

**LABORATORY REPORT**

September 15, 2009

Brian Baker  
Environmental Health & Engineering, Incorporated  
117 Fourth Avenue  
Needham, MA 02494

**RE: 16512**

Dear Brian:

Enclosed are the results of the samples submitted to our laboratory on August 20, 2009. For your reference, these analyses have been assigned our service request number P0902875.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at [www.caslab.com](http://www.caslab.com). Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 340 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Kate Aguilera  
Project Manager

Client: Environmental Health & Engineering, Incorporated CAS Project No: P0902875  
Project: 16512

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### CASE NARRATIVE

The samples were received intact under chain of custody on August 20, 2009 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

#### Volatile Organic Compound Analysis

The samples were analyzed for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

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*The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.*

Client: Environmental Health & Engineering, Incorporated  
 Project: 16512

Folder: P0902875

Detailed Sample Information

CAS Sample ID	Client Sample ID	Container Type	Pi1 (Hg)	Pi1 (psig)	Pf1 (Hg)	Pi2 (Hg)	Pi2 (psig)	Pf2	Cont ID	Order #	FC ID	Bottle Order #
P0902875-001.01	102028	6.0 L-Summa Canister Ambient	-28.9	-14.2	3.5				AC01421	14275		
P0902875-002.01	102265	6.0 L-Summa Canister Ambient		0.3	3.5				AC01148	14275		
P0902875-003.01	102266	6.0 L-Summa Canister Ambient		0.4	3.5				AC00742	14275		
P0902875-004.01	102267	6.0 L-Summa Canister Ambient	0.0	0.0	3.5				AC01394	14403		
P0902875-005.01	102268	6.0 L-Summa Canister Ambient	-0.4	-0.2	3.5				AC00540	14275		
P0902875-006.01	102269	6.0 L-Summa Canister Ambient	-0.2	-0.1	3.5				AC01400	14275		

Miscellaneous Items - received

- AVG00675
- AVG00525
- AVG00450
- FC00367
- FC00391
- FC00033
- FC00343
- AVG01044
- AVG00858
- AVG00760
- FC00564
- FC00505

FROM: Environmental Health and Engineering, Inc. 117 Fourth Avenue Needham, MA 02494-2725

PO 902875

TO: CAS

Please send invoices to ATTN: Accounts Payable Please send reports to ATTN: Data Coordinator

In all correspondence regarding this matter, please refer to EH&E Project # 16512

The cost of this analysis will be covered by EH&E Purchase Order # 16512

For EH & E Data Coordinator - URGENT DATA [ ]

Table with columns: SAMPLE ID, SAMPLE TYPE, ANALYTICAL METHOD/NUMBER, OTHER: Time/Date/Vol. Rows include sample IDs 102028, 102265, 102266, 102267, 102268, 102269 and method EPA TO-15 Full List.

Special instructions:

- Standard turn around time [ ] Rush by [ ] Other [ ] Fax results 781-247-4305 [ ] RETURN SAMPLES [ ] Electronic transfer - datacoordinator@ehinc.com [x] Additional report recipient mbmgala@ehinc.com

Each signatory please return one copy of this form to the above address

Relinquished by: [Signature] of Environmental Health & Engineering, Inc. Date: 8/19/09 Received by: FEDEX of (company name) Date: Relinquished by: FEDEX of (company name) Date: Received by: [Signature] of (company name) CAS Date: 08/20/09 0950 Relinquished by: of (company name) Date: Received by: of (company name) Date: Lab Data Received by: of Environmental Health & Engineering, Inc. Date:

**Columbia Analytical Services, Inc.**  
**Sample Acceptance Check Form**

Client: Environmental Health & Engineering, Incorporated

Work order: P0902875

Project: Project # 16512 / 16512

Sample(s) received on: 8/20/2009

Date opened: 8/20/2009

by: ADAVID

*Note:* This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- |  | Yes                                 | No                                  | N/A                                 |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were <b>sample containers</b> properly marked with client sample ID?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 Container(s) <b>supplied by CAS</b> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3 Did <b>sample containers</b> arrive in good condition?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 4 Was a <b>chain-of-custody</b> provided?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5 Was the <b>chain-of-custody</b> properly completed?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 6 Did <b>sample container labels</b> and/or tags agree with custody papers?                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 Was <b>sample volume</b> received adequate for analysis?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 8 Are samples within specified holding times?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 9 Was proper <b>temperature</b> (thermal preservation) of cooler at receipt adhered to?                          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Cooler Temperature _____ °C    Blank Temperature _____ °C  |                                     |                                     |                                     |
| 10 Was a <b>trip blank</b> received?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Trip blank supplied by CAS: _____  |                                     |                                     |                                     |
| 11 Were <b>custody seals</b> on outside of cooler/Box?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Location of seal(s)? _____ Sealing Lid?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were signature and date included?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were seals intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were custody seals on outside of sample container?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Location of seal(s)? _____ Sealing Lid?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were signature and date included?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were seals intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 12 Do containers have appropriate <b>preservation</b> , according to method/SOP or Client specified information? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is there a client indication that the submitted samples are <b>pH</b> preserved?                                 | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were <b>VOA vials</b> checked for presence/absence of air bubbles?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 13 <b>Tubes:</b> Are the tubes capped and intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Do they contain moisture?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 14 <b>Badges:</b> Are the badges properly capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Are dual bed badges separated and individually capped and intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH*	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0902875-001.01	6.0 L Ambient Can					
P0902875-002.01	6.0 L Ambient Can					
P0902875-003.01	6.0 L Ambient Can					
P0902875-004.01	6.0 L Ambient Can					
P0902875-005.01	6.0 L Ambient Can					
P0902875-006.01	6.0 L Ambient Can					

Explain any discrepancies: (include lab sample ID numbers): \_\_\_\_\_

Chain of Custody is missing time collected \_\_\_\_\_

\*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12); Diss. Sulfide, NaOH (pH>12); T. Sulfide, NaOH/ZnAc (pH>12); RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

## RESULTS OF VOLATILE ORGANIC ANALYSIS

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102028  
**Client Project ID:** 16512  
  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01421

**CAS Project ID:** P0902875  
**CAS Sample ID:** P0902875-001

**Date Collected:** 8/19/09  
**Date Received:** 8/20/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result		MRL		Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

*9/3/09*

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102028  
**Client Project ID:** 16512

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
Analyst: Wida Ang  
Sampling Media: 6.0 L Summa Canister  
Test Notes:  
Container ID: AC01421

CAS Project ID: P0902875  
CAS Sample ID: P0902875-001

Date Collected: 8/19/09  
Date Received: 8/20/09  
Date Analyzed: 8/25/09  
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

TO15scan.xls - 75 Compounds - PageNo.:



**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102028  
**Client Project ID:** 16512

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-001

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01421

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.10	ND	0.019	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

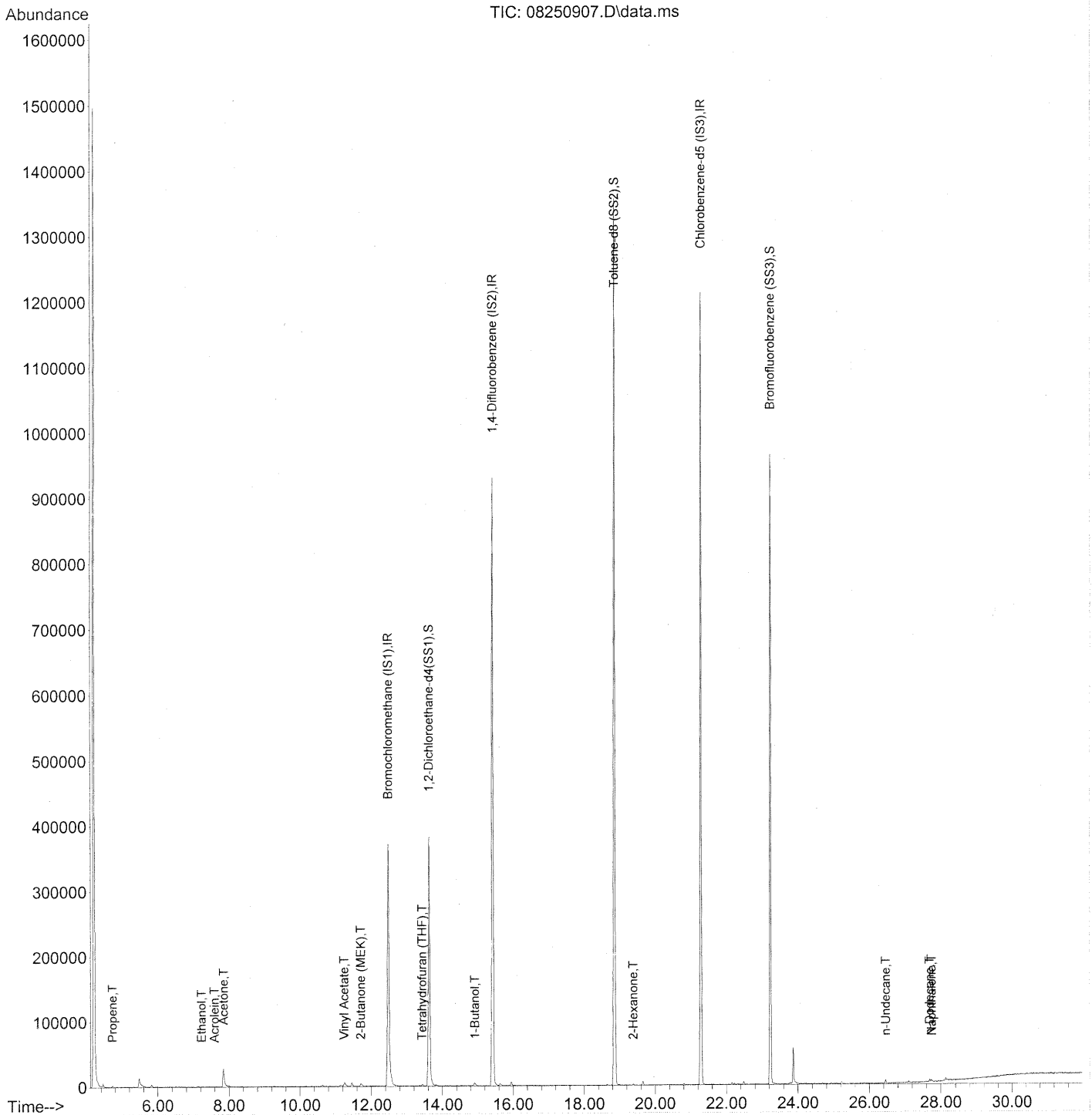
Date: 9/3/09

TO15scan.xls - 75 Compounds - PageNo.:

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250907.D  
Acq On : 25 Aug 2009 1:57 pm  
Operator : WA/CC  
Sample : P0902875-001 (1000mL)  
Misc : Environmental Health 102028  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 09:14:51 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
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 Response via : Initial Calibration

11/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.47	130	217972	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1085151	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	509845	25.000	ng	-0.02

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.62	65	413774	21.840	ng	-0.04
Spiked Amount	25.000			Recovery	=	87.36%
57) Toluene-d8 (SS2)	18.85	98	1171191	26.290	ng	-0.02
Spiked Amount	25.000			Recovery	=	105.16%
73) Bromofluorobenzene (SS3)	23.23	174	319873	27.228	ng	-0.01
Spiked Amount	25.000			Recovery	=	108.92%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.72	42	851	0.057	ng	95
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.23	45	722	0.076	ng	# 37
11) Acetonitrile	0.00	41	0	N.D.		
12) Acrolein	7.59	56	1046	0.145	ng	# 28
13) Acetone	7.85	58	20906	2.337	ng	# 64
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	8.35	45	672	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.		
19) Methylene Chloride	9.24	84	104	N.D.		
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.66	76	93	N.D.		
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.23	86	1442	0.792	ng	# 43
27) 2-Butanone (MEK)	11.70	72	1688	0.209	ng	# 70
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	0.00	61	0	N.D.		
31) n-Hexane	0.00	57	0	N.D.		

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250907.D  
 Acq On : 25 Aug 2009 1:57 pm  
 Operator : WA/CC  
 Sample : P0902875-001 (1000mL)  
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 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.43	72	668	0.078	ng	86
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.91	56	3474	0.247	ng	83
41) Benzene	14.88	78	1338	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.40	84	519	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d	
58) Toluene	18.98	91	909	N.D.		
59) 2-Hexanone	19.38	43	2042	0.070	ng	79
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	0.00	43	0	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.04	91	118	N.D.		
67) m- & p-Xylenes	22.05	91	182	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.50	104	106	N.D.		
70) o-Xylene	0.00	91	0	N.D.		
71) n-Nonane	22.91	43	87	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.23	105	506	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.05	91	89	N.D.		
77) 3-Ethyltoluene	24.20	105	197	N.D.		
78) 4-Ethyltoluene	24.26	105	87	N.D.		
79) 1,3,5-Trimethylbenzene	24.31	105	96	N.D.		

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250907.D  
 Acq On : 25 Aug 2009 1:57 pm  
 Operator : WA/CC  
 Sample : P0902875-001 (1000mL)  
 Misc : Environmental Health 102028  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 09:14:51 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

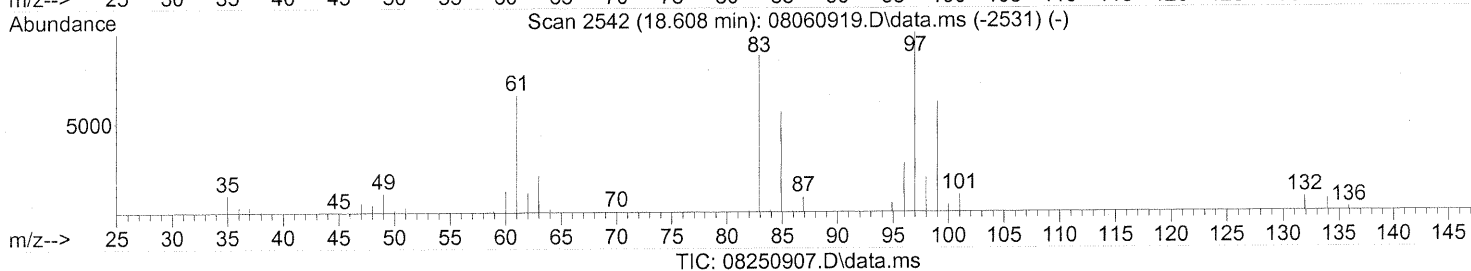
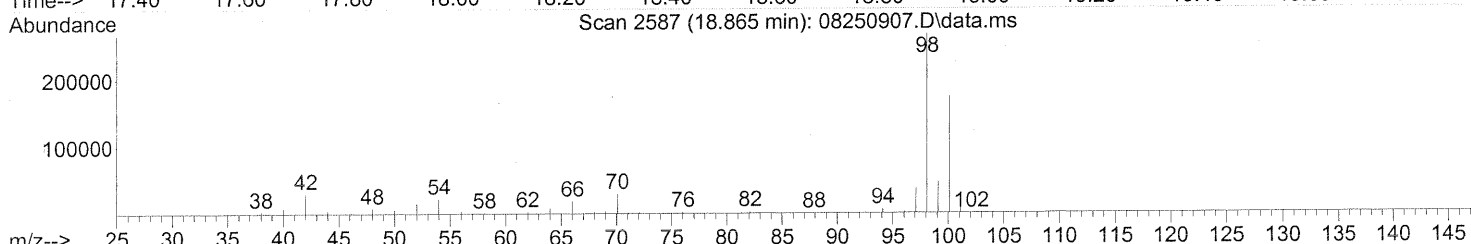
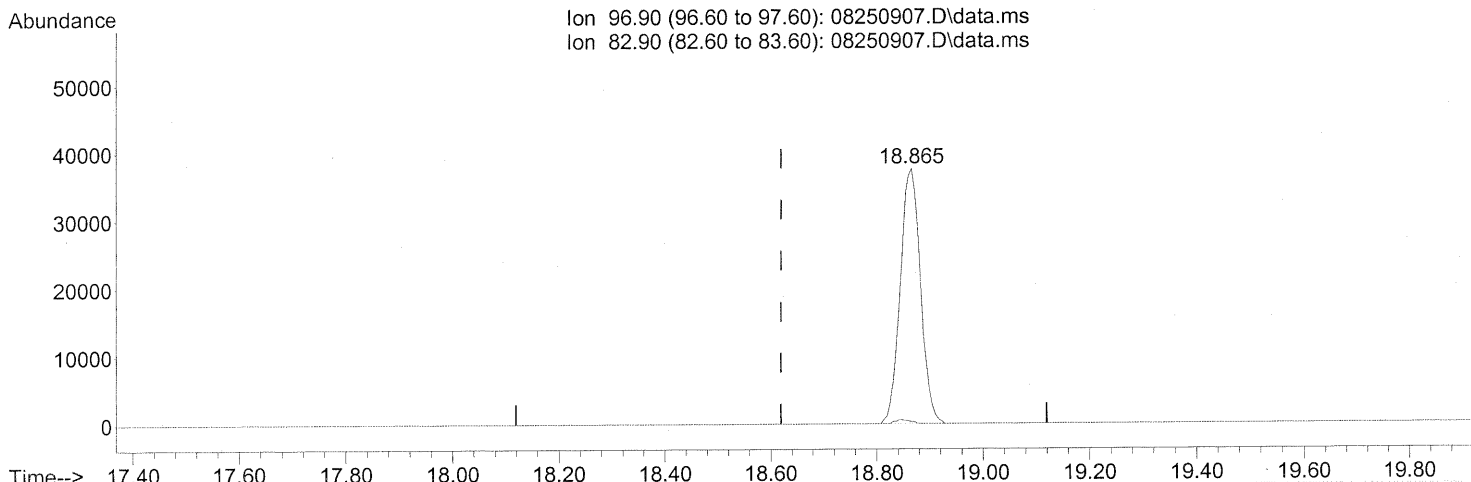
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0		N.D.	
81) 2-Ethyltoluene	24.56	105	205		N.D.	
82) 1,2,4-Trimethylbenzene	24.83	105	302		N.D.	
83) n-Decane	24.93	57	449		N.D.	
84) Benzyl Chloride	24.99	91	652		N.D.	
85) 1,3-Dichlorobenzene	25.02	146	210		N.D.	
86) 1,4-Dichlorobenzene	25.10	146	467		N.D.	
87) sec-Butylbenzene	24.83	105	302		N.D.	
88) 4-Isopropyltoluene (p-...	0.00	119	0		N.D.	
89) 1,2,3-Trimethylbenzene	25.84	105	370		N.D.	
90) 1,2-Dichlorobenzene	25.52	146	90		N.D.	
91) d-Limonene	0.00	68	0		N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0		N.D.	
93) n-Undecane	26.46	57	2101	0.074	ng	93
94) 1,2,4-Trichlorobenzene	27.59	180	241		N.D.	
95) Naphthalene	27.75	128	4801	0.087	ng	98
96) n-Dodecane	27.69	57	1657	0.050	ng	87
97) Hexachlorobutadiene	0.00	225	0		N.D.	
98) Cyclohexanone	22.32	55	835		N.D.	
99) tert-Butylbenzene	0.00	119	0		N.D.	
100) n-Butylbenzene	25.86	91	109		N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250907.D  
 Acq On : 25 Aug 2009 1:57 pm  
 Operator : WA/CC  
 Sample : P0902875-001 (1000mL)  
 Misc : Environmental Health 102028  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 06:39:07 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(55) 1,1,2-Trichloroethane (T)

18.865min (+0.246) 9.49ng

response 99457

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

*FP*  
*in 9/3/09*

*com 9/3/09*

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102265  
**Client Project ID:** 16512

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-002

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01148

**Date Collected:** 8/19/09  
**Date Received:** 8/20/09  
**Date Analyzed:** 8/25 - 8/26/09  
**Volume(s) Analyzed:** 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): 0.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	5.5	0.61	1.1	0.12	
74-87-3	Chloromethane	1.5	0.12	0.71	0.059	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.055	
74-83-9	Bromomethane	0.16	0.12	0.041	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	Ethanol	170	6.1	88	3.2	
75-05-8	Acetonitrile	180	0.61	110	0.36	D
107-02-8	Acrolein	6.3	0.61	2.8	0.26	
67-64-1	Acetone	140	6.1	58	2.5	
75-69-4	Trichlorofluoromethane	1.5	0.12	0.27	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	44	0.61	18	0.25	
107-13-1	Acrylonitrile	0.83	0.61	0.38	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	0.65	0.61	0.19	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	0.74	0.12	0.096	0.016	
75-15-0	Carbon Disulfide	0.69	0.61	0.22	0.19	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	2-Butanone (MEK)	4.9	0.61	1.7	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

TO15scan.xls - 75 Compounds - PageNo.:

**15**

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102265  
**Client Project ID:** 16512

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
Analyst: Wida Ang  
Sampling Media: 6.0 L Summa Canister  
Test Notes:  
Container ID: AC01148

CAS Project ID: P0902875  
CAS Sample ID: P0902875-002

Date Collected: 8/19/09  
Date Received: 8/20/09  
Date Analyzed: 8/25 - 8/26/09  
Volume(s) Analyzed: 1.00 Liter(s)  
0.20 Liter(s)

Initial Pressure (psig): 0.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	<b>Ethyl Acetate</b>	<b>4.5</b>	0.61	<b>1.3</b>	0.17	
110-54-3	<b>n-Hexane</b>	<b>6.4</b>	0.61	<b>1.8</b>	0.17	
67-66-3	<b>Chloroform</b>	<b>1.3</b>	0.12	<b>0.27</b>	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	<b>1,2-Dichloroethane</b>	<b>1.4</b>	0.12	<b>0.34</b>	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	<b>Benzene</b>	<b>6.9</b>	0.12	<b>2.2</b>	0.038	
56-23-5	<b>Carbon Tetrachloride</b>	<b>1.3</b>	0.12	<b>0.21</b>	0.019	
110-82-7	<b>Cyclohexane</b>	<b>1.3</b>	0.61	<b>0.38</b>	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	<b>n-Heptane</b>	<b>2.9</b>	0.61	<b>0.71</b>	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>0.91</b>	0.61	<b>0.22</b>	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	<b>Toluene</b>	<b>27</b>	0.61	<b>7.2</b>	0.16	
591-78-6	<b>2-Hexanone</b>	<b>1.9</b>	0.61	<b>0.46</b>	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	<b>1,2-Dibromoethane</b>	<b>0.13</b>	0.12	<b>0.017</b>	0.016	
123-86-4	<b>n-Butyl Acetate</b>	<b>2.9</b>	0.61	<b>0.60</b>	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_ Date: 9/3/09 **16**



**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102265  
**Client Project ID:** 16512

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
Analyst: Wida Ang  
Sampling Media: 6.0 L Summa Canister  
Test Notes:  
Container ID: AC01148

CAS Project ID: P0902875  
CAS Sample ID: P0902875-002

Date Collected: 8/19/09  
Date Received: 8/20/09  
Date Analyzed: 8/25 - 8/26/09  
Volume(s) Analyzed: 1.00 Liter(s)  
0.20 Liter(s)

Initial Pressure (psig): 0.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	1.4	0.61	0.30	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	4.9	0.61	1.1	0.14	
179601-23-1	m,p-Xylenes	18	0.61	4.0	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	4.2	0.61	0.98	0.14	
95-47-6	o-Xylene	6.4	0.61	1.5	0.14	
111-84-2	n-Nonane	1.2	0.61	0.22	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	210	0.61	38	0.11	D
103-65-1	n-Propylbenzene	0.75	0.61	0.15	0.12	
622-96-8	4-Ethyltoluene	1.3	0.61	0.27	0.12	
108-67-8	1,3,5-Trimethylbenzene	1.1	0.61	0.22	0.12	
95-63-6	1,2,4-Trimethylbenzene	3.6	0.61	0.73	0.12	
100-44-7	Benzyl Chloride	0.13	0.12	0.024	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	0.21	0.12	0.035	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	41	0.61	7.4	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	Naphthalene	0.94	0.61	0.18	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

*F*

Date: \_\_\_\_\_

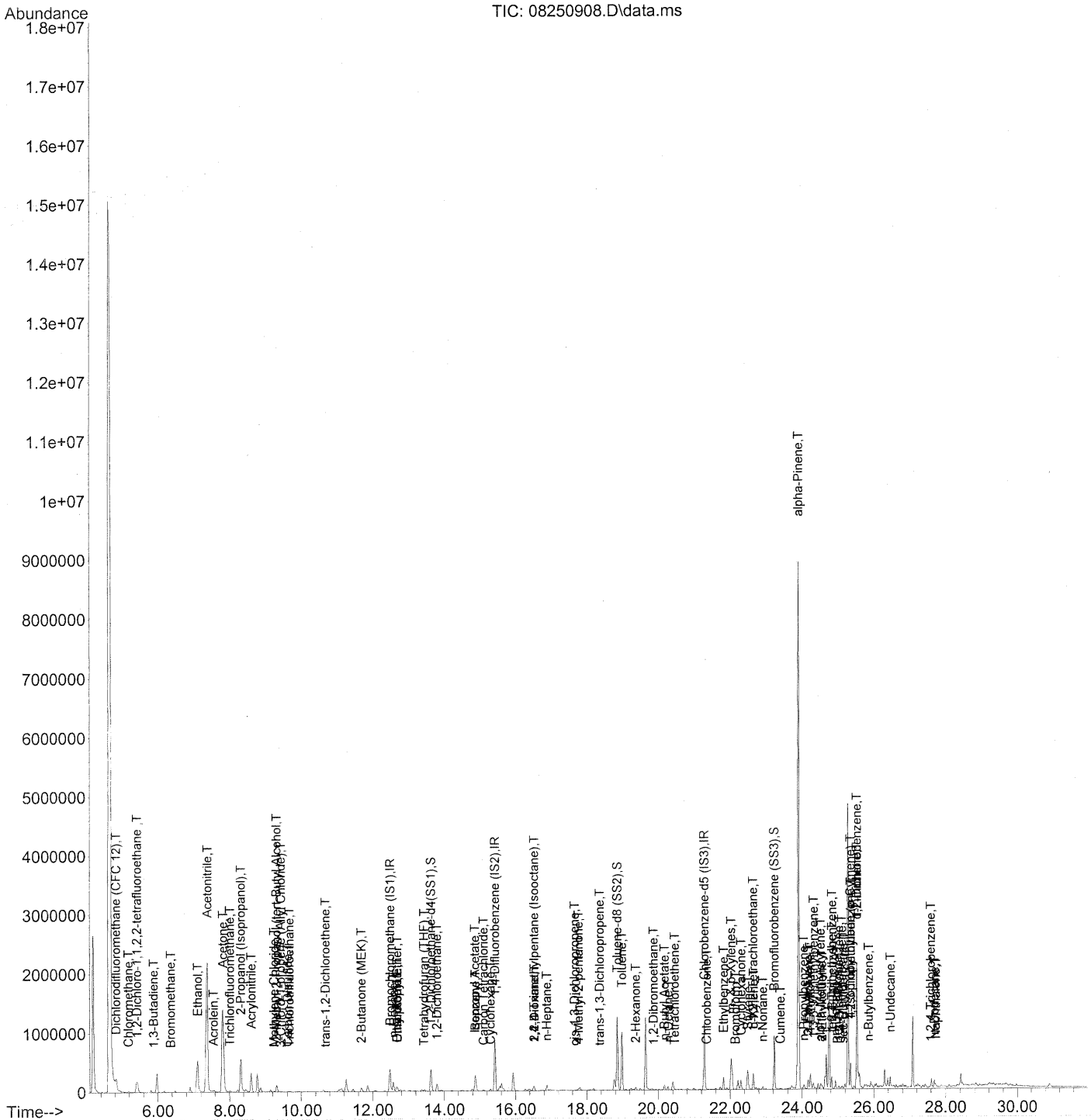
9/3/09

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Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 16:14:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 16:14:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*WA 9/3/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	194828	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.42	114	985424	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.28	82	470035	25.000	ng	-0.02

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.63	65	380707	22.482	ng	-0.03
Spiked Amount	25.000			Recovery =	89.92%	✓
57) Toluene-d8 (SS2)	18.85	98	1062368	25.867	ng	-0.02
Spiked Amount	25.000			Recovery =	103.48%	✓
73) Bromofluorobenzene (SS3)	23.23	174	298334	27.545	ng	-0.01
Spiked Amount	25.000			Recovery =	110.16%	✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	0.00	42	0	N.D.	d	
3) Dichlorodifluoromethan...	4.84	85	100037	4.578	ng	99
4) Chloromethane	5.18	50	17804	1.213	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	884	0.100	ng	# 62
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.89	54	680	0.067	ng	# 67
8) Bromomethane	6.36	94	1127	0.131	ng	# 69
9) Chloroethane	6.70	64	197	N.D.		
10) Ethanol	7.11	45	1166566	137.655	ng	98
11) Acetonitrile	7.39	41	4131863	166.483	ng	See list 100
12) Acrolein	7.56	56	33695	5.223	ng	97
13) Acetone	7.82	58	910124	113.821	ng	100
14) Trichlorofluoromethane	8.01	101	24392	1.235	ng	100
15) 2-Propanol (Isopropanol)	8.32	45	1146971	36.501	ng	99
16) Acrylonitrile	8.61	53	9863	0.683	ng	# 9
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.31	59	6263	0.225	ng	# 1
19) Methylene Chloride	9.25	84	5784	0.539	ng	85
20) 3-Chloro-1-propene (Al...	9.43	41	1188	0.057	ng	# 43
21) Trichlorotrifluoroethane	9.67	151	4368	0.608	ng	96
22) Carbon Disulfide	9.62	76	21638	0.572	ng	95
23) trans-1,2-Dichloroethene	10.67	61	1151	0.071	ng	94
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.12	73	116	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.	d	
27) 2-Butanone (MEK)	11.68	72	29377	4.069	ng	# 91
28) cis-1,2-Dichloroethene	12.24	61	497	N.D.		
29) Diisopropyl Ether	12.68	87	2072	0.214	ng	# 1
30) Ethyl Acetate	12.68	61	14043	3.734	ng	98
31) n-Hexane	12.58	57	101459	5.273	ng	100

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 16:14:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.68	83	18271	1.079 ng		99
34) Tetrahydrofuran (THF)	13.43	72	1868	0.243 ng	< MRL	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	17424	1.126 ng		98
38) 1,1,1-Trichloroethane	14.18	97	306	N.D.		
39) Isopropyl Acetate	14.86	61	1652	0.226 ng	#	1
40) 1-Butanol	15.00	56	423	N.D.		
41) Benzene	14.87	78	247450	5.711 ng		99
42) Carbon Tetrachloride	15.10	117	14723	1.066 ng		99
43) Cyclohexane	15.29	84	16950	1.068 ng		92
44) tert-Amyl Methyl Ether	15.66	73	230	N.D.		
45) 1,2-Dichloropropane	15.94	63	89	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.43	130	86	N.D.		
48) 1,4-Dioxane	16.53	88	833	0.101 ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	79786	1.563 ng		89
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	16.88	71	28094	2.416 ng		96
52) cis-1,3-Dichloropropene	17.65	75	1223	0.068 ng	#	44
53) 4-Methyl-2-pentanone	17.76	58	7840	0.753 ng		100
54) trans-1,3-Dichloropropene	18.36	75	2575	0.150 ng	< MRL	87
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	903986	22.396 ng		99
59) 2-Hexanone	19.36	43	41918	1.562 ng		97
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	19.86	107	1117	0.110 ng	#	71
62) n-Butyl Acetate	20.17	43	74645	2.359 ng		95
63) n-Octane	20.28	57	11274	1.155 ng		97
64) Tetrachloroethene	20.46	166	505	0.054 ng		81
65) Chlorobenzene	21.34	112	2263	0.091 ng	#	57
66) Ethylbenzene	21.82	91	188125	4.077 ng		99
67) m- & p-Xylenes	22.03	91	539840	14.463 ng		97
68) Bromoform	22.15	173	437	0.055 ng	#	29
69) Styrene	22.50	104	93309	3.459 ng		98
70) o-Xylene	22.65	91	198588	5.307 ng		97
71) n-Nonane	22.91	43	23927	0.962 ng		96
72) 1,1,2,2-Tetrachloroethane	22.64	83	1190	0.072 ng	#	26
74) Cumene	23.40	105	9924	0.210 ng		98
75) alpha-Pinene	23.91	93	4377744	180.664 ng	S.A.P	87
76) n-Propylbenzene	24.05	91	36865	0.620 ng		89
77) 3-Ethyltoluene	24.17	105	86010	1.904 ng		100
78) 4-Ethyltoluene	24.22	105	47554	1.086 ng		95
79) 1,3,5-Trimethylbenzene	24.32	105	32711	0.886 ng		100

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 16:14:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

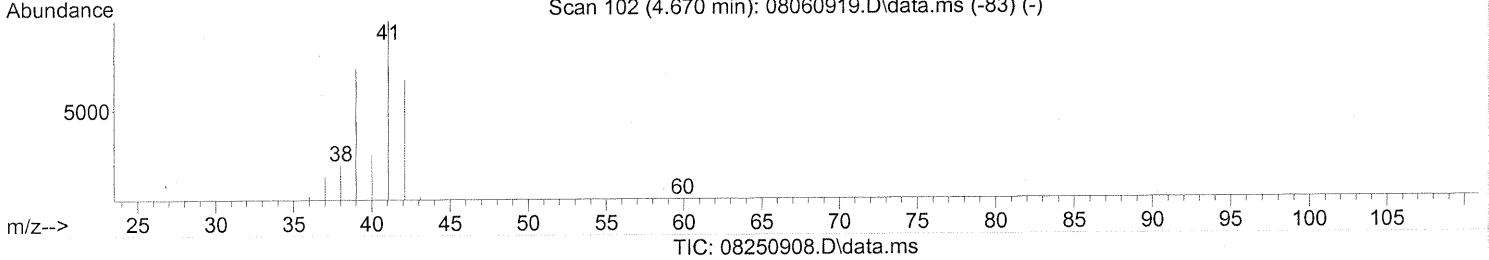
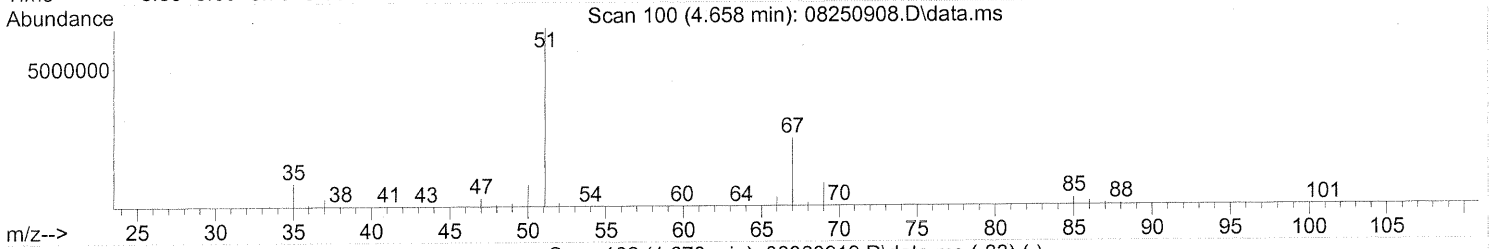
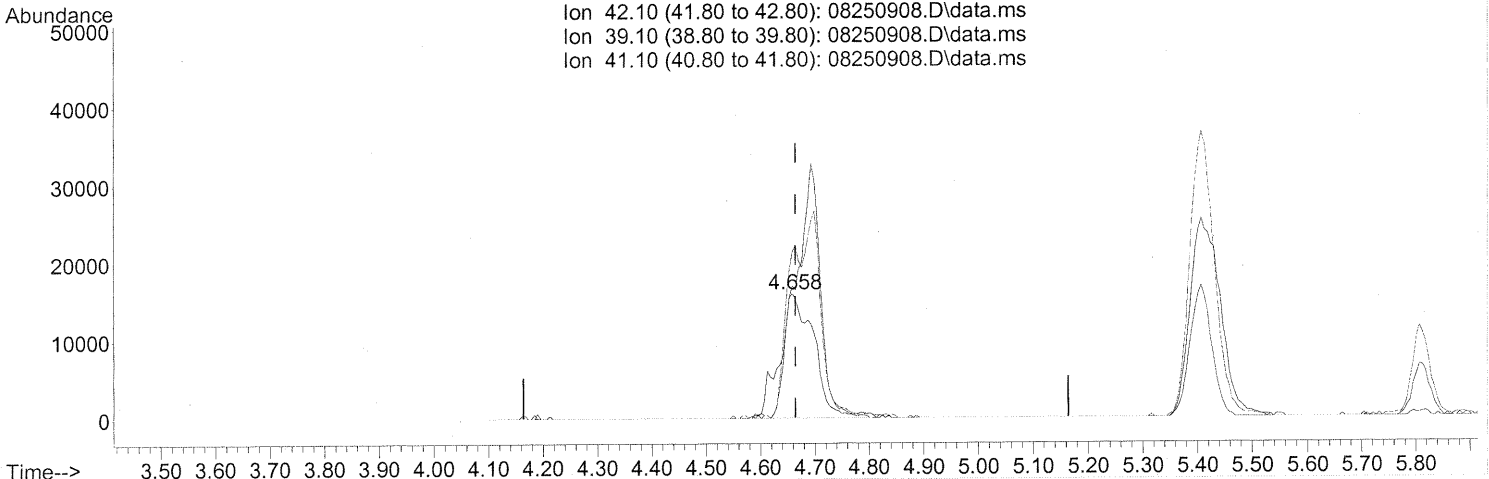
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	3061	0.155	ng	# 1
81) 2-Ethyltoluene	24.55	105	31632	0.694	ng	77
82) 1,2,4-Trimethylbenzene	24.83	105	111185	2.953	ng	90
83) n-Decane	24.93	57	54273	2.217	ng	93
84) Benzyl Chloride	24.99	91	3676m	0.104	ng	
85) 1,3-Dichlorobenzene	25.02	146	1653	0.087	ng	89
86) 1,4-Dichlorobenzene	25.11	146	3495	0.172	ng	100
87) sec-Butylbenzene	25.15	105	3986	0.078	ng	# 69
88) 4-Isopropyltoluene (p-...	25.35	119	212955	4.695	ng	93
89) 1,2,3-Trimethylbenzene	25.35	105	37704	0.983	ng	# 40
90) 1,2-Dichlorobenzene	25.53	146	1016	0.056	ng	81
91) d-Limonene	25.53	68	545500	34.071	ng	# 66
92) 1,2-Dibromo-3-Chloropr...	26.06	157	100	N.D.		
93) n-Undecane	26.46	57	61448	2.359	ng	80
94) 1,2,4-Trichlorobenzene	27.58	180	1985	0.160	ng	<MRL 95
95) Naphthalene	27.72	128	39860	0.780	ng	98
96) n-Dodecane	27.69	57	41056	1.357	ng	97
97) Hexachlorobutadiene	28.15	225	179	N.D.		
98) Cyclohexanone	22.30	55	88485	5.291	ng	94
99) tert-Butylbenzene	24.83	119	14631	0.402	ng	# 56
100) n-Butylbenzene	25.86	91	14467	0.345	ng	# 56

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 21:15:44 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(2) Propene (T)

4.658min (-0.006) 5.16ng

response 69012

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

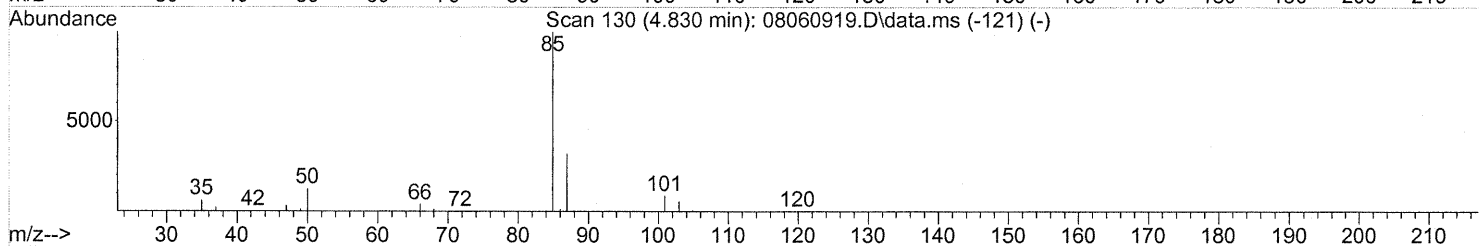
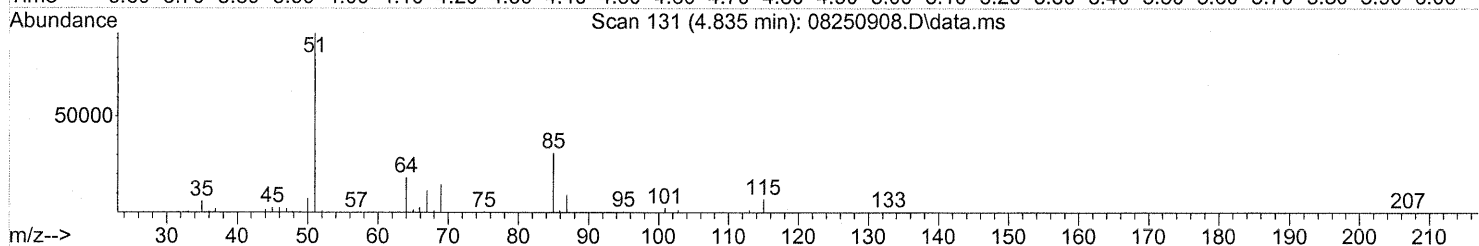
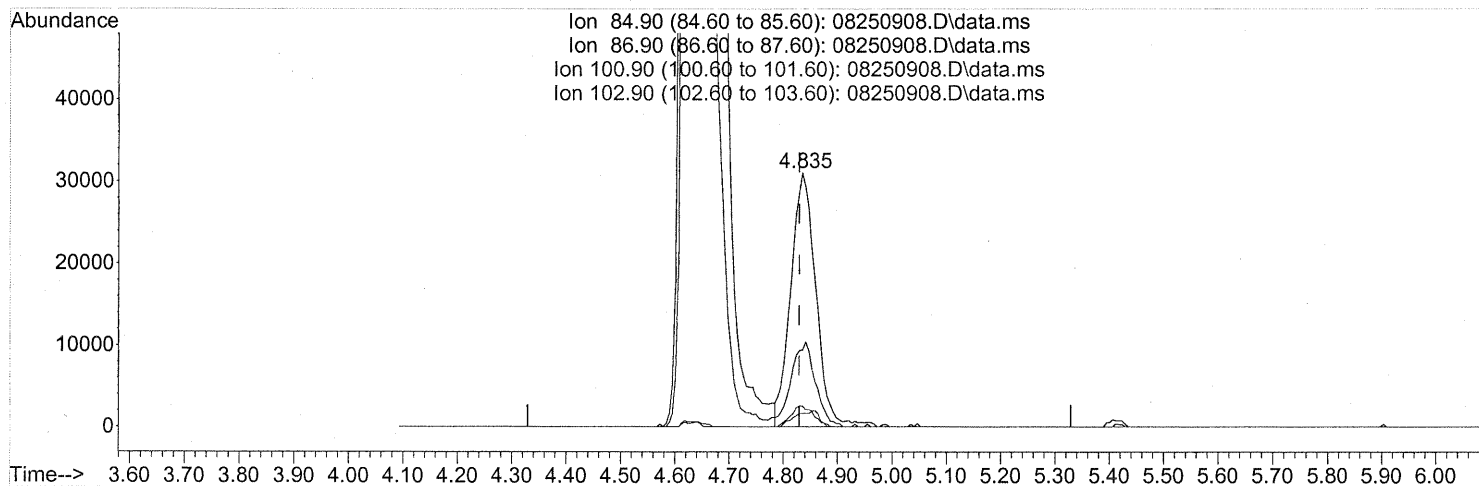
FP  
 07/2/09

09/13/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.835min (+0.006) 4.58ng

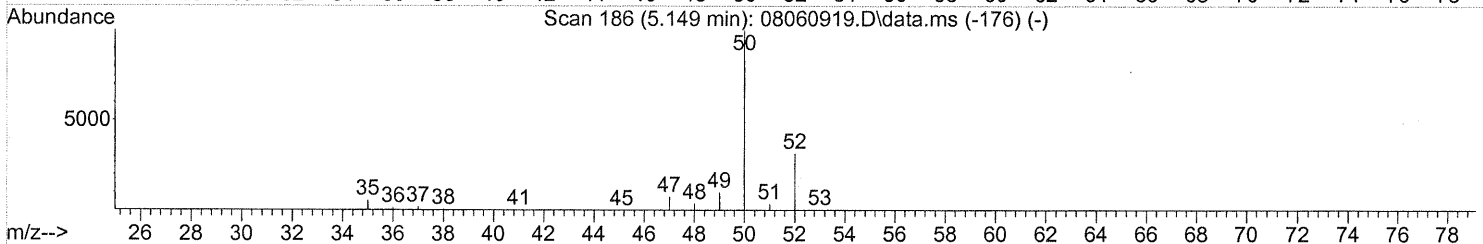
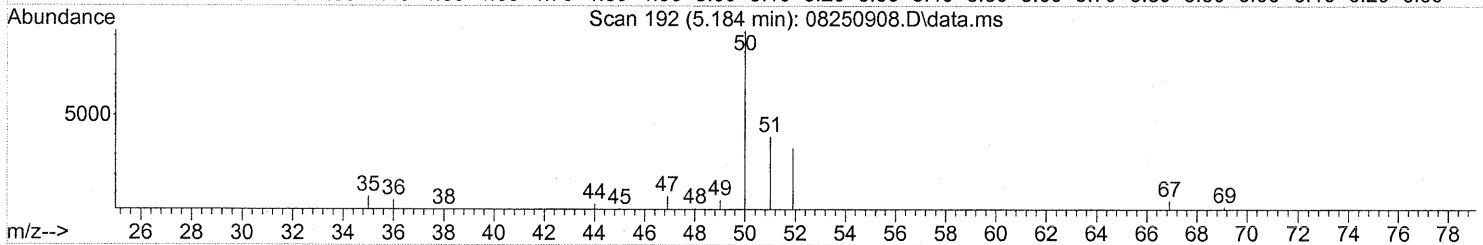
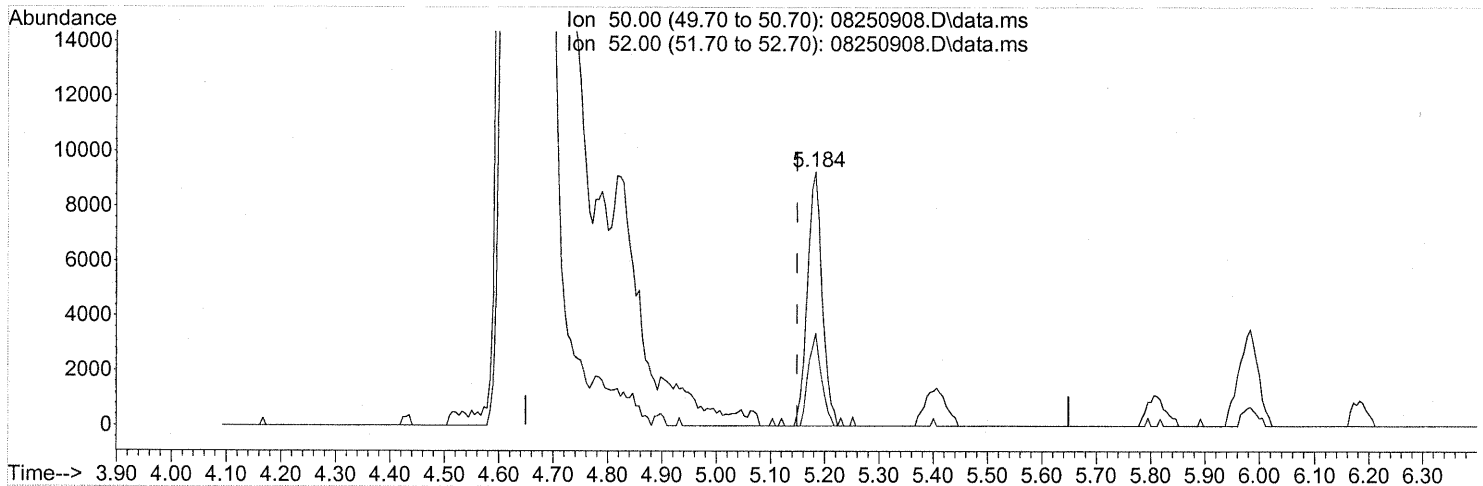
response 100037

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	33.04
100.90	8.80	7.81
102.90	5.20	5.31

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(4) Chloromethane (T)

5.184min (+0.034) 1.21ng

response 17804

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	32.04
0.00	0.00	0.00
0.00	0.00	0.00

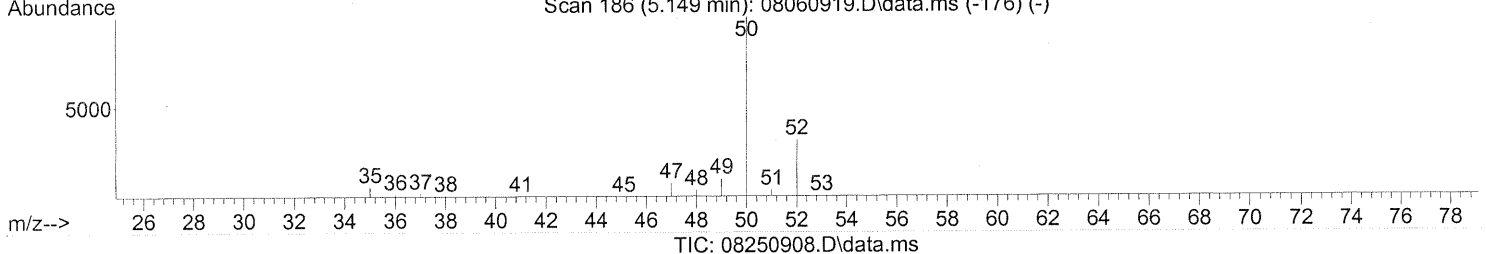
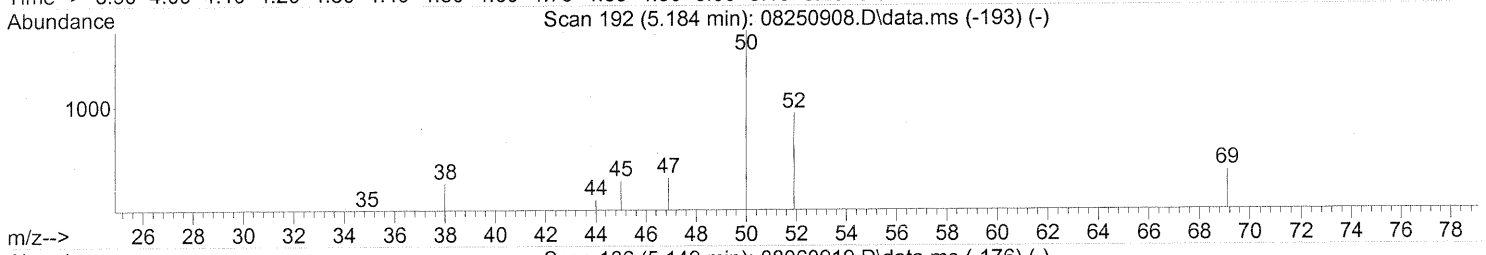
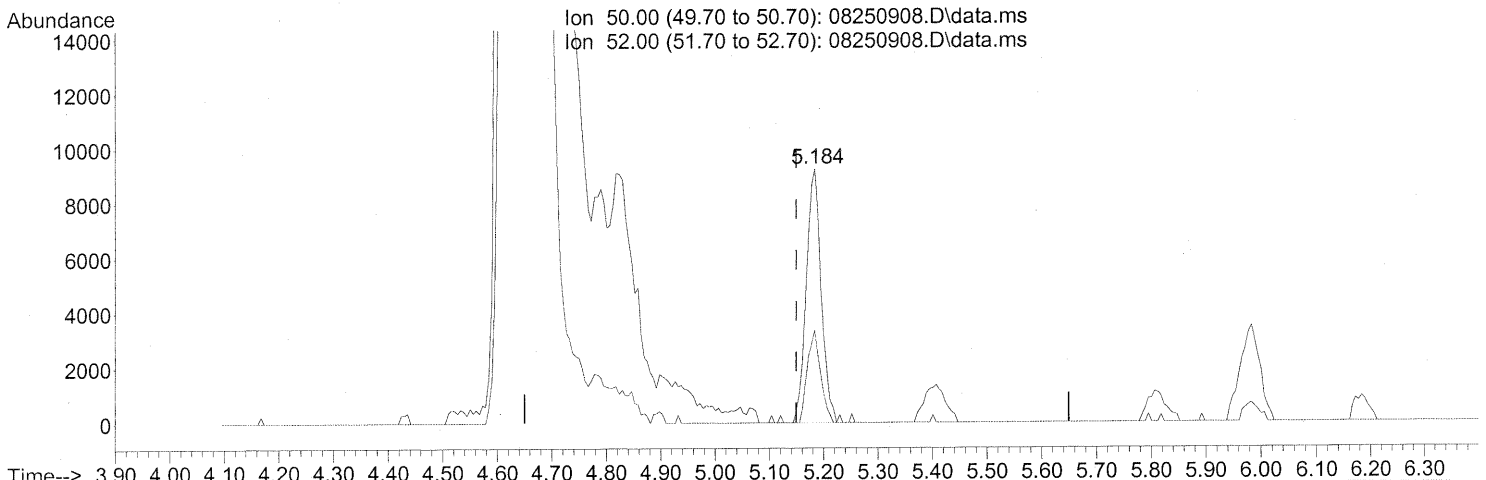
*before substa.*



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 21:15:44 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(4) Chloromethane (T)  
 5.184min (+0.034) 1.21ng  
 response 17804

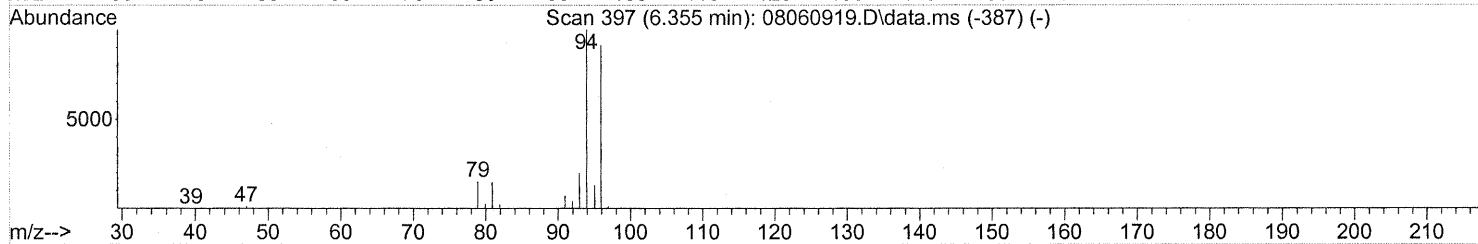
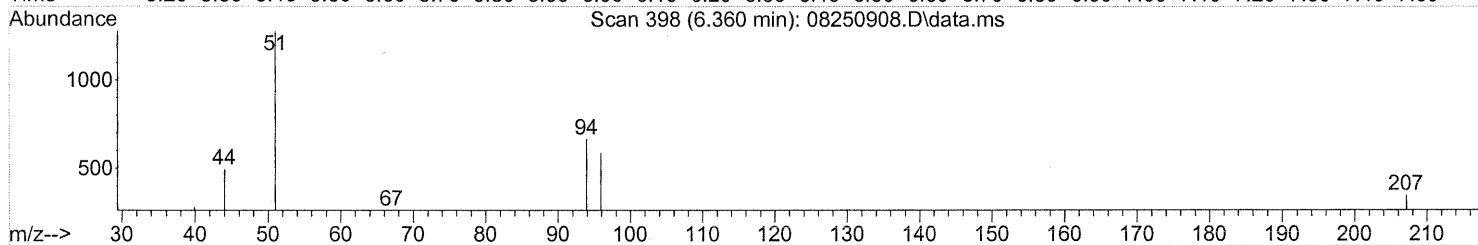
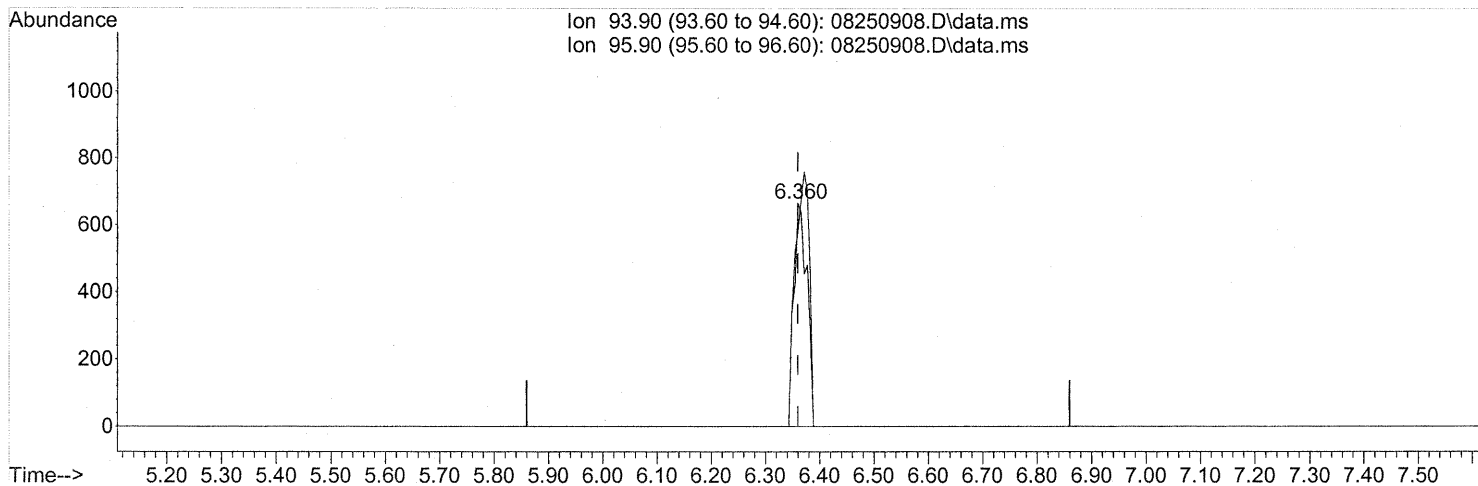
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	32.04
0.00	0.00	0.00
0.00	0.00	0.00

*After - substa.*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

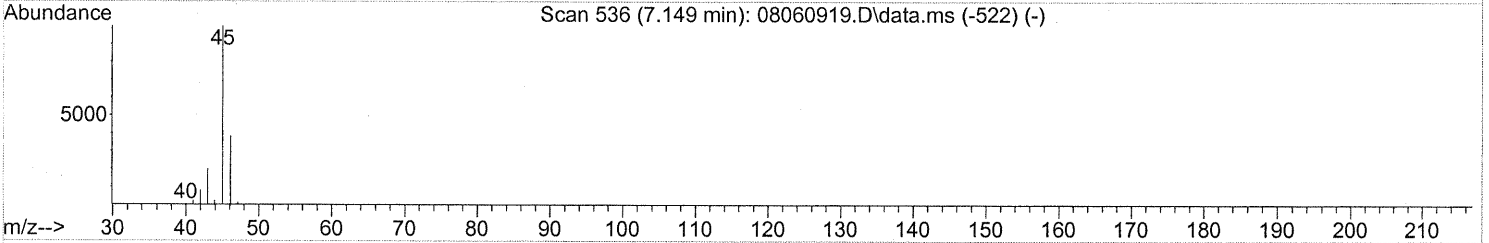
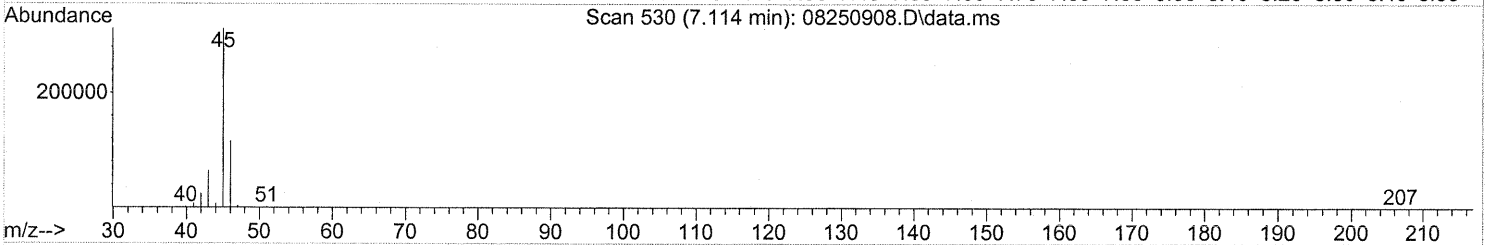
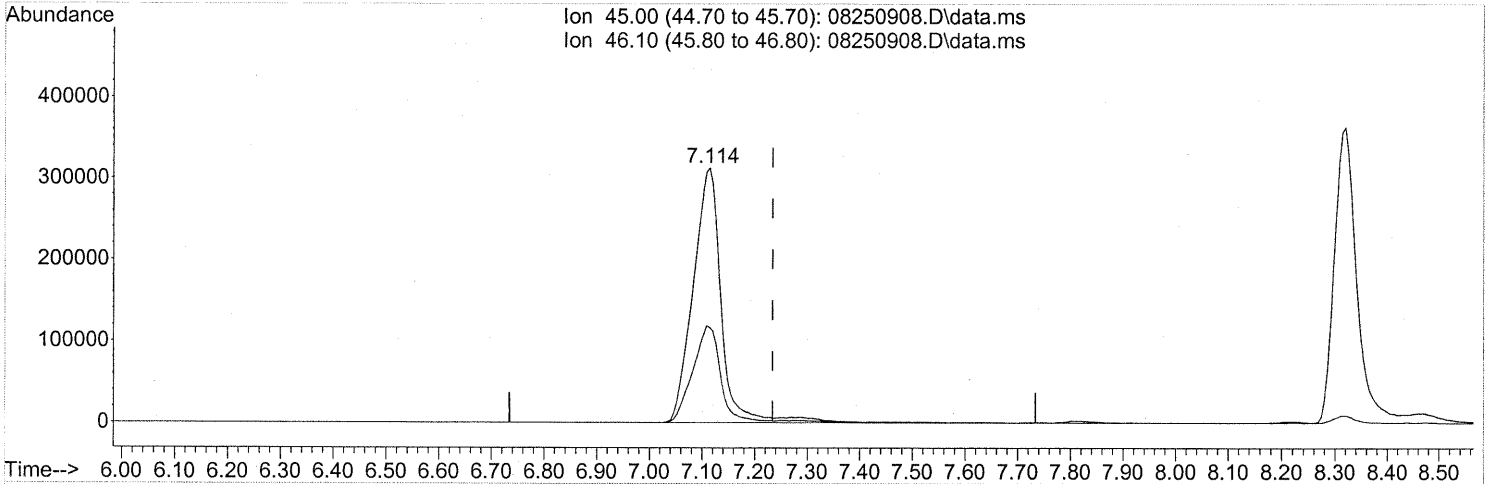
(8) Bromomethane (T)  
 6.360min (+0.000) 0.13ng  
 response 1127

Ion	Exp%	Act%
93.90	100	100
95.90	92.80	122.63#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(10) Ethanol (T)

7.114min (-0.120) 137.66ng

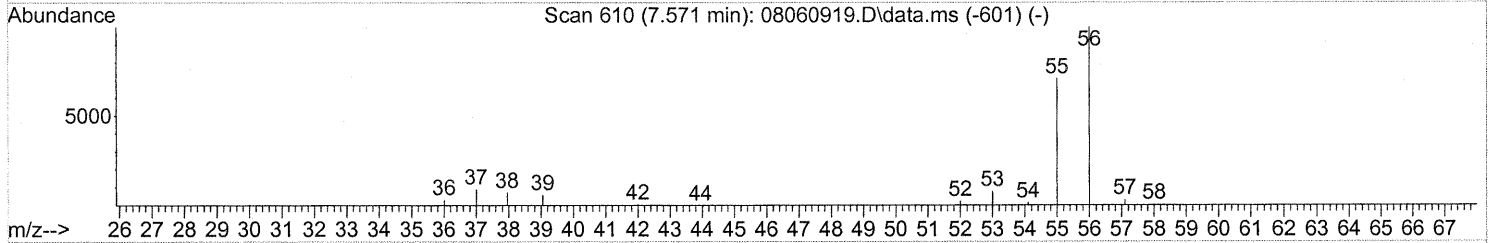
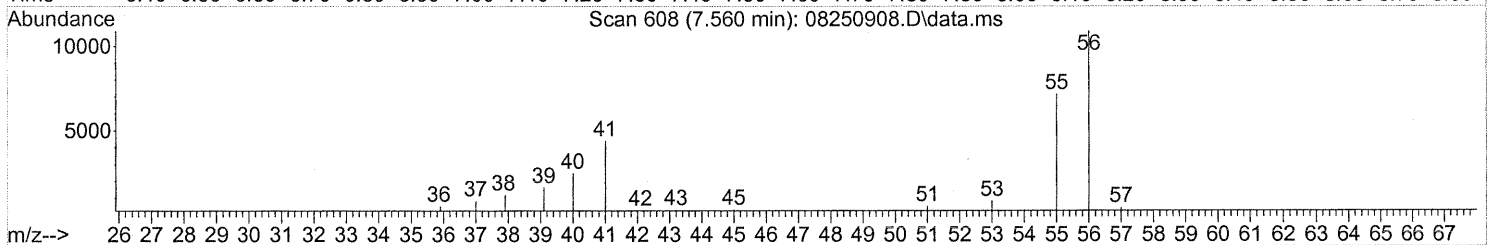
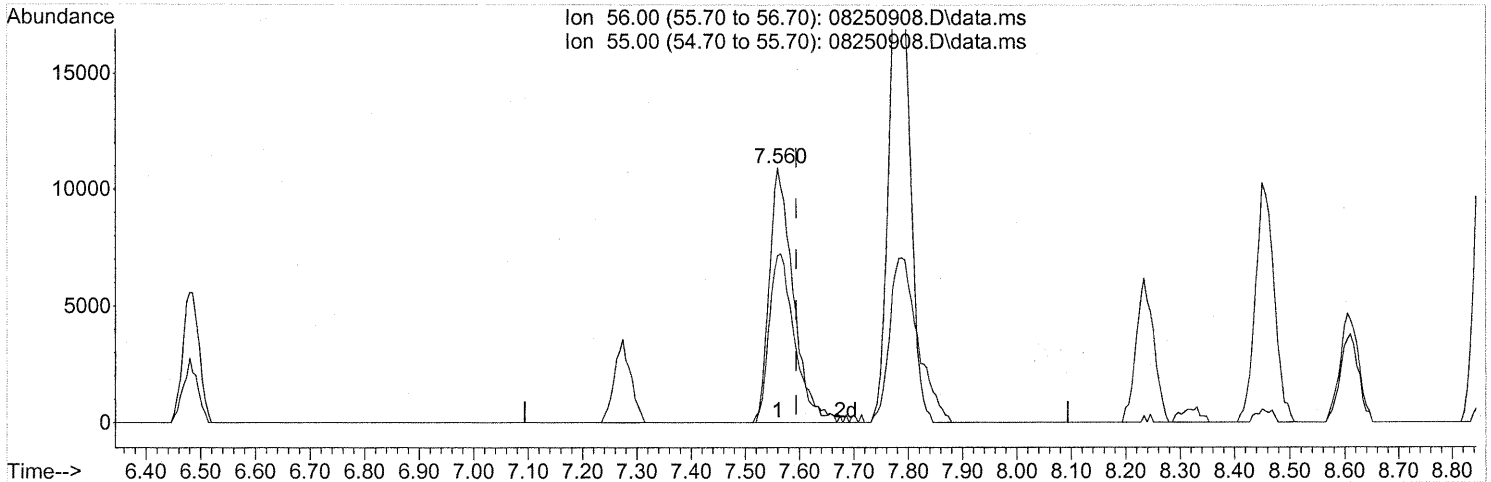
response 1166566

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	37.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(12) Acrolein (T)

7.560min (-0.034) 5.22ng

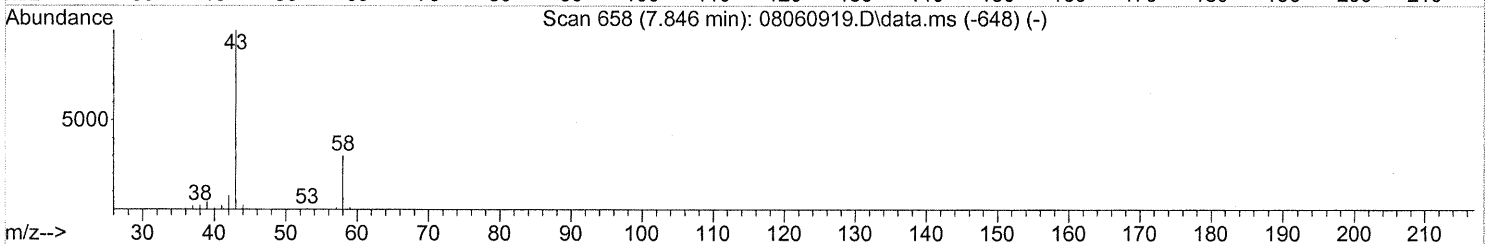
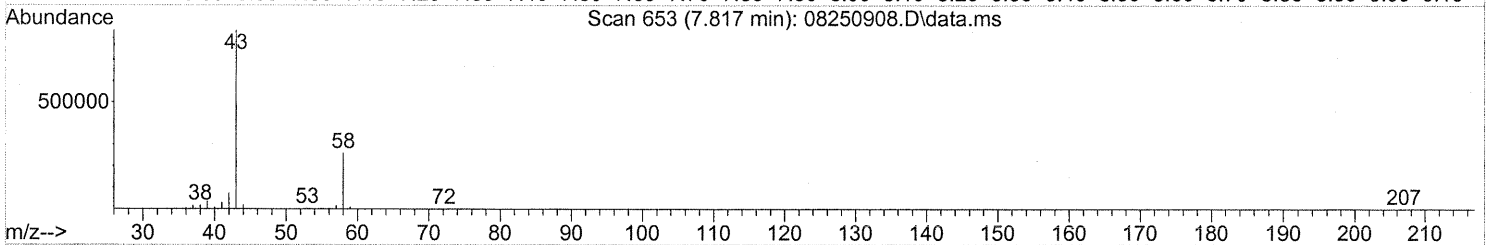
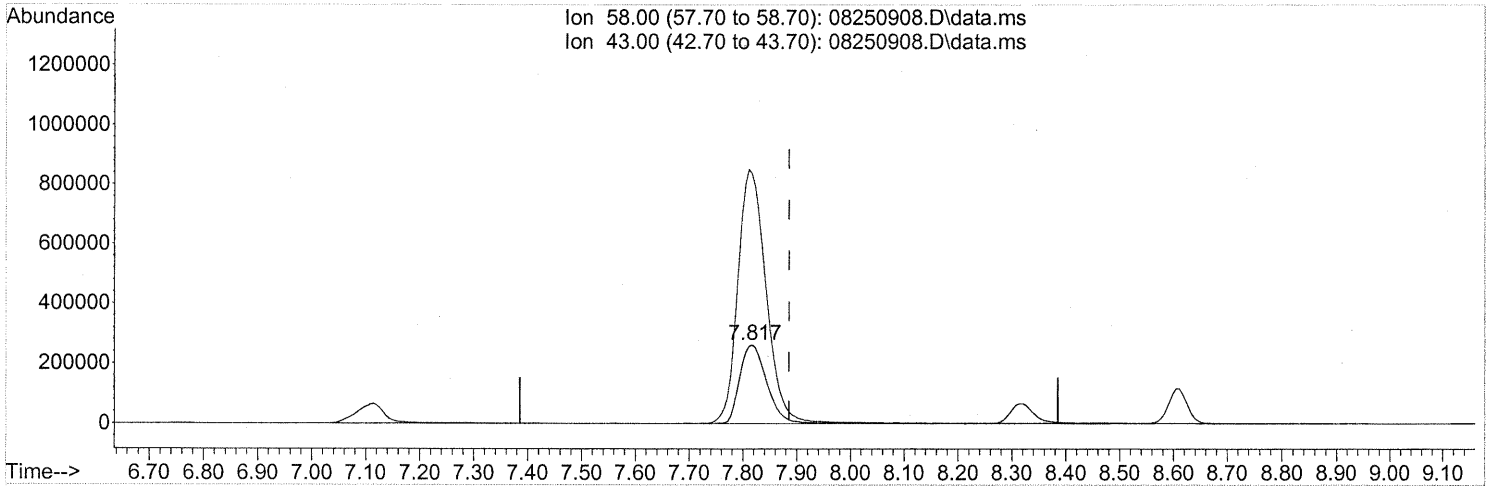
response 33695

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	70.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(13) Acetone (T)

7.817min (-0.069) 113.82ng

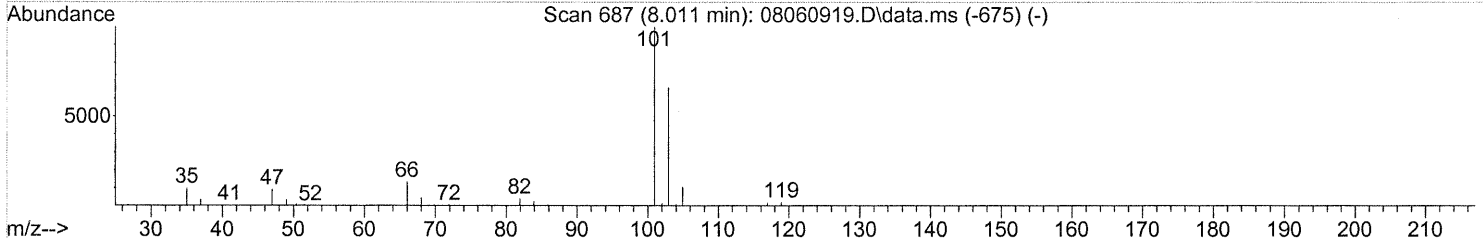
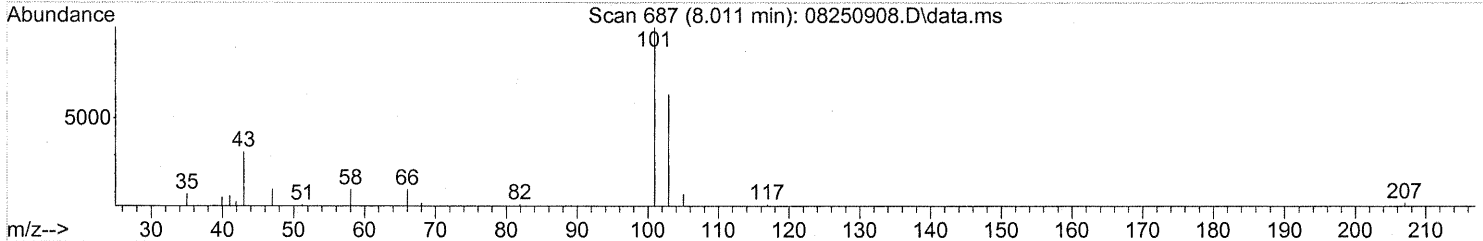
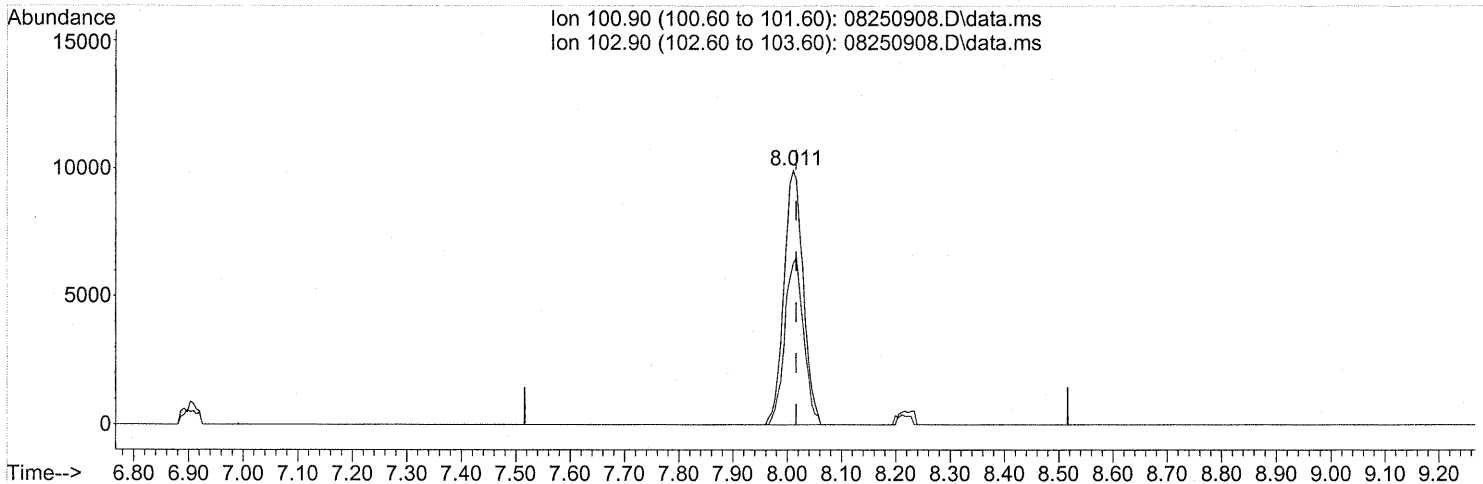
response 910124

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	340.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(14) Trichlorofluoromethane (T)

8.011min (-0.006) 1.23ng

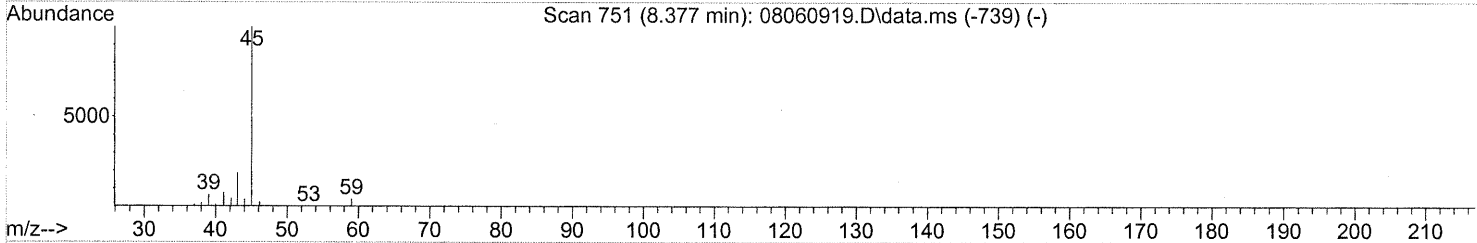
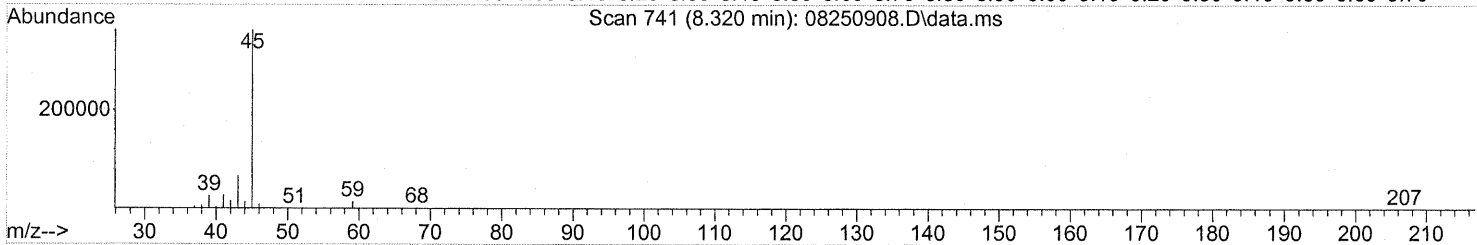
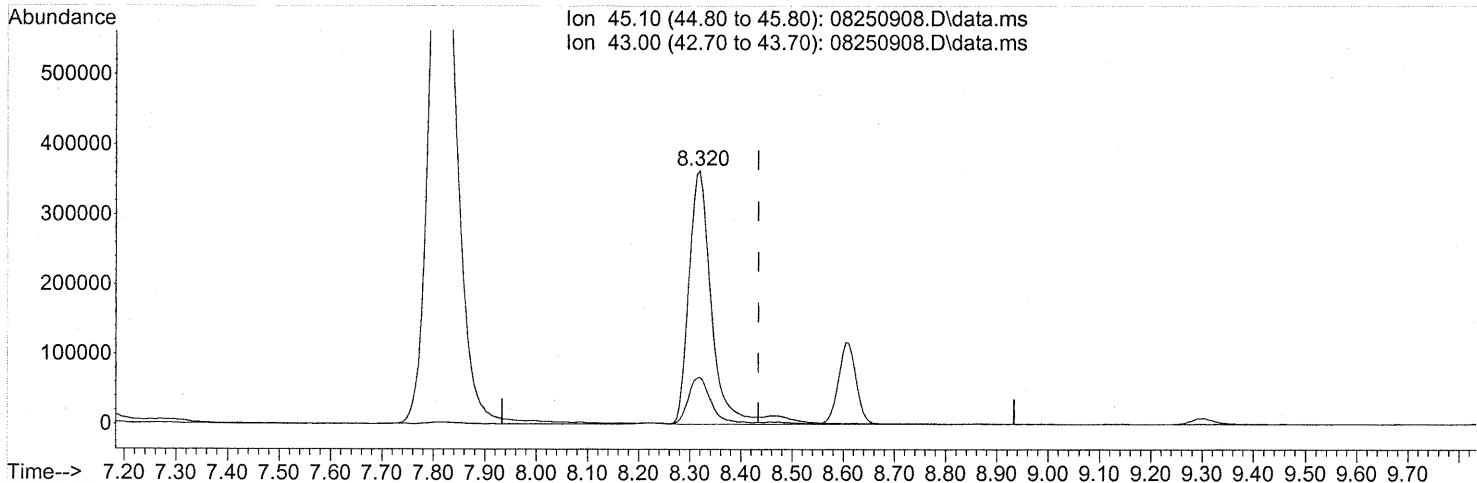
response 24392

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(15) 2-Propanol (Isopropanol) (T)

8.320min (-0.114) 36.50ng

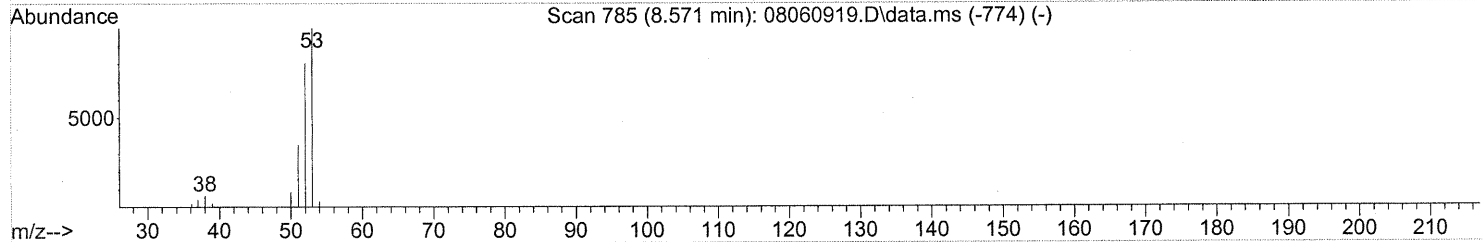
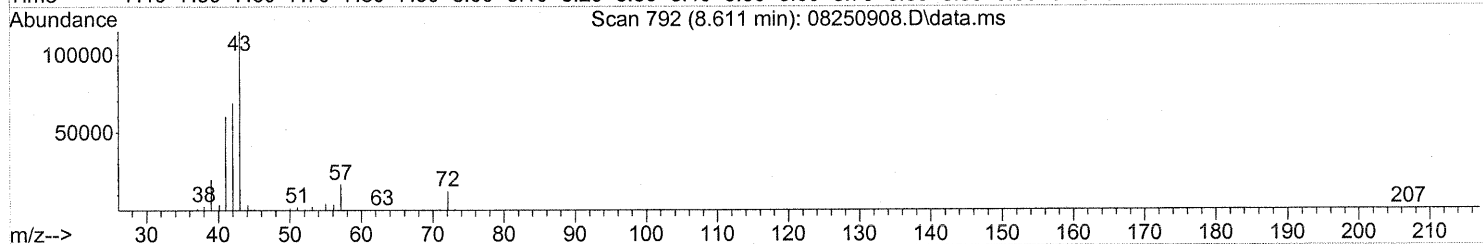
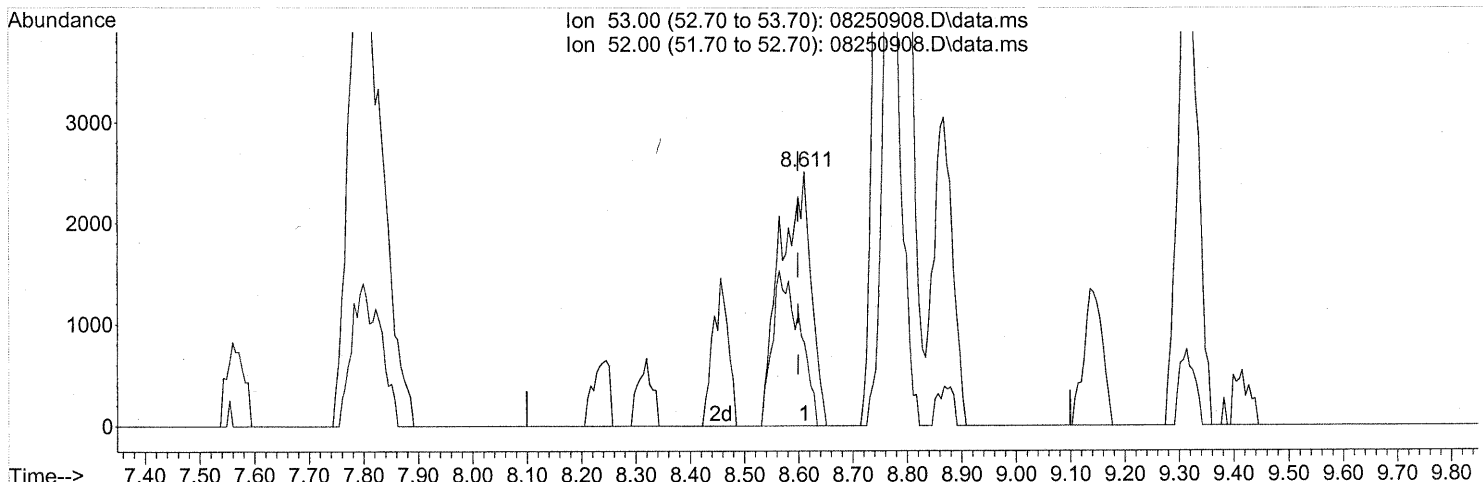
response 1146971

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.34
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(16) Acrylonitrile (T)

8.611min (+0.011) 0.68ng

response 9863

Ion	Exp%	Act%
53.00	100	100
52.00	81.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

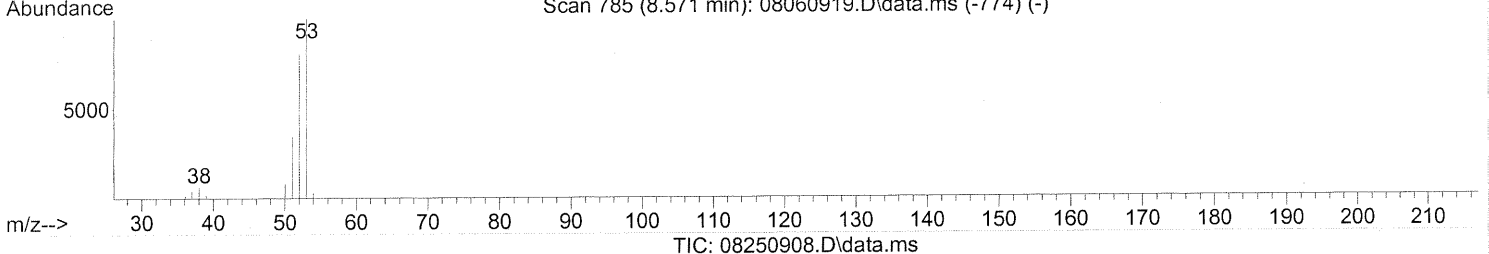
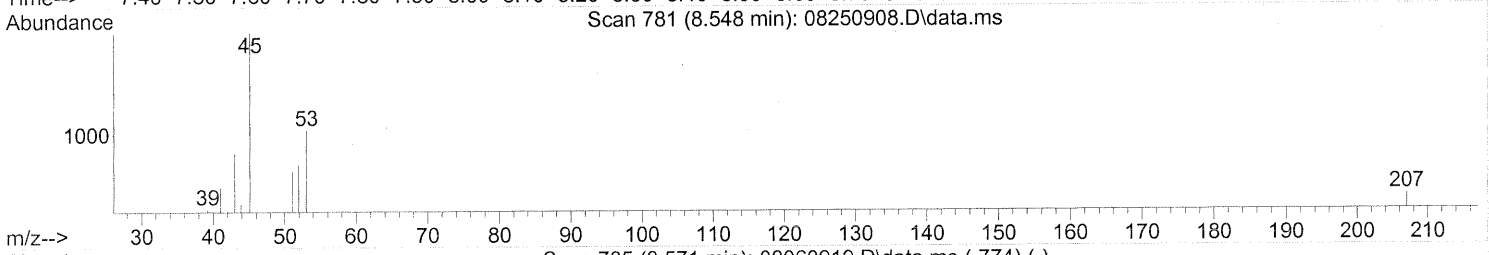
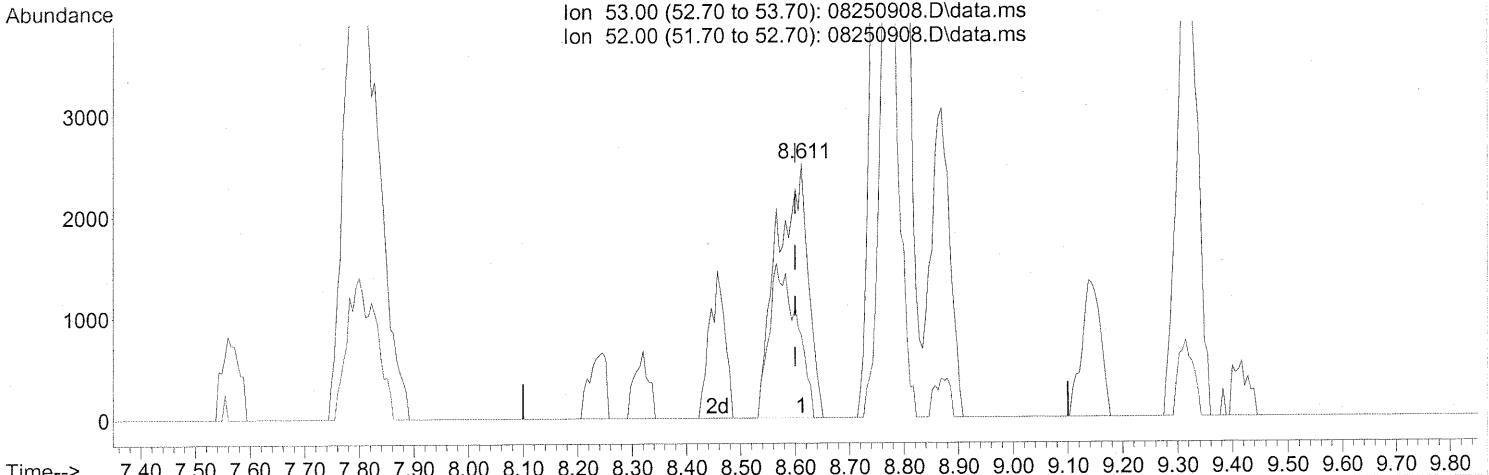
*before subtr.*



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 21:15:44 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(16) Acrylonitrile (T)

8.611min (+0.011) 0.68ng

response 9863

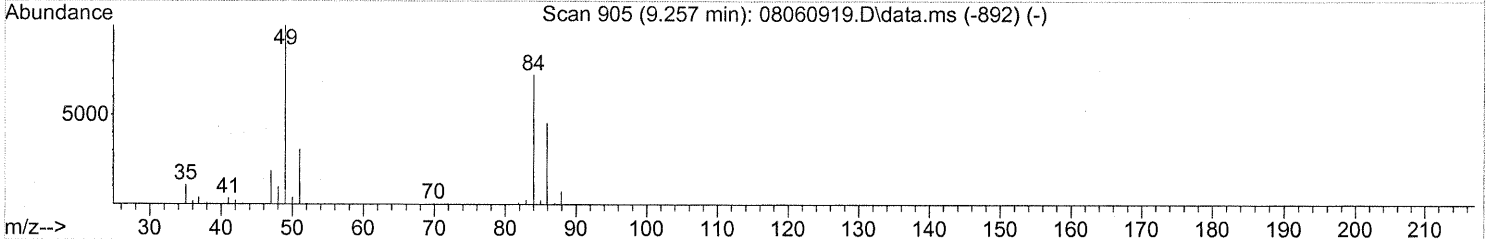
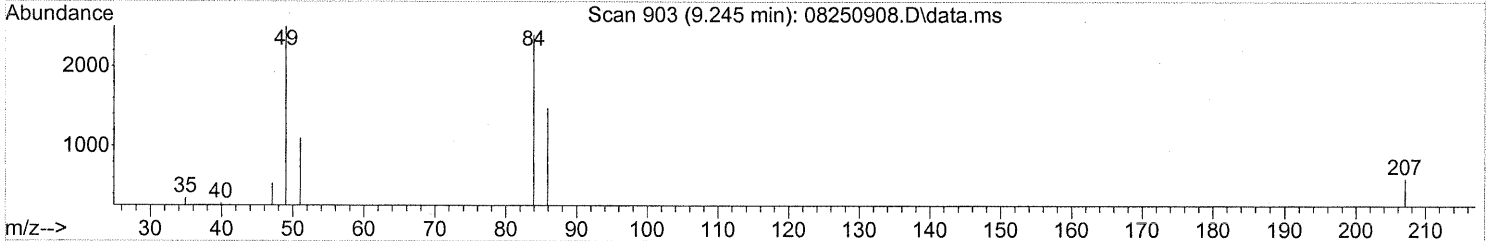
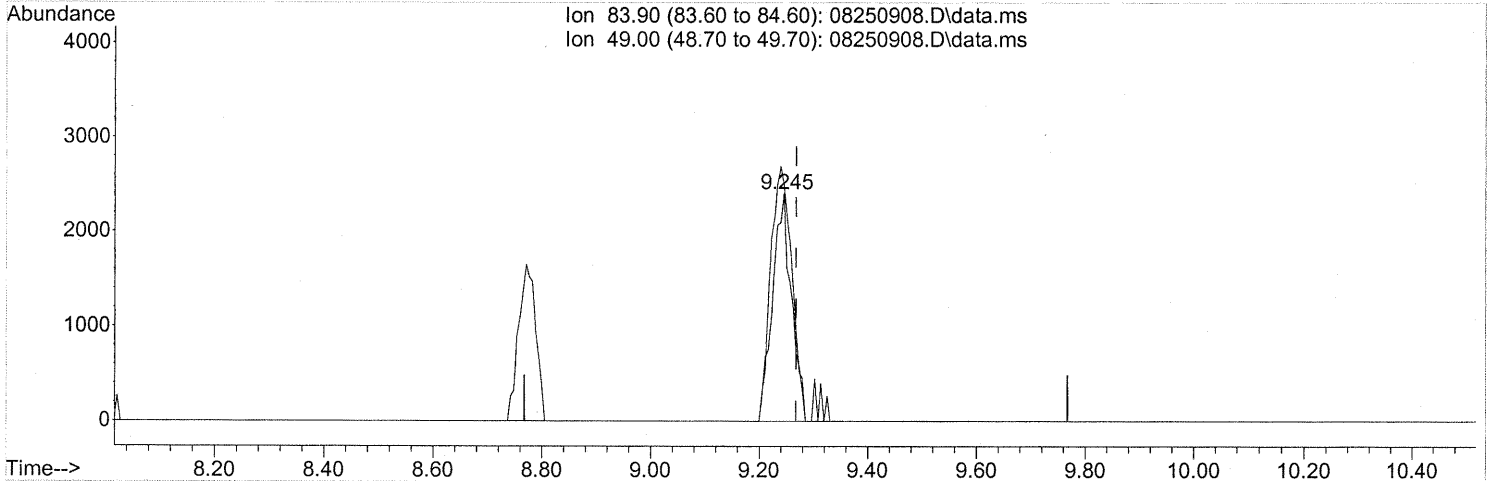
Ion	Exp%	Act%
53.00	100	100
52.00	81.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

*After subtr.*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(19) Methylene Chloride (T)

9.245min (-0.023) 0.54ng

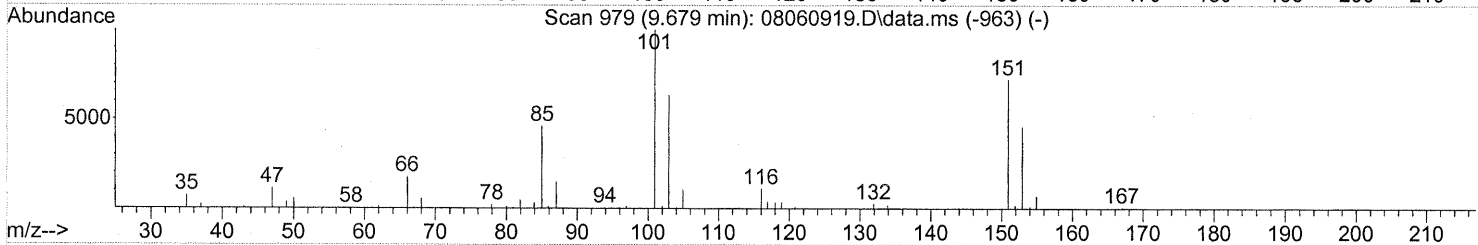
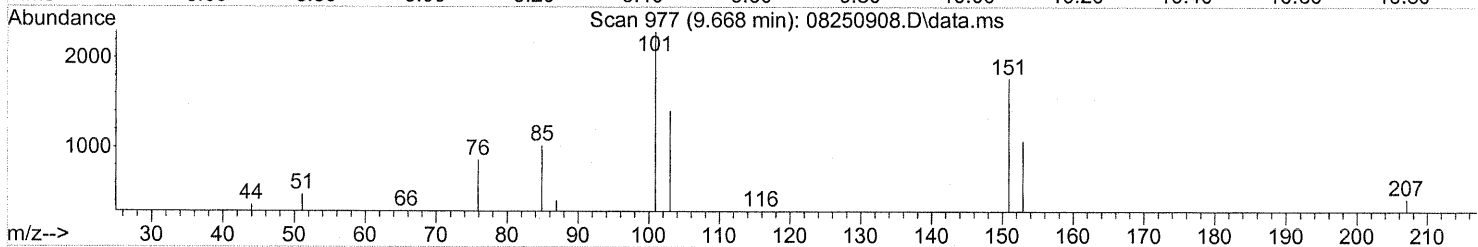
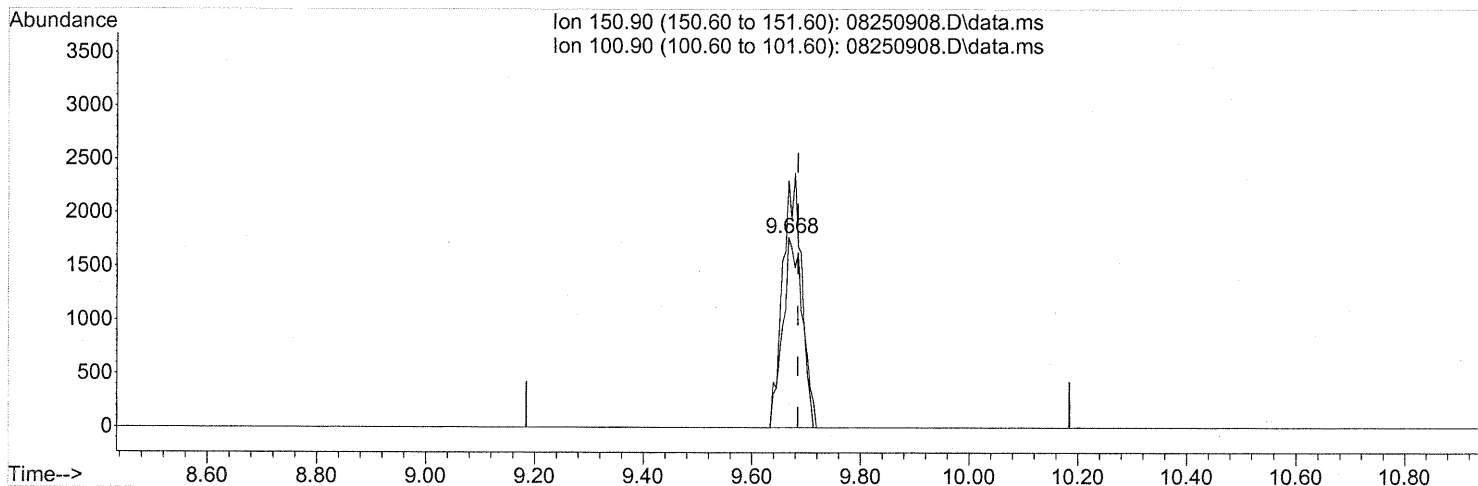
response 5784

Ion	Exp%	Act%
83.90	100	100
49.00	144.60	125.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250908.D  
Acq On : 25 Aug 2009 14:39  
Operator : WA/CC  
Sample : P0902875-002 (1000mL)  
Misc : Environmental Health 102265  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



TIC: 08250908.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.668min (-0.017) 0.61ng

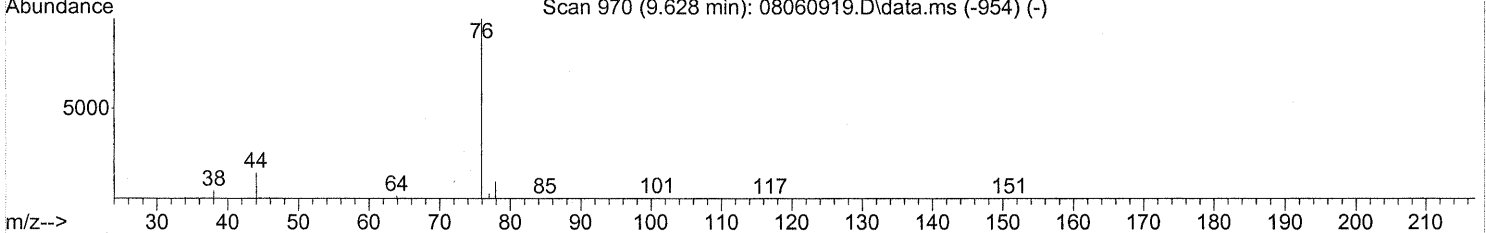
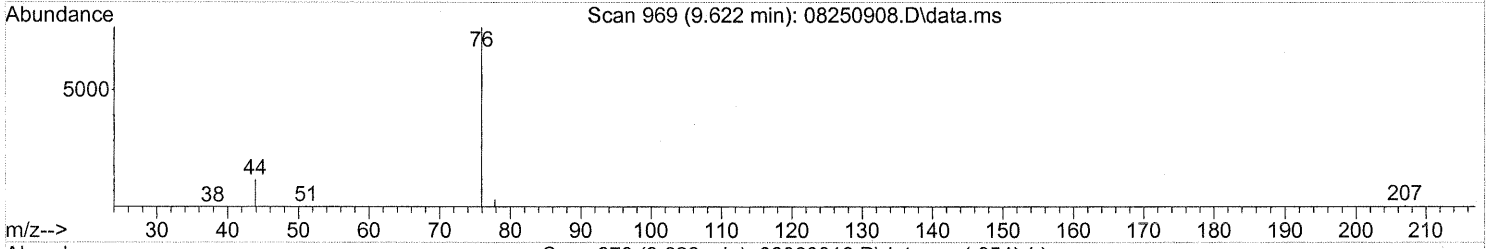
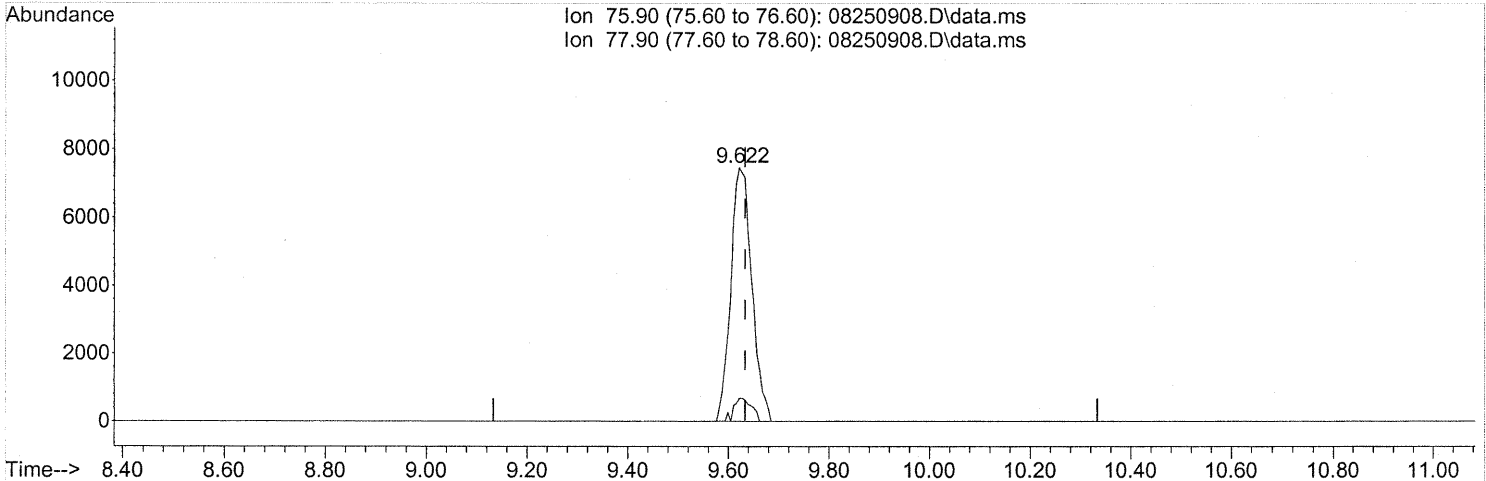
response 4368

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	133.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(22) Carbon Disulfide (T)

9.622min (-0.011) 0.57ng

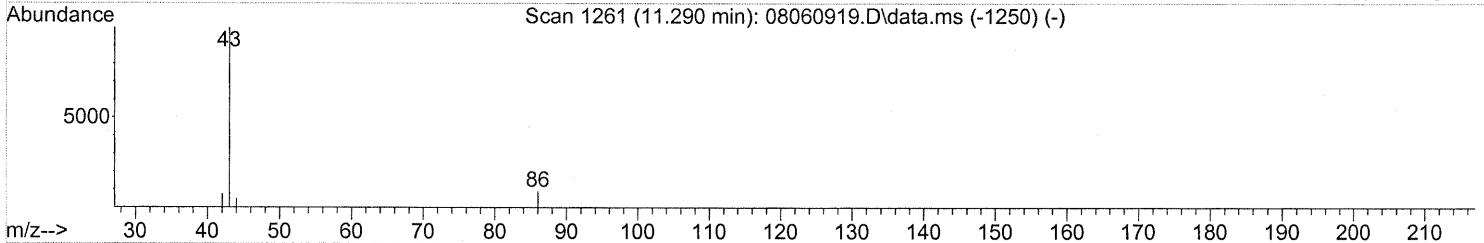
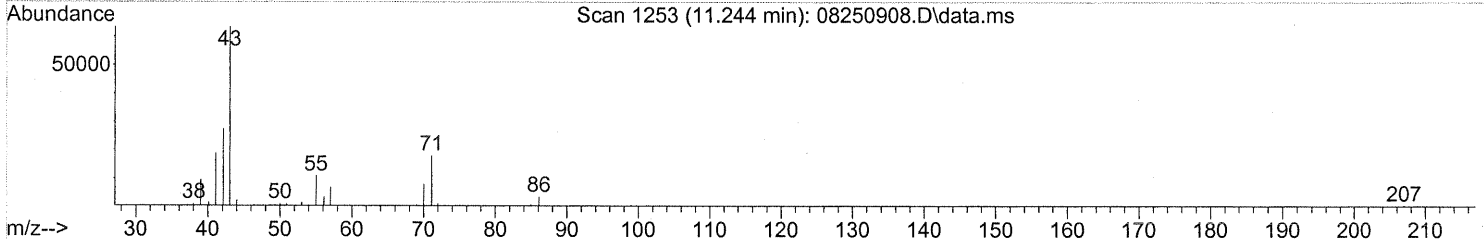
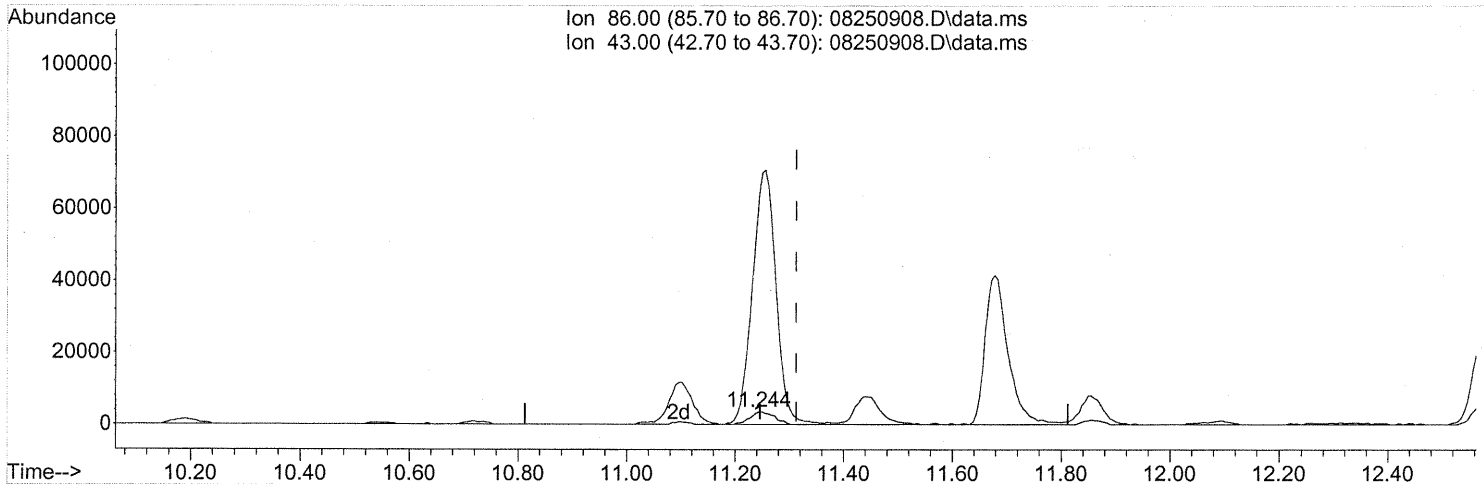
response 21638

Ion	Exp%	Act%
75.90	100	100
77.90	9.40	7.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)

11.244min (-0.069) 6.38ng

response 10385

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	2036.15#
0.00	0.00	0.00
0.00	0.00	0.00

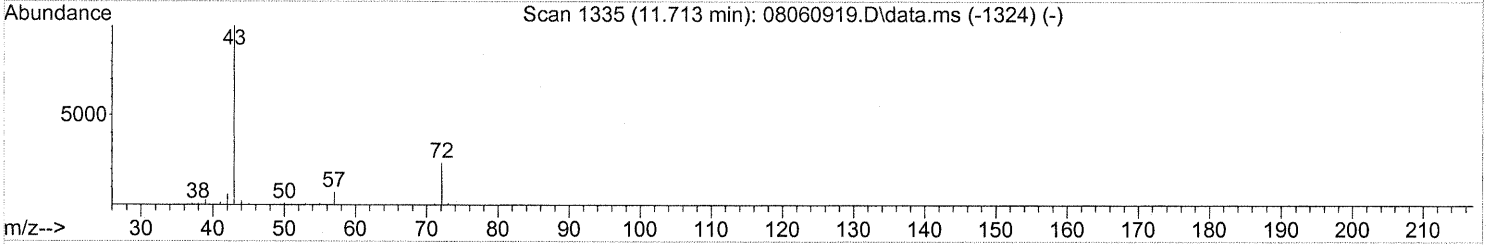
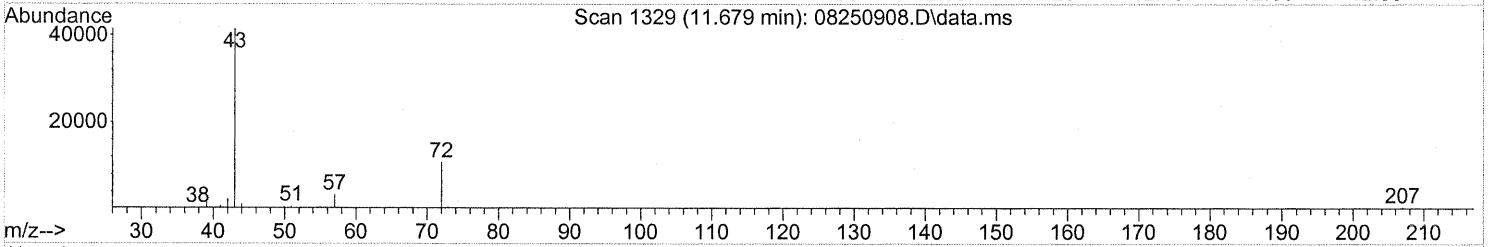
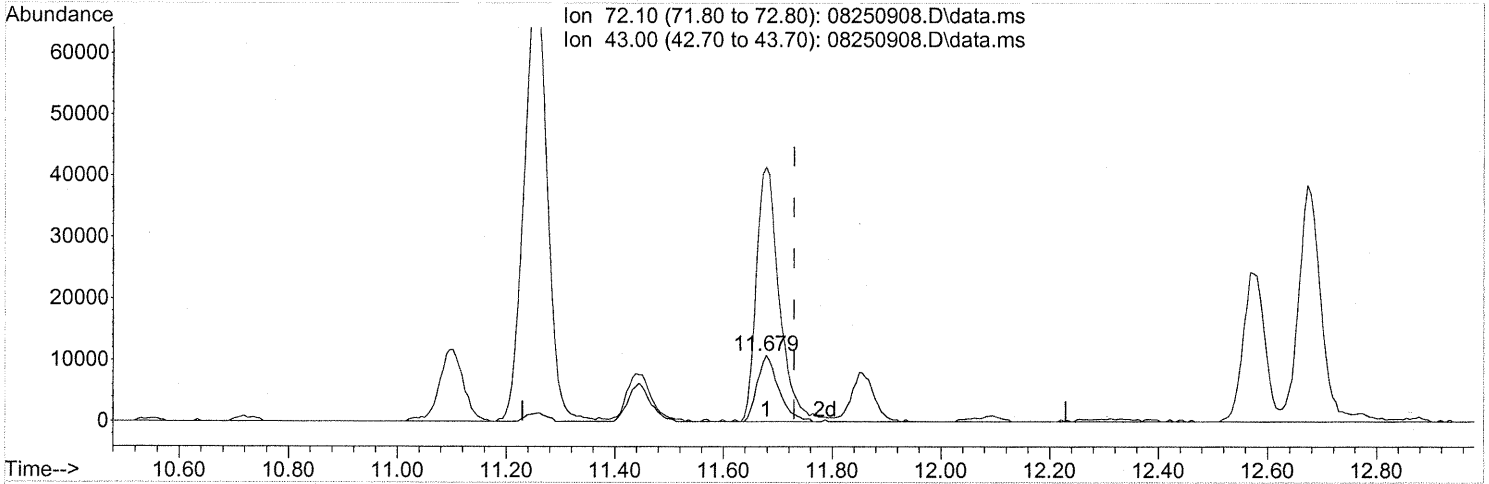
FP  
 WA 9/2/09

WA 9/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(27) 2-Butanone (MEK) (T)

11.679min (-0.051) 4.07ng

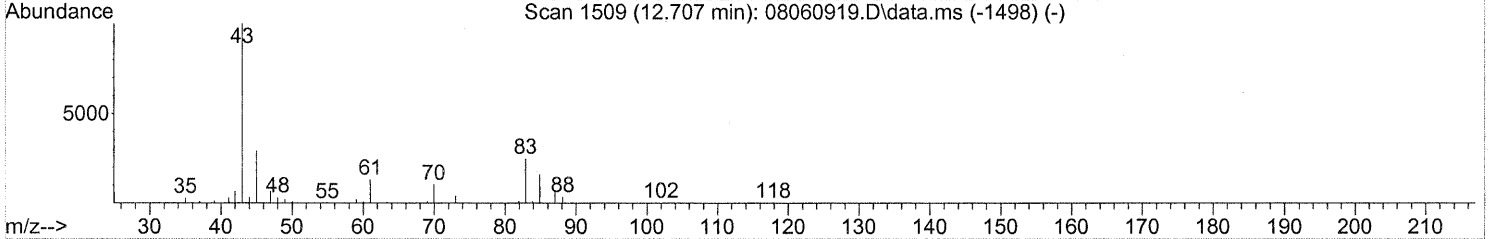
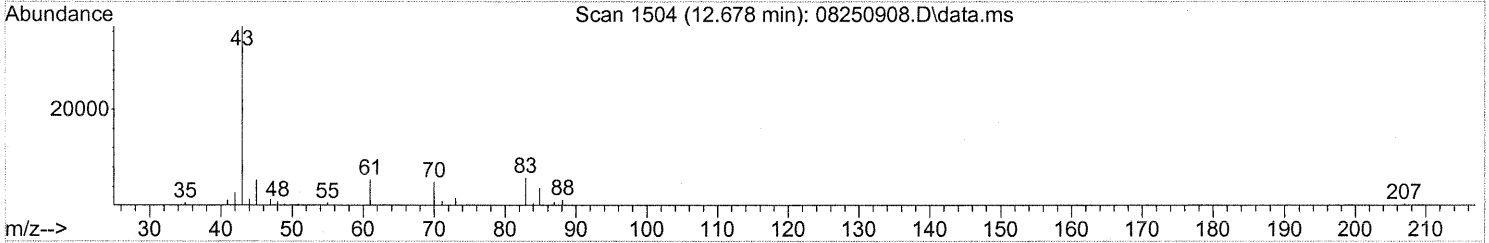
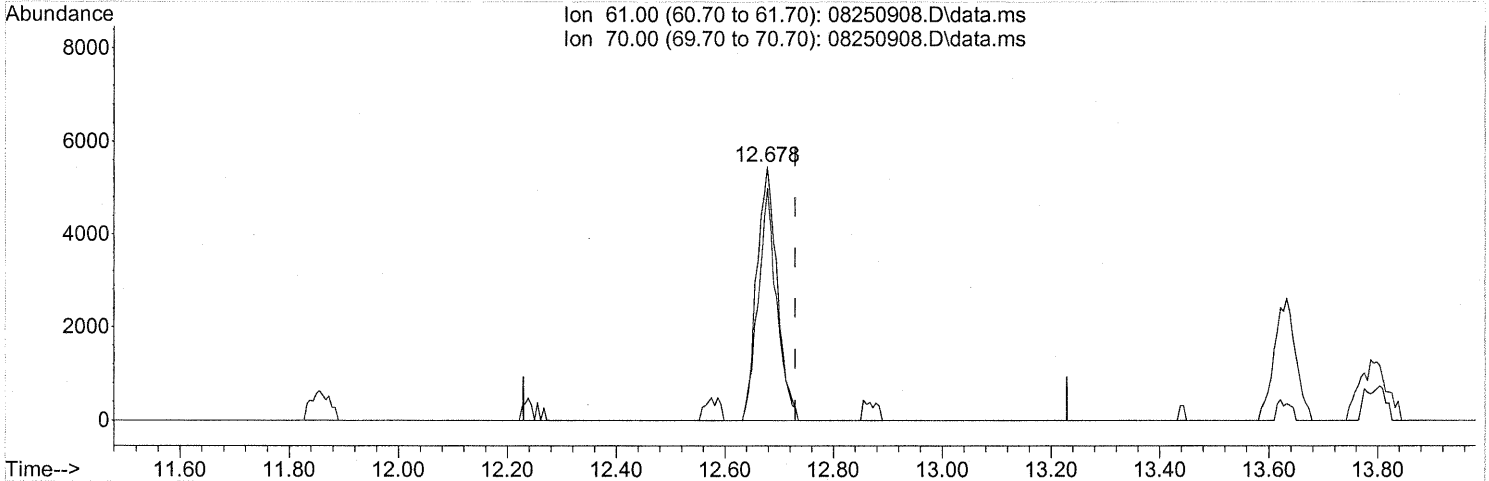
response 29377

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	414.02#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

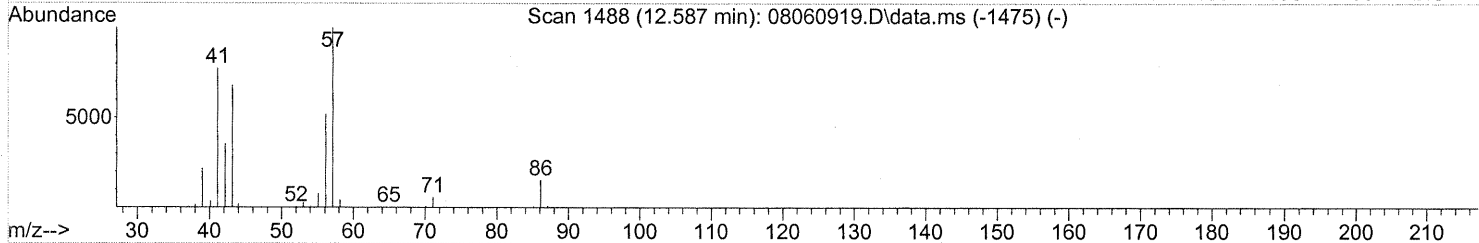
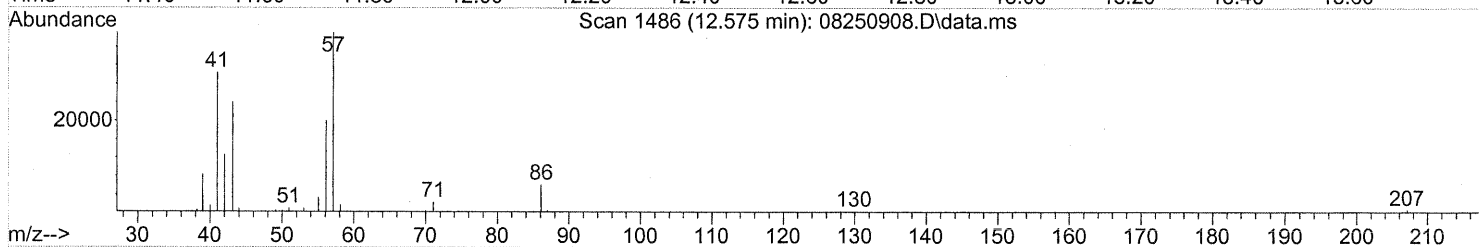
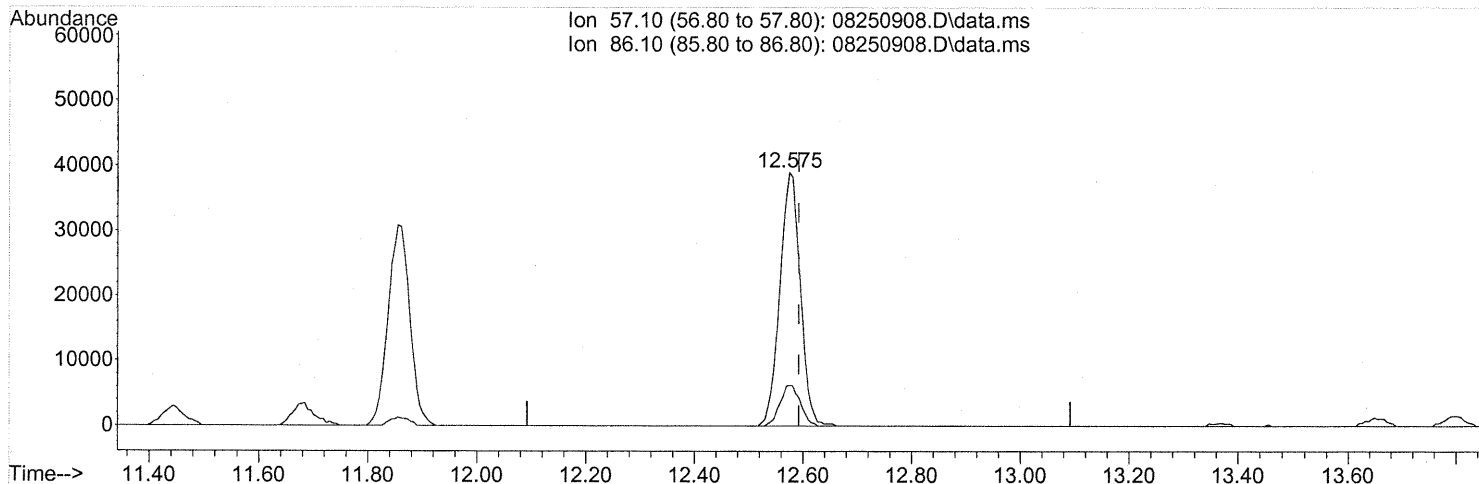
(30) Ethyl Acetate (T)  
 12.678min (-0.051) 3.73ng  
 response 14043

