetrachloroethane	0.244	0.259	0.010	6.2	50.0
1,3-Dichlorobenzene	1.763	1.781	0.010	1.0	50.0
1,4-Dichlorobenzene	1.844	1.794	0.010	-2.7	50.0
1,2-Dichlorobenzene	1.617	1.653	0.010	2.2	50.0
1,2-Dibromo-3-chloropropane	0.067	0.078	0.010	16.2	50.0
1,2,4-Trichlorobenzene	0.833	0.800	0.010	-4.0	50.0
1,2,3-Trichlorobenzene	0.706	0.650	0.010	-7.9	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.: F5WC4

Instrument ID: H-5975 Calibration Date: 05/18/2012 Time: 1654

Lab File ID: H3655.D Init. Calib. Date(s): 05/03/2012 05/03/2012

EPA Sample No.(VSTD#####): VSTD0055C Init. Calib. Time(s): 1542 1910

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.081	0.074	0.010	-8.9	50.0
Chloroethane-d5	0.046	0.042	0.010	-8.9	50.0
1,1-Dichloroethene-d2	0.540	0.611	0.010	13.2	50.0
2-Butanone-d5	0.110	0.111	0.010	1.0	50.0
Chloroform-d	0.563	0.590	0.010	4.7	50.0
1,2-Dichloroethane-d4	0.300	0.319	0.010	6.5	50.0
Benzene-d6	1.605	1.602	0.010	-0.2	50.0
1,2-Dichloropropane-d6	0.455	0.428	0.010	-5.9	50.0
Toluene-d8	1.390	1.436	0.010	3.3	50.0
trans-1,3-Dichloropropene-d4	0.322	0.311	0.010	-3.3	50.0
2-Hexanone-d5	0.078	0.089	0.010	14.0	50.0
1,1,2,2-Tetrachloroethane-d2	0.252	0.239	0.010	-4.8	50.0
1,2-Dichlorobenzene-d4	0.958	0.927	0.010	-3.2	50.0

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

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3655.D
Acq On : 18 May 2012 16:54
Sample : 2E21003-CCV2
Misc : VSTD0055C 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

Quant Time: May 18 18:28:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WC4

05/22/12

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.374	114	106471	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.262	117	83790	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.815	152	34747	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.481	65	7896	4.55 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 91.00%		
7) Chloroethane-d5	1.809	69	4433	4.56 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 91.20%		
10) 1,1-Dichloroethene-d2	2.445	63	65103	5.66 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 113.20%#		
20) 2-Butanone-d5	3.982	46	118229	50.50 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 101.00%		
24) Chloroform-d	4.333	84	62782	5.23 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 104.60%		
26) 1,2-Dichloroethane-d4	4.857	65	34004	5.32 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 106.40%		
32) Benzene-d6	4.889	84	134236	4.99 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 99.80%		
35) 1,2-Dichloropropane-d6	5.815	67	35886	4.70 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 94.00%		
41) Toluene-d8	7.201	98	120330	5.17 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 103.40%		
43) trans-1,3-Dichloroprop...	7.564	79	26083	4.84 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 96.80%		
47) 2-Hexanone-d5	8.175	63	74933	57.02 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 114.04%		
57) 1,1,2,2-Tetrachloroeth...	11.393	84	20061	4.76 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 95.20%		
63) 1,2-Dichlorobenzene-d4	13.229	152	32215	4.84 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 96.80%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.256	85	10920	4.4175 ug/L	94
3) Chloromethane	1.394	50	23571	4.3964 ug/L	98
5) Vinyl Chloride	1.487	62	10951	4.8010 ug/L	96
6) Bromomethane	1.747	94	7003	5.9340 ug/L	95
8) Chloroethane	1.831	64	5672	5.1354 ug/L	86
9) Trichlorofluoromethane	2.040	101	28392	6.5080 ug/L	96
11) 1,1-Dichloroethene	2.455	96	31297	6.0624 ug/L	97
12) 1,1,2-Trichloro-1,2,2-...	2.471	101	21458	6.0064 ug/L	98
13) Acetone	2.497	43	52489	45.2252 ug/L	95
14) Carbon Disulfide	2.628	76	84044	5.6058 ug/L	98
15) Methyl Acetate	2.783	43	14675	4.7673 ug/L	97
16) Methylene Chloride	2.860	84	26395	4.3126 ug/L	96
17) trans-1,2-Dichloroethene	3.104	96	36484	5.4663 ug/L	95
18) Methyl tert-Butyl Ether	3.104	73	26220	5.3598 ug/L	98
19) 1,1-Dichloroethane	3.474	63	74174	5.6694 ug/L	99
21) cis-1,2-Dichloroethene	4.027	96	38891	5.6357 ug/L	97
22) 2-Butanone	4.040	43	86537	46.8149 ug/L	99
23) Bromochloromethane	4.255	128	14957	5.2643 ug/L	92
25) Chloroform	4.349	83	68517	5.2463 ug/L	99
27) 1,2-Dichloroethane	4.943	62	50046	5.9441 ug/L	97
29) 1,1,1-Trichloroethane	4.542	97	47199	5.9952 ug/L	98
30) Cyclohexane	4.606	56	79015	6.1081 ug/L	99
31) Carbon Tetrachloride	4.718	117	32872	6.1934 ug/L	100

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3655.D
Acq On : 18 May 2012 16:54
Sample : 2E21003-CCV2
Misc : VSTD0055C 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 18:28:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Benzene	4.931	78	155968	5.5782 ug/L	100
34) Trichloroethene	5.670	95	39098	5.3999 ug/L	98
36) Methylcyclohexane	5.898	83	68186	6.1892 ug/L	93
37) 1,2-Dichloropropane	5.918	63	40380	5.3955 ug/L	100
38) Bromodichloromethane	6.271	83	40285	5.5825 ug/L	99
39) cis-1,3-Dichloropropene	6.847	75	44042	5.3602 ug/L	97
40) 4-Methyl-2-Pentanone	7.069	43	186787	51.8551 ug/L	98
42) Toluene	7.287	91	162040	5.8772 ug/L	94
44) trans-1,3-Dichloropropene	7.609	75	33356	5.5637 ug/L	99
45) 1,1,2-Trichloroethane	7.850	97	22044	5.3428 ug/L	100
46) Tetrachloroethene	8.046	164	31935	5.7386 ug/L	98
48) 2-Hexanone	8.246	43	144803	52.6617 ug/L	100
49) Dibromochloromethane	8.400	129	23127	5.4279 ug/L	98
50) 1,2-Dibromoethane	8.538	107	20842	5.1006 ug/L	99
51) Chlorobenzene	9.303	112	102062	5.4668 ug/L	98
52) Ethylbenzene	9.509	91	161512	5.7748 ug/L	98
53) m,p-Xylene	9.699	106	62973	5.7148 ug/L	96
54) o-Xylene	10.313	106	59670	5.7310 ug/L	96
55) Styrene	10.339	104	89413	5.4194 ug/L	97
56) Isopropylbenzene	10.930	105	141837	5.9346 ug/L	99
58) 1,1,2,2-Tetrachloroethane	11.435	83	21698	5.3095 ug/L	97
60) Bromoform	10.586	173	9255	4.8452 ug/L	95
61) 1,3-Dichlorobenzene	12.734	146	61879	5.0499 ug/L	99
62) 1,4-Dichlorobenzene	12.843	146	62322	4.8633 ug/L	98
64) 1,2-Dichlorobenzene	13.245	146	57425	5.1116 ug/L	100
65) 1,2-Dibromo-3-chloropr...	14.017	75	2710	5.8112 ug/L	86
66) 1,2,4-Trichlorobenzene	14.731	180	27781	4.7982 ug/L	97
67) 1,2,3-Trichlorobenzene	15.107	180	22583	4.6050 ug/L	98

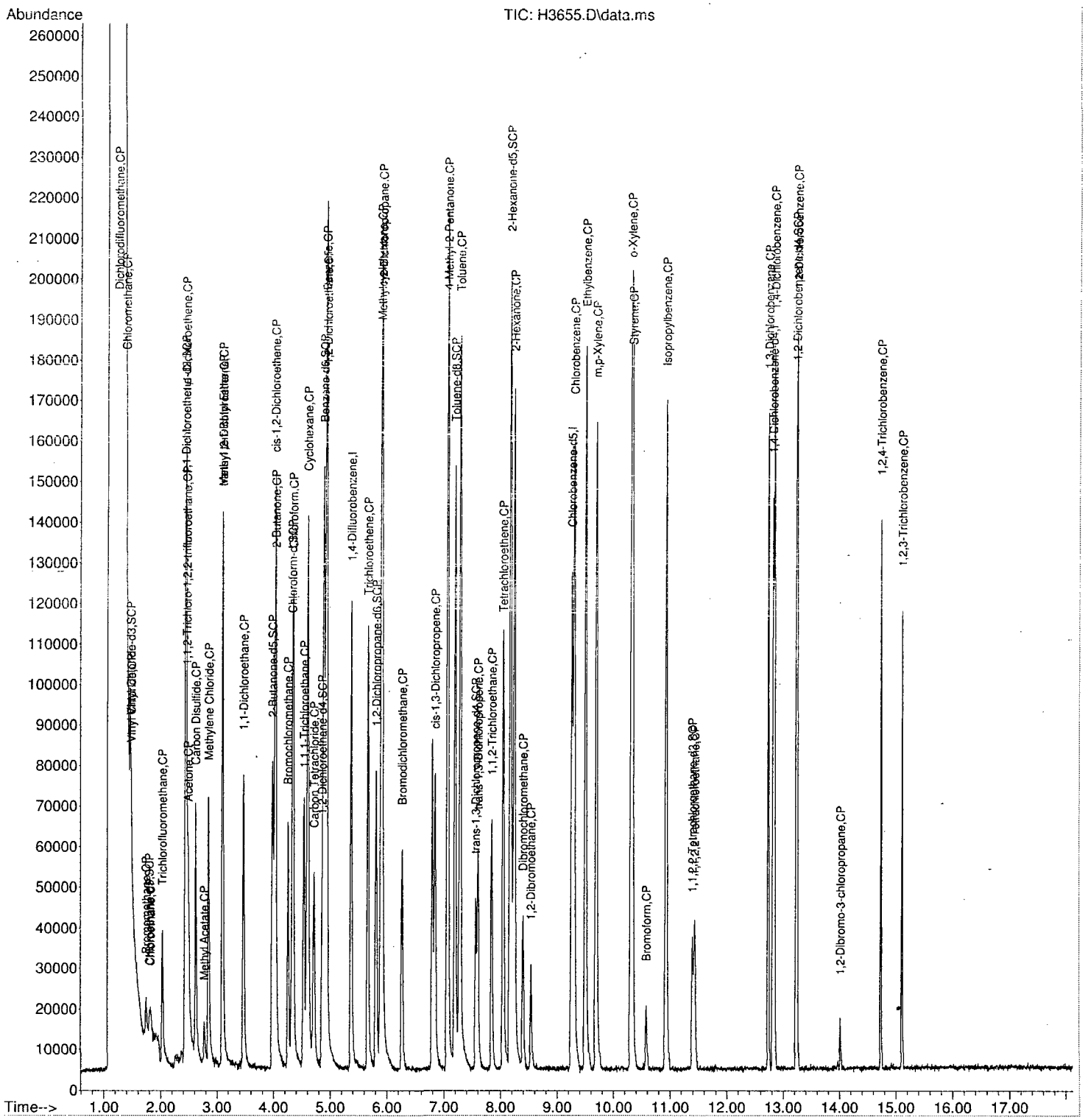
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3655.D
Acq On : 18 May 2012 16:54
Sample : 2E21003-CCV2
Misc : VSTD0055C 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 18:28:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



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Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\H3655.D
Acq On : 18 May 2012 16:54
Sample : 2E21003-CCV2
Misc : VSTD0055C 25ML
DataAcq Meth:VOAC.M

Vial: 62
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 18 18:28:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 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-Difluorobenzene	1.000	1.000	0.0	51	0.00
2	CP	Dichlorodifluoromethane	0.116	0.103	11.2	38#	0.00
3	CP	Chloromethane	0.252	0.221	12.3	53	0.00
4	SCP	Vinyl Chloride-d3	0.081	0.074	8.6	39#	0.00
5	CP	Vinyl Chloride	0.107	0.103	3.7	41#	0.00
6	CP	Bromomethane	0.055	0.066#	-20.0	48#	0.00
7	SCP	Chloroethane-d5	0.046	0.042	8.7	38#	0.00
8	CP	Chloroethane	0.052	0.053	-1.9	45#	0.00
9	CP	Trichlorofluoromethane	0.205	0.267	-30.2	56	0.00
10	SCP	1,1-Dichloroethene-d2	0.540	0.611	-13.1	53	0.00
11	CP	1,1-Dichloroethene	0.242	0.294	-21.5	54	0.00
12	CP	1,1,2-Trichloro-1,2,2-trifl	0.168	0.202	-20.2	55	0.00
13	CP	Acetone	0.055	0.049	10.9	48#	0.00
14	CP	Carbon Disulfide	0.704	0.789	-12.1	51	0.00
15	CP	Methyl Acetate	0.145	0.138	4.8	52	0.00
16	CP	Methylene Chloride	0.287	0.248	13.6	47#	0.00
17	CP	trans-1,2-Dichloroethene	0.313	0.343	-9.6	53	0.00
18	CP	Methyl tert-Butyl Ether	0.230	0.246	-7.0	57	0.00
19	CP	1,1-Dichloroethane	0.614	0.697	-13.5	56	0.00
20	SCP	2-Butanone-d5	0.110	0.111	-0.9	54	0.00
21	CP	cis-1,2-Dichloroethene	0.324	0.365	-12.7	56	0.00
22	CP	2-Butanone	0.087	0.081	6.9	50#	0.00
23	CP	Bromochloromethane	0.133	0.140	-5.3	53	0.00
24	SCP	Chloroform-d	0.563	0.590	-4.8	55	0.00
25	CP	Chloroform	0.613	0.644	-5.1	55	0.00
26	SCP	1,2-Dichloroethane-d4	0.300	0.319	-6.3	57	0.00
27	CP	1,2-Dichloroethane	0.395	0.470	-19.0	61	0.00
28	I	Chlorobenzene-d5	1.000	1.000	0.0	51	0.00
29	CP	1,1,1-Trichloroethane	0.470	0.563	-19.8	59	0.00
30	CP	Cyclohexane	0.772	0.943	-22.2	58	0.00
31	CP	Carbon Tetrachloride	0.317	0.392	-23.7	63	0.00
32	SCP	Benzene-d6	1.605	1.602	0.2	52	0.00
33	CP	Benzene	1.668	1.861	-11.6	56	0.00
34	CP	Trichloroethene	0.432	0.467	-8.1	54	0.00
35	SCP	1,2-Dichloropropane-d6	0.455	0.428	5.9	51	0.00
36	CP	Methylcyclohexane	0.657	0.814	-23.9	62	0.00
37	CP	1,2-Dichloropropane	0.447	0.482	-7.8	56	0.00
38	CP	Bromodichloromethane	0.431	0.481	-11.6	57	0.00
39	CP	cis-1,3-Dichloropropene	0.490	0.526	-7.3	53	0.00
40	CP	4-Methyl-2-Pentanone	0.215	0.223	-3.7	57	0.00
41	SCP	Toluene-d8	1.390	1.436	-3.3	54	0.00
42	CP	Toluene	1.645	1.934	-17.6	61	0.00
43	SCP	trans-1,3-Dichloropropene-d	0.322	0.311	3.4	52	0.00
44	CP	trans-1,3-Dichloropropene	0.358	0.398	-11.2	55	0.00
45	CP	1,1,2-Trichloroethane	0.246	0.263	-6.9	55	0.00
46	CP	Tetrachloroethene	0.332	0.381	-14.8	58	0.00

47	SCP	2-Hexanone-d5	0.078	0.089	-14.1	62	0.00
48	CP	2-Hexanone	0.164	0.173	-5.5	58	0.00
49	CP	Dibromochloromethane	0.254	0.276	-8.7	54	0.00
50	CP	1,2-Dibromoethane	0.244	0.249	-2.0	56	0.00
51	CP	Chlorobenzene	1.114	1.218	-9.3	56	0.00
52	CP	Ethylbenzene	1.669	1.928	-15.5	57	0.00
53	CP	m,p-Xylene	0.658	0.752	-14.3	56	0.00
54	CP	o-Xylene	0.621	0.712	-14.7	56	0.00
55	CP	Styrene	0.985	1.067	-8.3	55	0.00
56	CP	Isopropylbenzene	1.426	1.693	-18.7	57	0.00
57	SCP	1,1,2,2-Tetrachloroethane-d	0.252	0.239	5.2	56	0.00
58	CP	1,1,2,2-Tetrachloroethane	0.244	0.259	-6.1	56	0.00
59	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	55	0.00
60	CP	Bromoform	0.275	0.266	3.3	50#	0.00
61	CP	1,3-Dichlorobenzene	1.763	1.781	-1.0	57	0.00
62	CP	1,4-Dichlorobenzene	1.844	1.794	2.7	57	0.00
63	SCP	1,2-Dichlorobenzene-d4	0.958	0.927	3.2	56	0.00
64	CP	1,2-Dichlorobenzene	1.617	1.653	-2.2	59	0.00
65	CP	1,2-Dibromo-3-chloropropane	0.067	0.078	-16.4	65	0.00
66	CP	1,2,4-Trichlorobenzene	0.833	0.800	4.0	59	0.00
67	CP	1,2,3-Trichlorobenzene	0.706	0.650	7.9	59	0.00

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

SOTH3646.M Mon May 21 11:09:51 2012

CLPBFB

Data File : C:\msdchem\1\data\H3395.D
Acq On : 3 May 2012 12:43
Sample : 2E04001-TUN1
Misc : BFB3Y 50NG
DataAcq Meth:BFB.M

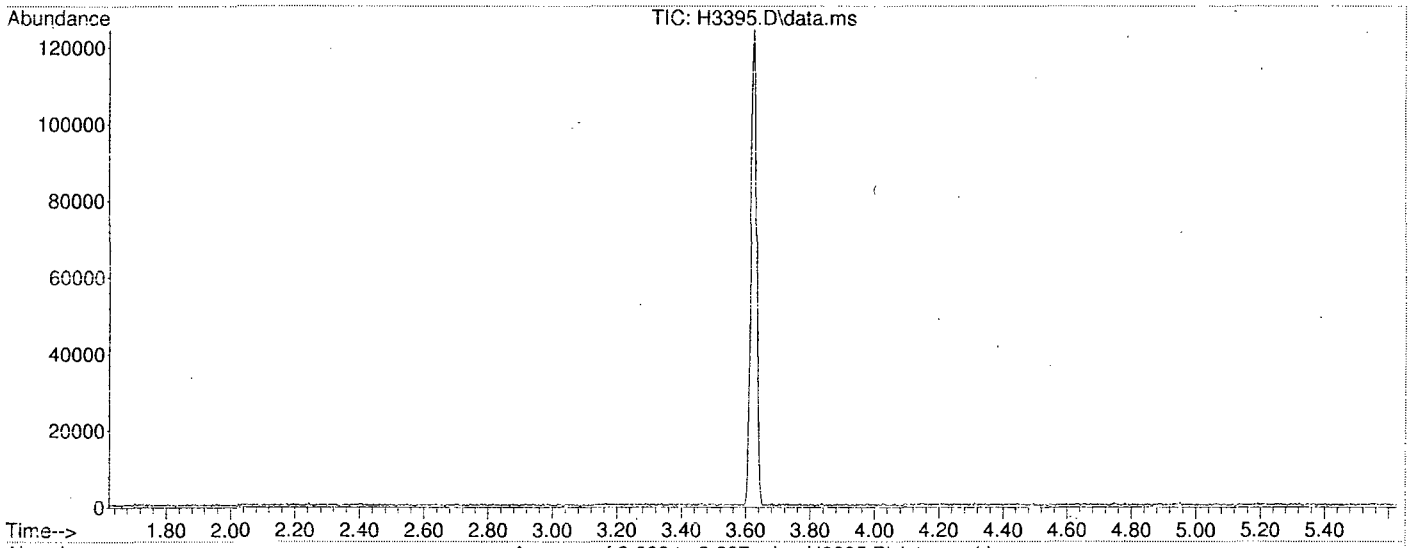
Vial: 52
Operator: AC
Inst : H-5975
Multiplr: 1.00

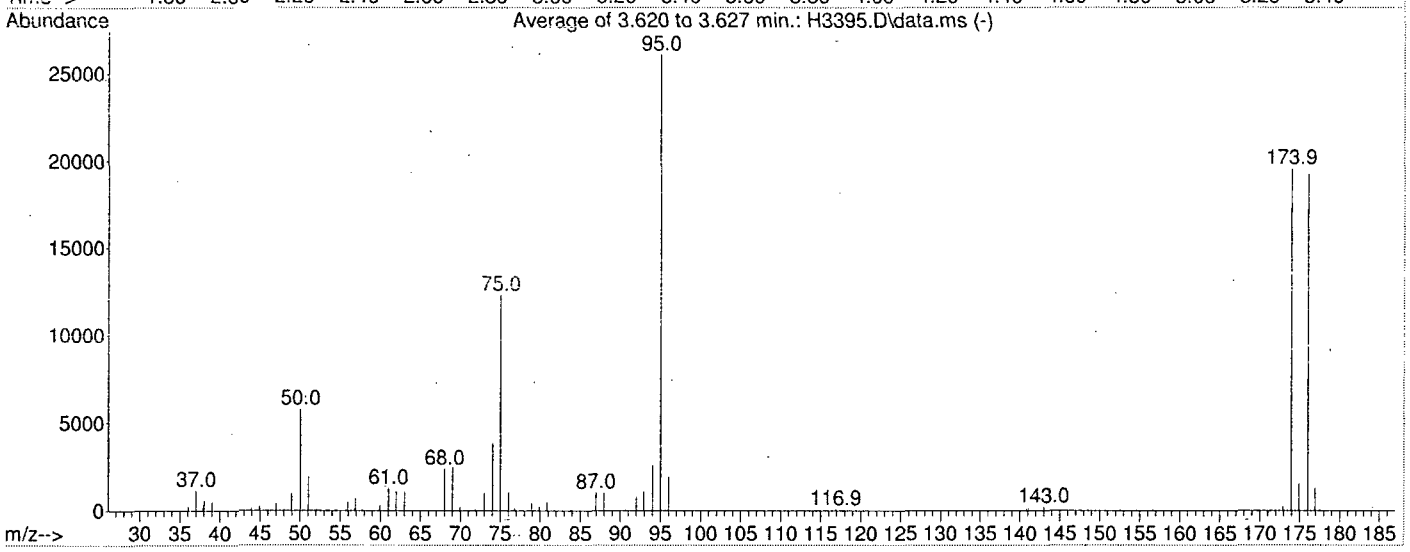
05/07/12

ORIGINAL LOCATED IN
CASE: 42178 SDG: Y88S0

05/07/12

Quant Time: May 04 09:11:01 2012
Quant Results File: SOTH3396.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Thu May 03 19:29:26 2012
Response via : Initial Calibration





AutoFind: Scans 788, 789, 790; Background Corrected with Scan 778

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	5762	PASS
75	95	30	60	47.2	12308	PASS
95	95	100	100	100.0	26085	PASS
96	95	5	9	7.3	1894	PASS
173	174	0.00	2	1.0	202	PASS
174	95	50	100	74.9	19541	PASS
175	174	5	9	7.7	1505	PASS
176	174	95	101	98.5	19243	PASS
177	176	5	9	6.4	1240	PASS

Average of 3.620 to 3.627 min.: H3395.D\data.ms
2E04001-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	212	51.05	1929	71.90	70	92.00	745
37.00	1118	52.10	51	73.00	976	92.95	1043
37.90	286	55.95	466	74.05	3805	94.00	2535
38.05	553	56.90	658	75.00	12308	95.00	26085
39.05	460	59.95	272	76.05	1007	96.00	1894
43.90	120	61.00	1244	76.80	146	116.90	67
44.95	219	61.95	1073	78.90	392	140.80	75
47.00	392	63.00	1039	79.90	201	141.05	135
48.00	62	68.00	2332	80.85	476	143.00	180
48.95	963	69.00	2449	86.95	1003	172.90	202
50.05	5762	69.95	187	87.95	967	173.90	19541

Average of 3.620 to 3.627 min.: H3395.D\data.ms
2E04001-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.90	1505						
176.00	19243						
176.90	1240						

CLPBFB

Data File : C:\msdchem\1\data\H3645.D
Acq On : 18 May 2012 8:58
Sample : 2E21003-TUN1
Misc : BFB5B 50NG
DataAcq Meth:BFB.M

Vial: 46
Operator: AC
Inst : H-5975
Multiplr: 1.00

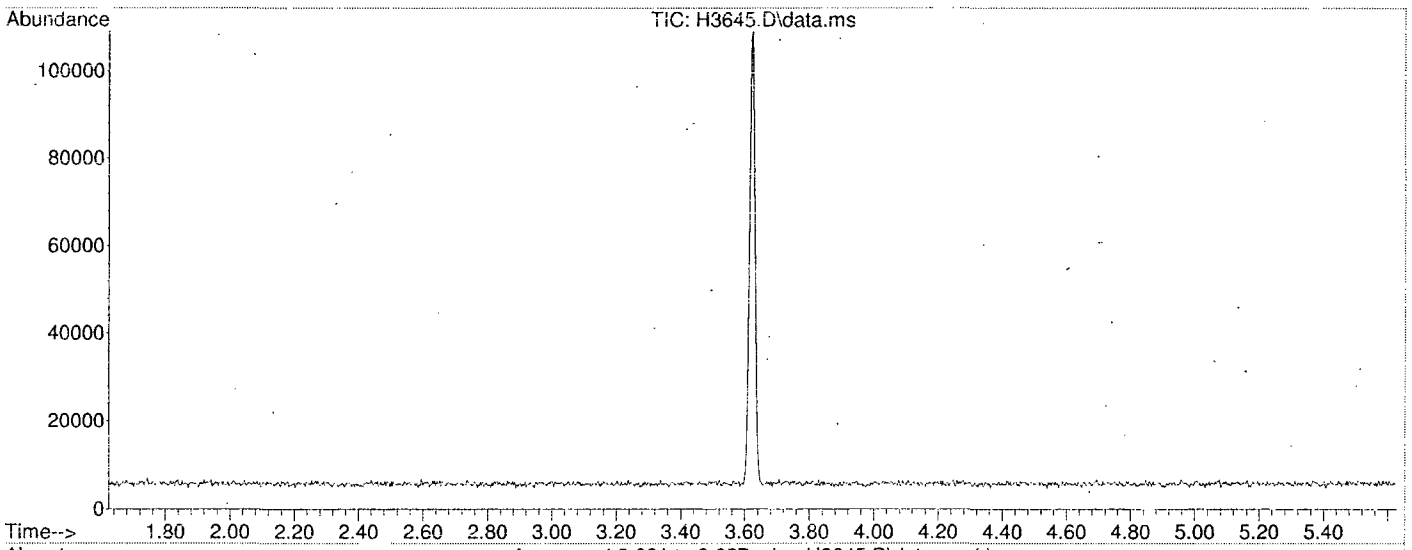
Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Title :
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

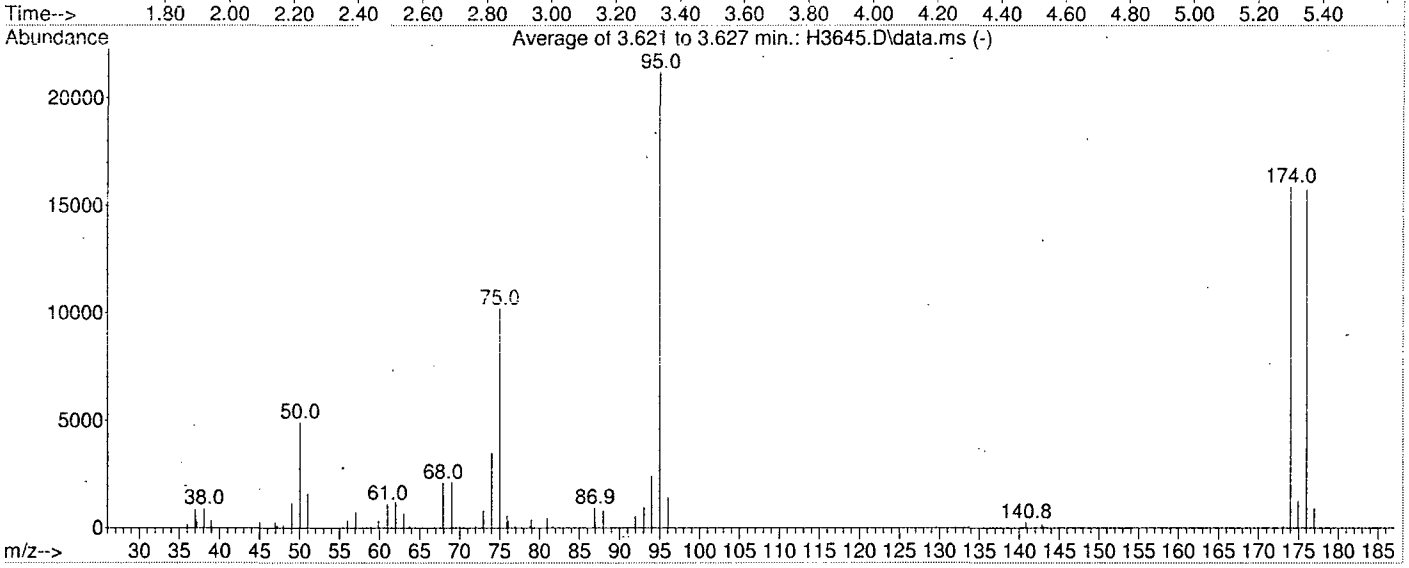
ORIGINAL LOCATED IN

CASE: 42562 **SDG:** F5WC4

05/22/12

05/22/12





AutoFind: Scans 788, 789, 790; Background Corrected with Scan 778

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	4887	PASS
75	95	30	60	48.0	10179	PASS
95	95	100	100	100.0	21187	PASS
96	95	5	9	6.6	1402	PASS
173	174	0.00	2	0.3	55	PASS
174	95	50	100	74.8	15844	PASS
175	174	5	9	7.7	1221	PASS
176	174	95	101	99.3	15736	PASS
177	176	5	9	5.6	878	PASS

Average of 3.621 to 3.627 min.: H3645.D\data.ms
2E21003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	147	51.00	1569	72.00	64	86.90	915
37.00	836	56.00	322	72.95	774	87.95	785
37.20	277	57.05	718	74.00	3493	91.95	517
38.05	876	59.90	310	75.00	10179	93.05	931
38.95	335	61.00	1101	75.90	545	94.00	2396
45.00	269	62.00	1178	76.10	328	95.00	21187
46.95	233	63.00	652	76.90	51	96.05	1402
47.20	115	63.80	57	78.80	79	140.85	231
47.95	111	67.95	2079	78.95	368	142.85	145
49.05	1139	69.00	2117	80.95	438	143.10	62
50.05	4887	70.00	59	81.70	61	173.10	55

Average of 3.621 to 3.627 min.: H3645.D\data.ms
2E21003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.00	15844						
174.95	1221						
176.00	15736						
176.95	878						

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

EPA SAMPLE NO.

VHBLKQT

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-06

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3653.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

VHBLKQT

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-06

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3653.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
VHBLKQT

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-06

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3653.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WC4

05/22/12

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	103985	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.259	117	88233	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	31841	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	7419	4.38 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery = 87.60%		
7) Chloroethane-d5	1.812	69	5869	6.18 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery = 123.60%		
10) 1,1-Dichloroethene-d2	2.442	63	51380	4.57 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery = 91.40%		
20) 2-Butanone-d5	3.979	46	129031	56.44 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery = 112.88%		
24) Chloroform-d	4.330	84	64509	5.51 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery = 110.20%		
26) 1,2-Dichloroethane-d4	4.860	65	38482	6.17 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery = 123.40%		
32) Benzene-d6	4.889	84	144019	5.09 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery = 101.80%		
35) 1,2-Dichloropropane-d6	5.812	67	39460	4.91 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery = 98.20%		
41) Toluene-d8	7.201	98	120820	4.93 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery = 98.60%		
43) trans-1,3-Dichloroprop...	7.567	79	28454	5.01 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery = 100.20%		
47) 2-Hexanone-d5	8.172	63	79843	57.69 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery = 115.38%		
57) 1,1,2,2-Tetrachloroeth...	11.390	84	21675	4.88 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery = 97.60%		
63) 1,2-Dichlorobenzene-d4	13.226	152	32024	5.25 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery = 105.00%		

Target Compounds Qvalue

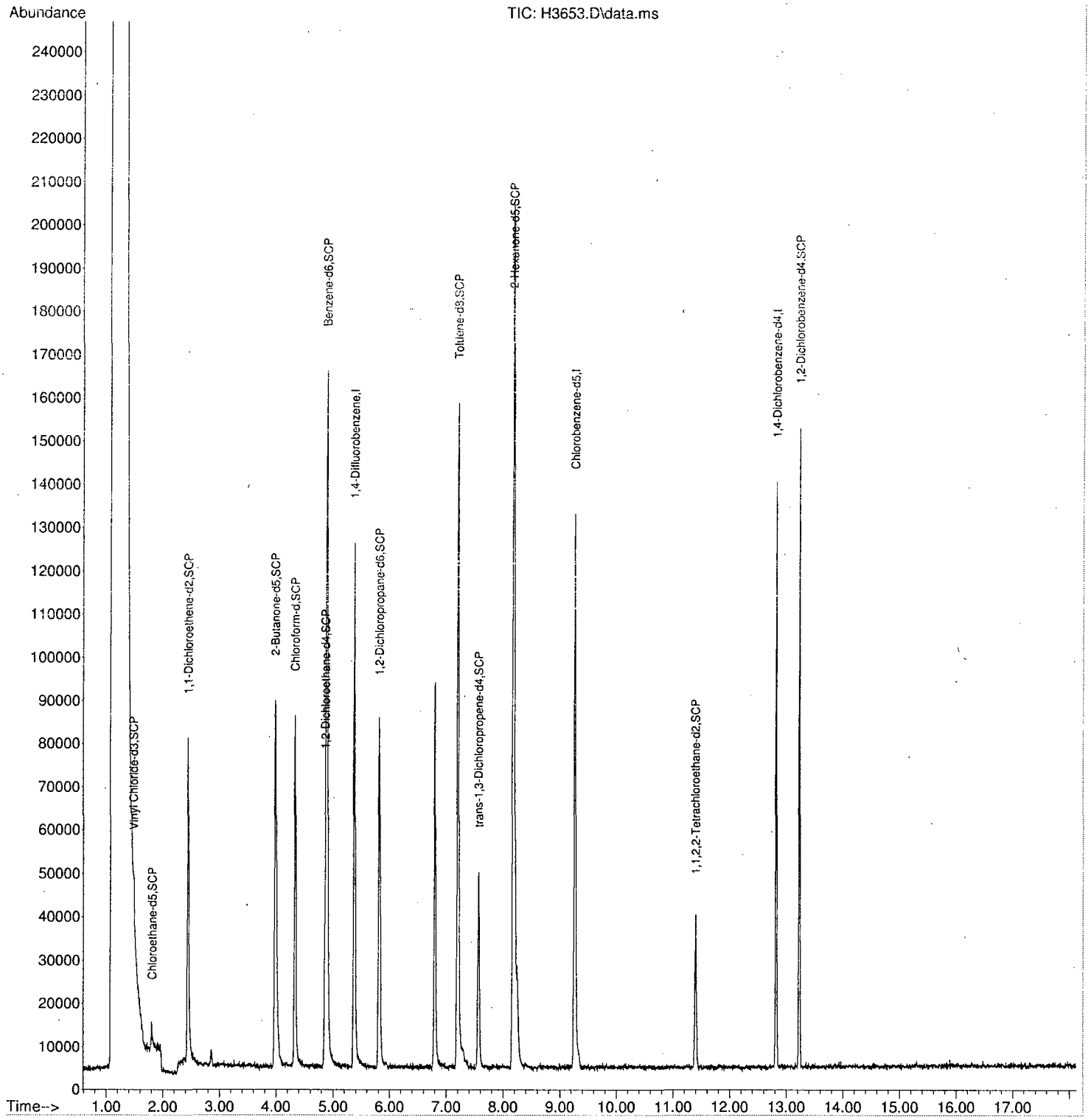
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3653.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	145	171	272	rBV	4717309	40091500	100.00%	92.752%
2	1.806	374	379	380	rBV	5377	3159	0.01%	0.007%
3	2.269	519	523	524	rBV	2275	1237	0.00%	0.003%
4	2.281	524	527	529	rVV	1798	1114	0.00%	0.003%
5	2.371	552	555	556	rBV3	1838	1117	0.00%	0.003%
6	2.442	566	577	592	rBV	75006	128071	0.32%	0.296%
7	2.854	696	705	711	rBV3	3875	6196	0.02%	0.014%
8	3.539	914	918	922	rVB	1212	1095	0.00%	0.003%
9	3.979	1044	1055	1074	rBV	84732	205126	0.51%	0.475%
10	4.330	1153	1164	1183	rBV	80571	154540	0.39%	0.358%
11	4.889	1319	1338	1357	rBV3	160373	410297	1.02%	0.949%
12	5.371	1475	1488	1504	rBV	121518	242078	0.60%	0.560%
13	5.815	1611	1626	1645	rBV3	81288	176577	0.44%	0.409%
14	6.799	1919	1932	1947	rBV2	88682	170754	0.43%	0.395%
15	6.931	1972	1973	1978	rBV	1430	1140	0.00%	0.003%
16	7.059	2009	2013	2015	rBV	1357	1091	0.00%	0.003%
17	7.201	2043	2057	2076	rBV	154067	326520	0.81%	0.755%
18	7.567	2160	2171	2185	rBV3	44237	83147	0.21%	0.192%
19	8.175	2347	2360	2375	rBV3	201278	468800	1.17%	1.085%
20	9.156	2662	2665	2669	rVB	1546	1327	0.00%	0.003%
21	9.259	2683	2697	2717	rBV2	128128	274445	0.68%	0.635%
22	11.394	3348	3361	3376	rBV3	35455	72882	0.18%	0.169%
23	11.631	3432	3435	3440	rVB2	1171	1110	0.00%	0.003%
24	12.242	3620	3625	3626	rBV	1289	1204	0.00%	0.003%
25	12.818	3793	3804	3818	rBV3	135398	193121	0.48%	0.447%
26	13.226	3921	3931	3942	rBV	148098	199670	0.50%	0.462%
27	13.966	4158	4161	4164	rBV3	1951	1550	0.00%	0.004%
28	14.779	4409	4414	4416	rVB2	1282	1019	0.00%	0.002%
29	14.792	4416	4418	4421	rBV2	1296	1026	0.00%	0.002%
30	15.850	4744	4747	4750	rBV	1537	1097	0.00%	0.003%
31	17.159	5150	5154	5157	rVB2	1855	1200	0.00%	0.003%
32	18.072	5432	5438	5439	rBV	1099	1074	0.00%	0.002%

Sum of corrected areas: 43224284

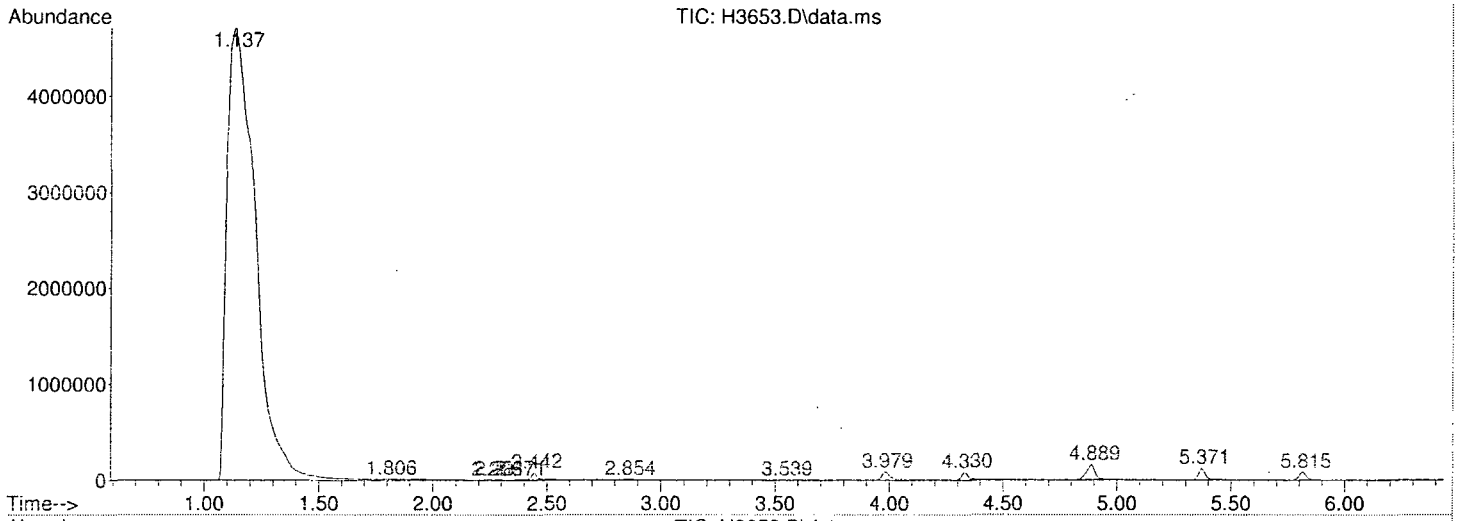
LSC Report - Integrated Chromatogram

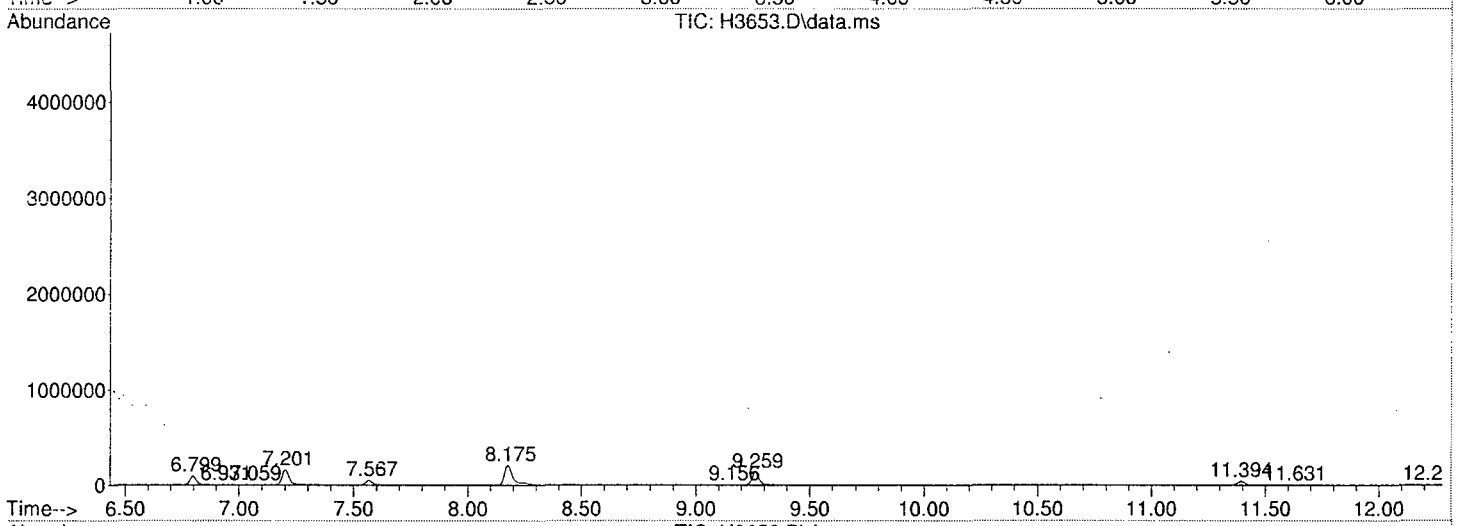
Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

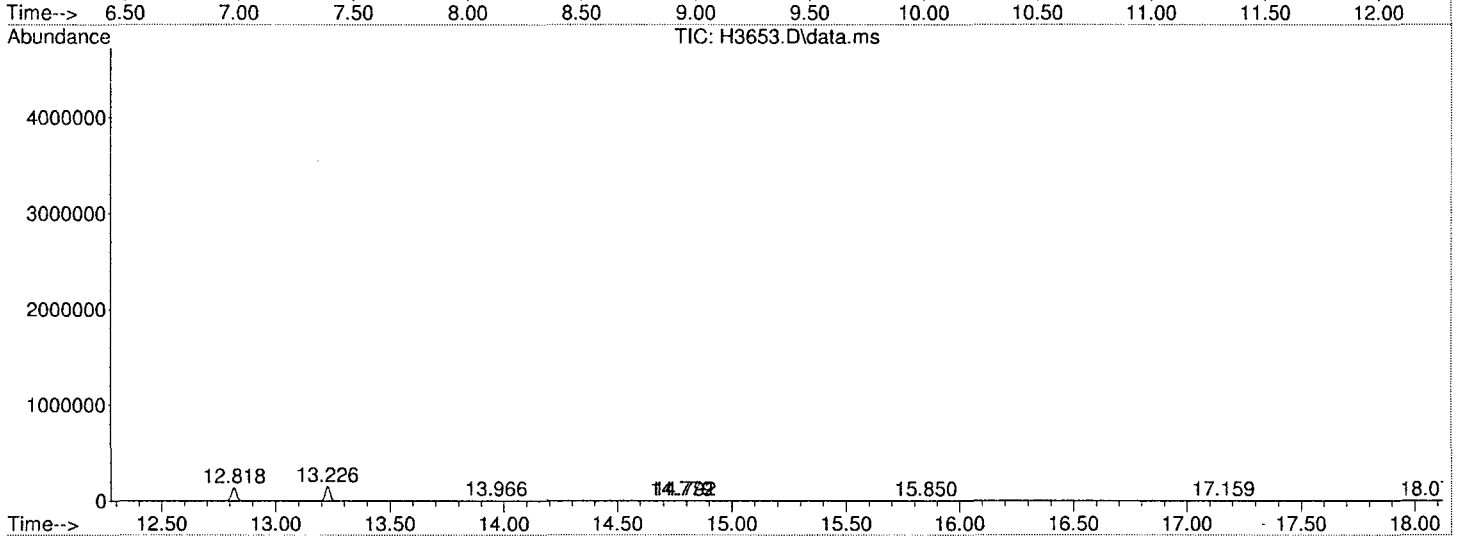
Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
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Vial: 60
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Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

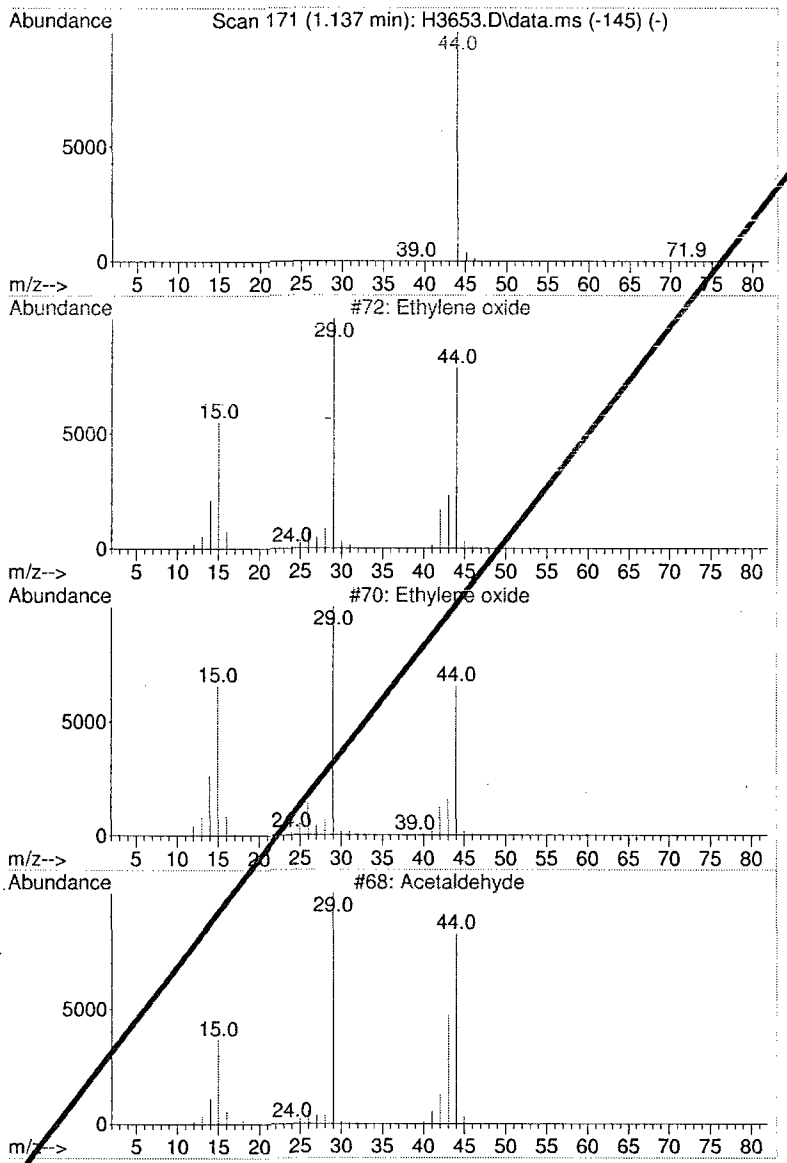
****

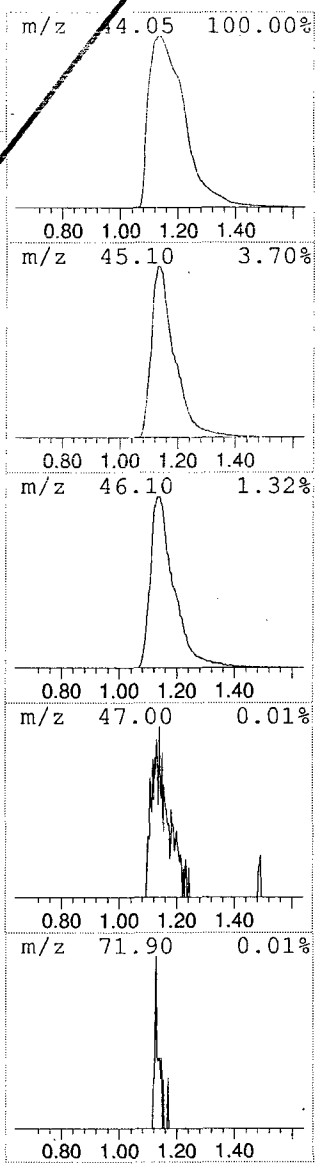
Peak Number 1 Ethylene oxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.137	828.07 ug/L	40091500	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	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3
5	Ethyne, fluoro-	44	C2HF	002713-09-9	3

Carbon dioxide





Library Search Compound Report

Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

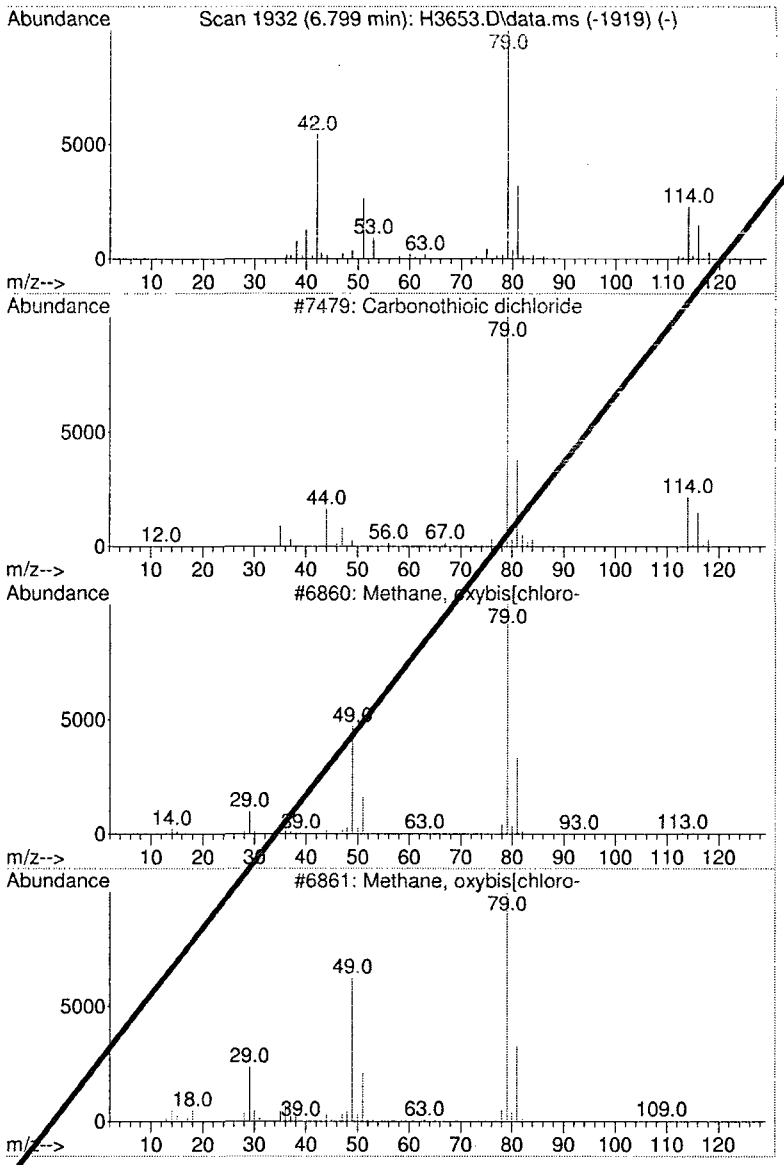
****

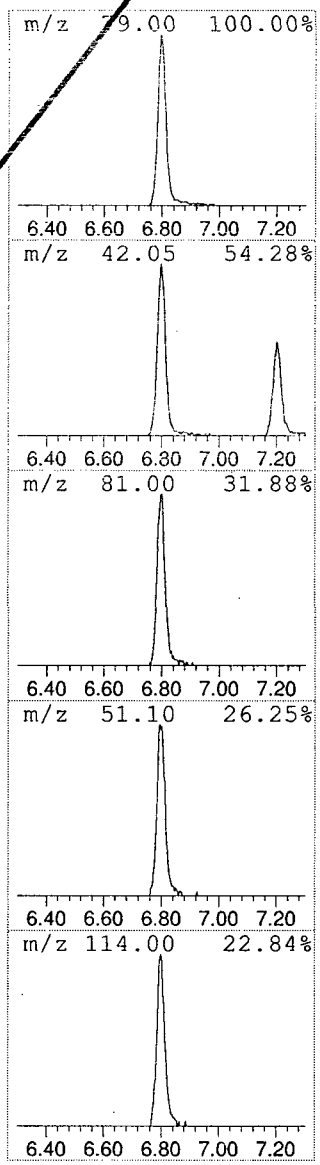
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.799	3.53 ug/L	170754	1,4-Difluorobenzene	5.371

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonothioic dichloride	114	CCl2S	000463-72-8	47
2	Methane, oxybis[chloro-	114	C2H4Cl2O	000542-88-1	23
3	Methane, oxybis[chloro-	114	C2H4Cl2O	000542-88-1	23
4	2-Propanol, 1,3-dichloro-	128	C3H6Cl2O	000096-23-1	23
5	.alpha.,.alpha.-Dichloromethyl m...	114	C2H4Cl2O	004285-02-3	23

DMC Artifact





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\H3653.D
Acq On : 18 May 2012 16:03
Sample : 0015957-06
Misc : VHBLKQT 25ML
DataAcq Meth:VOAC.M

Vial: 60
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 11:05:29 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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	828.1	ug/L	40091500	1	5.371	242078	5.0
Carbonothioic d...	6.799	3.5	ug/L	170754	1	5.371	242078	5.0

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

EPA SAMPLE NO.

VBLK5B

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050160-BLK1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3647.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

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

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

EPA SAMPLE NO.

VBLK5B

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050160-BLK1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3647.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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

EPA SAMPLE NO.
VBLK5B

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: - SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050160-BLK1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: H3647.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/18/2012

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/L Purge Volume: 25.0 (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\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

05/22/12

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration

ORIGINAL LOCATED IN
CASE: 42562 SDG: F5WC4

05/22/12

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Difluorobenzene	5.371	114	111090	5.0000 ug/L	0.00
28) Chlorobenzene-d5	9.258	117	85078	5.0000 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	12.818	152	30725	5.0000 ug/L	0.00
System Monitoring Compounds					
4) Vinyl Chloride-d3	1.484	65	6212m	3.43 ug/L	0.00
Spiked Amount 5.000	Range 65 - 131		Recovery	= 68.60%	
7) Chloroethane-d5	1.809	69	4163	4.10 ug/L	0.00
Spiked Amount 5.000	Range 71 - 131		Recovery	= 82.00%	
10) 1,1-Dichloroethene-d2	2.442	63	39156	3.26 ug/L	0.00
Spiked Amount 5.000	Range 55 - 104		Recovery	= 65.20%	
20) 2-Butanone-d5	3.982	46	109643	44.89 ug/L	0.00
Spiked Amount 50.000	Range 49 - 155		Recovery	= 89.78%	
24) Chloroform-d	4.329	84	60225	4.81 ug/L	0.00
Spiked Amount 5.000	Range 78 - 121		Recovery	= 96.20%	
26) 1,2-Dichloroethane-d4	4.860	65	34662	5.20 ug/L	0.00
Spiked Amount 5.000	Range 78 - 129		Recovery	= 104.00%	
32) Benzene-d6	4.886	84	134410	4.92 ug/L	0.00
Spiked Amount 5.000	Range 77 - 124		Recovery	= 98.40%	
35) 1,2-Dichloropropane-d6	5.812	67	37397	4.83 ug/L	0.00
Spiked Amount 5.000	Range 79 - 124		Recovery	= 96.60%	
41) Toluene-d8	7.201	98	110481	4.67 ug/L	0.00
Spiked Amount 5.000	Range 77 - 121		Recovery	= 93.40%	
43) trans-1,3-Dichloroprop...	7.564	79	26137	4.77 ug/L	0.00
Spiked Amount 5.000	Range 73 - 121		Recovery	= 95.40%	
47) 2-Hexanone-d5	8.175	63	68649	51.44 ug/L	0.00
Spiked Amount 50.000	Range 28 - 135		Recovery	= 102.88%	
57) 1,1,2,2-Tetrachloroeth...	11.390	84	19306	4.51 ug/L	0.00
Spiked Amount 5.000	Range 73 - 125		Recovery	= 90.20%	
63) 1,2-Dichlorobenzene-d4	13.229	152	29321	4.98 ug/L	0.00
Spiked Amount 5.000	Range 80 - 131		Recovery	= 99.60%	

AC S.P.

Target Compounds Qvalue

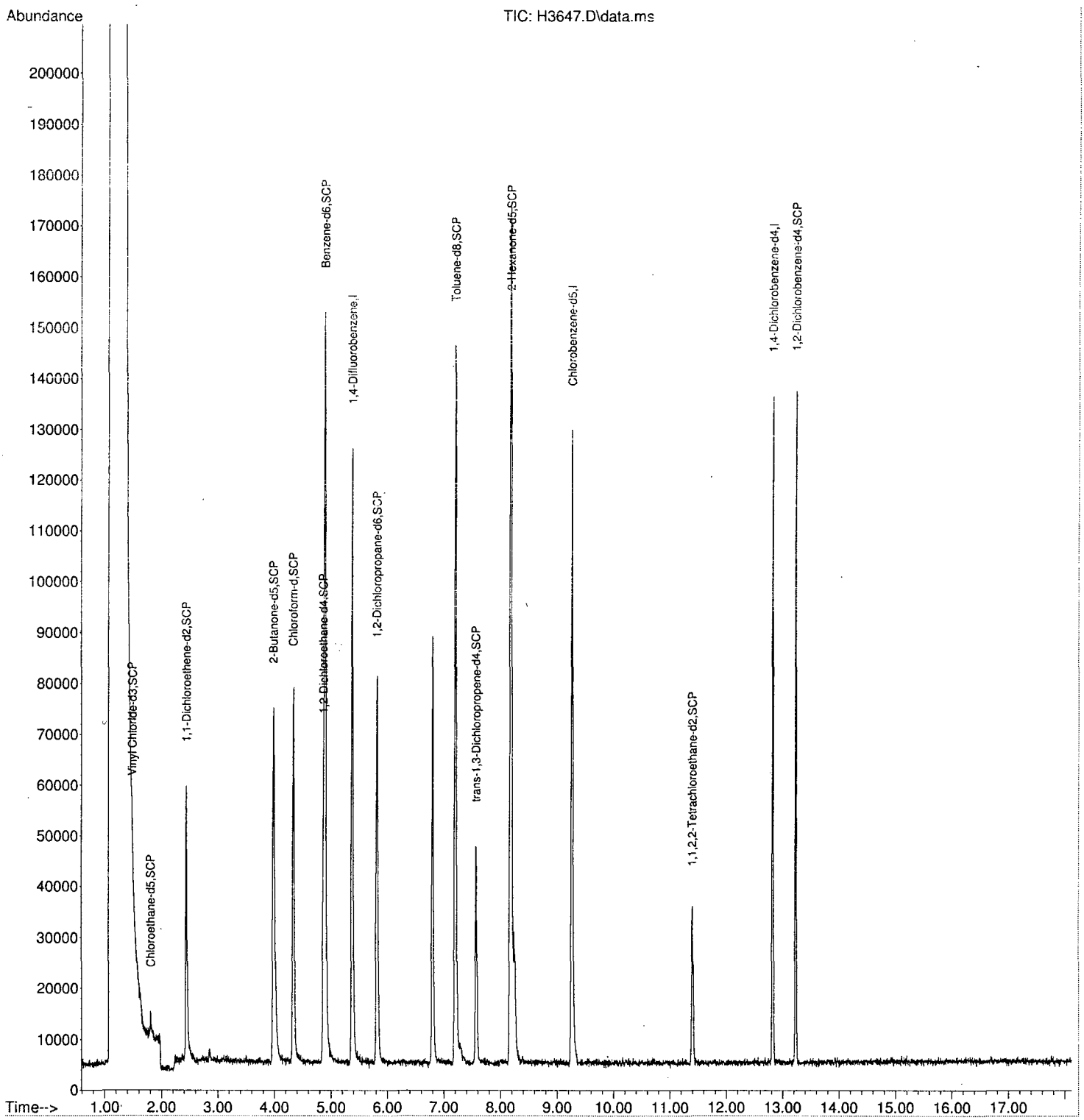
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: H3647.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.616	5	9	10	rVB	1983	1047	0.00%	0.002%
2	0.632	10	14	17	rBV	1390	1279	0.00%	0.003%
3	0.732	42	45	48	rVB	1473	1037	0.00%	0.002%
4	1.133	146	170	274	rBV	5112188	45538871	100.00%	93.969%
5	1.767	365	367	370	rBV	2127	1032	0.00%	0.002%
6	1.960	424	427	430	rVB3	2022	1326	0.00%	0.003%
7	2.246	509	516	517	rBV2	2651	2279	0.01%	0.005%
8	2.442	565	577	592	rBV	53589	92537	0.20%	0.191%
9	2.844	697	702	703	rBV	2456	1350	0.00%	0.003%
10	3.982	1042	1056	1089	rBV2	69846	184293	0.40%	0.380%
11	4.333	1150	1165	1181	rBV	74009	148723	0.33%	0.307%
12	4.886	1317	1337	1360	rBV3	147593	392595	0.86%	0.810%
13	4.976	1364	1365	1371	rVV2	1922	1376	0.00%	0.003%
14	5.371	1475	1488	1510	rBV2	120906	250381	0.55%	0.517%
15	5.452	1510	1513	1516	rVB2	1498	1240	0.00%	0.003%
16	5.815	1609	1626	1644	rBV2	76458	166901	0.37%	0.344%
17	6.731	1908	1911	1913	rBV2	1246	1009	0.00%	0.002%
18	6.796	1917	1931	1950	rVV2	84120	167398	0.37%	0.345%
19	7.198	2042	2056	2076	rBV	141621	304313	0.67%	0.628%
20	7.313	2091	2092	2096	rVB2	2504	1152	0.00%	0.002%
21	7.564	2159	2170	2184	rBV3	42533	81116	0.18%	0.167%
22	8.175	2344	2360	2377	rBV2	169826	408484	0.90%	0.843%
23	8.384	2421	2425	2428	rBV	1420	1056	0.00%	0.002%
24	9.258	2684	2697	2713	rBV2	124651	262811	0.58%	0.542%
25	9.911	2897	2900	2904	rBV	1509	1208	0.00%	0.002%
26	11.020	3242	3245	3248	rBV2	1377	1250	0.00%	0.003%
27	11.397	3348	3362	3373	rBV6	31242	66055	0.15%	0.136%
28	11.474	3383	3386	3391	rVB	1088	1034	0.00%	0.002%
29	11.911	3517	3522	3527	rVB2	1159	1200	0.00%	0.002%
30	12.818	3793	3804	3818	rVB	131500	187847	0.41%	0.388%
31	12.885	3821	3825	3828	rBV	1300	1056	0.00%	0.002%
32	13.226	3922	3931	3942	rVB	132273	181124	0.40%	0.374%
33	13.635	4056	4058	4063	rBV	1755	1337	0.00%	0.003%
34	14.734	4397	4400	4403	rBV2	1610	1112	0.00%	0.002%
35	14.805	4419	4422	4426	rBV2	1238	1062	0.00%	0.002%
36	14.917	4454	4457	4464	rBV2	1271	1350	0.00%	0.003%
37	15.384	4599	4602	4605	rBV2	1338	1153	0.00%	0.002%
38	17.068	5122	5126	5130	rBV	1175	1003	0.00%	0.002%

LSC Area Percent Report

Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

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: 48461397

LSC Report - Integrated Chromatogram

Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
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Vial: 54
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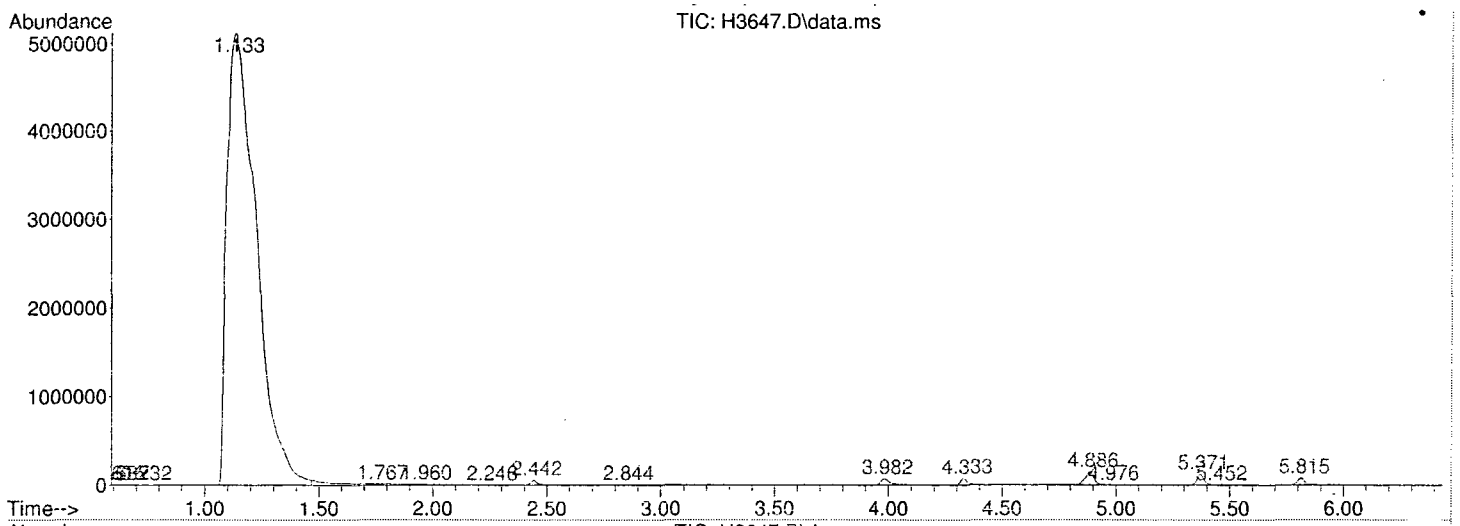
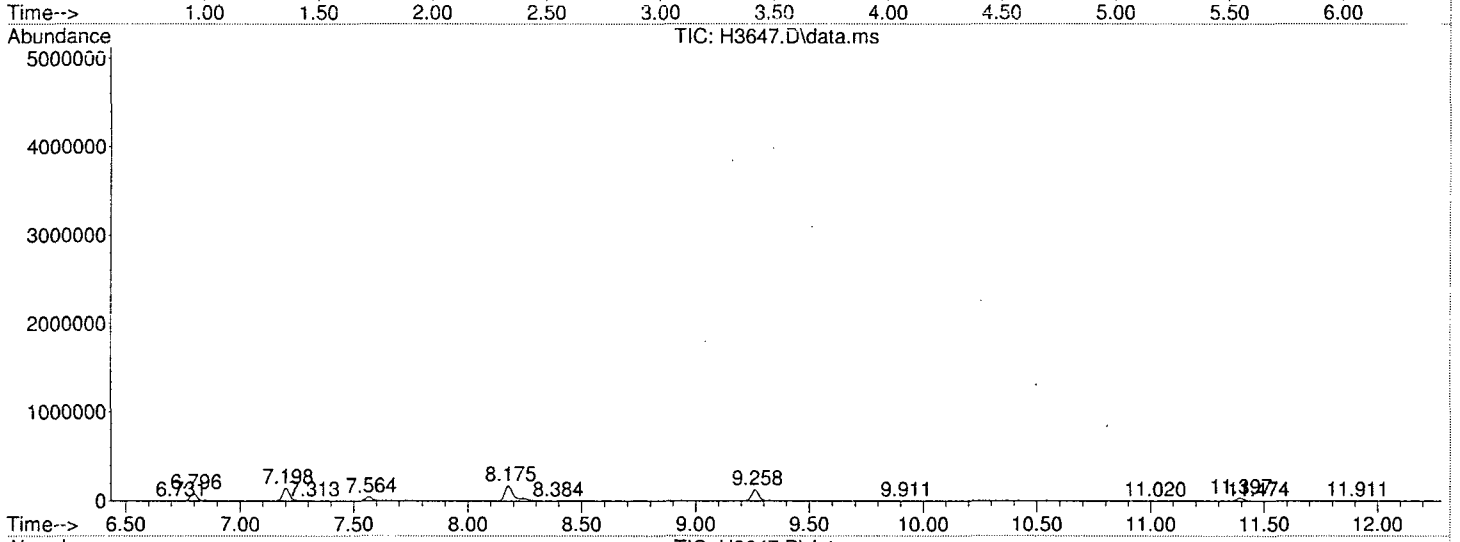
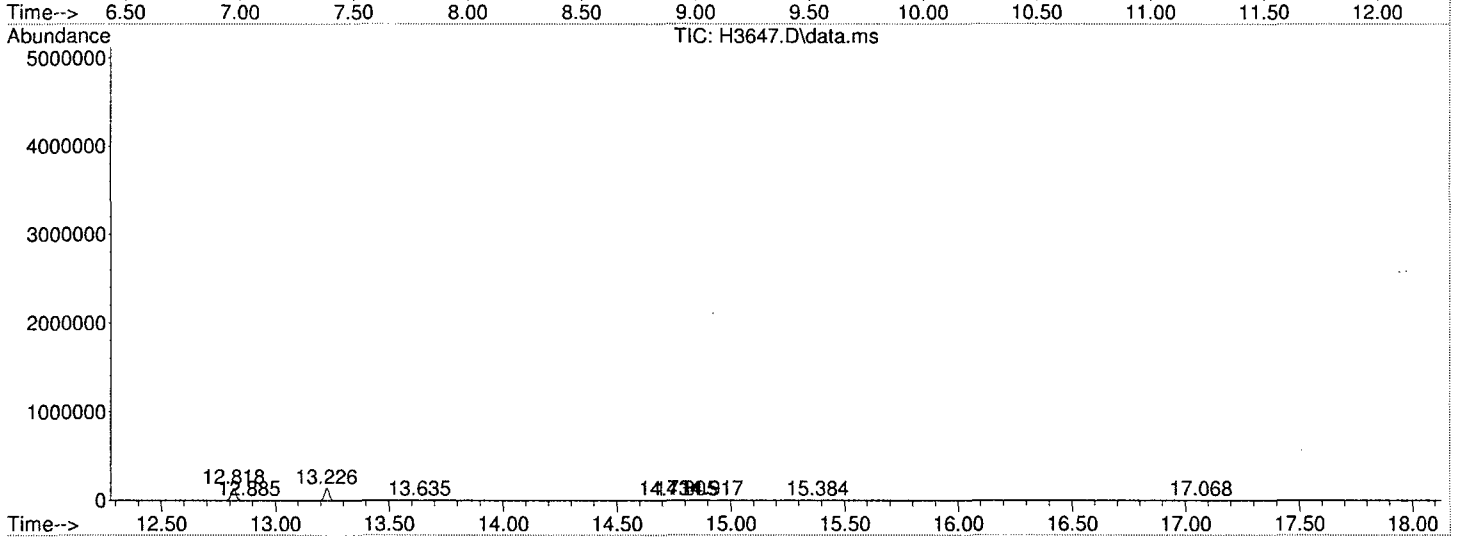
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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







Library Search Compound Report

Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

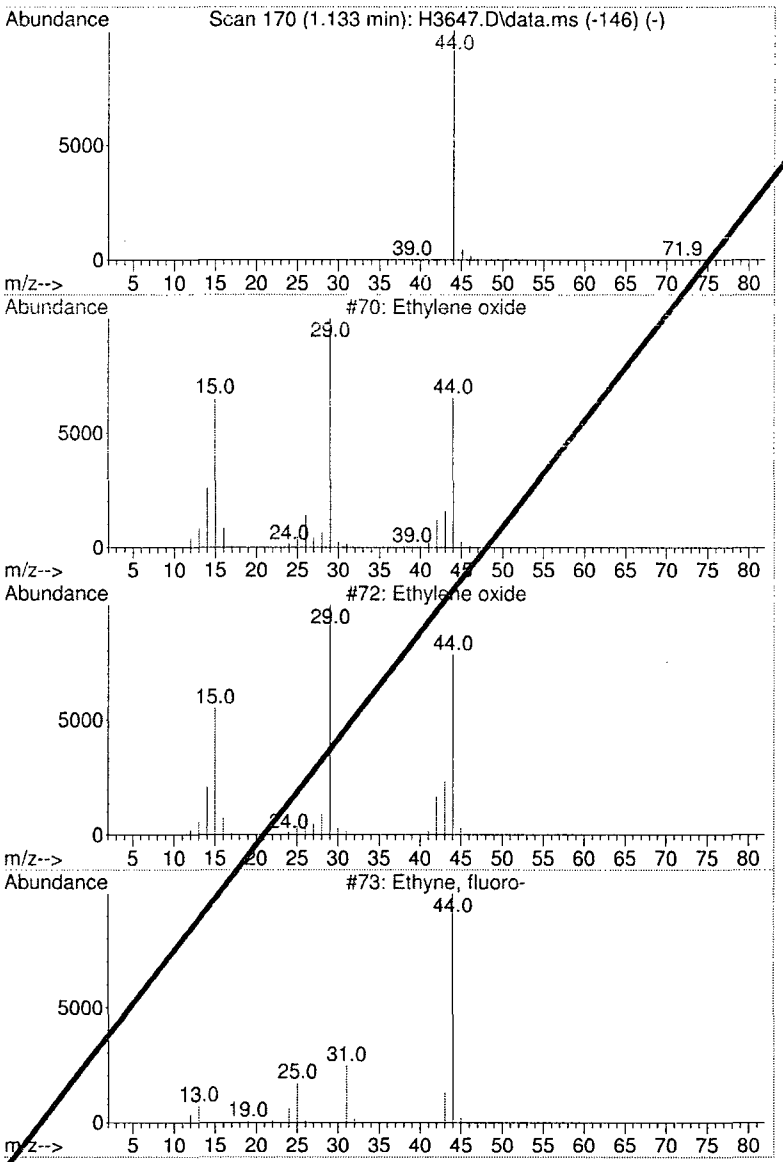
****

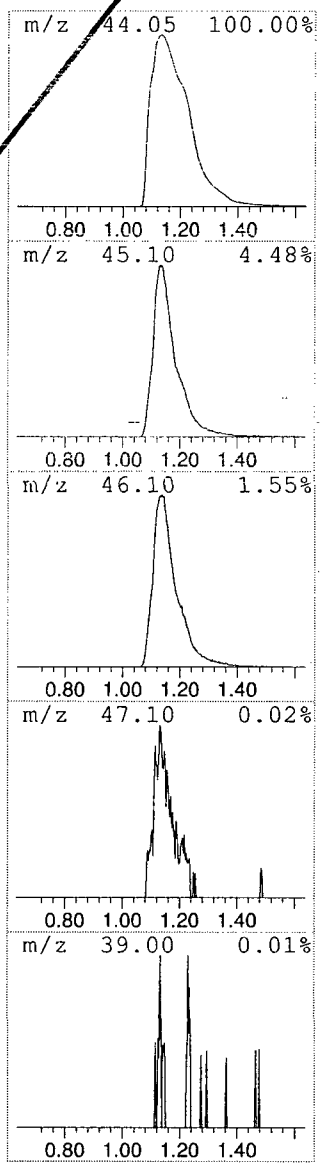
Peak Number 1 Ethylene oxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.133	909.39 ug/L	45538900	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	3
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\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

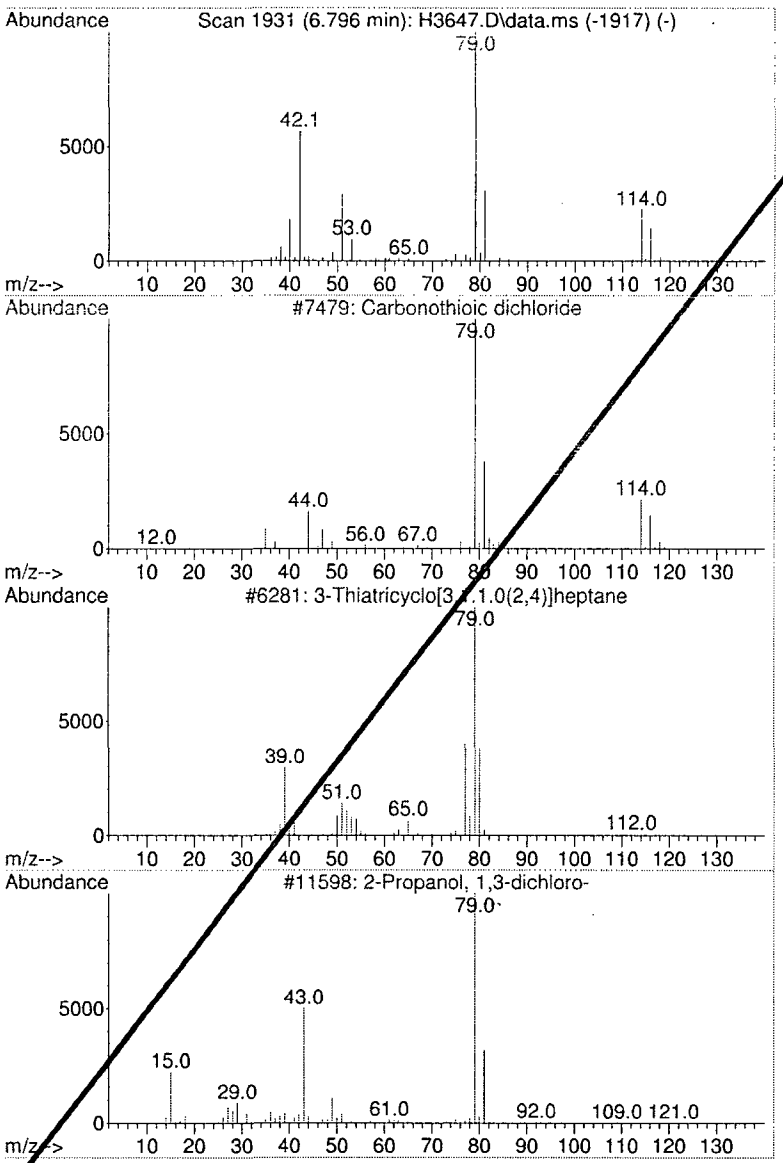
****

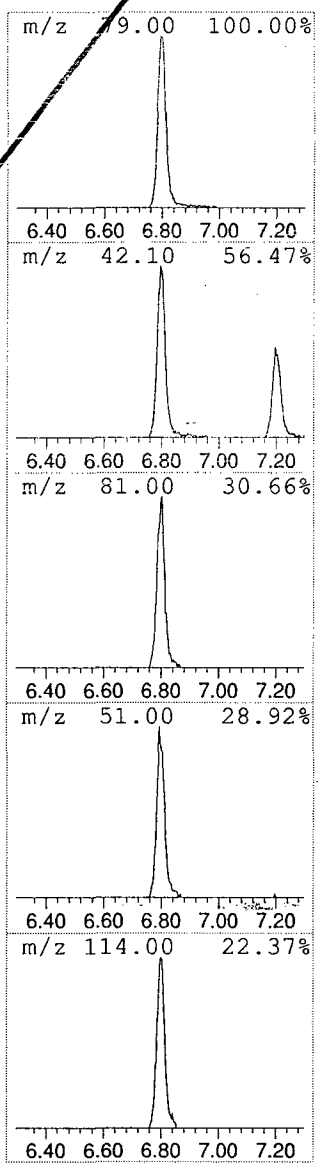
Peak Number 2 Carbonothioic dichloride Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.796	3.34 ug/L	167398	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	23
3	2-Propanol, 1,3-dichloro-	128	C3H6Cl2O	000096-23-1	17
4	Cyclopropane	42	C3H6	000075-19-4	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\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0

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

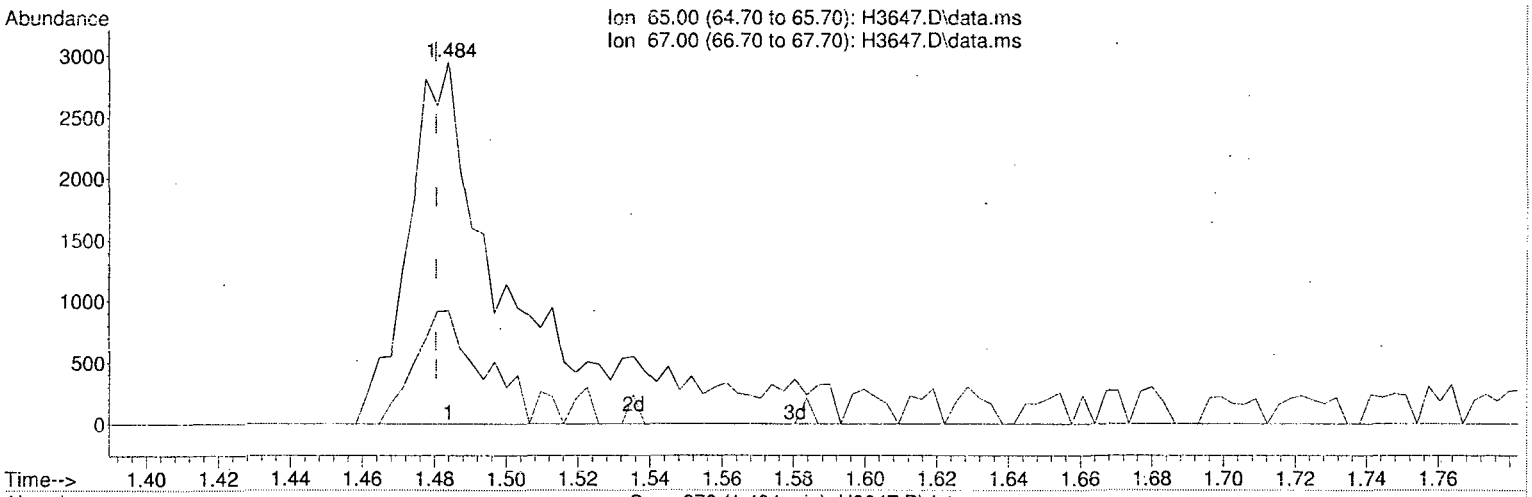
TIC Top Hit name	RT	EstConc	Units	Response	|--Internal Standard---| #	RT	Resp	Conc|
Ethylene oxide	1.133	909.4	ug/L	45538900	1	5.371	250381	5.0
Carbonothioic d...	6.796	3.3	ug/L	167398	1	5.371	250381	5.0

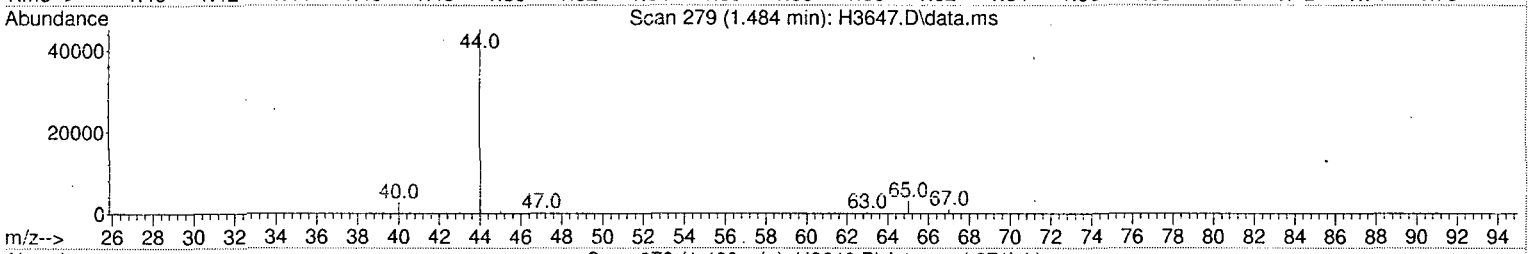
Quantitation Report (Qedit)

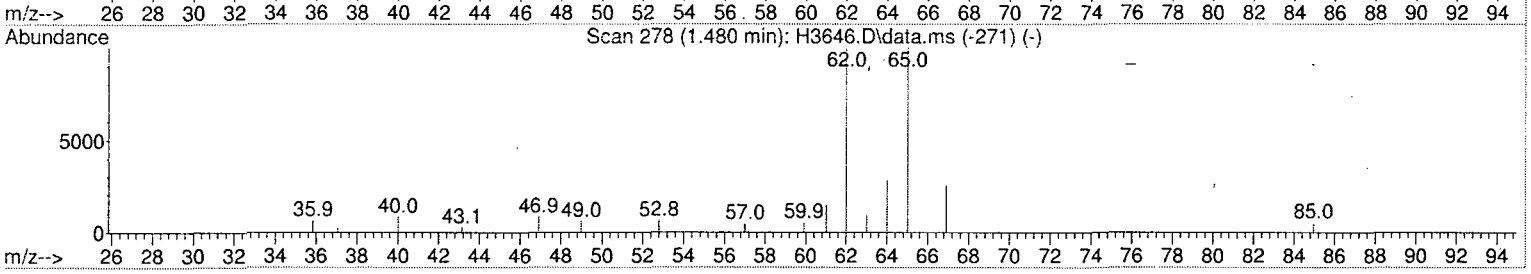
Data File : C:\msdchem\1\data\H3647.D
Acq On : 18 May 2012 13:00
Sample : 2050160-BLK1
Misc : VBLK5B 25ML
DataAcq Meth:VOAC.M

Vial: 54
Operator: AC
Inst : H-5975
Multiplr: 1.00

Quant Time: May 21 10:56:14 2012
Quant Results File: SOTH3646.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOTH3646.M
Quant Title : CLP SOM01.2-TRACE VOA-WATER-25ML-MA-2210.0
QLast Update : Fri May 18 11:38:14 2012
Response via : Initial Calibration







TIC: H3647.D\data.ms

(4) Vinyl Chloride-d3 (SCP)

1.484min (+ 0.003) 3.43 ug/L m AC S.P.

response 6212

Ion	Exp%	Act%
65.00	100.00	100.00
67.00	25.70	19.08
0.00	0.00	0.00
0.00	0.00	0.00

2G - FORM II SV-1
WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

	EPA SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	F5WC4	85	92	89	89	107	104	98	148 *
02	F5WC5	96	96	96	94	109 *	106	100	170 *
03	F5WC6	95	96	97	93	108	107	99	77
04	SBLK6K	76	75	75	72	92	91	83	110
05									
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		QC LIMITS
SDMC1	(PHL) = Phenol-d5	(39-106)
SDMC2	(BCE) = Bis(2-chloroethyl)ether-d8	(40-105)
SDMC3	(2CP) = 2-Chlorophenol-d4	(41-106)
SDMC4	(4MP) = 4-Methylphenol-d8	(25-111)
SDMC5	(NBZ) = Nitrobenzene-d5	(43-108)
SDMC6	(2NP) = 2-Nitrophenol-d4	(40-108)
SDMC7	(DCP) = 2,4-Dichlorophenol-d3	(37-105)
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

2H - FORM II SV-2
WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: _____ SDG No.: F5WC4

	EPA SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	F5WC4	106	96	86	101	81	106	115	116	1
02	F5WC5	99	89	94	96	71	96	106	105	2
03	F5WC6	96	87	88	92	66	88	98	99	0
04	SBLK6K	86	79	79	84	72	90	98	99	0
05										
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	QC LIMITS
SDMC9 (DMP) = Dimethylphthalate-d6	(47-114)
SDMC10 (ACY) = Acenaphthylene-d8	(41-107)
SDMC11 (4NP) = 4-Nitrophenol-d4	(33-116)
SDMC12 (FLR) = Fluorene-d10	(42-111)
SDMC13 (NMP) = 4,6-Dinitro-2-methylphenol-d2	(22-104)
SDMC14 (ANC) = Anthracene-d10	(44-110)
SDMC15 (PYR) = Pyrene-d10	(52-119)
SDMC16 (BAP) = Benzo(a)pyrene-d12	(32-121)

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.

SBLK6K

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Lab File ID: E4635.D Lab Sample ID: 2050140-BLK1

Instrument ID: E-5973 Date Extracted: 05/21/2012

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/24/2012

Level: (LOW/MED) LOW Time Analyzed: 1721

Extraction: (Type) Cont. Liq/Liq Extra. GPC Cleanup: (Y/N) N
x

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	F5WC4	0015957-01	E4636.D	05/24/2012
02	F5WC5	0015957-02	E4637.D	05/24/2012
03	F5WC6	0015957-03	E4638.D	05/24/2012
04				
05				
06				
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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.: F5WC4

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	SBLK6K	2050140-BLK1	E4635.D	05/24/2012	1721
10	F5WC4	0015957-01	E4636.D	05/24/2012	1755
11	F5WC5	0015957-02	E4637.D	05/24/2012	1924
12	F5WC6	0015957-03	E4638.D	05/24/2012	1955
13	SSTD0209R	2E23005-CCV4	E4653.D	05/25/2012	0343
14					
15					
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19					
20					
21					

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.: F5WC4

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
06							
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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.: F5WC4

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.: F5WC4

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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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.: F5WC4

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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20							
21							
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.: F5WC4

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							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
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.: F5WC4

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
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
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.: F5WC4

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	SBLK6K	53383	3.30	214577	4.96	139384	7.60
02	F5WC4	49841	3.30	208671	4.96	133377	7.60
03	F5WC5	48882	3.30	207371	4.96	144461	7.60
04	F5WC6	53611	3.30	231920	4.96	160910	7.60
05	SSTD0209R	199263 *	3.30	830122 *	4.96	519004 *	7.60
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
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.: F5WC4

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	SBLK6K	238264	9.85	241113	13.99	226377	16.05
02	F5WC4	243404	9.85	246853	13.99	236692	16.06
03	F5WC5	272954	9.85	272078	13.99	262965	16.05
04	F5WC6	303801	9.85	305900	13.99	279113	16.05
05	SSTD0209R	933207 *	9.85	975310 *	13.99	868694 *	16.05
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
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.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4636.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	0.30	J
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4636.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	0.50	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo (a) anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.3	JB
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo (b) fluoranthene	5.0	U
207-08-9	Benzo (k) fluoranthene	5.0	U
50-32-8	Benzo (a) pyrene	5.0	U
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U
53-70-3	Dibenzo (a,h) anthracene	5.0	U
191-24-2	Benzo (g,h,i) perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-01

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4636.D

Level: (LOW/MED) LOW Extraction: (Type): CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01 (1 3.296)	1.51	14	J
02		Unknown-02 (1 3.296)	1.58	13	J
03		Unknown-03 (1 3.296)	1.73	11	JB
04		Unknown-04 (1 3.296)	1.84	6.0	J
05		Unknown-05 (2 4.963)	4.43	2.5	JB
06		Unknown-06 (2 4.963)	5.82	2.4	J
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[2]	Total Alkanes	N/A	2.4	J

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vokati
05/28/12

Quant Time: May 26 01:44:50 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	49841	20.0000 ug/mL	0.00
21) Naphthalene-d8	4.963	136	208671	20.0000 ug/mL	0.00
38) Acenaphthene-d10	7.596	164	133377	20.0000 ug/mL	0.00
66) Phenanthrene-d10	9.853	188	243404	20.0000 ug/mL	0.00
80) Chrysene-d12	13.986	240	246853	20.0000 ug/mL	0.00
88) Perylene-d12	16.055	264	236692	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	381304	33.82 ug/mL	0.00
Spiked Amount 40.000	Range 39 - 106		Recovery = 84.55%		
18) Bis(2-chloroethyl)ethe...	3.039	67	231110	36.95 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 105		Recovery = 92.38%		
19) 2-Chlorophenol-d4	3.109	132	356085	35.67 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 106		Recovery = 89.18%		
20) 4-Methylphenol-d8	3.964	113	298048	35.56 ug/mL	0.00
Spiked Amount 40.000	Range 25 - 111		Recovery = 88.90%		
22) Nitrobenzene-d5	4.044	128	189556	42.76 ug/mL	0.00
Spiked Amount 40.000	Range 43 - 108		Recovery = 106.90%		
35) 2-Nitrophenol-d4	4.487	143	204660	41.47 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 108		Recovery = 103.68%		
36) 2,4-Dichlorophenol-d3	4.856	165	321479	39.04 ug/mL	0.00
Spiked Amount 40.000	Range 37 - 105		Recovery = 97.60%		
37) 4-Chloroaniline-d4	5.182	131	418742	59.30 ug/mL	0.00
Spiked Amount 40.000	Range 1 - 145		Recovery = 148.25%#		
62) Acenaphthylene-d8	7.335	160	1113579	38.47 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 107		Recovery = 96.17%		
63) 4-Nitrophenol-d4	8.173	143	139796	34.44 ug/mL	0.00
Spiked Amount 40.000	Range 33 - 116		Recovery = 86.10%		
64) Dimethylphthalate-d6	7.383	166	946593	42.21 ug/mL	0.00
Spiked Amount 40.000	Range 47 - 114		Recovery = 105.53%		
65) Fluorene-d10	8.387	176	732471	40.49 ug/mL	0.00
Spiked Amount 40.000	Range 42 - 111		Recovery = 101.23%		
78) 4,6-Dinitro-2-methylph...	8.682	200	123974	32.36 ug/mL	0.00
Spiked Amount 40.000	Range 22 - 104		Recovery = 80.90%		
79) Anthracene-d10	9.928	188	1276456	42.50 ug/mL	0.00
Spiked Amount 40.000	Range 44 - 110		Recovery = 106.25%		
87) Pyrene-d10	12.031	212	1490319	46.14 ug/mL	0.00
Spiked Amount 40.000	Range 52 - 119		Recovery = 115.35%		
96) Benzo (a) pyrene-d12	15.946	264	1256269	46.47 ug/mL	0.00
Spiked Amount 40.000	Range 32 - 121		Recovery = 116.18%		
Target Compounds					Qvalue
29) Naphthalene	4.984	128	7803	0.3025 ug/mL	95
76) Di-n-butylphthalate	11.094	149	19311	0.5036 ug/mL	99
86) Bis(2-ethylhexyl)phtha...	14.420	149	54829	2.3386 ug/mL	97

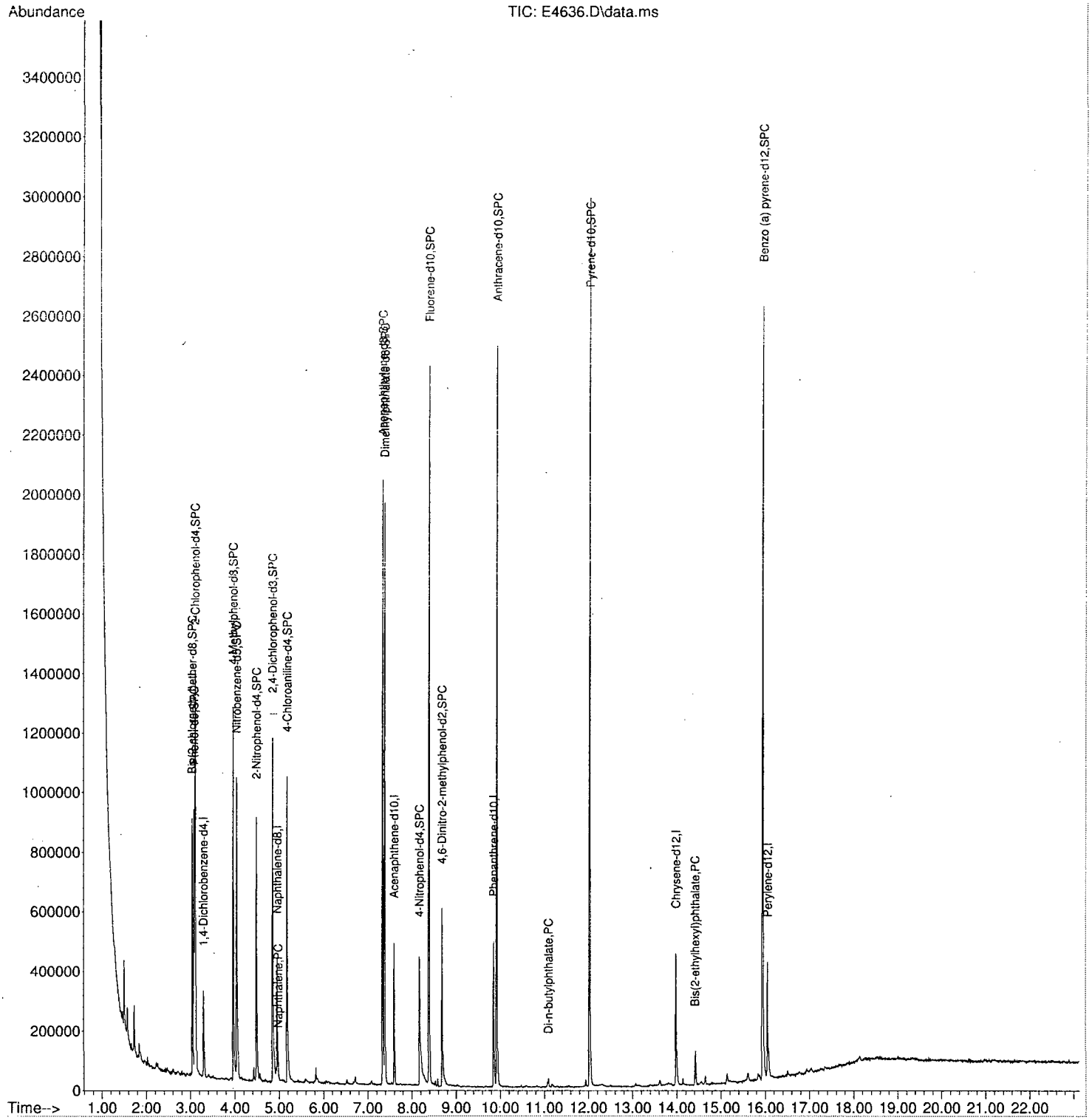
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

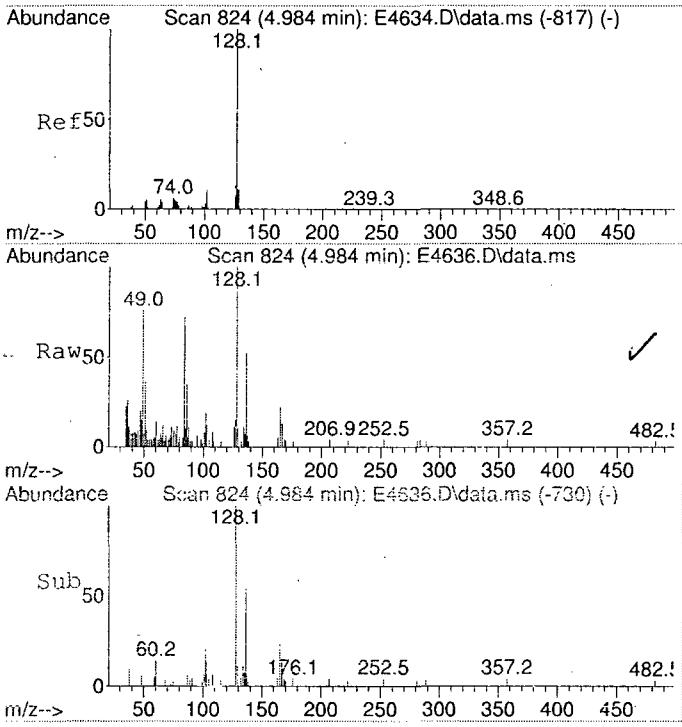
Quant Time: May 26 01:44:50 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

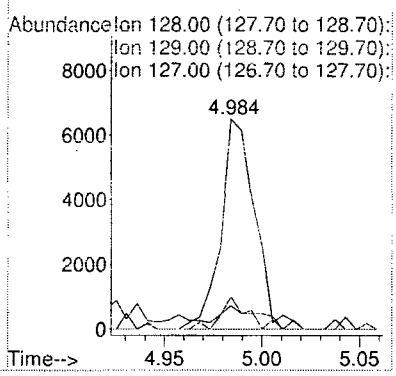
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

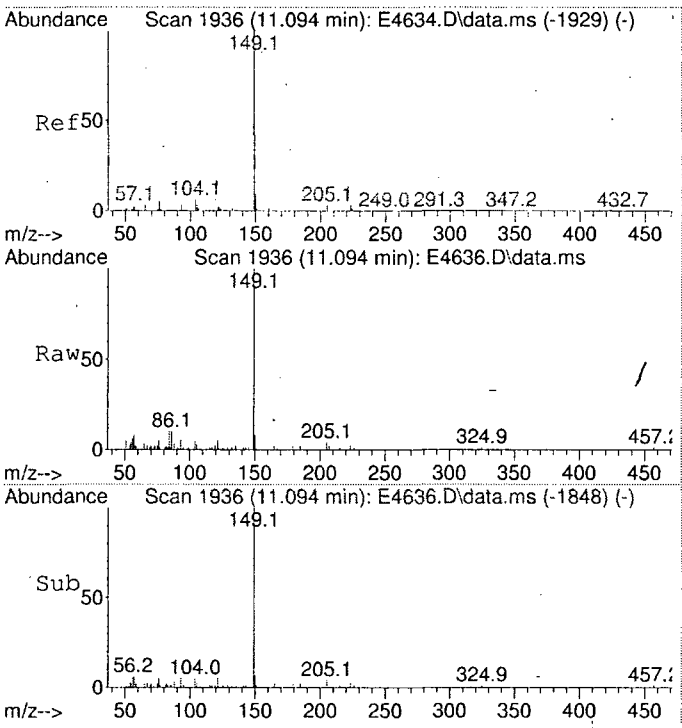


#29
Naphthalene
Concen: 0.3025 ug/mL
RT: 4.98 min Scan# 824
Delta R.T. 0.00 min
Lab File: E4636.D
Acq: 24 May 2012 17:55

Tgt Ion:128 Resp: 7803

Ion	Ratio	Lower	Upper
128	100		
129	13.4	0.0	30.7
127	12.1	0.0	33.1

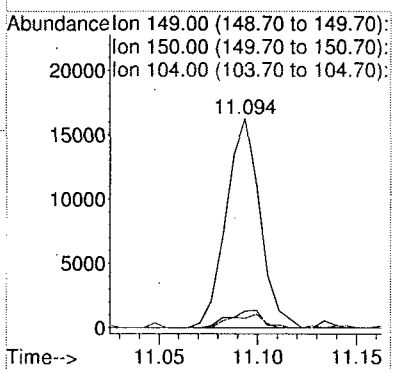




#76
Di-n-butylphthalate
Concen: 0.5036 ug/mL
RT: 11.09 min Scan# 1936
Delta R.T. 0.00 min
Lab File: E4636.D
Acq: 24 May 2012 17:55

Tgt Ion:149 Resp: 19311

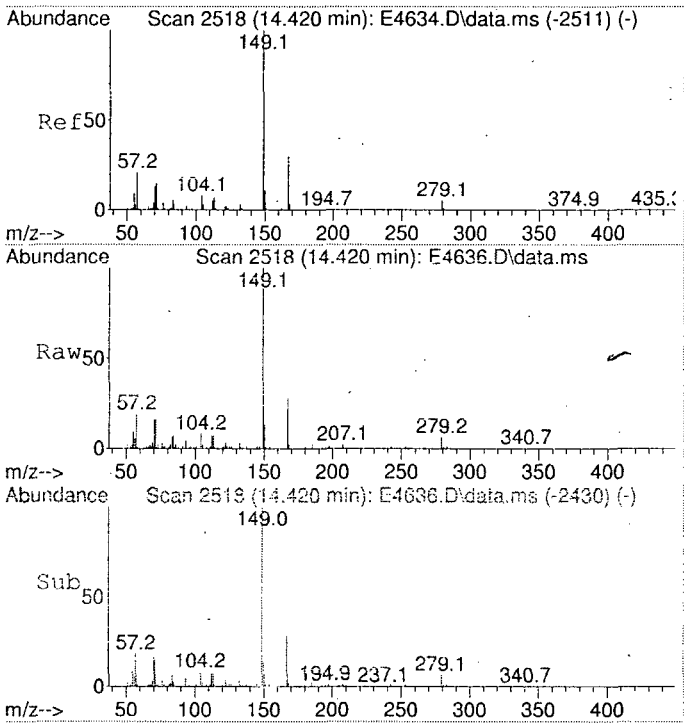
Ion	Ratio	Lower	Upper
149	100		
150	8.5	0.0	29.0
104	6.1	0.0	26.3



Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

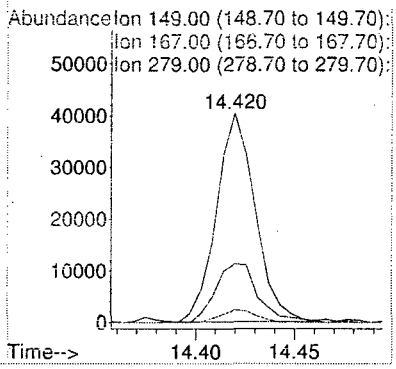
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration



#86
Bis(2-ethylhexyl)phthalate
Concen: 2.3386 ug/mL
RT: 14.42 min Scan# 2518
Delta R.T. 0.00 min
Lab File: E4636.D
Acq: 24 May 2012 17:55

Tgt Ion:149 Resp: 54829

Ion	Ratio	Lower	Upper
149	100		
167	31.3	10.2	50.2
279	5.6	0.0	28.1



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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: E4636.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.506	171	173	184	rVV	240365	287332	7.76%	0.817%
2	1.576	184	186	201	rVB2	142370	267430	7.22%	0.760%
3	1.731	212	215	234	rVB2	173827	228230	6.16%	0.649%
4	1.843	234	236	256	rVB4	63465	122127	3.30%	0.347%
5	3.040	457	460	465	rBV	860323	861421	23.27%	2.449%
6	3.082	465	468	471	rVV	885663	988552	26.70%	2.810%
7	3.109	471	473	484	rVB	1351986	1533274	41.41%	4.359%
8	3.296	503	508	522	rVB2	291180	404503	10.92%	1.150%
9	3.964	629	633	645	rBV	1243584	1473738	39.80%	4.190%
10	4.044	645	648	661	rVB	1011025	1247621	33.70%	3.547%
11	4.428	715	720	726	rBV2	45701	58460	1.58%	0.166%
12	4.482	727	730	742	rVB	879427	1089371	29.42%	3.097%
13	4.685	766	768	772	rBV5	10057	9669	0.26%	0.027%
14	4.856	796	800	811	rBV	1154490	1495493	40.39%	4.252%
15	4.963	816	820	830	rVB	410699	470427	12.71%	1.337%
16	5.182	857	861	882	rBV	1025401	1343933	36.30%	3.821%
17	5.593	935	938	939	rBV3	9911	7160	0.19%	0.020%
18	5.689	953	956	959	rBV5	7176	9850	0.27%	0.028%
19	5.823	978	981	985	rBV4	47069	55700	1.50%	0.158%
20	6.053	1020	1024	1030	rBV8	11482	21253	0.57%	0.060%
21	6.314	1070	1073	1075	rVB4	7303	6178	0.17%	0.018%
22	6.533	1110	1114	1117	rVB5	12548	17397	0.47%	0.049%
23	6.678	1139	1141	1142	rBV	9208	6974	0.19%	0.020%
24	6.715	1145	1148	1156	rVB5	23923	30149	0.81%	0.086%
25	7.030	1205	1207	1212	rBV6	4774	6412	0.17%	0.018%
26	7.084	1212	1217	1221	rVV8	13240	22293	0.60%	0.063%
27	7.206	1237	1240	1242	rVB4	4644	4895	0.13%	0.014%
28	7.335	1259	1264	1269	rBV	2026560	2323491	62.75%	6.606%
29	7.383	1269	1273	1284	rVB	1951757	2154515	58.19%	6.125%
30	7.596	1308	1313	1321	rVB	476518	549430	14.84%	1.562%
31	7.842	1357	1359	1360	rBV2	5999	4515	0.12%	0.013%
32	8.131	1410	1413	1416	rBV5	4207	5107	0.14%	0.015%
33	8.168	1416	1420	1454	rVV	431715	1008463	27.24%	2.867%
34	8.387	1455	1461	1470	rVB2	2404514	2845659	76.85%	8.090%
35	8.527	1483	1487	1492	rVB5	19588	29246	0.79%	0.083%
36	8.579	1492	1496	1501	rVB3	27817	37913	1.02%	0.108%
37	8.636	1501	1506	1507	rBV4	3734	5210	0.14%	0.015%
38	8.682	1510	1514	1530	rBV	598038	846266	22.86%	2.406%
39	8.876	1546	1548	1550	rVB3	5624	4254	0.11%	0.012%
40	9.025	1572	1574	1577	rVB3	6098	5244	0.14%	0.015%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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	9.253	1611	1614	1616	rBV3	4723	5115	0.14%	0.015%
42	9.431	1640	1645	1646	rVB3	5185	7413	0.20%	0.021%
43	9.453	1646	1649	1652	rBV4	3624	4333	0.12%	0.012%
44	9.499	1654	1657	1660	rVV3	5326	5641	0.15%	0.016%
45	9.636	1677	1681	1683	rBV2	2747	4402	0.12%	0.013%
46	9.676	1685	1688	1690	rVV2	4599	4327	0.12%	0.012%
47	9.762	1700	1703	1706	rVB3	5211	6112	0.17%	0.017%
48	9.802	1707	1710	1712	rVB2	5433	4334	0.12%	0.012%
49	9.853	1714	1719	1726	rBV	488650	649748	17.55%	1.847%
50	9.928	1726	1732	1741	rVB	2481592	3069589	82.90%	8.727%
51	10.071	1754	1757	1759	rBV3	4315	5234	0.14%	0.015%
52	10.173	1774	1775	1778	rVB3	5995	4705	0.13%	0.013%
53	10.419	1813	1818	1820	rBV4	3936	6240	0.17%	0.018%
54	10.471	1825	1827	1832	rVB2	8678	7957	0.21%	0.023%
55	10.516	1834	1835	1840	rBV4	6200	8192	0.22%	0.023%
56	10.562	1840	1843	1844	rVV3	4685	4023	0.11%	0.011%
57	10.591	1844	1848	1857	rVB10	8101	18437	0.50%	0.052%
58	10.825	1885	1889	1895	rVV6	6201	7533	0.20%	0.021%
59	10.876	1896	1898	1904	rVB4	6279	9496	0.26%	0.027%
60	10.922	1904	1906	1909	rBV3	3220	4096	0.11%	0.012%
61	11.065	1926	1931	1933	rBV4	17894	23217	0.63%	0.066%
62	11.094	1933	1936	1939	rVB	28084	30811	0.83%	0.088%
63	11.168	1946	1949	1951	rBV3	13182	16143	0.44%	0.046%
64	11.282	1965	1969	1971	rBV3	4817	6178	0.17%	0.018%
65	11.551	2014	2016	2020	rBV4	5769	4034	0.11%	0.011%
66	11.688	2037	2040	2042	rBV2	5855	6317	0.17%	0.018%
67	11.940	2080	2084	2089	rVB	22587	29614	0.80%	0.084%
68	12.031	2094	2100	2112	rBV	2983007	3644986	98.44%	10.363%
69	12.282	2142	2144	2148	rBV5	3833	4958	0.13%	0.014%
70	12.494	2179	2181	2185	rVB4	8197	7579	0.20%	0.022%
71	12.528	2185	2187	2189	rBV2	4928	4672	0.13%	0.013%
72	12.574	2194	2195	2201	rVB3	4431	5272	0.14%	0.015%
73	12.734	2220	2223	2224	rVB3	5053	4331	0.12%	0.012%
74	12.751	2224	2226	2229	rBV3	4755	4817	0.13%	0.014%
75	12.877	2247	2248	2251	rVB3	3944	3991	0.11%	0.011%
76	13.071	2276	2282	2285	rBV7	13424	21051	0.57%	0.060%
77	13.151	2294	2296	2299	rVB4	5596	4395	0.12%	0.012%
78	13.328	2324	2327	2329	rBV3	3389	4447	0.12%	0.013%
79	13.380	2333	2336	2337	rBV4	4760	5538	0.15%	0.016%
80	13.397	2337	2339	2343	rVV5	6345	8551	0.23%	0.024%
81	13.620	2374	2378	2382	rVB5	17164	31090	0.84%	0.088%
82	13.677	2386	2388	2392	rBV5	6118	5469	0.15%	0.016%
83	13.746	2397	2400	2401	rBV2	4710	4407	0.12%	0.013%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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	13.826	2409	2414	2420	rBV9	6454	12510	0.34%	0.036%
85	13.923	2429	2431	2433	rBV3	5410	4753	0.13%	0.014%
86	13.946	2433	2435	2437	rBV3	6198	6603	0.18%	0.019%
87	13.986	2437	2442	2455	rVV	443089	664425	17.94%	1.889%
88	14.134	2466	2468	2472	rBV2	21105	28021	0.76%	0.080%
89	14.420	2513	2518	2525	rVB2	114175	162697	4.39%	0.463%
90	14.643	2554	2557	2562	rVB4	29732	42444	1.15%	0.121%
91	14.751	2573	2576	2579	rBV4	8101	9853	0.27%	0.028%
92	14.786	2579	2582	2586	rBV5	10905	12195	0.33%	0.035%
93	14.814	2586	2587	2590	rVV3	7864	5370	0.15%	0.015%
94	14.906	2599	2603	2604	rBV3	5130	4767	0.13%	0.014%
95	15.020	2621	2623	2629	rBV6	9020	13179	0.36%	0.037%
96	15.134	2636	2643	2649	rBV5	37274	84867	2.29%	0.241%
97	15.603	2721	2725	2736	rVB8	28536	65670	1.77%	0.187%
98	15.832	2762	2765	2771	rBV6	19971	41793	1.13%	0.119%
99	15.946	2778	2785	2797	rBV	2590361	3702647	100.00%	10.526%
100	16.055	2798	2804	2828	rVB	388807	704907	19.04%	2.004%

Sum of corrected areas: 35174651

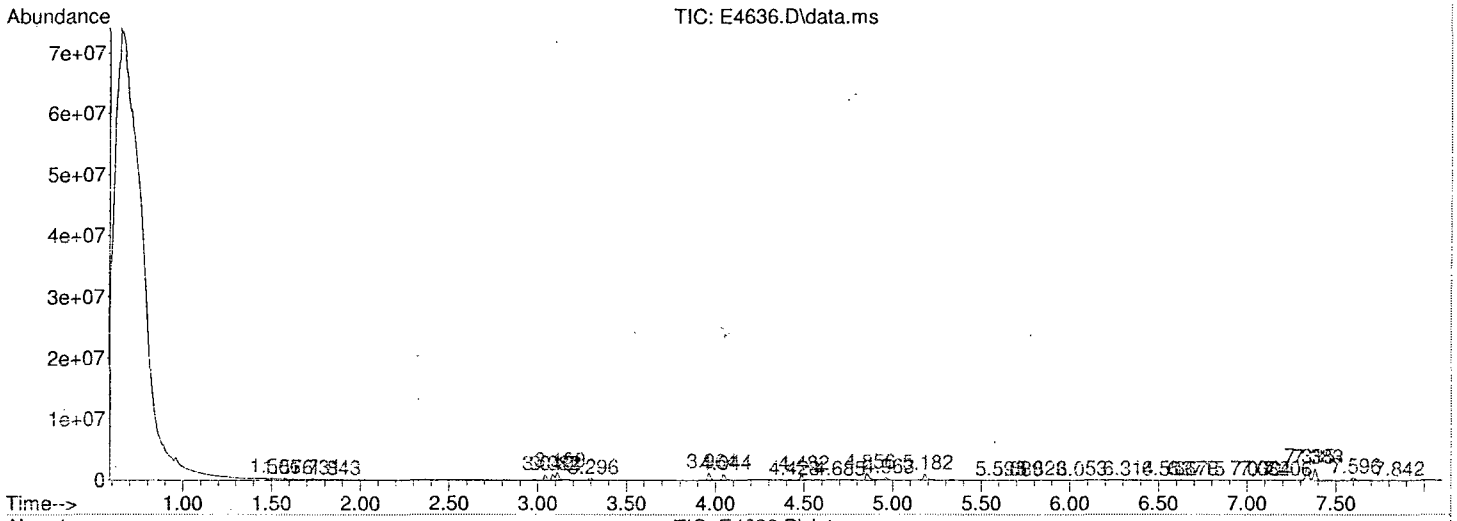
LSC Report - Integrated Chromatogram

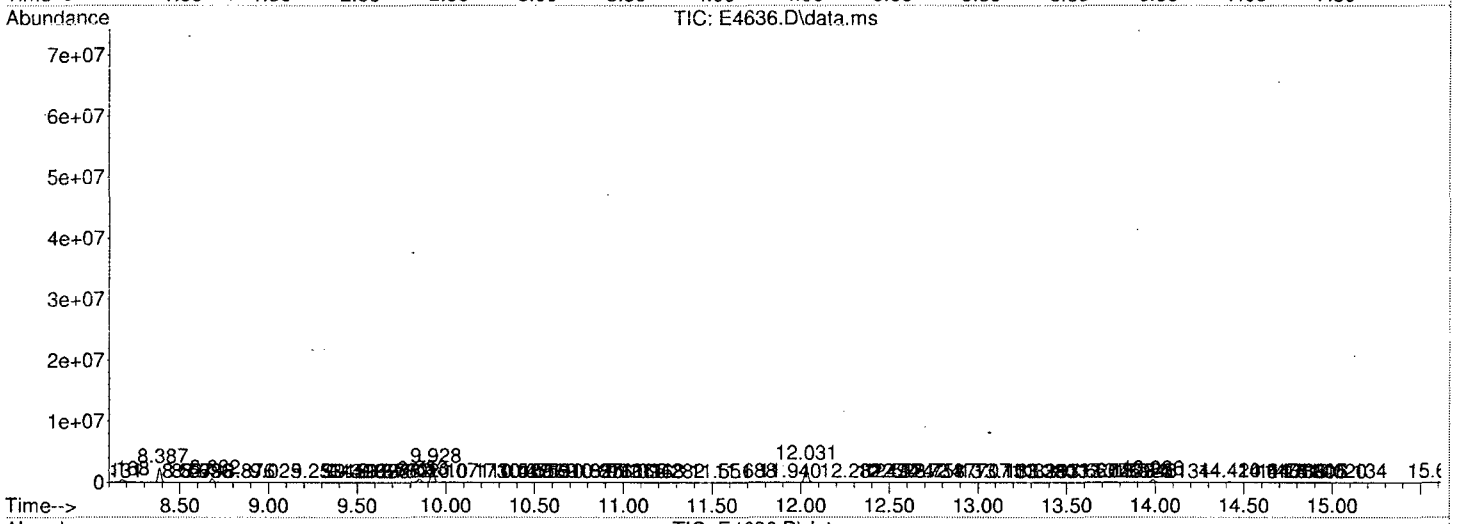
Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

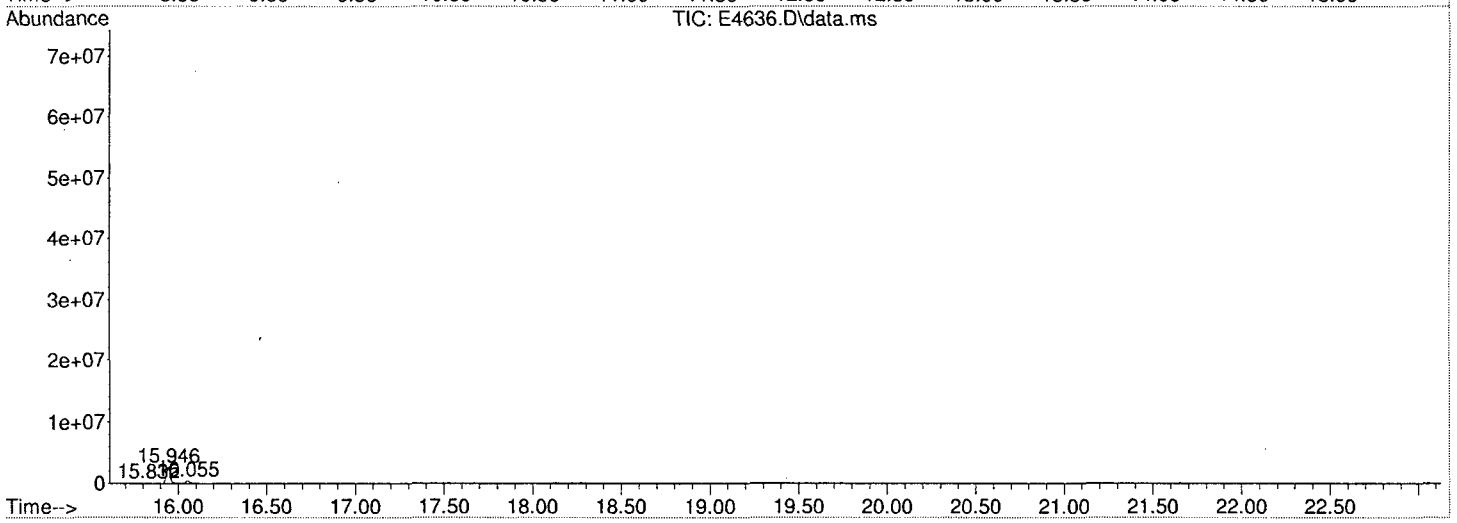
Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

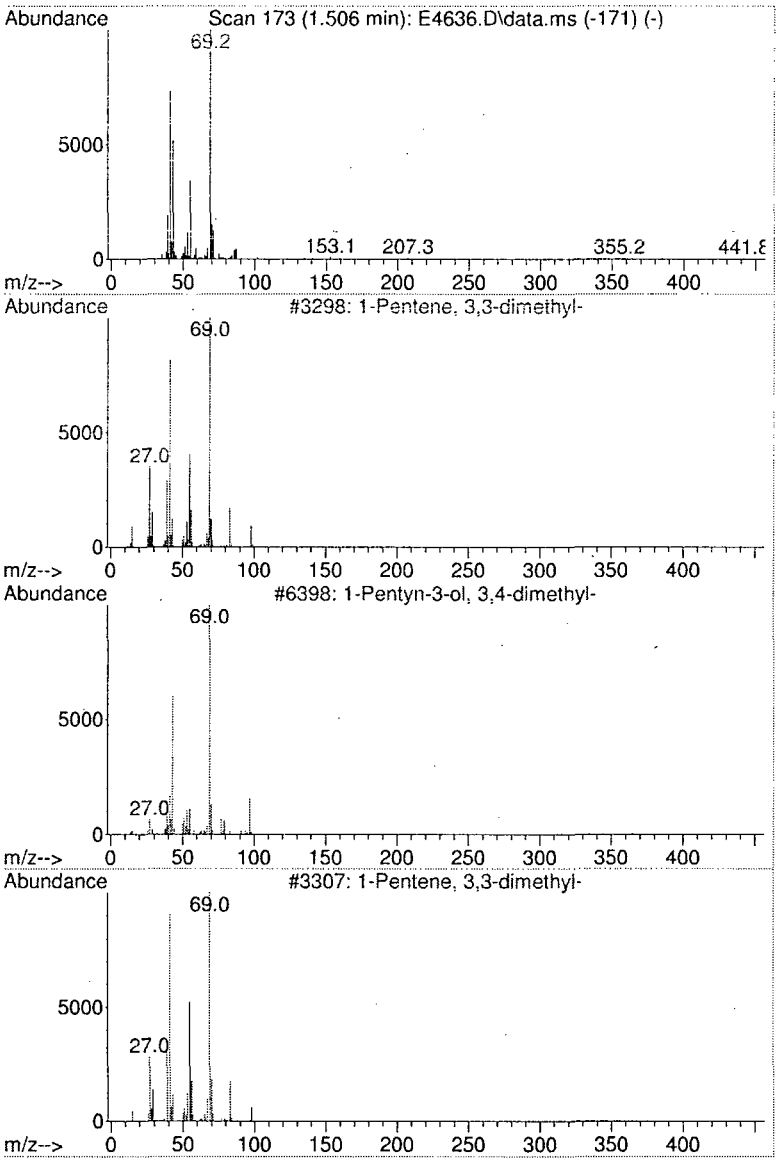
****

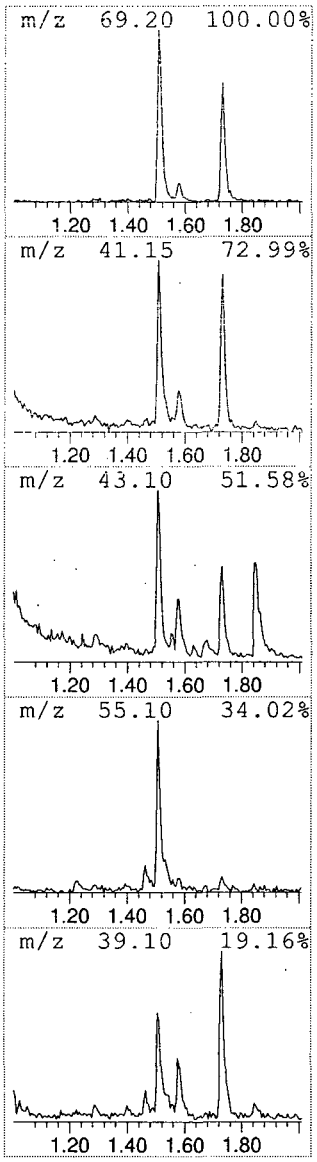
Peak Number 1 1-Pentene, 3,3-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.506	14.21 ug/mL	287332	1,4-Dichlorobenzene-d4	3.296

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	59
2	1-Pentyn-3-ol, 3,4-dimethyl-	112	C7H12O	001482-15-1	45
3	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	45
4	1-Pentyn-3-ol, 3-methyl-	98	C6H10O	000077-75-8	42
5	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	42

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

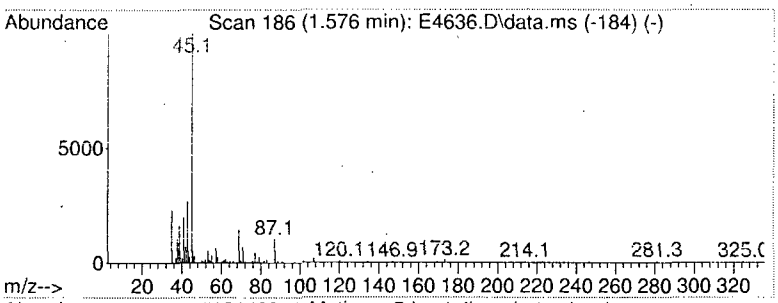
****

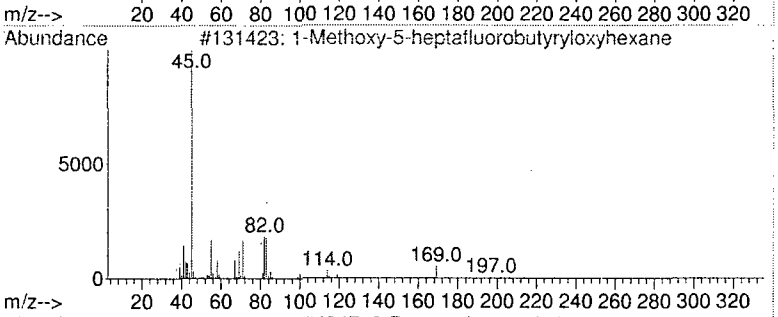
Peak Number 2 1-Methoxy-5-heptafluorobuty... Concentration Rank 2

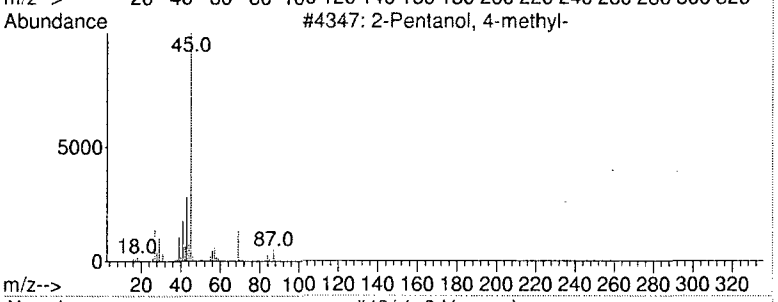
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.576	13.22 ug/mL	267430	1,4-Dichlorobenzene-d4	3.296

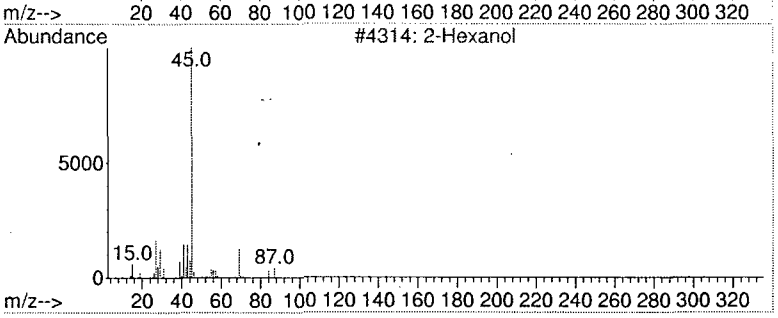
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methoxy-5-heptafluorobutyrylox...	328	C11H15F7O3	1000216-63-3	40
2	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	35
3	2-Hexanol	102	C6H14O	000626-93-7	35
4	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	32
5	2-Hexanol	102	C6H14O	000626-93-7	23

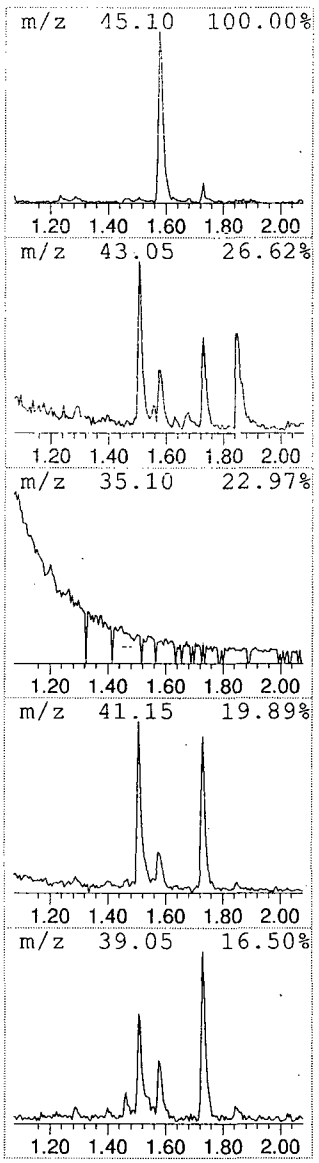
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

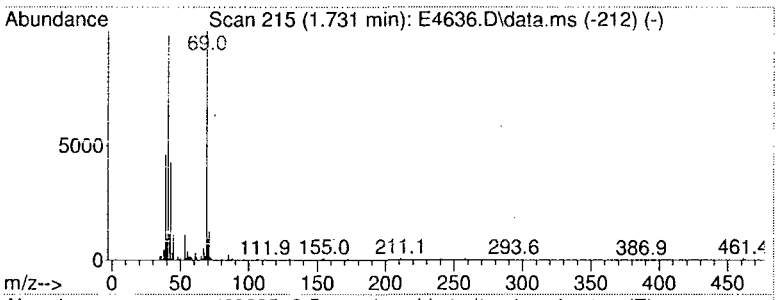
****

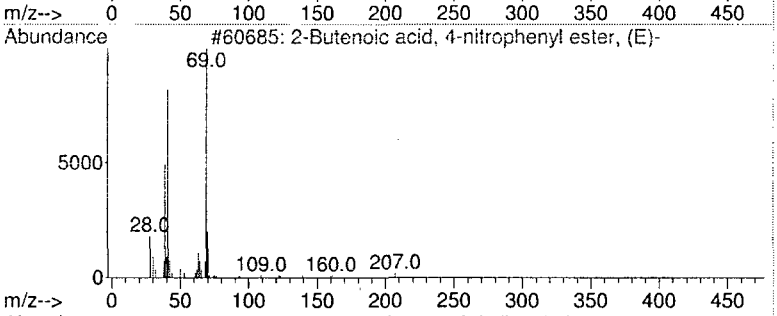
Peak Number 3 2-Butenoic acid, 4-nitrophe... Concentration Rank 3

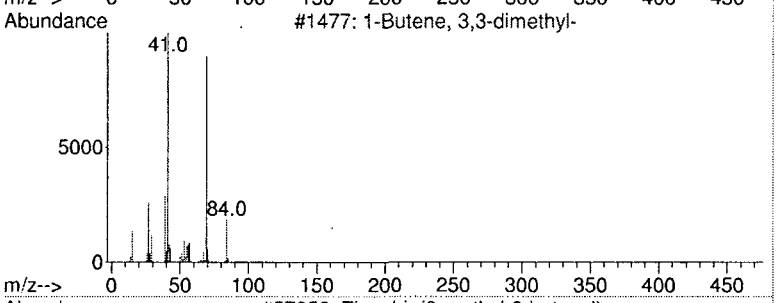
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.731	11.28 ug/mL	228230	1,4-Dichlorobenzene-d4	3.296

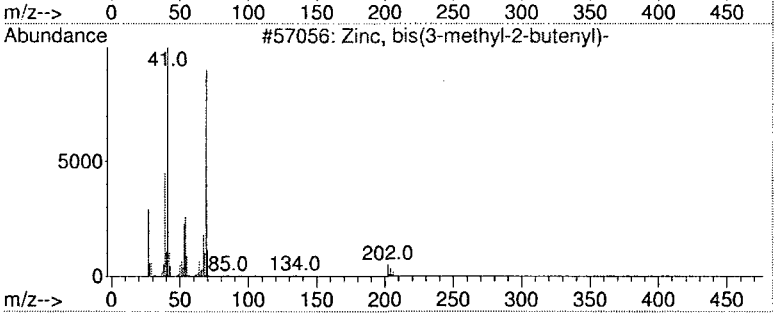
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butenoic acid, 4-nitrophenyl e...	207	C10H9NO4	014617-88-0	38
2	1-Butene, 3,3-dimethyl-	84	C6H12	000558-37-2	38
3	Zinc, bis(3-methyl-2-butenyl)-	202	C10H18Zn	066094-28-8	38
4	Cyclopentane, nitro-	115	C5H9NO2	002562-38-1	38
5	1-Pentene, 2,3-dimethyl-	98	C7H14	003404-72-6	38

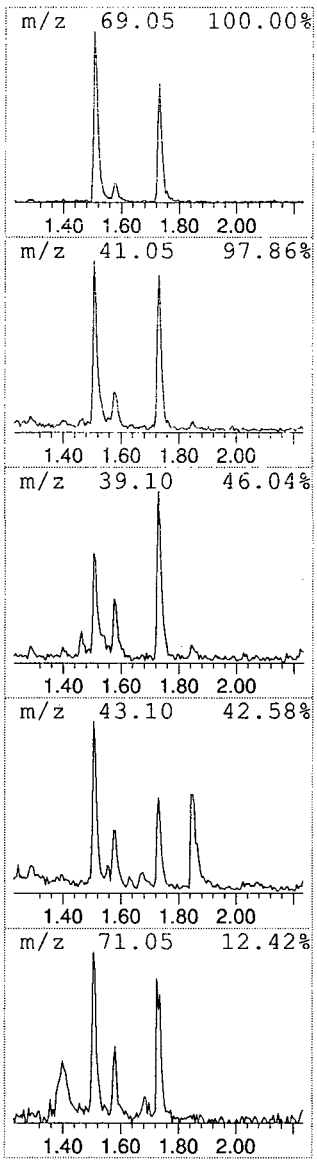
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

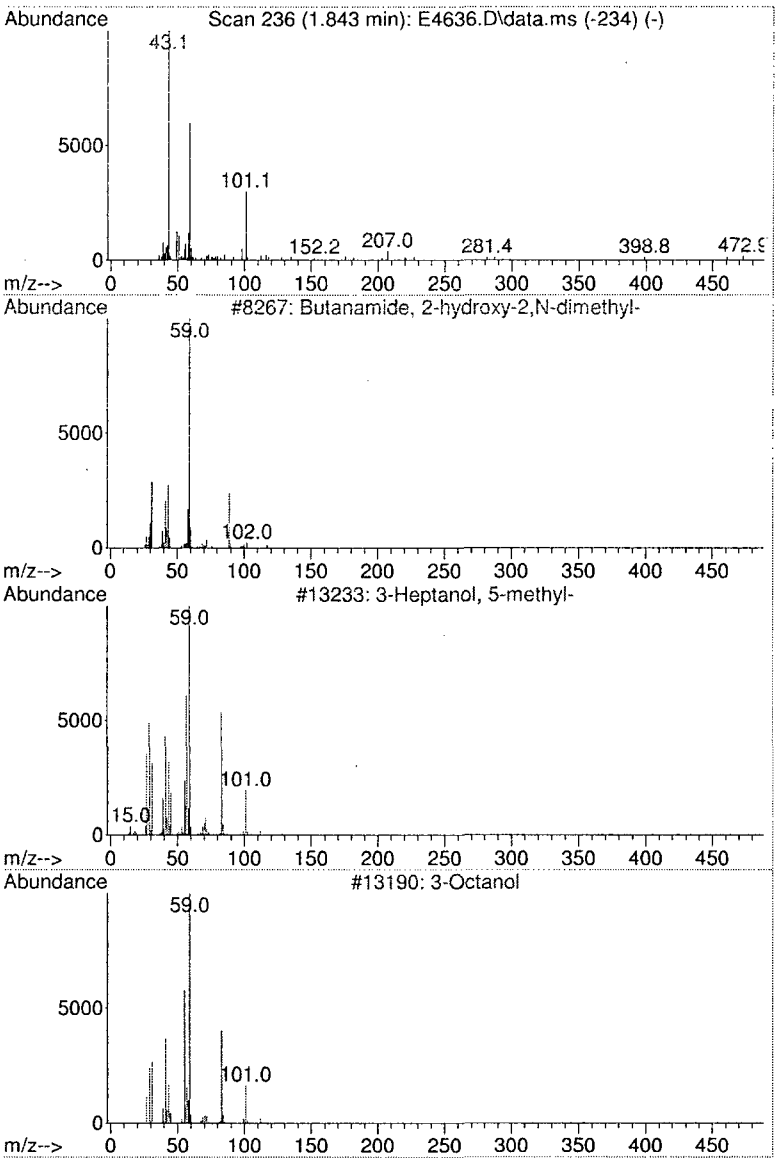
****

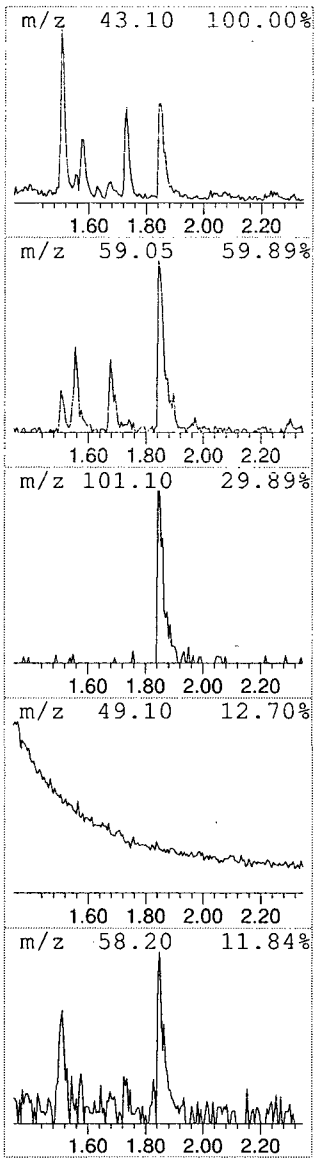
Peak Number 4 Butanamide, 2-hydroxy-2,N-d... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.843	6.04 ug/mL	122127	1,4-Dichlorobenzene-d4	3.296

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanamide, 2-hydroxy-2,N-dimethyl-	117	C5H11NO2	039961-72-3	30
2	3-Heptanol, 5-methyl-	130	C8H18O	018720-65-5	25
3	3-Octanol	130	C8H18O	000589-98-0	25
4	Acetic acid, chloro-, 1,1-dimeth...	150	C6H11ClO2	000107-59-5	25
5	3-Tridecanol	200	C13H28O	010289-68-6	17

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

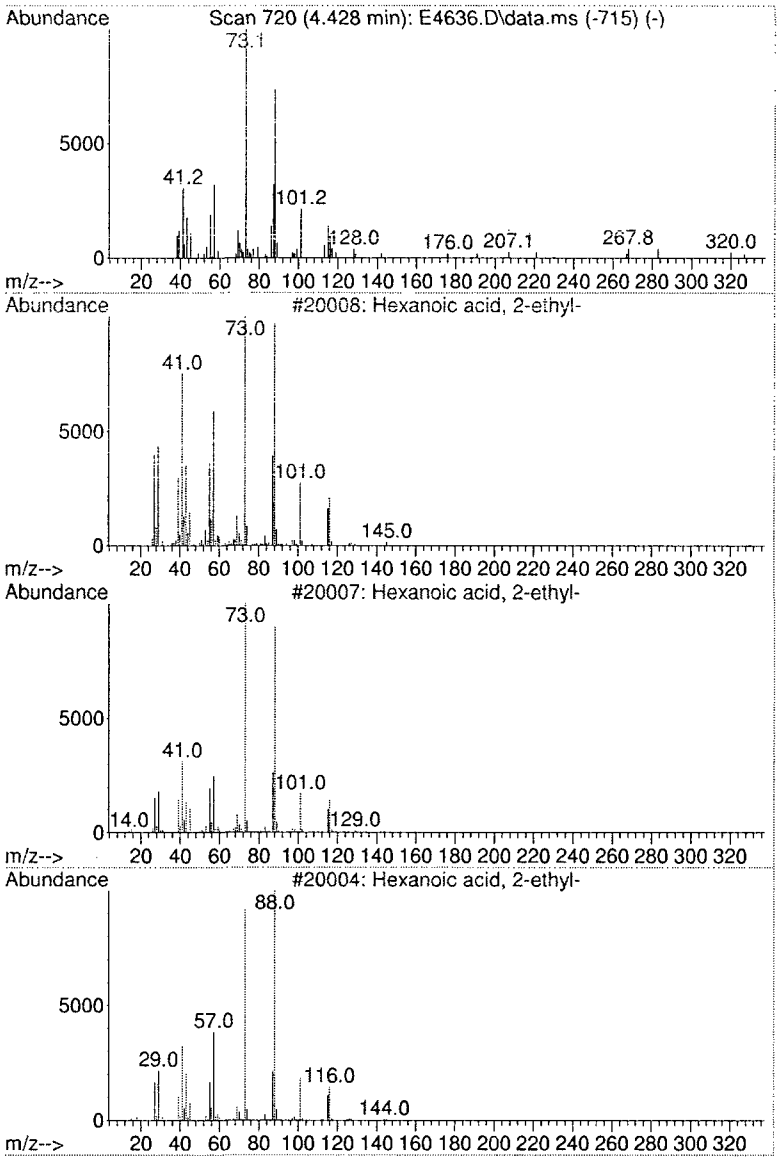
****

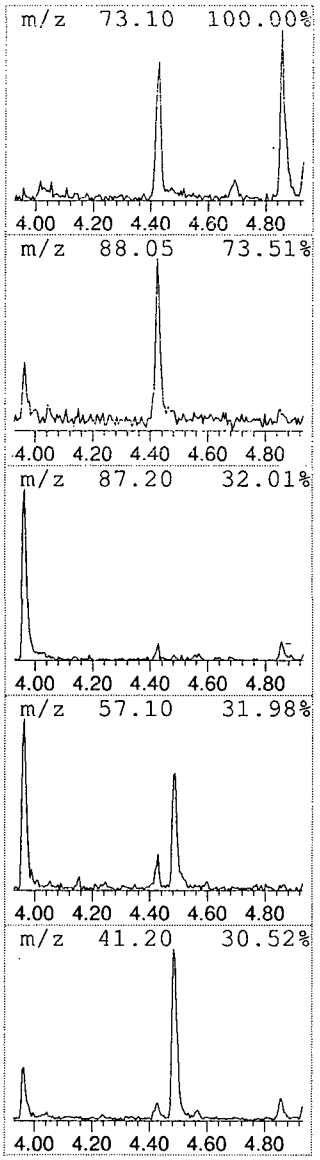
Peak Number 5 Hexanoic acid, 2-ethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.428	2.49 ug/mL	58460	Naphthalene-d8	4.963

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	64
2	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	64
3	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	59
4	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	45
5	Acetic acid, diethyl-	116	C6H12O2	000088-09-5	40

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

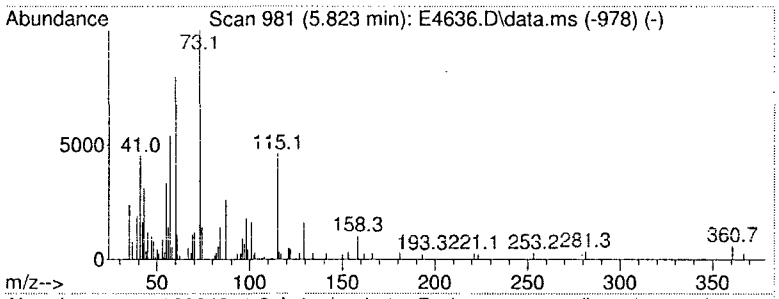
****

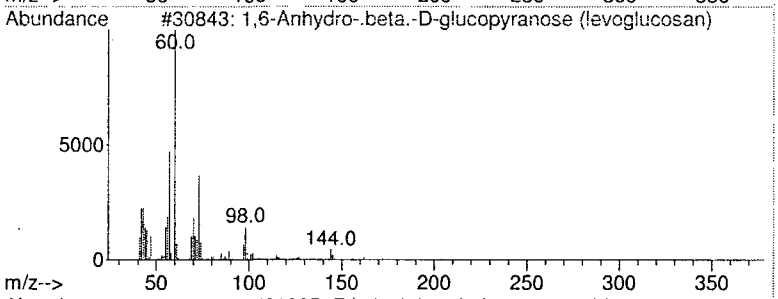
Peak Number 6 1,6-Anhydro-.beta.-D-glucop... Concentration Rank 7

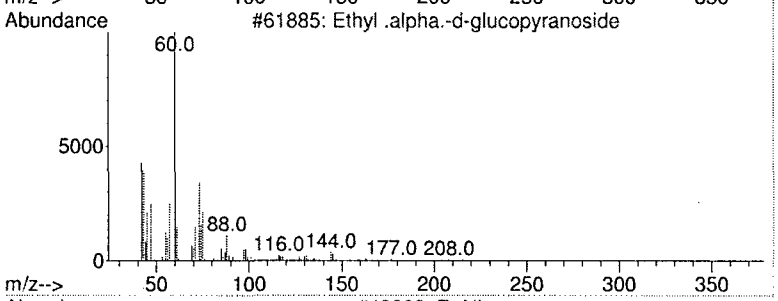
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.823	2.37 ug/mL	55700	Naphthalene-d8	4.963

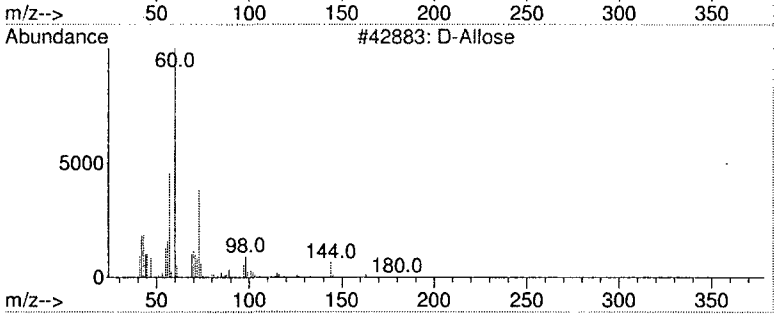
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,6-Anhydro-.beta.-D-glucopyrano...	162	C6H10O5	000498-07-7	43
2	Ethyl .alpha.-d-glucopyranoside	208	C8H16O6	1000127-29-4	37
3	D-Allose	180	C6H12O6	002595-97-3	37
4	3,4-Altrosan	162	C6H10O5	1000129-76-4	37
5	Xylose	150	C5H10O5	000058-86-6	32

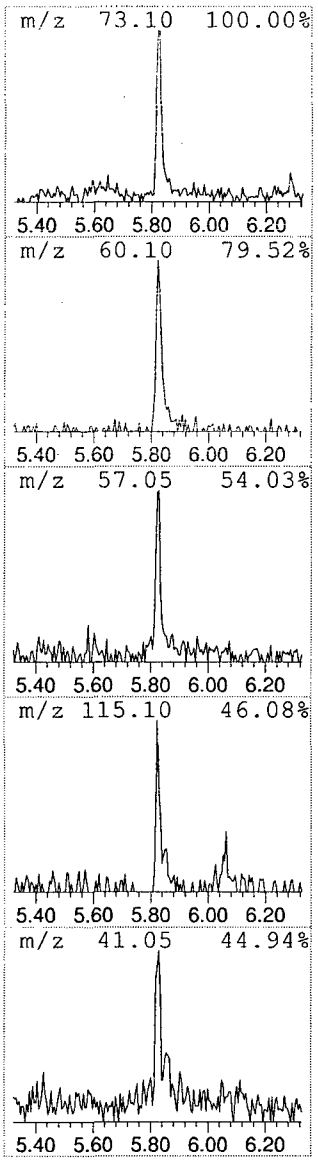
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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

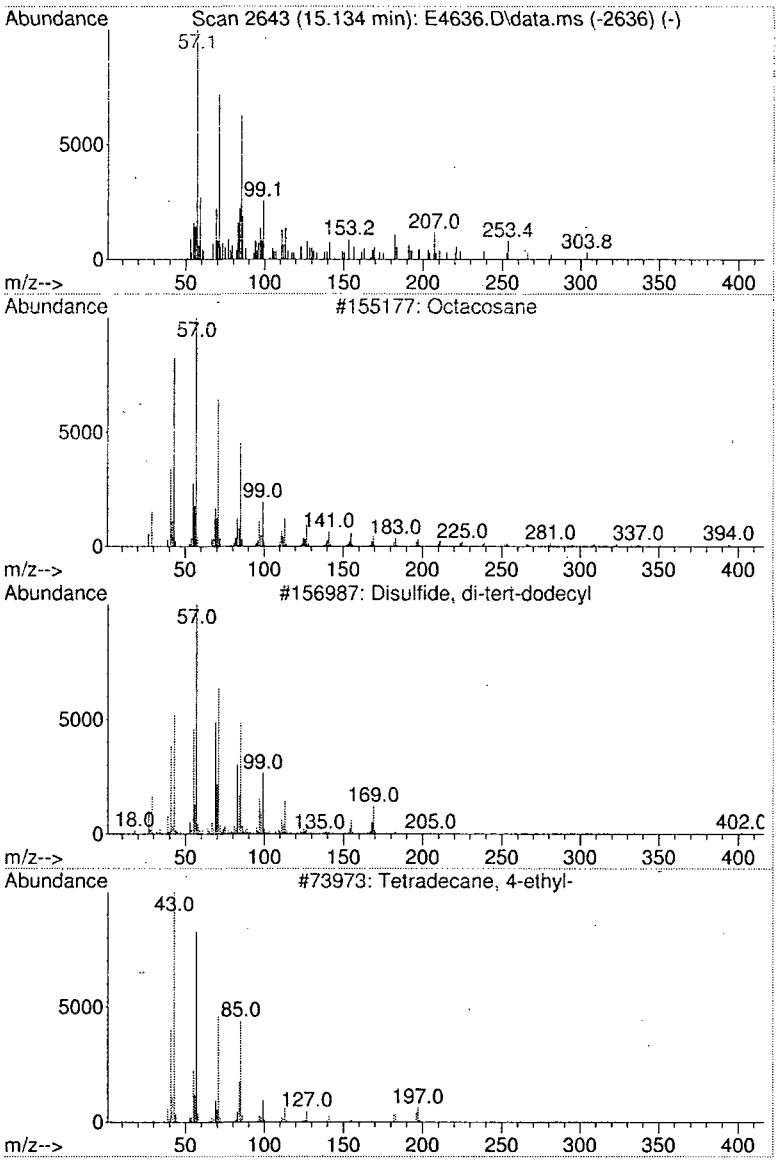
****

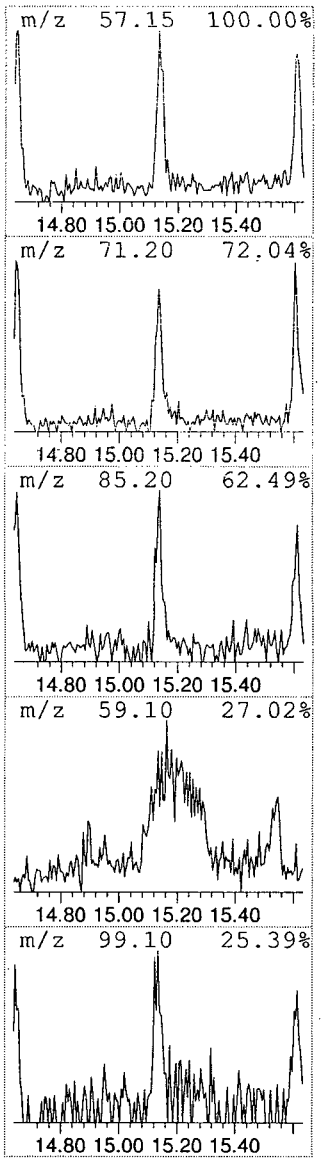
Peak Number 7 Octacosane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.134	2.41 ug/mL	84867	Perylene-d12	16.055

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	53
2	Disulfide, di-tert-dodecyl	402	C24H50S2	027458-90-8	50
3	Tetradecane, 4-ethyl-	226	C16H34	055045-14-2	47
4	Heptadecane	240	C17H36	000629-78-7	46
5	Tetratriacontane	479	C34H70	014167-59-0	46

Alkane





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4636.D
Acq On : 24 May 2012 17:55
Sample : 0015957-01
Misc : F5WC4 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 2
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:44:50 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
1-Pentene, 3,3-...	1.506	14.2	ug/mL	287332	1	3.296	404503	20.0
1-Methoxy-5-hep...	1.576	13.2	ug/mL	267430	1	3.296	404503	20.0
2-Butenoic acid...	1.731	11.3	ug/mL	228230	1	3.296	404503	20.0
Butanamide, 2-h...	1.843	6.0	ug/mL	122127	1	3.296	404503	20.0
Hexanoic acid, ...	4.428	2.5	ug/mL	58460	2	4.963	470427	20.0
1,6-Anhydro-.be...	5.823	2.4	ug/mL	55700	2	4.963	470427	20.0
Octacosane	15.134	2.4	ug/mL	84867	6	16.055	704907	20.0

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4637.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4637.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	0.40	JB
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo (a) anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.1	JB
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo (b) fluoranthene	5.0	U
207-08-9	Benzo (k) fluoranthene	5.0	U
50-32-8	Benzo (a) pyrene	5.0	U
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U
53-70-3	Dibenzo (a,h) anthracene	5.0	U
191-24-2	Benzo (g,h,i) perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-02

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4637.D

Level: (LOW/MED) LOW Extraction: (Type): CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01 (1 3.301)	1.51	15	J
02		Unknown-02 (1 3.301)	1.58	13	J
03		Unknown-03 (1 3.301)	1.73	10	J
04		Unknown-04 (1 3.301)	1.84	7.4	J
05		Unknown-05 (2 4.957)	4.42	2.6	JB
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[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vitkati
05/28/12

Quant Time: May 26 01:50:54 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	3.301	152	48882	20.0000 ug/mL	0.00
21) Naphthalene-d8	4.957	136	207371	20.0000 ug/mL	0.00
38) Acenaphthene-d10	7.596	164	144461	20.0000 ug/mL	0.00
66) Phenanthrene-d10	9.848	188	272954	20.0000 ug/mL	0.00
80) Chrysene-d12	13.986	240	272078	20.0000 ug/mL	0.00
88) Perylene-d12	16.054	264	262965	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	423269	38.27 ug/mL	0.00
Spiked Amount 40.000	Range 39 - 106		Recovery = 95.68%		
18) Bis(2-chloroethyl)ethe...	3.039	67	235979	38.47 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 105		Recovery = 96.17%		
19) 2-Chlorophenol-d4	3.109	132	377206	38.52 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 106		Recovery = 96.30%		
20) 4-Methylphenol-d8	3.964	113	308436	37.53 ug/mL	0.00
Spiked Amount 40.000	Range 25 - 111		Recovery = 93.83%		
22) Nitrobenzene-d5	4.044	128	191626	43.49 ug/mL	0.00
Spiked Amount 40.000	Range 43 - 108		Recovery = 108.73%#		
35) 2-Nitrophenol-d4	4.482	143	208475	42.51 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 108		Recovery = 106.27%		
36) 2,4-Dichlorophenol-d3	4.856	165	328034	40.08 ug/mL	0.00
Spiked Amount 40.000	Range 37 - 105		Recovery = 100.20%		
37) 4-Chloroaniline-d4	5.176	131	476913	67.96 ug/mL	0.00
Spiked Amount 40.000	Range 1 - 145		Recovery = 169.90%#		
62) Acenaphthylene-d8	7.335	160	1112850	35.50 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 107		Recovery = 88.75%		
63) 4-Nitrophenol-d4	8.168	143	164601	37.44 ug/mL	0.00
Spiked Amount 40.000	Range 33 - 116		Recovery = 93.60%		
64) Dimethylphthalate-d6	7.383	166	962843	39.64 ug/mL	0.00
Spiked Amount 40.000	Range 47 - 114		Recovery = 99.10%		
65) Fluorene-d10	8.387	176	752850	38.43 ug/mL	0.00
Spiked Amount 40.000	Range 42 - 111		Recovery = 96.08%		
78) 4,6-Dinitro-2-methylph...	8.682	200	122732	28.57 ug/mL	0.00
Spiked Amount 40.000	Range 22 - 104		Recovery = 71.43%		
79) Anthracene-d10	9.928	188	1293118	38.40 ug/mL	0.00
Spiked Amount 40.000	Range 44 - 110		Recovery = 96.00%		
87) Pyrene-d10	12.031	212	1512412	42.48 ug/mL	0.00
Spiked Amount 40.000	Range 52 - 119		Recovery = 106.20%		
96) Benzo (a) pyrene-d12	15.946	264	1259282	41.93 ug/mL	0.00
Spiked Amount 40.000	Range 32 - 121		Recovery = 104.82%		
Target Compounds					Qvalue
76) Di-n-butylphthalate	11.094	149	17004	0.3954 ug/mL	98
86) Bis(2-ethylhexyl)phtha...	14.420	149	54842	2.1223 ug/mL	96

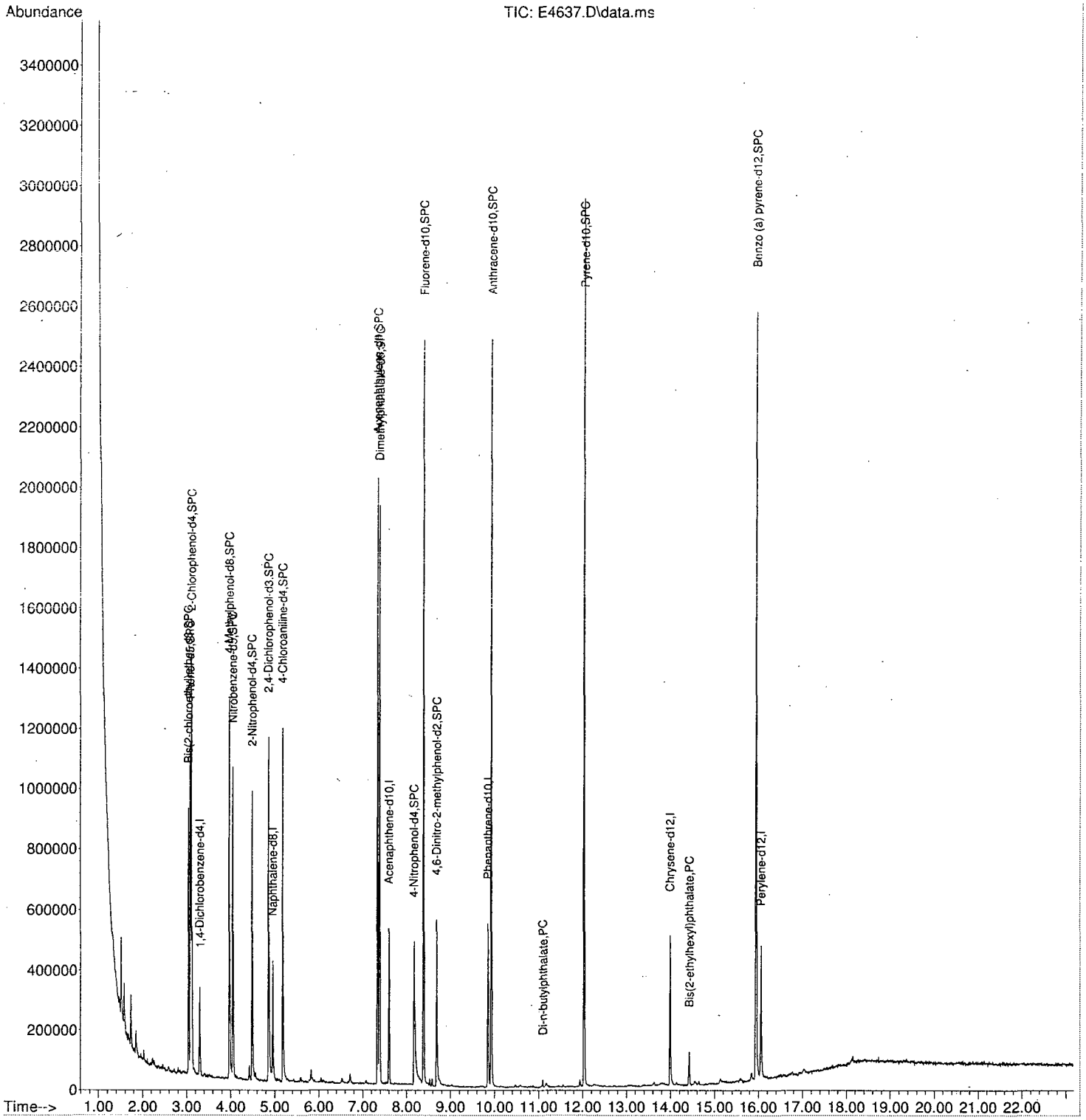
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

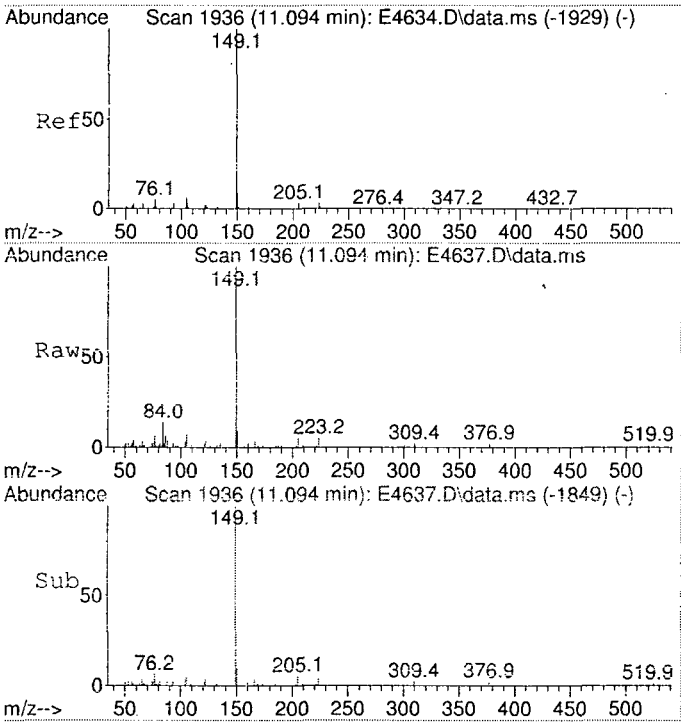
Quant Time: May 26 01:50:54 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

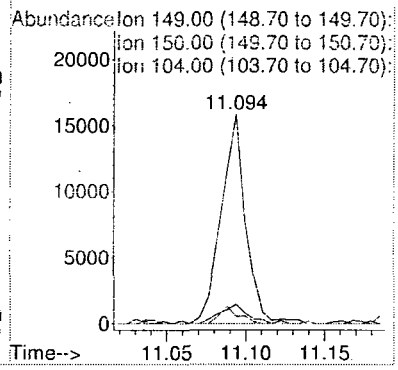
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

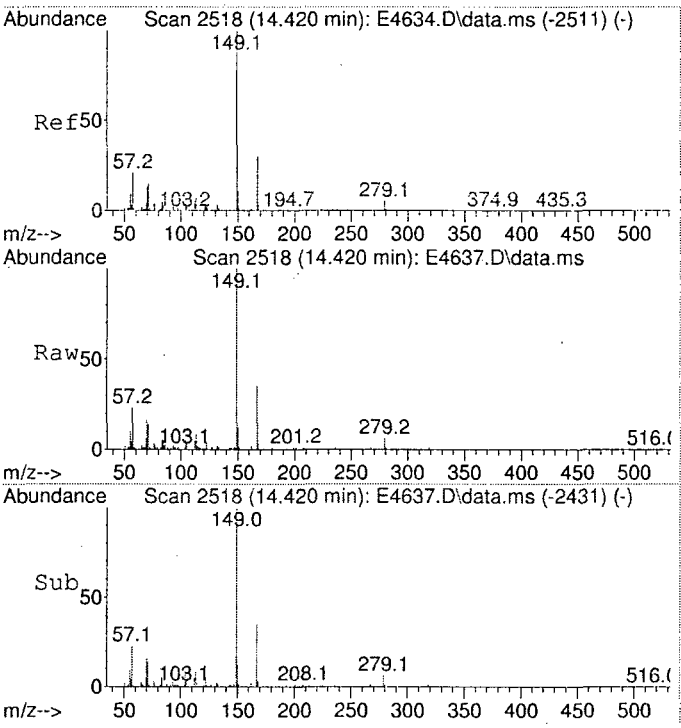


#76
Di-n-butylphthalate
Concen: 0.3954 ug/mL
RT: 11.09 min Scan# 1936
Delta R.T. 0.00 min
Lab File: E4637.D
Acq: 24 May 2012 19:24

Tgt Ion:149 Resp: 17004

Ion	Ratio	Lower	Upper
149	100		
150	10.4	0.0	29.0
104	6.3	0.0	26.3

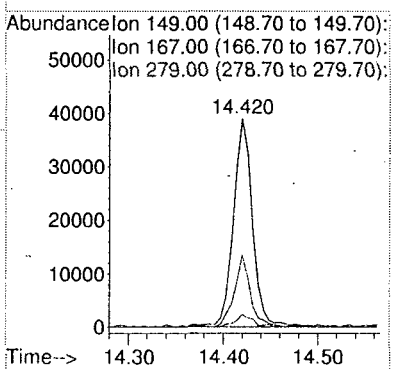




#86
Bis(2-ethylhexyl)phthalate
Concen: 2.1223 ug/mL
RT: 14.42 min Scan# 2518
Delta R.T. 0.00 min
Lab File: E4637.D
Acq: 24 May 2012 19:24

Tgt Ion:149 Resp: 54842

Ion	Ratio	Lower	Upper
149	100		
167	28.8	10.2	50.2
279	5.4	0.0	28.1



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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: E4637.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.506	171	173	183	rVB	278383	323527	8.76%	0.903%
2	1.576	184	186	203	rVB	186455	288747	7.82%	0.806%
3	1.731	212	215	229	rVB	186447	229141	6.20%	0.640%
4	1.843	234	236	248	rVB3	91371	161769	4.38%	0.452%
5	3.039	457	460	465	rBV	875564	864688	23.41%	2.414%
6	3.082	465	468	471	rVV	1087063	1161182	31.44%	3.242%
7	3.109	471	473	485	rVB	1375877	1499720	40.61%	4.188%
8	3.296	503	508	523	rVB2	298689	439708	11.91%	1.228%
9	3.964	629	633	645	rBV	1261569	1532316	41.49%	4.279%
10	4.044	645	648	659	rVB	1028533	1243098	33.66%	3.471%
11	4.423	715	719	726	rVB4	50301	62741	1.70%	0.175%
12	4.482	726	730	742	rBV	958939	1138040	30.81%	3.178%
13	4.818	792	793	796	rBV2	6876	4966	0.13%	0.014%
14	4.856	796	800	812	rBV	1138169	1538621	41.66%	4.296%
15	4.957	816	819	831	rVB	400166	486354	13.17%	1.358%
16	5.176	856	860	877	rBV	1174825	1507927	40.83%	4.211%
17	5.823	978	981	985	rBV3	36349	40363	1.09%	0.113%
18	5.908	995	997	1012	rVB3	8018	6758	0.18%	0.019%
19	6.047	1021	1023	1027	rVB4	15498	19523	0.53%	0.055%
20	6.095	1030	1032	1034	rBV3	7077	5209	0.14%	0.015%
21	6.667	1138	1139	1141	rBV2	8609	5839	0.16%	0.016%
22	6.715	1143	1148	1152	rVV4	31484	38647	1.05%	0.108%
23	6.987	1197	1199	1201	rBV3	5706	4866	0.13%	0.014%
24	7.078	1212	1216	1219	rVB6	10595	14479	0.39%	0.040%
25	7.270	1249	1252	1254	rBV4	6123	6973	0.19%	0.019%
26	7.335	1259	1264	1269	rBV	2011037	2369125	64.15%	6.615%
27	7.383	1269	1273	1285	rVB	1919534	2191224	59.33%	6.119%
28	7.511	1295	1297	1299	rVB3	8930	4656	0.13%	0.013%
29	7.527	1299	1300	1301	rBV	7735	4665	0.13%	0.013%
30	7.596	1308	1313	1320	rVB	516284	595342	16.12%	1.662%
31	7.730	1336	1338	1341	rBV4	6759	6392	0.17%	0.018%
32	7.821	1354	1355	1357	rBV2	5688	4256	0.12%	0.012%
33	7.960	1379	1381	1382	rBV2	5856	3724	0.10%	0.010%
34	8.098	1406	1407	1416	rVB6	5469	3852	0.10%	0.011%
35	8.168	1416	1420	1445	rBV	475812	1039871	28.16%	2.904%
36	8.387	1455	1461	1477	rVB	2466368	2899082	78.50%	8.095%
37	8.527	1483	1487	1492	rVB3	26680	32904	0.89%	0.092%
38	8.579	1492	1496	1500	rBV2	27150	37924	1.03%	0.106%
39	8.682	1510	1514	1531	rBV	552089	760546	20.59%	2.124%
40	8.847	1542	1543	1547	rBV4	3326	4790	0.13%	0.013%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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	9.122	1589	1591	1593	rVB3	4821	4602	0.12%	0.013%
42	9.150	1593	1596	1598	rBV4	4672	5335	0.14%	0.015%
43	9.168	1598	1599	1603	rVB3	5036	4364	0.12%	0.012%
44	9.305	1621	1623	1628	rBV3	4273	5397	0.15%	0.015%
45	9.413	1641	1642	1649	rVB5	3955	7188	0.19%	0.020%
46	9.499	1654	1657	1659	rBV4	4401	6021	0.16%	0.017%
47	9.676	1687	1688	1693	rVV4	3686	4972	0.13%	0.014%
48	9.733	1693	1698	1705	rVB6	6911	16326	0.44%	0.046%
49	9.848	1713	1718	1726	rBV	542846	709839	19.22%	1.982%
50	9.928	1726	1732	1747	rVB	2479202	3154777	85.42%	8.809%
51	10.173	1773	1775	1781	rVB5	3038	5238	0.14%	0.015%
52	10.271	1790	1792	1795	rVB	4362	4540	0.12%	0.013%
53	10.328	1799	1802	1803	rBV3	4605	5477	0.15%	0.015%
54	10.476	1823	1828	1832	rBV4	8657	14350	0.39%	0.040%
55	10.556	1839	1842	1844	rBV4	4621	4416	0.12%	0.012%
56	10.585	1844	1847	1852	rVV5	6342	10606	0.29%	0.030%
57	10.831	1884	1890	1894	rVB8	5878	9624	0.26%	0.027%
58	10.876	1894	1898	1899	rBV4	7616	8876	0.24%	0.025%
59	10.928	1906	1907	1910	rBV2	3565	3954	0.11%	0.011%
60	11.065	1927	1931	1933	rBV3	4590	6749	0.18%	0.019%
61	11.094	1933	1936	1940	rVB	25942	28030	0.76%	0.078%
62	11.168	1946	1949	1956	rVB3	11158	16661	0.45%	0.047%
63	11.448	1996	1998	2002	rVB4	6494	6030	0.16%	0.017%
64	11.557	2013	2017	2025	rBV5	9169	15382	0.42%	0.043%
65	11.654	2030	2034	2036	rBV3	3860	6074	0.16%	0.017%
66	11.939	2079	2084	2091	rBV2	24158	36215	0.98%	0.101%
67	12.031	2094	2100	2118	rVV	2946480	3672601	99.44%	10.255%
68	12.145	2118	2120	2121	rVB2	6620	4057	0.11%	0.011%
69	12.168	2121	2124	2127	rBV3	5092	7110	0.19%	0.020%
70	12.351	2155	2156	2161	rVB4	5847	6778	0.18%	0.019%
71	12.420	2165	2168	2171	rBV5	4319	5714	0.15%	0.016%
72	12.705	2214	2218	2220	rBV4	6170	6049	0.16%	0.017%
73	12.957	2259	2262	2265	rVB3	4680	6202	0.17%	0.017%
74	12.980	2265	2266	2268	rBV	6068	4774	0.13%	0.013%
75	13.037	2272	2276	2278	rBV5	6897	8090	0.22%	0.023%
76	13.220	2306	2308	2310	rBV3	6540	5193	0.14%	0.015%
77	13.671	2386	2387	2391	rVB4	5236	4732	0.13%	0.013%
78	13.700	2391	2392	2394	rBV2	5674	4203	0.11%	0.012%
79	13.768	2400	2404	2405	rBV4	8026	7646	0.21%	0.021%
80	13.865	2419	2421	2426	rVB5	8032	8946	0.24%	0.025%
81	13.986	2437	2442	2454	rBV	498011	745860	20.20%	2.083%
82	14.134	2466	2468	2475	rVB6	11439	17937	0.49%	0.050%
83	14.186	2475	2477	2479	rBV3	6431	5382	0.15%	0.015%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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	14.311	2497	2499	2500	rBV2	7314	5527	0.15%	0.015%
85	14.420	2512	2518	2523	rBV	113706	158880	4.30%	0.444%
86	14.483	2526	2529	2531	rBV4	6576	8408	0.23%	0.023%
87	14.506	2531	2533	2535	rBV3	4245	4606	0.12%	0.013%
88	14.551	2535	2541	2546	rBV10	13665	30282	0.82%	0.085%
89	14.774	2578	2580	2581	rBV2	4974	4040	0.11%	0.011%
90	15.563	2716	2718	2719	rBV2	8218	7811	0.21%	0.022%
91	15.946	2778	2785	2795	rBV	2546269	3693192	100.00%	10.312%
92	16.049	2799	2803	2814	rVB	434262	694386	18.80%	1.939%