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	83.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(31) n-Hexane (T)

12.575min (-0.017) 5.27ng

response 101459

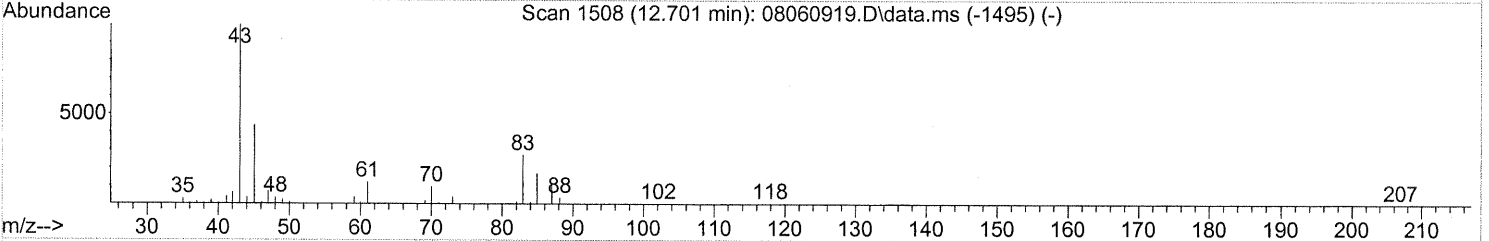
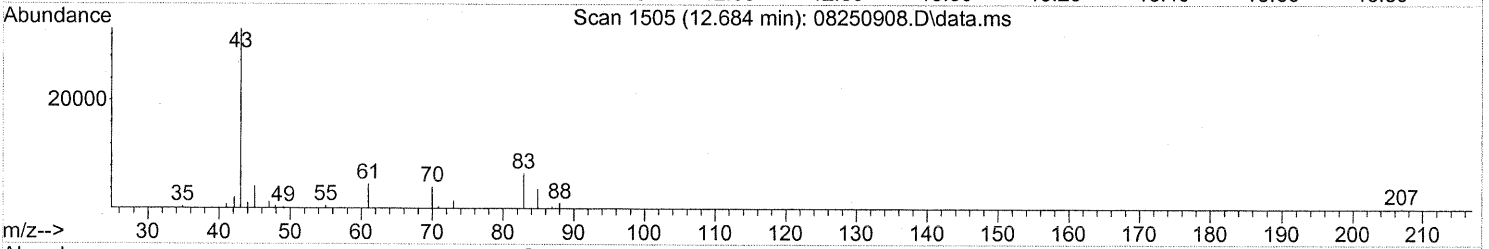
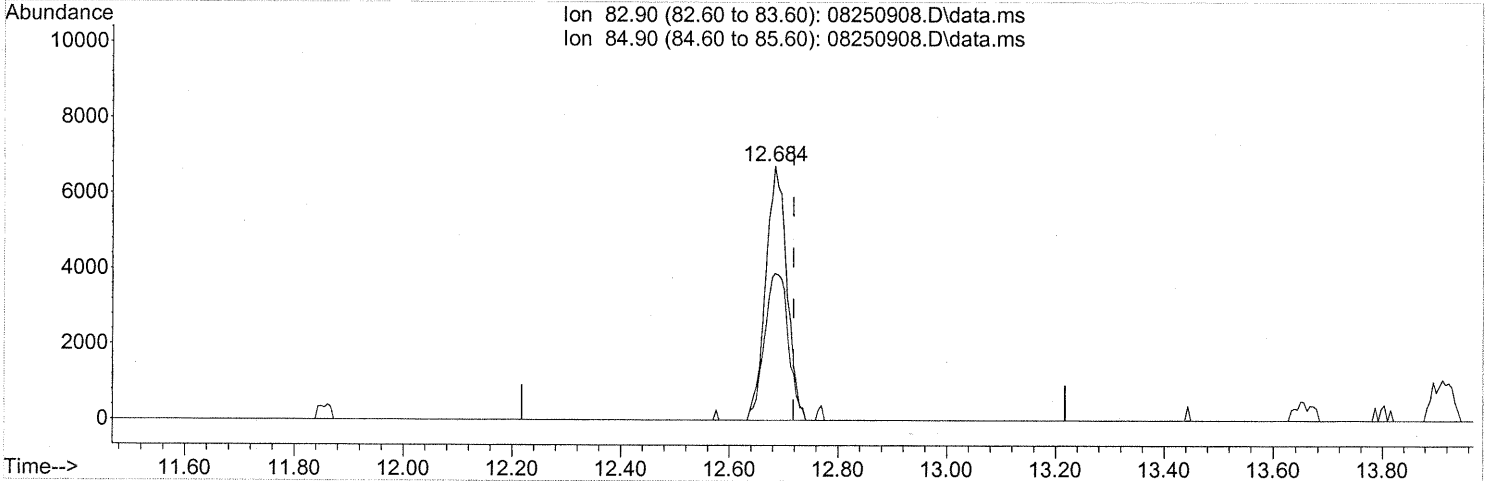
Ion	Exp%	Act%
57.10	100	100
86.10	15.70	15.79
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

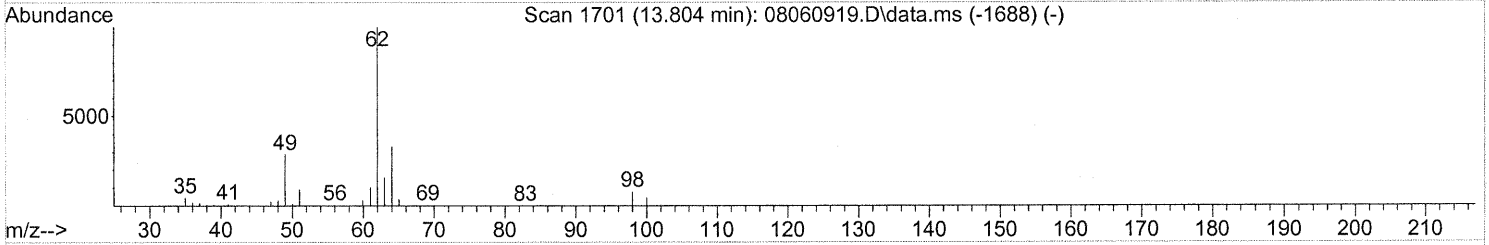
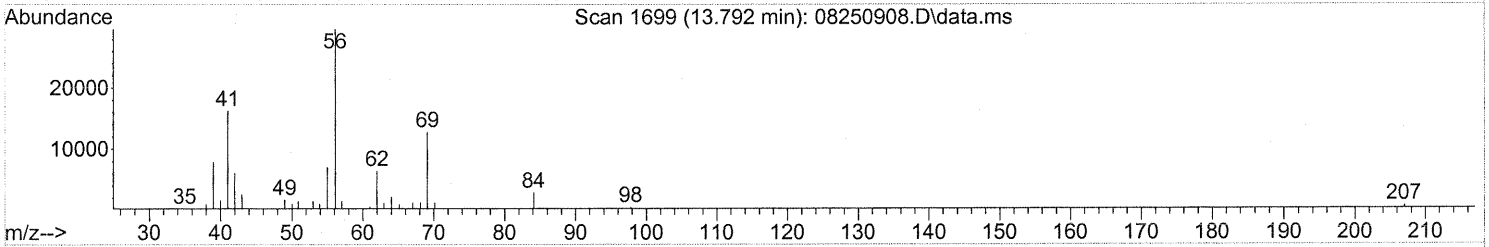
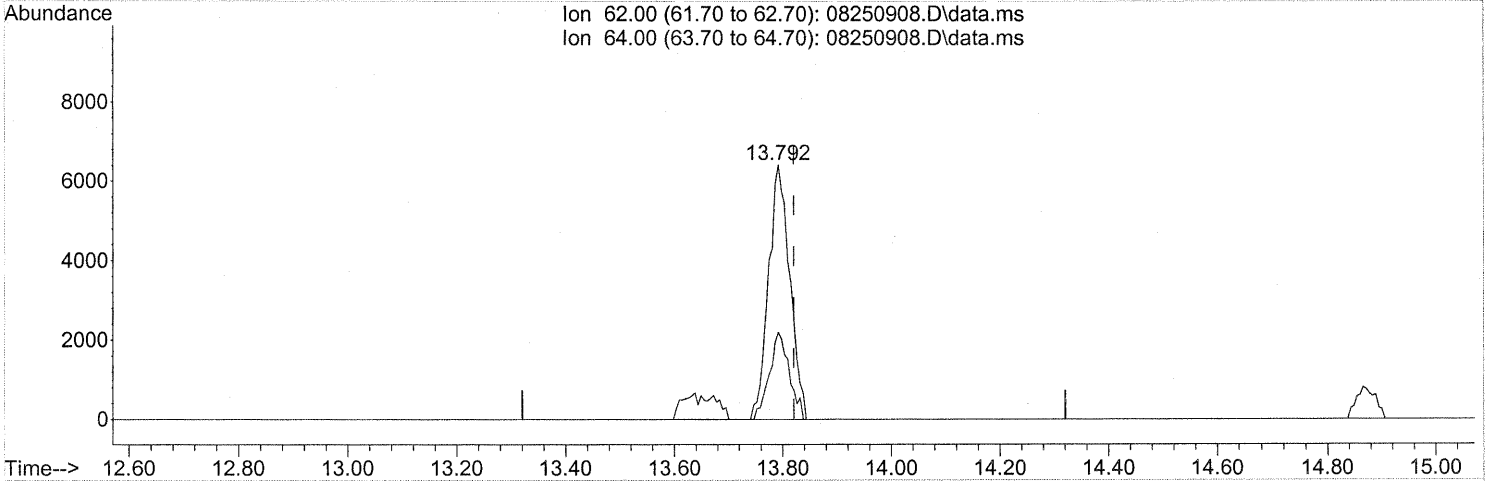
(32) Chloroform (T)  
 12.684min (-0.034) 1.08ng  
 response 18271

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	65.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.13ng

response 17424

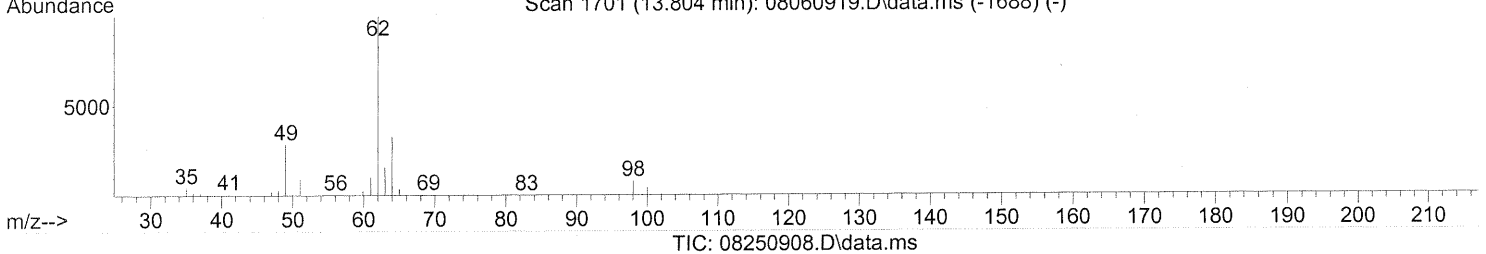
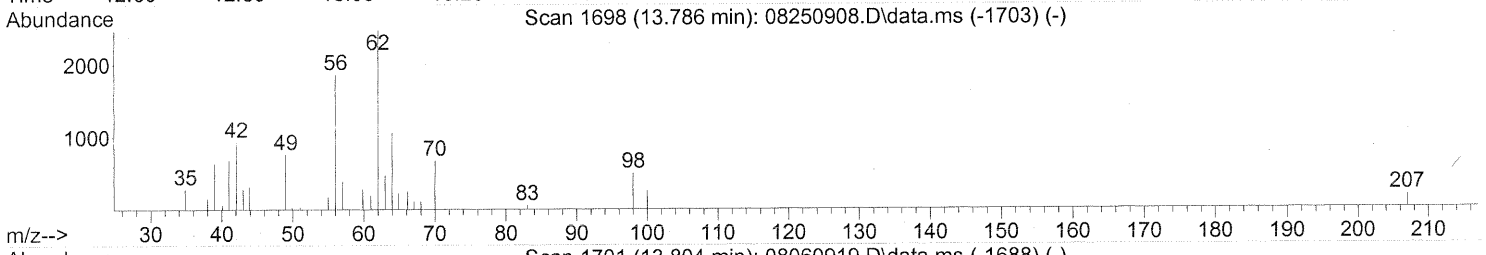
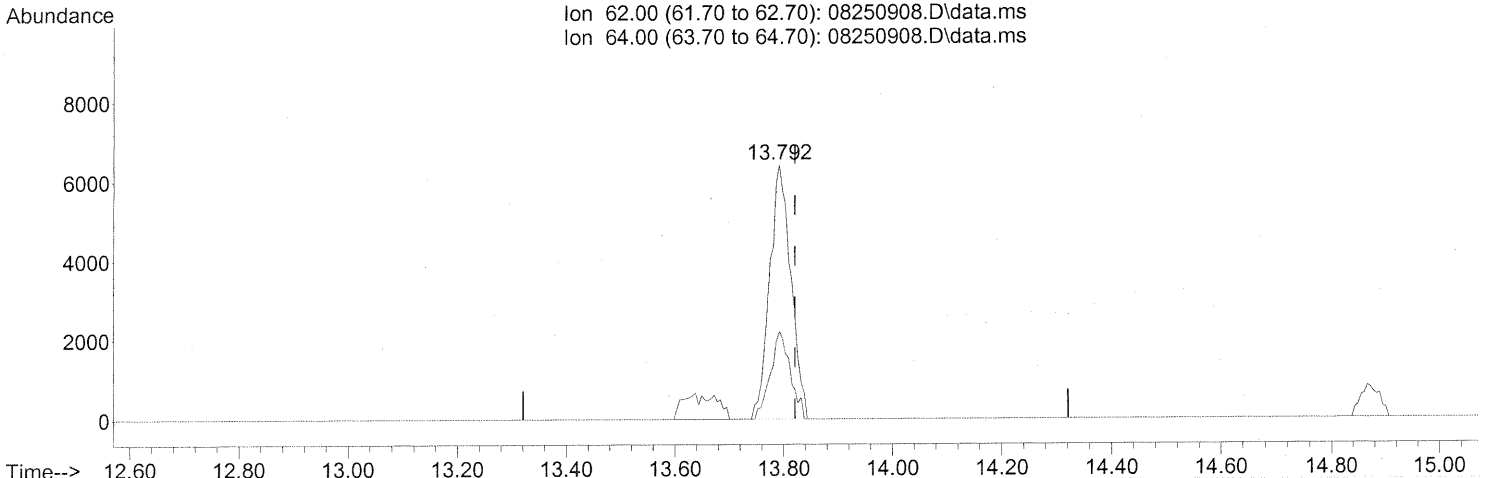
*Before submit.*

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 2:39 pm  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 21:15:44 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.13ng

response 17424

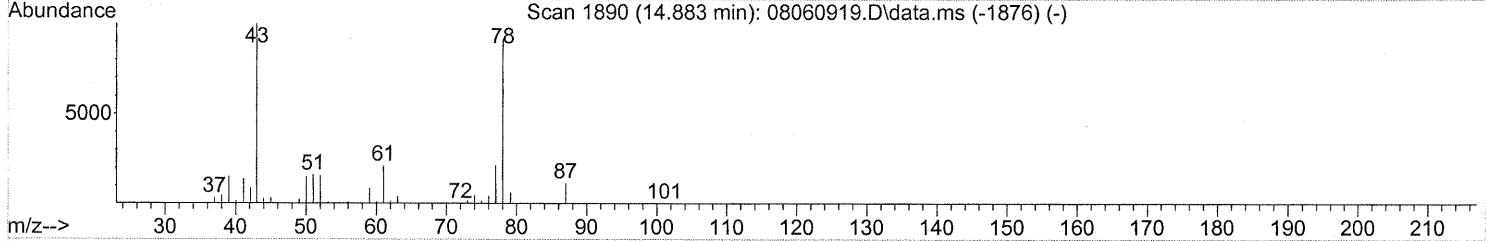
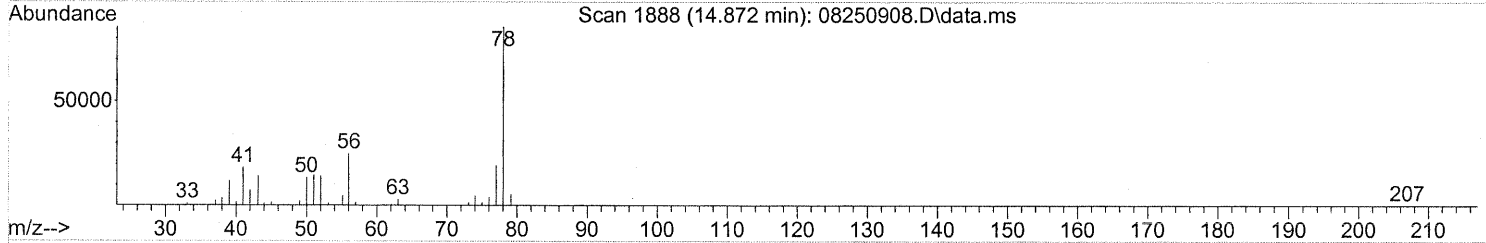
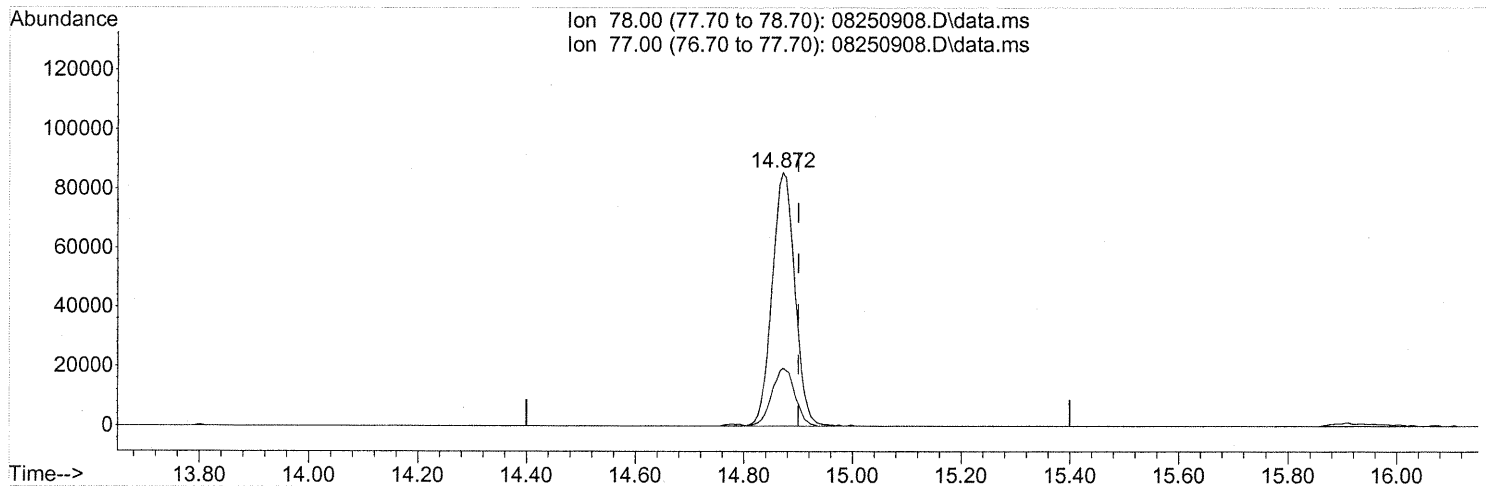
*After subtraction*

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

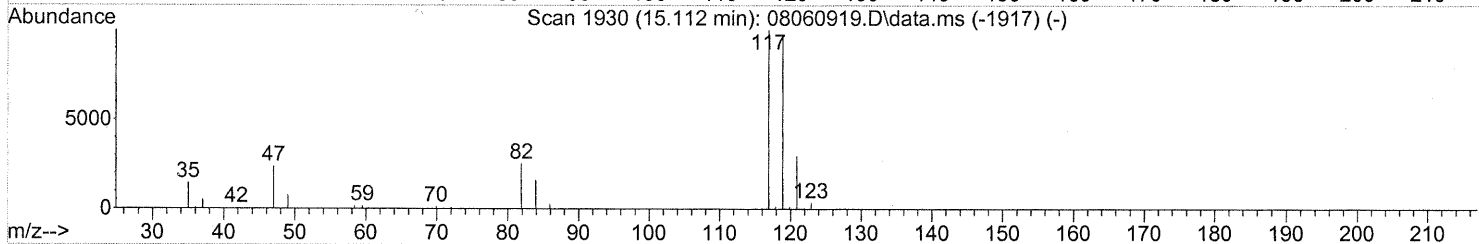
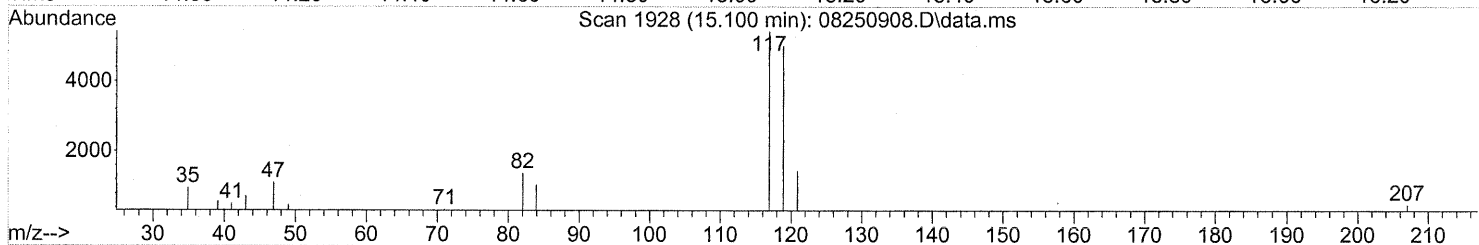
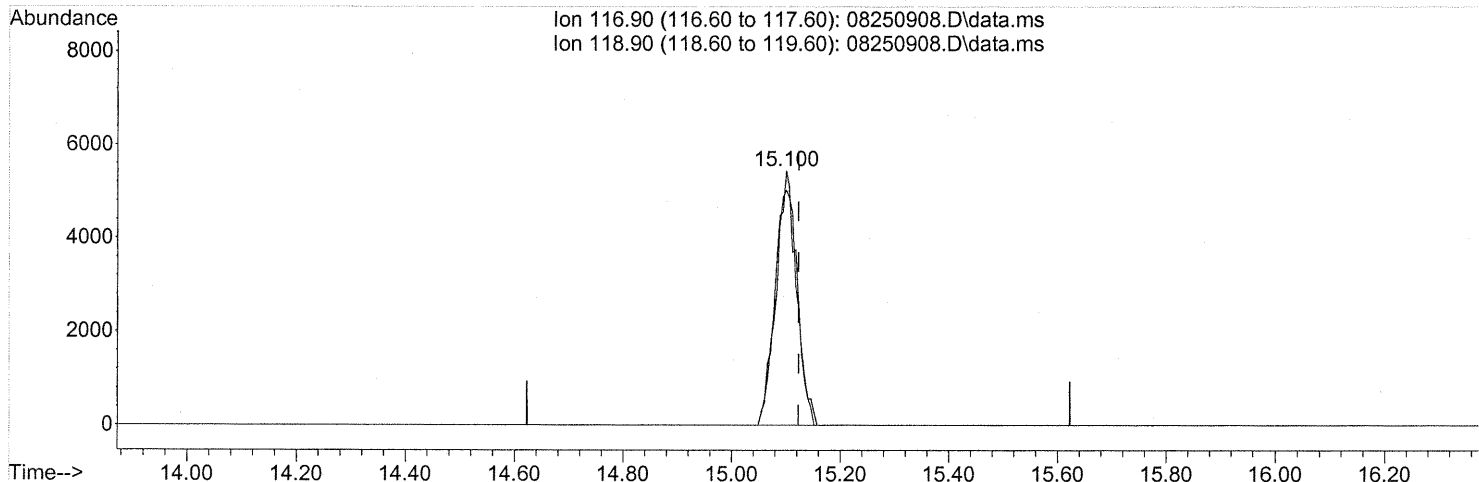
(41) Benzene (T)  
 14.872min (-0.029) 5.71ng  
 response 247450

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	22.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 1.07ng

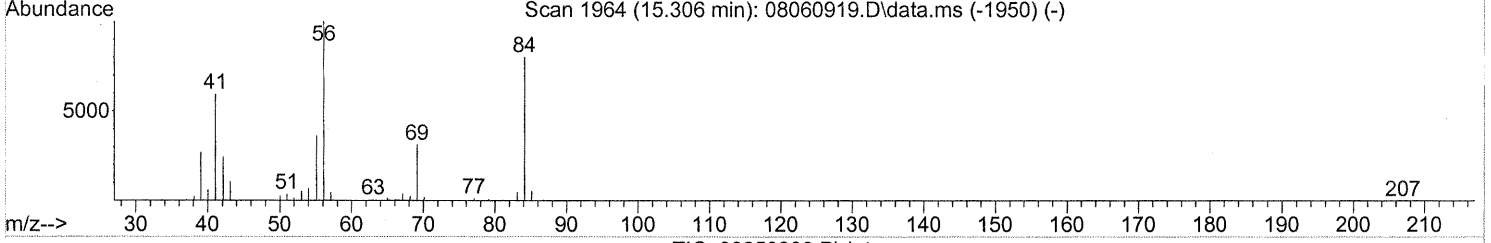
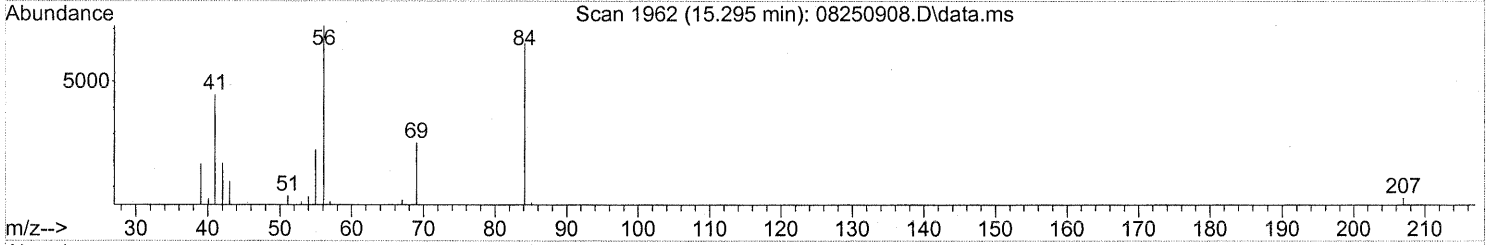
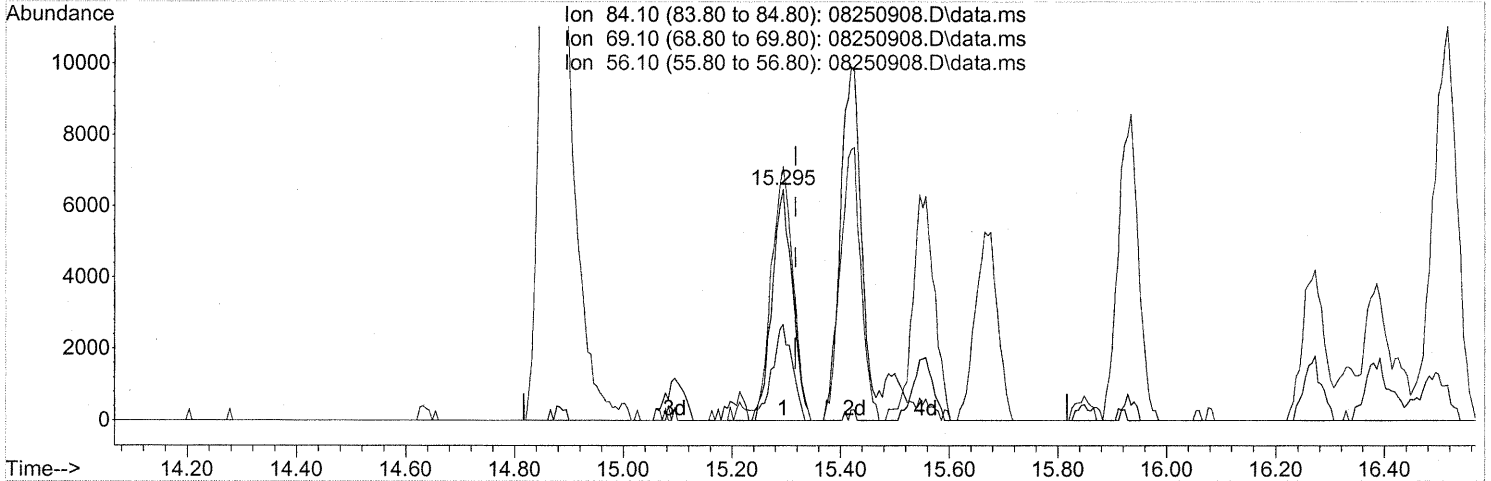
response 14723

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	95.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

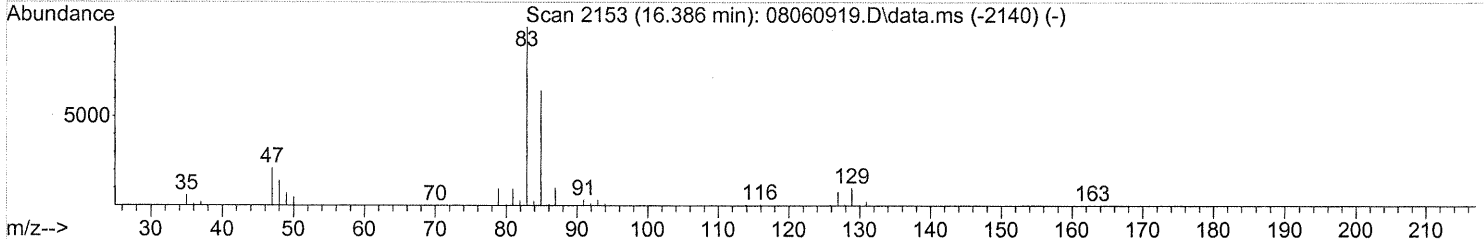
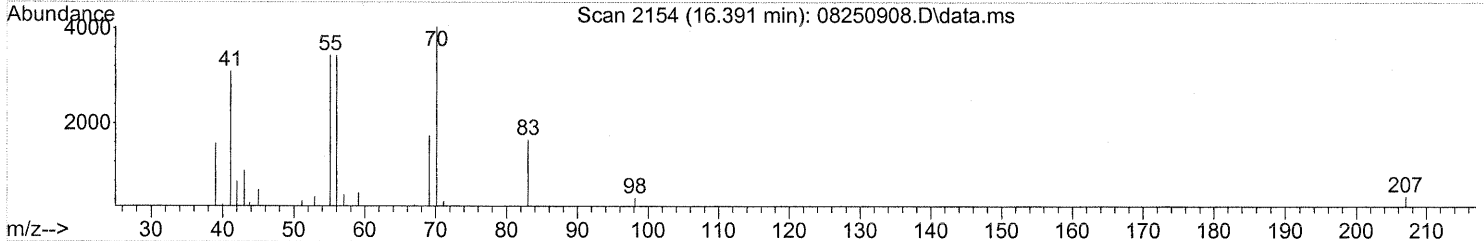
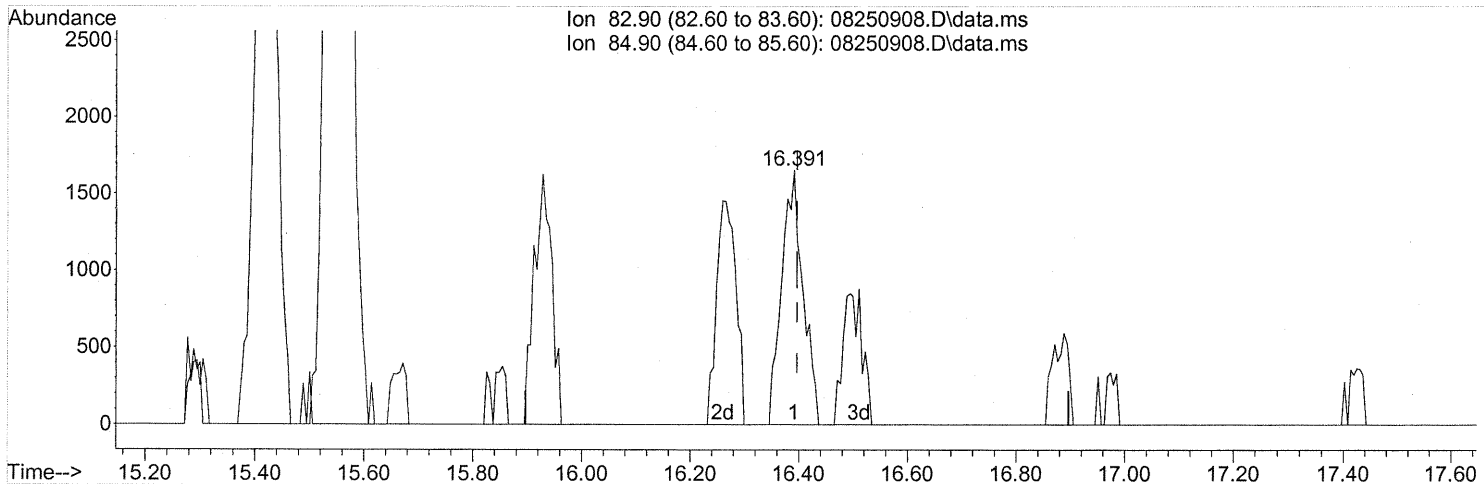
(43) Cyclohexane (T)  
 15.295min (-0.023) 1.07ng  
 response 16950

Ion	Exp%	Act%
84.10	100	100
69.10	38.70	41.23
56.10	127.50	117.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.391min (-0.006) 0.31ng

response 4474

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

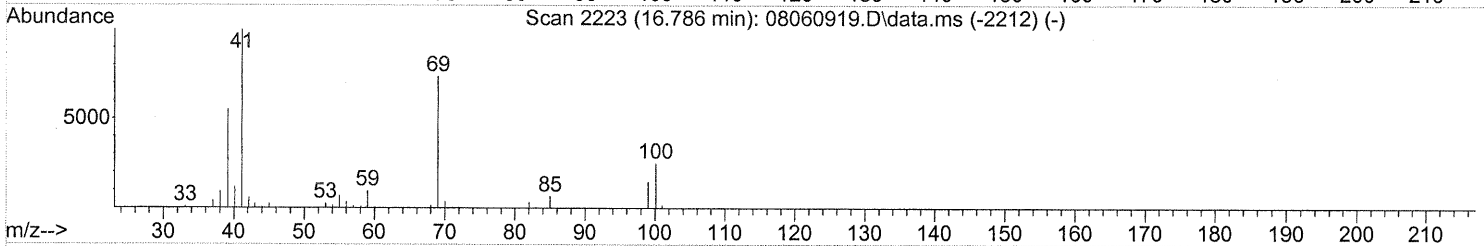
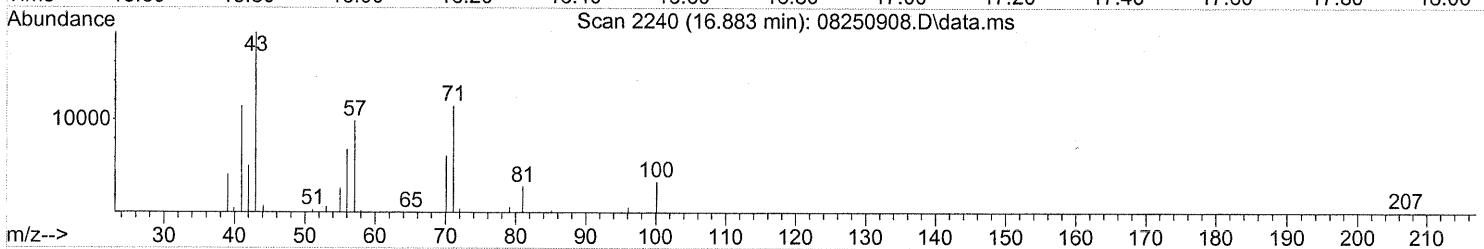
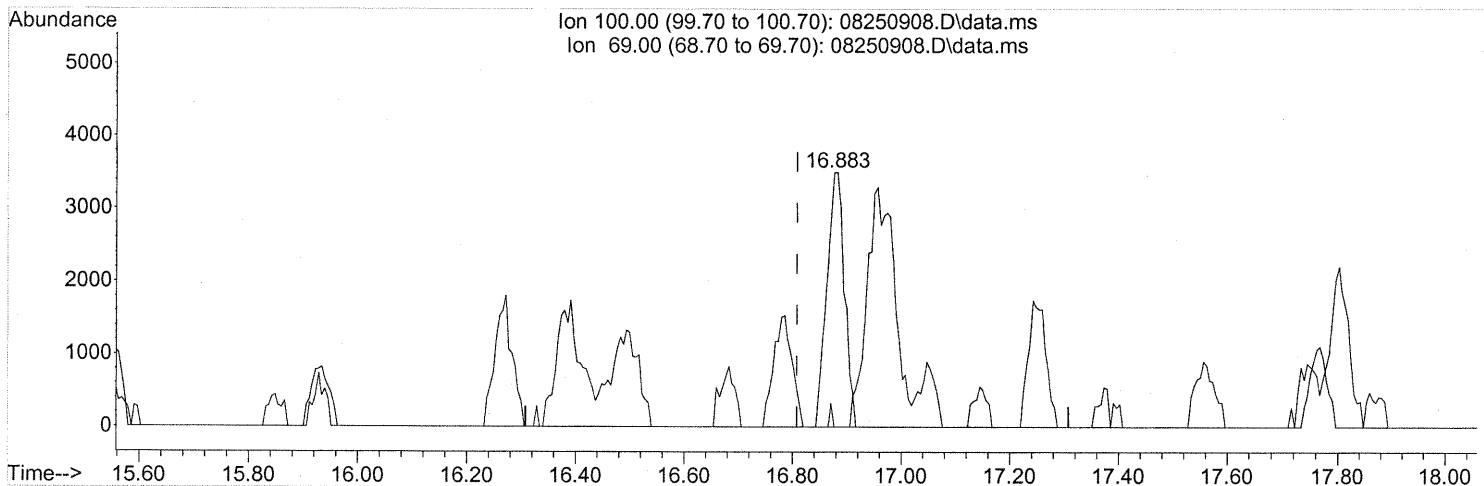
FP  
 W7 9/2/09

9/2/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(50) Methyl Methacrylate (T)

16.883min (+0.074) 1.97ng

response 7872

Ion	Exp%	Act%
100.00	100	100
69.00	294.80	1.38#
0.00	0.00	0.00
0.00	0.00	0.00

FP  
 WA 9/2/09

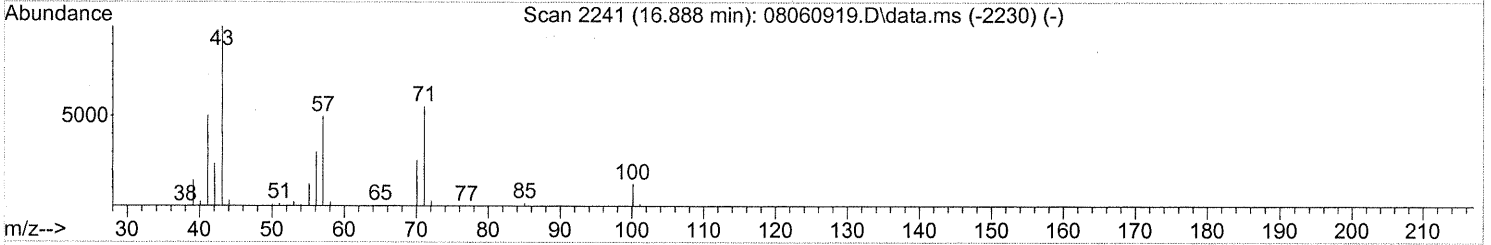
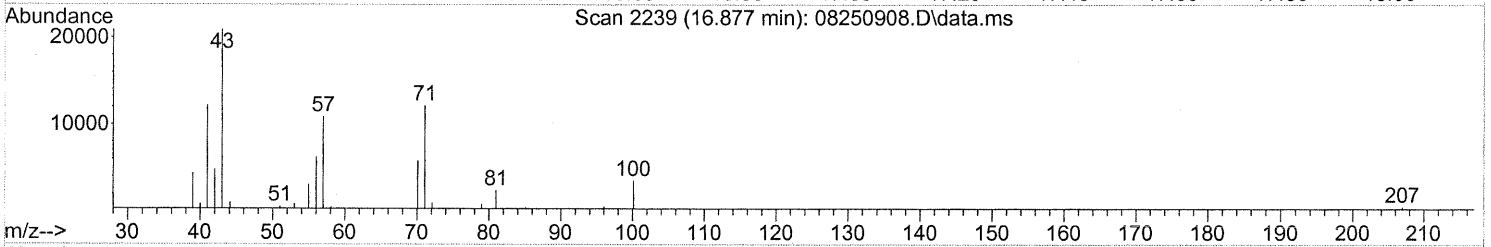
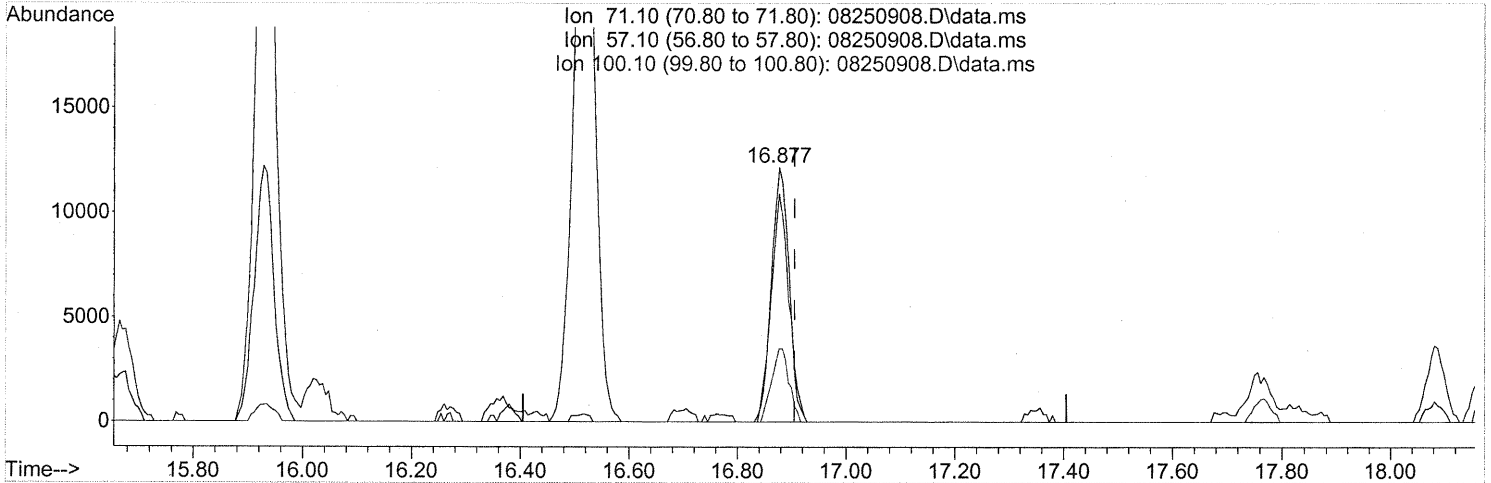
WA 9/3/09



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

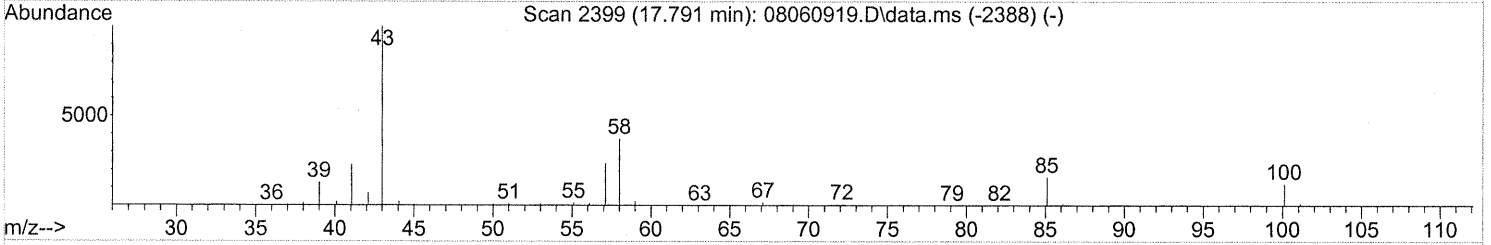
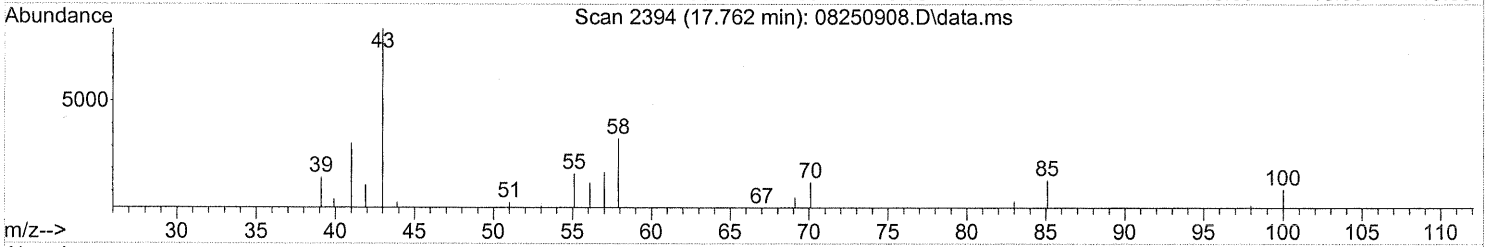
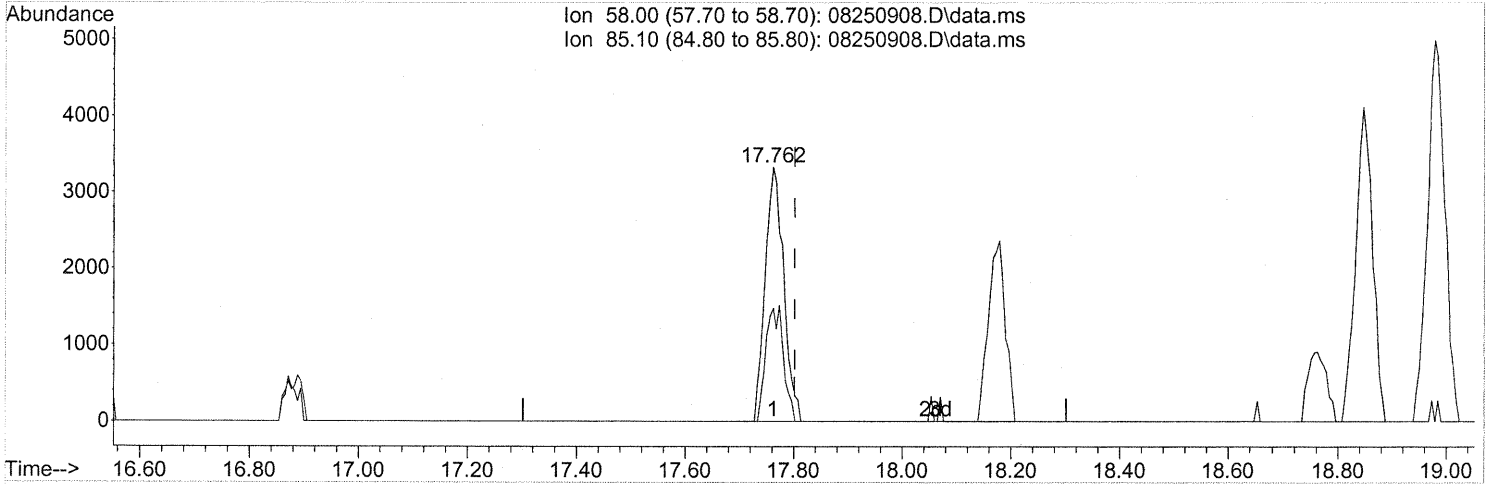
(51) n-Heptane (T)  
 16.877min (-0.029) 2.42ng  
 response 28094

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	87.25
100.10	26.40	28.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(53) 4-Methyl-2-pentanone (T)

17.762min (-0.040) 0.75ng

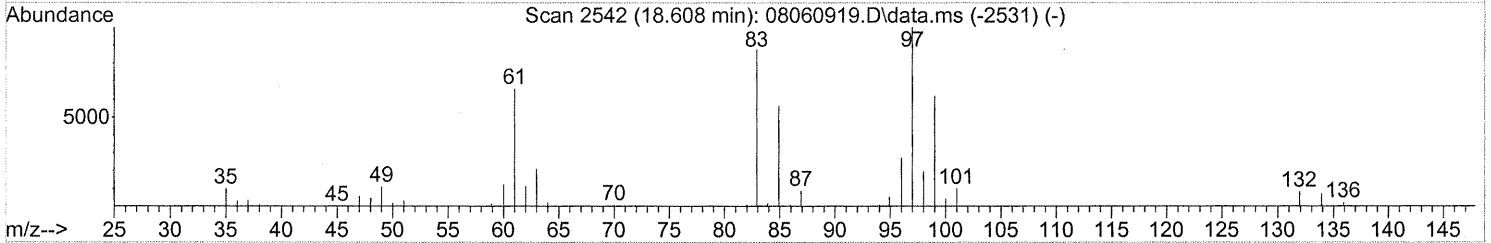
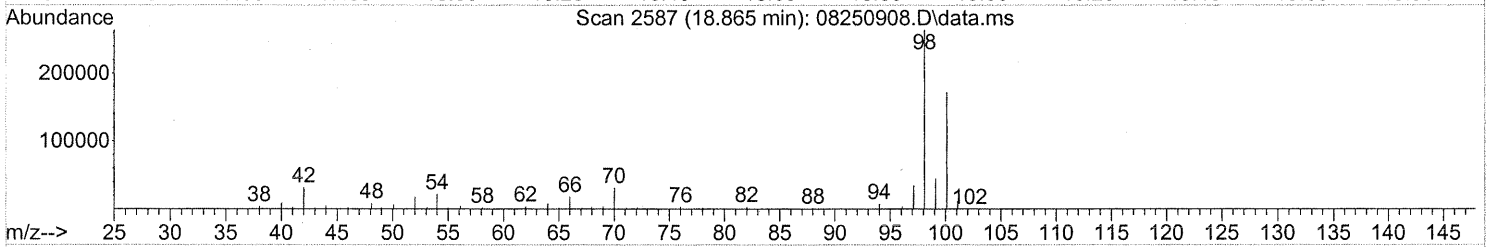
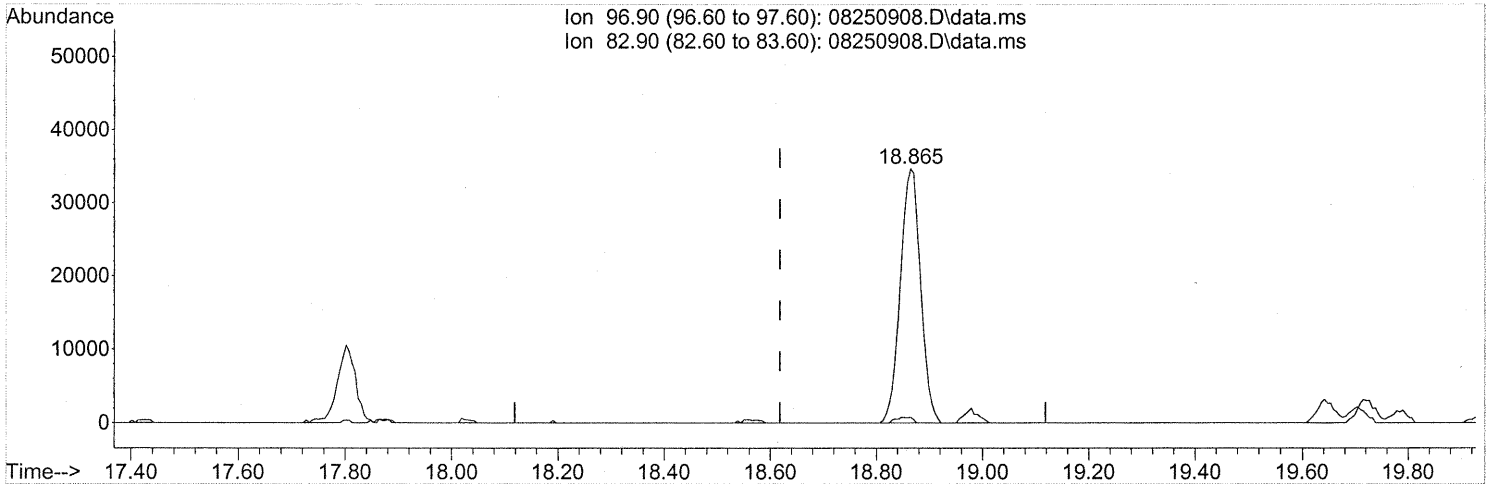
response 7840

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	42.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(55) 1,1,2-Trichloroethane (T)

18.865min (+0.246) 9.60ng

response 91339

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.72#
0.00	0.00	0.00
0.00	0.00	0.00

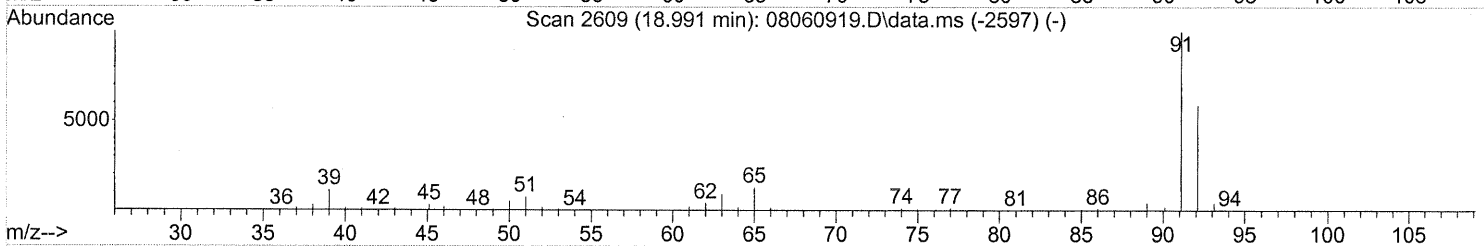
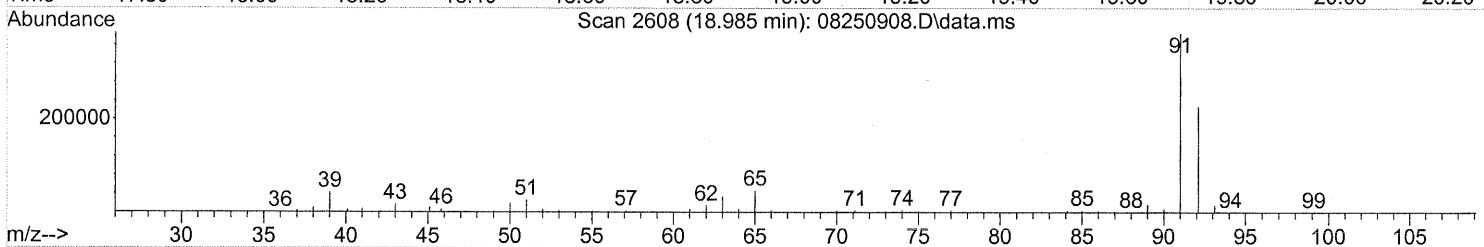
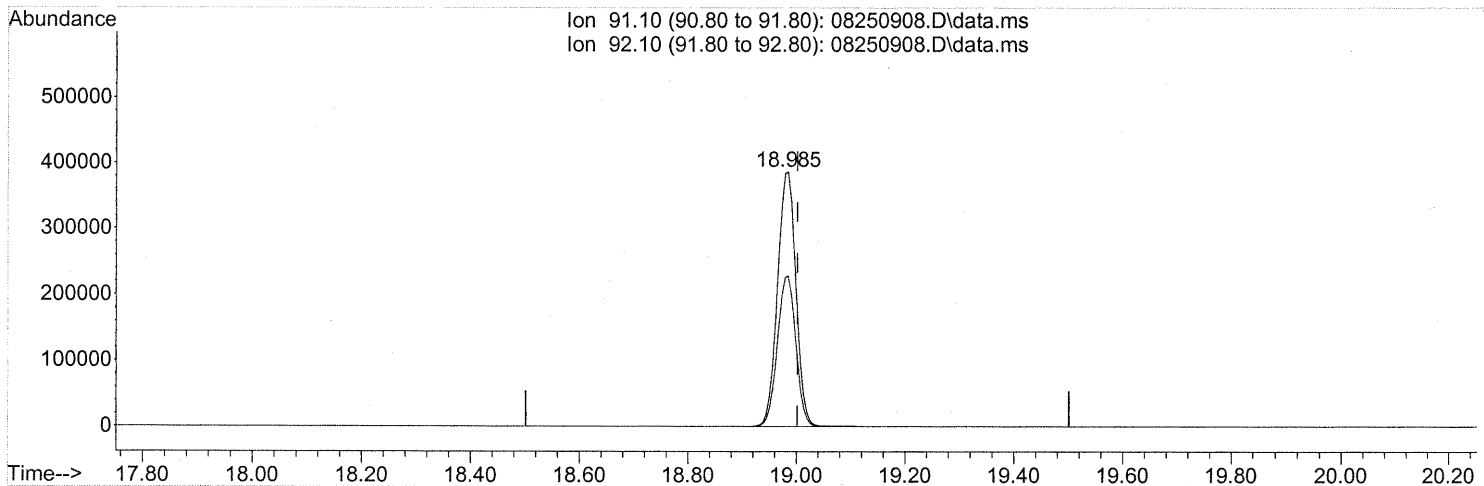
FP W7  
9/2/09

449/13/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

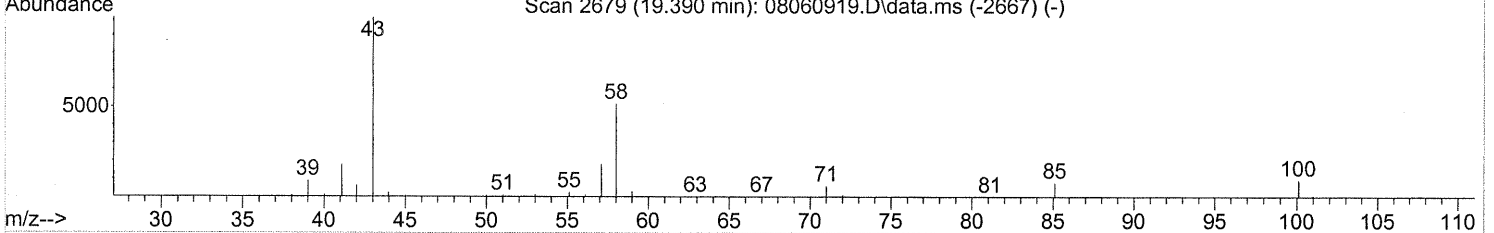
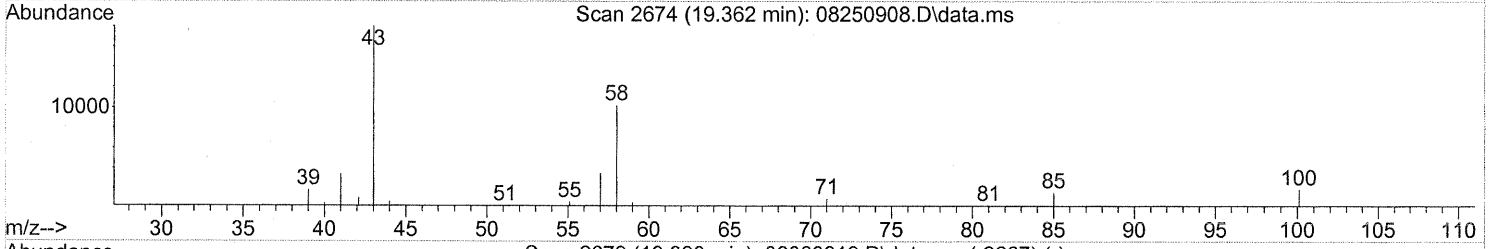
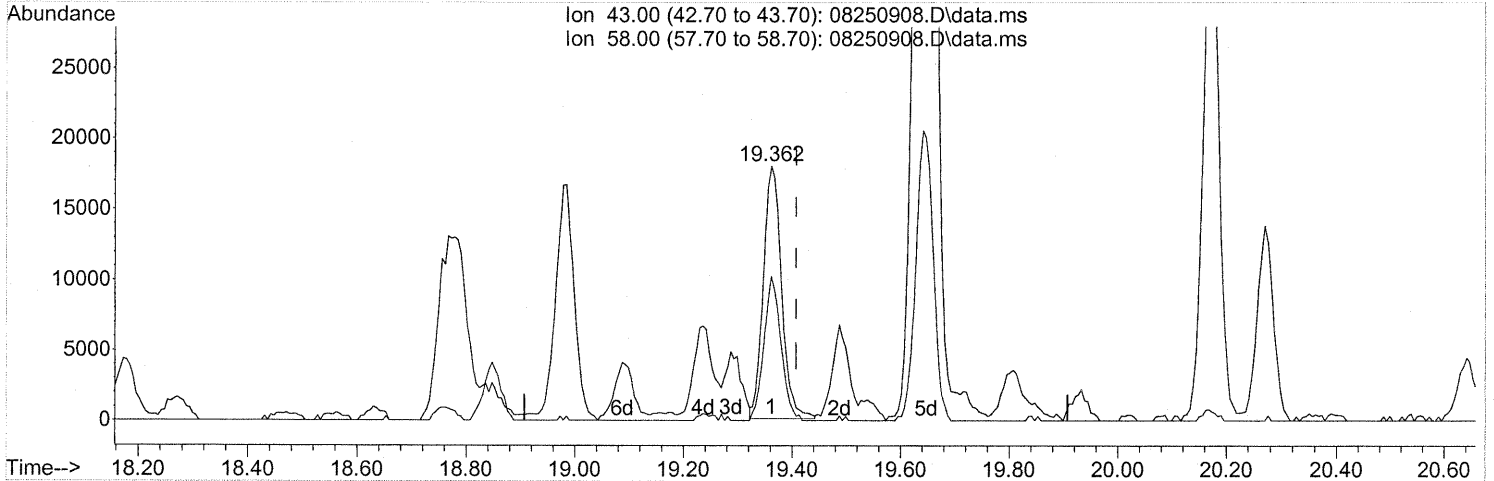
(58) Toluene (T)  
 18.985min (-0.017) 22.40ng  
 response 903986

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.15
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 1.56ng

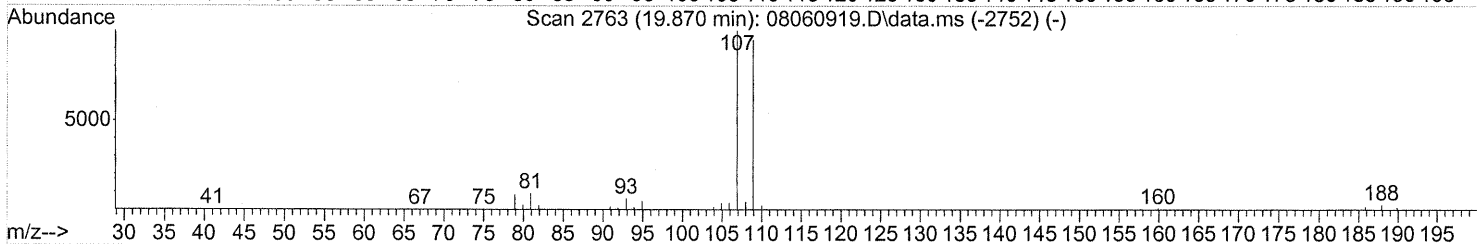
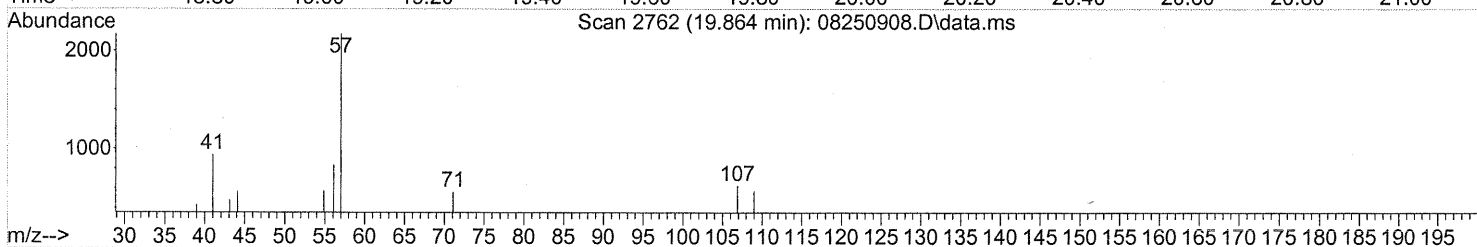
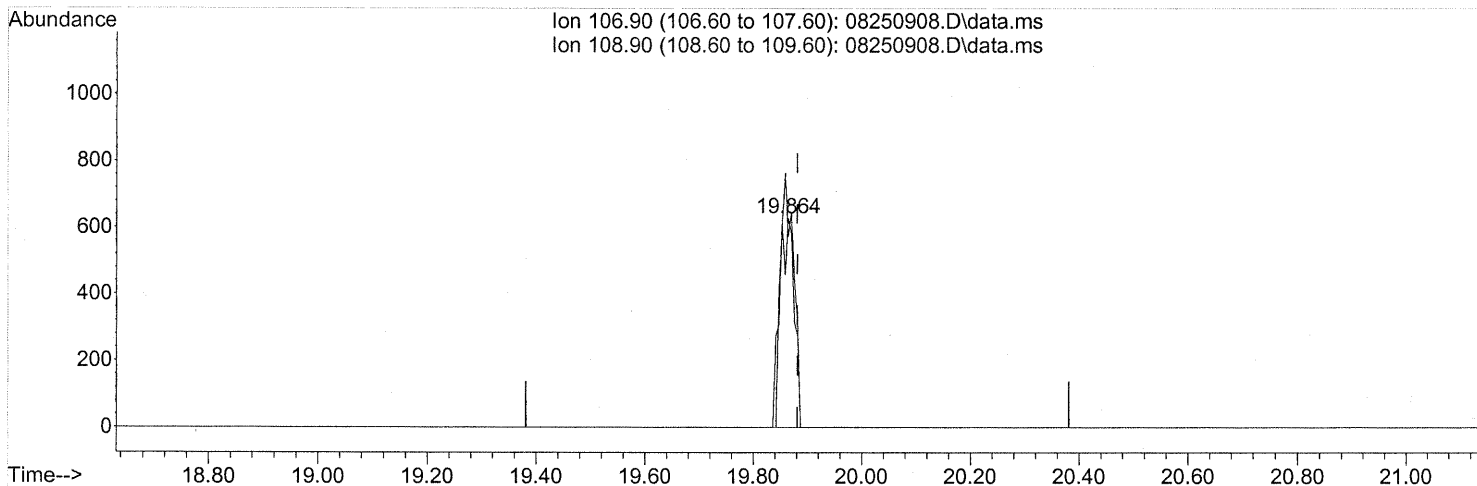
response 41918

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	53.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(61) 1,2-Dibromoethane (T)

19.864min (-0.017) 0.11ng

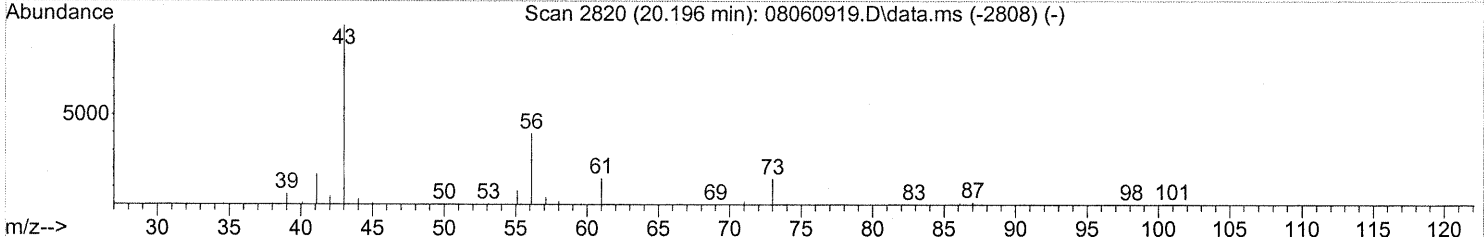
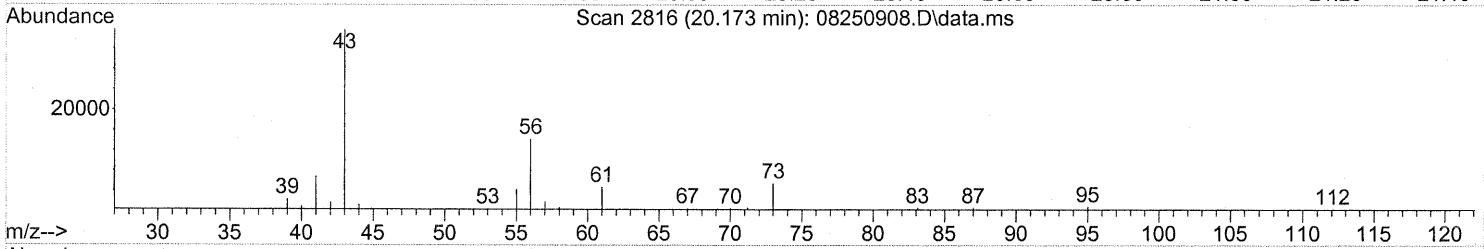
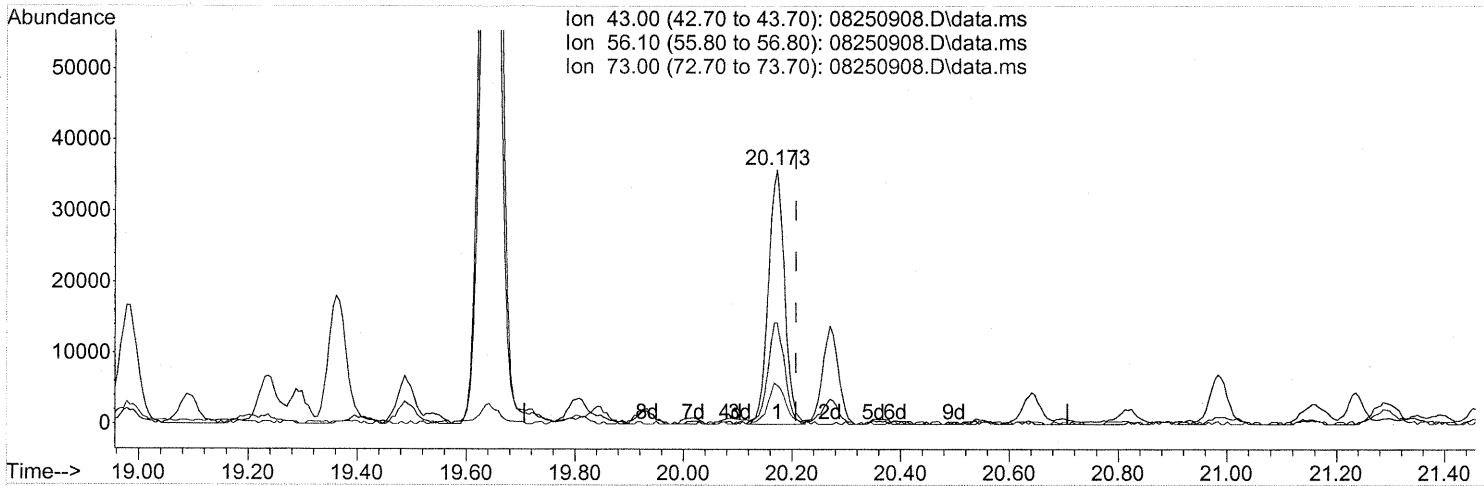
response 1117

Ion	Exp%	Act%
106.90	100	100
108.90	92.30	119.87#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

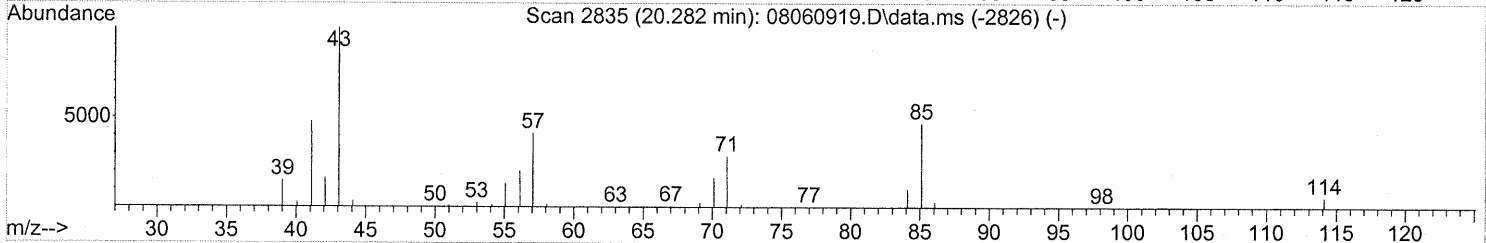
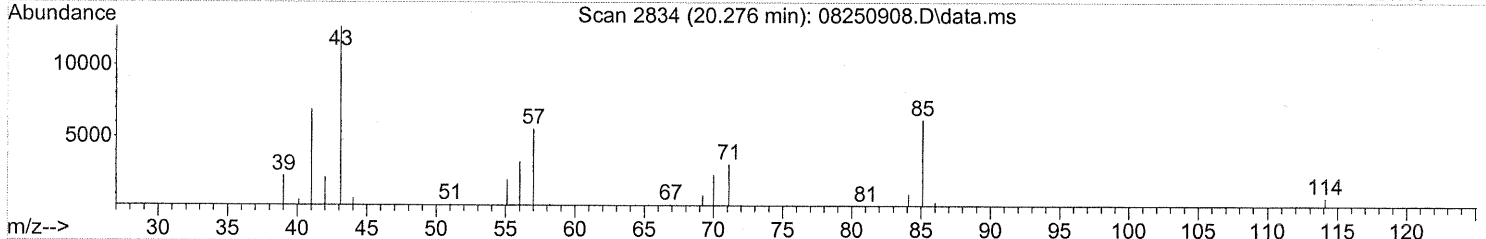
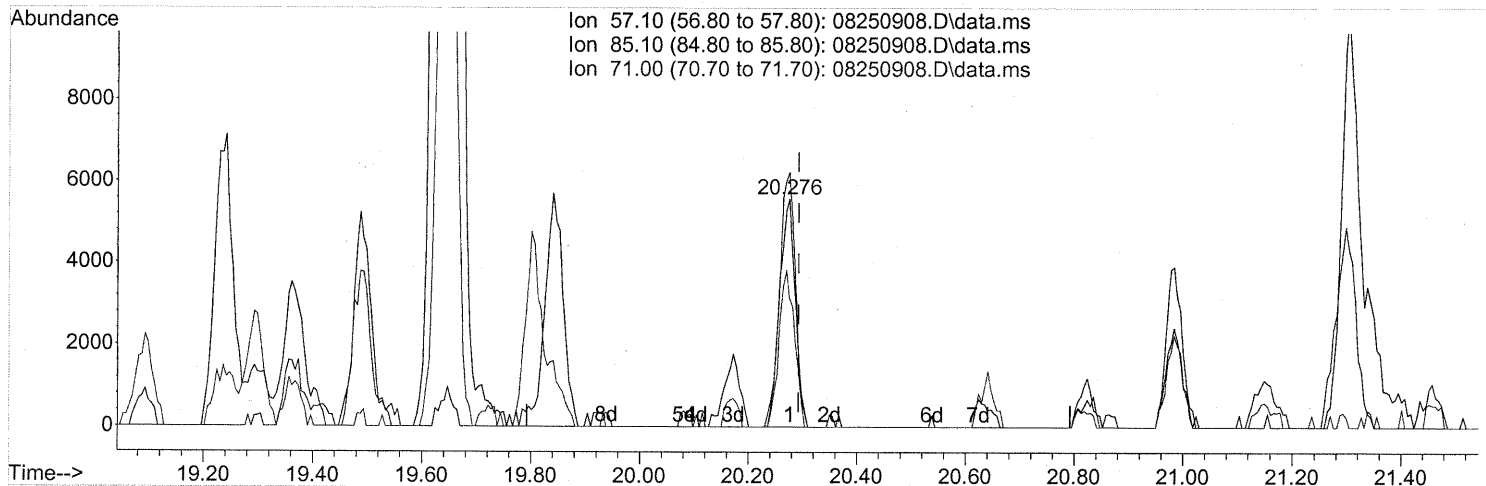
(62) n-Butyl Acetate (T)  
 20.173min (-0.034) 2.36ng  
 response 74645

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	40.99
73.00	14.80	17.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(63) n-Octane (T)  
 20.276min (-0.017) 1.16ng  
 response 11274

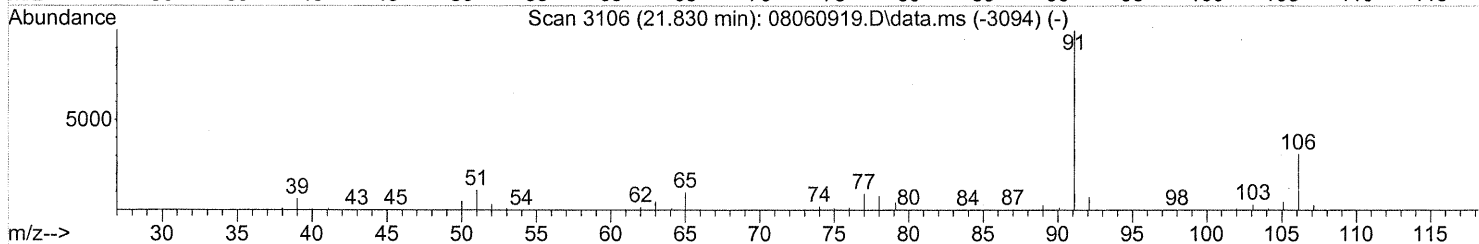
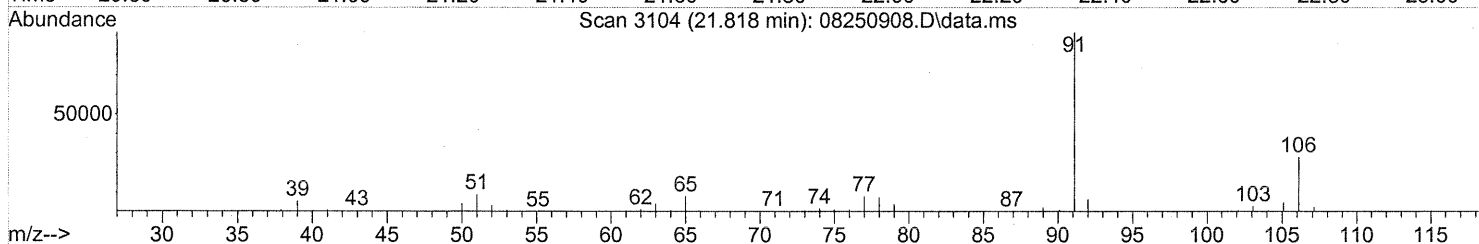
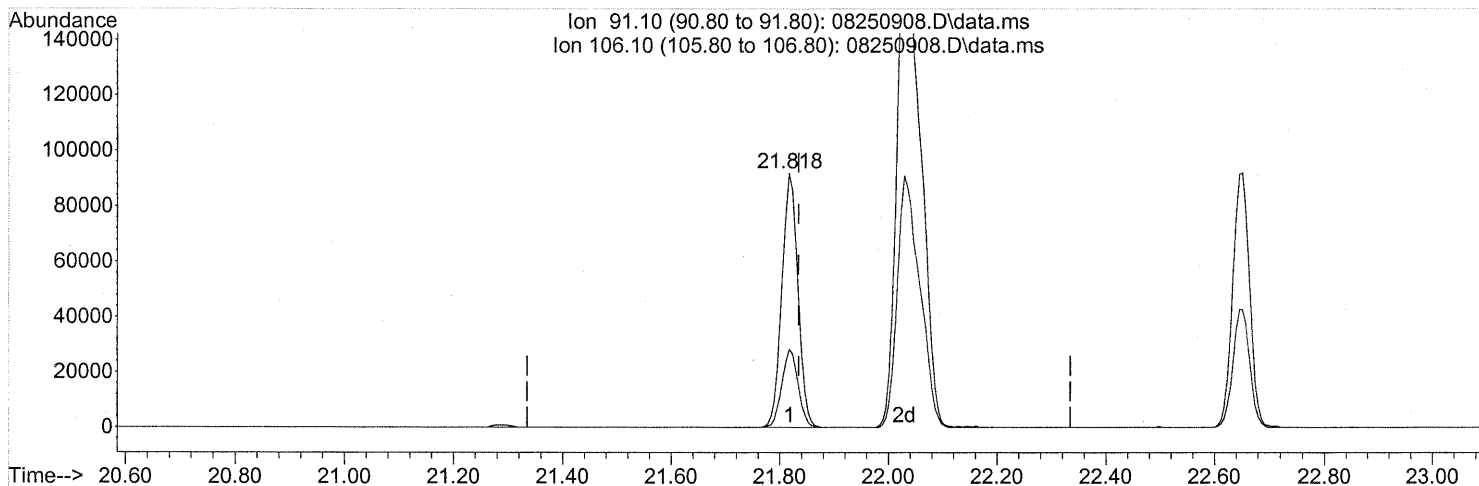
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	110.39
71.00	68.10	66.72
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

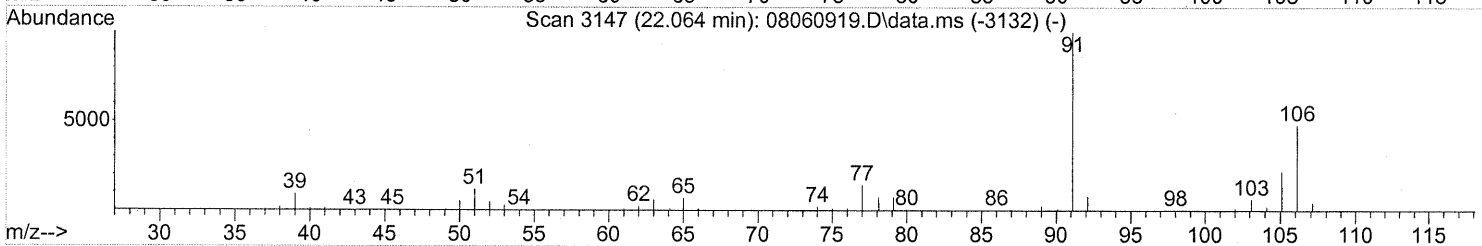
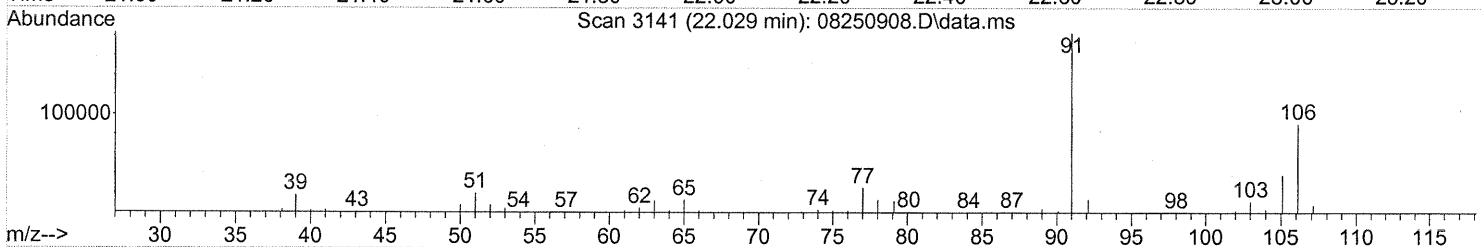
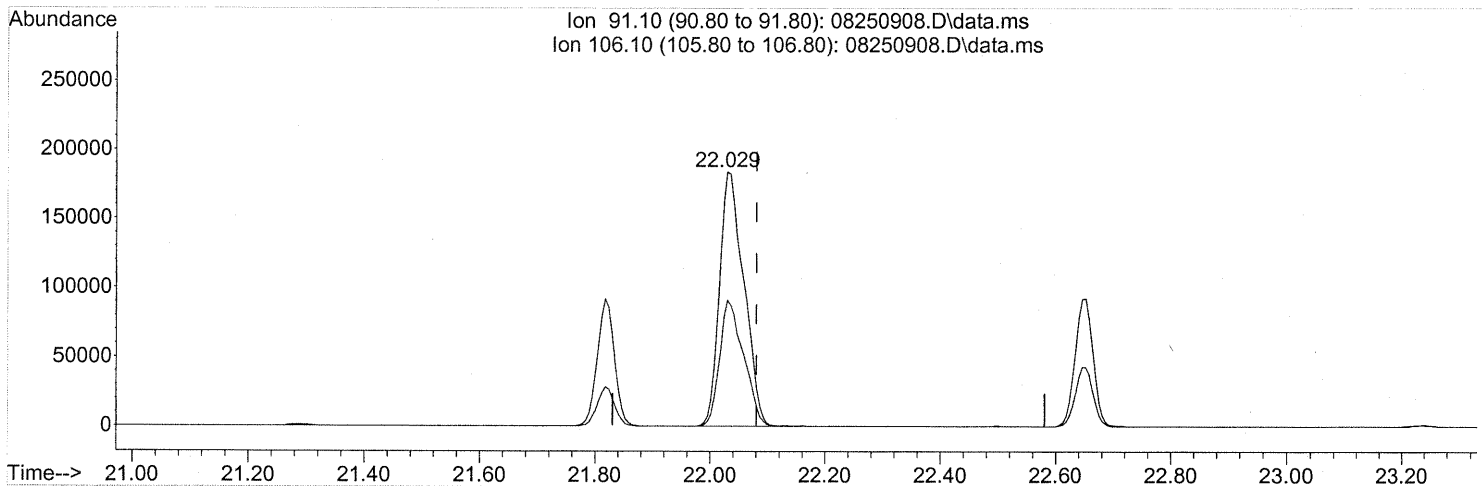
(66) Ethylbenzene (T)  
 21.818min (-0.017) 4.08ng  
 response 188125

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(67) m- & p-Xylenes (T)

22.029min (-0.051) 14.46ng

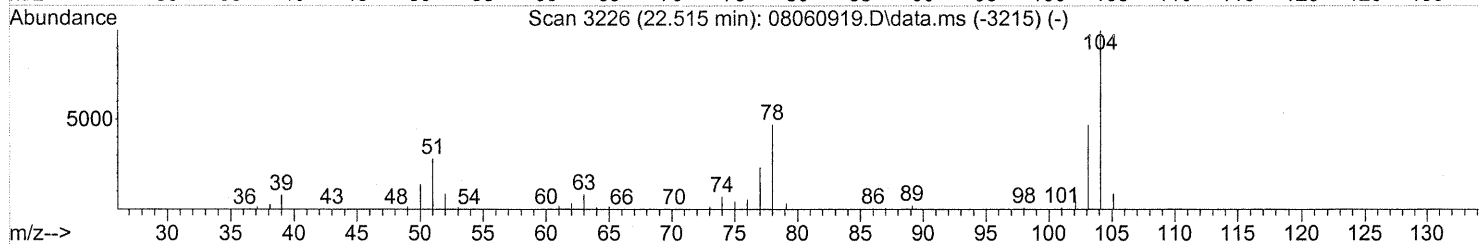
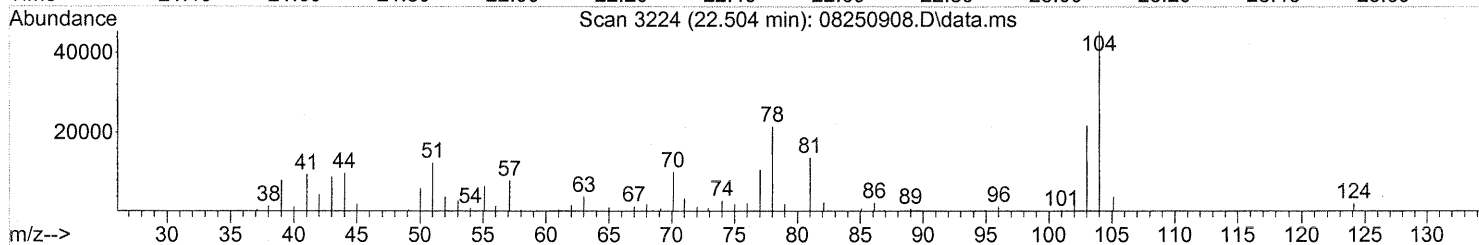
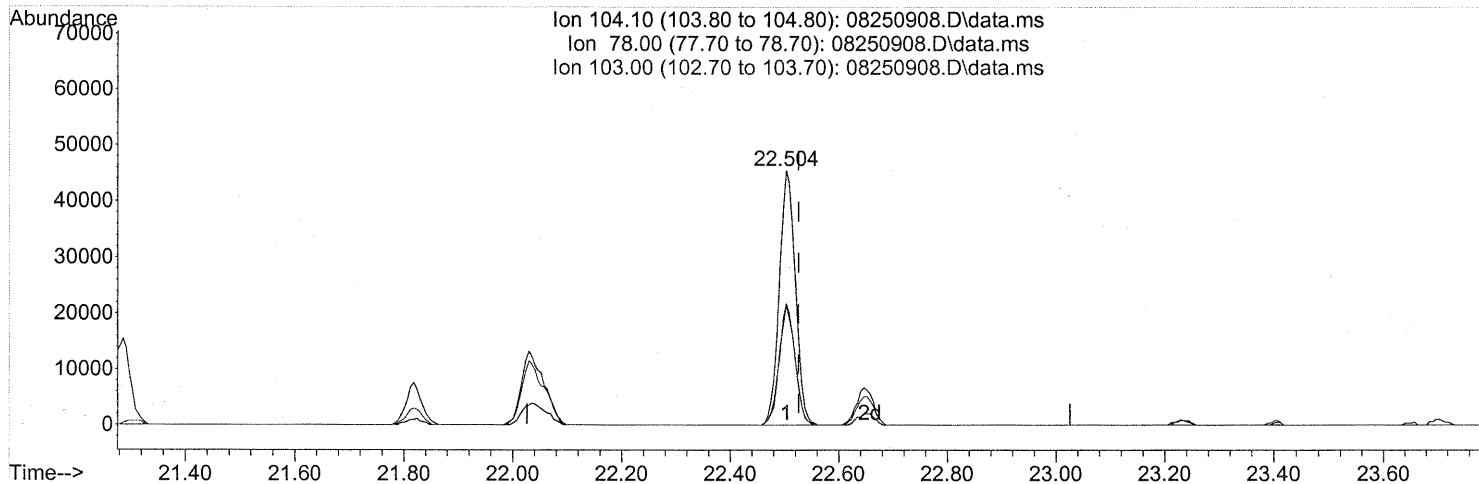
response 539840

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

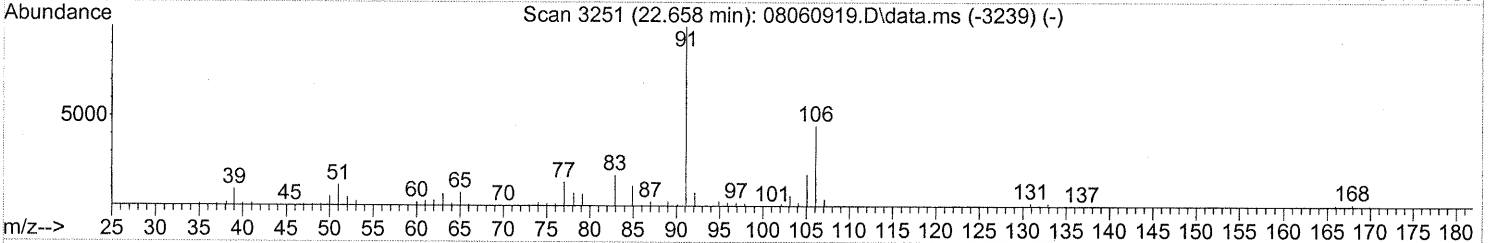
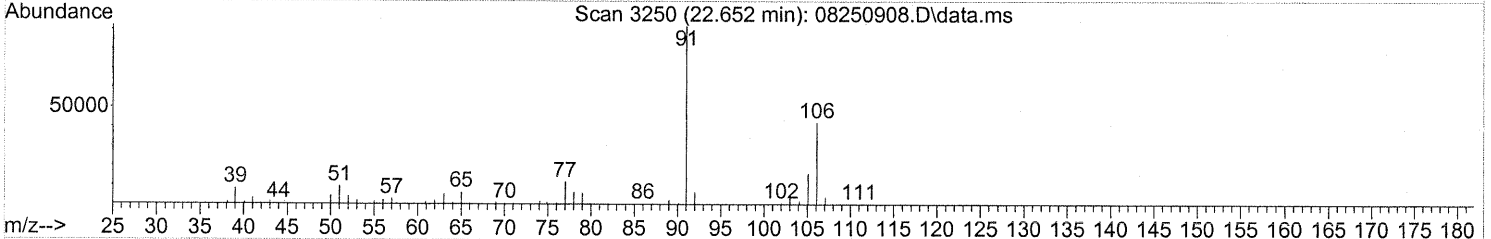
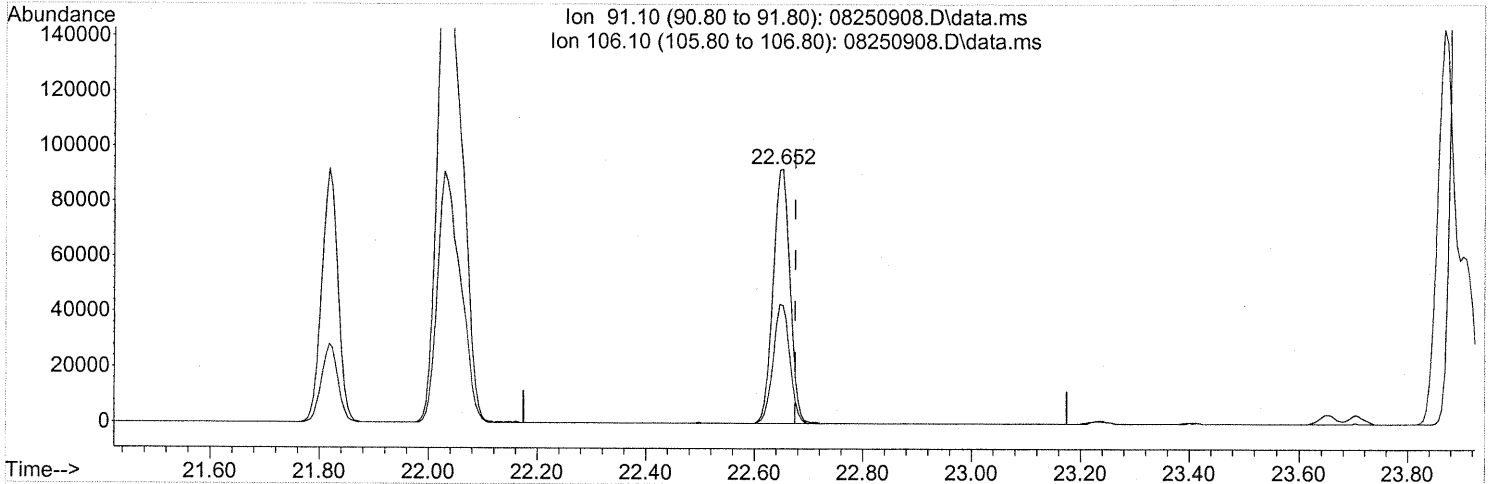
(69) Styrene (T)  
 22.504min (-0.023) 3.46ng  
 response 93309

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	45.96
103.00	46.20	47.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 5.31ng

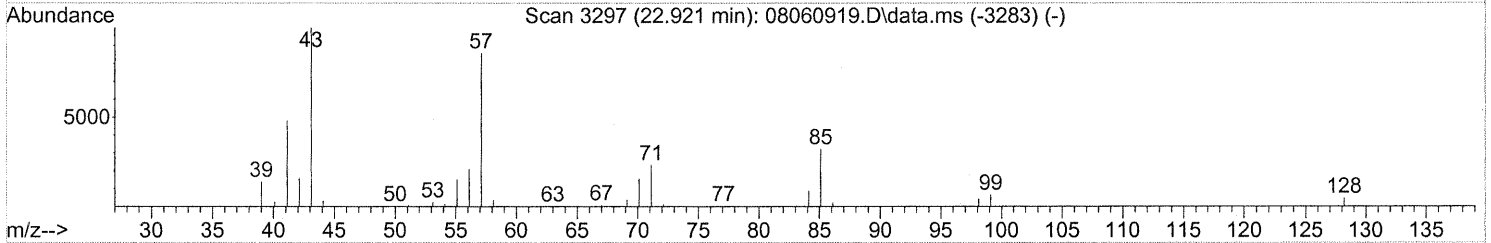
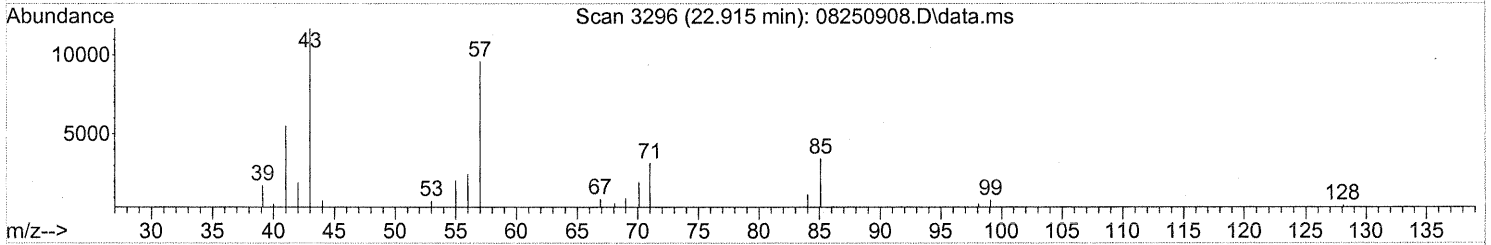
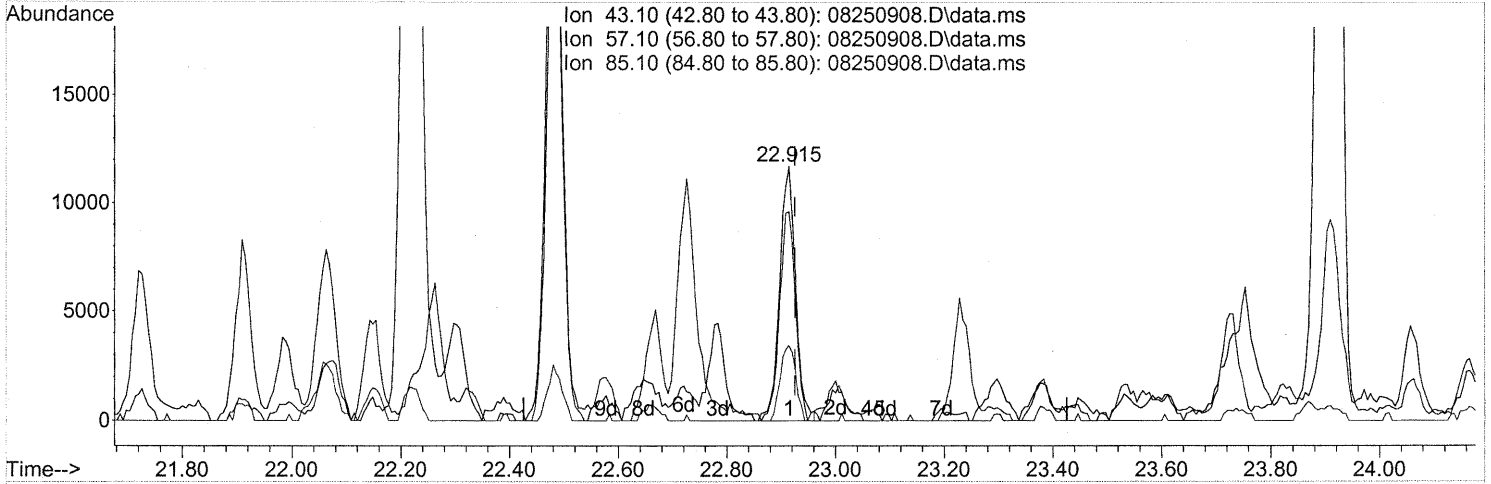
response 198588

Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

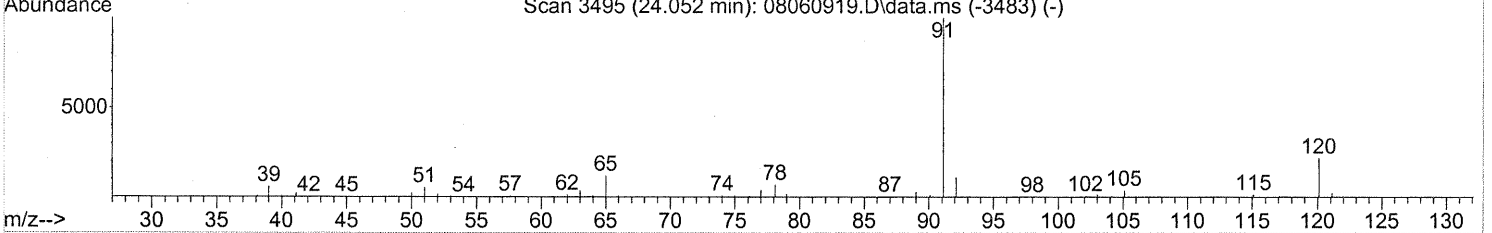
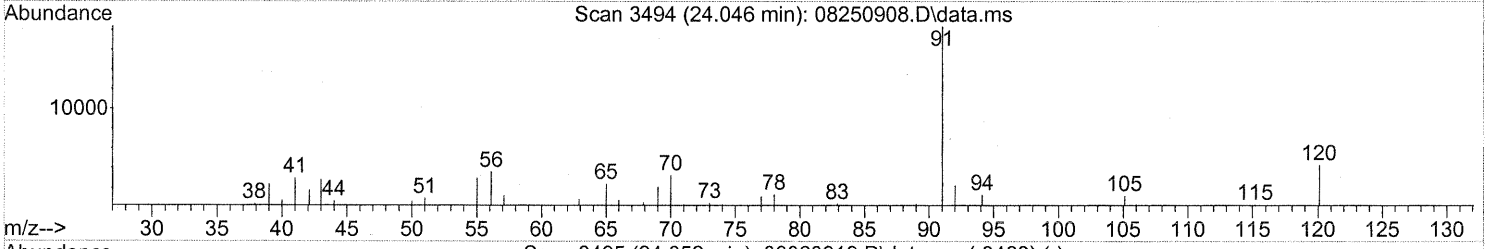
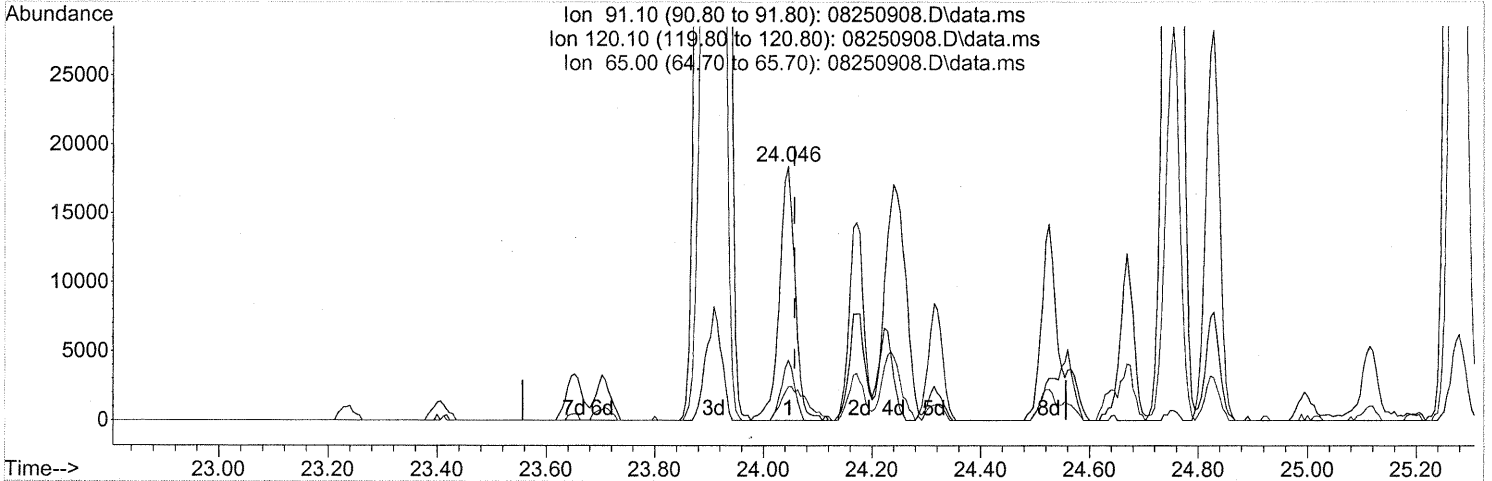
(71) n-Nonane (T)  
 22.915min (-0.011) 0.96ng  
 response 23927

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	81.22
85.10	30.40	28.61
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.62ng

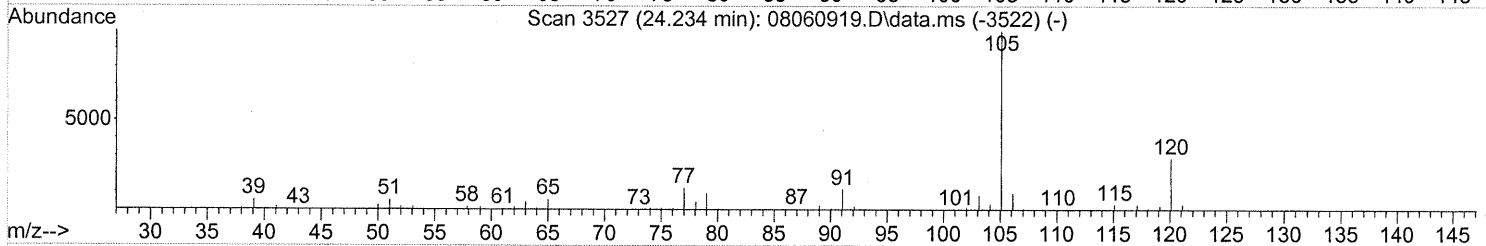
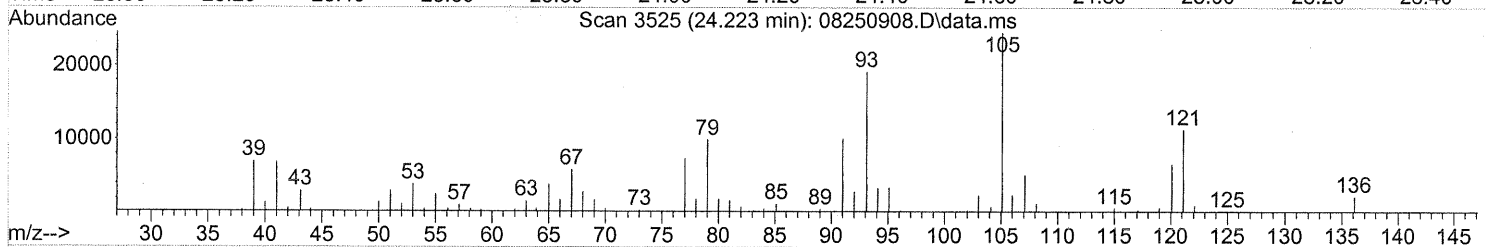
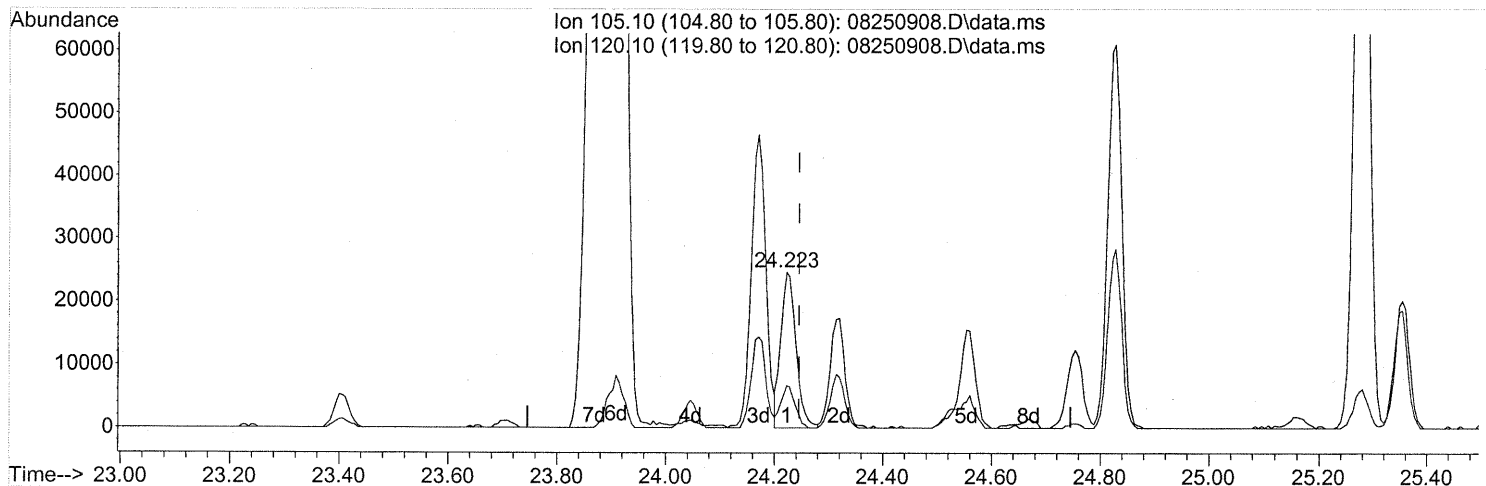
response 36865

Ion	Exp%	Act%
91.10	100	100
120.10	21.60	19.93
65.00	12.00	21.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(78) 4-Ethyltoluene (T)

24.223min (-0.023) 1.09ng

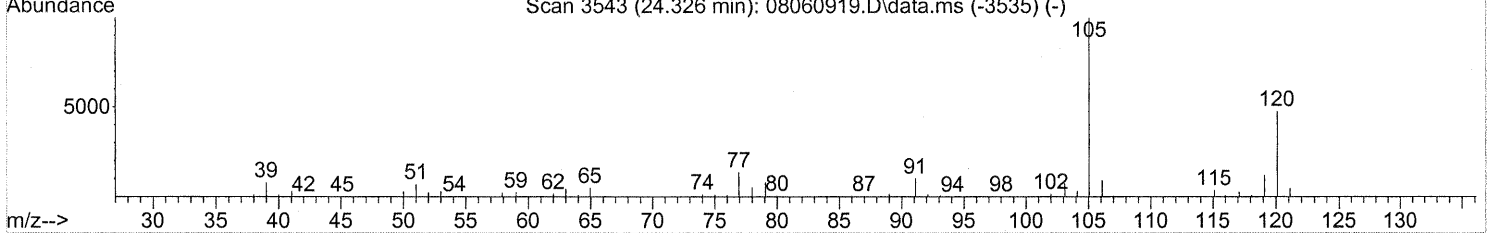
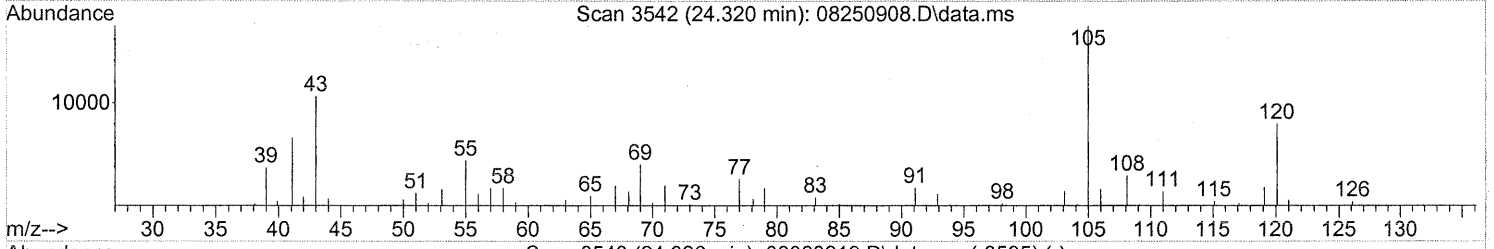
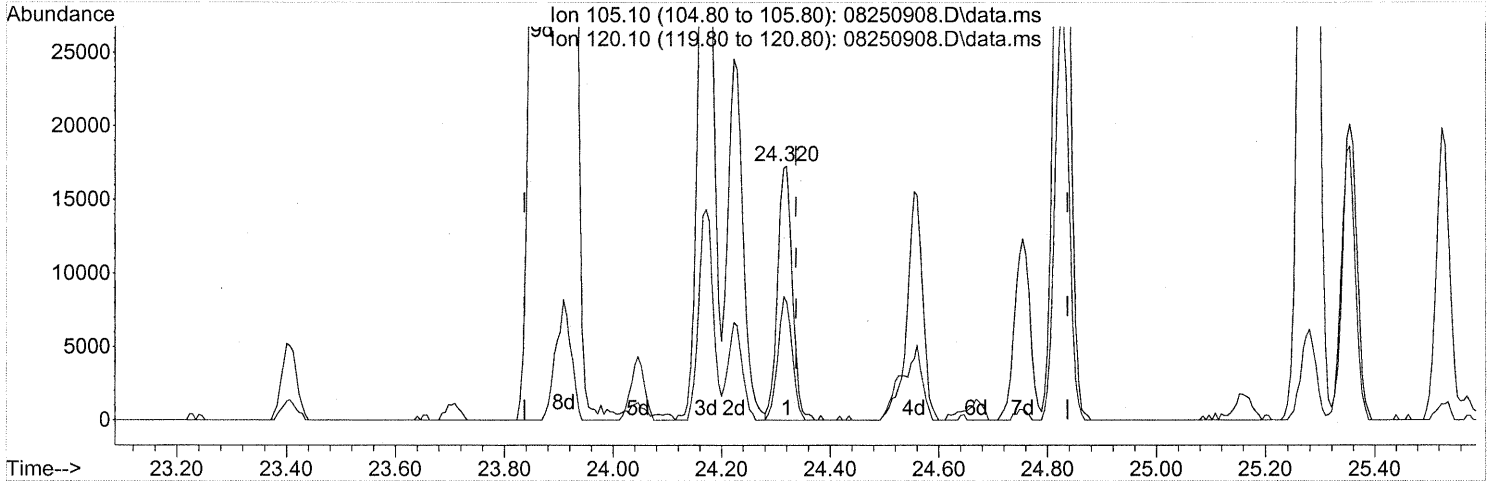
response 47554

Ion	Exp%	Act%
105.10	100	100
120.10	28.40	25.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(79) 1,3,5-Trimethylbenzene (T)

24.320min (-0.017) 0.89ng

response 32711

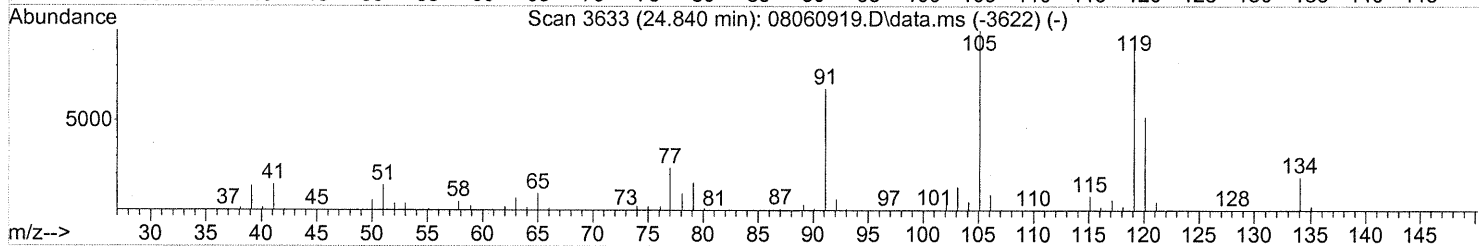
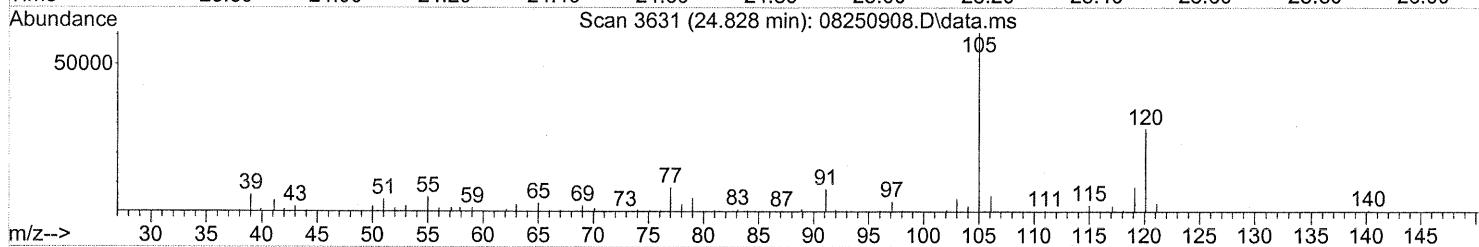
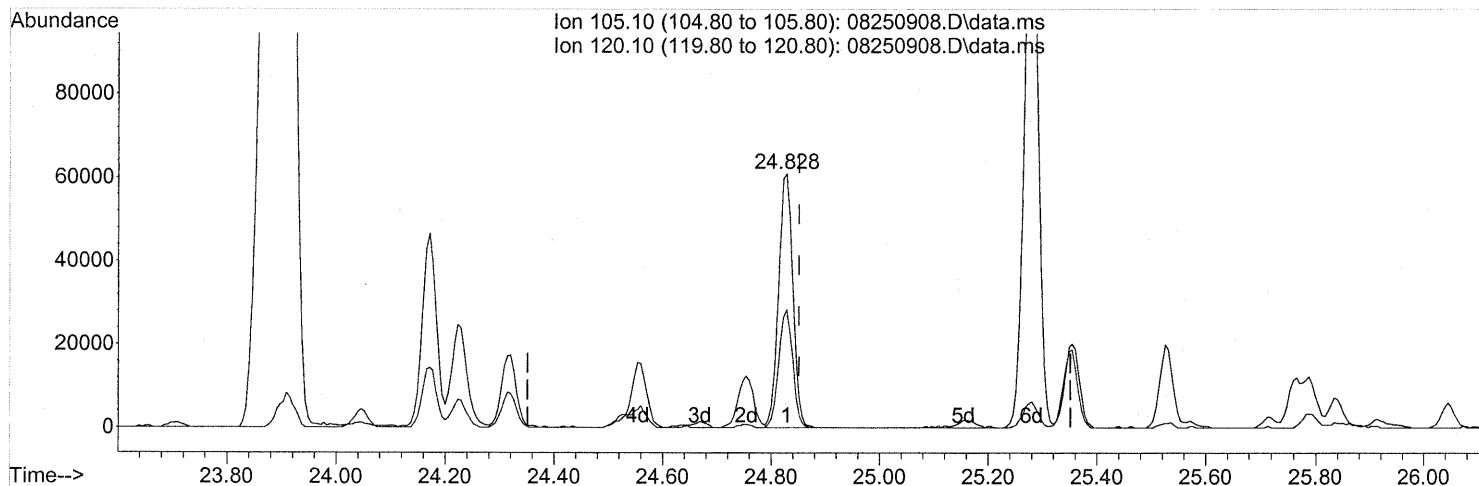
Ion	Exp%	Act%
105.10	100	100
120.10	46.80	46.65
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(82) 1,2,4-Trimethylbenzene (T)

24.828min (-0.023) 2.95ng

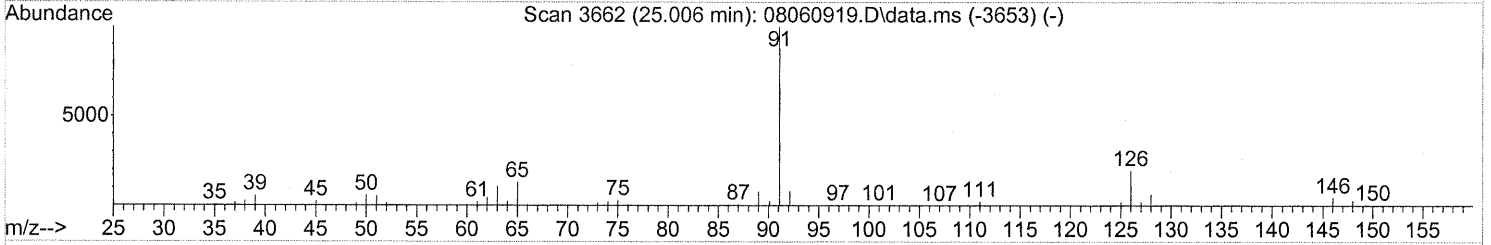
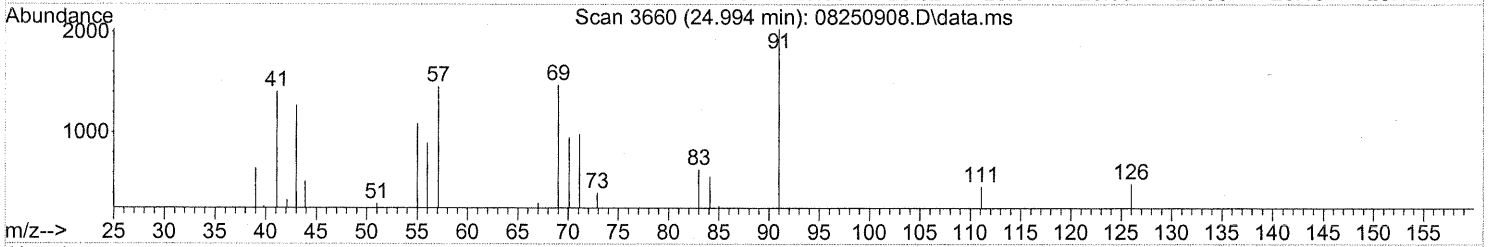
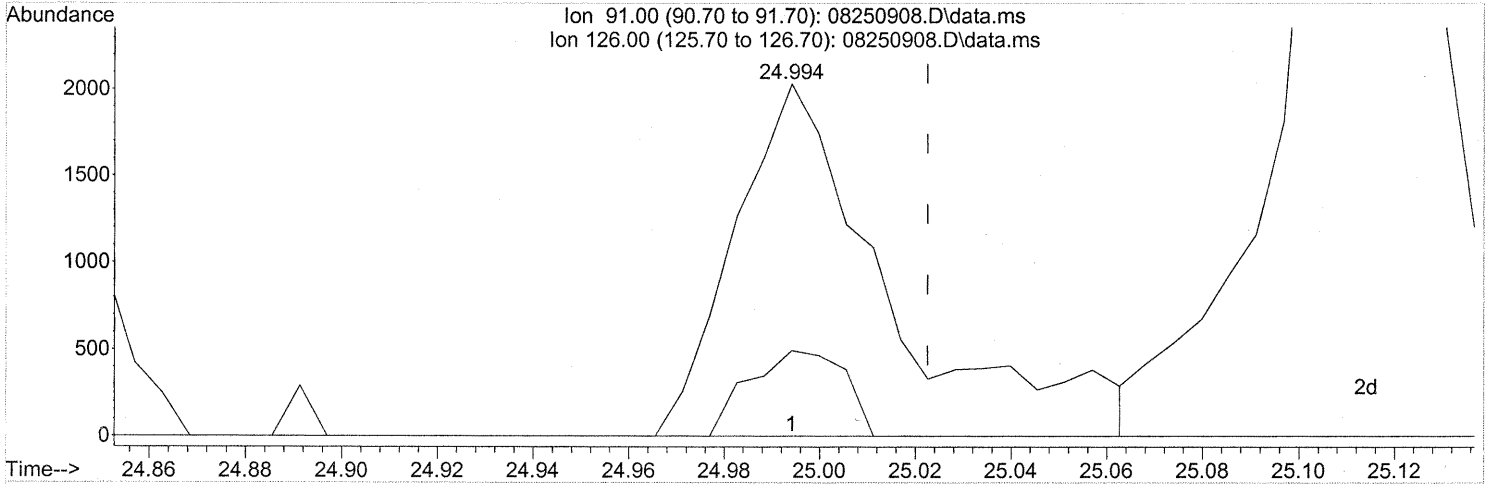
response 111185

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250908.D  
Acq On : 25 Aug 2009 14:39  
Operator : WA/CC  
Sample : P0902875-002 (1000mL)  
Misc : Environmental Health 102265  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



(84) Benzyl Chloride (T)  
24.994min (-0.029) 0.13ng  
response 4526

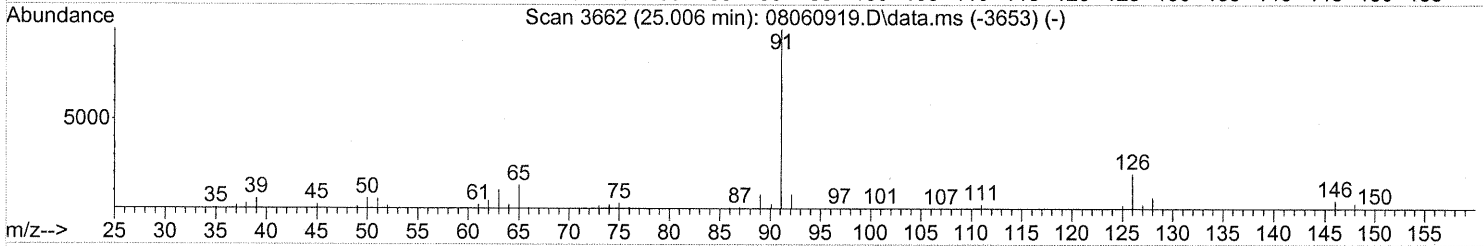
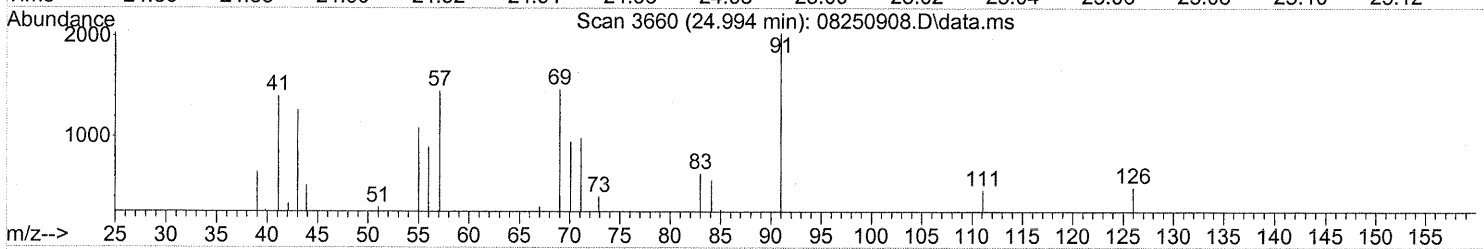
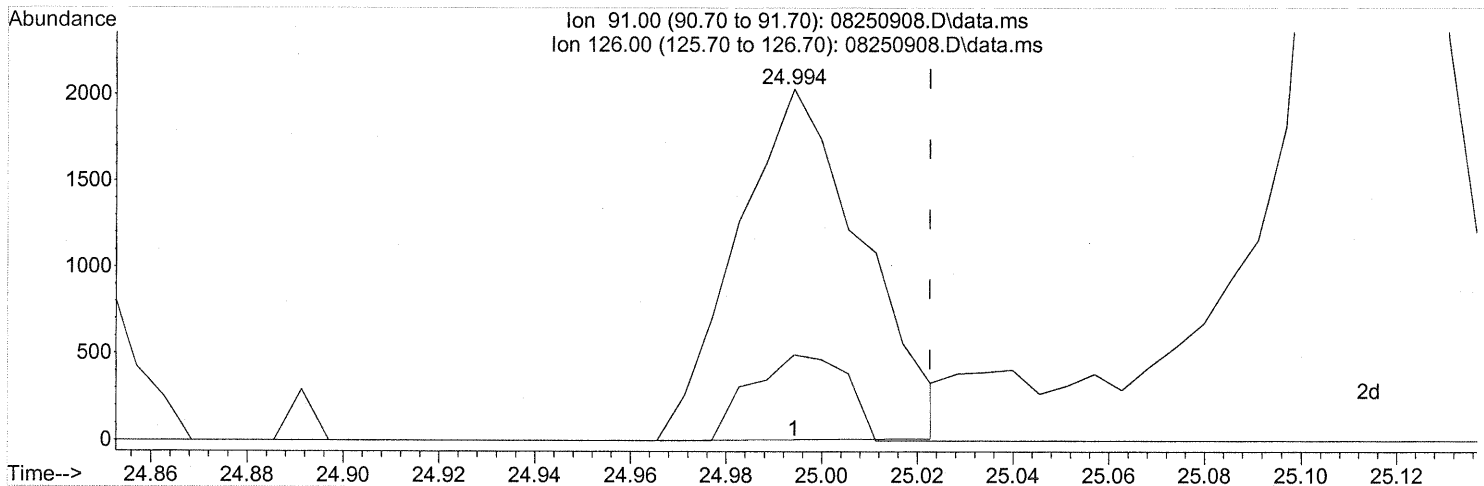
Ion	Exp%	Act%
91.00	100	100
126.00	19.50	15.11
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(84) Benzyl Chloride (T)  
 24.994min (-0.029) 0.10ng m  
 response 3676

Ion	Exp%	Act%
91.00	100	100
126.00	19.50	18.61
0.00	0.00	0.00
0.00	0.00	0.00

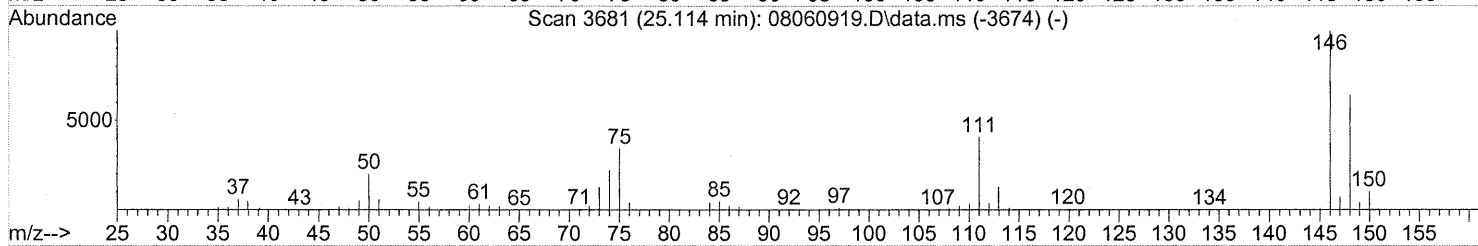
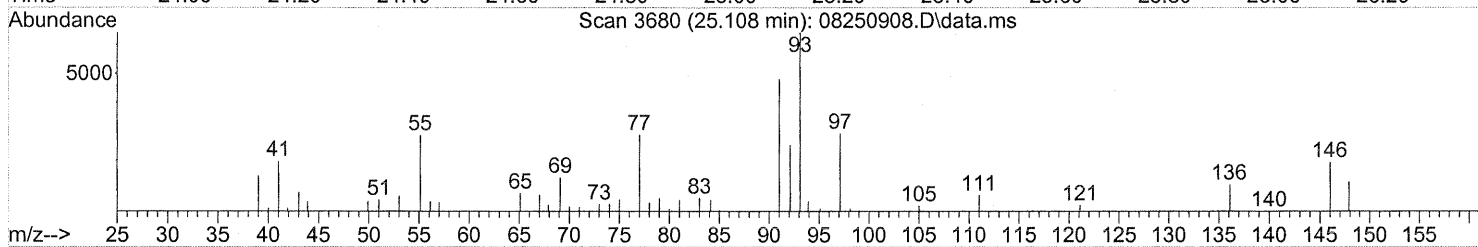
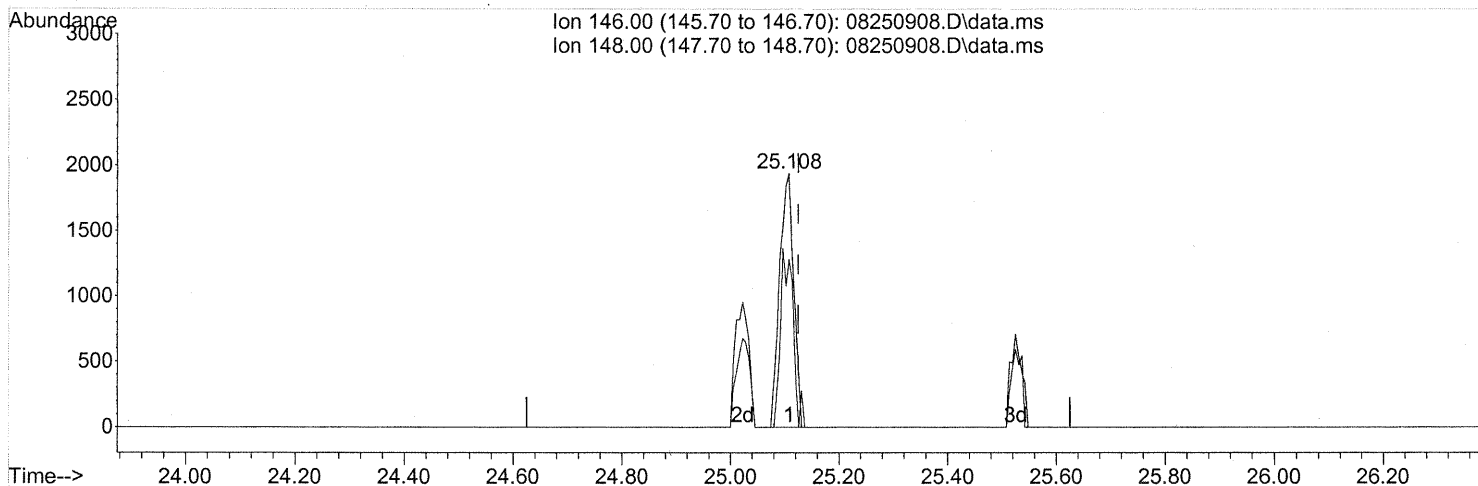
*PT -> IC  
 117 9/2/09*

*12/9/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.108min (-0.017) 0.17ng

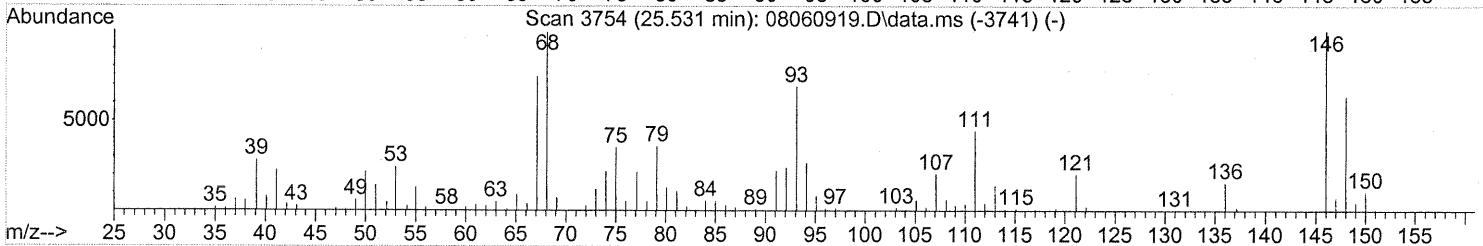
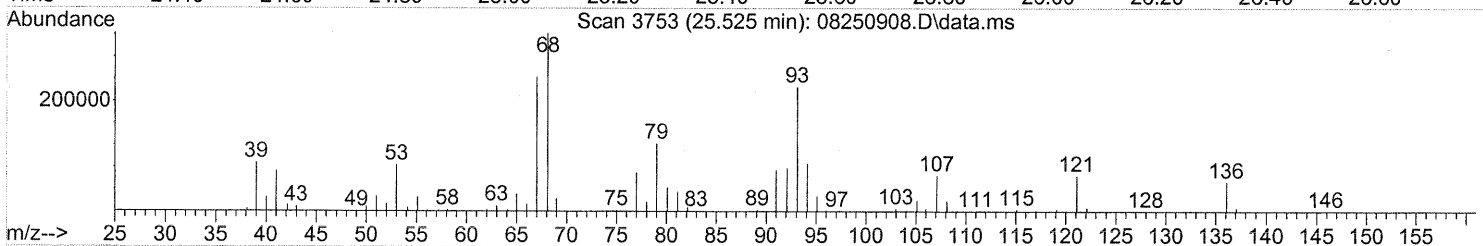
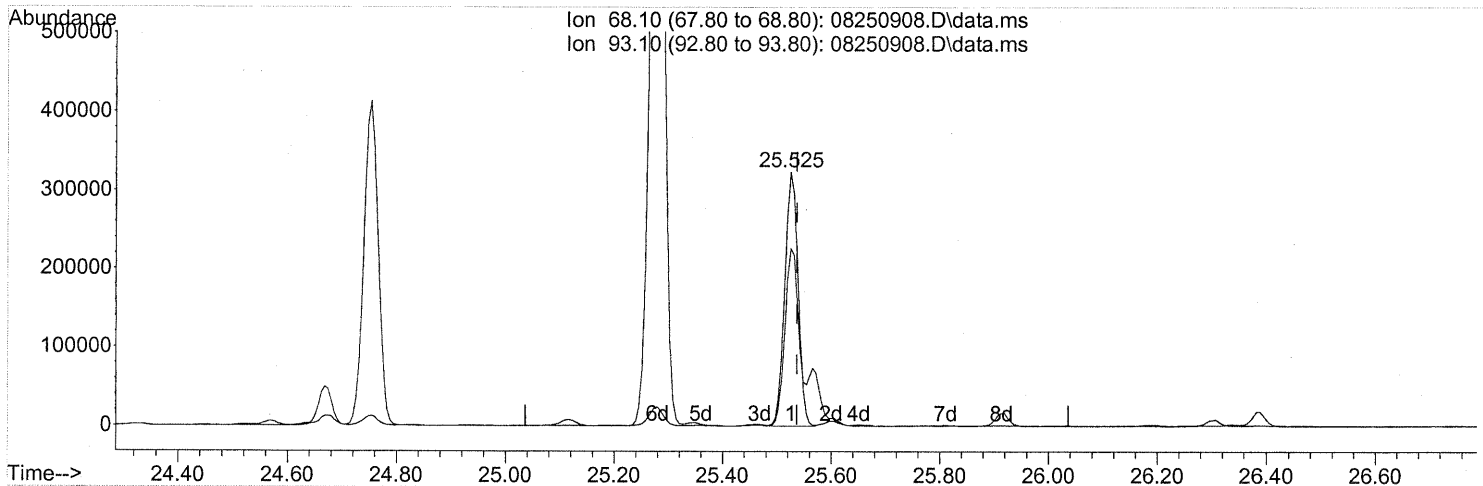
response 3495

Ion	Exp%	Act%
146.00	100	100
148.00	62.20	62.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

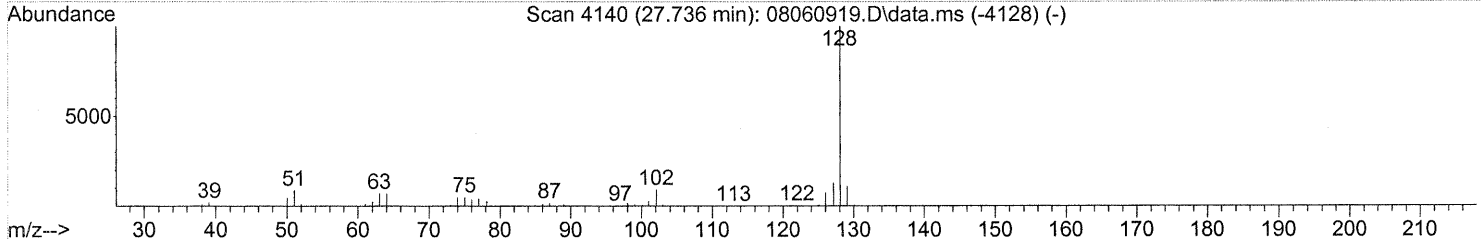
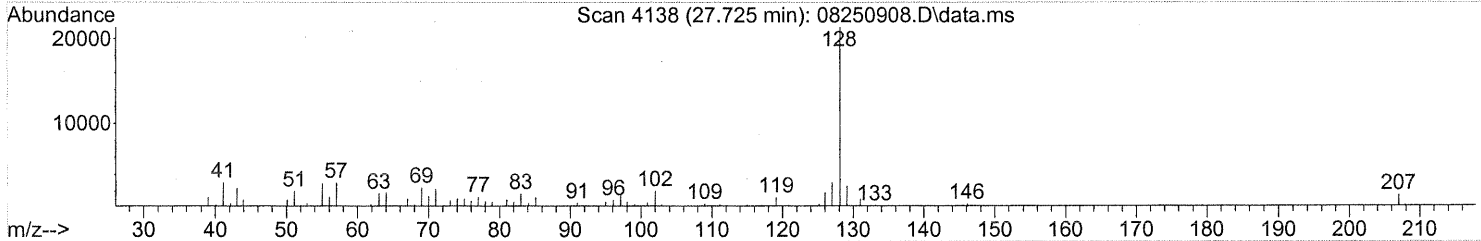
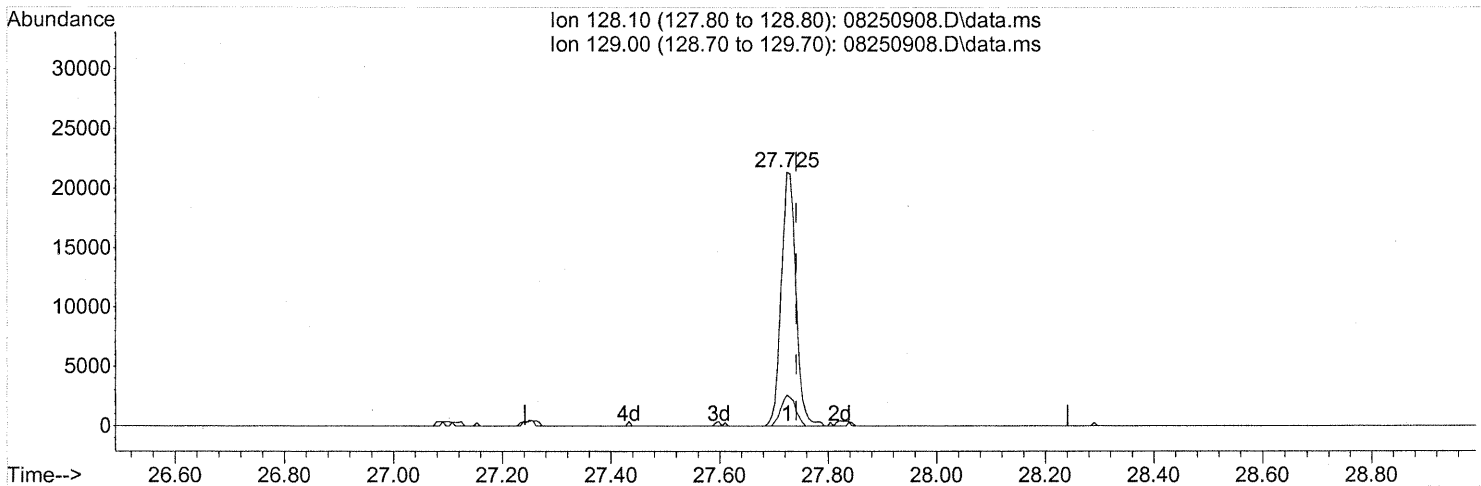
(91) d-Limonene (T)  
 25.525min (-0.011) 34.07ng  
 response 545500

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	95.75#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250908.D  
 Acq On : 25 Aug 2009 14:39  
 Operator : WA/CC  
 Sample : P0902875-002 (1000mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 06:39:12 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250908.D\data.ms

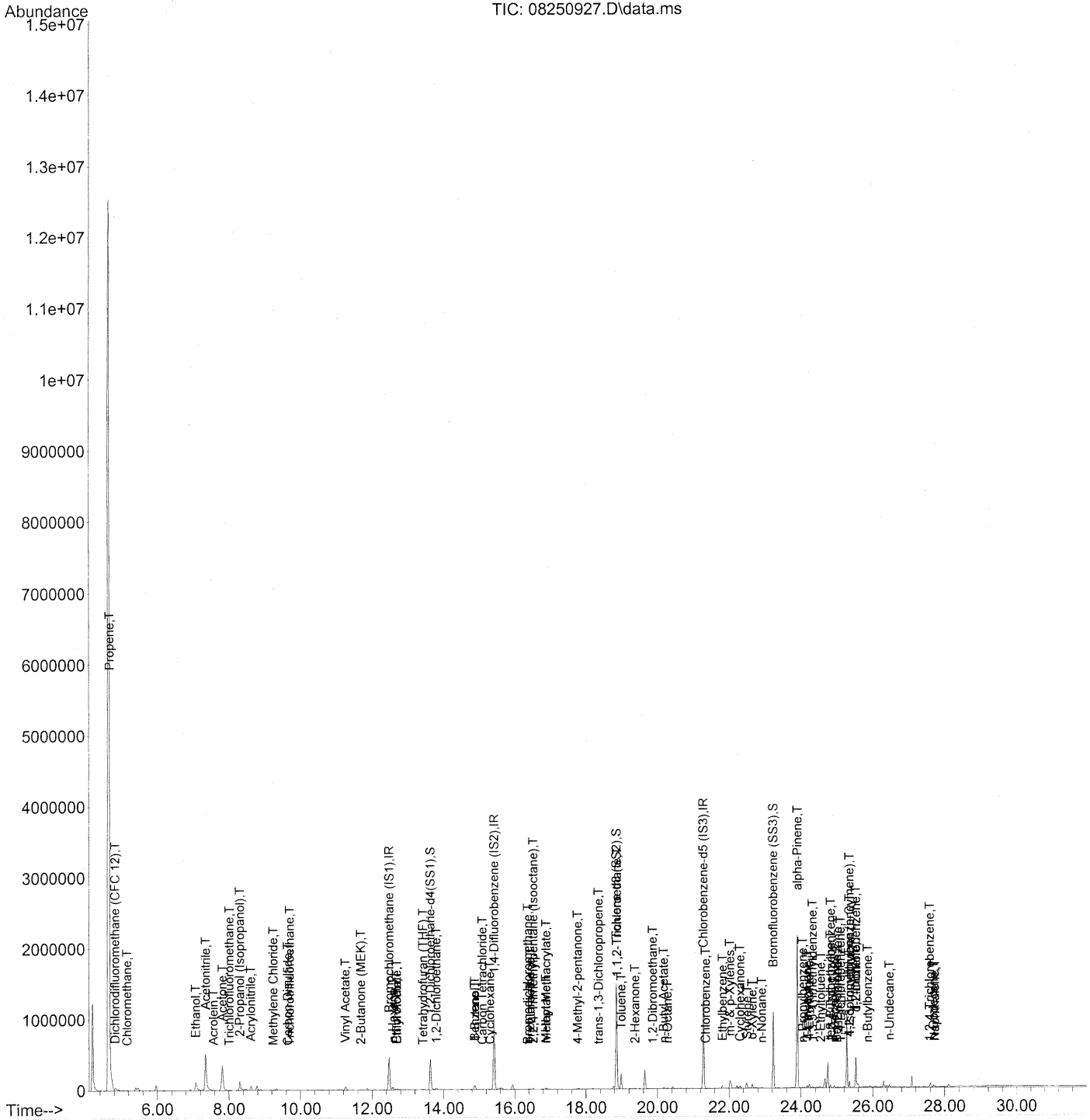
(95) Naphthalene (T)  
 27.725min (-0.017) 0.78ng  
 response 39860

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.83
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04 am  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04 am  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*m 9/13/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	237228	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1176646	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	564238	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	451452	21.895	ng	-0.03
Spiked Amount	25.000			Recovery	=	87.56%
57) Toluene-d8 (SS2)	18.85	98	1289105	26.147	ng	-0.02
Spiked Amount	25.000			Recovery	=	104.60%
73) Bromofluorobenzene (SS3)	23.23	174	355818	27.367	ng	-0.01
Spiked Amount	25.000			Recovery	=	109.48%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.67	42	26920	1.654	ng	# 46
3) Dichlorodifluoromethan...	4.83	85	19807	0.744	ng	98
4) Chloromethane	5.16	50	9031	0.505	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	6.37	94	206	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.07	45	258641	25.065	ng	100
11) Acetonitrile	7.35	41	902131	29.852	ng	100
12) Acrolein	7.57	56	7737	0.985	ng	97
13) Acetone	7.82	58	196453	20.177	ng	97
14) Trichlorofluoromethane	8.01	101	4669	0.194	ng	94
15) 2-Propanol (Isopropanol)	8.30	45	299578	7.830	ng	99
16) Acrylonitrile	8.61	53	2969	0.169	ng	# 9
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.34	59	1172	N.D.		
19) Methylene Chloride	9.23	84	2015	0.154	ng	94
20) 3-Chloro-1-propene (Al...	9.42	41	537	N.D.		
21) Trichlorotrifluoroethane	9.70	151	603	0.069	ng	# 81
22) Carbon Disulfide	9.64	76	7533	0.163	ng	78
23) trans-1,2-Dichloroethene	10.68	61	762	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.26	86	3197	1.614	ng	# 26
27) 2-Butanone (MEK)	11.68	72	6996	0.796	ng	98
28) cis-1,2-Dichloroethene	12.24	61	912	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.68	61	2964	0.647	ng	95
31) n-Hexane	12.58	57	20512	0.876	ng	99



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04 am  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	12.69	83	3682	0.179	ng	99
34) Tetrahydrofuran (THF)	13.42	72	2025	0.216	ng #	71
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	3924	0.208	ng	88
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.88	56	18753	1.228	ng #	77
41) Benzene	14.87	78	52598	1.017	ng	99
42) Carbon Tetrachloride	15.09	117	2875	0.174	ng #	1
43) Cyclohexane	15.30	84	3348	0.177	ng	89
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.37	83	1001	0.059	ng #	19
47) Trichloroethene	16.44	130	763	0.065	ng	99
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	16160	0.265	ng	84
50) Methyl Methacrylate	16.88	100	1463	0.307	ng #	1
51) n-Heptane	16.88	71	5848	0.421	ng	95
52) cis-1,3-Dichloropropene	17.65	75	1012	N.D.		
53) 4-Methyl-2-pentanone	17.76	58	1316	0.106	ng	98
54) trans-1,3-Dichloropropene	18.35	75	1742	0.085	ng #	54
55) 1,1,2-Trichloroethane	18.86	97	111988	9.859	ng #	6
58) Toluene	18.98	91	187209	3.864	ng	98
59) 2-Hexanone	19.37	43	9686	0.301	ng	99
60) Dibromochloromethane	19.53	129	89	N.D.		
61) 1,2-Dibromoethane	19.86	107	836	0.069	ng	81
62) n-Butyl Acetate	20.17	43	15198	0.400	ng	89
63) n-Octane	20.28	57	2425	0.207	ng #	90
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	21.34	112	1840	0.061	ng #	43
66) Ethylbenzene	21.82	91	39215	0.708	ng	99
67) m- & p-Xylenes	22.03	91	112111	2.502	ng	99
68) Bromoform	22.14	173	386	N.D.		
69) Styrene	22.50	104	19541	0.603	ng	98
70) o-Xylene	22.65	91	41176	0.917	ng	99
71) n-Nonane	22.91	43	5312	0.178	ng	93
72) 1,1,2,2-Tetrachloroethane	22.63	83	107	N.D.		
74) Cumene	23.41	105	1983	N.D.		
75) alpha-Pinene	23.90	93	1013805	34.853	ng	92
76) n-Propylbenzene	24.05	91	8175	0.115	ng #	87
77) 3-Ethyltoluene	24.17	105	18575	0.343	ng	99
78) 4-Ethyltoluene	24.23	105	10725	0.204	ng	98
79) 1,3,5-Trimethylbenzene	24.32	105	6896	0.156	ng	97

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04 am  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

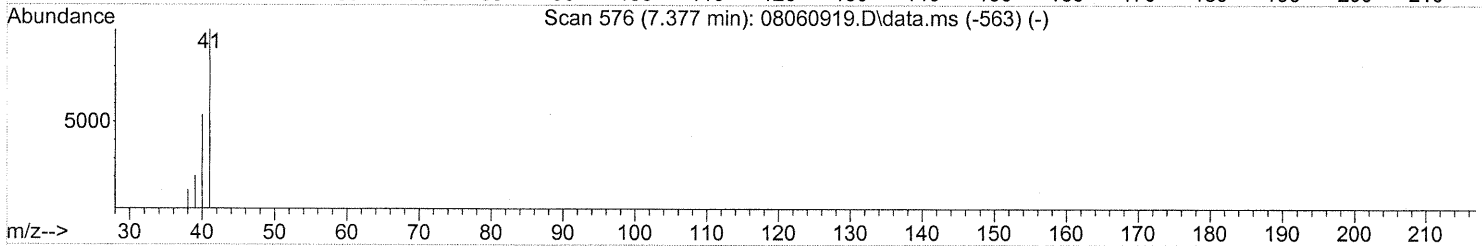
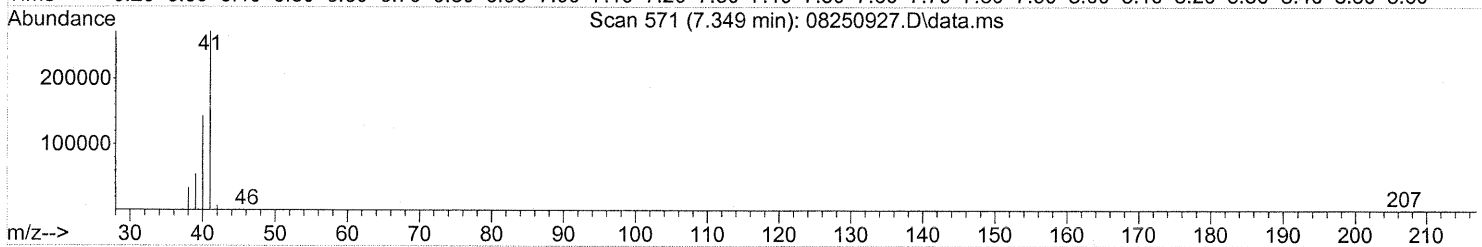
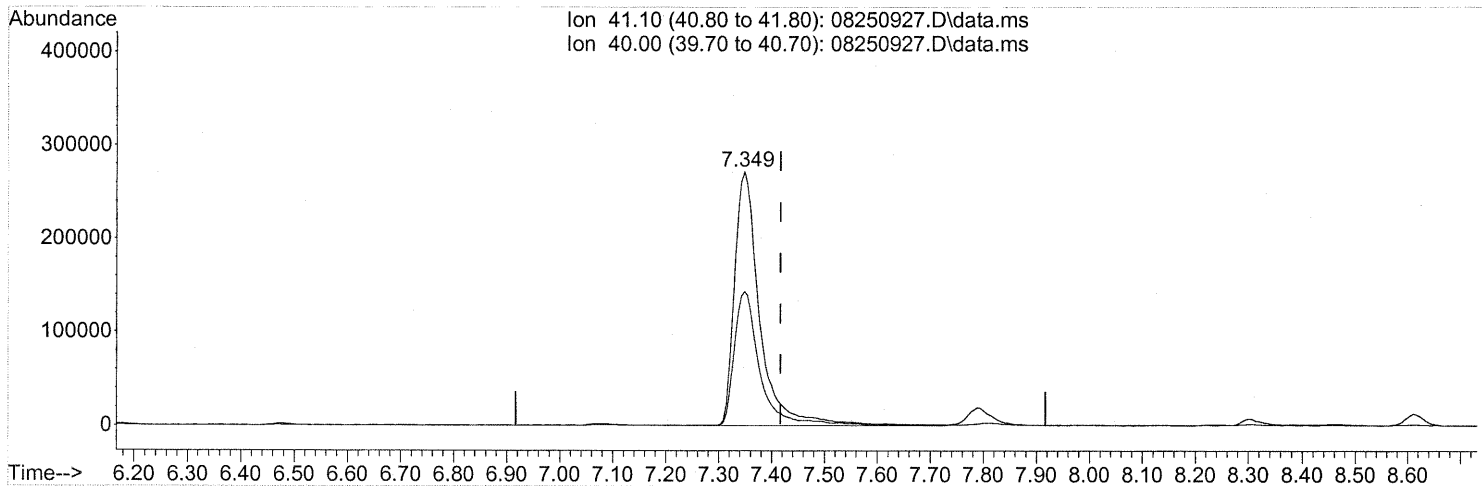
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.50	118	1186	N.D.		
81) 2-Ethyltoluene	24.55	105	6514	0.119	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	22989	0.509	ng	88
83) n-Decane	24.93	57	11170	0.380	ng	98
84) Benzyl Chloride	25.00	91	5267	0.124	ng	91
85) 1,3-Dichlorobenzene	25.02	146	1428	0.062	ng	96
86) 1,4-Dichlorobenzene	25.10	146	1848	0.076	ng	97
87) sec-Butylbenzene	25.15	105	695	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	43067	0.791	ng	95
89) 1,2,3-Trimethylbenzene	25.35	105	7616	0.165	ng	# 47
90) 1,2-Dichlorobenzene	25.53	146	1297	0.060	ng	99
91) d-Limonene	25.53	68	110168	5.732	ng	# 67
92) 1,2-Dibromo-3-Chloropr...	26.07	157	86	N.D.		
93) n-Undecane	26.46	57	13092	0.419	ng	82
94) 1,2,4-Trichlorobenzene	27.58	180	1760	0.118	ng	# 92
95) Naphthalene	27.72	128	13266	0.216	ng	97
96) n-Dodecane	27.69	57	8726	0.240	ng	92
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	18623	0.928	ng	96
99) tert-Butylbenzene	24.82	119	2950	0.067	ng	# 56
100) n-Butylbenzene	25.86	91	4609	0.092	ng	# 58

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(11) Acetonitrile (T)

7.349min (-0.069) 29.85ng

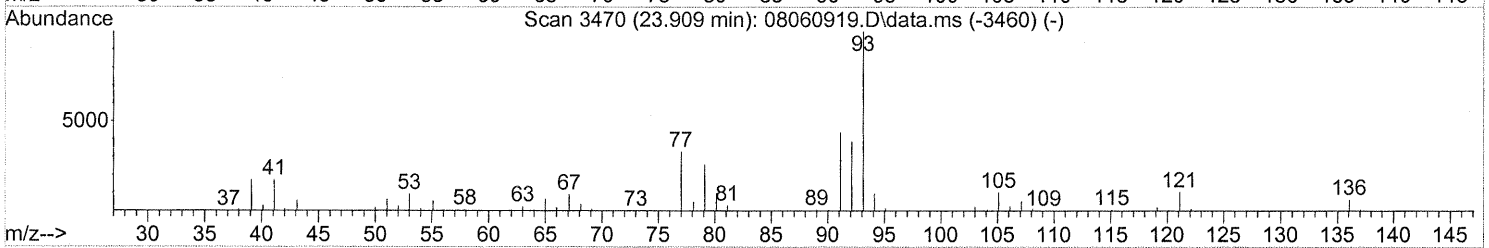
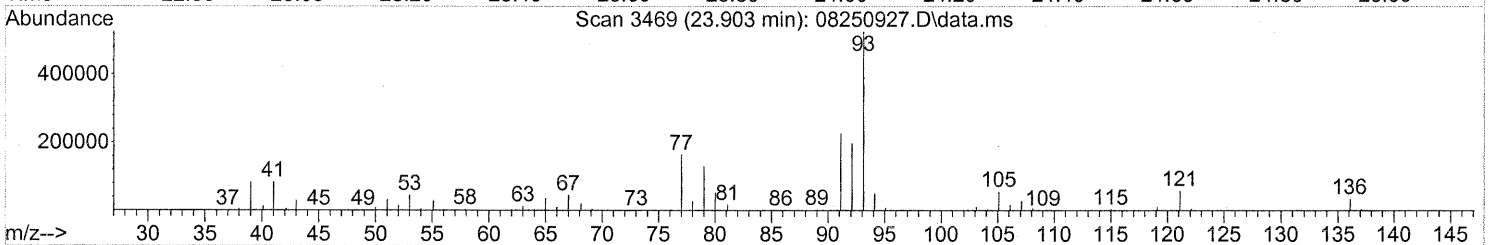
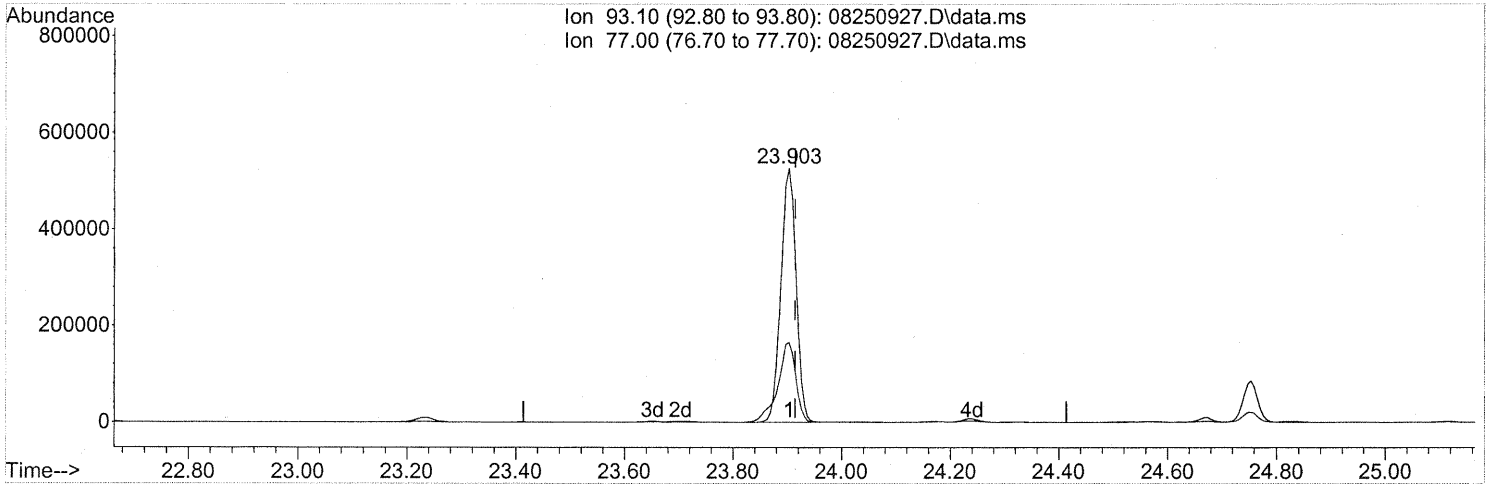
response 902131

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 26 Aug 2009 7:04  
 Operator : WA/CC  
 Sample : P0902875-002 dil (200mL)  
 Misc : Environmental Health 102265  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:05:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(75) alpha-Pinene (T)  
 23.903min (-0.011) 34.85ng  
 response 1013805

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	37.02
0.00	0.00	0.00
0.00	0.00	0.00

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102266  
**Client Project ID:** 16512  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00742

**CAS Project ID:** P0902875  
**CAS Sample ID:** P0902875-003

**Date Collected:** 8/19/09  
**Date Received:** 8/20/09  
**Date Analyzed:** 8/25 - 8/26/09  
**Volume(s) Analyzed:** 1.00 Liter(s)  
 0.10 Liter(s)

Initial Pressure (psig): 0.4      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result		MRL		Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	6.1	0.61	1.2	0.12	
74-87-3	Chloromethane	1.7	0.12	0.83	0.059	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.055	
74-83-9	Bromomethane	0.16	0.12	0.041	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	Ethanol	170	6.1	92	3.2	
75-05-8	Acetonitrile	210	0.61	130	0.36	D
107-02-8	Acrolein	6.6	0.61	2.9	0.26	
67-64-1	Acetone	140	6.1	60	2.5	
75-69-4	Trichlorofluoromethane	1.5	0.12	0.27	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	55	0.61	22	0.25	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	0.73	0.12	0.096	0.016	
75-15-0	Carbon Disulfide	ND	0.61	ND	0.19	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	2-Butanone (MEK)	5.3	0.61	1.8	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

Date: 9/3/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102266  
**Client Project ID:** 16512  
 Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00742

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-003

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25 - 8/26/09  
 Volume(s) Analyzed: 1.00 Liter(s)  
 0.10 Liter(s)

Initial Pressure (psig): 0.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	5.0	0.61	1.4	0.17	
110-54-3	n-Hexane	6.5	0.61	1.9	0.17	
67-66-3	Chloroform	1.2	0.12	0.25	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	1.3	0.12	0.32	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	7.1	0.12	2.2	0.038	
56-23-5	Carbon Tetrachloride	1.3	0.12	0.20	0.019	
110-82-7	Cyclohexane	1.3	0.61	0.39	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.61	ND	0.15	
142-82-5	n-Heptane	3.0	0.61	0.73	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	0.90	0.61	0.22	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	28	0.61	7.4	0.16	
591-78-6	2-Hexanone	2.0	0.61	0.48	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	3.0	0.61	0.64	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

TO15scan.xls - 75 Compounds - PageNo.:

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102266  
**Client Project ID:** 16512

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
Analyst: Wida Ang  
Sampling Media: 6.0 L Summa Canister  
Test Notes:  
Container ID: AC00742

CAS Project ID: P0902875  
CAS Sample ID: P0902875-003

Date Collected: 8/19/09  
Date Received: 8/20/09  
Date Analyzed: 8/25 - 8/26/09  
Volume(s) Analyzed: 1.00 Liter(s)  
0.10 Liter(s)

Initial Pressure (psig): 0.4      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	1.6	0.61	0.34	0.13	
127-18-4	Tetrachloroethene	0.32	0.12	0.047	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	5.1	0.61	1.2	0.14	
179601-23-1	m,p-Xylenes	18	0.61	4.2	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	4.3	0.61	1.0	0.14	
95-47-6	o-Xylene	6.6	0.61	1.5	0.14	
111-84-2	n-Nonane	1.1	0.61	0.21	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	240	0.61	43	0.11	D
103-65-1	n-Propylbenzene	0.76	0.61	0.15	0.12	
622-96-8	4-Ethyltoluene	1.3	0.61	0.27	0.12	
108-67-8	1,3,5-Trimethylbenzene	1.1	0.61	0.23	0.12	
95-63-6	1,2,4-Trimethylbenzene	3.6	0.61	0.74	0.12	
100-44-7	Benzyl Chloride	0.14	0.12	0.027	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	42	0.61	7.5	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	Naphthalene	0.89	0.61	0.17	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

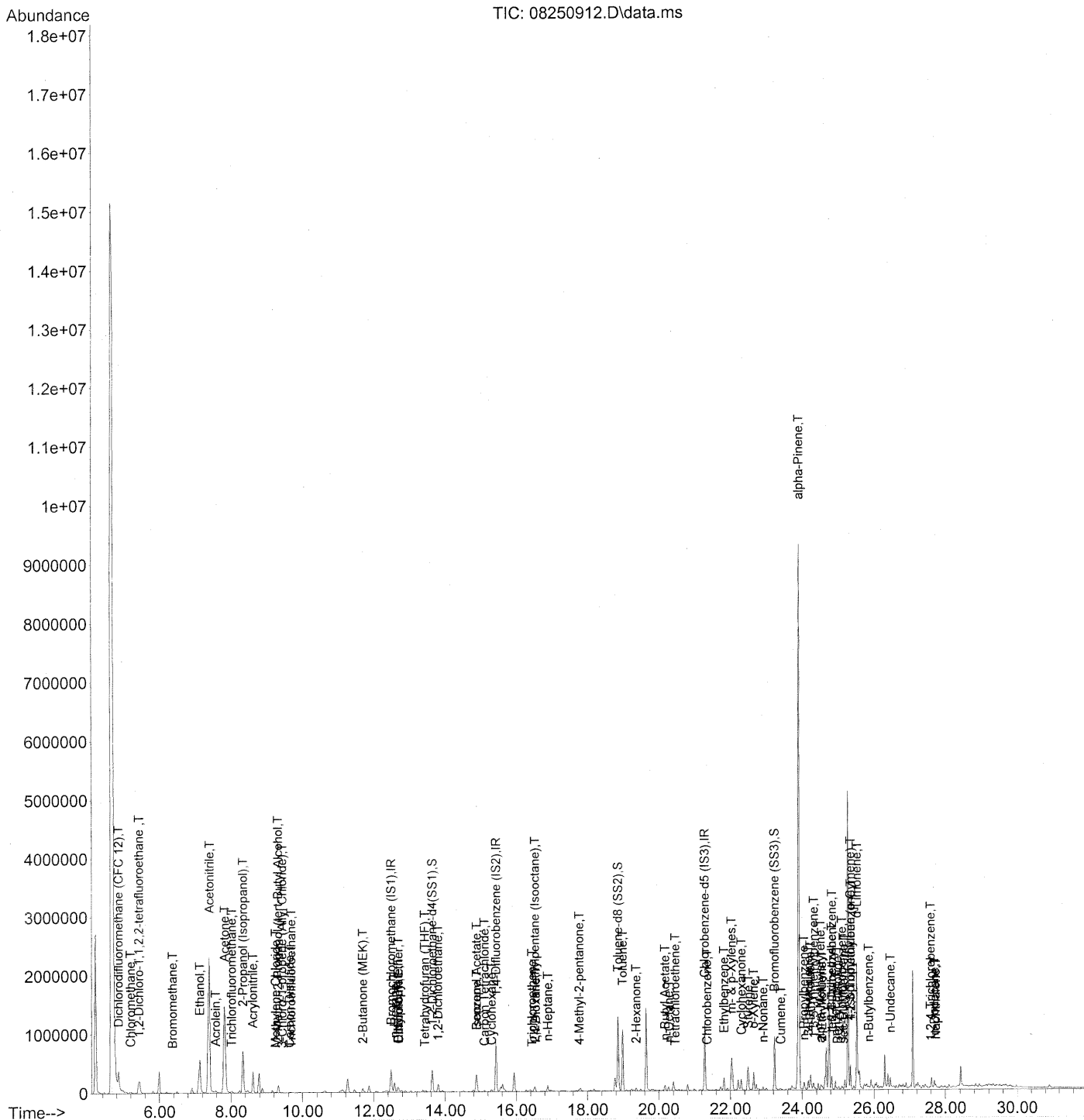
Date: \_\_\_\_\_

9/3/09

**79**

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 6:48 pm  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 02 16:05:11 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration





Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 6:48 pm  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 02 16:05:11 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*m 9/2/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	200278	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.42	114	1002766	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	477209	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.63	65	383634	22.038	ng	-0.03
Spiked Amount	25.000		Recovery	=	88.16%	
57) Toluene-d8 (SS2)	18.85	98	1092529	26.201	ng	-0.02
Spiked Amount	25.000		Recovery	=	104.80%	
73) Bromofluorobenzene (SS3)	23.23	174	299863	27.270	ng	-0.01
Spiked Amount	25.000		Recovery	=	109.08%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	0.00	42	0	N.D.	d	
3) Dichlorodifluoromethan...	4.85	85	114017	5.076	ng	98
4) Chloromethane	5.20	50	21262	1.409	ng	97
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	956	0.105	ng	81
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.81	54	434	N.D.		
8) Bromomethane	6.37	94	1169	0.132	ng	96
9) Chloroethane	6.71	64	86	N.D.		
10) Ethanol	7.13	45	1242264	142.599	ng	100
11) Acetonitrile	7.40	41	4373222	171.413	ng	99
12) Acrolein	7.57	56	36162	5.453	ng	97
13) Acetone	7.82	58	970487	118.068	ng	98
14) Trichlorofluoromethane	8.02	101	25663	1.264	ng	100
15) 2-Propanol (Isopropanol)	8.33	45	1459915	45.196	ng	99
16) Acrylonitrile	8.61	53	7190	0.484	ng	# 53
17) 1,1-Dichloroethene	9.20	96	92	N.D.		
18) 2-Methyl-2-Propanol (t...	9.31	59	8058	0.281	ng	# 1
19) Methylene Chloride	9.25	84	5107	0.463	ng	90
20) 3-Chloro-1-propene (Al...	9.42	41	1140	0.054	ng	# 43
21) Trichlorotrifluoroethane	9.68	151	4475	0.606	ng	97
22) Carbon Disulfide	9.63	76	17571	0.451	ng	98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.	d	
27) 2-Butanone (MEK)	11.68	72	32396	4.365	ng	# 85
28) cis-1,2-Dichloroethene	12.34	61	92	N.D.		
29) Diisopropyl Ether	12.69	87	1905	0.192	ng	# 1
30) Ethyl Acetate	12.68	61	15816	4.091	ng	96
31) n-Hexane	12.58	57	106696	5.395	ng	100

*m 9/3/09*

*El Sample*

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 6:48 pm  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 02 16:05:11 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.70	83	17843	1.025 ng		96
34) Tetrahydrofuran (THF)	13.42	72	1874	0.237 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	17247	1.084 ng		97
38) 1,1,1-Trichloroethane	14.17	97	395	N.D.		
39) Isopropyl Acetate	14.88	61	2225	0.299 ng	#	1
40) 1-Butanol	15.02	56	501	N.D.		
41) Benzene	14.88	78	260017	5.898 ng		98
42) Carbon Tetrachloride	15.10	117	14821	1.055 ng		100
43) Cyclohexane	15.29	84	17943	1.111 ng		95
44) tert-Amyl Methyl Ether	16.07	73	596	N.D.		
45) 1,2-Dichloropropane	15.93	63	94	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.44	130	799	0.080 ng	#	46
48) 1,4-Dioxane	16.54	88	795	0.094 ng	#	12
49) 2,2,4-Trimethylpentane...	16.52	57	83392	1.606 ng		88
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	16.88	71	29329	2.479 ng		97
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.76	58	7842	0.740 ng		95
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	944456	23.047 ng		98
59) 2-Hexanone	19.36	43	44232	1.623 ng		95
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	80286	2.500 ng		93
63) n-Octane	20.28	57	12915	1.304 ng		96
64) Tetrachloroethene	20.46	166	2506	0.264 ng		91
65) Chlorobenzene	21.34	112	1526	0.060 ng	#	43
66) Ethylbenzene	21.82	91	197489	4.216 ng		98
67) m- & p-Xylenes	22.03	91	565592	14.925 ng		97
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.50	104	97388	3.556 ng		98
70) o-Xylene	22.65	91	205790	5.416 ng		98
71) n-Nonane	22.91	43	23222	0.920 ng		94
72) 1,1,2,2-Tetrachloroethane	22.64	83	804	N.D.		
74) Cumene	23.41	105	10028	0.209 ng		96
75) alpha-Pinene	23.91	93	4589139	186.540 ng	See list	92
76) n-Propylbenzene	24.05	91	37910	0.628 ng		83
77) 3-Ethyltoluene	24.17	105	89249	1.946 ng		98
78) 4-Ethyltoluene	24.23	105	48611	1.094 ng		99
79) 1,3,5-Trimethylbenzene	24.32	105	34841	0.930 ng		100

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 6:48 pm  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 02 16:05:11 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

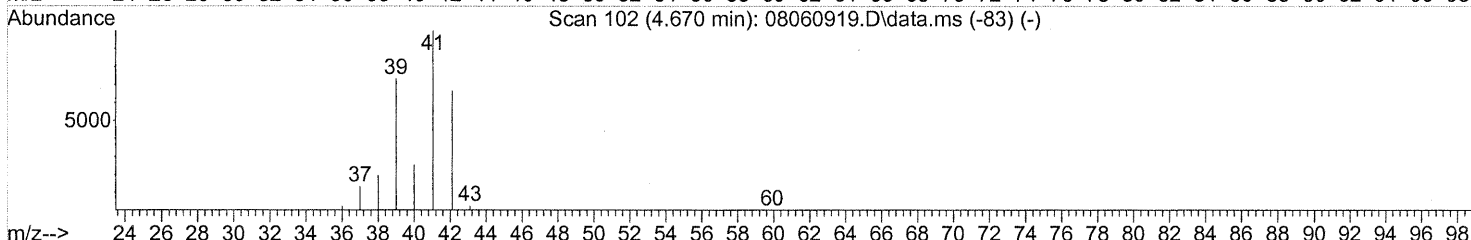
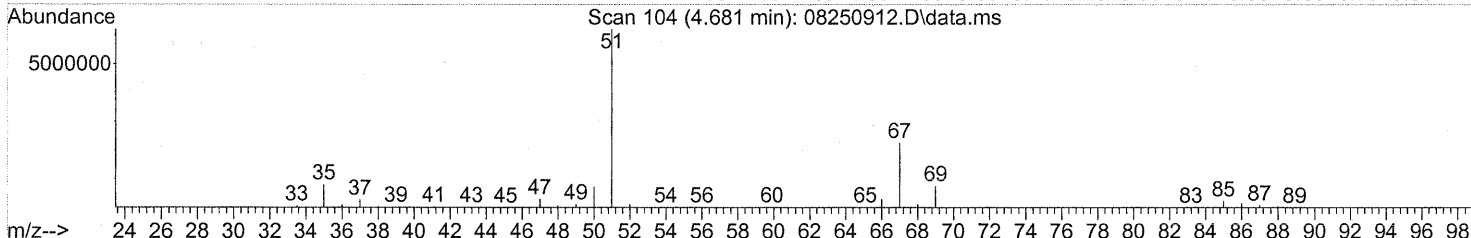
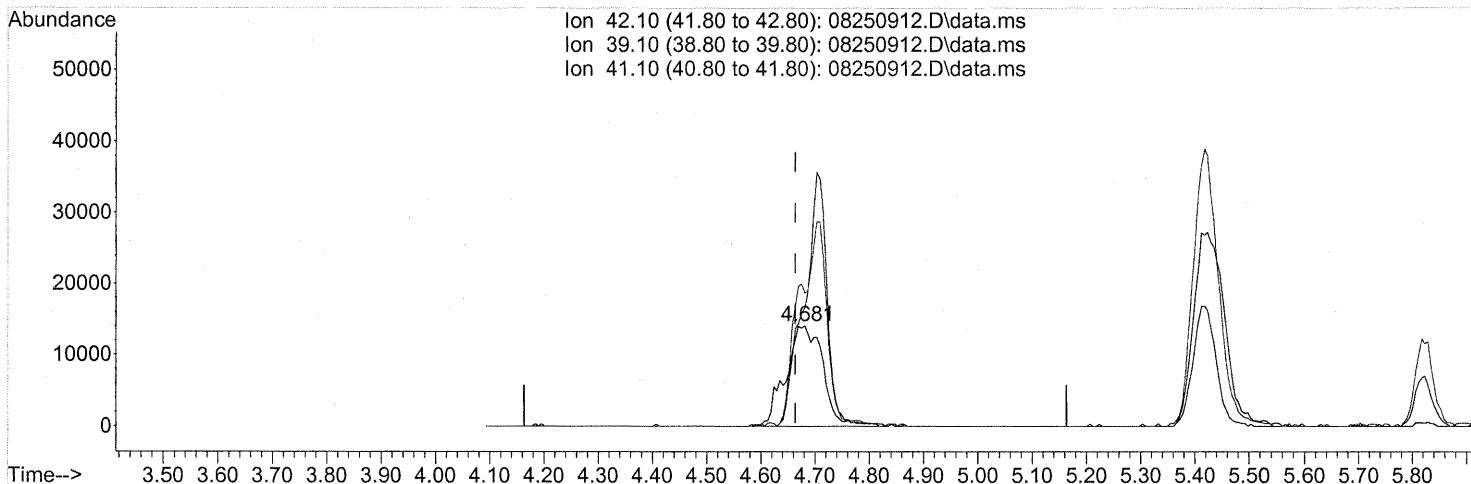
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	2352	0.117	ng	# 1
81) 2-Ethyltoluene	24.55	105	31497	0.681	ng	82
82) 1,2,4-Trimethylbenzene	24.83	105	115092	3.011	ng	89
83) n-Decane	24.93	57	56847	2.287	ng	89
84) Benzyl Chloride	24.99	91	4091	0.114	ng	87
85) 1,3-Dichlorobenzene	25.02	146	340	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	1829	0.089	ng	96
87) sec-Butylbenzene	25.16	105	3944	0.076	ng	# 73
88) 4-Isopropyltoluene (p-...	25.35	119	200930	4.364	ng	92
89) 1,2,3-Trimethylbenzene	25.35	105	37956	0.975	ng	# 47
90) 1,2-Dichlorobenzene	25.53	146	115	N.D.		
91) d-Limonene	25.53	68	557932	34.323	ng	92
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	61832	2.338	ng	87
94) 1,2,4-Trichlorobenzene	27.59	180	996	0.079	ng	# 78
95) Naphthalene	27.72	128	38222	0.736	ng	99
96) n-Dodecane	27.69	57	42343	1.378	ng	# 79
97) Hexachlorobutadiene	28.15	225	366	N.D.		
98) Cyclohexanone	22.30	55	100784	5.936	ng	95
99) tert-Butylbenzene	24.82	119	15050	0.407	ng	# 59
100) n-Butylbenzene	25.86	91	13755	0.323	ng	# 57

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 20:59:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(2) Propene (T)

4.681min (+0.017) 4.83ng

response 66392

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	0.00#
41.10	150.20	62.79#
0.00	0.00	0.00

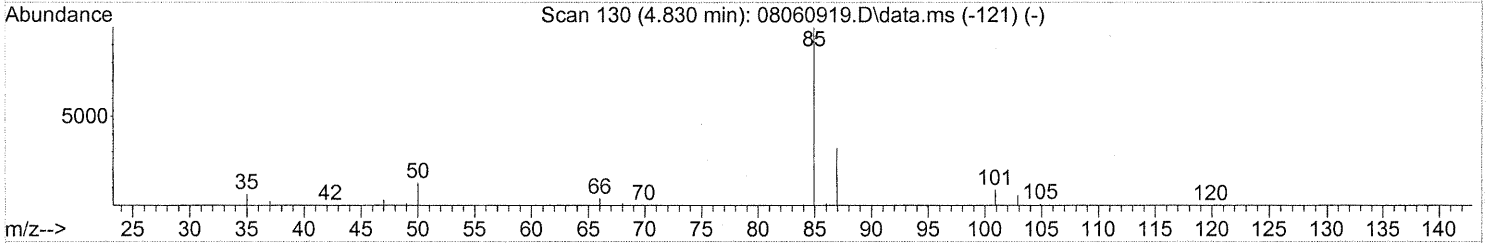
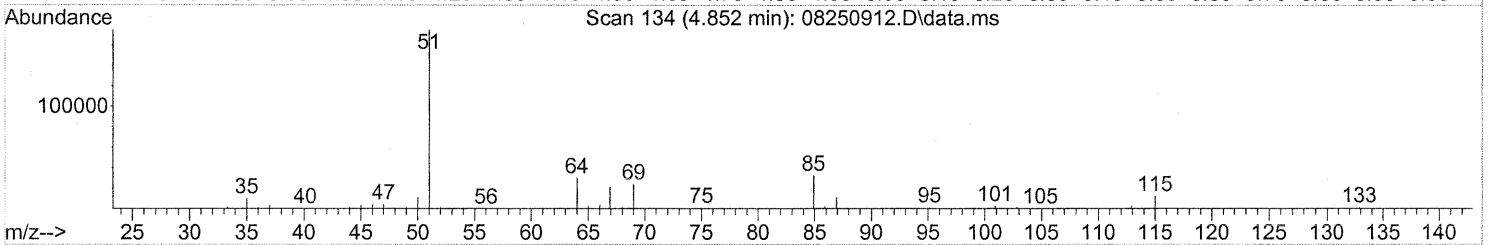
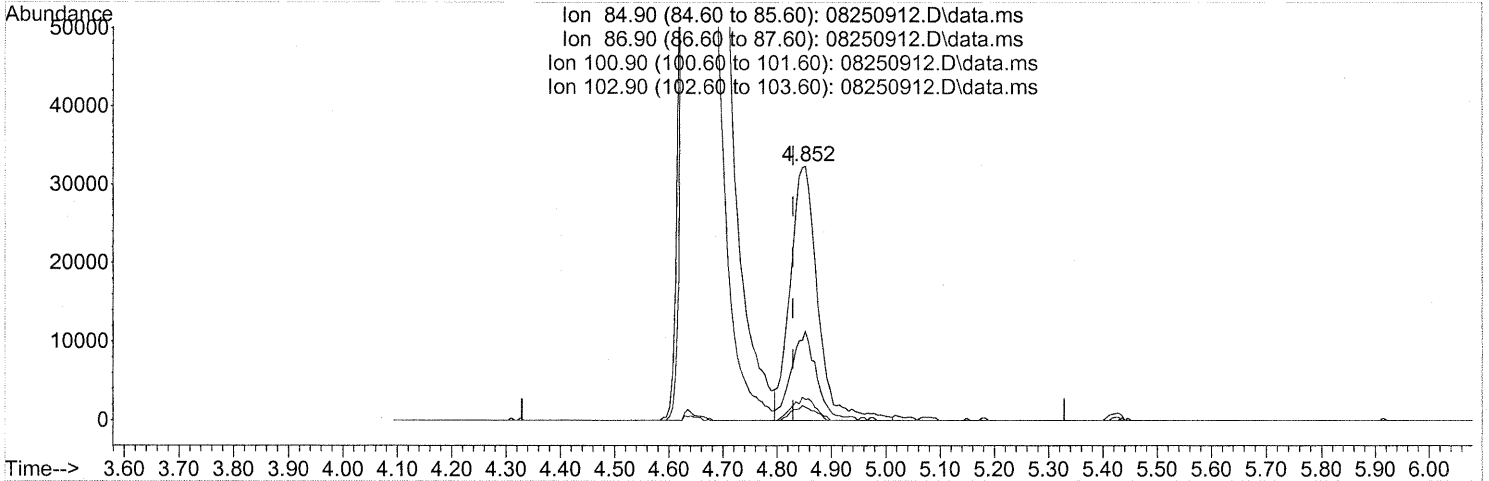
*FP*  
*11/9/09*

*11/3/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.852min (+0.023) 5.08ng

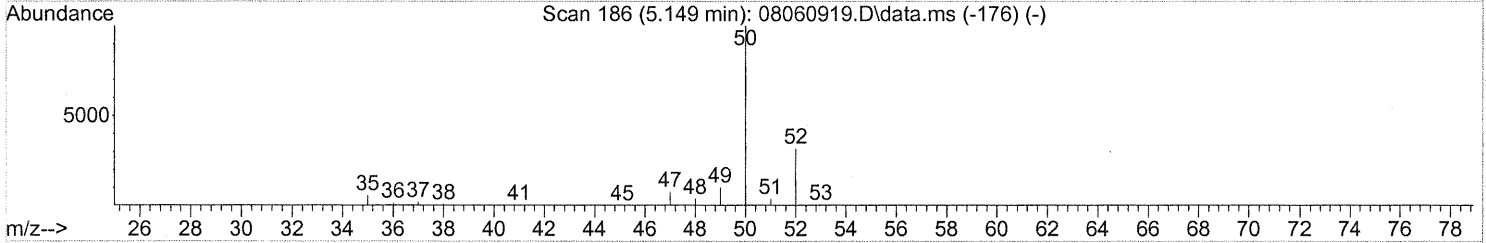
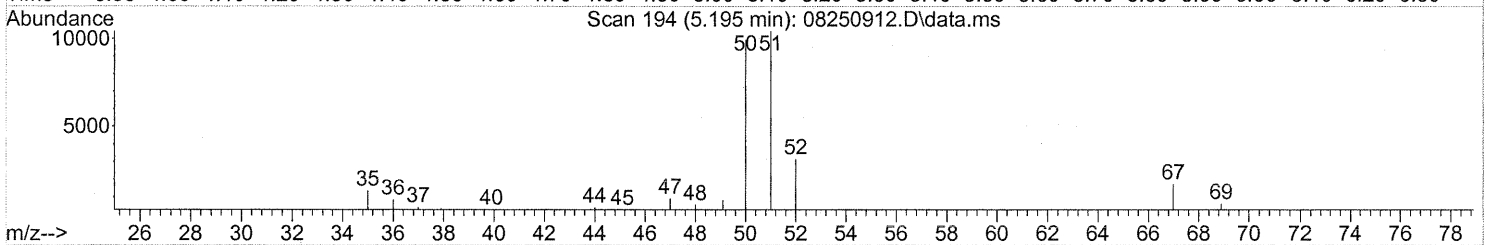
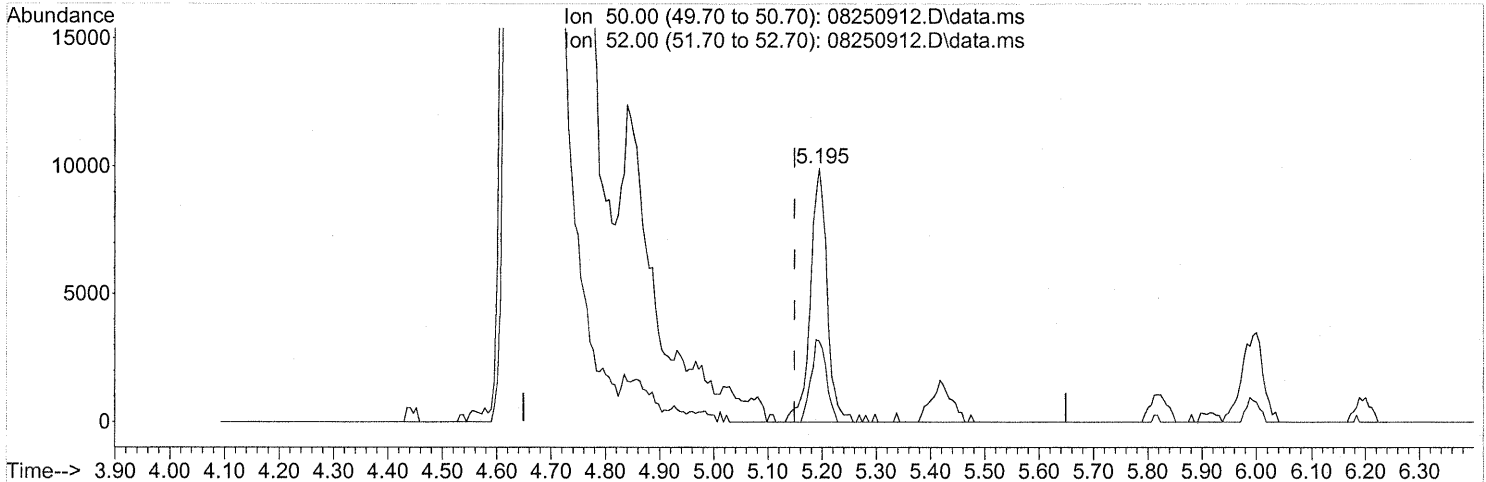
response 114017

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.25
100.90	8.80	7.57
102.90	5.20	4.56

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(4) Chloromethane (T)

5.195min (+0.046) 1.41ng

response 21262

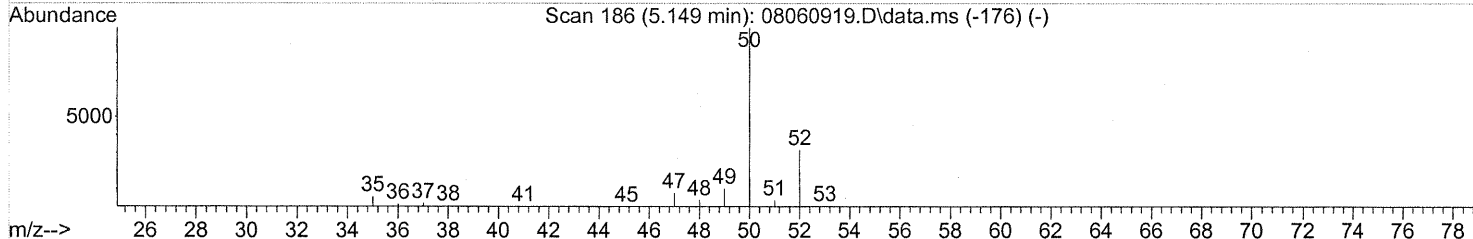
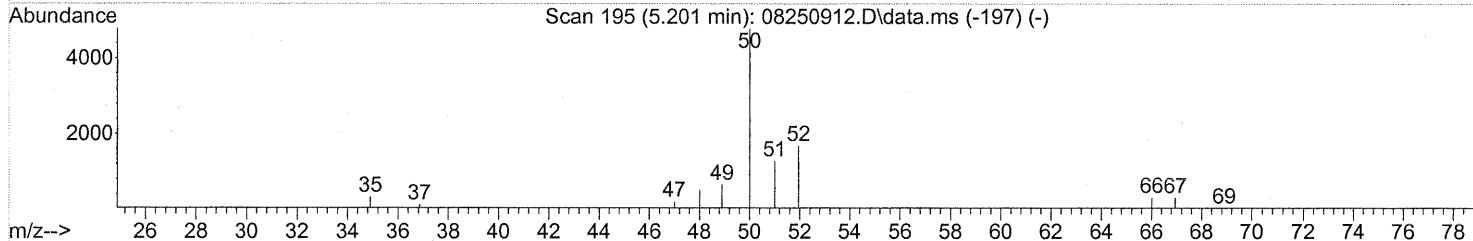
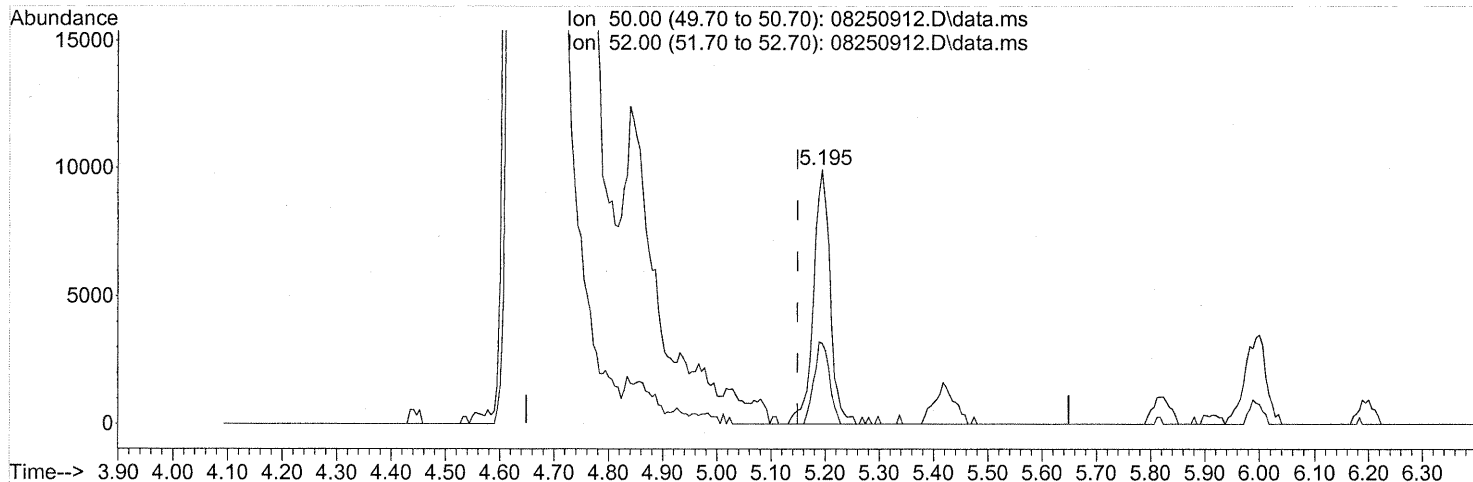
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.97
0.00	0.00	0.00
0.00	0.00	0.00

*Before submit*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 20:59:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(4) Chloromethane (T)  
 5.195min (+0.046) 1.41ng  
 response 21262

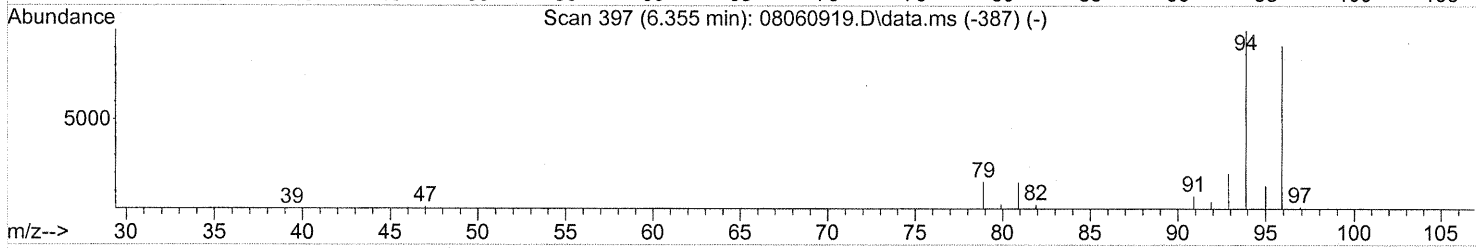
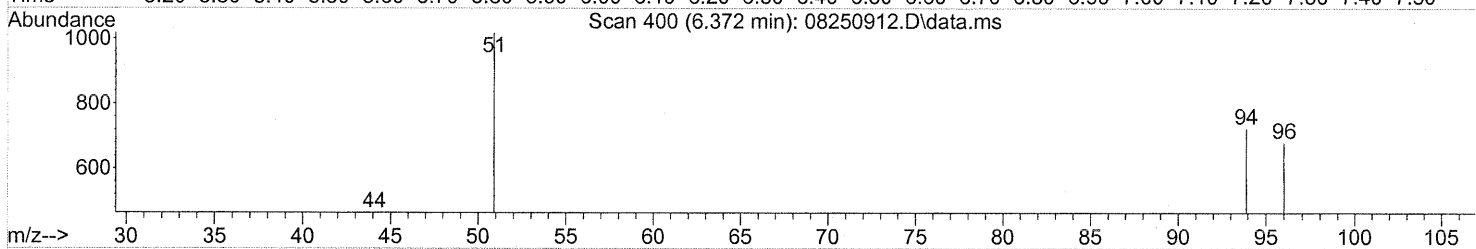
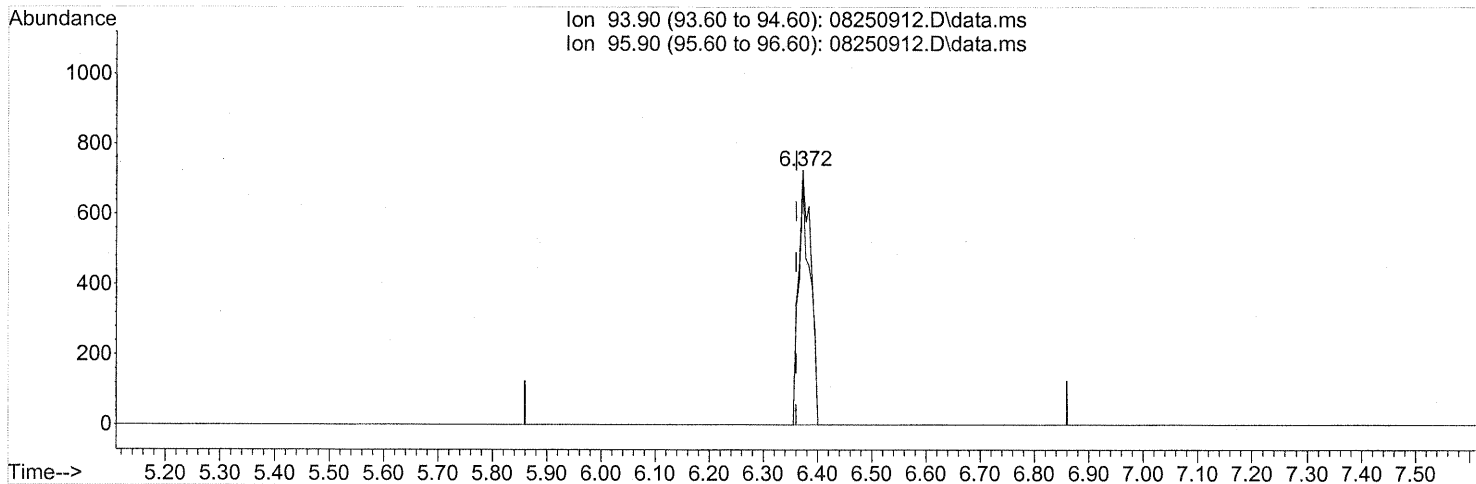
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.97
0.00	0.00	0.00
0.00	0.00	0.00

*After subh.*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(8) Bromomethane (T)

6.372min (+0.011) 0.13ng

response 1169

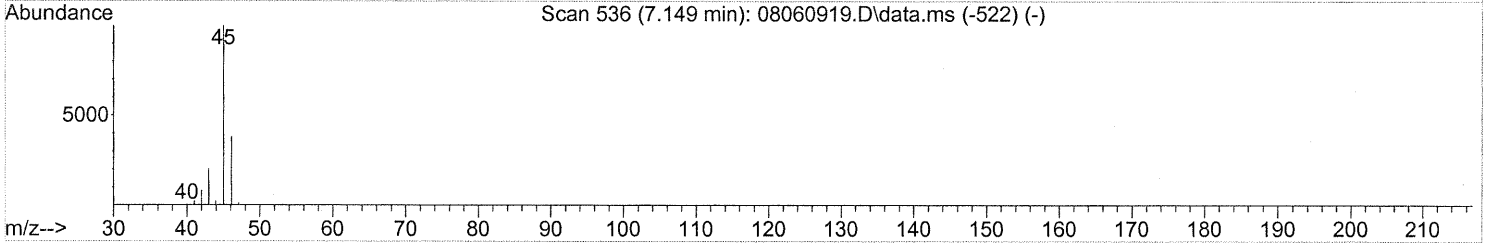
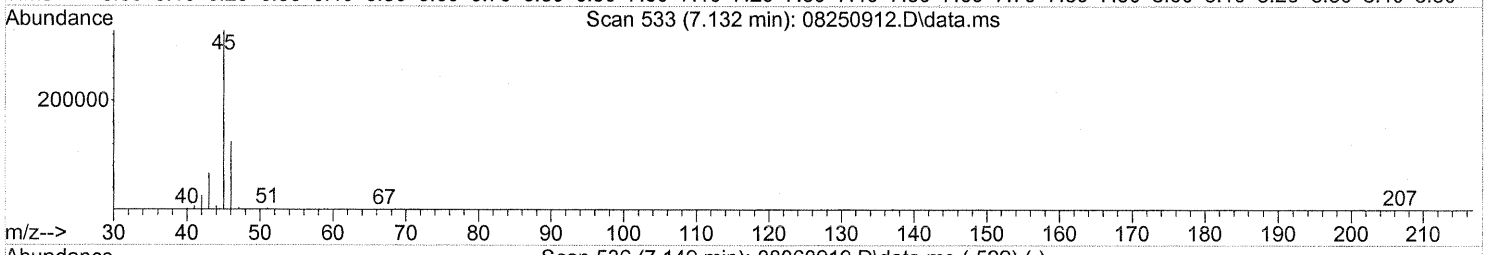
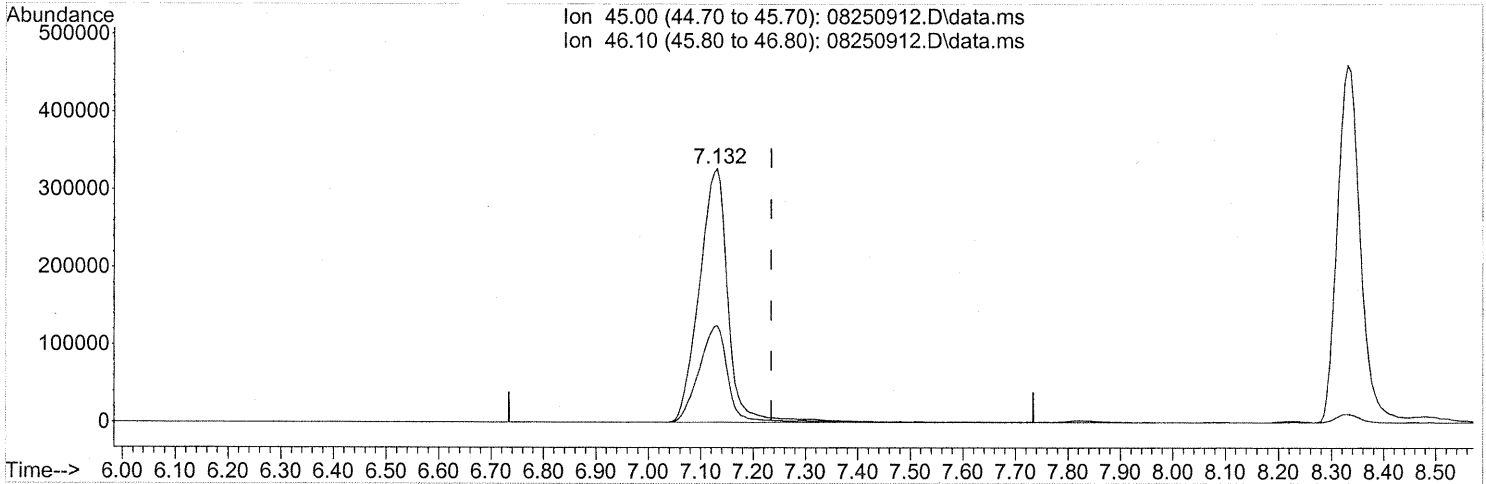
Ion	Exp%	Act%
93.90	100	100
95.90	92.80	89.05
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250912.D  
Acq On : 25 Aug 2009 18:48  
Operator : WA/CC  
Sample : P0902875-003 (1000mL)  
Misc : Environmental Health 102266  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



TIC: 08250912.D\data.ms

(10) Ethanol (T)

7.132min (-0.103) 142.60ng

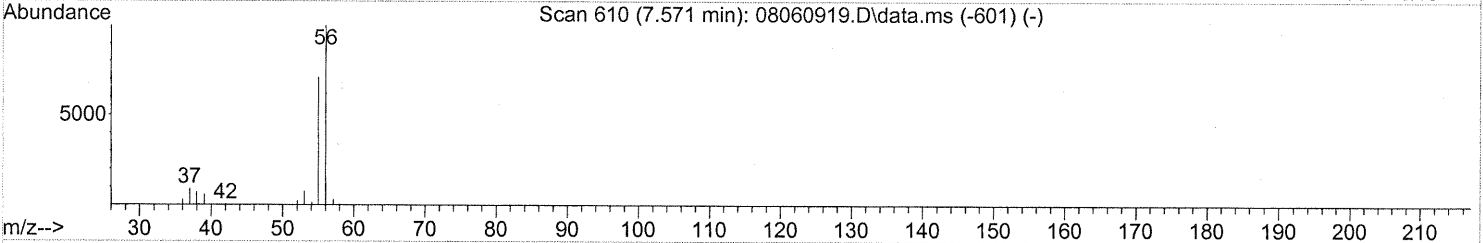
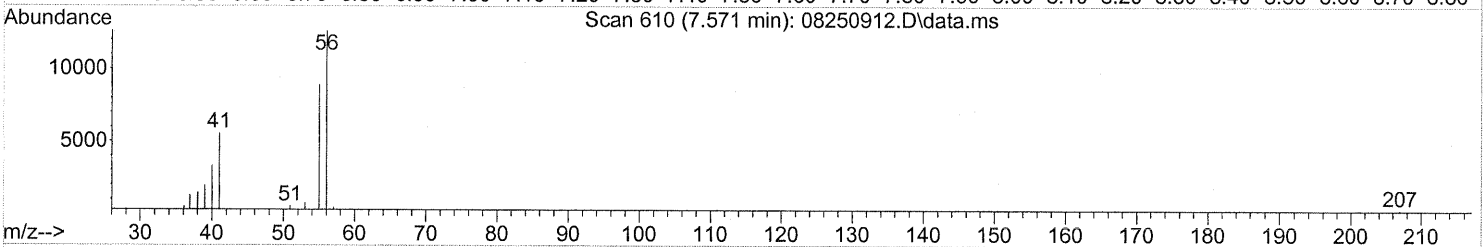
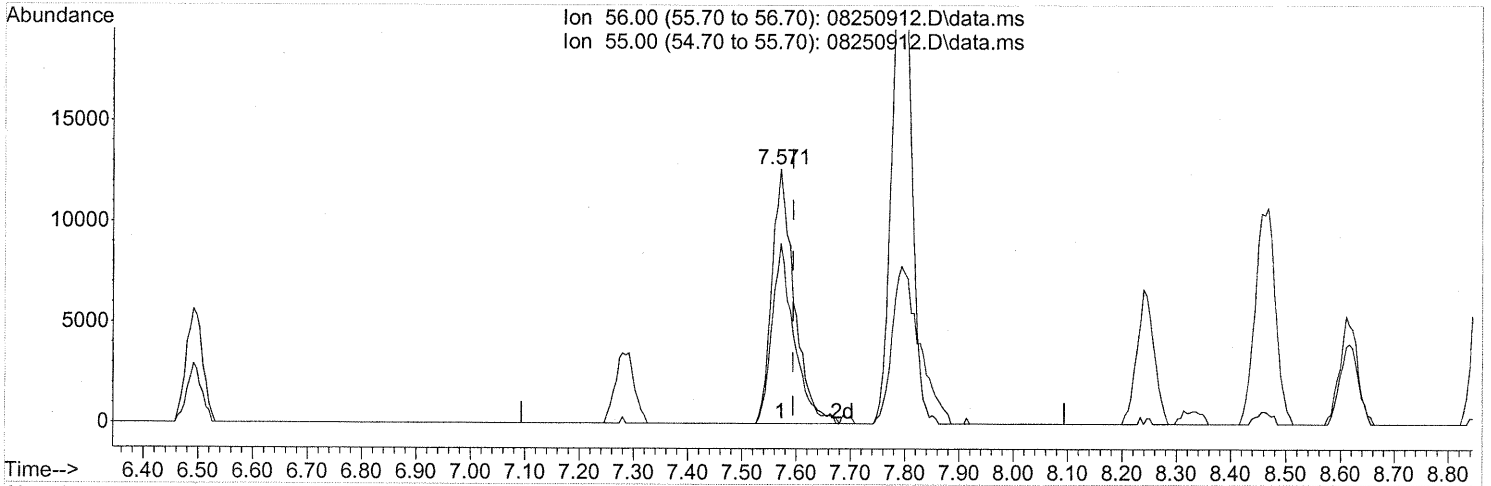
response 1242264

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(12) Acrolein (T)

7.571min (-0.023) 5.45ng

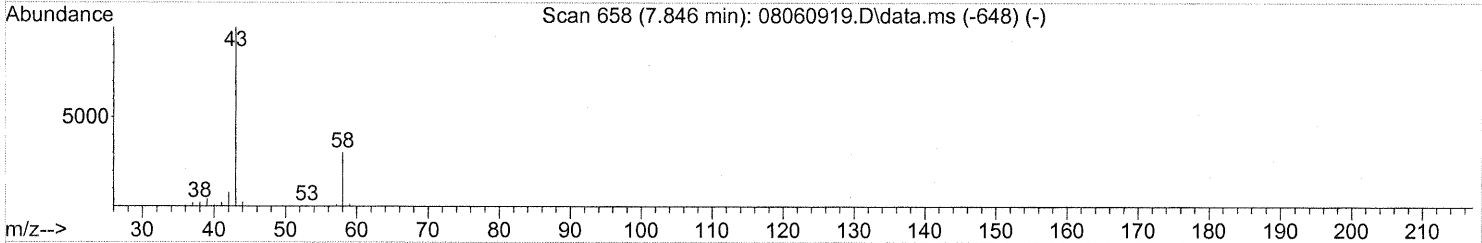
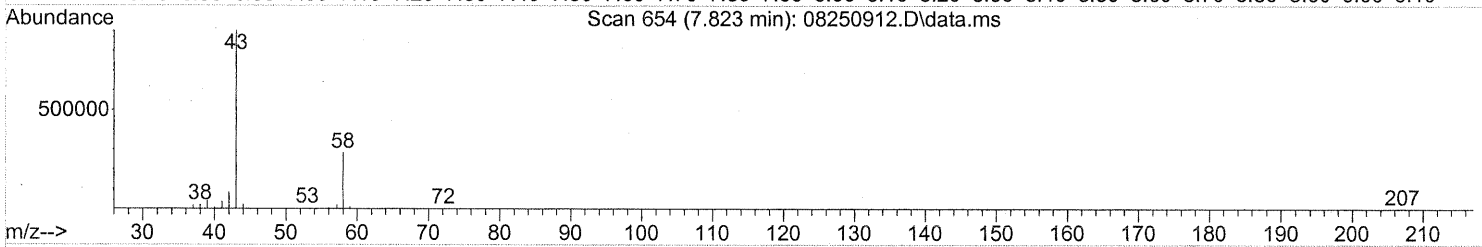
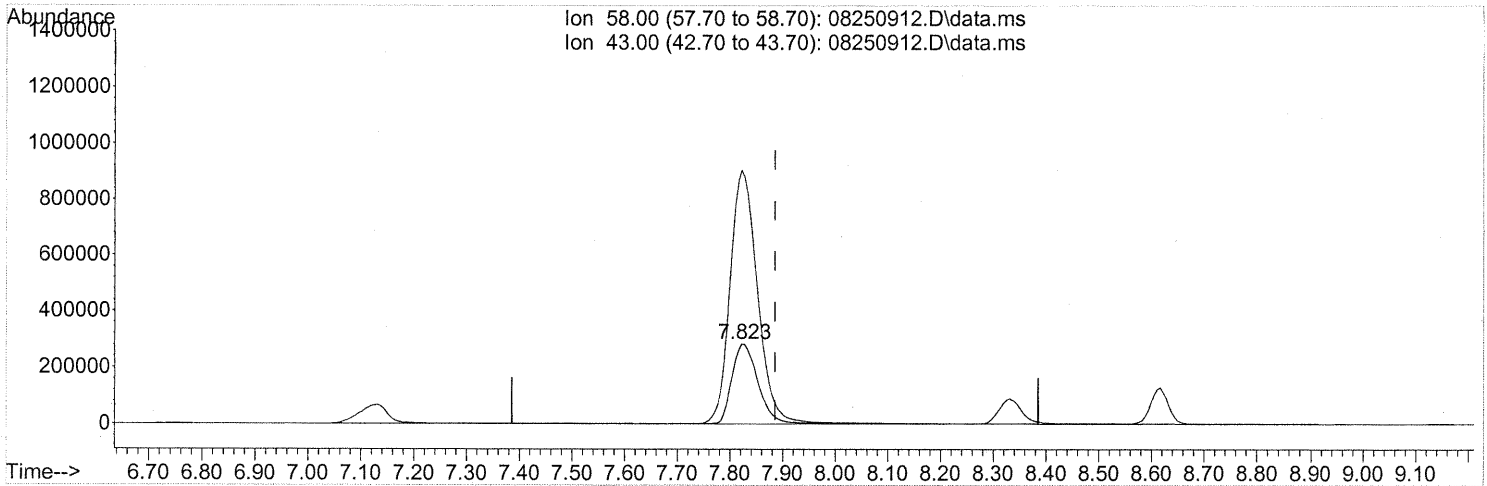
response 36162

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	70.15
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

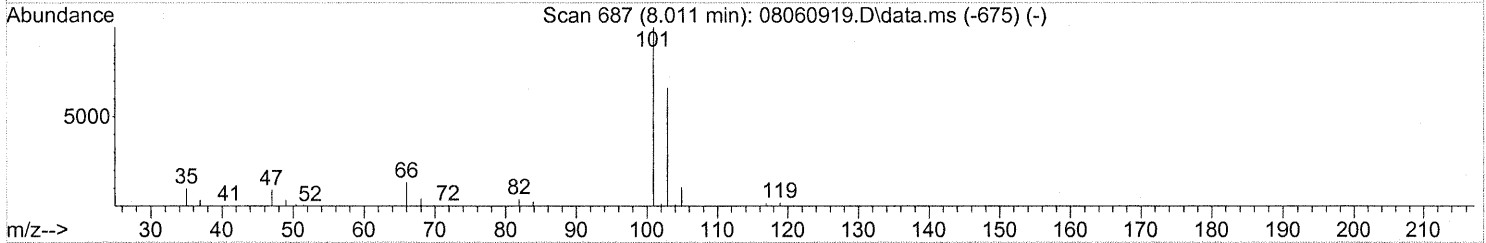
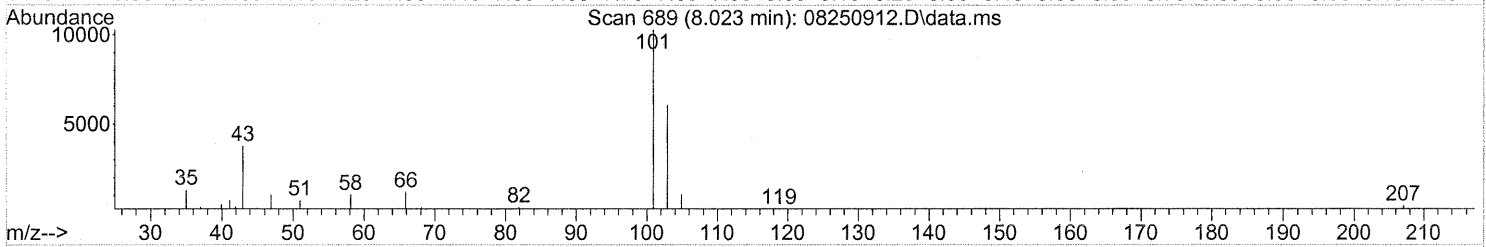
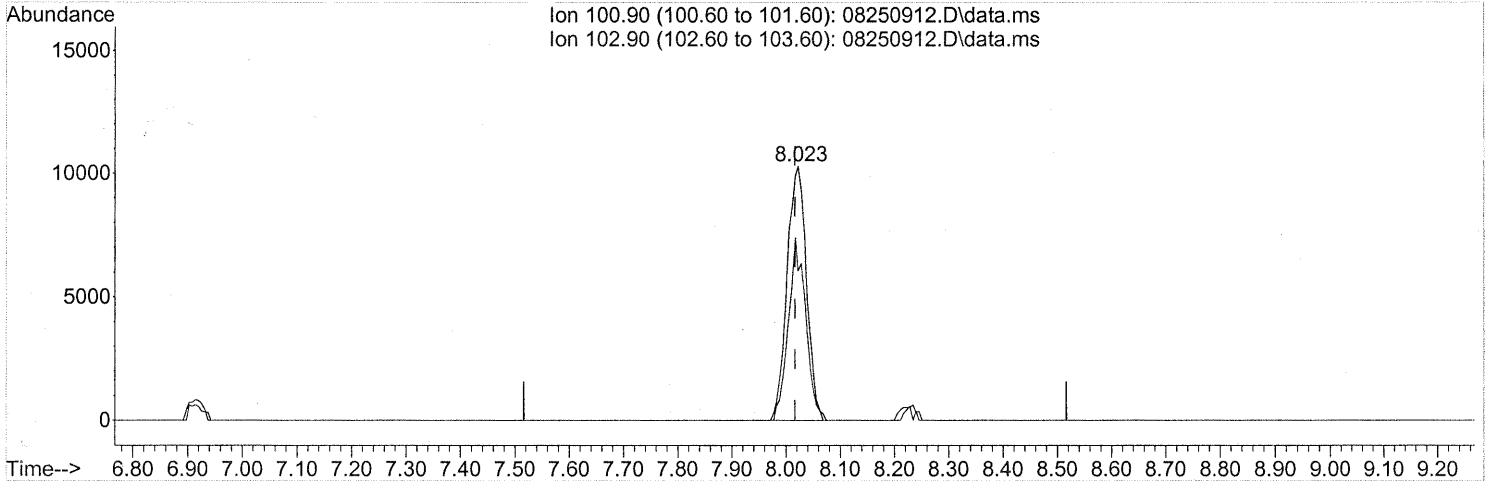
(13) Acetone (T)  
 7.823min (-0.063) 118.07ng  
 response 970487

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	337.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250912.D  
Acq On : 25 Aug 2009 18:48  
Operator : WA/CC  
Sample : P0902875-003 (1000mL)  
Misc : Environmental Health 102266  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



TIC: 08250912.D\data.ms

(14) Trichlorofluoromethane (T)

8.023min (+0.006) 1.26ng

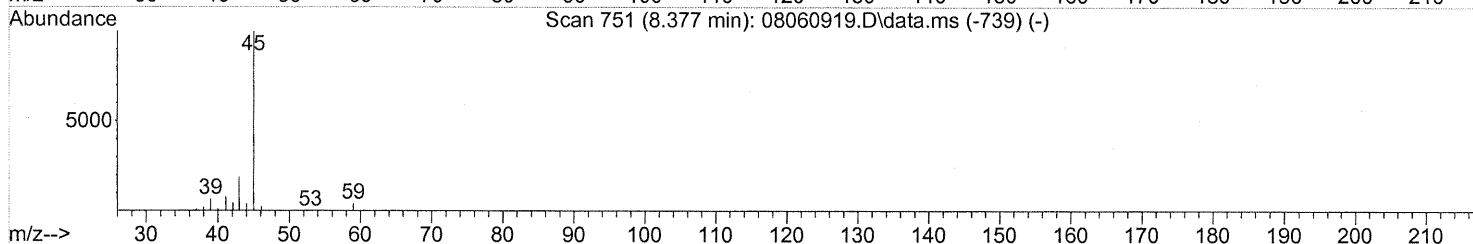
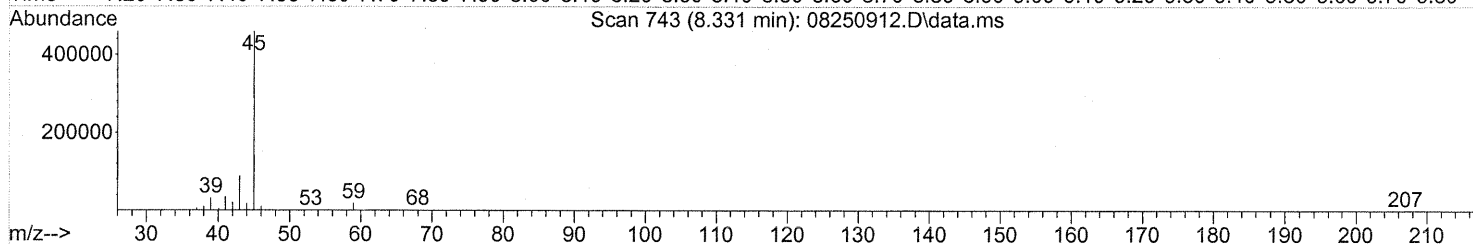
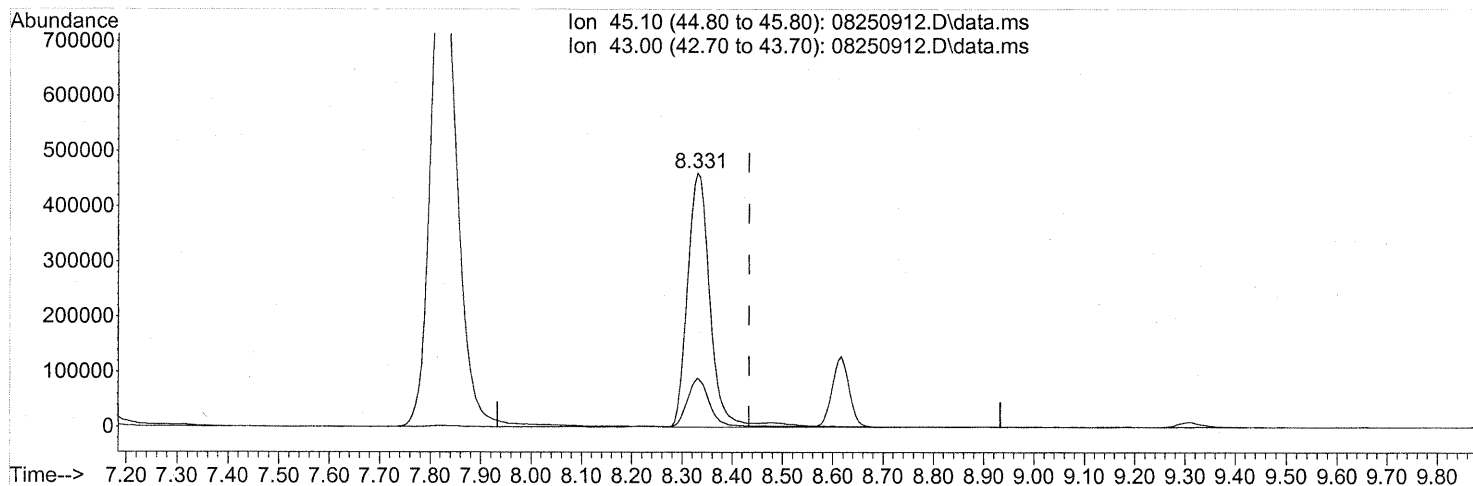
response 25663

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(15) 2-Propanol (Isopropanol) (T)

8.331min (-0.103) 45.20ng

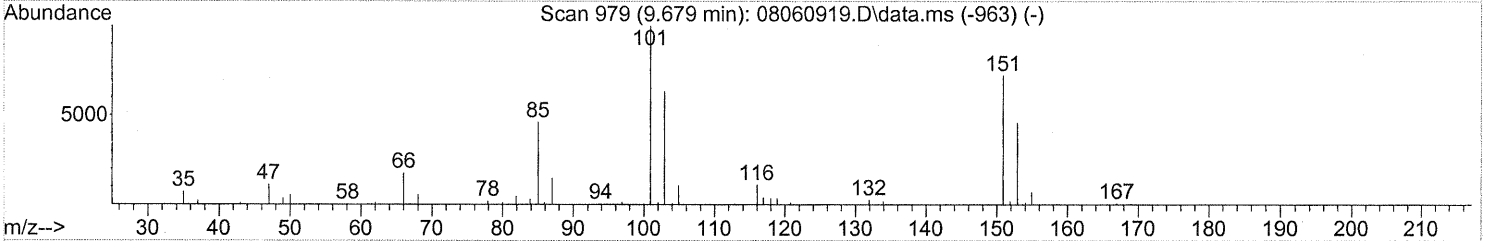
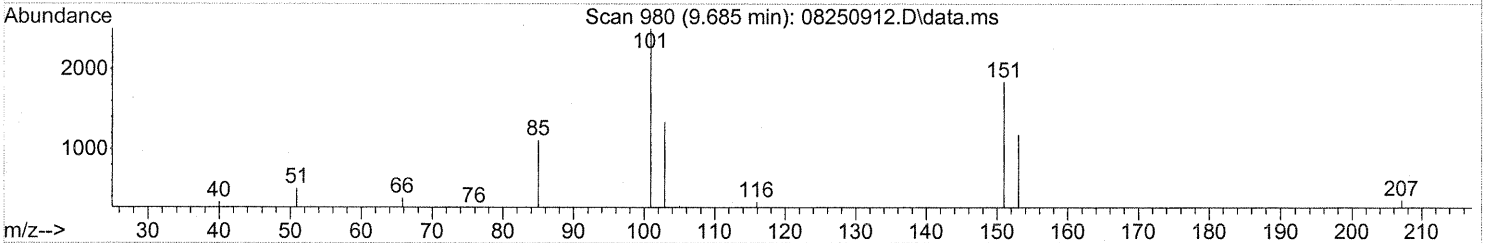
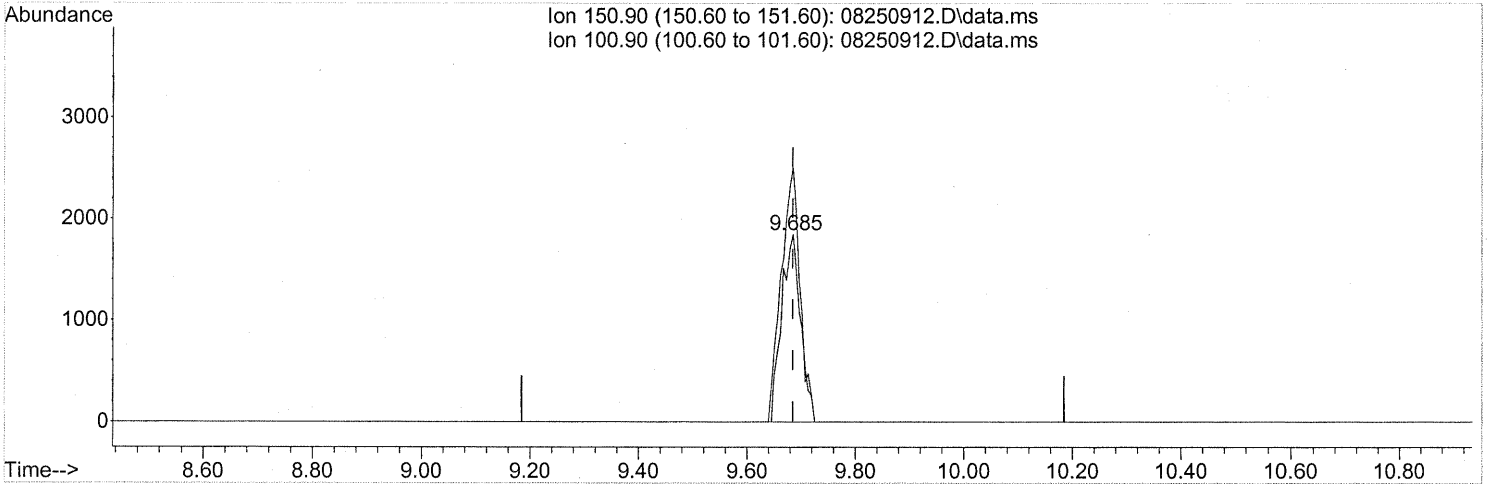
response 1459915

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.685min (+0.000) 0.61ng

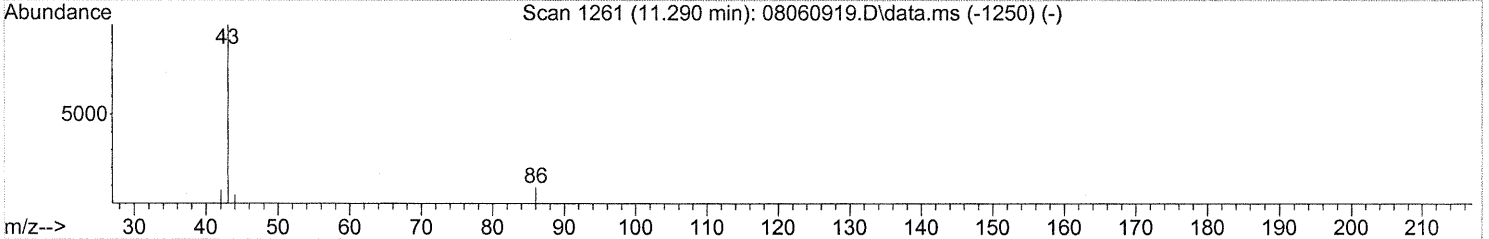
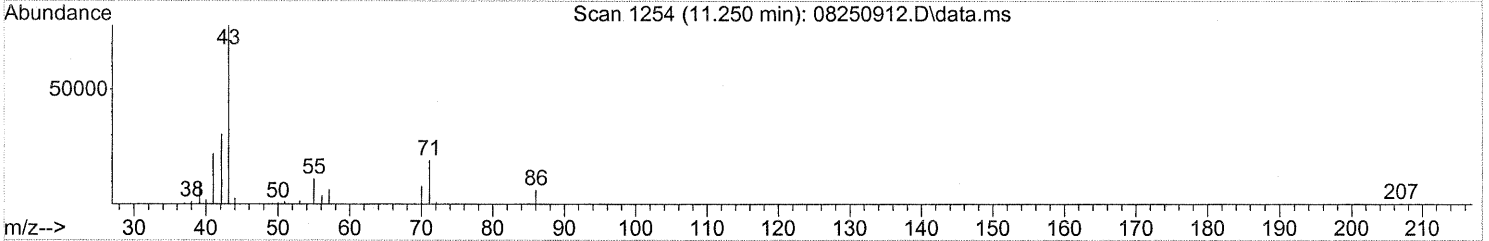
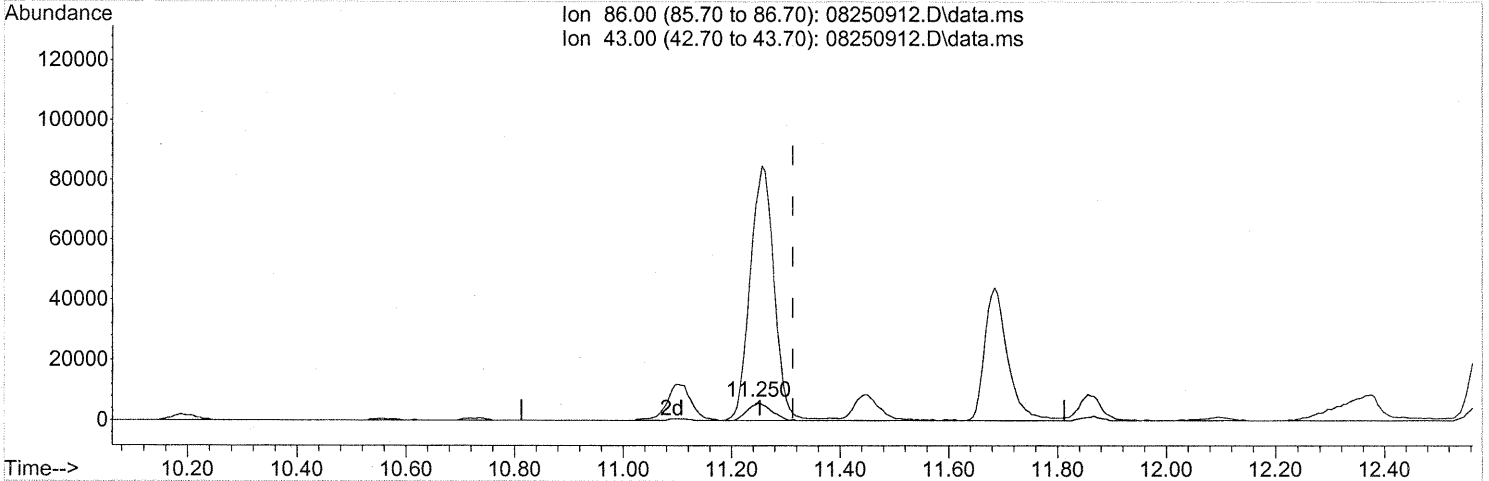
response 4475

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	134.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250912.D  
Acq On : 25 Aug 2009 18:48  
Operator : WA/CC  
Sample : P0902875-003 (1000mL)  
Misc : Environmental Health 102266  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



(26) Vinyl Acetate (T)  
11.250min (-0.063) 10.43ng

response 17451

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1487.79#
0.00	0.00	0.00
0.00	0.00	0.00

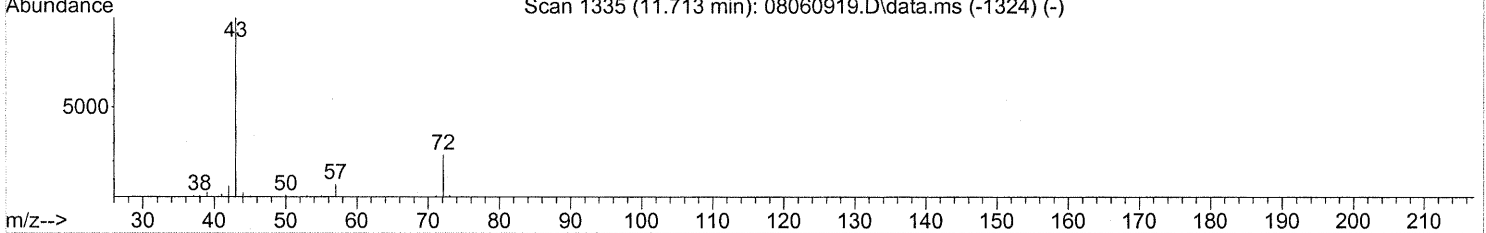
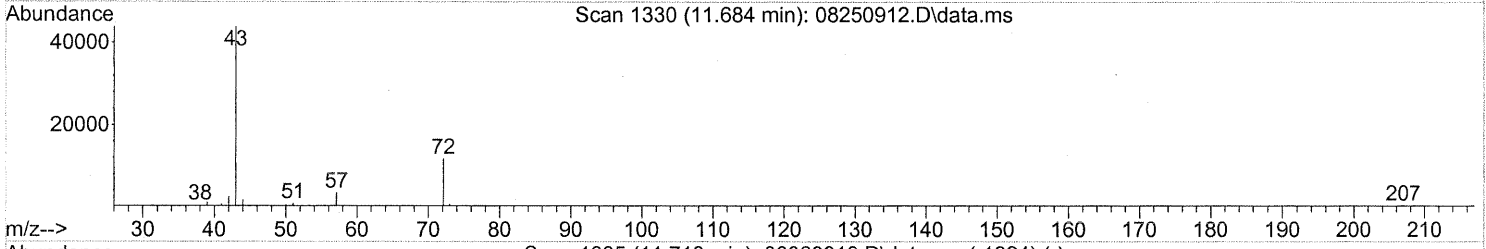
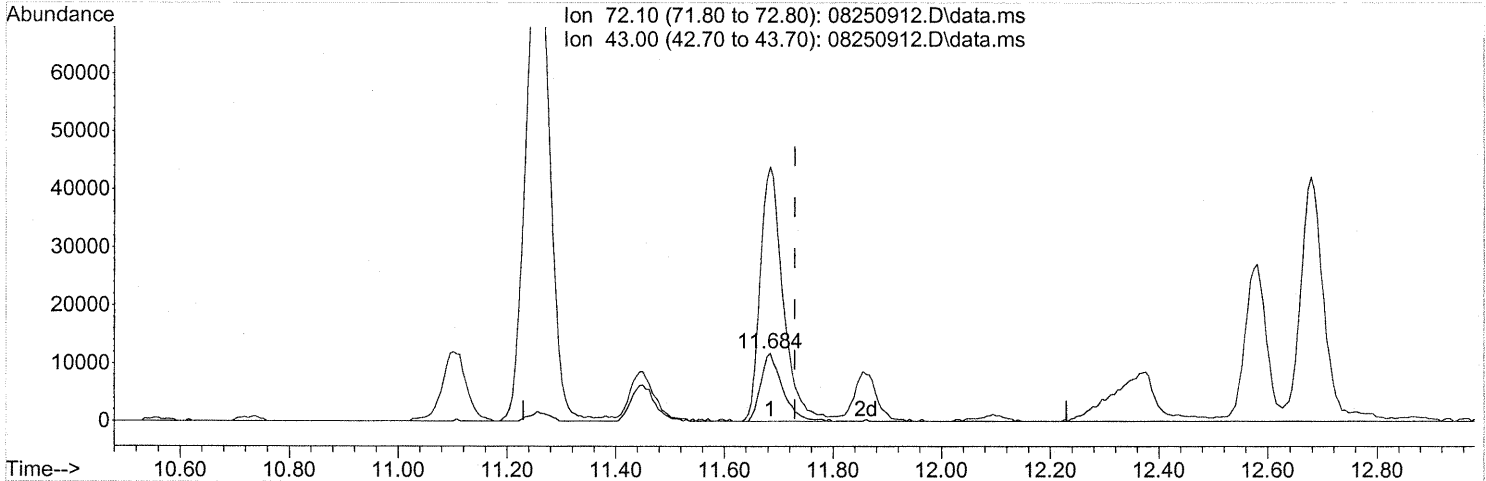
FP  
11/9/09

11/13/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(27) 2-Butanone (MEK) (T)

11.684min (-0.046) 4.37ng

response 32396

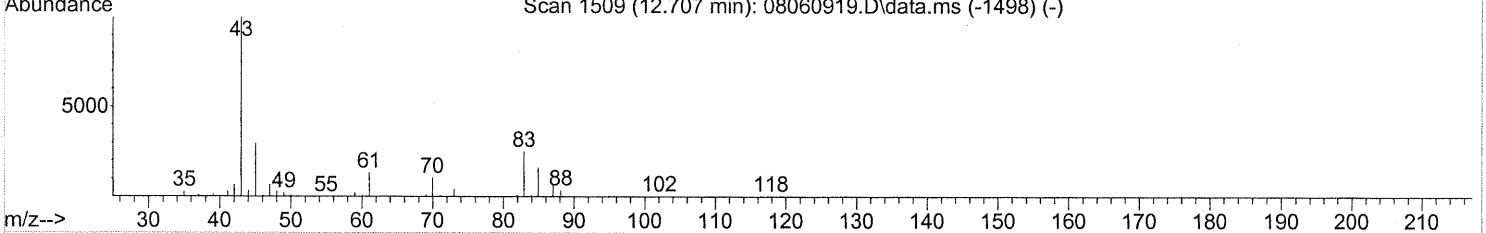
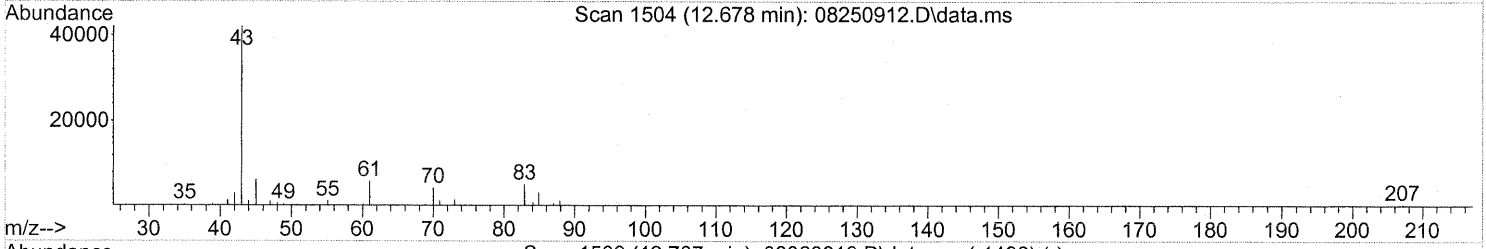
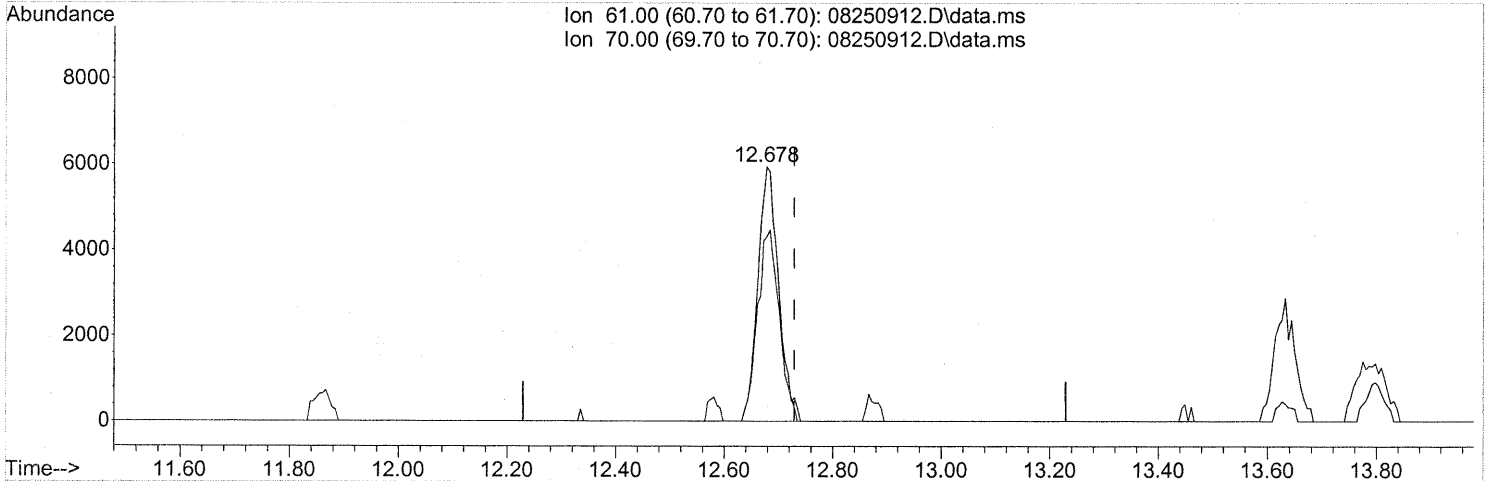
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	398.73#
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(30) Ethyl Acetate (T)