Sum of corrected areas: 35813004

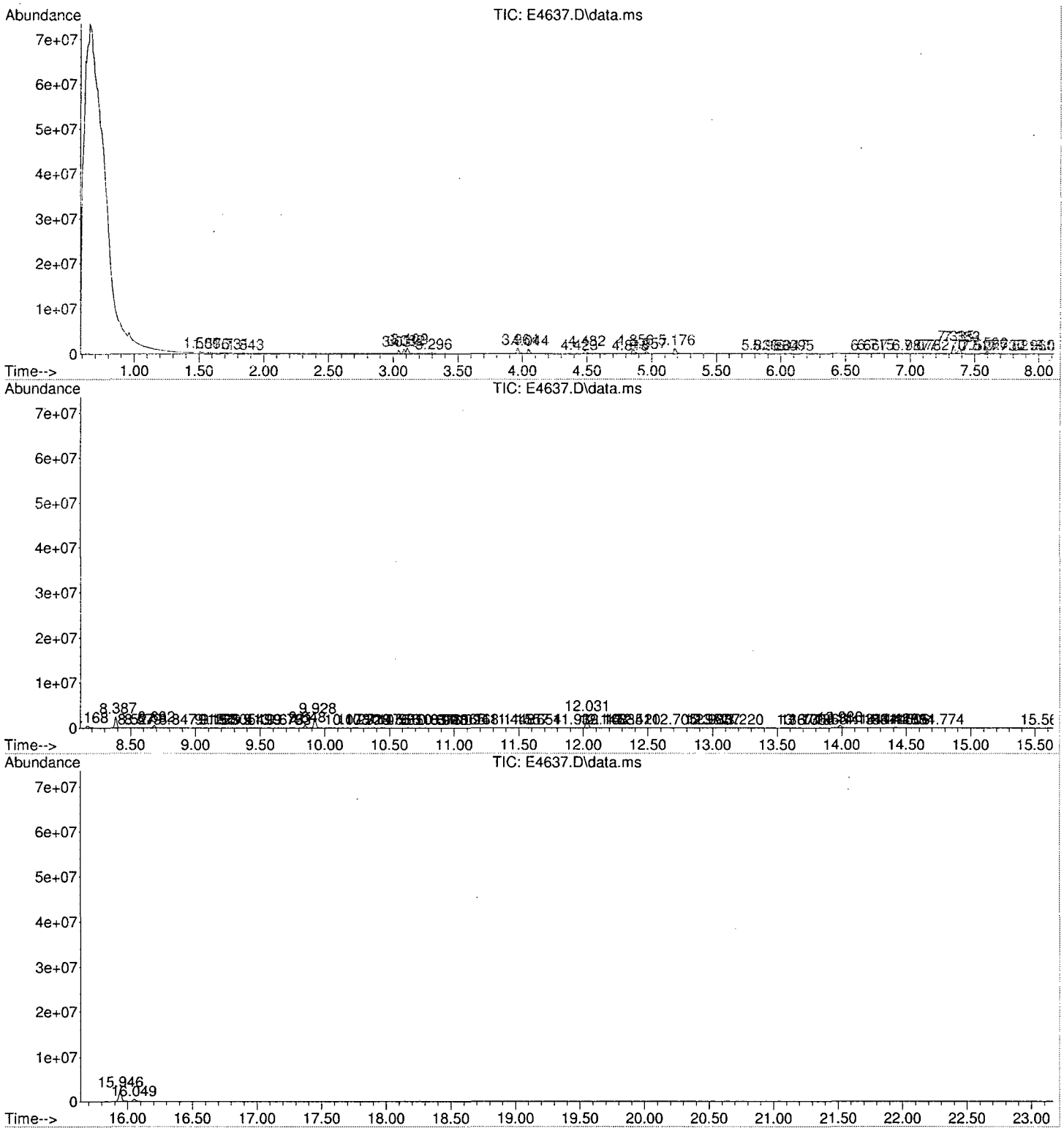
LSC Report - Integrated Chromatogram

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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

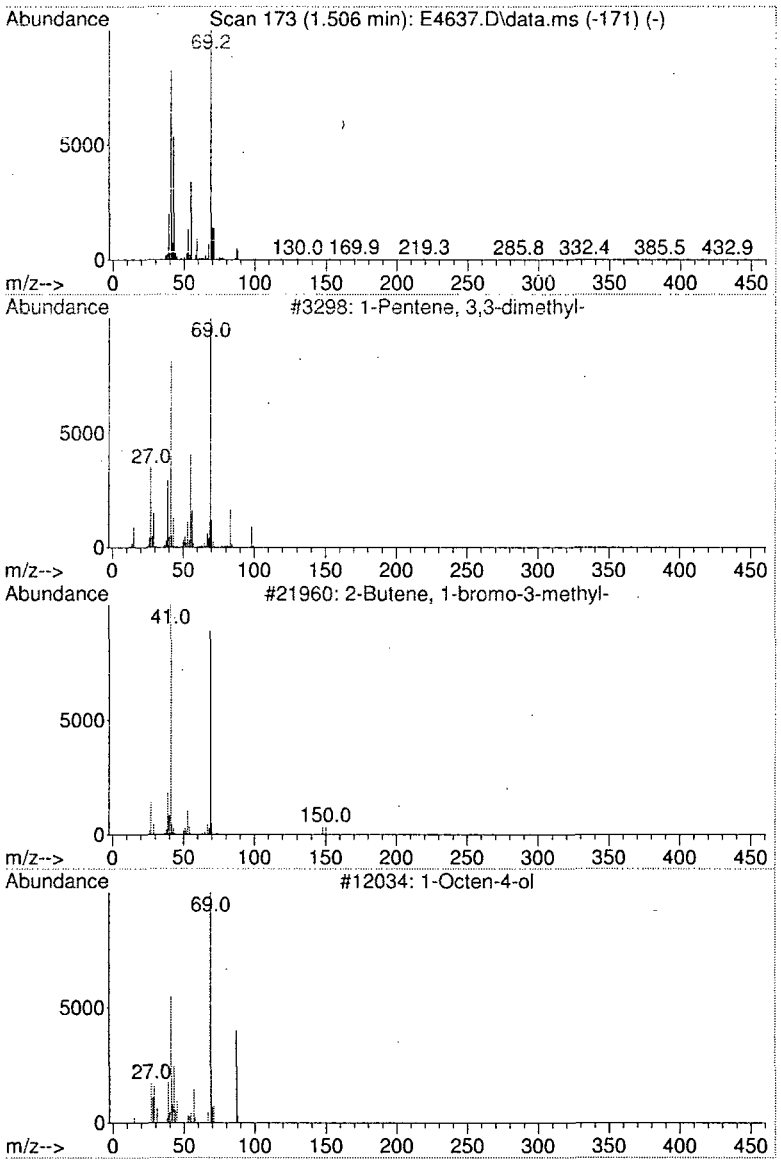
****

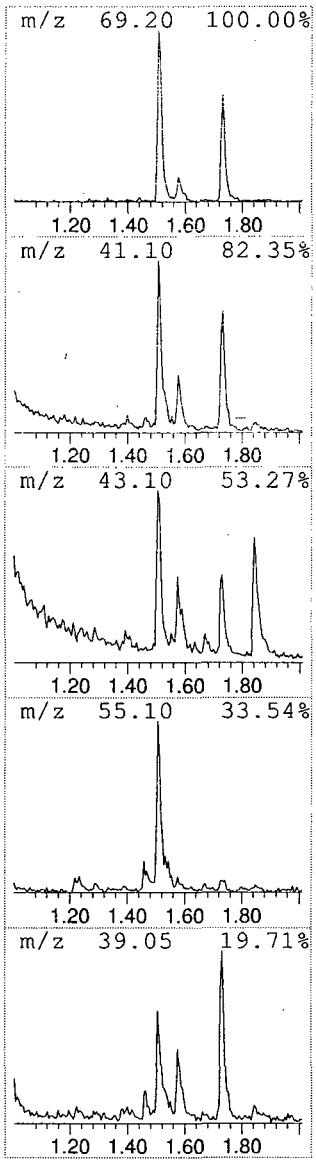
Peak Number 1 1-Pentene, 3,3-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.506	14.72 ug/mL	323527	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	59
2	2-Butene, 1-bromo-3-methyl-	148	C5H9Br	000870-63-3	42
3	1-Octen-4-ol	128	C8H16O	040575-42-6	39
4	1,5-Heptadiene, 3,6-dimethyl-	124	C9H16	034891-10-6	38
5	1,6-Octadiene, 3,5-dimethyl-, tr...	138	C10H18	074630-87-8	38

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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

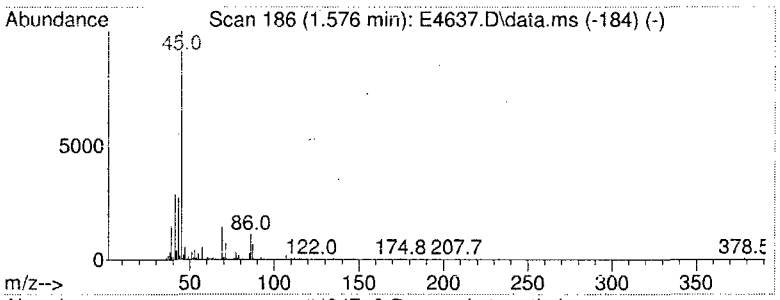
****

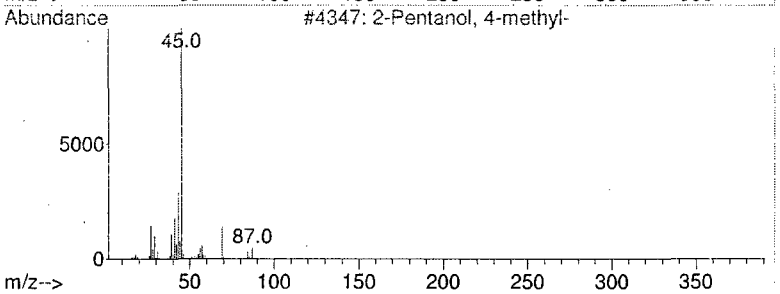
Peak Number 2 2-Pentanol, 4-methyl- Concentration Rank 2

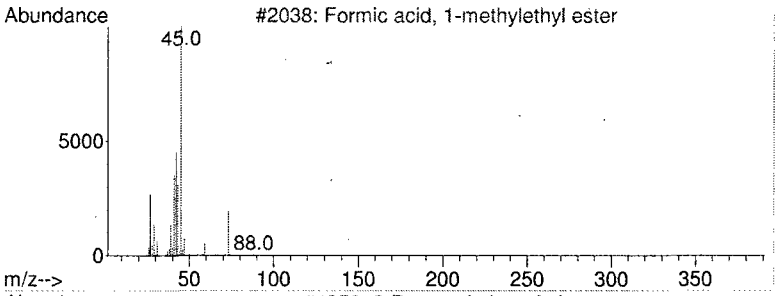
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.576	13.13 ug/mL	288747	1,4-Dichlorobenzene-d4	3.301

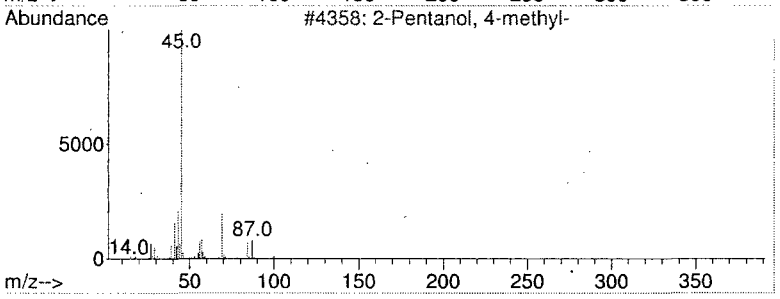
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	59
2	Formic acid, 1-methylethyl ester	88	C4H8O2	000625-55-8	53
3	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	45
4	Formic acid, 1-methylethyl ester	88	C4H8O2	000625-55-8	42
5	2-Hexanol	102	C6H14O	000626-93-7	39

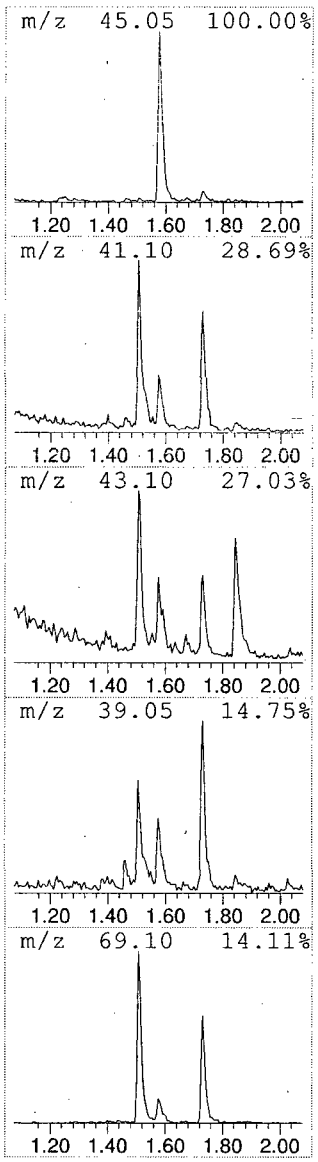
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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

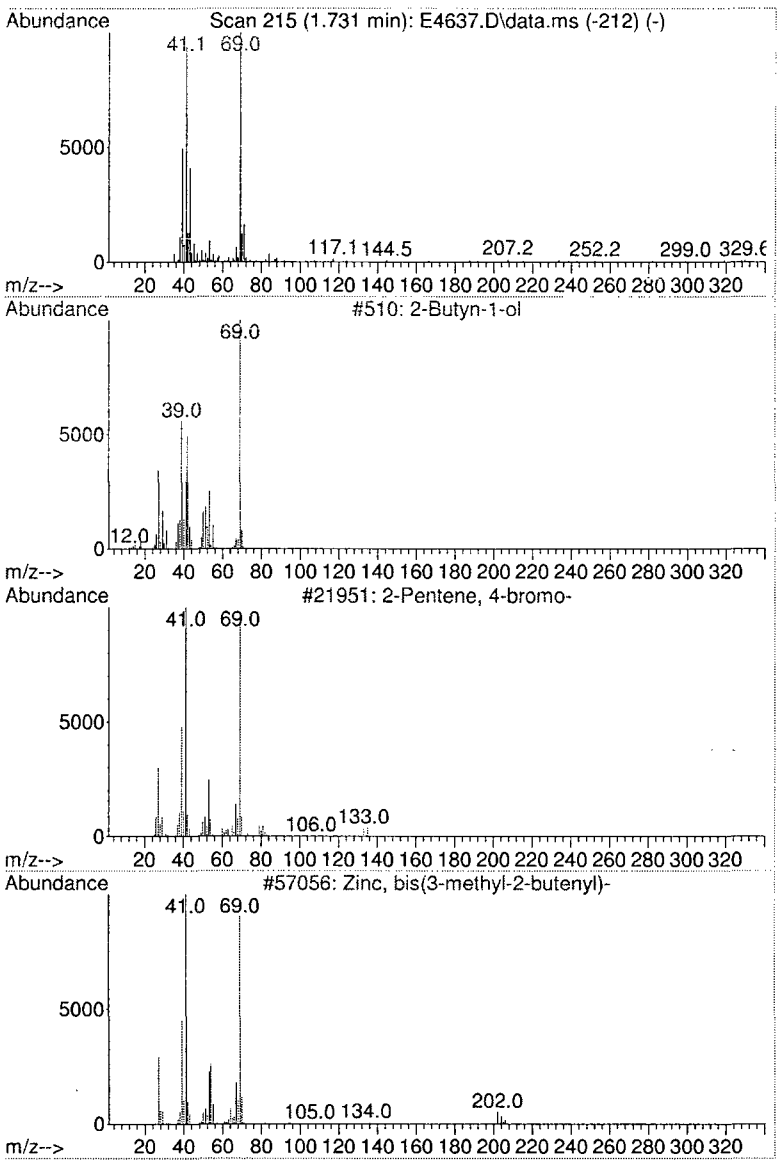
****

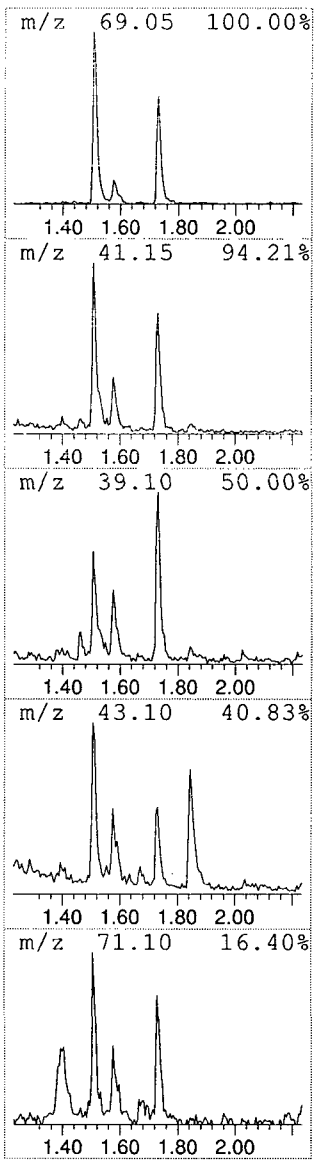
Peak Number 3 2-Butyn-1-ol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.731	10.42 ug/mL	229141	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butyn-1-ol	70	C4H6O	000764-01-2	64
2	2-Pentene, 4-bromo-	148	C5H9Br	001809-26-3	38
3	Zinc, bis(3-methyl-2-butenyl)-	202	C10H18Zn	066094-28-8	38
4	2-Butenoic acid, 4-nitrophenyl e...	207	C10H9NO4	014617-88-0	38
5	Cyclopropanecarboxylic acid, 2-e...	198	C12H22O2	103604-31-5	38

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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

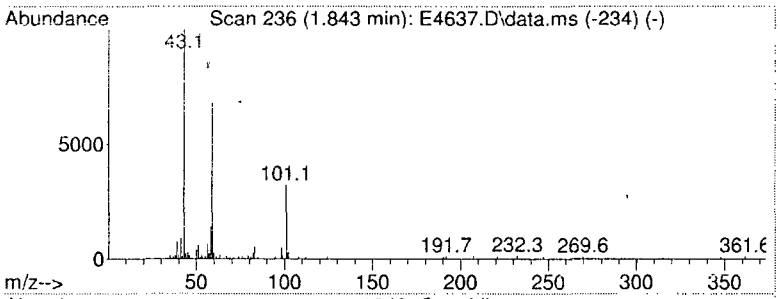
****

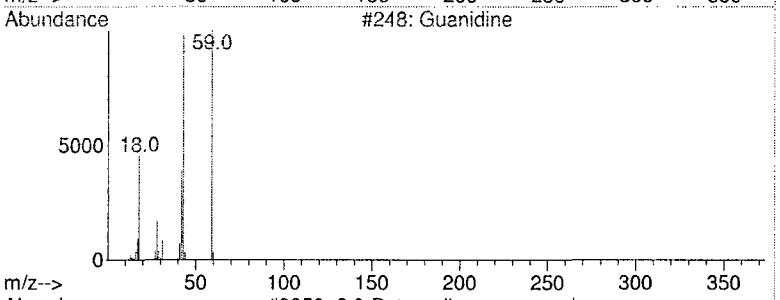
Peak Number 4 Guanidine Concentration Rank 4

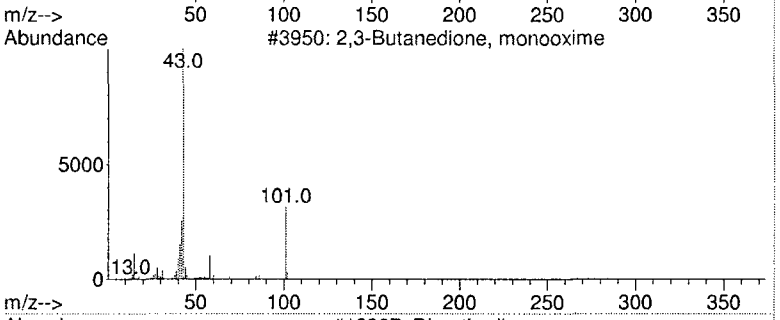
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.843	7.36 ug/mL	161769	1,4-Dichlorobenzene-d4	3.301

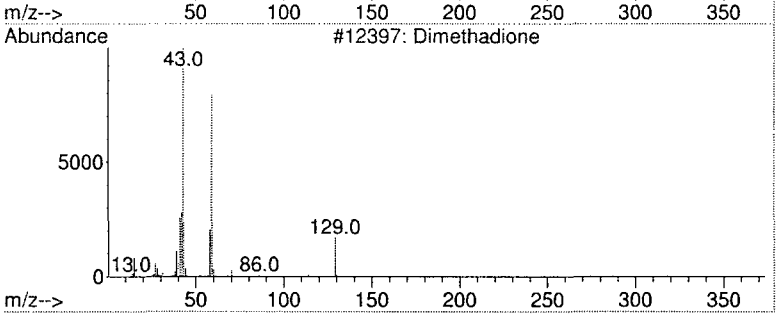
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Guanidine	59	CH5N3	000113-00-8	43
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	38
3	Dimethadione	129	C5H7NO3	000695-53-4	28
4	3-Tridecanol	200	C13H28O	010289-68-6	23
5	Ethyl dithioacetate	120	C4H8S2	000870-73-5	23

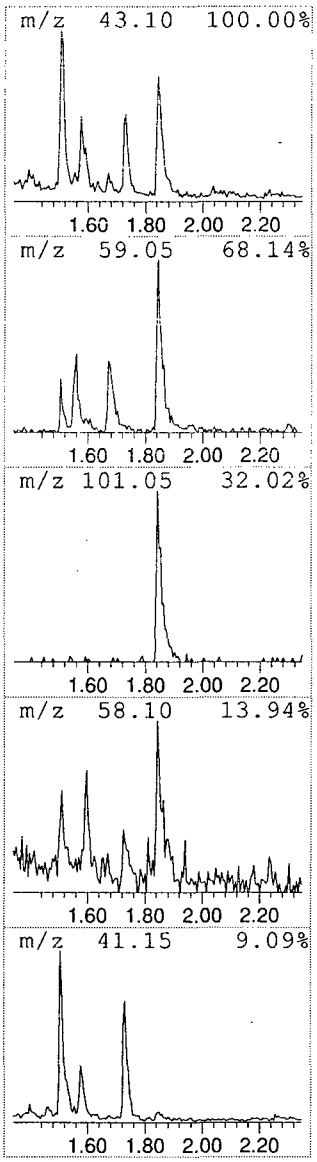
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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

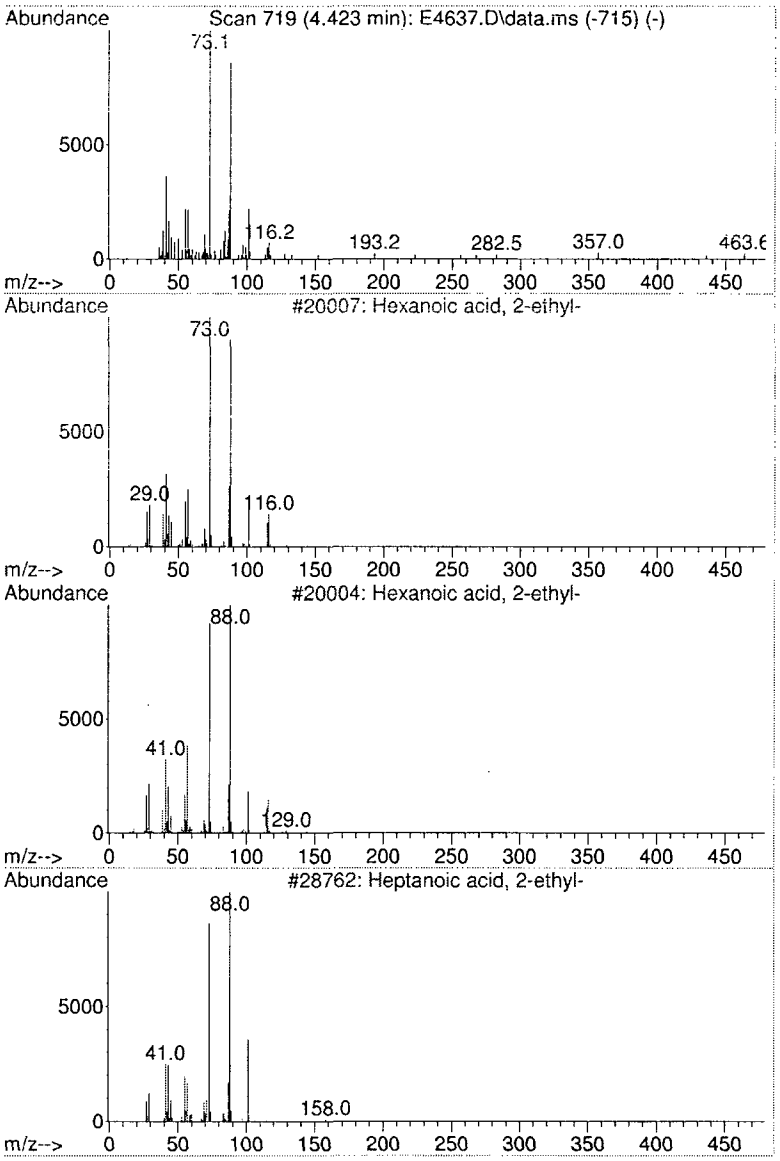
****

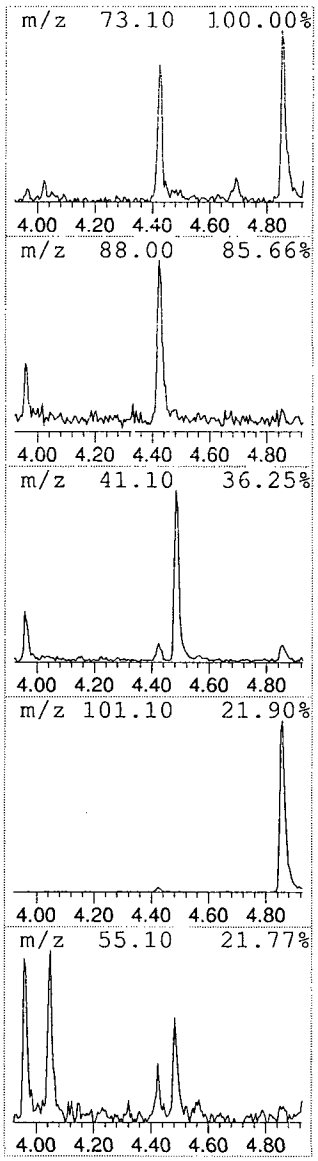
Peak Number 5 Hexanoic acid, 2-ethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.423	2.58 ug/mL	62741	Naphthalene-d8	4.957

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	59
2	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	56
3	Heptanoic acid, 2-ethyl-	158	C9H18O2	003274-29-1	56
4	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	45
5	Pentanoic acid, 2,4-dimethyl-, m...	144	C8H16O2	071672-33-8	45

Unknown





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4637.D
Acq On : 24 May 2012 19:24
Sample : 0015957-02
Misc : F5WC5 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 3
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:50:54 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
1-Pentene, 3,3-...	1.506	14.7	ug/mL	323527	1	3.301	439708	20.0
2-Pentanol, 4-m...	1.576	13.1	ug/mL	288747	1	3.301	439708	20.0
2-Butyn-1-ol	1.731	10.4	ug/mL	229141	1	3.301	439708	20.0
Guanidine	1.843	7.4	ug/mL	161769	1	3.301	439708	20.0
Hexanoic acid, ...	4.423	2.6	ug/mL	62741	2	4.957	486354	20.0

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4638.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4638.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo (a) anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.0	JB
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo (b) fluoranthene	5.0	U
207-08-9	Benzo (k) fluoranthene	5.0	U
50-32-8	Benzo (a) pyrene	5.0	U
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U
53-70-3	Dibenzo (a,h) anthracene	5.0	U
191-24-2	Benzo (g,h,i) perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F5WC6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0015957-03

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4638.D

Level: (LOW/MED) LOW Extraction: (Type): CONT

% Moisture: Decanted: (Y/N) Date Received: 05/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01 (1 3.296)	1.51	12	J
02		Unknown-02 (1 3.296)	1.58	9.8	J
03		Unknown-03 (1 3.296)	1.73	7.9	J
04		Unknown-04 (1 3.296)	1.83	10	J
05		Unknown-05 (1 3.296)	2.58	6.9	J
06		Unknown-06 (2 4.957)	4.42	2.9	JB
07		Unknown-07 (2 4.957)	5.58	3.1	J
08		Unknown-08 (2 4.957)	5.83	3.7	JB
09					
10					
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 : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

05/28/12

S. Vetkati
05/28/12

Quant Time: May 26 01:54:28 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	53611	20.0000 ug/mL	0.00
21) Naphthalene-d8	4.957	136	231920	20.0000 ug/mL	0.00
38) Acenaphthene-d10	7.597	164	160910	20.0000 ug/mL	0.00
66) Phenanthrene-d10	9.848	188	303801	20.0000 ug/mL	0.00
80) Chrysene-d12	13.986	240	305900	20.0000 ug/mL	0.00
88) Perylene-d12	16.049	264	279113	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	459693	37.90 ug/mL	0.00
Spiked Amount 40.000	Range 39 - 106		Recovery = 94.75%		
18) Bis(2-chloroethyl)ethe...	3.040	67	259102	38.51 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 105		Recovery = 96.28%		
19) 2-Chlorophenol-d4	3.109	132	415258	38.67 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 106		Recovery = 96.67%		
20) 4-Methylphenol-d8	3.958	113	333641	37.01 ug/mL	0.00
Spiked Amount 40.000	Range 25 - 111		Recovery = 92.52%		
22) Nitrobenzene-d5	4.044	128	212972	43.22 ug/mL	0.00
Spiked Amount 40.000	Range 43 - 108		Recovery = 108.05%#		
35) 2-Nitrophenol-d4	4.482	143	235394	42.91 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 108		Recovery = 107.27%		
36) 2,4-Dichlorophenol-d3	4.856	165	362019	39.56 ug/mL	0.00
Spiked Amount 40.000	Range 37 - 105		Recovery = 98.90%		
37) 4-Chloroaniline-d4	5.182	131	240192	30.61 ug/mL	0.00
Spiked Amount 40.000	Range 1 - 145		Recovery = 76.53%		
62) Acenaphthylene-d8	7.335	160	1214714	34.79 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 107		Recovery = 86.98%		
63) 4-Nitrophenol-d4	8.168	143	171702	35.06 ug/mL	0.00
Spiked Amount 40.000	Range 33 - 116		Recovery = 87.65%		
64) Dimethylphthalate-d6	7.383	166	1038562	38.39 ug/mL	0.00
Spiked Amount 40.000	Range 47 - 114		Recovery = 95.97%		
65) Fluorene-d10	8.382	176	803148	36.80 ug/mL	0.00
Spiked Amount 40.000	Range 42 - 111		Recovery = 92.00%		
78) 4,6-Dinitro-2-methylph...	8.682	200	125809	26.31 ug/mL	0.00
Spiked Amount 40.000	Range 22 - 104		Recovery = 65.77%		
79) Anthracene-d10	9.922	188	1325899	35.37 ug/mL	0.00
Spiked Amount 40.000	Range 44 - 110		Recovery = 88.42%		
87) Pyrene-d10	12.031	212	1565430	39.11 ug/mL	0.00
Spiked Amount 40.000	Range 52 - 119		Recovery = 97.78%		
96) Benzo (a) pyrene-d12	15.940	264	1256177	39.40 ug/mL	0.00
Spiked Amount 40.000	Range 32 - 121		Recovery = 98.50%		
Target Compounds					Qvalue
86) Bis(2-ethylhexyl)phtha...	14.420	149	59298	2.0410 ug/mL	97

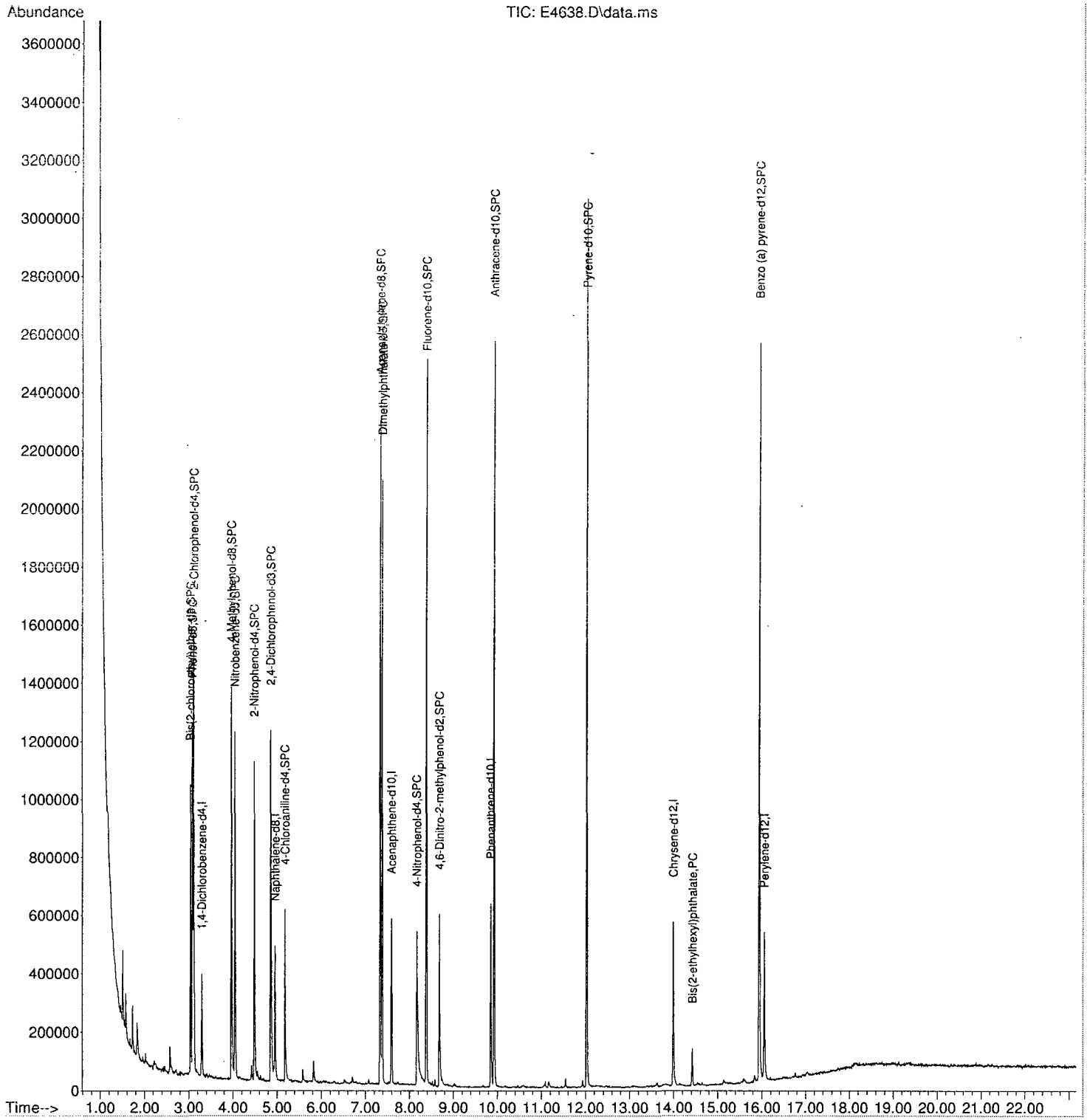
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

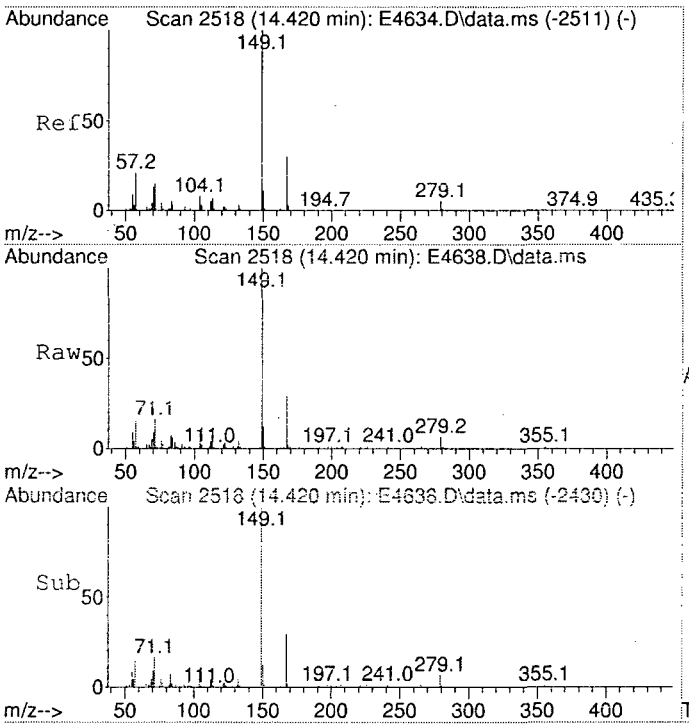
Quant Time: May 26 01:54:28 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

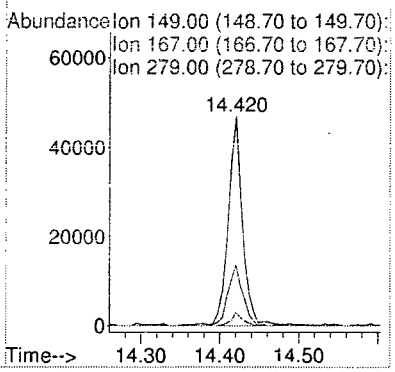
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration



#86
Bis(2-ethylhexyl)phthalate
Concen: 2.0410 ug/mL
RT: 14.42 min Scan# 2518
Delta R.T. 0.00 min
Lab File: E4638.D
Acq: 24 May 2012 19:55

Tgt Ion:149 Resp: 59298

Ion	Ratio	Lower	Upper
149	100		
167	29.7	10.2	50.2
279	4.9	0.0	28.1



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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: E4638.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.506	171	173	184	rVV	264229	274220	7.25%	0.726%
2	1.576	184	186	203	rVB	169101	215661	5.70%	0.571%
3	1.731	212	215	221	rVB	159360	172823	4.57%	0.458%
4	1.832	231	234	246	rVB3	126983	229727	6.07%	0.609%
5	2.575	371	373	387	rVB4	93224	151301	4.00%	0.401%
6	3.040	457	460	465	rBV	988967	950554	25.13%	2.518%
7	3.082	465	468	470	rVV	1201595	1151442	30.44%	3.050%
8	3.109	470	473	483	rVB	1504843	1835890	48.54%	4.863%
9	3.296	503	508	518	rVB2	344969	439654	11.62%	1.165%
10	3.392	524	526	527	rBV2	12013	7284	0.19%	0.019%
11	3.958	629	632	645	rBV	1348018	1644763	43.49%	4.357%
12	4.044	645	648	662	rVB	1195653	1400161	37.02%	3.709%
13	4.423	715	719	726	rVB3	50963	77839	2.06%	0.206%
14	4.482	726	730	742	rBV	1095595	1257879	33.26%	3.332%
15	4.557	742	744	754	rVV5	30601	41800	1.11%	0.111%
16	4.621	754	756	760	rVB4	16983	12674	0.34%	0.034%
17	4.856	796	800	812	rBV	1209723	1719618	45.47%	4.555%
18	4.957	815	819	830	rVB	461789	539324	14.26%	1.429%
19	5.182	857	861	880	rBV	592210	773135	20.44%	2.048%
20	5.556	929	931	932	rBV2	6455	4663	0.12%	0.012%
21	5.577	932	935	949	rVB7	46147	84332	2.23%	0.223%
22	5.684	952	955	957	rBV4	8899	7288	0.19%	0.019%
23	5.828	977	982	988	rBV3	69928	100942	2.67%	0.267%
24	6.106	1031	1034	1043	rVB9	8834	14552	0.38%	0.039%
25	6.389	1085	1087	1092	rVB6	7349	8494	0.22%	0.022%
26	6.528	1110	1113	1122	rBV9	13429	23359	0.62%	0.062%
27	6.672	1138	1140	1143	rBV3	5972	4736	0.13%	0.013%
28	6.710	1144	1147	1150	rVB3	20610	22396	0.59%	0.059%
29	7.009	1199	1203	1206	rBV6	7163	5850	0.15%	0.015%
30	7.078	1212	1216	1219	rBV5	15682	17386	0.46%	0.046%
31	7.335	1259	1264	1269	rBV	2290813	2589063	68.46%	6.858%
32	7.383	1269	1273	1293	rVB	2078953	2368537	62.63%	6.274%
33	7.597	1308	1313	1323	rVB	566989	653539	17.28%	1.731%
34	7.735	1336	1339	1345	rVB6	11086	19310	0.51%	0.051%
35	8.168	1416	1420	1453	rBV	523942	1133687	29.98%	3.003%
36	8.387	1455	1461	1471	rVB	2490464	3118779	82.46%	8.261%
37	8.494	1479	1481	1483	rVB3	8739	7388	0.20%	0.020%
38	8.528	1483	1487	1491	rVB4	19882	26516	0.70%	0.070%
39	8.579	1491	1496	1501	rBV5	25517	38739	1.02%	0.103%
40	8.682	1510	1514	1523	rBV	589935	791896	20.94%	2.098%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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	8.899	1551	1552	1556	rBV4	5497	5385	0.14%	0.014%
42	9.025	1571	1574	1578	rVB4	9617	9235	0.24%	0.024%
43	9.139	1592	1594	1597	rVB2	6812	6202	0.16%	0.016%
44	9.219	1606	1608	1612	rVB4	3379	4539	0.12%	0.012%
45	9.265	1612	1616	1619	rBV3	4349	7934	0.21%	0.021%
46	9.362	1630	1633	1634	rBV	5075	4538	0.12%	0.012%
47	9.602	1673	1675	1678	rVB3	4337	4490	0.12%	0.012%
48	9.682	1685	1689	1694	rVB5	8990	12739	0.34%	0.034%
49	9.774	1702	1705	1708	rVB6	4452	5900	0.16%	0.016%
50	9.848	1713	1718	1726	rBV	630094	798019	21.10%	2.114%
51	9.922	1726	1731	1743	rVB	2561853	3231620	85.45%	8.560%
52	10.185	1772	1777	1780	rVB3	7012	11204	0.30%	0.030%
53	10.231	1782	1785	1789	rVB3	4860	5752	0.15%	0.015%
54	10.334	1800	1803	1806	rBV5	4749	7183	0.19%	0.019%
55	10.368	1806	1809	1814	rVB5	3865	6352	0.17%	0.017%
56	10.465	1824	1826	1827	rBV2	8568	5467	0.14%	0.014%
57	10.557	1839	1842	1844	rBV3	6183	5868	0.16%	0.016%
58	10.597	1844	1849	1854	rVB7	7362	14020	0.37%	0.037%
59	11.071	1927	1932	1933	rBV5	8068	13015	0.34%	0.034%
60	11.094	1933	1936	1943	rVB	21979	27780	0.73%	0.074%
61	11.168	1946	1949	1960	rVB6	20459	42047	1.11%	0.111%
62	11.425	1990	1994	1996	rBV3	3238	4314	0.11%	0.011%
63	11.448	1996	1998	2003	rVB3	7024	10312	0.27%	0.027%
64	11.551	2012	2016	2022	rVB3	31765	41048	1.09%	0.109%
65	11.631	2026	2030	2031	rBV2	4654	5205	0.14%	0.014%
66	11.648	2031	2033	2036	rVV2	4877	4280	0.11%	0.011%
67	11.728	2045	2047	2051	rBV4	4055	4957	0.13%	0.013%
68	11.842	2062	2067	2071	rBV6	5194	9543	0.25%	0.025%
69	11.905	2075	2078	2080	rBV4	4570	6702	0.18%	0.018%
70	11.934	2080	2083	2089	rVB2	25386	35969	0.95%	0.095%
71	12.031	2094	2100	2114	rBV	3055585	3782087	100.00%	10.018%
72	12.237	2133	2136	2137	rBV2	6024	4387	0.12%	0.012%
73	12.368	2157	2159	2163	rVB5	5237	4652	0.12%	0.012%
74	12.465	2173	2176	2177	rBV4	4458	4426	0.12%	0.012%
75	12.700	2213	2217	2221	rBV5	5008	8834	0.23%	0.023%
76	12.900	2250	2252	2255	rBV4	5073	4302	0.11%	0.011%
77	13.066	2279	2281	2284	rVB4	7148	4877	0.13%	0.013%
78	13.100	2286	2287	2294	rVB5	6292	8483	0.22%	0.022%
79	13.266	2315	2316	2320	rVB3	4512	4334	0.11%	0.011%
80	13.500	2355	2357	2358	rVB2	8869	5045	0.13%	0.013%
81	13.517	2358	2360	2363	rBV4	5503	6381	0.17%	0.017%
82	13.614	2368	2377	2379	rBV9	12243	21930	0.58%	0.058%
83	13.757	2399	2402	2404	rBV4	7096	5617	0.15%	0.015%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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	13.929	2429	2432	2433	rVB3	6354	5293	0.14%	0.014%
85	13.986	2436	2442	2460	rVV	561732	828680	21.91%	2.195%
86	14.140	2465	2469	2472	rVB6	8089	11174	0.30%	0.030%
87	14.334	2501	2503	2507	rVB4	4604	4661	0.12%	0.012%
88	14.420	2512	2518	2526	rBV	128739	178139	4.71%	0.472%
89	14.540	2536	2539	2543	rBV6	9730	13760	0.36%	0.036%
90	14.574	2543	2545	2551	rVB7	10122	13137	0.35%	0.035%
91	14.649	2551	2558	2563	rBV8	11678	24855	0.66%	0.066%
92	14.763	2576	2578	2581	rVB4	6026	4874	0.13%	0.013%
93	15.054	2627	2629	2630	rVB2	6915	4425	0.12%	0.012%
94	15.106	2636	2638	2639	rBV2	7595	5072	0.13%	0.013%
95	15.135	2639	2643	2645	rBV5	14607	18976	0.50%	0.050%
96	15.580	2719	2721	2722	rBV2	10230	4531	0.12%	0.012%
97	15.792	2756	2758	2760	rVB3	8848	6246	0.17%	0.017%
98	15.837	2762	2766	2770	rVV7	22013	39159	1.04%	0.104%
99	15.940	2778	2784	2796	rBV	2534539	3647159	96.43%	9.661%
100	16.049	2798	2803	2816	rVB	501079	788442	20.85%	2.088%

Sum of corrected areas: 37752758

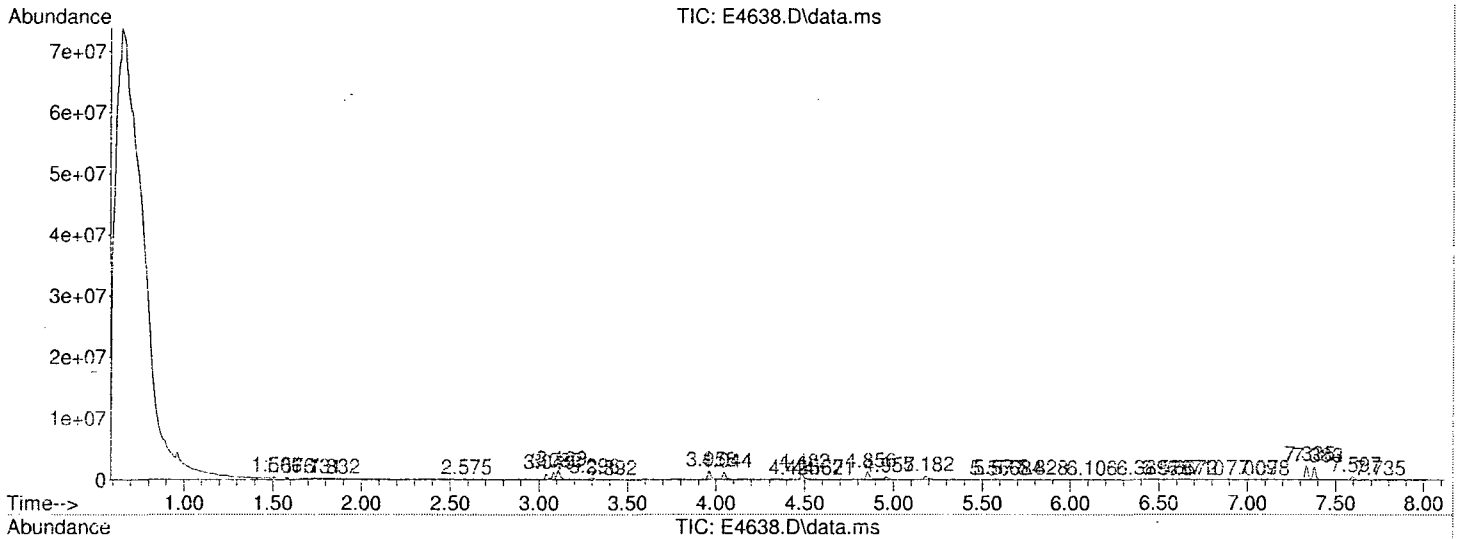
LSC Report - Integrated Chromatogram

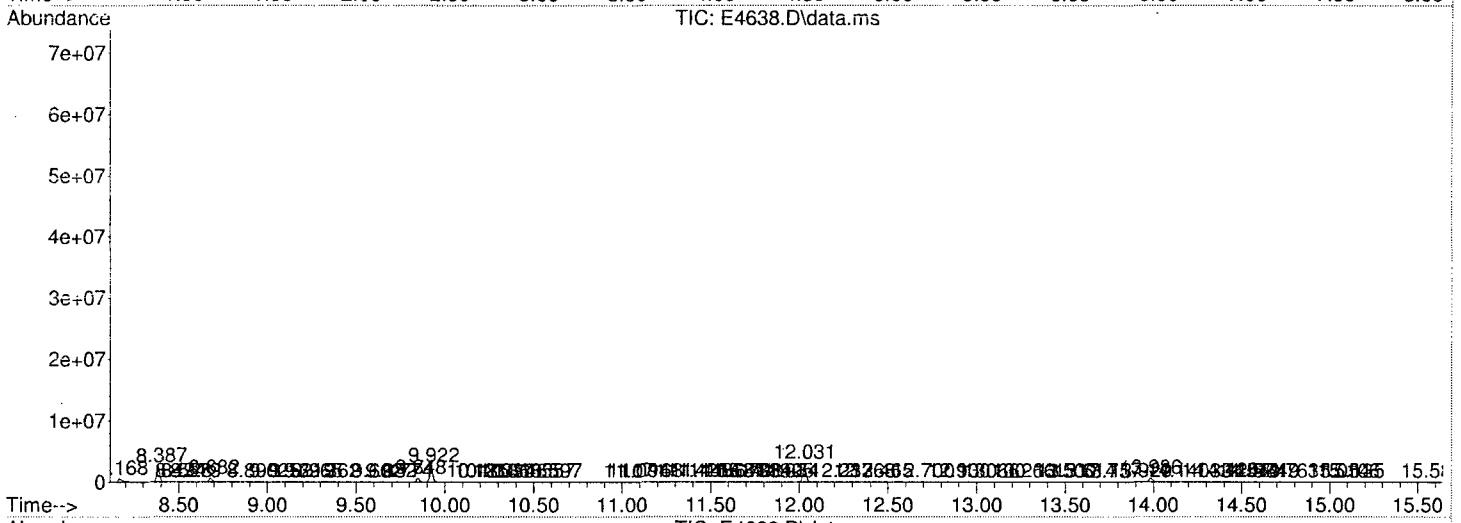
Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

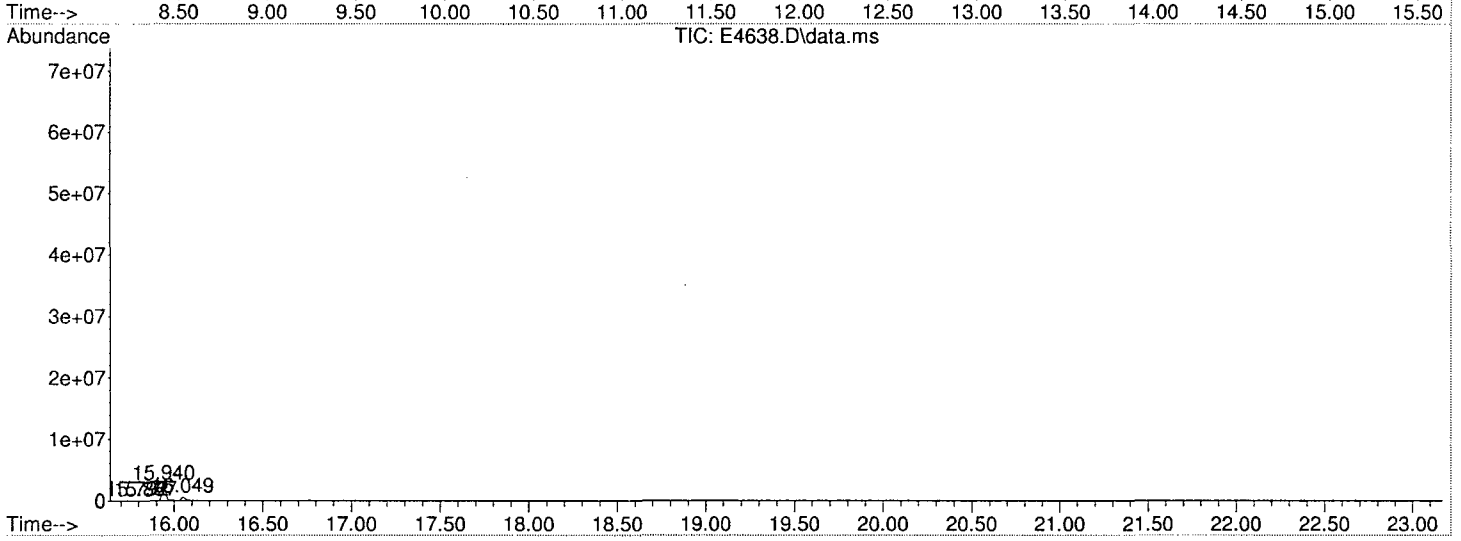
Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

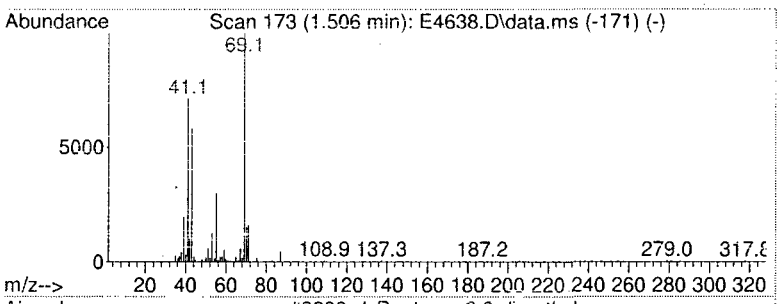
****

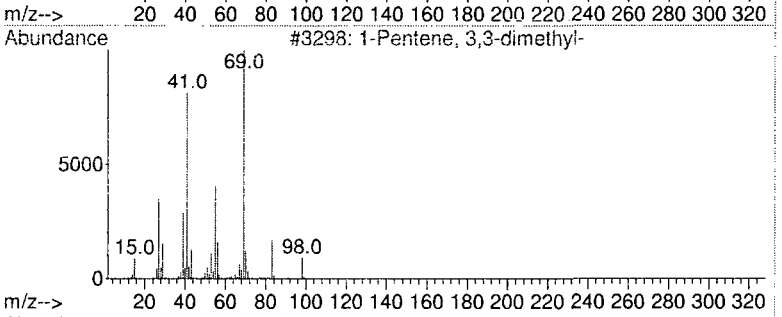
Peak Number 1 1-Pentene, 3,3-dimethyl- Concentration Rank 1

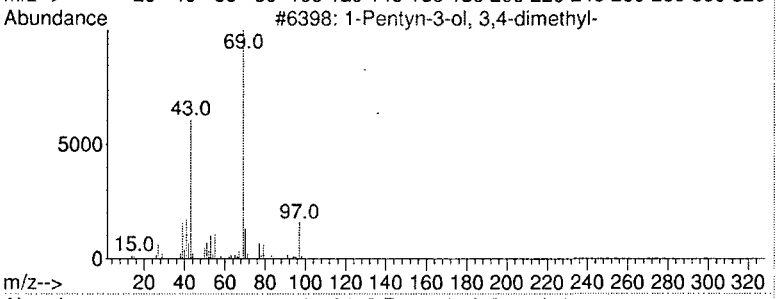
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.506	12.47 ug/mL	274220	1,4-Dichlorobenzene-d4	3.296

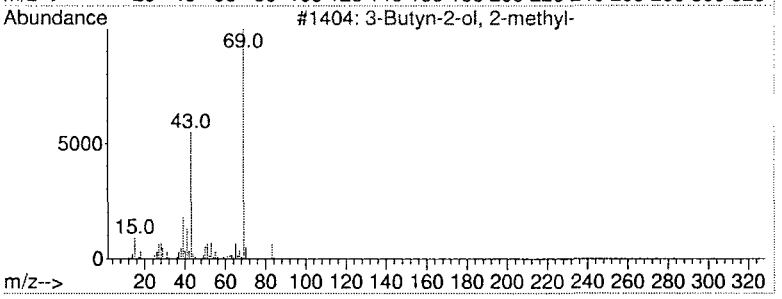
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	59
2	1-Pentyn-3-ol, 3,4-dimethyl-	112	C7H12O	001482-15-1	50
3	3-Butyn-2-ol, 2-methyl-	84	C5H8O	000115-19-5	42
4	5-Hexadecanol	242	C16H34O	021078-87-5	39
5	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	39

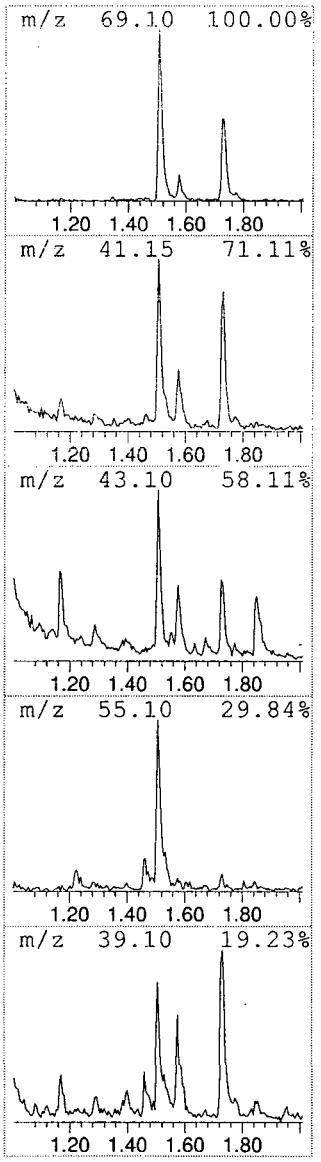
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

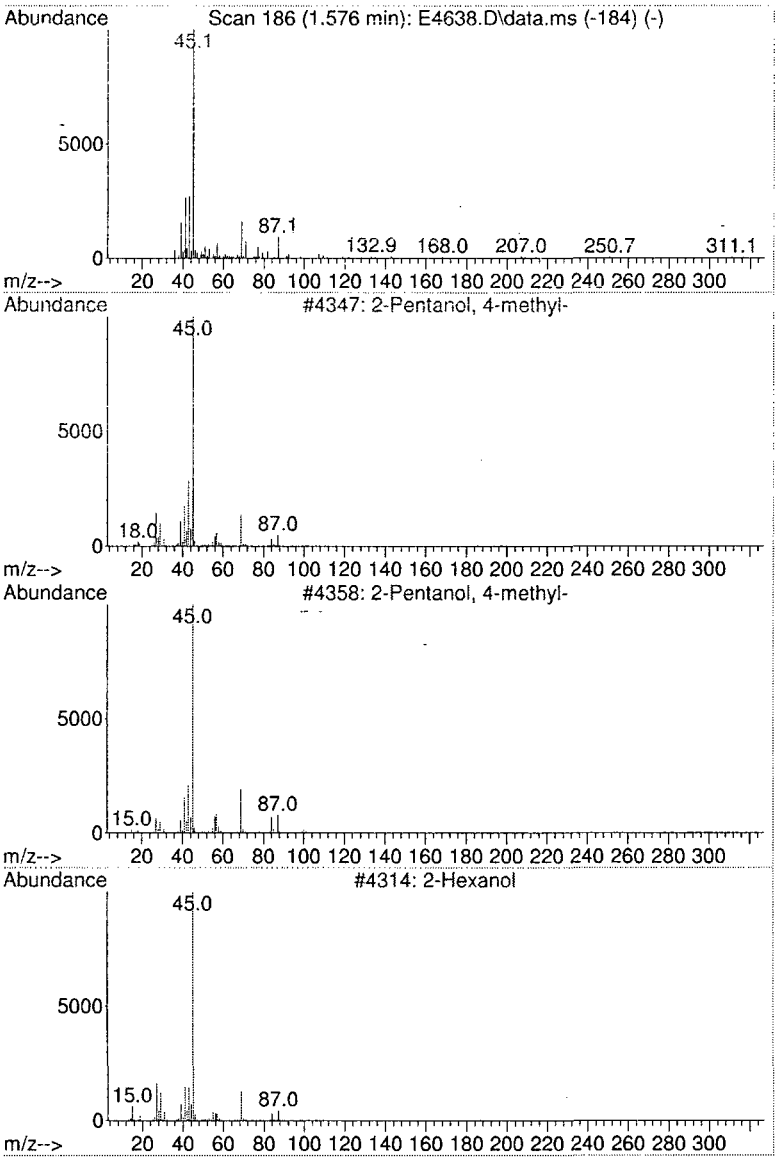
****

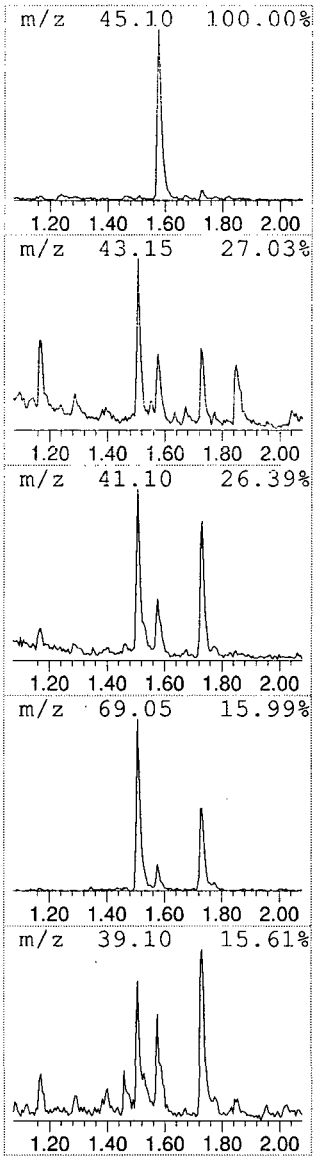
Peak Number 2 2-Pentanol, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.576	9.81 ug/mL	215661	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	64
2	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	50
3	2-Hexanol	102	C6H14O	000626-93-7	40
4	2-Hexanol	102	C6H14O	000626-93-7	40
5	Ether, 2-chloro-1-methylethyl is...	136	C6H13ClO	098277-76-0	38

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

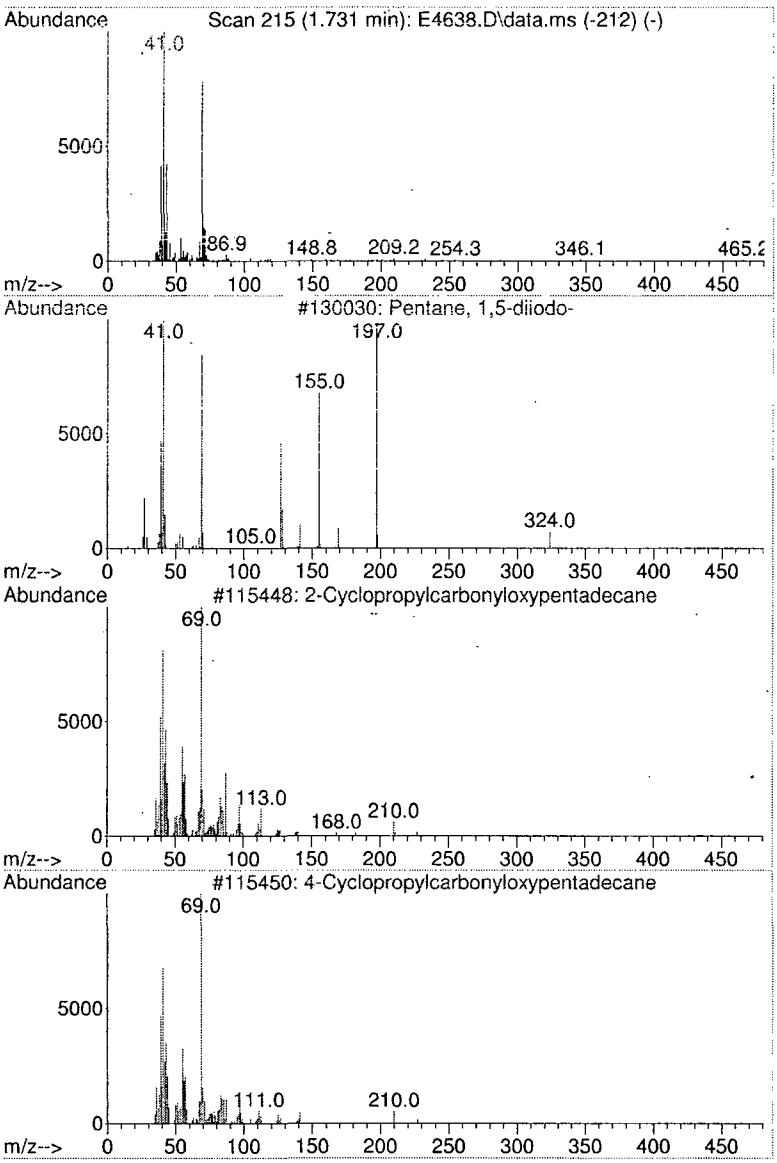
****

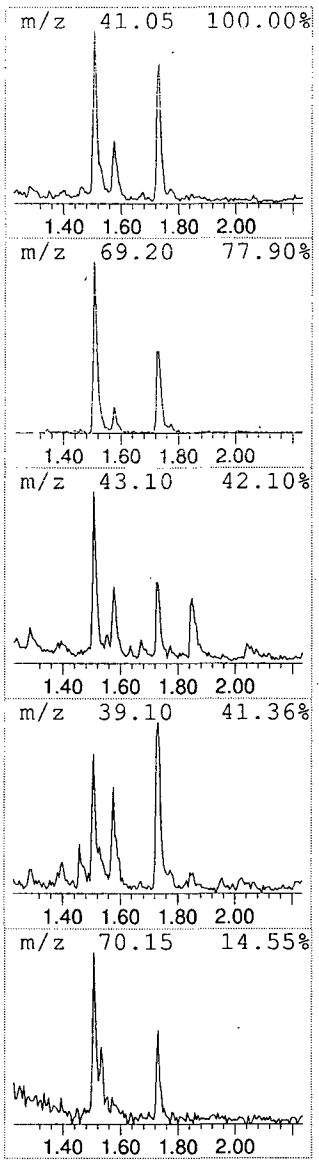
Peak Number 3 Pentane, 1,5-diiodo- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.731	7.86 ug/mL	172823	1,4-Dichlorobenzene-d4	3.296

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 1,5-diiodo-	324	C5H10I2	000628-77-3	64
2	2-Cyclopropylcarbonyloxypentadecane	296	C19H36O2	1000245-58-9	56
3	4-Cyclopropylcarbonyloxypentadecane	296	C19H36O2	1000245-59-1	56
4	Cyclopropanecarboxylic acid, 2-p...	156	C9H16O2	1000278-80-0	50
5	3-Cyclopropylcarbonyloxytridecane	268	C17H32O2	1000245-58-4	40

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

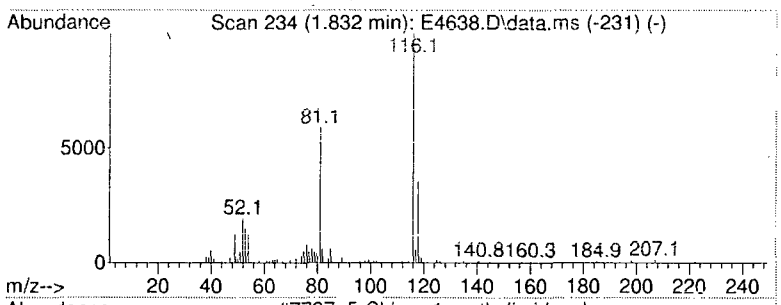
****

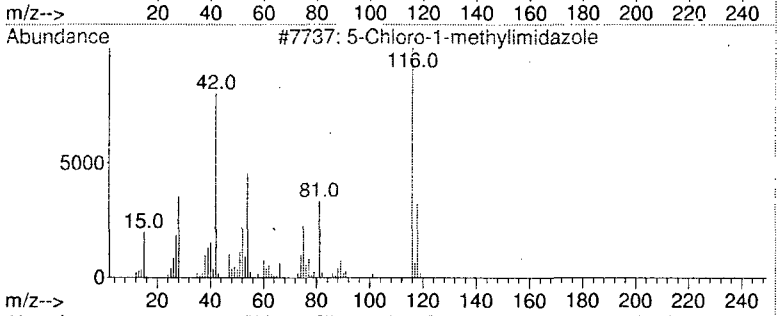
Peak Number 4 5-Chloro-1-methylimidazole Concentration Rank 2

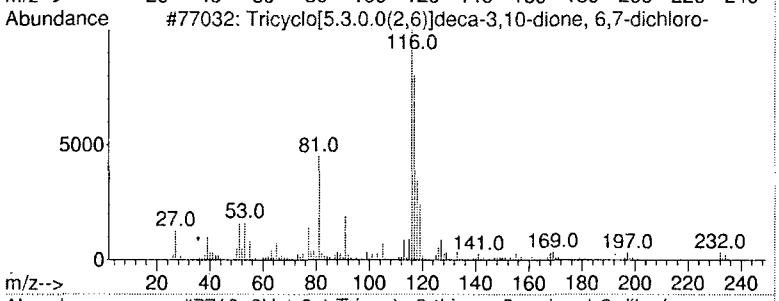
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.832	10.45 ug/mL	229727	1,4-Dichlorobenzene-d4	3.296

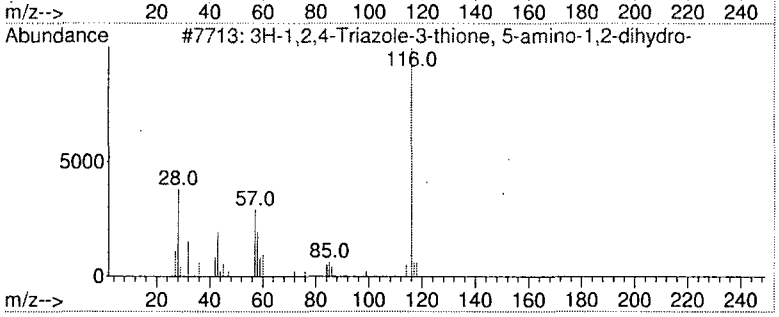
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Chloro-1-methylimidazole	116	C4H5ClN2	000872-49-1	32
2	Tricyclo[5.3.0.0(2,6)]deca-3,10-...	232	C10H10Cl2O2	1000160-07-7	17
3	3H-1,2,4-Triazole-3-thione, 5-am...	116	C2H4N4S	016691-43-3	16
4	3H-1,2,4-Triazole-3-thione, 5-am...	116	C2H4N4S	016691-43-3	16
5	Pyrimidine,2,4-difluoro-	116	C4H2F2N2	002802-61-1	9

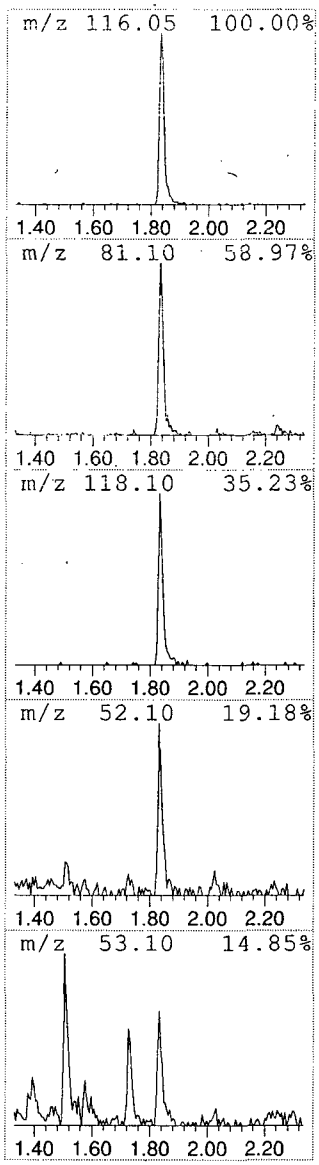
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

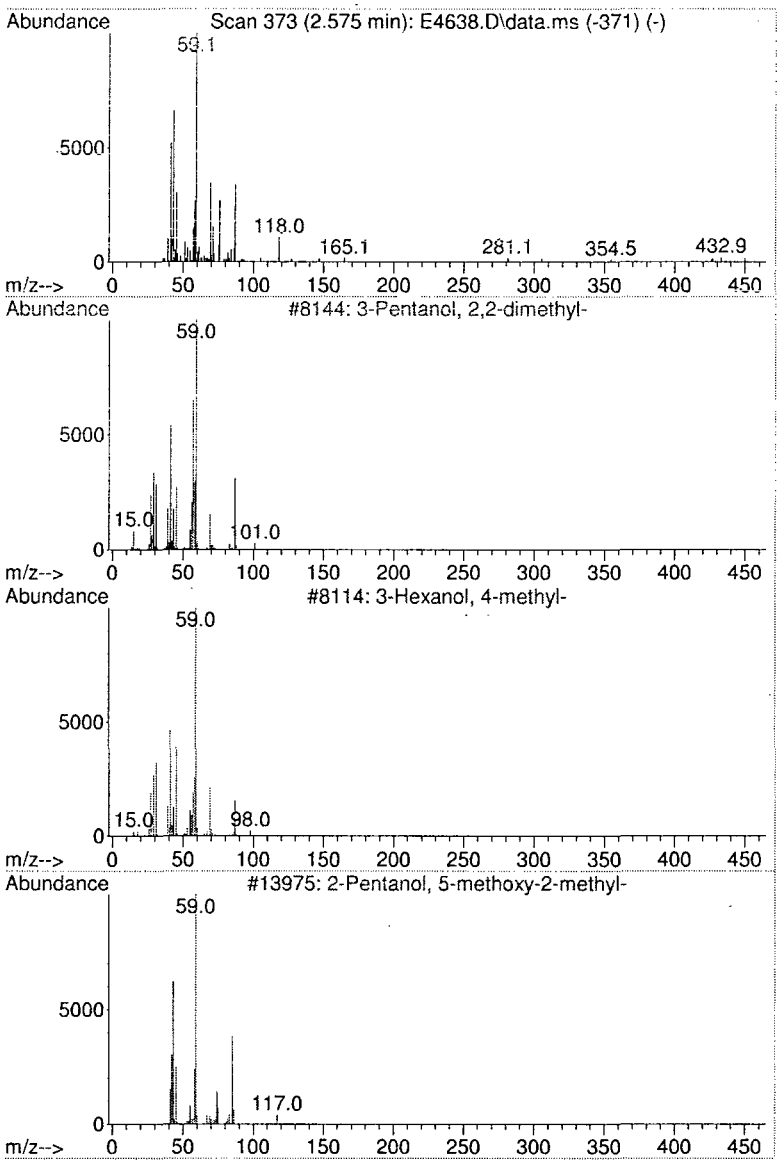
****

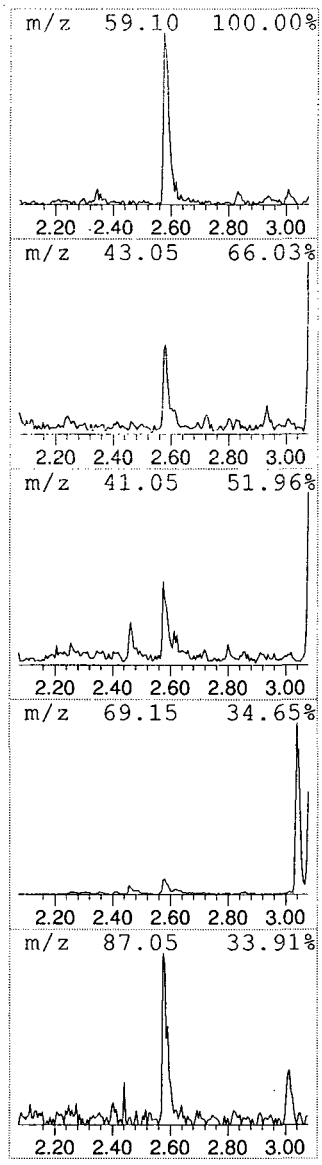
Peak Number 5 3-Pentanol, 2,2-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.575	6.88 ug/mL	151301	1,4-Dichlorobenzene-d4	3.296

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pentanol, 2,2-dimethyl-	116	C7H16O	003970-62-5	53
2	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	50
3	2-Pentanol, 5-methoxy-2-methyl-	132	C7H16O2	055724-04-4	47
4	3-Pentanol, 2-methyl-	102	C6H14O	000565-67-3	38
5	N,N-Dimethylformamide-di-t-butyl...	203	C11H25NO2	036805-97-7	38

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

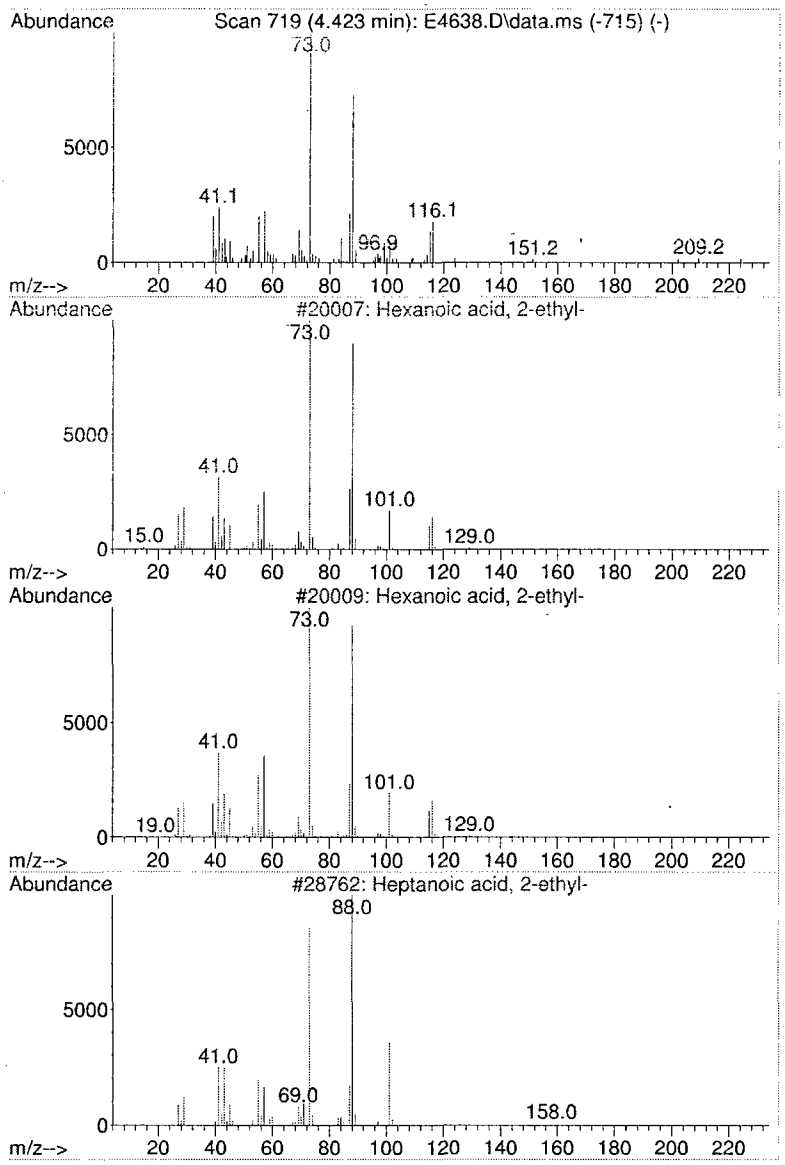
****

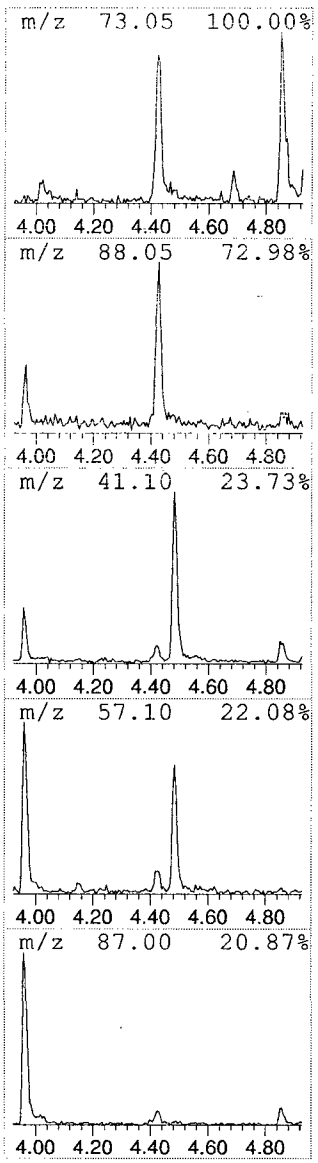
Peak Number 6 Hexanoic acid, 2-ethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.423	2.89 ug/mL	77839	Naphthalene-d8	4.957

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	50
2	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	50
3	Heptanoic acid, 2-ethyl-	158	C9H18O2	003274-29-1	47
4	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	42
5	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	36