12.678min (-0.051) 4.09ng

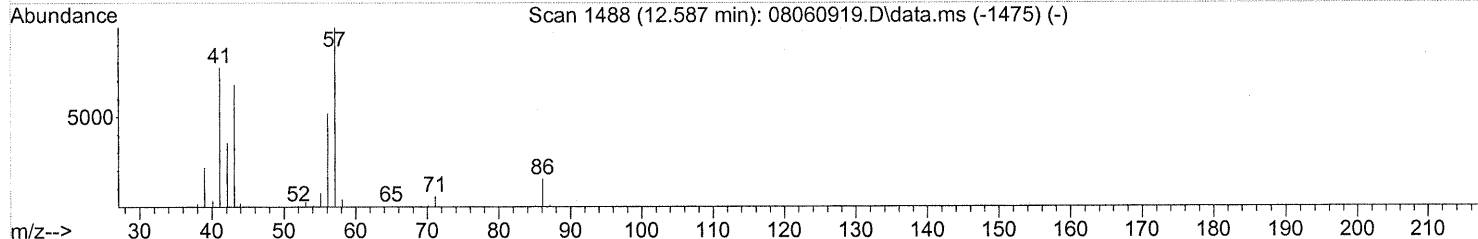
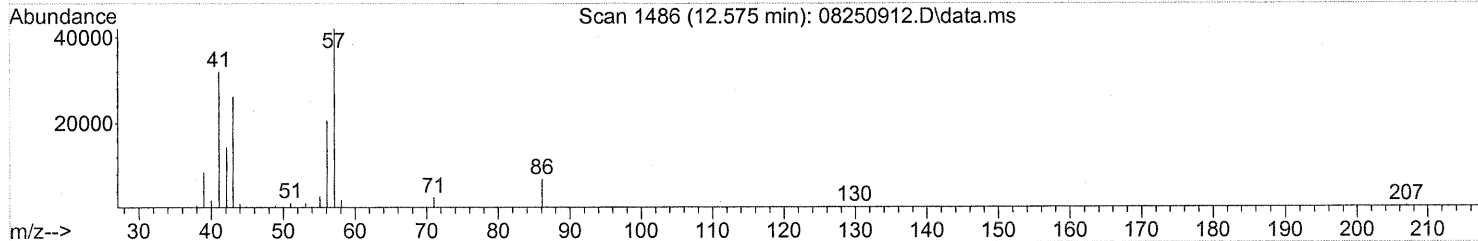
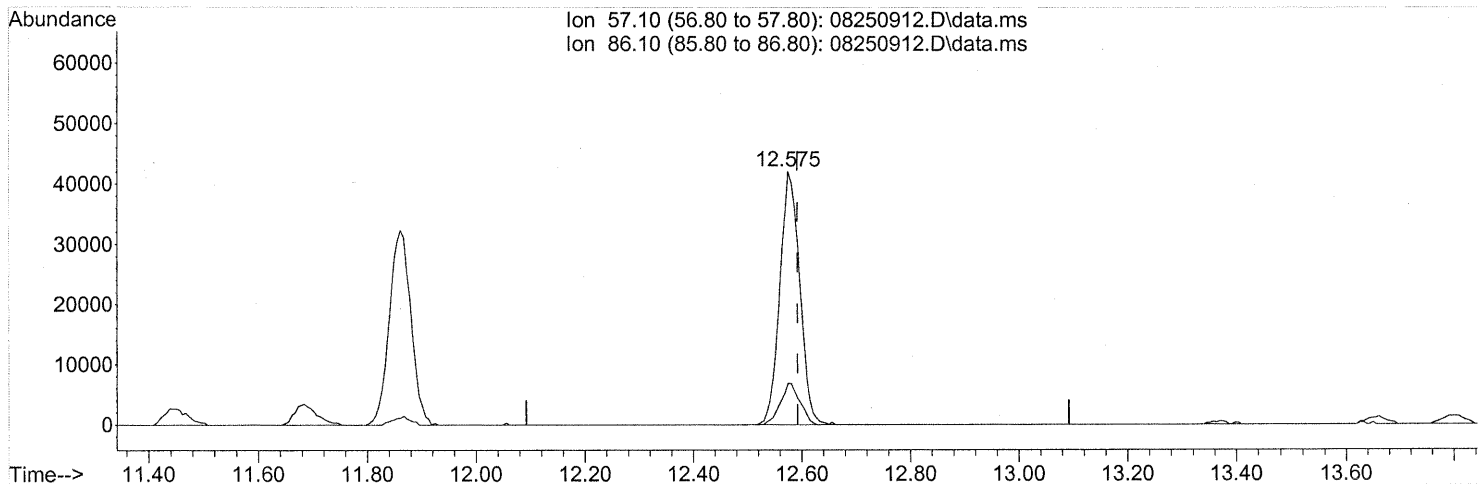
response 15816

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	78.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

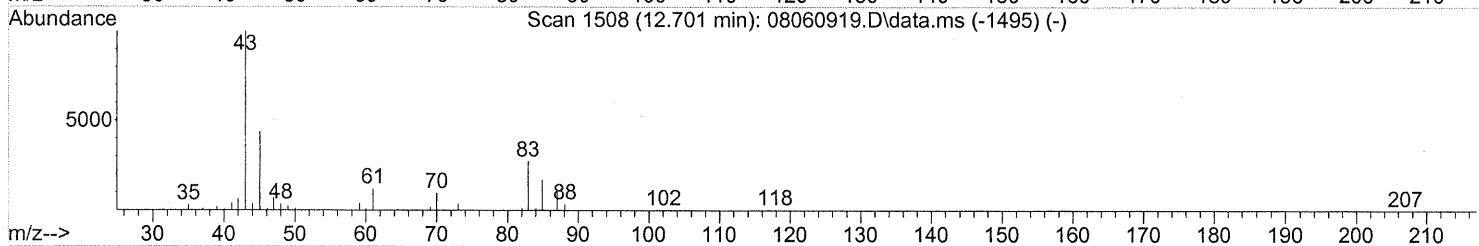
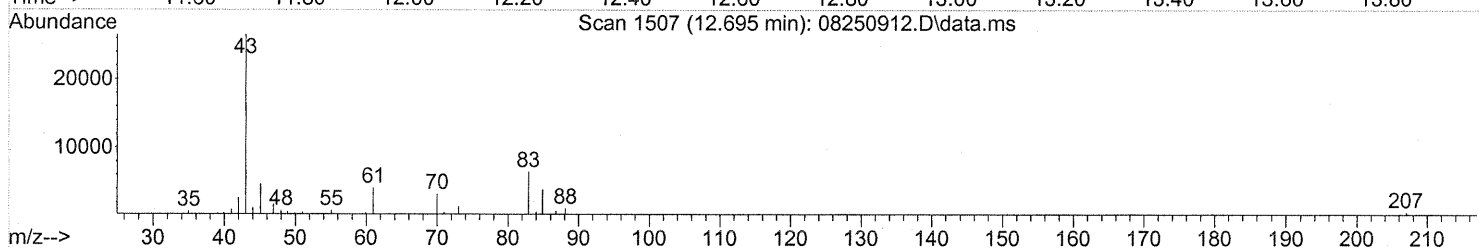
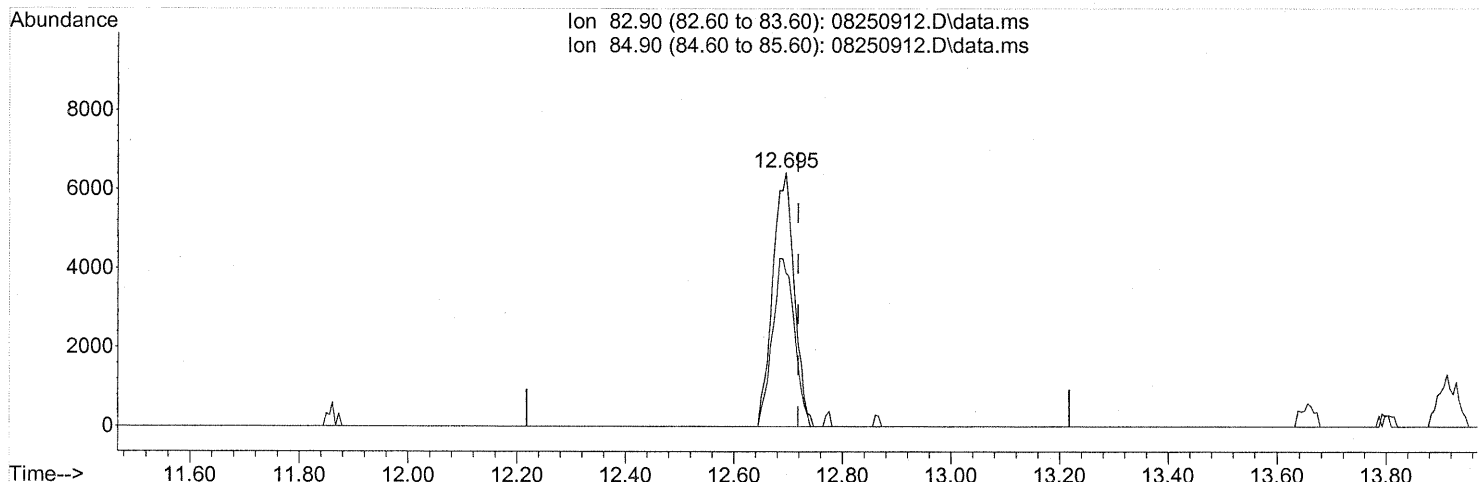
(31) n-Hexane (T)  
 12.575min (-0.017) 5.39ng  
 response 106696

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	15.88
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(32) Chloroform (T)

12.695min (-0.023) 1.02ng

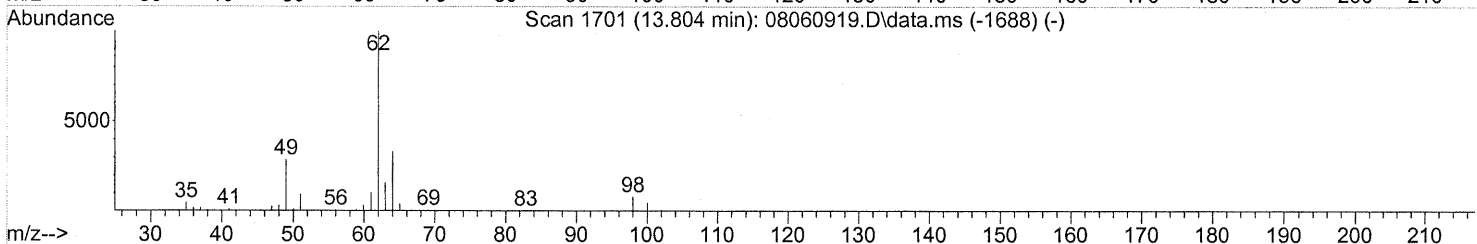
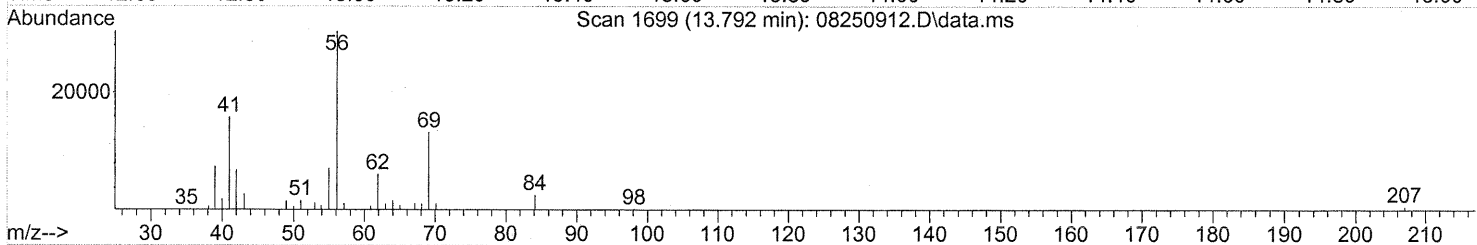
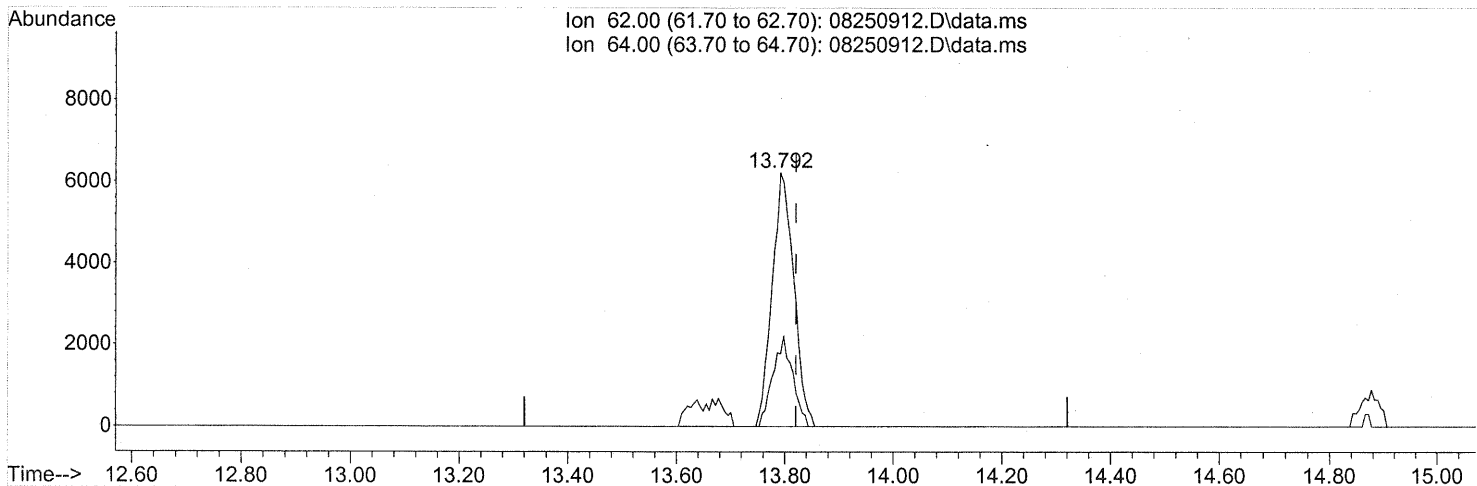
response 17843

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	67.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.08ng

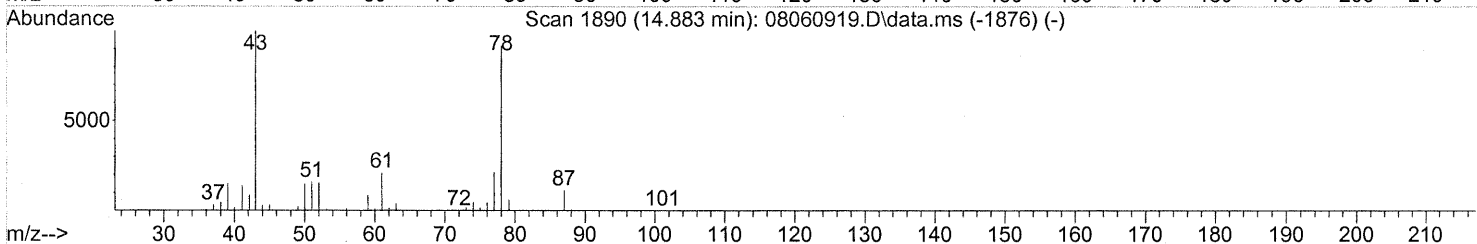
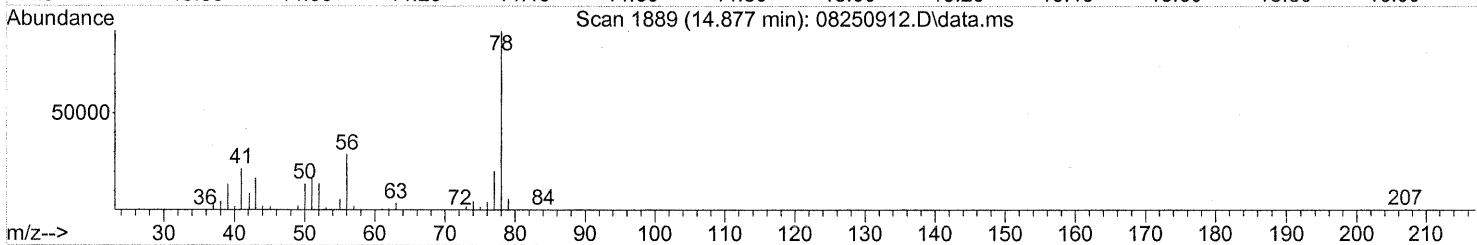
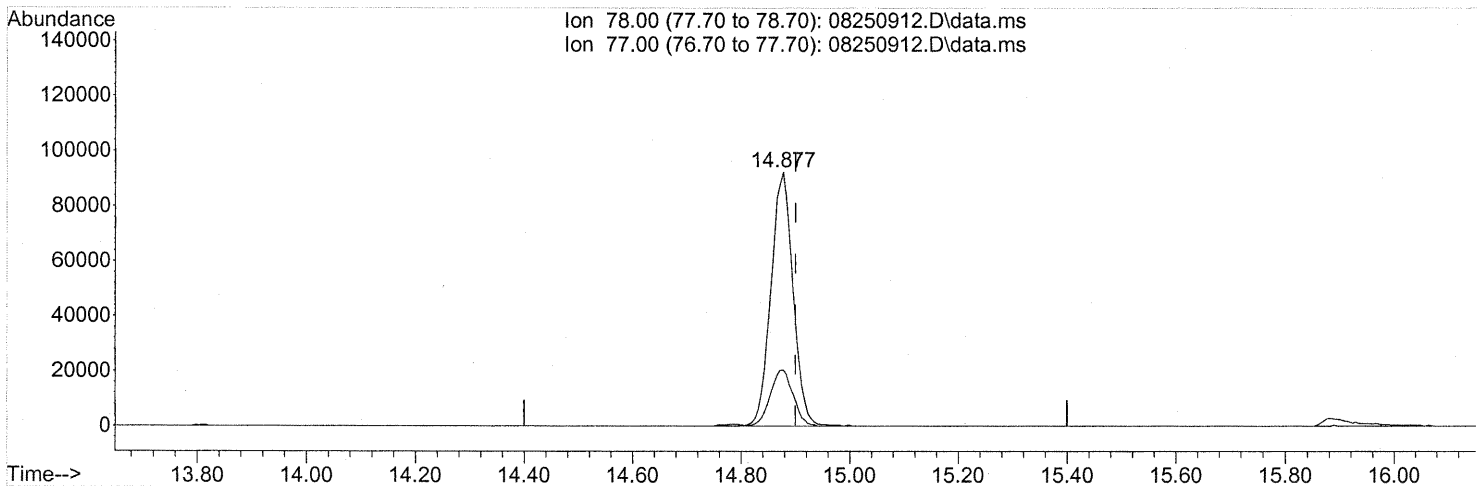
response 17247

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.43
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(41) Benzene (T)

14.877min (-0.023) 5.90ng

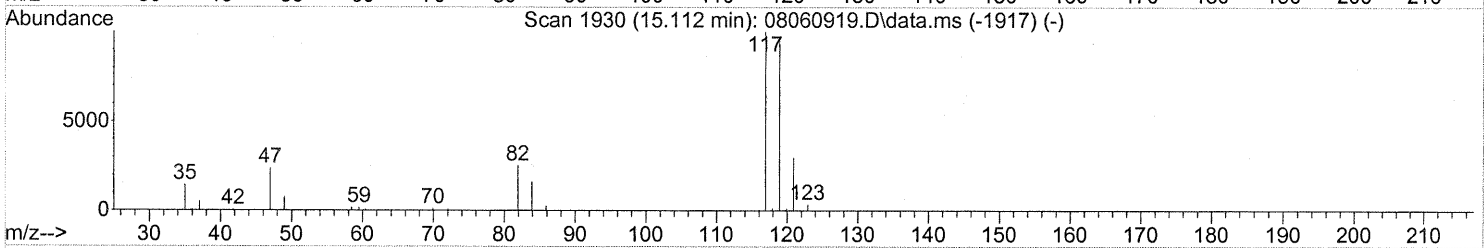
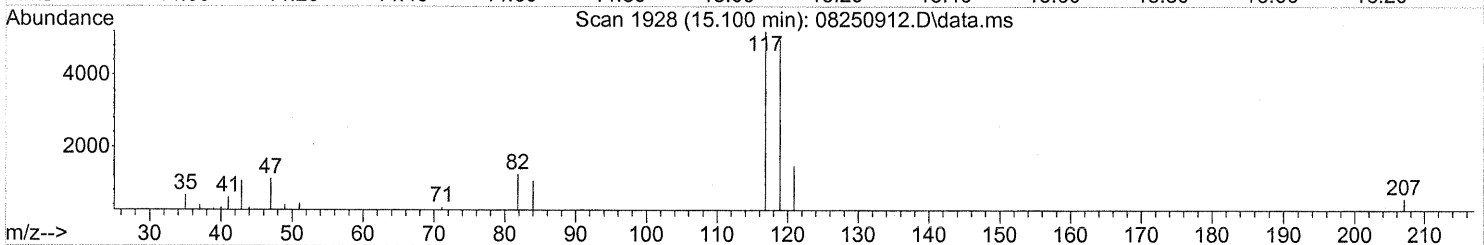
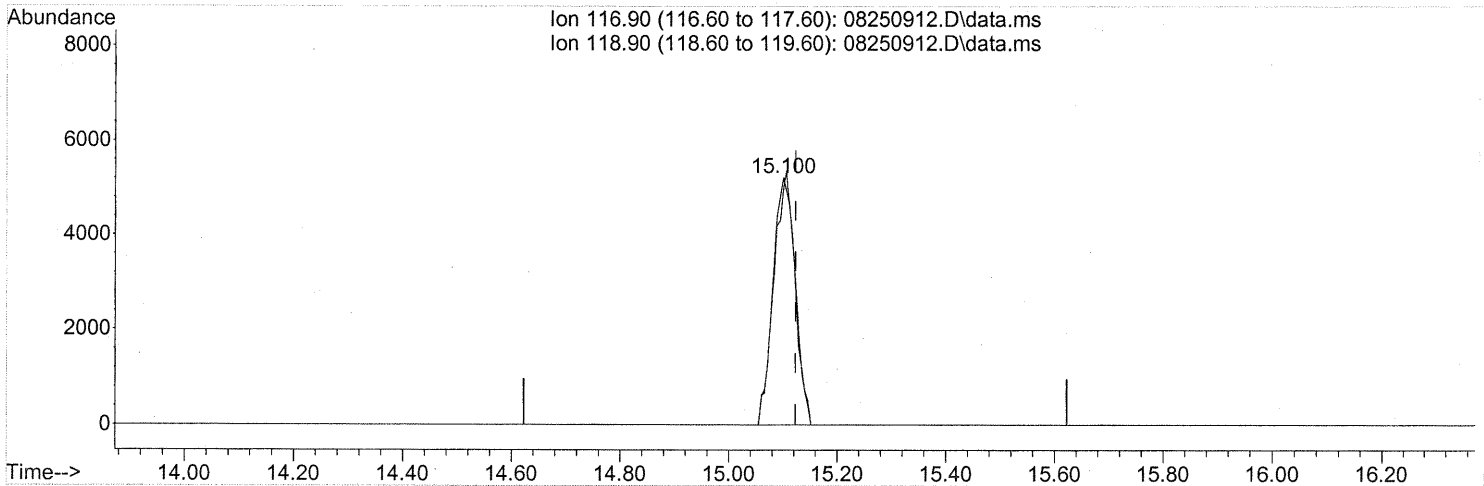
response 260017

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	22.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 1.05ng

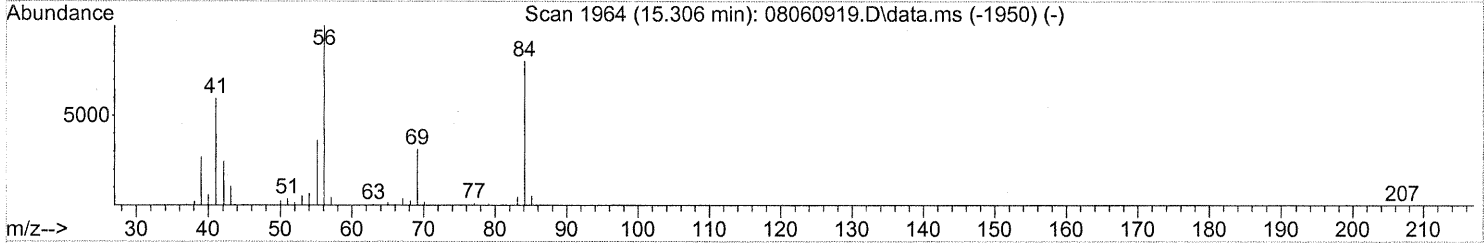
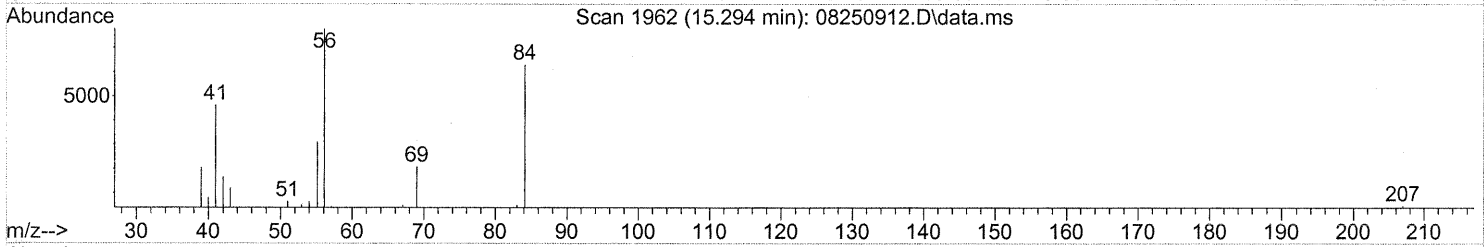
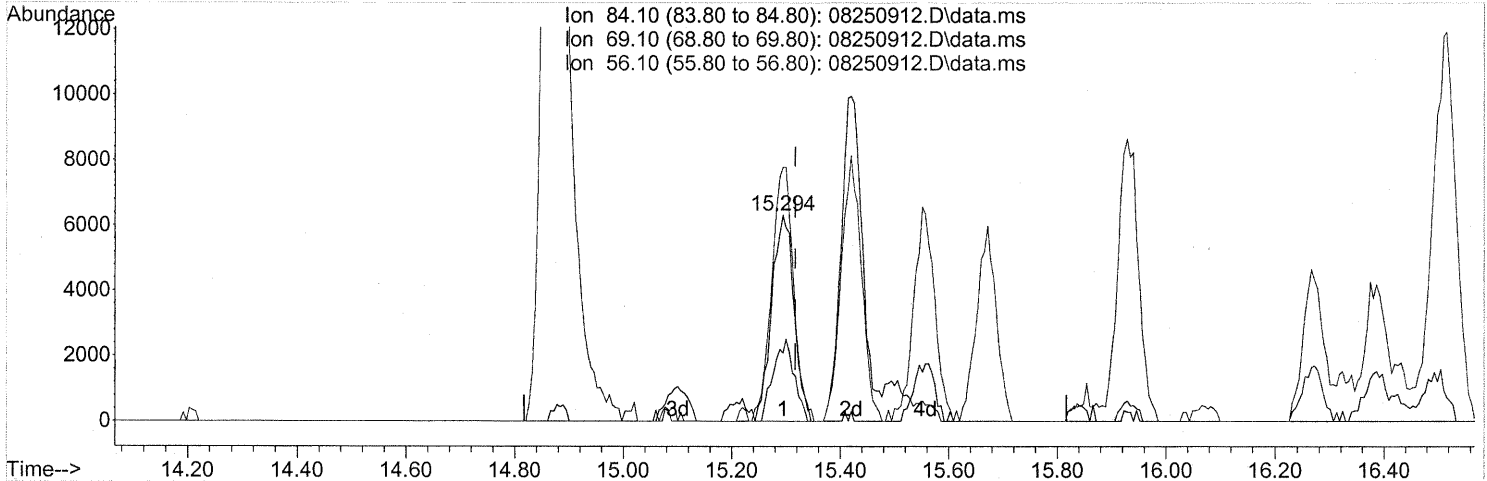
response 14821

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	97.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(43) Cyclohexane (T)

15.294min (-0.023) 1.11ng

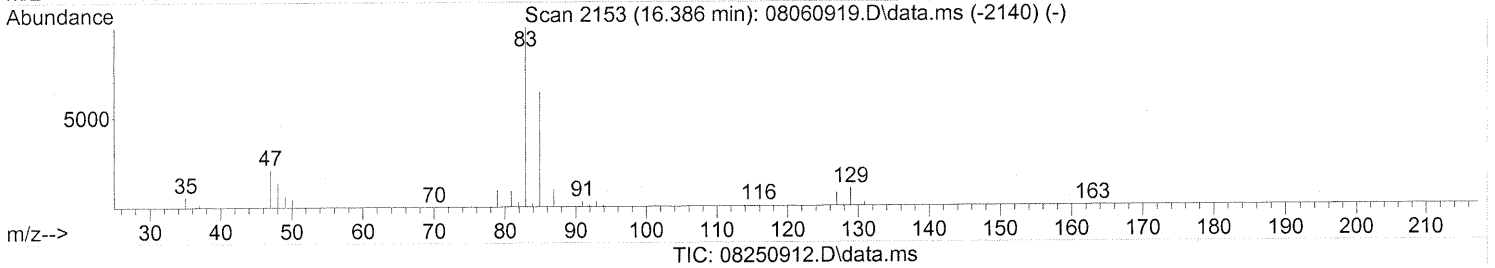
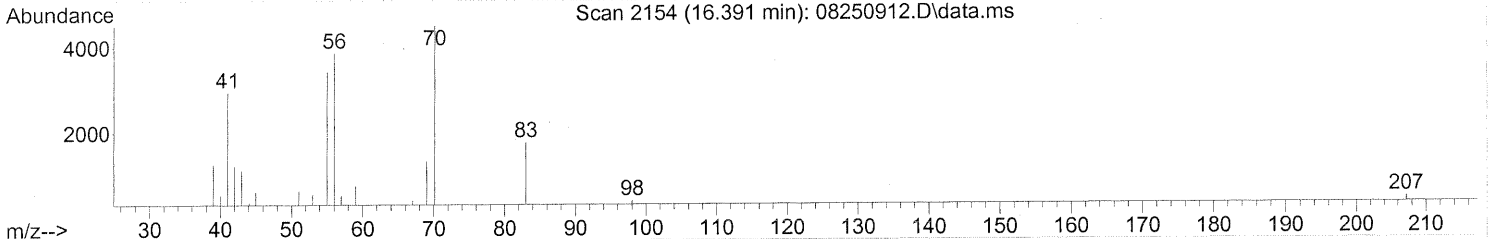
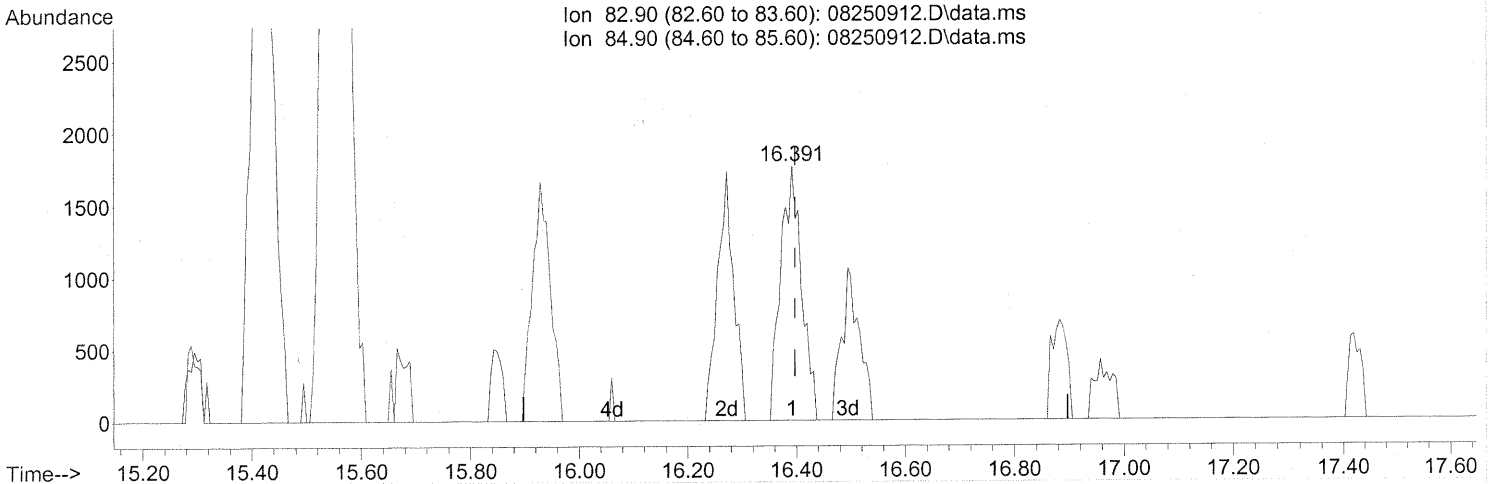
response 17943

Ion	Exp%	Act%
84.10	100	100
69.10	38.70	37.11
56.10	127.50	121.06
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250912.D  
Acq On : 25 Aug 2009 6:48 pm  
Operator : WA/CC  
Sample : P0902875-003 (1000mL)  
Misc : Environmental Health 102266  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 20:59:50 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.391min (-0.006) 0.32ng

response 4710

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FP

10/9/2/09.

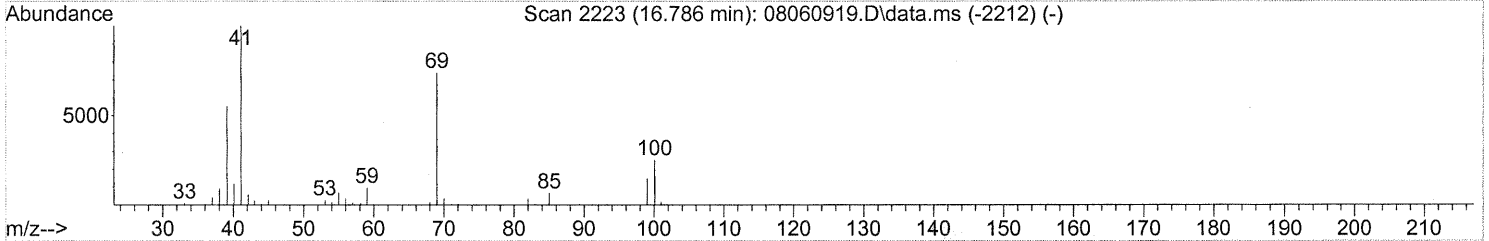
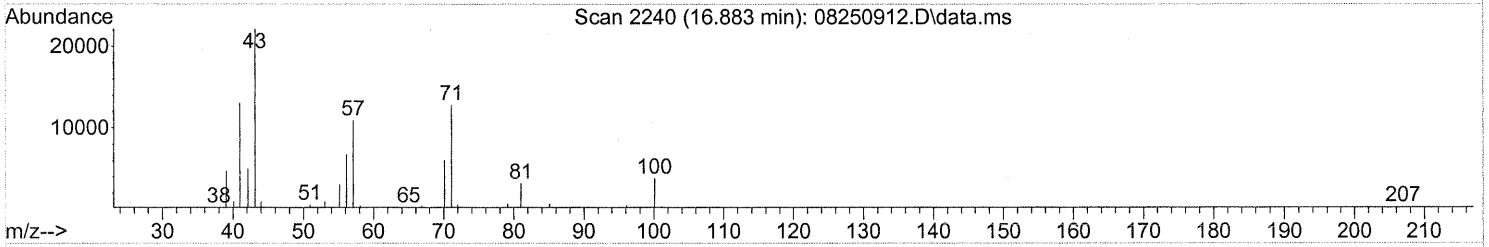
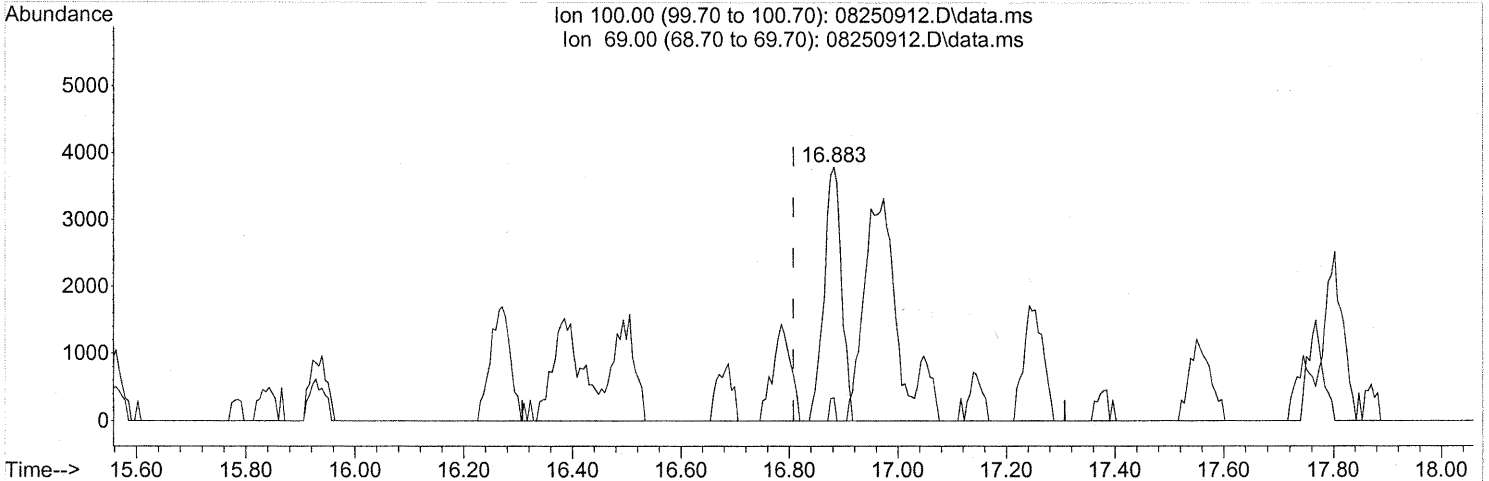
10/9/3/09



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(50) Methyl Methacrylate (T)

16.883min (+0.074) 2.09ng

response 8468

Ion	Exp%	Act%
100.00	100	100
69.00	294.80	2.70#
0.00	0.00	0.00
0.00	0.00	0.00

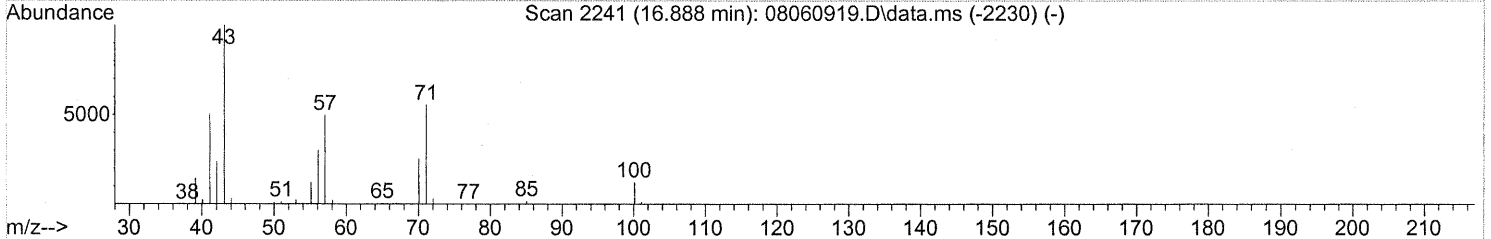
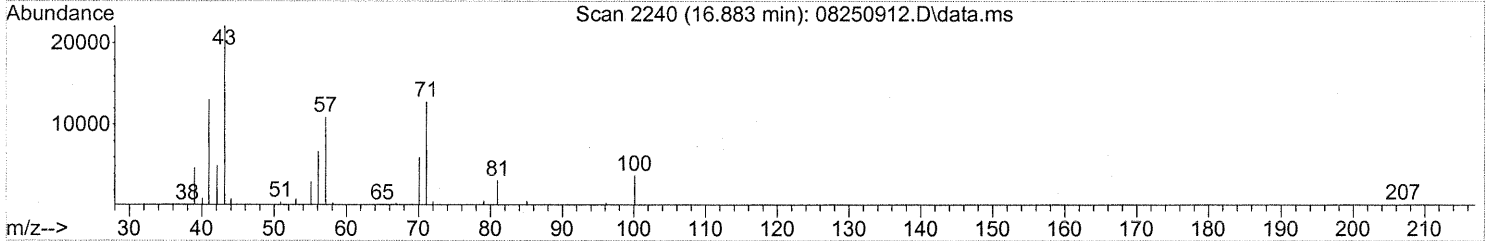
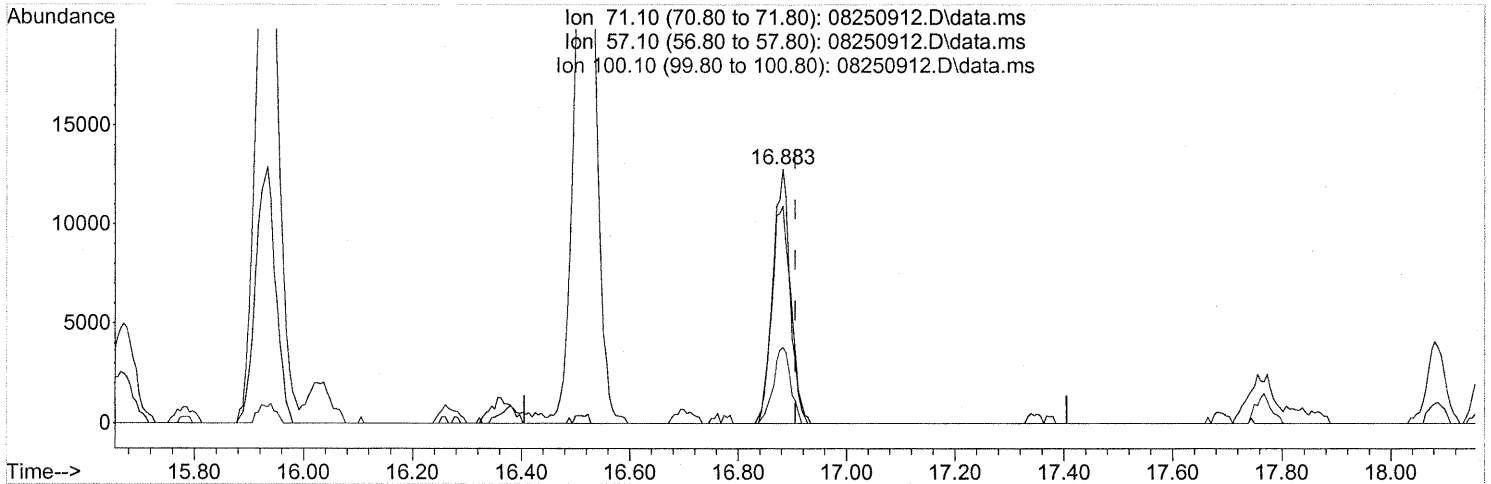
*FP  
17 9/2/09*

*KE 9/3/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(51) n-Heptane (T)

16.883min (-0.023) 2.48ng

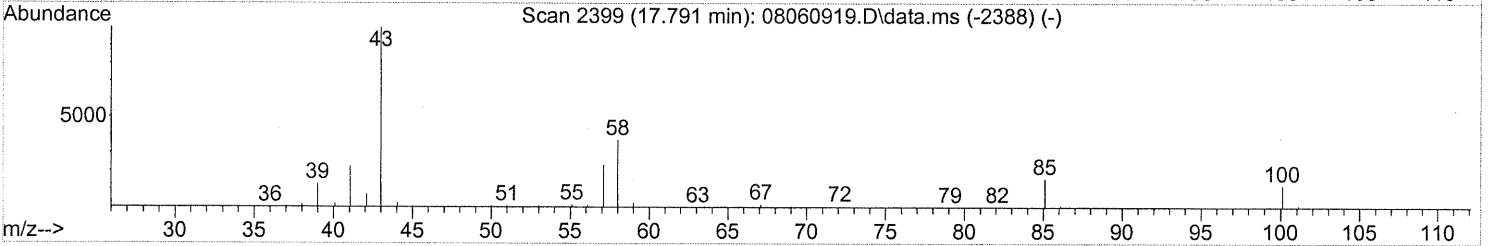
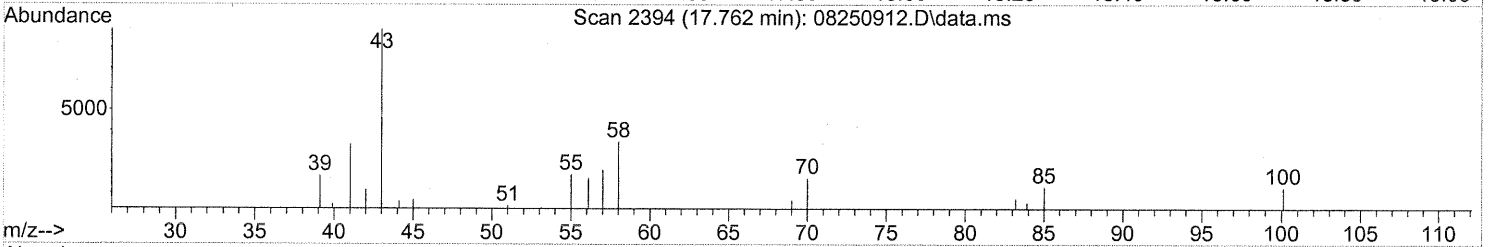
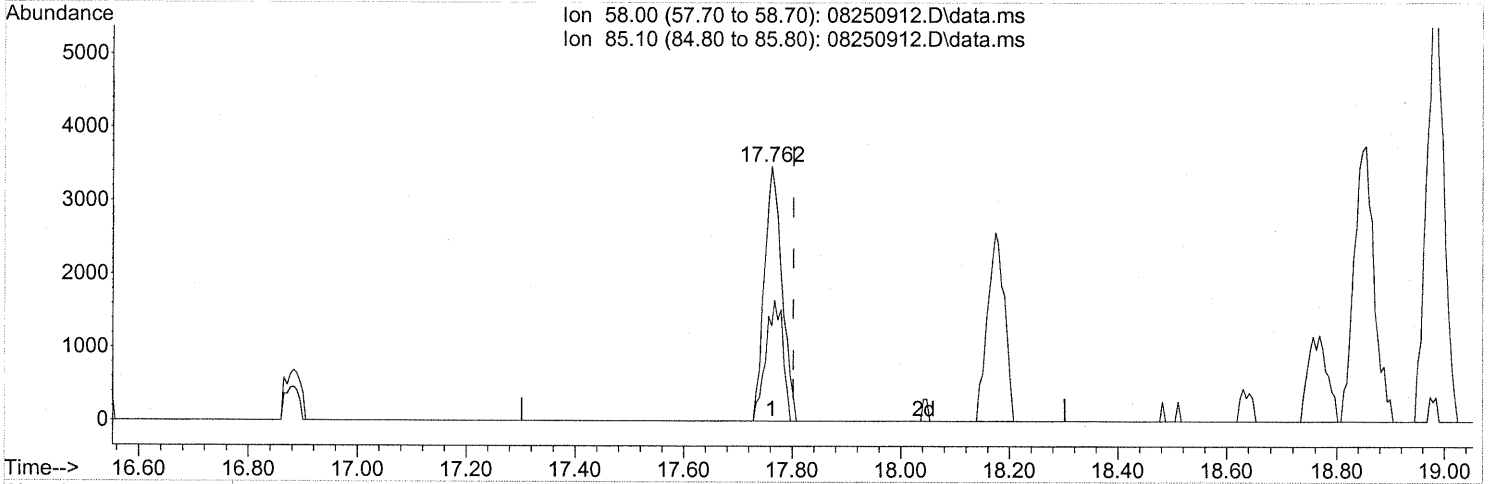
response 29329

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	89.34
100.10	26.40	28.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(53) 4-Methyl-2-pentanone (T)

17.762min (-0.040) 0.74ng

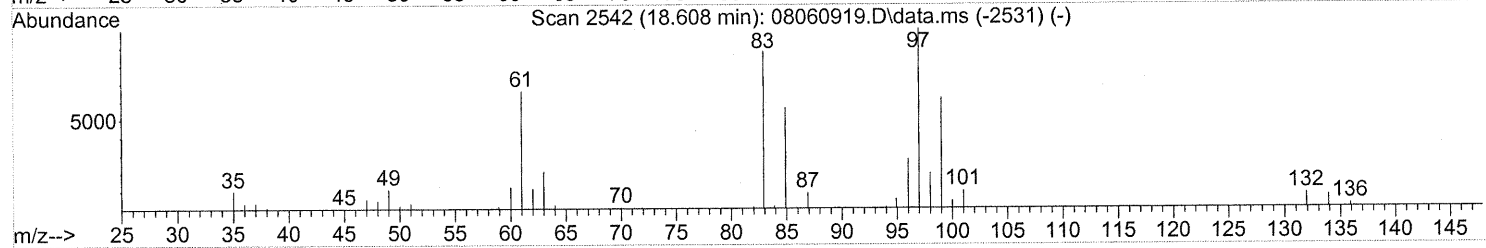
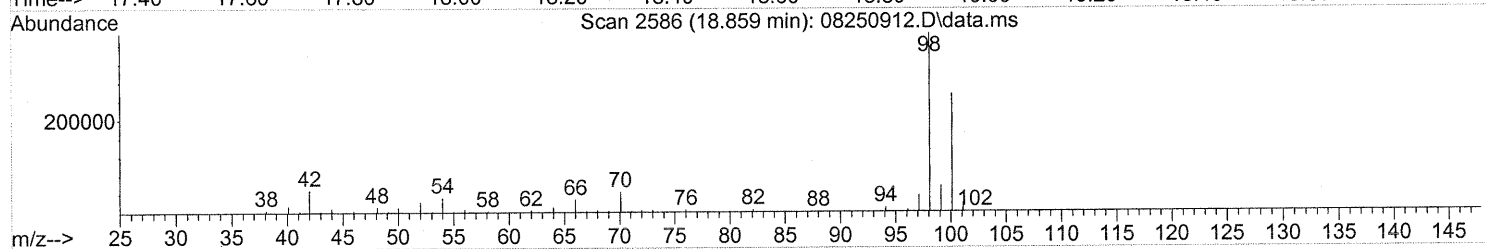
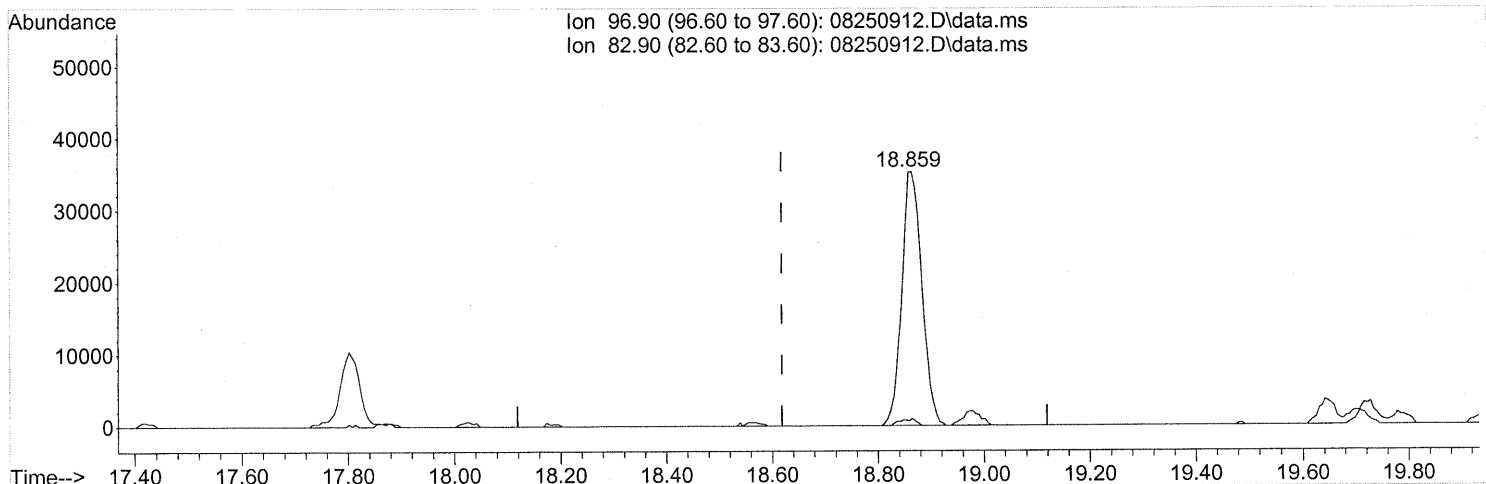
response 7842

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	45.70
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(55) 1,1,2-Trichloroethane (T)

18.859min (+0.240) 9.63ng

response 93227

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.89#
0.00	0.00	0.00
0.00	0.00	0.00

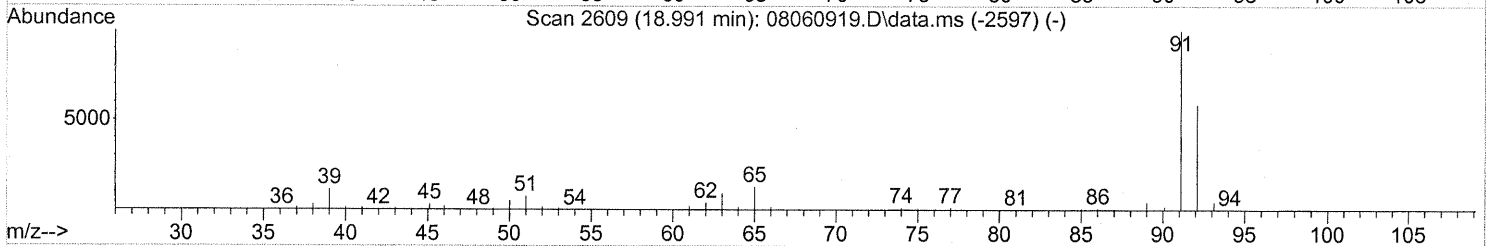
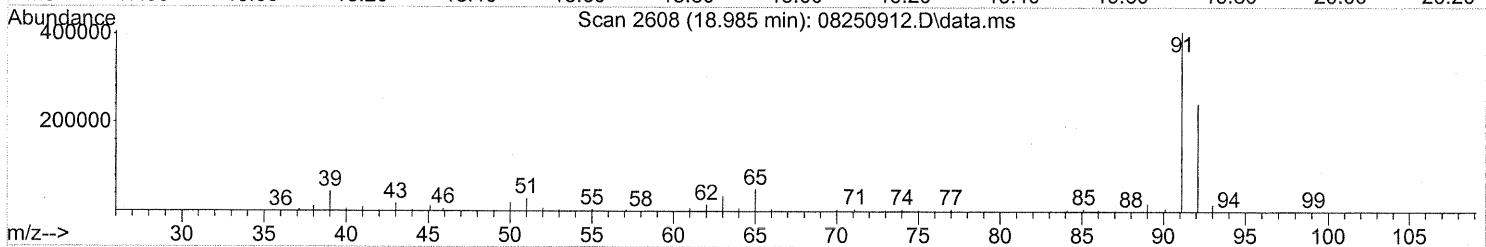
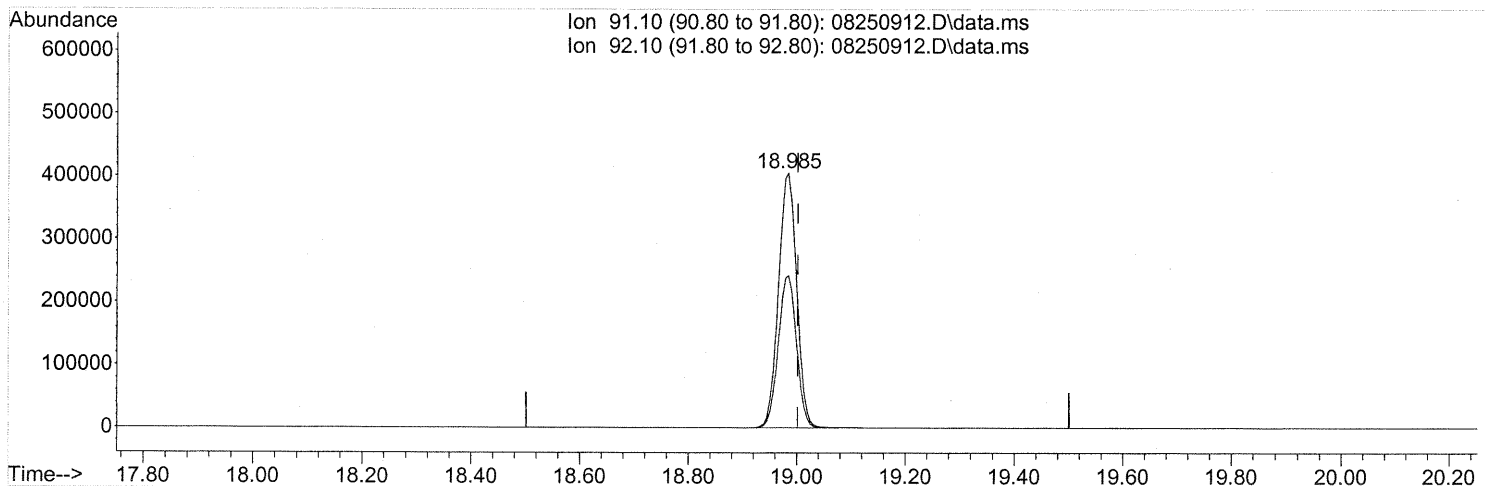
EP  
 in 9/2/09

9/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

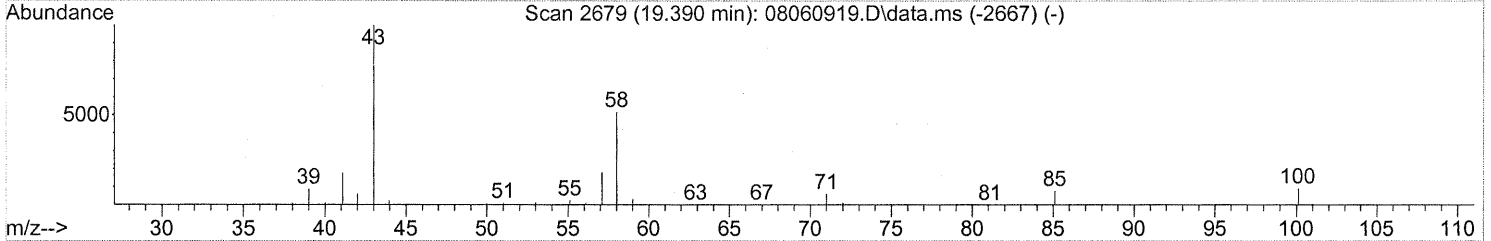
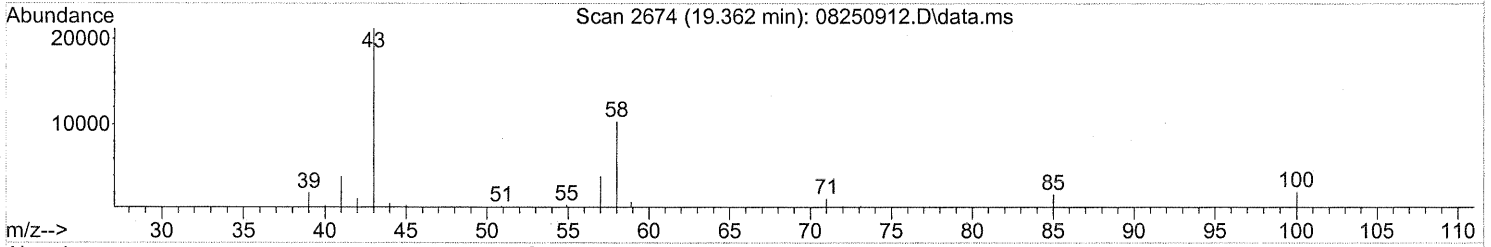
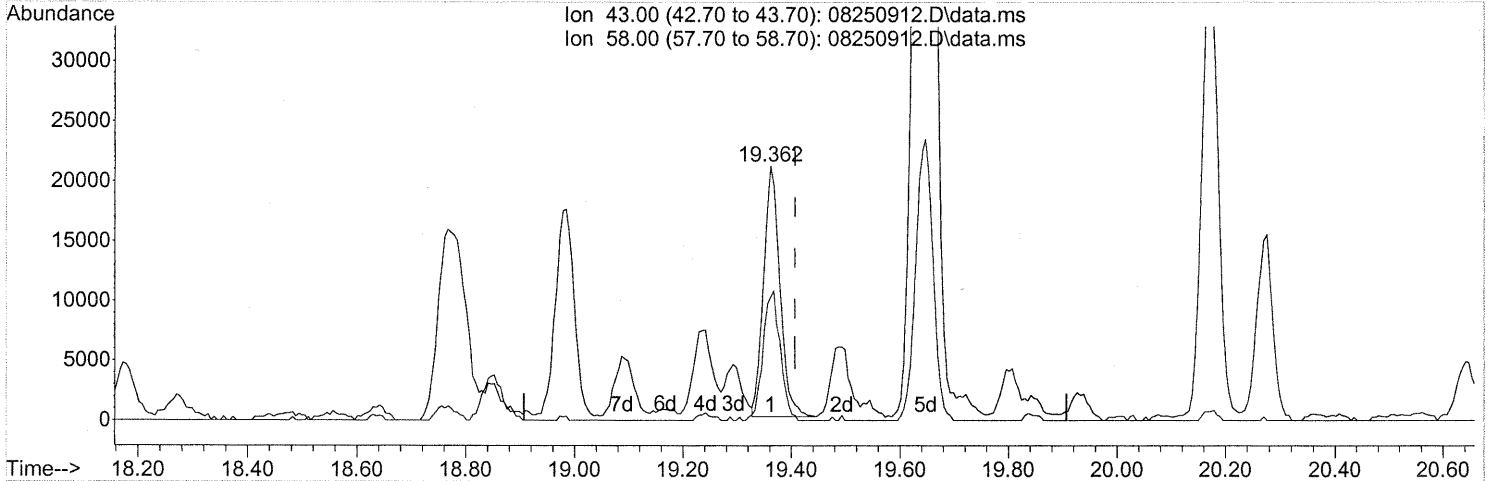
(58) Toluene (T)  
 18.985min (-0.017) 23.05ng  
 response 944456

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 1.62ng

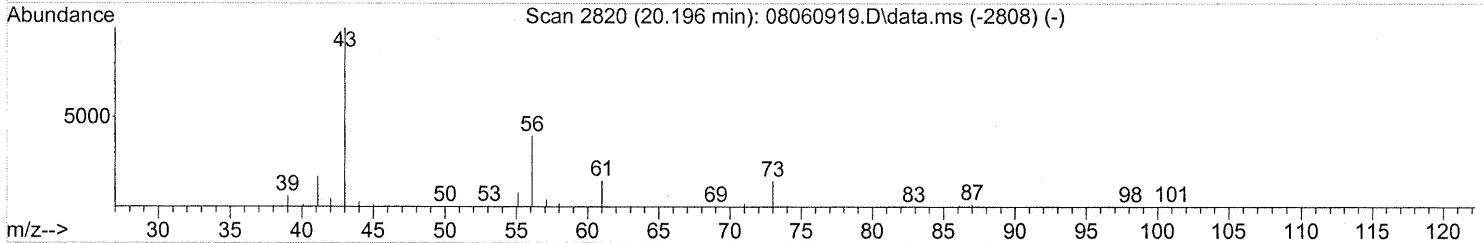
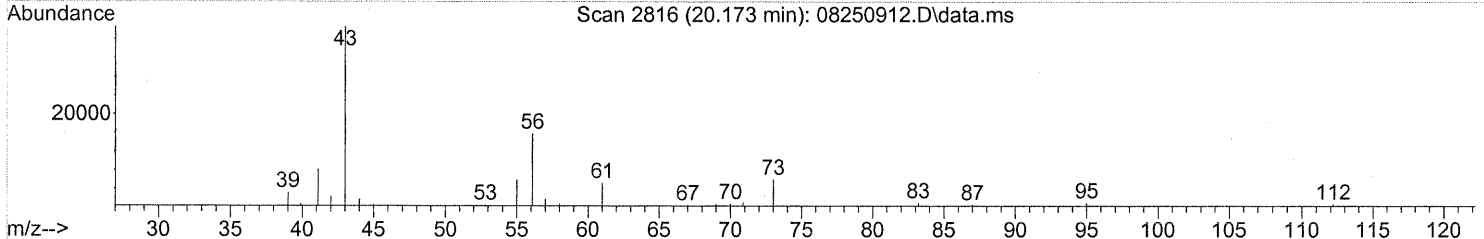
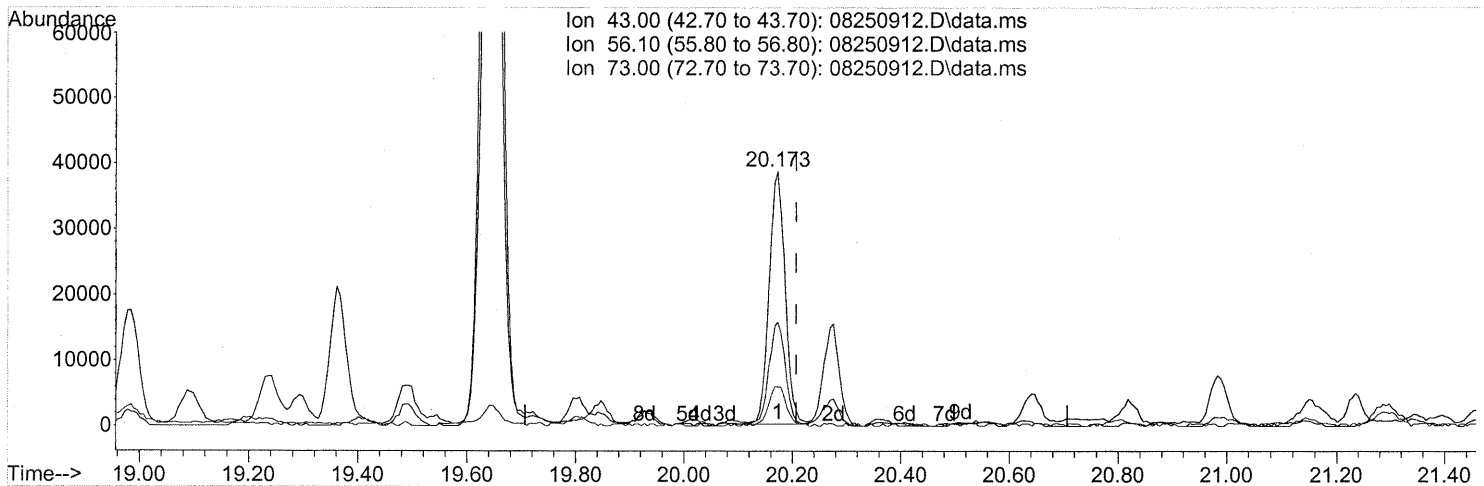
response 44232

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	54.15
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

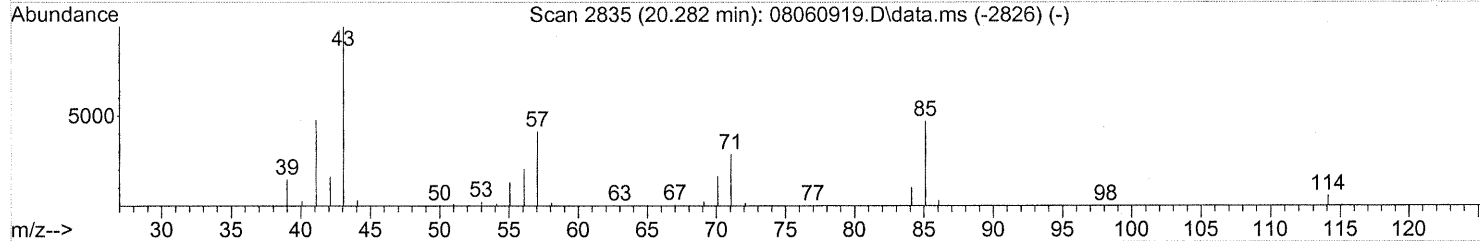
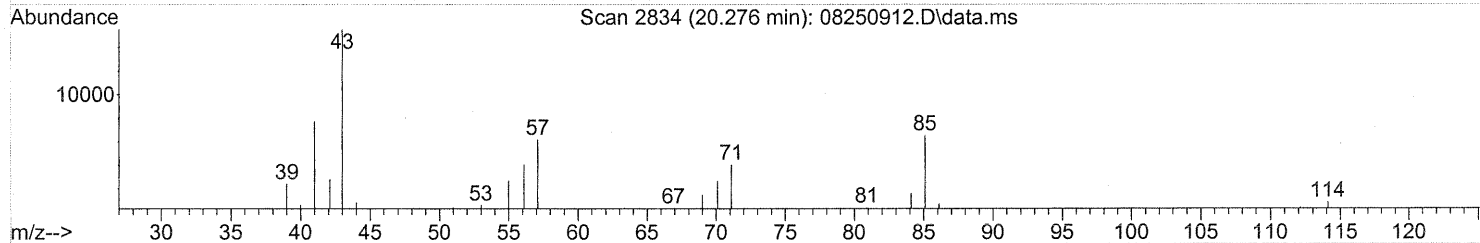
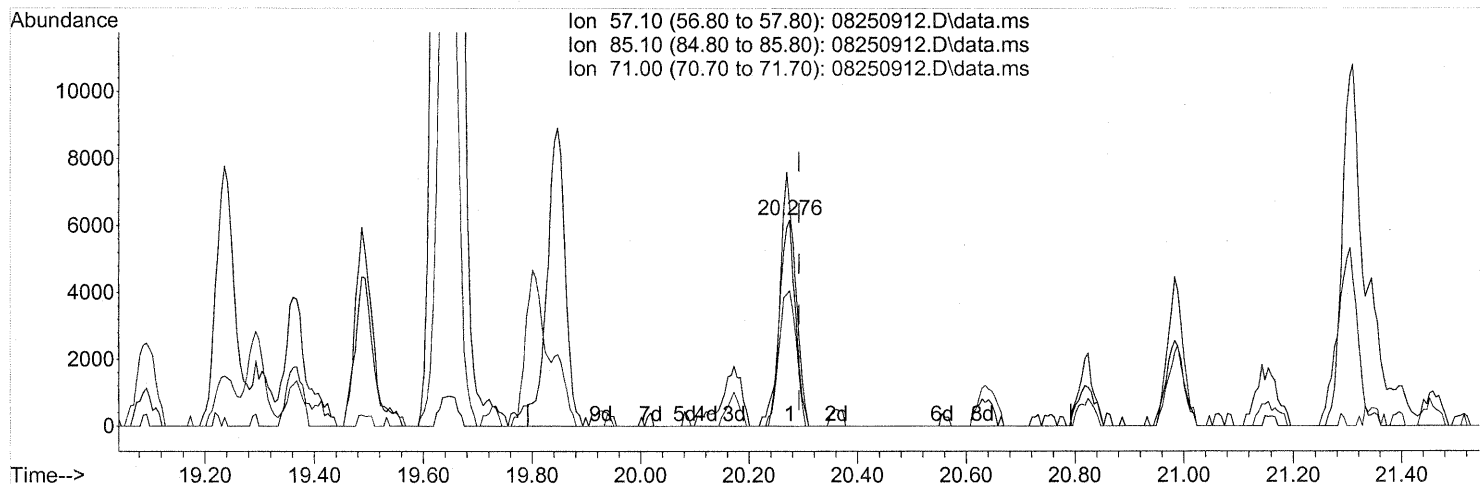
(62) n-Butyl Acetate (T)  
 20.173min (-0.034) 2.50ng  
 response 80286

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	42.57
73.00	14.80	17.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(63) n-Octane (T)  
 20.276min (-0.017) 1.30ng  
 response 12915

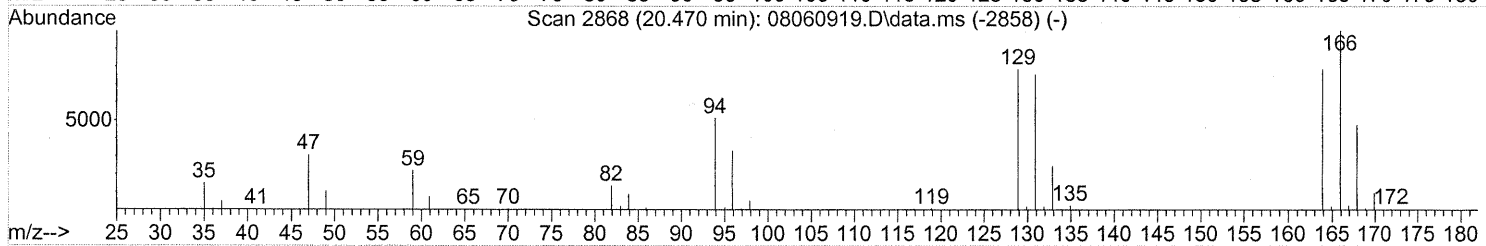
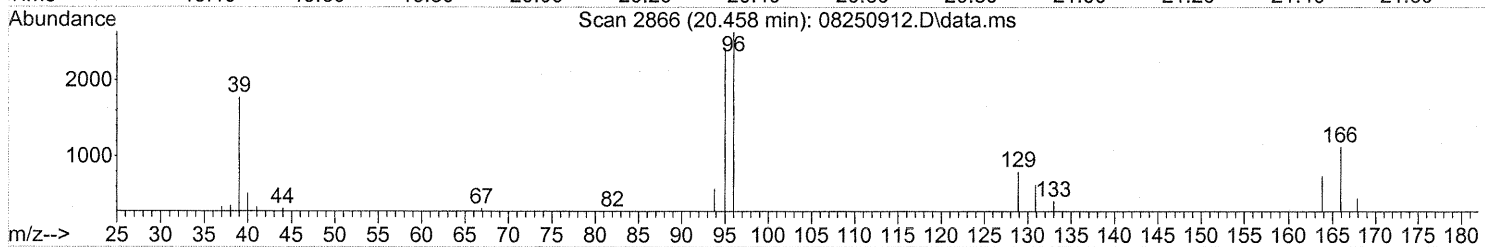
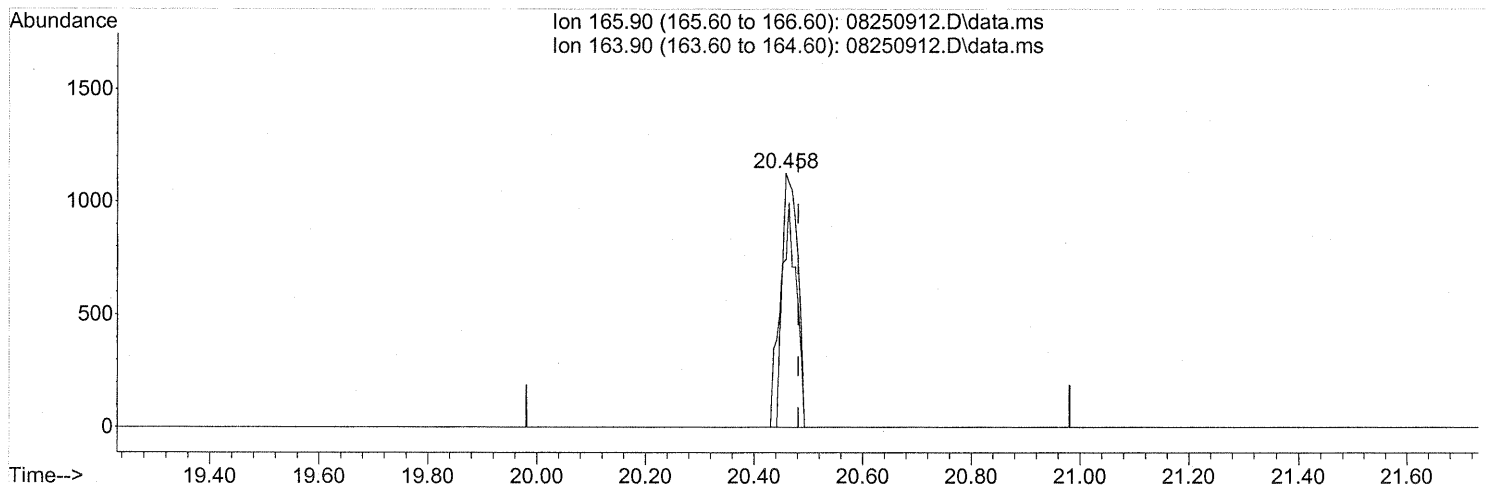
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	113.64
71.00	68.10	69.24
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(64) Tetrachloroethene (T)

20.458min (-0.023) 0.26ng

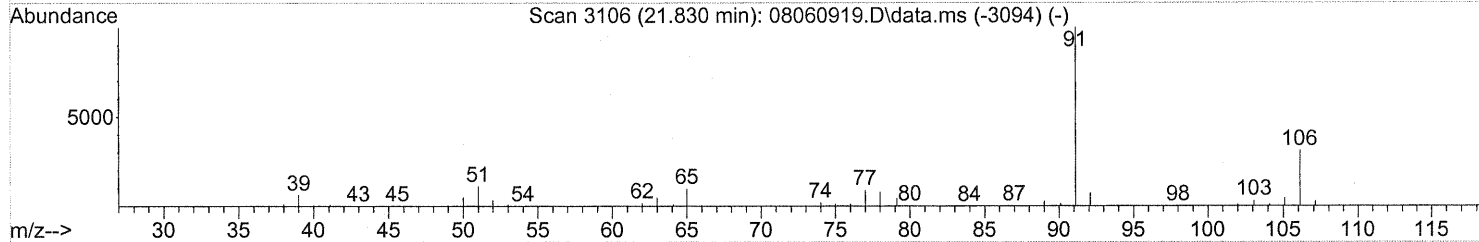
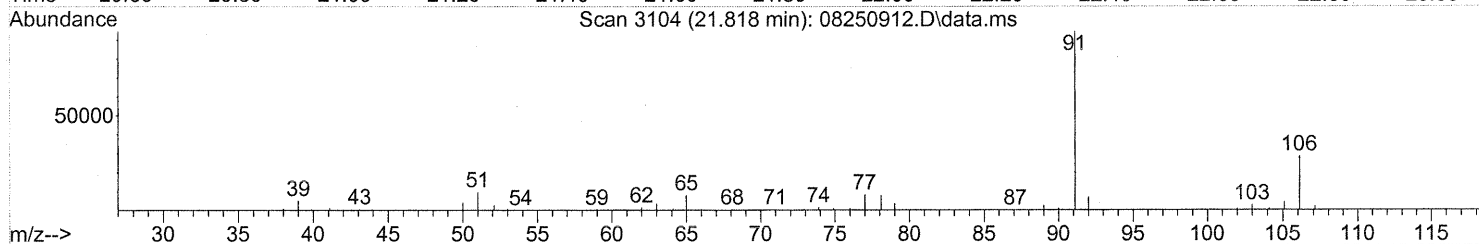
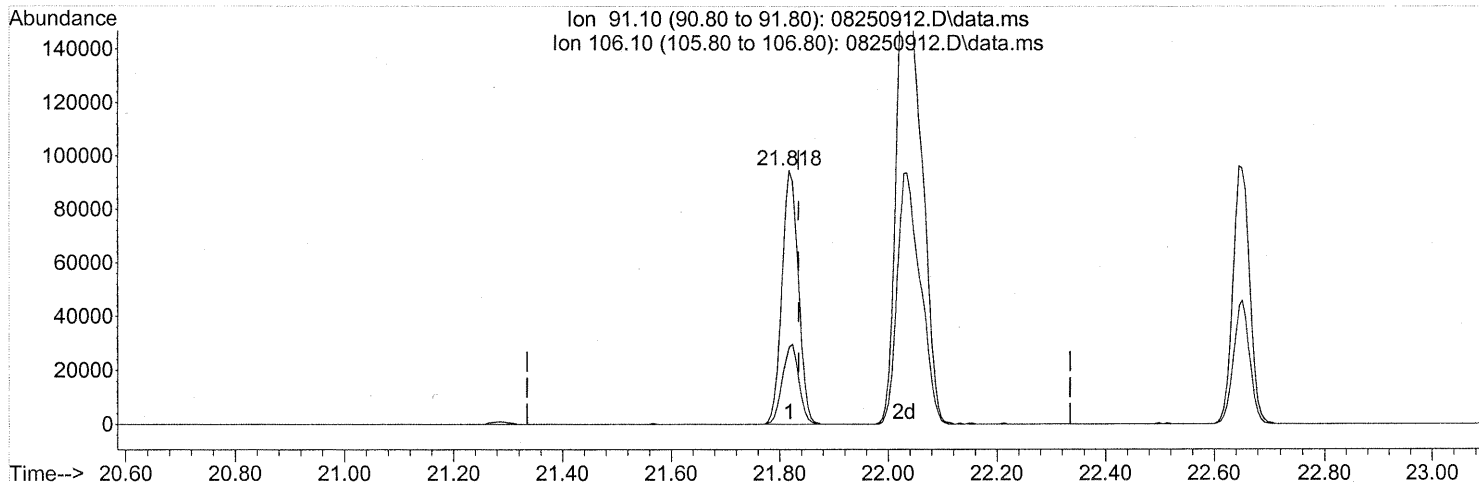
response 2506

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	69.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 4.22ng

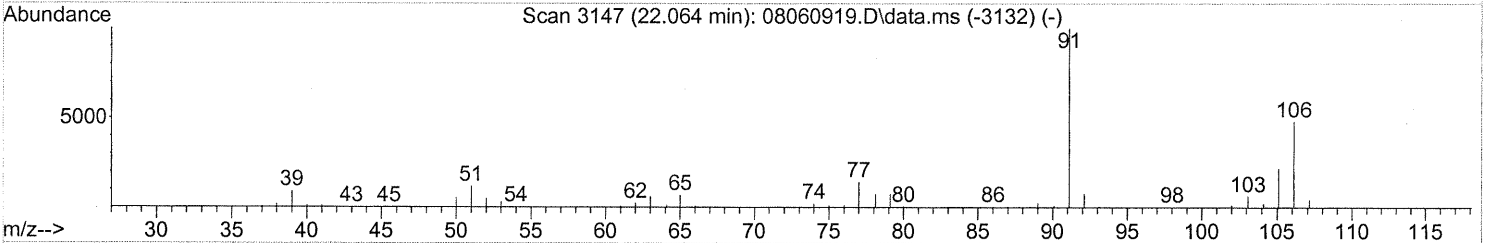
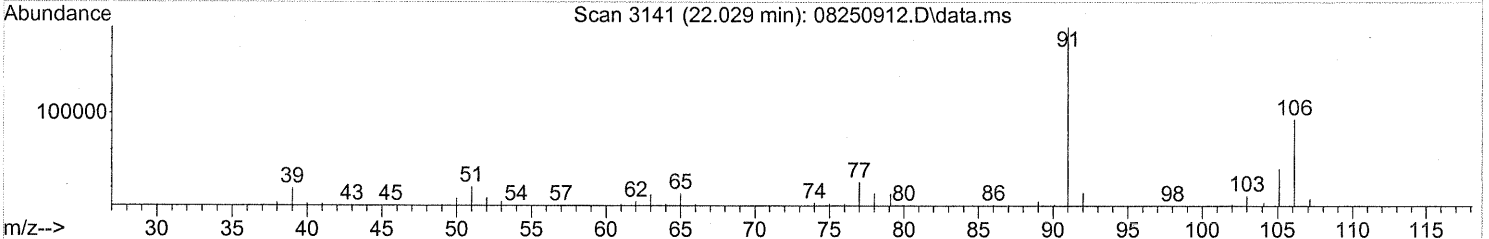
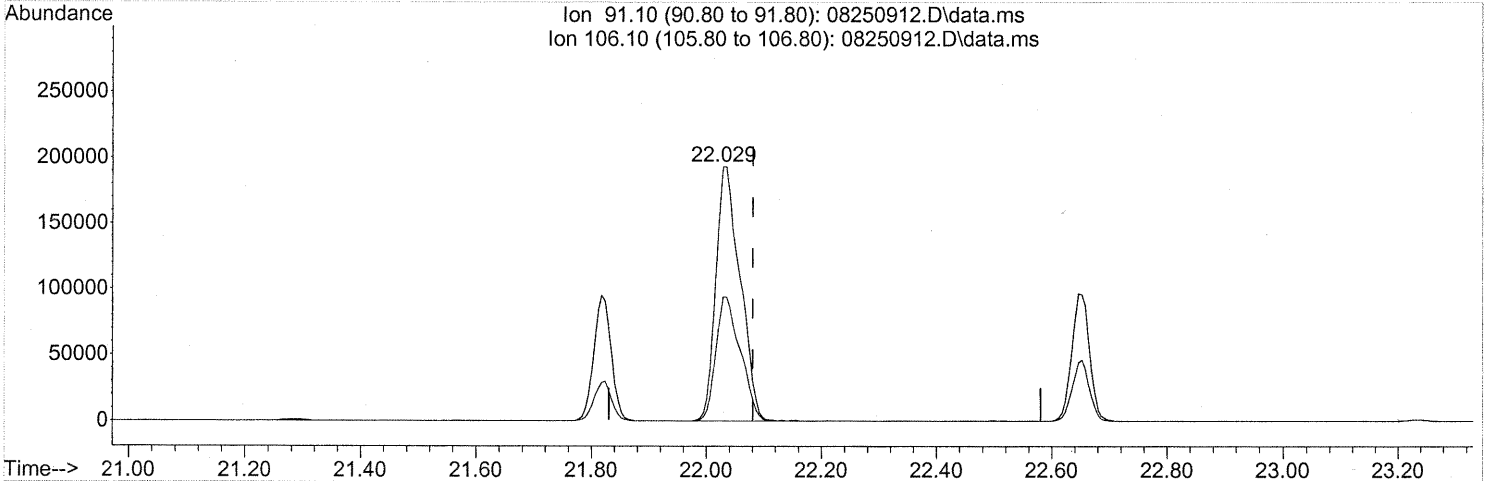
response 197489

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	31.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(67) m- & p-Xylenes (T)

22.029min (-0.051) 14.93ng

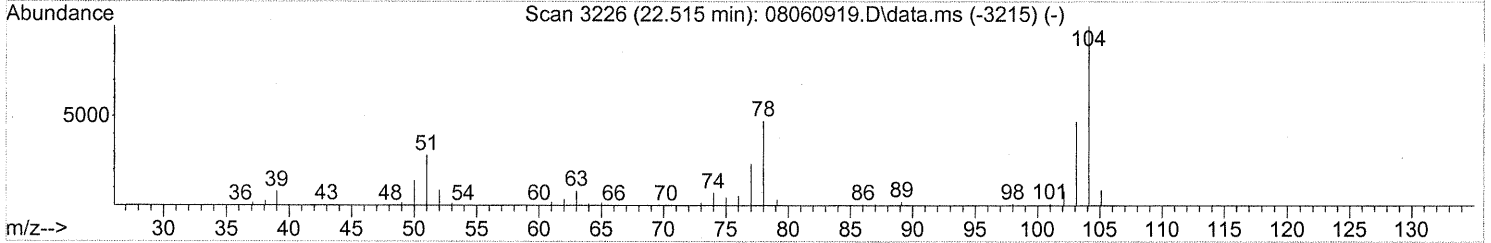
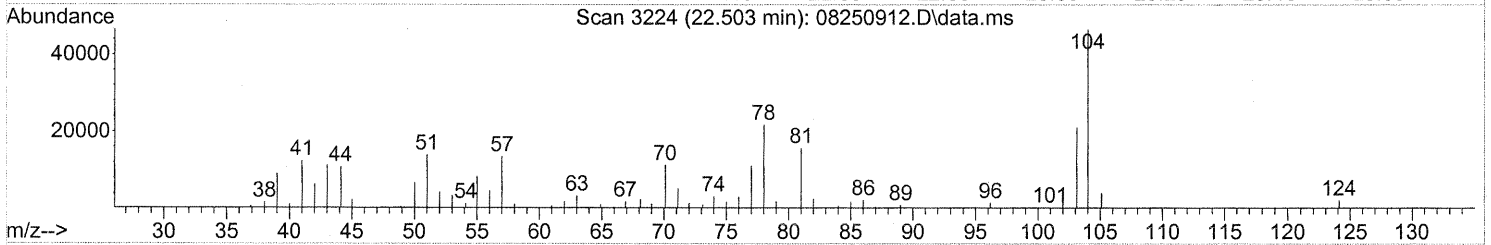
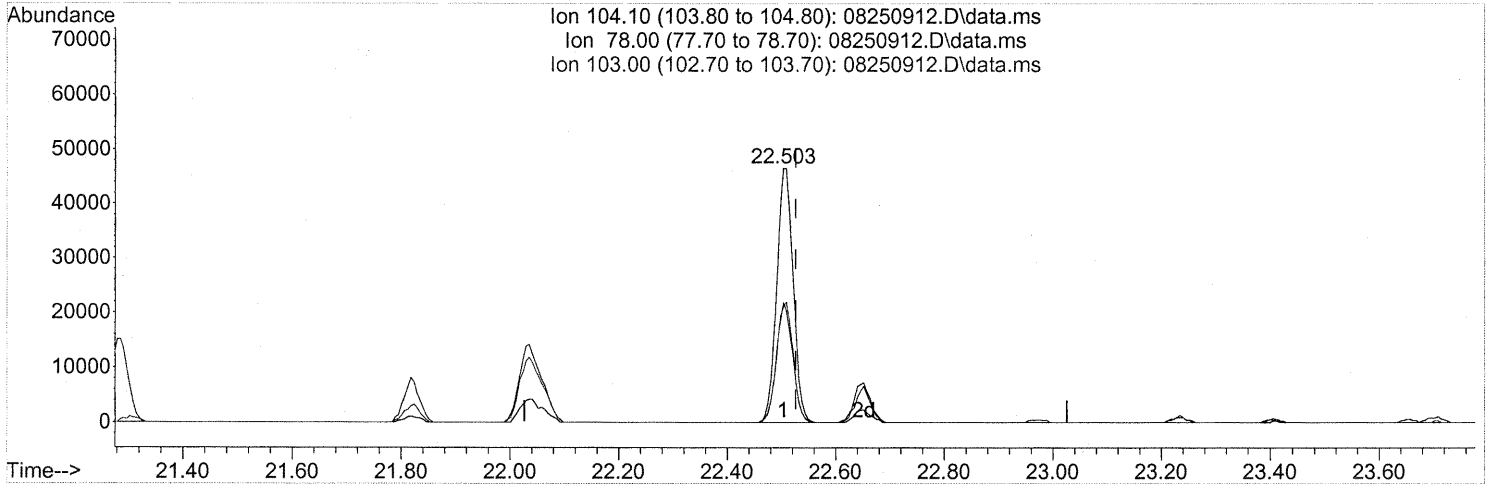
response 565592

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(69) Styrene (T)

22.503min (-0.023) 3.56ng

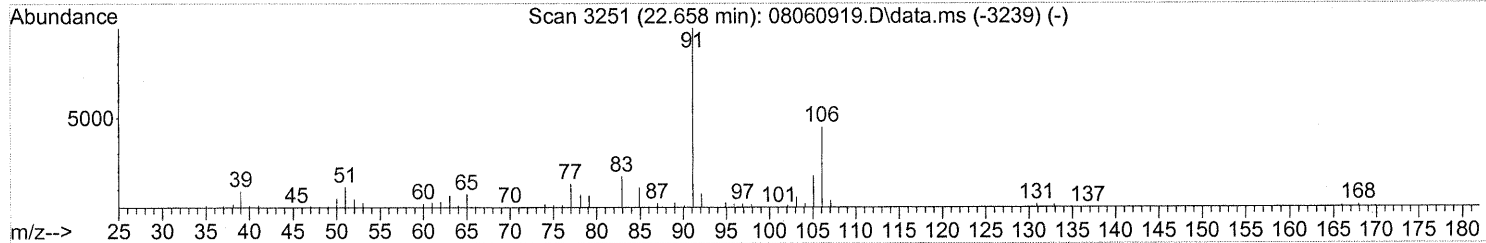
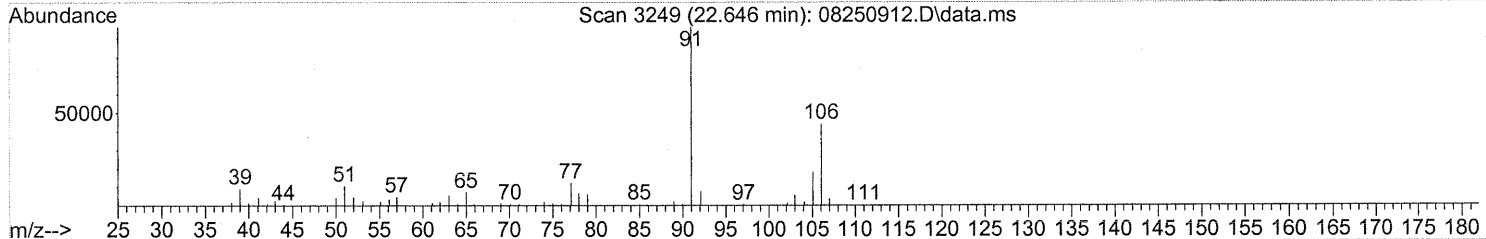
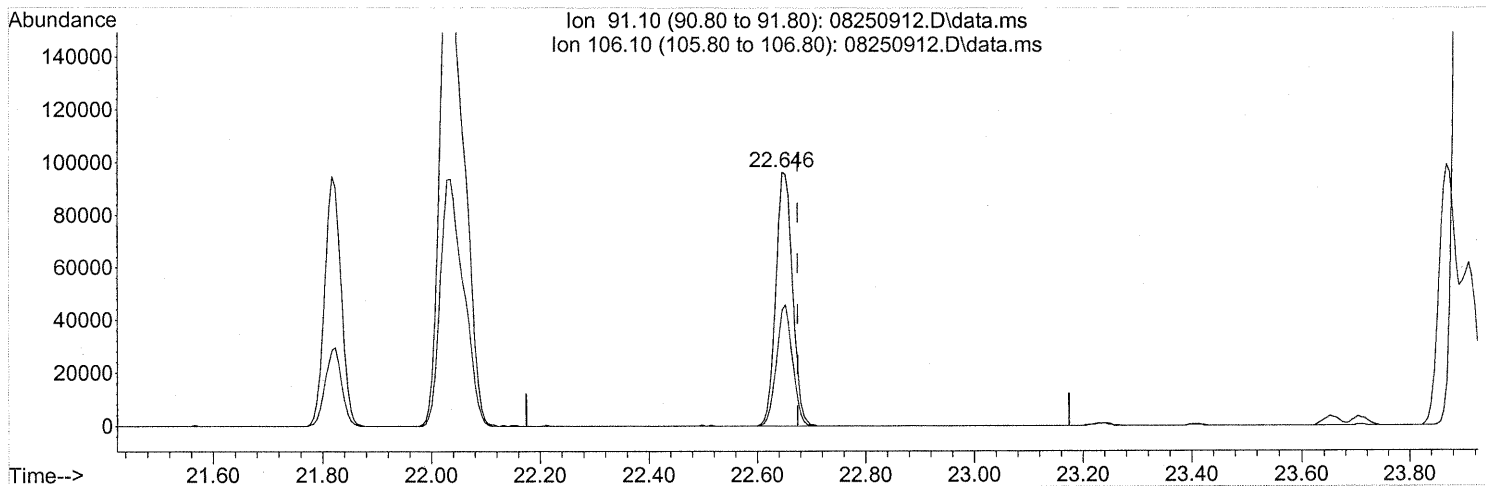
response 97388

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	46.07
103.00	46.20	47.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(70) o-Xylene (T)

22.646min (-0.029) 5.42ng

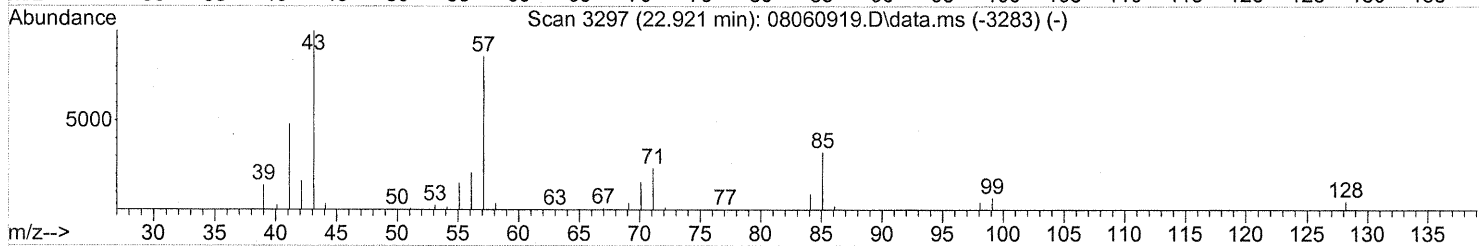
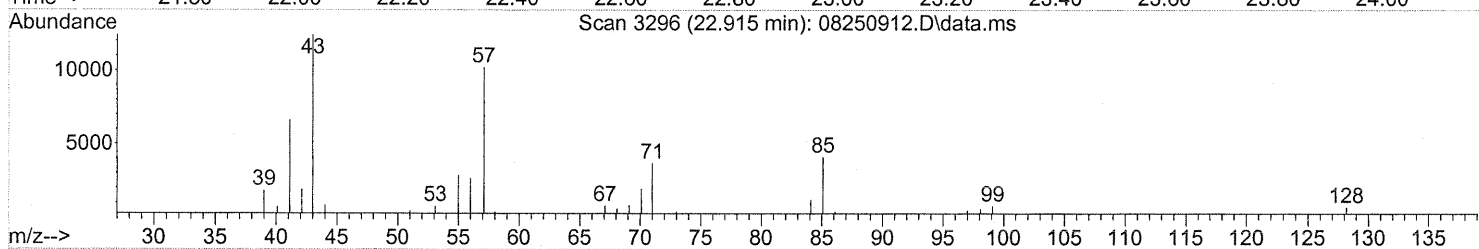
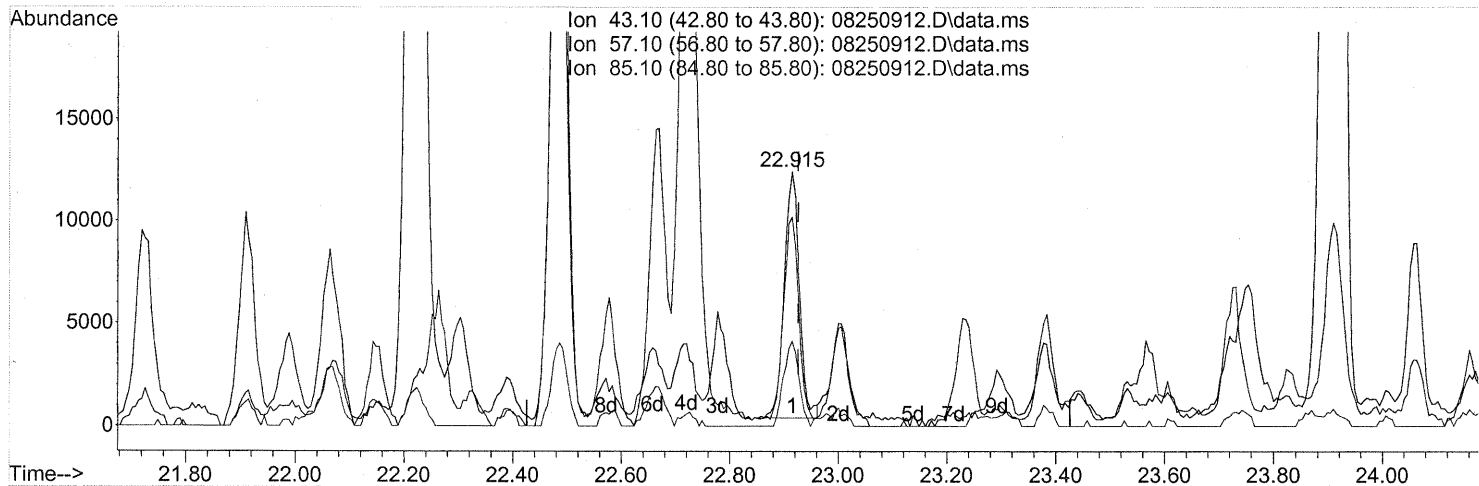
response 205790

Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(71) n-Nonane (T)

22.915min (-0.011) 0.92ng

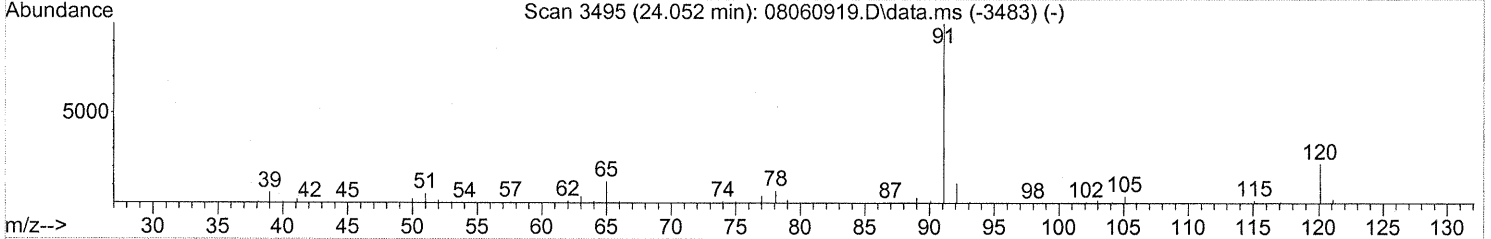
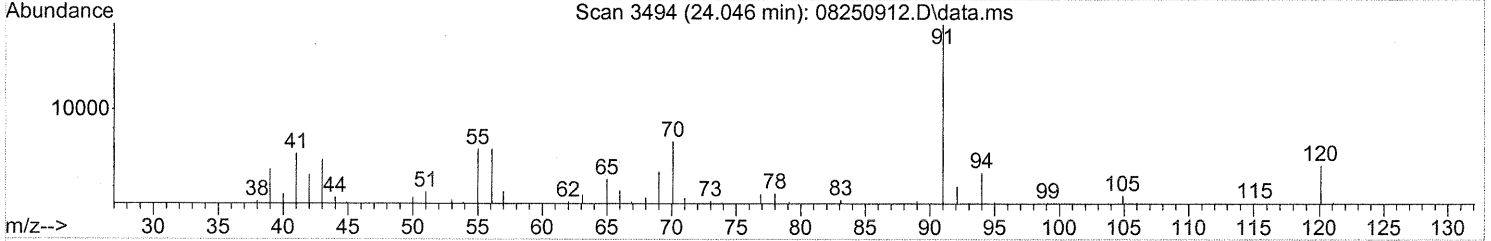
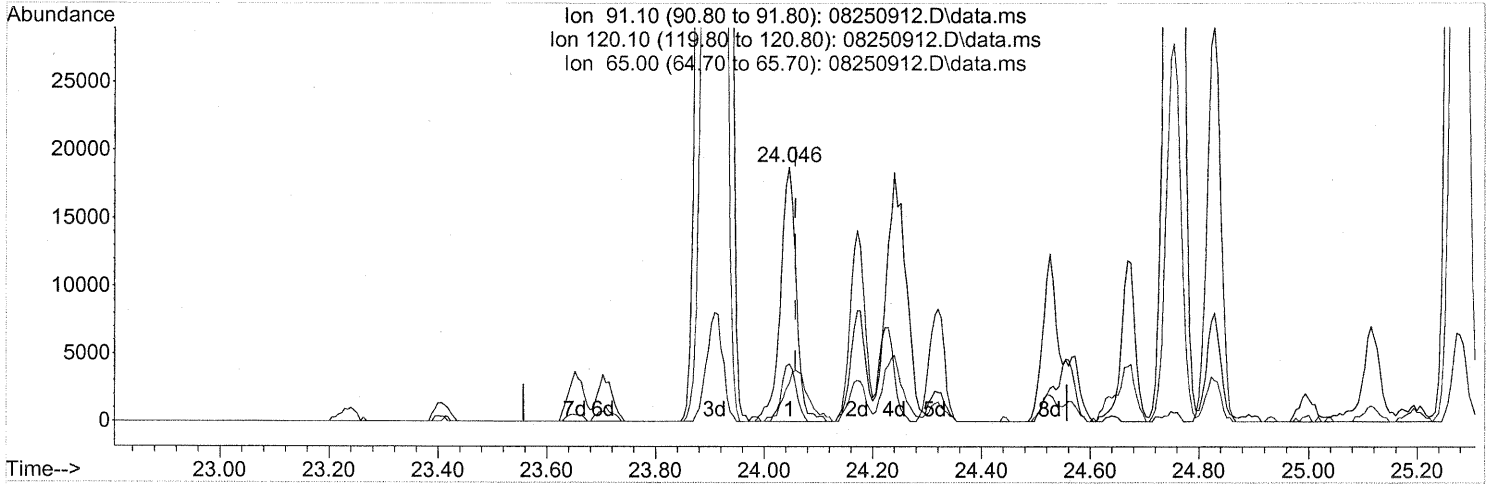
response 23222

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	89.34
85.10	30.40	34.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.63ng

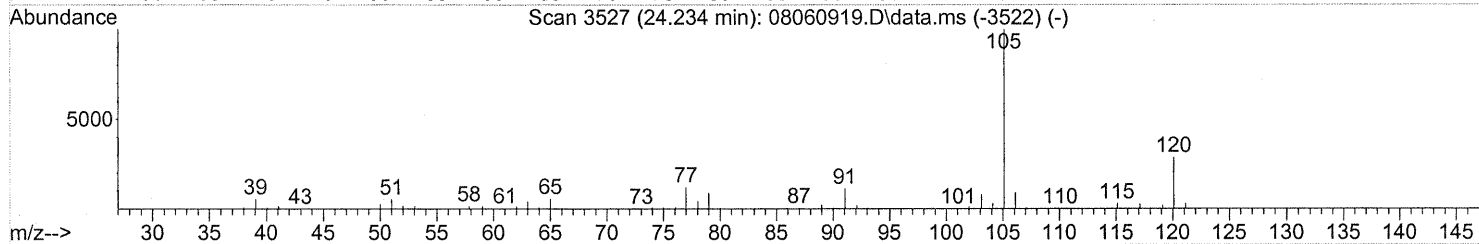
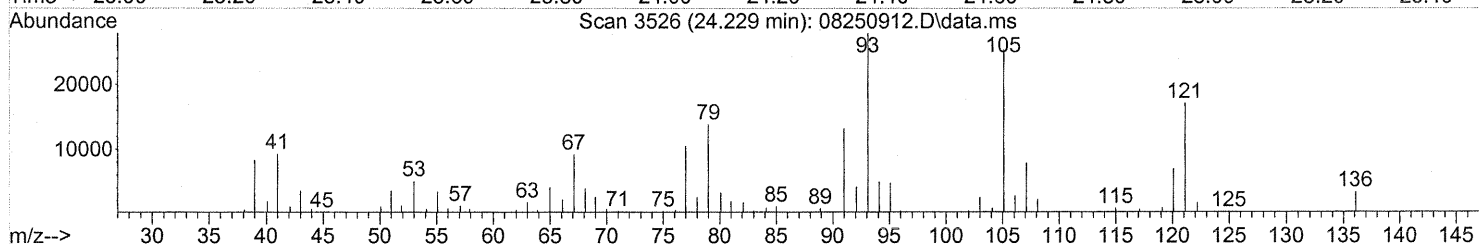
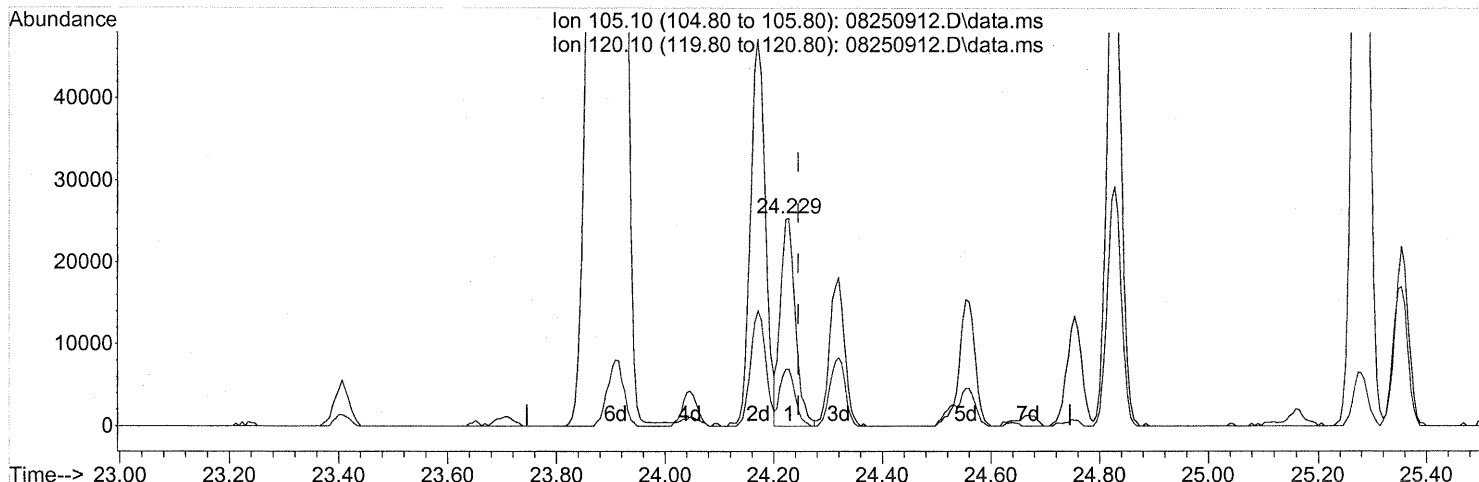
response 37910

Ion	Exp%	Act%
91.10	100	100
120.10	21.60	20.94
65.00	12.00	29.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(78) 4-Ethyltoluene (T)

24.229min (-0.017) 1.09ng

response 48611

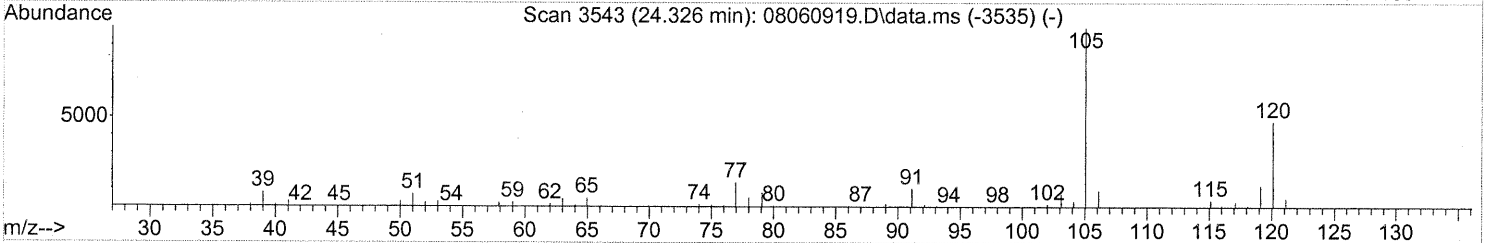
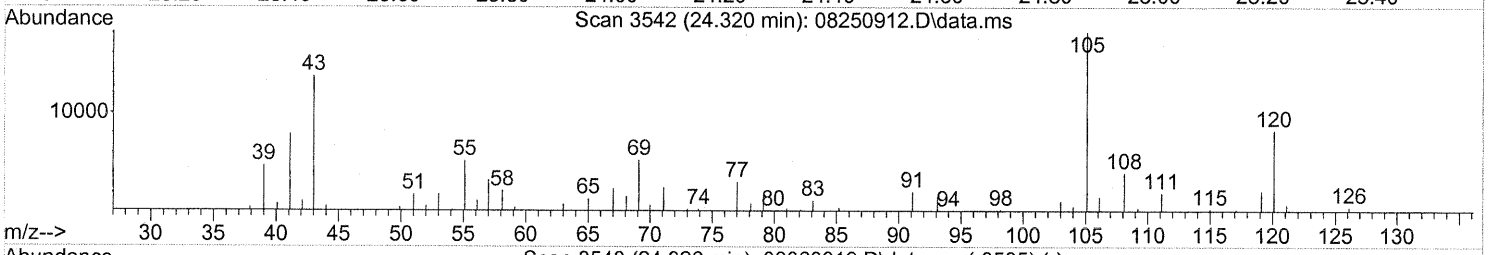
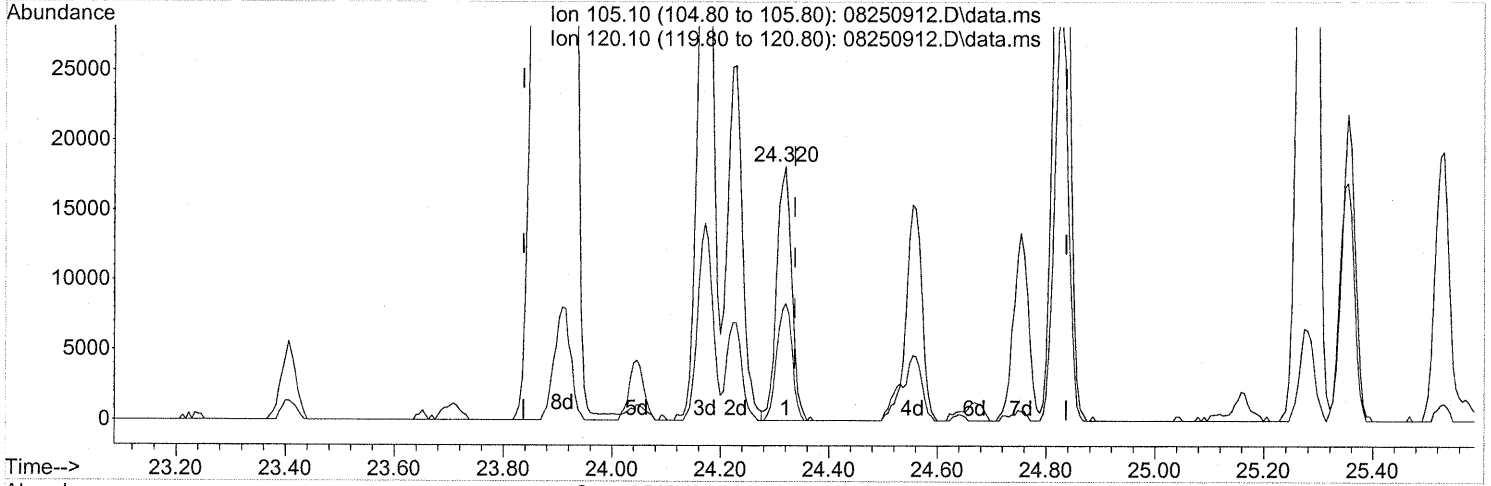
Ion	Exp%	Act%
105.10	100	100
120.10	28.40	27.79
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(79) 1,3,5-Trimethylbenzene (T)

24.320min (-0.017) 0.93ng

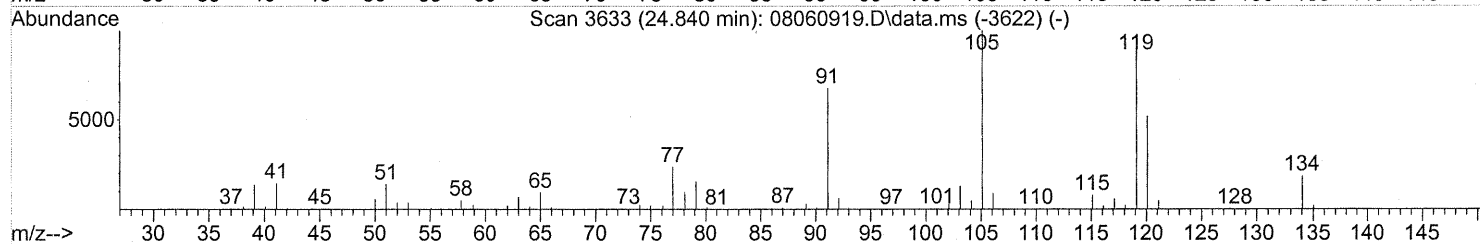
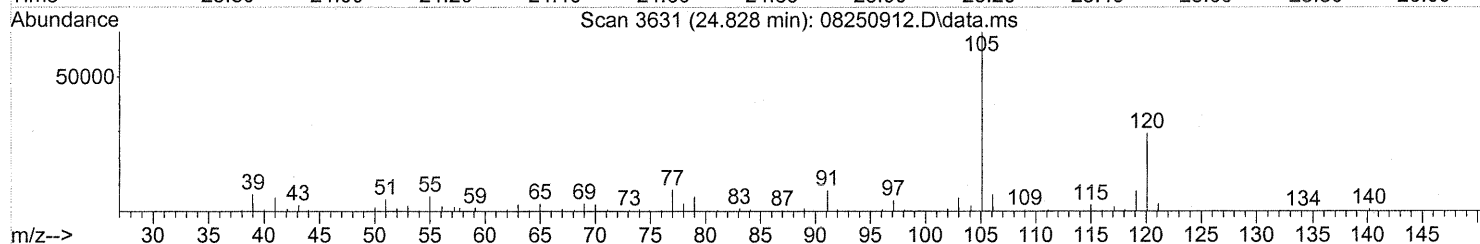
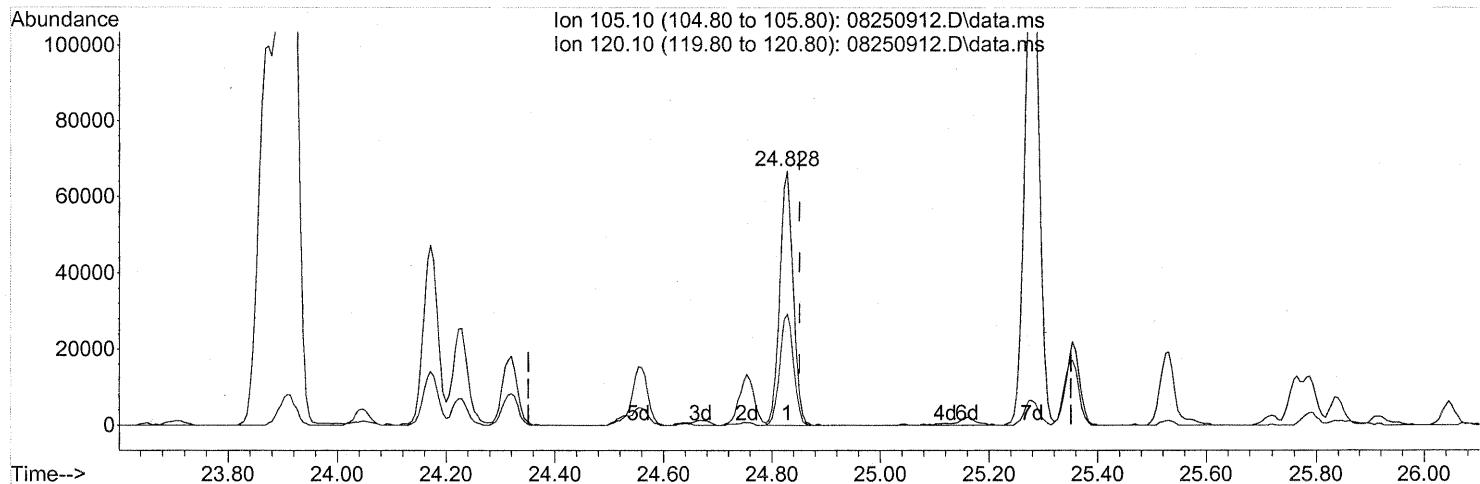
response 34841

Ion	Exp%	Act%
105.10	100	100
120.10	46.80	46.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(82) 1,2,4-Trimethylbenzene (T)

24.828min (-0.023) 3.01ng

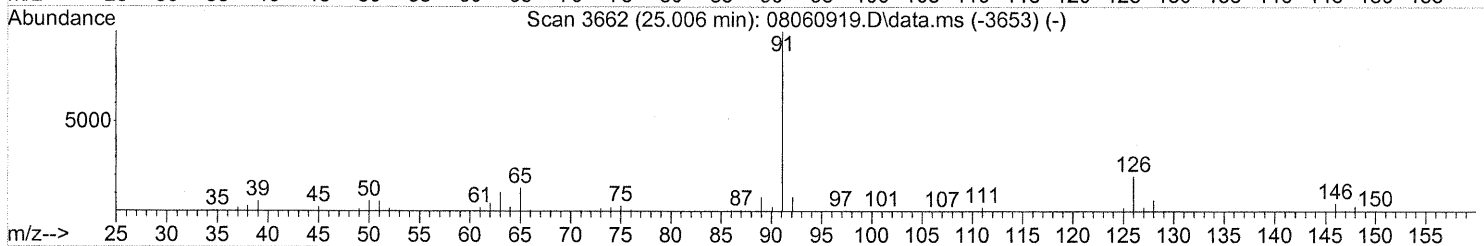
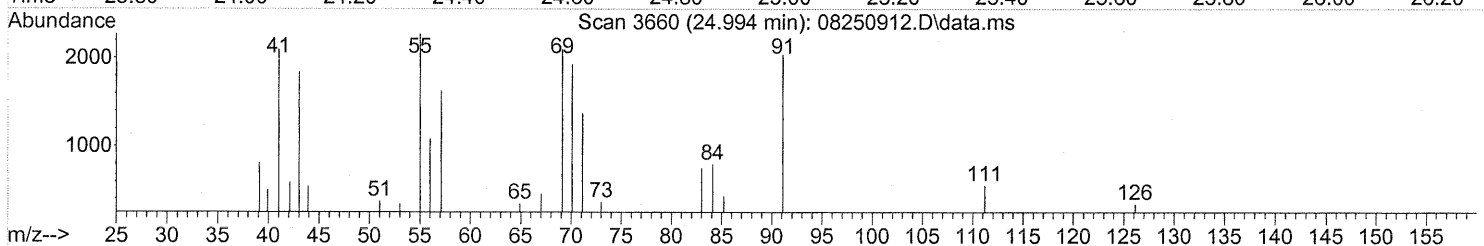
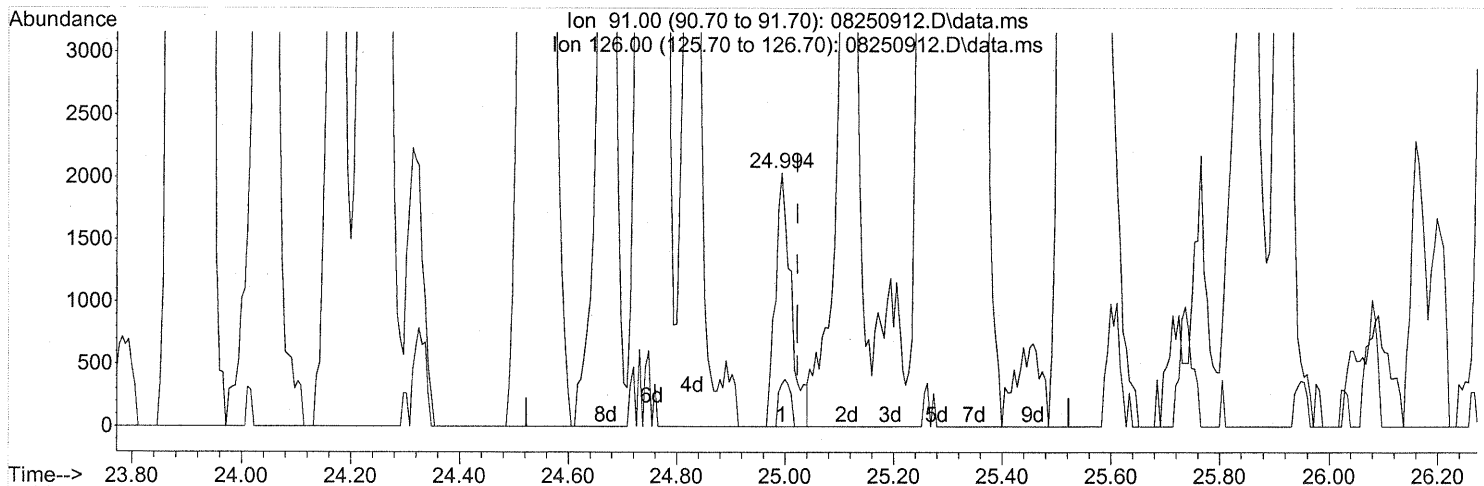
response 115092

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

(84) Benzyl Chloride (T)