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

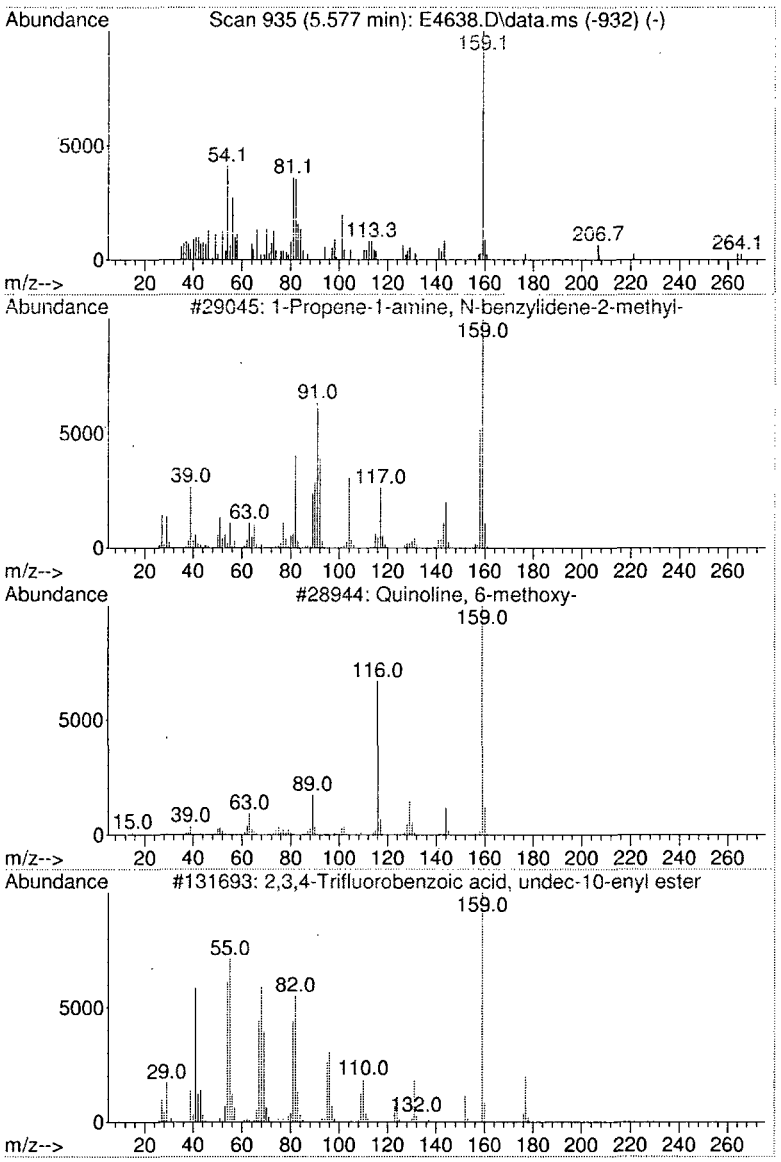
****

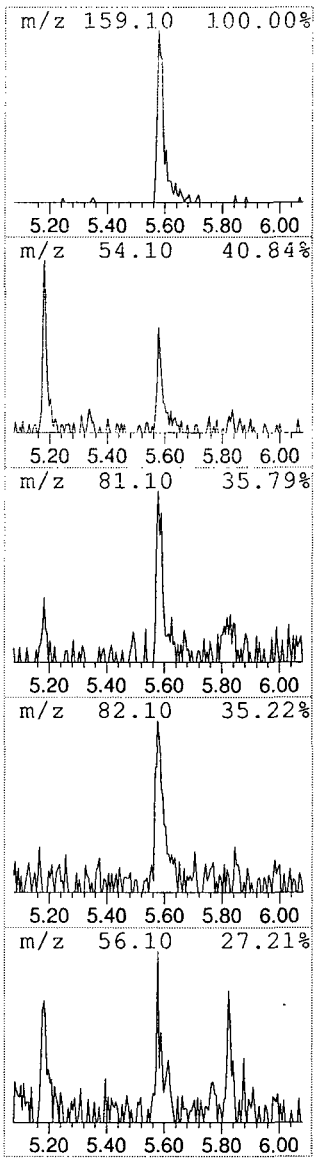
Peak Number 7 1-Propene-1-amine, N-benzyl... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.577	3.13 ug/mL	84332	Naphthalene-d8	4.957

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene-1-amine, N-benzylidene...	159	C11H13N	039575-55-8	38
2	Quinoline, 6-methoxy-	159	C10H9NO	005263-87-6	35
3	2,3,4-Trifluorobenzoic acid, und...	328	C18H23F3O2	1000280-45-0	35
4	4-Amino-1-naphthol	159	C10H9NO	002834-90-4	30
5	1H-Indene, 2,3-dihydro-1,1,4,6-t...	174	C13H18	000941-60-6	27

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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

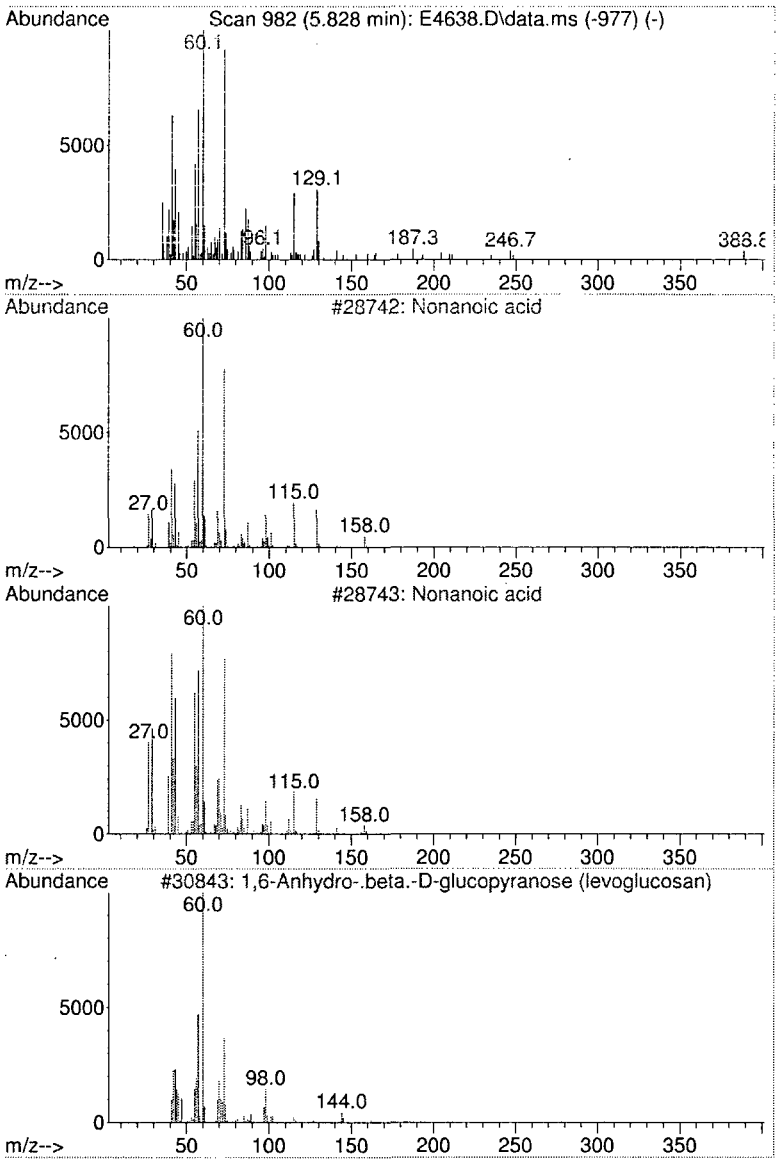
****

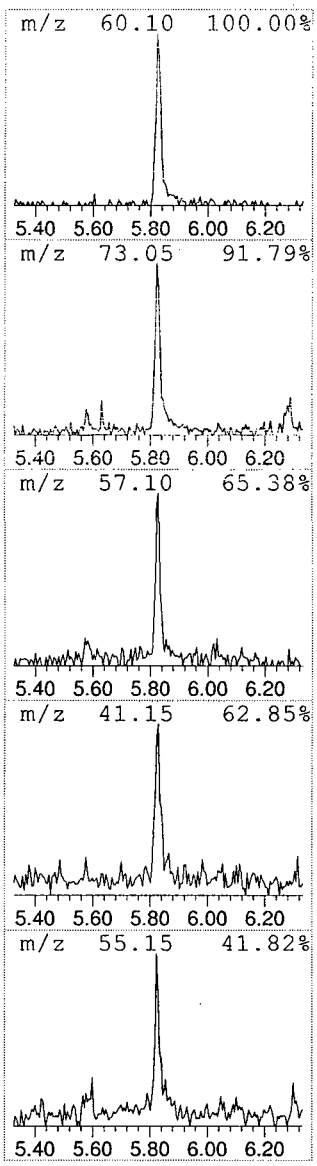
Peak Number 8 Nonanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.828	3.74 ug/mL	100942	Naphthalene-d8	4.957

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonanoic acid	158	C9H18O2	000112-05-0	43
2	Nonanoic acid	158	C9H18O2	000112-05-0	37
3	1,6-Anhydro-.beta.-D-glucopyrano...	162	C6H10O5	000498-07-7	37
4	Tridecanoic acid	214	C13H26O2	000638-53-9	32
5	Octanoic Acid	144	C8H16O2	000124-07-2	25

Unknown





Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4638.D
Acq On : 24 May 2012 19:55
Sample : 0015957-03
Misc : F5WC6 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 4
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:54:28 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
1-Pentene, 3,3-...	1.506	12.5	ug/mL	274220	1	3.296	439654	20.0
2-Pentanol, 4-m...	1.576	9.8	ug/mL	215661	1	3.296	439654	20.0
Pentane, 1,5-di...	1.731	7.9	ug/mL	172823	1	3.296	439654	20.0
5-Chloro-1-meth...	1.832	10.5	ug/mL	229727	1	3.296	439654	20.0
3-Pentanol, 2,2...	2.575	6.9	ug/mL	151301	1	3.296	439654	20.0
Hexanoic acid, ...	4.423	2.9	ug/mL	77839	2	4.957	539324	20.0
1-Propene-1-ami...	5.577	3.1	ug/mL	84332	2	4.957	539324	20.0
Nonanoic acid	5.828	3.7	ug/mL	100942	2	4.957	539324	20.0

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.: F5WC4

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.: F5WC4

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.: F5WC4

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 PRV
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 PRV
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

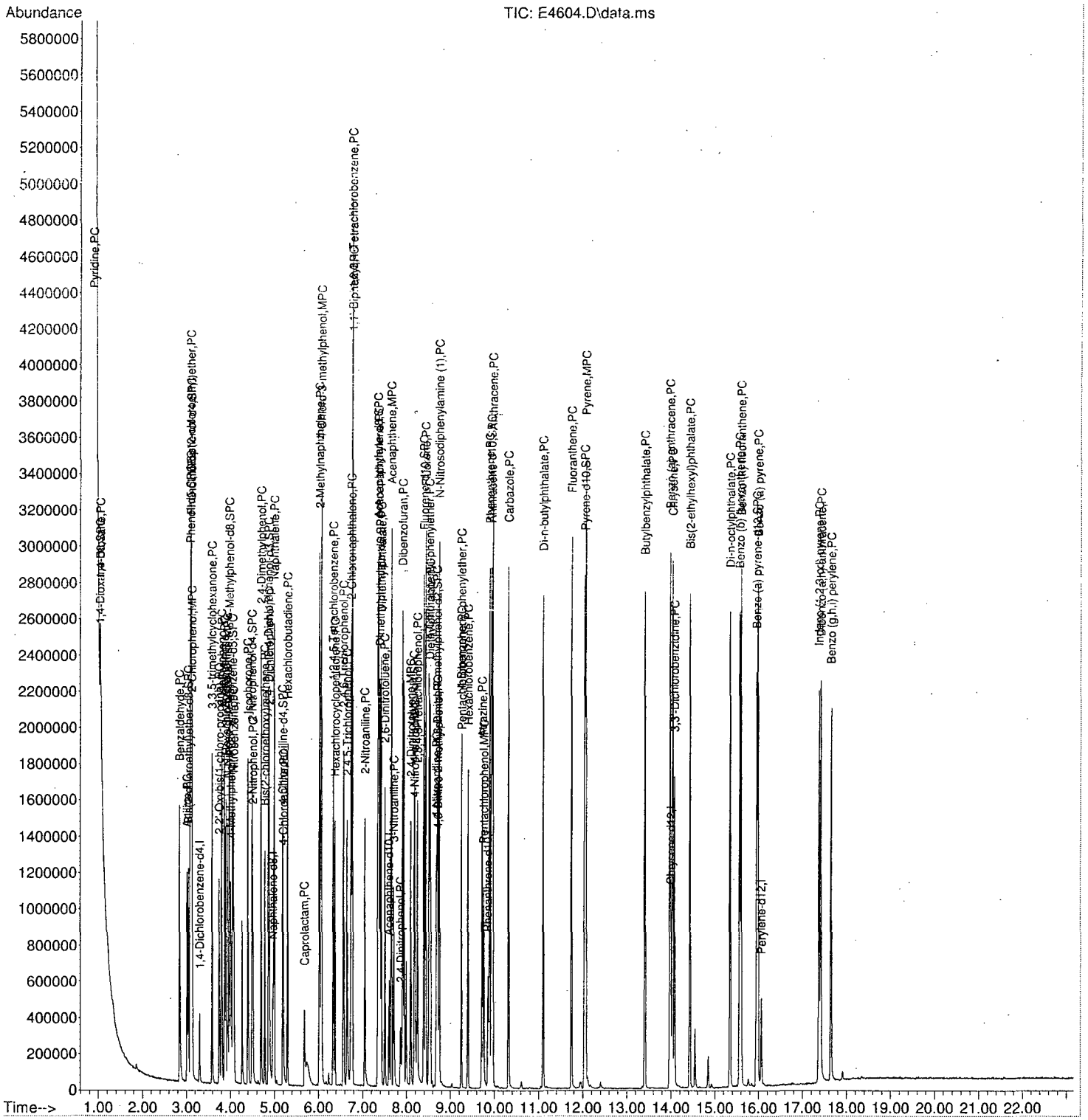
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

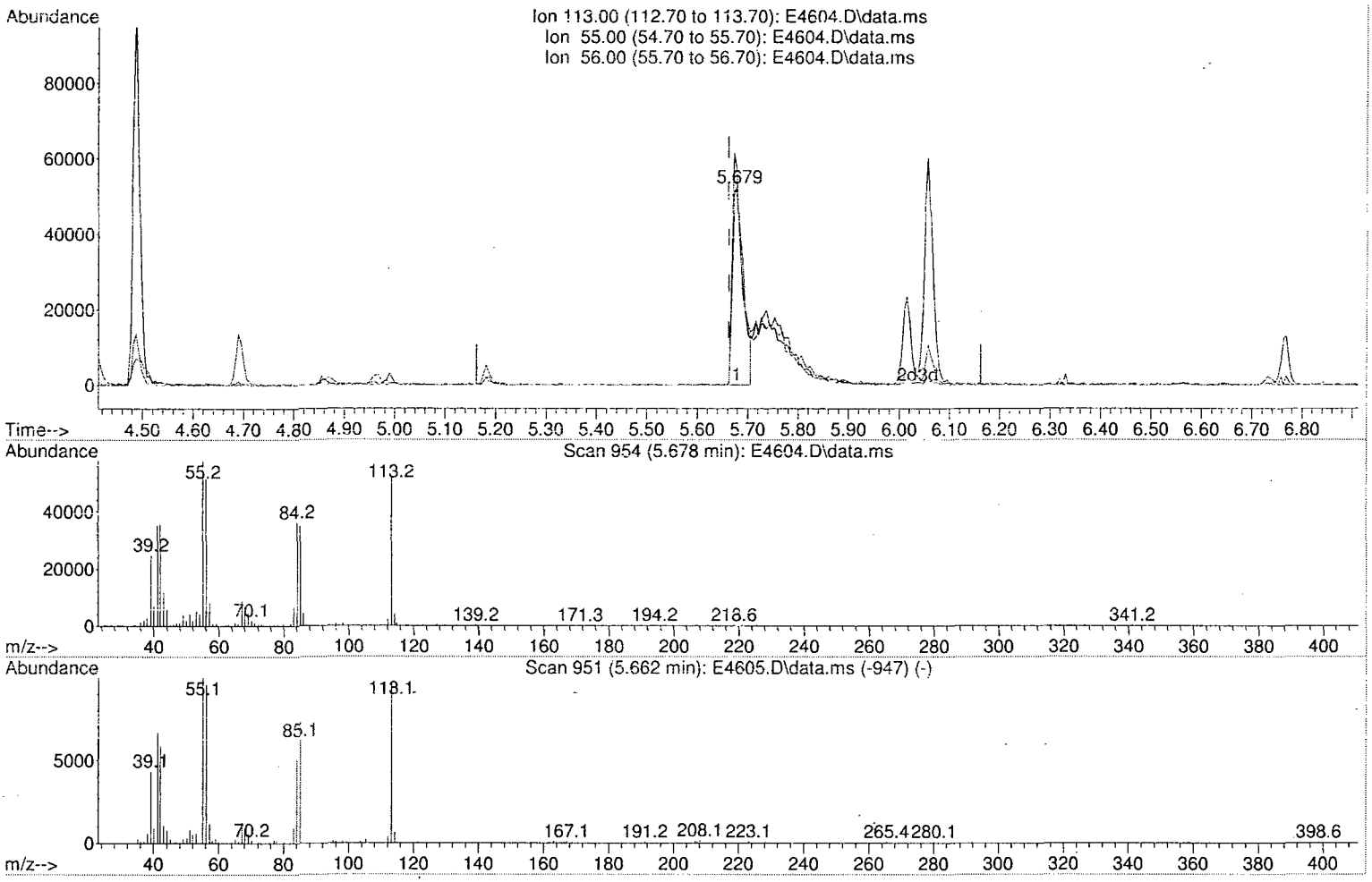


Quantitation Report (Qedit)

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

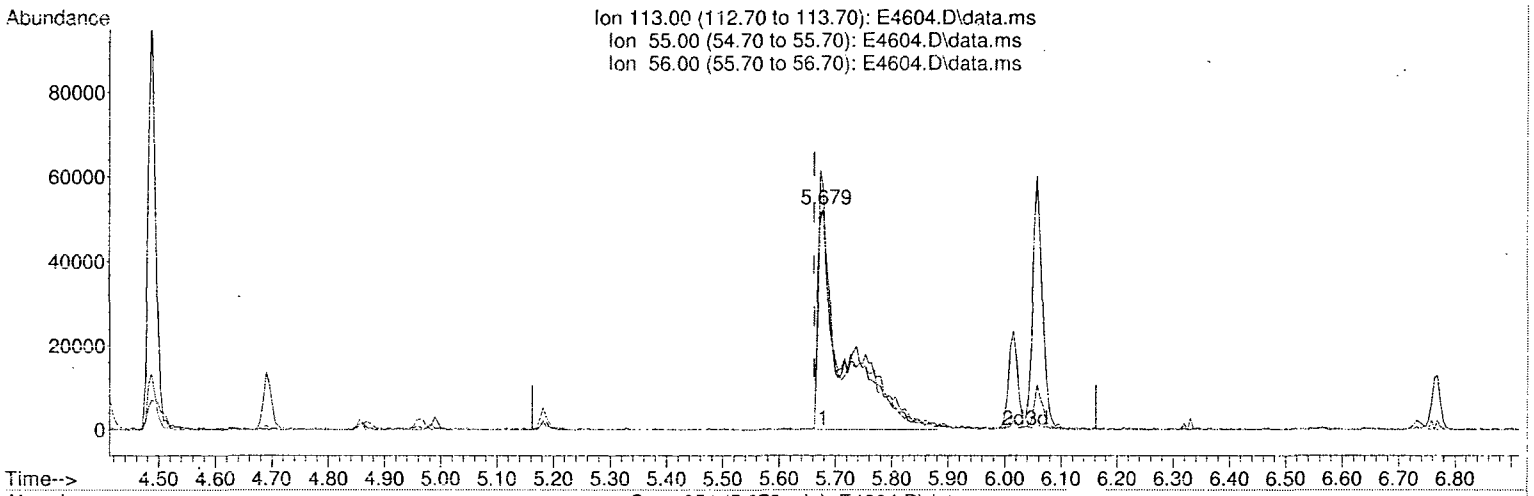
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	117.86
56.00	92.50	109.17
0.00	0.00	0.00

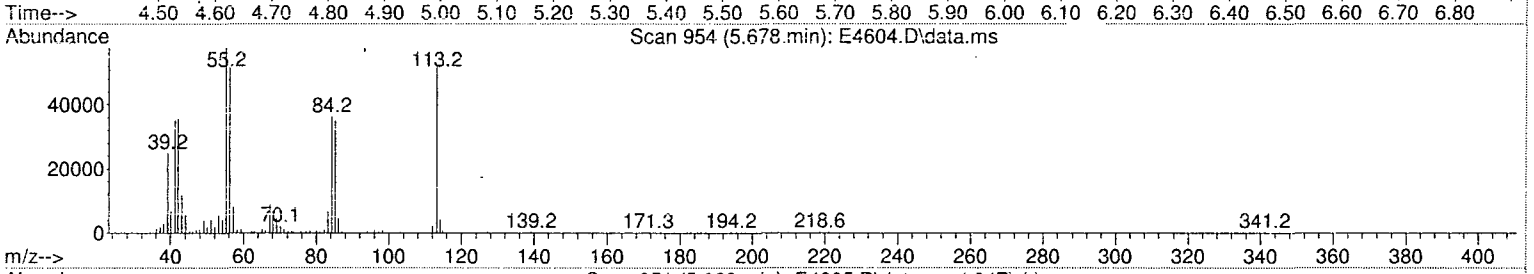
Quantitation Report (Qedit)

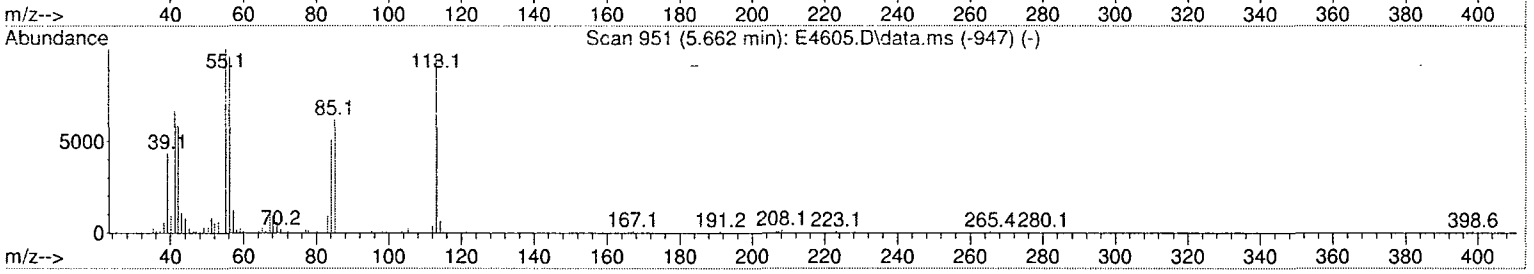
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

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 5/24

response 155499

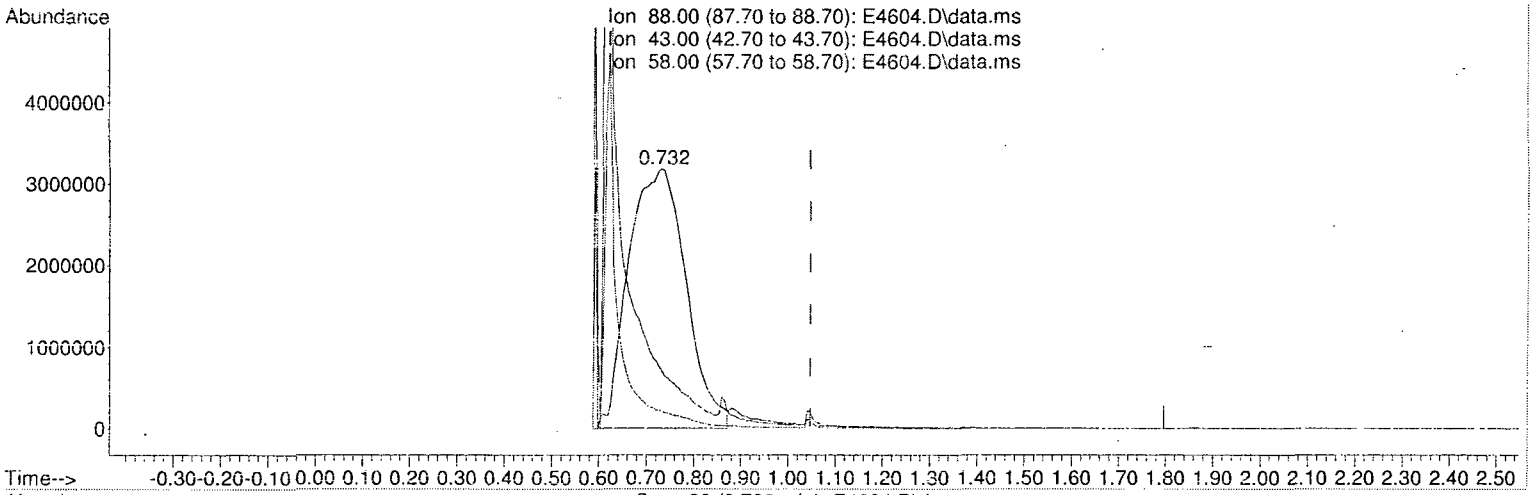
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	56.64#
56.00	92.50	52.47#
0.00	0.00	0.00

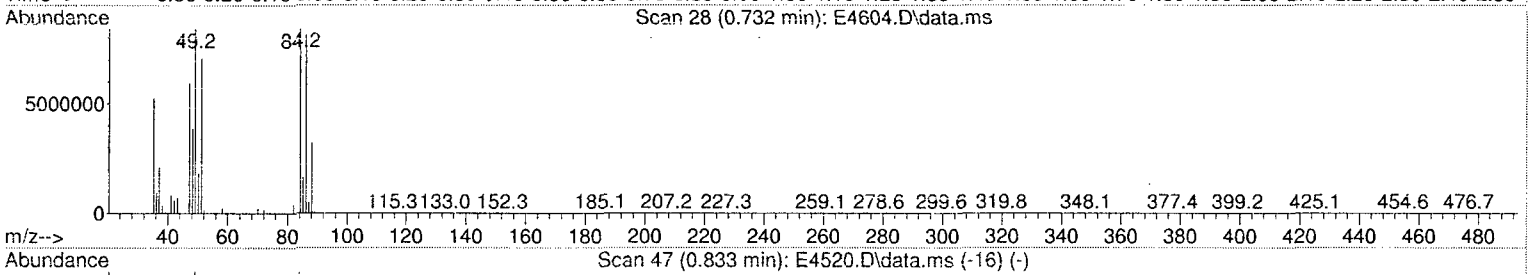
Quantitation Report (Qedit)

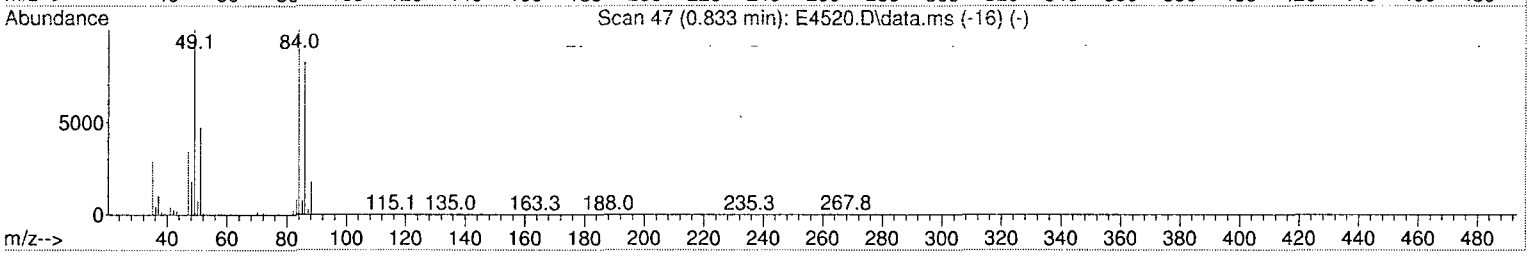
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

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

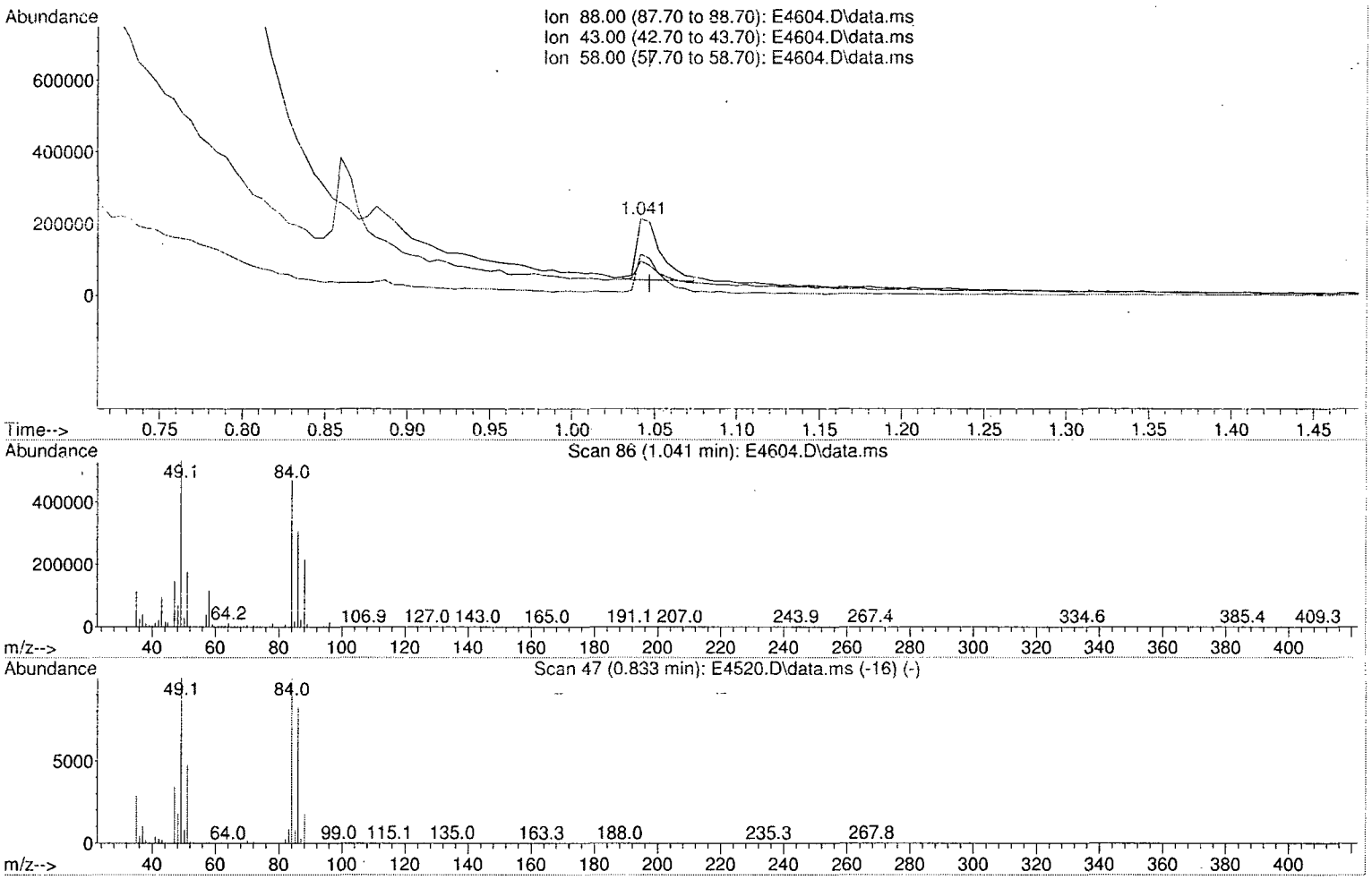
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

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 8/24

response 170496

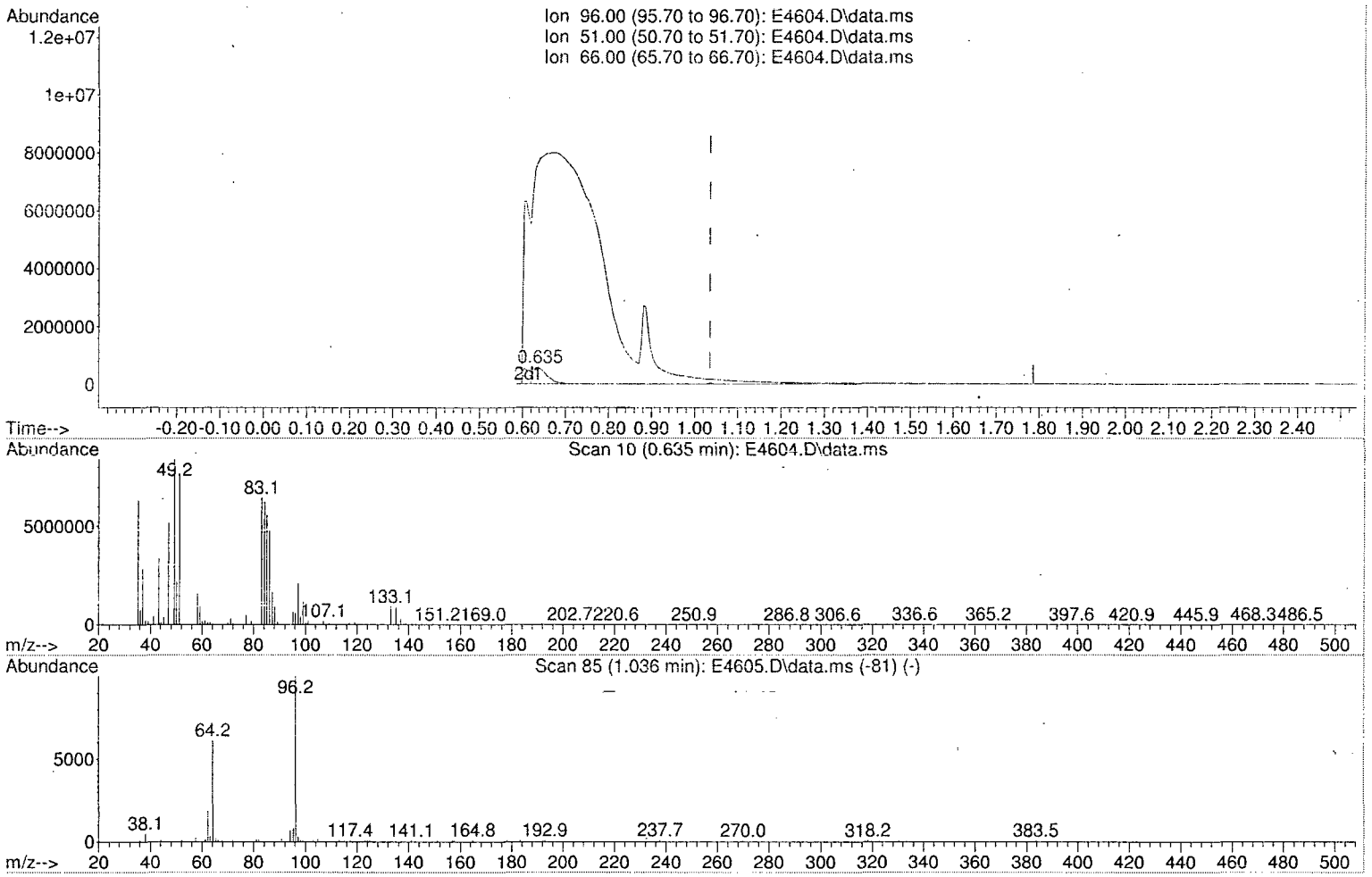
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

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

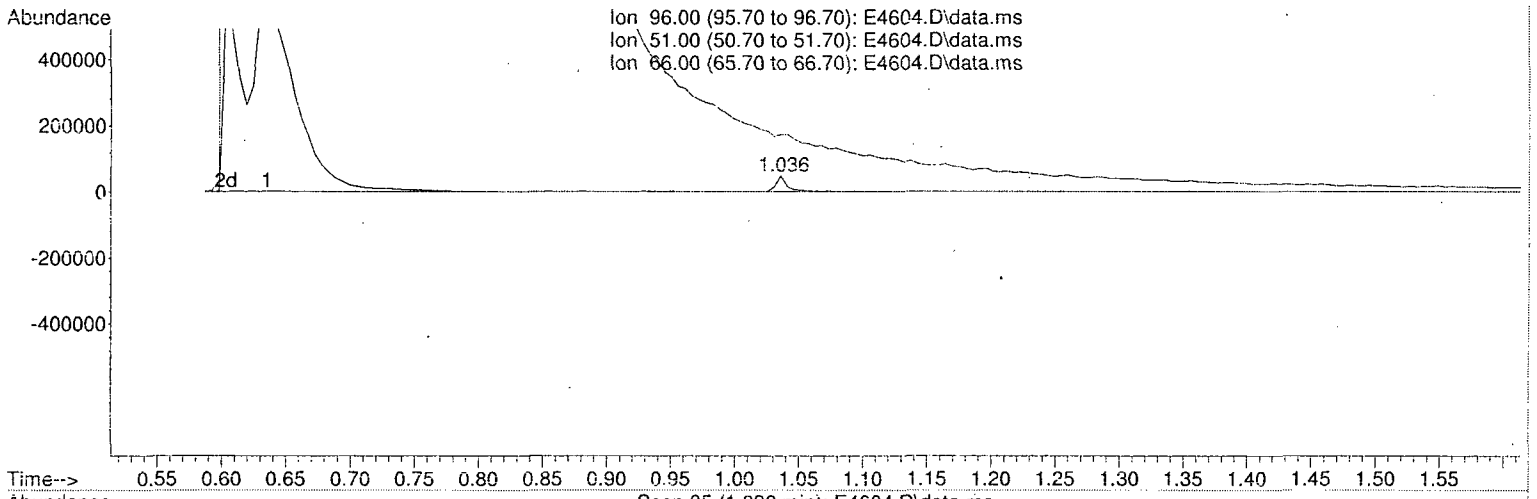
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.21#
0.00	0.00	0.00

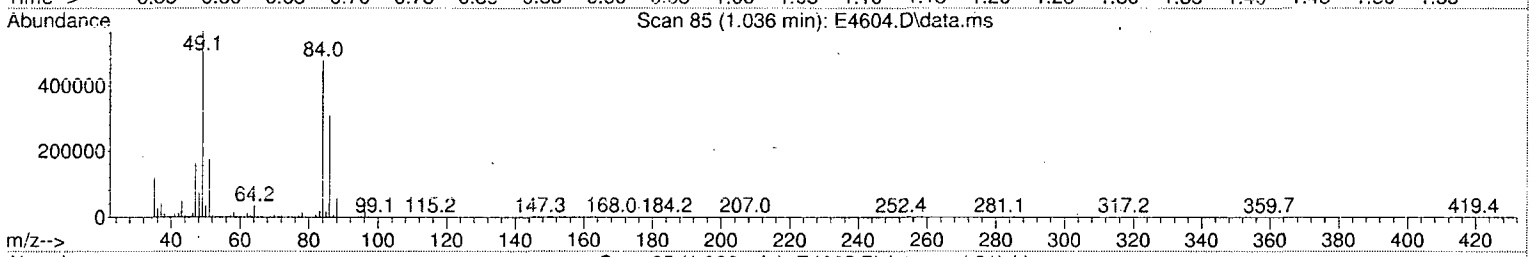
Quantitation Report (Qedit)

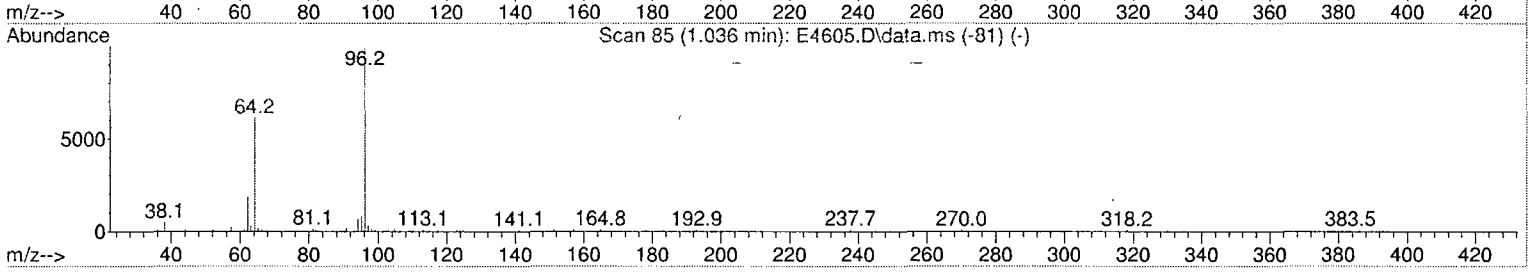
Data File : C:\msdchem\1\data\E4604.D
Acq On : 23 May 2012 17:50
Sample : 2E23005-CAL4
Misc : SSTD0409N
DataAcq Meth:CLPACQ.M

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

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. Vakati

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

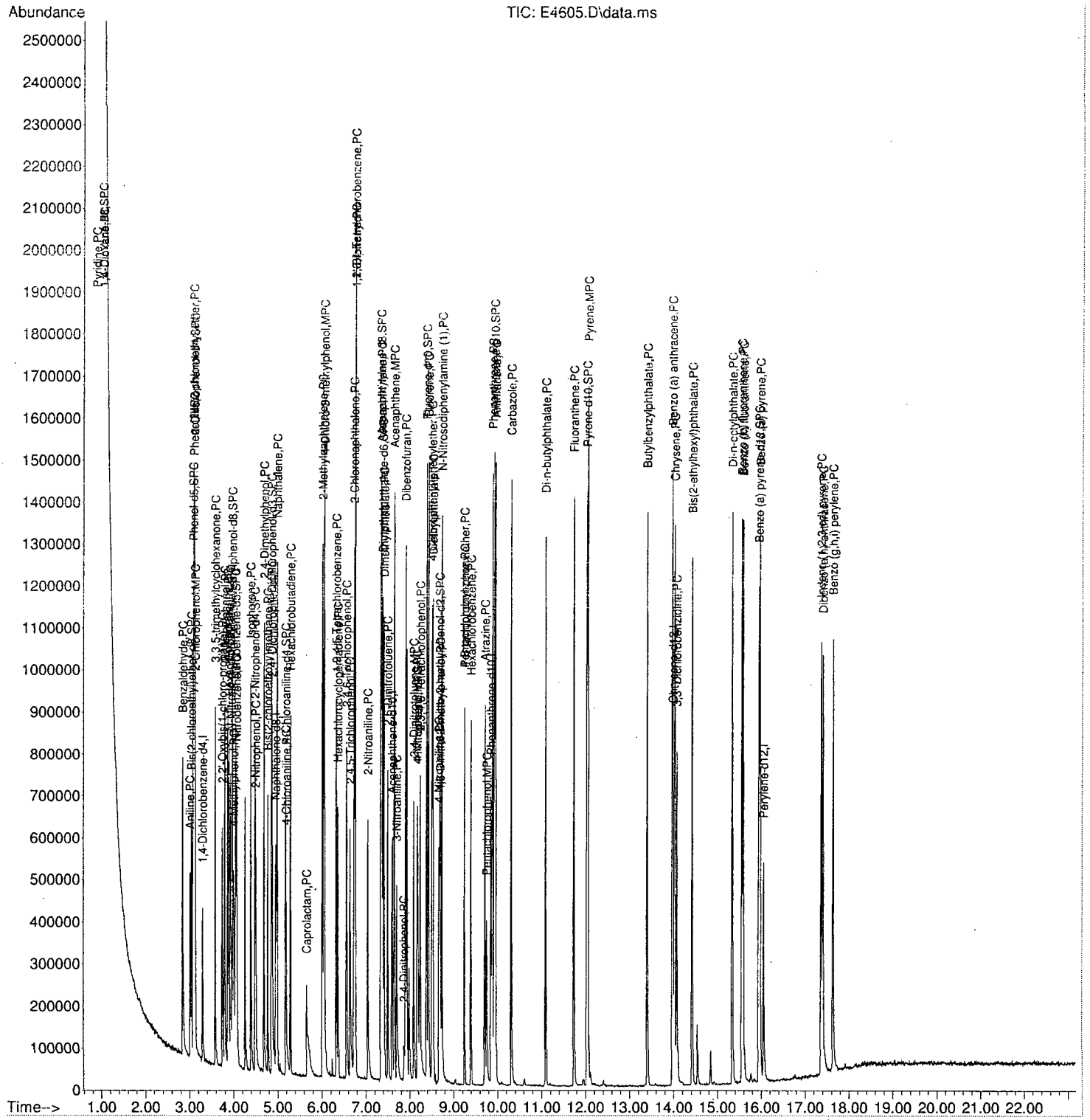
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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



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
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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

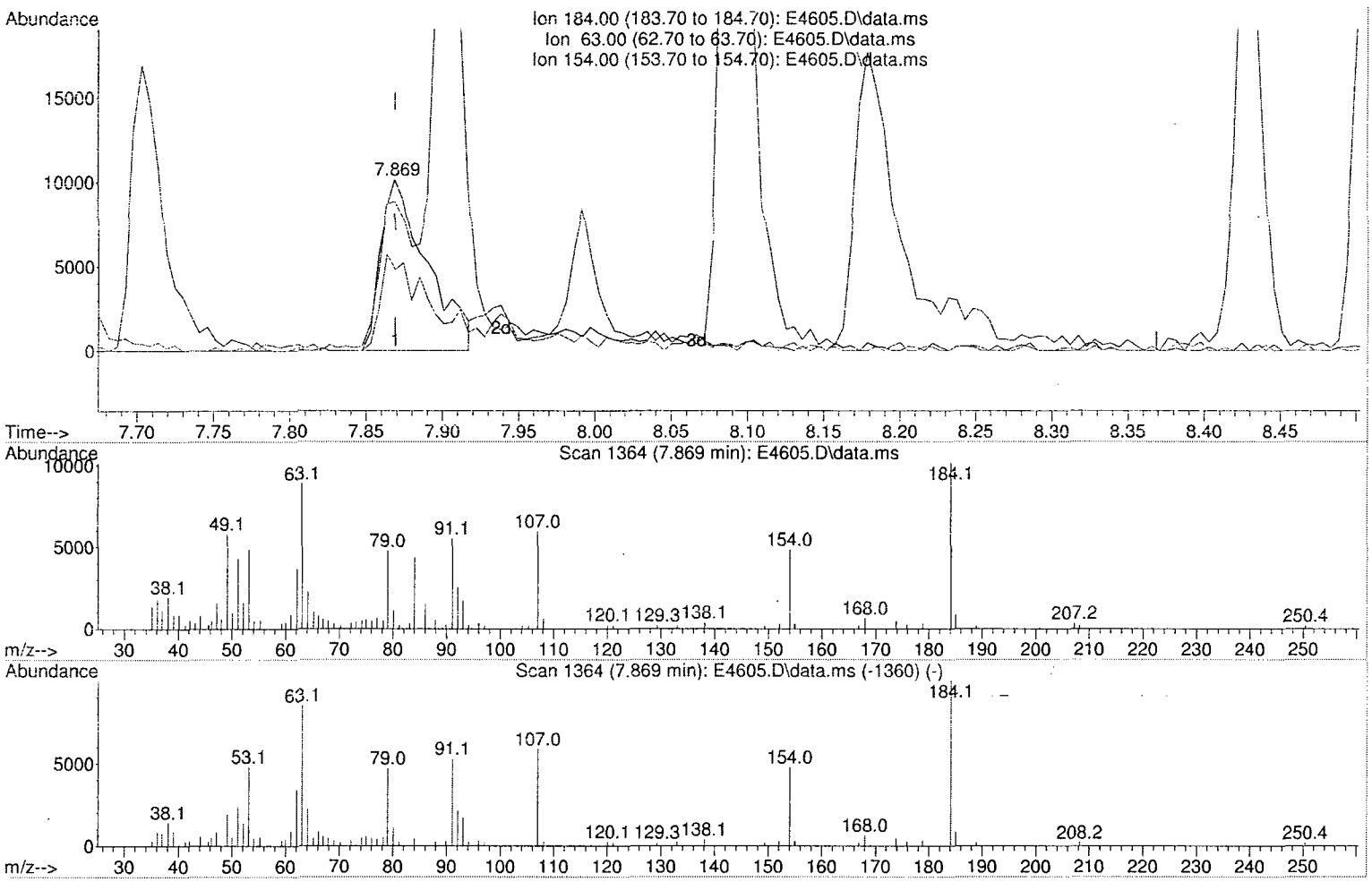
(#) = Out of Range SPCC's out = 0 CCC's out = 2

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

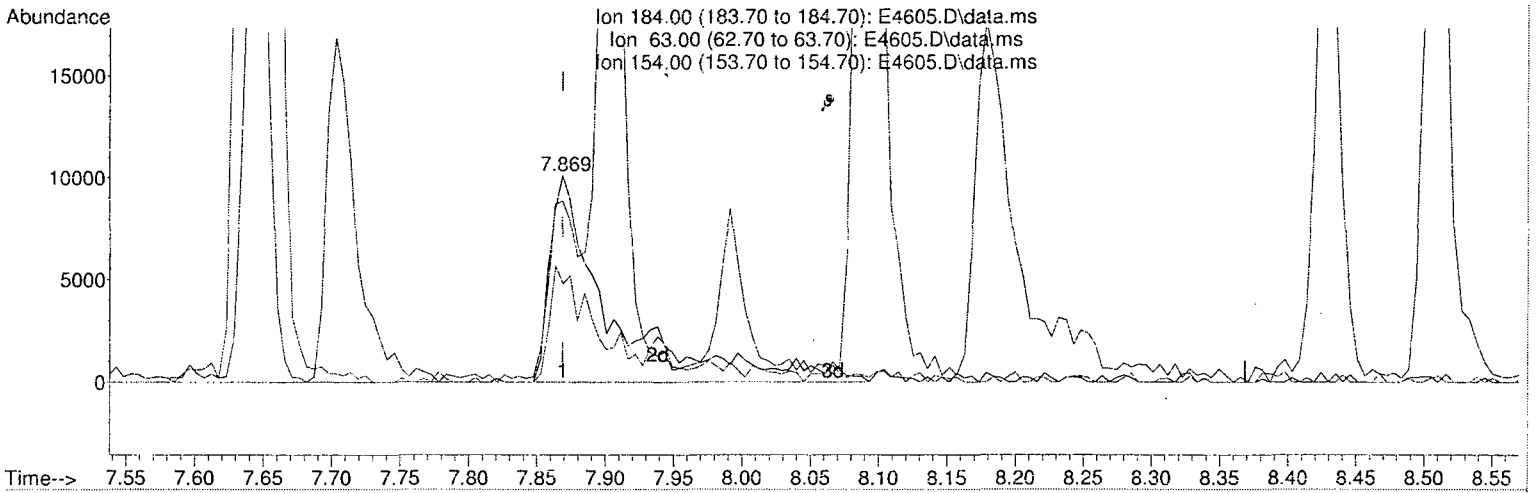
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	55.73
154.00	63.80	60.55
0.00	0.00	0.00

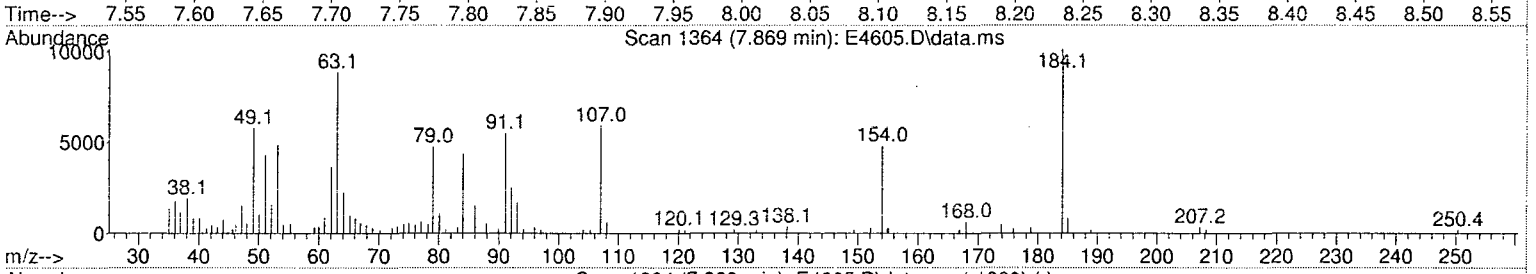
Quantitation Report (Qedit)

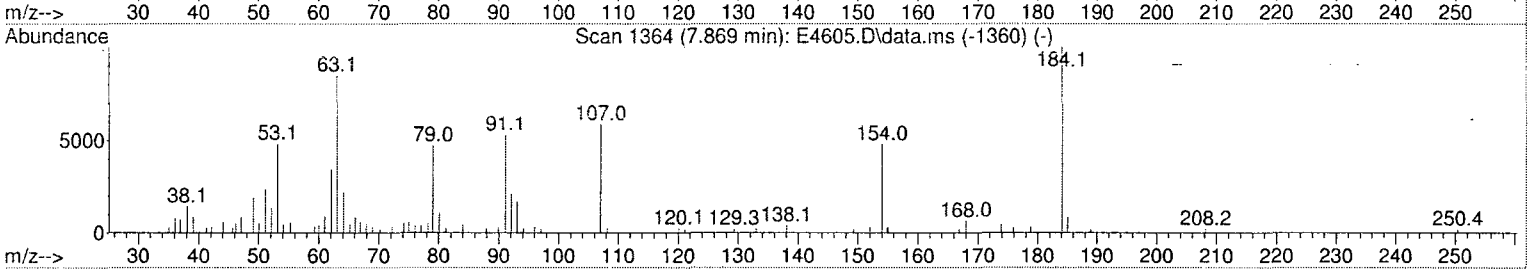
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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 8/24

response 32046

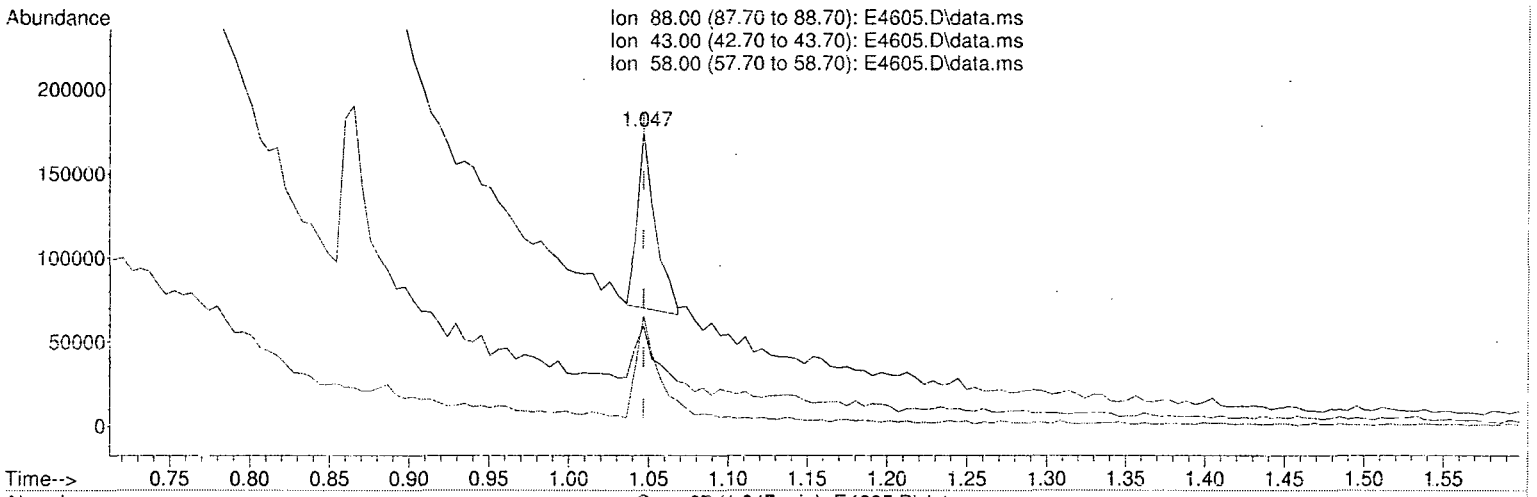
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	37.02#
154.00	63.80	40.22#
0.00	0.00	0.00

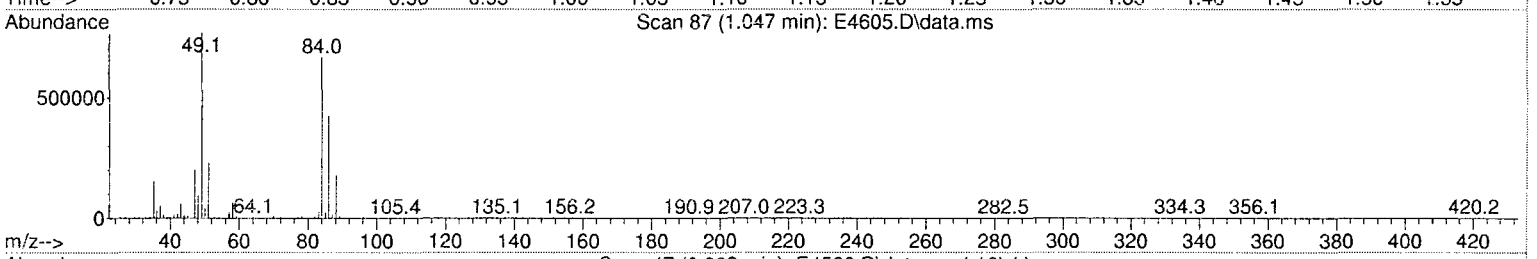
Quantitation Report (Qedit)

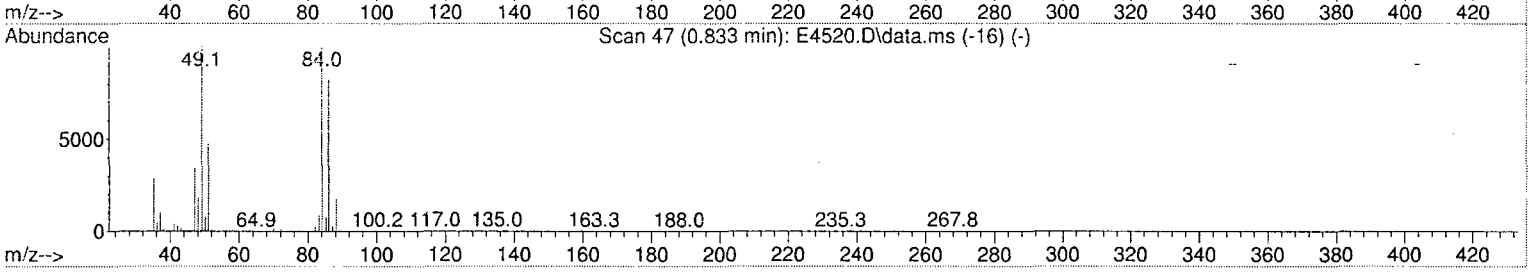
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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 5/24

response 82987

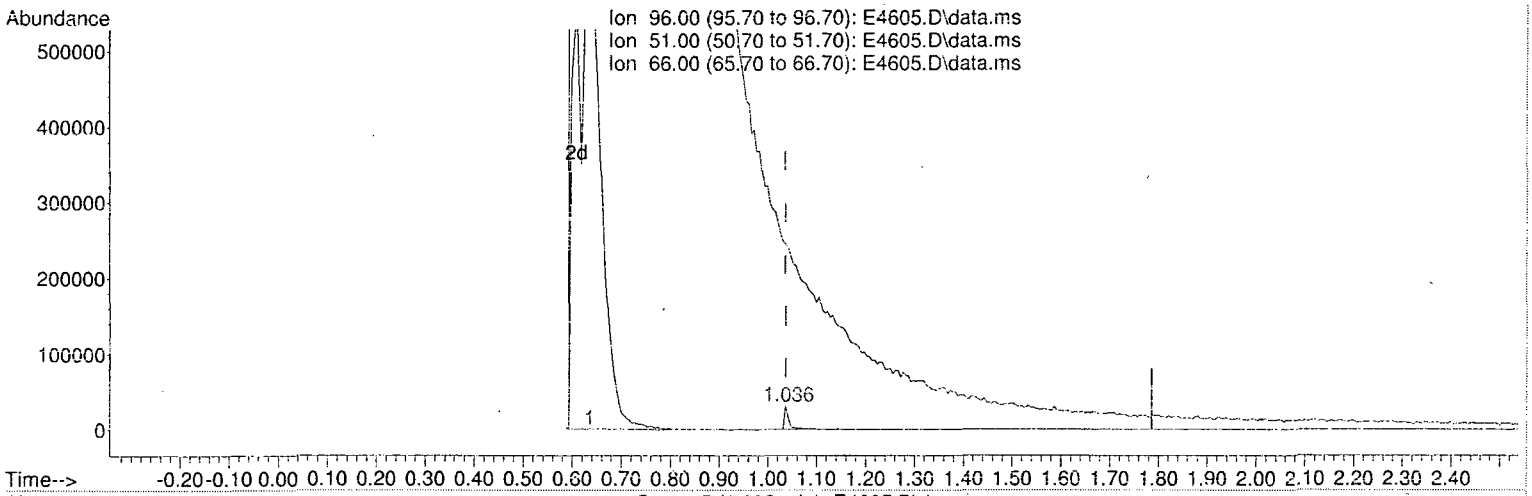
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

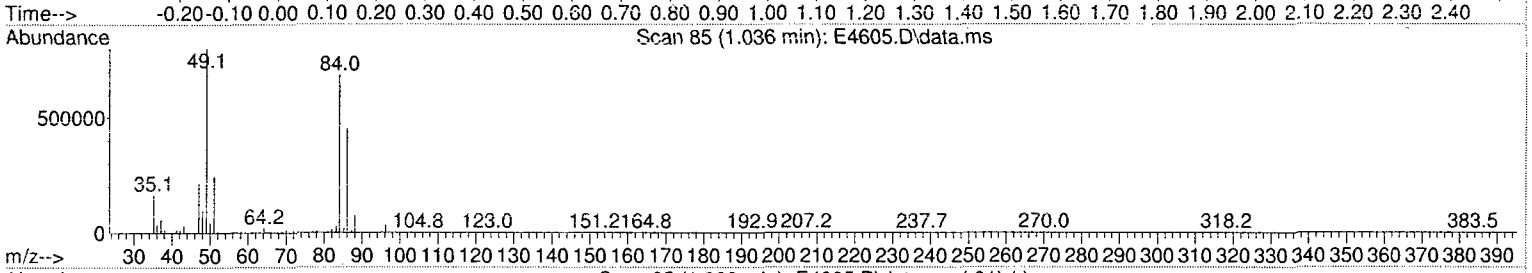
Quantitation Report (Qedit)

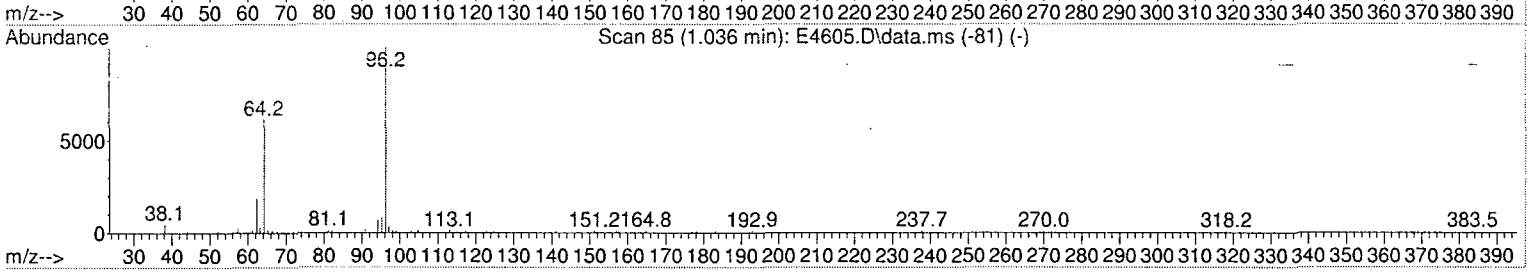
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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 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 PRV

RS PRV

00233

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 8RV

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

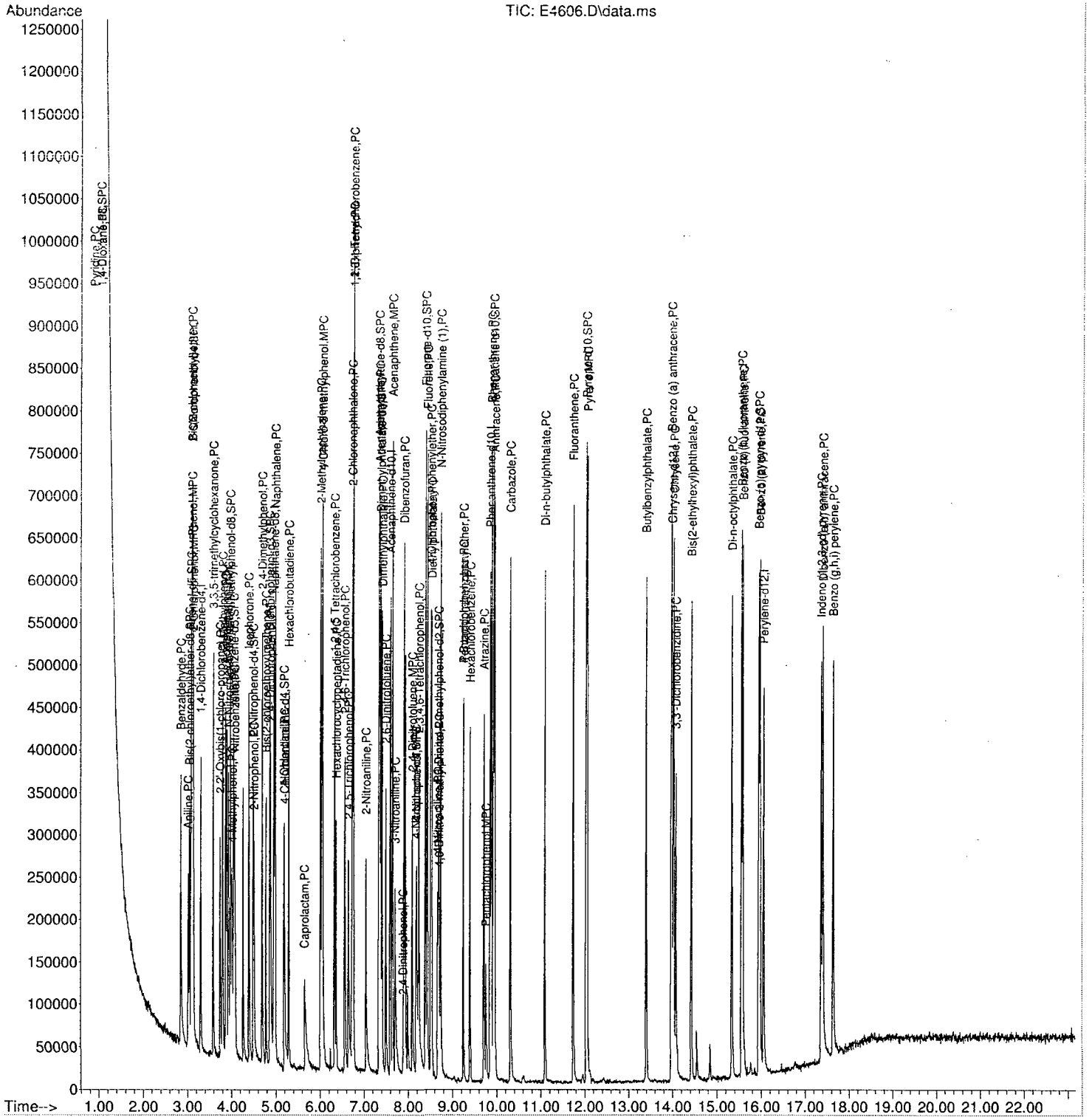
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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



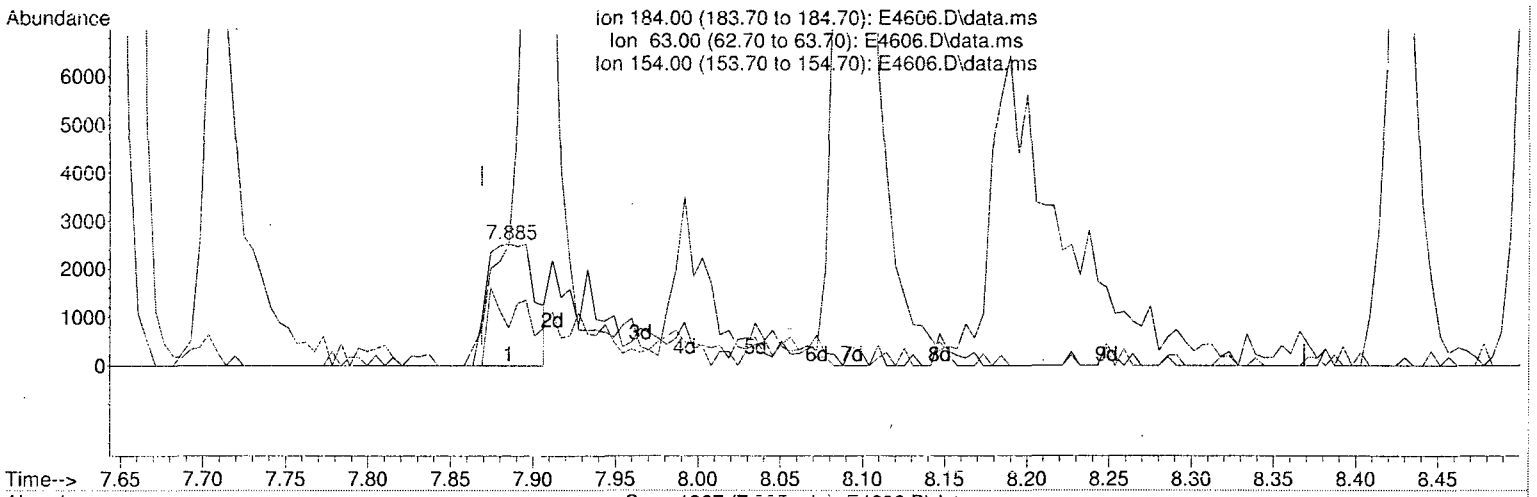
00236

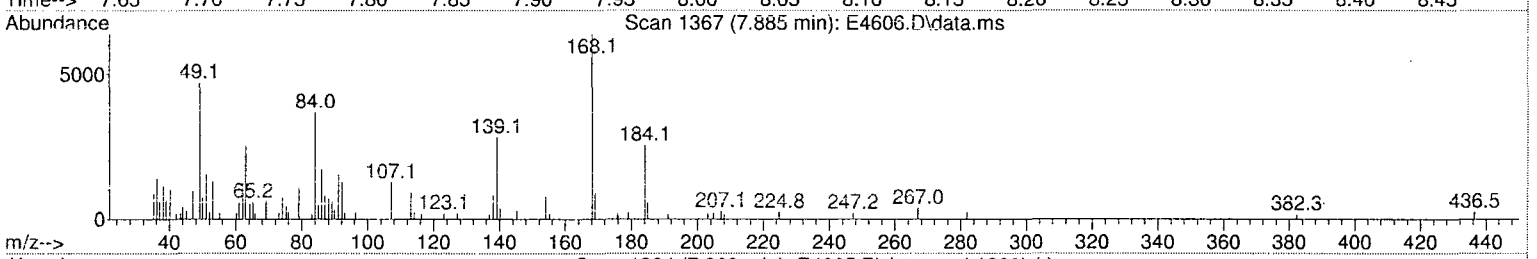
Quantitation Report (Qedit)

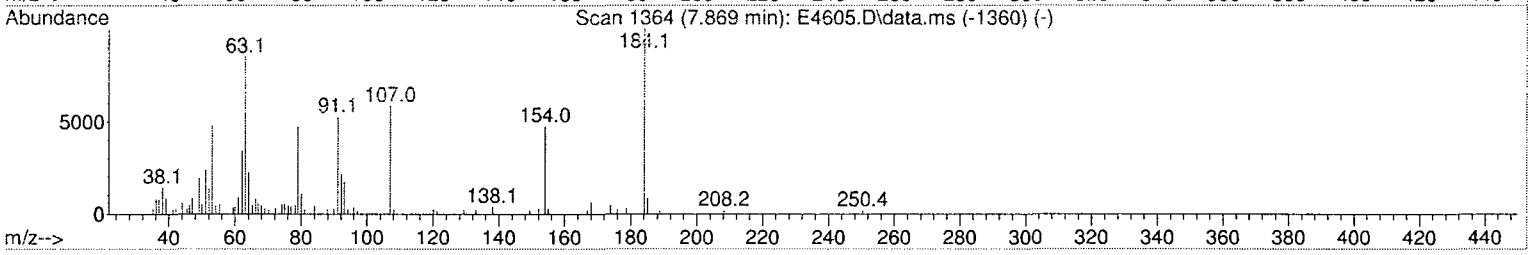
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

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

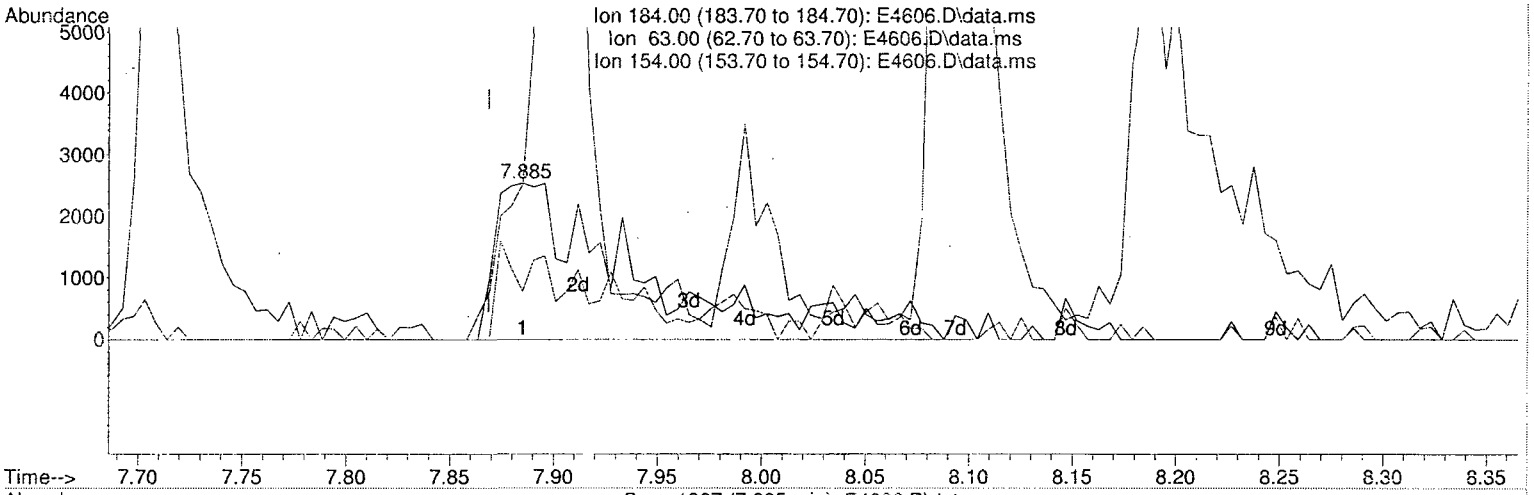
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	0.00#
154.00	63.80	0.00#
0.00	0.00	0.00

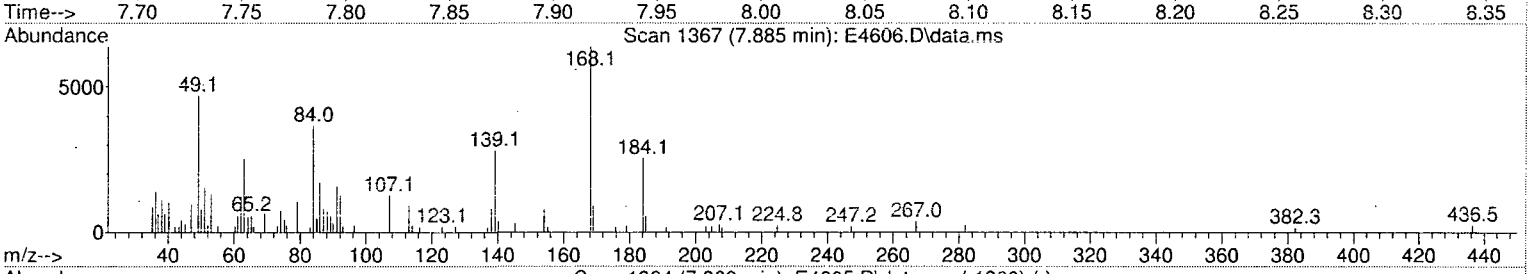
Quantitation Report (Qedit)

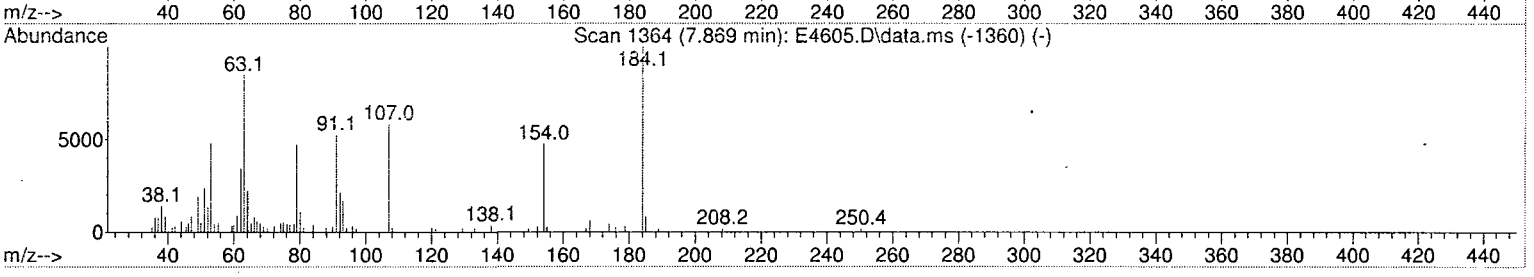
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

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

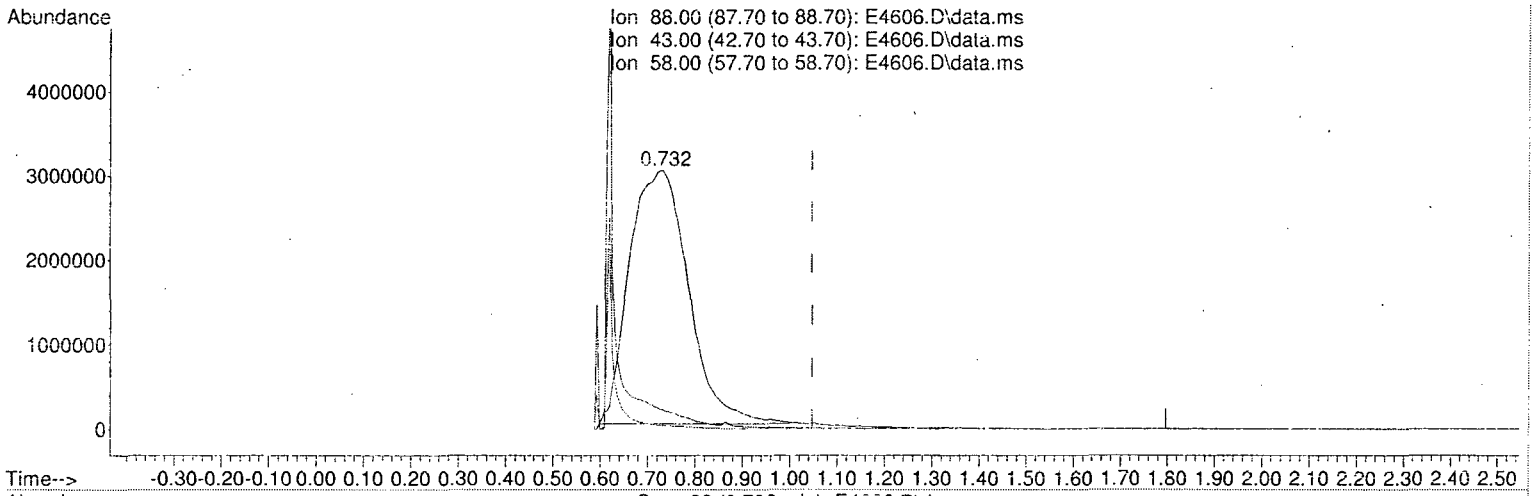
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	0.00#
154.00	63.80	0.00#
0.00	0.00	0.00

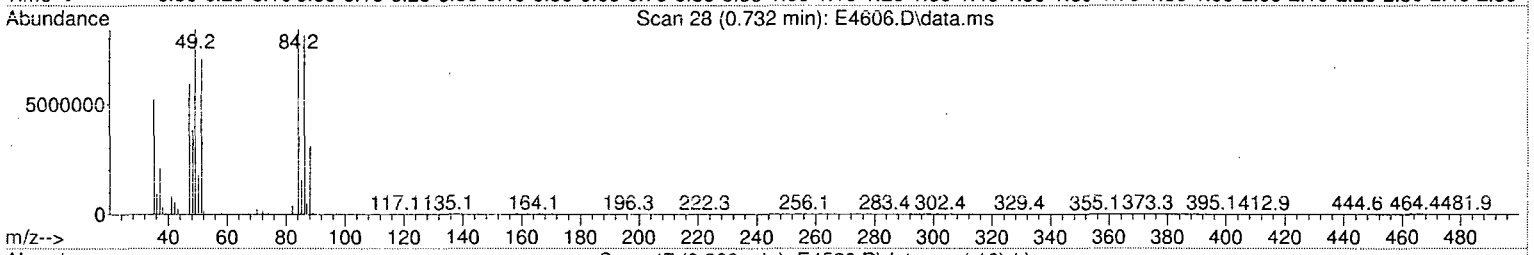
Quantitation Report (Qedit)

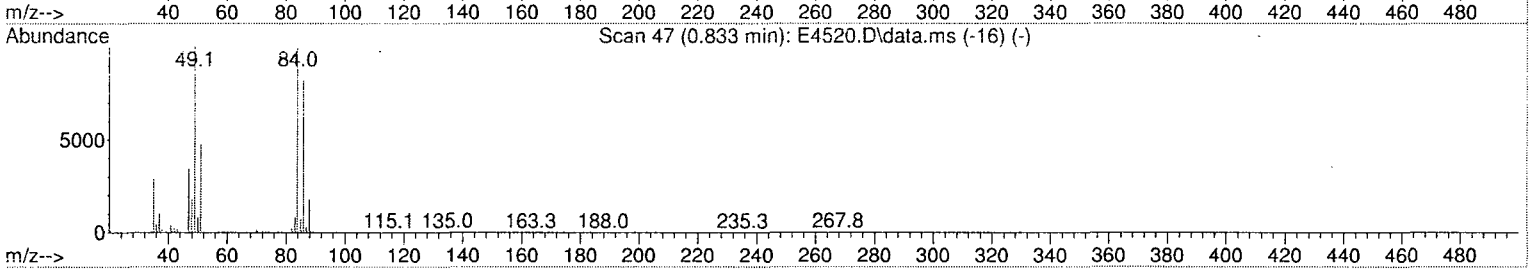
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

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

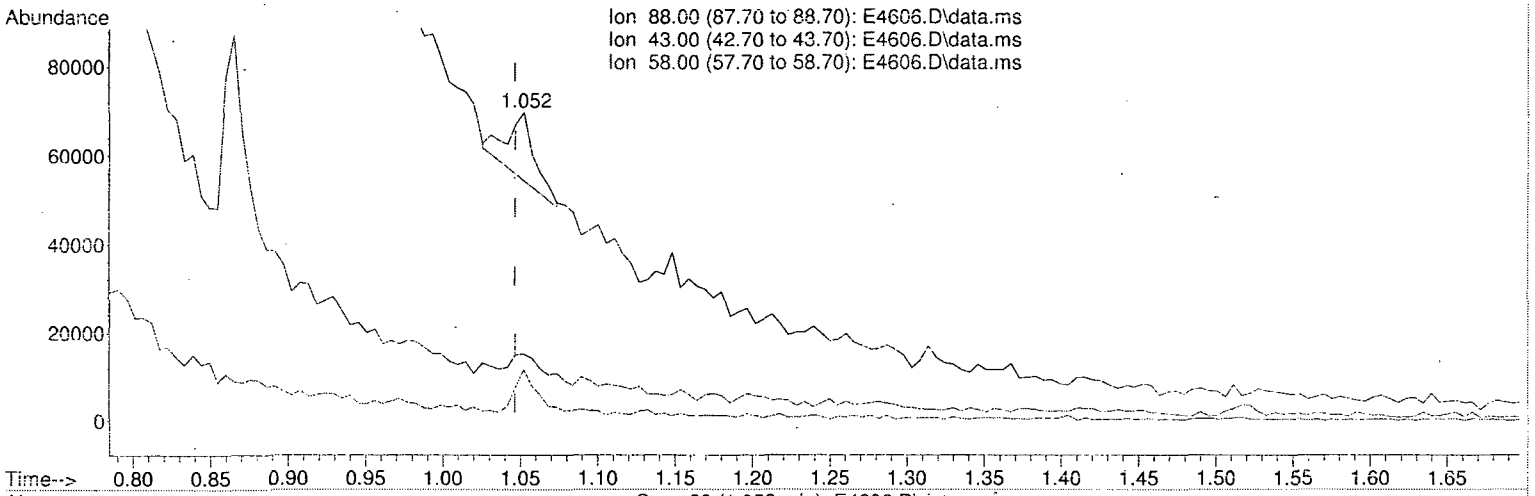
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

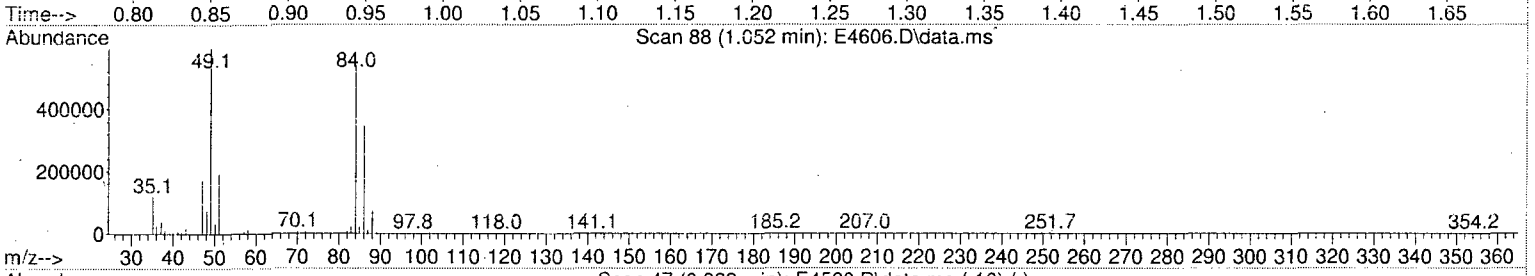
Quantitation Report (Qedit)

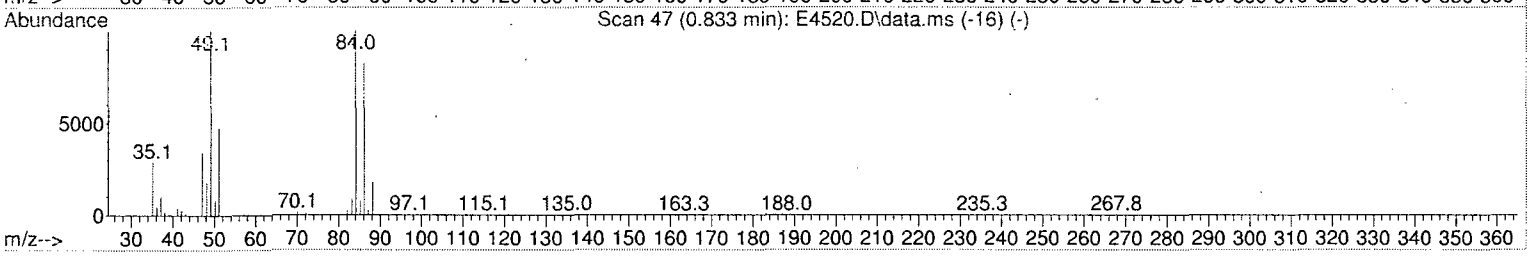
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

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

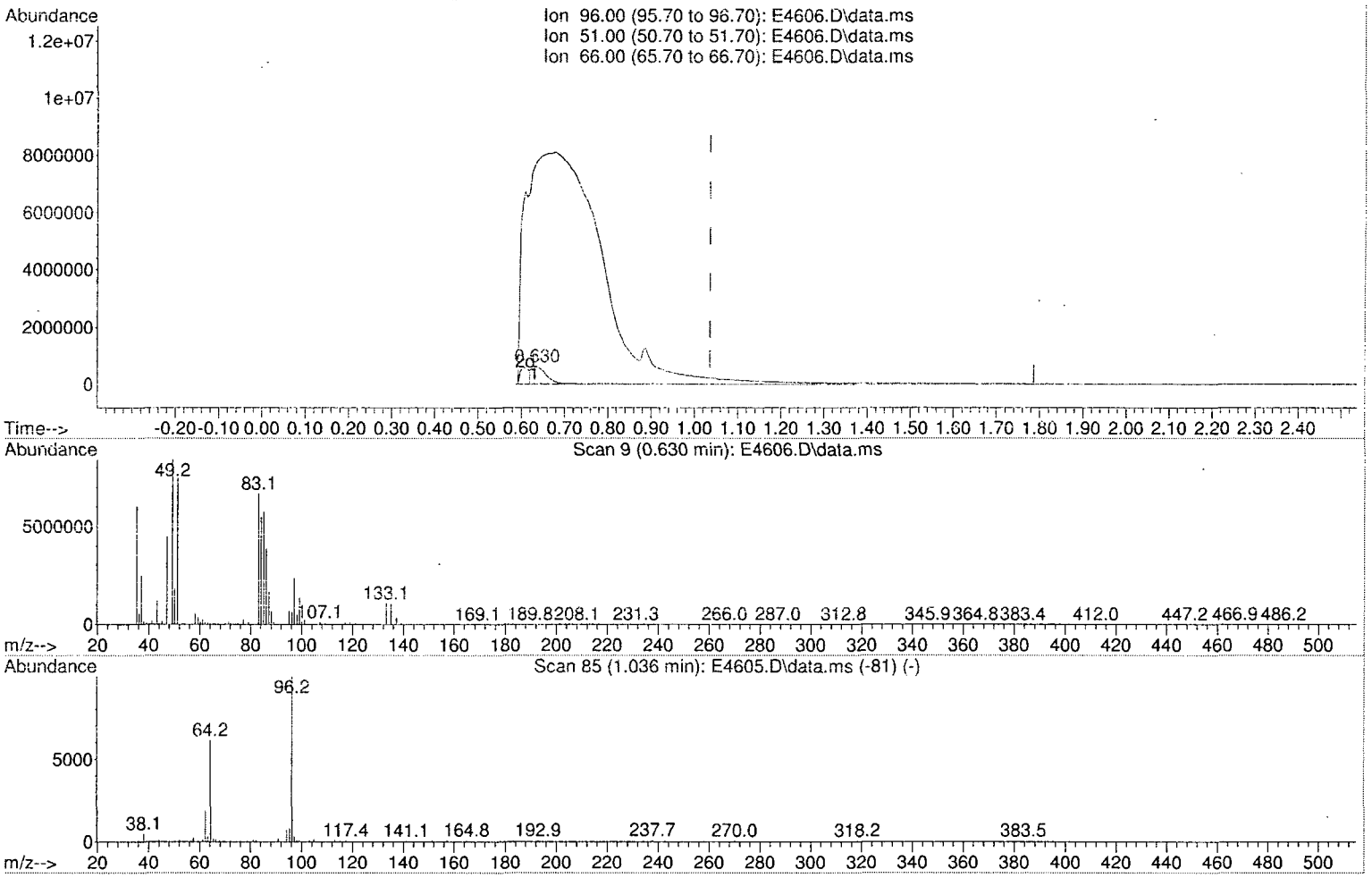
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

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

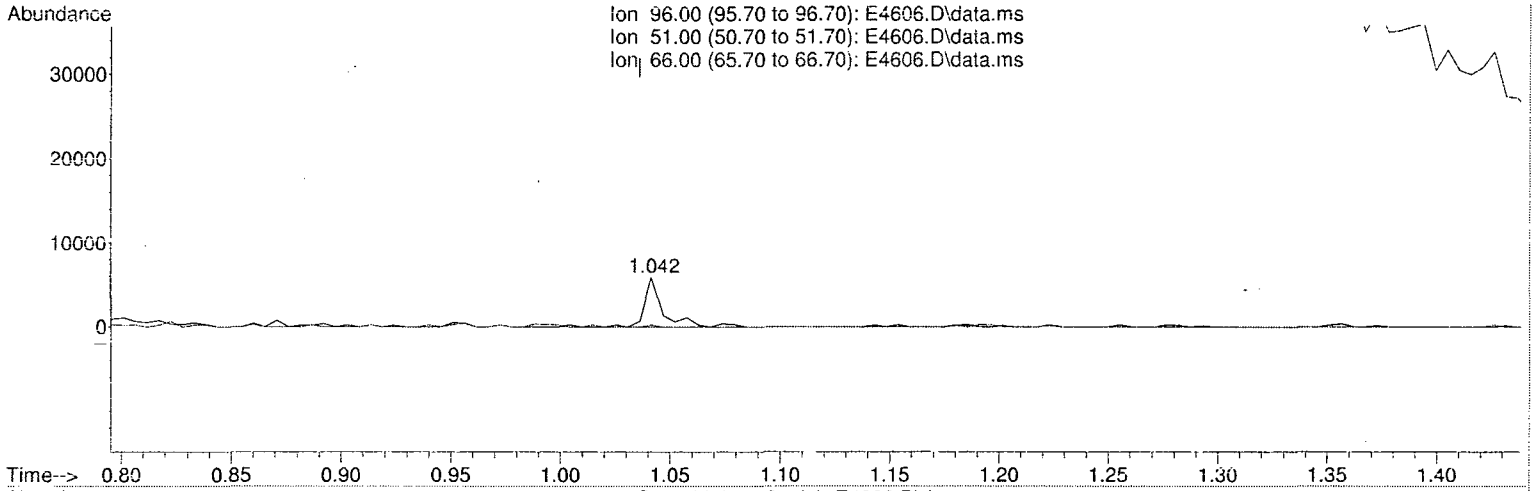
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.03#
0.00	0.00	0.00

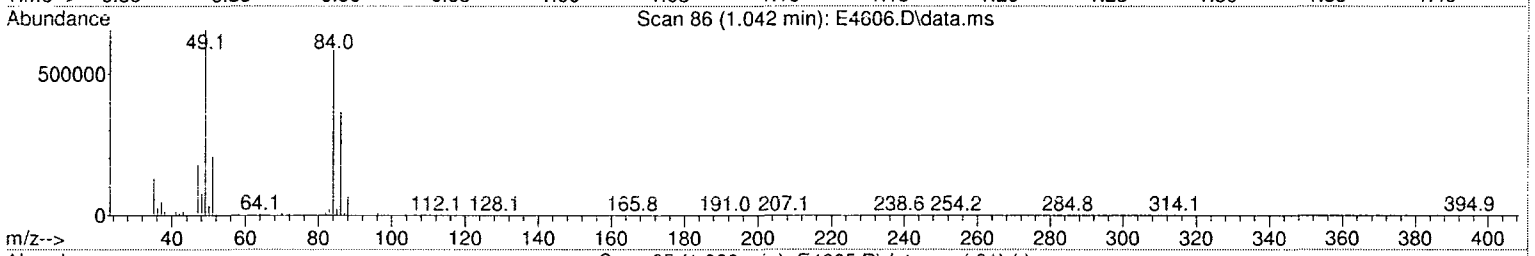
Quantitation Report (Qedit)

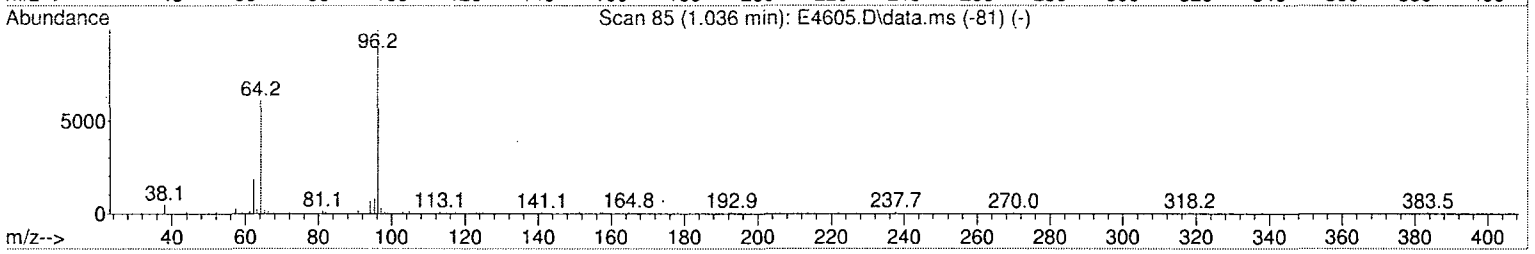
Data File : C:\msdchem\1\data\E4606.D
Acq On : 23 May 2012 18:53
Sample : 2E23005-CAL2
Misc : SSTD0109N
DataAcq Meth:CLPACQ.M

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

00243

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 5/24

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

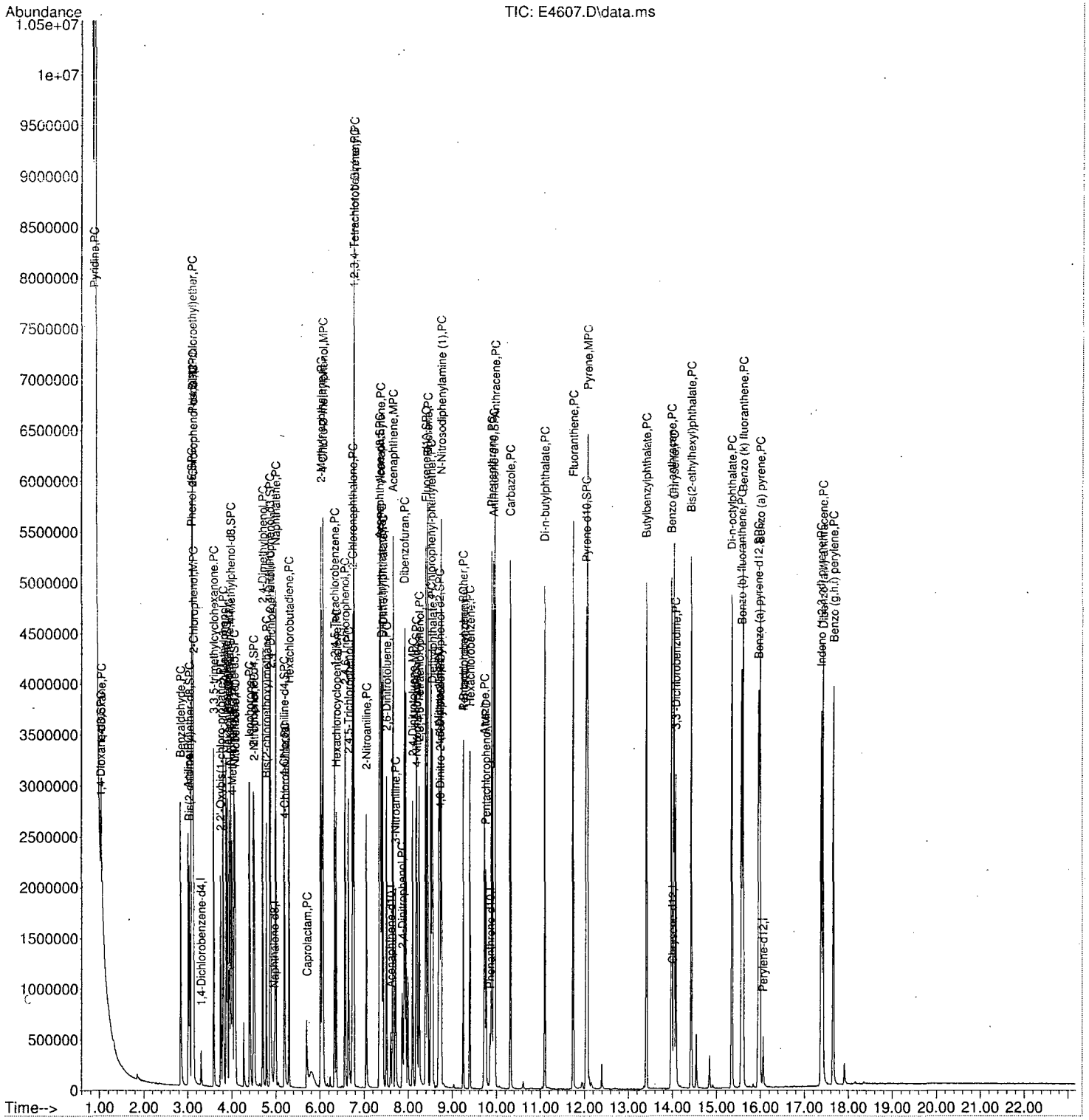
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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



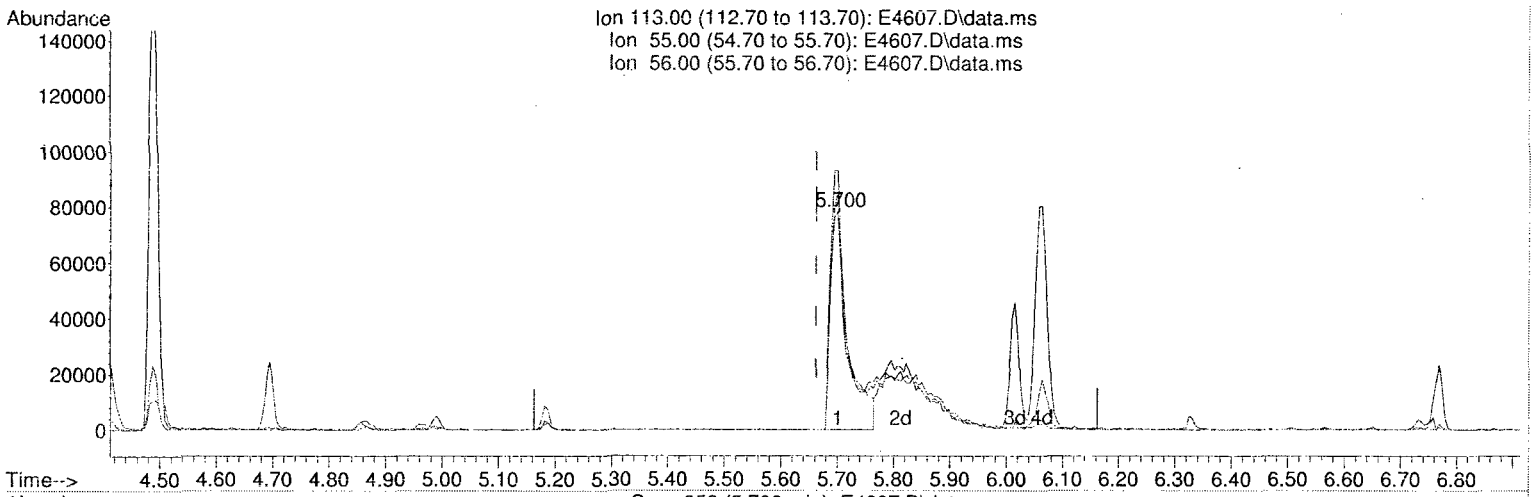
00246

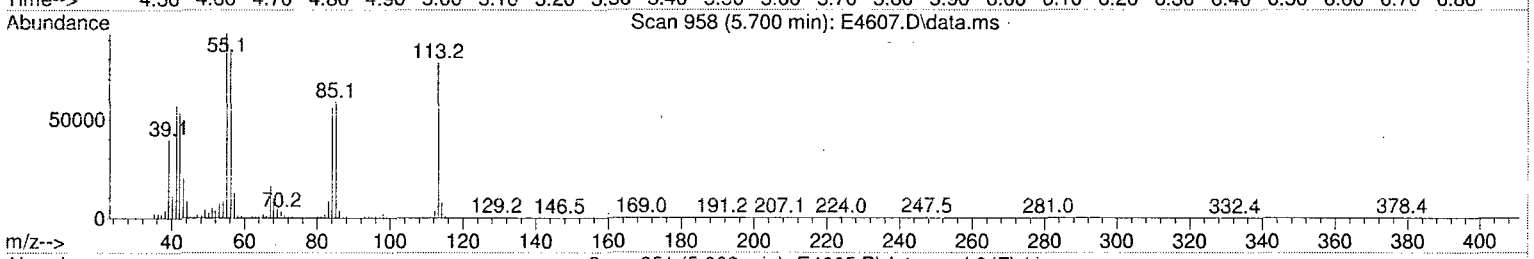
Quantitation Report (Qedit)

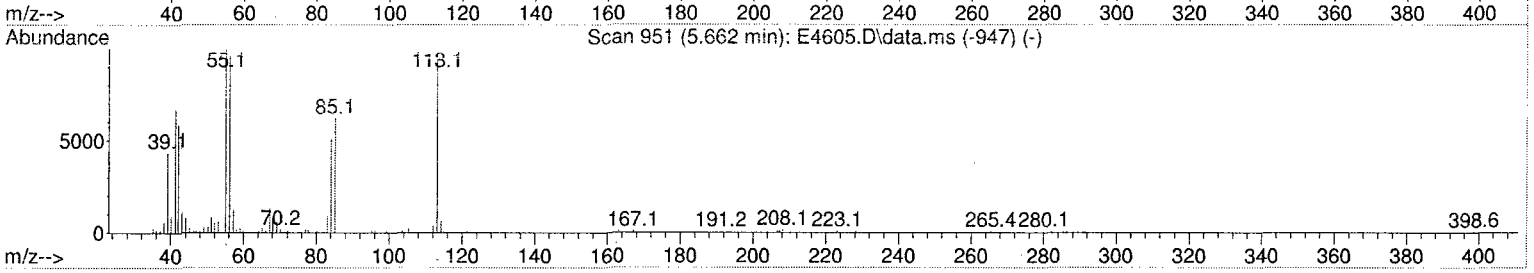
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

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

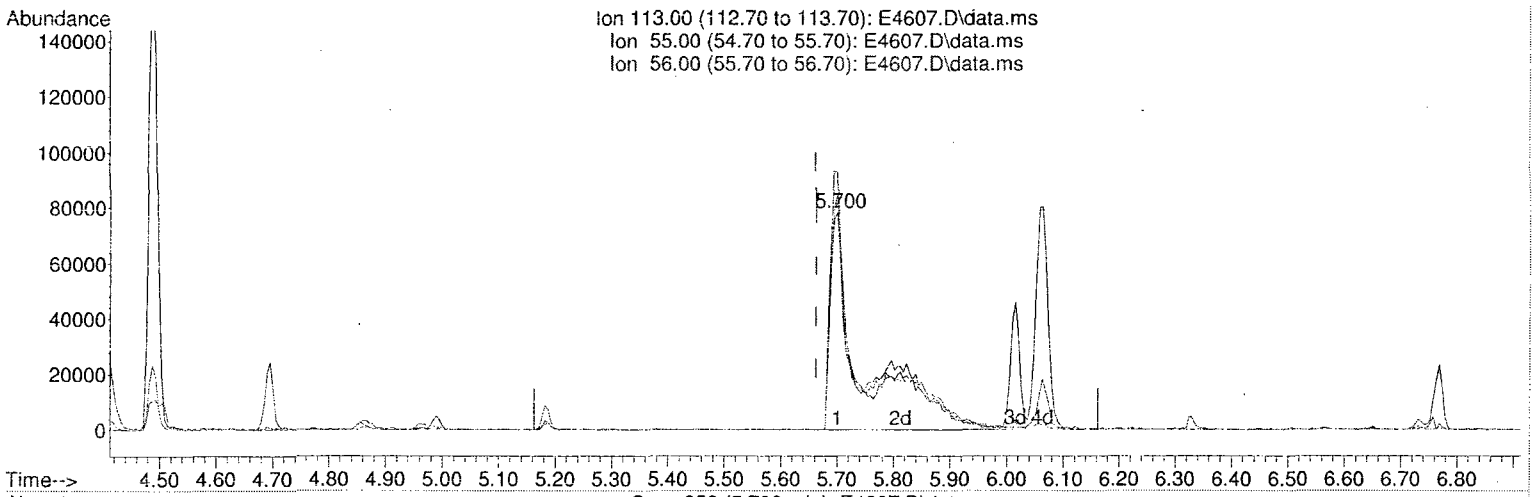
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	108.45
56.00	92.50	99.59
0.00	0.00	0.00

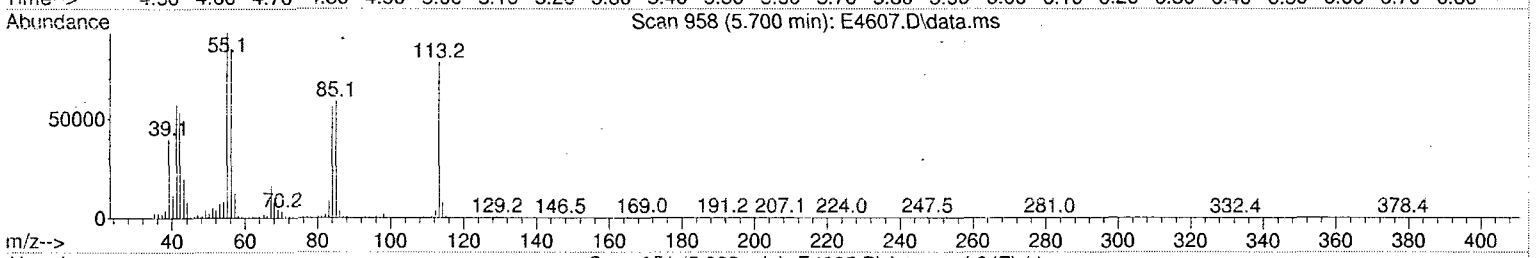
Quantitation Report (Qedit)

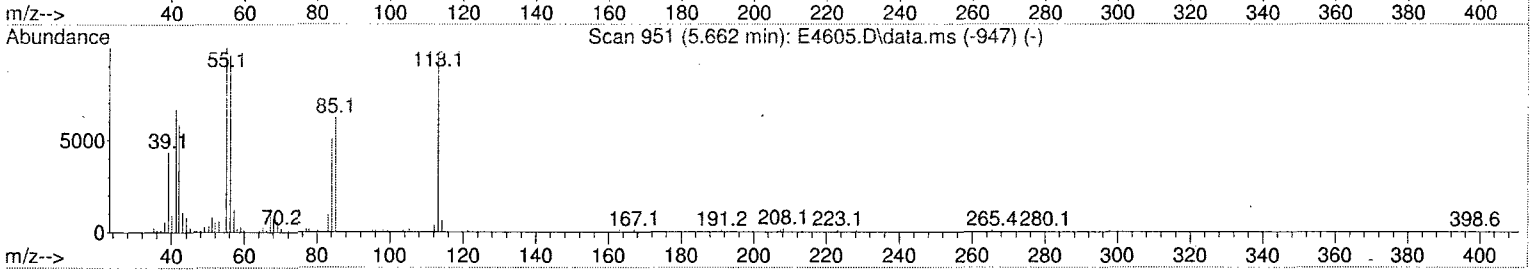
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

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 8/21

response 295806

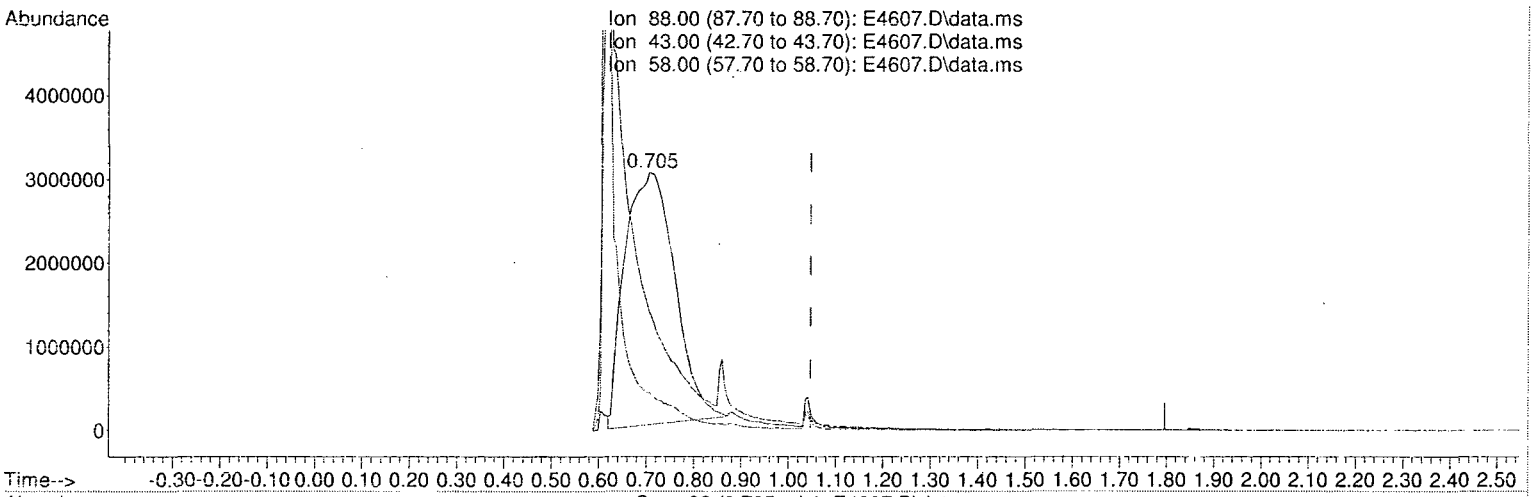
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	60.50#
56.00	92.50	55.56#
0.00	0.00	0.00

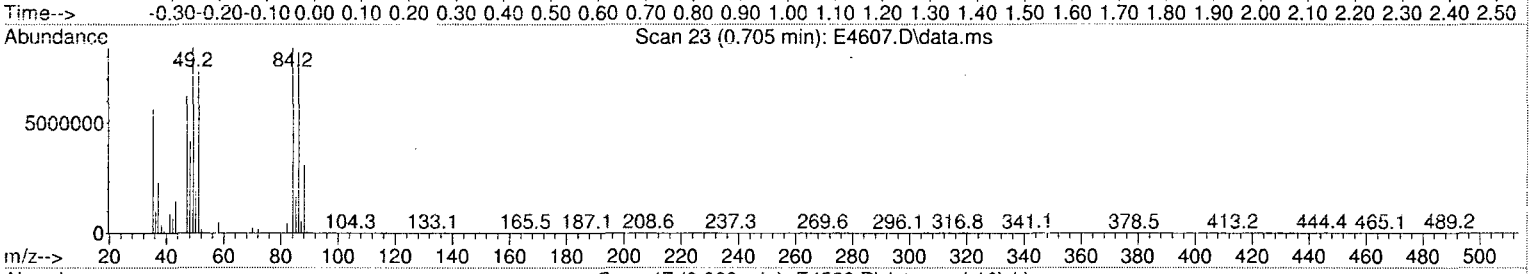
Quantitation Report (Qedit)

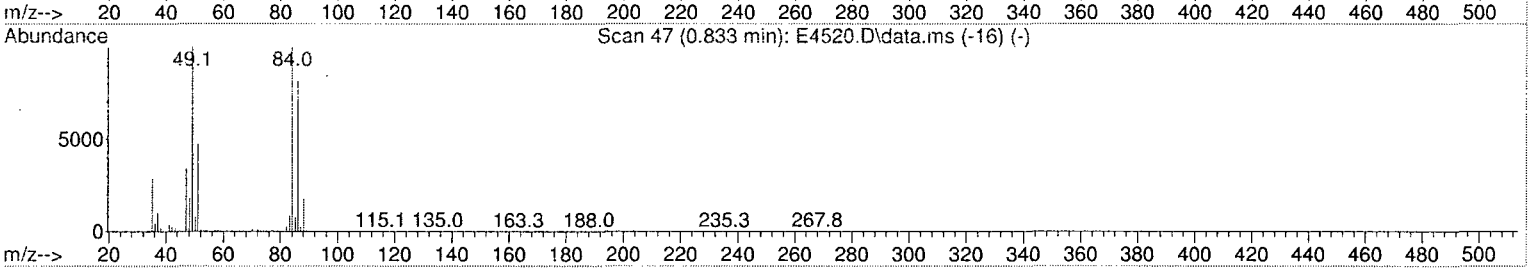
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

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

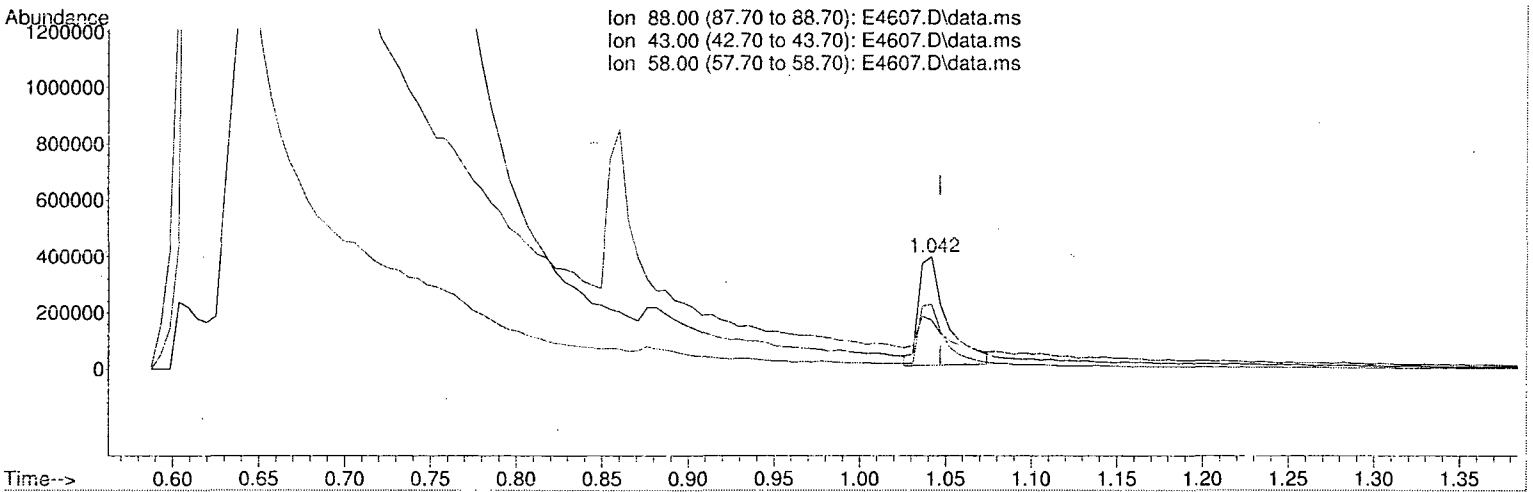
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

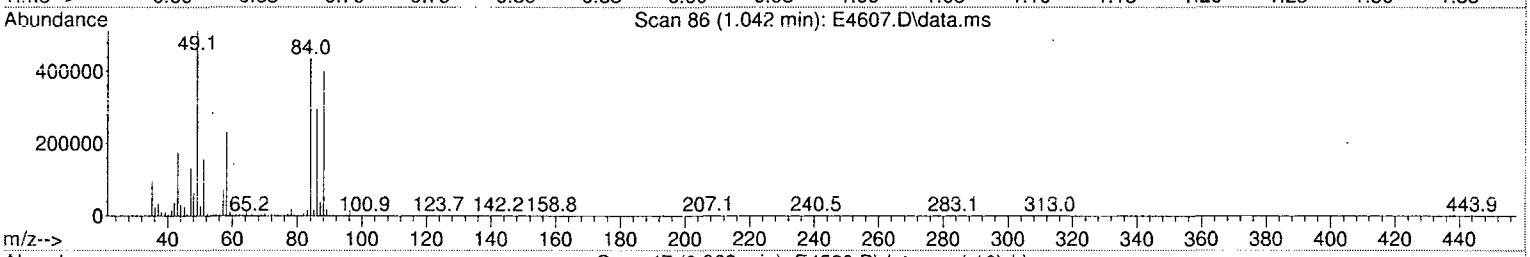
Quantitation Report (Qedit)

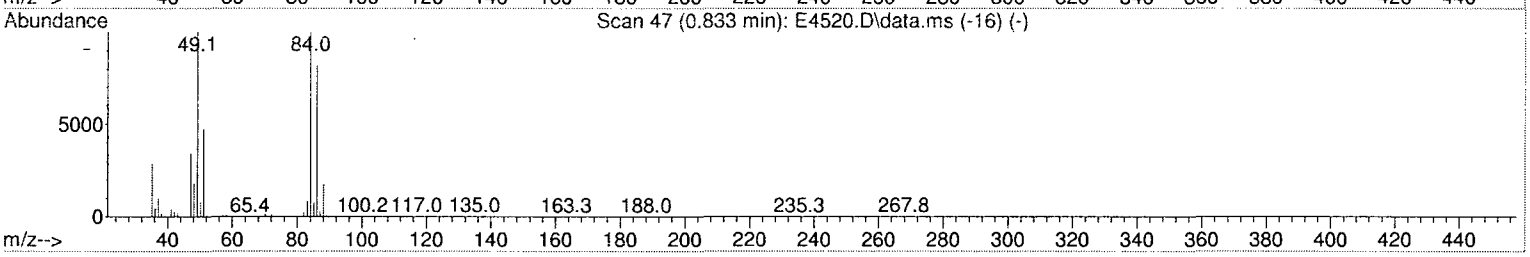
Data File : C:\msdchem\1\data\E4607.D
Acq On : 23 May 2012 19:23
Sample : 2E23005-CAL5
Misc : SSTD0809N
DataAcq Meth:CLPACQ.M

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 8/23

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

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

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	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 8/21

RS 8/21

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

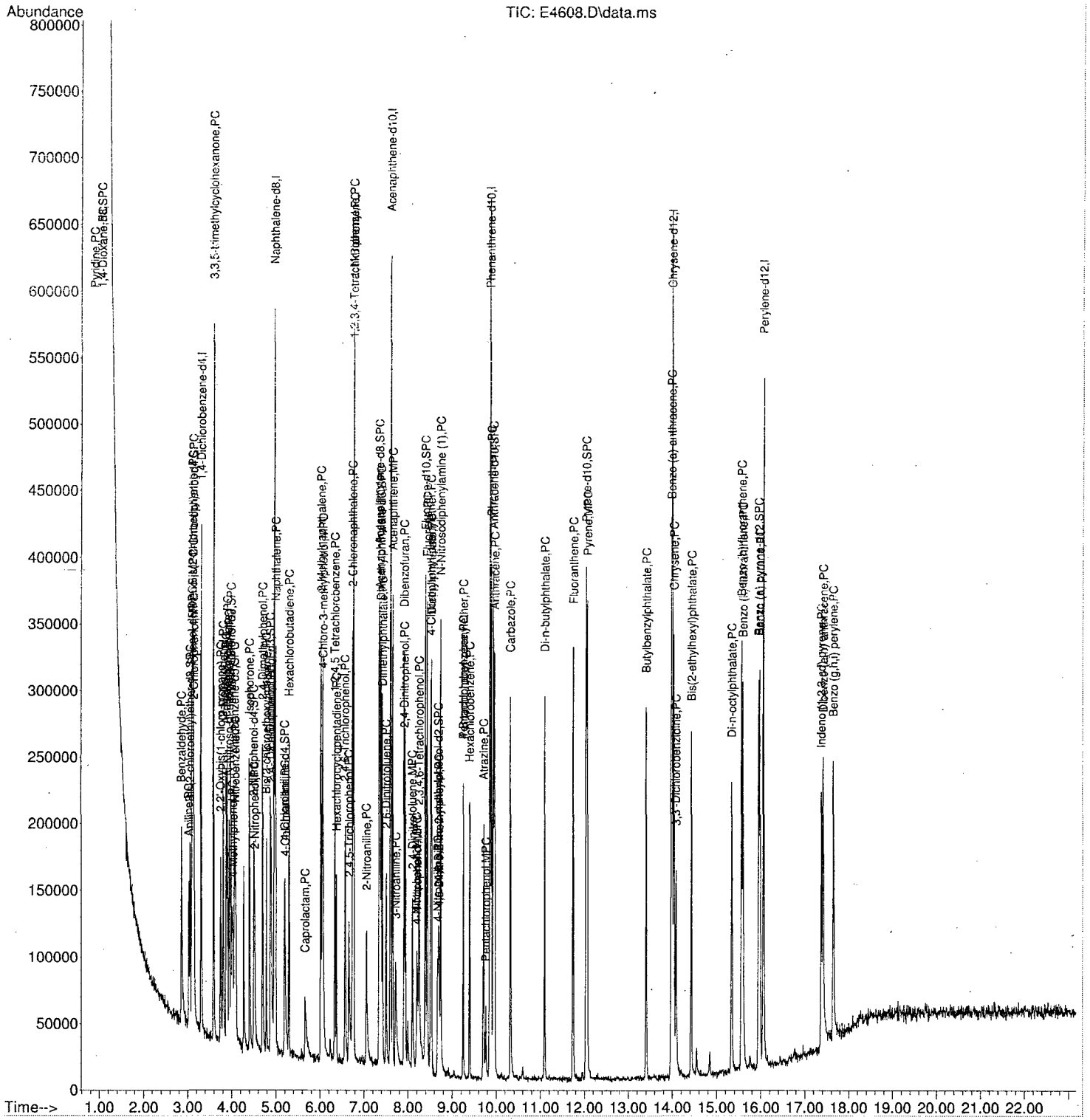
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

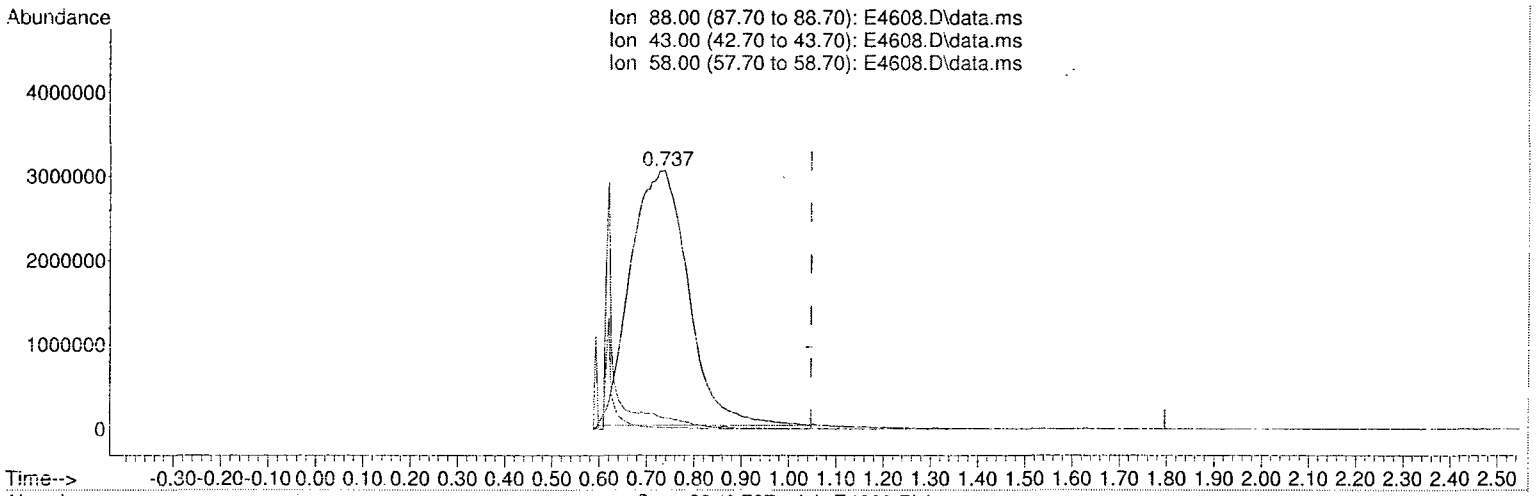


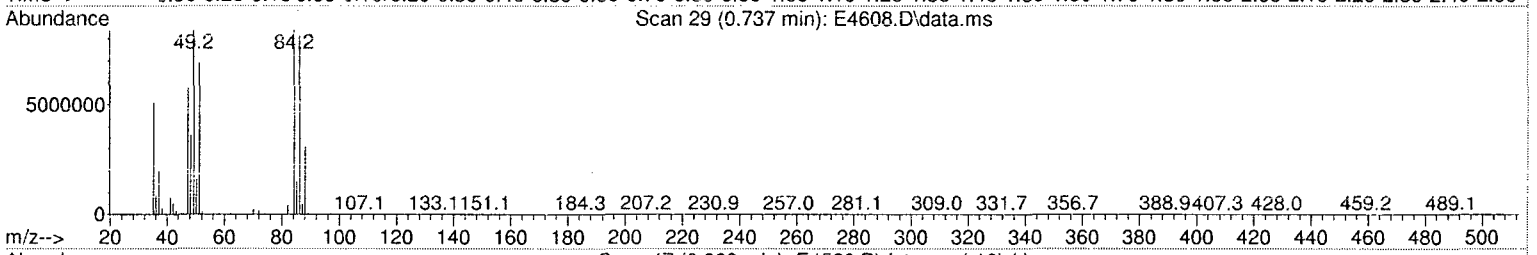
Quantitation Report (Qedit)

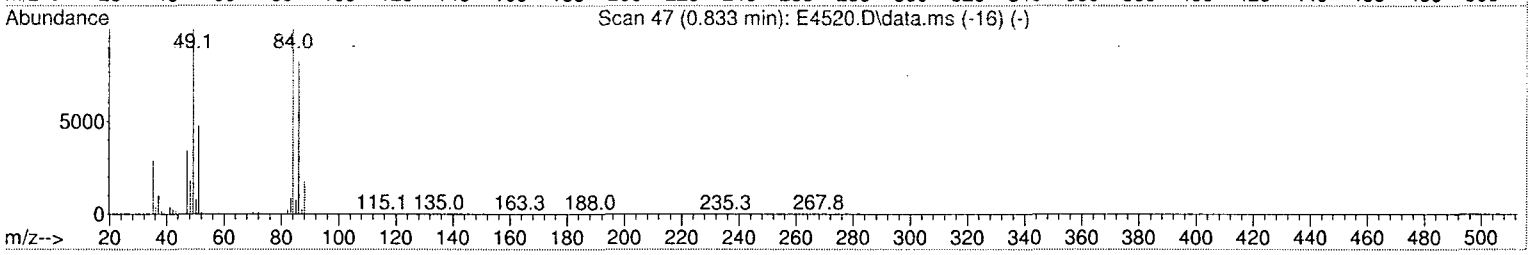
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

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

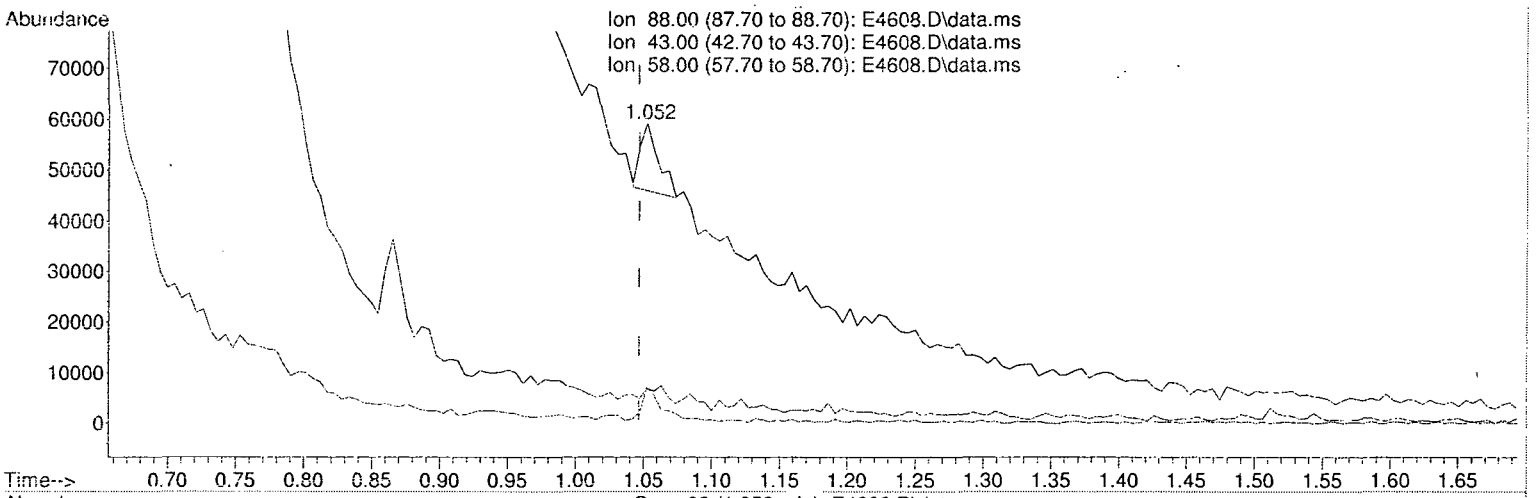
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

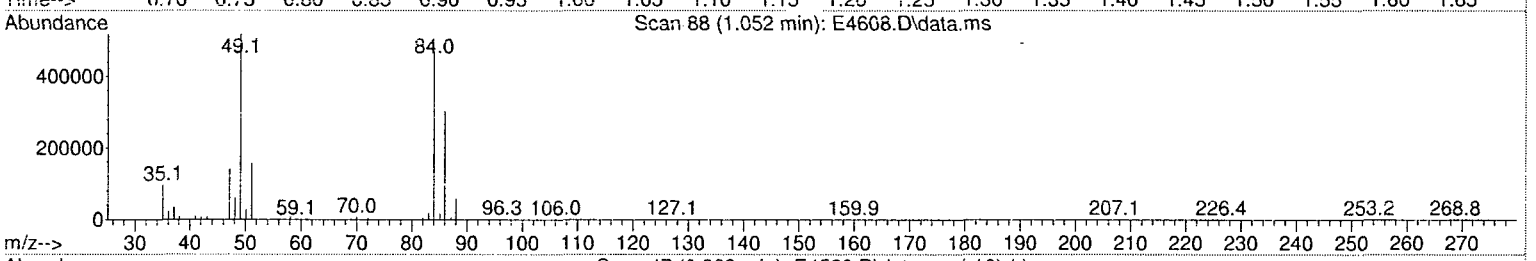
Quantitation Report (Qedit)

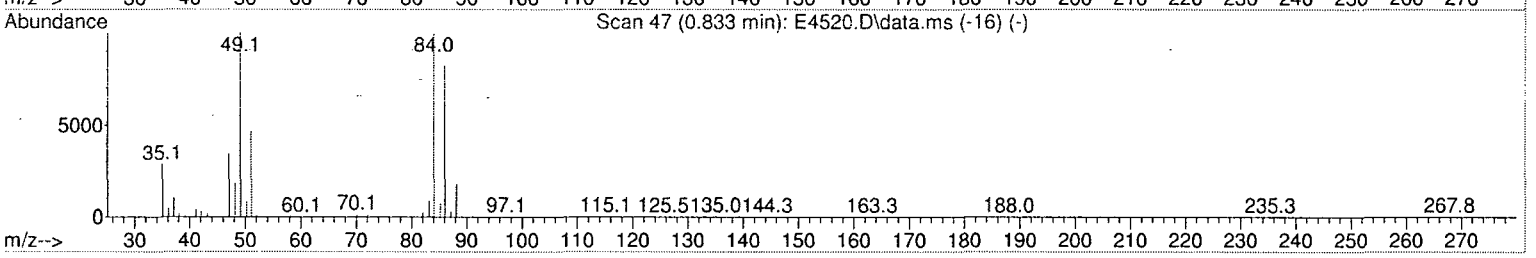
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

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 8/24

response 12301

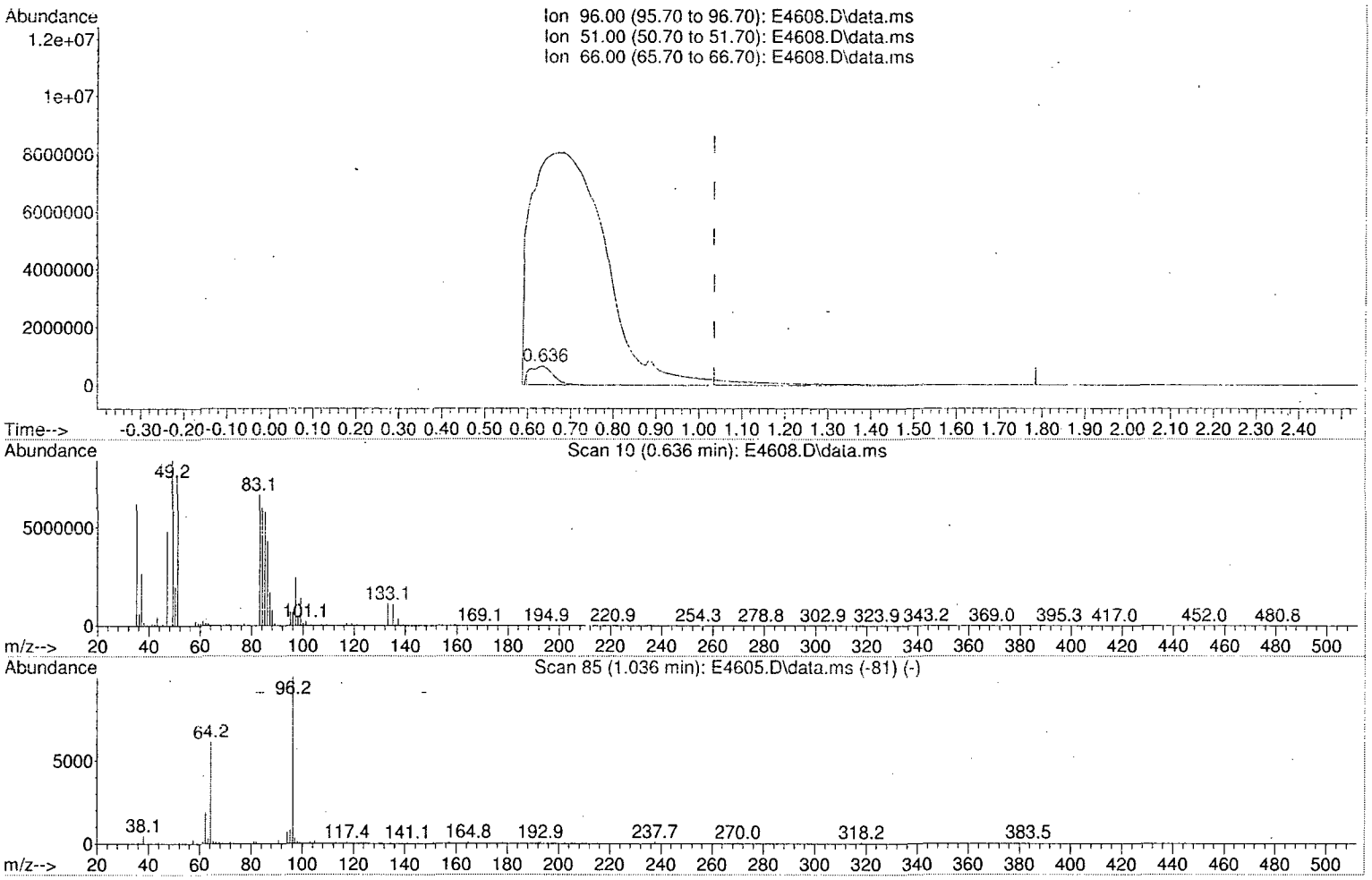
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

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

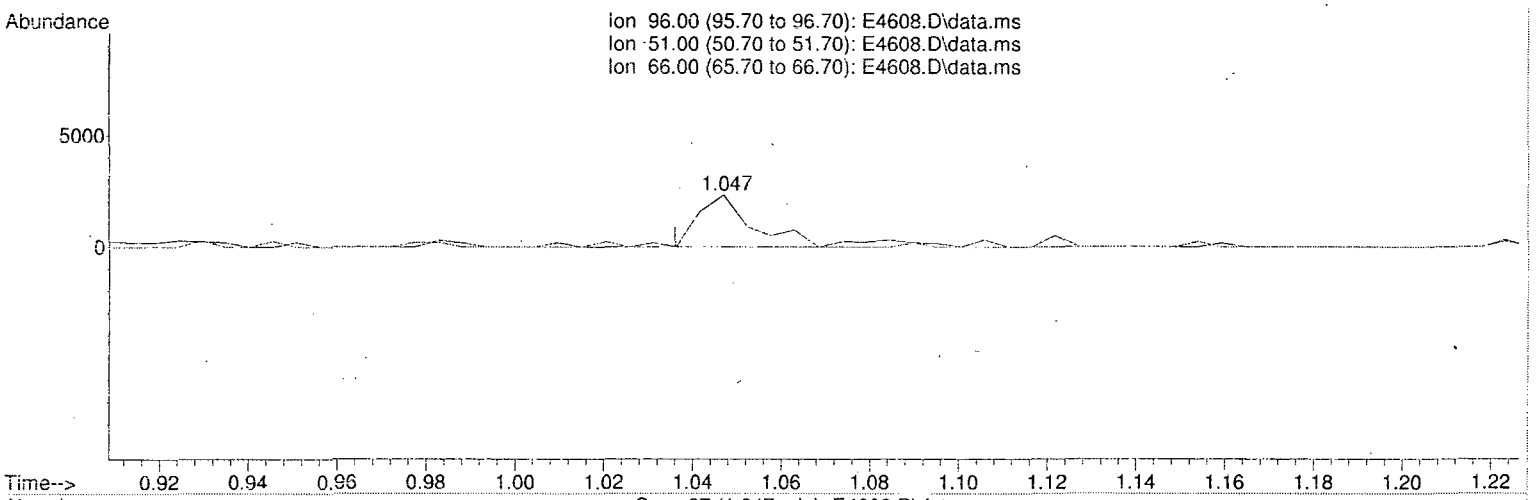
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.05#
0.00	0.00	0.00

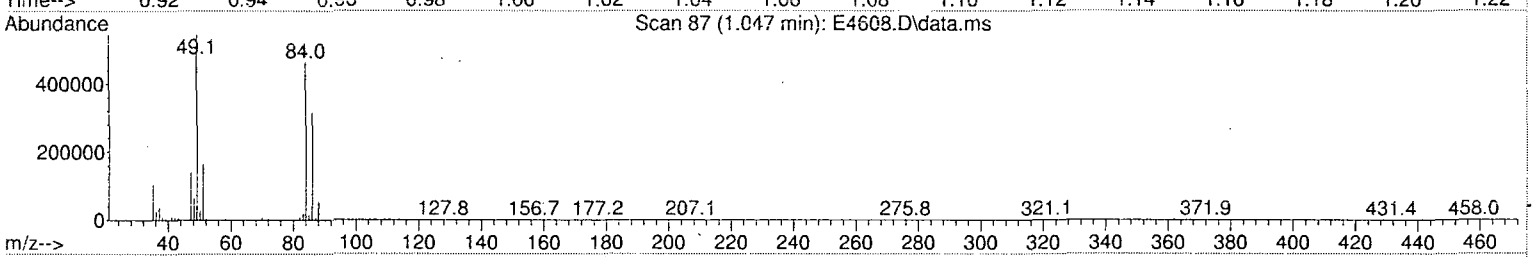
Quantitation Report (Qedit)

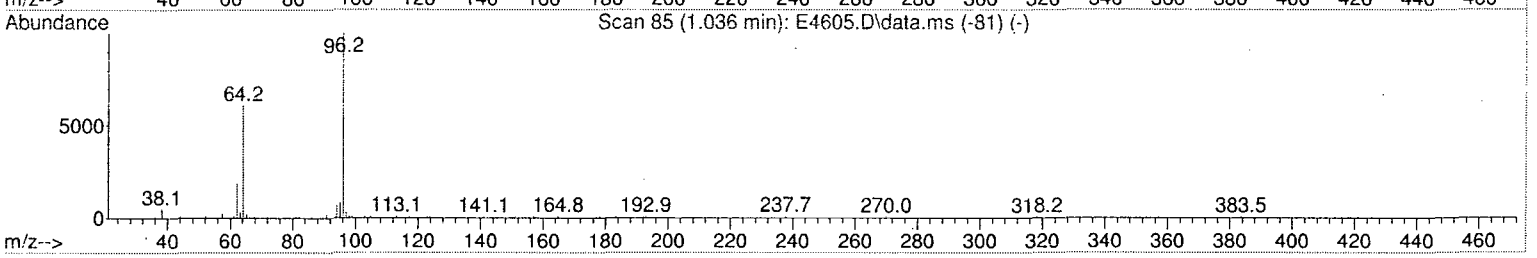
Data File : C:\msdchem\1\data\E4608.D
Acq On : 23 May 2012 19:55
Sample : 2E23005-CAL1
Misc : SSTD0059N
DataAcq Meth:CLPACQ.M

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.: F5WC4

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.: F5WC4

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.: F5WC4

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

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 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

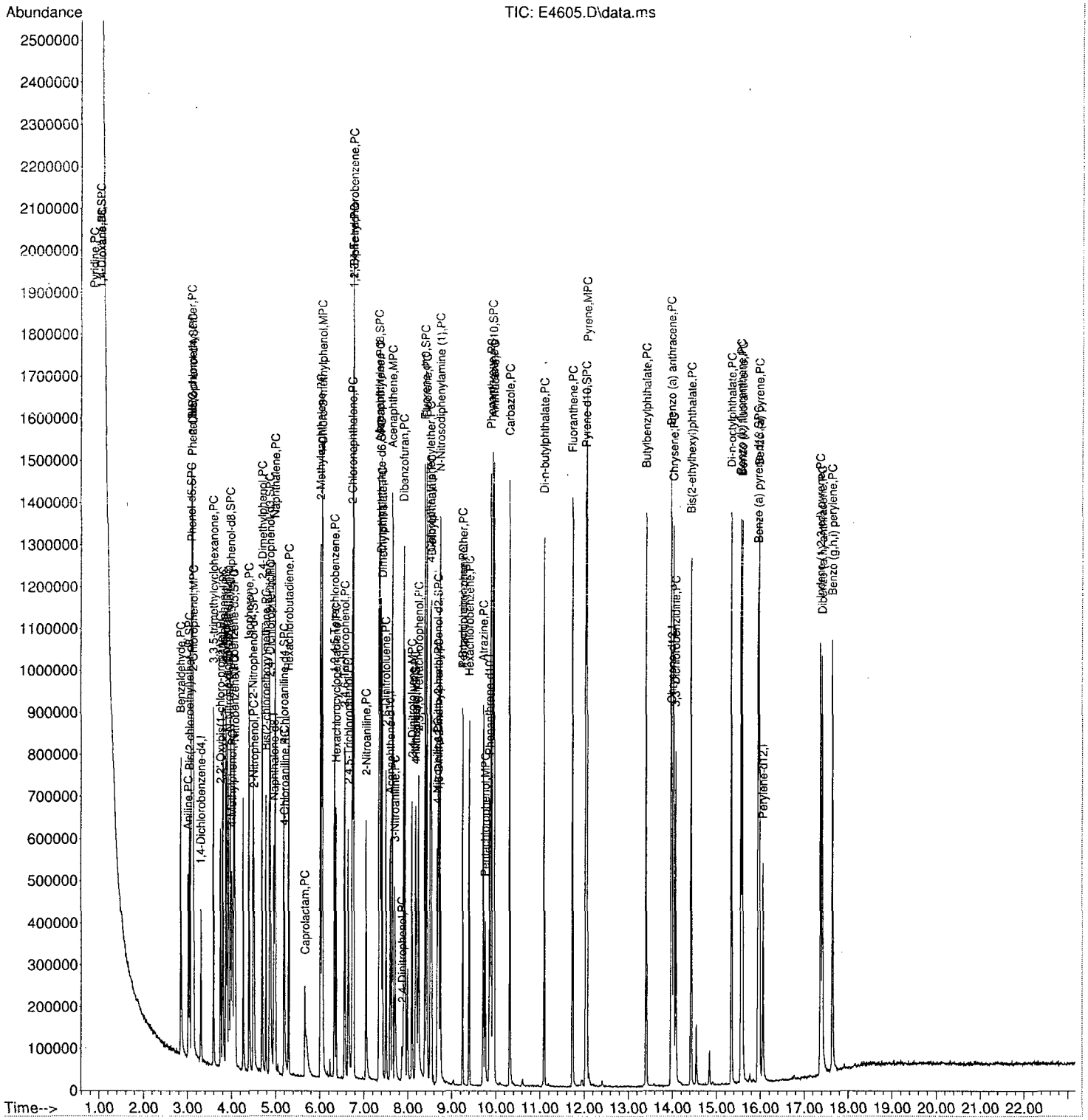
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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



00265

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

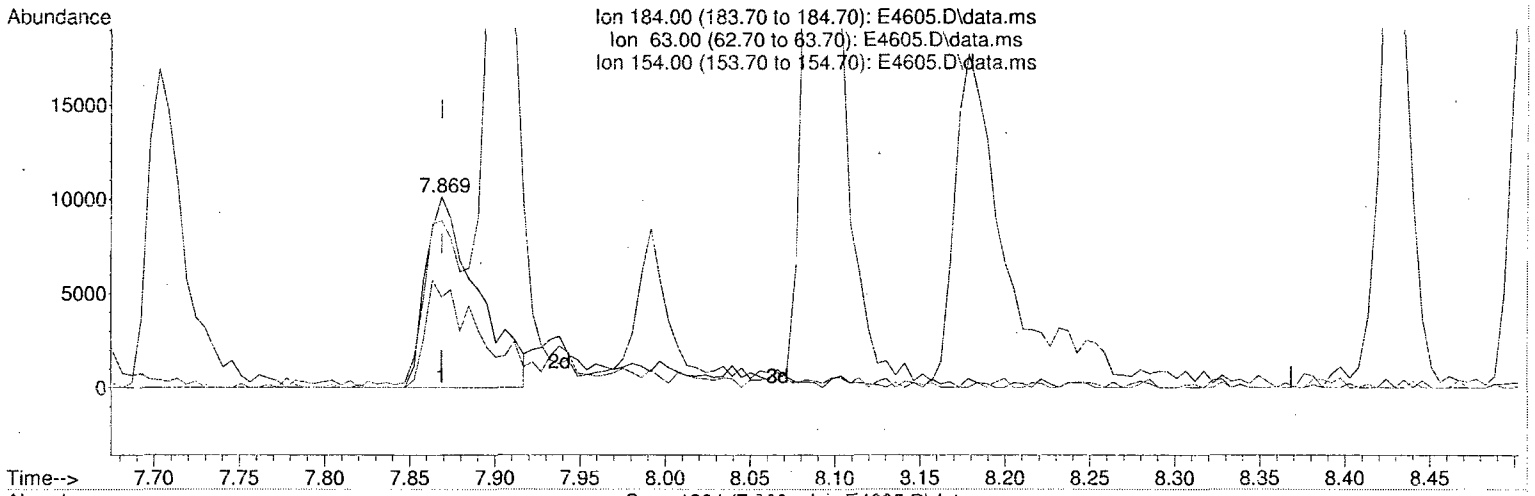
(#) = Out of Range SPCC's out = 0 CCC's out = 2

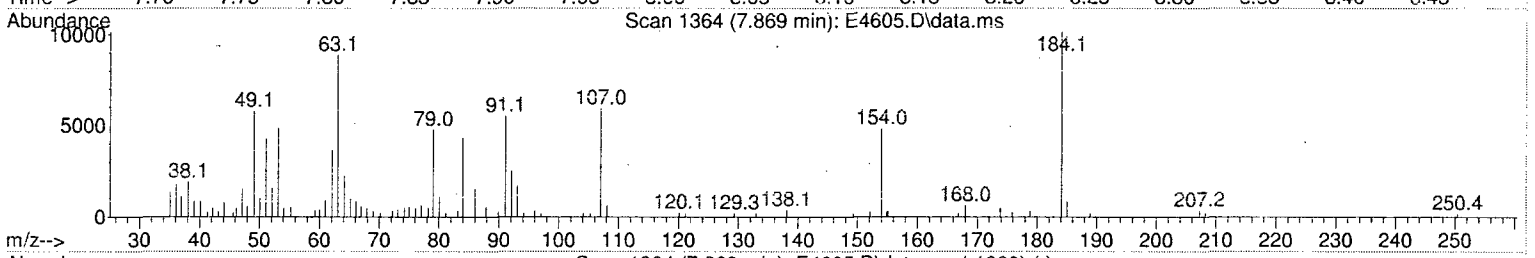
Quantitation Report (Qedit)

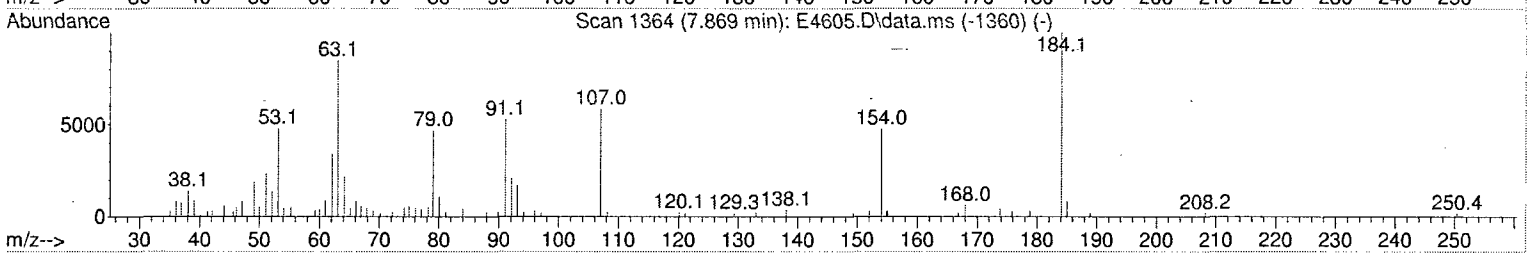
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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

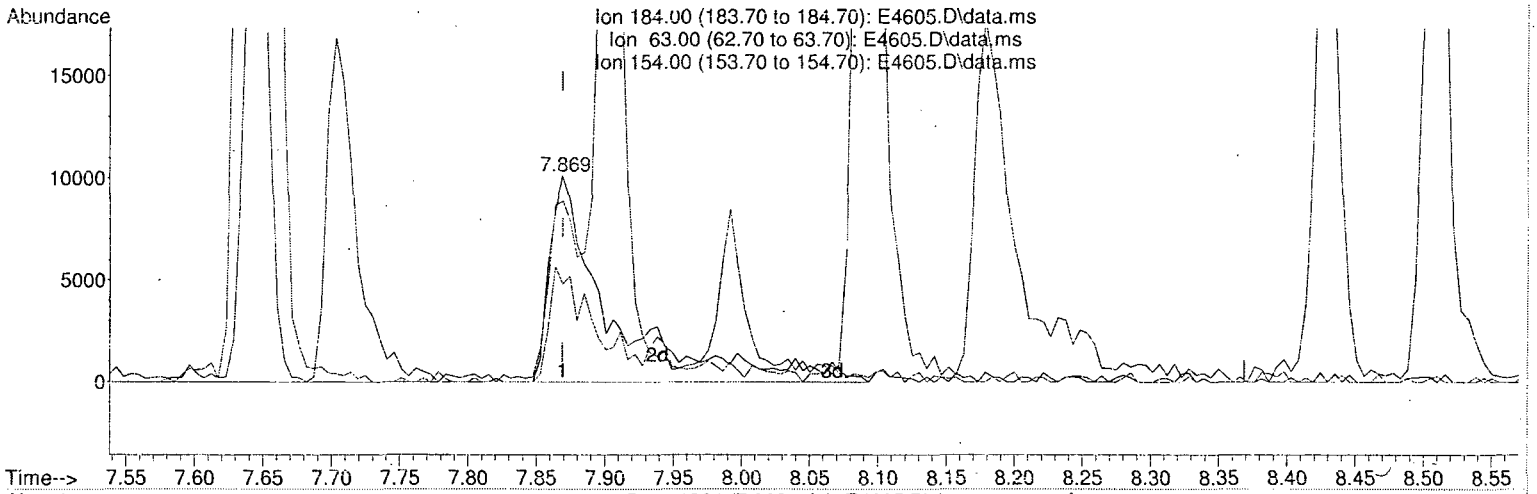
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	55.73
154.00	63.80	60.55
0.00	0.00	0.00

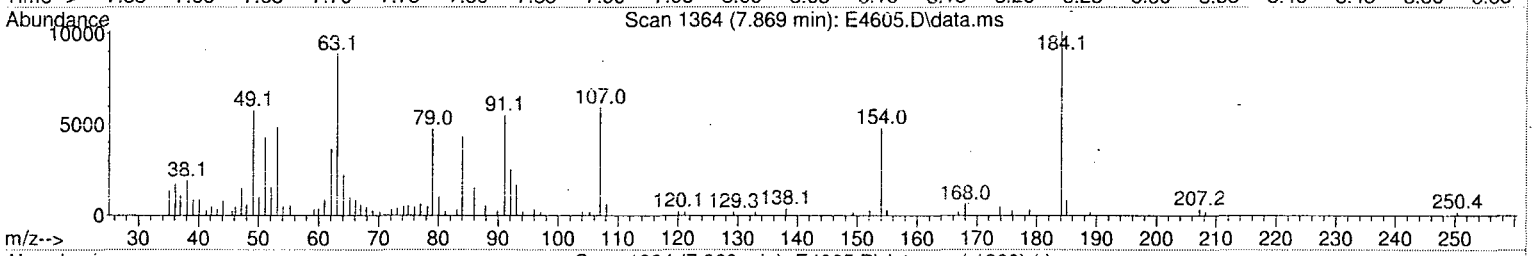
Quantitation Report (Qedit)

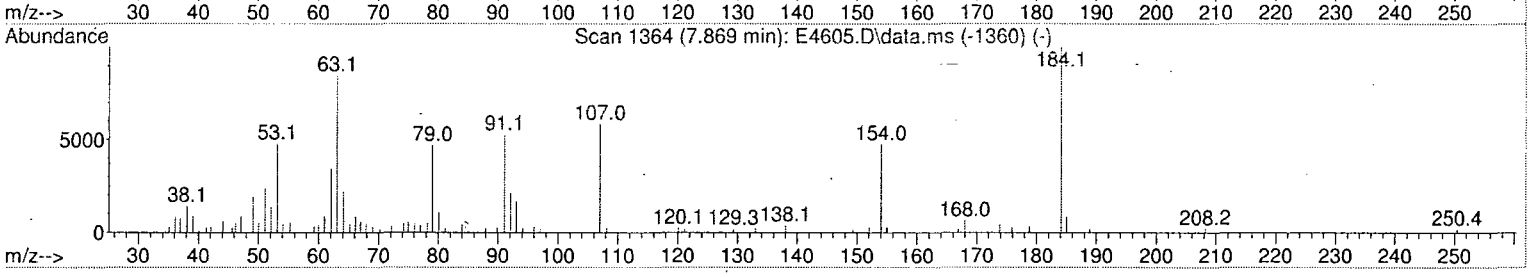
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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 8RV

response 32046

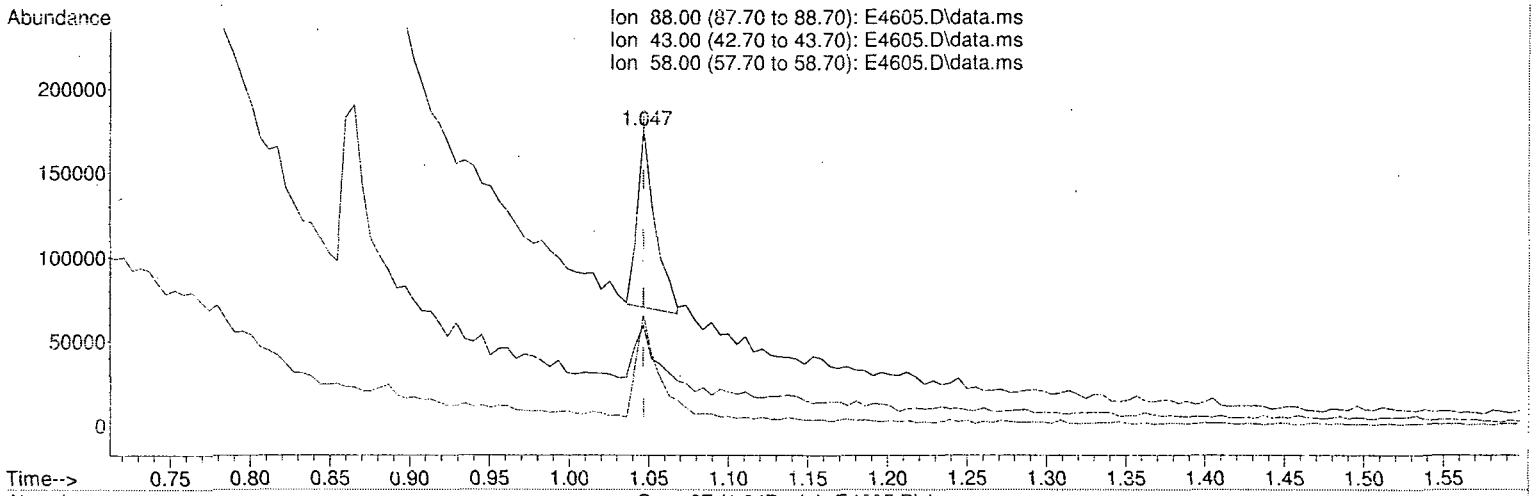
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	37.02#
154.00	63.80	40.22#
0.00	0.00	0.00

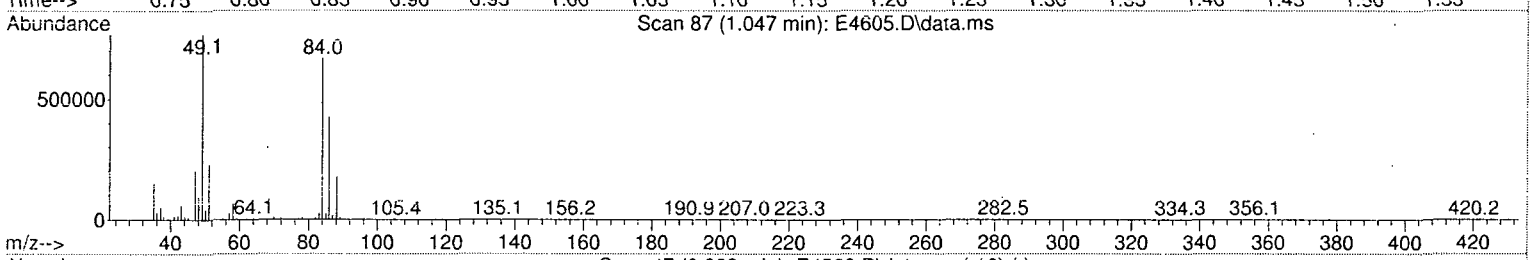
Quantitation Report (Qedit)

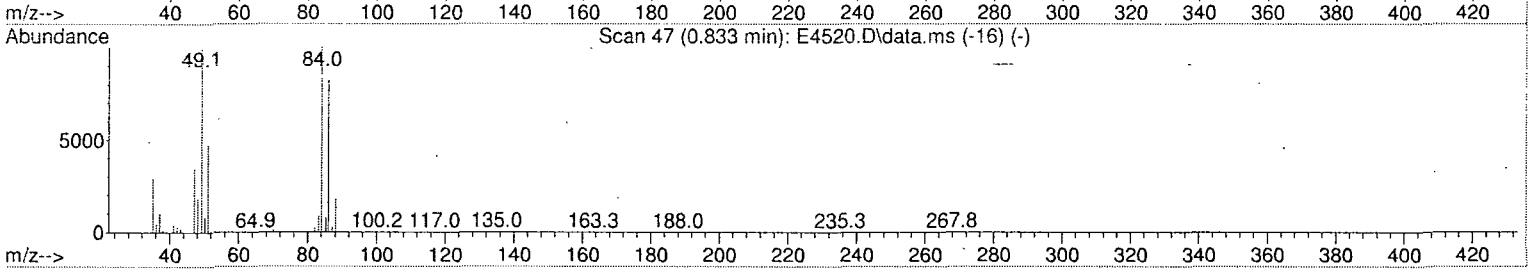
Data File : C:\msdchem\1\data\E4605.D
Acq On : 23 May 2012 18:22
Sample : 2E23005-CAL3
Misc : SSTD0209N
DataAcq Meth:CLPACQ.M

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

response 82987

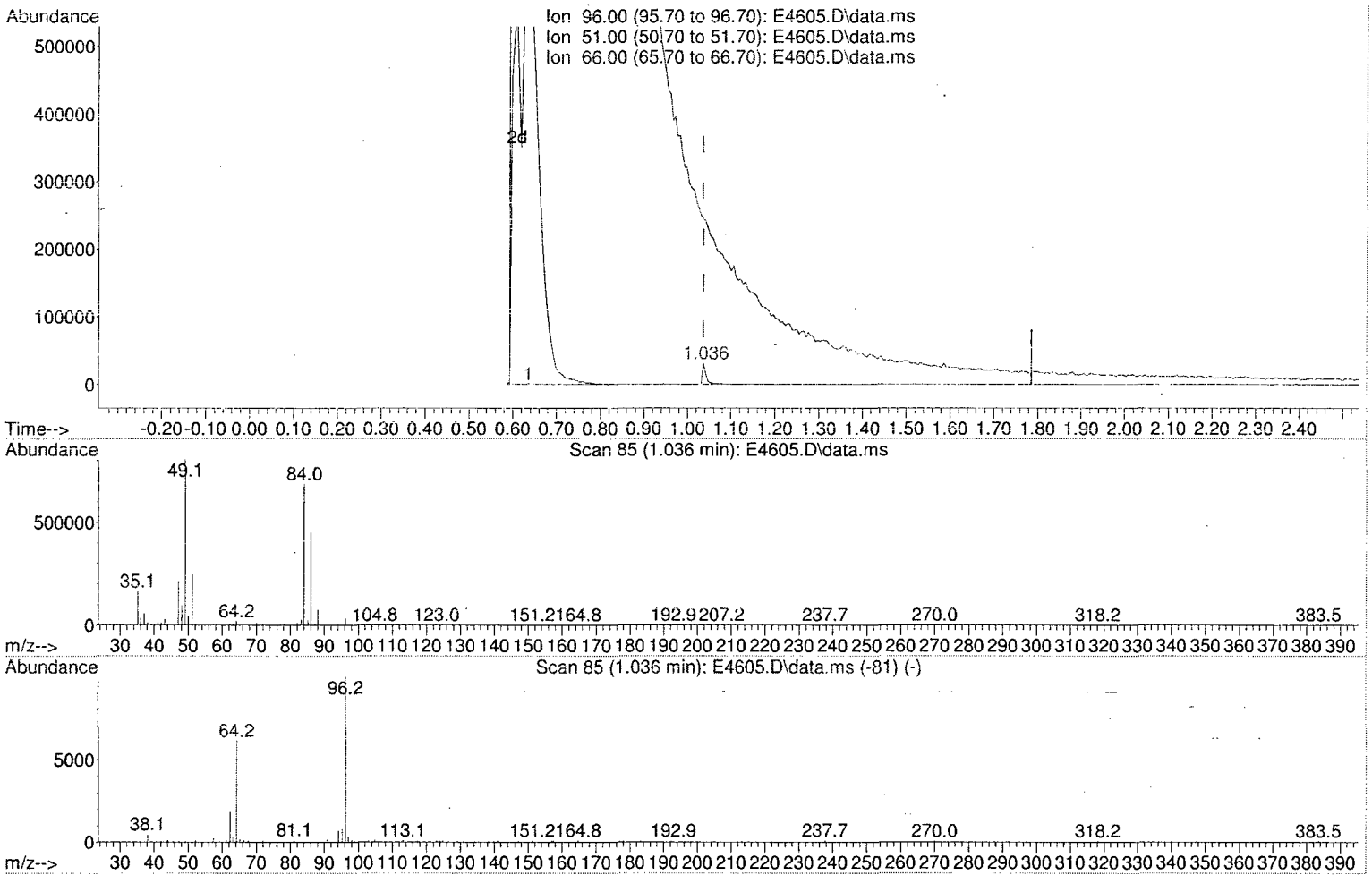
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

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.: F5WC4

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
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.: F5WC4

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.: F5WC4

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
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. Vakati
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 5/27

RS 5/27

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

	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 gRW
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 gRW
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
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Multiplr: 1.00

Quant Time: May 24 13:03:58 2012
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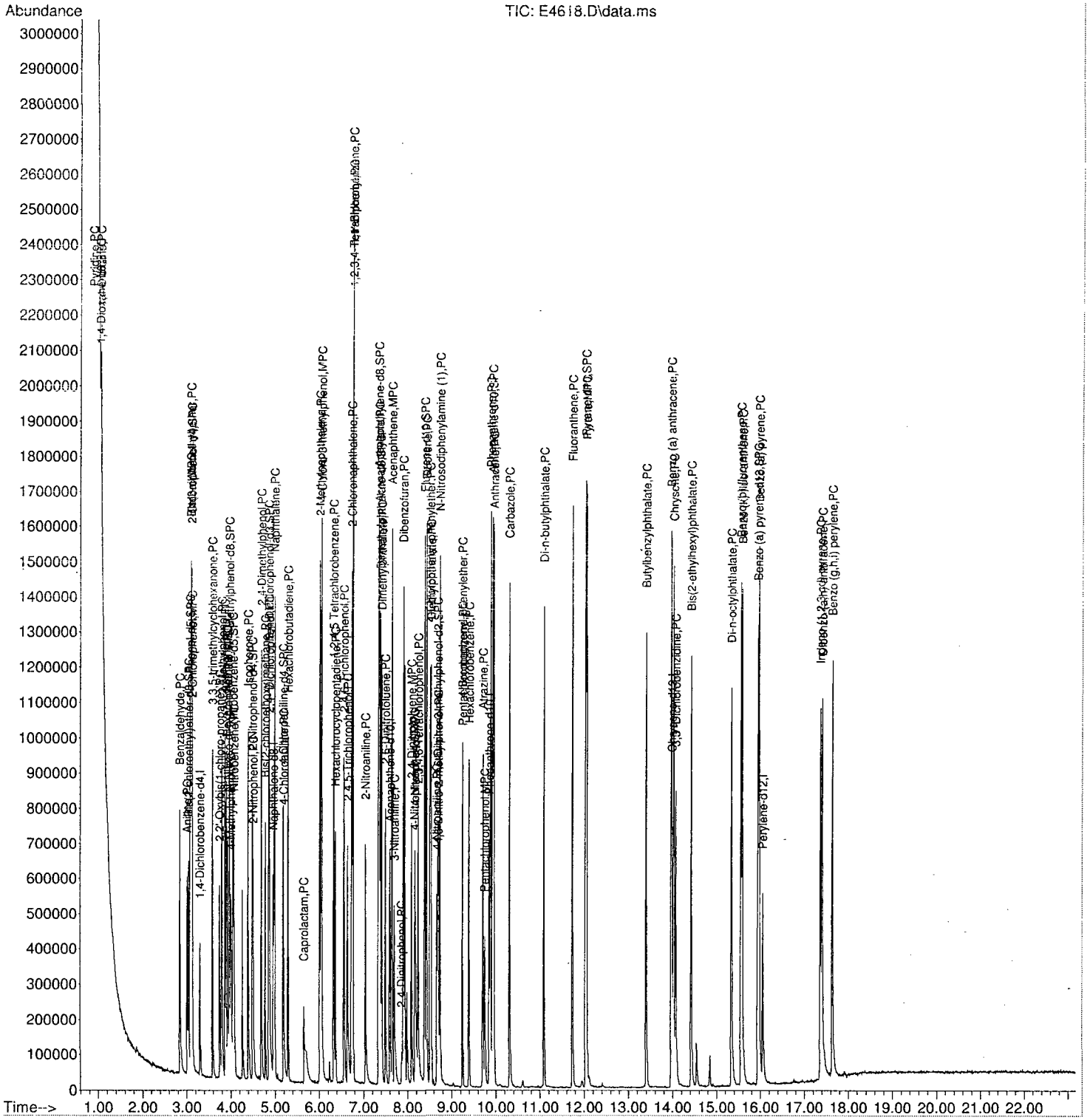
Quant Method : C:\msdchem\1\methods\SOME4618.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 13:01:37 2012
Response via : Initial Calibration



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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)
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 : 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)
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

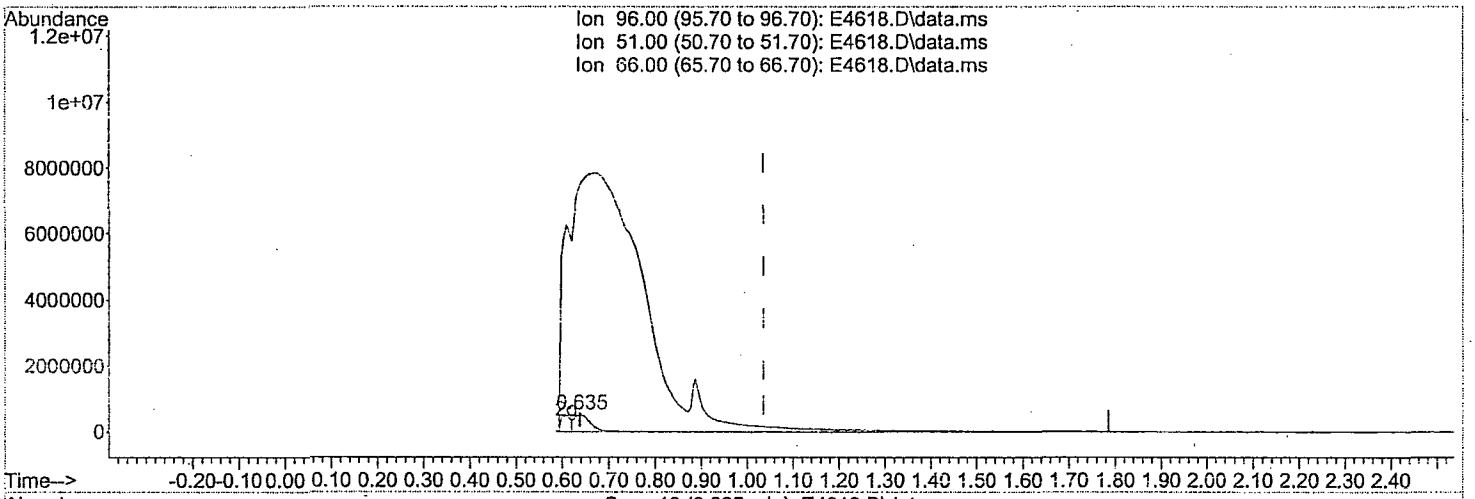
(#) = Out of Range SPCC's out = 0 CCC's out = 2