24.994min (-0.029) 0.11ng

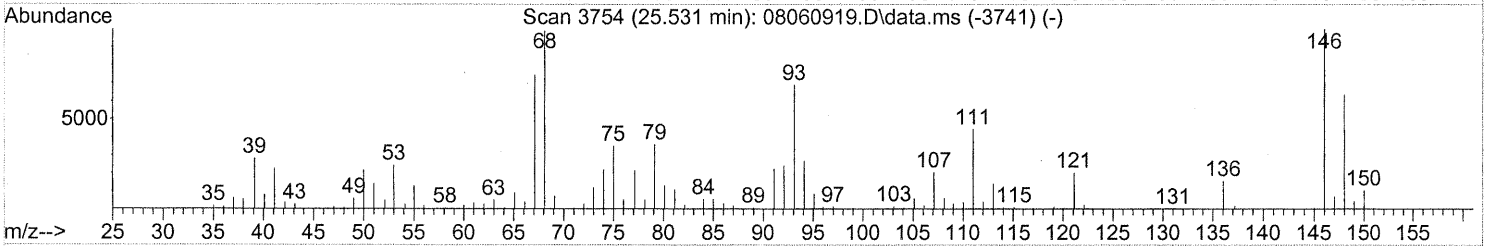
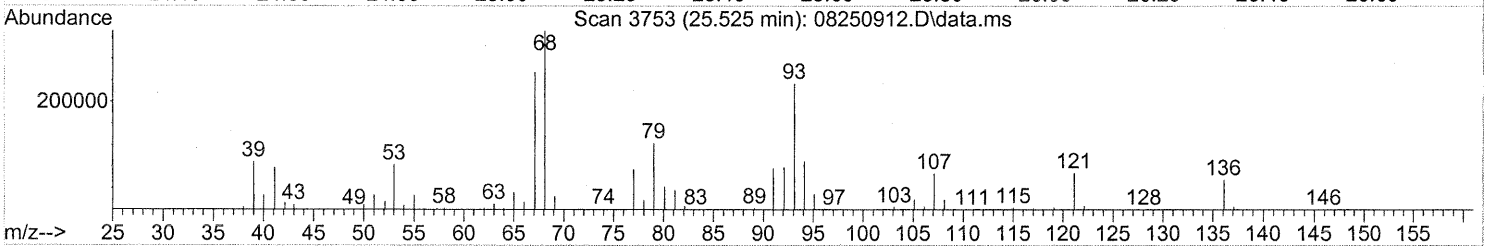
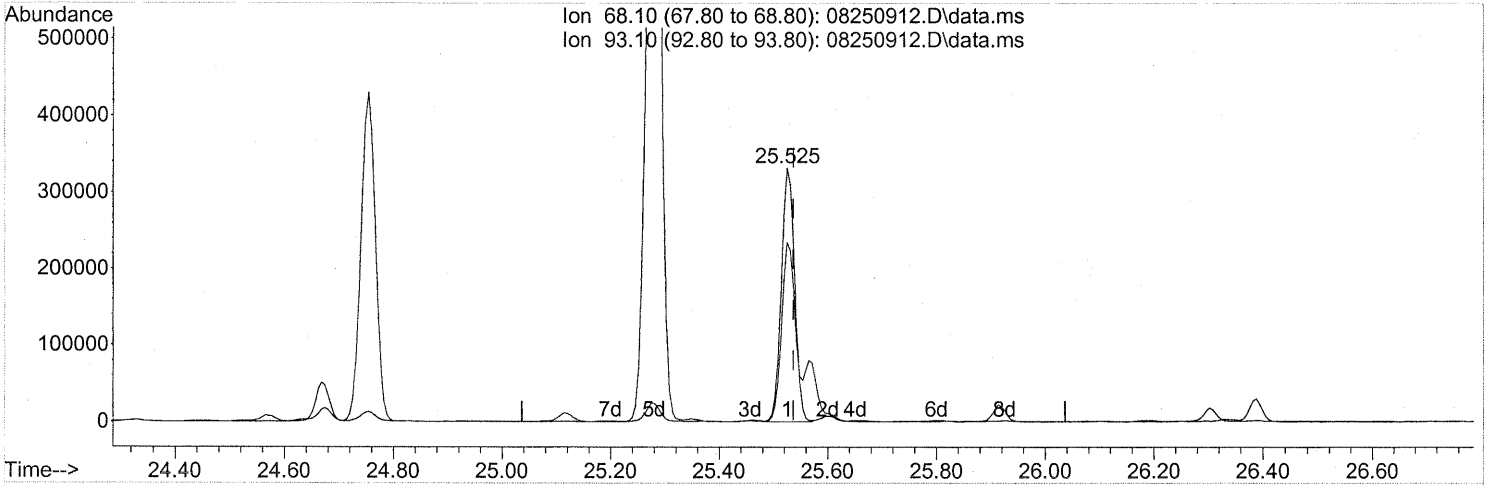
response 4091

Ion	Exp%	Act%
91.00	100	100
126.00	19.50	13.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250912.D\data.ms

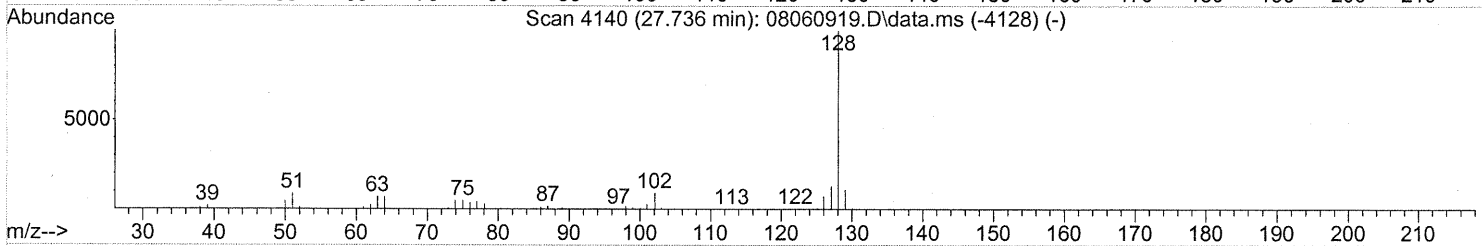
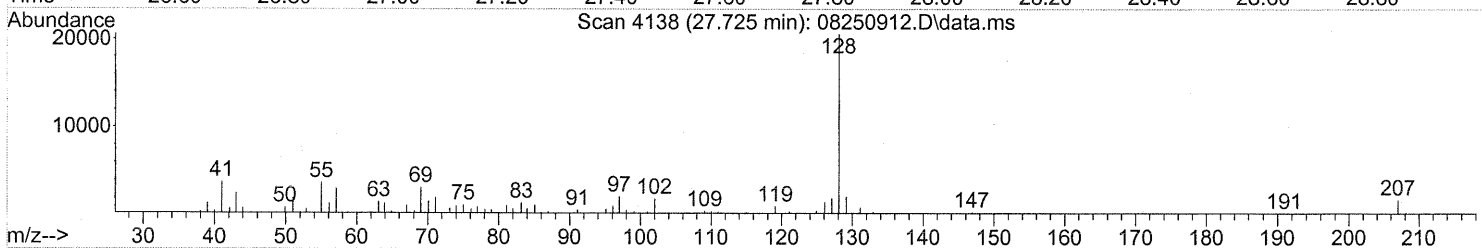
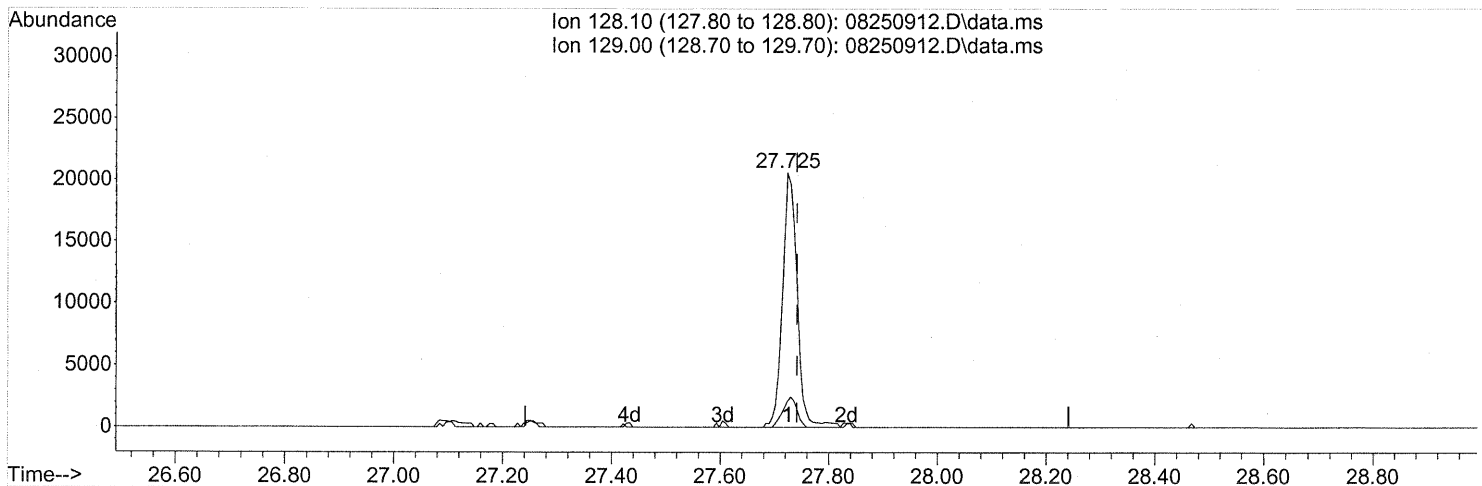
(91) d-Limonene (T)  
 25.525min (-0.011) 34.32ng  
 response 557932

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	74.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250912.D  
 Acq On : 25 Aug 2009 18:48  
 Operator : WA/CC  
 Sample : P0902875-003 (1000mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 06:39:16 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



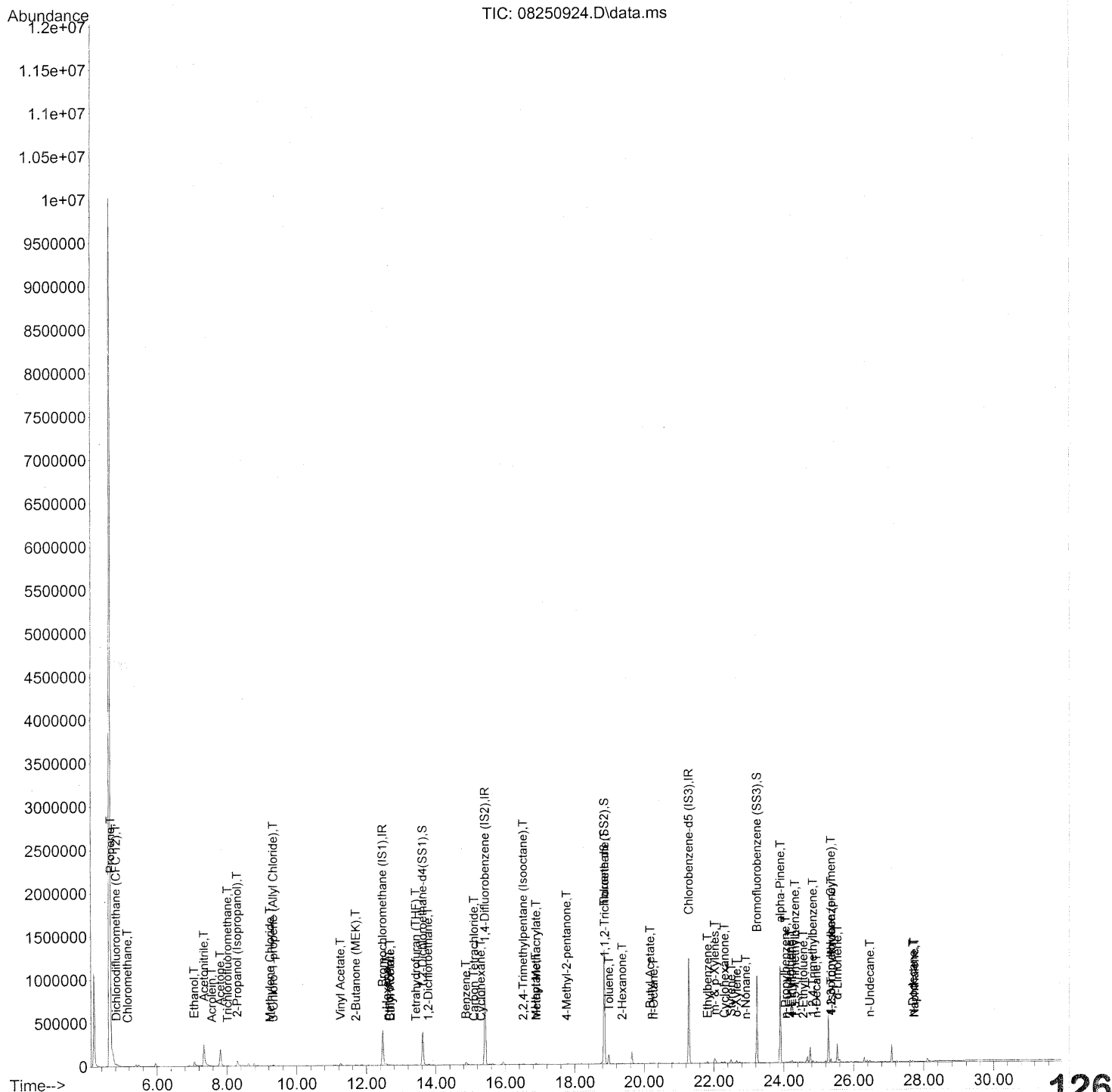
TIC: 08250912.D\data.ms

(95) Naphthalene (T)  
 27.725min (-0.017) 0.74ng  
 response 38222

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.23
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09 am  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09 am  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*AM 9/13/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.47	130	212443	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.41	114	1060096	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	511481	25.000	ng	-0.02

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.62	65	401162	21.726	ng	-0.04
Spiked Amount	25.000			Recovery =	86.92%	
57) Toluene-d8 (SS2)	18.85	98	1157051	25.889	ng	-0.02
Spiked Amount	25.000			Recovery =	103.56%	
73) Bromofluorobenzene (SS3)	23.23	174	333755	28.318	ng	-0.01
Spiked Amount	25.000			Recovery =	113.28%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.66	42	16986	1.165	ng	# 32
3) Dichlorodifluoromethan...	4.82	85	10541	0.442	ng	97
4) Chloromethane	5.16	50	4303	0.269	ng	85
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.06	45	131988m	14.283	ng	<i>Not needed</i>
11) Acetonitrile	7.34	41	469864	17.362	ng	100
12) Acrolein	7.57	56	2830	0.402	ng	100
13) Acetone	7.81	58	100667	11.546	ng	96
14) Trichlorofluoromethane	8.02	101	2537	0.118	ng	85
15) 2-Propanol (Isopropanol)	8.30	45	171743	5.012	ng	98
16) Acrylonitrile	8.62	53	109	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.38	59	109	N.D.		
19) Methylene Chloride	9.24	84	846	0.072	ng	81
20) 3-Chloro-1-propene (Al...	9.33	41	2869	0.127	ng	# 43
21) Trichlorotrifluoroethane	9.69	151	103	N.D.		
22) Carbon Disulfide	9.64	76	2016	N.D.		
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.26	86	1827	1.030	ng	# 23
27) 2-Butanone (MEK)	11.69	72	3300	0.419	ng	94
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.68	61	1430	0.349	ng	92
31) n-Hexane	12.58	57	10637	0.507	ng	97

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Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09 am  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.67	83	1503	0.081	ng	95
34) Tetrahydrofuran (THF)	13.42	72	1347	0.161	ng #	67
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.78	62	1460	0.086	ng #	44
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.98	56	95	N.D.		
41) Benzene	14.87	78	27489	0.590	ng	98
42) Carbon Tetrachloride	15.10	117	1571	0.106	ng	94
43) Cyclohexane	15.29	84	1267	0.074	ng #	61
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.51	57	8403	0.153	ng	92
50) Methyl Methacrylate	16.89	100	749	0.175	ng #	1
51) n-Heptane	16.88	71	2695	0.215	ng	98
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.76	58	572	0.051	ng #	33
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.86	97	98948	9.669	ng #	4
58) Toluene	18.98	91	97276	2.215	ng	100
59) 2-Hexanone	19.36	43	4941	0.169	ng	95
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	8389	0.244	ng	89
63) n-Octane	20.27	57	1286	0.121	ng	90
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.82	91	19478	0.388	ng	95
67) m- & p-Xylenes	22.03	91	56339	1.387	ng	96
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.50	104	9227	0.314	ng	98
70) o-Xylene	22.65	91	20312	0.499	ng	95
71) n-Nonane	22.91	43	2619	0.097	ng	85
72) 1,1,2,2-Tetrachloroethane	22.32	83	901	N.D.		
74) Cumene	23.40	105	1113	N.D.		
75) alpha-Pinene	23.90	93	525497	19.929	ng	96
76) n-Propylbenzene	24.05	91	3806	0.059	ng	92
77) 3-Ethyltoluene	24.17	105	8776	0.179	ng	99
78) 4-Ethyltoluene	24.22	105	4760	0.100	ng	94
79) 1,3,5-Trimethylbenzene	24.31	105	3537	0.088	ng	97



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09 am  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

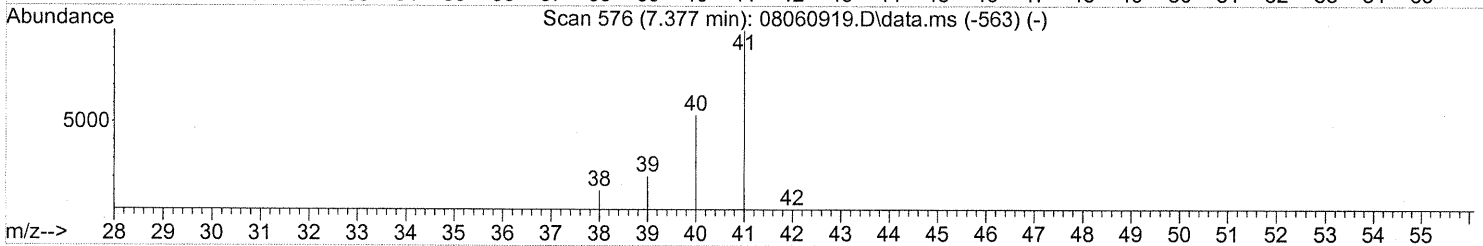
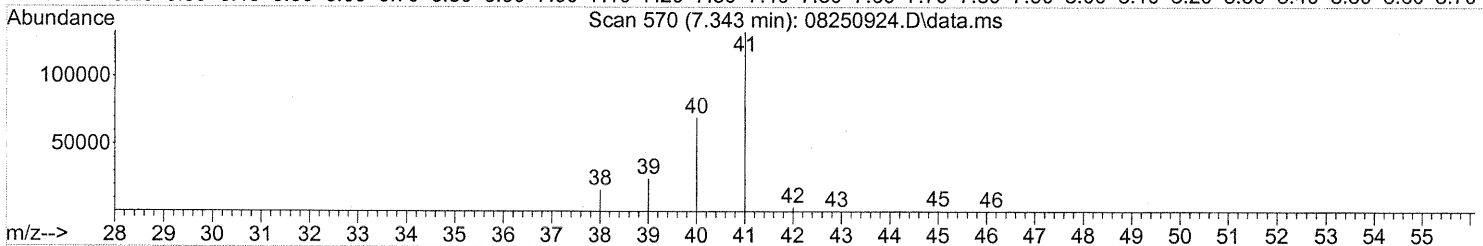
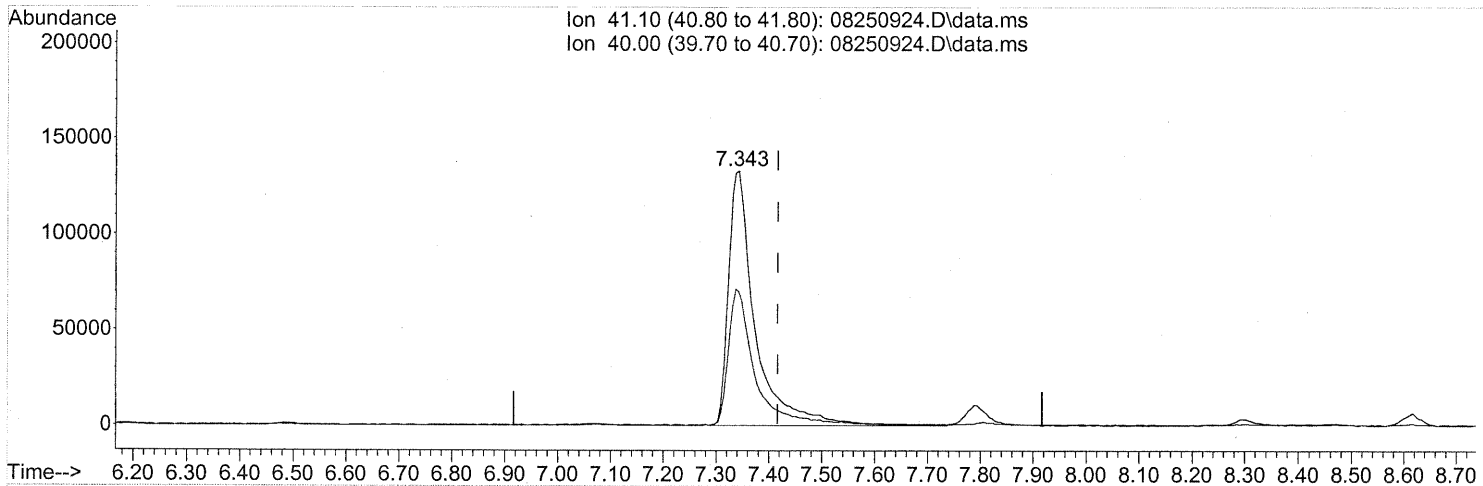
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.55	105	3062	0.062	ng	92
82) 1,2,4-Trimethylbenzene	24.82	105	11496	0.281	ng	87
83) n-Decane	24.93	57	5849	0.220	ng	95
84) Benzyl Chloride	25.00	91	1751	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	25.16	105	206	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	19766	0.400	ng	96
89) 1,2,3-Trimethylbenzene	25.35	105	4159	0.100	ng	# 59
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	25.53	68	54779	3.144	ng	# 62
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	6615	0.233	ng	77
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.73	128	4094	0.074	ng	77
96) n-Dodecane	27.70	57	4173	0.127	ng	87
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	10365	0.570	ng	98
99) tert-Butylbenzene	24.82	119	1404	N.D.		
100) n-Butylbenzene	25.85	91	1857	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

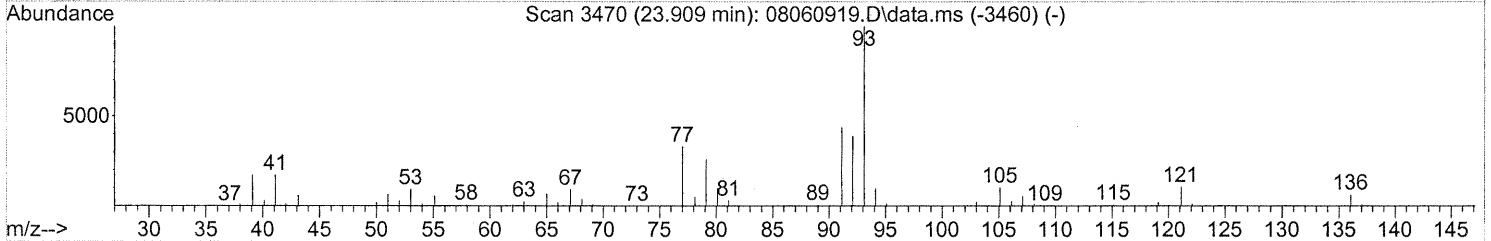
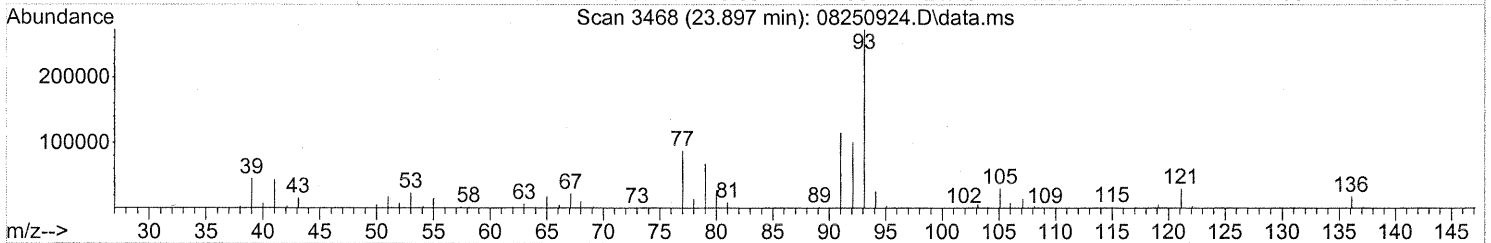
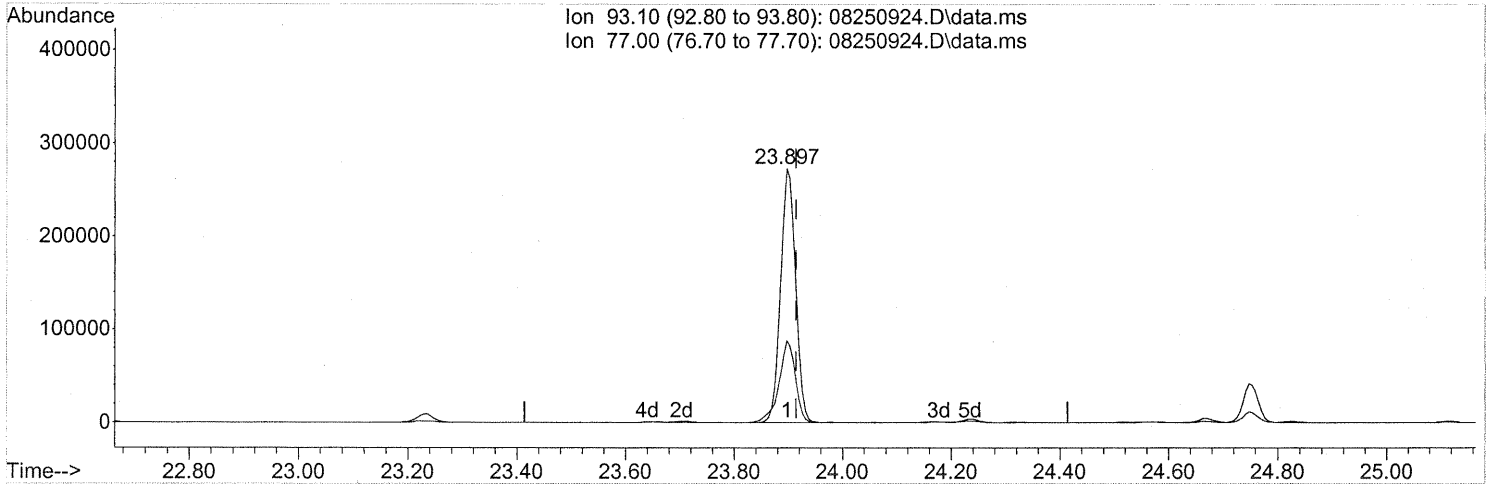
(11) Acetonitrile (T)  
 7.343min (-0.074) 17.36ng  
 response 469864

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 26 Aug 2009 3:09  
 Operator : WA/CC  
 Sample : P0902875-003 dil (100mL)  
 Misc : Environmental Health 102266  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 10:47:23 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(75) alpha-Pinene (T)  
 23.897min (-0.017) 19.93ng  
 response 525497

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	34.89
0.00	0.00	0.00
0.00	0.00	0.00

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102267  
**Client Project ID:** 16512  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01394

**CAS Project ID:** P0902875  
**CAS Sample ID:** P0902875-004

**Date Collected:** 8/19/09  
**Date Received:** 8/20/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 1.00 Liter(s)

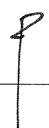
Initial Pressure (psig): 0.0      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	ND	0.62	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.5	0.62	0.50	0.13	
74-87-3	Chloromethane	0.55	0.12	0.27	0.060	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.056	
74-83-9	Bromomethane	ND	0.12	ND	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	Ethanol	6.6	6.2	3.5	3.3	
75-05-8	Acetonitrile	10	0.62	6.1	0.37	
107-02-8	Acrolein	ND	0.62	ND	0.27	
67-64-1	Acetone	22	6.2	9.2	2.6	
75-69-4	Trichlorofluoromethane	1.2	0.12	0.21	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	1.1	0.62	0.47	0.25	
107-13-1	Acrylonitrile	ND	0.62	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.040	
76-13-1	Trichlorotrifluoroethane	0.60	0.12	0.079	0.016	
75-15-0	Carbon Disulfide	ND	0.62	ND	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.8	
78-93-3	2-Butanone (MEK)	1.0	0.62	0.34	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:  Date: 8/25/09 **132**

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.

**Client Sample ID:** 102267

**Client Project ID:** 16512

CAS Project ID: P0902875

CAS Sample ID: P0902875-004

Test Code: EPA TO-15

Date Collected: 8/19/09

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Date Received: 8/20/09

Analyst: Wida Ang

Date Analyzed: 8/25/09

Sampling Media: 6.0 L Summa Canister

Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AC01394

Initial Pressure (psig): 0.0      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	0.62	ND	0.17	
110-54-3	n-Hexane	ND	0.62	ND	0.18	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.62	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	<b>Benzene</b>	<b>0.32</b>	0.12	<b>0.10</b>	0.039	
56-23-5	<b>Carbon Tetrachloride</b>	<b>0.49</b>	0.12	<b>0.078</b>	0.020	
110-82-7	Cyclohexane	ND	0.62	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.019	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.62	ND	0.15	
142-82-5	n-Heptane	ND	0.62	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	<b>Toluene</b>	<b>1.9</b>	0.62	<b>0.49</b>	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.62	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

8/25/09

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102267  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01394

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-004

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.0      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.24

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	0.67	0.62	0.14	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.62	ND	0.14	
179601-23-1	m,p-Xylenes	0.99	0.62	0.23	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.15	
95-47-6	o-Xylene	ND	0.62	ND	0.14	
111-84-2	n-Nonane	ND	0.62	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	alpha-Pinene	4.1	0.62	0.73	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.62	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.62	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.62	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.021	
5989-27-5	d-Limonene	0.80	0.62	0.14	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.62	ND	0.084	
91-20-3	Naphthalene	ND	0.62	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.62	ND	0.058	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

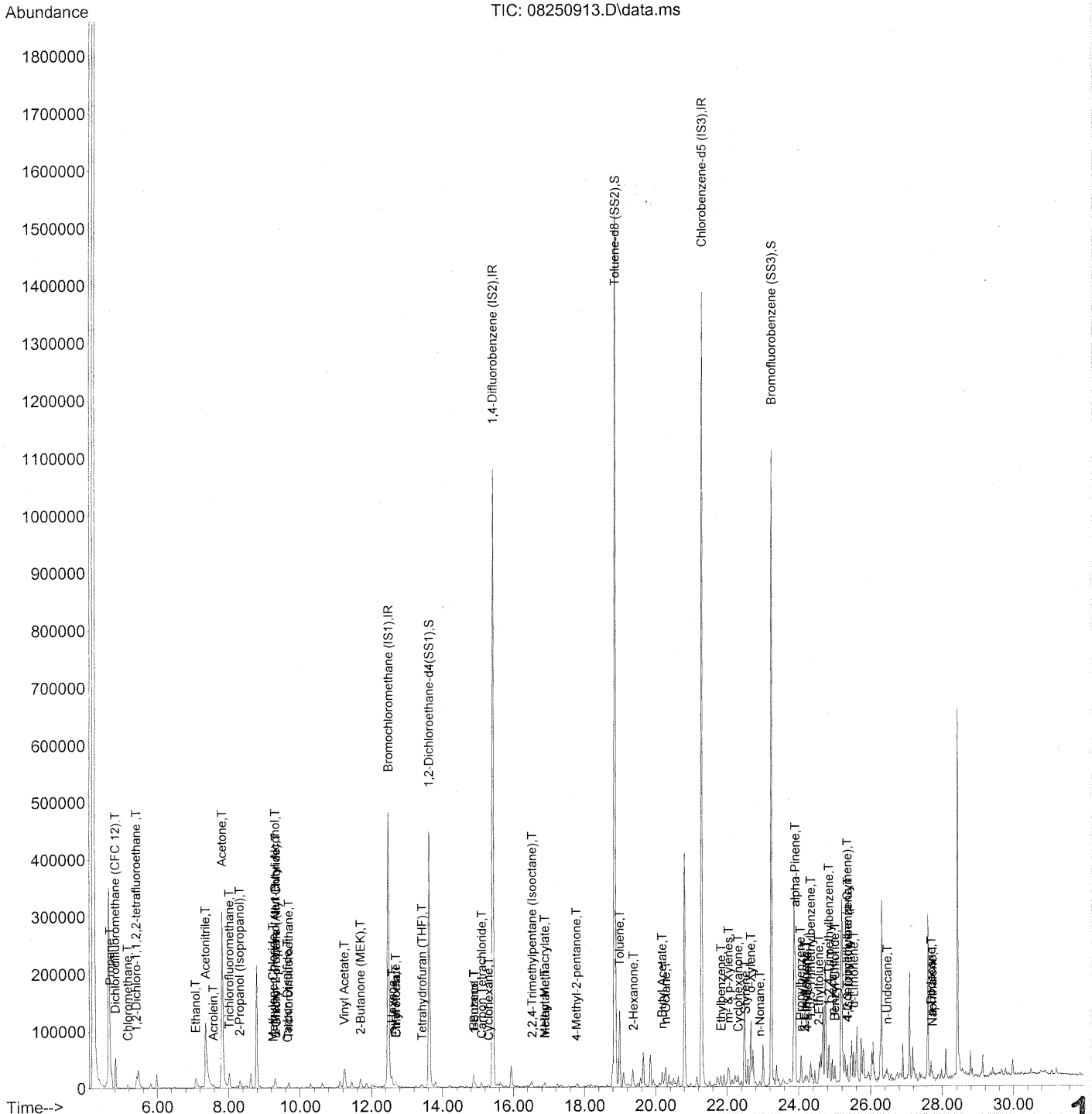
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9/3/09

**134**

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 7:30 pm  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 21:21:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 7:30 pm  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

*11/9/09*

Quant Time: Sep 01 21:21:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	245335	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1240006	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.29	82	580618	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.62	65	464352	21.776	ng	-0.04
Spiked Amount	25.000			Recovery =	87.12%	✓
57) Toluene-d8 (SS2)	18.85	98	1340134	26.415	ng	-0.02
Spiked Amount	25.000			Recovery =	105.68%	✓
73) Bromofluorobenzene (SS3)	23.23	174	372492	27.842	ng	-0.01
Spiked Amount	25.000			Recovery =	111.36%	✓

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.68	42	7453	<del>0.443</del> ng		98
3) Dichlorodifluoromethan...	<del>4.83</del>	85	54806	<del>1.992</del> ng		99
4) Chloromethane	<del>5.18</del>	50	8214	<del>0.444</del> ng	<i>yes</i>	97
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	927	<del>0.083</del> ng	<i>#</i>	44
6) Vinyl Chloride	0.00	62	0	N.D.	<i>11/9/09</i>	
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	6.38	94	188	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	<del>7.07</del>	45	56776m	<del>5.320</del> ng		
11) Acetonitrile	<del>7.35</del>	41	256940	<del>8.221</del> ng		98
12) Acrolein	7.57	56	3898	<del>0.480</del> ng		93
13) Acetone	<del>7.82</del>	58	178095	<del>17.688</del> ng		92
14) Trichlorofluoromethane	<del>8.02</del>	101	23841	<del>0.958</del> ng		98
15) 2-Propanol (Isopropanol)	<del>8.31</del>	45	36632m	<del>0.926</del> ng		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.31	59	3080	<del>0.088</del> ng	<i>#</i>	1
19) Methylene Chloride	9.24	84	1793	<del>0.133</del> ng		95
20) 3-Chloro-1-propene (Al...	9.32	41	1656	<del>0.064</del> ng	<i>#</i>	43
21) Trichlorotrifluoroethane	<del>9.68</del>	151	4401	<del>0.487</del> ng		98
22) Carbon Disulfide	9.65	76	2867	<del>0.060</del> ng	<i>#</i>	74
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.24	86	5089	<del>2.484</del> ng	<i>#</i>	83
27) 2-Butanone (MEK)	<del>11.70</del>	72	7413	<del>0.815</del> ng		96
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.69	61	1553	<del>0.328</del> ng		91
31) n-Hexane	12.59	57	7093	<del>0.293</del> ng		92



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 7:30 pm  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 21:21:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.70	83	1154	<del>0.054</del> ng		77
34) Tetrahydrofuran (THF)	13.42	72	1101	<del>0.114</del> ng	#	61
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	97	N.D.		
38) 1,1,1-Trichloroethane	14.19	97	307	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.89	56	12901	<del>0.802</del> ng		82
41) Benzene	<u>14.88</u>	78	14198	<del>0.260</del> ng		100
42) Carbon Tetrachloride	<u>15.11</u>	117	6833	<del>0.393</del> ng		96
43) Cyclohexane	15.29	84	1789	0.090 ng	#	79
44) tert-Amyl Methyl Ether	16.11	73	1010	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	10039	0.156 ng		81
50) Methyl Methacrylate	16.88	100	310	<del>0.062</del> ng	#	1
51) n-Heptane	16.88	71	2016	<del>0.138</del> ng		91
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.77	58	761	<del>0.058</del> ng	#	33
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	<u>18.98</u>	91	74816	<del>1.501</del> ng		99
59) 2-Hexanone	<u>19.37</u>	43	10192	<del>0.307</del> ng		73
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	8387	<del>0.215</del> ng		74
63) n-Octane	<u>20.28</u>	57	6521	<del>0.541</del> ng		97
64) Tetrachloroethene	20.47	166	535	N.D.		
65) Chlorobenzene	21.35	112	92	N.D.		
66) Ethylbenzene	21.82	91	16501	<del>0.290</del> ng		98
67) m- & p-Xylenes	<u>22.04</u>	91	36688	<del>0.796</del> ng		100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.51	104	9478	<del>0.284</del> ng		96
70) o-Xylene	22.65	91	14377	<del>0.311</del> ng		96
71) n-Nonane	22.91	43	5884	<del>0.192</del> ng		87
72) 1,1,2,2-Tetrachloroethane	22.65	83	846	N.D.		
74) Cumene	23.41	105	1483	N.D.		
75) alpha-Pinene	<u>23.90</u>	93	98187	<del>3.280</del> ng	#	42
76) n-Propylbenzene	24.04	91	4465	<del>0.061</del> ng	#	77
77) 3-Ethyltoluene	24.17	105	9493	0.170 ng		94
78) 4-Ethyltoluene	24.22	105	4960	<del>0.092</del> ng		97
79) 1,3,5-Trimethylbenzene	24.32	105	4159	<del>0.091</del> ng		87

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 7:30 pm  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 21:21:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

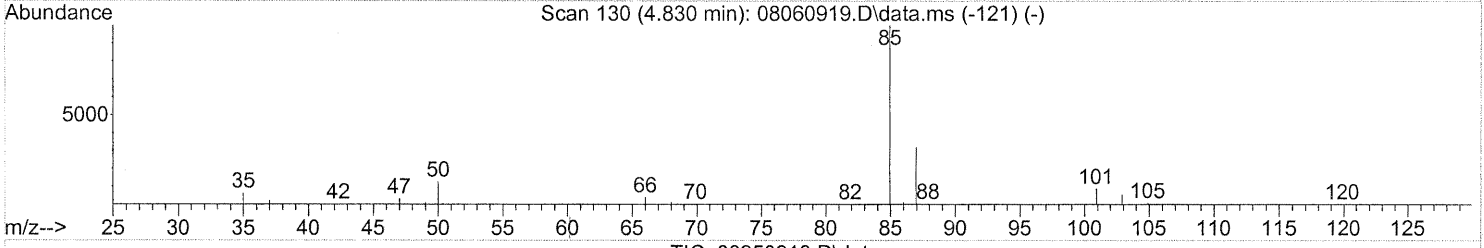
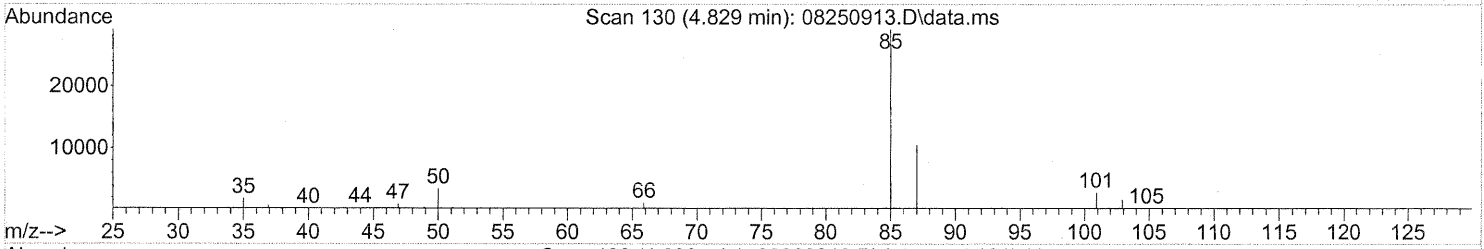
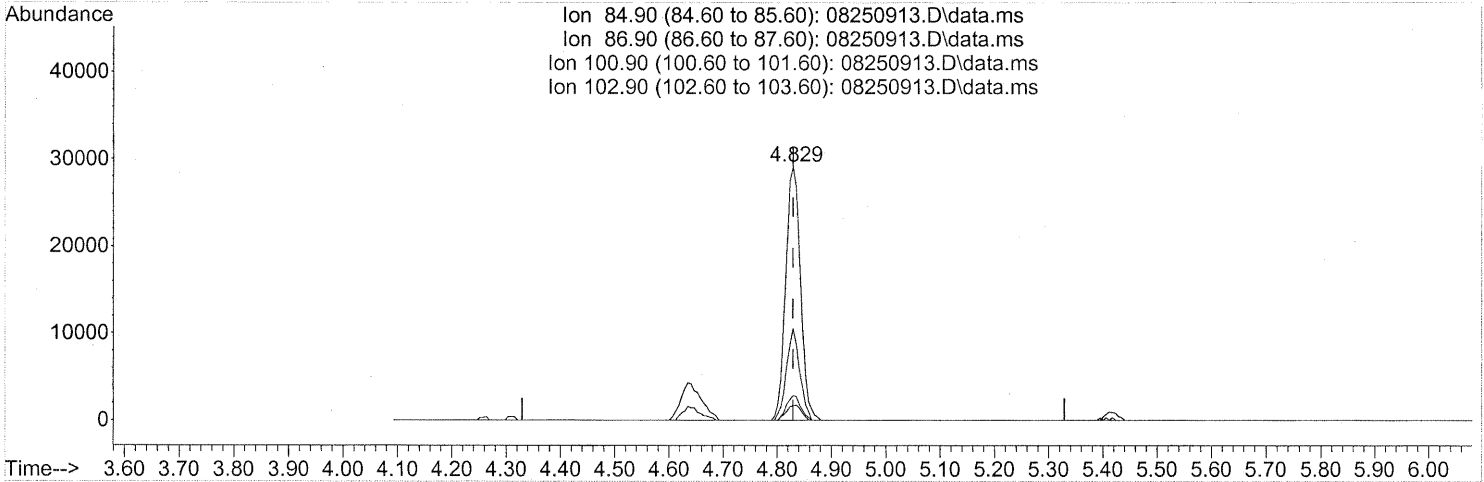
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	570	N.D.		
81) 2-Ethyltoluene	24.55	105	4382	0.078	ng	92
82) 1,2,4-Trimethylbenzene	24.83	105	13160	<del>0.283</del>	ng	86
83) n-Decane	24.93	57	15197	0.503	ng	76
84) Benzyl Chloride	25.00	91	3051	<del>0.070</del>	ng	80
85) 1,3-Dichlorobenzene	25.10	146	799	N.D.		
86) 1,4-Dichlorobenzene	25.10	146	799	N.D.		
87) sec-Butylbenzene	25.17	105	1797	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	5820	0.104	ng	84
89) 1,2,3-Trimethylbenzene	25.35	105	5351	<del>0.113</del>	ng	96
90) 1,2-Dichlorobenzene	25.53	146	90	N.D.		
91) d-Limonene	<u>25.53</u>	68	12756	<u>0.645</u>	ng	87
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	10190	0.317	ng	77
94) 1,2,4-Trichlorobenzene	27.58	180	524	N.D.		
95) Naphthalene	27.72	128	11746	<del>0.186</del>	ng	95
96) n-Dodecane	27.69	57	11450	0.306	ng	95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	9699	0.470	ng	95
99) tert-Butylbenzene	24.82	119	1810	N.D.		
100) n-Butylbenzene	25.91	91	790	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.829min (-0.000) 1.99ng

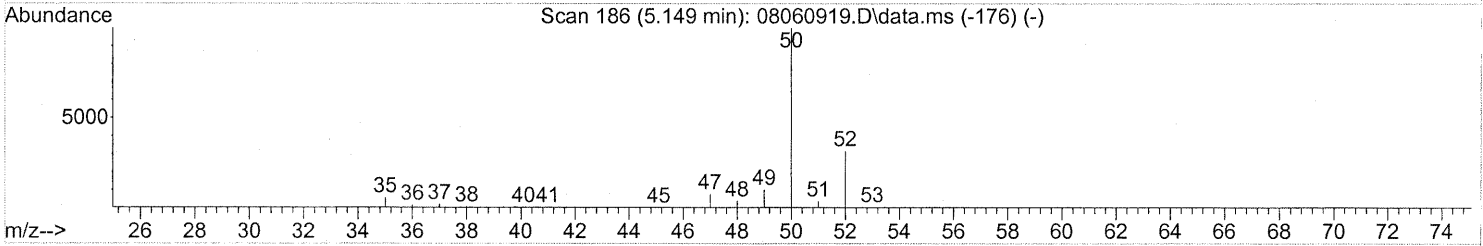
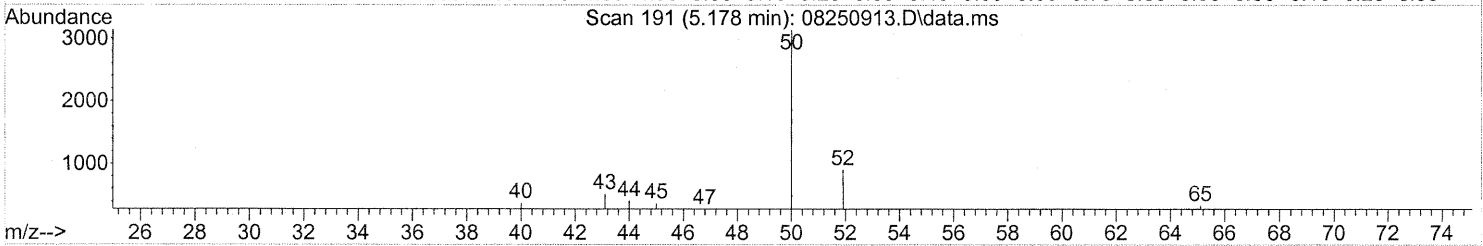
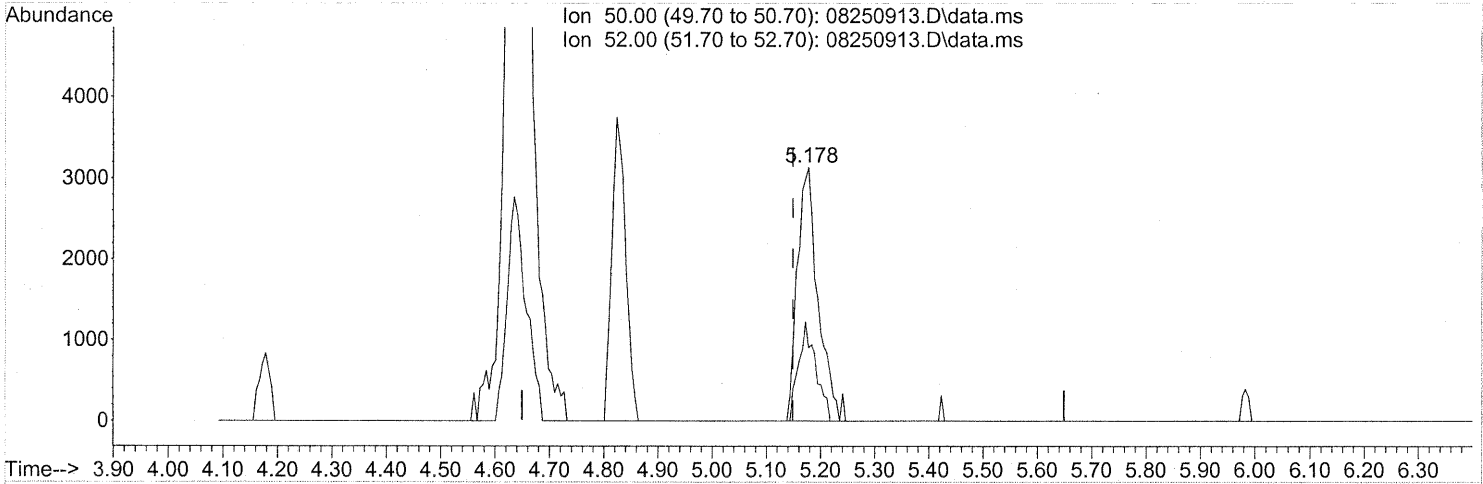
response 54806

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.38
100.90	8.80	9.18
102.90	5.20	5.82

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
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Quant Time: Aug 26 06:39:20 2009  
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TIC: 08250913.D\data.ms

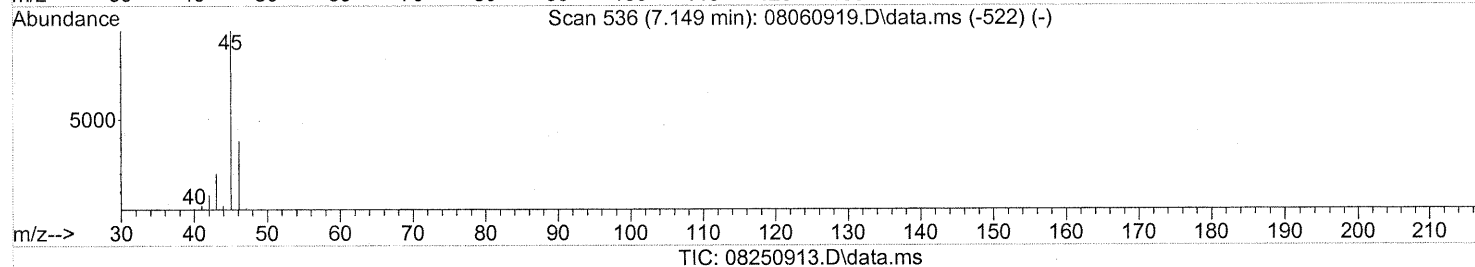
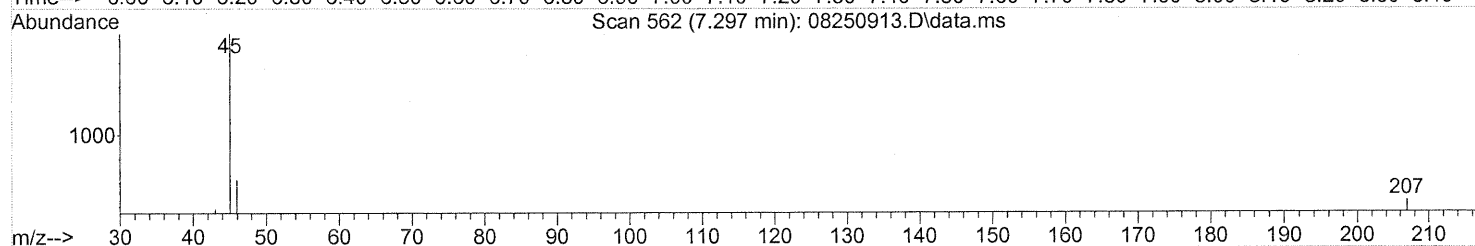
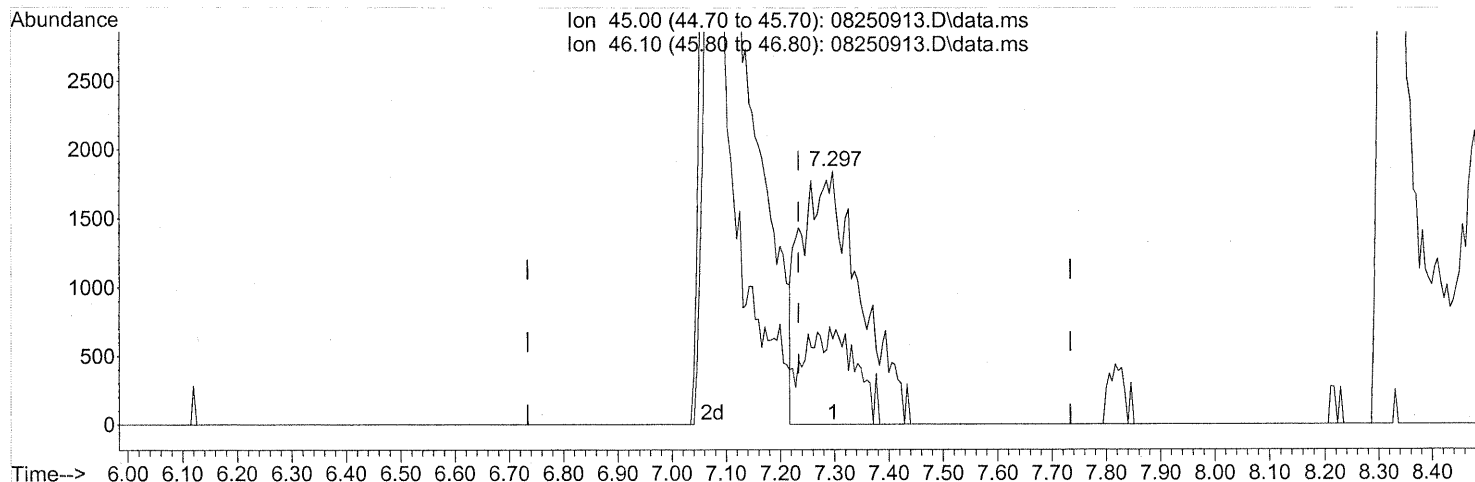
(4) Chloromethane (T)  
 5.178min (+0.028) 0.44ng  
 response 8214

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	33.11
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.297min (+0.063) 1.31ng

response 13945

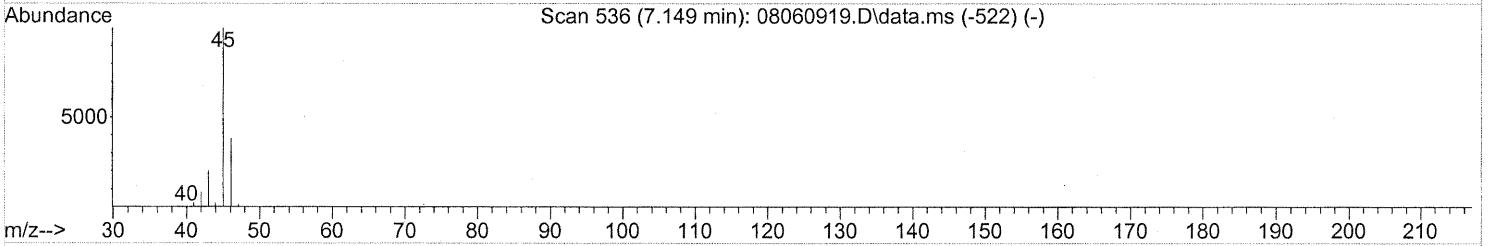
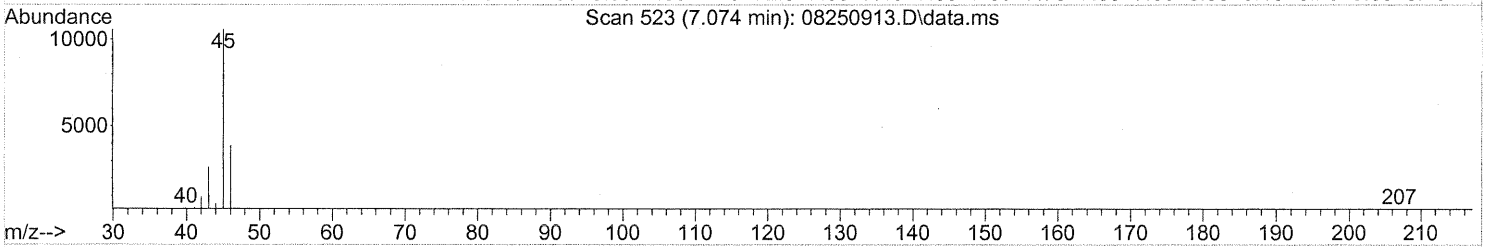
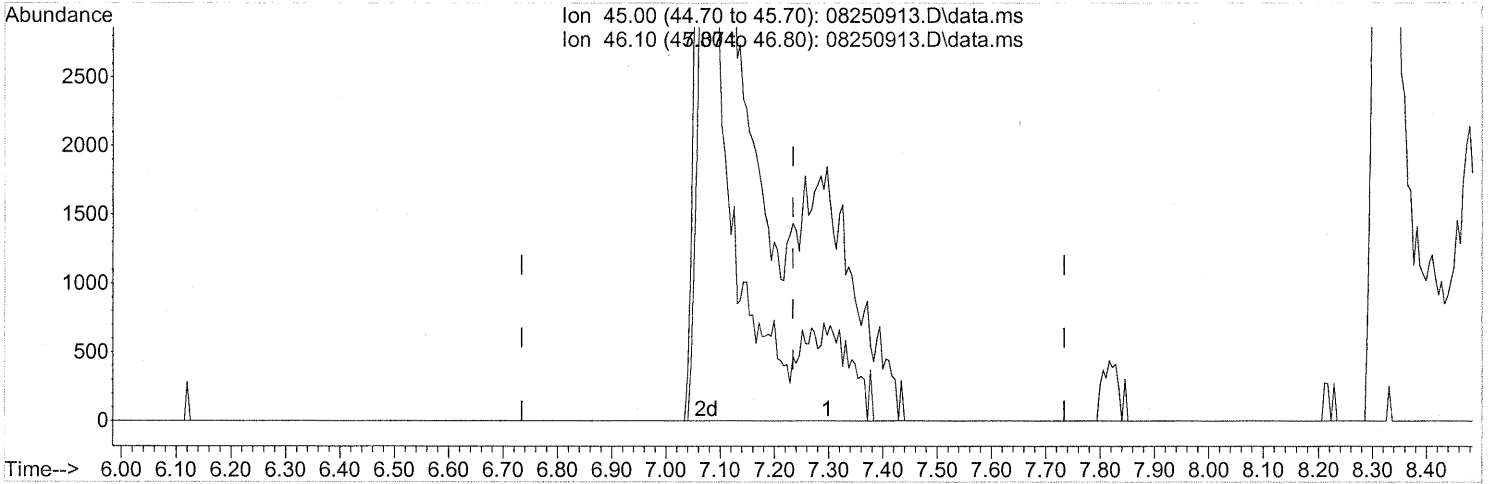
Ion	Exp%	Act%
45.00	100	100
46.10	38.40	30.95
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(10) Ethanol (T)  
 7.074min (-0.160) 5.32ng m  
 response 56776

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	7.60#
0.00	0.00	0.00
0.00	0.00	0.00

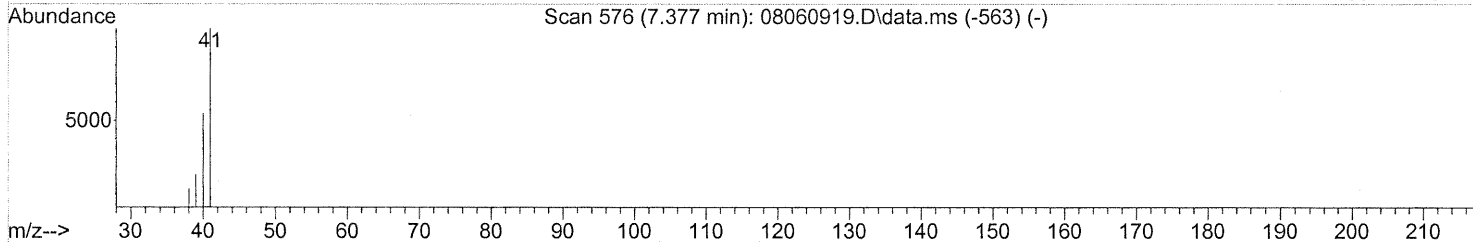
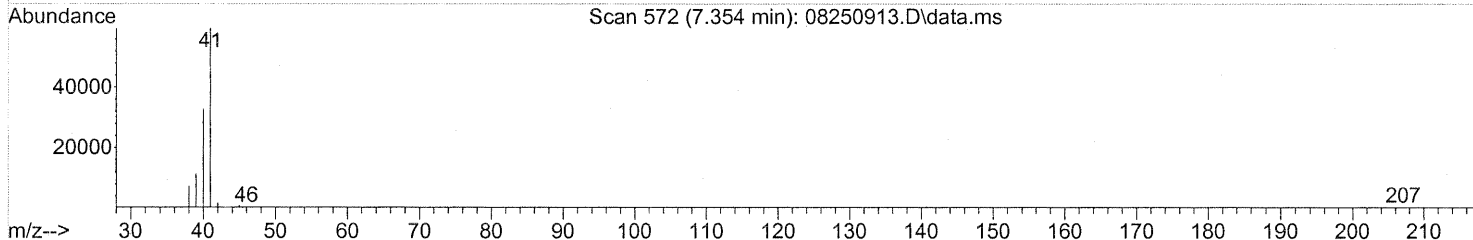
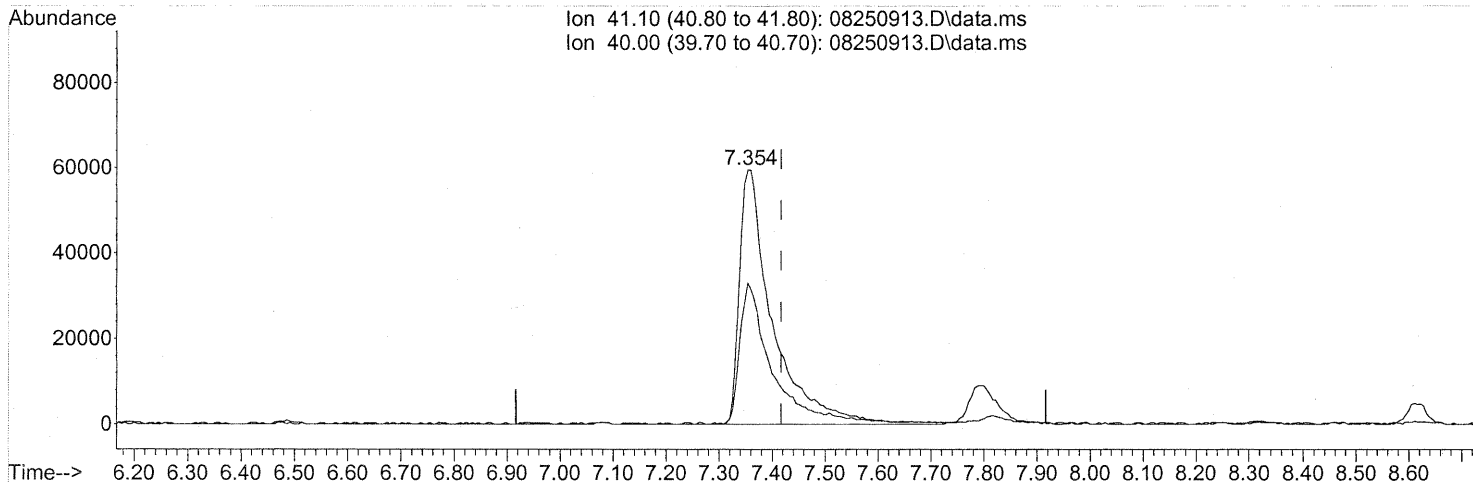
*SP > IC  
 11/9/09*

*11/9/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

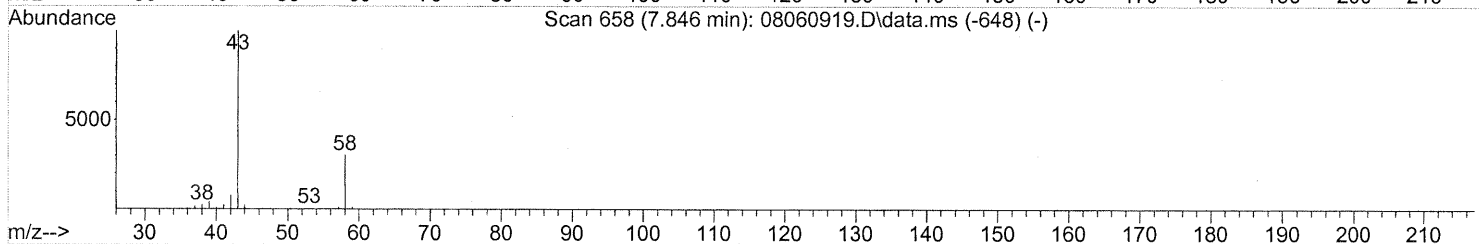
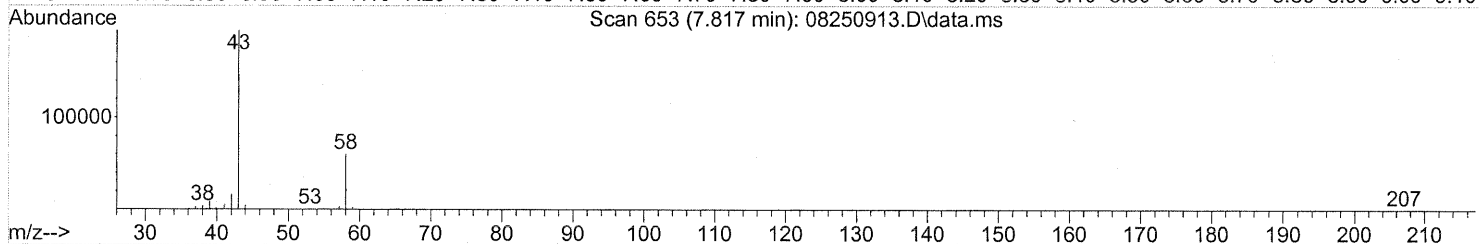
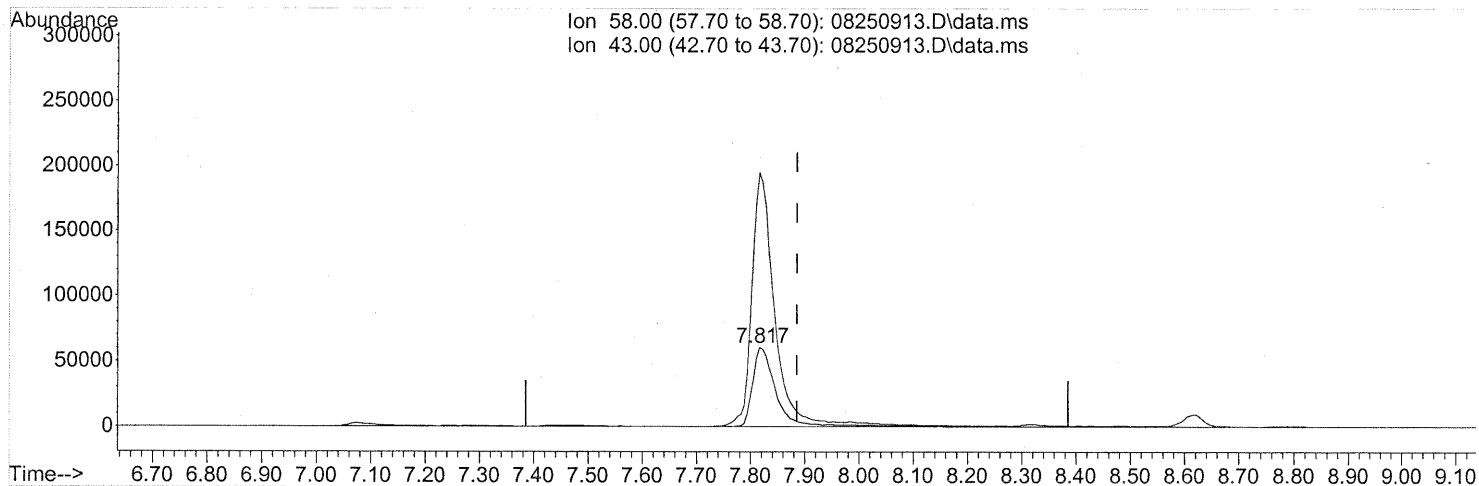
(11) Acetonitrile (T)  
 7.354min (-0.063) 8.22ng  
 response 256940

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	55.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(13) Acetone (T)  
 7.817min (-0.069) 17.69ng  
 response 178095

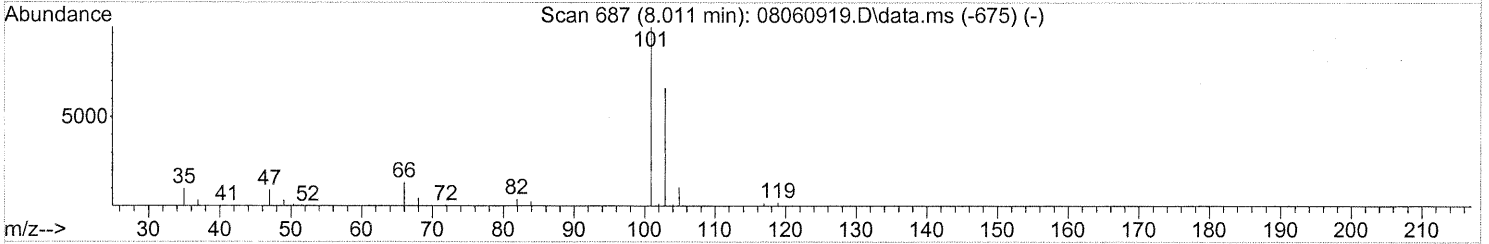
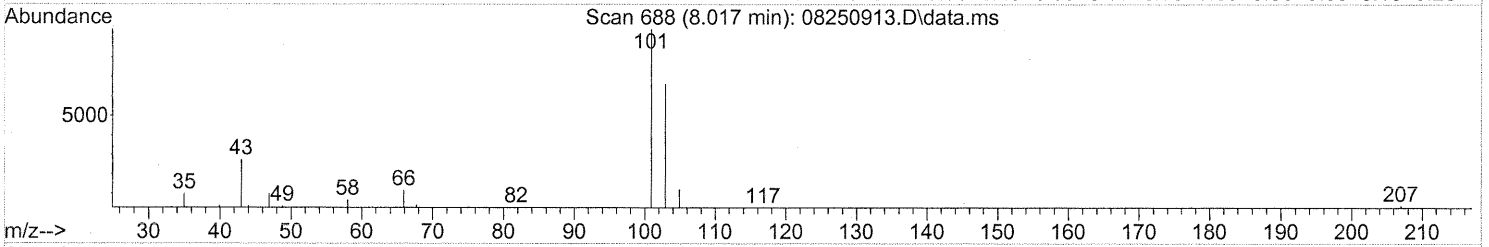
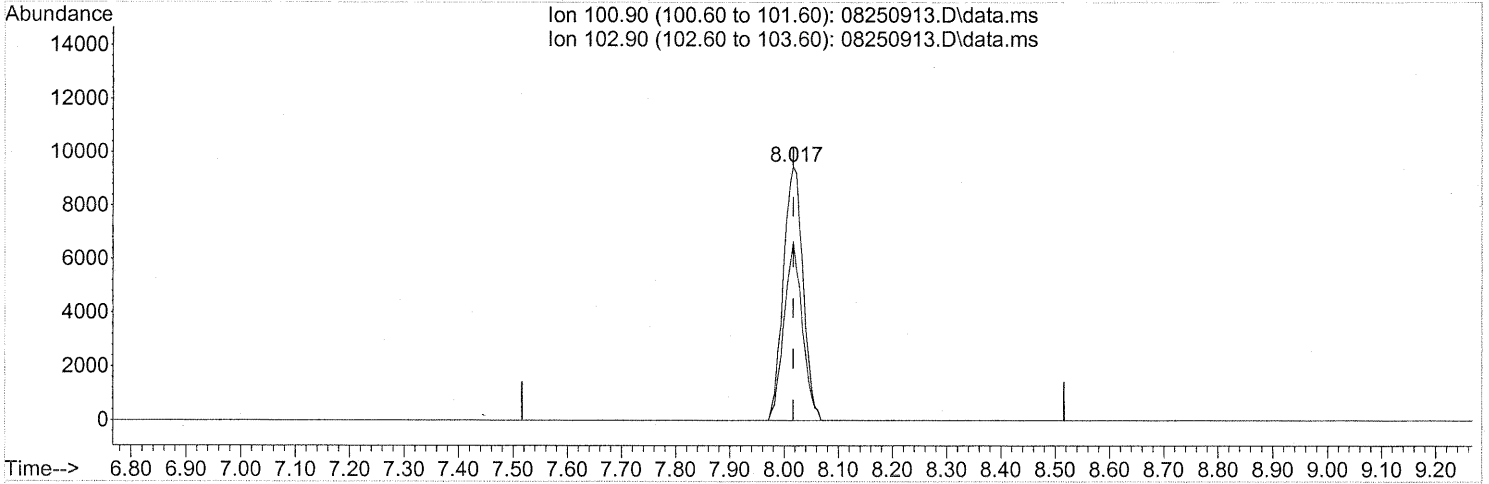
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	324.35
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(14) Trichlorofluoromethane (T)

8.017min (-0.000) 0.96ng

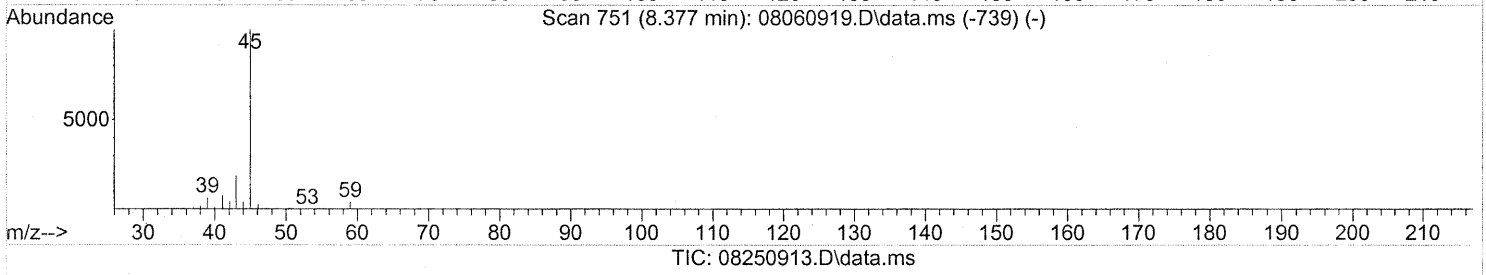
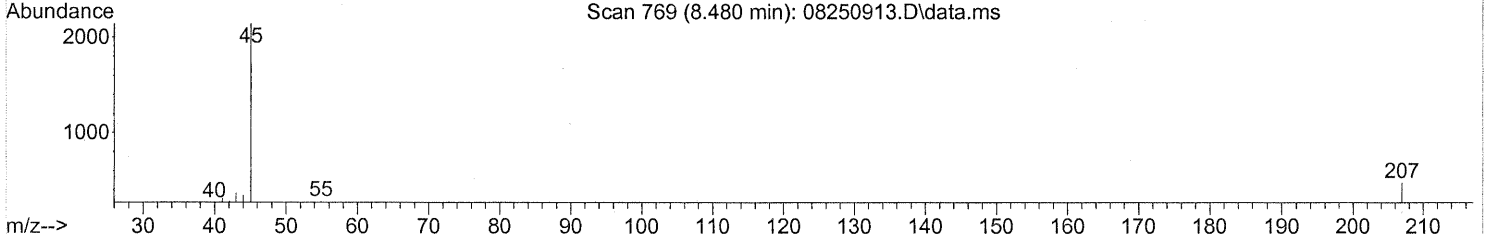
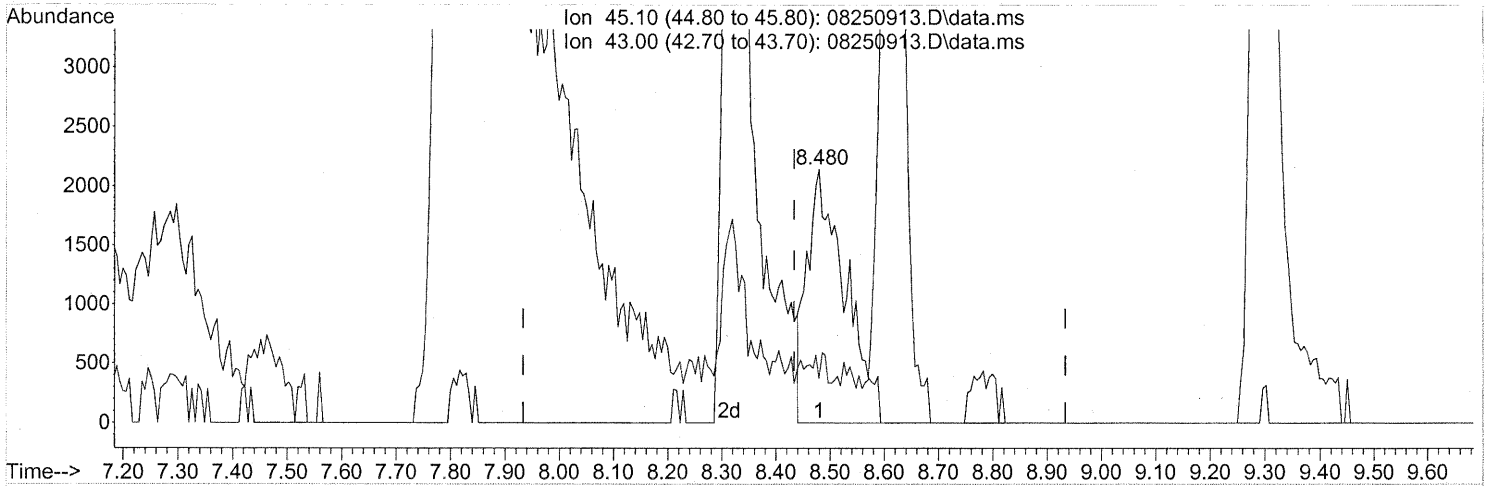
response 23841

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(15) 2-Propanol (Isopropanol) (T)

8.480min (+0.046) 0.26ng

*SP*

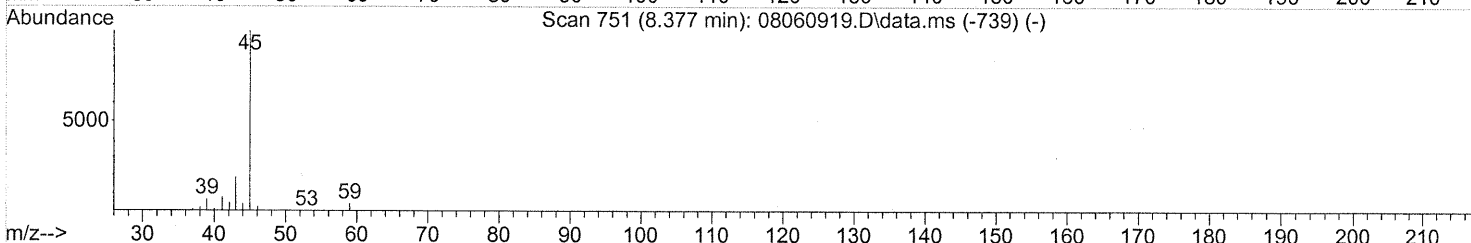
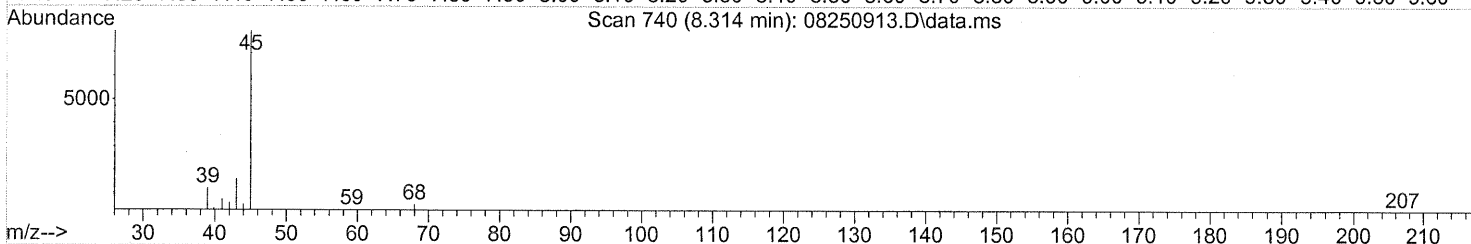
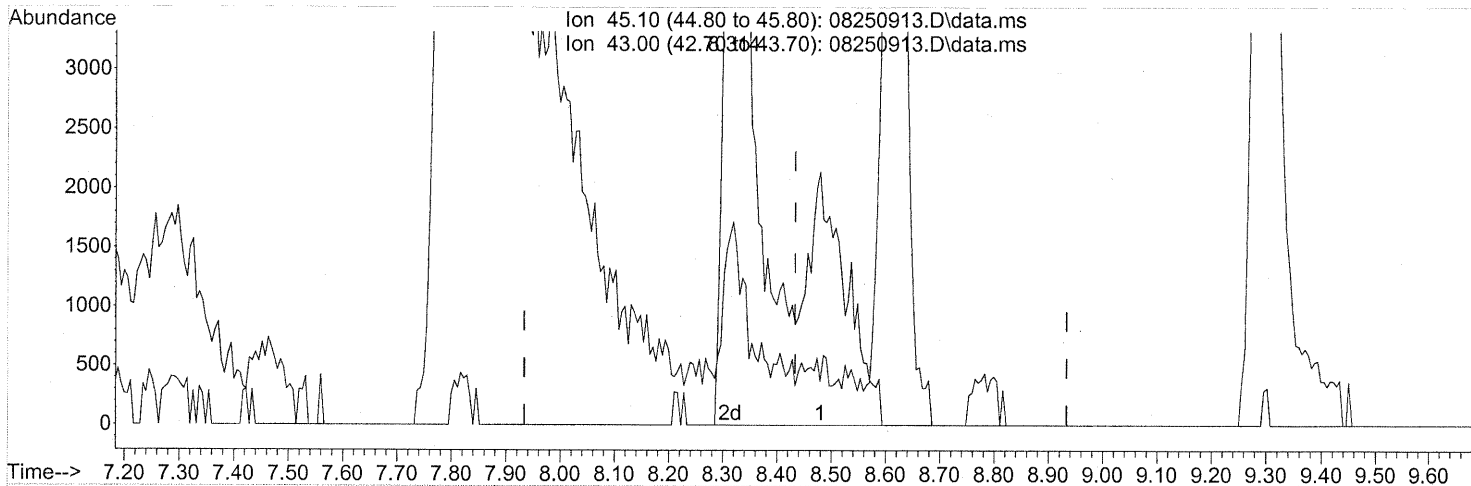
response 10400

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(15) 2-Propanol (Isopropanol) (T)

8.314min (-0.120) 0.93ng m

response 36632

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

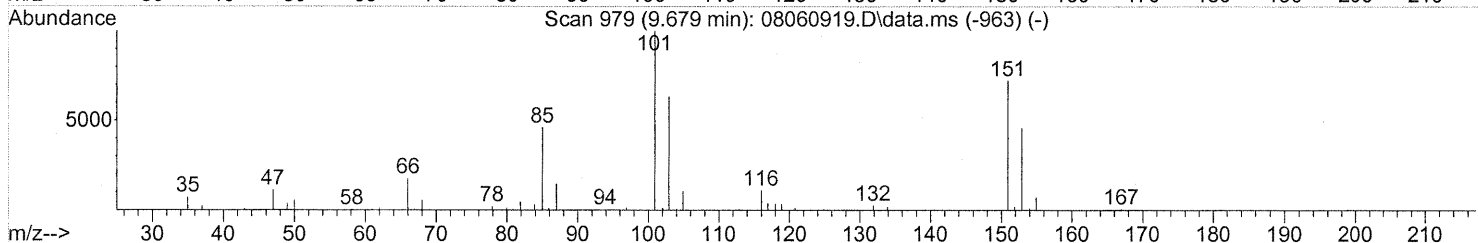
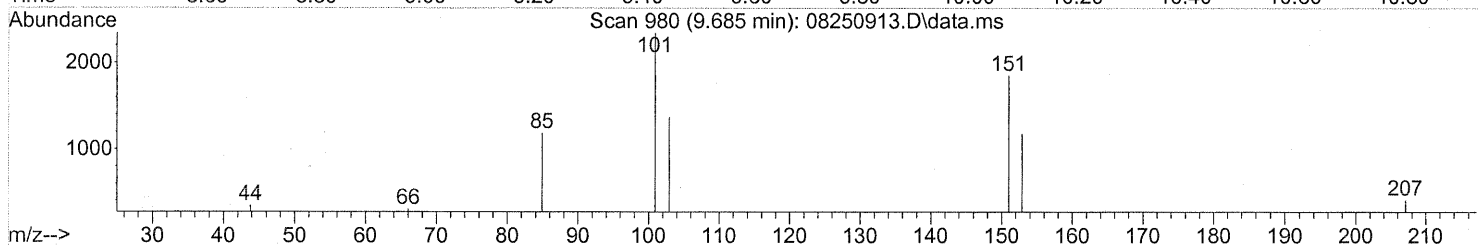
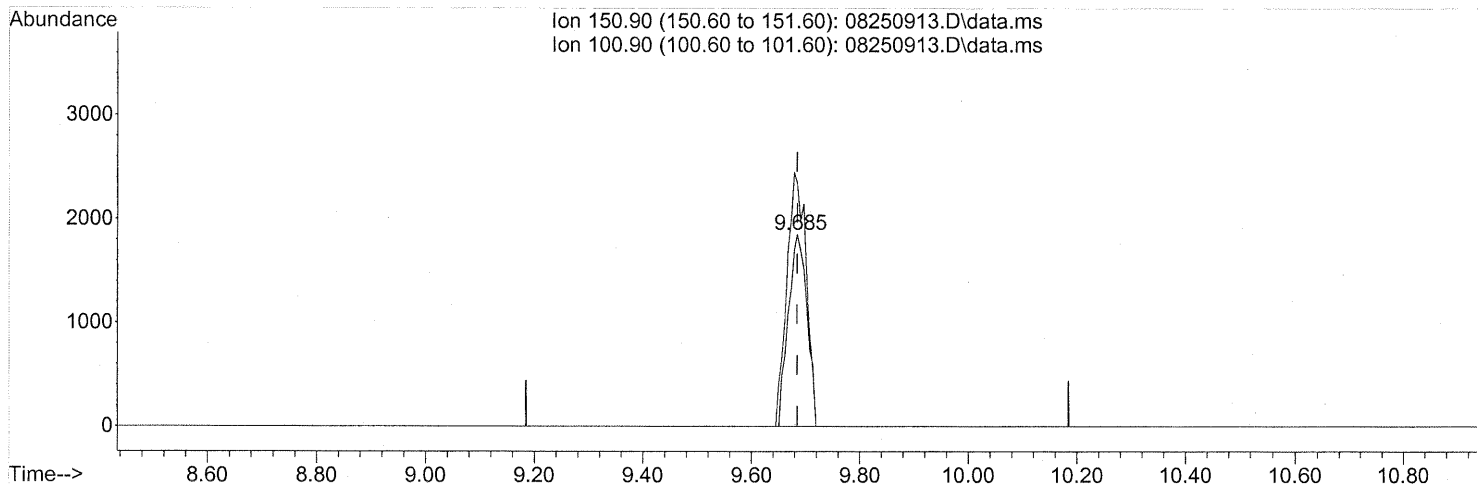
*SP > IC*  
*11/9/2/09*

*11/9/3/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.685min (-0.000) 0.49ng

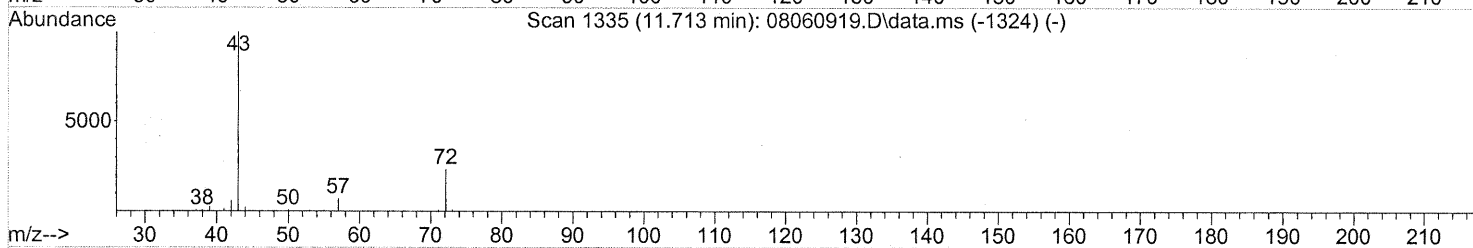
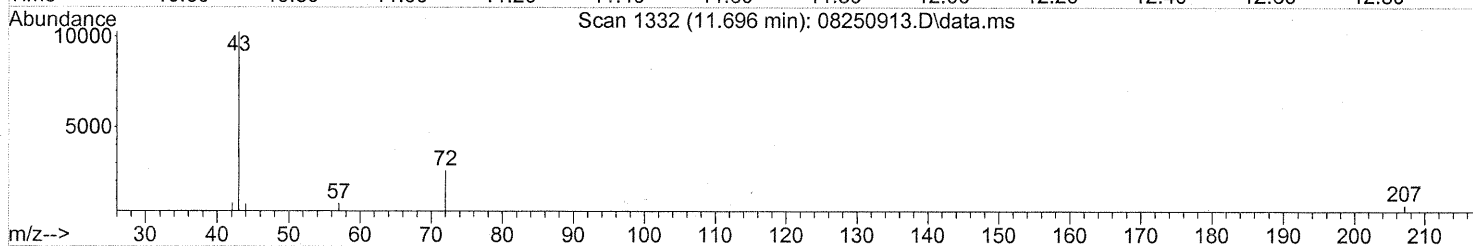
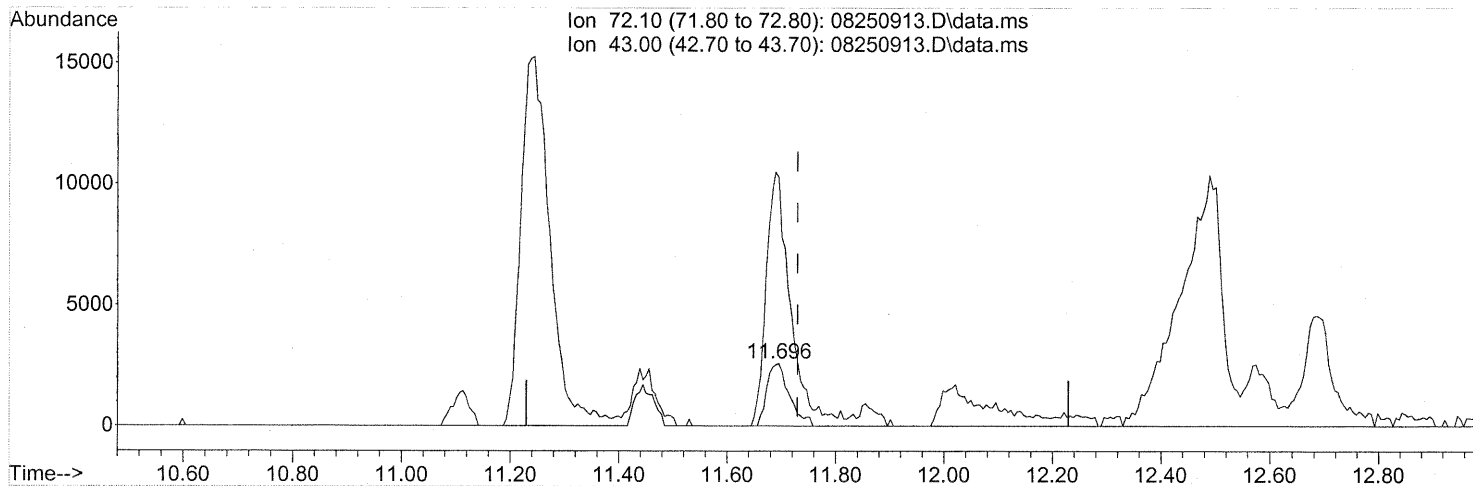
response 4401

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	136.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(27) 2-Butanone (MEK) (T)

11.696min (-0.034) 0.82ng

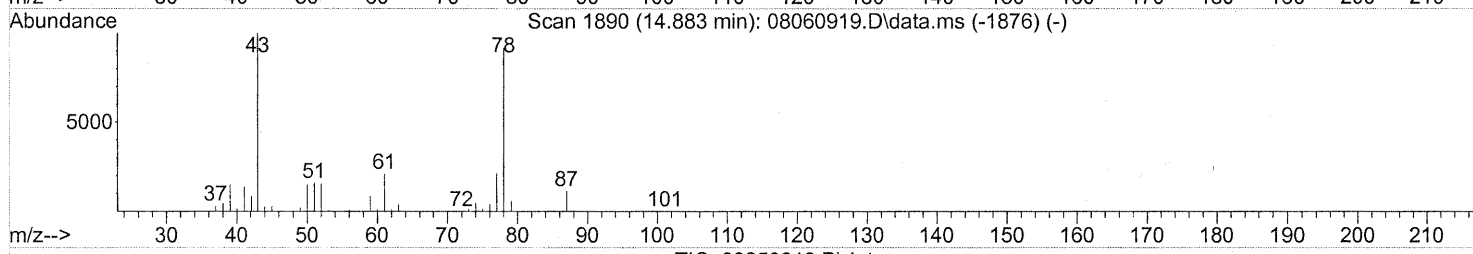
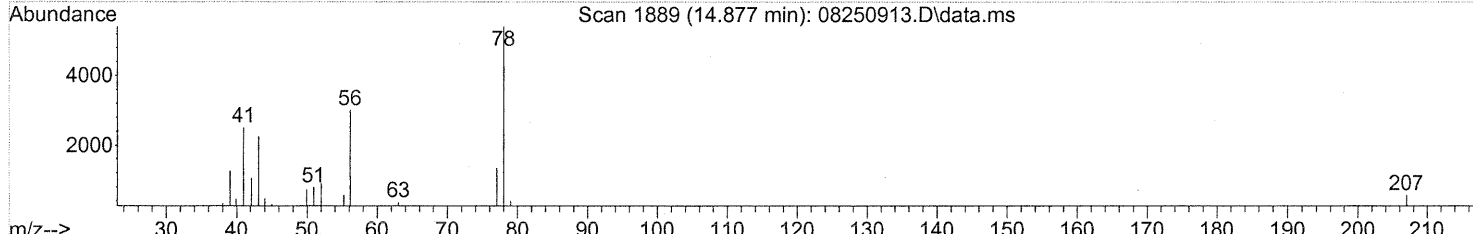
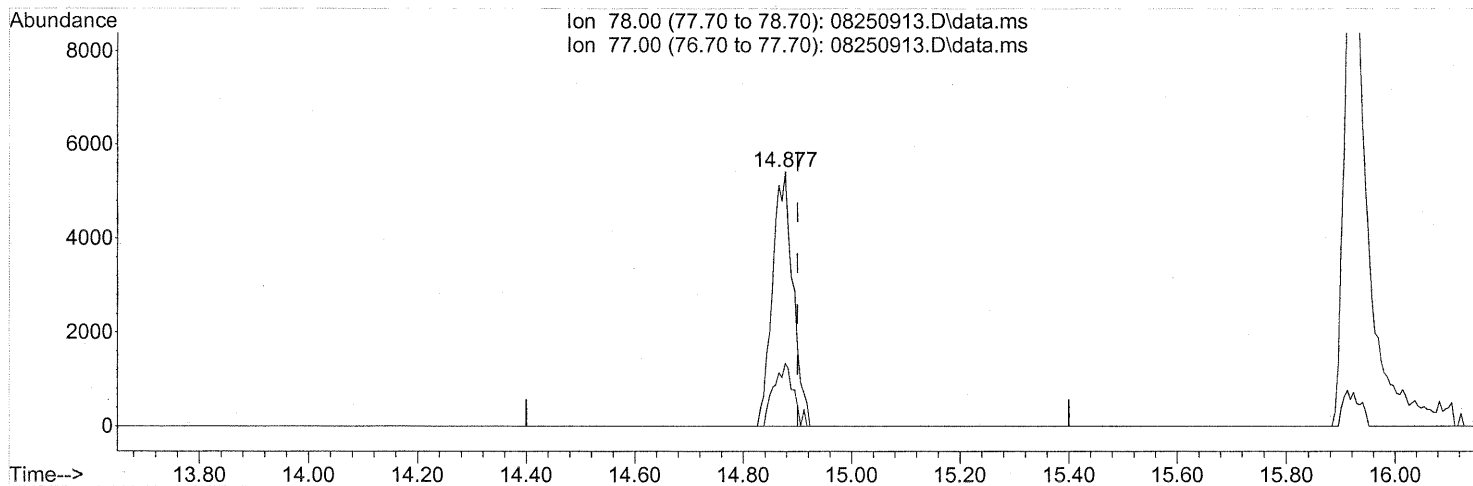
response 7413

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	446.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

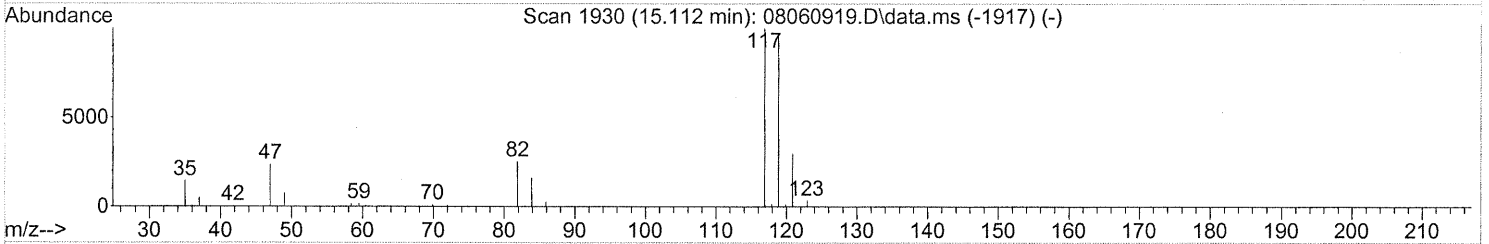
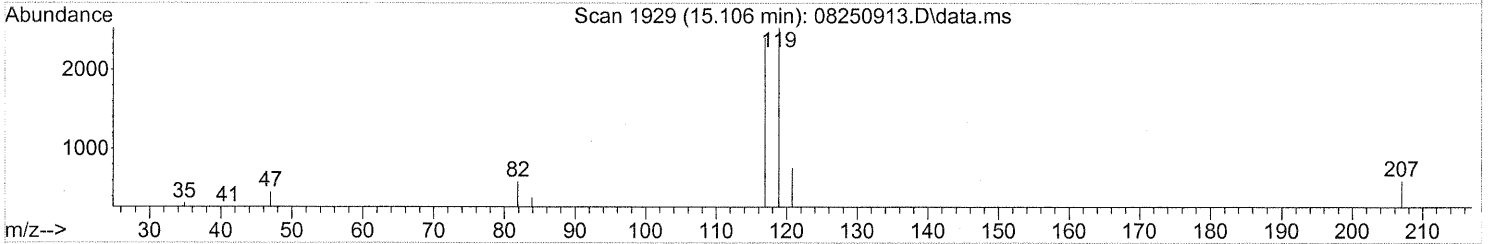
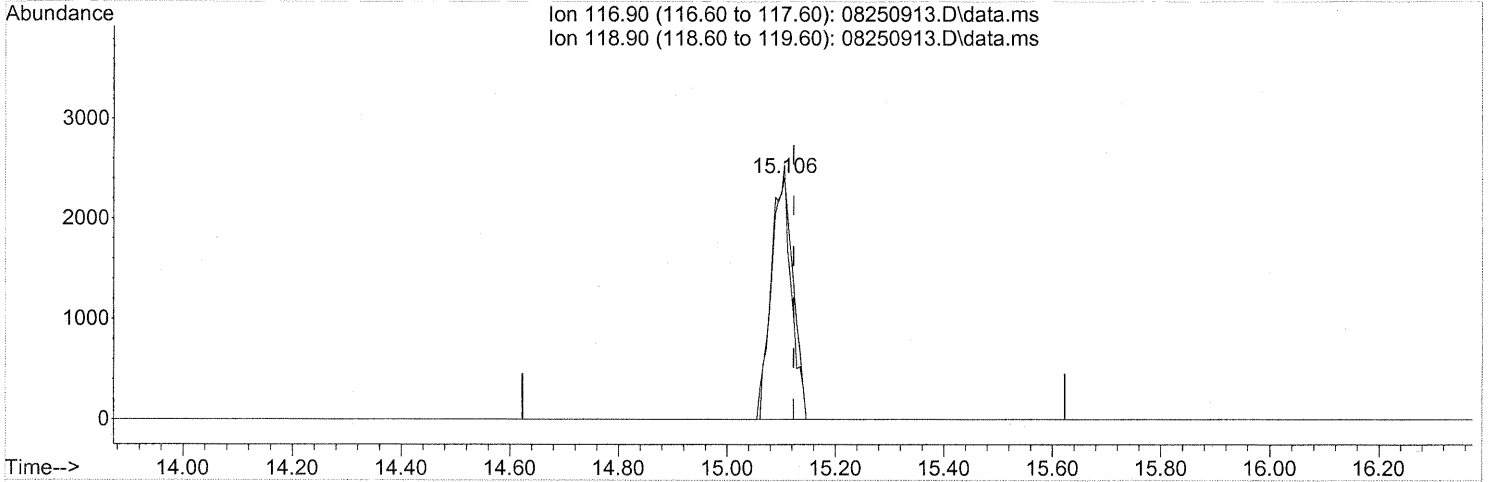
(41) Benzene (T)  
 14.877min (-0.023) 0.26ng  
 response 14198

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250913.D\data.ms

(42) Carbon Tetrachloride (T)

15.106min (-0.017) 0.39ng

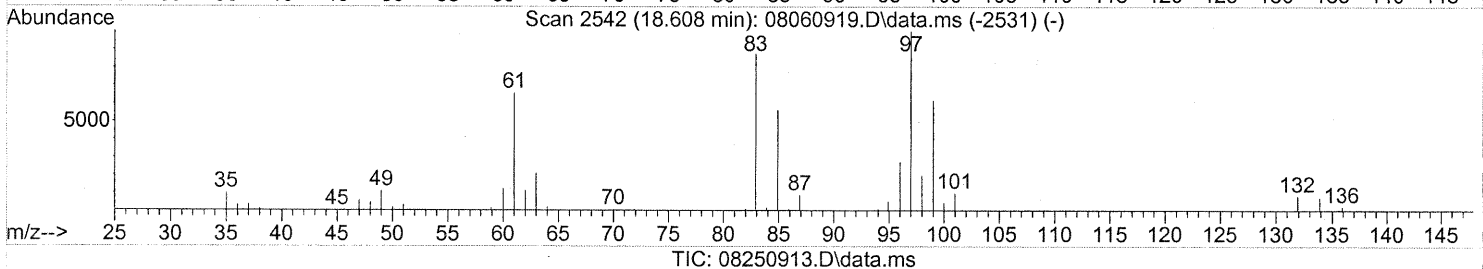
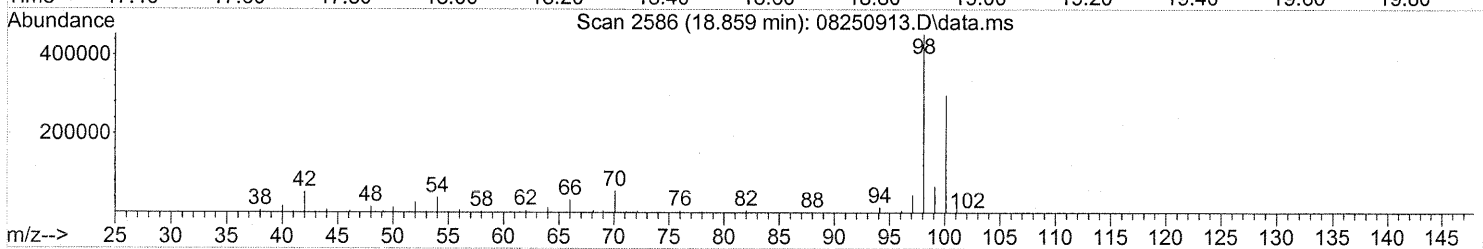
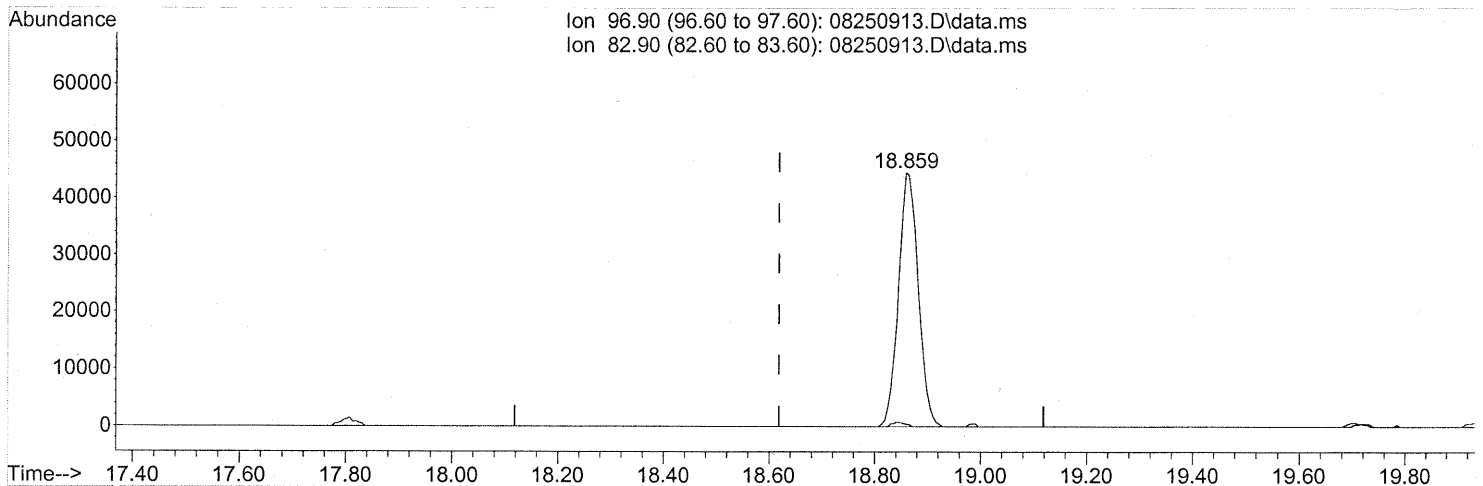
response 6833

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	92.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(55) 1,1,2-Trichloroethane (T)

18.859min (+0.240) 9.64ng

response 115443

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.10#
0.00	0.00	0.00
0.00	0.00	0.00

*EP*  
*m 9/2/09*

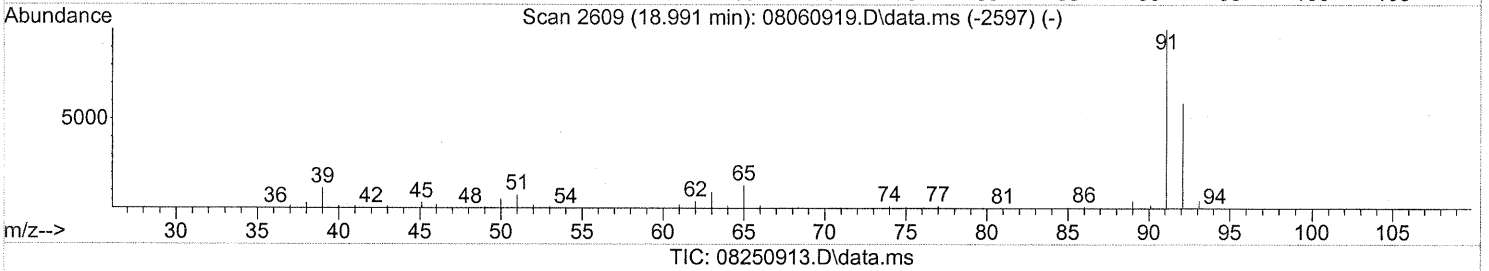
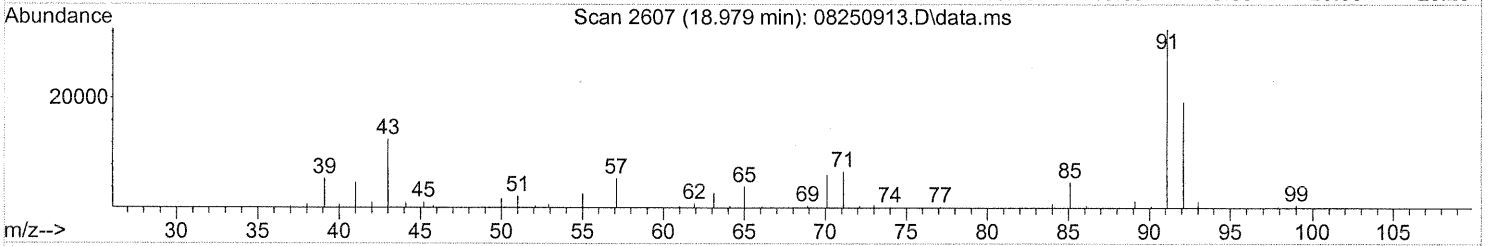
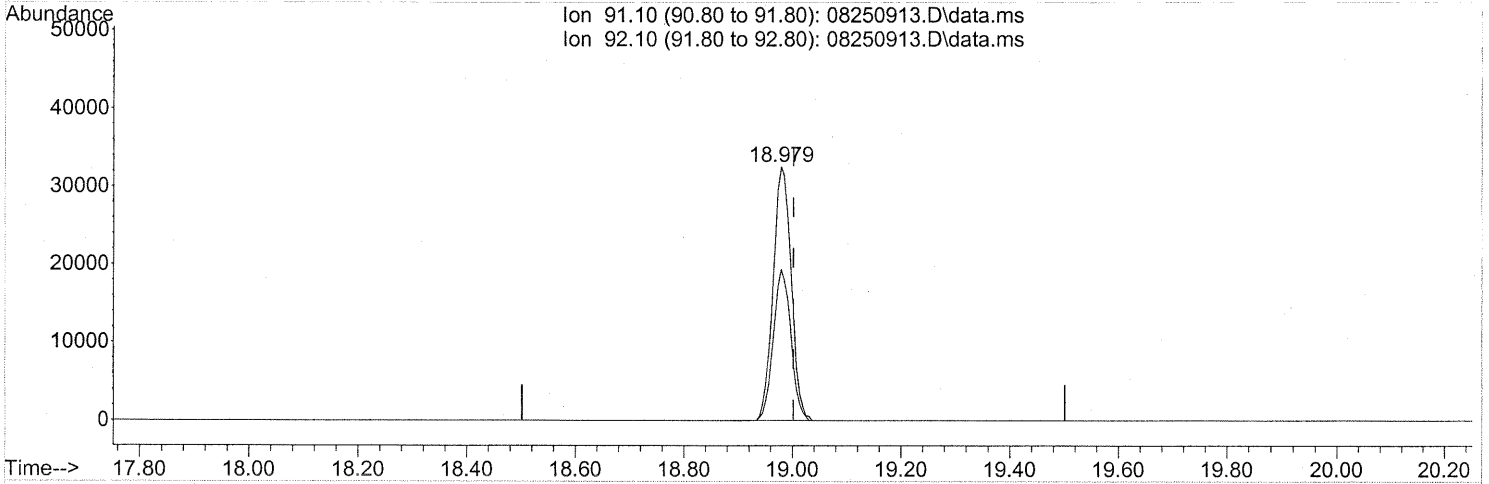
*W 9/2/09*



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



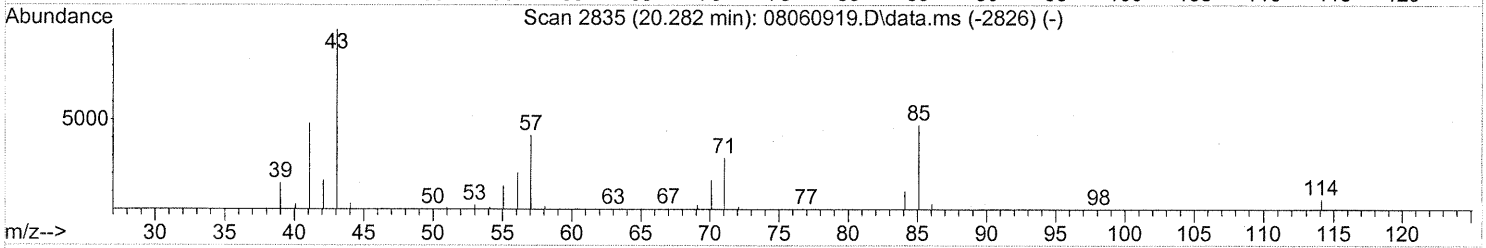
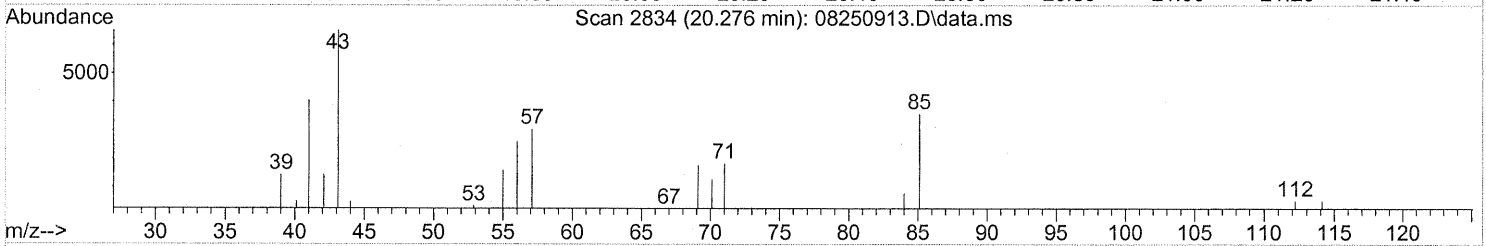
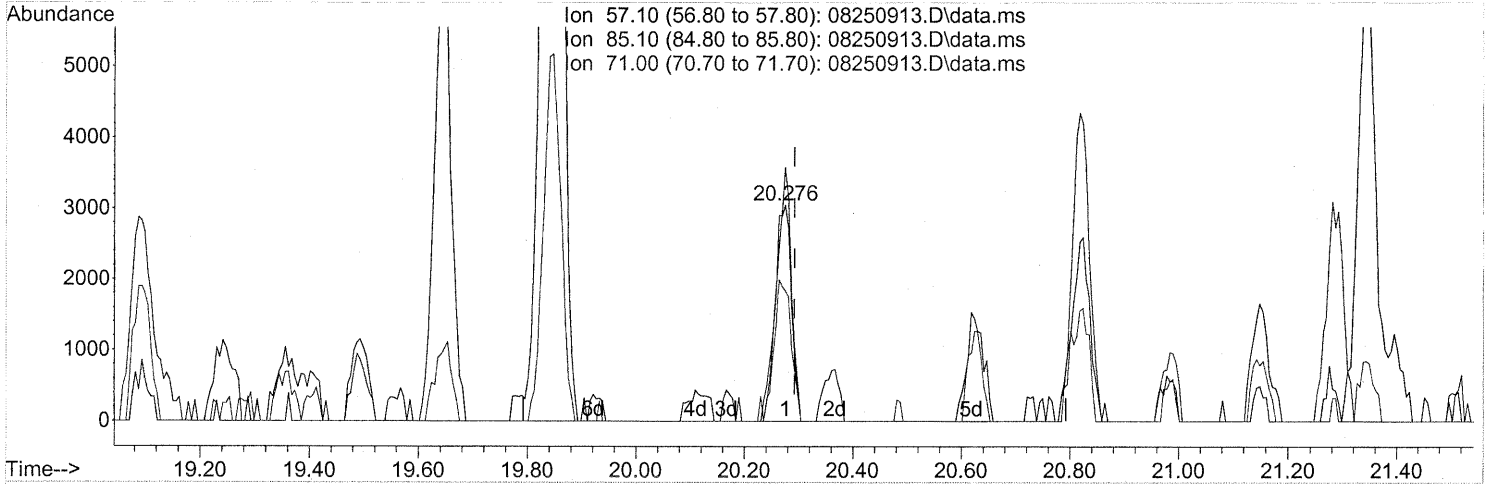
(58) Toluene (T)  
 18.979min (-0.023) 1.50ng  
 response 74816

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	57.73
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



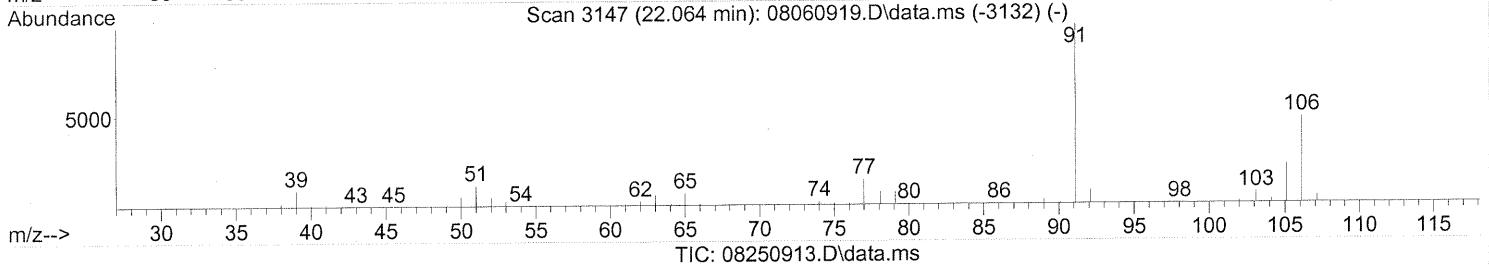
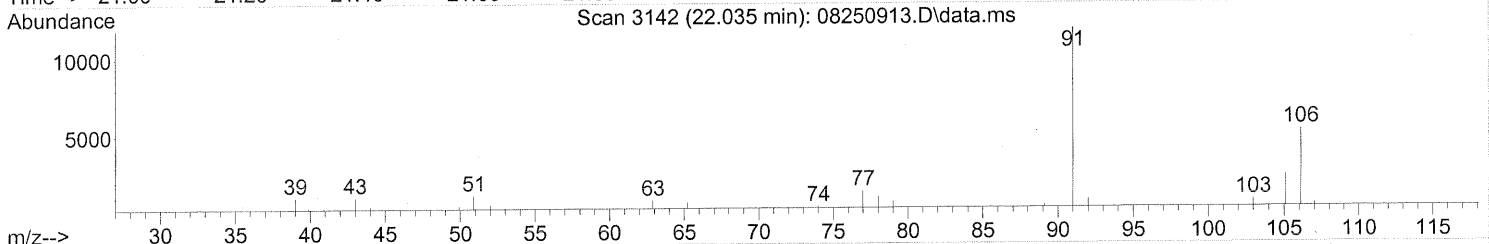
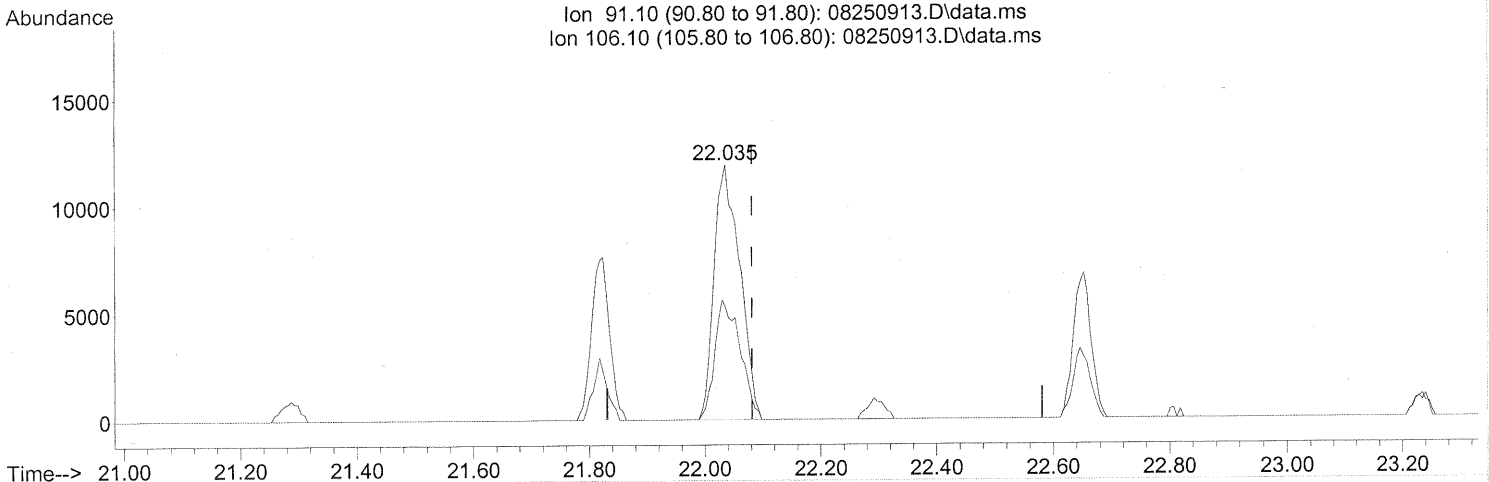
(63) n-Octane (T)  
 20.276min (-0.017) 0.54ng  
 response 6521

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	101.96
71.00	68.10	67.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 7:30 pm  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 21:21:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



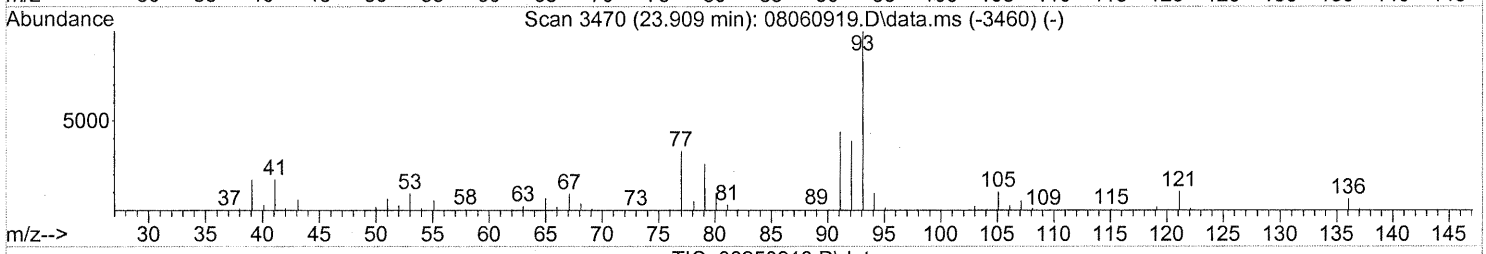
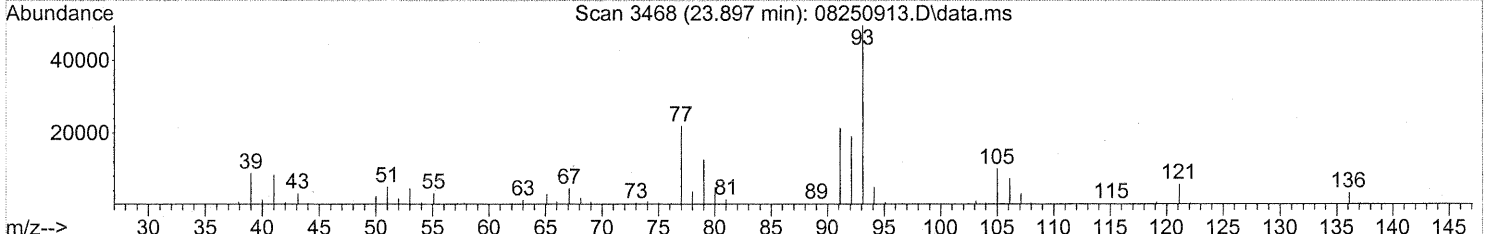
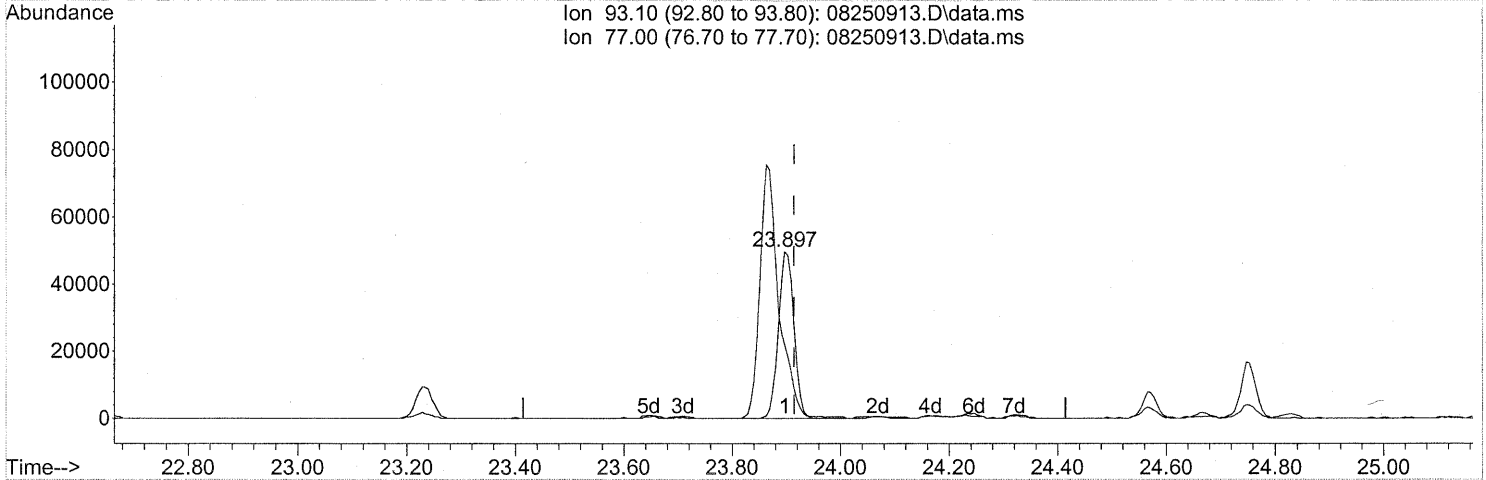
(67) m- & p-Xylenes (T)  
 22.035min (-0.046) 0.80ng  
 response 36688

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	46.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



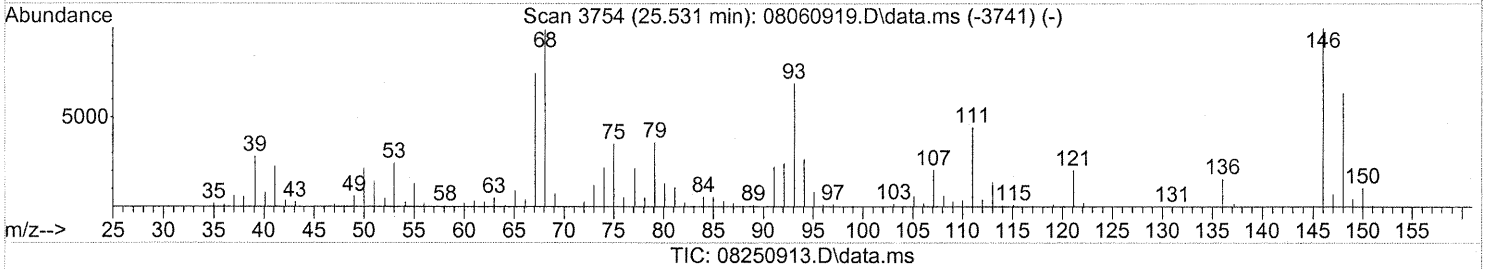
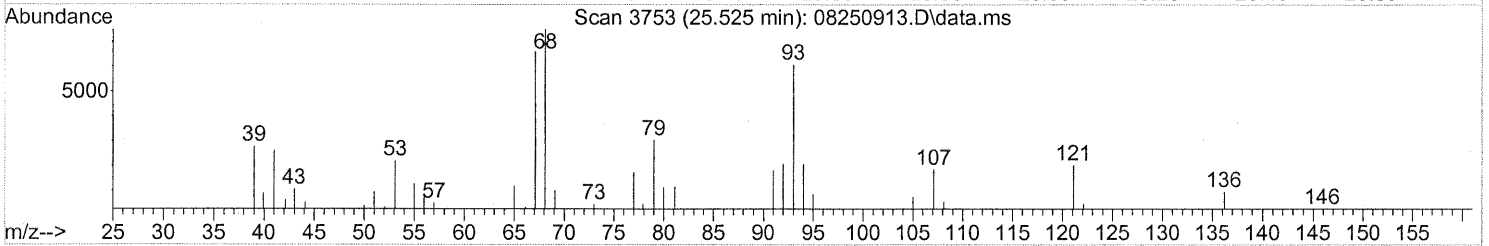
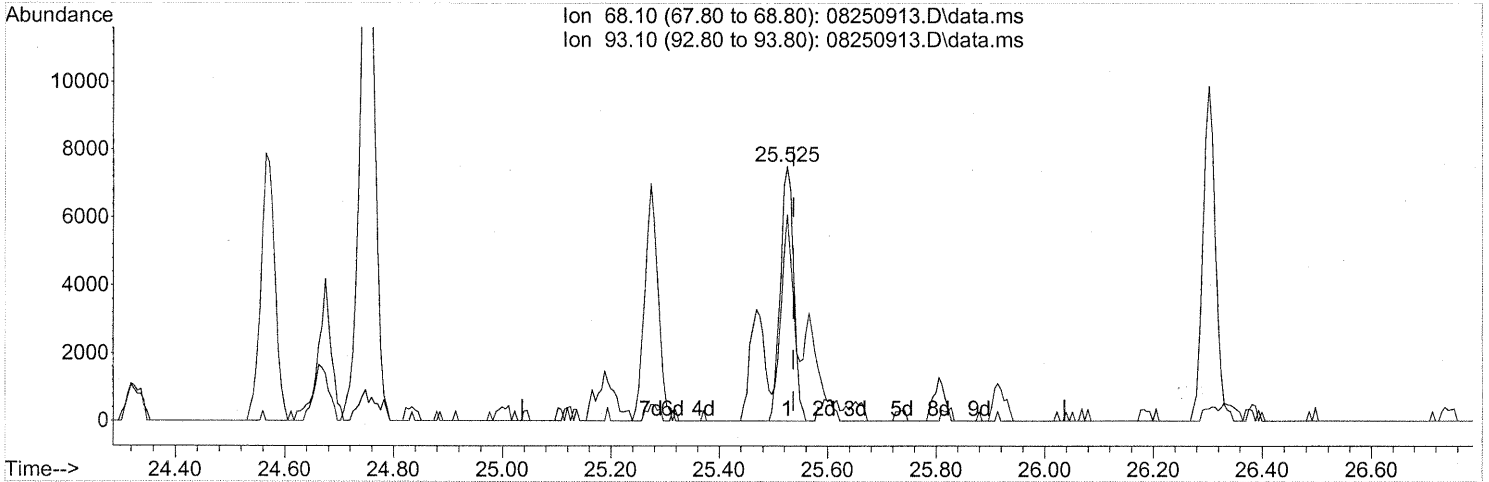
(75) alpha-Pinene (T)  
 23.897min (-0.017) 3.28ng  
 response 98187

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250913.D  
 Acq On : 25 Aug 2009 19:30  
 Operator : WA/CC  
 Sample : P0902875-004 (1000mL)  
 Misc : Environmental Health 102267  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 06:39:20 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(91) d-Limonene (T)  
 25.525min (-0.012) 0.64ng  
 response 12756

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	78.34
0.00	0.00	0.00
0.00	0.00	0.00

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102268  
**Client Project ID:** 16512  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00540

**CAS Project ID:** P0902875  
**CAS Sample ID:** P0902875-005

**Date Collected:** 8/19/09  
**Date Received:** 8/20/09  
**Date Analyzed:** 8/25 - 8/26/09  
**Volume(s) Analyzed:** 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): -0.2      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.26

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	ND	0.63	ND	0.37	
75-71-8	Dichlorodifluoromethane (CFC 12)	5.4	0.63	1.1	0.13	
74-87-3	Chloromethane	1.4	0.13	0.68	0.061	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.63	ND	0.090	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.13	ND	0.057	
74-83-9	Bromomethane	ND	0.13	ND	0.032	
75-00-3	Chloroethane	ND	0.13	ND	0.048	
64-17-5	Ethanol	150	6.3	81	3.3	
75-05-8	Acetonitrile	210	0.63	120	0.38	D
107-02-8	Acrolein	6.0	0.63	2.6	0.27	
67-64-1	Acetone	130	6.3	53	2.7	
75-69-4	Trichlorofluoromethane	1.3	0.13	0.23	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	43	0.63	17	0.26	
107-13-1	Acrylonitrile	ND	0.63	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.032	
75-09-2	Methylene Chloride	ND	0.63	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.040	
76-13-1	Trichlorotrifluoroethane	0.64	0.13	0.083	0.016	
75-15-0	Carbon Disulfide	ND	0.63	ND	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	ND	0.032	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.035	
108-05-4	Vinyl Acetate	ND	6.3	ND	1.8	
78-93-3	2-Butanone (MEK)	4.6	0.63	1.6	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

9/3/09

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102268  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00540

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-005

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25 - 8/26/09  
 Volume(s) Analyzed: 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): -0.2      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.13	ND	0.032	
141-78-6	Ethyl Acetate	4.5	0.63	1.2	0.17	
110-54-3	n-Hexane	5.7	0.63	1.6	0.18	
67-66-3	Chloroform	1.1	0.13	0.23	0.026	
109-99-9	Tetrahydrofuran (THF)	ND	0.63	ND	0.21	
107-06-2	1,2-Dichloroethane	1.1	0.13	0.28	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.023	
71-43-2	Benzene	6.1	0.13	1.9	0.039	
56-23-5	Carbon Tetrachloride	1.1	0.13	0.17	0.020	
110-82-7	Cyclohexane	1.2	0.63	0.34	0.18	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.019	
79-01-6	Trichloroethene	ND	0.13	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.63	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.63	ND	0.15	
142-82-5	n-Heptane	2.6	0.63	0.63	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.63	ND	0.14	
108-10-1	4-Methyl-2-pentanone	0.85	0.63	0.21	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.63	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.023	
108-88-3	Toluene	24	0.63	6.4	0.17	
591-78-6	2-Hexanone	1.7	0.63	0.42	0.15	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.016	
123-86-4	n-Butyl Acetate	2.5	0.63	0.54	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_

Date: 9/3/09

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102268  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00540

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-005

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25 - 8/26/09  
 Volume(s) Analyzed: 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): -0.2      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	1.4	0.63	0.31	0.13	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.019	
108-90-7	Chlorobenzene	ND	0.13	ND	0.027	
100-41-4	Ethylbenzene	4.3	0.63	1.0	0.15	
179601-23-1	m,p-Xylenes	15	0.63	3.6	0.15	
75-25-2	Bromoform	ND	0.63	ND	0.061	
100-42-5	Styrene	3.6	0.63	0.85	0.15	
95-47-6	o-Xylene	5.6	0.63	1.3	0.15	
111-84-2	n-Nonane	0.86	0.63	0.16	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.018	
98-82-8	Cumene	ND	0.63	ND	0.13	
80-56-8	alpha-Pinene	210	0.63	38	0.11	D
103-65-1	n-Propylbenzene	0.65	0.63	0.13	0.13	
622-96-8	4-Ethyltoluene	1.1	0.63	0.23	0.13	
108-67-8	1,3,5-Trimethylbenzene	0.93	0.63	0.19	0.13	
95-63-6	1,2,4-Trimethylbenzene	3.2	0.63	0.64	0.13	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.13	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.021	
5989-27-5	d-Limonene	35	0.63	6.3	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.63	ND	0.065	
120-82-1	1,2,4-Trichlorobenzene	ND	0.63	ND	0.085	
91-20-3	Naphthalene	0.76	0.63	0.14	0.12	
87-68-3	Hexachlorobutadiene	ND	0.63	ND	0.059	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

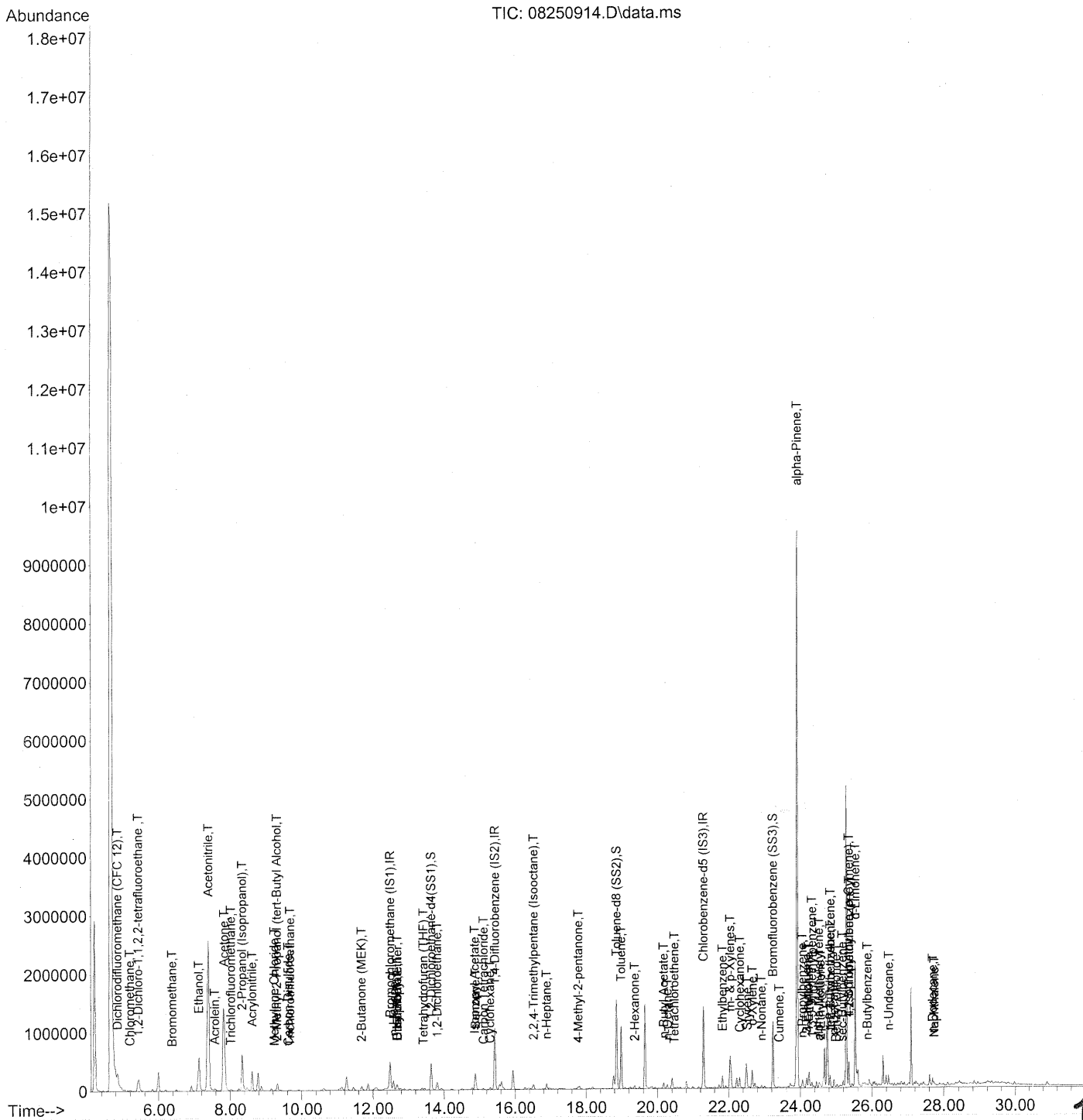
D = The reported result is from a dilution.