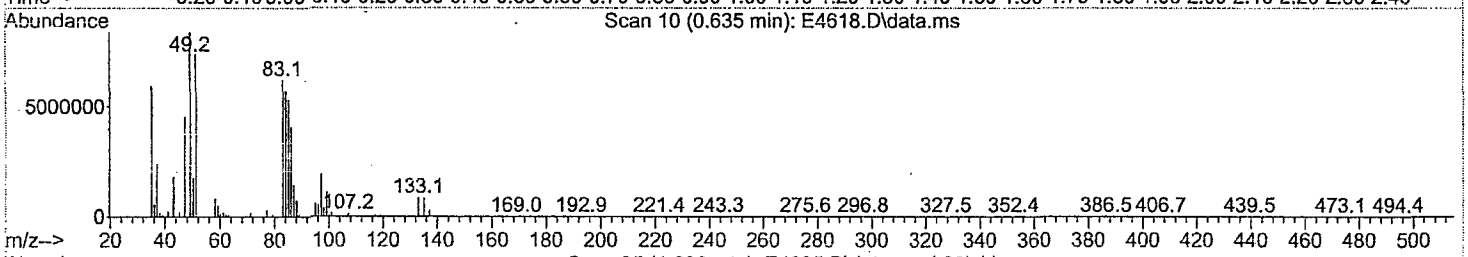
Quantitation Report (Qedit)

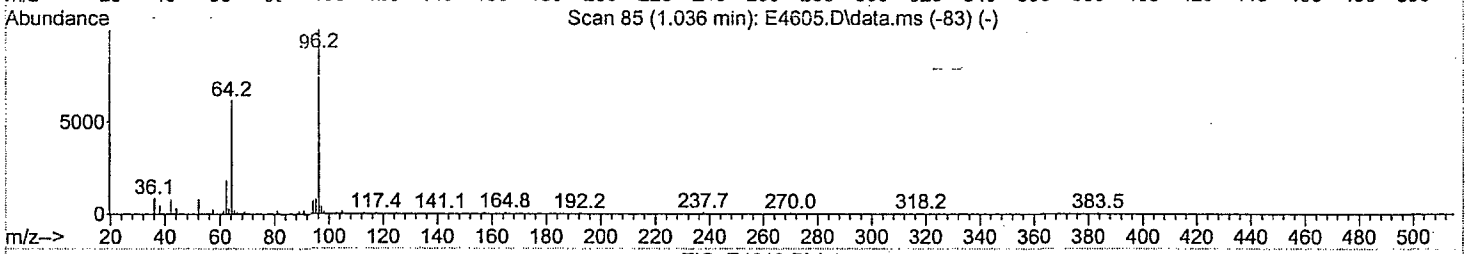
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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

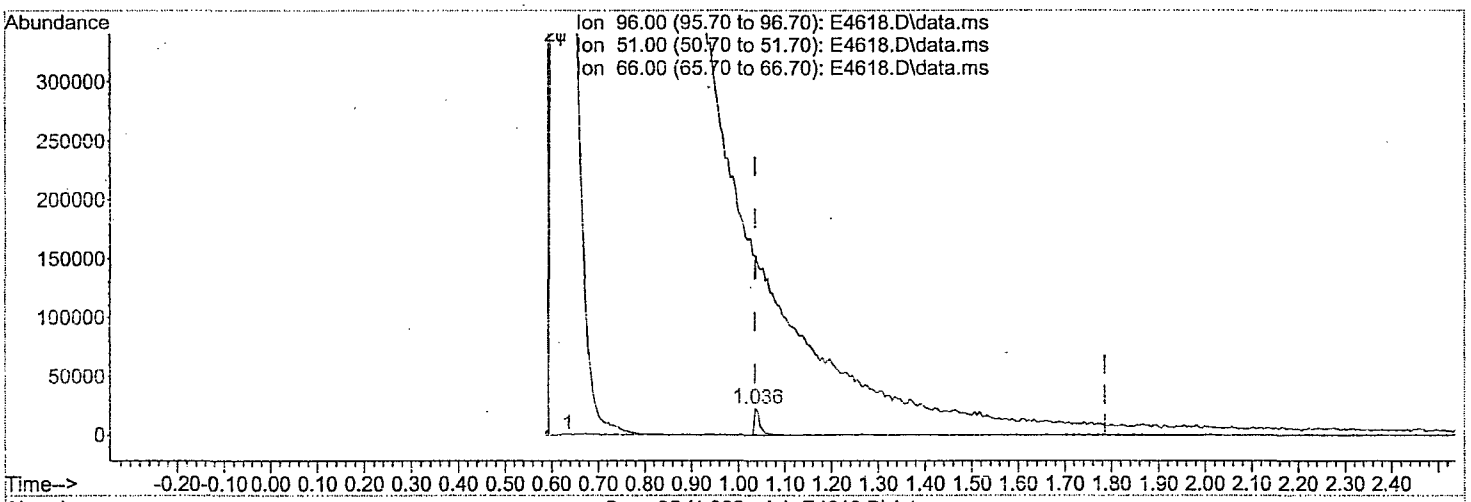
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.09#
0.00	0.00	0.00

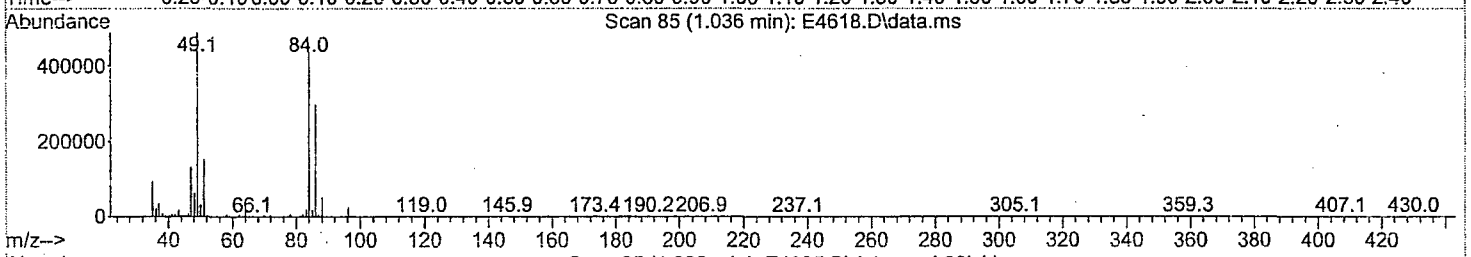
Quantitation Report (Qedit)

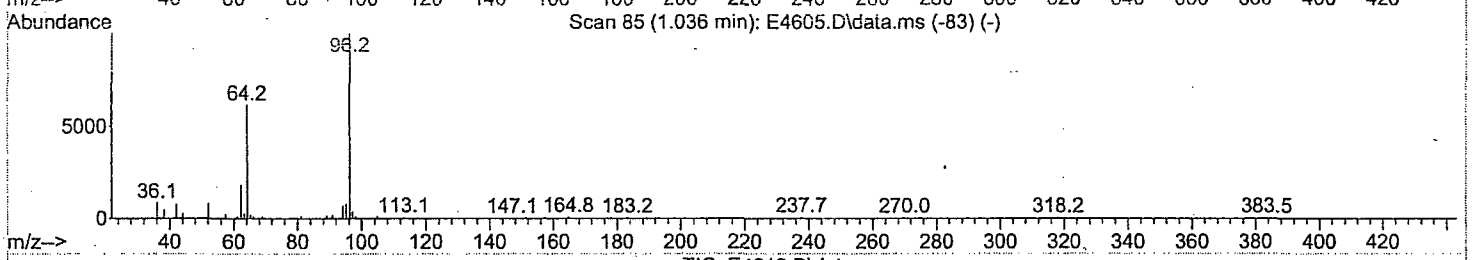
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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 [illegible]

response 17999

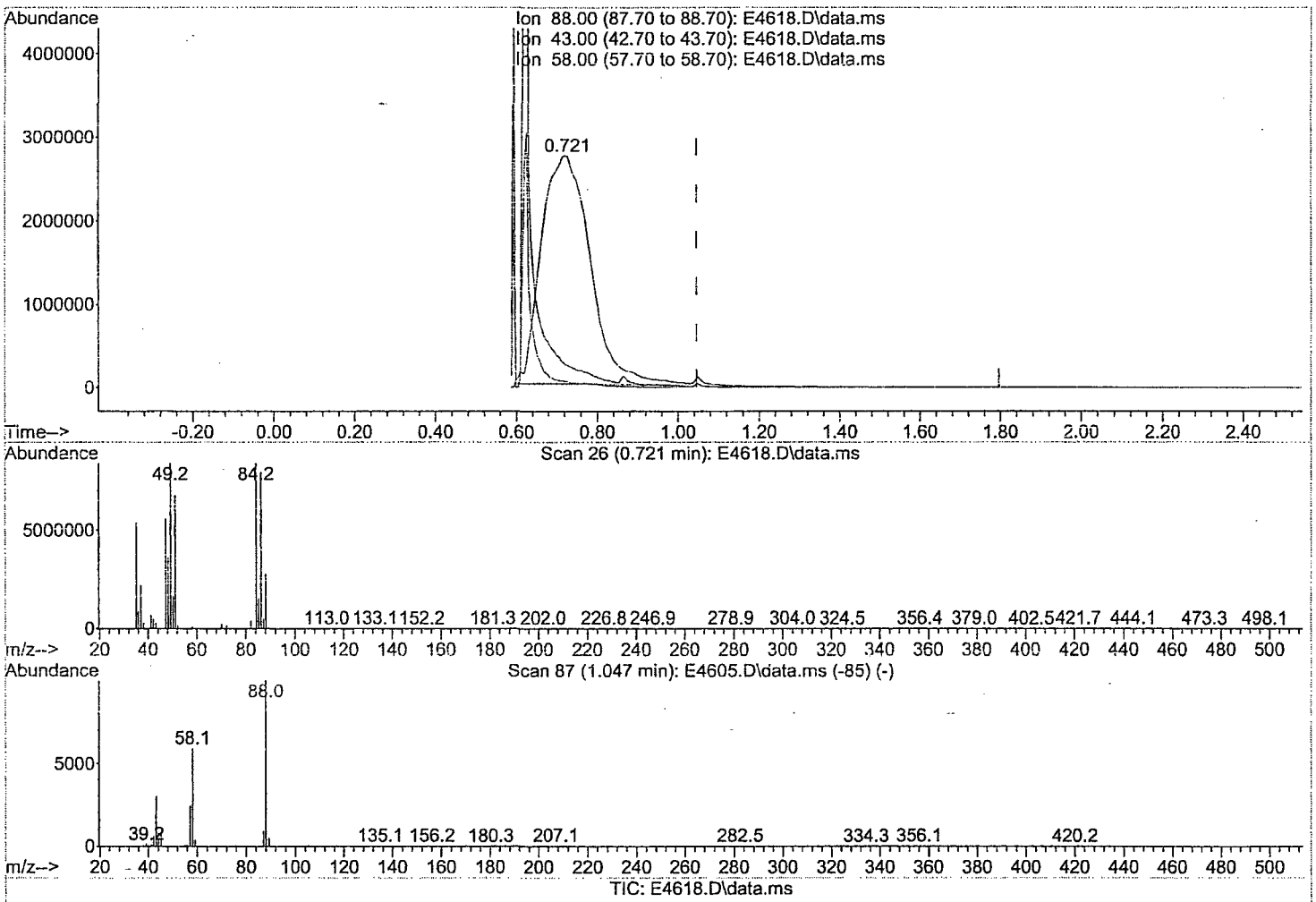
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	6.34#
0.00	0.00	0.00

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



(4) 1,4-Dioxane (PC)

0.721min (-0.326) 4208.86 ug/mL

response 22909162

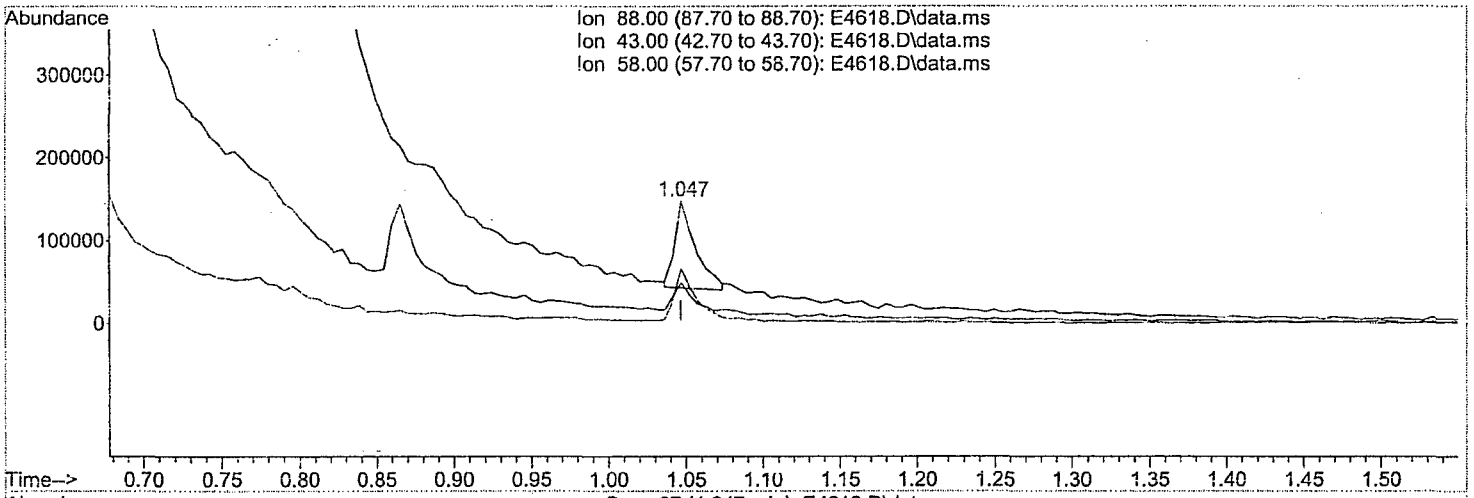
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

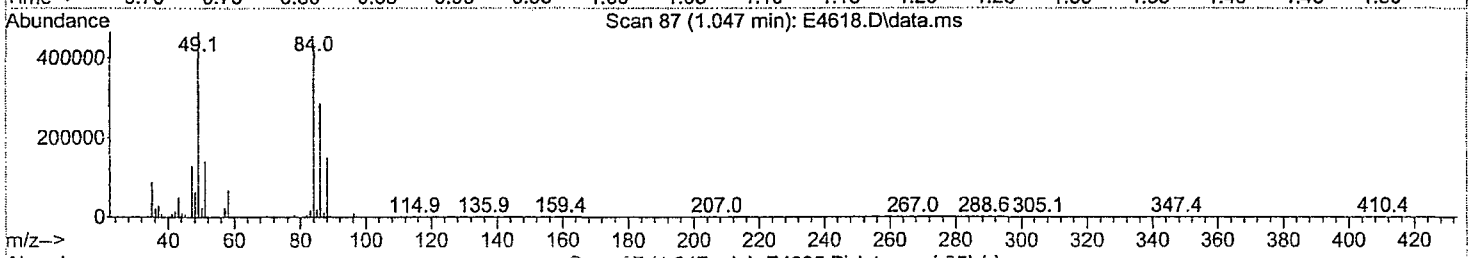
Quantitation Report (Qedit)

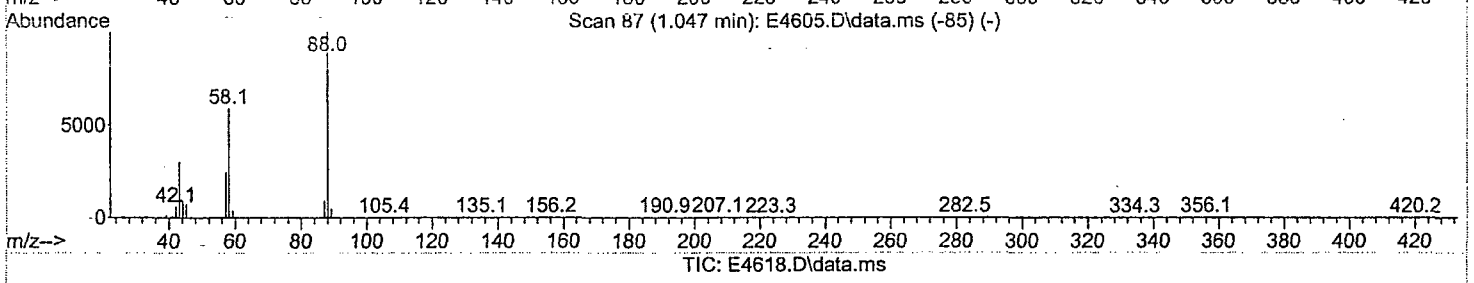
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD02090
DataAcq Meth:CLPACQ.M

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

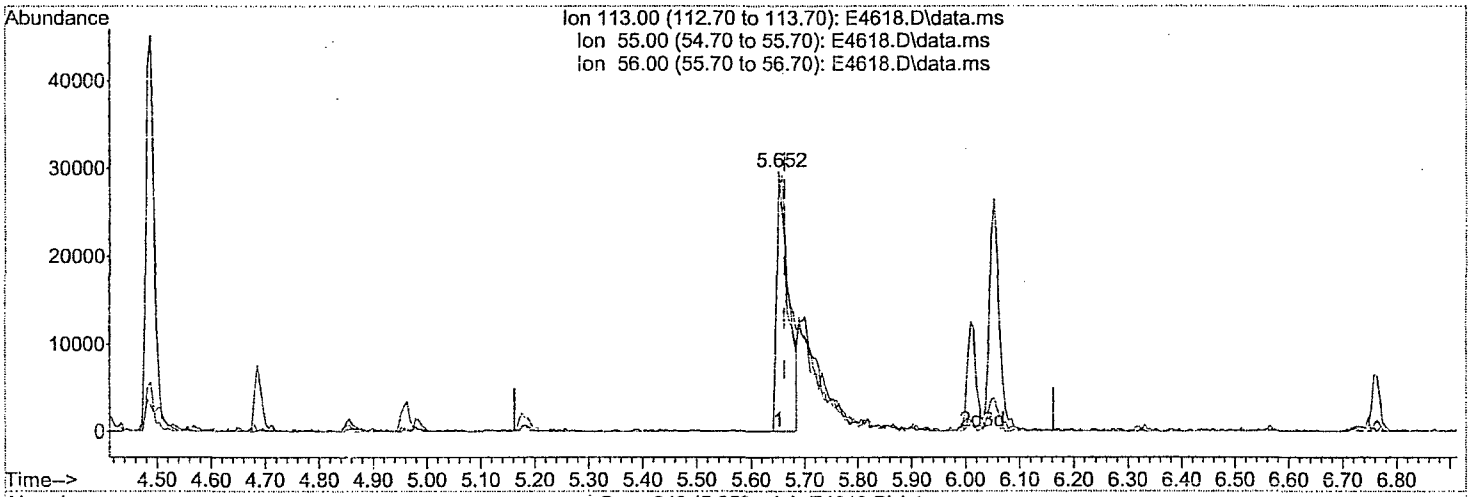
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

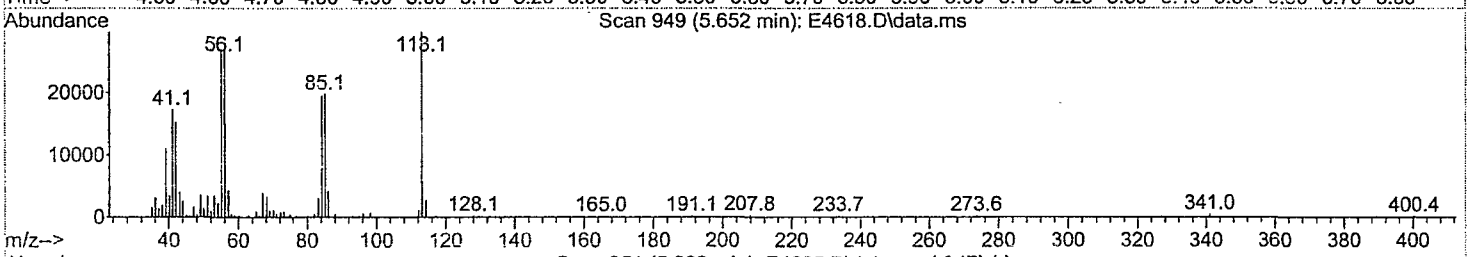
Quantitation Report (Qedit)

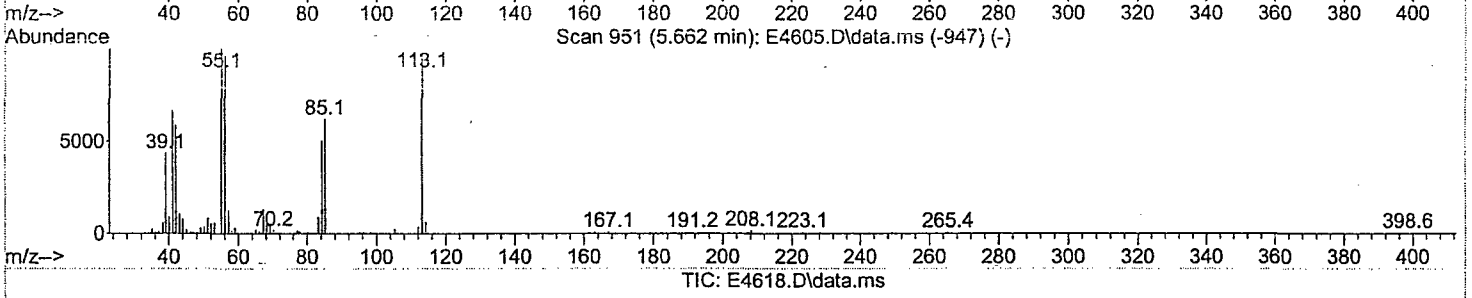
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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

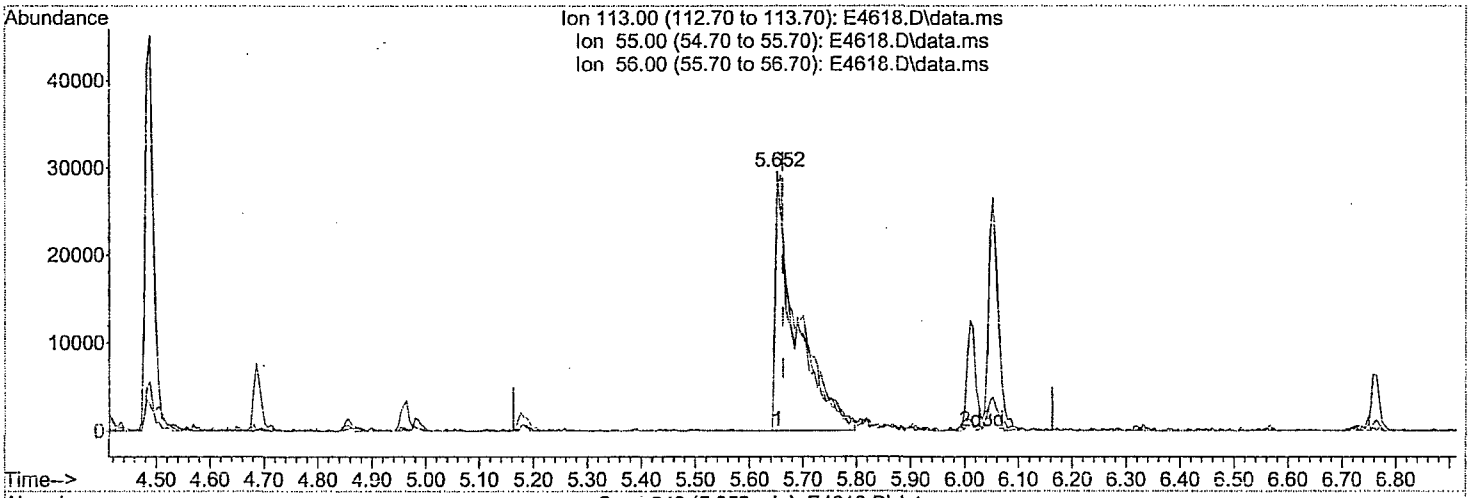
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	115.12
56.00	92.50	94.62
0.00	0.00	0.00

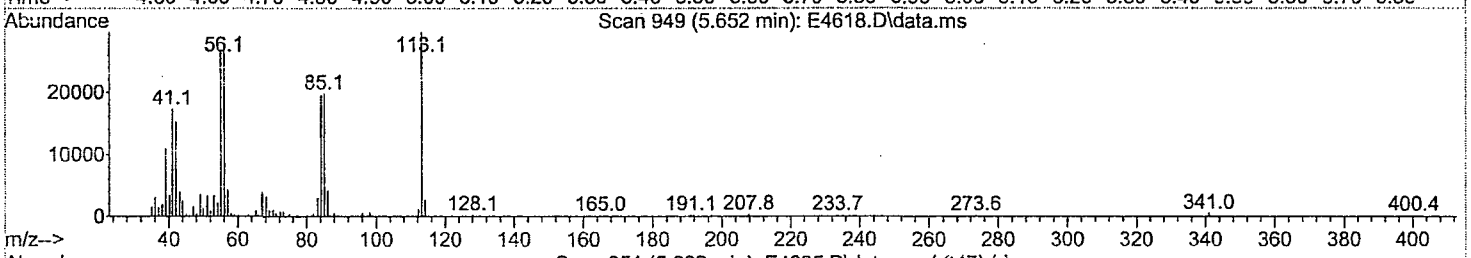
Quantitation Report (Qedit)

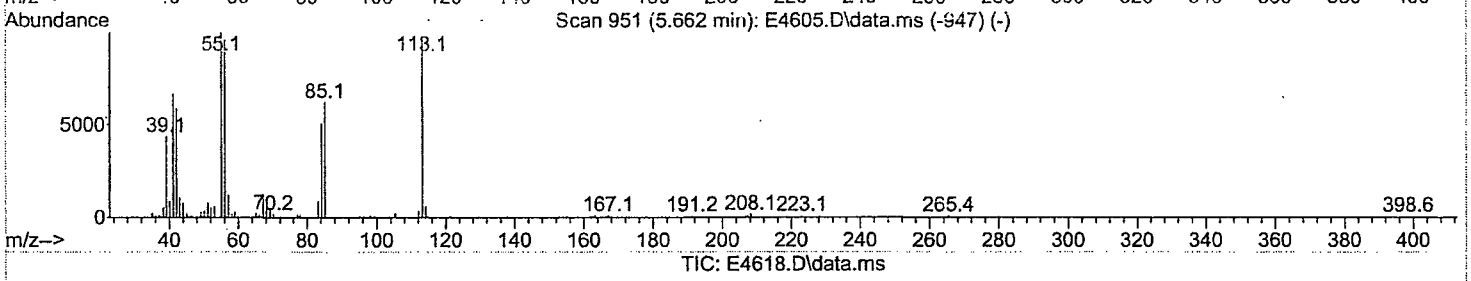
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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







(32) Caprolactam (PC)

5.652min (-0.011) 19.15 ug/mL m RS 8/24

response 80499

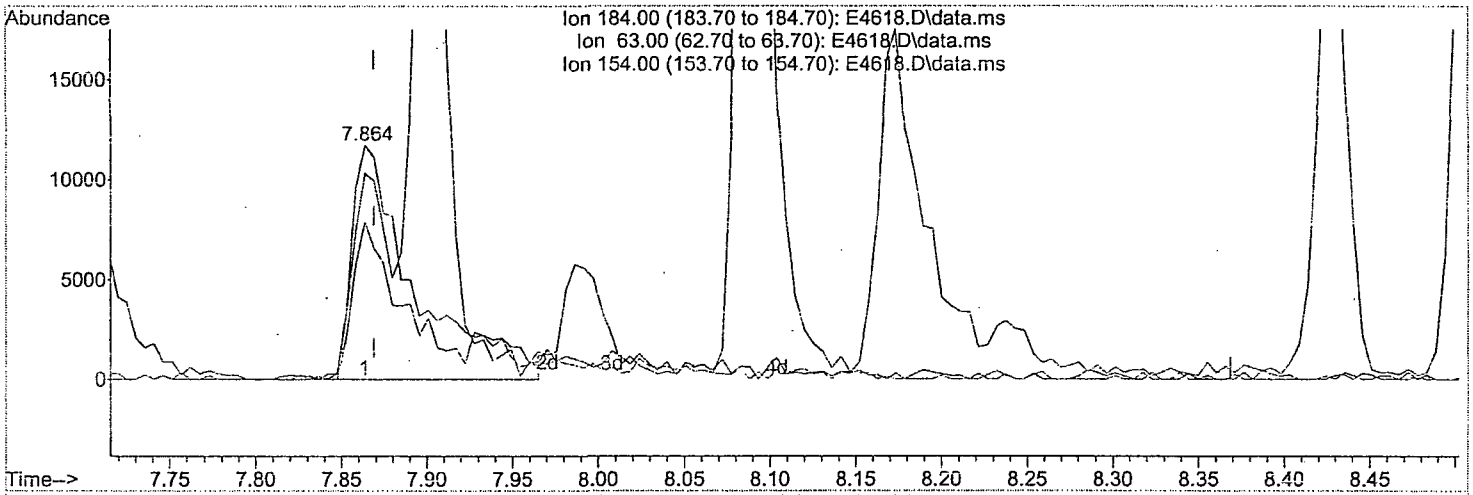
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	63.99#
56.00	92.50	52.59#
0.00	0.00	0.00

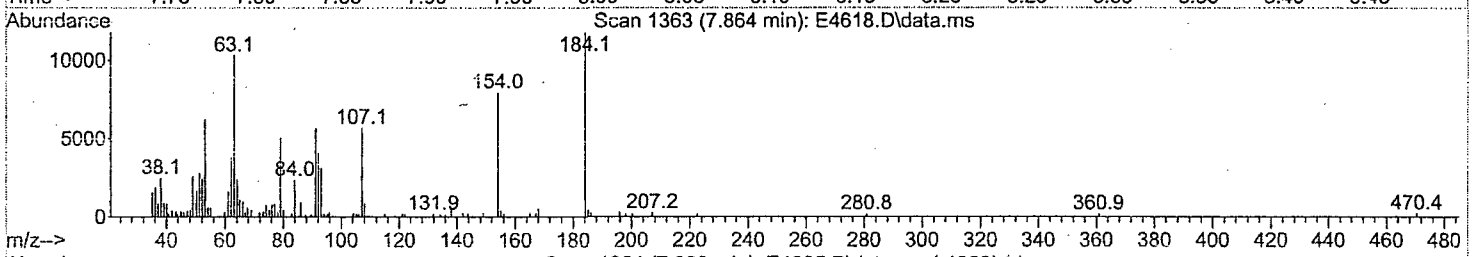
Quantitation Report (Qedit)

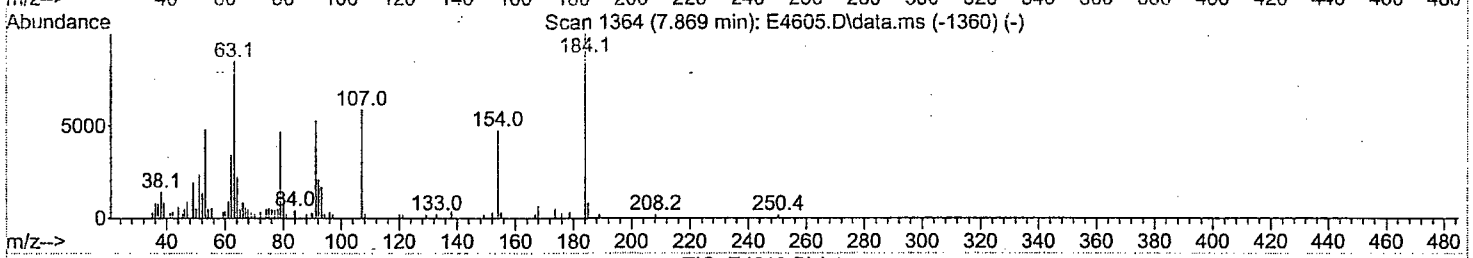
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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

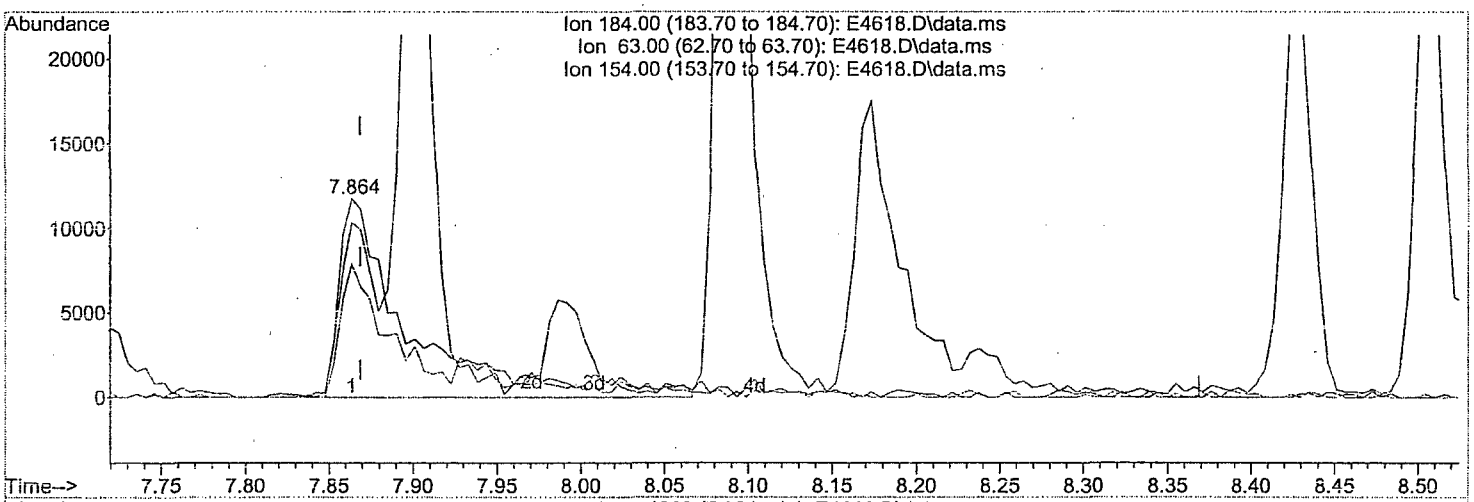
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	46.85#
154.00	63.80	53.09
0.00	0.00	0.00

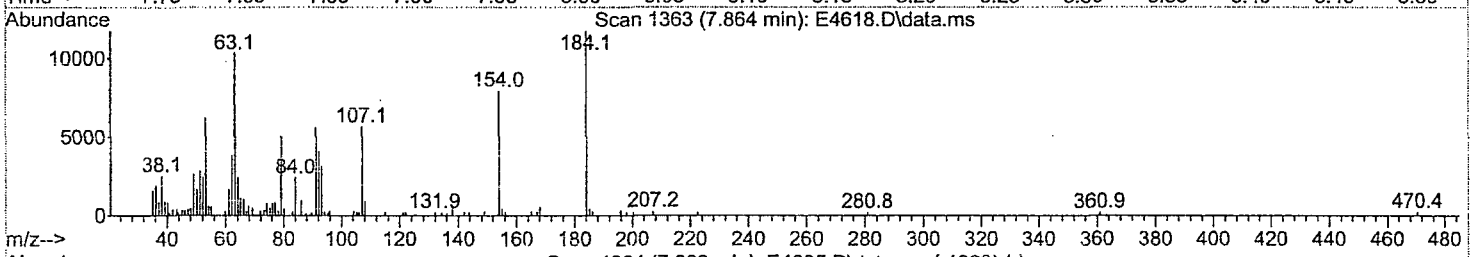
Quantitation Report (Qedit)

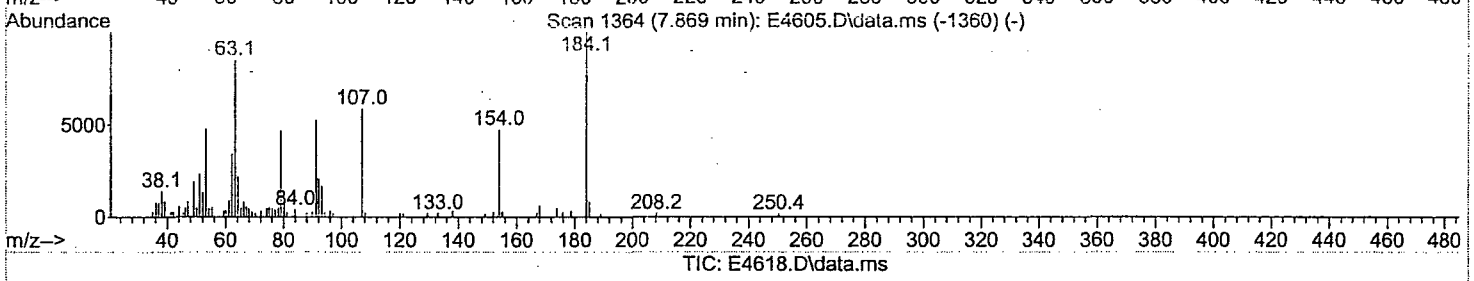
Data File : C:\msdchem\1\data\E4618.D
Acq On : 24 May 2012 1:07
Sample : 2E23005-CCV1
Misc : SSTD0209O
DataAcq Meth:CLPACQ.M

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.: F5WC4

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
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.: F5WC4

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.: F5WC4

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

05/26/12
S. Vitkati
05/26/12

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

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 RW
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 RW
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
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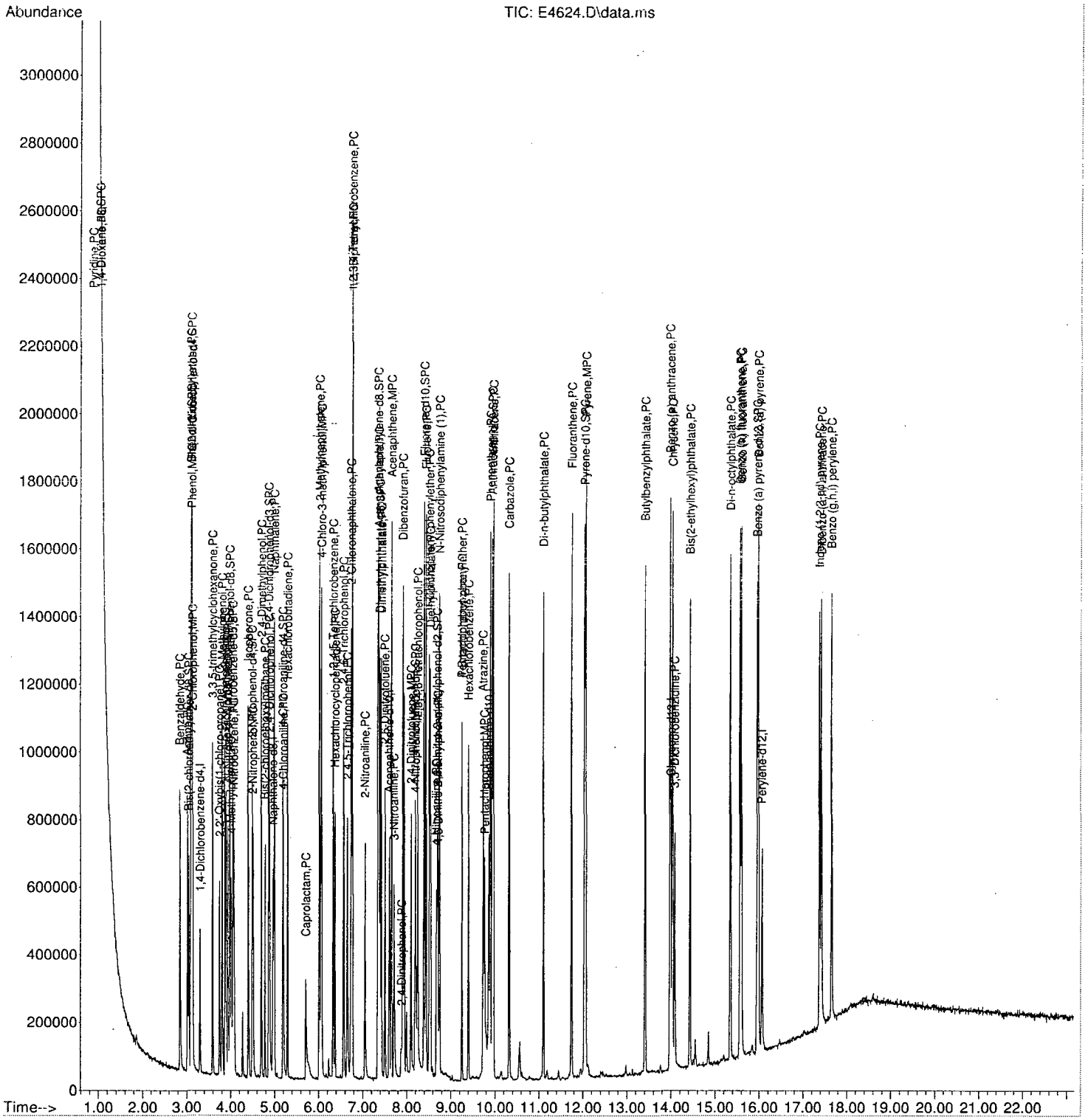

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Evaluate Continuing Calibration Report

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
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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
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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

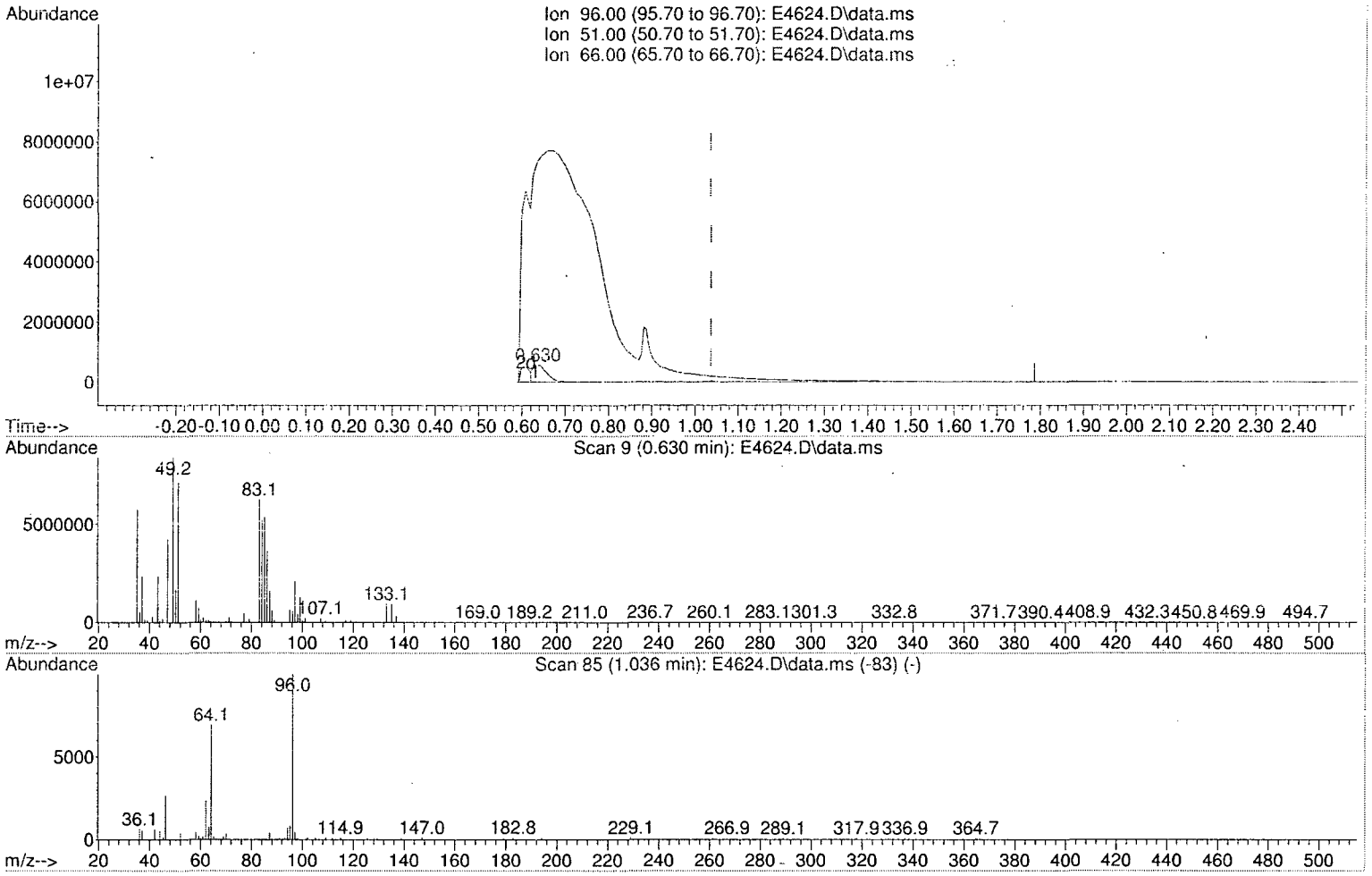
(#) = Out of Range SPCC's out = 0 CCC's out = 2

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

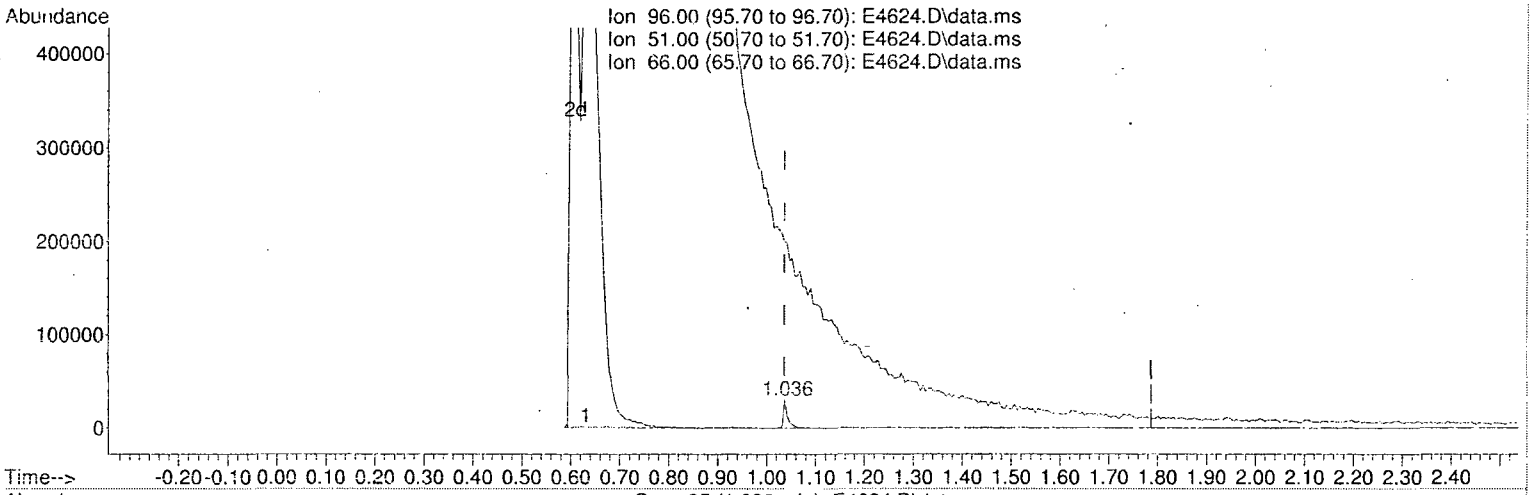
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.09#
0.00	0.00	0.00

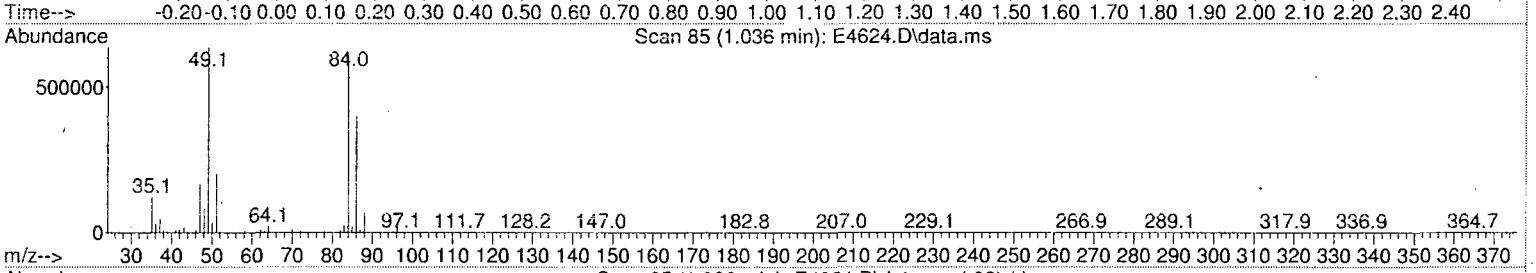
Quantitation Report (Qedit)

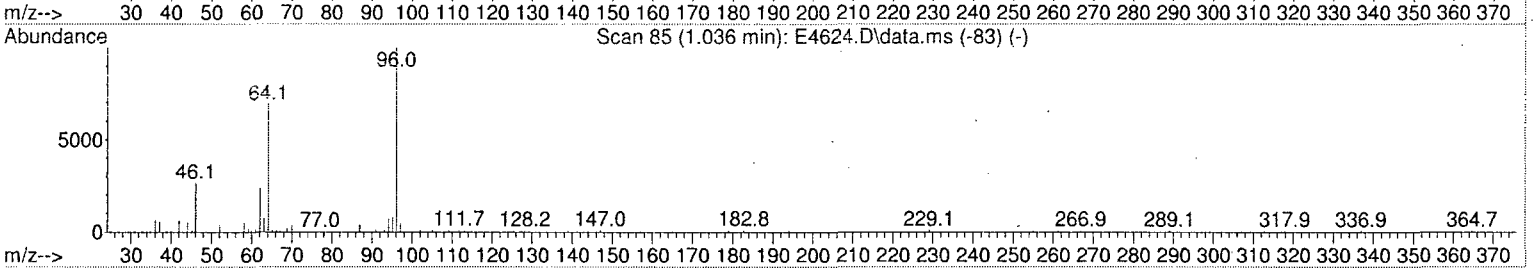
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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 5/24

response 18615

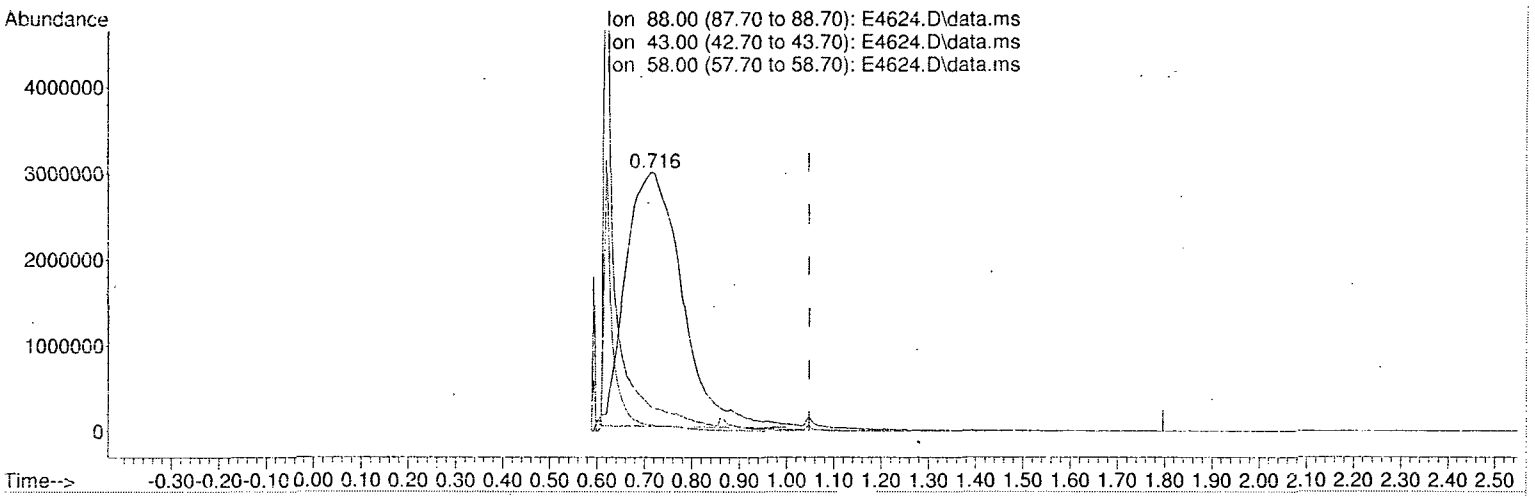
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	6.27#
0.00	0.00	0.00

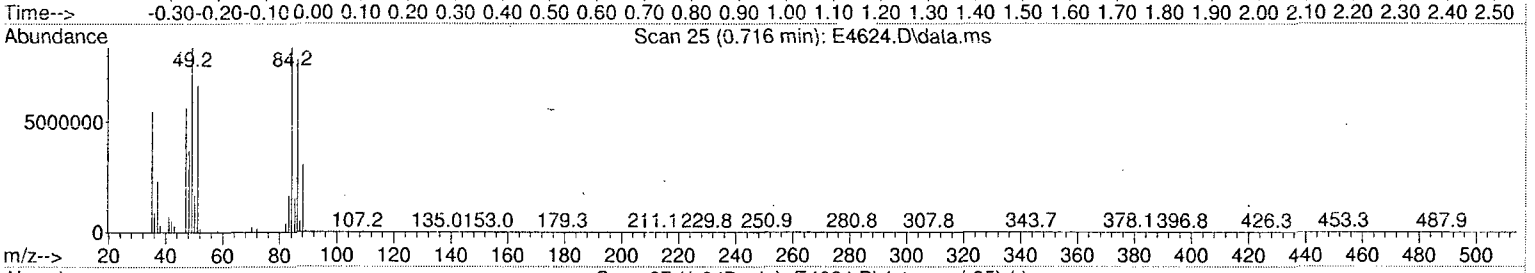
Quantitation Report (Qedit)

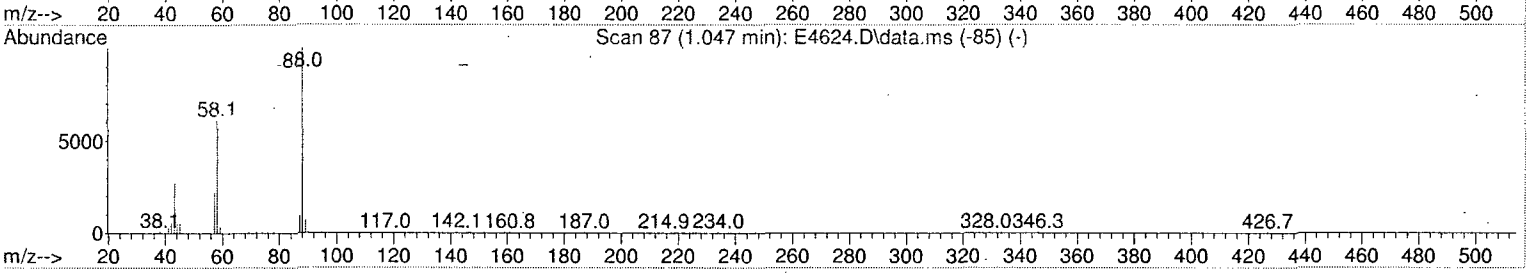
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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

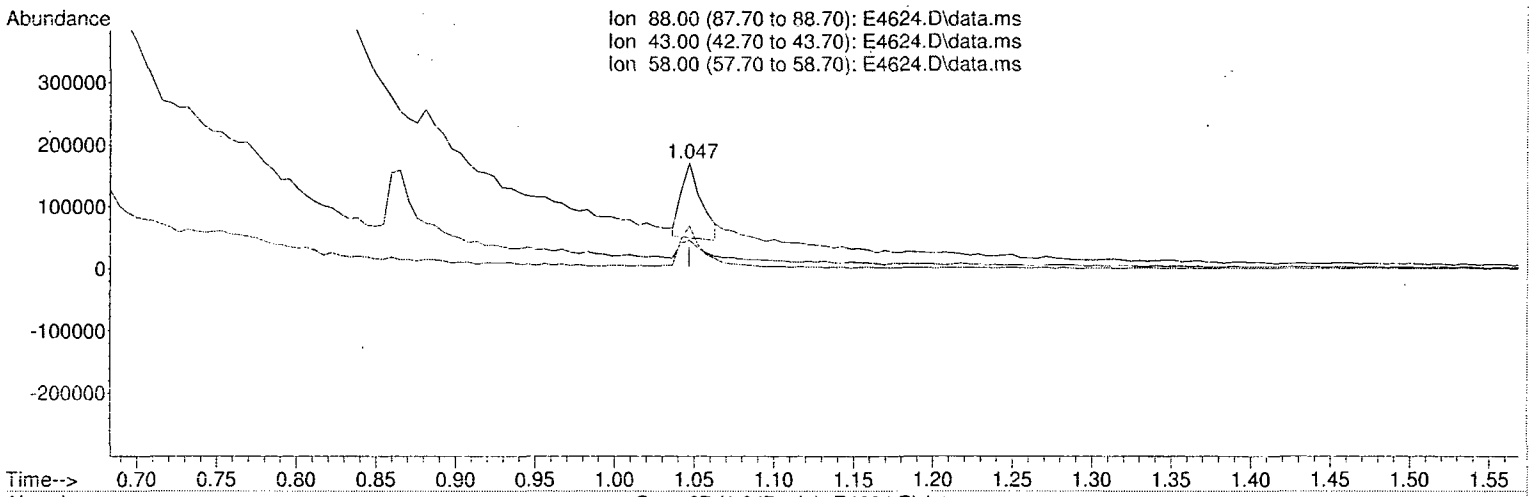
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

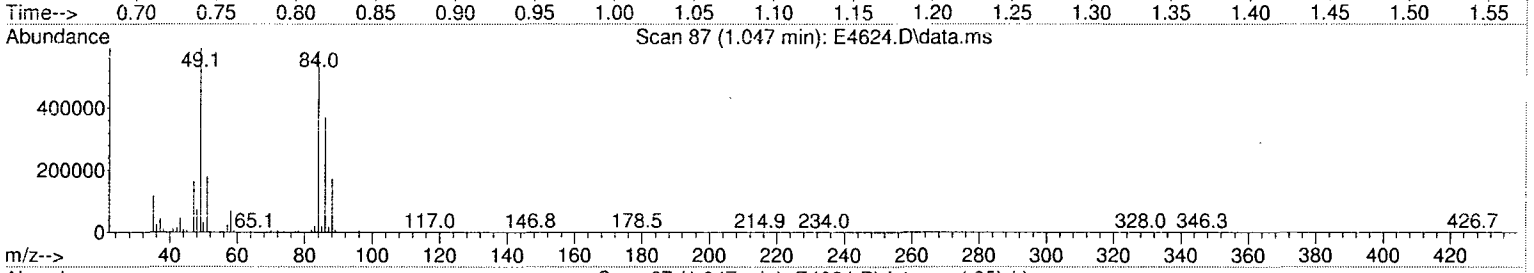
Quantitation Report (Qedit)

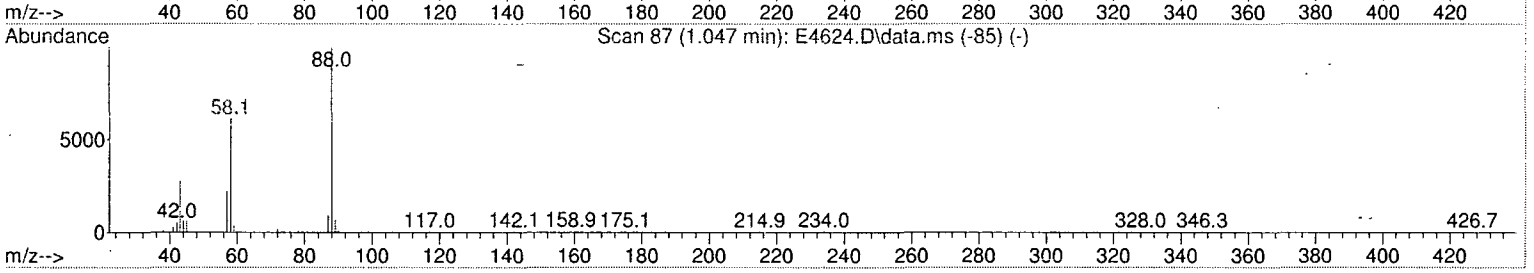
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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 8/24

response 106365

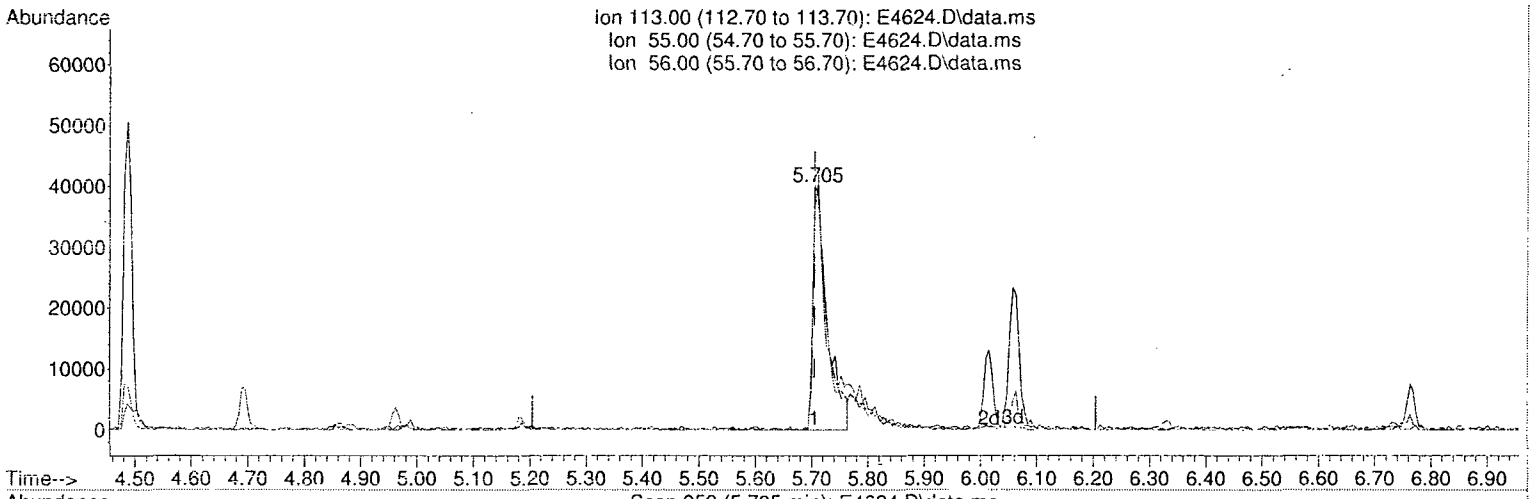
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

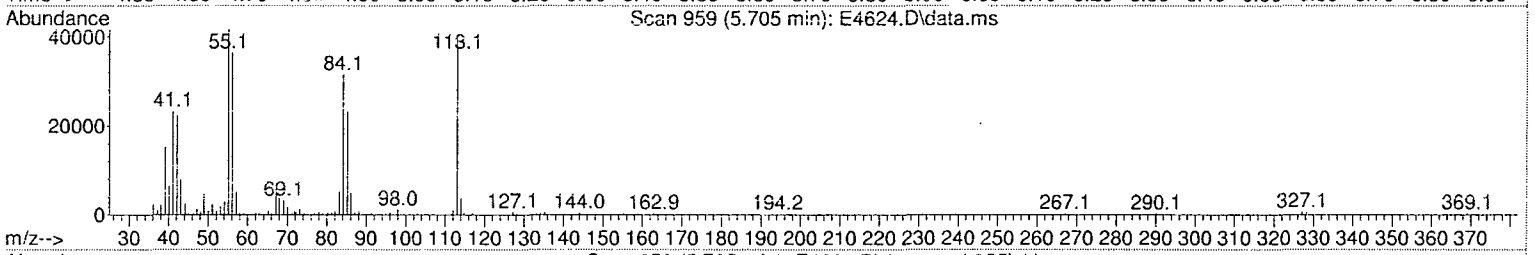
Quantitation Report (Qedit)

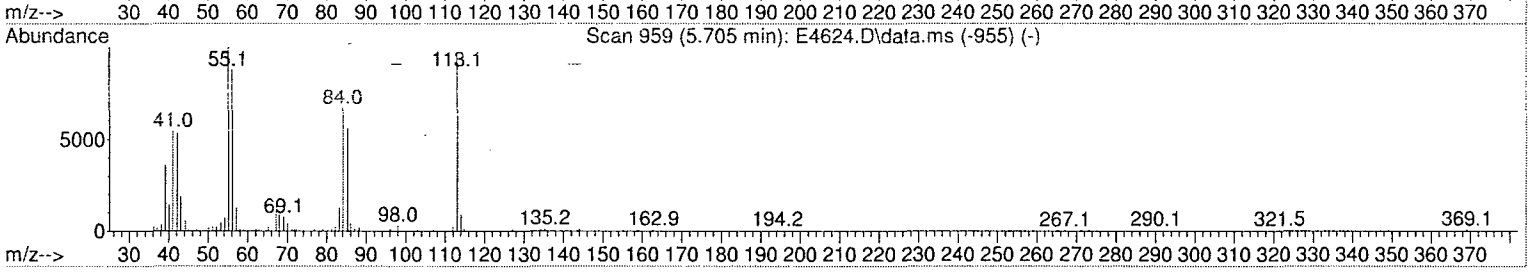
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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

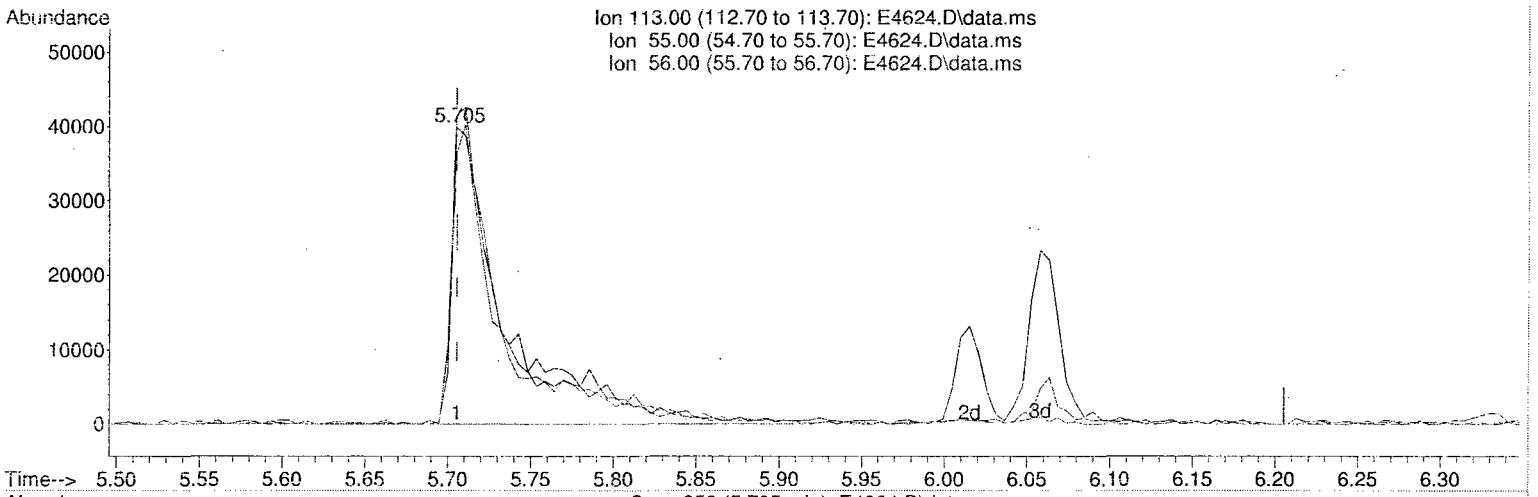
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	95.67
56.00	92.50	92.33
0.00	0.00	0.00

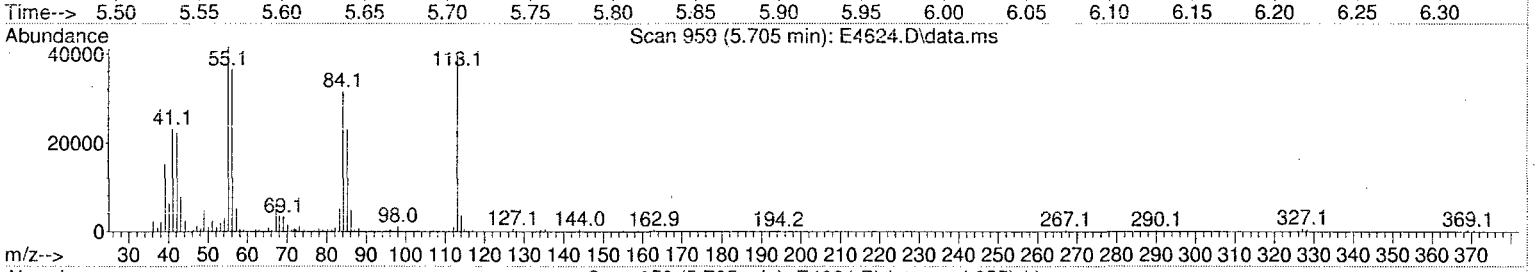
Quantitation Report (Qedit)

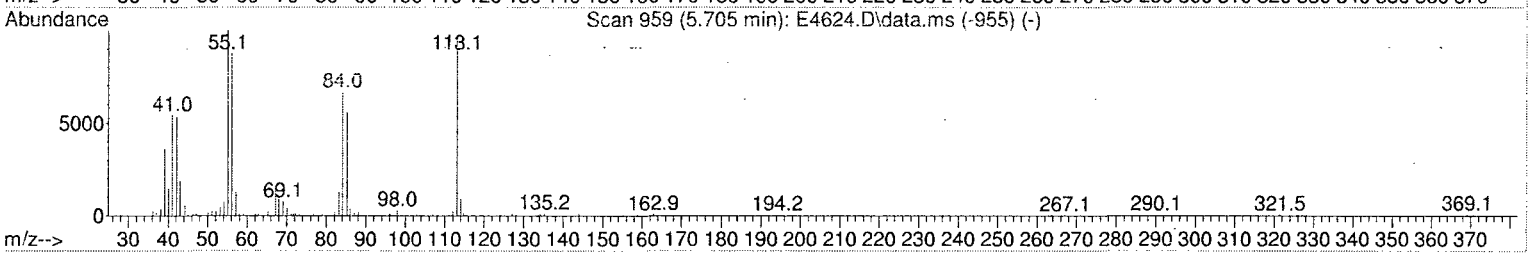
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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

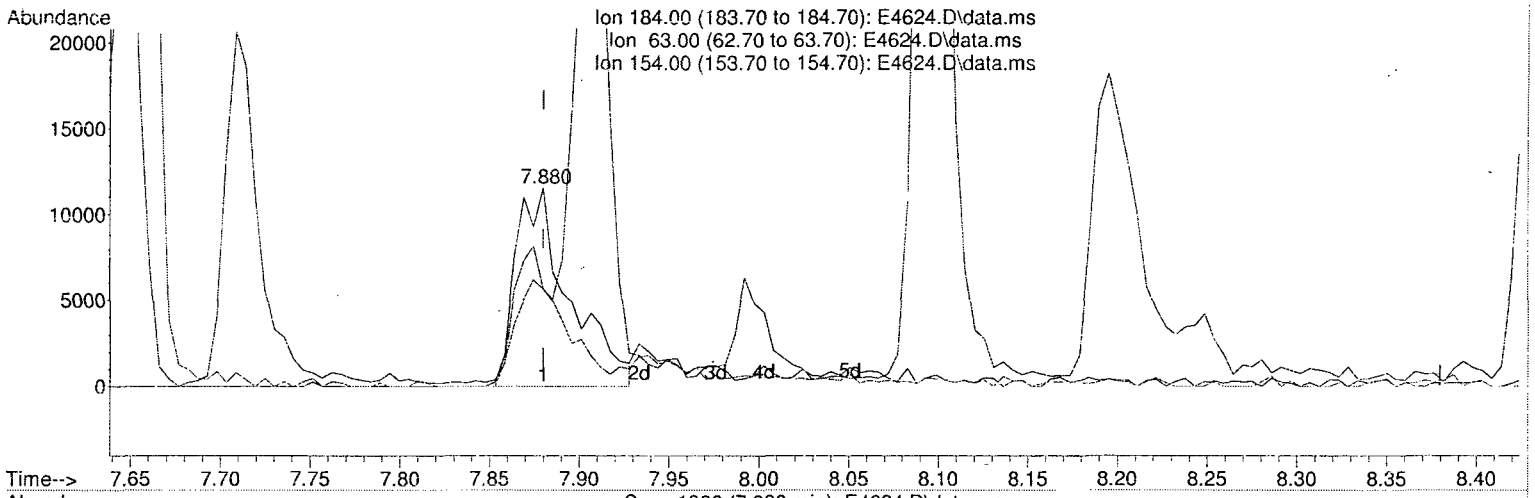
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	76.25#
56.00	92.50	73.58
0.00	0.00	0.00

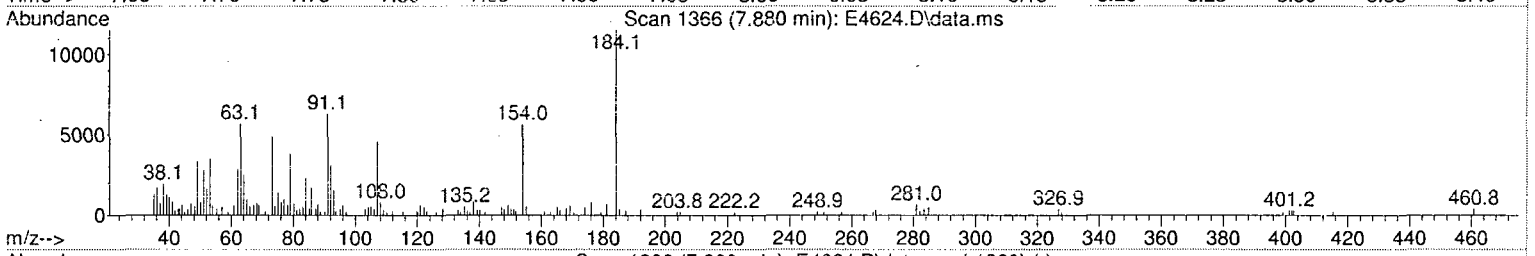
Quantitation Report (Qedit)

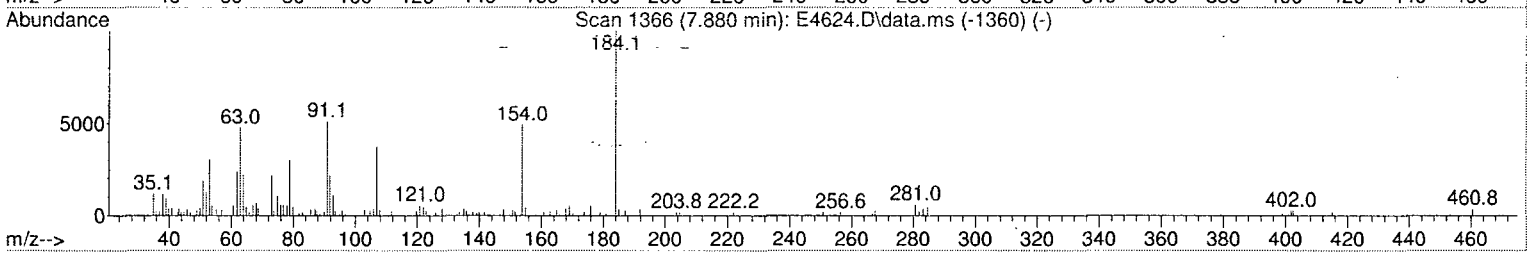
Data File : C:\msdchem\1\data\E4624.D
Acq On : 24 May 2012 10:16
Sample : 2E23005-CCV2
Misc : SSTD0209P
DataAcq Meth:CLPACQ.M

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

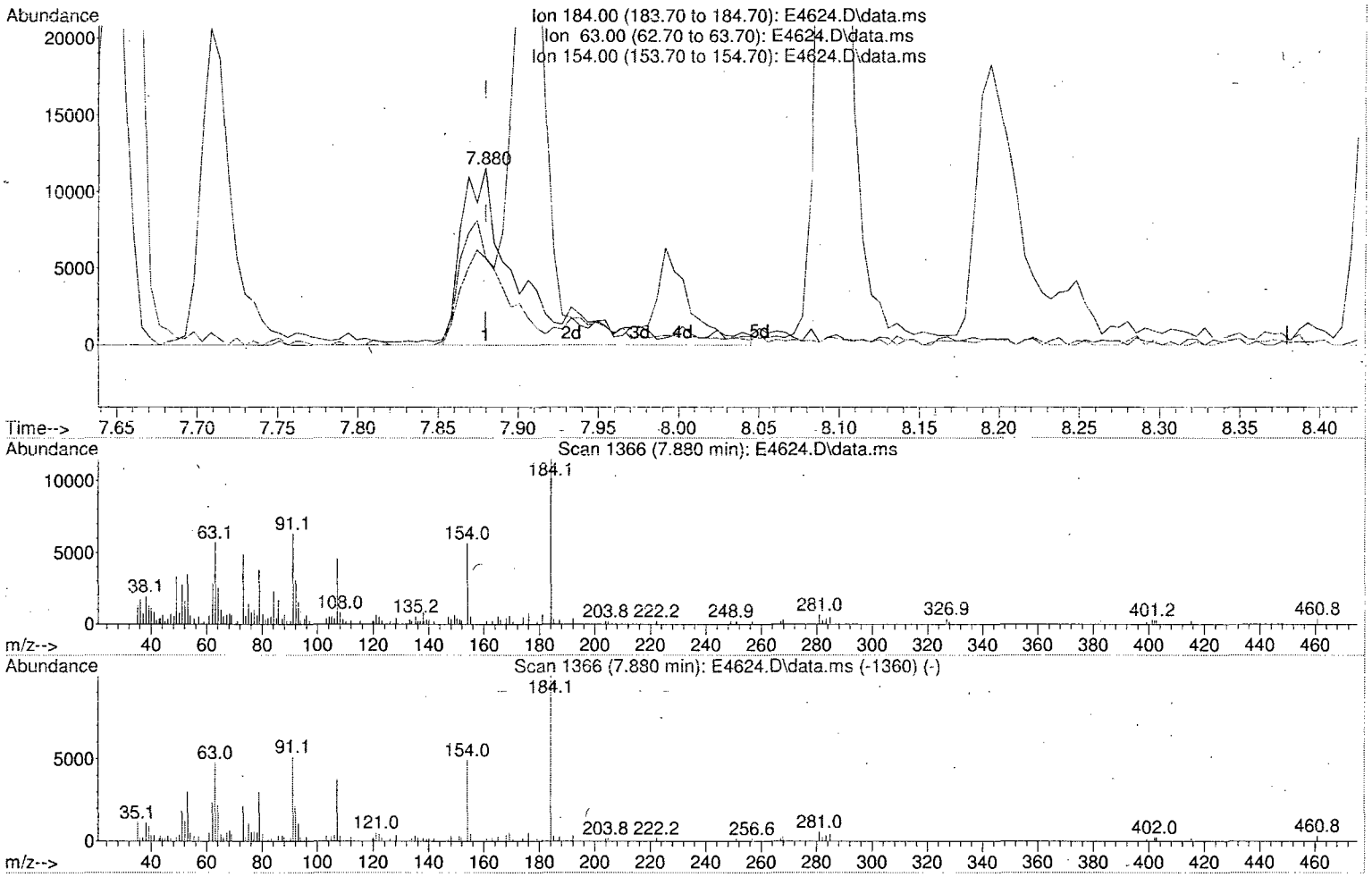
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	43.42#
154.00	63.80	0.00#
0.00	0.00	0.00

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

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.: F5WC4

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.: F5WC4

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.: F5WC4

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

S. Vokati
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

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

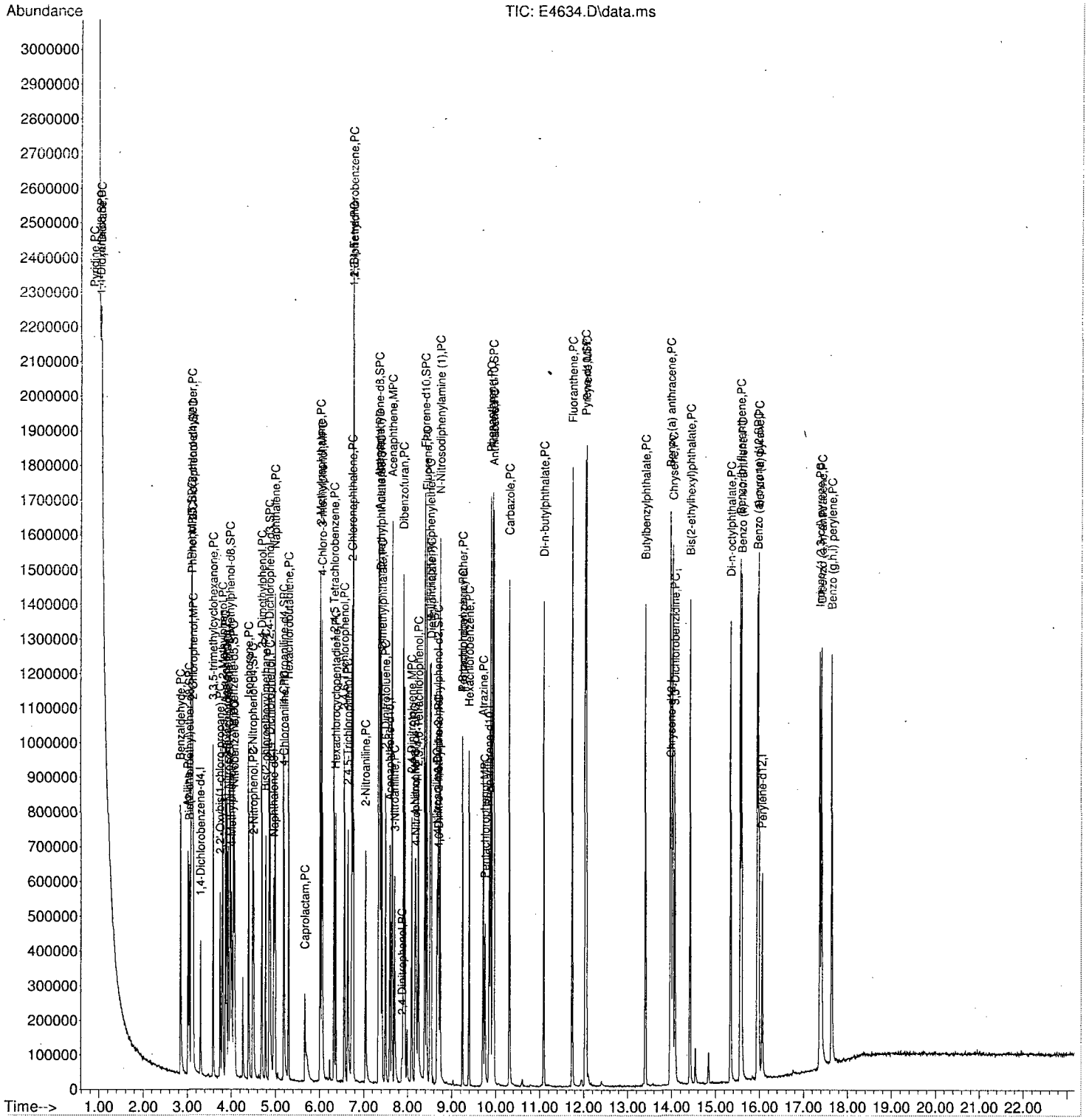
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
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



00312

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

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

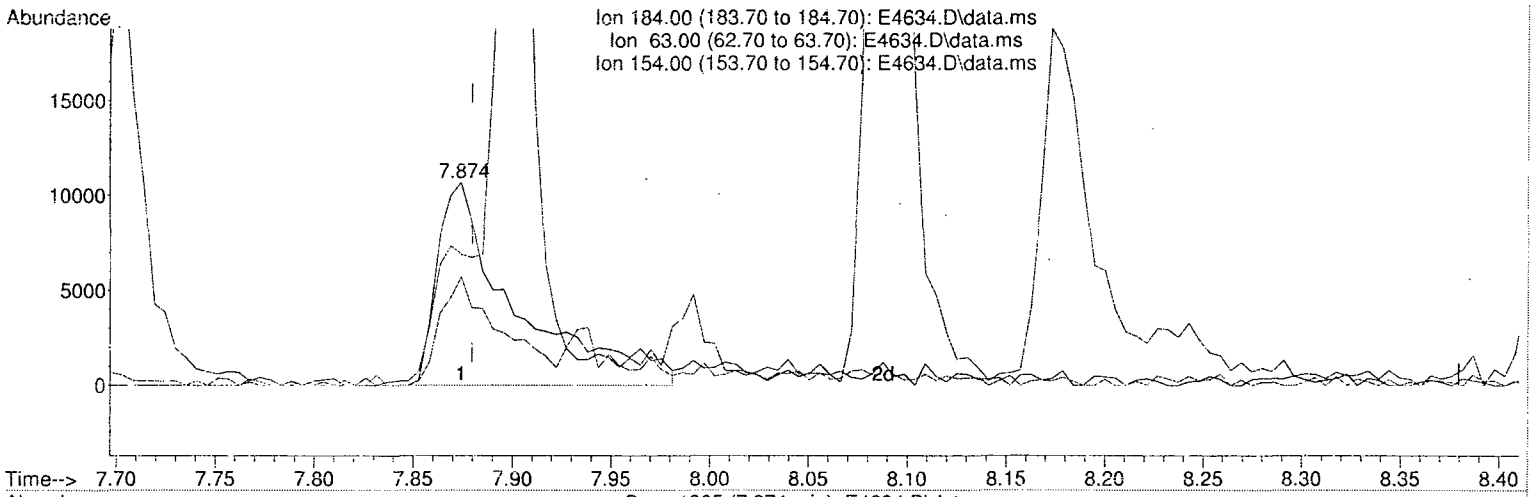
(#) = Out of Range SPCC's out = 0 CCC's out = 2

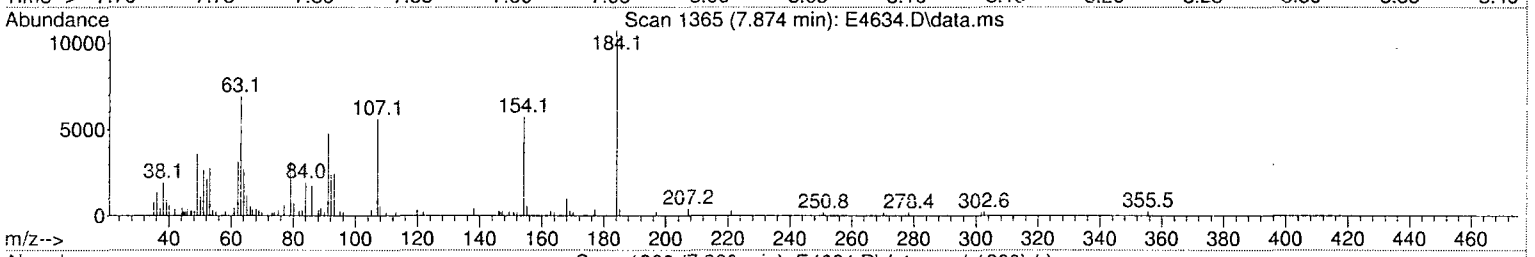
Quantitation Report (Qedit)

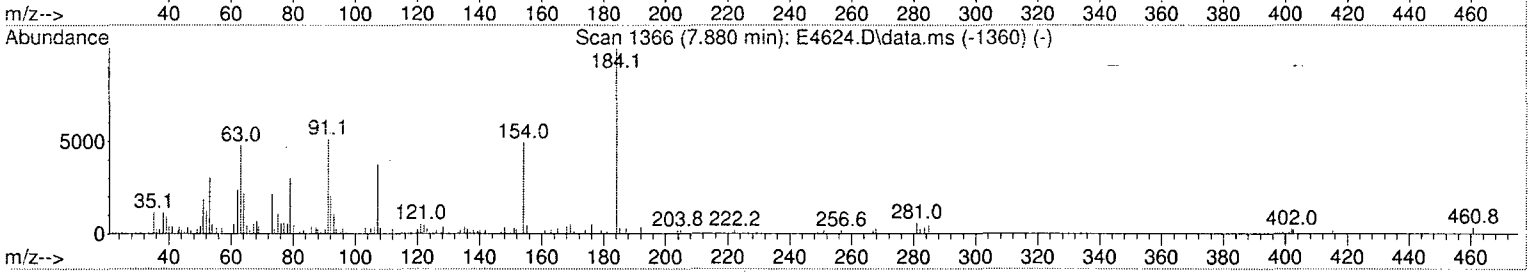
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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

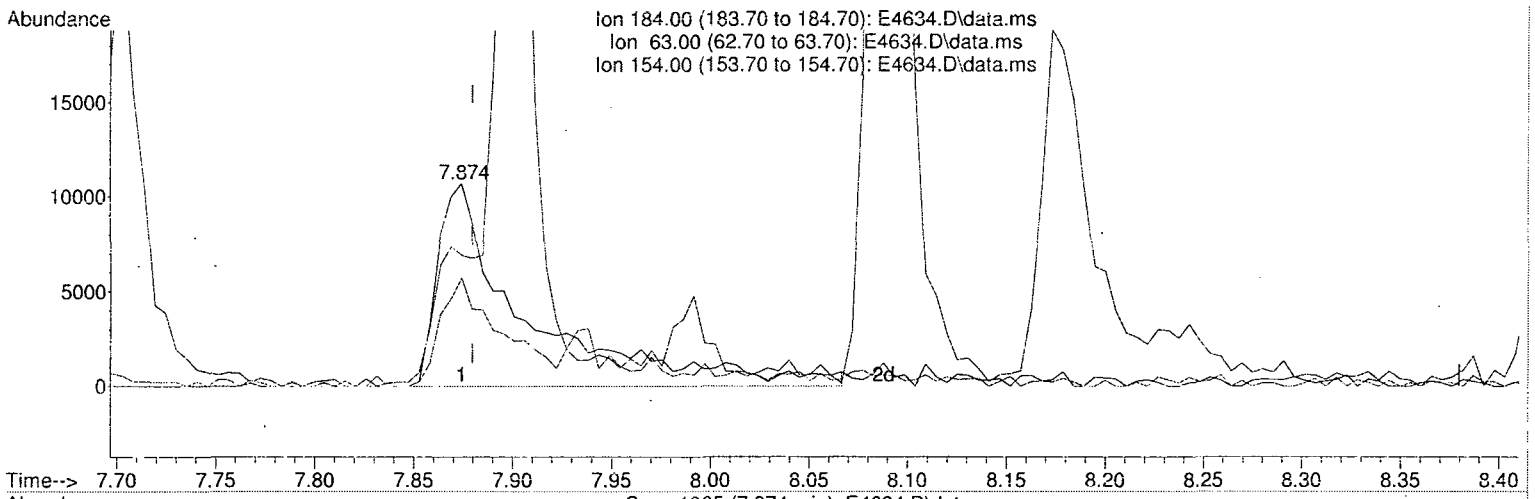
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	32.92#
154.00	63.80	0.00#
0.00	0.00	0.00

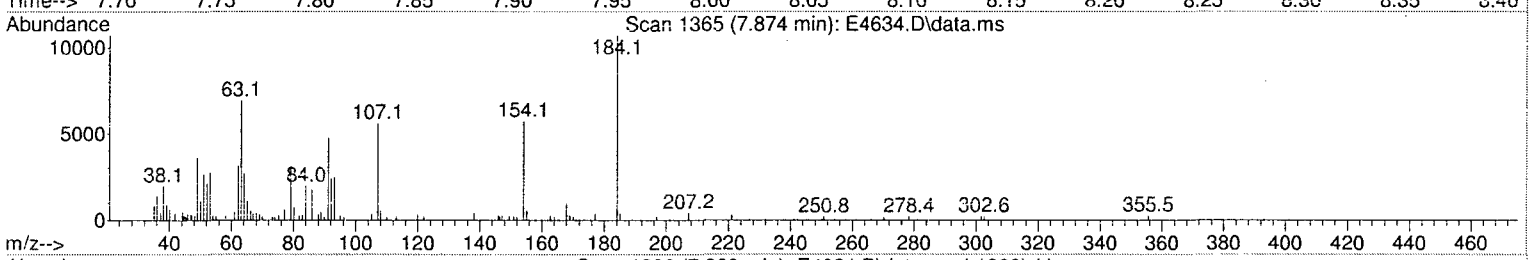
Quantitation Report (Qedit)

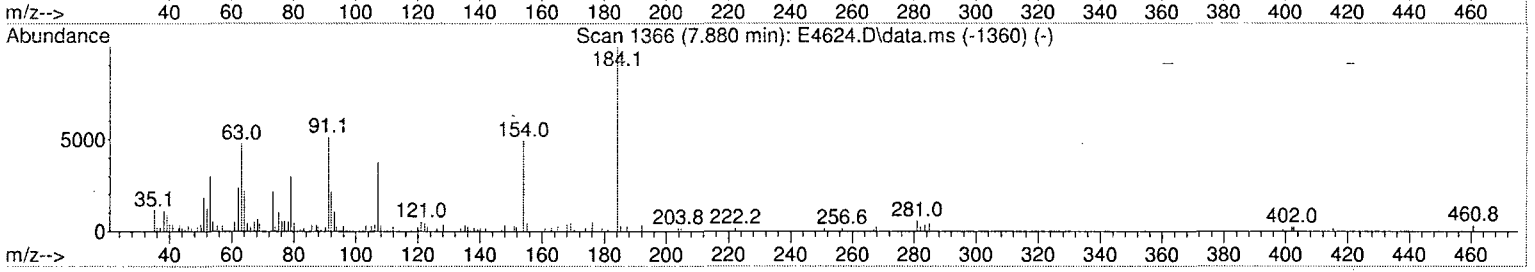
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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 5/24

response 33467

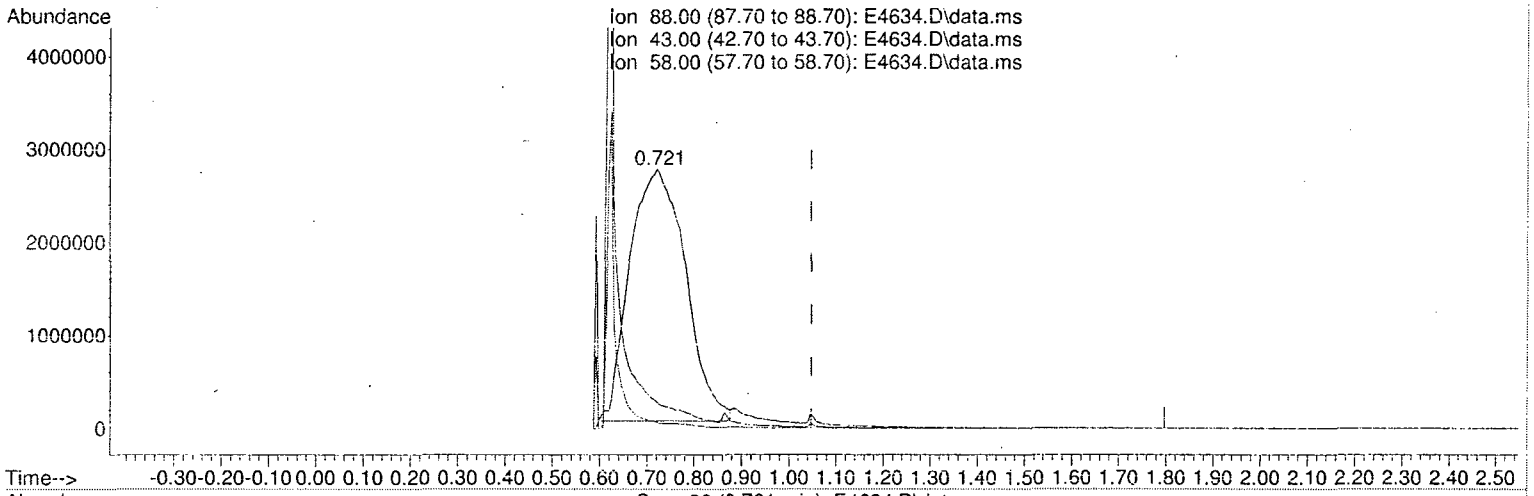
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	29.08#
154.00	63.80	0.00#
0.00	0.00	0.00

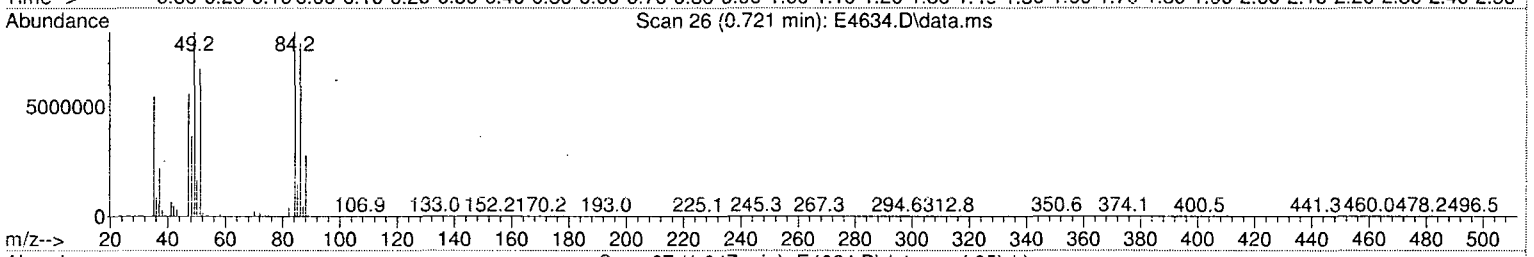
Quantitation Report (Qedit)

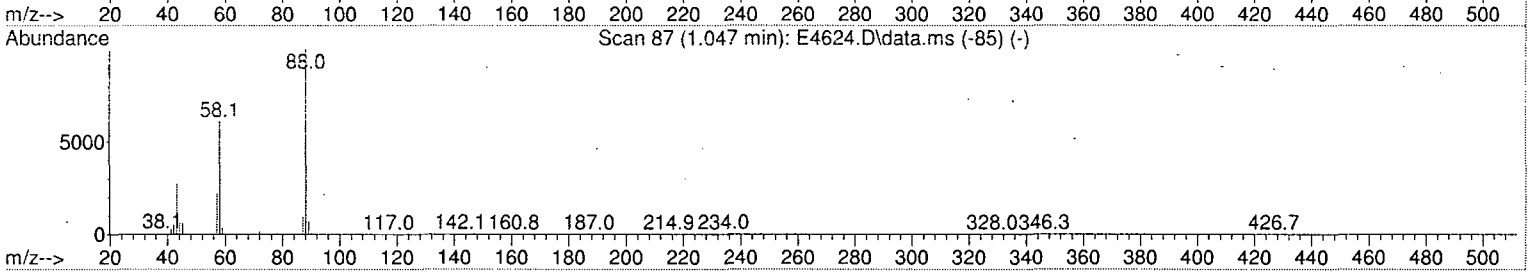
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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

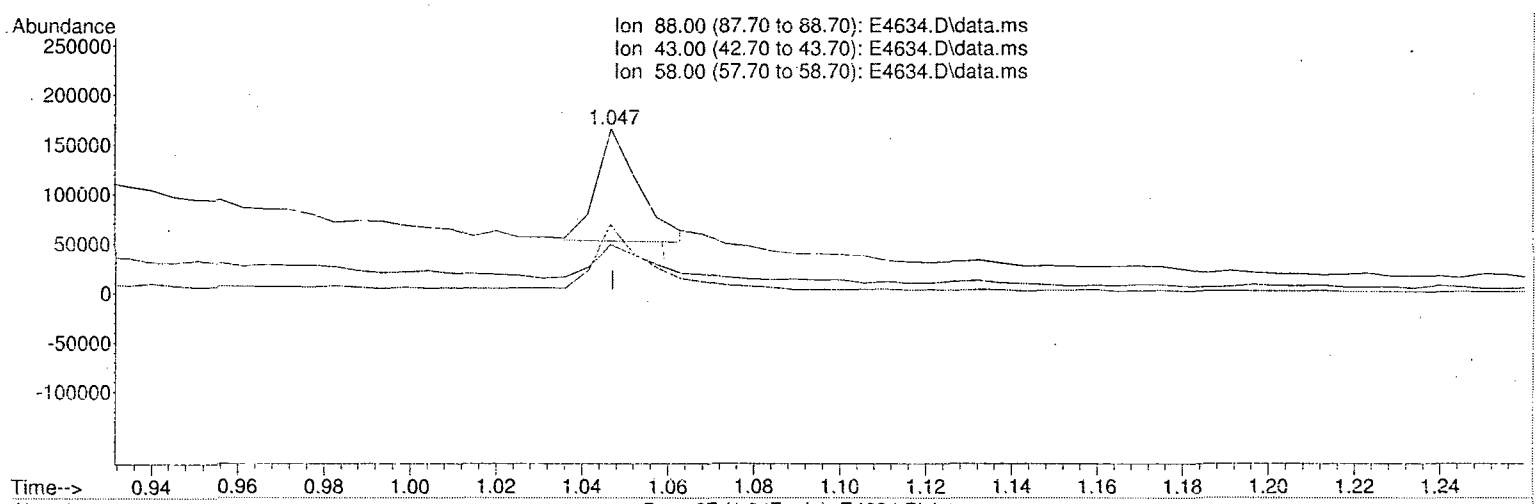
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

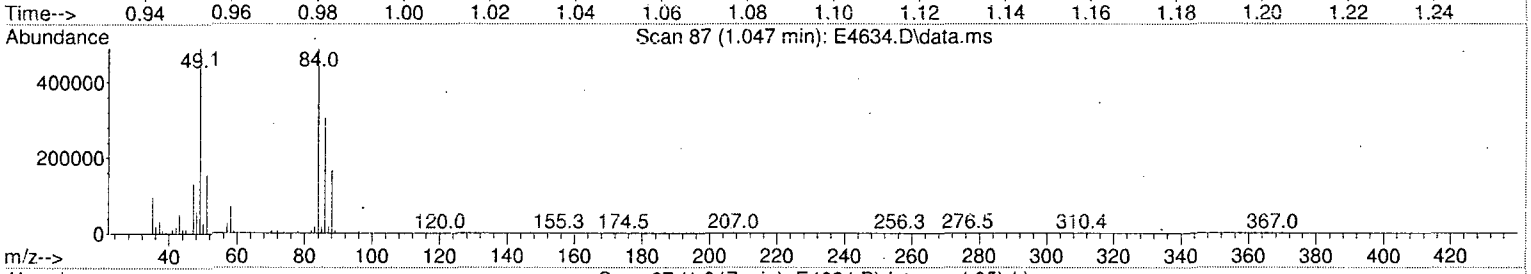
Quantitation Report (Qedit)

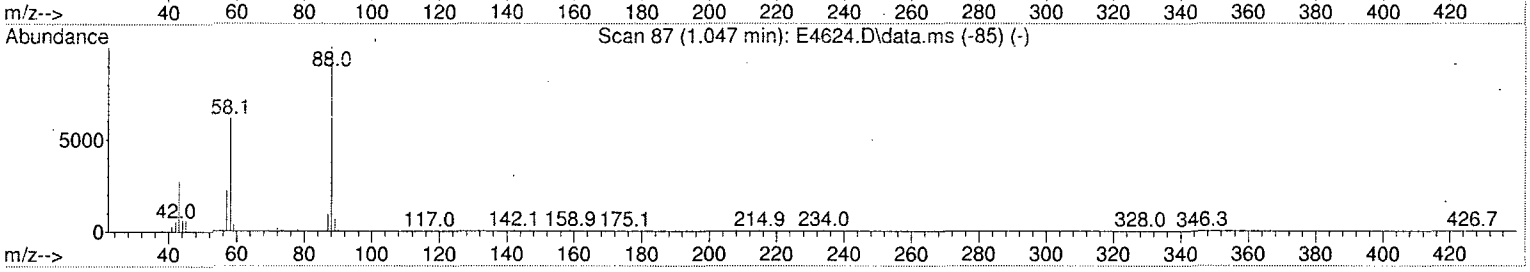
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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

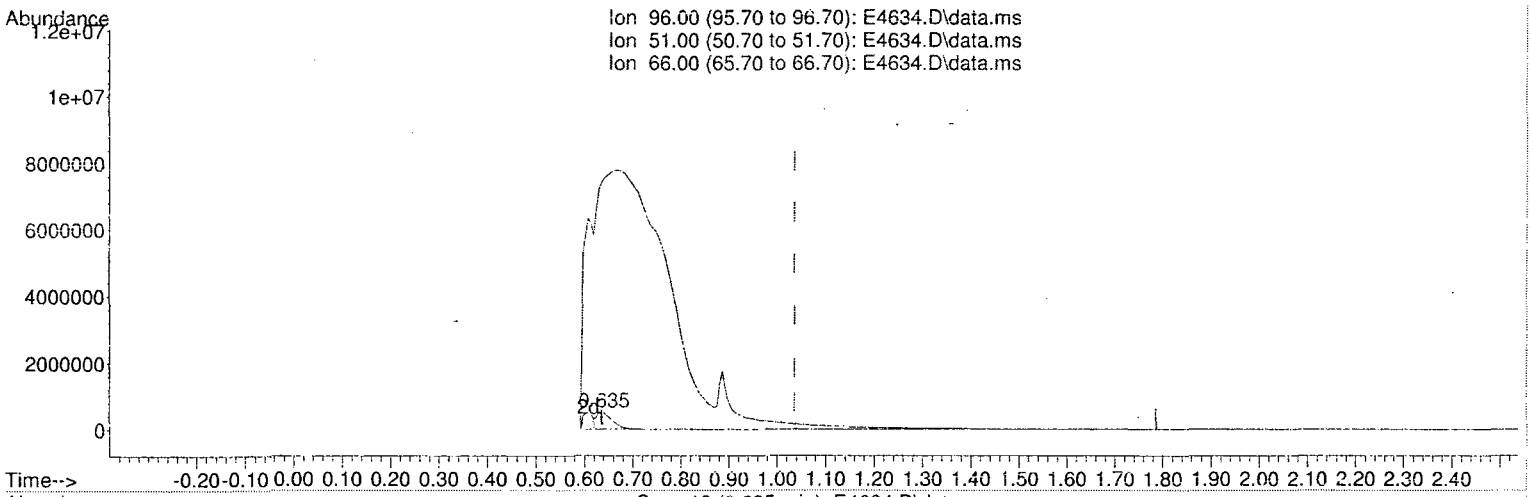
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	0.00#
0.00	0.00	0.00

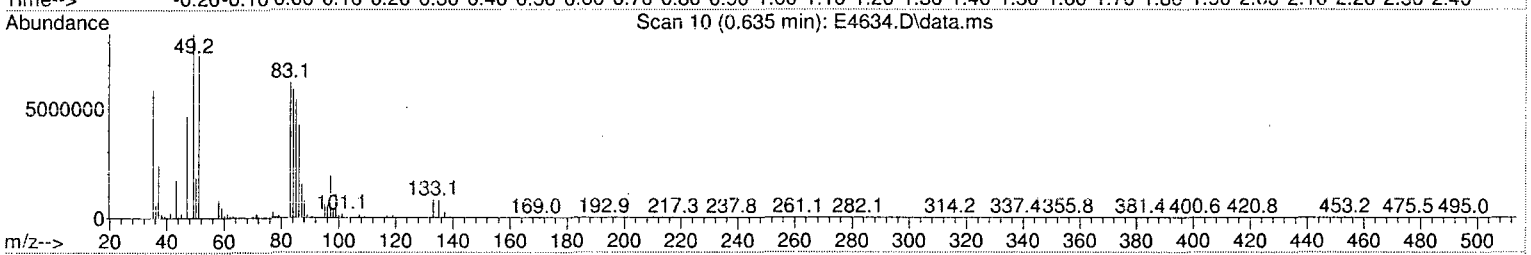
Quantitation Report (Qedit)

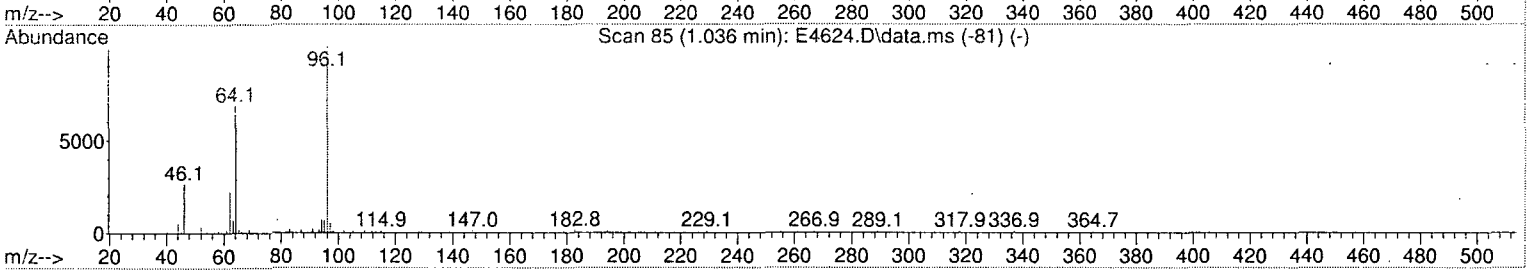
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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

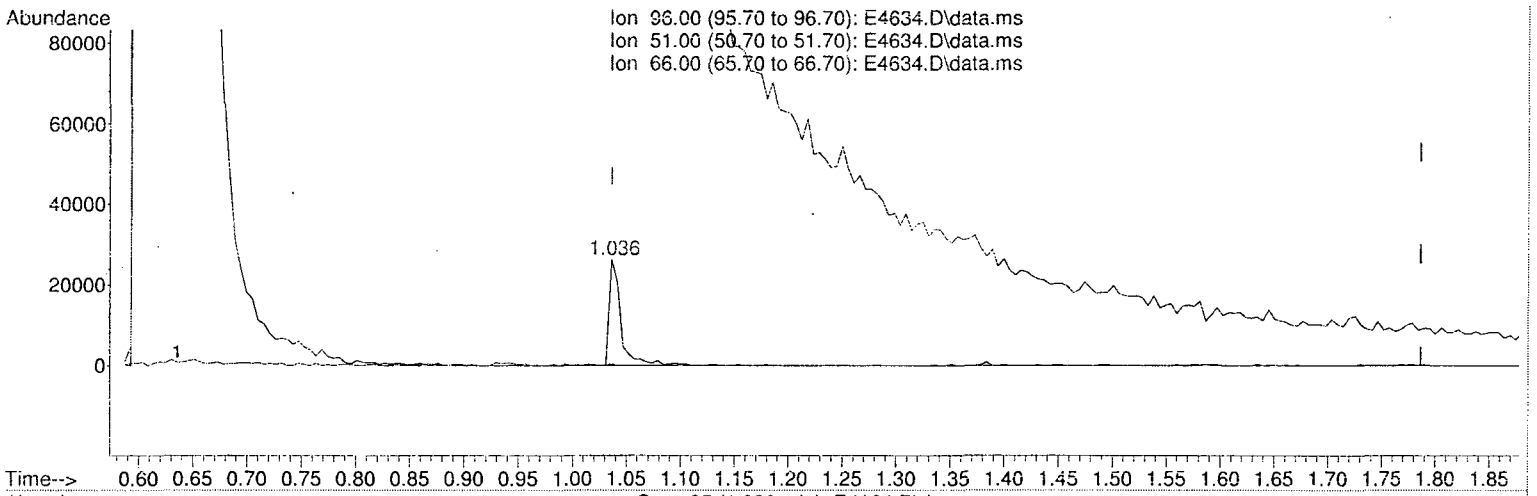
Ion	Exp%	Act%
96.00	100.00	100.00
51.00	0.00	0.00
66.00	1.70	0.13#
0.00	0.00	0.00

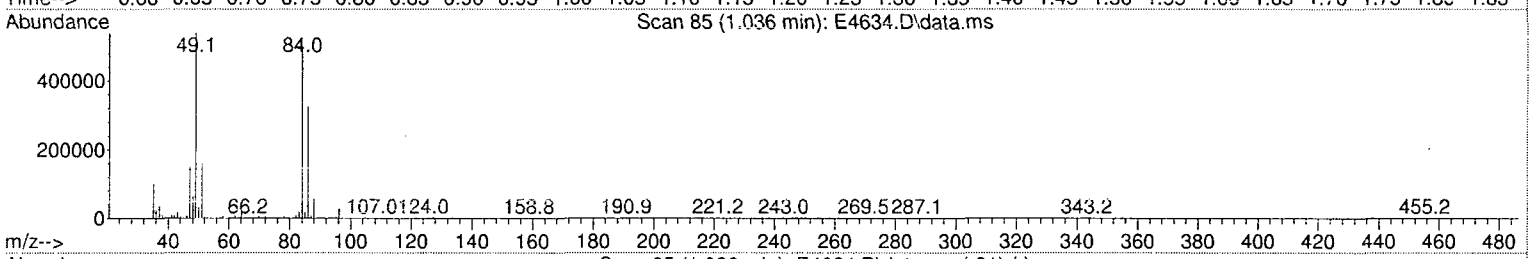
Quantitation Report (Qedit)

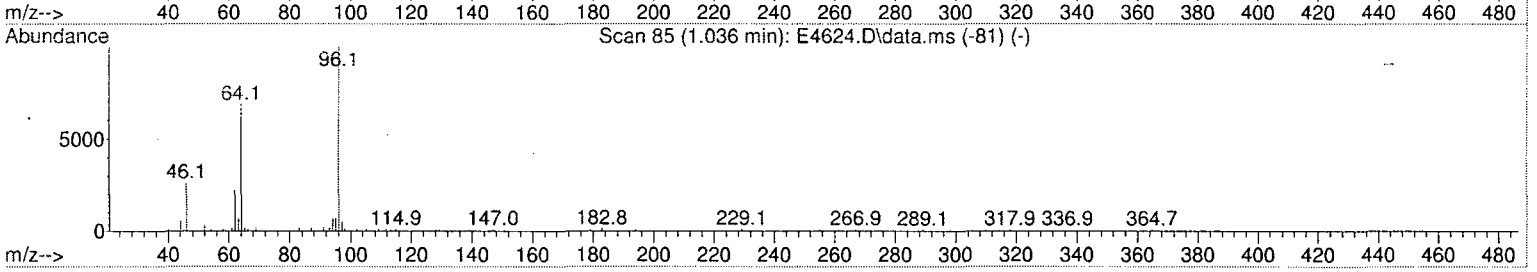
Data File : C:\msdchem\1\data\E4634.D
Acq On : 24 May 2012 16:50
Sample : 2E23005-CCV3
Misc : SSTD0209Q
DataAcq Meth:CLPACQ.M

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

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.: F5WC4

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.: F5WC4

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.: F5WC4

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

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

05/26/12

S. Vitkati

05/26/12

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 8RV

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
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Vial: 19
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Quant Time: May 25 20:43:22 2012
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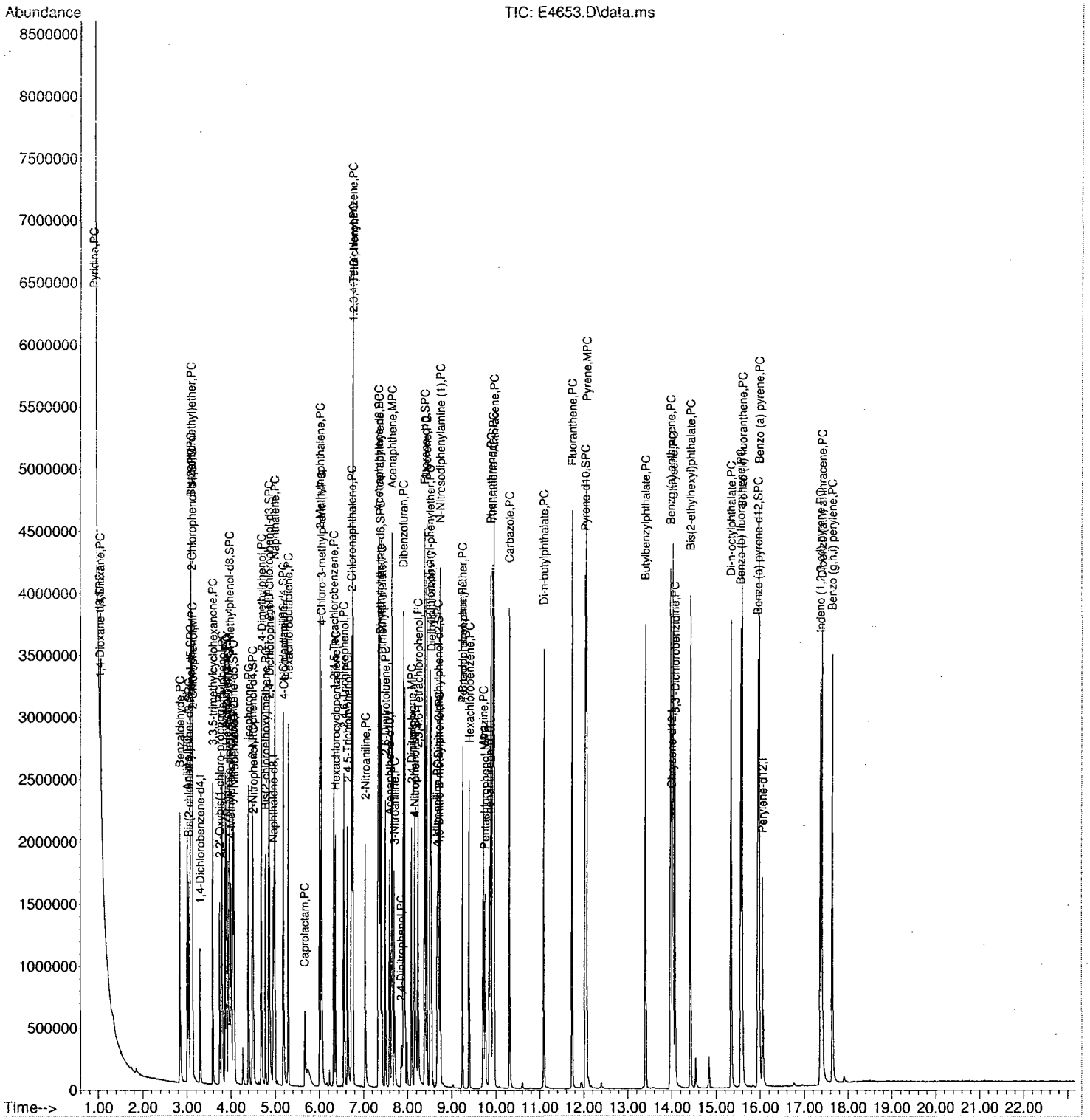
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



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
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Multiplr: 1.00

Quant Time: May 25 20:43:22 2012
Quant Results File: SOME4634.RES
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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
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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)
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

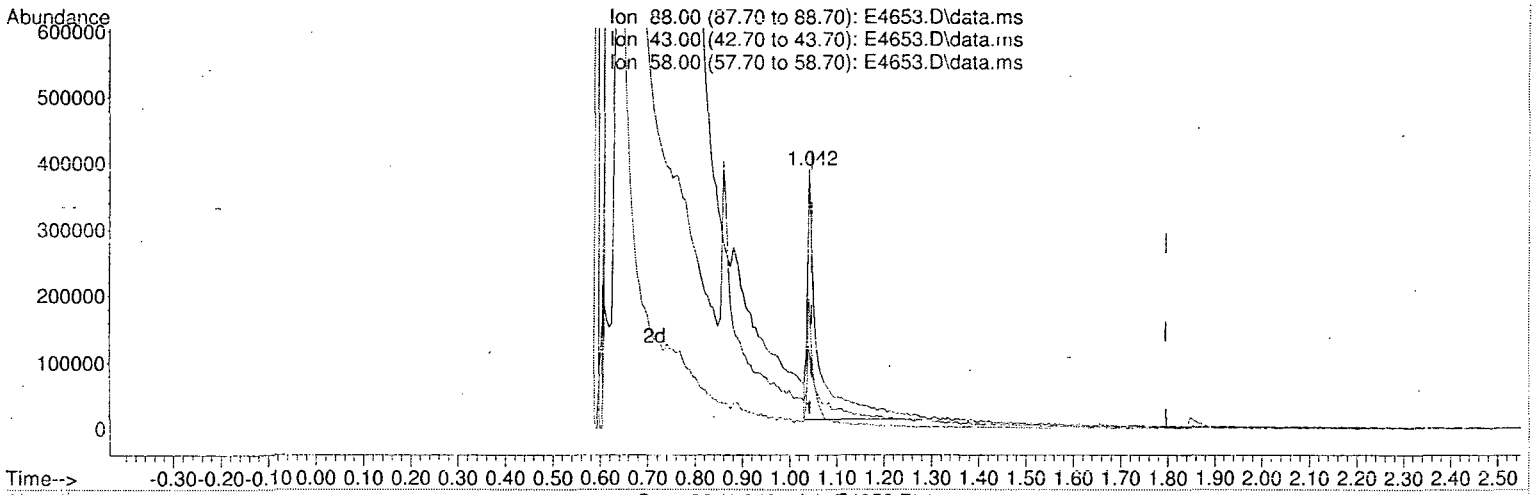
Quantitation Report (Qedit)

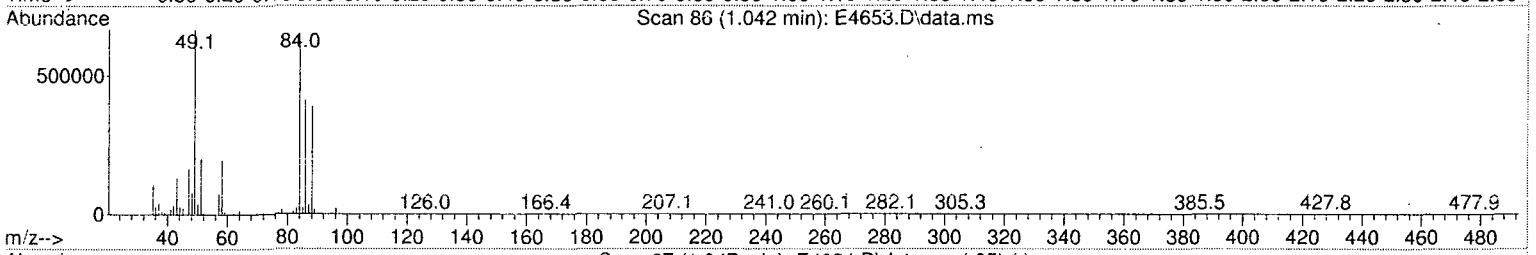
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

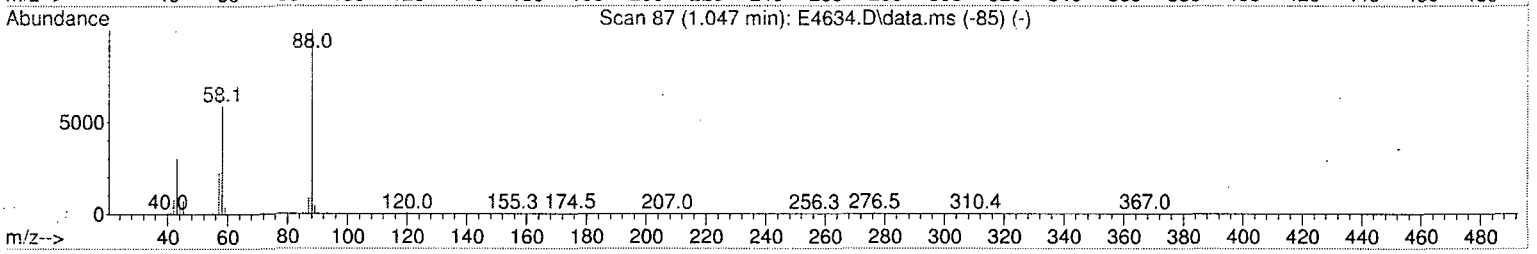
Vial: 19
Operator: RS
Inst : E-5973
Multiplr: 1.00

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

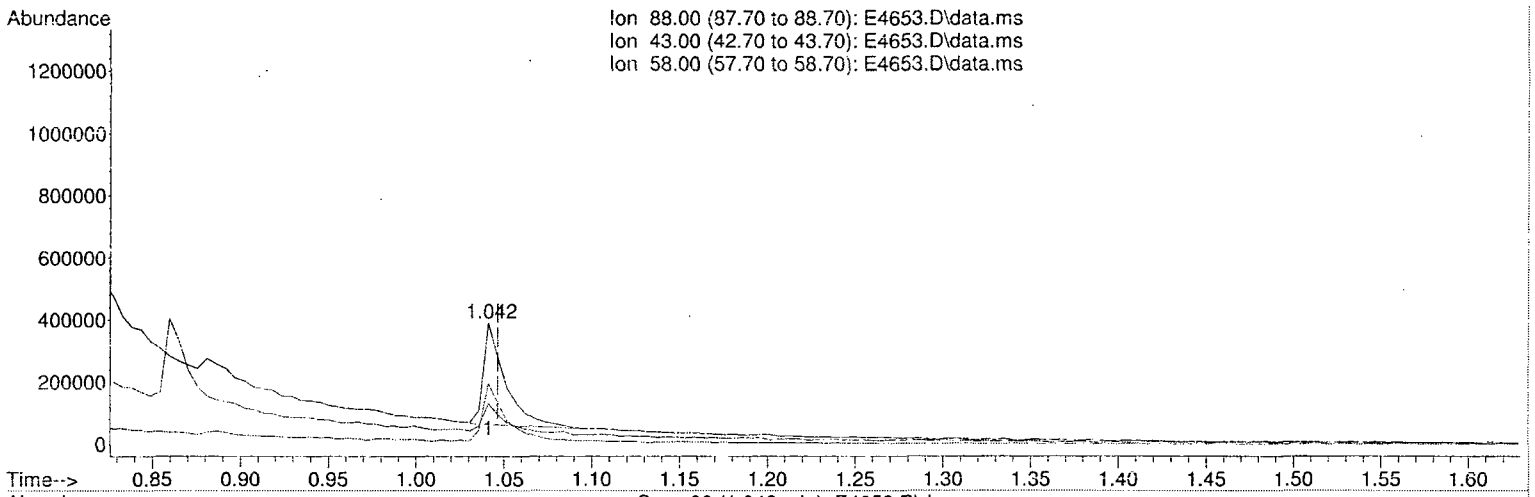
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	29.54#
0.00	0.00	0.00

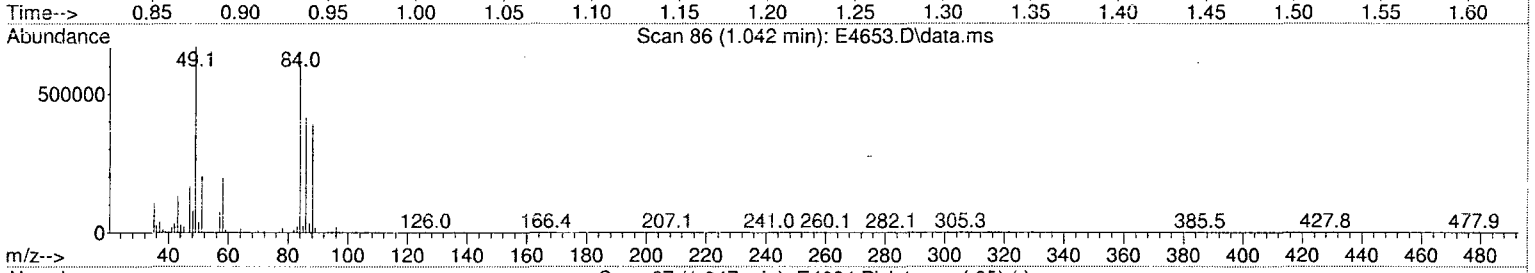
Quantitation Report (Qedit)

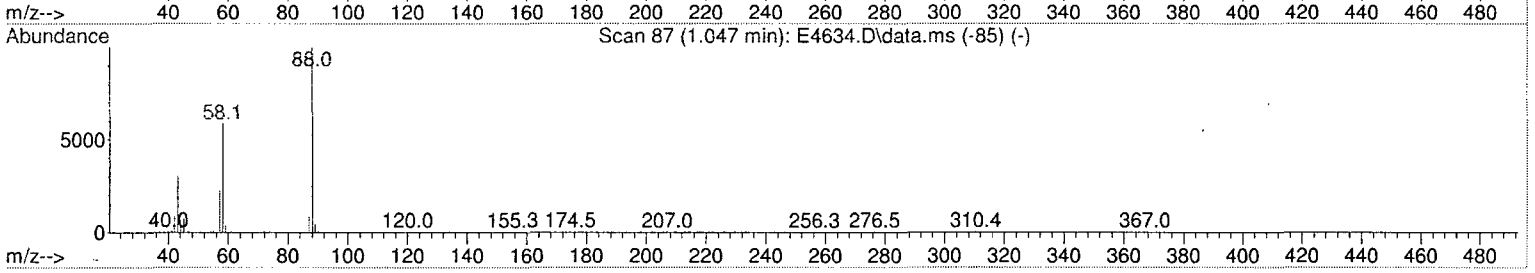
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

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 5/25

response 280268

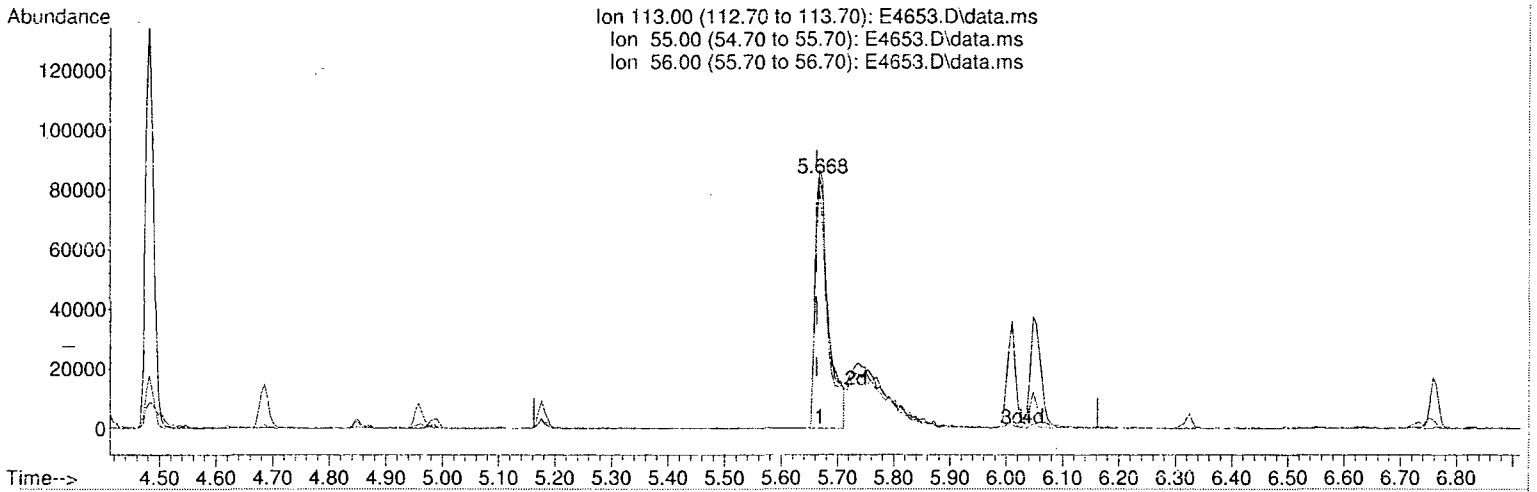
Ion	Exp%	Act%
88.00	100.00	100.00
43.00	23.00	0.00#
58.00	46.00	66.46#
0.00	0.00	0.00

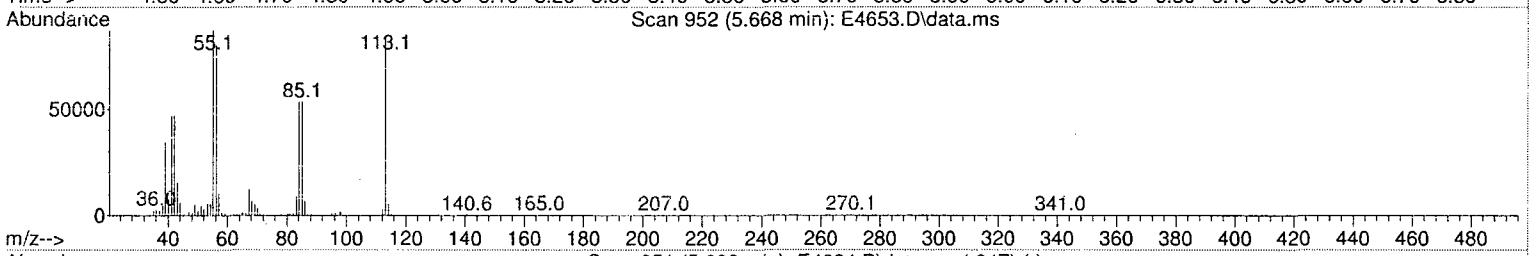
Quantitation Report (Qedit)

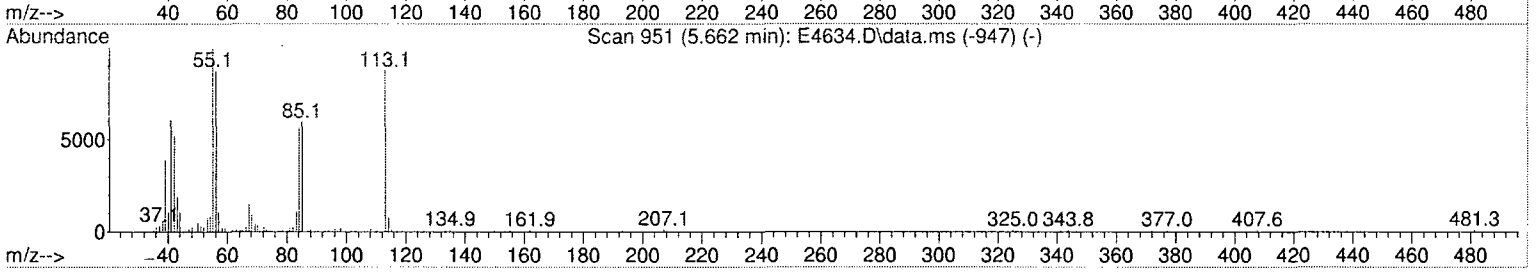
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

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

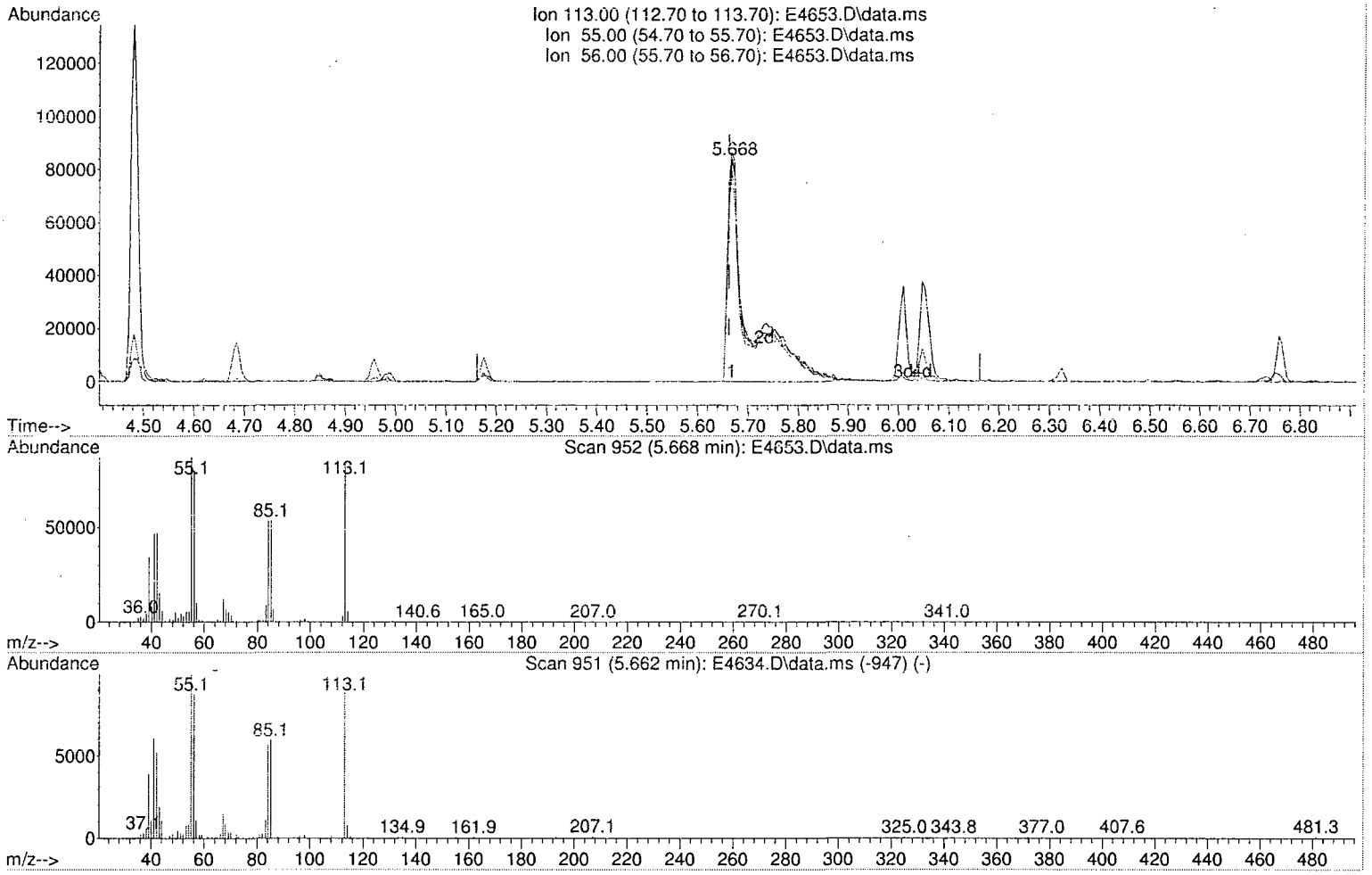
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	100.92
56.00	92.50	93.10
0.00	0.00	0.00

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

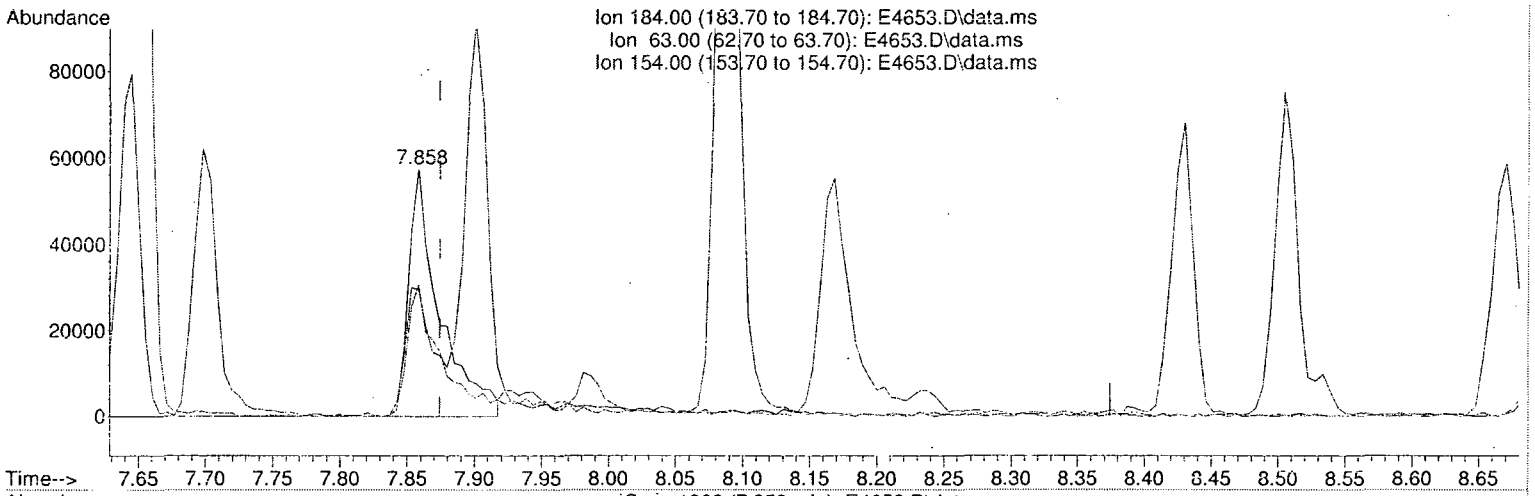
Ion	Exp%	Act%
113.00	100.00	100.00
55.00	110.10	59.74#
56.00	92.50	55.11#
0.00	0.00	0.00

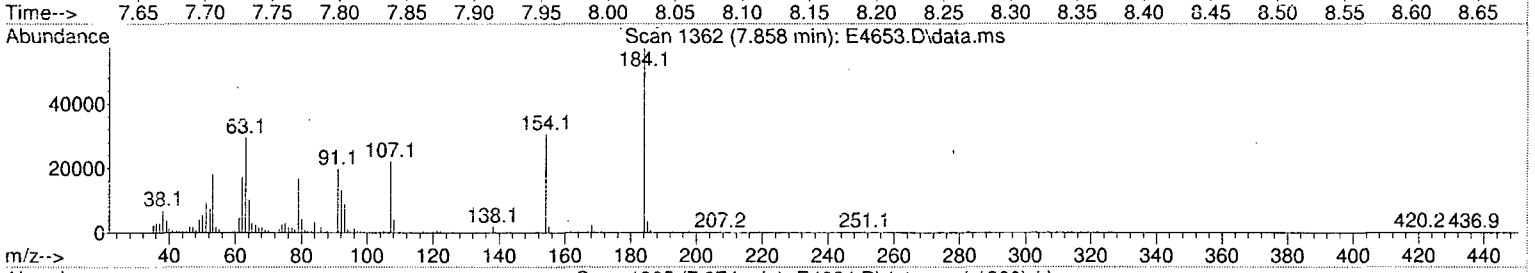
Quantitation Report (Qedit)

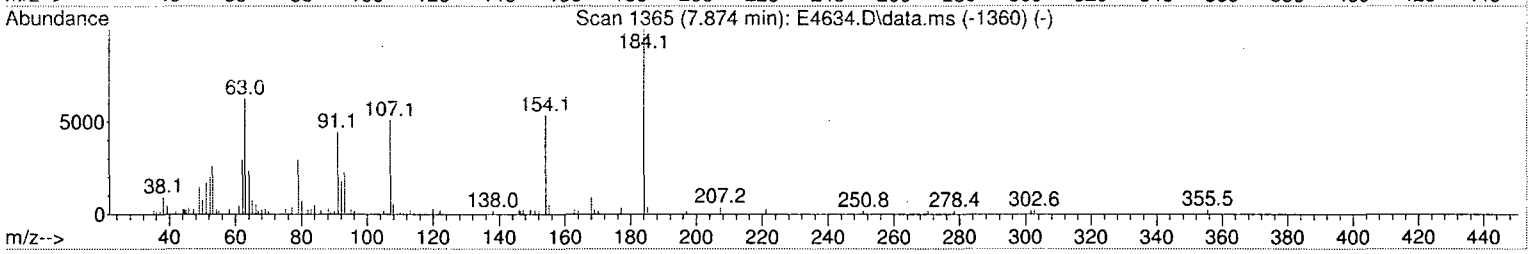
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

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

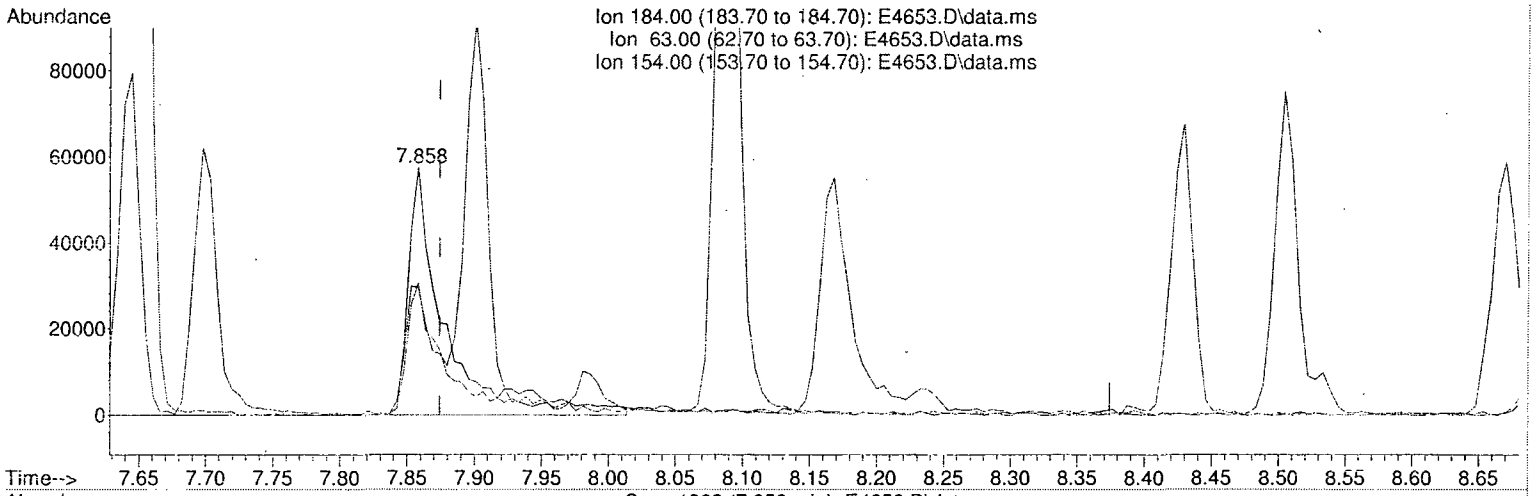
Ion	Exp%	Act%
184.00	100.00	100.00
63.00	70.10	47.59#
154.00	63.80	59.71
0.00	0.00	0.00

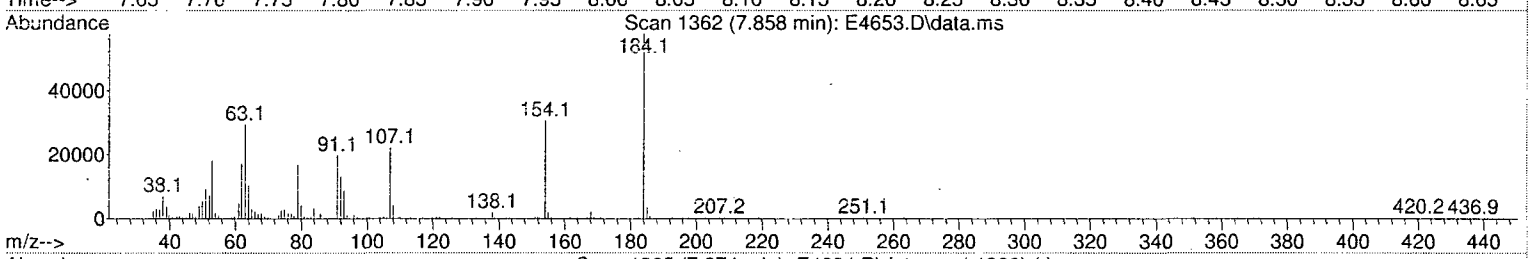
Quantitation Report (Qedit)

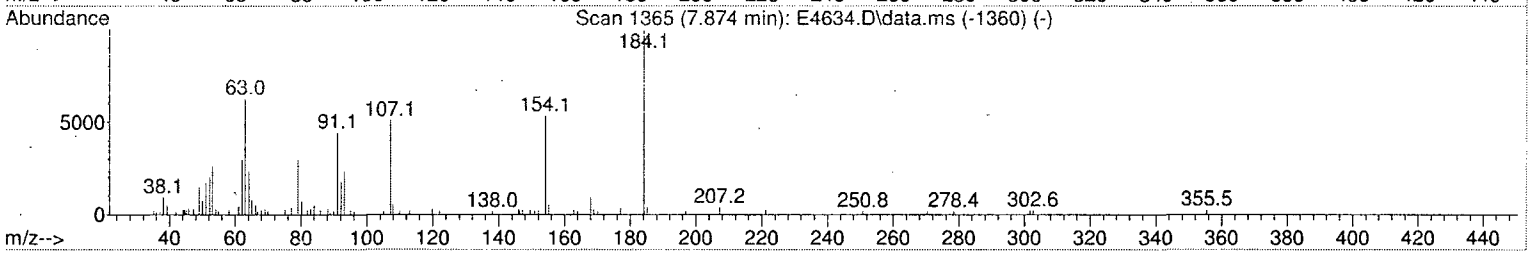
Data File : C:\msdchem\1\data\E4653.D
Acq On : 25 May 2012 3:43
Sample : 2E23005-CCV4
Misc : SSTD0209R
DataAcq Meth:CLPACQ.M

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 8/2

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

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

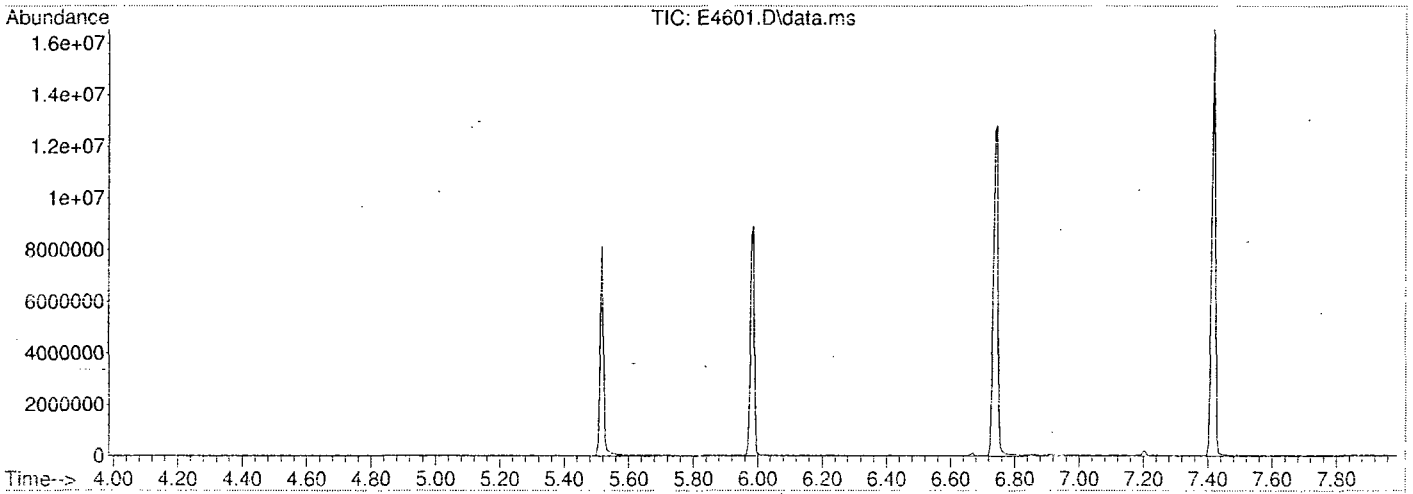
ORIGINAL LOCATED IN

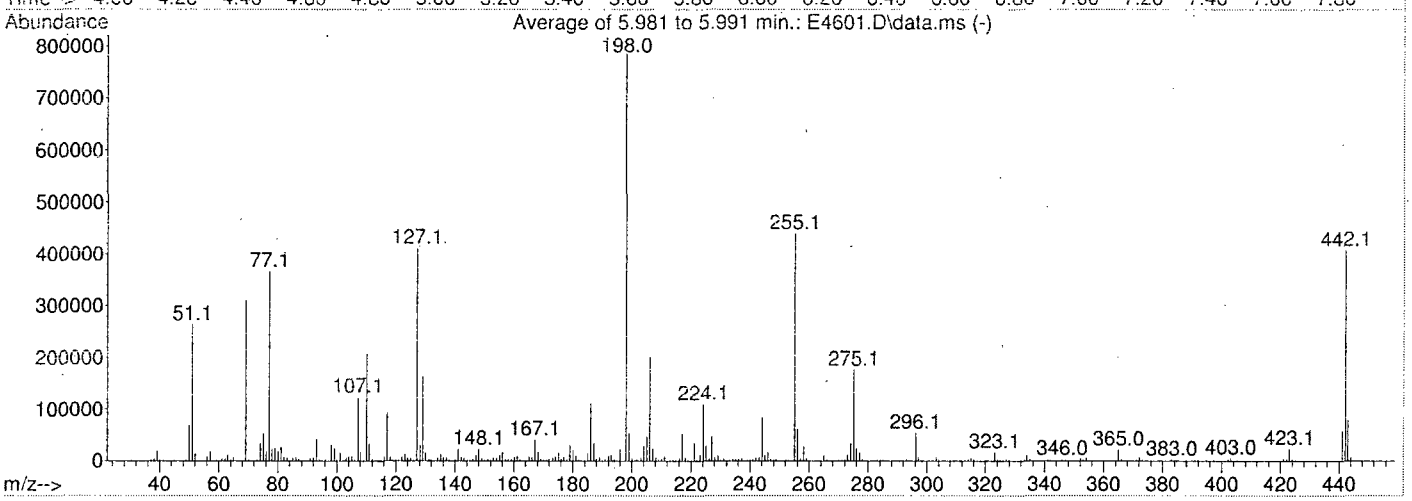
CASE: 42543 SDG: X0T49

05/25/12

S. Vokati

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						

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SBLK6K

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050140-BLK1

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4635.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	1.2	J
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SBLK6K

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050140-BLK1

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4635.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	0.39	J
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	0.74	J
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo (a) anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.63	J
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo (b) fluoranthene	5.0	U
207-08-9	Benzo (k) fluoranthene	5.0	U
50-32-8	Benzo (a) pyrene	5.0	U
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U
53-70-3	Dibenzo (a,h) anthracene	5.0	U
191-24-2	Benzo (g,h,i) perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
SBLK6K

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW10018

Lab Code: A4 Case No.: 42562 Mod. Ref No.: SDG No.: F5WC4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 2050140-BLK1

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E4635.D

Level: (LOW/MED) LOW Extraction: (Type): CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/21/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 05/24/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01 (1 3.301)	1.51	11	J
02		Unknown-02 (1 3.301)	1.58	11	J
03		Unknown-03 (1 3.301)	1.66	6.3	J
04		Unknown-04 (1 3.301)	1.73	11	J
05		Unknown-05 (1 3.301)	2.16	2.6	J
06	000108-94-1	Cyclohexanone	2.24	6.5	JN
07		Unknown-06 (2 4.963)	4.43	2.8	J
08		Unknown-07 (2 4.963)	5.83	4.3	J
09		Unknown-08 (3 7.596)	6.53	2.9	J
10		Unknown-09 (3 7.596)	6.71	2.3	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 : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

05/31/12
S. Vakati
05/31/12

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	3.301	152	53383	20.0000 ug/mL	0.00
21) Naphthalene-d8	4.963	136	214577	20.0000 ug/mL	0.00
38) Acenaphthene-d10	7.596	164	139384	20.0000 ug/mL	0.00
66) Phenanthrene-d10	9.848	188	238264	20.0000 ug/mL	0.00
80) Chrysene-d12	13.986	240	241113	20.0000 ug/mL	0.00
88) Perylene-d12	16.054	264	226377	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	368322	30.50 ug/mL	0.00
Spiked Amount 40.000	Range 39 - 106		Recovery = 76.25%		
18) Bis(2-chloroethyl)ethe...	3.039	67	199656	29.80 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 105		Recovery = 74.50%		
19) 2-Chlorophenol-d4	3.109	132	321784	30.09 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 106		Recovery = 75.22%		
20) 4-Methylphenol-d8	3.964	113	258746	28.83 ug/mL	0.00
Spiked Amount 40.000	Range 25 - 111		Recovery = 72.08%		
22) Nitrobenzene-d5	4.049	128	167262	36.69 ug/mL	0.00
Spiked Amount 40.000	Range 43 - 108		Recovery = 91.72%		
35) 2-Nitrophenol-d4	4.487	143	184710	36.40 ug/mL	0.00
Spiked Amount 40.000	Range 40 - 108		Recovery = 91.00%		
36) 2,4-Dichlorophenol-d3	4.856	165	281091	33.19 ug/mL	0.00
Spiked Amount 40.000	Range 37 - 105		Recovery = 82.97%		
37) 4-Chloroaniline-d4	5.182	131	319632	44.02 ug/mL	0.00
Spiked Amount 40.000	Range 1 - 145		Recovery = 110.05%		
62) Acenaphthylene-d8	7.335	160	961880	31.80 ug/mL	0.00
Spiked Amount 40.000	Range 41 - 107		Recovery = 79.50%		
63) 4-Nitrophenol-d4	8.173	143	133583	31.49 ug/mL	0.00
Spiked Amount 40.000	Range 33 - 116		Recovery = 78.72%		
64) Dimethylphthalate-d6	7.383	166	804372	34.32 ug/mL	0.00
Spiked Amount 40.000	Range 47 - 114		Recovery = 85.80%		
65) Fluorene-d10	8.382	176	633496	33.51 ug/mL	0.00
Spiked Amount 40.000	Range 42 - 111		Recovery = 83.78%		
78) 4,6-Dinitro-2-methylph...	8.682	200	107863	28.76 ug/mL	0.00
Spiked Amount 40.000	Range 22 - 104		Recovery = 71.90%		
79) Anthracene-d10	9.922	188	1053715	35.84 ug/mL	0.00
Spiked Amount 40.000	Range 44 - 110		Recovery = 89.60%		
87) Pyrene-d10	12.031	212	1236315	39.18 ug/mL	0.00
Spiked Amount 40.000	Range 52 - 119		Recovery = 97.95%		
96) Benzo (a) pyrene-d12	15.940	264	1028630	39.78 ug/mL	0.00
Spiked Amount 40.000	Range 32 - 121		Recovery = 99.45%		
Target Compounds					Qvalue
13) Acetophenone	3.878	105	16605	1.2175 ug/mL	90
59) Diethylphthalate	8.527	149	8979	0.3887 ug/mL#	66
76) Di-n-butylphthalate	11.088	149	27895	0.7431 ug/mL	100
86) Bis(2-ethylhexyl)phtha...	14.420	149	14341	0.6263 ug/mL	96

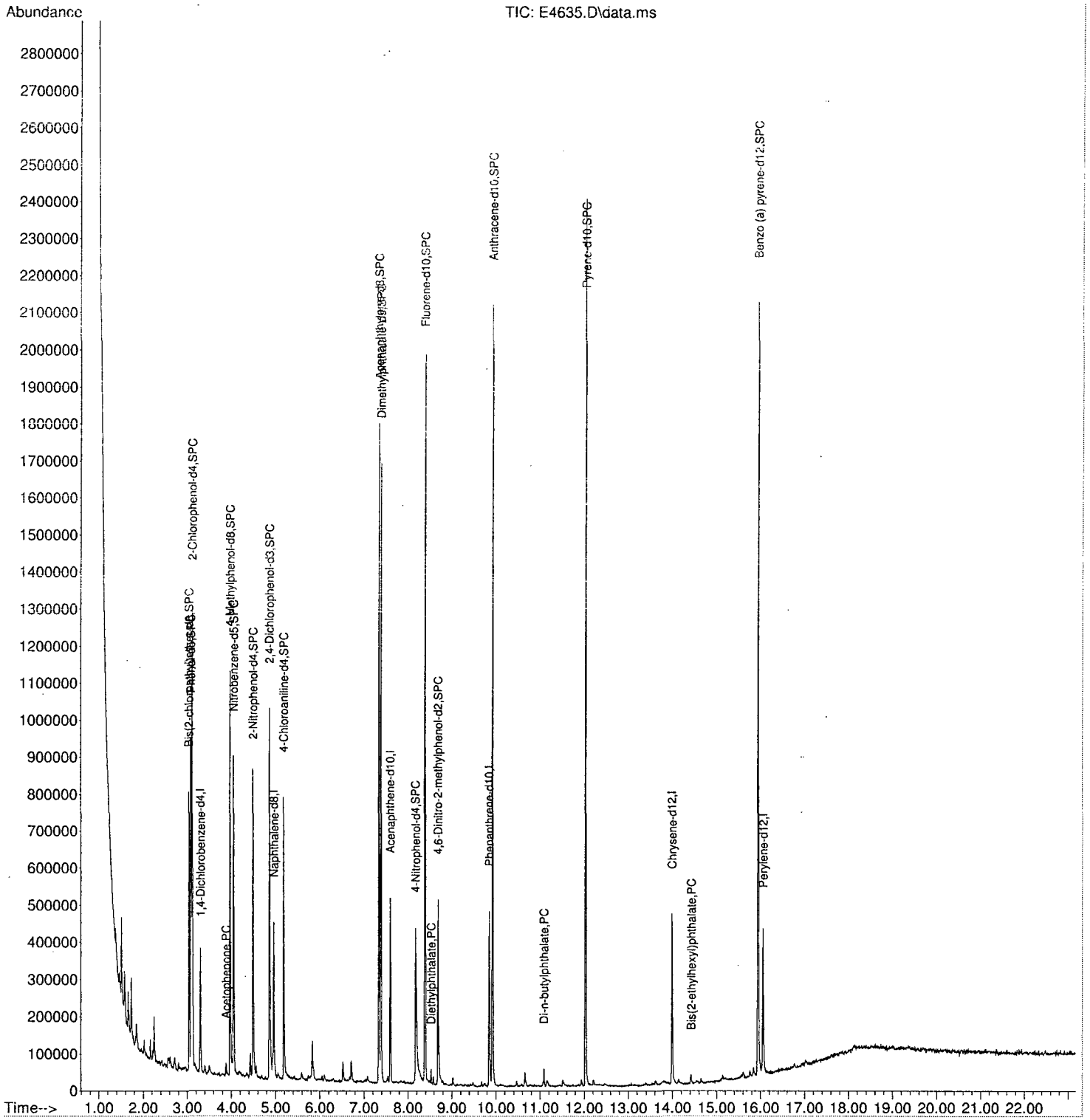
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

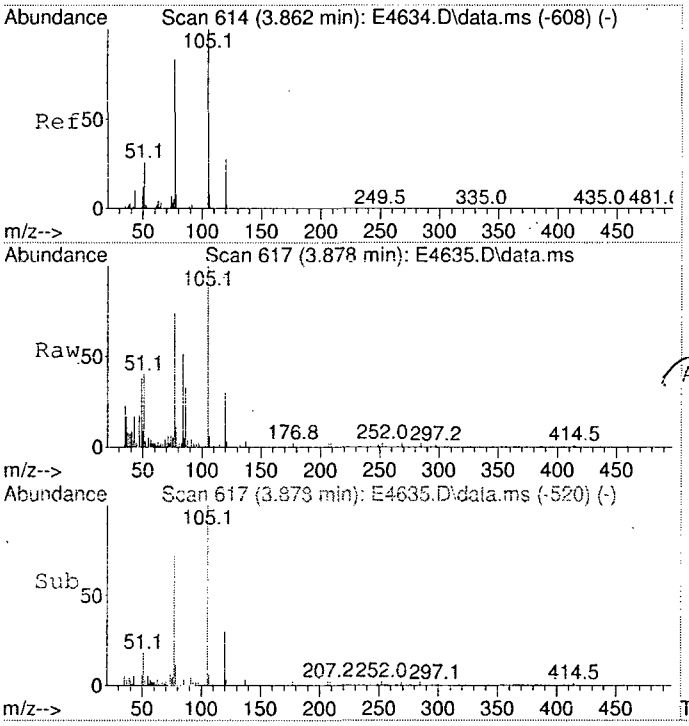
Quant Time: May 26 01:41:07 2012
Quant Results File: SOME4634.RES
Integration File: RTEINT.P
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration
QLast Update : Thu May 24 17:33:56 2012
Response via : Initial Calibration



Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

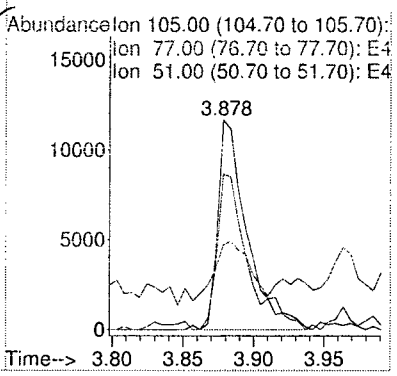
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

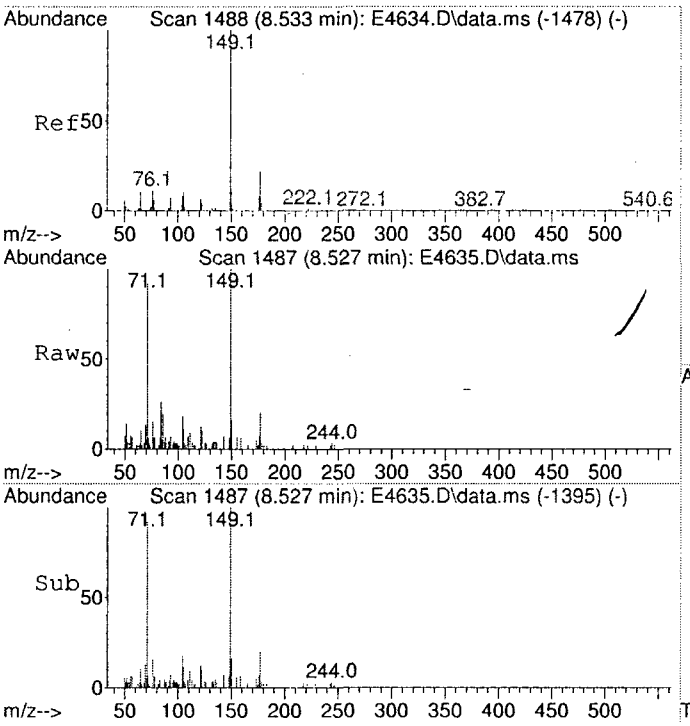


#13
Acetophenone
Concen: 1.2175 ug/mL
RT: 3.88 min Scan# 617
Delta R.T. 0.02 min
Lab File: E4635.D
Acq: 24 May 2012 17:21

Tgt Ion:105 Resp: 16605

Ion	Ratio	Lower	Upper
105	100		
77	78.5	66.4	106.4
51	34.1	5.9	45.9

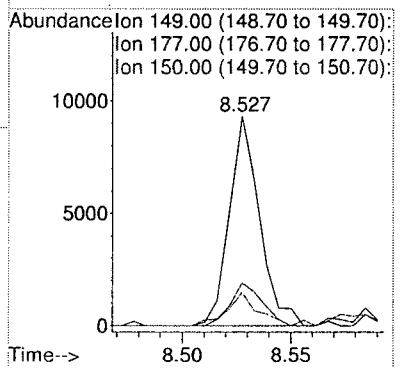




#59
Diethylphthalate
Concen: 0.3887 ug/mL
RT: 8.53 min Scan# 1487
Delta R.T. -0.01 min
Lab File: E4635.D
Acq: 24 May 2012 17:21

Tgt Ion:149 Resp: 8979

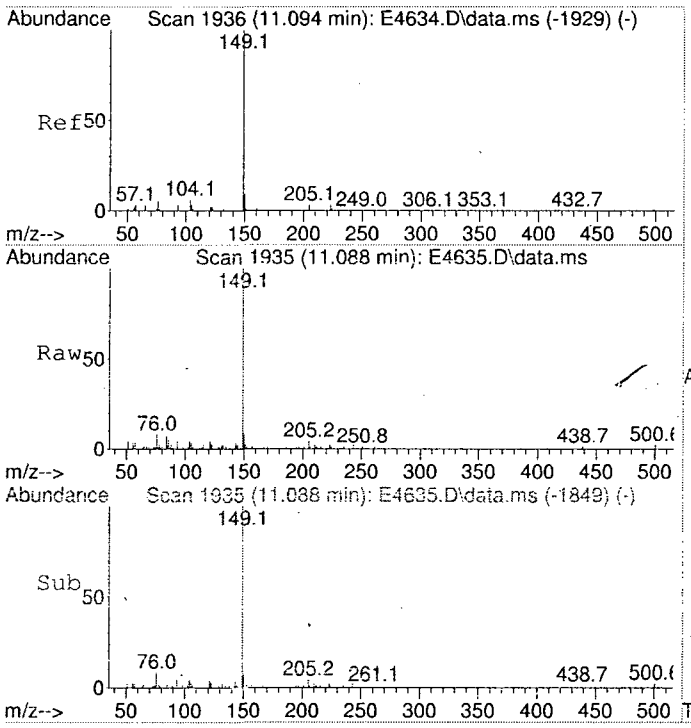
Ion	Ratio	Lower	Upper
149	100		
177	0.0	2.5	42.5#
150	16.2	0.0	32.2



Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
MS Integration Params: RTEINT.P

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

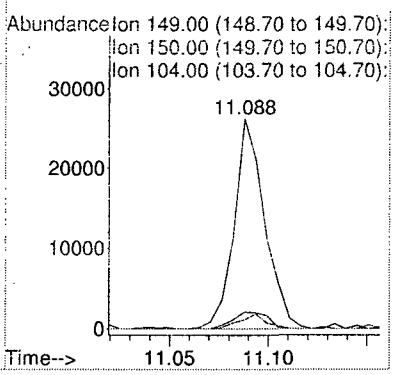
Method : C:\msdchem\1\methods\SOME4634.M (RTE Integrator)
Title : CLP SOM1.2 BNA Calibration

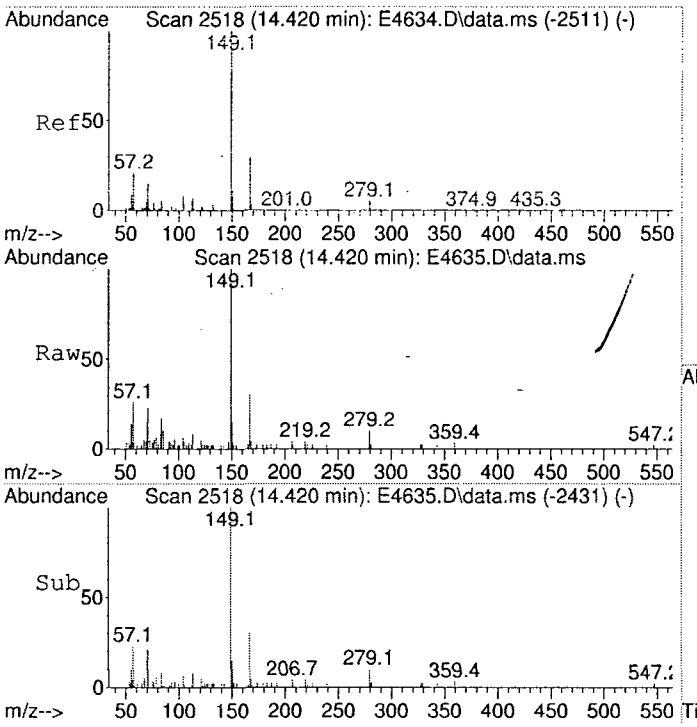


#76
Di-n-butylphthalate
Concen: 0.7431 ug/mL
RT: 11.09 min Scan# 1935
Delta R.T. -0.01 min
Lab File: E4635.D
Acq: 24 May 2012 17:21

Tgt Ion:149 Resp: 27895

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	29.0
104	6.1	0.0	26.3

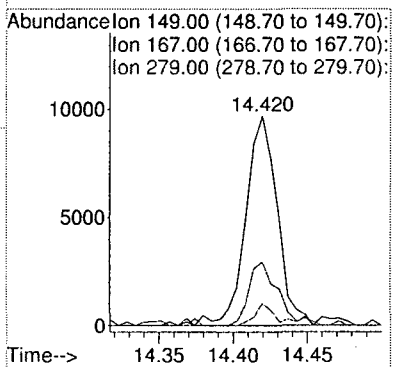




#86
Bis(2-ethylhexyl)phthalate
Concen: 0.6263 ug/mL
RT: 14.42 min Scan# 2518
Delta R.T. 0.00 min
Lab File: E4635.D
Acq: 24 May 2012 17:21