Verified By:  Date: 9/2/09 **160**



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 8:12 pm  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 10:08:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 8:12 pm  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 10:08:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

WA 9/3/09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	241890	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1218396	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	580019	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	460293	21.893	ng	-0.03
Spiked Amount	25.000		Recovery	=	87.56%	✓
57) Toluene-d8 (SS2)	18.85	98	1329761	26.238	ng	-0.02
Spiked Amount	25.000		Recovery	=	104.96%	✓
73) Bromofluorobenzene (SS3)	23.23	174	373391	27.938	ng	-0.01
Spiked Amount	25.000		Recovery	=	111.76%	✓

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	0.00	42	0	N.D.	d	
3) Dichlorodifluoromethan...	4.85	85	116227	4.284	ng	97
4) Chloromethane	5.20	50	20178	1.107	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	789	0.072	ng	64
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.82	54	352	N.D.		
8) Bromomethane	6.38	94	928	0.087	ng	# 67
9) Chloroethane	6.71	64	119	N.D.		
10) Ethanol	7.13	45	1274207	121.104	ng	100
11) Acetonitrile	7.39	41	4942221	160.391	ng	sec 100
12) Acrolein	7.57	56	38408	4.796	ng	96
13) Acetone	7.83	58	986401	99.360	ng	99
14) Trichlorofluoromethane	8.02	101	24707	1.007	ng	99
15) 2-Propanol (Isopropanol)	8.33	45	1329861	34.087	ng	98
16) Acrylonitrile	8.62	53	6682	0.373	ng	# 9
17) 1,1-Dichloroethene	9.02	96	100	N.D.		
18) 2-Methyl-2-Propanol (t...	9.31	59	8189	0.236	ng	# 1
19) Methylene Chloride	9.24	84	4982	0.374	ng	97
20) 3-Chloro-1-propene (Al...	9.41	41	782	N.D.		
21) Trichlorotrifluoroethane	9.67	151	4525	0.507	ng	96
22) Carbon Disulfide	9.63	76	17018	0.362	ng	96
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.22	73	87	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.	d	
27) 2-Butanone (MEK)	11.68	72	32515	3.627	ng	94
28) cis-1,2-Dichloroethene	12.41	61	98	N.D.		
29) Diisopropyl Ether	12.69	87	2112	0.176	ng	# 1
30) Ethyl Acetate	12.68	61	16510	3.536	ng	97
31) n-Hexane	12.58	57	107403	4.496	ng	99

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Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 8:12 pm  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 10:08:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.69	83	18588	0.884	ng	98
34) Tetrahydrofuran (THF)	13.42	72	1979	0.207	ng #	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.80	62	17463	0.909	ng	97
38) 1,1,1-Trichloroethane	14.18	97	288	N.D.		
39) Isopropyl Acetate	14.86	61	2023	0.224	ng #	1
40) 1-Butanol	15.00	56	458	N.D.		
41) Benzene	14.88	78	259239	4.839	ng	98
42) Carbon Tetrachloride	15.11	117	14420	0.845	ng	96
43) Cyclohexane	15.29	84	18235	0.929	ng	94
44) tert-Amyl Methyl Ether	15.85	73	88	N.D.		
45) 1,2-Dichloropropane	15.92	63	195	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.53	88	508	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	83150	1.318	ng	87
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	16.88	71	29562	2.056	ng	99
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.77	58	8679	0.674	ng	95
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	952326	19.120	ng	99
59) 2-Hexanone	19.36	43	45578	1.376	ng	97
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	78929	2.022	ng	94
63) n-Octane	20.28	57	13763	1.143	ng	96
64) Tetrachloroethene	20.47	166	608	0.053	ng	93
65) Chlorobenzene	21.34	112	561	N.D.		
66) Ethylbenzene	21.82	91	195937	3.441	ng	99
67) m- & p-Xylenes	22.04	91	564186	12.249	ng	98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.51	104	95876	2.880	ng	99
70) o-Xylene	22.65	91	206517	4.472	ng	97
71) n-Nonane	22.91	43	20879	0.680	ng	99
72) 1,1,2,2-Tetrachloroethane	22.65	83	1016	N.D.		
74) Cumene	23.41	105	9903	0.170	ng	97
75) alpha-Pinene	23.91	93	4731975	158.253	ng <i>See Art'p</i>	94
76) n-Propylbenzene	24.05	91	37664	0.514	ng #	75
77) 3-Ethyltoluene	24.17	105	88829	1.593	ng	98
78) 4-Ethyltoluene	24.22	105	48421	0.896	ng	95
79) 1,3,5-Trimethylbenzene	24.31	105	33530	0.736	ng	99

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 8:12 pm  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 10:08:50 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

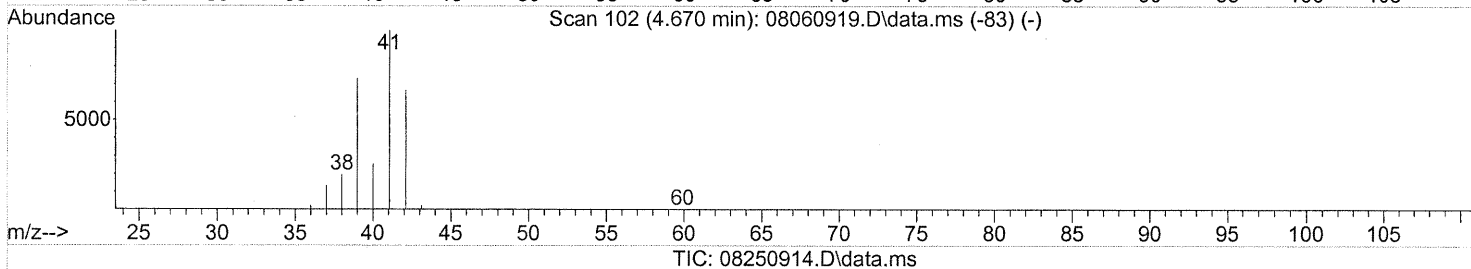
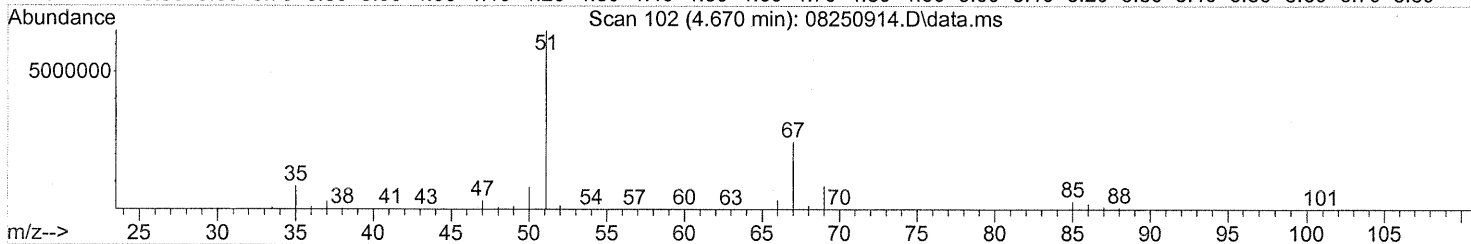
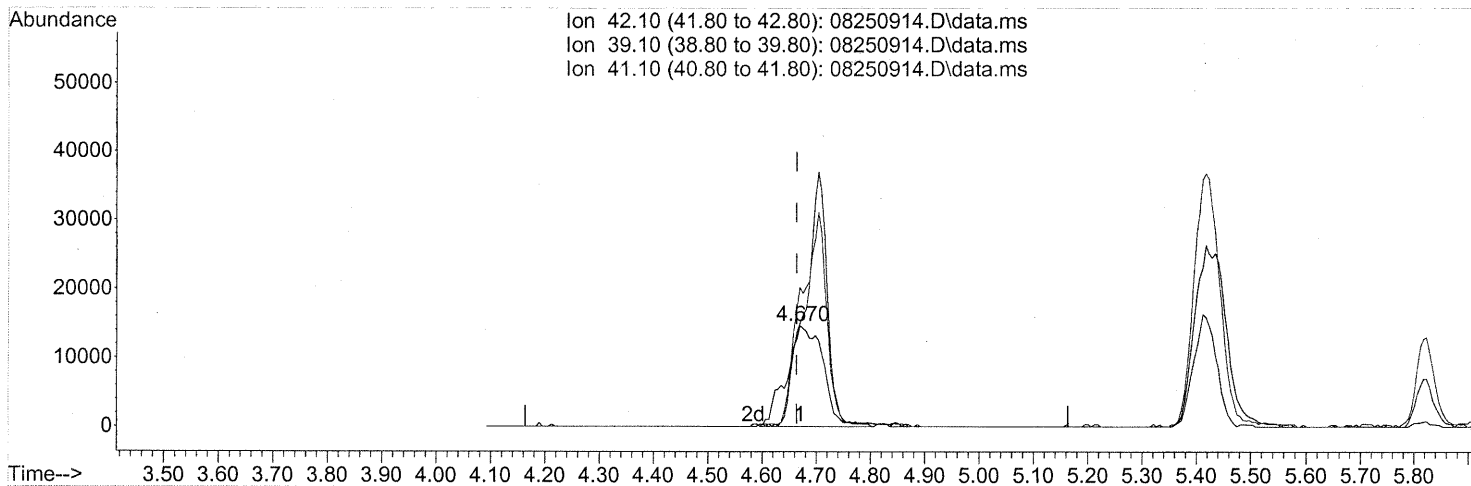
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	2265	0.093	ng	# 1
81) 2-Ethyltoluene	24.56	105	30834	0.548	ng	78
82) 1,2,4-Trimethylbenzene	24.83	105	116208	2.501	ng	89
83) n-Decane	24.93	57	50755	1.680	ng	92
84) Benzyl Chloride	24.99	91	3015	0.069	ng	64
85) 1,3-Dichlorobenzene	25.11	146	1063	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	1063	N.D.		
87) sec-Butylbenzene	25.17	105	3833	0.061	ng	# 67
88) 4-Isopropyltoluene (p-...	25.35	119	217127	3.880	ng	# 93
89) 1,2,3-Trimethylbenzene	25.35	105	38038	0.804	ng	# 42
90) 1,2-Dichlorobenzene	25.11	146	1063	N.D.		
91) d-Limonene	25.53	68	546070	27.639	ng	# 68
92) 1,2-Dibromo-3-Chloropr...	26.46	157	183	N.D.		
93) n-Undecane	26.46	57	59508	1.852	ng	76
94) 1,2,4-Trichlorobenzene	27.59	180	94	N.D.		
95) Naphthalene	27.73	128	37993	0.602	ng	98
96) n-Dodecane	27.69	57	43142	1.156	ng	96
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	102832	4.983	ng	96
99) tert-Butylbenzene	24.83	119	15053	0.335	ng	# 57
100) n-Butylbenzene	25.86	91	14966	0.289	ng	# 63

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(2) Propene (T)  
 4.670min (+0.006) 4.11ng  
 response 68160

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

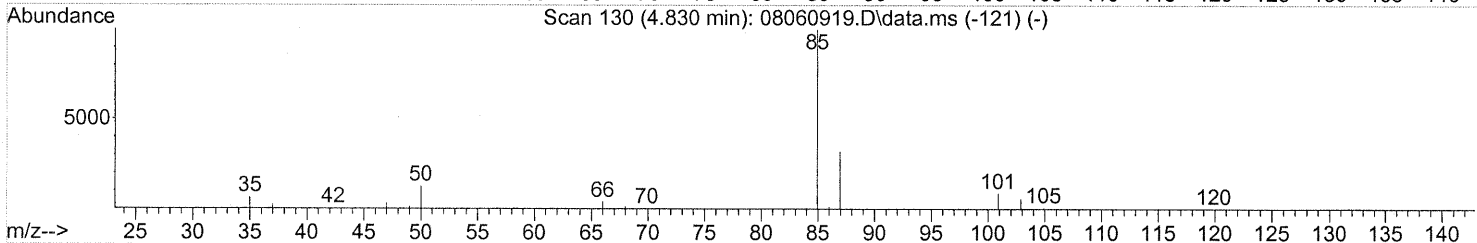
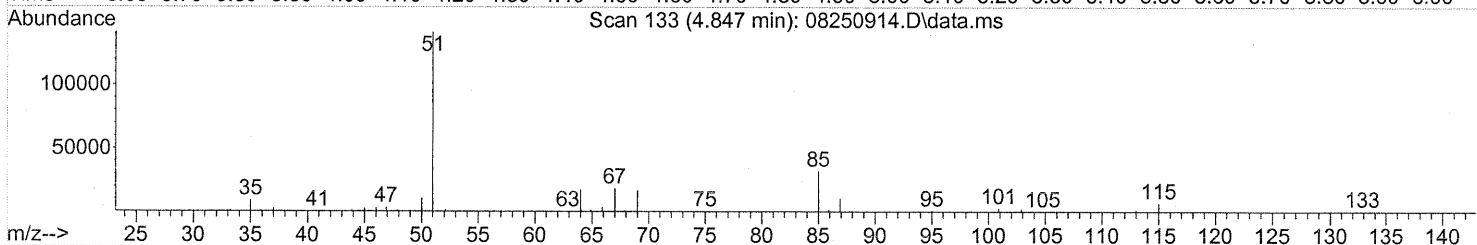
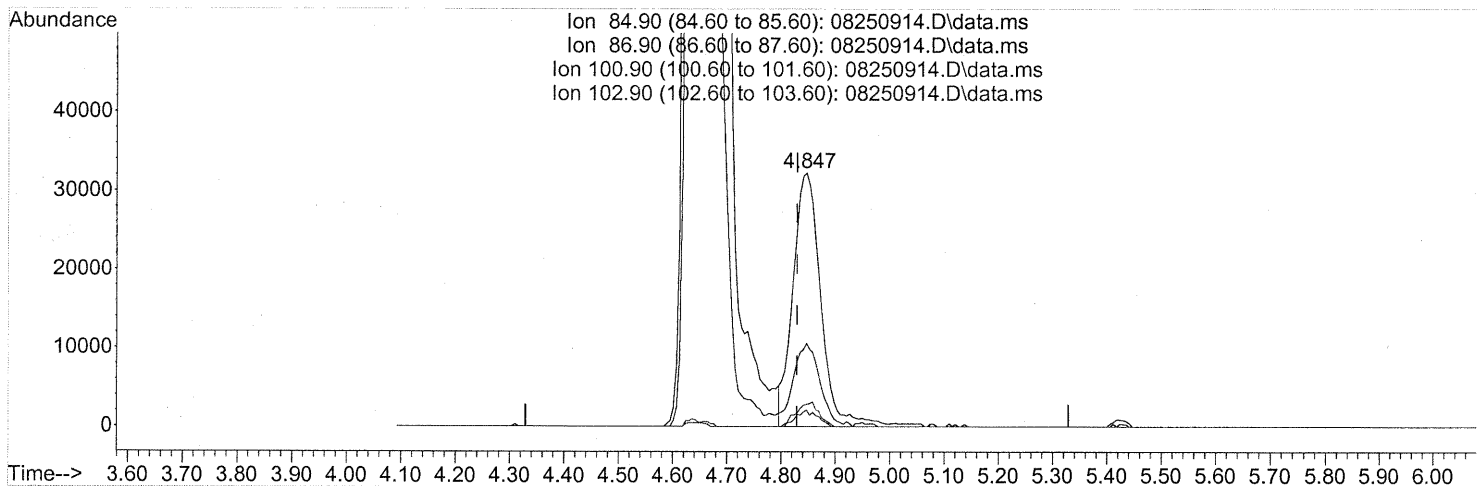
FD  
 11/9/09

11/9/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
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 Acq On : 25 Aug 2009 20:12  
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 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.847min (+0.017) 4.28ng

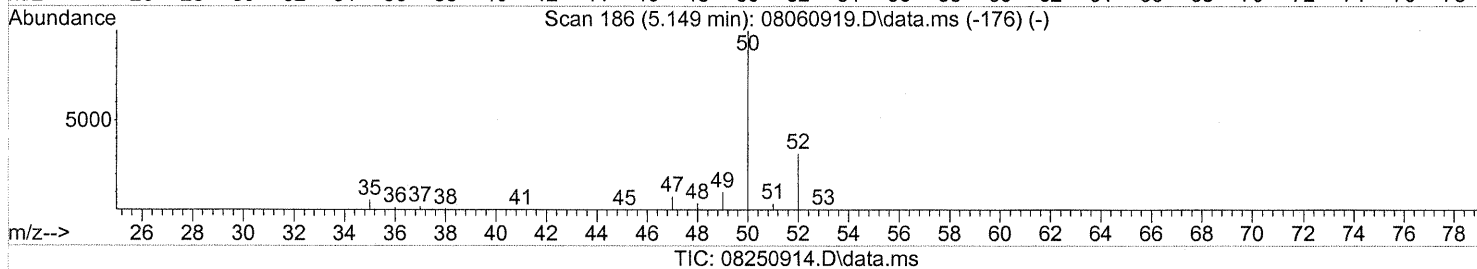
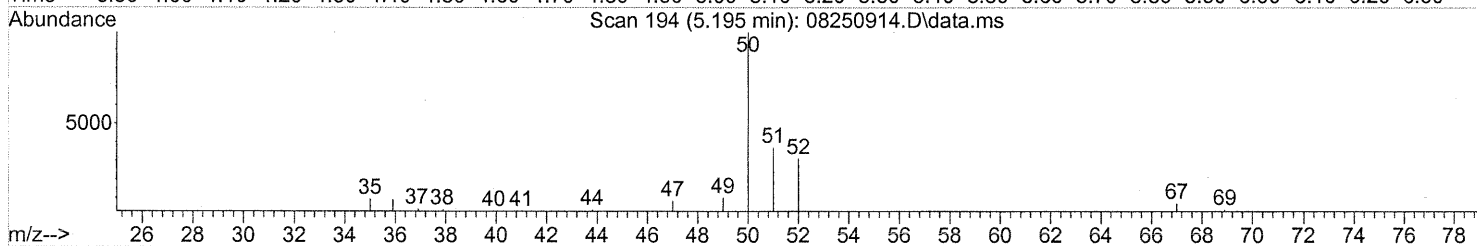
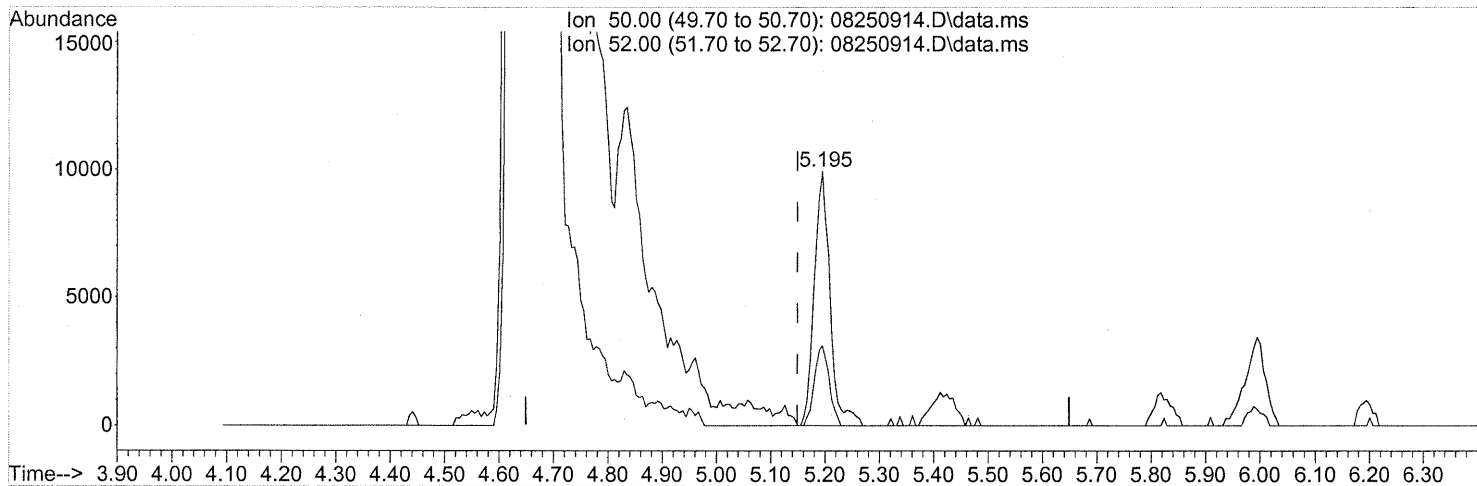
response 116227

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	31.11
100.90	8.80	7.59
102.90	5.20	4.83

Quantitation Report (Qedit)

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 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(4) Chloromethane (T)

5.195min (+0.046) 1.11ng

response 20178

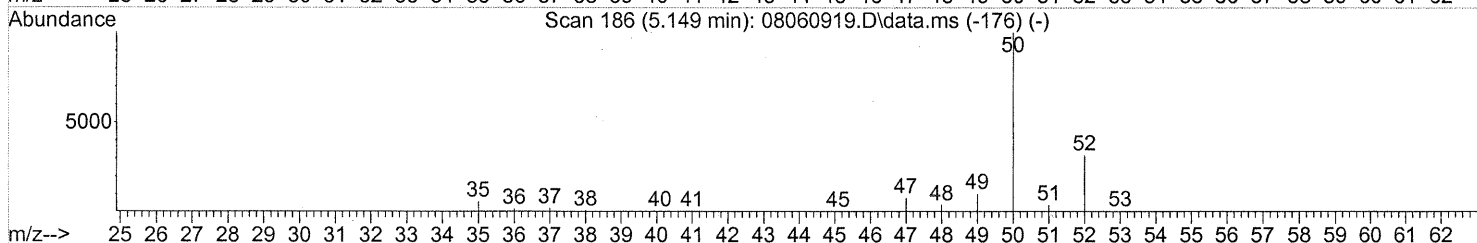
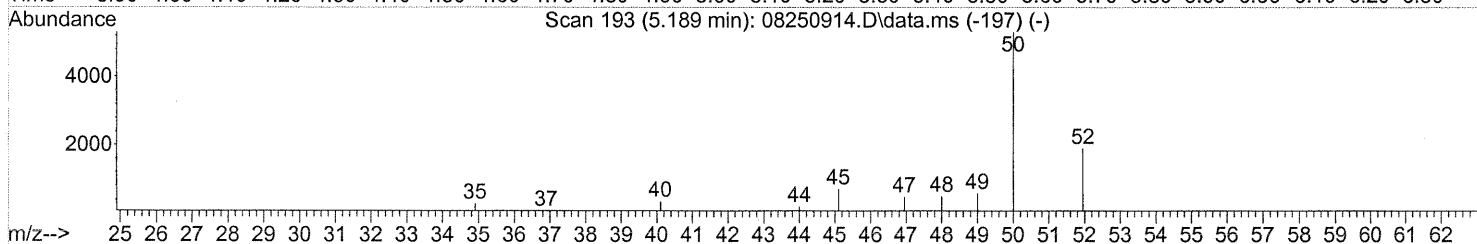
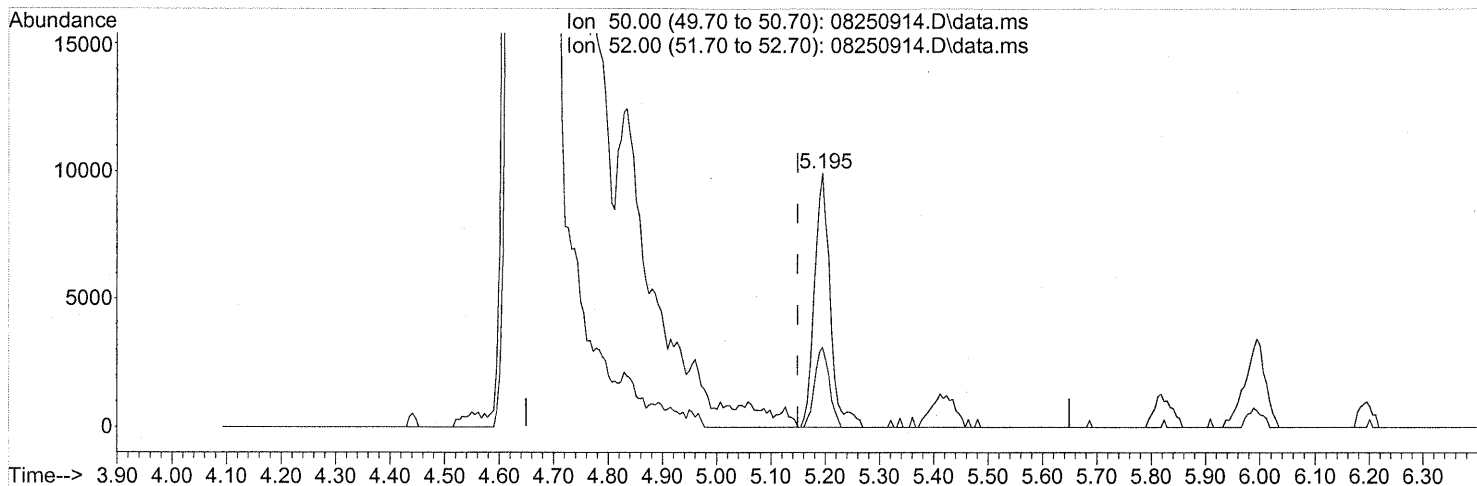
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.27
0.00	0.00	0.00
0.00	0.00	0.00

*Before subtraction.*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(4) Chloromethane (T)

5.195min (+0.046) 1.11ng

response 20178

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.27
0.00	0.00	0.00
0.00	0.00	0.00

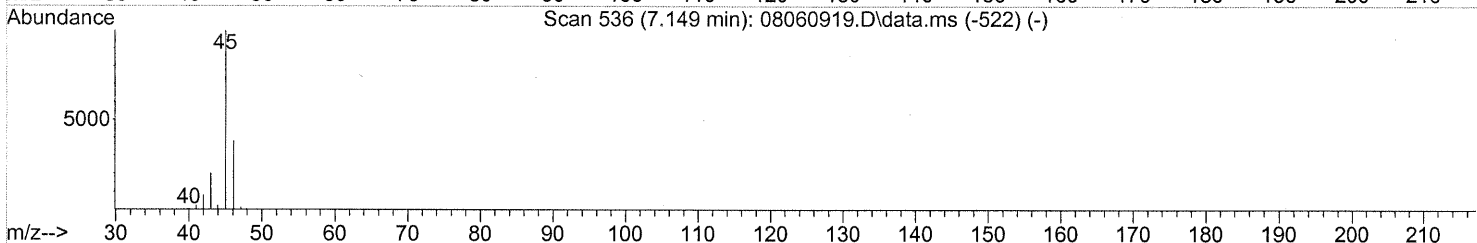
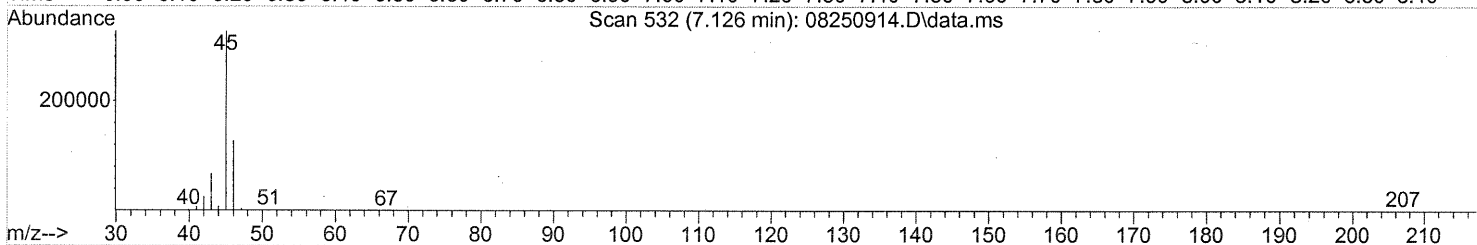
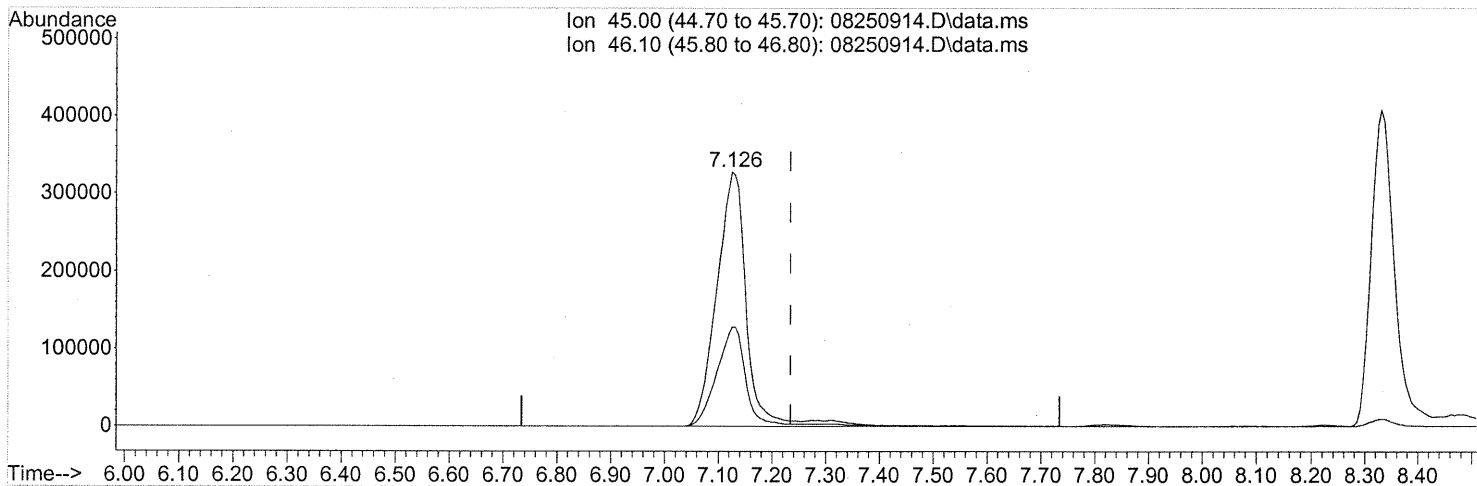
*After subdn.*



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

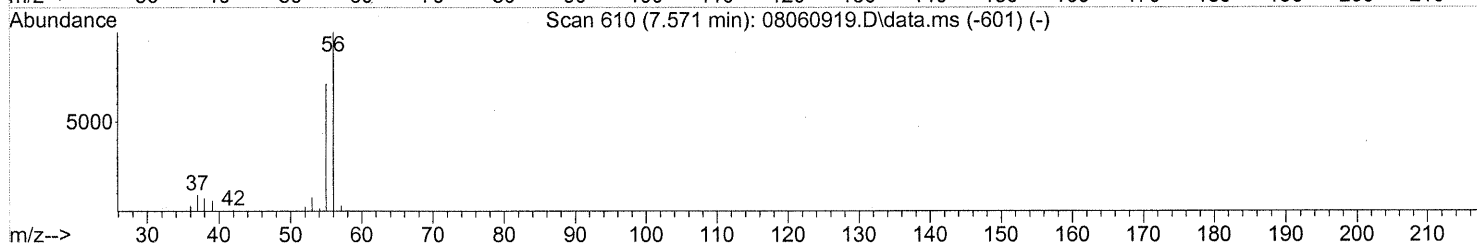
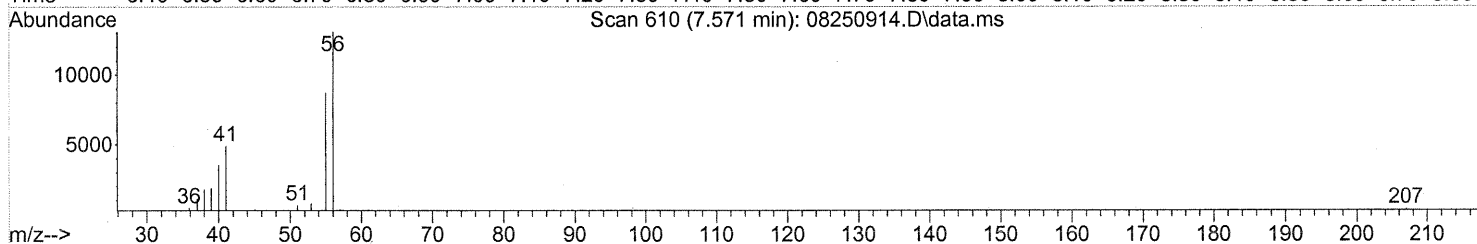
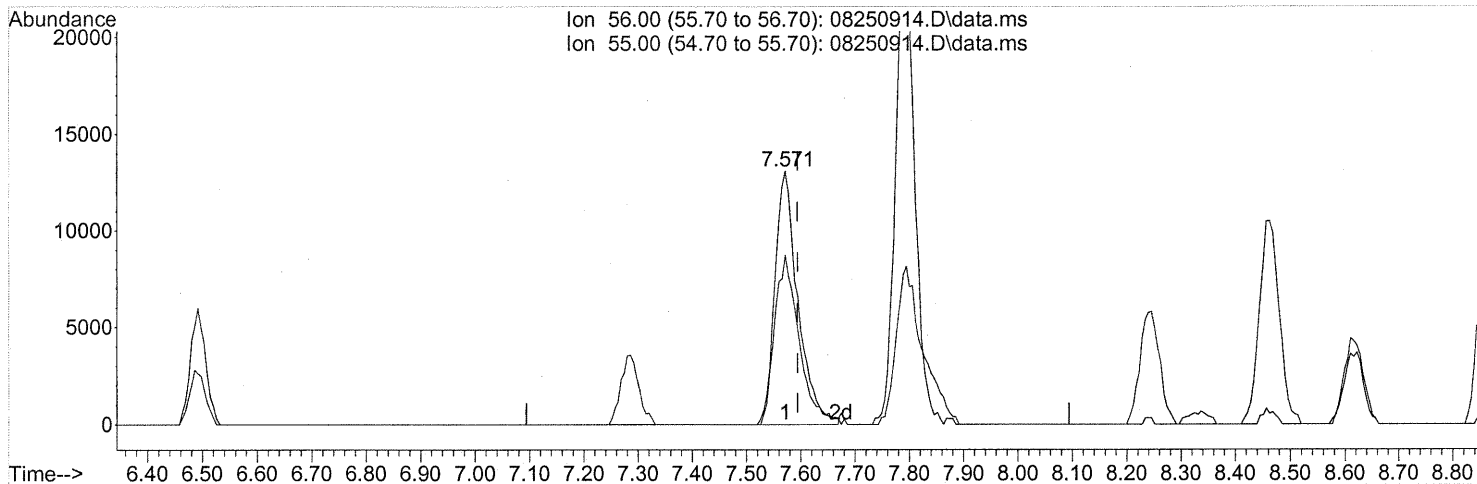
(10) Ethanol (T)  
 7.126min (-0.108) 121.10ng  
 response 1274207

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.67
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

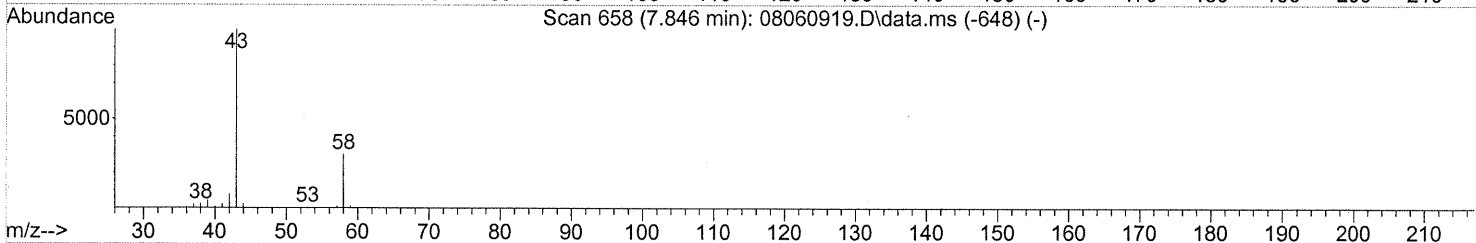
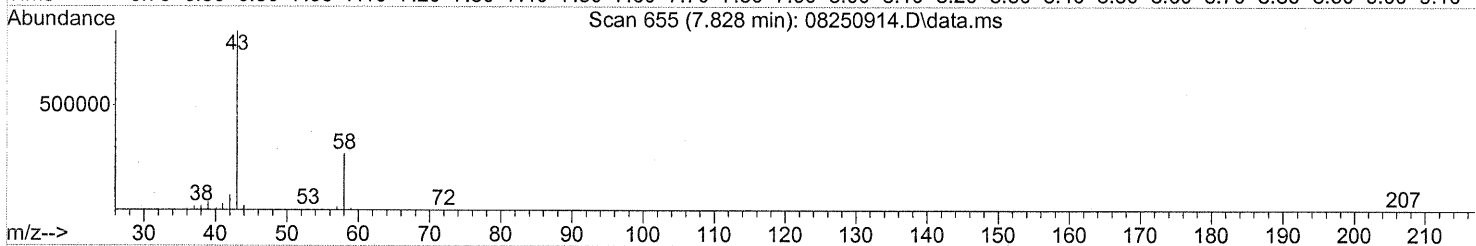
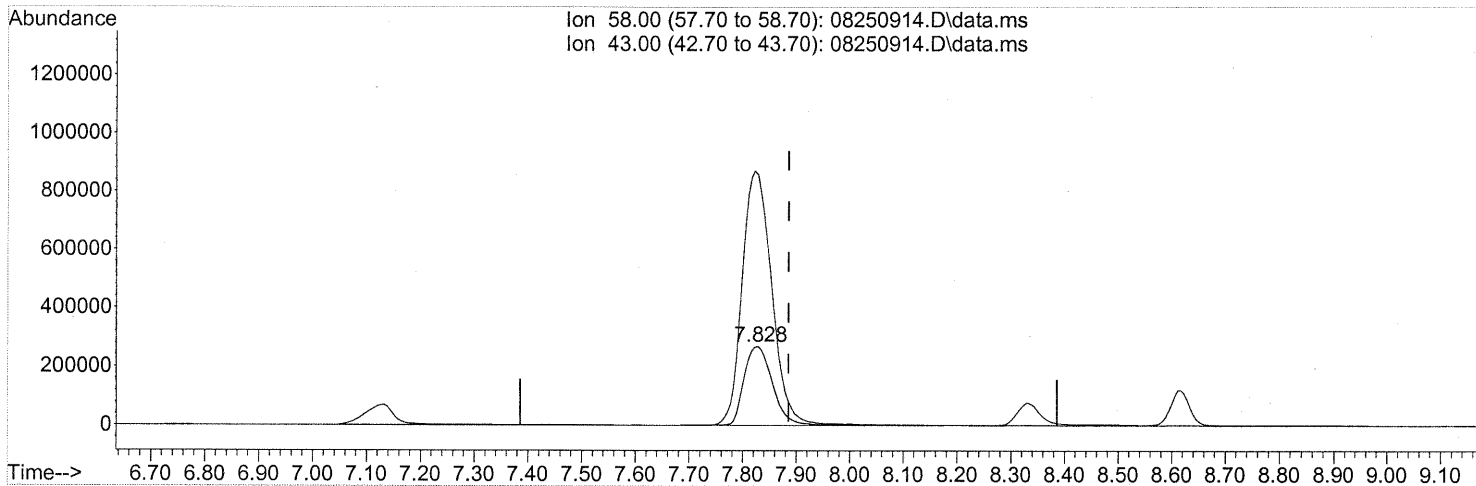
(12) Acrolein (T)  
 7.571min (-0.023) 4.80ng  
 response 38408

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	71.13
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

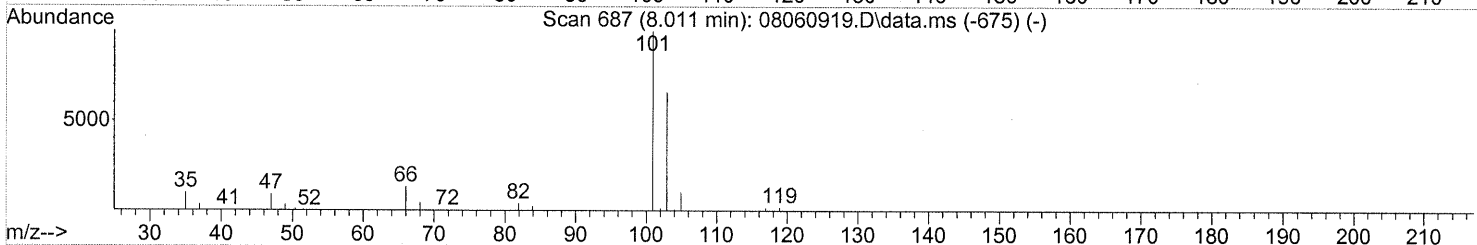
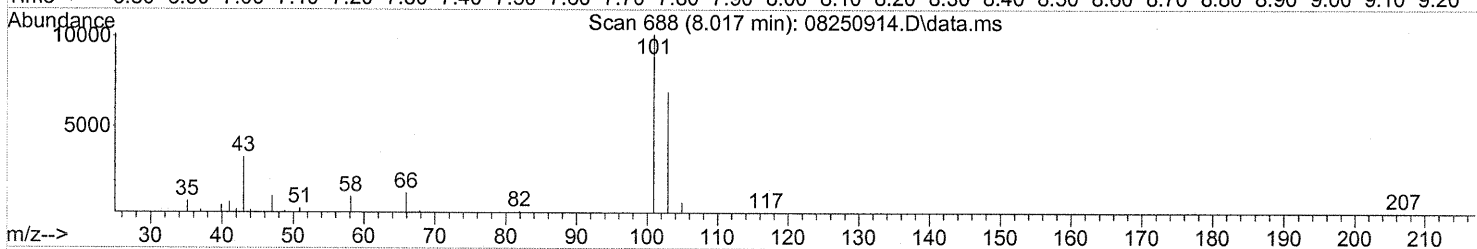
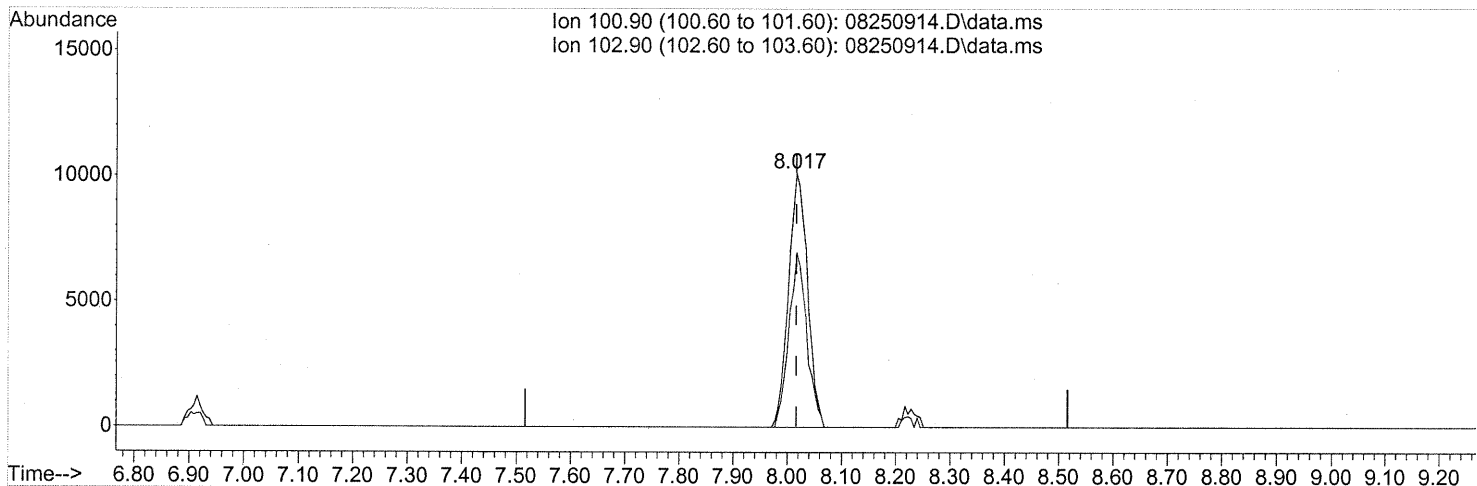
(13) Acetone (T)  
 7.828min (-0.058) 99.36ng  
 response 986401

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	339.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(14) Trichlorofluoromethane (T)

8.017min (+0.000) 1.01ng

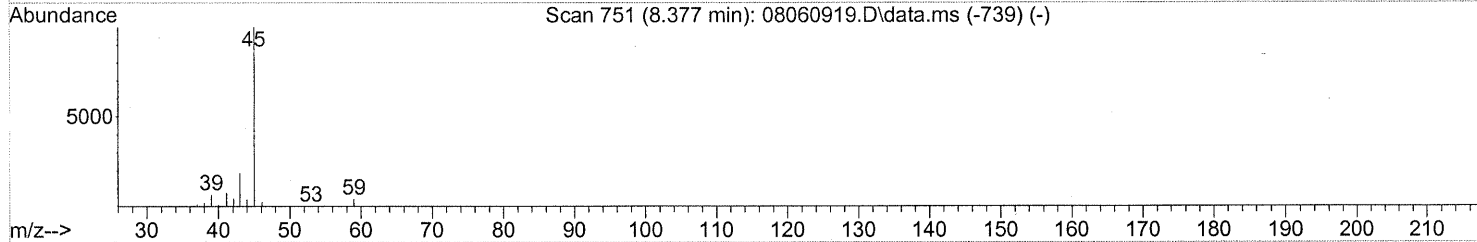
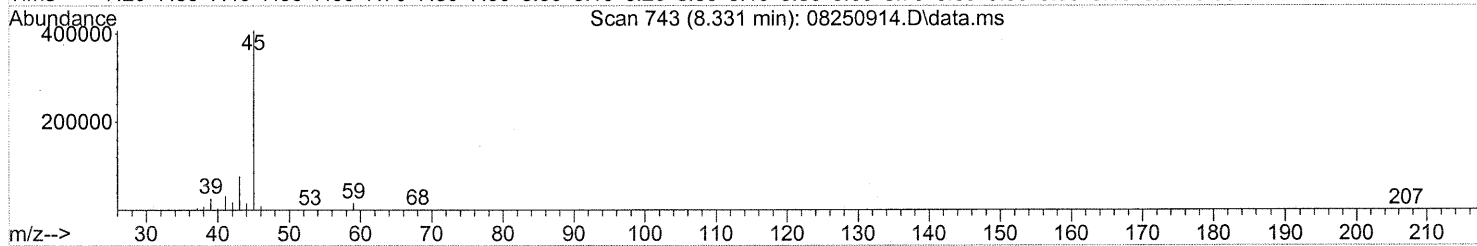
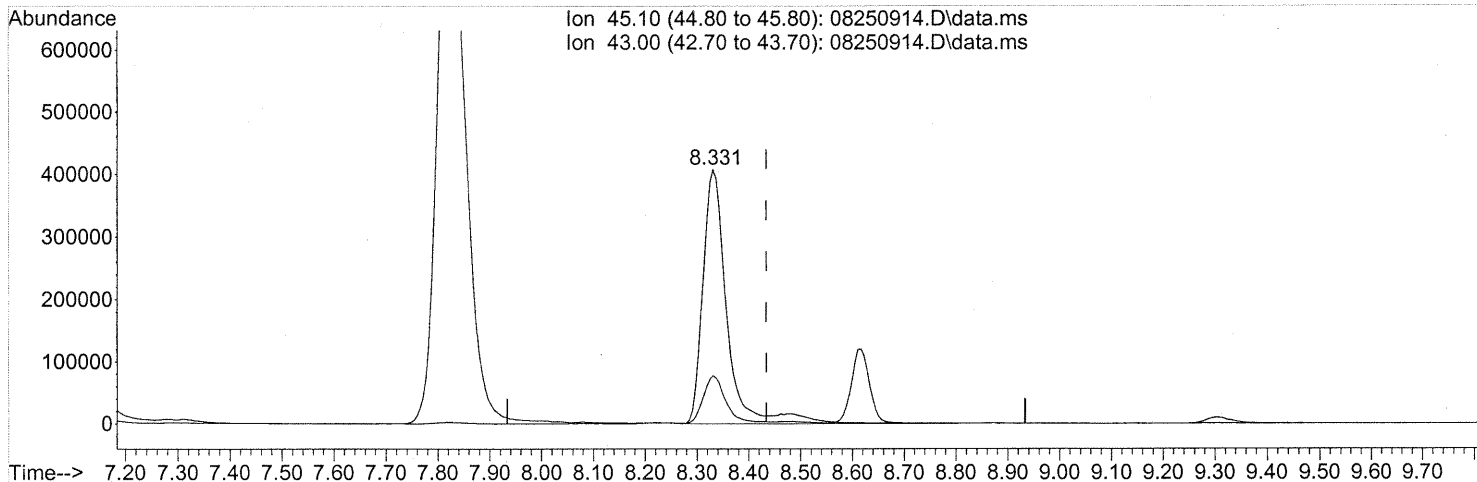
response 24707

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.13
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(15) 2-Propanol (Isopropanol) (T)

8.331min (-0.103) 34.09ng

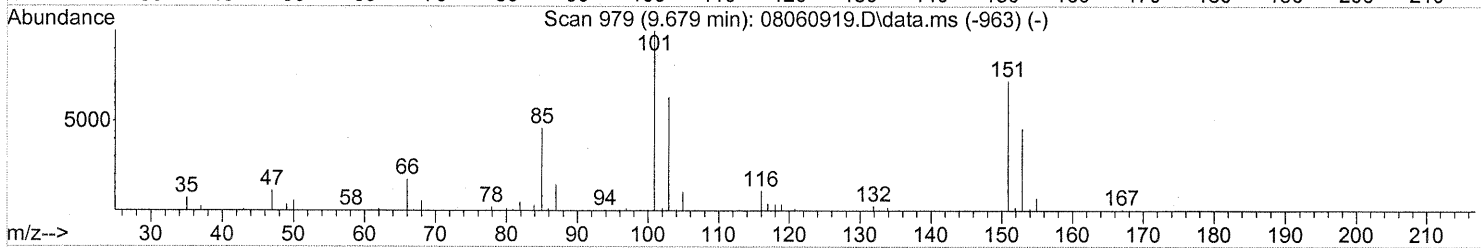
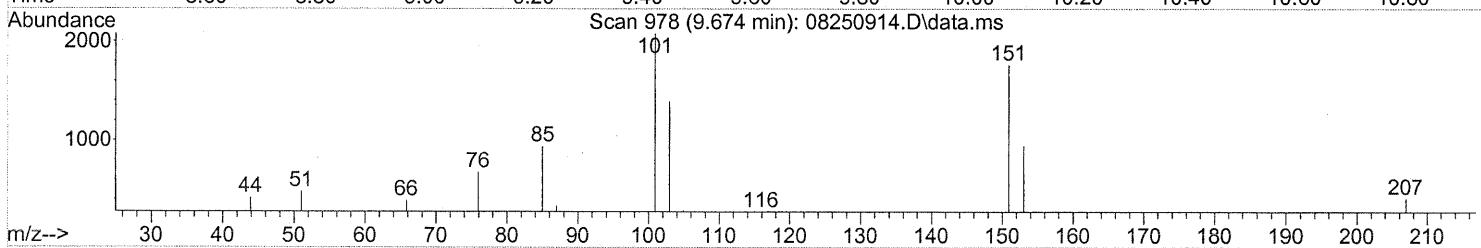
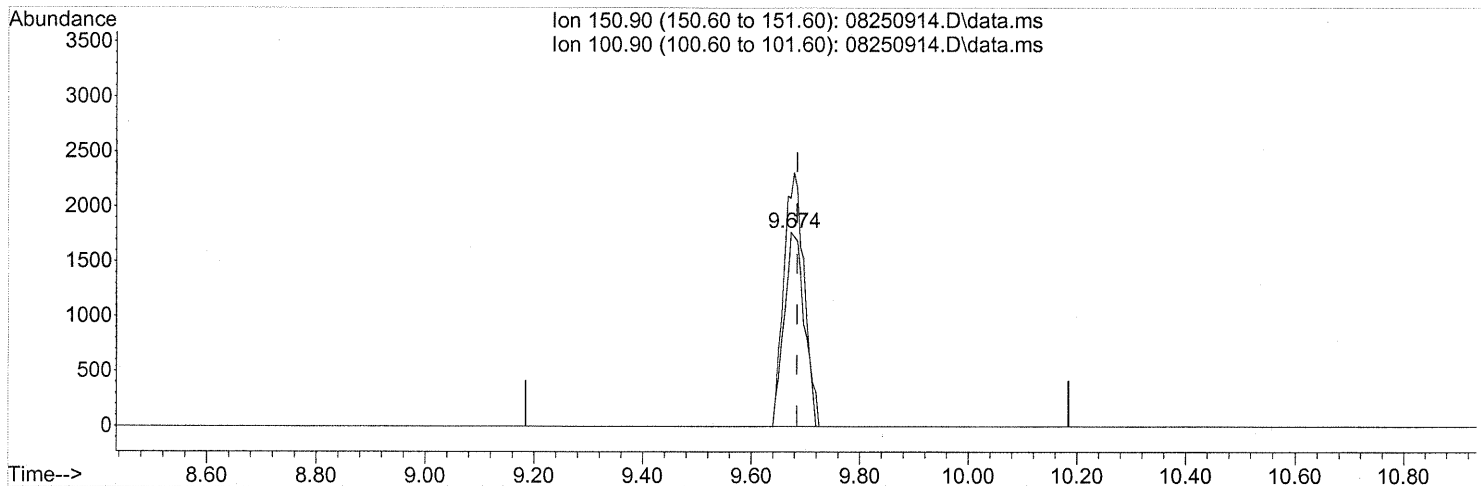
response 1329861

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.674min (-0.011) 0.51ng

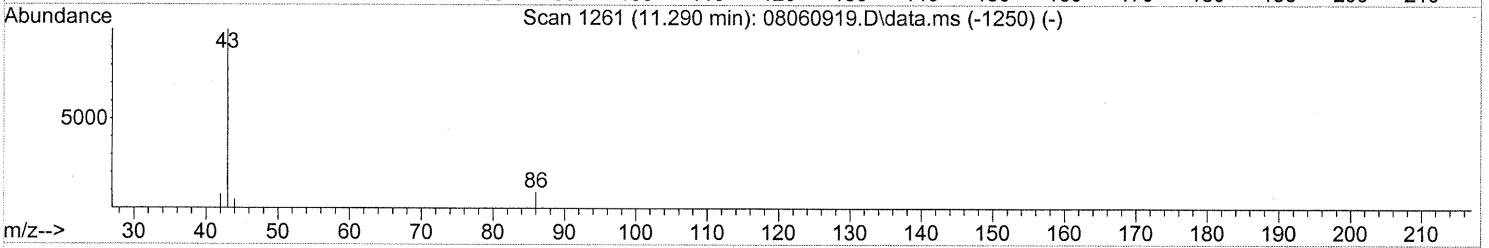
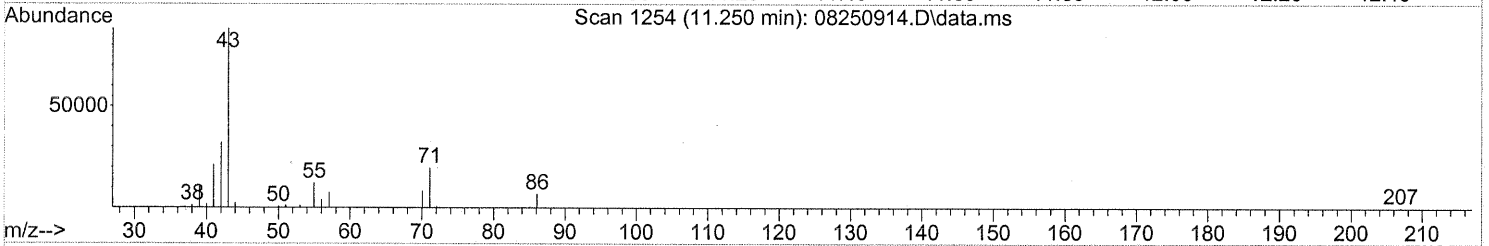
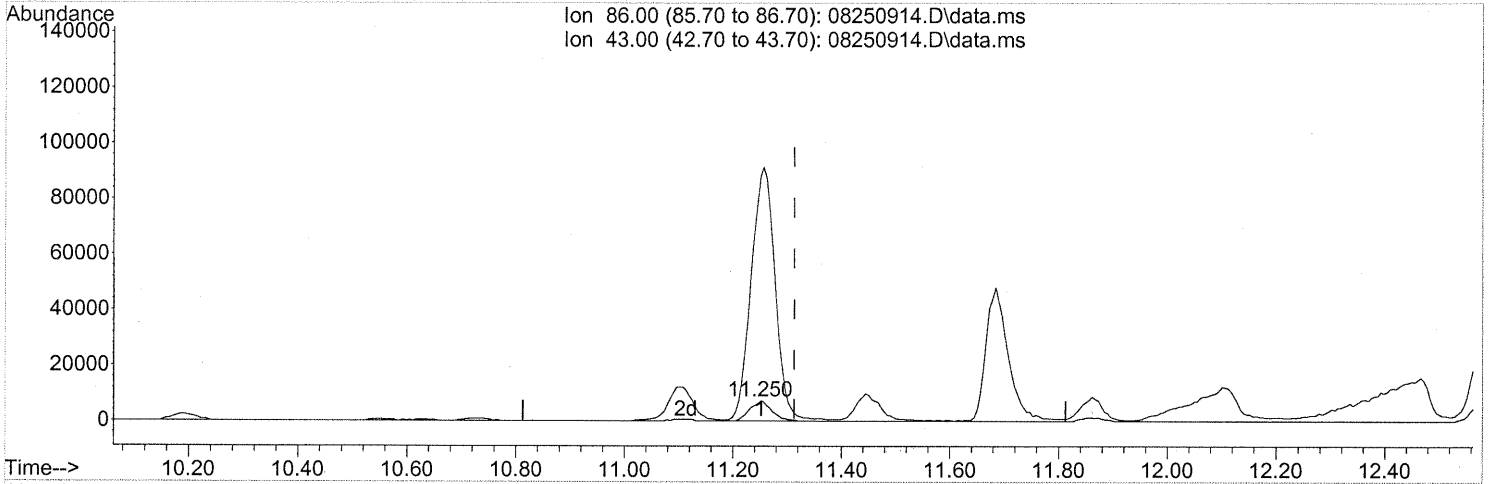
response 4525

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	134.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)

11.250min (-0.063) 9.73ng

response 19651

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1411.83#
0.00	0.00	0.00
0.00	0.00	0.00

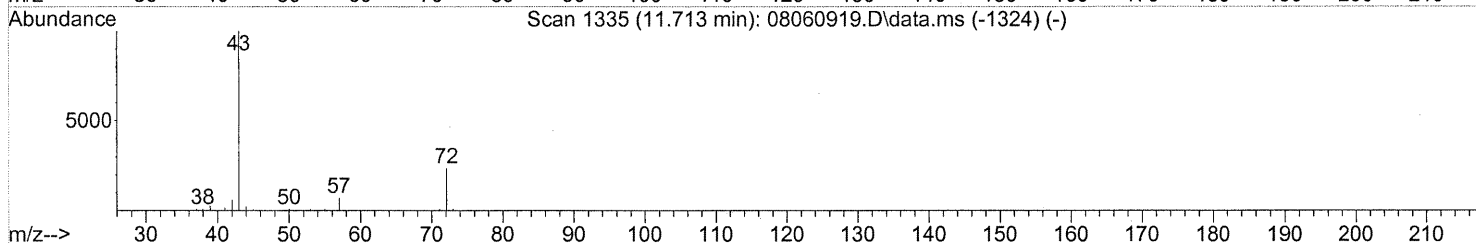
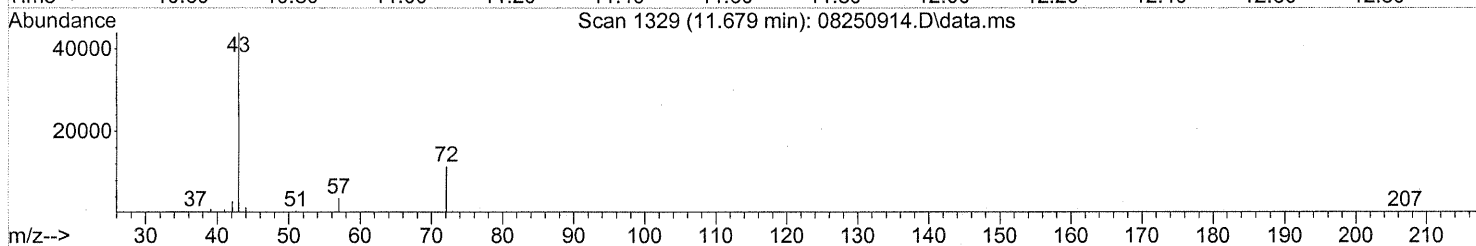
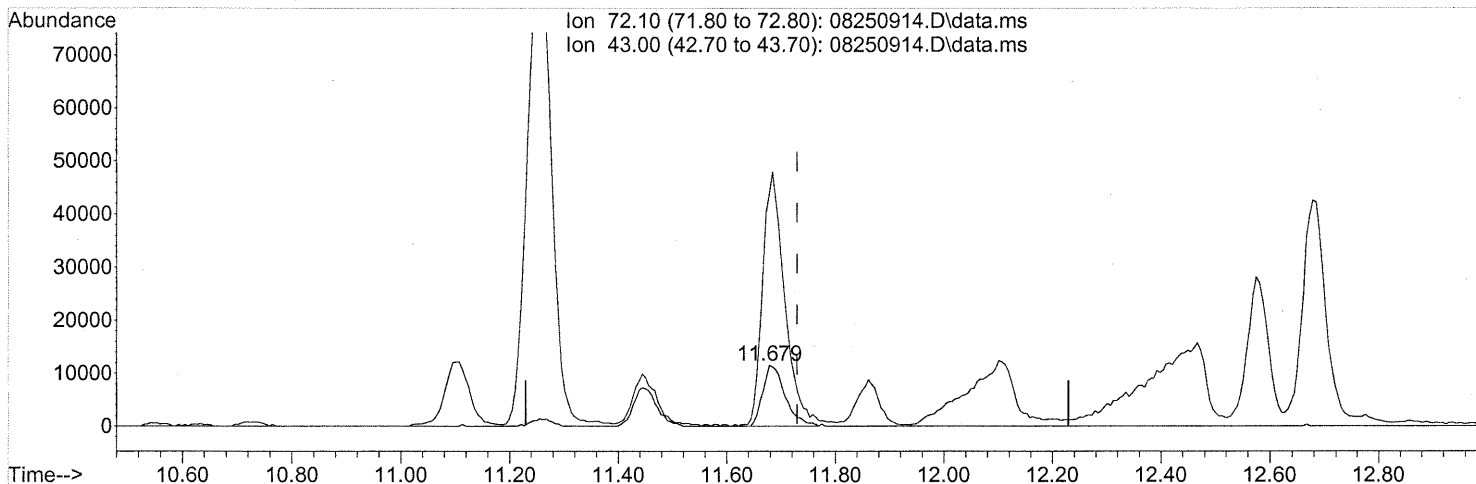
FP  
 11/9/09

KR 9/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(27) 2-Butanone (MEK) (T)

11.679min (-0.051) 3.63ng

response 32515

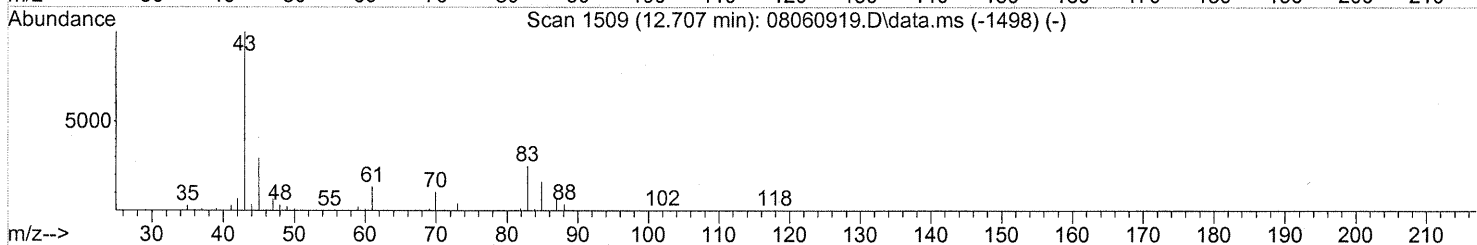
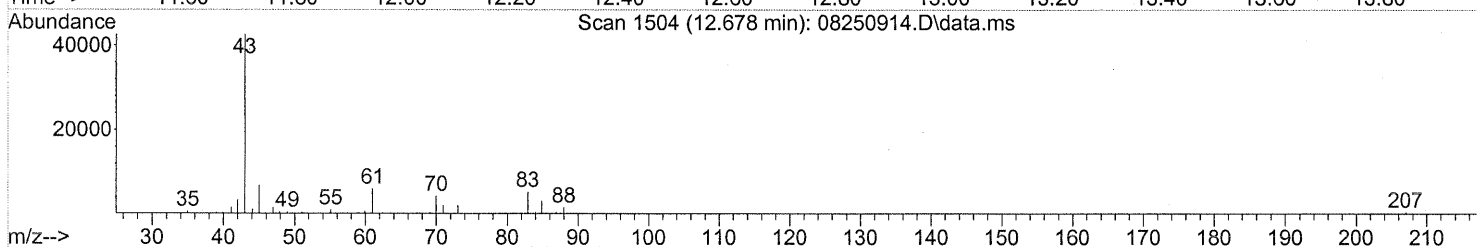
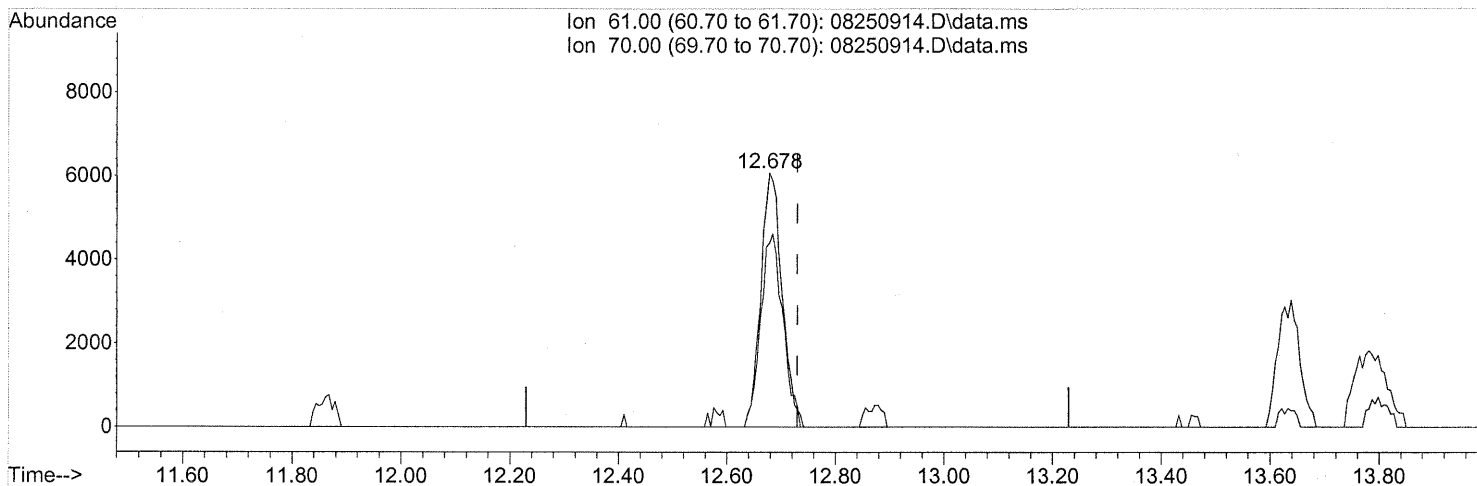
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	421.09
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(30) Ethyl Acetate (T)

12.678min (-0.051) 3.54ng

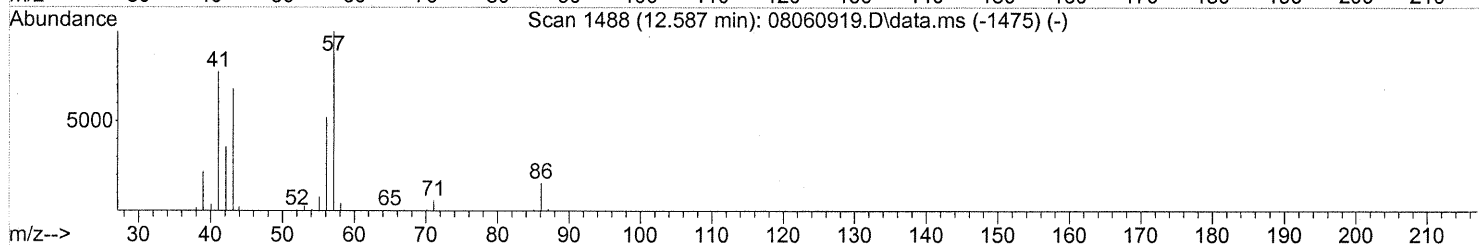
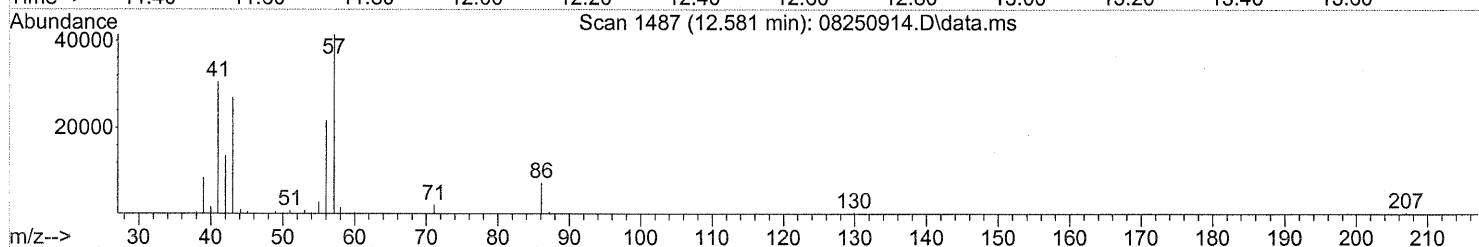
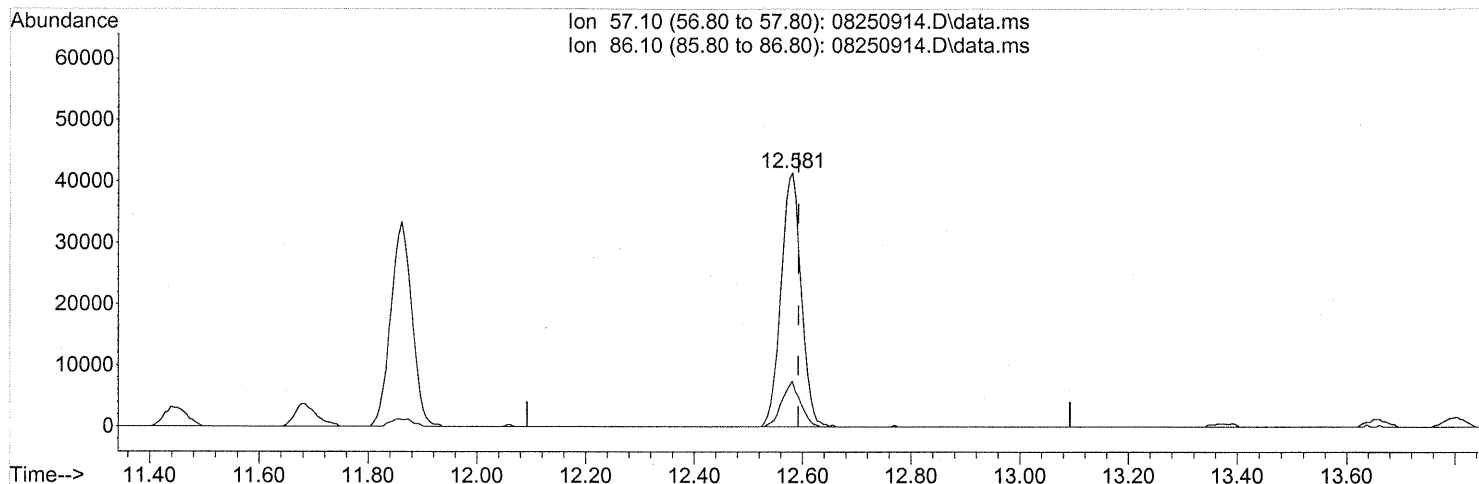
response 16510

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	79.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

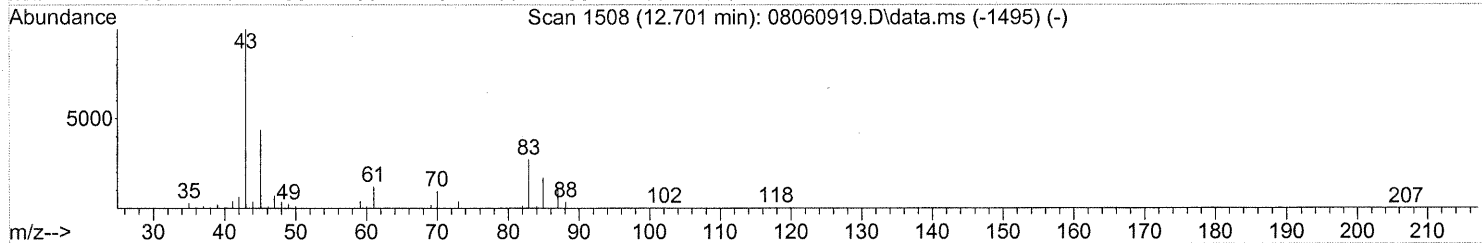
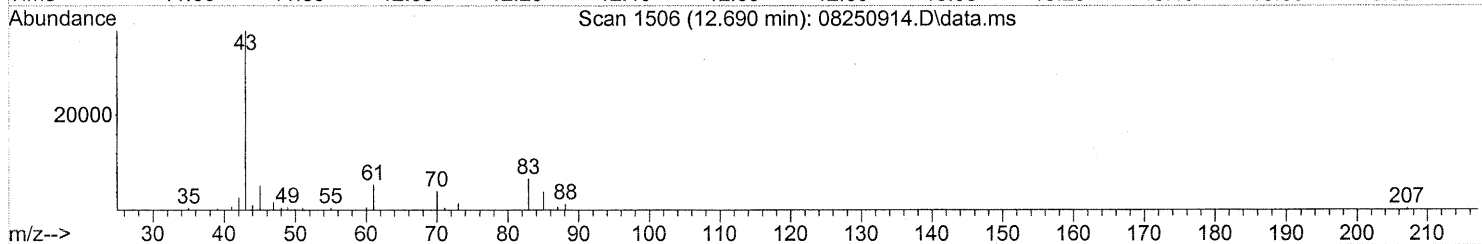
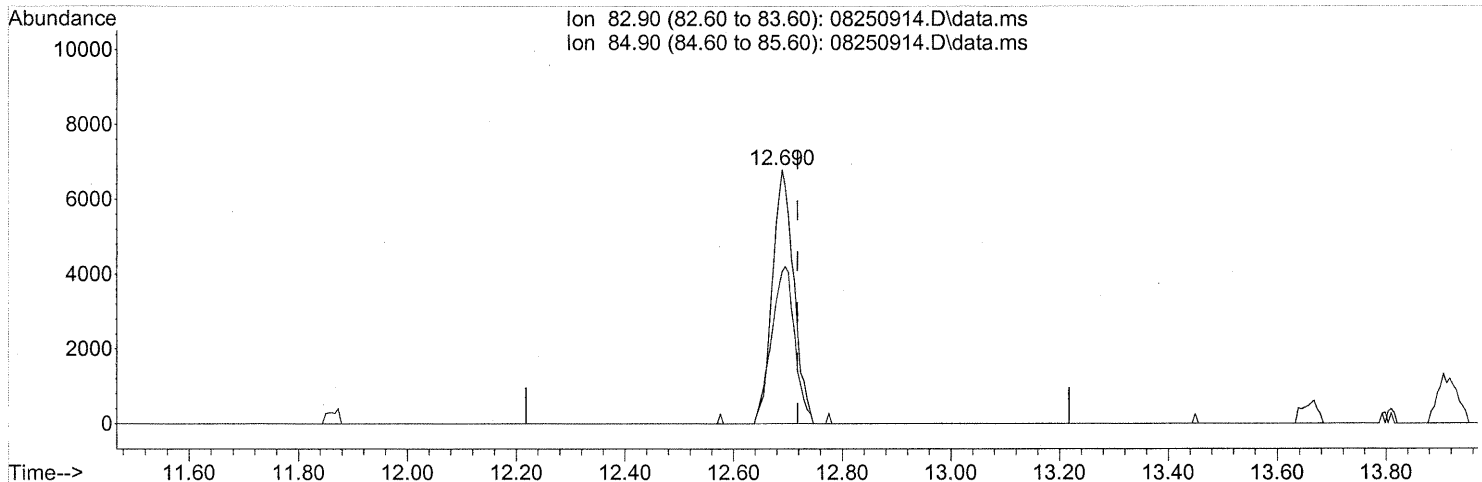
(31) n-Hexane (T)  
 12.581min (-0.011) 4.50ng  
 response 107403

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	16.27
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(32) Chloroform (T)

12.690min (-0.028) 0.88ng

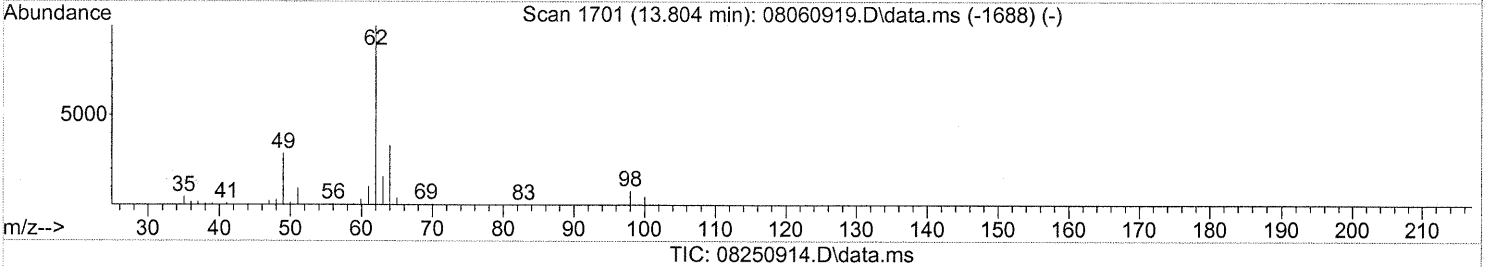
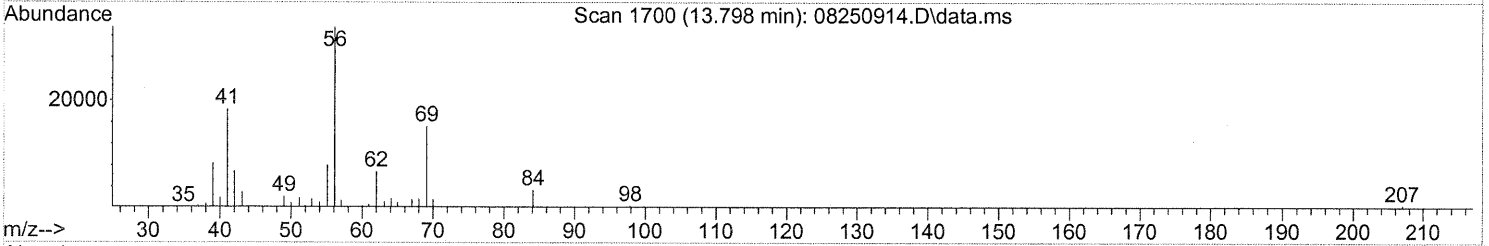
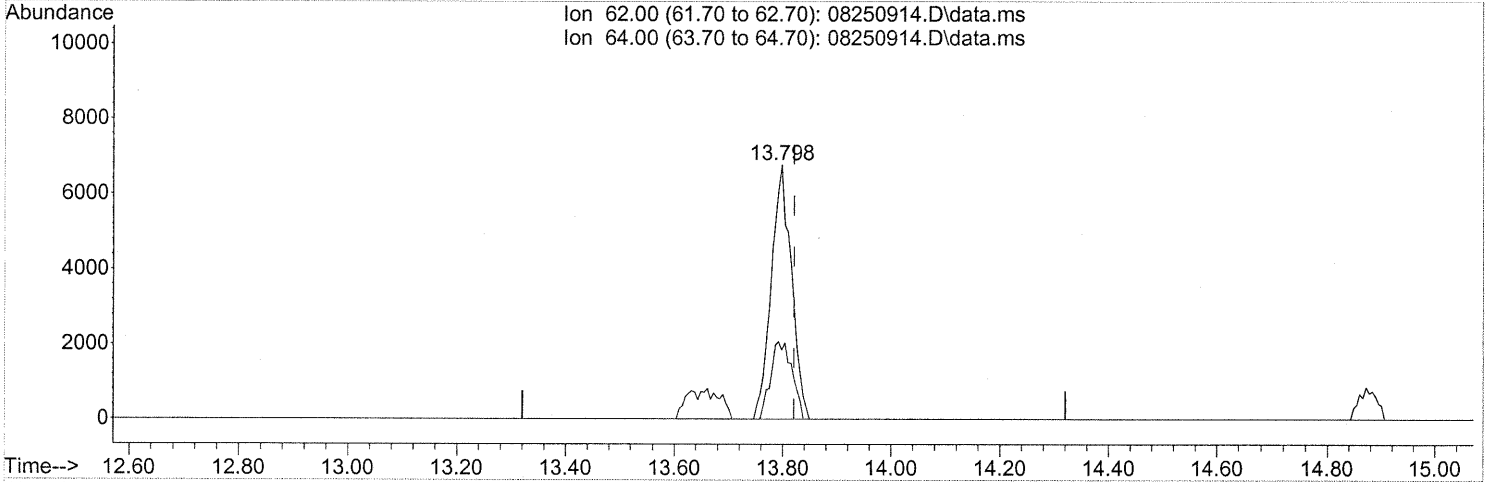
response 18588

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	66.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(36) 1,2-Dichloroethane (T)

13.798min (-0.023) 0.91ng

response 17463

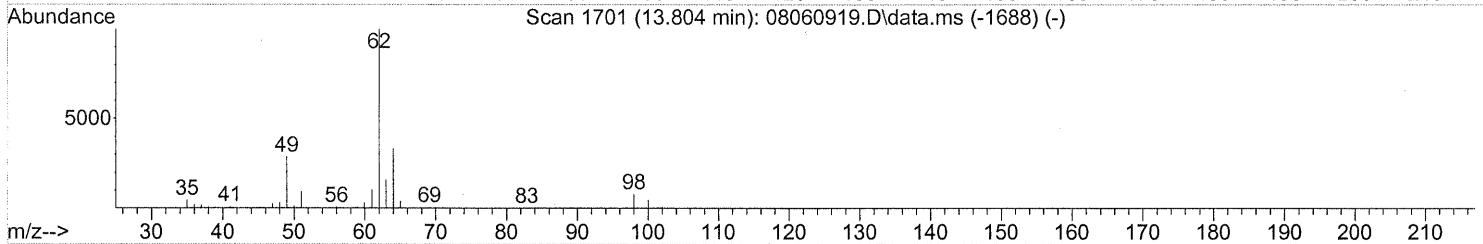
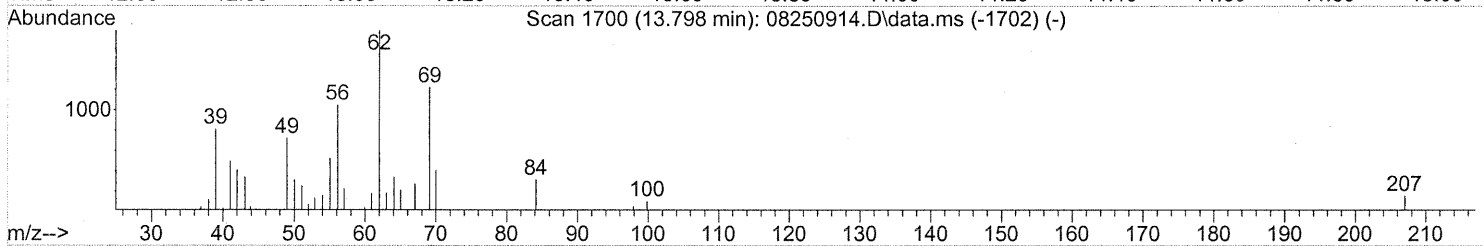
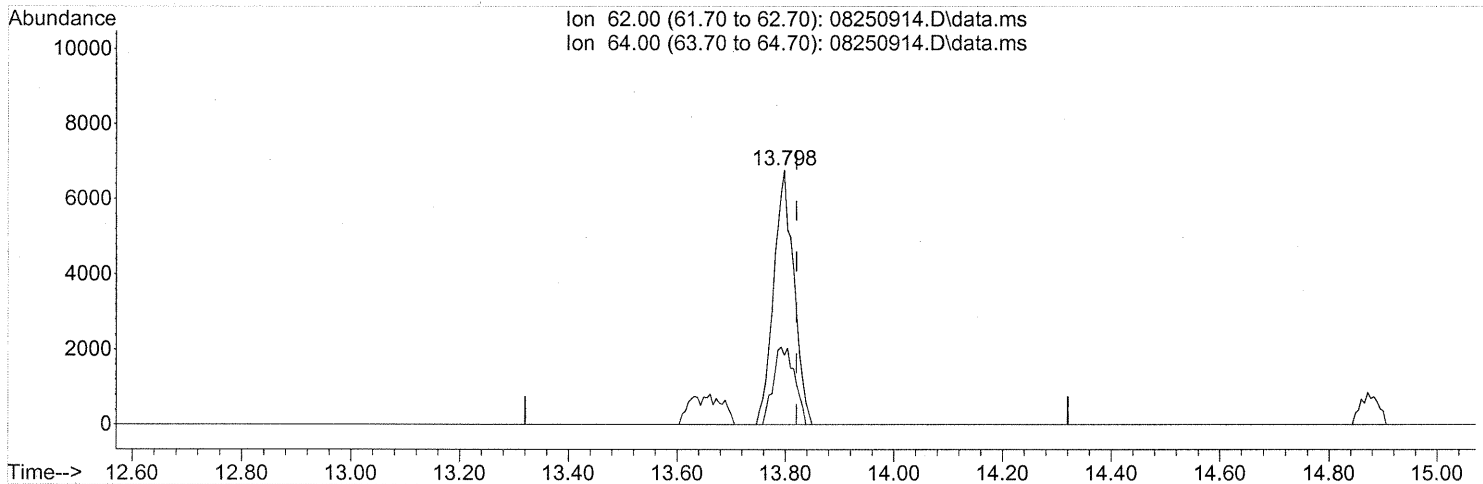
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.29
0.00	0.00	0.00
0.00	0.00	0.00

*Before subtr.*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(36) 1,2-Dichloroethane (T)

13.798min (-0.023) 0.91ng

response 17463

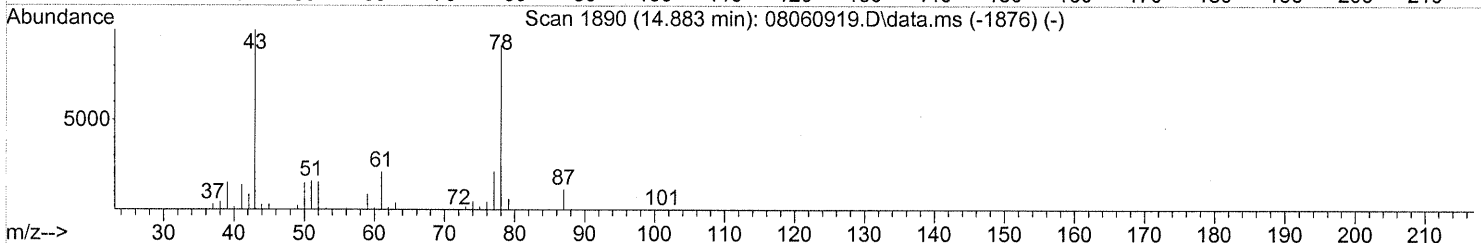
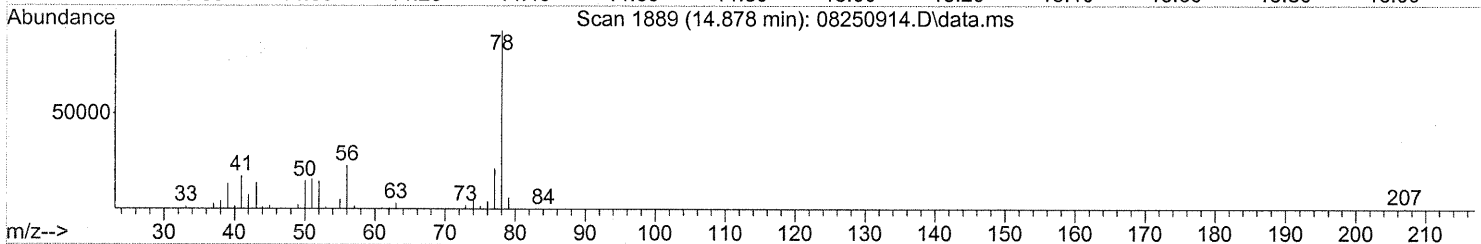
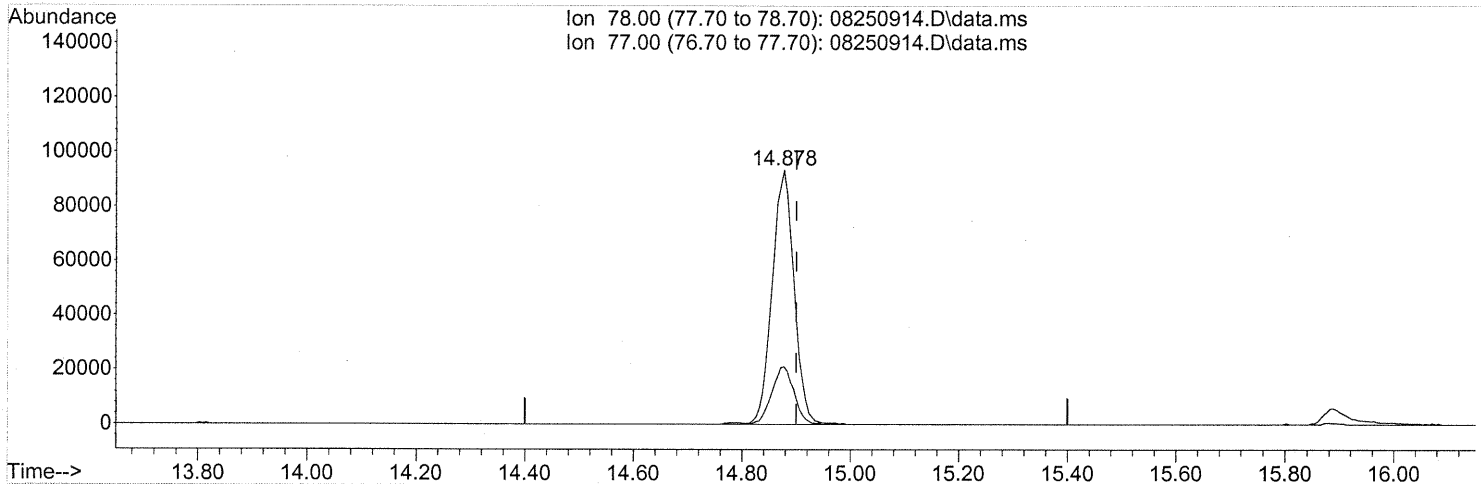
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.29
0.00	0.00	0.00
0.00	0.00	0.00

*After subtraction*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(41) Benzene (T)

14.878min (-0.023) 4.84ng

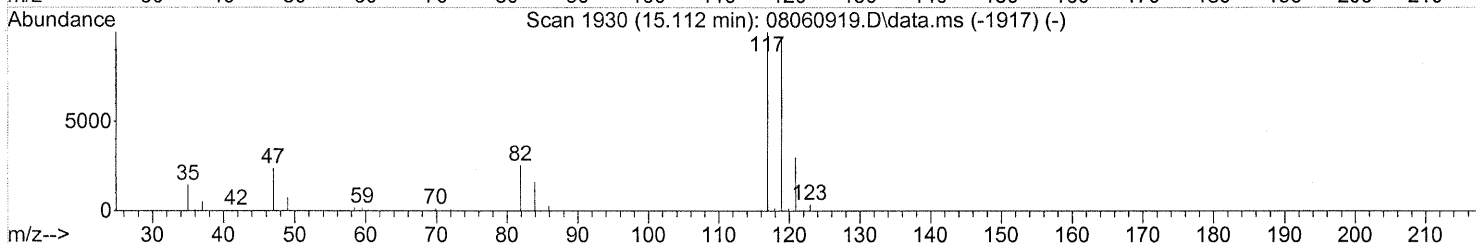
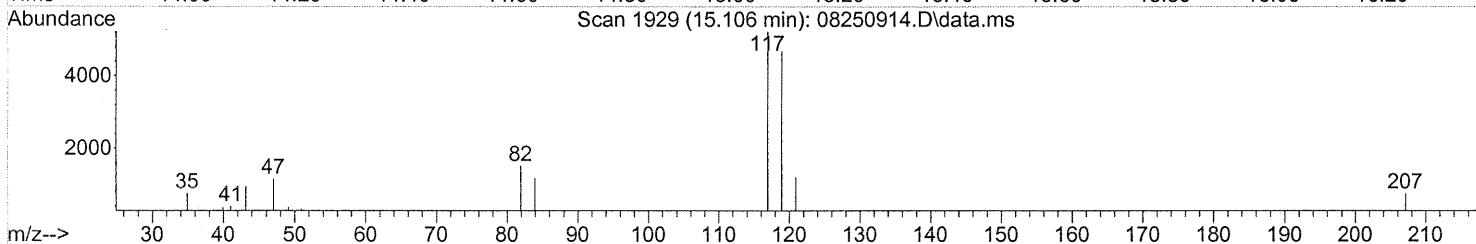
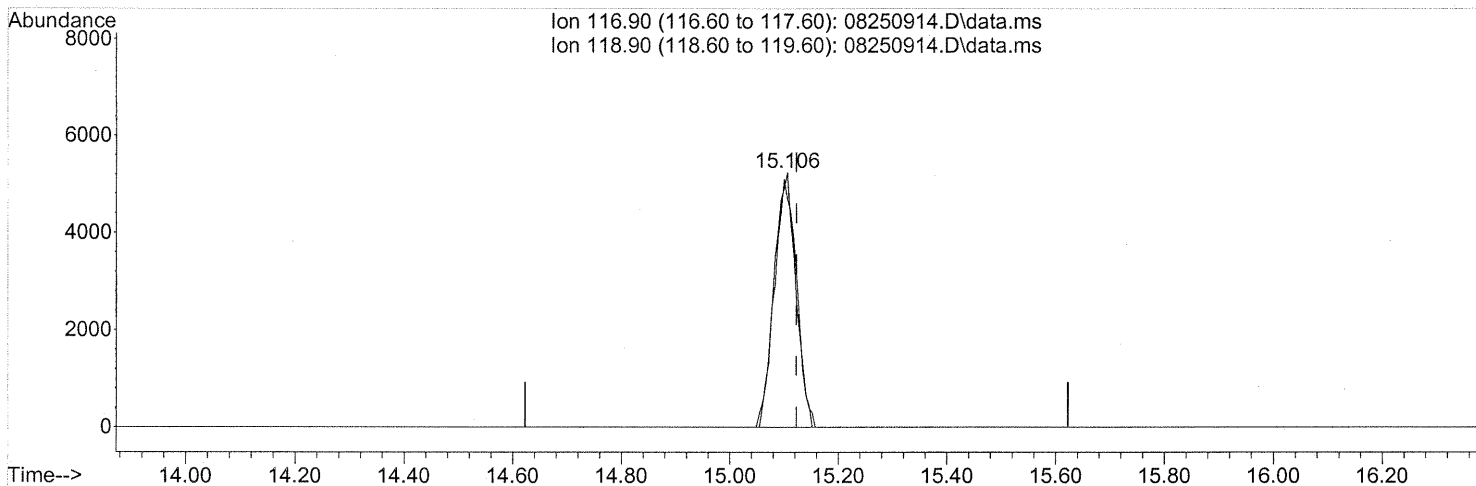
response 259239

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	22.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250914.D  
Acq On : 25 Aug 2009 20:12  
Operator : WA/CC  
Sample : P0902875-005 (1000mL)  
Misc : Environmental Health 102268  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



TIC: 08250914.D\data.ms

(42) Carbon Tetrachloride (T)

15.106min (-0.017) 0.84ng

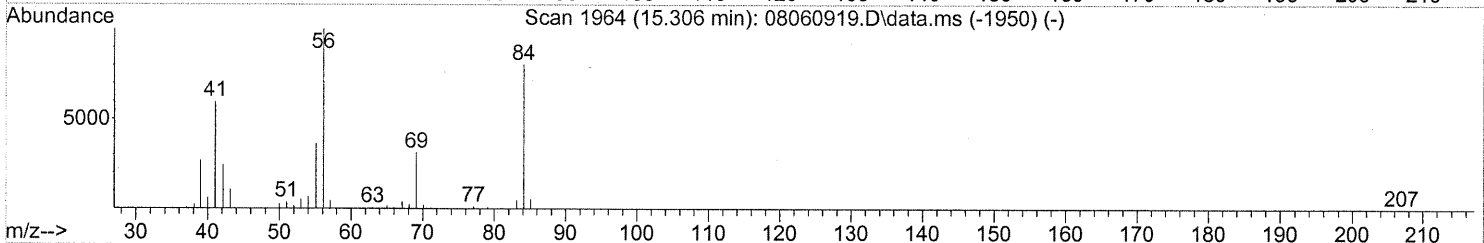
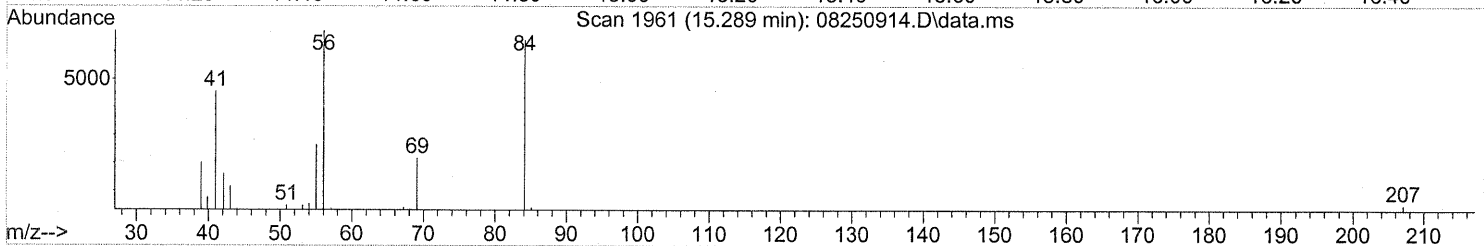
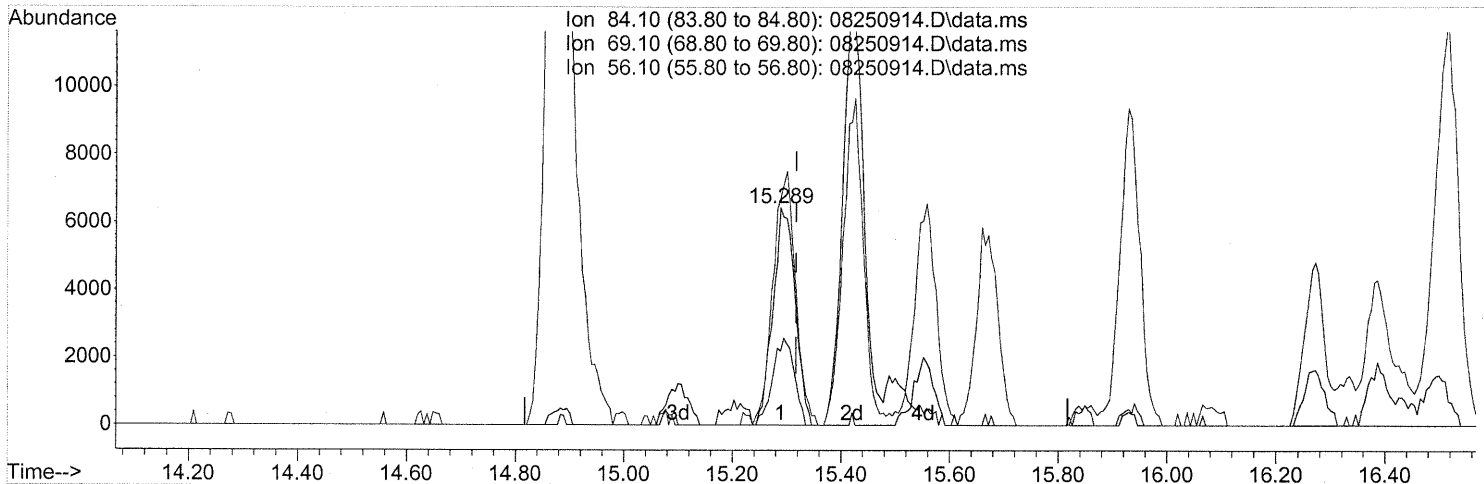
response 14420

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	101.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(43) Cyclohexane (T)  
 15.289min (-0.028) 0.93ng  
 response 18235

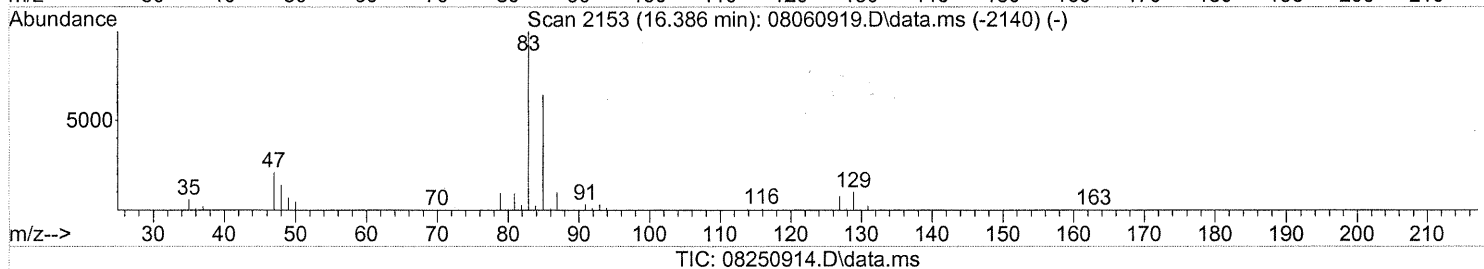
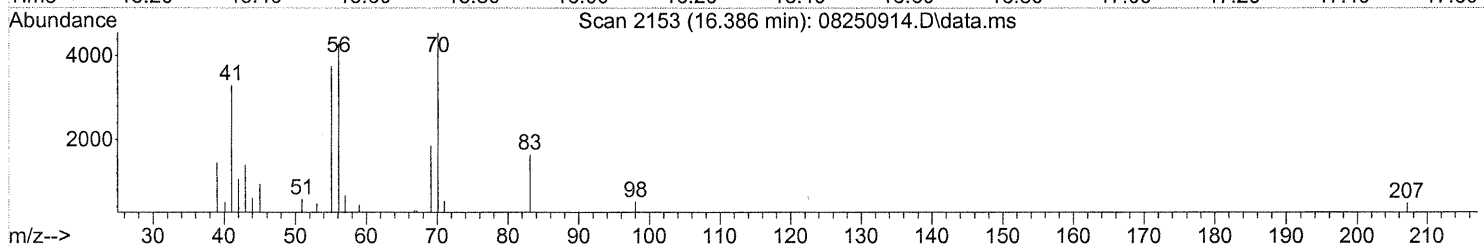
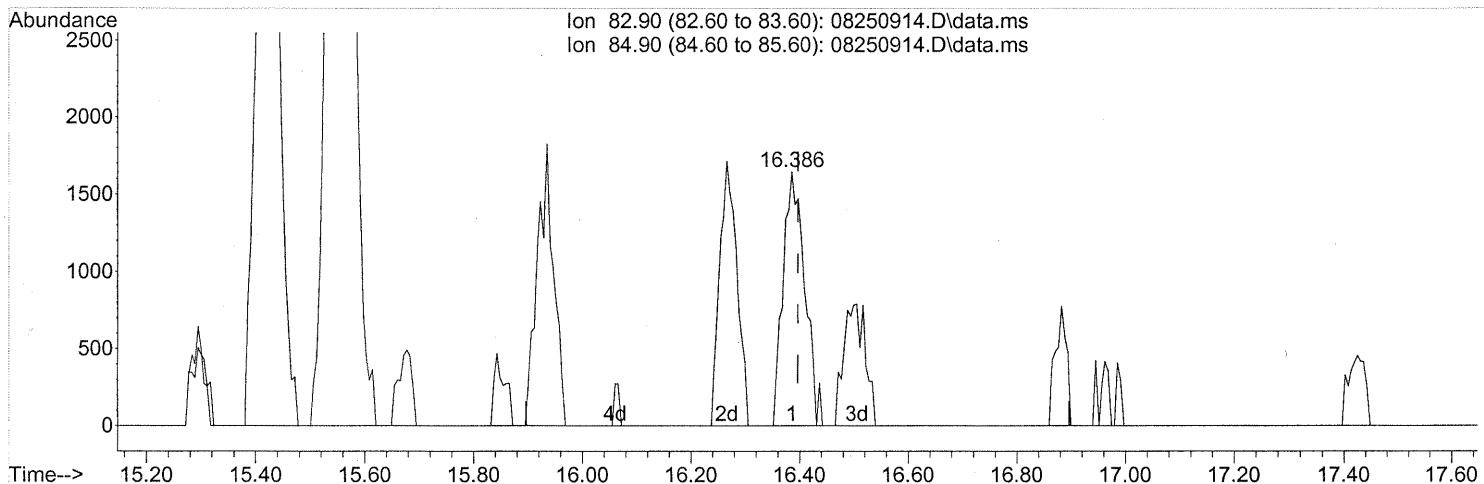
Ion	Exp%	Act%
84.10	100	100
69.10	38.70	38.61
56.10	127.50	118.67
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.386min (-0.011) 0.26ng

response 4552

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

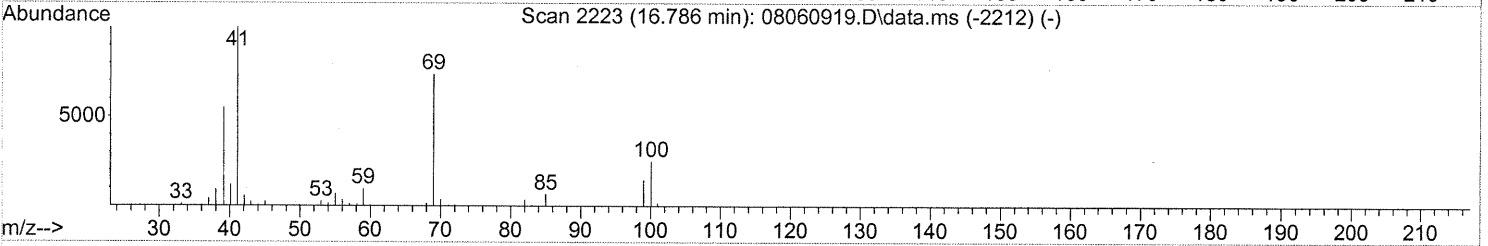
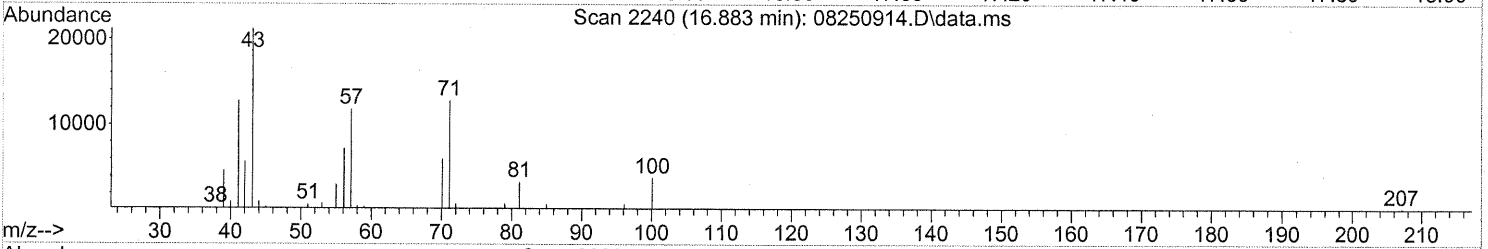
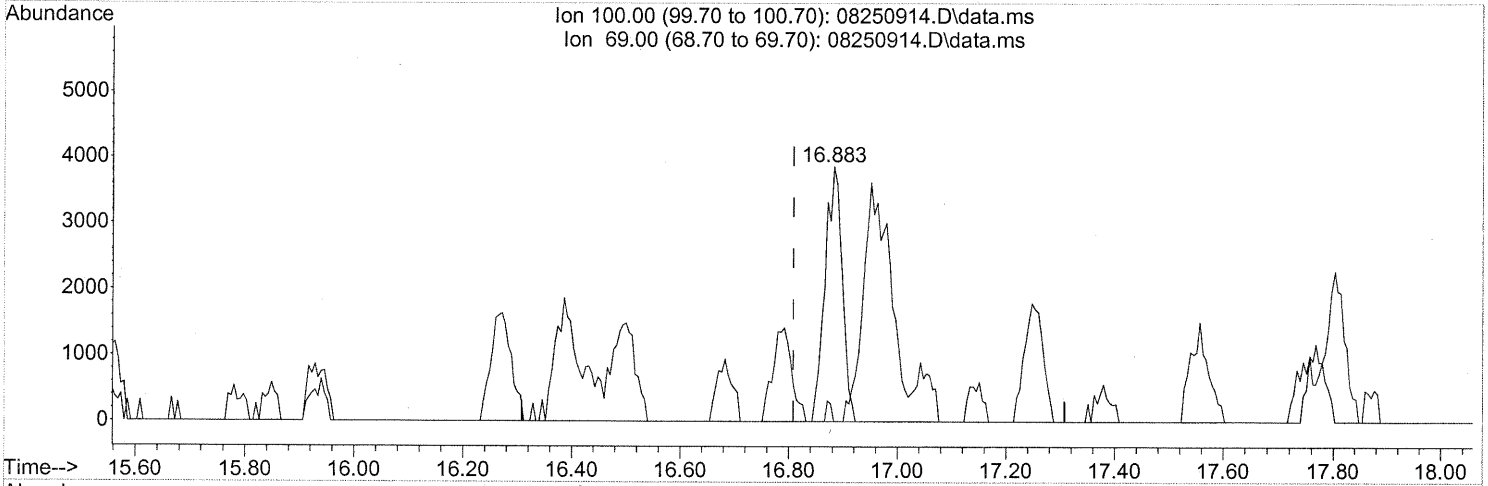
FP  
 07/31/09

08/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(50) Methyl Methacrylate (T)

16.883min (+0.074) 1.72ng

response 8485

Ion	Exp%	Act%
100.00	100	100
69.00	294.80	2.32#
0.00	0.00	0.00
0.00	0.00	0.00

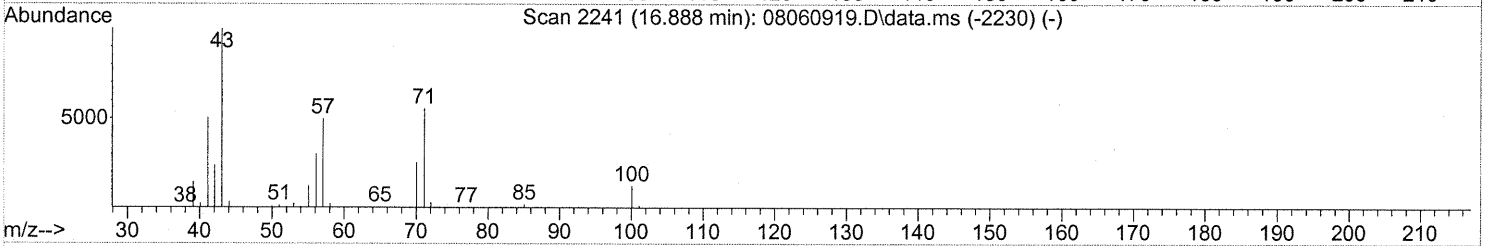
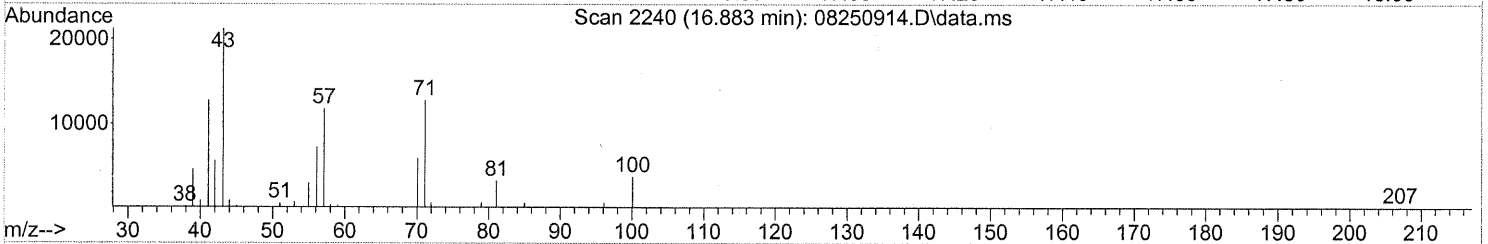
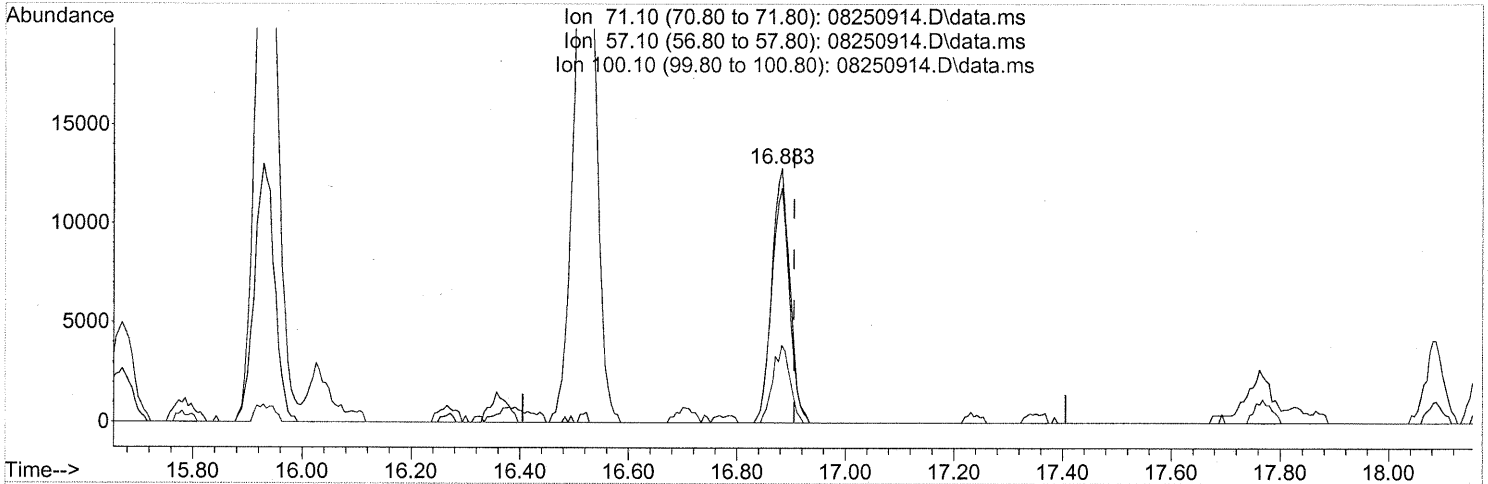
*FP*  
*179/3/09*

*179/3/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

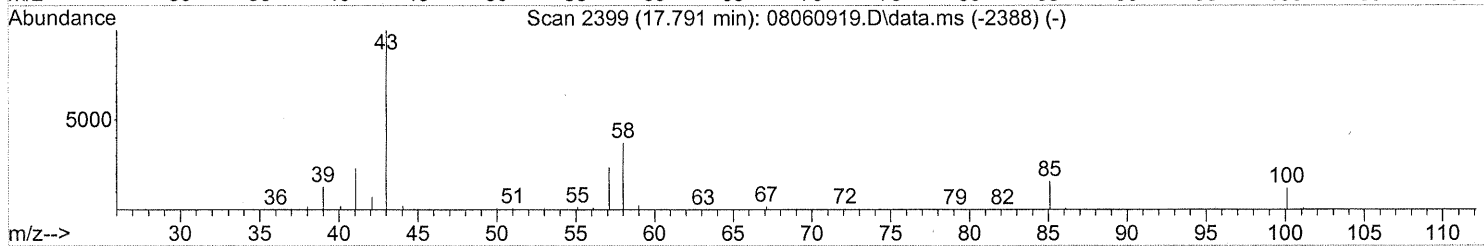
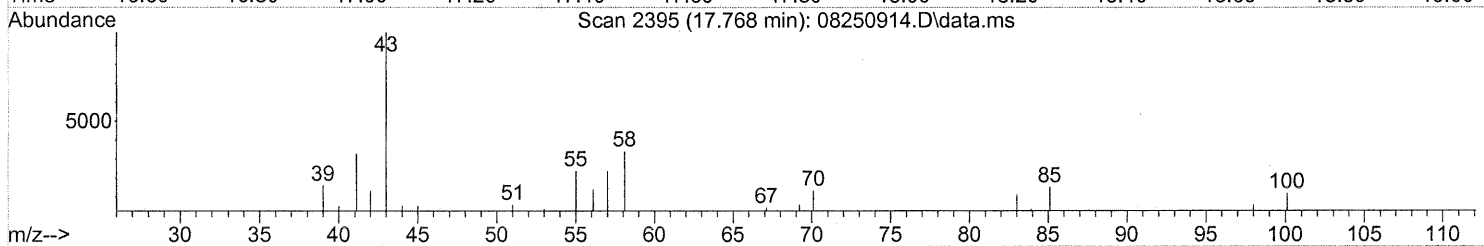
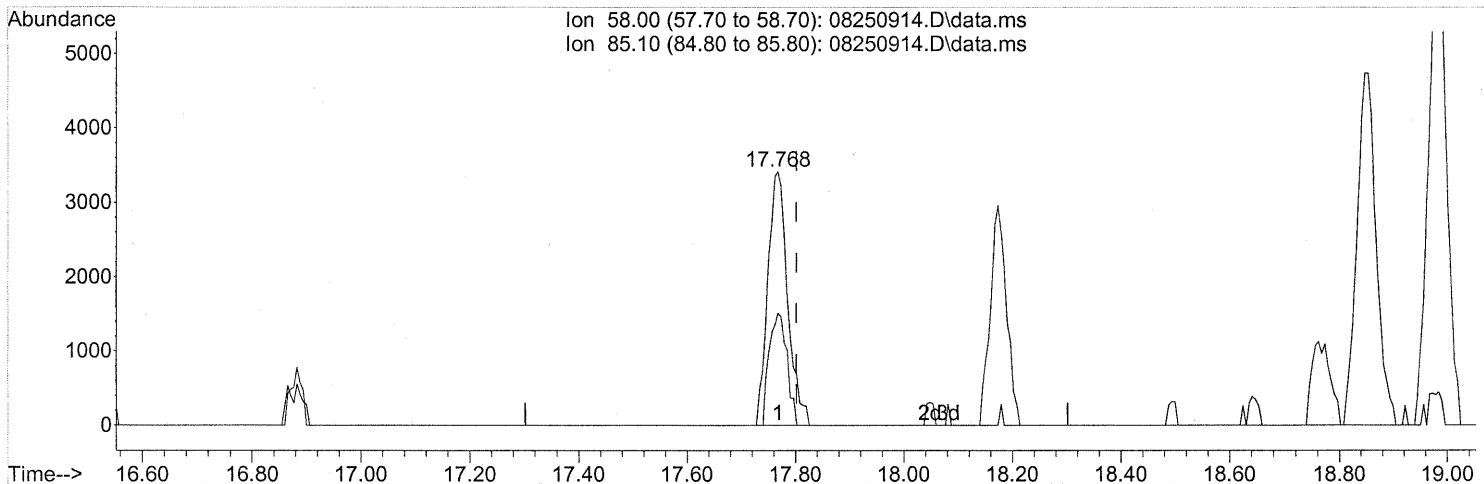
(51) n-Heptane (T)  
 16.883min (-0.023) 2.06ng  
 response 29562

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	91.62
100.10	26.40	28.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(53) 4-Methyl-2-pentanone (T)

17.768min (-0.034) 0.67ng

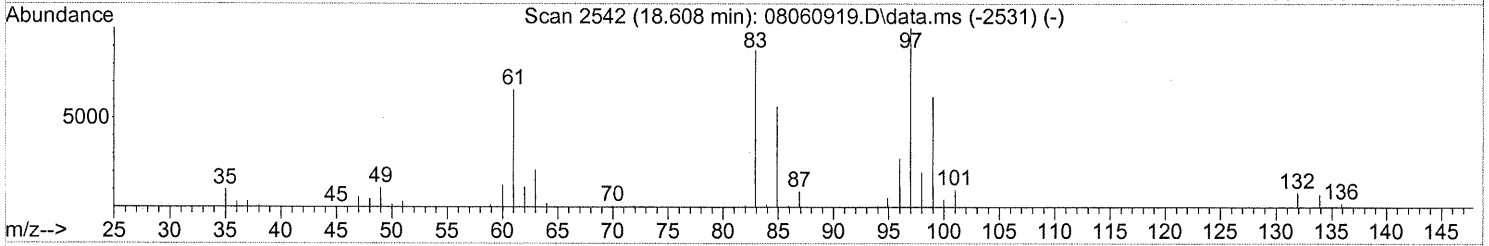
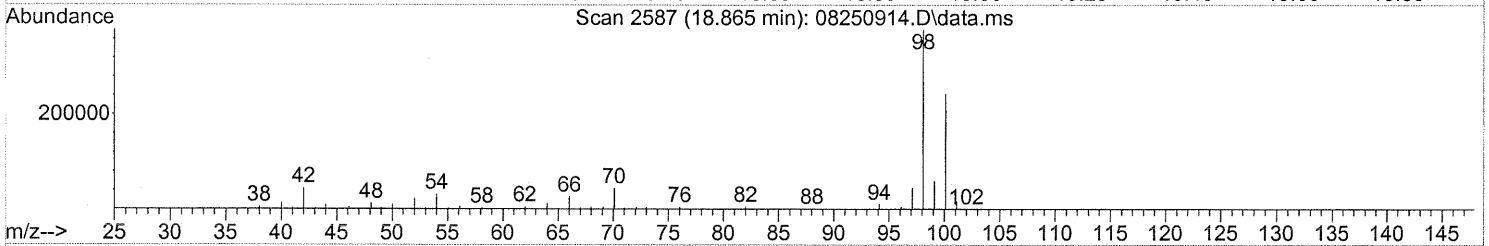
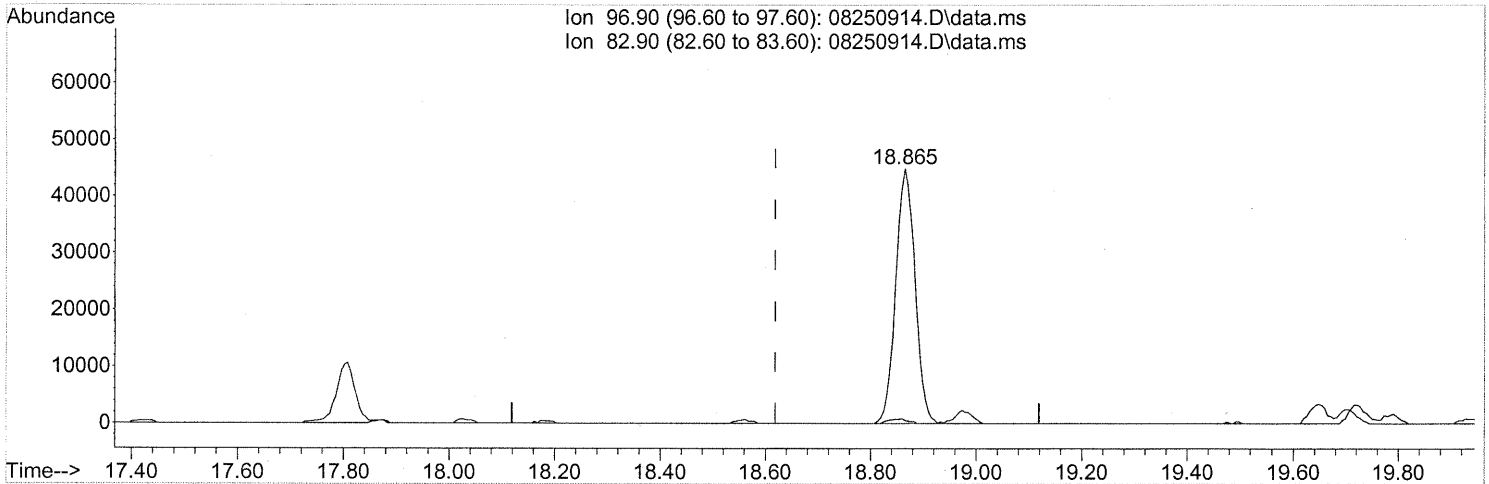
response 8679

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	39.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(55) 1,1,2-Trichloroethane (T)

18.865min (+0.246) 9.70ng

response 114138

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.64#
0.00	0.00	0.00
0.00	0.00	0.00

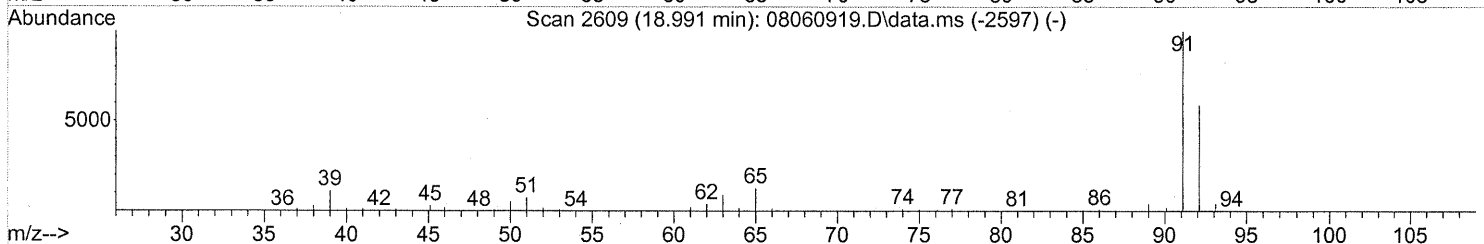
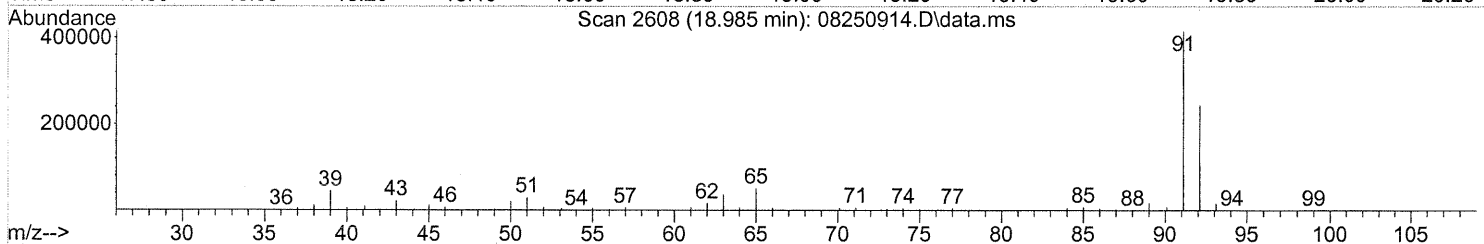
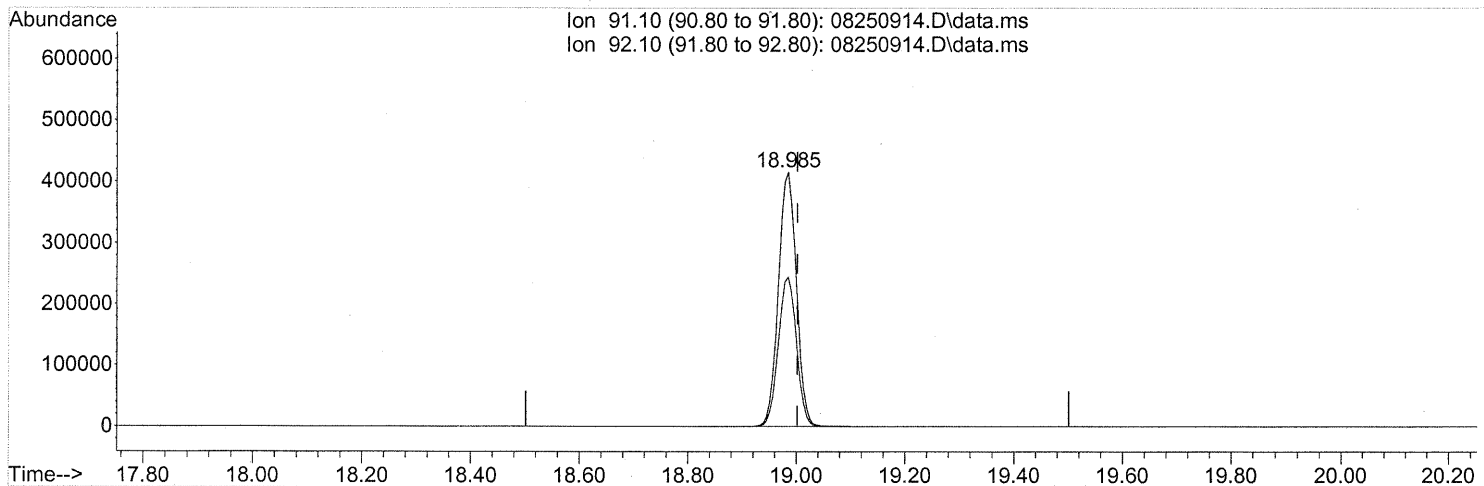
FP  
 179/3/09

KR 9/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

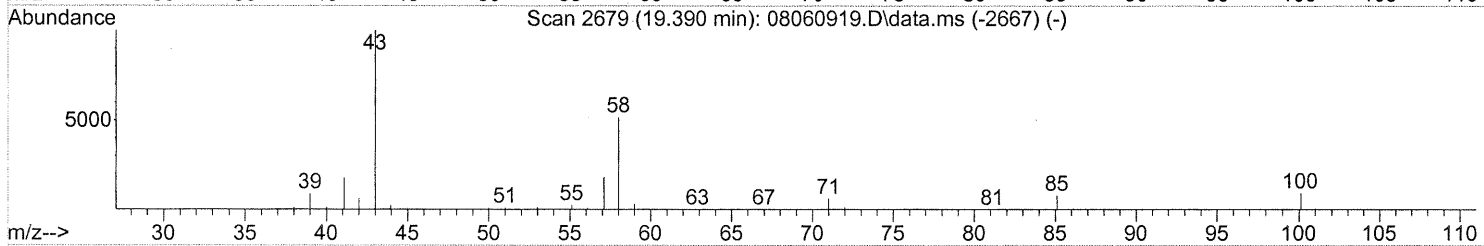
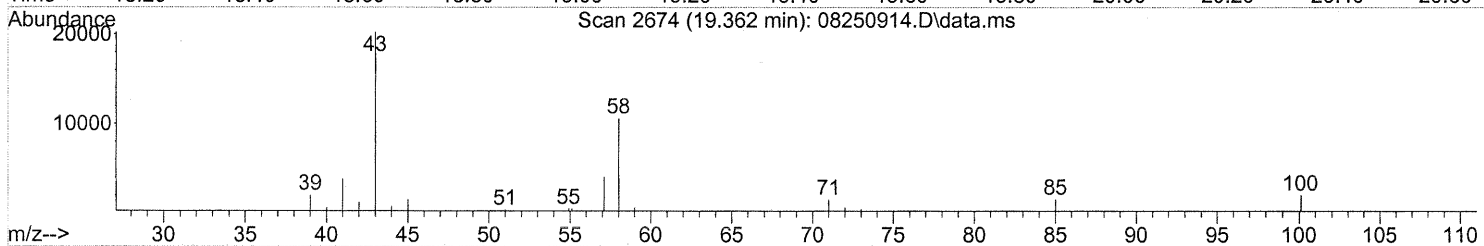
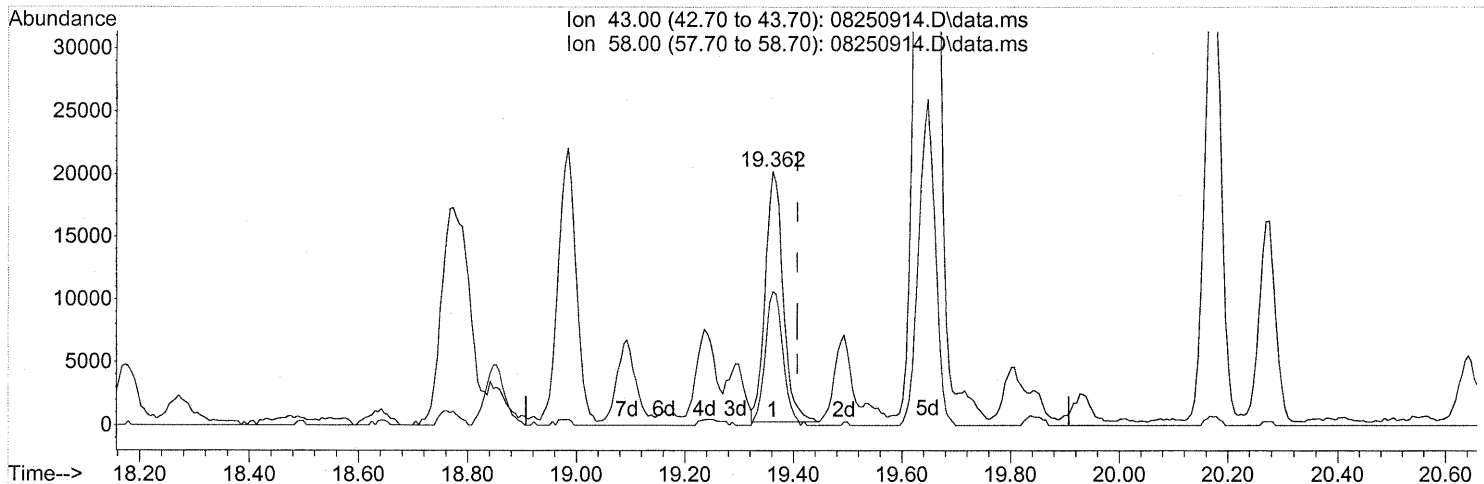
(58) Toluene (T)  
 18.985min (-0.017) 19.12ng  
 response 952326

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

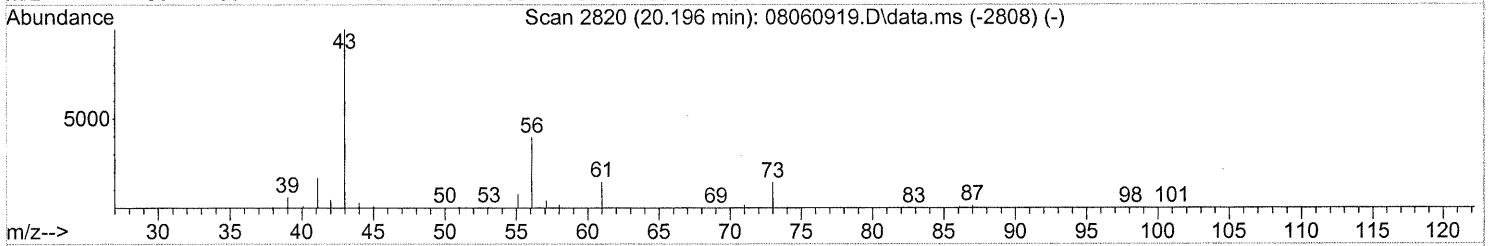
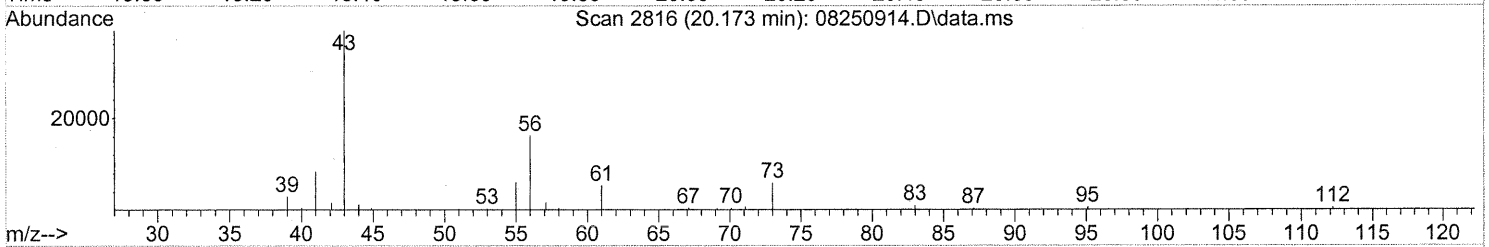
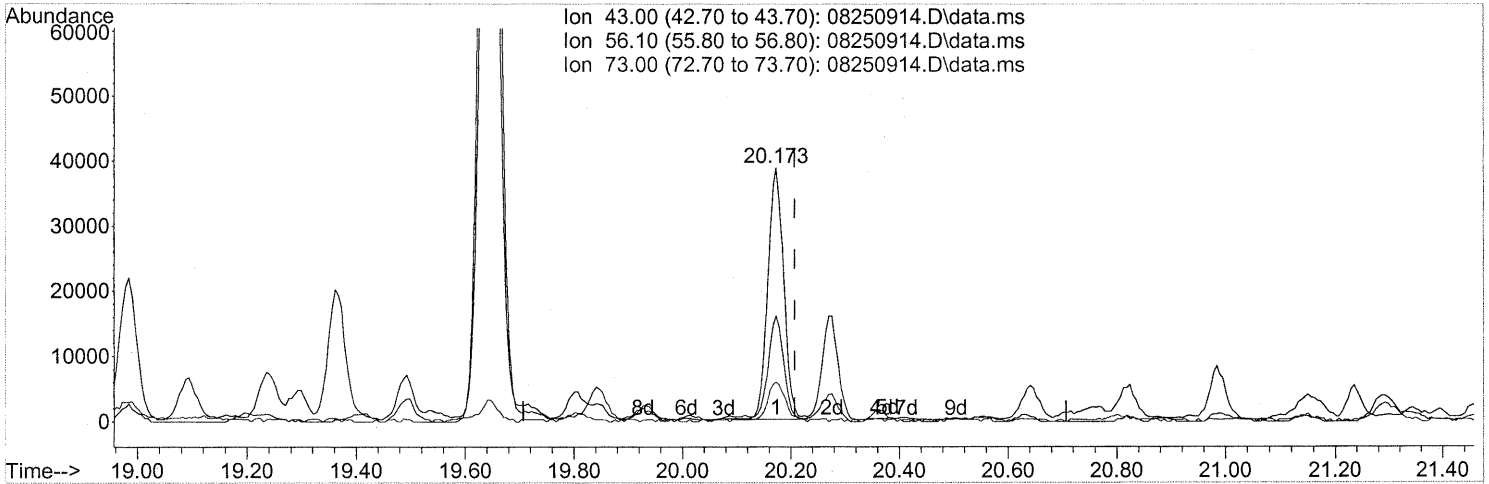
(59) 2-Hexanone (T)  
 19.362min (-0.046) 1.38ng  
 response 45578

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	53.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(62) n-Butyl Acetate (T)  
 20.173min (-0.034) 2.02ng  
 response 78929

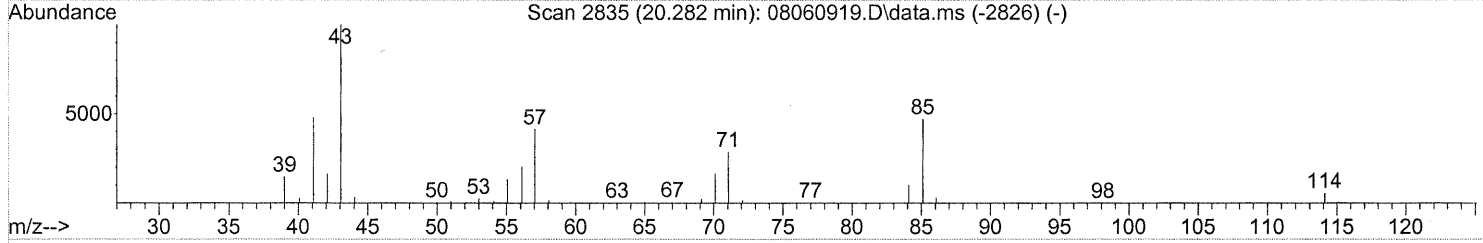
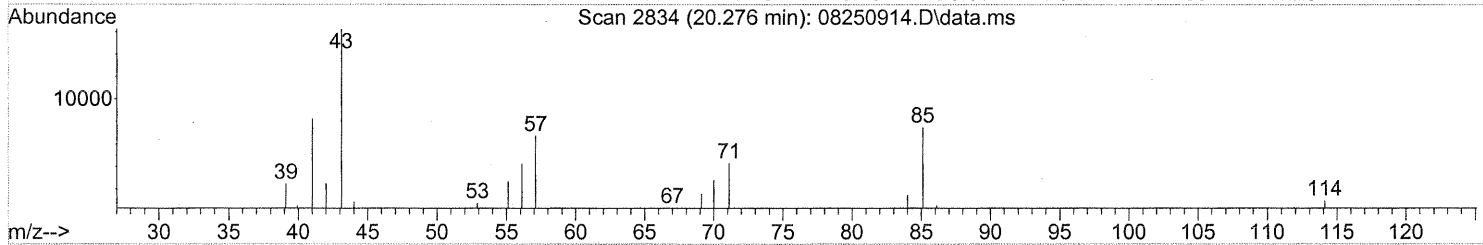
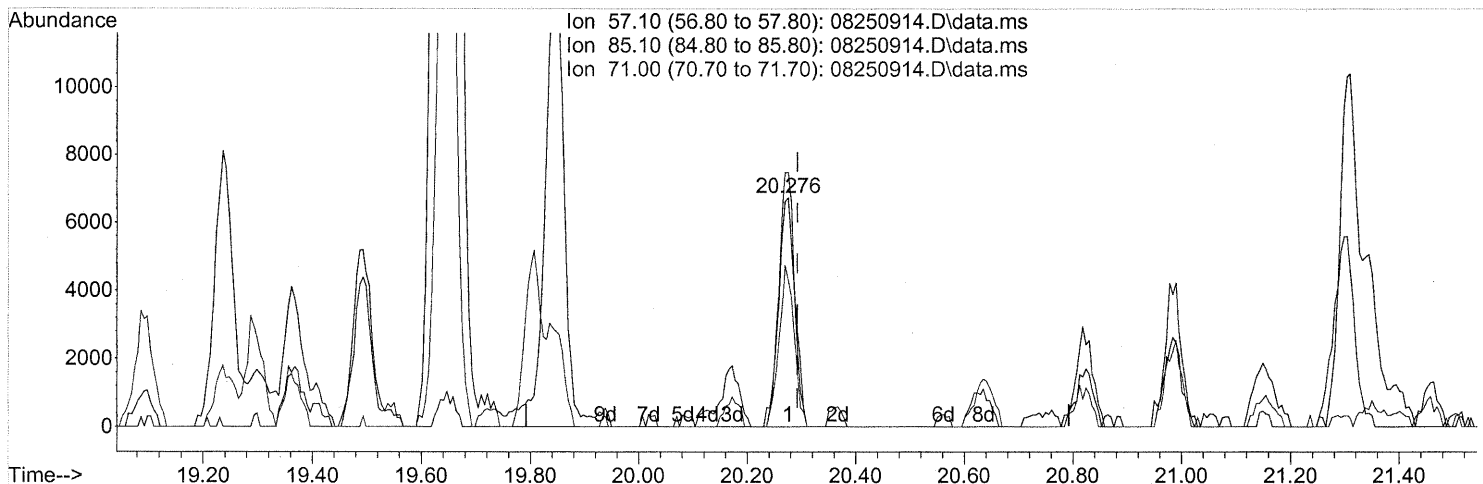
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	41.53
73.00	14.80	18.13
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

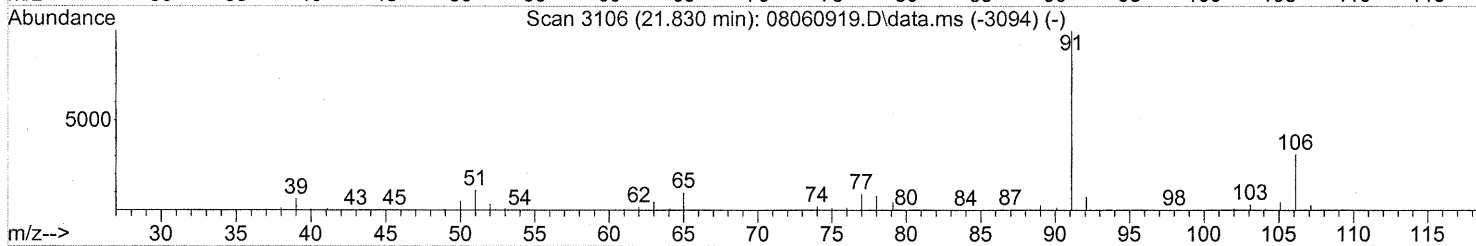
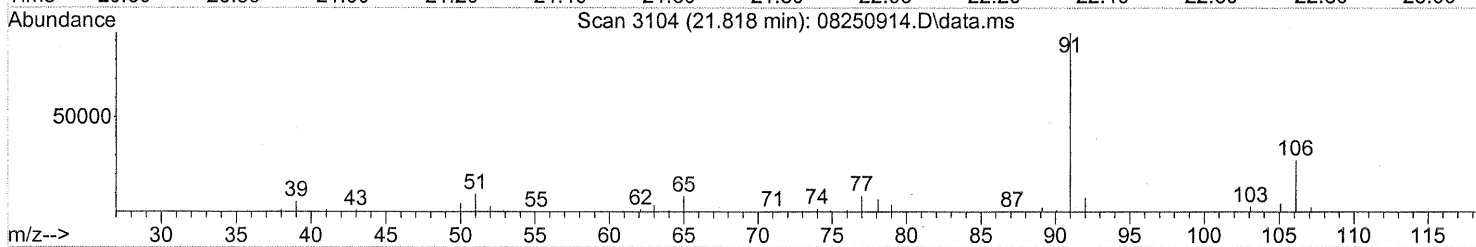
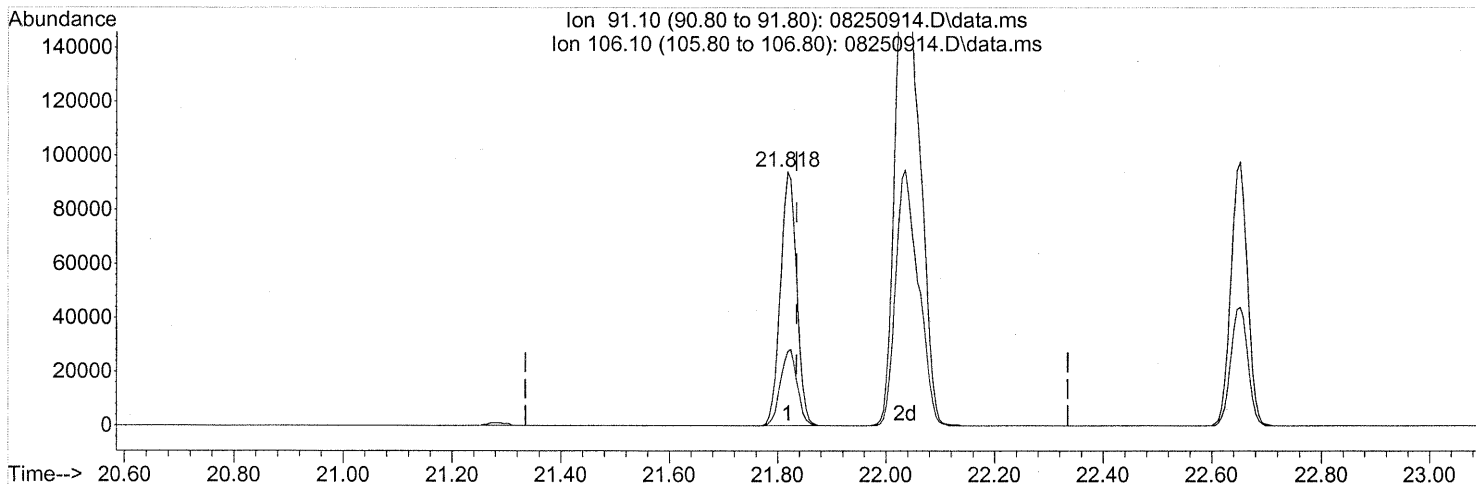
(63) n-Octane (T)  
 20.276min (-0.017) 1.14ng  
 response 13763

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	111.95
71.00	68.10	66.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 3.44ng

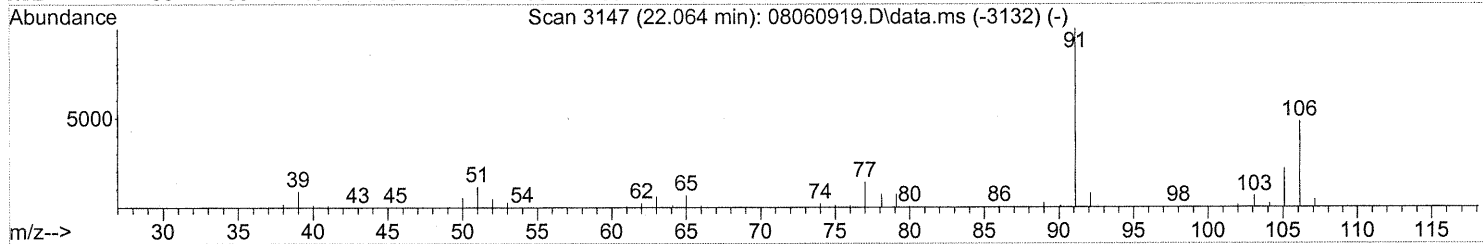
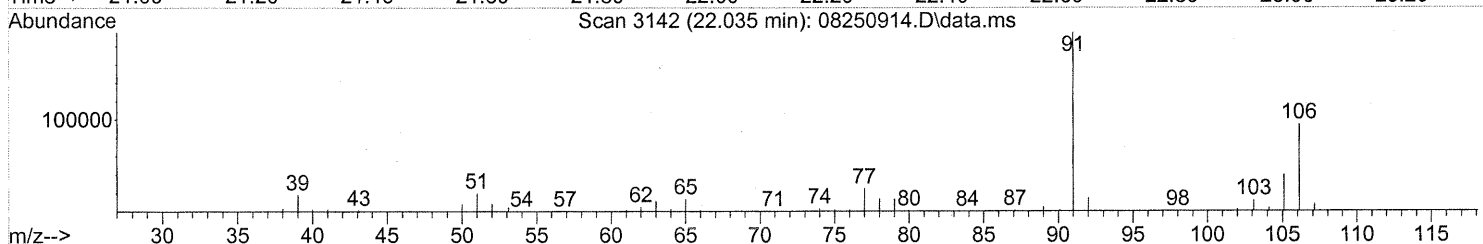
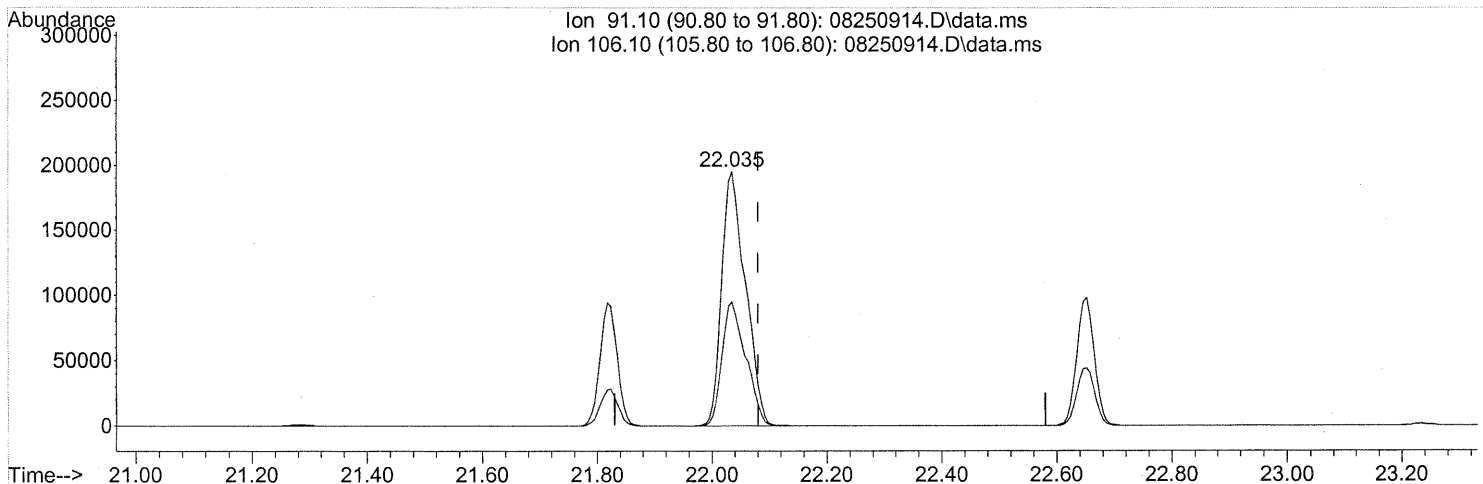
response 195937

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(67) m- & p-Xylenes (T)

22.035min (-0.046) 12.25ng

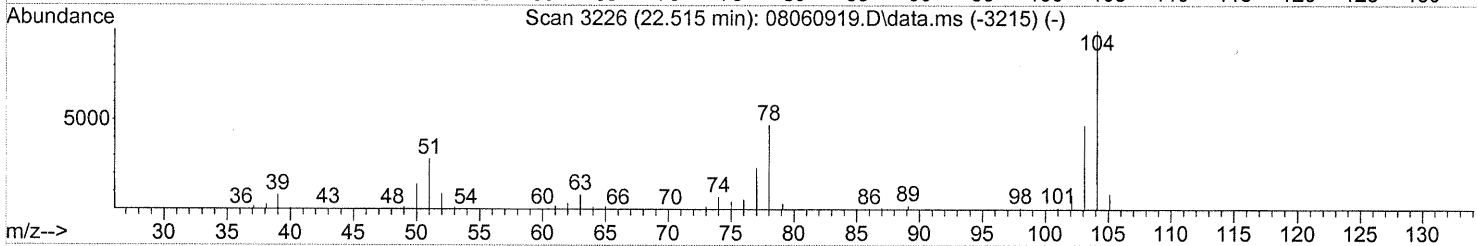
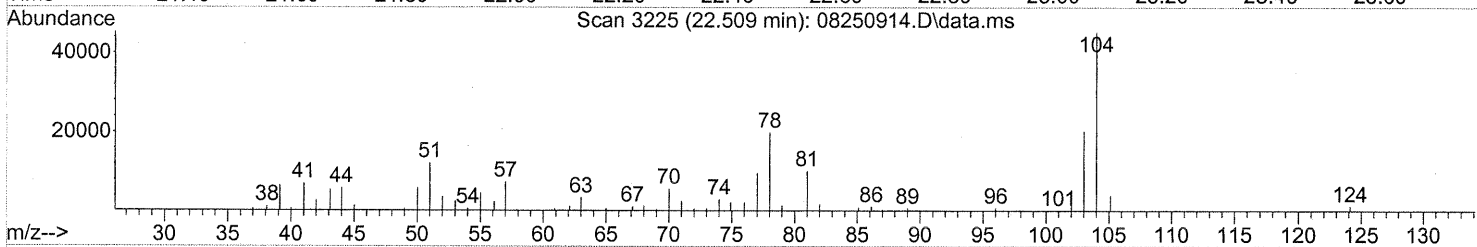
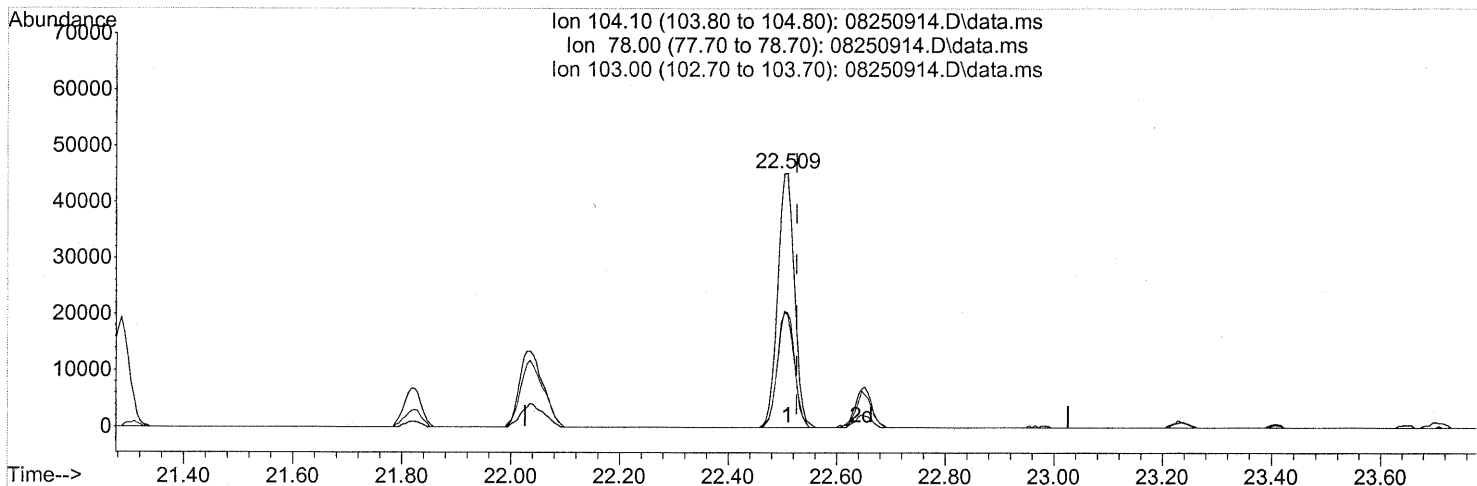
response 564186

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

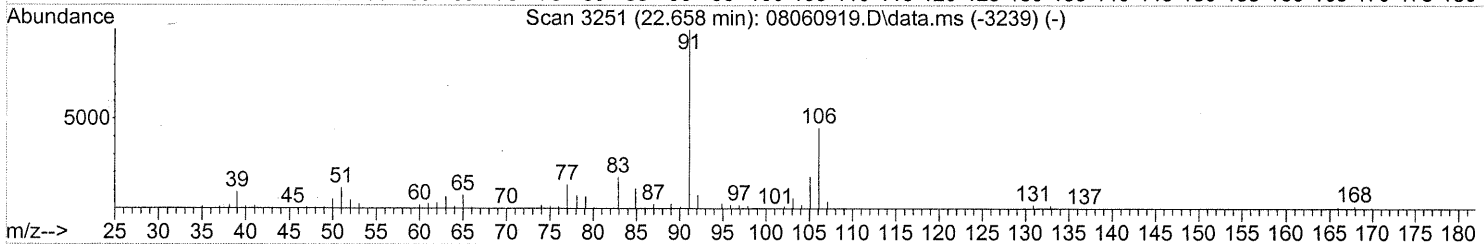
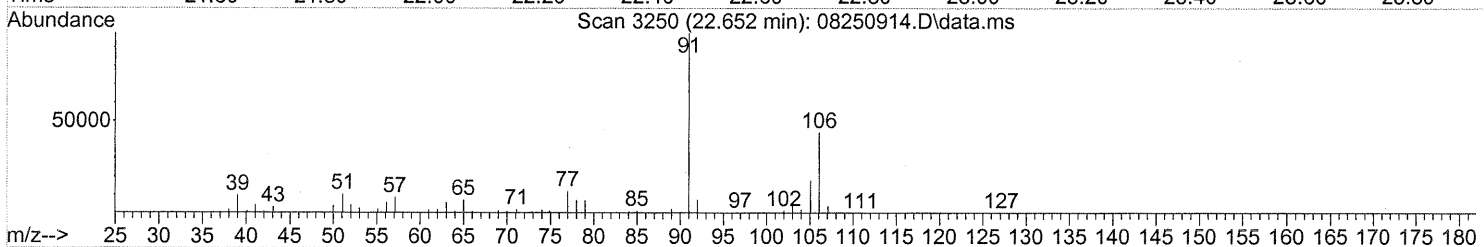
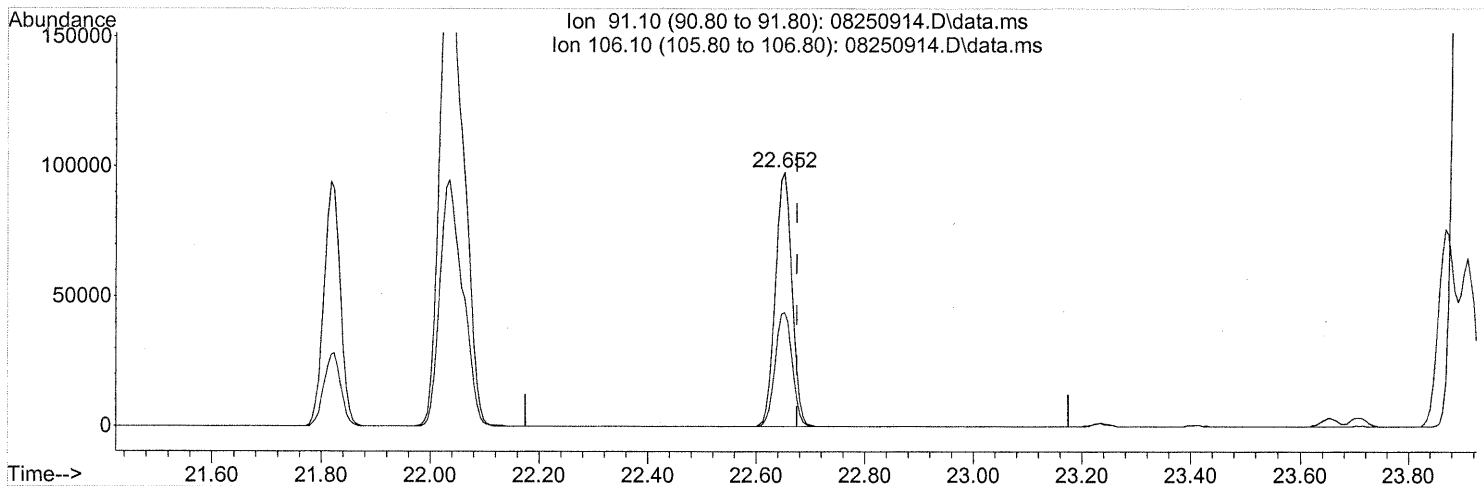
(69) Styrene (T)  
 22.509min (-0.017) 2.88ng  
 response 95876

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	45.76
103.00	46.20	46.59
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 4.47ng

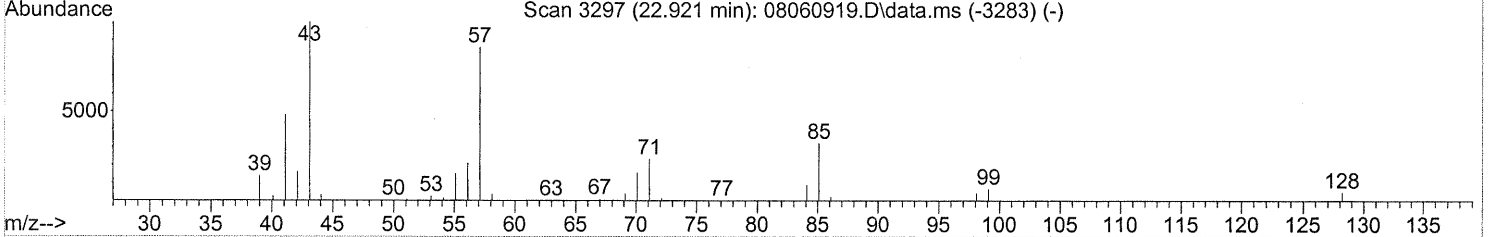
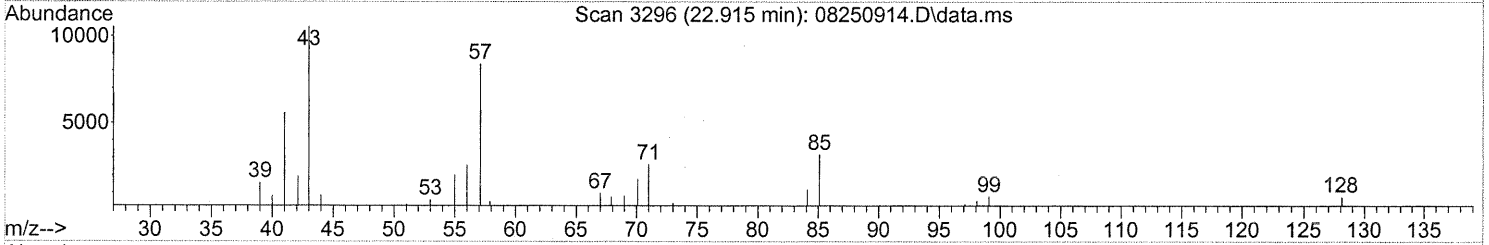
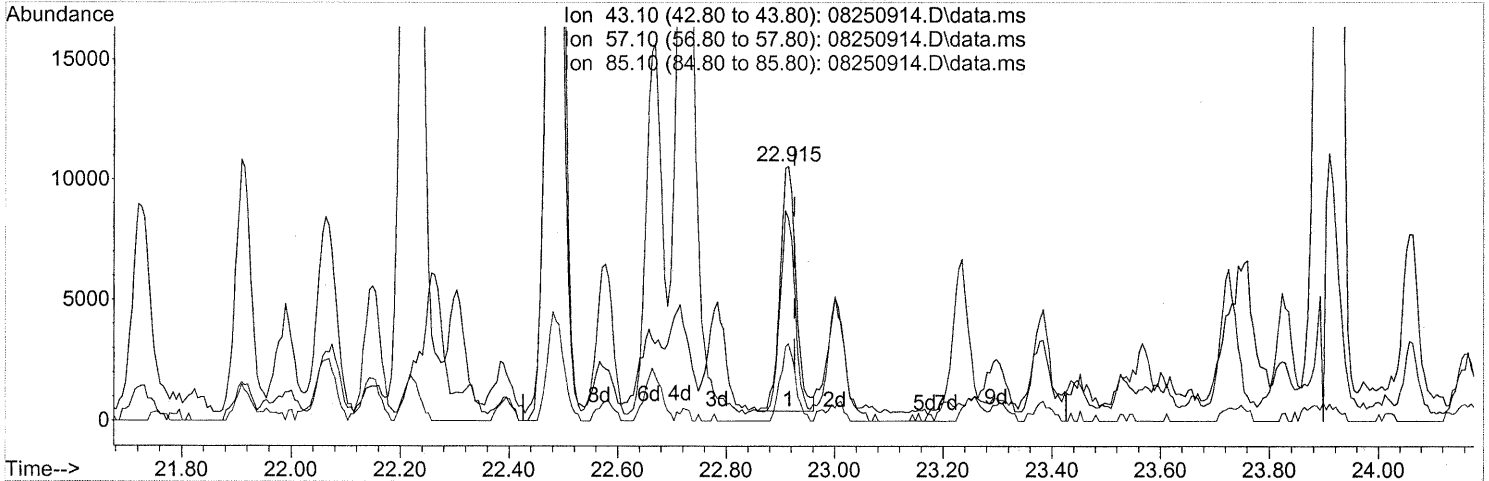
response 206517

Ion	Exp%	Act%
91.10	100	100
106.10	44.10	46.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

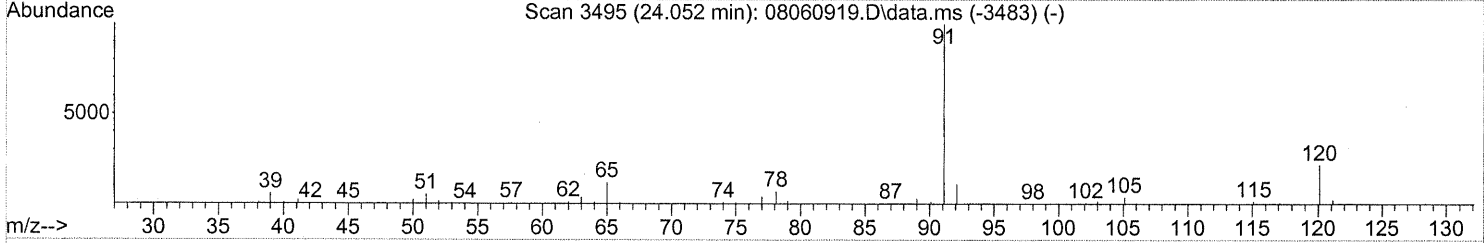
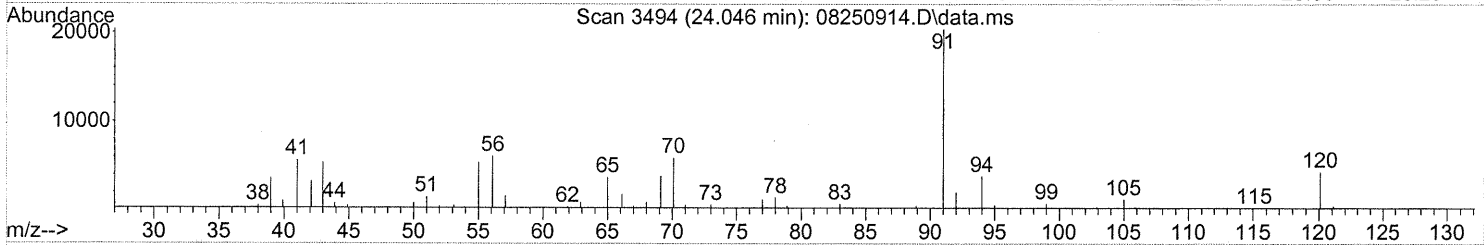
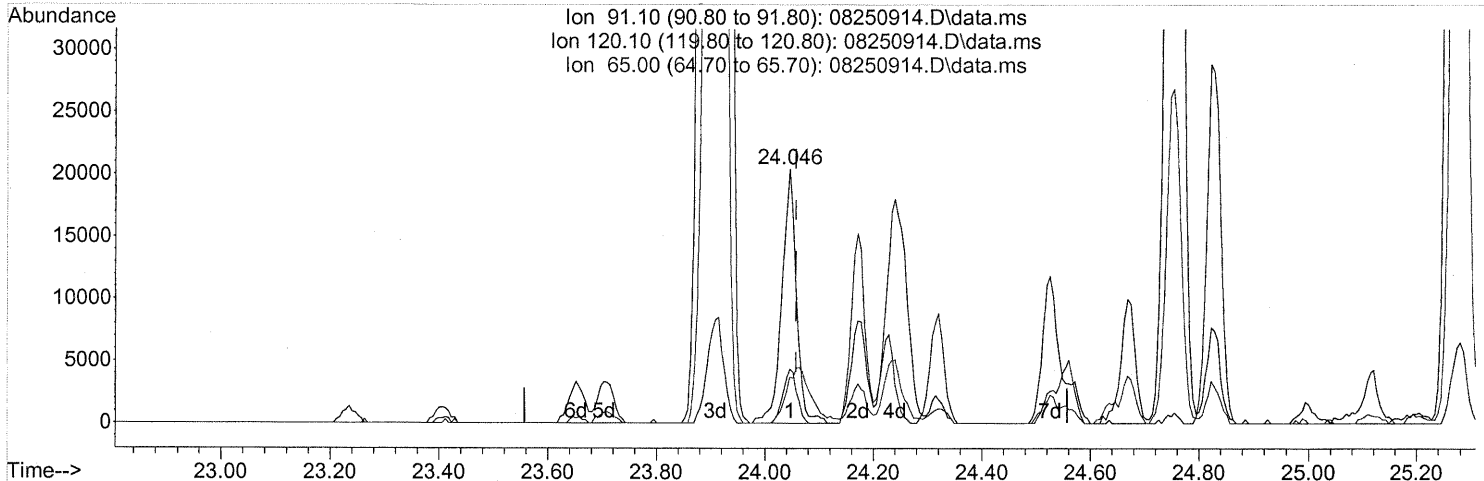
(71) n-Nonane (T)  
 22.915min (-0.011) 0.68ng  
 response 20879

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	84.29
85.10	30.40	29.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.51ng

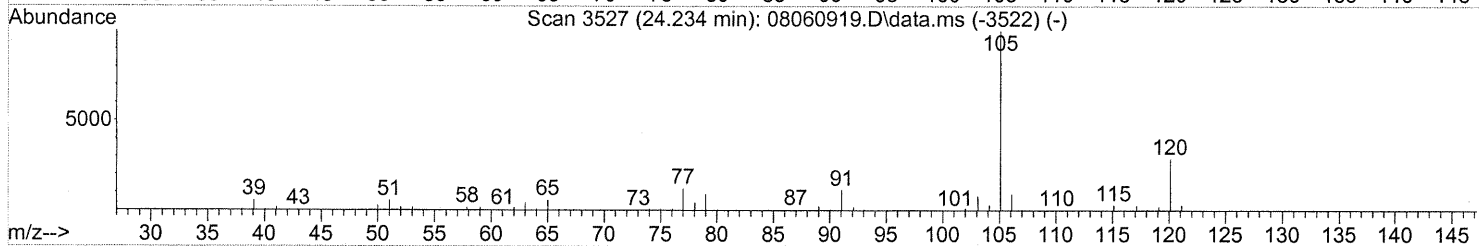
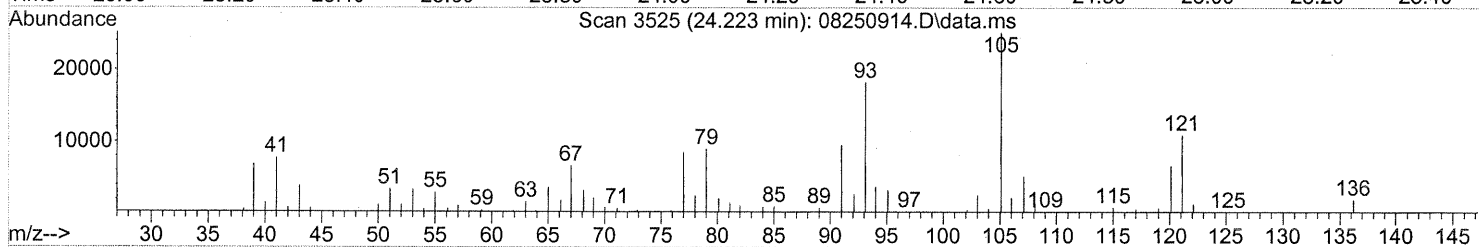
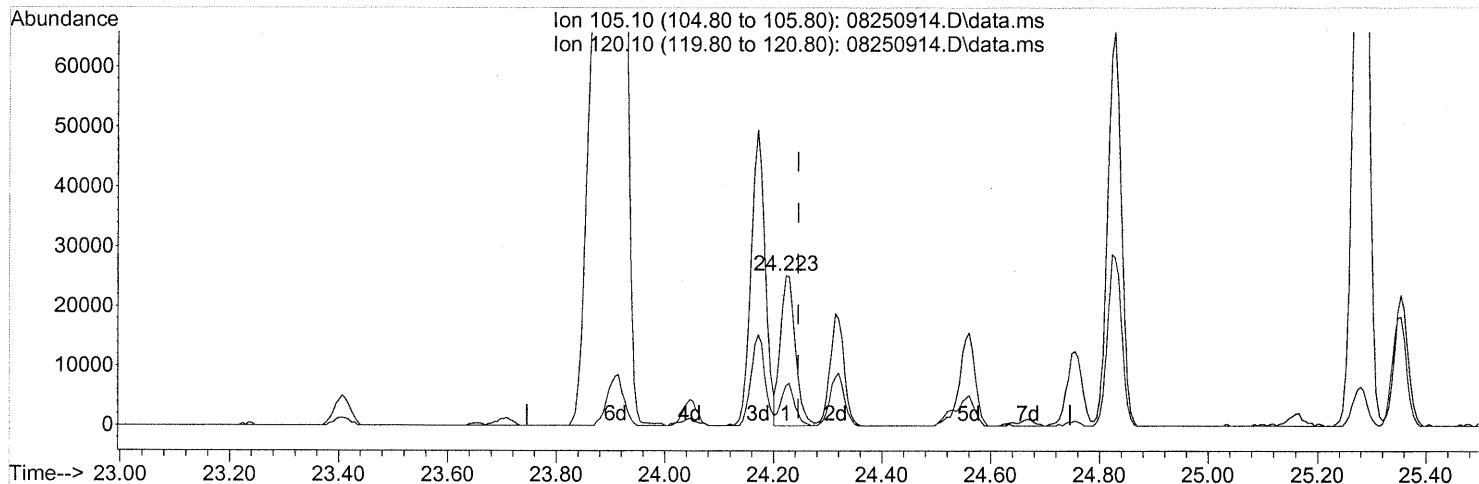
response 37664

Ion	Exp%	Act%
91.10	100	100
120.10	21.60	20.23
65.00	12.00	37.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(78) 4-Ethyltoluene (T)

24.223min (-0.023) 0.90ng

response 48421

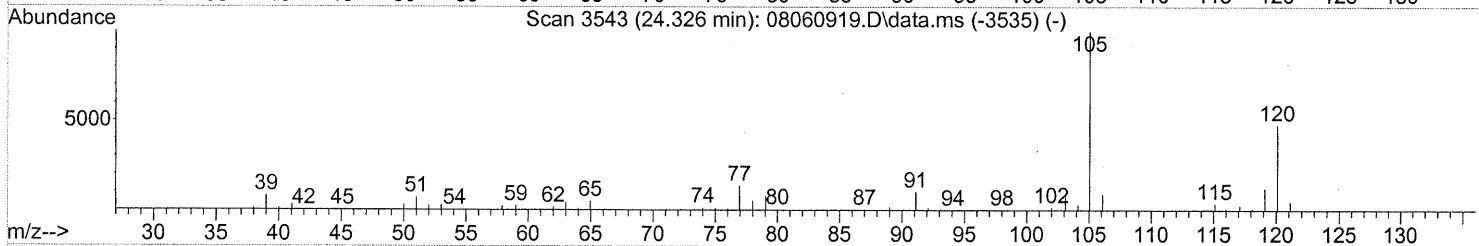
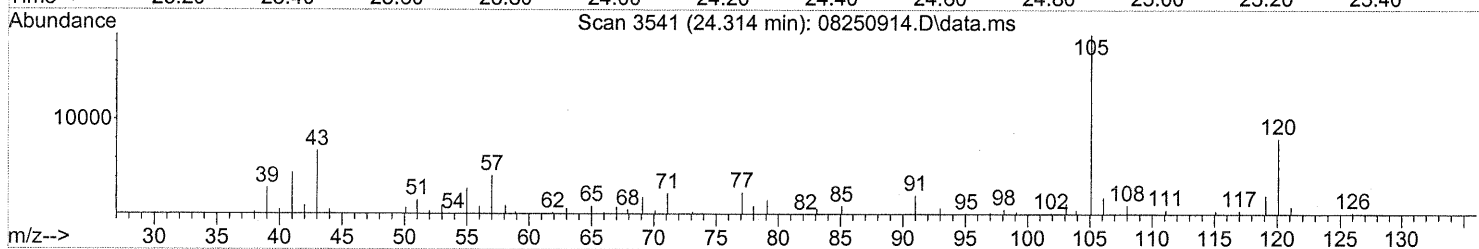
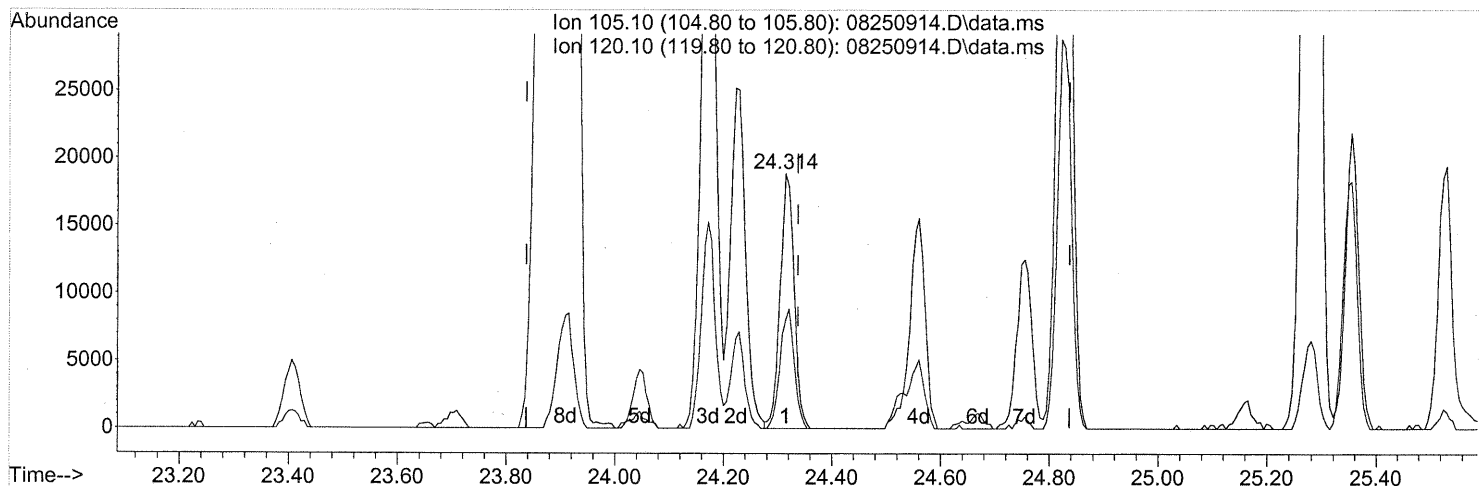
Ion	Exp%	Act%
105.10	100	100
120.10	28.40	25.83
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(79) 1,3,5-Trimethylbenzene (T)

24.314min (-0.023) 0.74ng

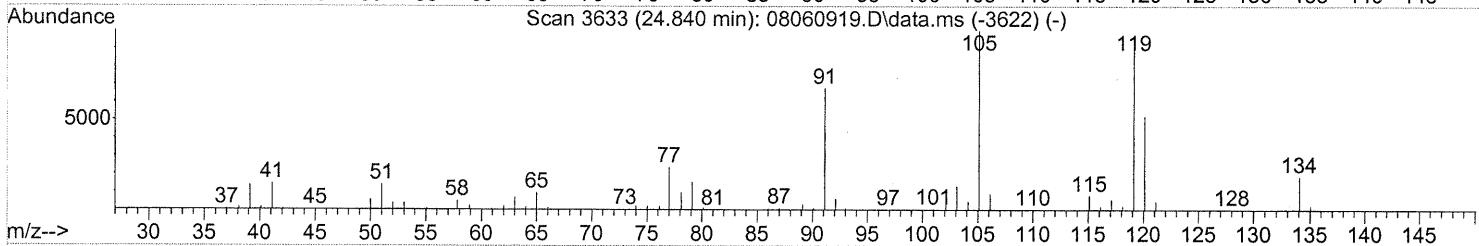
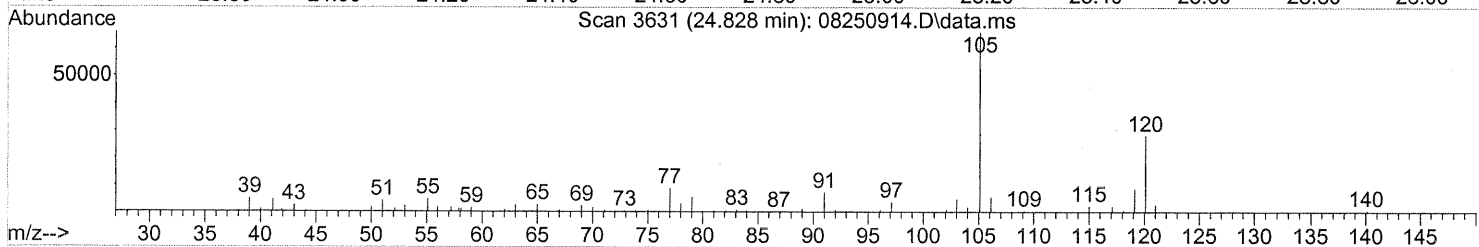
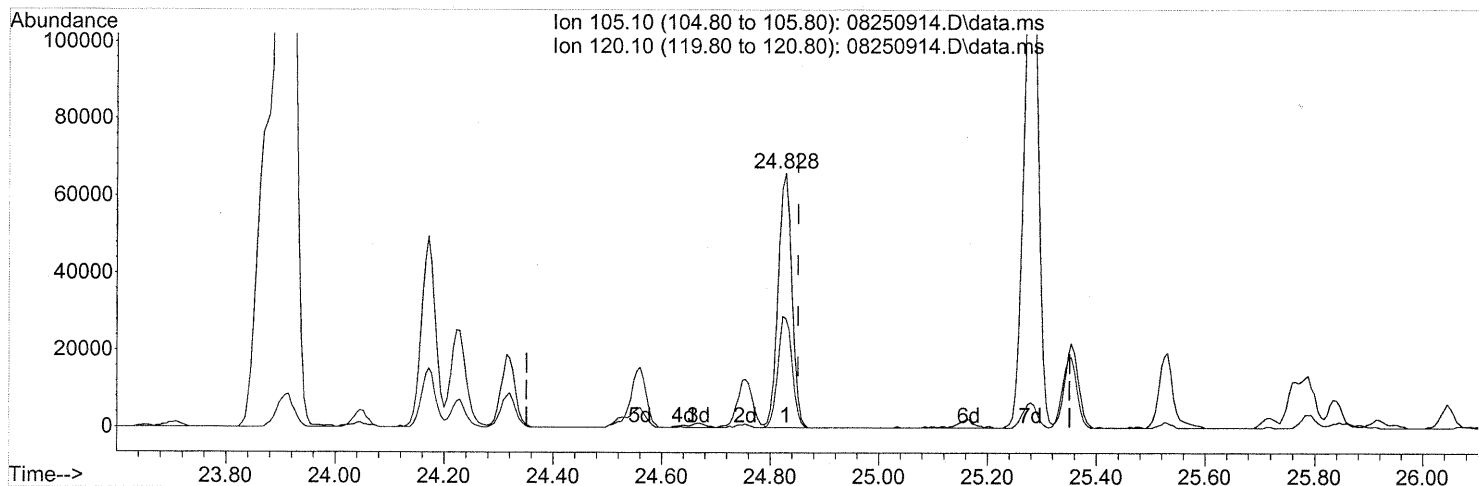
response 33530

Ion	Exp%	Act%
105.10	100	100
120.10	46.80	47.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

(82) 1,2,4-Trimethylbenzene (T)

24.828min (-0.023) 2.50ng

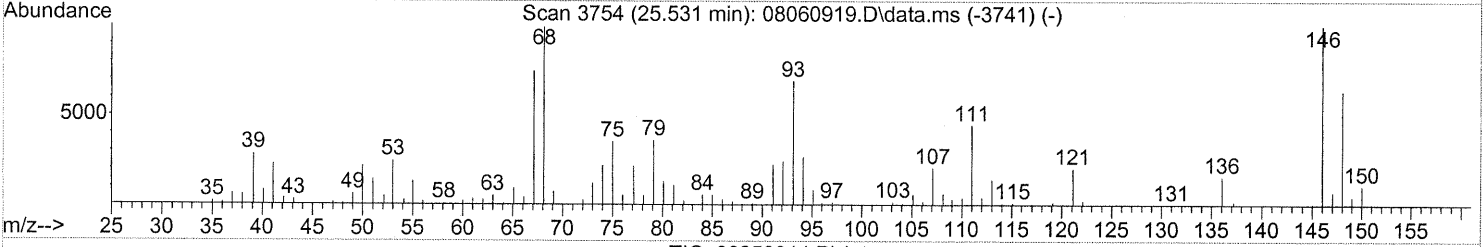
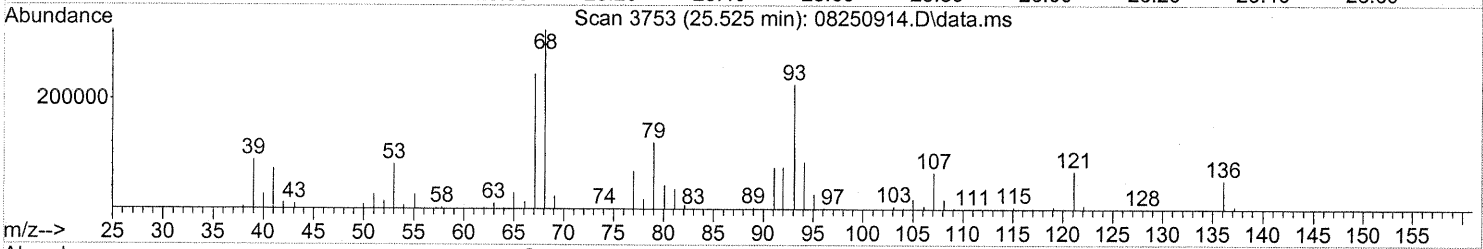
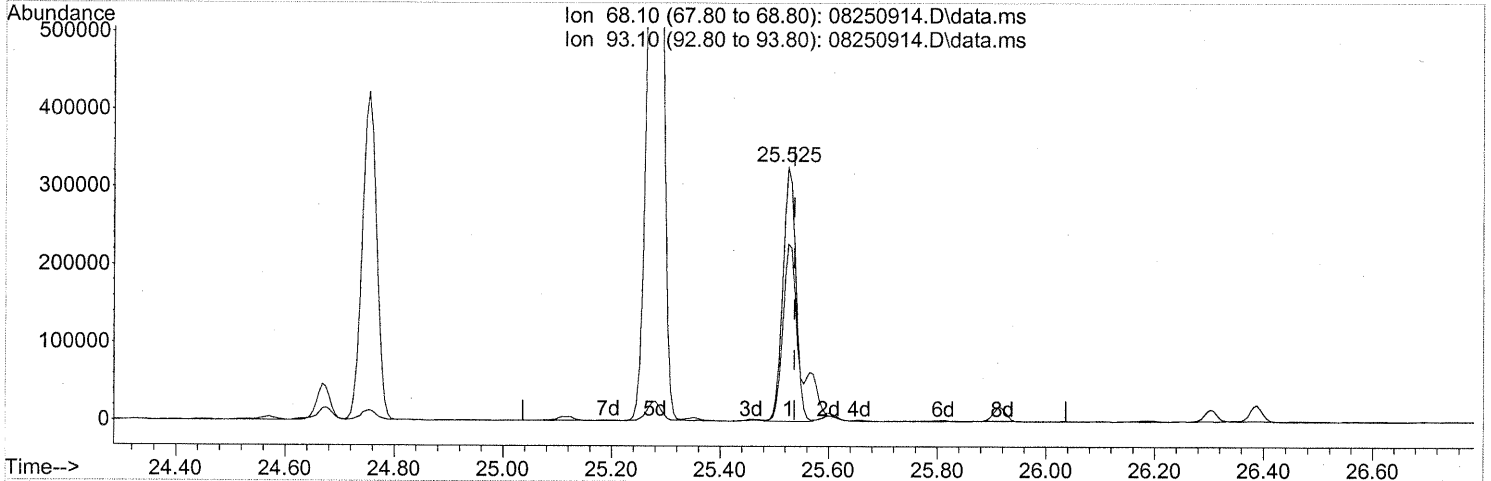
response 116208

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	44.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250914.D\data.ms

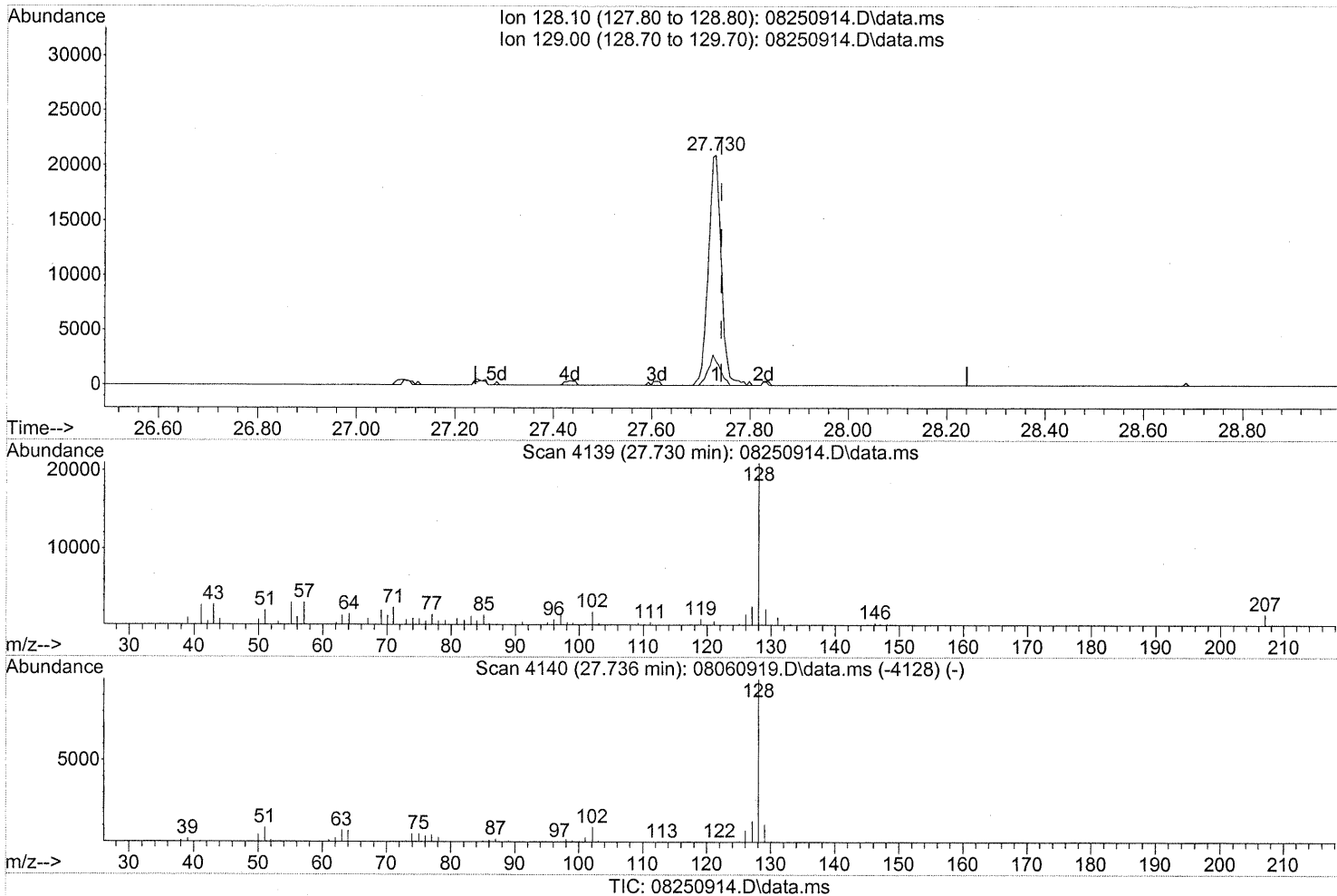
(91) d-Limonene (T)  
 25.525min (-0.011) 27.64ng  
 response 546070

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	93.87#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250914.D  
 Acq On : 25 Aug 2009 20:12  
 Operator : WA/CC  
 Sample : P0902875-005 (1000mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:39:24 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

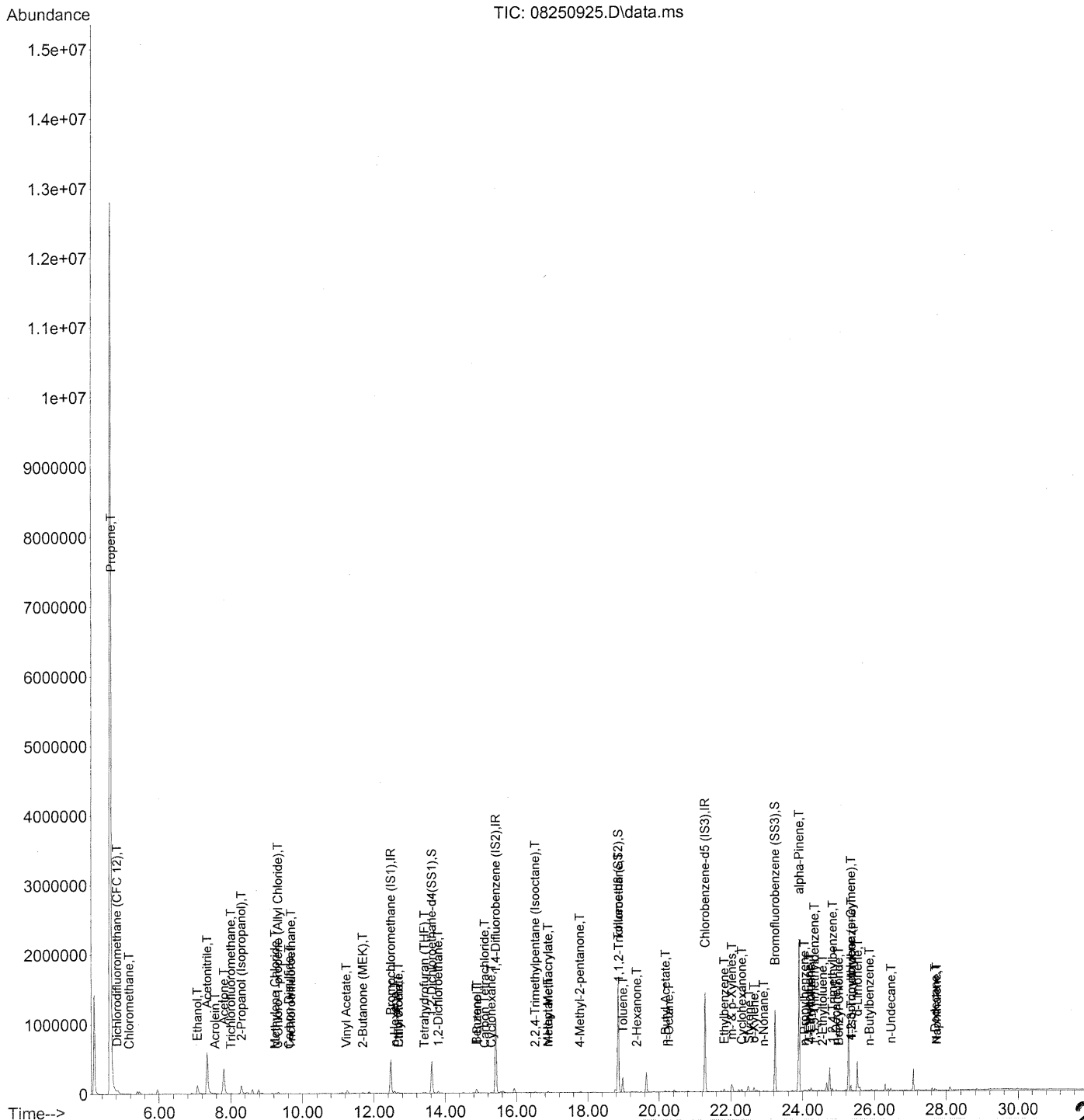


(95) Naphthalene (T)  
 27.730min (-0.011) 0.60ng  
 response 37993

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.74
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250925.D  
Acq On : 26 Aug 2009 5:22 am  
Operator : WA/CC  
Sample : P0902875-005 dil (200mL)  
Misc : Environmental Health 102268  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 26 Aug 2009 5:22 am  
 Operator : WA/CC  
 Sample : P0902875-005 dil (200mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

11/9(3)/09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.47	130	245550	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1235720	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.29	82	597750	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.62	65	466540	21.860	ng	-0.04
Spiked Amount	25.000		Recovery	=	87.44%	
57) Toluene-d8 (SS2)	18.85	98	1343483	25.722	ng	-0.02
Spiked Amount	25.000		Recovery	=	102.88%	
73) Bromofluorobenzene (SS3)	23.23	174	383222	27.823	ng	-0.01
Spiked Amount	25.000		Recovery	=	111.28%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.66	42	20349	1.208	ng	# 80
3) Dichlorodifluoromethan...	4.82	85	21248	0.772	ng	97
4) Chloromethane	5.16	50	8310	0.449	ng	93
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.07	45	267675	25.061	ng	100
11) Acetonitrile	7.34	41	1032462	33.007	ng	99
12) Acrolein	7.56	56	7197	0.885	ng	95
13) Acetone	7.81	58	206328	20.474	ng	98
14) Trichlorofluoromethane	8.01	101	4987	0.200	ng	96
15) 2-Propanol (Isopropanol)	8.30	45	302286	7.633	ng	99
16) Acrylonitrile	8.60	53	862	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.38	59	843	N.D.		
19) Methylene Chloride	9.23	84	1048	0.077	ng	# 74
20) 3-Chloro-1-propene (Al...	9.31	41	6051	0.232	ng	# 43
21) Trichlorotrifluoroethane	9.68	151	631	0.070	ng	100
22) Carbon Disulfide	9.63	76	3695	0.077	ng	# 74
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.23	86	4250	2.072	ng	# 1
27) 2-Butanone (MEK)	11.68	72	7448	0.819	ng	# 92
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.67	87	94	N.D.		
30) Ethyl Acetate	12.68	61	3271	0.690	ng	98
31) n-Hexane	12.58	57	20442	0.843	ng	99

206

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 26 Aug 2009 5:22 am  
 Operator : WA/CC  
 Sample : P0902875-005 dil (200mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.68	83	3653	0.171	ng	92
34) Tetrahydrofuran (THF)	13.41	72	5092	0.525	ng #	68
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.80	62	3408	0.175	ng	97
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.88	56	15811	0.986	ng	79
41) Benzene	14.87	78	51831	0.954	ng	99
42) Carbon Tetrachloride	15.10	117	3132	0.181	ng	96
43) Cyclohexane	15.29	84	3343	0.168	ng	92
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.38	83	845	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	15565	0.243	ng	82
50) Methyl Methacrylate	16.88	100	1471	0.294	ng #	1
51) n-Heptane	16.88	71	5843	0.401	ng	97
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.77	58	1487	0.114	ng	81
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.86	97	115029	9.643	ng #	4
58) Toluene	18.98	91	188596	3.674	ng	99
59) 2-Hexanone	19.37	43	8864	0.260	ng	98
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.18	43	15591	0.388	ng	93
63) n-Octane	20.27	57	2663	0.215	ng	96
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.82	91	37424	0.638	ng	97
67) m- & p-Xylenes	22.03	91	109771	2.313	ng	98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.51	104	18432	0.537	ng	99
70) o-Xylene	22.65	91	40543	0.852	ng	100
71) n-Nonane	22.91	43	5263	0.166	ng #	78
72) 1,1,2,2-Tetrachloroethane	22.70	83	89	N.D.		
74) Cumene	23.41	105	1789	N.D.		
75) alpha-Pinene	23.90	93	1035272	33.596	ng	96
76) n-Propylbenzene	24.05	91	7424	0.098	ng #	84
77) 3-Ethyltoluene	24.17	105	17510	0.305	ng	95
78) 4-Ethyltoluene	24.23	105	9261	0.166	ng	95
79) 1,3,5-Trimethylbenzene	24.32	105	6718	0.143	ng	94

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 26 Aug 2009 5:22 am  
 Operator : WA/CC  
 Sample : P0902875-005 dil (200mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	216	N.D.		
81) 2-Ethyltoluene	24.55	105	6030	0.104	ng	85
82) 1,2,4-Trimethylbenzene	24.83	105	22752	0.475	ng	88
83) n-Decane	24.93	57	10605	0.341	ng	94
84) Benzyl Chloride	25.00	91	7203	0.160	ng	96
85) 1,3-Dichlorobenzene	25.11	146	298	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	298	N.D.		
87) sec-Butylbenzene	25.17	105	535	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	42367	0.735	ng	94
89) 1,2,3-Trimethylbenzene	25.35	105	7916	0.162	ng	# 47
90) 1,2-Dichlorobenzene	25.11	146	298	N.D.		
91) d-Limonene	25.53	68	106997	5.255	ng	# 70
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	11978	0.362	ng	# 62
94) 1,2,4-Trichlorobenzene	27.59	180	134	N.D.		
95) Naphthalene	27.73	128	9899	0.152	ng	96
96) n-Dodecane	27.69	57	8542	0.222	ng	# 52
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	20021	0.941	ng	97
99) tert-Butylbenzene	24.73	119	1213	N.D.		
100) n-Butylbenzene	25.86	91	3381	0.063	ng	# 60

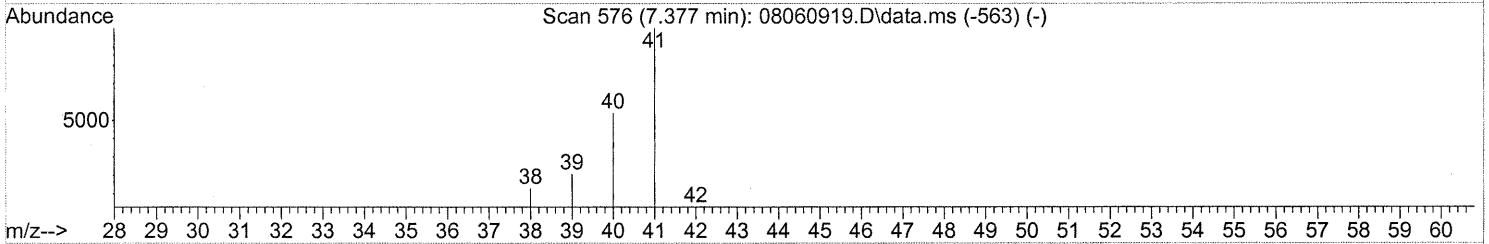
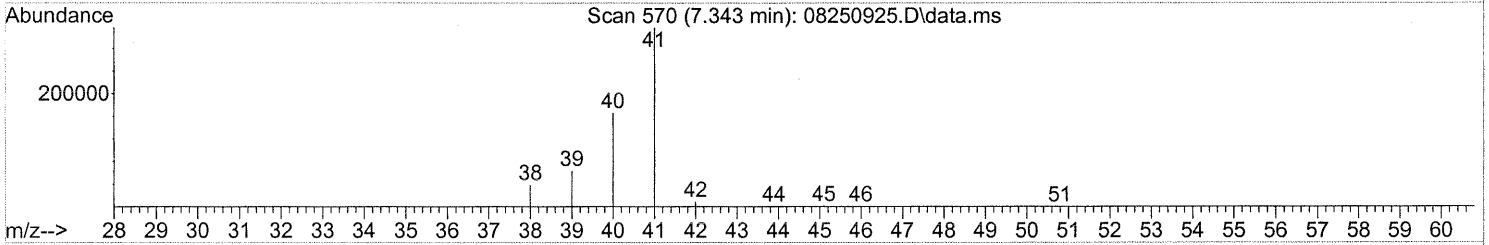
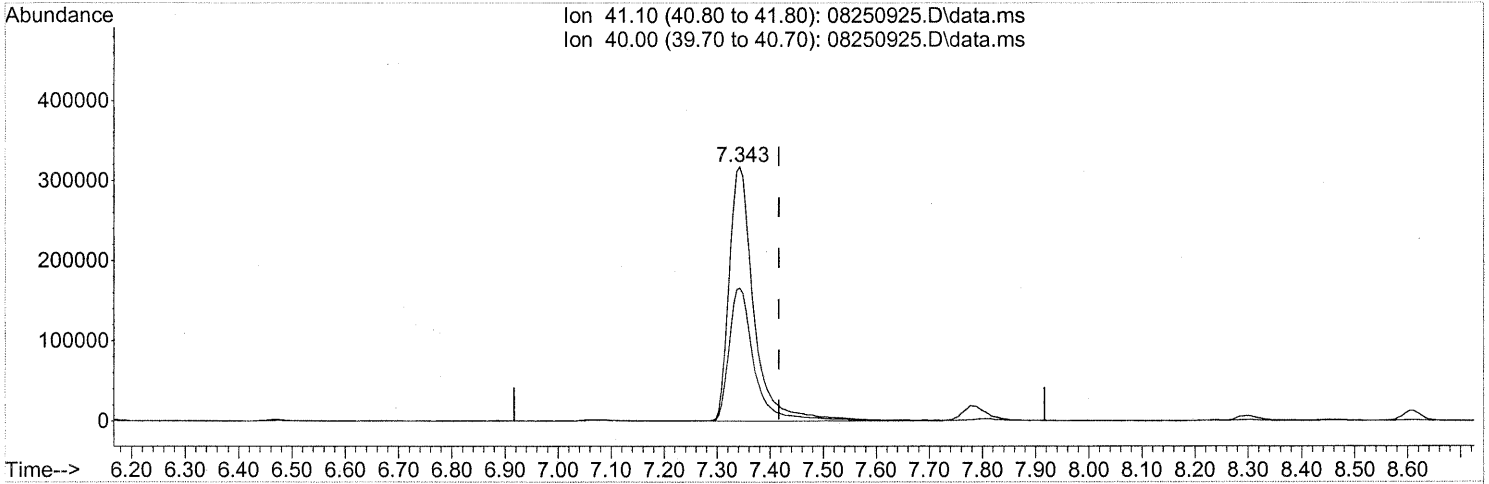
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 26 Aug 2009 5:22  
 Operator : WA/CC  
 Sample : P0902875-005 dil (200mL)  
 Misc : Environmental Health 102268  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

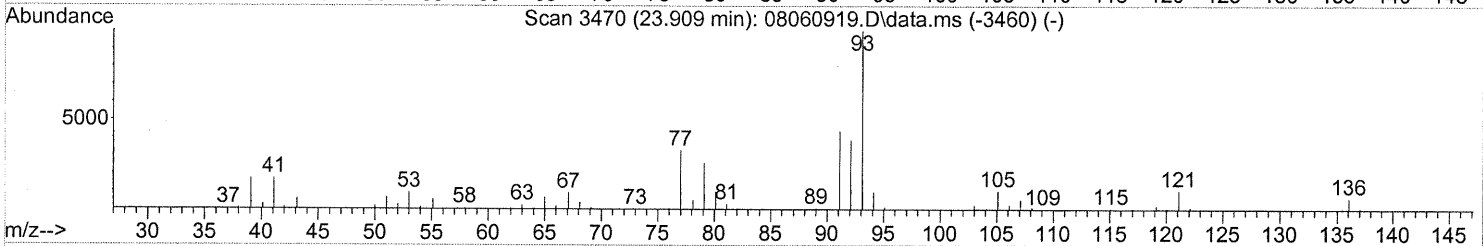
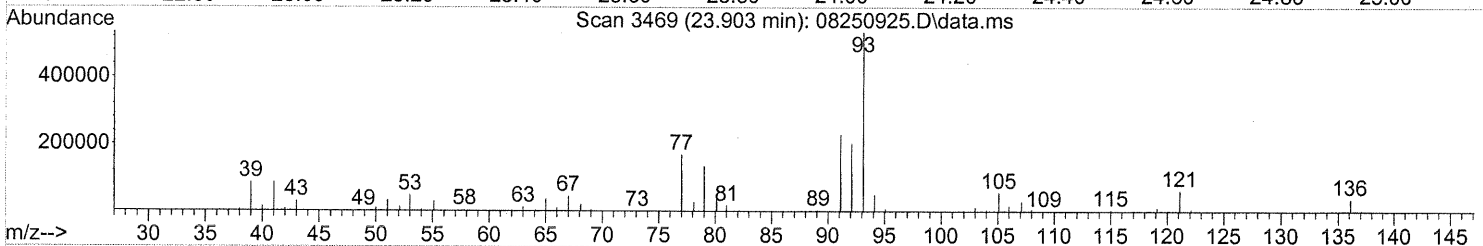
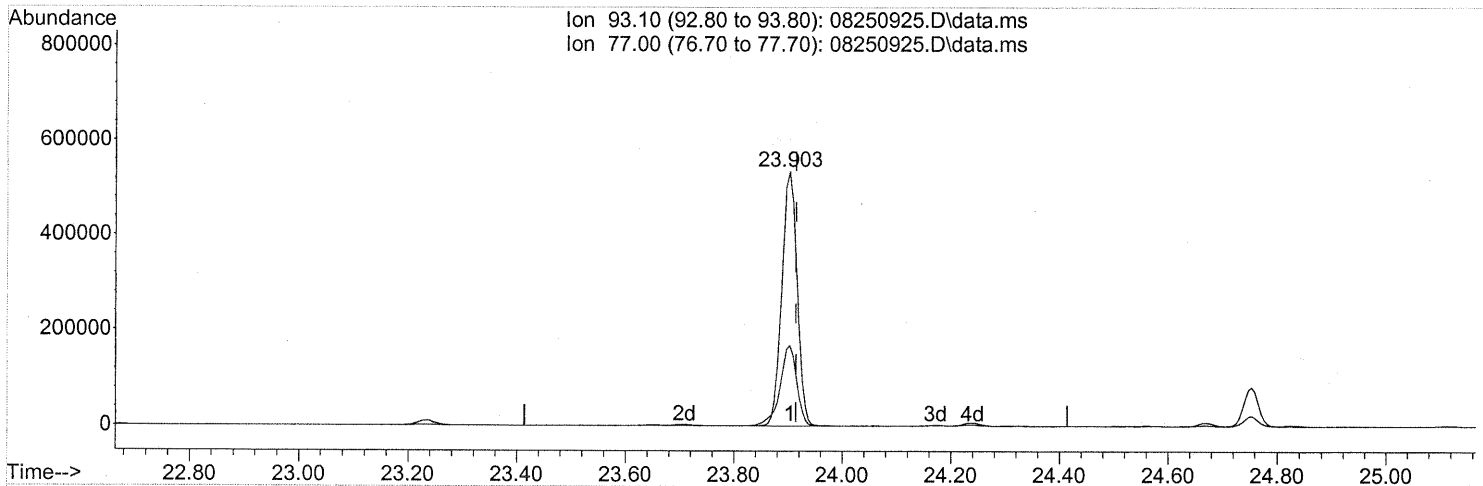
(11) Acetonitrile (T)  
 7.343min (-0.074) 33.01ng  
 response 1032462

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	52.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 26 Aug 2009 5:22  
 Operator : WA/CC  
 Sample : P0902875-005 dil (200mL)  
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 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 06:40:04 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(75) alpha-Pinene (T)  
 23.903min (-0.011) 33.60ng  
 response 1035272

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	34.39
0.00	0.00	0.00
0.00	0.00	0.00

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102269  
**Client Project ID:** 16512  
 Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01400

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-006  
 Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25 - 8/26/09  
 Volume(s) Analyzed: 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): -0.1      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.63	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	5.9	0.63	1.2	0.13	
74-87-3	Chloromethane	1.6	0.13	0.79	0.061	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.63	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.049	
106-99-0	1,3-Butadiene	ND	0.13	ND	0.057	
74-83-9	Bromomethane	ND	0.13	ND	0.032	
75-00-3	Chloroethane	ND	0.13	ND	0.047	
64-17-5	Ethanol	190	6.3	100	3.3	
75-05-8	Acetonitrile	230	0.63	140	0.37	D
107-02-8	Acrolein	7.3	0.63	3.2	0.27	
67-64-1	Acetone	150	6.3	64	2.6	
75-69-4	Trichlorofluoromethane	1.5	0.13	0.26	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	57	0.63	23	0.25	
107-13-1	Acrylonitrile	ND	0.63	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.032	
75-09-2	Methylene Chloride	ND	0.63	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.040	
76-13-1	Trichlorotrifluoroethane	0.75	0.13	0.098	0.016	
75-15-0	Carbon Disulfide	ND	0.63	ND	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	ND	0.032	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.035	
108-05-4	Vinyl Acetate	ND	6.3	ND	1.8	
78-93-3	2-Butanone (MEK)	5.9	0.63	2.0	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

9/3/09

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.

**Client Sample ID:** 102269

**Client Project ID:** 16512

CAS Project ID: P0902875

CAS Sample ID: P0902875-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: AC01400

Date Collected: 8/19/09

Date Received: 8/20/09

Date Analyzed: 8/25 - 8/26/09

Volume(s) Analyzed: 1.00 Liter(s)

0.20 Liter(s)

Initial Pressure (psig): -0.1      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.25

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
156-59-2	cis-1,2-Dichloroethene	ND	0.13	ND	0.032	
141-78-6	<b>Ethyl Acetate</b>	<b>5.0</b>	0.63	<b>1.4</b>	0.17	
110-54-3	<b>n-Hexane</b>	<b>7.0</b>	0.63	<b>2.0</b>	0.18	
67-66-3	<b>Chloroform</b>	<b>1.3</b>	0.13	<b>0.27</b>	0.026	
109-99-9	Tetrahydrofuran (THF)	ND	0.63	ND	0.21	
107-06-2	<b>1,2-Dichloroethane</b>	<b>1.4</b>	0.13	<b>0.35</b>	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.023	
71-43-2	<b>Benzene</b>	<b>7.5</b>	0.13	<b>2.4</b>	0.039	
56-23-5	<b>Carbon Tetrachloride</b>	<b>1.3</b>	0.13	<b>0.20</b>	0.020	
110-82-7	<b>Cyclohexane</b>	<b>1.5</b>	0.63	<b>0.44</b>	0.18	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.019	
79-01-6	Trichloroethene	ND	0.13	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.63	ND	0.17	
80-62-6	Methyl Methacrylate	ND	0.63	ND	0.15	
142-82-5	<b>n-Heptane</b>	<b>3.2</b>	0.63	<b>0.78</b>	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.63	ND	0.14	
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.0</b>	0.63	<b>0.25</b>	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.63	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.023	
108-88-3	<b>Toluene</b>	<b>30</b>	0.63	<b>7.9</b>	0.17	
591-78-6	<b>2-Hexanone</b>	<b>2.1</b>	0.63	<b>0.51</b>	0.15	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.016	
123-86-4	<b>n-Butyl Acetate</b>	<b>3.4</b>	0.63	<b>0.72</b>	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 102269  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01400

CAS Project ID: P0902875  
 CAS Sample ID: P0902875-006

Date Collected: 8/19/09  
 Date Received: 8/20/09  
 Date Analyzed: 8/25 - 8/26/09  
 Volume(s) Analyzed: 1.00 Liter(s)  
 0.20 Liter(s)

Initial Pressure (psig): -0.1      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	1.6	0.63	0.34	0.13	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.018	
108-90-7	Chlorobenzene	ND	0.13	ND	0.027	
100-41-4	Ethylbenzene	5.4	0.63	1.2	0.14	
179601-23-1	m,p-Xylenes	19	0.63	4.4	0.14	
75-25-2	Bromoform	ND	0.63	ND	0.060	
100-42-5	Styrene	5.0	0.63	1.2	0.15	
95-47-6	o-Xylene	6.9	0.63	1.6	0.14	
111-84-2	n-Nonane	1.0	0.63	0.20	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.018	
98-82-8	Cumene	ND	0.63	ND	0.13	
80-56-8	alpha-Pinene	270	0.63	48	0.11	D
103-65-1	n-Propylbenzene	0.82	0.63	0.17	0.13	
622-96-8	4-Ethyltoluene	1.4	0.63	0.29	0.13	
108-67-8	1,3,5-Trimethylbenzene	1.1	0.63	0.23	0.13	
95-63-6	1,2,4-Trimethylbenzene	3.9	0.63	0.78	0.13	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.13	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.021	
5989-27-5	d-Limonene	42	0.63	7.6	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.63	ND	0.065	
120-82-1	1,2,4-Trichlorobenzene	ND	0.63	ND	0.084	
91-20-3	Naphthalene	0.80	0.63	0.15	0.12	
87-68-3	Hexachlorobutadiene	ND	0.63	ND	0.059	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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D = The reported result is from a dilution.