Tgt Ion:149 Resp: 14341

Ion	Ratio	Lower	Upper
149	100		
167	27.7	10.2	50.2
279	7.0	0.0	28.1



LSC Area Percent Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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: E4635.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.506	171	173	184	rVB2	235040	247454	8.12%	0.786%
2	1.576	184	186	200	rVB3	148804	247155	8.11%	0.785%
3	1.656	200	201	212	rVB	109845	138495	4.54%	0.440%
4	1.731	212	215	231	rVB	175575	237306	7.78%	0.753%
5	2.163	294	296	304	rBV5	54033	57628	1.89%	0.183%
6	2.243	309	311	320	rVB3	123161	144020	4.72%	0.457%
7	3.039	457	460	465	rBV	750837	753004	24.70%	2.391%
8	3.082	465	468	471	rVV	891510	993285	32.58%	3.154%
9	3.109	471	473	482	rVB	1246378	1461597	47.95%	4.641%
10	3.296	503	508	522	rVB2	336553	441672	14.49%	1.402%
11	3.883	615	618	622	rBV	31406	37934	1.24%	0.120%
12	3.964	629	633	645	rBV	1092023	1343231	44.06%	4.265%
13	4.044	645	648	657	rVB	853739	1075513	35.28%	3.415%
14	4.428	715	720	726	rBV3	60705	73786	2.42%	0.234%
15	4.482	727	730	741	rVV	830642	1024720	33.61%	3.254%
16	4.562	743	745	751	rVB6	32705	35186	1.15%	0.112%
17	4.770	781	784	789	rBV6	10072	12681	0.42%	0.040%
18	4.856	796	800	812	rBV	996975	1322646	43.39%	4.199%
19	4.963	816	820	832	rVB	420292	523923	17.19%	1.663%
20	5.182	857	861	875	rBV	761835	1026961	33.69%	3.261%
21	5.422	904	906	911	rVB6	11772	12277	0.40%	0.039%
22	5.588	933	937	945	rBV10	19313	34111	1.12%	0.108%
23	5.737	961	965	968	rBV5	16792	21955	0.72%	0.070%
24	5.833	978	983	985	rBV	97138	113682	3.73%	0.361%
25	6.047	1021	1023	1027	rVB5	14792	16640	0.55%	0.053%
26	6.111	1031	1035	1036	rBV4	12047	12401	0.41%	0.039%
27	6.175	1043	1047	1051	rVB7	6221	10019	0.33%	0.032%
28	6.448	1096	1098	1100	rVB2	8735	5224	0.17%	0.017%
29	6.528	1108	1113	1120	rBV5	54789	81320	2.67%	0.258%
30	6.710	1144	1147	1154	rVB2	52758	63418	2.08%	0.201%
31	7.078	1214	1216	1224	rVB9	16079	21678	0.71%	0.069%
32	7.335	1259	1264	1269	rBV	1777570	2048607	67.20%	6.504%
33	7.383	1269	1273	1286	rVB	1671586	1851536	60.74%	5.879%
34	7.538	1299	1302	1308	rVB7	17597	22953	0.75%	0.073%
35	7.596	1308	1313	1322	rVB	497615	563728	18.49%	1.790%
36	7.837	1355	1358	1360	rBV3	5739	5389	0.18%	0.017%
37	7.928	1373	1375	1380	rVB5	6771	8477	0.28%	0.027%
38	8.168	1416	1420	1434	rBV	410437	801549	26.29%	2.545%
39	8.387	1455	1461	1469	rVB2	1958846	2448615	80.32%	7.774%
40	8.527	1484	1487	1492	rVB2	42523	47204	1.55%	0.150%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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	8.579	1492	1496	1502	rBV2	22346	27191	0.89%	0.086%
42	8.642	1505	1507	1510	rBV3	4636	4792	0.16%	0.015%
43	8.682	1510	1514	1532	rBV	498981	678816	22.27%	2.155%
44	8.842	1540	1542	1545	rBV4	4887	5586	0.18%	0.018%
45	8.870	1545	1547	1551	rVB4	4230	4858	0.16%	0.015%
46	8.967	1561	1564	1567	rBV4	5783	6446	0.21%	0.020%
47	9.025	1570	1574	1584	rVB4	22778	37233	1.22%	0.118%
48	9.122	1589	1591	1594	rBV3	5274	4954	0.16%	0.016%
49	9.196	1600	1604	1610	rVB7	5887	12011	0.39%	0.038%
50	9.242	1610	1612	1615	rVB4	5140	5074	0.17%	0.016%
51	9.305	1619	1623	1631	rVB10	7434	15988	0.52%	0.051%
52	9.368	1631	1634	1637	rBV4	7925	7506	0.25%	0.024%
53	9.425	1639	1644	1648	rBV8	7967	13617	0.45%	0.043%
54	9.482	1650	1654	1657	rBV5	9649	12455	0.41%	0.040%
55	9.682	1683	1689	1694	rBV7	15123	19663	0.65%	0.062%
56	9.733	1696	1698	1699	rBV2	6947	6065	0.20%	0.019%
57	9.785	1706	1707	1711	rVB3	7823	7264	0.24%	0.023%
58	9.819	1711	1713	1714	rBV2	5528	5415	0.18%	0.017%
59	9.848	1714	1718	1727	rVV	472701	634357	20.81%	2.014%
60	9.922	1727	1731	1743	rVB	2105890	2575577	84.49%	8.178%
61	10.071	1754	1757	1758	rBV3	4661	4837	0.16%	0.015%
62	10.168	1773	1774	1779	rVB3	6449	5195	0.17%	0.016%
63	10.345	1803	1805	1809	rBV3	4423	5101	0.17%	0.016%
64	10.471	1823	1827	1831	rVB	15118	20263	0.66%	0.064%
65	10.551	1838	1841	1844	rBV4	5149	6153	0.20%	0.020%
66	10.653	1856	1859	1867	rVV5	38833	62701	2.06%	0.199%
67	10.756	1874	1877	1879	rBV4	7182	5710	0.19%	0.018%
68	10.785	1879	1882	1885	rVV3	8665	9865	0.32%	0.031%
69	10.831	1885	1890	1893	rVB5	6568	9783	0.32%	0.031%
70	11.088	1927	1935	1942	rVB	49446	76418	2.51%	0.243%
71	11.168	1942	1949	1954	rBV8	16768	41554	1.36%	0.132%
72	11.328	1974	1977	1979	rVB3	4327	4898	0.16%	0.016%
73	11.454	1994	1999	2003	rVB5	4999	9180	0.30%	0.029%
74	11.517	2006	2010	2017	rBV4	17876	37022	1.21%	0.118%
75	11.602	2024	2025	2029	rVB4	6570	4909	0.16%	0.016%
76	11.642	2029	2032	2037	rVB7	5440	7122	0.23%	0.023%
77	11.717	2042	2045	2049	rBV3	3906	6982	0.23%	0.022%
78	11.751	2049	2051	2054	rVB3	7163	4715	0.15%	0.015%
79	11.934	2080	2083	2087	rBV3	16236	21719	0.71%	0.069%
80	12.031	2093	2100	2114	rBV	2395114	3048473	100.00%	9.679%
81	12.208	2128	2131	2136	rBV7	15813	24732	0.81%	0.079%
82	12.460	2173	2175	2179	rBV4	6270	8377	0.27%	0.027%
83	12.808	2232	2236	2239	rBV4	4262	5710	0.19%	0.018%

LSC Area Percent Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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	13.020	2270	2273	2275	rBV3	5918	5912	0.19%	0.019%
85	13.065	2278	2281	2283	rVV4	7515	7101	0.23%	0.023%
86	13.123	2289	2291	2295	rVB5	4353	4934	0.16%	0.016%
87	13.300	2318	2322	2325	rBV3	6051	7189	0.24%	0.023%
88	13.568	2367	2369	2373	rVB5	5392	5761	0.19%	0.018%
89	13.614	2373	2377	2381	rBV7	12753	22450	0.74%	0.071%
90	13.986	2436	2442	2455	rBV	458343	673430	22.09%	2.138%
91	14.420	2513	2518	2527	rVB4	25839	46966	1.54%	0.149%
92	14.637	2553	2556	2561	rBV5	13024	25437	0.83%	0.081%
93	14.986	2613	2617	2618	rBV4	6922	10462	0.34%	0.033%
94	15.111	2638	2639	2640	rBV	8069	4817	0.16%	0.015%
95	15.134	2641	2643	2647	rVB4	15184	16638	0.55%	0.053%
96	15.643	2731	2732	2735	rVB3	9114	6005	0.20%	0.019%
97	15.763	2750	2753	2756	rBV5	16696	22385	0.73%	0.071%
98	15.837	2763	2766	2776	rVB5	21698	36759	1.21%	0.117%
99	15.940	2778	2784	2797	rBV	2086193	3038638	99.68%	9.648%
100	16.049	2799	2803	2816	rVB	389999	655615	21.51%	2.082%

Sum of corrected areas: 31495766

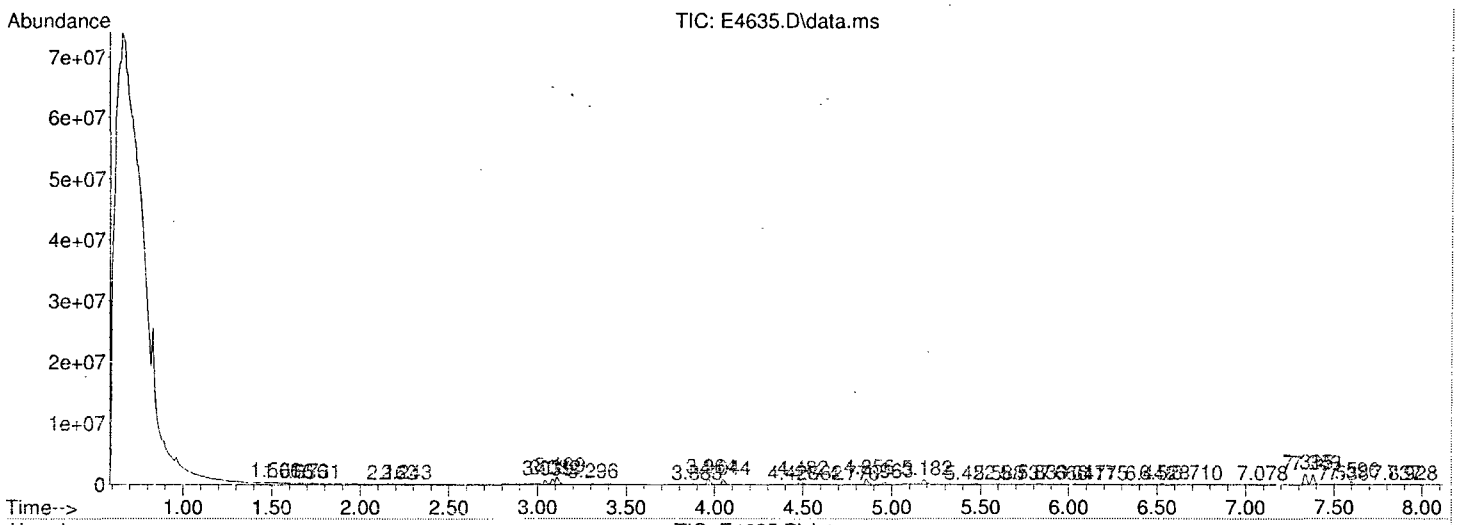
LSC Report - Integrated Chromatogram

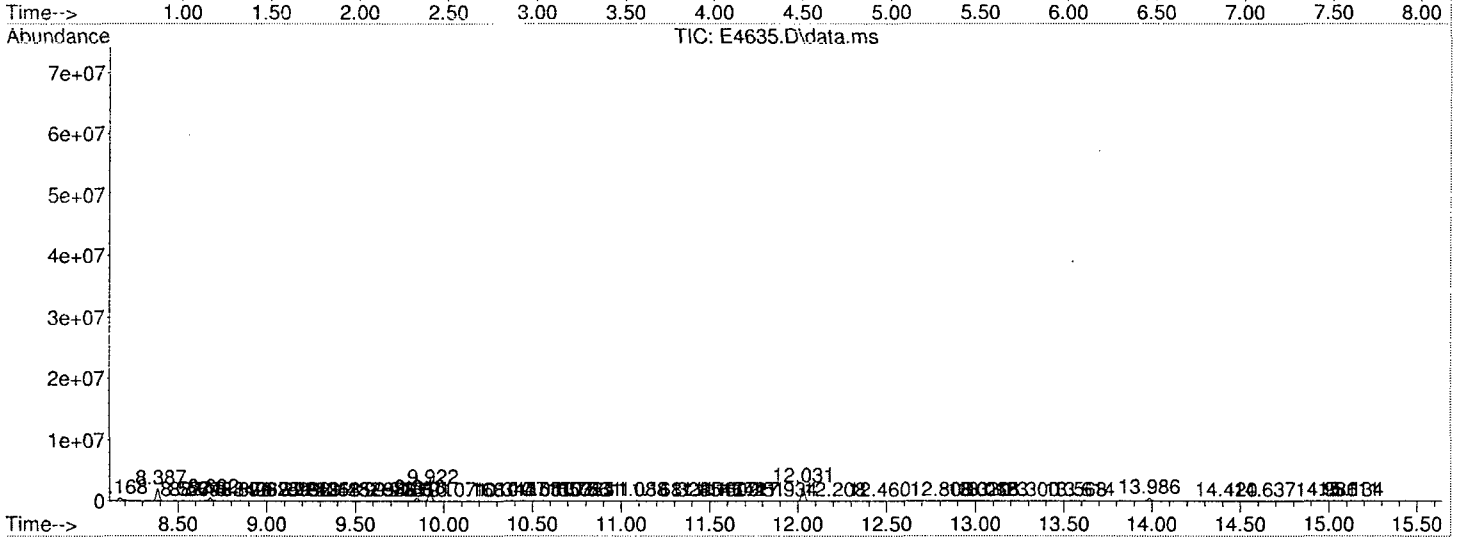
Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

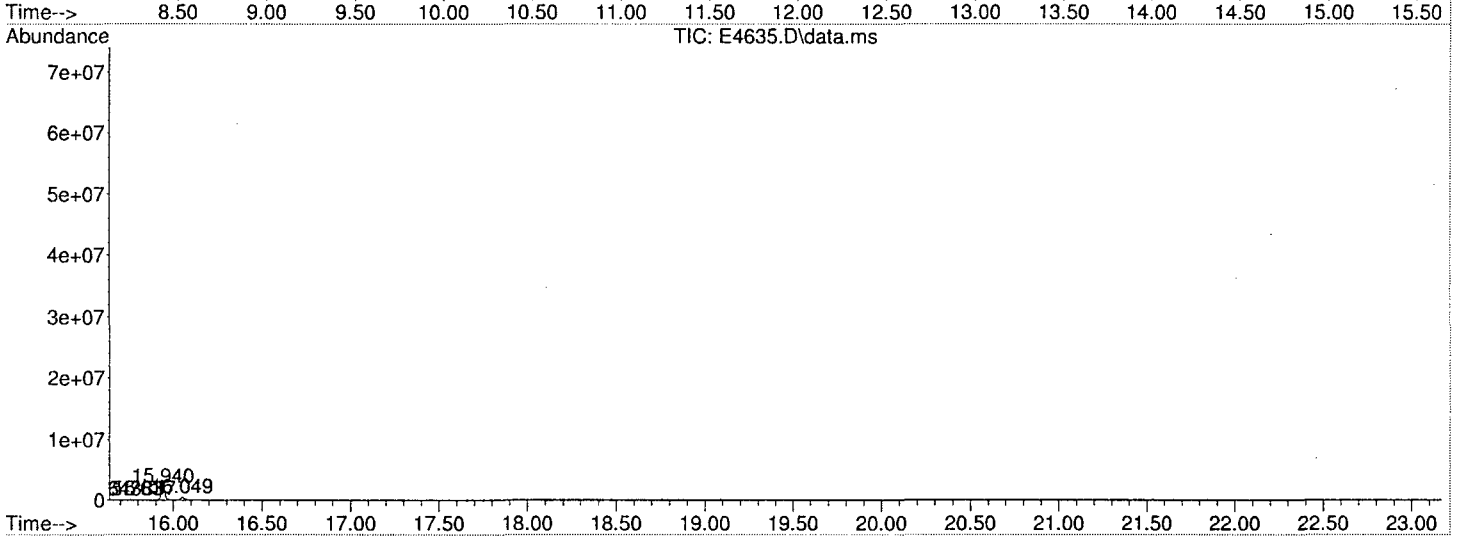
Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

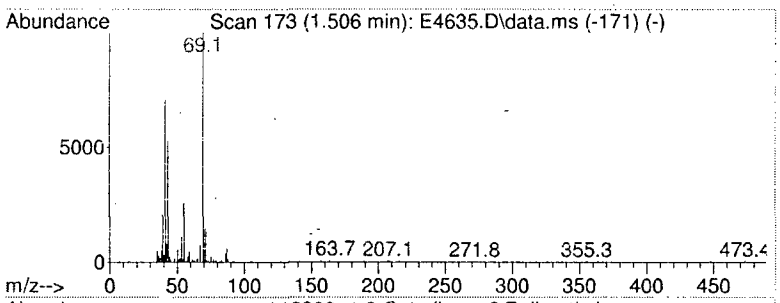
****

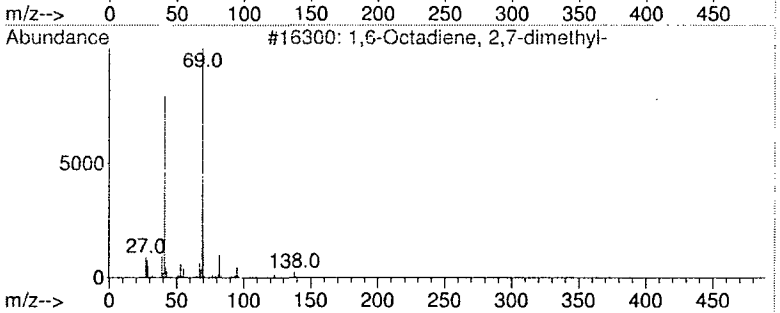
Peak Number 1 1,6-Octadiene, 2,7-dimethyl- Concentration Rank 1

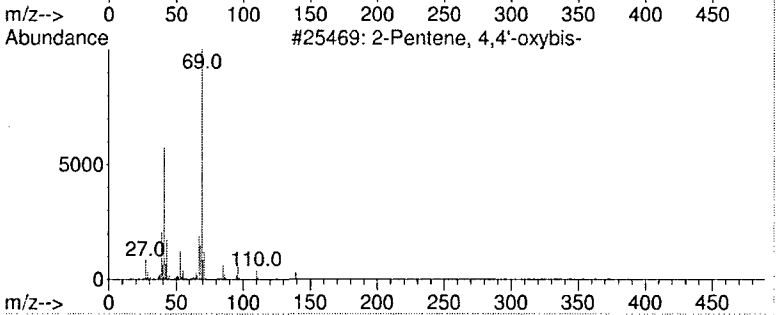
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.506	11.21 ug/mL	247454	1,4-Dichlorobenzene-d4	3.301

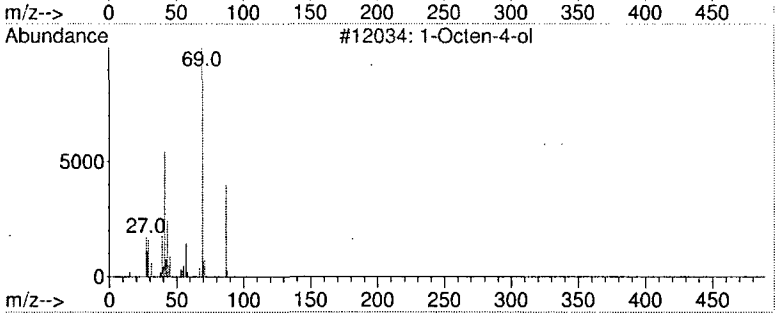
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,6-Octadiene, 2,7-dimethyl-	138	C10H18	040195-09-3	53
2	2-Pentene, 4,4'-oxybis-	154	C10H18O	052867-34-2	39
3	1-Octen-4-ol	128	C8H16O	040575-42-6	38
4	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	36
5	1-Pentyn-3-ol, 3,4-dimethyl-	112	C7H12O	001482-15-1	36

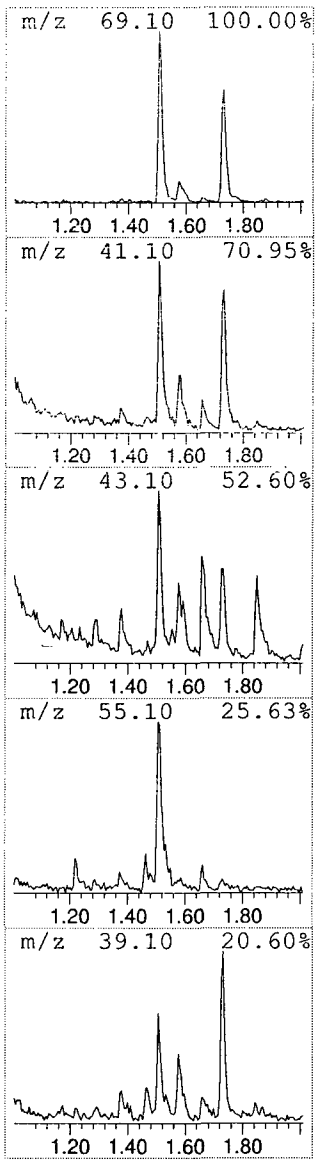
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

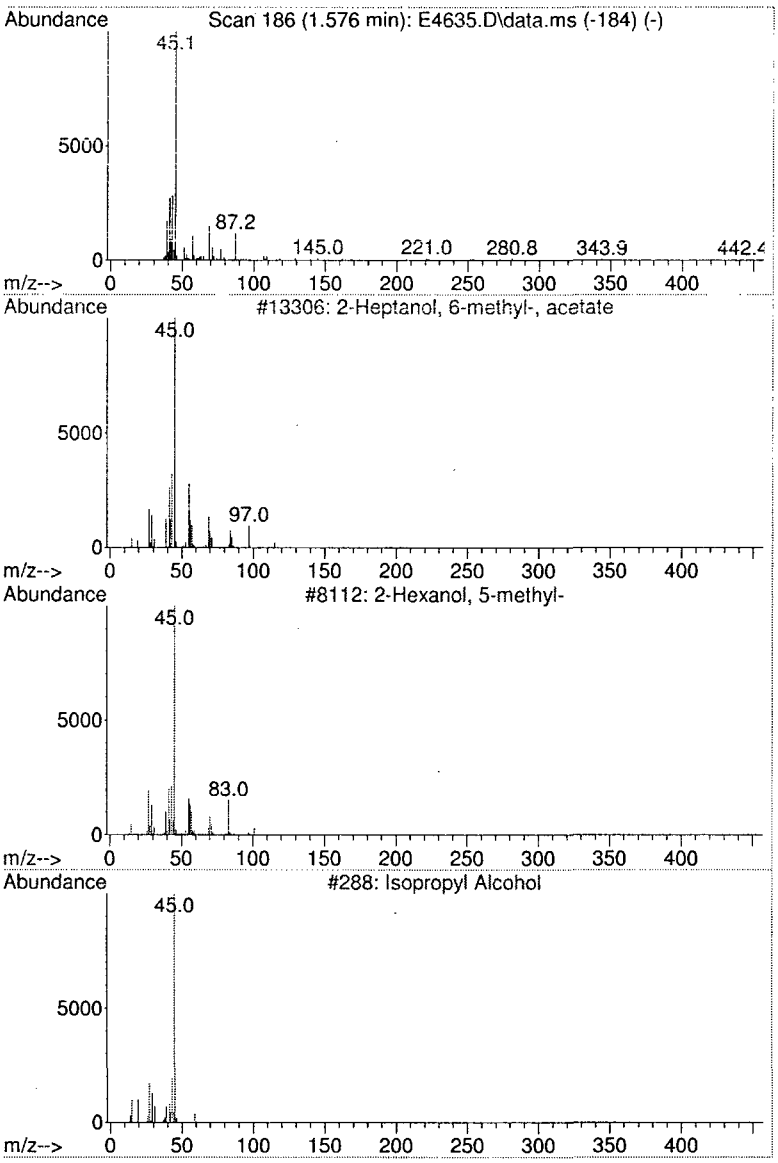
****

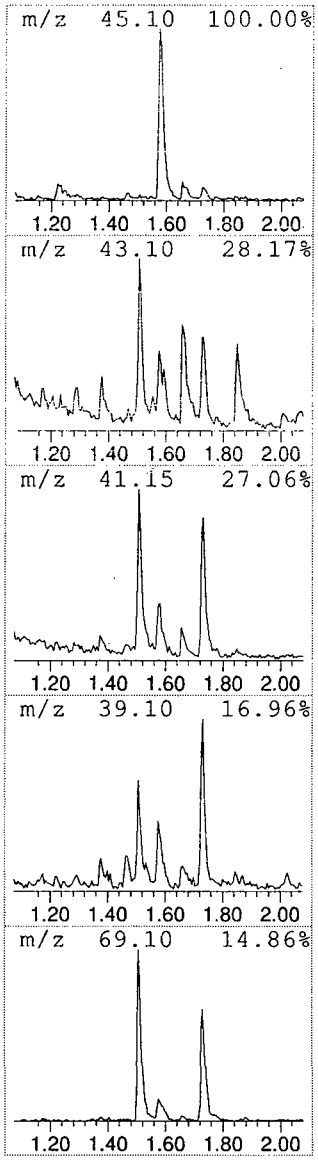
Peak Number 2 2-Heptanol, 6-methyl-, acetate Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.576	11.19 ug/mL	247155	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Heptanol, 6-methyl-, acetate	130	C8H18O	067952-57-2	56
2	2-Hexanol, 5-methyl-	116	C7H16O	000627-59-8	50
3	Isopropyl Alcohol	60	C3H8O	000067-63-0	42
4	2-Heptanol, 5-methyl-	130	C8H18O	054630-50-1	40
5	2-Heptanol, 6-methyl-	130	C8H18O	004730-22-7	40

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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-Butanol, 3-methoxy- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.656	6.27 ug/mL	138495	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanol, 3-methoxy-	104	C5H12O2	053778-72-6	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	59
3	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	50
4	Amylene Hydrate	88	C5H12O	000075-85-4	42
5	Hexanamide	115	C6H13NO	000628-02-4	42

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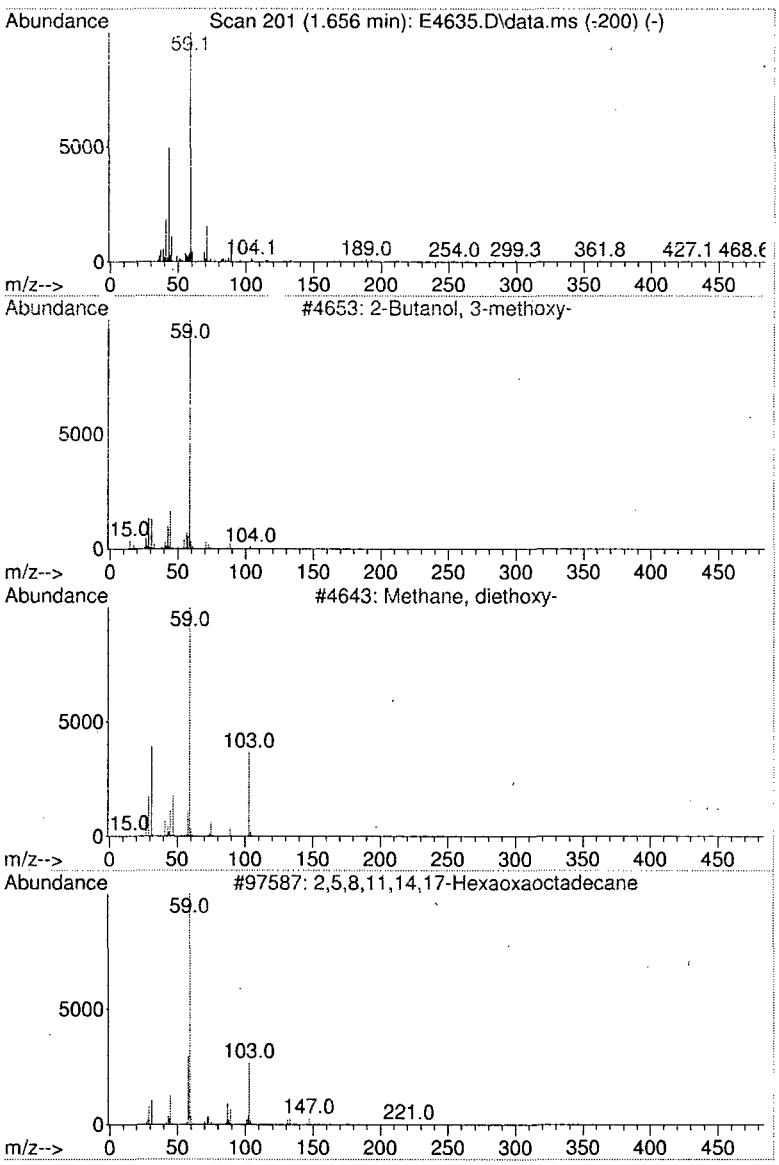
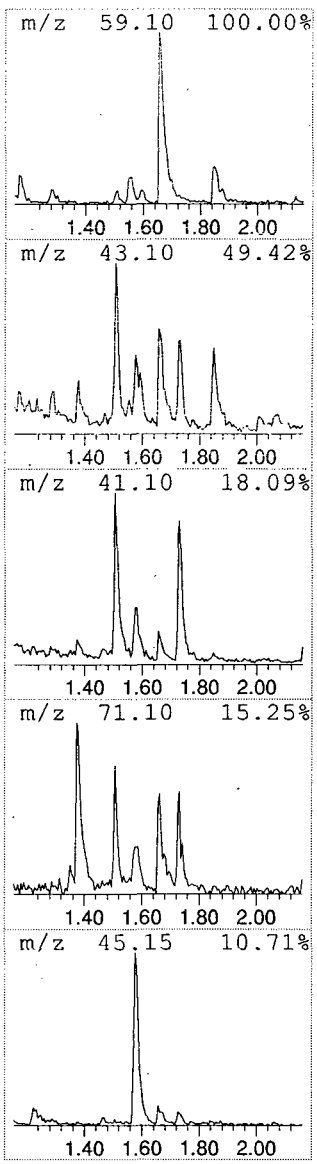




Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

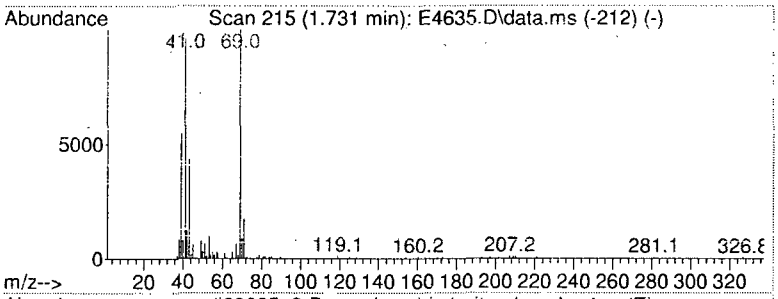
****

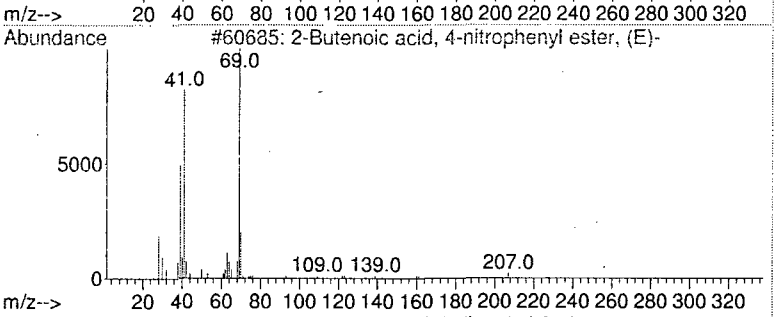
Peak Number 4 2-Butenoic acid, 4-nitrophe... Concentration Rank 3

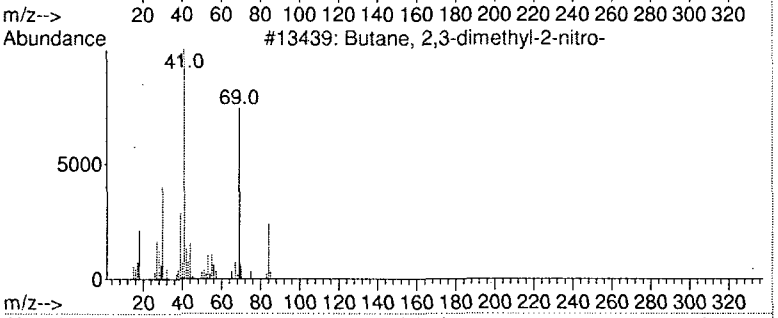
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.731	10.75 ug/mL	237306	1,4-Dichlorobenzene-d4	3.301

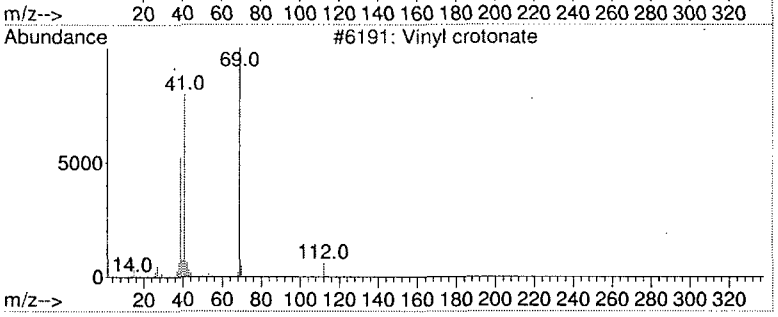
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butenoic acid, 4-nitrophenyl e...	207	C10H9NO4	014617-88-0	50
2	Butane, 2,3-dimethyl-2-nitro-	131	C6H13NO2	034075-28-0	50
3	Vinyl crotonate	112	C6H8O2	014861-06-4	50
4	1-Butene, 3,3-dimethyl-	84	C6H12	000558-37-2	40
5	1-Pentene, 2,3-dimethyl-	98	C7H14	003404-72-6	40

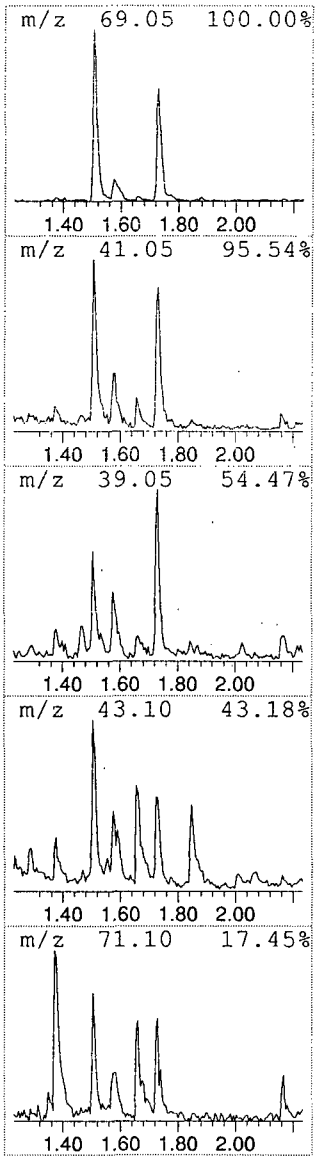
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

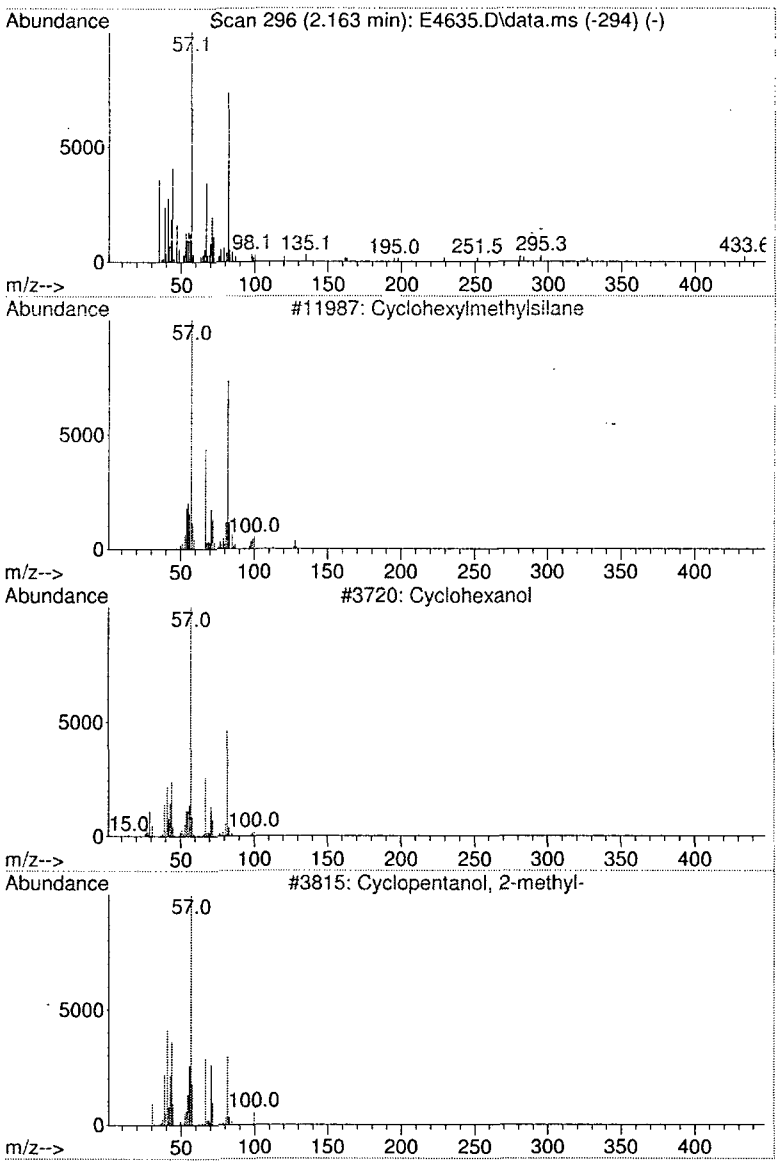
****

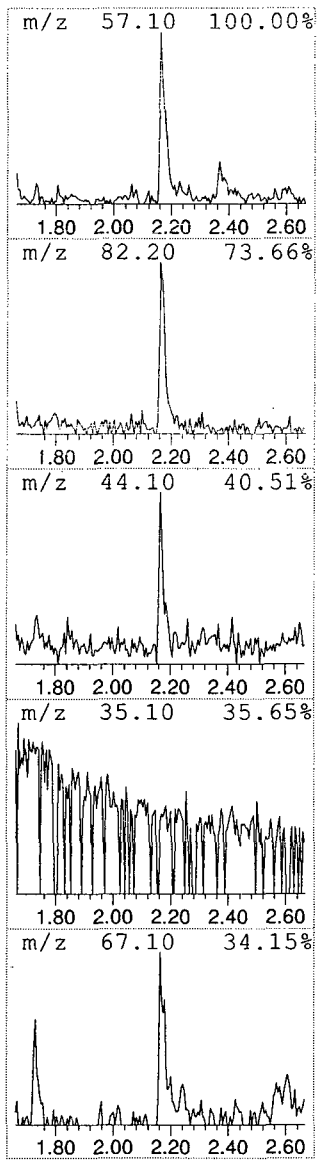
Peak Number 5 Cyclohexylmethylsilane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.163	2.61 ug/mL	57628	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexylmethylsilane	128	C7H16Si	002096-99-3	50
2	Cyclohexanol	100	C6H12O	000108-93-0	49
3	Cyclopentanol, 2-methyl-	100	C6H12O	024070-77-7	43
4	2-Hexen-1-ol, (E)-	100	C6H12O	000928-95-0	38
5	2-Hexen-1-ol, (E)-	100	C6H12O	000928-95-0	38

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

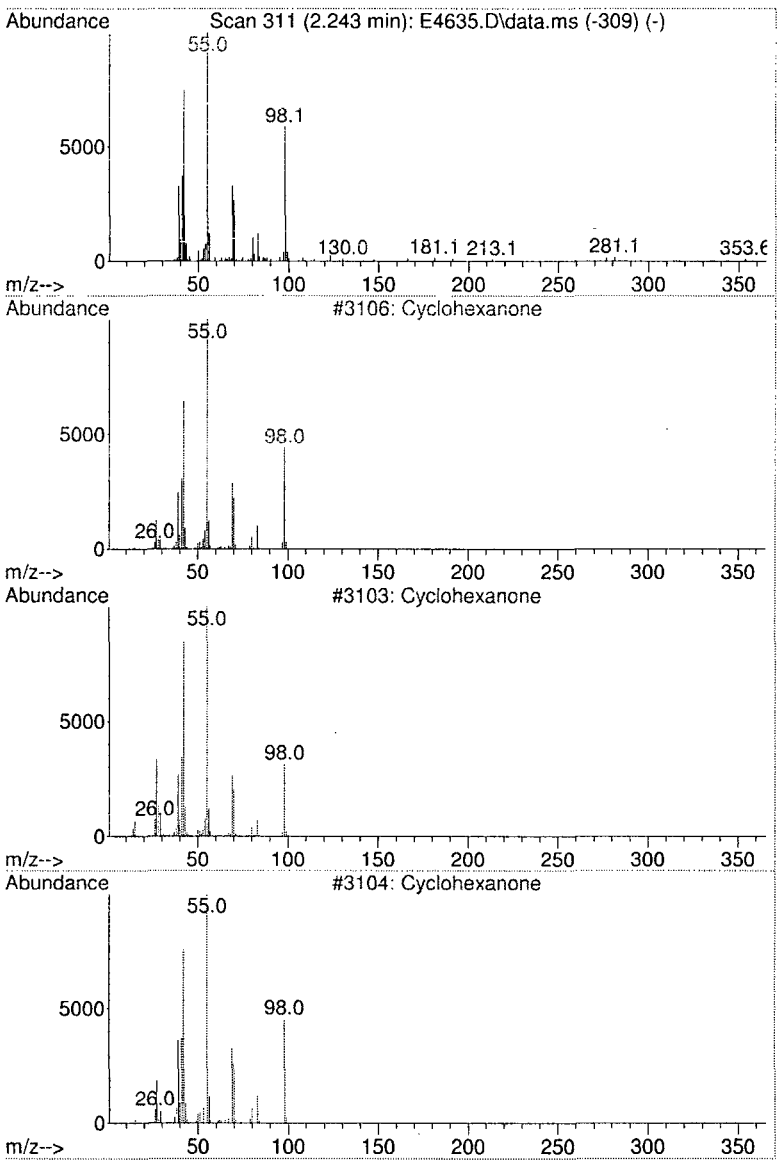
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

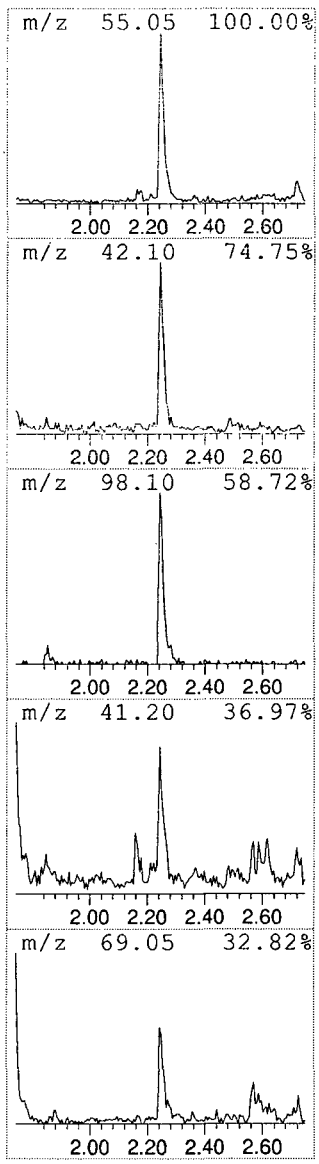
****

Peak Number 6 Cyclohexanone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.243	6.52 ug/mL	144020	1,4-Dichlorobenzene-d4	3.301

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone	98	C6H10O	000108-94-1	94✓
2	Cyclohexanone	98	C6H10O	000108-94-1	91
3	Cyclohexanone	98	C6H10O	000108-94-1	91
4	Cyclohexanone	98	C6H10O	000108-94-1	91
5	Cyclohexanone	98	C6H10O	000108-94-1	90





Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

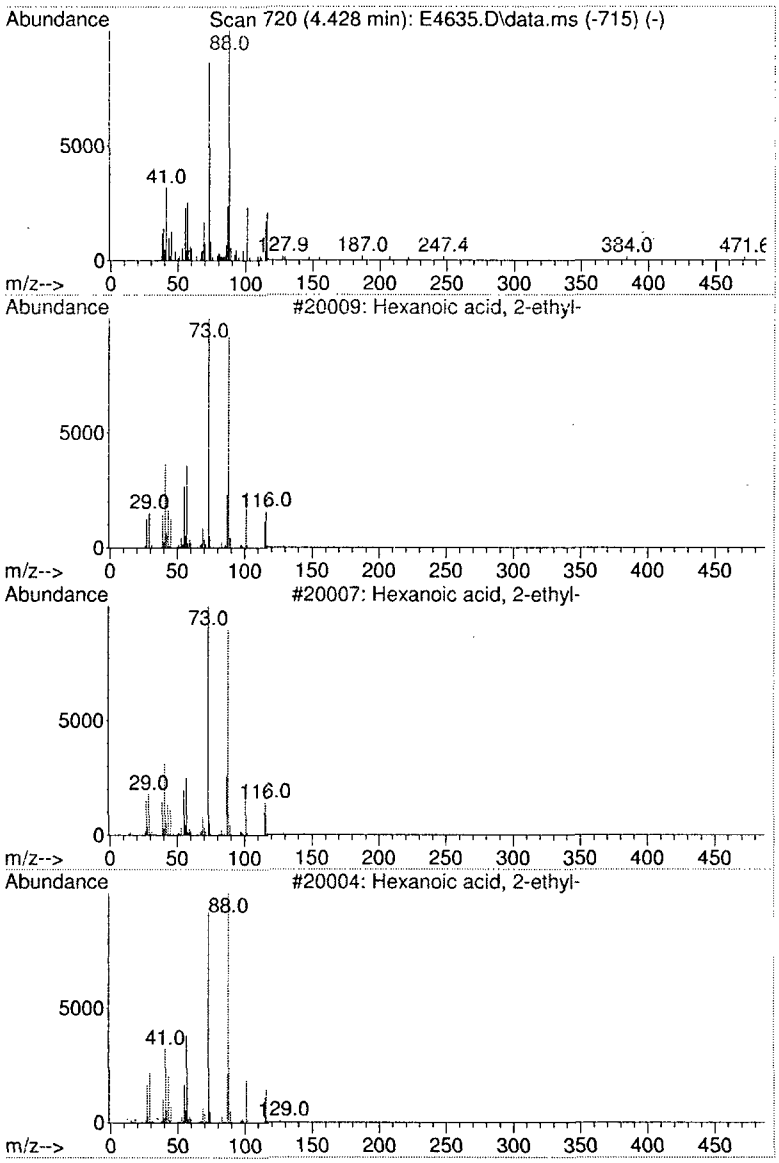
****

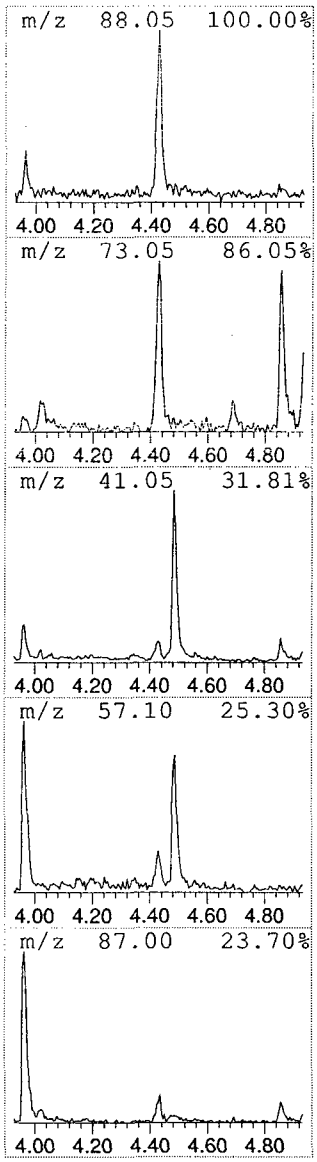
Peak Number 7 Hexanoic acid, 2-ethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.428	2.82 ug/mL	73786	Naphthalene-d8	4.963

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	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	64
4	Sulfide, allyl methyl	88	C4H8S	010152-76-8	43
5	3-Aza-2-oxabicyclo[2.2.2]oct-5-e...	267	C10H12F3NO4	102698-35-1	43

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

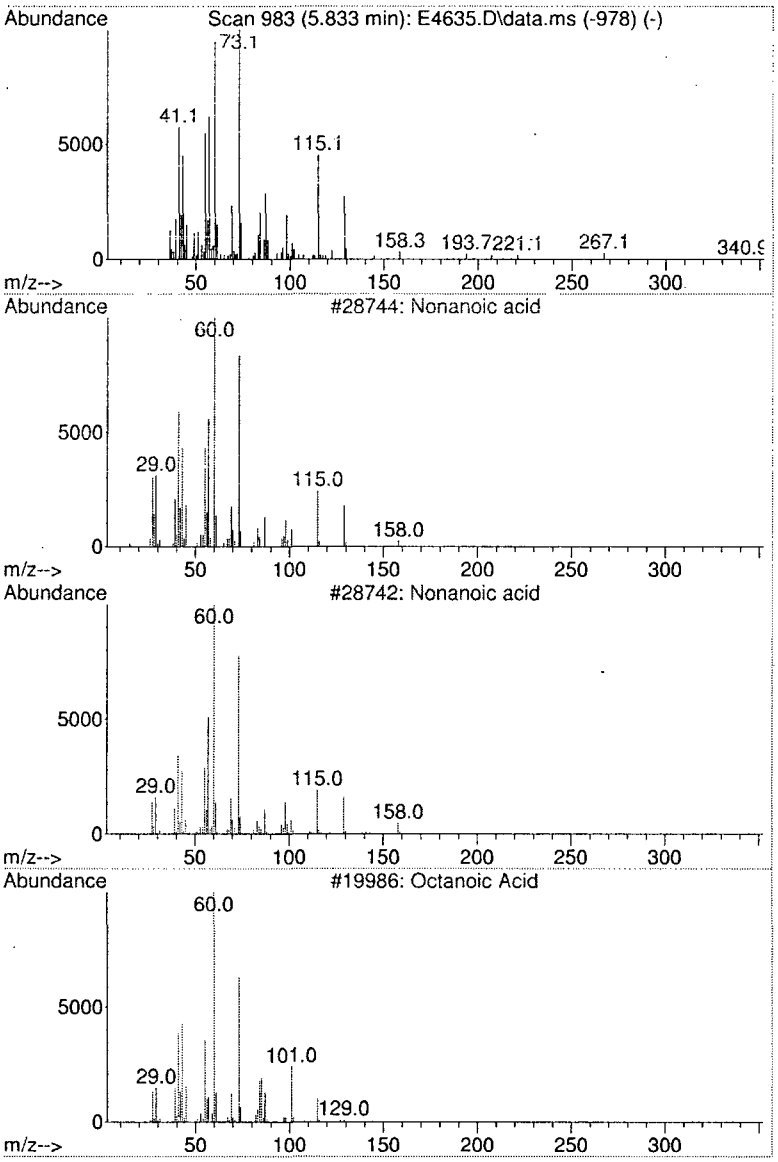
****

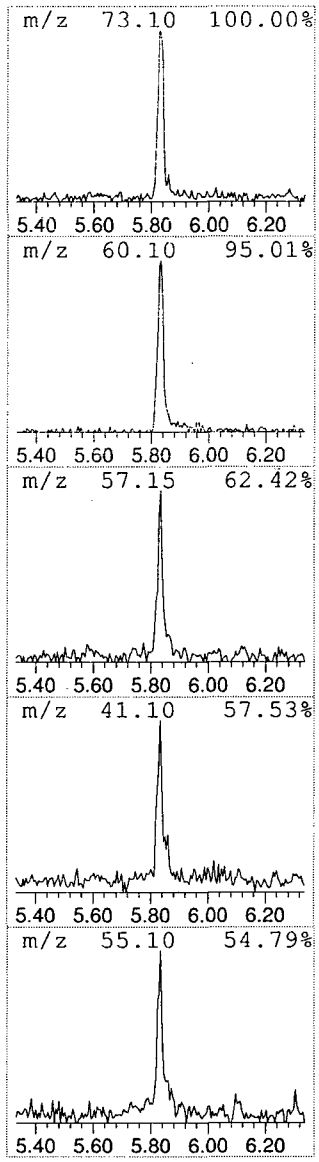
Peak Number 8 Nonanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.833	4.34 ug/mL	113682	Naphthalene-d8	4.963

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	45
3	Octanoic Acid	144	C8H16O2	000124-07-2	43
4	n-Decanoic acid	172	C10H20O2	000334-48-5	40
5	Tridecanoic acid	214	C13H26O2	000638-53-9	40

Unknown





Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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

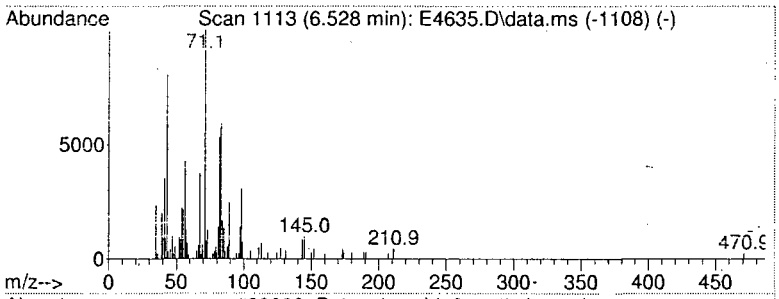
****

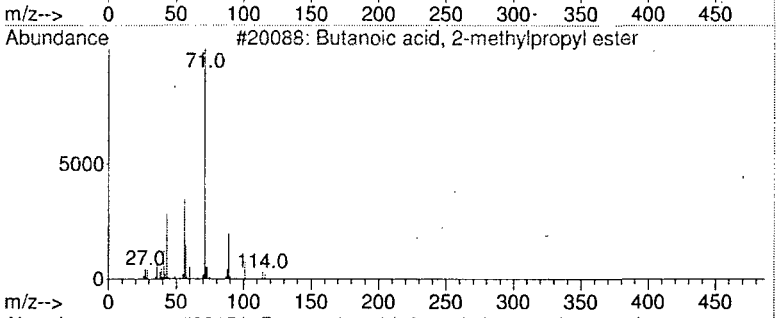
Peak Number 9 Butanoic acid, 2-methylprop... Concentration Rank 7

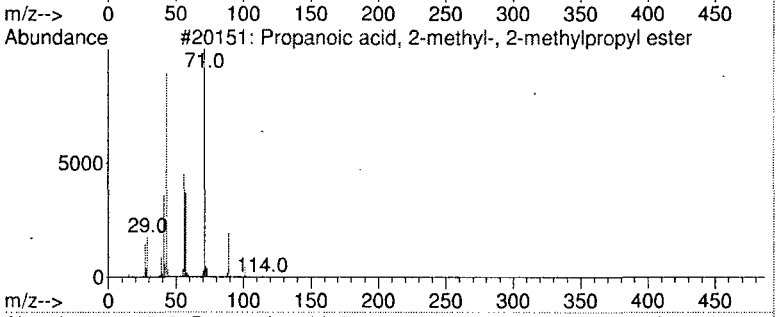
R.T.	EstConc	Area	Relative to ISTD	R.T.
6.528	2.89 ug/mL	81320	Acenaphthene-d10	7.596

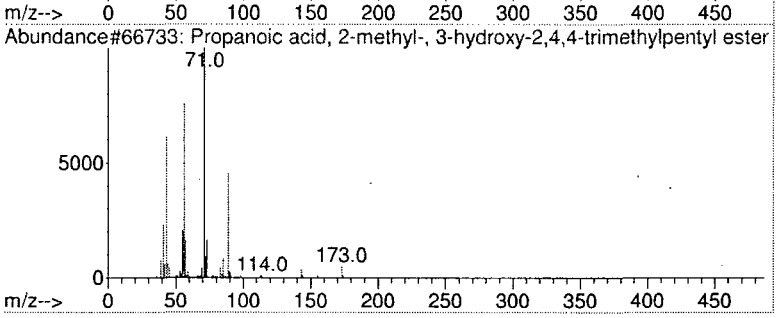
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 2-methylpropyl ester	144	C8H16O2	000539-90-2	27
2	Propanoic acid, 2-methyl-, 2-met...	144	C8H16O2	000097-85-8	27
3	Propanoic acid, 2-methyl-, 3-hyd...	216	C12H24O3	074367-34-3	27
4	Propanoic acid, 2-methyl-, butyl...	144	C8H16O2	000097-87-0	27
5	Cyclohexane, eicosyl-	364	C26H52	004443-55-4	22

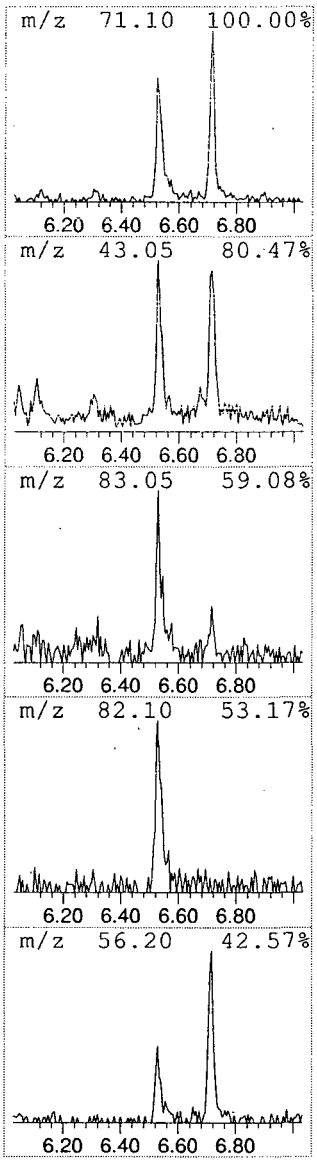
Unknown











Library Search Compound Report

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 2012
Quant Results File: SOME4634.RES
Quant Method : C:\msdchem\1\methods\SOME4634.M
Quant Title : CLP SOM1.2 BNA Calibration

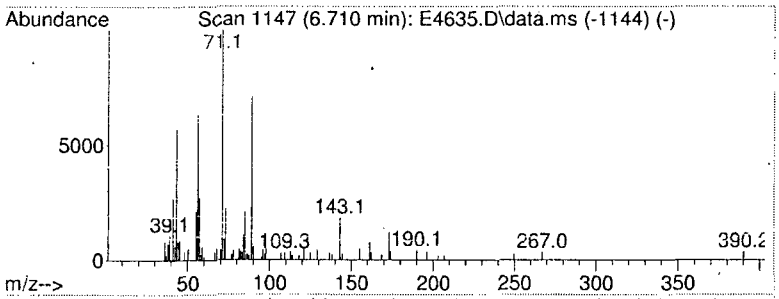
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

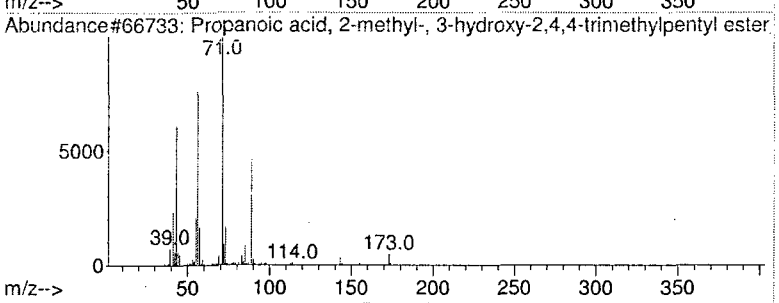
****

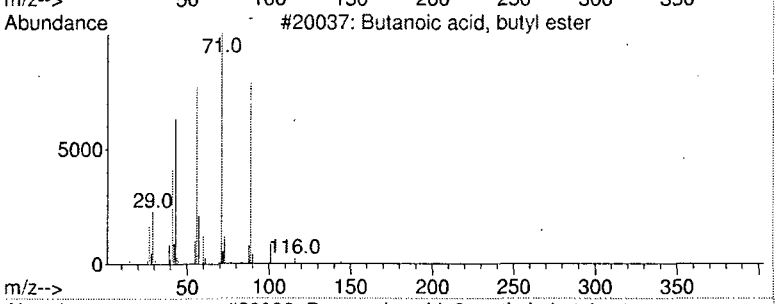
Peak Number 10 Propanoic acid, 2-methyl-, ... Concentration Rank 10

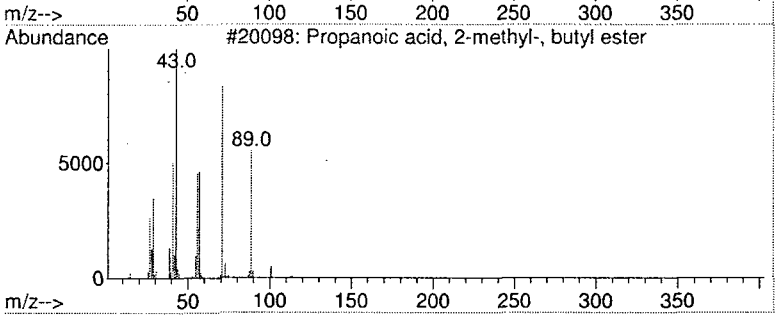
R.T.	EstConc	Area	Relative to ISTD	R.T.
6.710	2.25 ug/mL	63418	Acenaphthene-d10	7.596

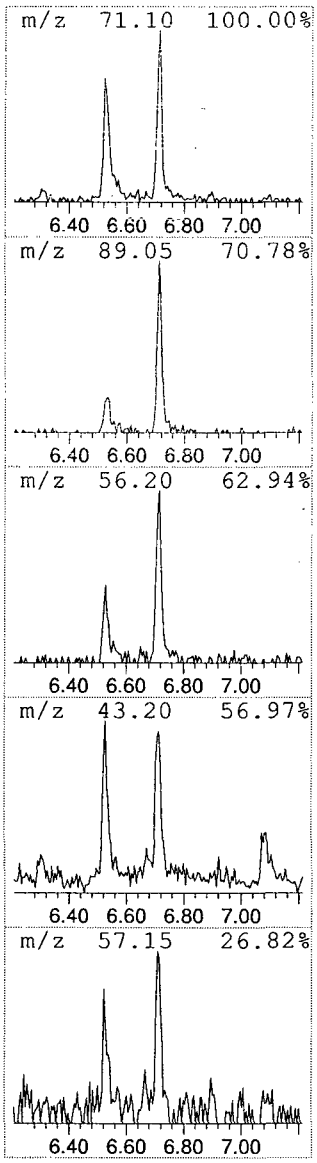
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual	
1	Propanoic acid, 2-methyl-, 3-hyd...	216	C12H24O3	074367-34-3	53	
2	Butanoic acid, butyl ester	144	C8H16O2	000109-21-7	53	Unknown
3	Propanoic acid, 2-methyl-, butyl...	144	C8H16O2	000097-87-0	53	
4	Propanoic acid, 2-methyl-, butyl...	144	C8H16O2	000097-87-0	53	
5	Propanoic acid, 2-methyl-, 2-met...	144	C8H16O2	000097-85-8	47	











Tentatively Identified Compound (LSC) summary

Data File : C:\msdchem\1\data\E4635.D
Acq On : 24 May 2012 17:21
Sample : 2050140-BLK1
Misc : SBLK6K 1000ML/1ML
DataAcq Meth:CLPACQ.M

Vial: 1
Operator: RS
Inst : E-5973
Multiplr: 1.00

Quant Time: May 26 01:41:07 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
1,6-Octadiene, ...	1.506	11.2	ug/mL	247454	1	3.301	441672	20.0
2-Heptanol, 6-m...	1.576	11.2	ug/mL	247155	1	3.301	441672	20.0
2-Butanol, 3-me...	1.656	6.3	ug/mL	138495	1	3.301	441672	20.0
2-Butenoic acid...	1.731	10.7	ug/mL	237306	1	3.301	441672	20.0
Cyclohexylmethy...	2.163	2.6	ug/mL	57628	1	3.301	441672	20.0
Cyclohexanone	2.243	6.5	ug/mL	144020	1	3.301	441672	20.0
Hexanoic acid, ...	4.428	2.8	ug/mL	73786	2	4.963	523923	20.0
Nonanoic acid	5.833	4.3	ug/mL	113682	2	4.963	523923	20.0
Butanoic acid, ...	6.528	2.9	ug/mL	81320	3	7.596	563728	20.0
Propanoic acid,...	6.710	2.2	ug/mL	63418	3	7.596	563728	20.0

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

BENCH SHEET - ORGANIC EXTRACTION

BATCH - 2050140

BATCH_2050140

SOM01.2 SVOA by Cont. Liq/Liq Extraction(4SOP01-C)

Start Date: 5-21-12 Start Time: 1200 End Date: 5-22-12 End Time: 17:00

Cleanup:

Extracted Leader: CL

Methy. Chloride ID: A204004
Hexane ID: N/A
Acetone ID: ↓
Sodium Sulfate ID: A811032
H2SO4 (1:1) ID: 879-106-12

Surrogate Sol. ID: 939-061-12
LCS Sol. ID: N/A
Matrix Spike Sol. ID: ↓
Florisil Lot ID: ↓
NaOH ID: ↓

GPC N/A
Florisil ↓
Acid ↓
Sulfur ↓
Other ↓

Extraction Assistants: NP

Spiked By: M.

Lab Sample ID	Client Sample ID	Matrix	Initial pH	Adjusted pH	Sample Amount (mL)	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
0015957-01	F5WC4	Water	8.2	<2	1000	500	1.0	1000	N/A	N/A	N/A	N/A	N/A	CAN	
0015957-02	F5WC5	Water	8.7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
0015957-03	F5WC6	Water	8.8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
2050140-BLK1	SBLK6K	Water	7.0	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

Notes: Extracted by 05/21/12

M 05/22/12 17:30
Received for Analysis by / Date&Time

05/22/12 17:35
Reviewed by / Date&Time

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): 2050026 SEQUENCE: 2E04001 CALIBRATION: AE20401
ACQ. METHOD(s): VOA C.M PROCESSING METHOD(S): SOTH3396.M
EMV: 1094 INTERNAL STD. ID: 929-115-12 SURROGATE STD. ID: 929-116-12
ANALYTICAL METHOD: TVOA (2210) SOP: 3SOP01C START DATE: 5/3/12

FILE ID	LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE WT/VOL	DIL.	pH	STANDARDS ID & COMMENTS
H3395	2E04001-TUN1	BFB3Y	50NG	—	—	929-105-12
96	— CAL3	VSTD0053Y	25mL			929-115 to 117-12
97	— CAL5	VSTD0003Y	5/4/12			
98	— CAL4	VSTD0103Y				
99	— CAL2	VSTD0013Y				
H3400	— CAL1	VSTD0.53Y				
01	2050026-BLK	VBLK3Y				
02	0015872-04 (68 07)	VHBLK QB AB	5/14/12			✗ Not used
03	ZZZ	ZZZ				✗ DMCs Failed
04	0015855-01	Y88S0				
05	↓ -02	↓ S1				✗ Carryover
06	ZZZ	ZZZ				✗ DMCs Failed.
07	ZZZ	ZZ				✗ ↓
08	2E04001-CCV1	VSTD0053Z				929-115 to 117-12

NOTES:

ANALYST/DATE: 5/3/12 REVIEWER/DATE: 5-3-12

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): 205016O SEQUENCE: 2E21003 CALIBRATION: AE20401
ACQ. METHOD(s): VOAC.M PROCESSING METHOD(S): SOTH3646.M
EMV: 1094 INTERNAL STD. ID: 929-115-12 SURROGATE STD. ID: 929-116-12
ANALYTICAL METHOD: TVOA SOP: 3SOP01C START DATE: 5/18/12

FILE ID	LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE WT/VOL	DIL.	pH	STANDARDS ID & COMMENTS
H3645	2E21003-TUN	BFB 5B	50NG	—	—	929-105-12
46	1 -CCV	VSTD005 5B	25mL	—	—	929-115 to 117-12
47	205016O-BLK	VBLK 5B		—	—	
48	001597-01	F5WC4		—	<2	
49	-02	C5		—		
50	-03	C6		—		
51	-04	C7		—		
52	-05	C8		—		5/20/12
53	-06	VHBLK-QT		—	—	
54	VBLK	VBLK		—	—	
55	2E21003-CCV2	VSTD005 5C		—	—	929-115 to 117-12

5/20/12

NOTES:

ANALYST/DATE: 5/20/12 REVIEWER/DATE: 5-18-12

00364

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 saw, Trimmed Column, Changed line

BATCHES(S): 2050149 SEQUENCE: 2E23005 CALIBRATION:
ACQ. METHOD(s): CWALQ PROCESSING METHOD(S): SOM E4605.M
EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/23/12
ANALYTICAL METHOD: SOM012 (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				✓ 939-085-12
19	0015929-01	F5MPO	1Dx	✓
20	-02	P1	20x	✓
21	-03	P2	10x	✓

NOTES: N/A

ANALYST/DATE: 05/23/12 REVIEWER/DATE: 5/25/12

00365

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): N/A

BATCHES(S): 2050147 SEQUENCE: 2E23005 CALIBRATION:

ACQ. METHOD(s): UP ALL PROCESSING METHOD(S): SOM E 4618 M

EMV: 1553 INTERNAL STD. ID: 939-084-12 START DATE: 05/22/12

ANALYTICAL METHOD: SOM01.2 (SCAN 1564.K) SOP: 4SOP02-B.

FILE ID	LAB SAMPLE ID	CLIENT SAMPLE ID	DIL.	STANDARDS ID & COMMENTS
E4622	0015929-04	F5MP3	10x	
23	-17	Q4	10x	
24	2E23005-CCV2	SSTD0209P	1x	939-075-12
25	2050149-BLK1	SBLK60		
26	0015969-03	XOT51		
27	0015970-02	56		
28	2050107-BLK1	SBLK6MG		
29	0015929-01RE1	F5MP0DL	50x	
30	-04RE1	P3DL	20x	
31	-17RE1	Q4DL	50x	
32	2050147-BLK1	SBLK6M.	1x	
33	GPCB05222012	GPCB05222012		
34	2E23005-CCV3	SSTD0209Q		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	2050165-BLK1	SBLK6Q		

NOTES: N/A

ANALYST/DATE: [signature] 05/24/12 REVIEWER/DATE: [signature] 5/25/12

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): 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: 4SOP02-B

FILE ID	LAB SAMPLE ID	CLIENT SAMPLE ID	DIL.	STANDARDS ID & COMMENTS
E4643	ZZZ0015977-01	FSWB4	1m	x IS ↓
44	0015977-02	B8	1m	✓
45	0015977-03	B9	10m	x RE 1m
46	↓ -05	C1	1m	x IS DRIED UP AT NIGHT
47	-06	C2		✓
48	0015968-06	B1		✓
49	0015956-01	WA4		✓
50	0015968-03	WA2		✓
51	2050139-BLK1	SBLK6T		✓
52	2E23005-CLV4	SSTD0209R	↓	x
53	↓	↓	↓	✓ 939-075-12

05/25/12

NOTES: N/A

ANALYST/DATE: 05/25/12 REVIEWER/DATE: 05/25/12

003

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	**Standard/Reagent Preparation Logbook** **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

[signature] 03/27/12

NOTES

REVIEWER: [signature] DATE: 3/27/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook Department: VOA			
Effective	Area	Type	Number-Version	RCN
3-Mar-2009	QA	FORM	6FORM15-A	929-08152011

Standard/Reagent ID: 929-115-12	Analyst: AC
Standard/Reagent Name: TVOA (Internal Standard)	
Dilution Solvent Name: MeOH	Dilution Solvent ID #: A202045
Prep Date: 04/23/12	Total Vol. (ml): 2 mL
Expiration Date: 05/22/12	

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	4c VOA Internal Standard Mix	30091	A202037	2500	20	25

04/23/12

NOTES

REVIEWER:

DATE: 04/27/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook Department: VOA			
Effective	Area	Type	Number-Version	RCN
3-Mar-2009	QA	FORM	6FORM15-A	929-08152011

Standard/Reagent ID: 929-116-12	Analyst: AC
Standard/Reagent Name: TVOA (DMC)	
Dilution Solvent Name: MeOH	Dilution Solvent ID #: A202045
Prep Date: 04/23/12	Total Vol. (ml): 2 mL
Expiration Date: 05/22/12	

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 Std	CLP DMC Liquids	94155	A202005	2000	25	25
	CLP DMC Gases	94156	A202006	2000	25	25
Carbacore	2-Hexanone-d5	1249	860-26-10	50,000	10	250
	2-Butanone-d5	CS-124	860-26-10	50,000	10	250
		04/23/12				

NOTES

REVIEWER:

DATE: 04/29/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	**Standard/Reagent Preparation Logbook** **Department: VOA**			
Effective	Area	Type	Number-Version	RCN
3-Mar-2009	**QA**	**FORM**	**6FORM15-A**	**929-08152011**

Standard/Reagent ID: 929-117-12	**Analyst:** AC
Standard/Reagent Name: TVOA (STD)	
Dilution Solvent Name: MeOH	**Dilution Solvent ID #:** A202045
Prep Date: 04/23/12	**Total Vol. (ml):** 1 mL
Expiration Date: 05/22/12	

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	50	250
	502.2 calibration mix #1	30042	A109038	2000	12.5	25
	OLC 03.2 VOA Mega Mix	30492	A109035	2000	12.5	25

04/23/12

NOTES

REVIEWER: [signature] DATE: 04/27/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook 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

[illegible] 03/26/12

NOTES

REVIEWER: [illegible] DATE: 3/26/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook 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 d8+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

R 05/23/12

NOTES _____

REVIEWER: D DATE: 5/23/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	**Standard/Reagent Preparation Logbook** **Department: ORGANICS**			
Effective	Area	Type	Number-Version	RCN
3-Mar-2009	**QA**	**FORM**	**6FORM15-A**	**939-12062011**

Standard/Reagent ID: 939-074-12	**Analyst:** Rs.
Standard/Reagent Name: CLP SOM 01-2 STD-2 SCAN	
Dilution Solvent Name: Melh	**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 d8+1,4 dioxane std	–	939-012-12	1000	2	4
↓	SCAN stock std.	–	939-070-12	100	50	10
Restek	SV Internal Std.	31206	A106024	2000	5	20

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	Standard/Reagent Preparation Logbook 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 dB + 1,4 dioxane std	—	939-072-12	1000	20	20
L	SCAN Stock Std	—	939-070-12	1000	20	20
Restek	SV Internal Std	31206	A106024	2000	10	20

[illegible] 05/23/12

NOTES [illegible]

REVIEWER: [illegible] DATE: 5/23/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook Department: ORGANICS			
Effective	Area	Type	Number-Version	RCN
3-Mar-2009	QA	FORM	6FORM15-A	939-12062011

Standard/Reagent ID: 939-076-12	**Analyst:** R.
Standard/Reagent Name: CLP SOM 01.2 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	2.0	40
↓	SCAN stock std	–	939-070-12	100	2.00	40
Restek	SV Internal std	31204	A106024	2000	5	20

NOTES N/A

REVIEWER: R DATE: 5/23/12

A4 Scientific 1544 Sawdust Road, Suite 505 The Woodlands, TX 77380 281-292-5277	Standard/Reagent Preparation Logbook 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 JTD-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 dioxane 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

Pr 05/23/12

NOTES N/A

REVIEWER: [signature] DATE: 5/23/12

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8991 9781 6302

0200 Form ID No.

FedEx Retrieval Copy

39 x 19 x 18 Organic Waters

1 From Date 5/15/12 [redacted]

Sender's Name Craig Watts Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

TD 05-16-12 9:45

2 Your Internal Billing Reference 12-10479/4441/70635

3 To Recipient's Name Laxmi Teerupalli Phone 281 292-5277

Company A4 Scientific, Inc

Address 1544 Sawdust Rd Ste 505 Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City The Woodlands State TX ZIP 77380

01 ☐ HOLD Weekday FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

31 ☐ HOLD Saturday FedEx location address REQUIRED. **Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

8991 9781 6302

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

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging • Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☒ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ 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.

☒ No 04 ☐ Yes — As per attached Shipper's Declaration.

☐ Yes — Shipper's Declaration not required.

06 ☐ 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. ☐

1 ☒ Sender — Acct. No. in Section 1 will be billed. 2 ☐ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted]

Total Packages 1 Total Weight 113 lbs. [redacted] 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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15957-A

00378

USEPA CLP Organics COC (LAB COPY)

DateShipped: 5/15/2012
CarrierName: FedEx
AirbillNo: 899197816302

CHAIN OF CUSTODY RECORD

Case #: 42562 contract: EPW10018
Cooler #: 1 of 2 SDG: F5WC4

No: 6-051512-133540-0001

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
F5WC4	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456844 (HCL), 6-456851 (HCL), 6-456852 (HCL), 6-456853 (None), 6-456854 (None) (5)	GW-01	05/15/2012 11:27	MF5WC4	0015957-01 1st Sx in SDG
F5WC5	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456859 (HCL), 6-456860 (HCL), 6-456861 (HCL), 6-456862 (None), 6-456863 (None) (5)	GW-02	05/15/2012 11:45	MF5WC5	-02
F5WC6	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456868 (HCL), 6-456869 (HCL), 6-456870 (HCL), 6-456871 (None), 6-456872 (None) (5)	GW-03	05/15/2012 10:14	MF5WC6	-03
F5WC7	Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456874 (HCL), 6-456875 (HCL), 6-456876 (HCL) (3)	FB-01	05/15/2012 13:30		-04
F5WC8	Water/ Craig Watts	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456877 (HCl), 6-456878 (HCl), 6-456879 (HCl) (3)	TB-01	05/11/2012 13:30		-05

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP TVOA=CLP TCL Trace 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	5/15/12	RD	05/16/12	9:45						
			RD 05/16/12					RD 05/16/12			

00379

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	11:27	Comp.	Grab

Tag Number 6- 456851

Station Location

Samplers (Signatures) Gary Hazlewood

☐ L ☐ M ☐ H

15957-01

Case: 42562

CLP Sample: F5WC4
Station Location: GW-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456851

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING 5-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	11:27	Comp.	Grab

Tag Number 6- 456844

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M

15957-01

Remarks:

Case: 42562

CLP Sample: F5WC4
Station Location: GW-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456844

GPO U.S. GOVERNMENT PRINTING 5-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	11:27	Comp.	Grab

Tag Number 6- 456852

Station Location

Samplers (Signatures) Gary Hazlewood

Concentration: ☐ L ☐ M

15957-01

Remarks:

Case: 42562

CLP Sample: F5WC4
Station Location: GW-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456852

GPO U.S. GOVERNMENT PRINTING 5-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:27		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456853

Case: 42562

CLP Sample: F5WC4
Station Location: GW-01

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456853

☐ L ☐ M ☐ H

15957-01 No.

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE 46-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:27		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456854

Case: 42562

CLP Sample: F5WC4
Station Location: GW-01

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456854

Concentration: ☐ L ☐ H

15957-01 No.

Remarks:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:45		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456861

Case: 42562

CLP Sample: F5WC5
Station Location: GW-02

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456861

Concentration: ☐ L ☐ M ☐ H

15957-02 ple No.

Preservative:

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:45		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456860

Concentration: ☐ L ☐ M ☐ H

Lab Sample No. 15957-02

Preservative: ☐

Case: 42562

CLP Sample: F5WC5
Station Location: GW-02

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456860

GPO U.S. GOVERNMENT PRINTING 546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:45		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456859

Concentration: ☐ L ☐ M ☐ H

Lab Sample No. 15957-02

Preservative: ☐

Case: 42562

CLP Sample: F5WC5
Station Location: GW-02

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456859

GPO U.S. GOVERNMENT PR 009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:45		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456862

☐ L ☐ M

Lab Sample No. 15957-02

Preservative: Yes ☐ No ☐

Case: 42562

CLP Sample: F5WC5
Station Location: GW-02

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456862

GPO U.S. GOVERNMENT PRINTING 009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	11:45		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456863

Case: 42562

CLP Sample: F5WC5
Station Location: GW-02

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456863

L 15957-02 H

No.

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
		5/15/12	10:14		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456868

Case: 42562

CLP Sample: F5WC6
Station Location: GW-03

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456868

L M H L 15957-03

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING C

765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/15/12	10:14		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456869

Case: 42562

CLP Sample: F5WC6
Station Location: GW-03

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456869

L 15957-03 H

ample No.

Volatile Organics (VOA)

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
		5/15/12	10:14		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456870

☐ L ☐ M ☐ H

15957-03 No.

Case: 42562

CLP Sample: F5WC6
Station Location: GW-03

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456870

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
		5/15/12	10:14		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456871

☐ L ☐ M ☐ H

15957-03 ile No.

Case: 42562

CLP Sample: F5WC6
Station Location: GW-03

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456871

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
		5/15/12	10:14		

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 6- 456872

☐ L ☐ M ☐ H

15957-03 nple No.

Case: 42562

CLP Sample: F5WC6
Station Location: GW-03

Analyses: CLP TCL Semivolatiles
Grab Sample Preservative: None
Tag No. 456872

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	1330	Comp.	Grab

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456875

Concentration: ☐ L ☐ M ☐ H

Case: 42562

CLP Sample: F5WC7
Station Location: FB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456875

Preservative:

15957-04 Lab No.

09-546-765

GPO U.S. GOVERNMENT PRI

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	1330	Comp.	Grab

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456874

Concentration: ☐ L ☐ M ☐ H

Case: 42562

CLP Sample: F5WC7
Station Location: FB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456874

Preservative:

15957-04 Lab No.

09-546-765

GPO U.S. GOVERNMENT PRI

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate:	
		5/15/12	1330	Comp.	Grab

Station Location

Samplers (Signatures) Gary Hazlewood

Tag Number 456876

Concentration: ☐ L ☐ M ☐ H

Case: 42562

CLP Sample: F5WC7
Station Location: FB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCL
Tag No. 456876

Preservative:

15957-04 Lab No.

GPO U.S. GOVERNMENT PRINTING OFF

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/11/12	13:30		

Station Location

Samplers (Signatures) Craig Watt

Tag Number 6 456879

Case: 42562

CLP Sample: F5WC8
Station Location: TB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCI
Tag No. 456879

☐ L ☐ M ☐ H

Preservative: Yes ☐ No ☐

15957-05 No.

GPO: U.S. GOVERNMENT PRINTING OFFICE 546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/11/12	~~13:50~~ CW 13:30		

Station Location

Samplers (Signatures) Craig Watt

Tag Number 6 456878

Case: 42562

CLP Sample: F5WC8
Station Location: TB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCI
Tag No. 456878

Concentration: ☐ L ☐ M ☐ H

Preservative: Yes ☐ No ☐

15957-05 Sample No.

GPO: U.S. GOVERNMENT PRINTING OFFICE 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Grab
		5/11/12	13:30		

Station Location

Samplers (Signatures) Craig Watt

Tag Number 6 456877

Case: 42562

CLP Sample: F5WC8
Station Location: TB-01

Analyses: CLP TCL Trace Volatiles
Grab Sample Preservative: HCI
Tag No. 456877

Concentration: ☐ L ☐ M ☐ H

Preservative: Yes ☐ No ☐

15957-05 No.

GPO: U.S. GOVERNMENT PRINTING OFFICE 546-765

15957-A

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name A4 SCIENTIFIC.INC	Page 1 of 1
Received By (Print Name) ~~RAJANI NEPAL~~ Ryan Dutko	Log-in Date 05/16/12
Received By (Signature) RD	
Case Number 42562	Sample Delivery Group No. F5WC4 / 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 (TR/COCs) or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	8991 9781 6302
6. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody
7. Sample Condition	Intact/Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present/Absent
9. Cooler Temperature	4°c
10. Does information on TR/COCs and sample tags agree?	Yes/No*
11. Date Received at Laboratory	05-16-12
12. Time Received	9:45

Sample Transfer

Fraction Volatiles	Fraction Extractables
Area # cooler-B	Area # cooler-A
By RD	By RD
On 05/16/12	On 05/16/12

EPA Sample #	Sample Tag #	Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
F5WC4	6-456844 6-456851 to 854	0015957-01	3-40mL, 2 Amber Intact
C5	6-456859 to 868	-02	
C6	868 to 872	-03	
C7	874 to 876	-04	3-40mL Intact
C8	877 to 879	-05	

RD 05/16/12

* Contact SMO and attach record of resolution.

Reviewed By [illegible]	Logbook No. NA
Date 5/16/12	Logbook Page No. NA

SOM01.2 (8/2007)

00387

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
(281) 292-5277
www.a4scientific.com

WORK ORDER LOG-IN REPORT

WORK ORDER = 0015957

`WORKORDER_0015957~

Printed: 5/17/2012 10:58:51AM

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 / 899197816302
COC/TR # : 6-051512-133540-0001

Lab Sample	Client Sample	Matrix	#Cont.	Case	SDG	Sampled	Received	Analysis	TAT	Comments
0015957-01	F5WC4	Water	5	42562	F5WC4	05/15/12 11:27	05/16/12 09:45	SOM01.2 SVOA	21	1st Sx
		Water						SOM01.2 VOA TRACE	21	
0015957-02	F5WC5	Water	5	42562	F5WC4	05/15/12 11:45	05/16/12 09:45	SOM01.2 SVOA	21	
		Water						SOM01.2 VOA TRACE	21	
0015957-03	F5WC6	Water	5	42562	F5WC4	05/15/12 10:14	05/16/12 09:45	SOM01.2 SVOA	21	
		Water						SOM01.2 VOA TRACE	21	
0015957-04	F5WC7	Water	3	42562	F5WC4	05/15/12 13:30	05/16/12 09:45	SOM01.2 VOA TRACE	21	FIELD BLANK
0015957-05	F5WC8	Water	3	42562	F5WC4	05/11/12 13:30	05/16/12 09:45	SOM01.2 VOA TRACE	21	TRIP BLANK
0015957-06	VHBLKQT	Water	2	42562	F5WC4	05/16/12 00:00	05/16/12 09:45	SOM01.2 VOA TRACE	21	STORAGE BLANK

Work Order Comments and Special Instructions:

TVOA/SVOA
NO QC

00388

Reviewed By

5/17/12
Date

00389

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature

TNRCC-10058 (2/98)

Date 05/16/2012

15957-A

RD
05/16/12

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature

Date 05/16/2012

A4 Scientific
1544 Sawdust Road, Suite 505
The Woodlands, TX 77380
281-292-5277

Sample Custody Logbook
COOLER B

Effective	Area	Type	Number-Version	RCN
26-Aug-2009	QA	FORM	6FORM06-A	974-03302012

Login Thermometer ID: T70197 Work Order: 0015957

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
0015957-01 to -05	3-40mL	05/16/12 13:00	RD				
0015957-06	2-40mL	↓	↓			RD 05/16/12	
	RD 05/16/12						

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
0015957-01	40ml	1	[illegible]	5/18/12 10:00	VOA	[illegible]	5/18/12 12:00	
to	↓	↓	↓	↓	↓	↓	↓	[illegible] 5/18/12
-06	↓	↓	↓	↓	↓	↓	↓	
			[illegible] 5/18/12					

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: 5-18-12

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: 0015957 Shelf: A-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
0015957-01 to-03	2-1L Amber	05/16/12 12:00	RD				
	RD	05/16/12			RD 05/16/12		

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
15957 01 03	1L Amber	3	NP	05-21-12 12:00	5VOA	NP	05-21-12 12:30	Empty
						RW 5/22/12		

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: 5/22/12

P-0025

USEPA CLP Organics COC (REGION COPY)
DateShipped: 5/15/2012
CarrierName: FedEx
AirbillNo: 899197816302

CHAIN OF CUSTODY RECORD
MSI
Case #: 42562
Cooler #: 1 of 2

No: 6-051512-133540-0001
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
F5WC4	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456844 (HCL), 6-456851 (HCL), 6-456852 (HCL), 6-456853 (None), 6-456854 (None) (5)	GW-01	05/15/2012 11:27	MF5WC4	Field Sample
F5WC5	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456859 (HCL), 6-456860 (HCL), 6-456861 (HCL), 6-456862 (None), 6-456863 (None) (5)	GW-02	05/15/2012 11:45	MF5WC5	Field Duplicate
F5WC6	Ground Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21), CLP SVOA(21), CLP SVOA(21)	6-456868 (HCL), 6-456869 (HCL), 6-456870 (HCL), 6-456871 (None), 6-456872 (None) (5)	GW-03	05/15/2012 10:14	MF5WC6	Field Sample
F5WC7	Water/ Gary Hazelwood	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456874 (HCL), 6-456875 (HCL), 6-456876 (HCL) (3)	FB-01	05/15/2012 13:30		Field Sample
F5WC8	Water/ Craig Watts	Grab	CLP TVOA(21), CLP TVOA(21), CLP TVOA(21)	6-456877 (HCl), 6-456878 (HCl), 6-456879 (HCl) (3)	TB-01	05/11/2012 13:30		Trip Blank

Special Instructions:	**Shipment for Case Complete? N**
	Samples Transferred From Chain of Custody #

Analysis Key: CLP TVOA=CLP TCL Trace 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	5/15/12									