Verified By: \_\_\_\_\_

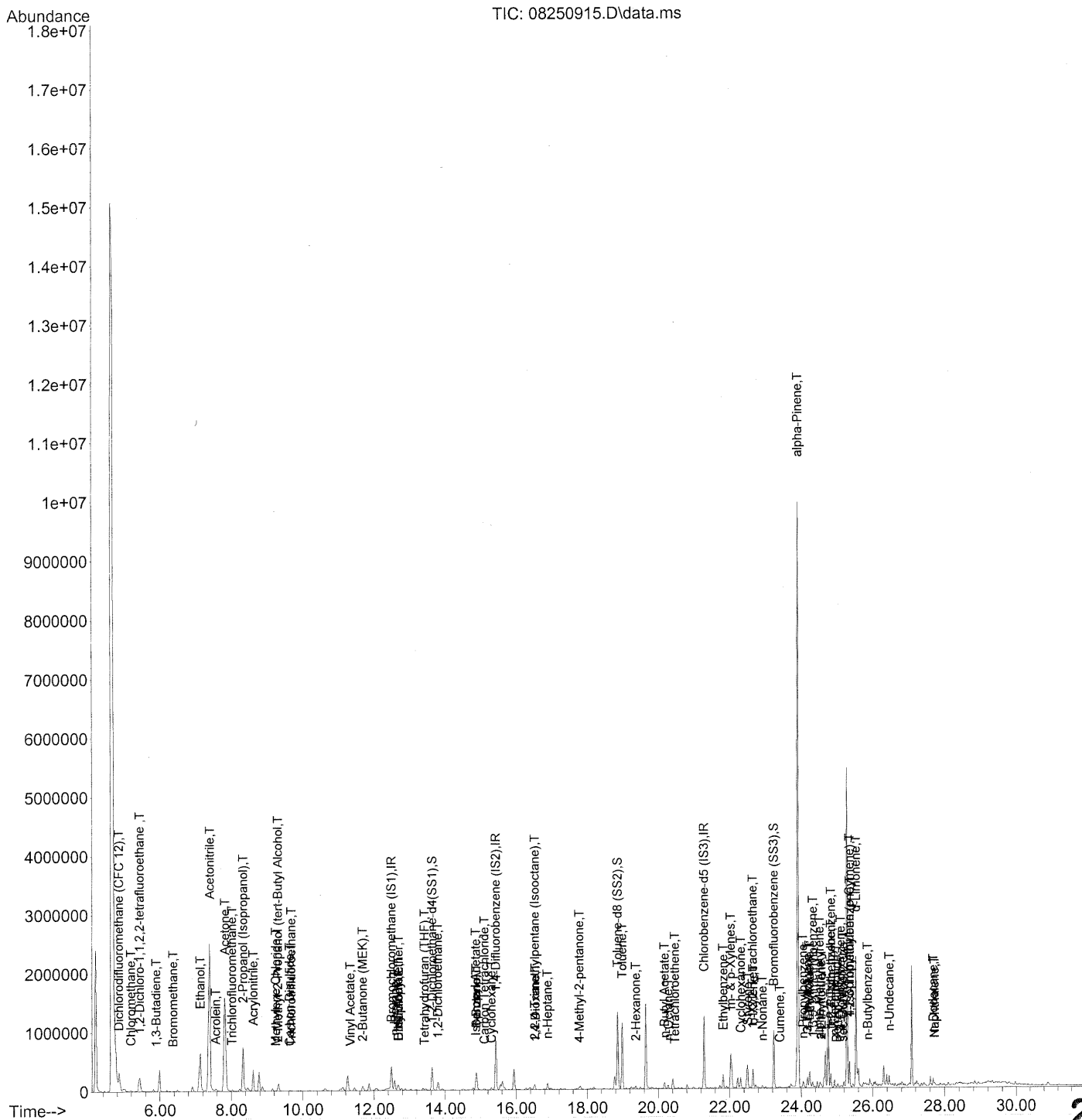
Date: \_\_\_\_\_

9/3/09

**213**

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 8:54 pm  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 10:13:46 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 8:54 pm  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 10:13:46 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*179/3/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	207391	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.42	114	1050568	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	504935	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.63	65	390037	21.638	ng	-0.03
Spiked Amount	25.000		Recovery	=	86.56%	
57) Toluene-d8 (SS2)	18.85	98	1142573	25.897	ng	-0.02
Spiked Amount	25.000		Recovery	=	103.60%	
73) Bromofluorobenzene (SS3)	23.23	174	317666	27.303	ng	-0.01
Spiked Amount	25.000		Recovery	=	109.20%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	0.00	42	0	N.D.	d	
3) Dichlorodifluoromethan...	<u>4.85</u>	85	109178	<u>4.694</u>	ng	96
4) Chloromethane	<u>5.19</u>	50	20416	<u>1.306</u>	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	5.43	135	973	<del>0.103</del>	ng	# 60
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.90	54	614	<del>0.057</del>	ng	# 19
8) Bromomethane	6.37	94	727	<del>0.080</del>	ng	83
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	<u>7.13</u>	45	1388346	<u>153.901</u>	ng	100
11) Acetonitrile	7.40	41	4772195	<del>180.636</del>	ng	<i>sent</i> 100
12) Acrolein	<u>7.57</u>	56	40082	<u>5.837</u>	ng	96
13) Acetone	<u>7.82</u>	58	1040900	<u>122.291</u>	ng	100
14) Trichlorofluoromethane	<u>8.02</u>	101	24493	<u>1.165</u>	ng	99
15) 2-Propanol (Isopropanol)	<u>8.33</u>	45	1512928	<u>45.231</u>	ng	99
16) Acrylonitrile	8.62	53	7237	<del>0.471</del>	ng	# 49
17) 1,1-Dichloroethene	9.02	96	90	N.D.		
18) 2-Methyl-2-Propanol (t...	9.30	59	9139	0.308	ng	# 1
19) Methylene Chloride	9.25	84	5315	<del>0.465</del>	ng	88
20) 3-Chloro-1-propene (Al...	9.44	41	187	N.D.		
21) Trichlorotrifluoroethane	<u>9.67</u>	151	4587	<u>0.600</u>	ng	95
22) Carbon Disulfide	9.63	76	16960	<del>0.421</del>	ng	95
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.14	73	91	N.D.		
26) Vinyl Acetate	11.33	86	105	<del>0.061</del>	ng	# 1
27) 2-Butanone (MEK)	<u>11.68</u>	72	36190	<u>4.709</u>	ng	# 90
28) cis-1,2-Dichloroethene	12.40	61	187	N.D.		
29) Diisopropyl Ether	12.69	87	2321	0.226	ng	# 1
30) Ethyl Acetate	<u>12.68</u>	61	16066	<u>4.013</u>	ng	98
31) n-Hexane	<u>12.58</u>	57	114094	<u>5.571</u>	ng	99

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 8:54 pm  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 10:13:46 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.69	83	18937	1.050 ng		99
34) Tetrahydrofuran (THF)	13.42	72	2407	0.294 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	18499	1.123 ng		96
38) 1,1,1-Trichloroethane	14.17	97	210	N.D.		
39) Isopropyl Acetate	14.85	61	2131	0.273 ng	#	1
40) 1-Butanol	14.87	56	78310	5.743 ng		81
41) Benzene	14.87	78	278047	6.020 ng		99
42) Carbon Tetrachloride	15.10	117	15112	1.027 ng		98
43) Cyclohexane	15.29	84	20441	1.208 ng		93
44) tert-Amyl Methyl Ether	15.68	73	91	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.53	88	842	0.095 ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	88769	1.632 ng		86
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	16.88	71	31603	2.549 ng		98
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.77	58	9226	0.831 ng		96
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	1026250	23.668 ng		100
59) 2-Hexanone	19.36	43	48201	1.672 ng		97
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	92335	2.717 ng		96
63) n-Octane	20.28	57	13305	1.269 ng		98
64) Tetrachloroethene	20.46	166	502	0.050 ng	#	57
65) Chlorobenzene	21.36	112	1129	N.D.		
66) Ethylbenzene	21.82	91	214039	4.318 ng		98
67) m- & p-Xylenes	22.03	91	611380	15.248 ng		97
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.50	104	115103	3.972 ng		97
70) o-Xylene	22.65	91	222225	5.528 ng		98
71) n-Nonane	22.91	43	22384	0.838 ng		93
72) 1,1,2,2-Tetrachloroethane	22.64	83	973	0.055 ng	#	18
74) Cumene	23.40	105	11183	0.220 ng		96
75) alpha-Pinene	23.91	93	4989373	191.673 ng	See A11	95
76) n-Propylbenzene	24.05	91	41682	0.653 ng		80
77) 3-Ethyltoluene	24.17	105	96844	1.995 ng		100
78) 4-Ethyltoluene	24.22	105	53076	1.129 ng		95
79) 1,3,5-Trimethylbenzene	24.32	105	35942	0.906 ng		96



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 8:54 pm  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 10:13:46 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

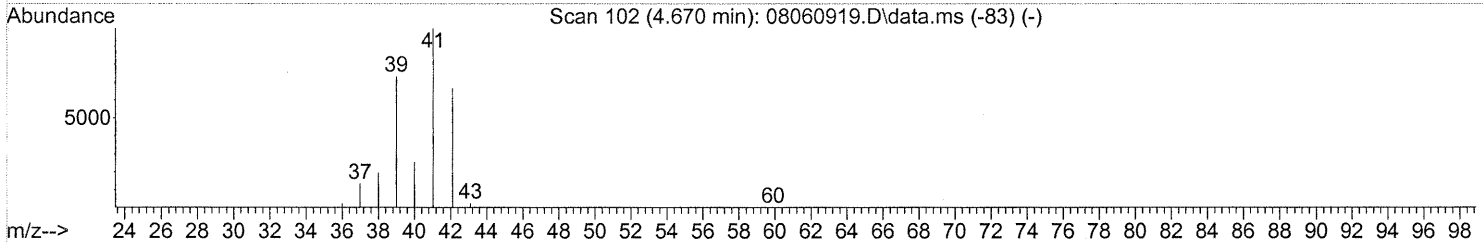
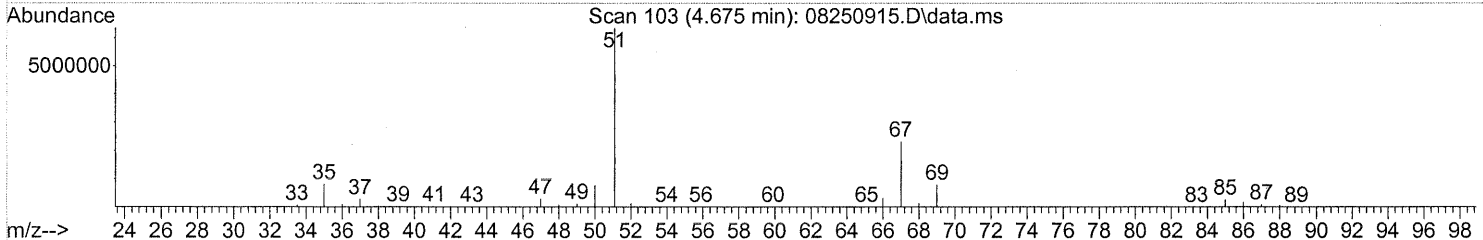
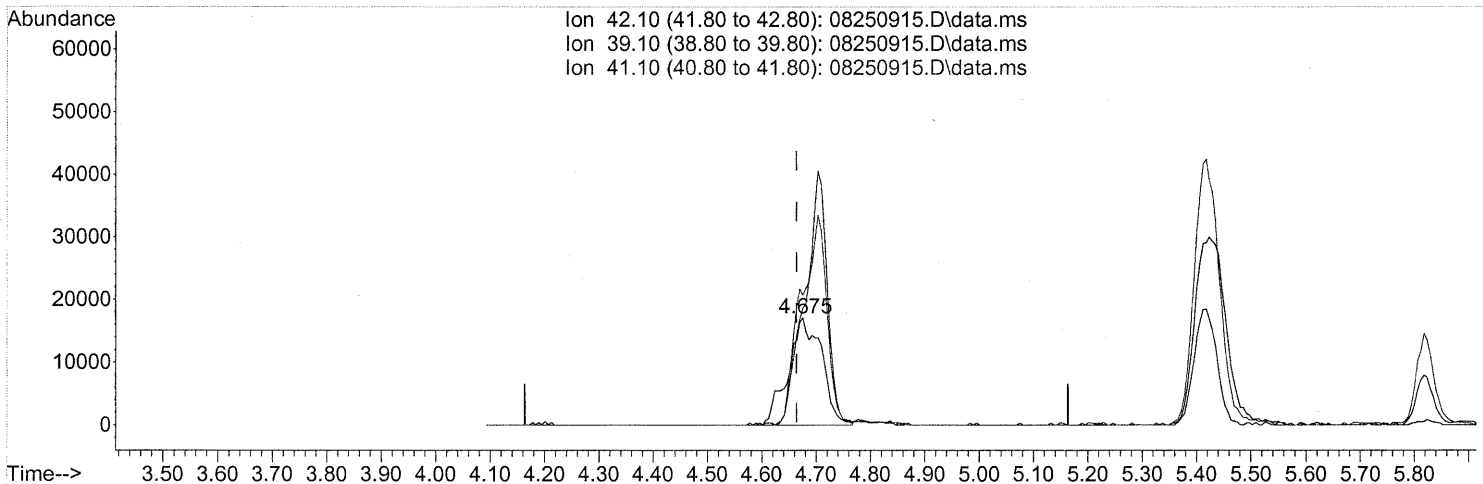
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	2425	0.114	ng	# 1
81) 2-Ethyltoluene	24.56	105	34444	0.704	ng	78
82) 1,2,4-Trimethylbenzene	24.83	105	124582	3.080	ng	90
83) n-Decane	24.93	57	48649	1.850	ng	89
84) Benzyl Chloride	24.99	91	2892	0.076	ng	66
85) 1,3-Dichlorobenzene	25.10	146	1186	0.058	ng	97
86) 1,4-Dichlorobenzene	25.10	146	1186	0.054	ng	96
87) sec-Butylbenzene	25.17	105	3600	0.066	ng	# 75
88) 4-Isopropyltoluene (p-...	25.35	119	220105	4.518	ng	# 93
89) 1,2,3-Trimethylbenzene	25.35	105	39897	0.968	ng	# 42
90) 1,2-Dichlorobenzene	25.10	146	1186	0.061	ng	94
91) d-Limonene	25.53	68	580045	33.724	ng	# 69
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	56823	2.031	ng	81
94) 1,2,4-Trichlorobenzene	27.58	180	190	N.D.		
95) Naphthalene	27.72	128	35317	0.643	ng	98
96) n-Dodecane	27.69	57	42261	1.300	ng	92
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	98693	5.494	ng	95
99) tert-Butylbenzene	24.83	119	15485	0.396	ng	# 56
100) n-Butylbenzene	25.86	91	16045	0.356	ng	# 61

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(2) Propene (T)

4.675min (+0.011) 5.13ng

response 72944

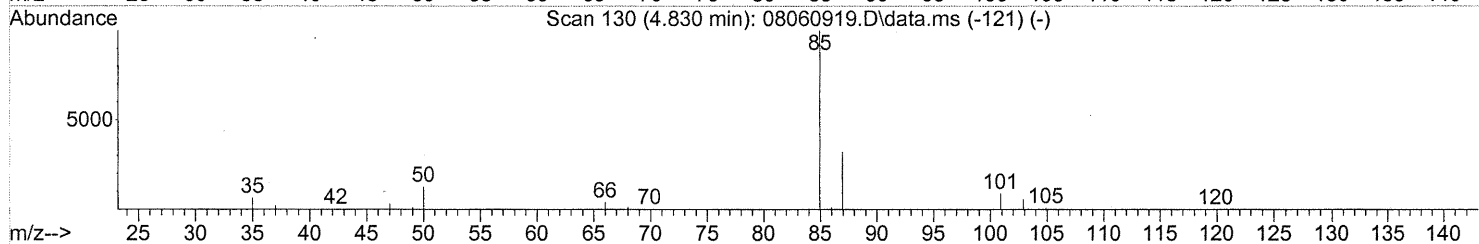
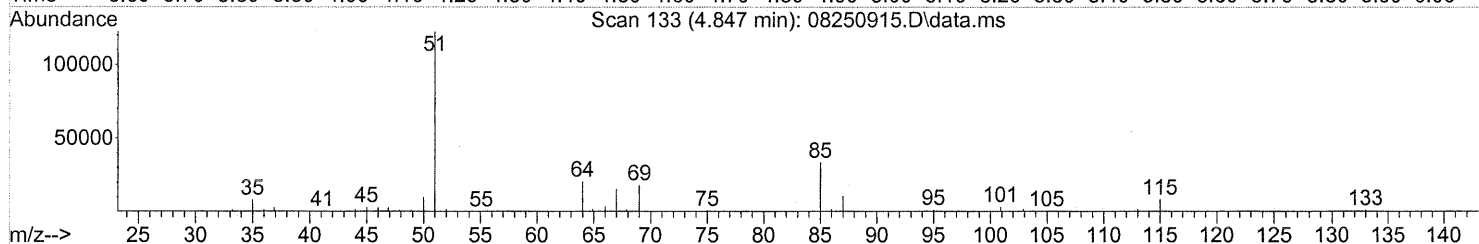
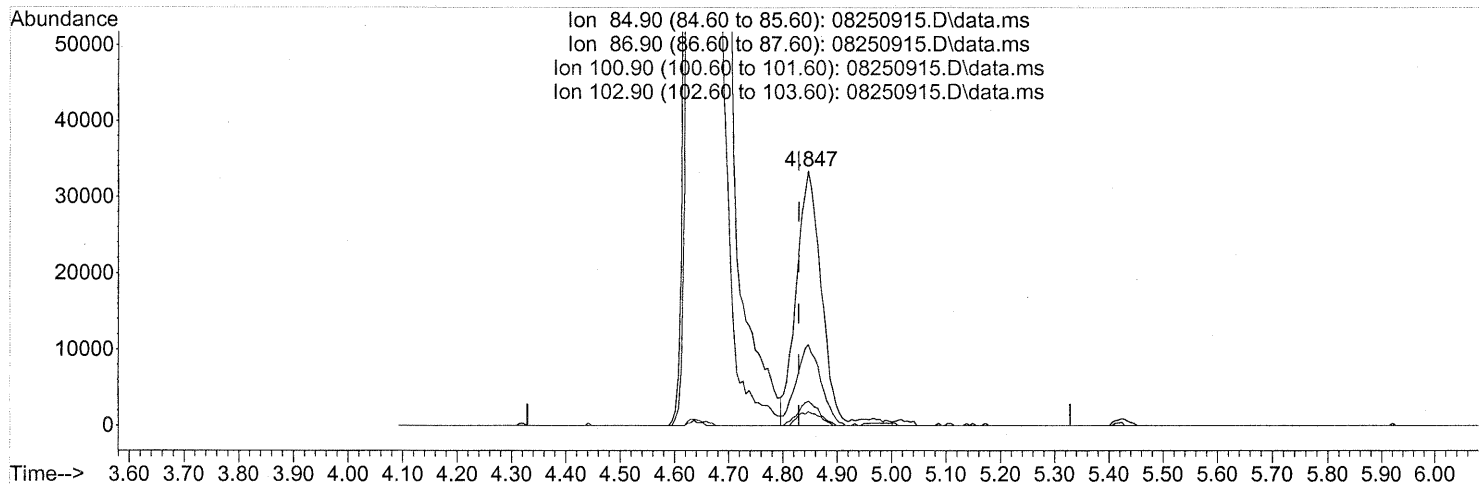
Ion	Exp%	Act%
42.10	100	100
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

*FP*  
*11/9/09*  
*12/13/01*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.847min (+0.017) 4.69ng

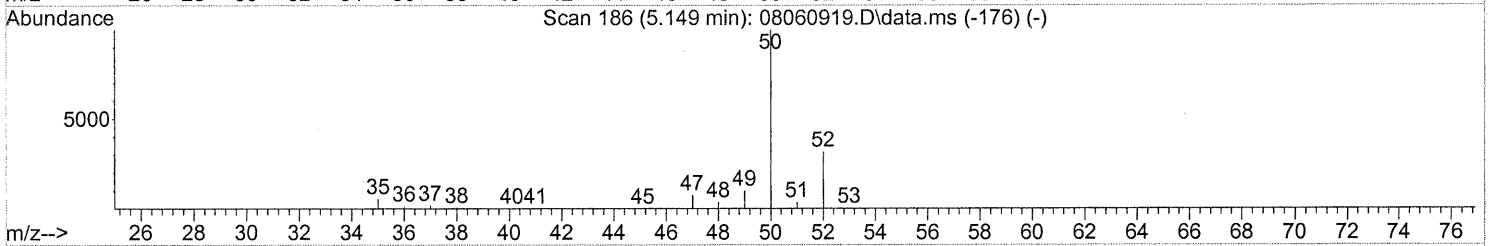
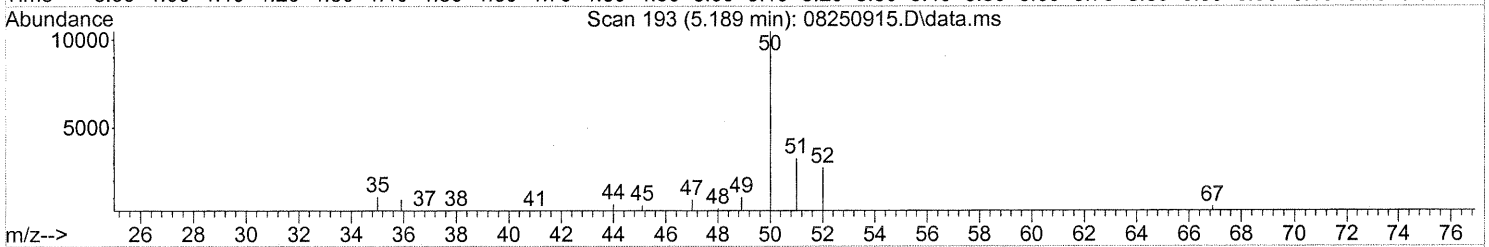
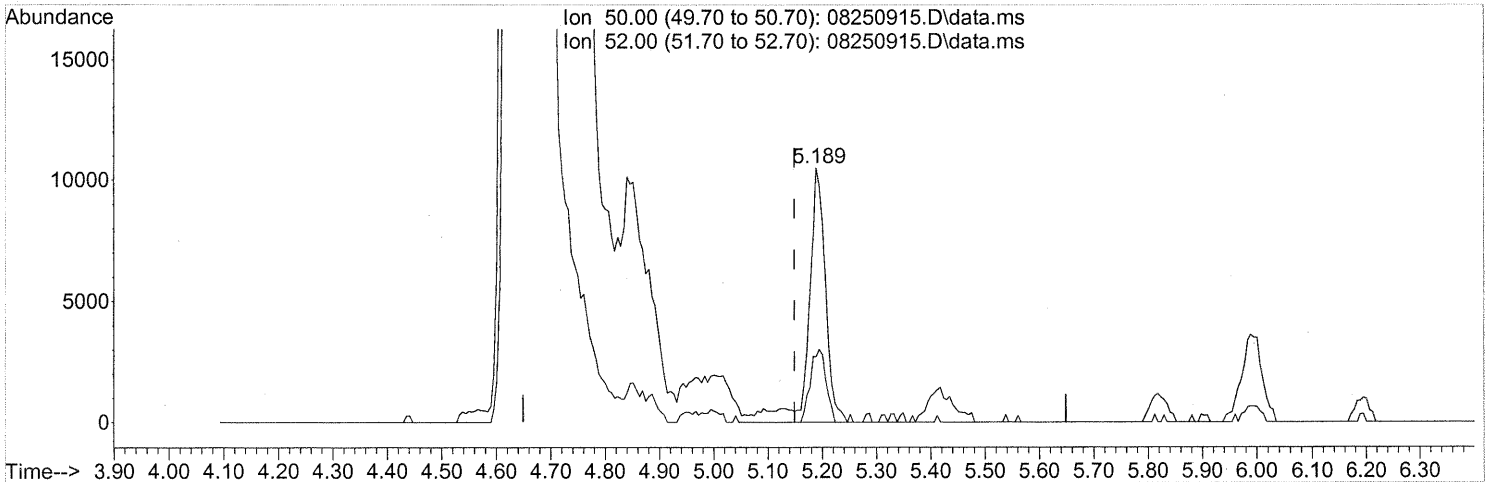
response 109178

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	30.50
100.90	8.80	7.91
102.90	5.20	4.57

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(4) Chloromethane (T)

5.189min (+0.040) 1.31ng

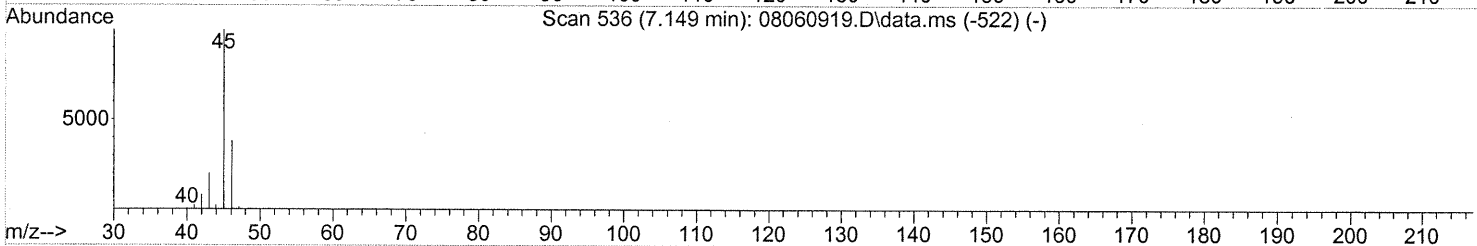
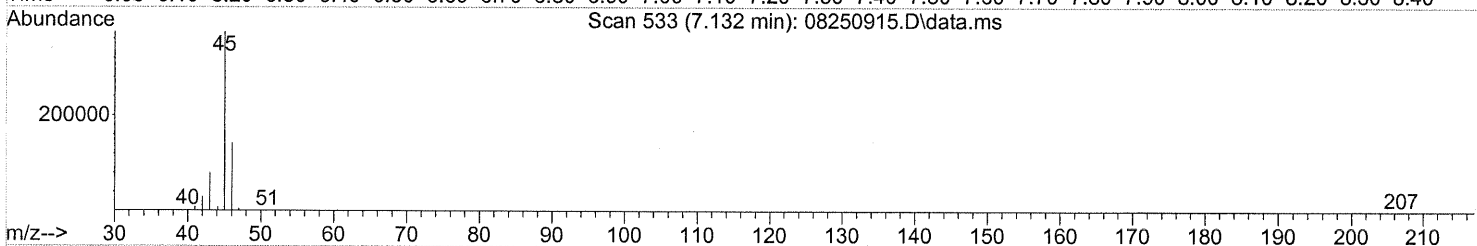
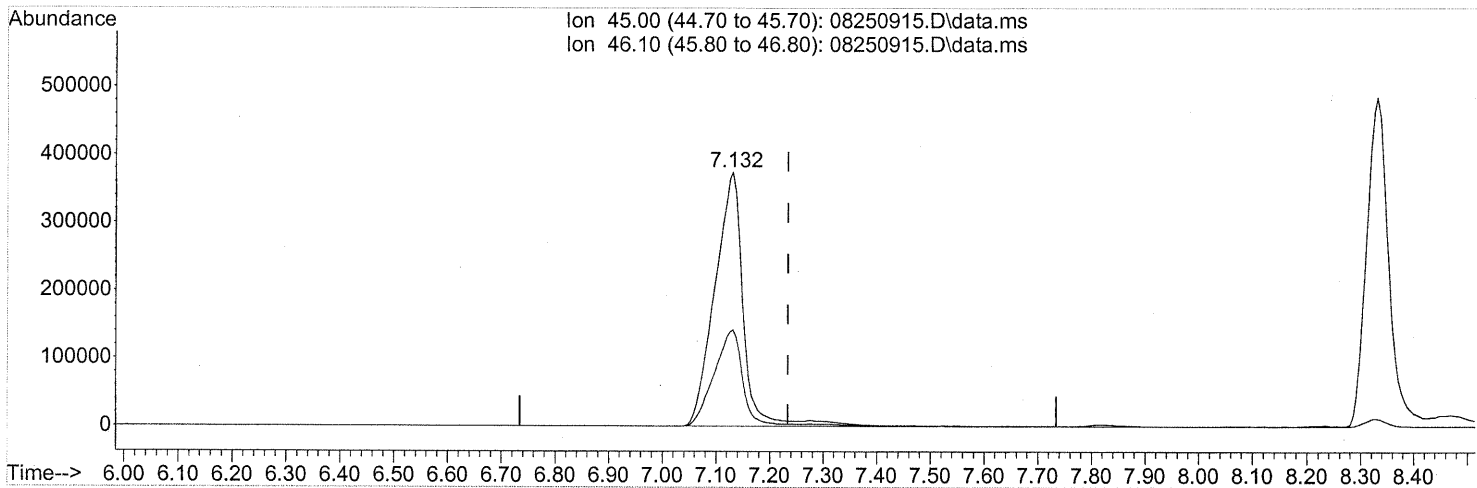
response 20416

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(10) Ethanol (T)

7.132min (-0.103) 153.90ng

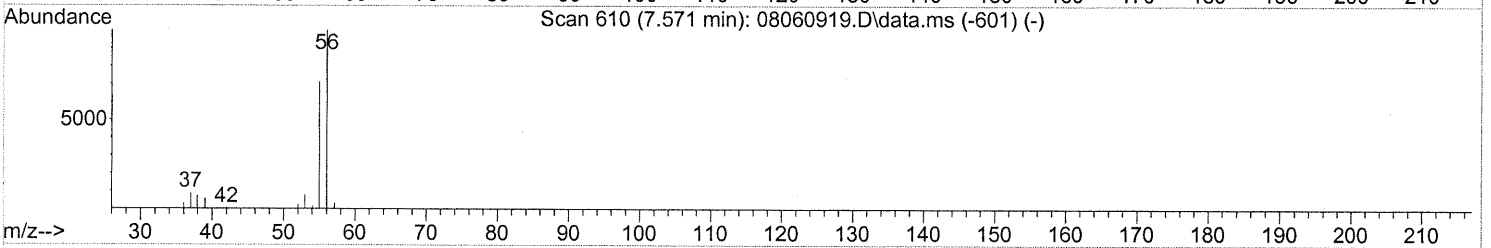
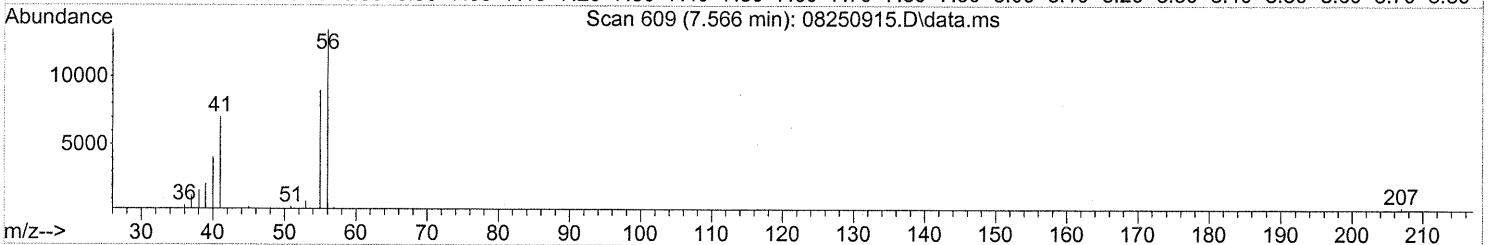
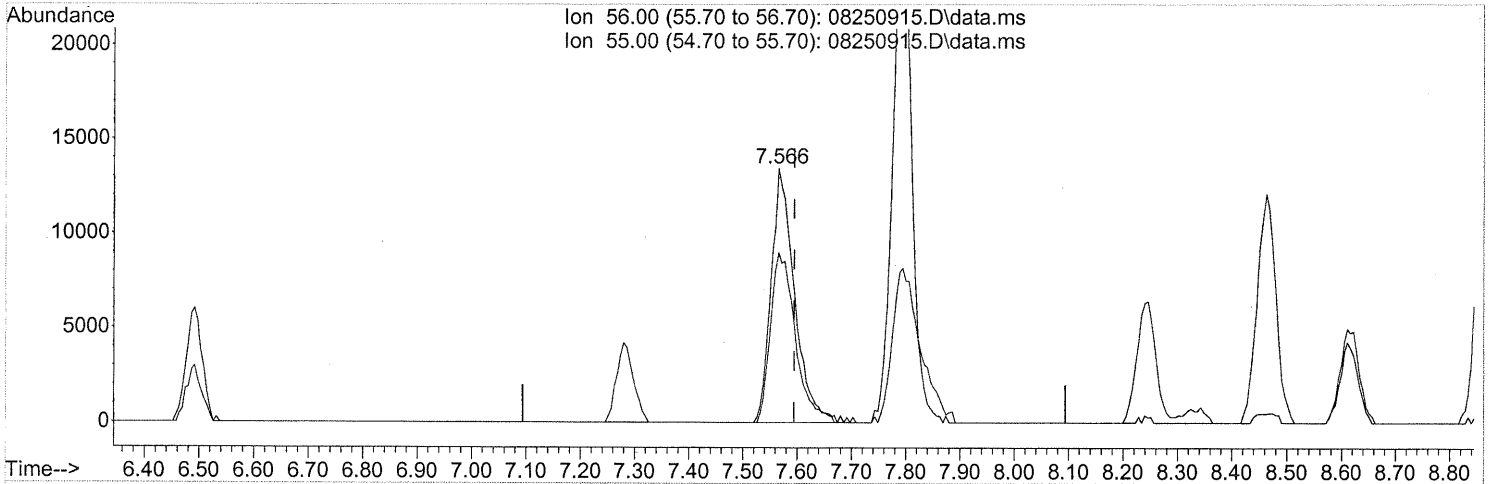
response 1388346

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.60
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(12) Acrolein (T)

7.566min (-0.029) 5.84ng

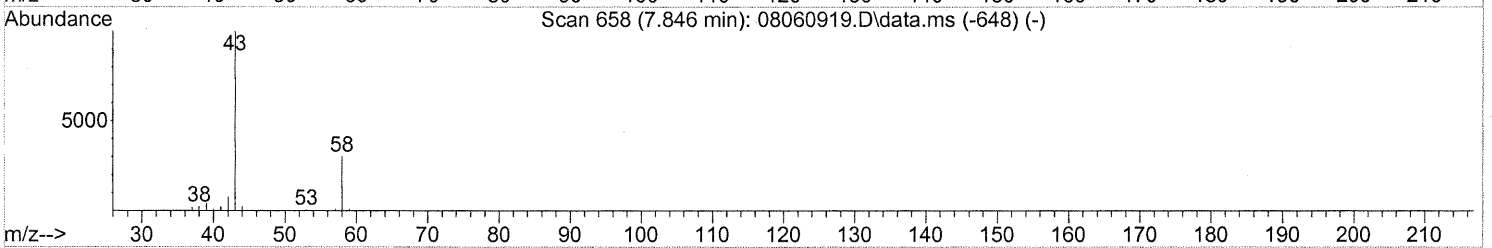
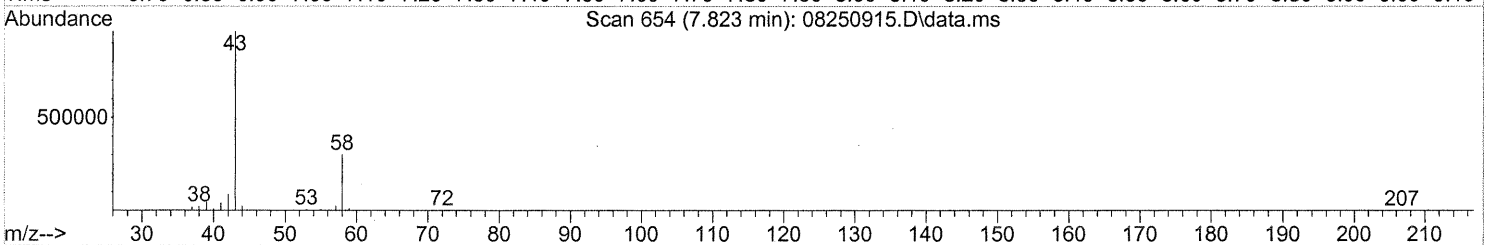
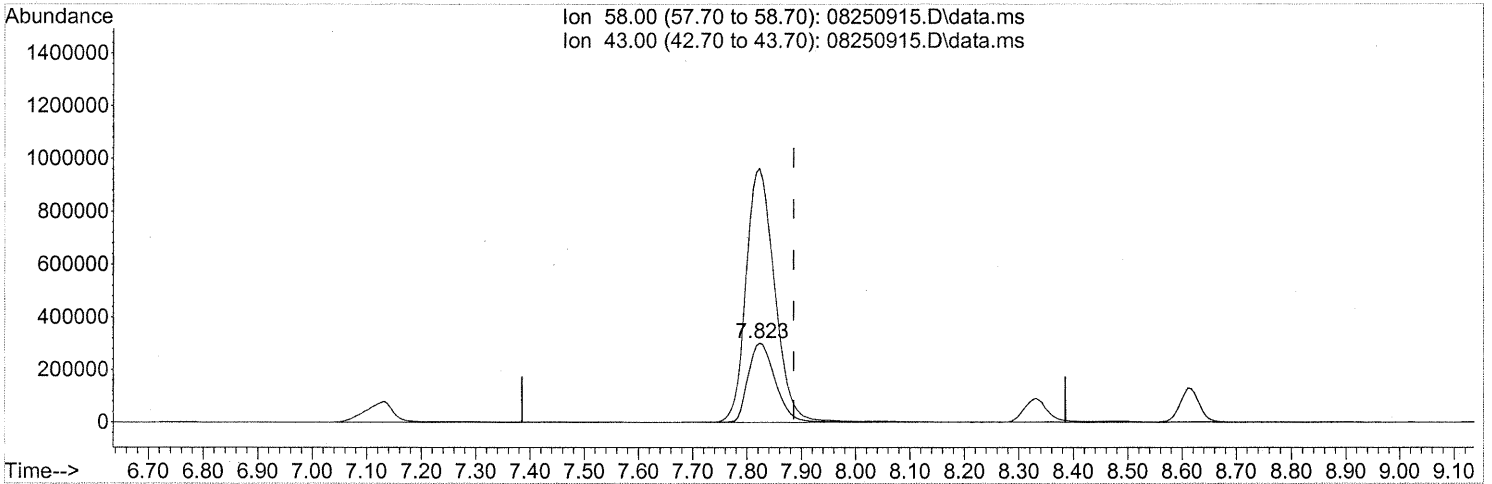
response 40082

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	71.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(13) Acetone (T)

7.823min (-0.063) 122.29ng

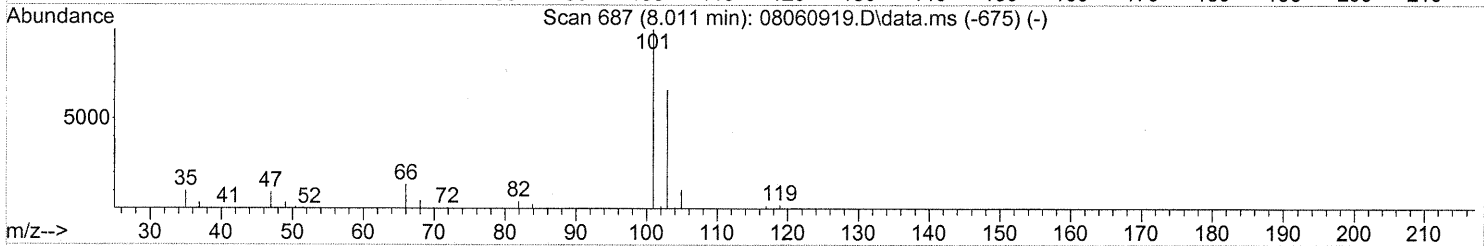
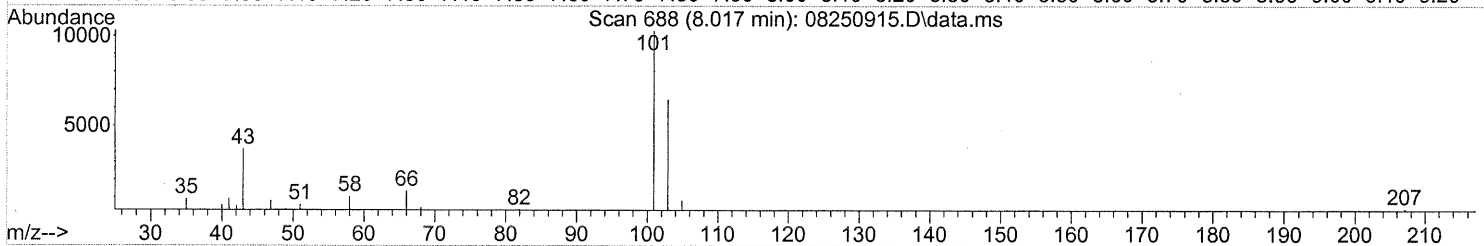
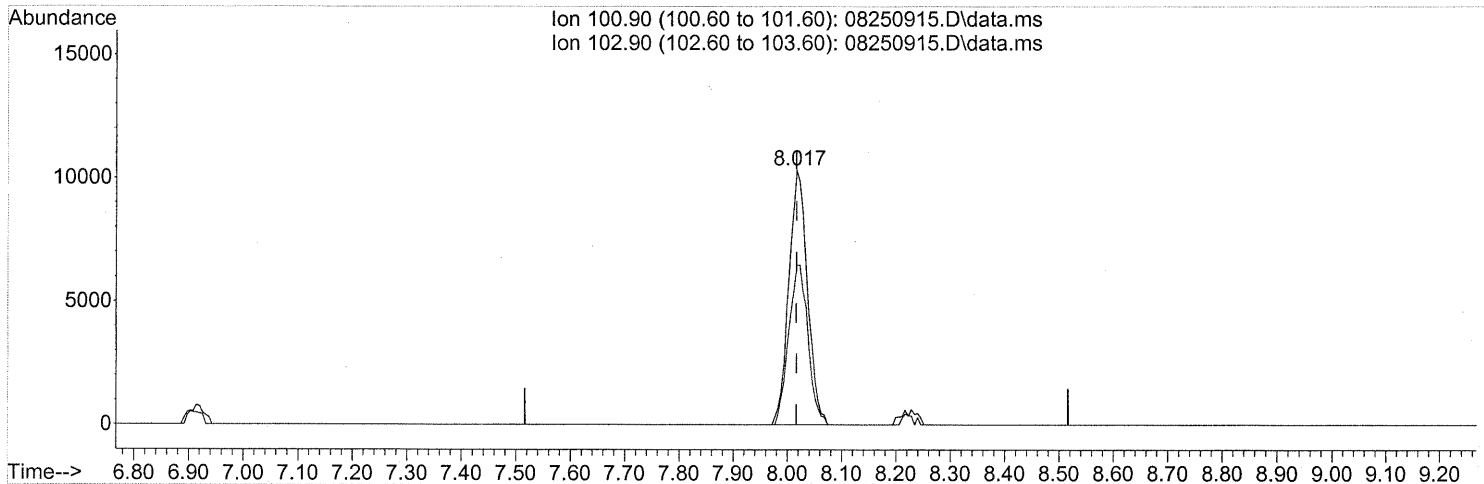
response 1040900

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	339.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(14) Trichlorofluoromethane (T)

8.017min (0.000) 1.16ng

response 24493

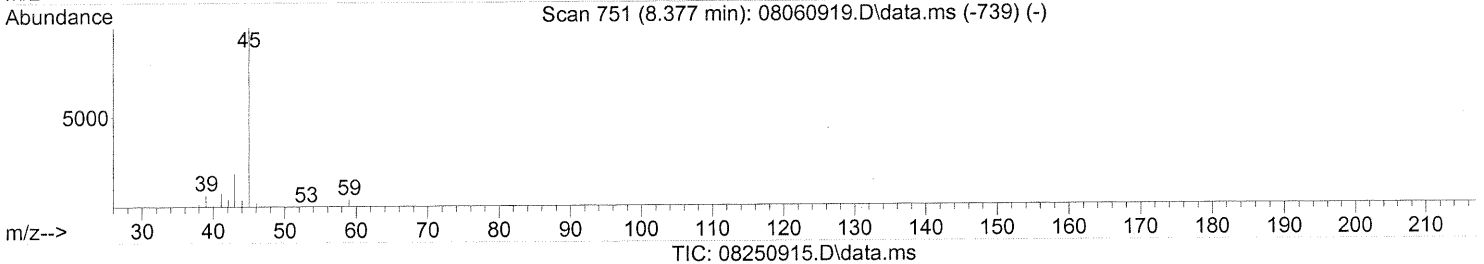
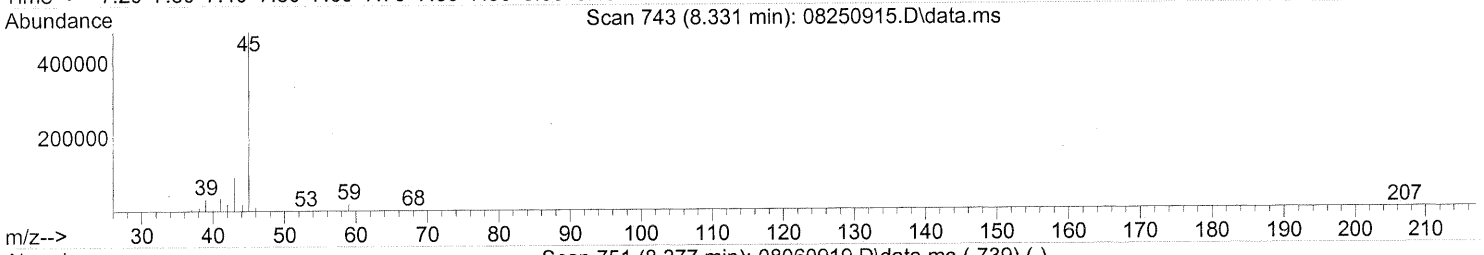
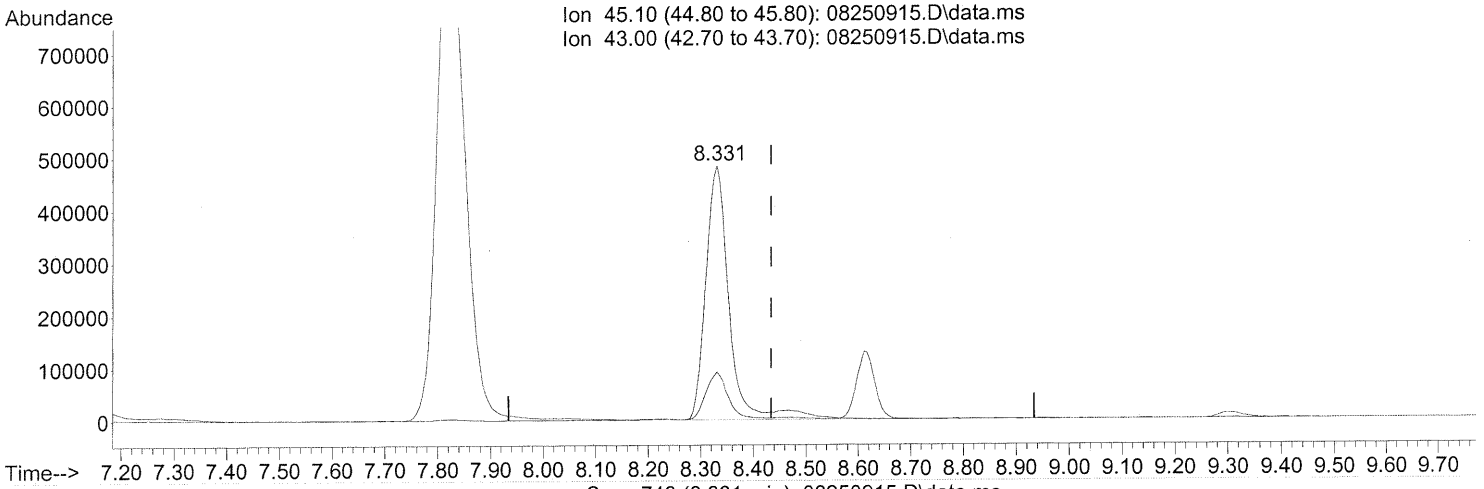
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.04
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 8:54 pm  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 10:13:46 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



(15) 2-Propanol (Isopropanol) (T)

8.331min (-0.103) 45.23ng

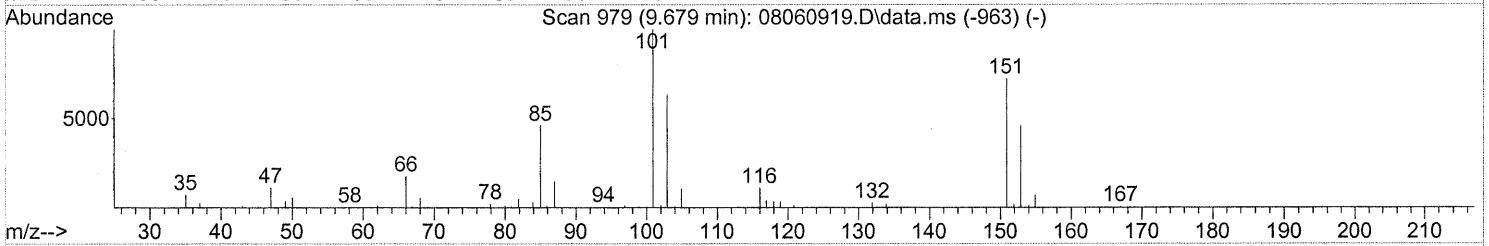
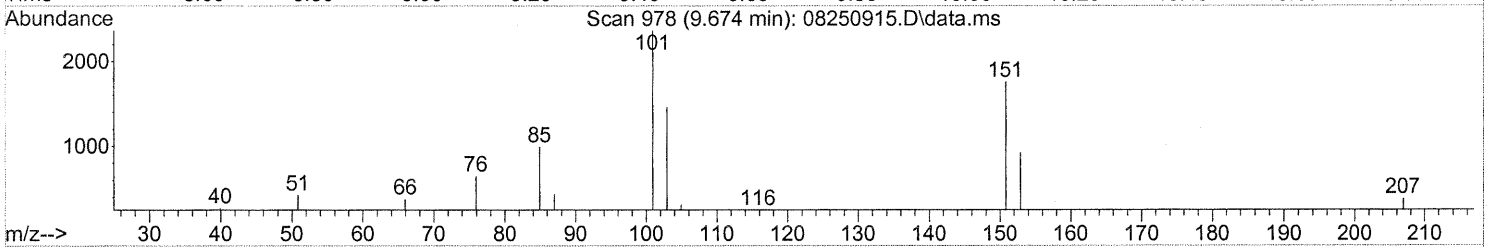
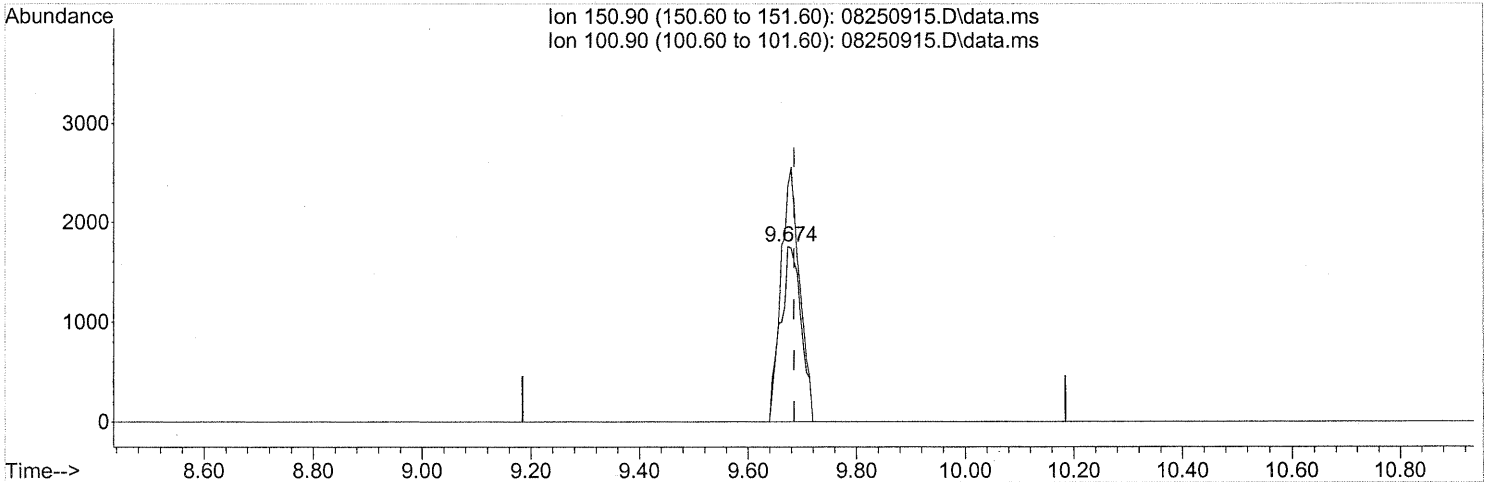
response 1512928

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.674min (-0.011) 0.60ng

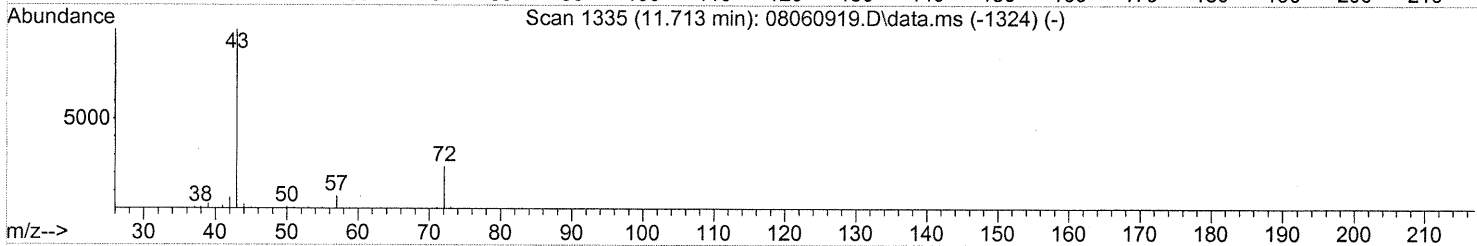
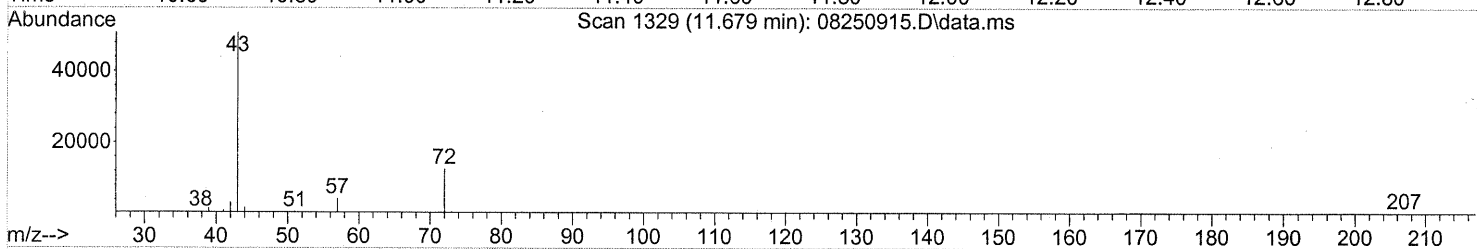
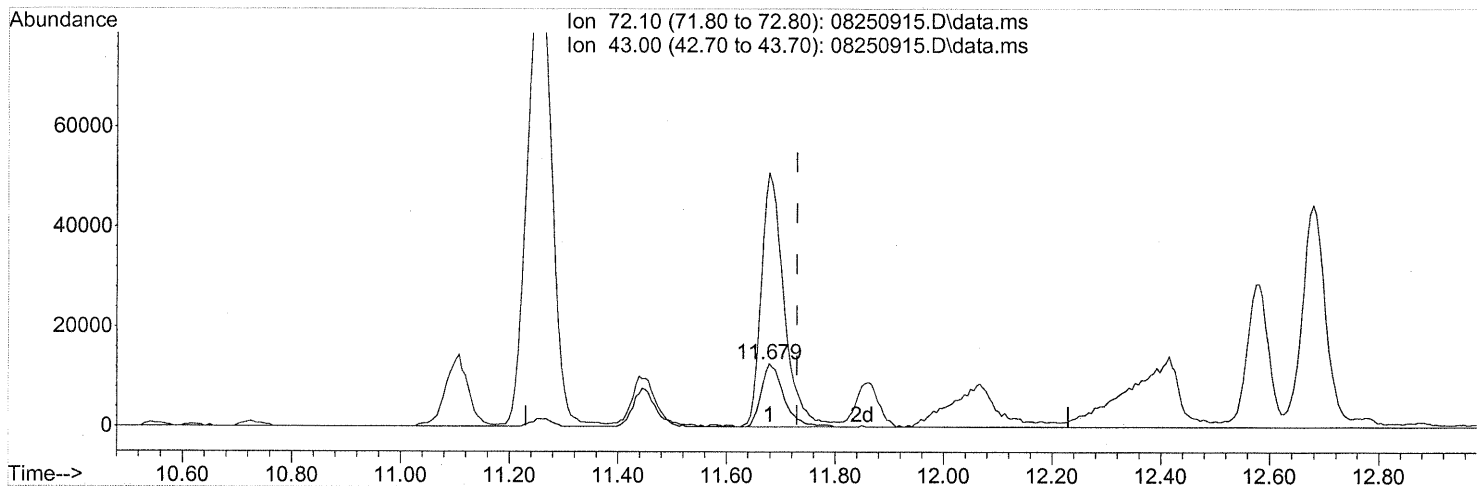
response 4587

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	132.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(27) 2-Butanone (MEK) (T)

11.679min (-0.051) 4.71ng

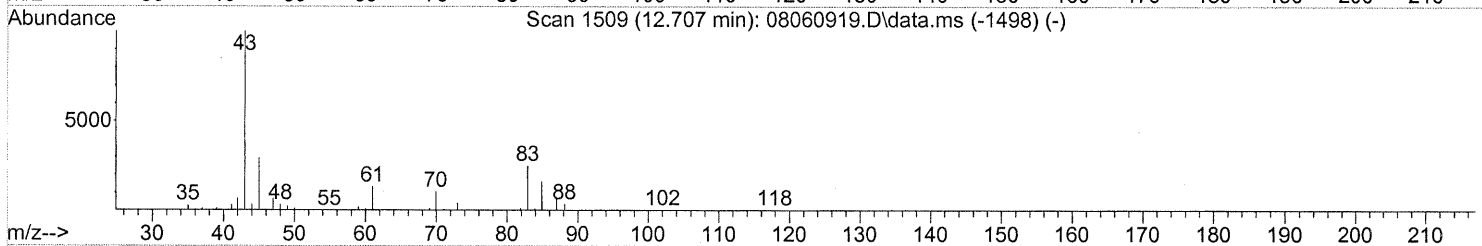
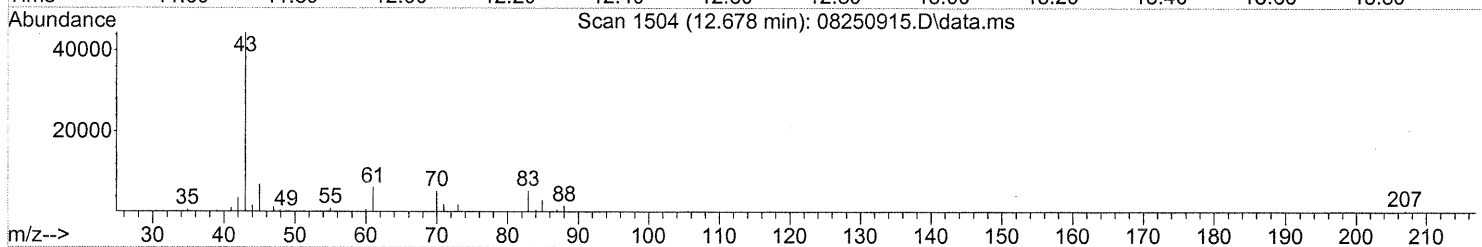
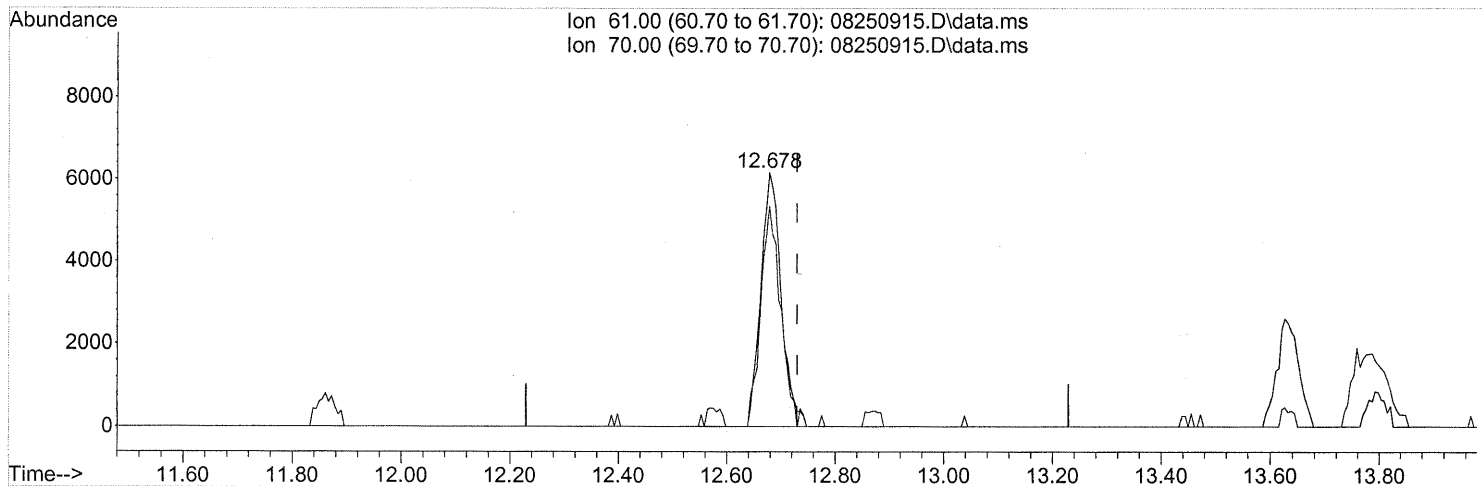
response 36190

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	411.63#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(30) Ethyl Acetate (T)

12.678min (-0.051) 4.01ng

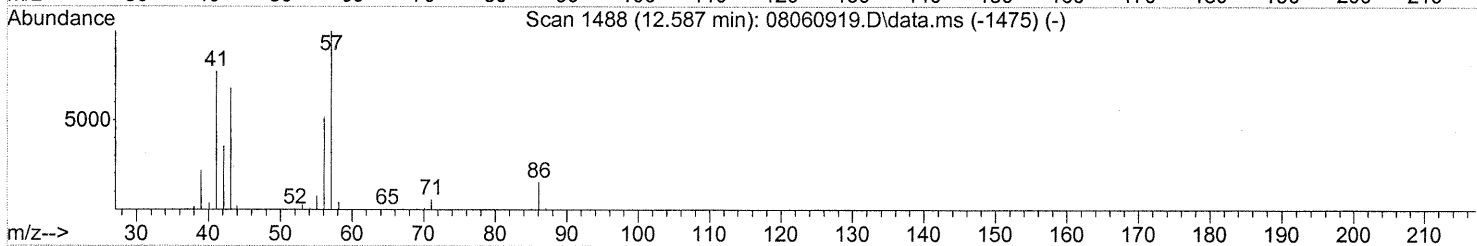
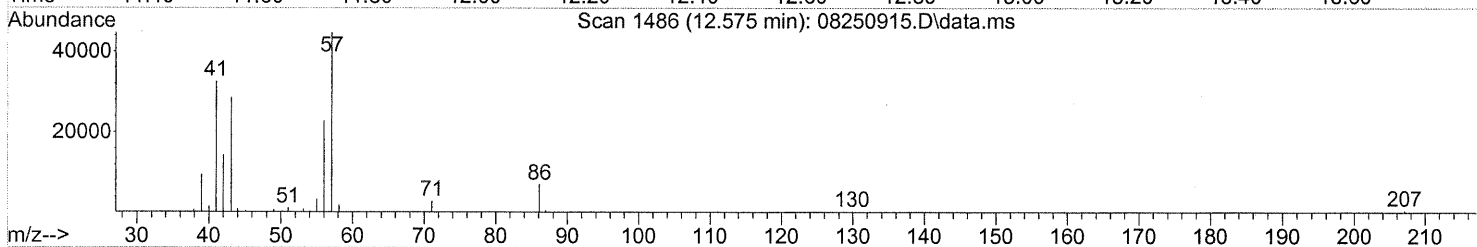
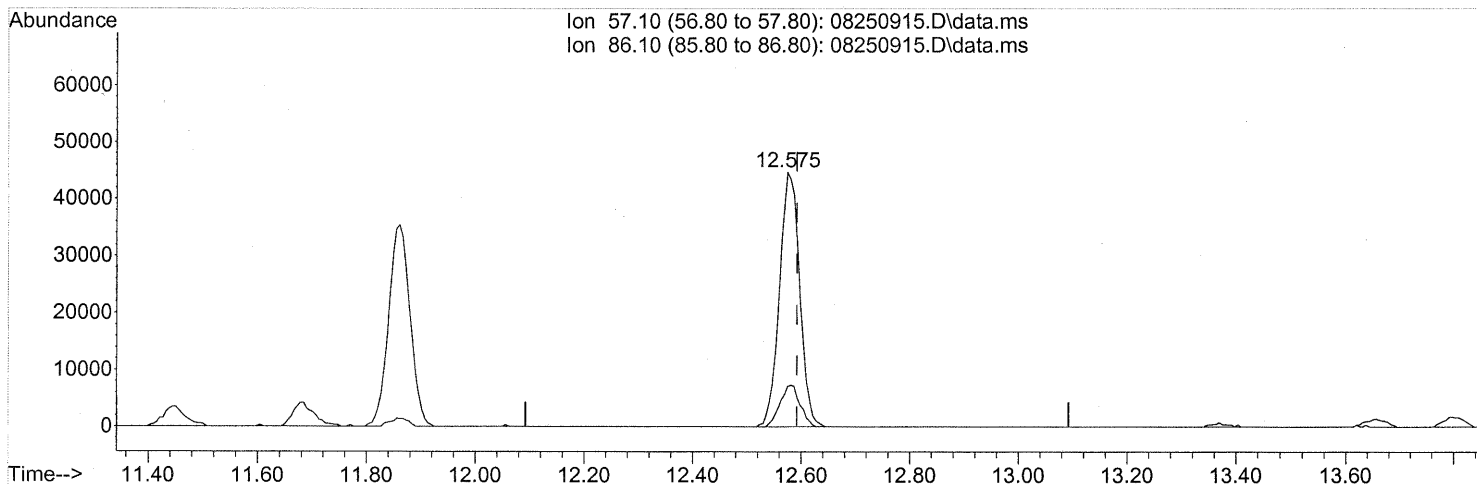
response 16066

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	84.11
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

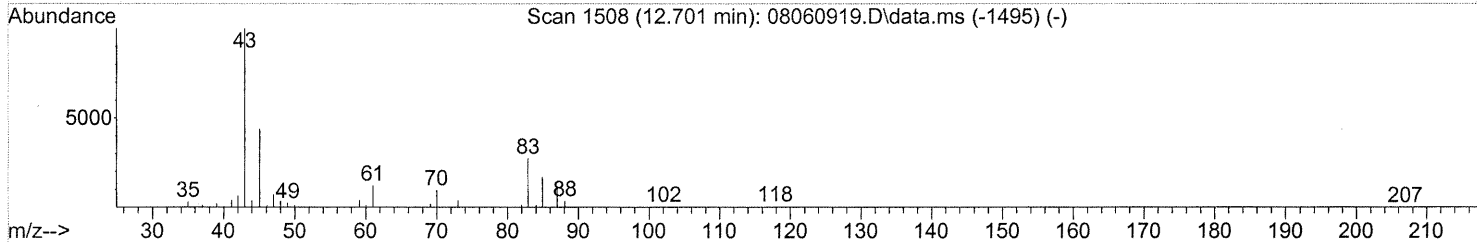
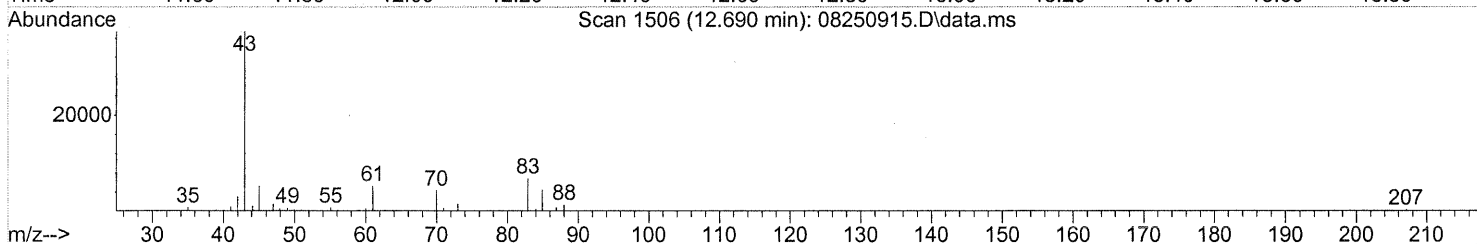
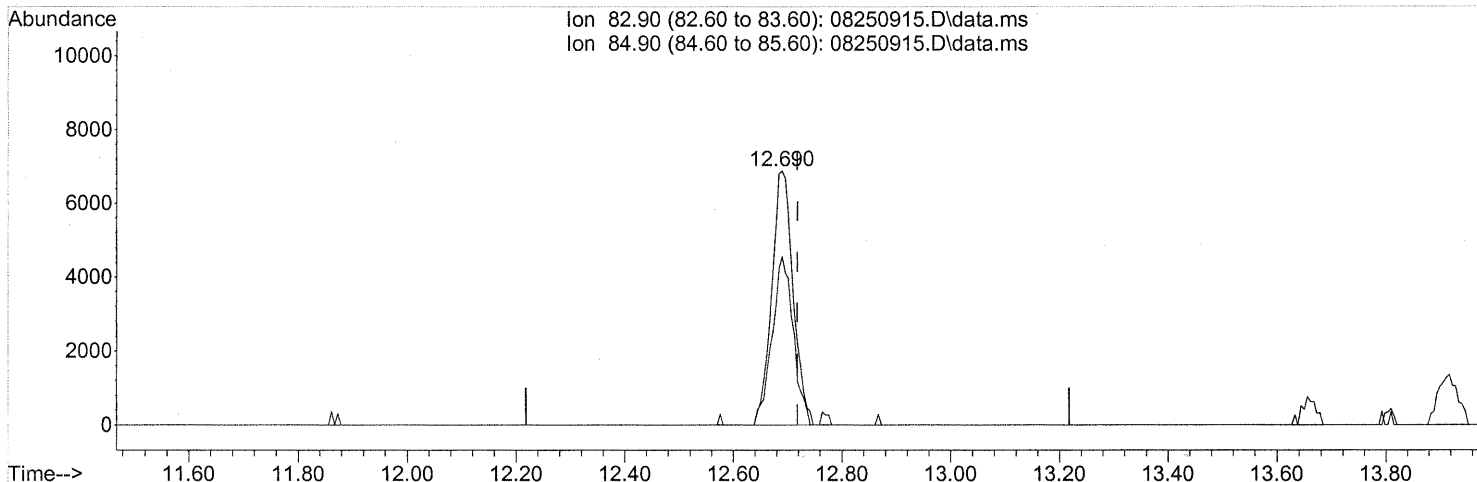
(31) n-Hexane (T)  
 12.575min (-0.017) 5.57ng  
 response 114094

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	16.13
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(32) Chloroform (T)

12.690min (-0.029) 1.05ng

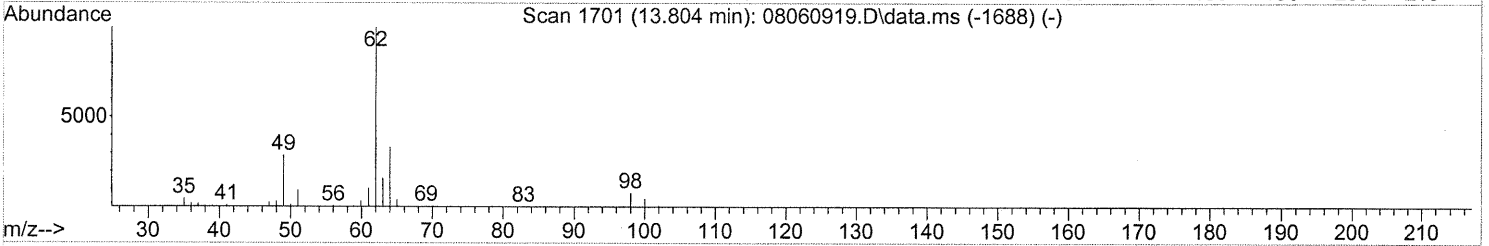
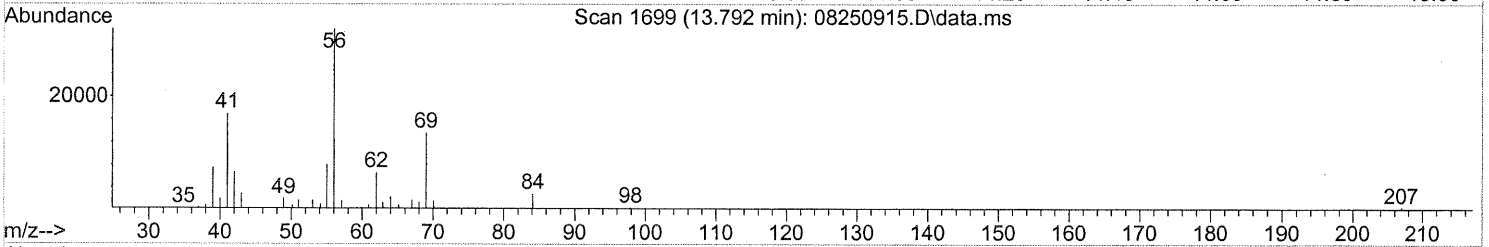
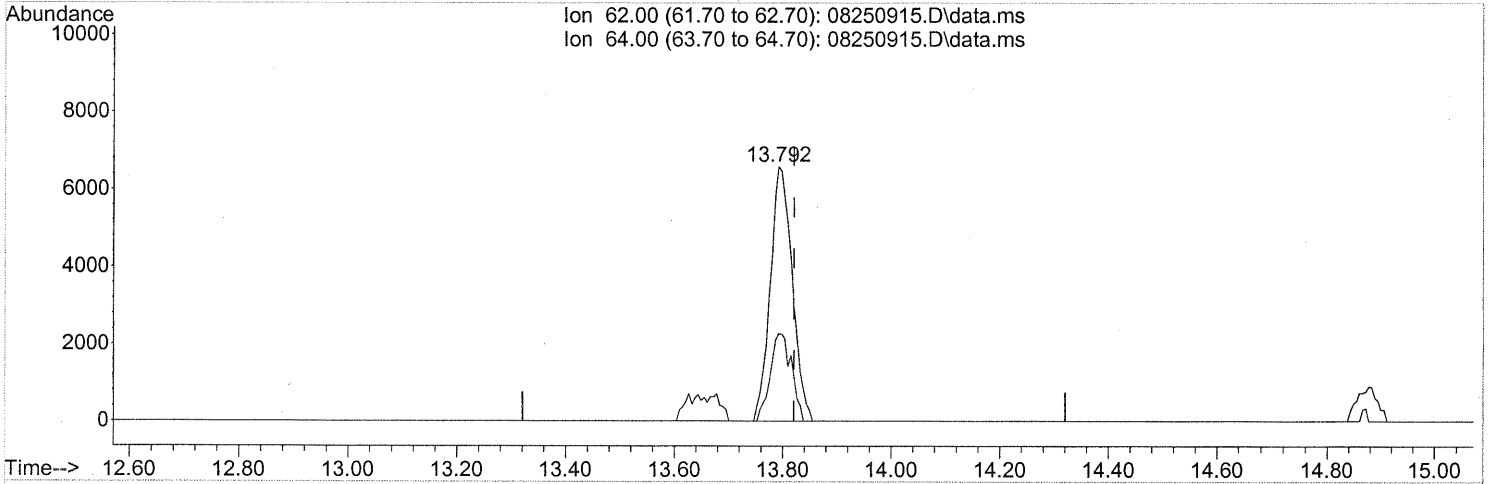
response 18937

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	65.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.12ng

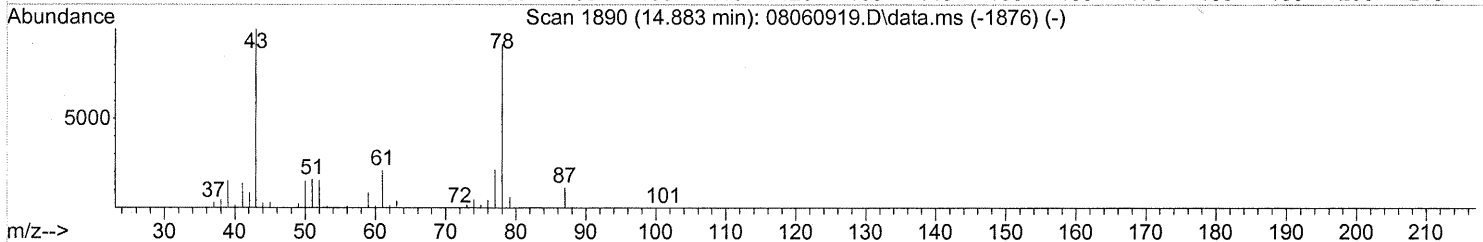
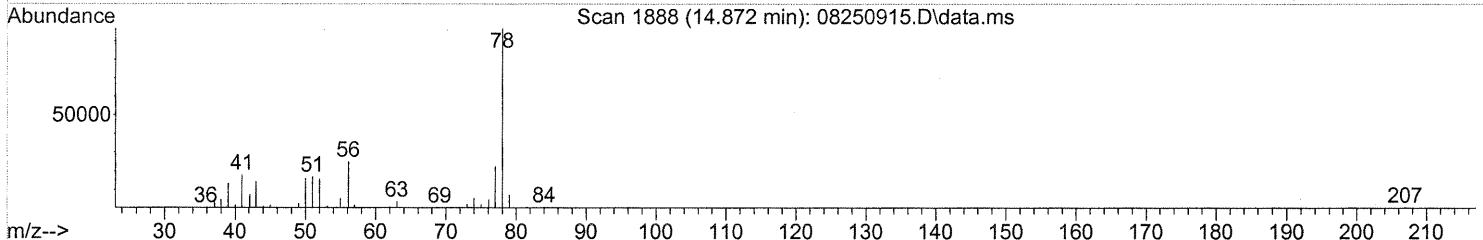
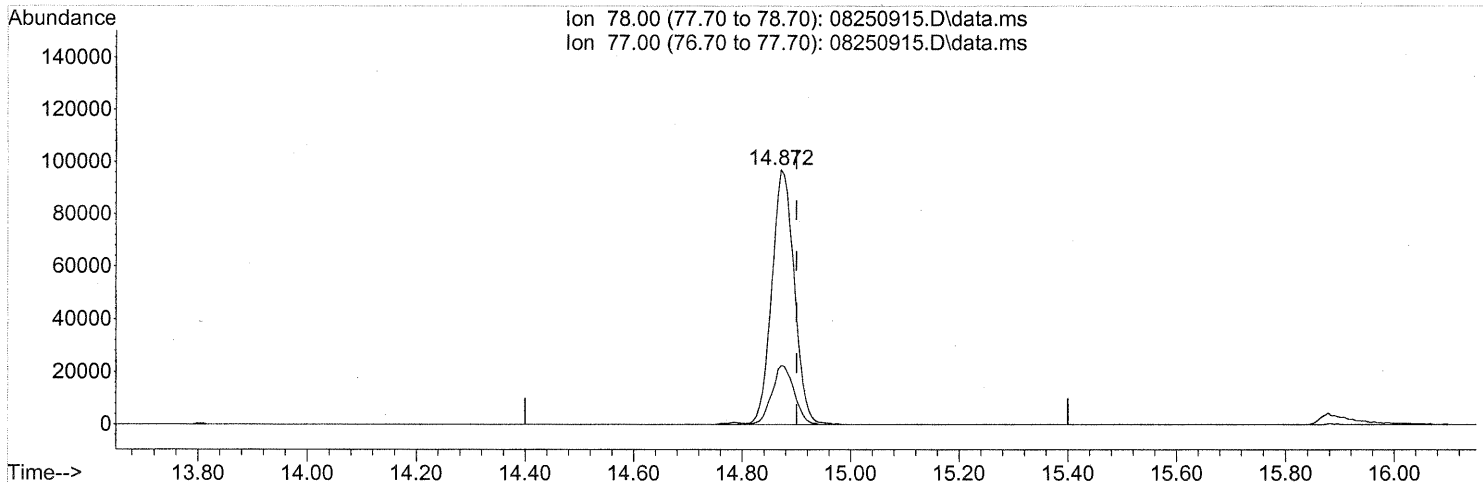
response 18499

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	33.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(41) Benzene (T)

14.872min (-0.029) 6.02ng

response 278047

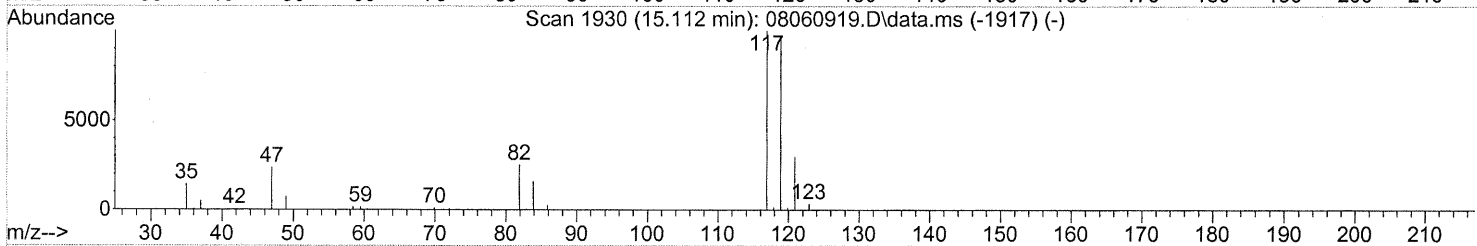
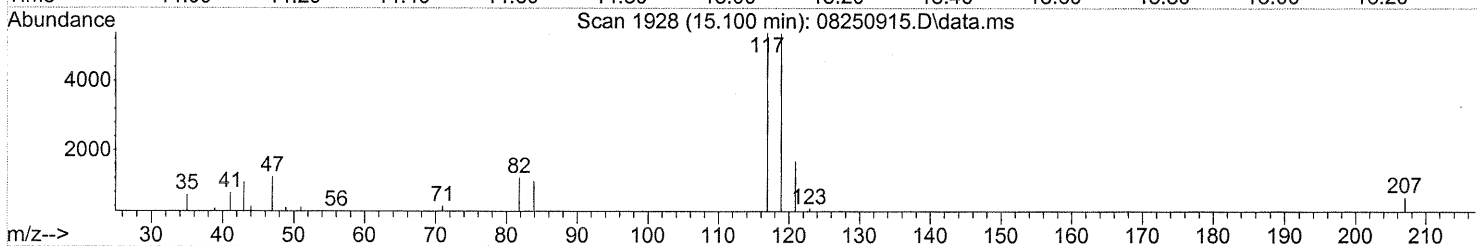
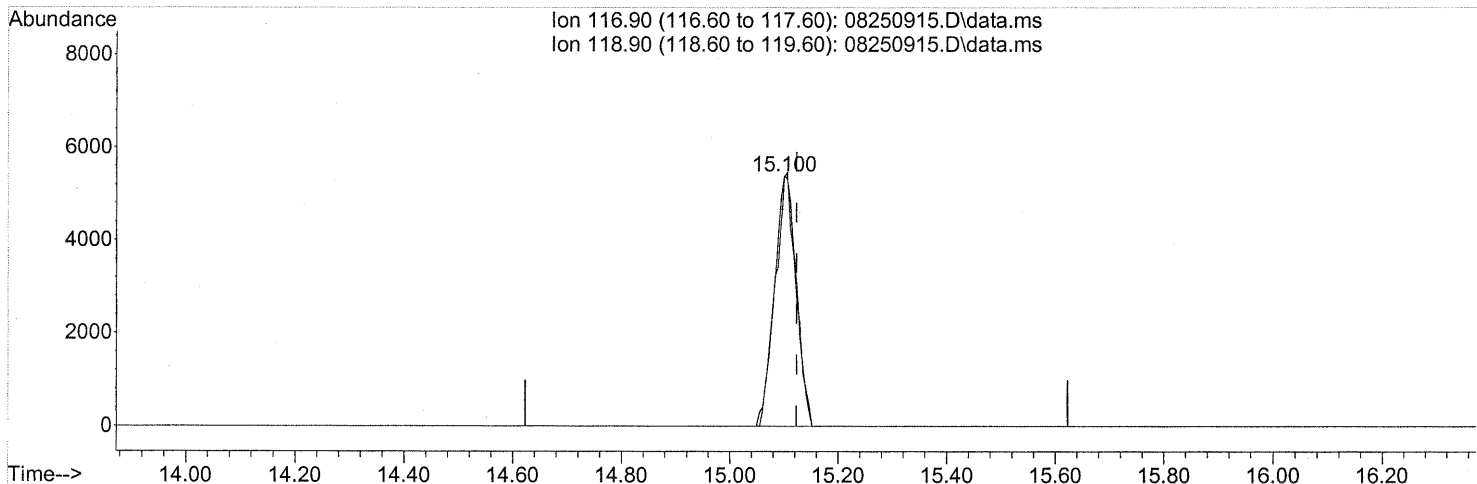
Ion	Exp%	Act%
78.00	100	100
77.00	23.60	22.95
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 1.03ng

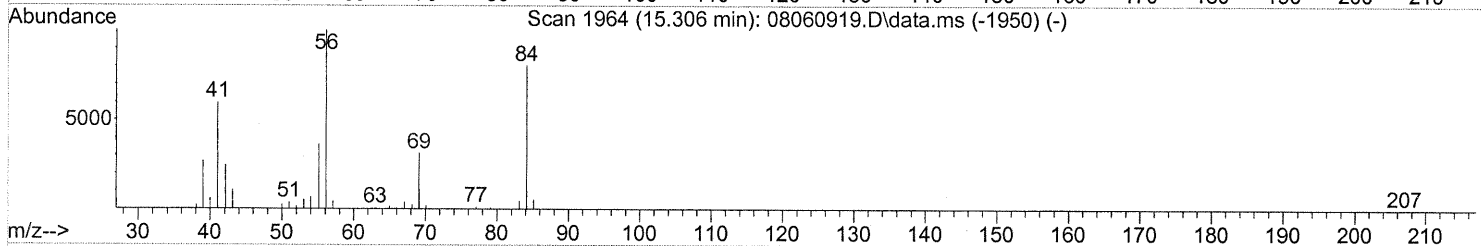
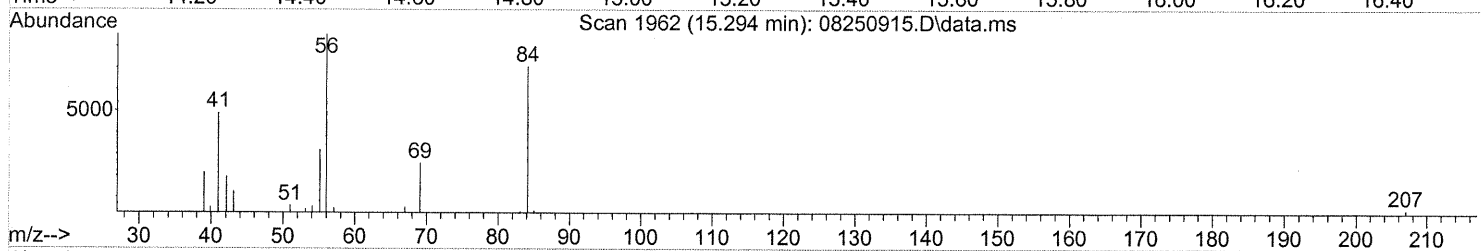
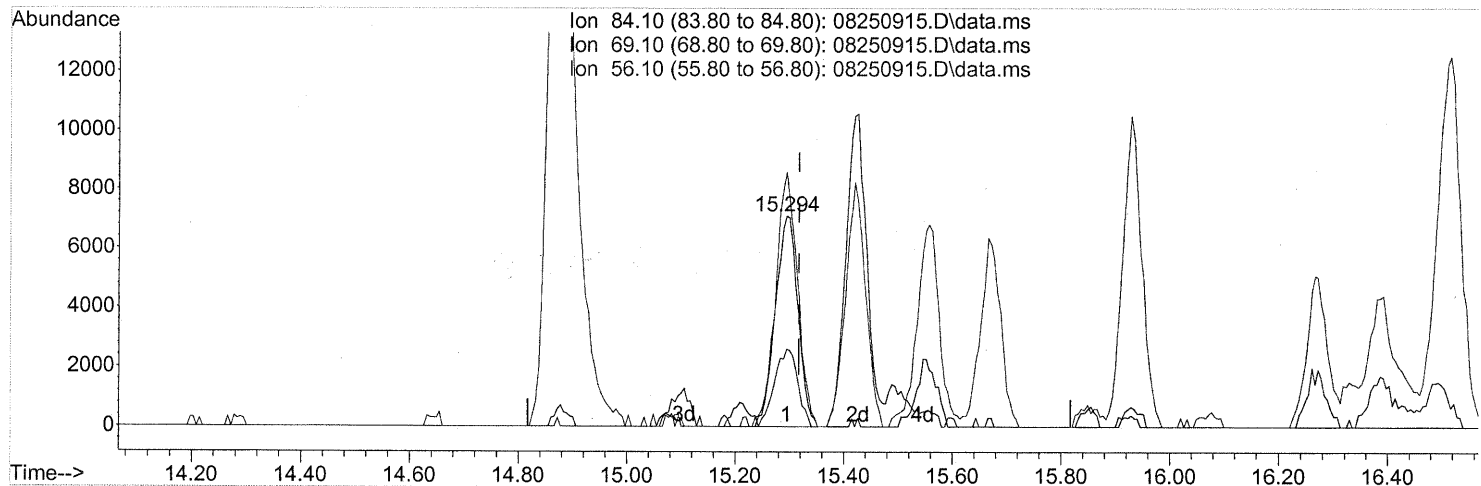
response 15112

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	95.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(43) Cyclohexane (T)

15.294min (-0.023) 1.21ng

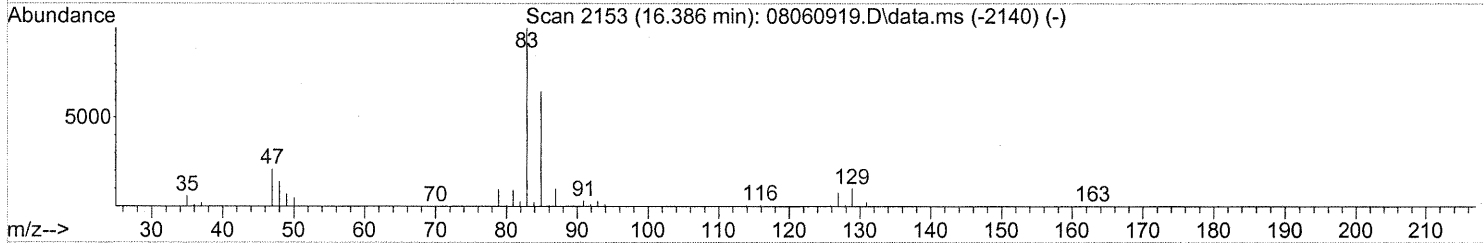
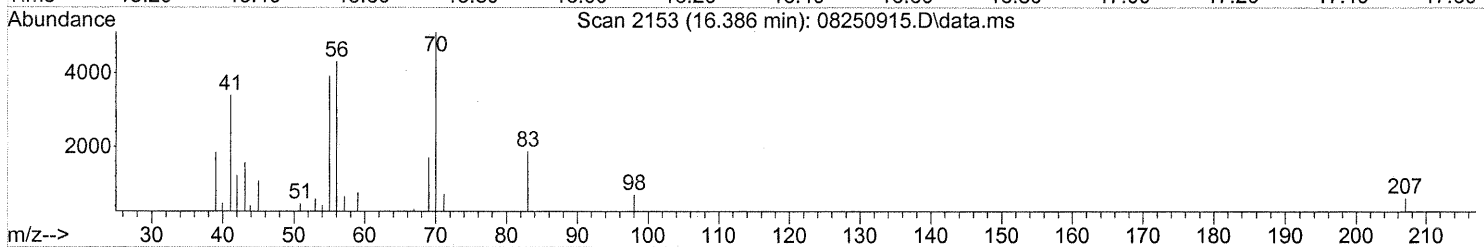
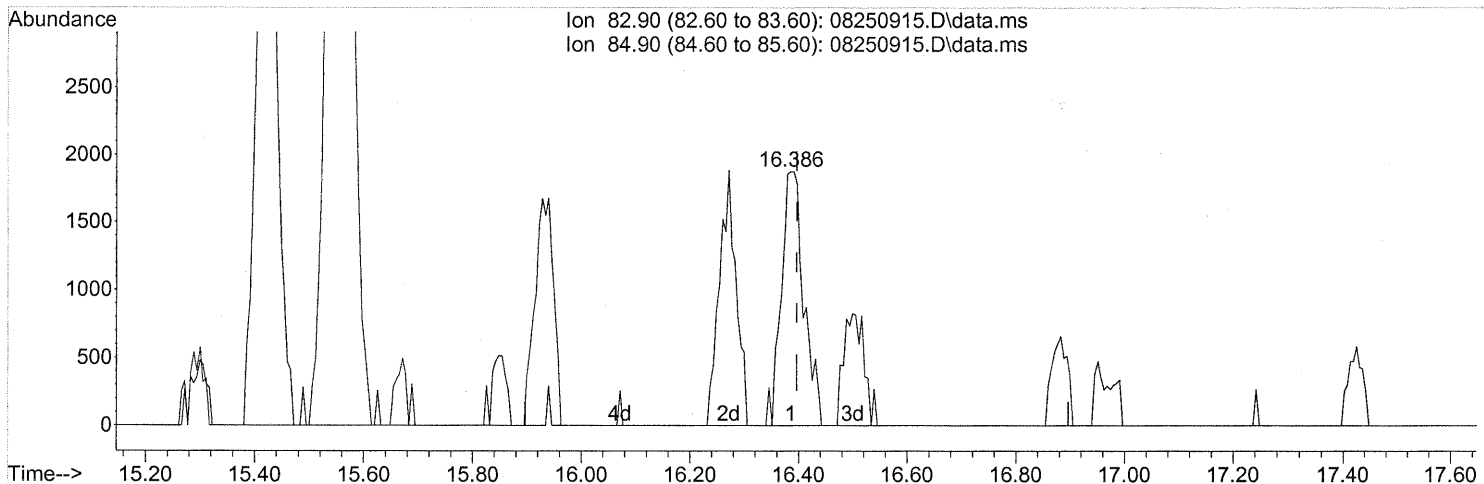
response 20441

Ion	Exp%	Act%
84.10	100	100
69.10	38.70	37.61
56.10	127.50	117.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(46) Bromodichloromethane (T)

16.386min (-0.011) 0.36ng

response 5423

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

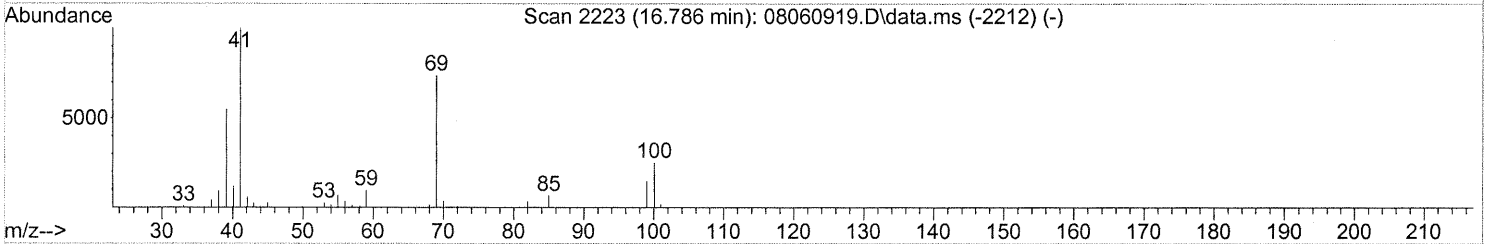
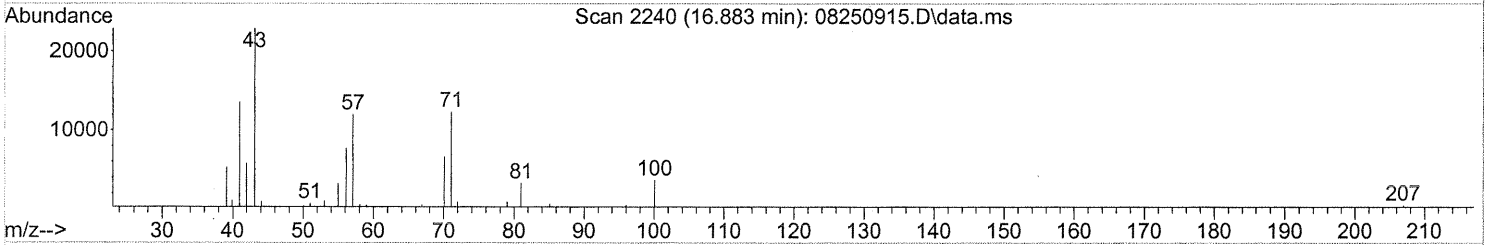
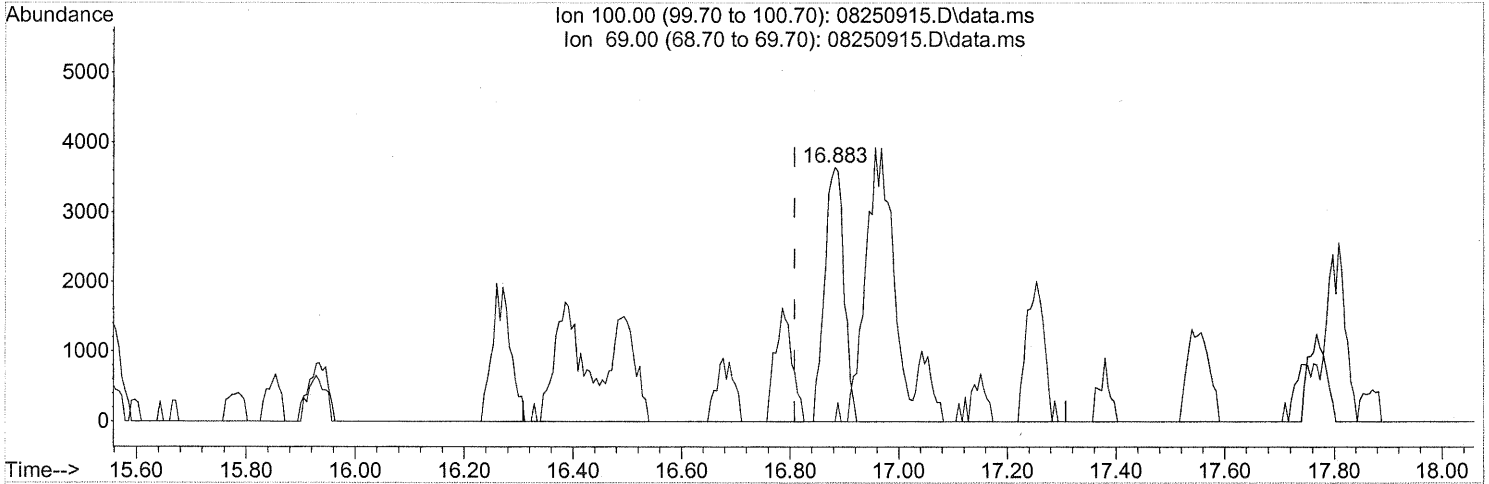
FD  
 11/9/3/09

11/9/3/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(50) Methyl Methacrylate (T)

16.883min (+0.074) 2.12ng

response 9016

Ion	Exp%	Act%
100.00	100	100
69.00	294.80	1.01#
0.00	0.00	0.00
0.00	0.00	0.00

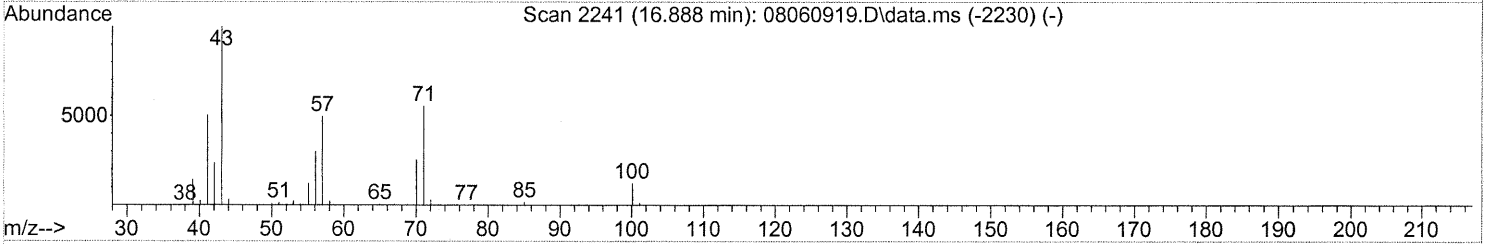
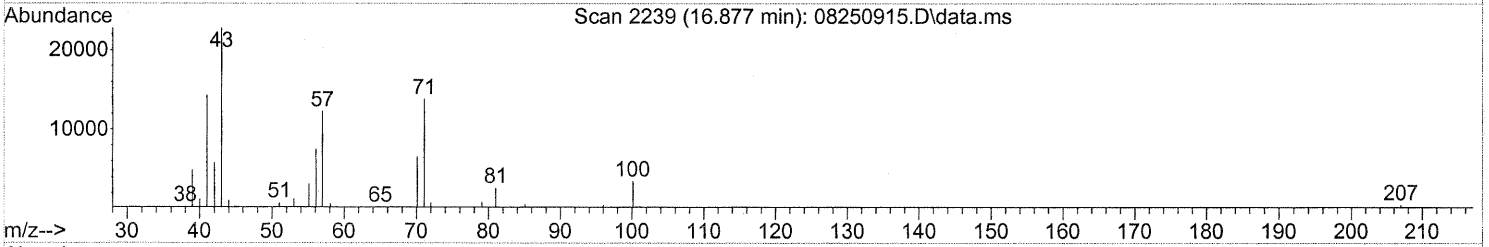
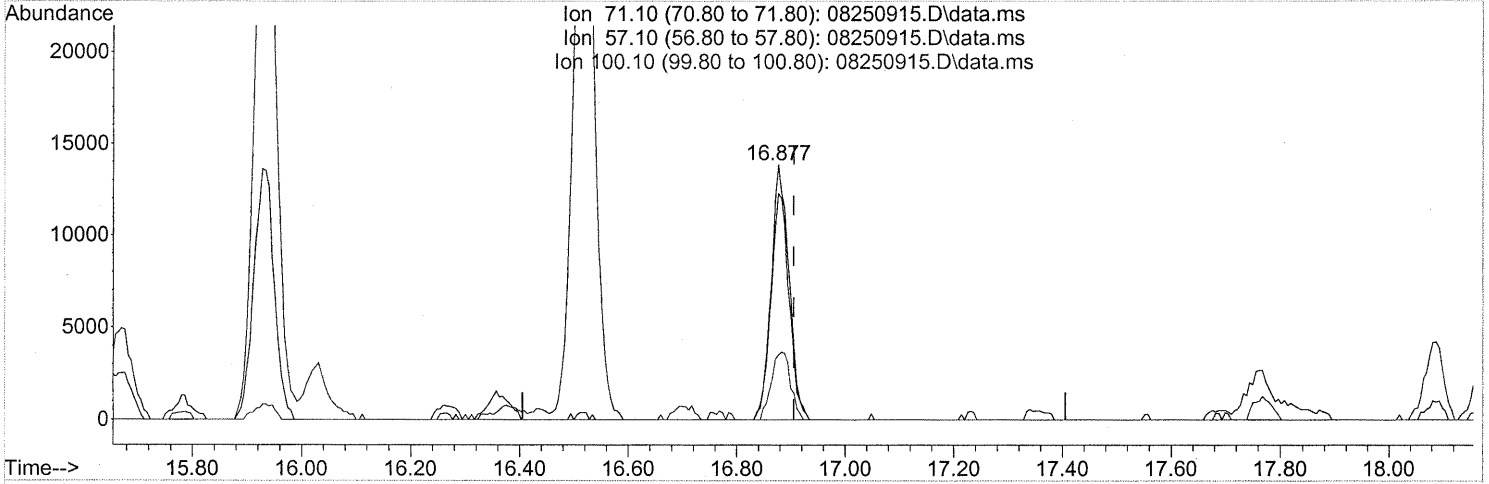
*FP*  
*WA 9/3/09*

*KA 9/3/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



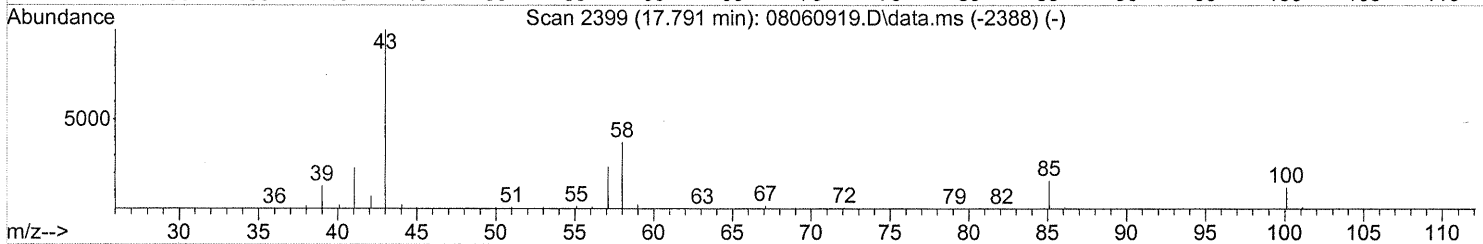
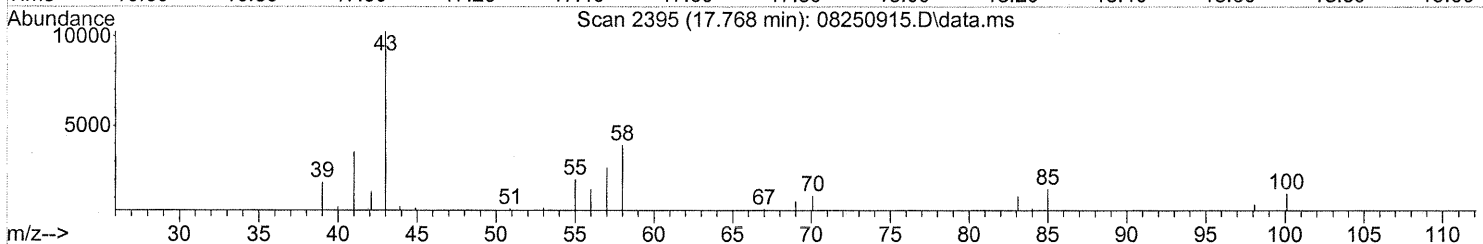
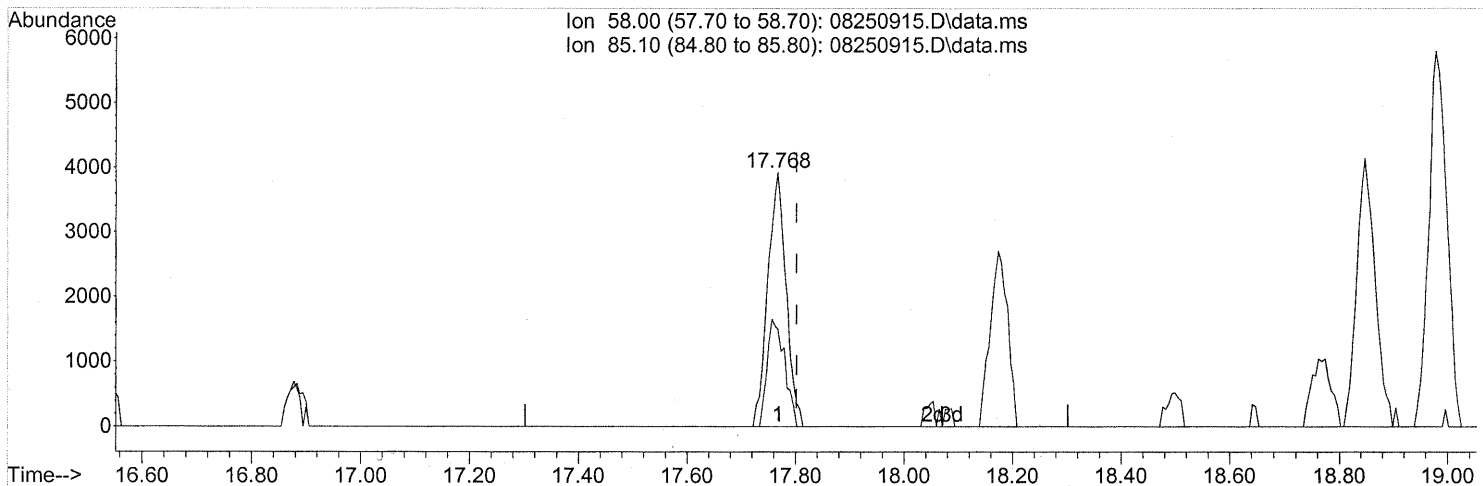
(51) n-Heptane (T)  
 16.877min (-0.029) 2.55ng  
 response 31603

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	90.42
100.10	26.40	28.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(53) 4-Methyl-2-pentanone (T)

17.768min (-0.034) 0.83ng

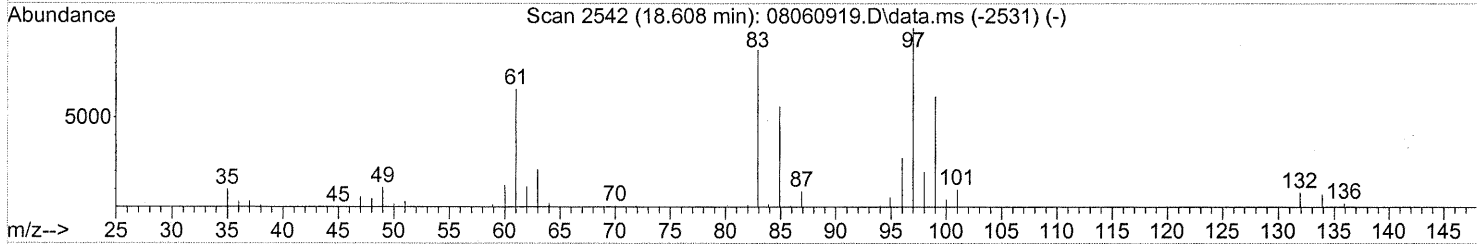
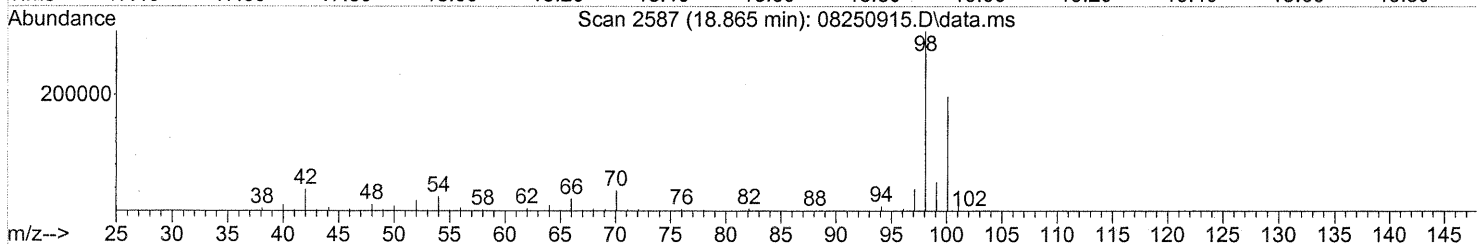
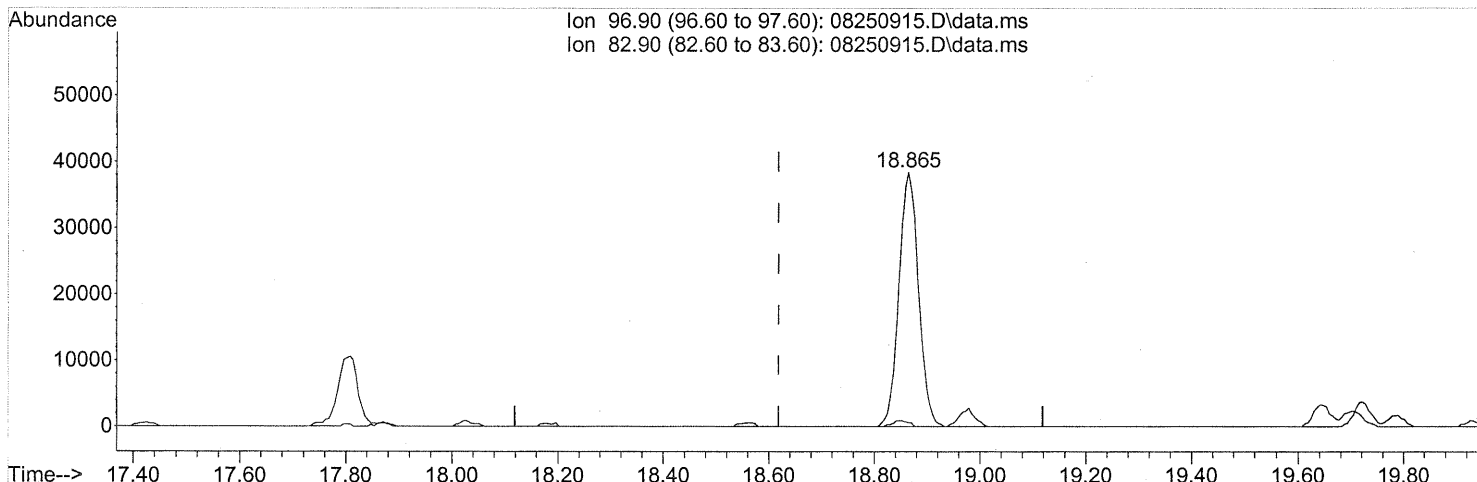
response 9226

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	40.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(55) 1,1,2-Trichloroethane (T)

18.865min (+0.246) 9.76ng

response 98947

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.81#
0.00	0.00	0.00
0.00	0.00	0.00

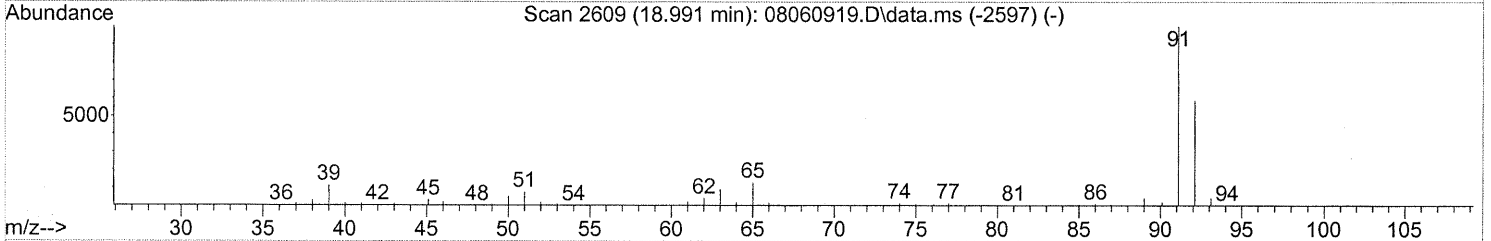
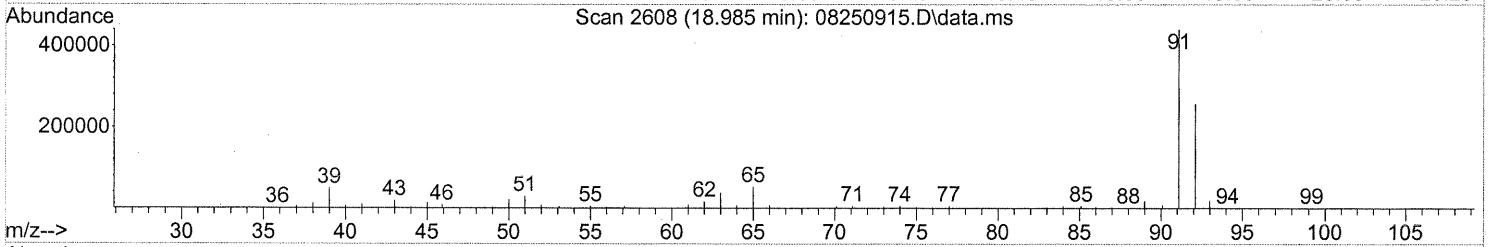
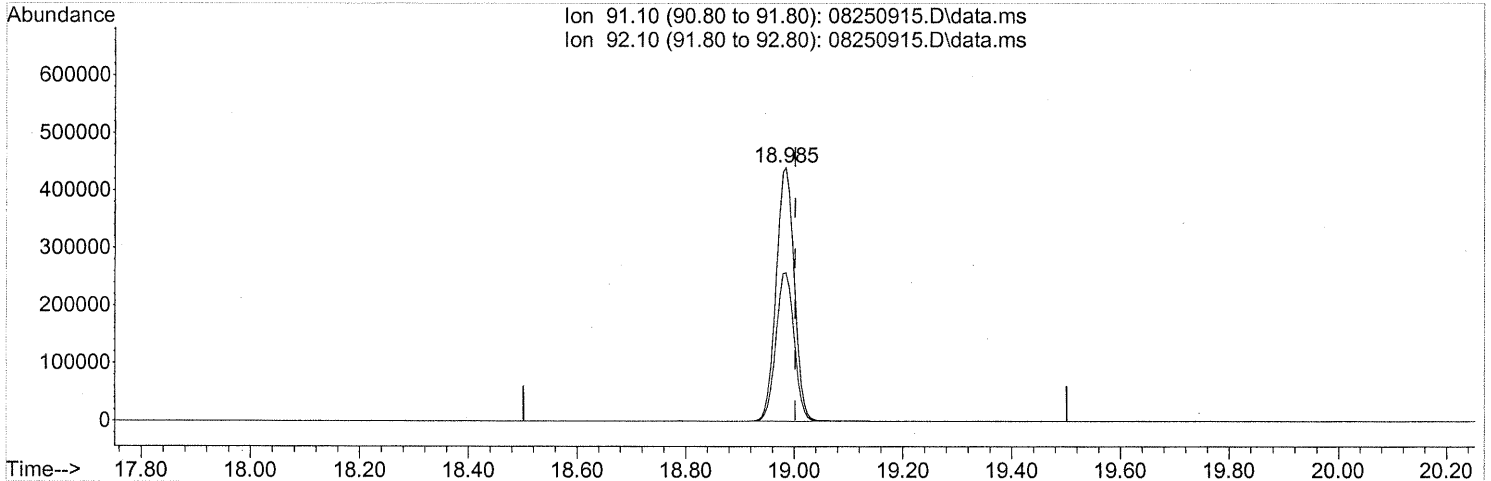
FP  
 11/9/09

11/9/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(58) Toluene (T)

18.985min (-0.017) 23.67ng

response 1026250

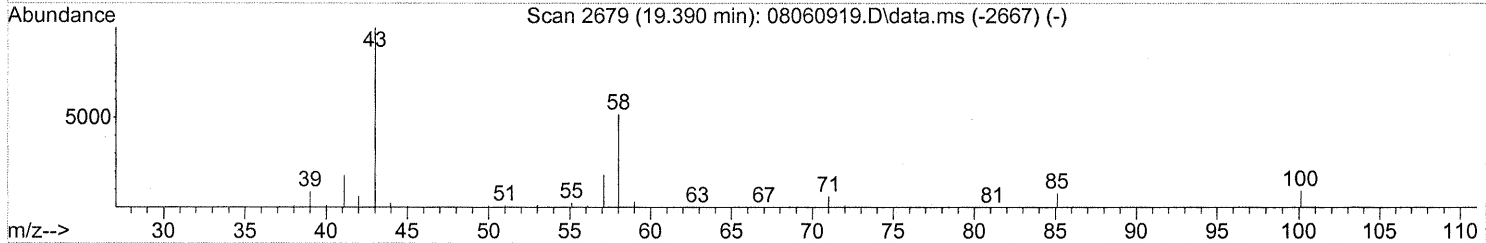
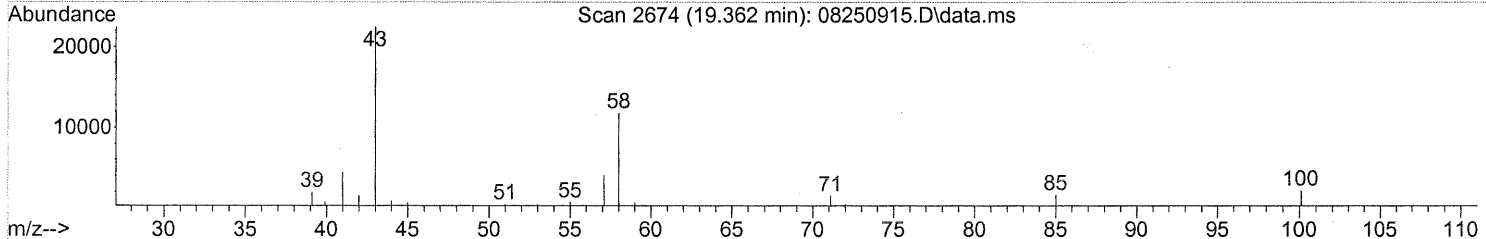
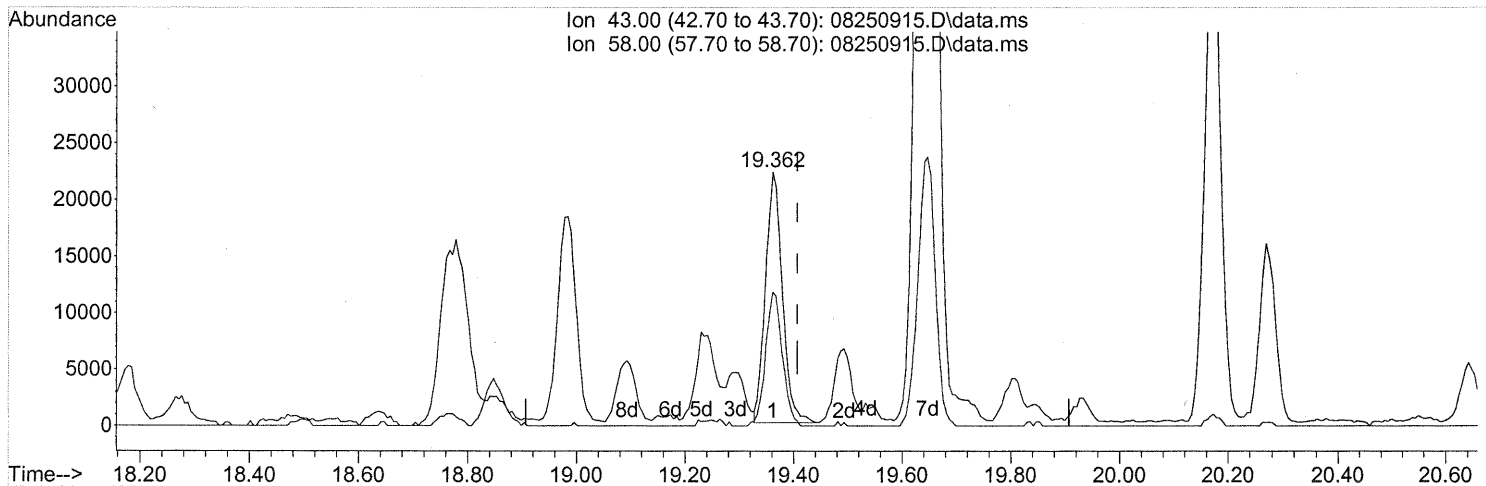
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	58.57
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

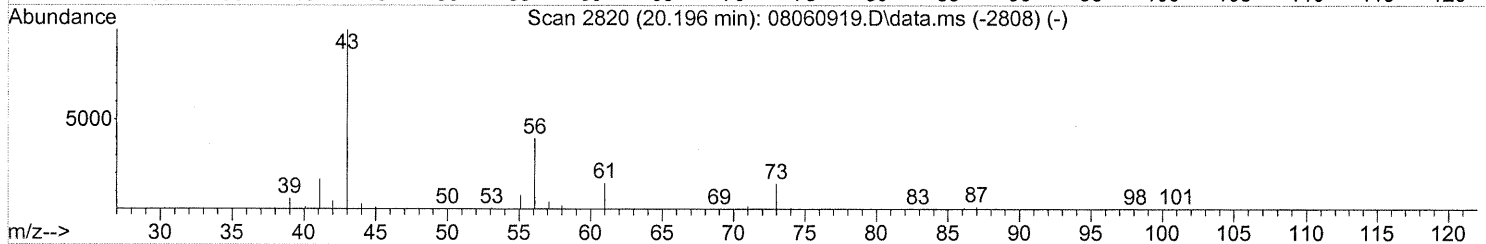
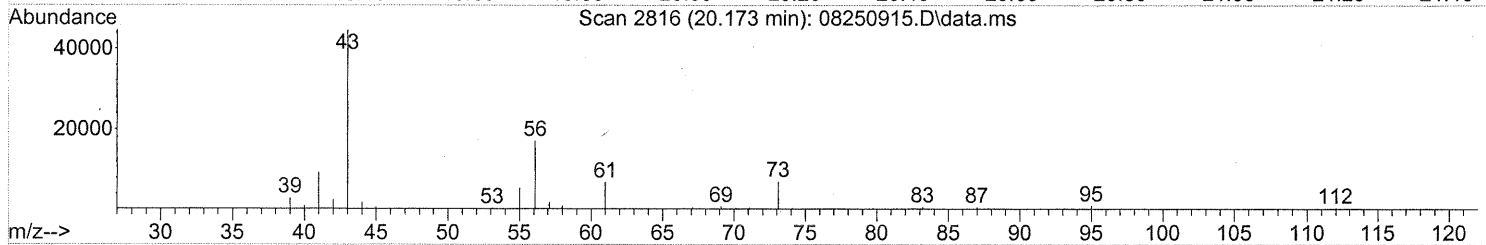
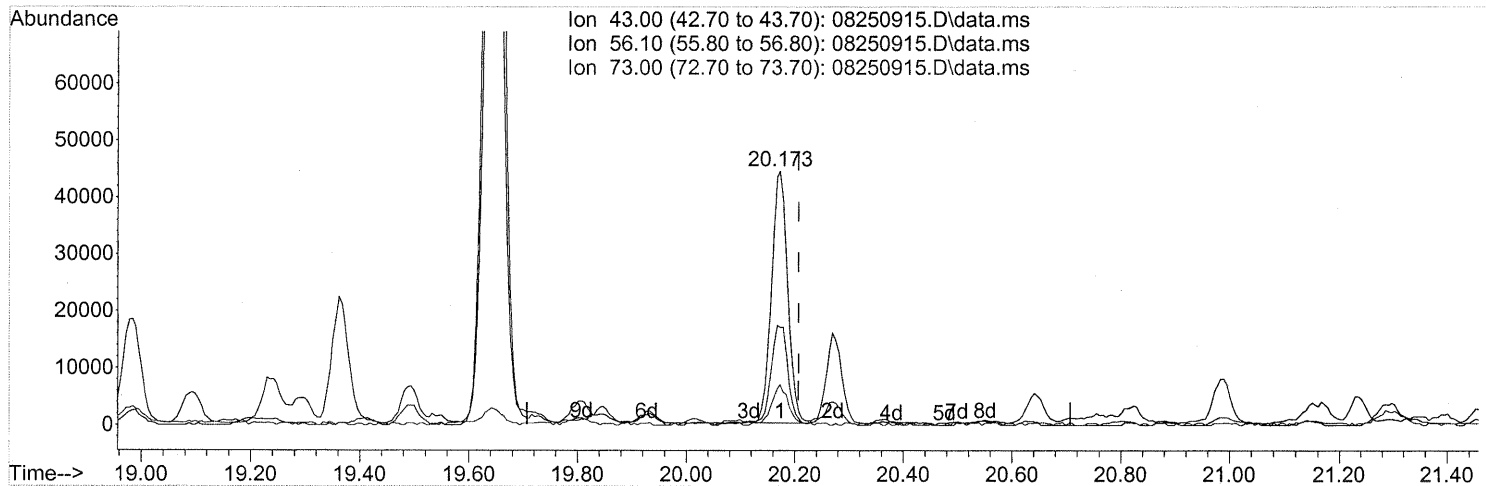
(59) 2-Hexanone (T)  
 19.362min (-0.046) 1.67ng  
 response 48201

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	52.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 2.72ng

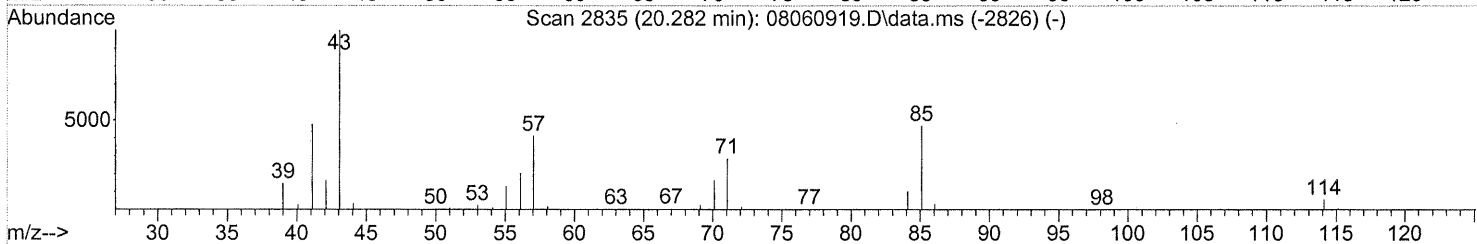
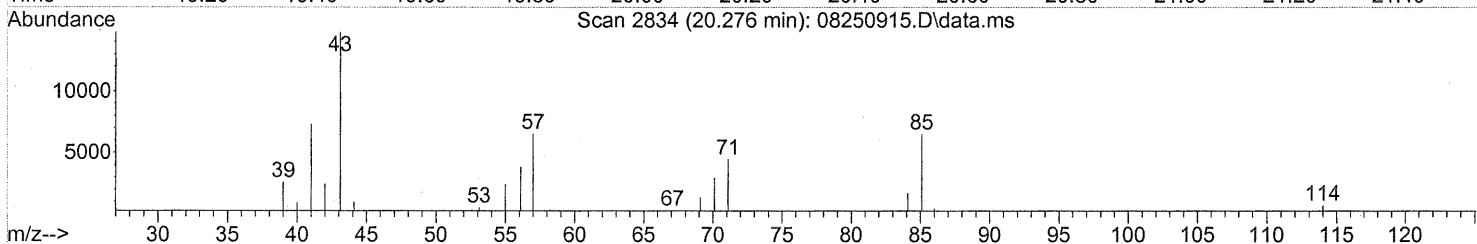
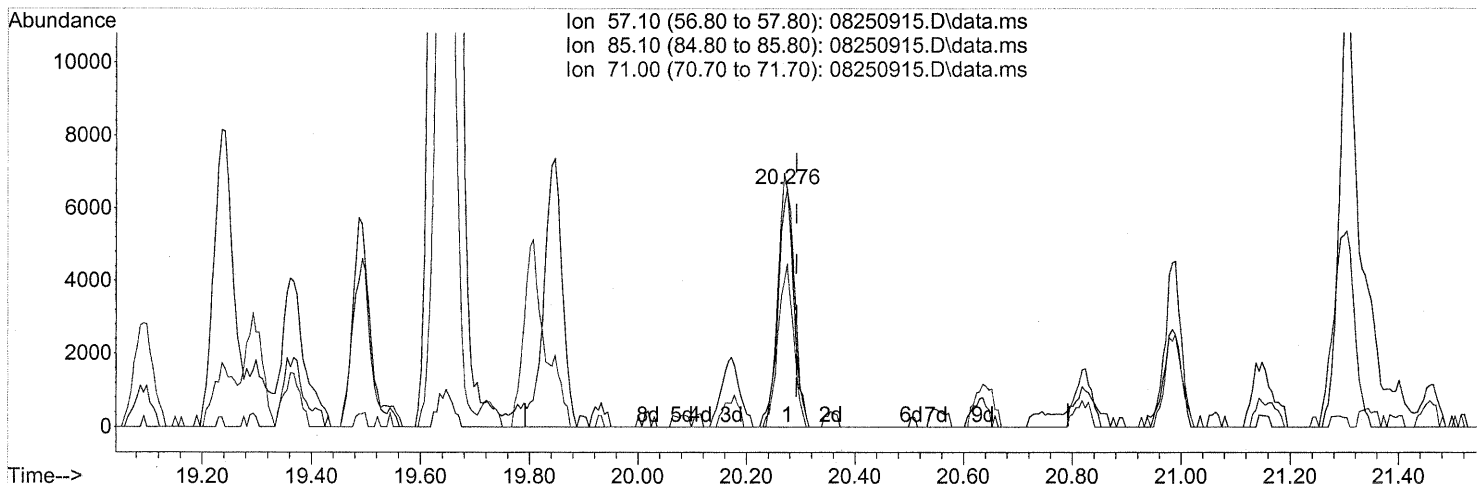
response 92335

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	40.31
73.00	14.80	16.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

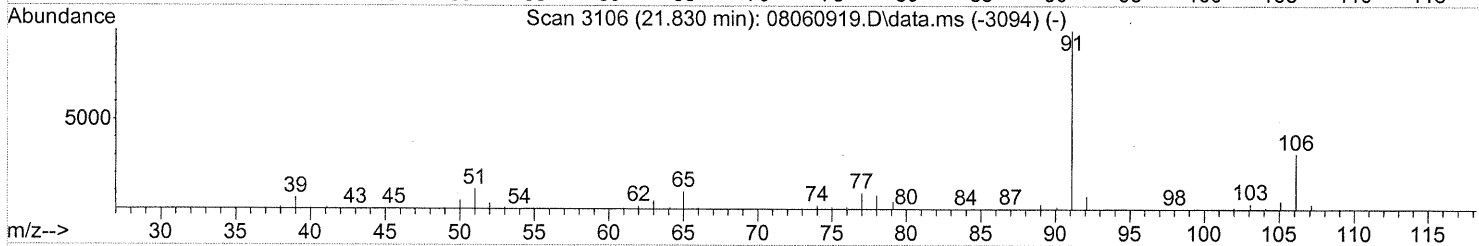
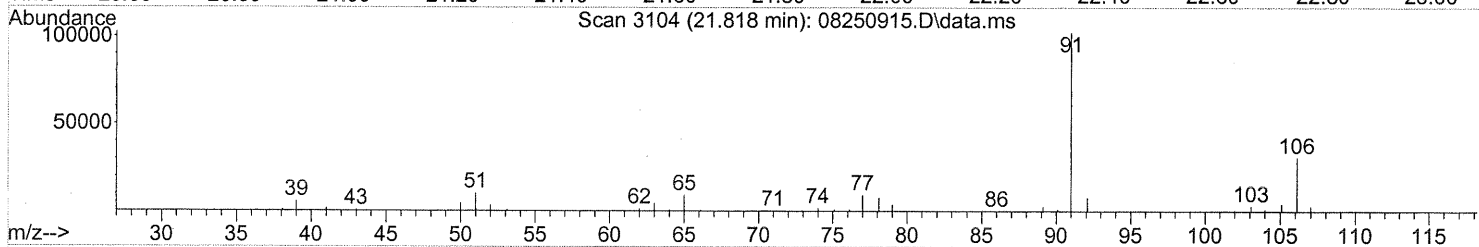
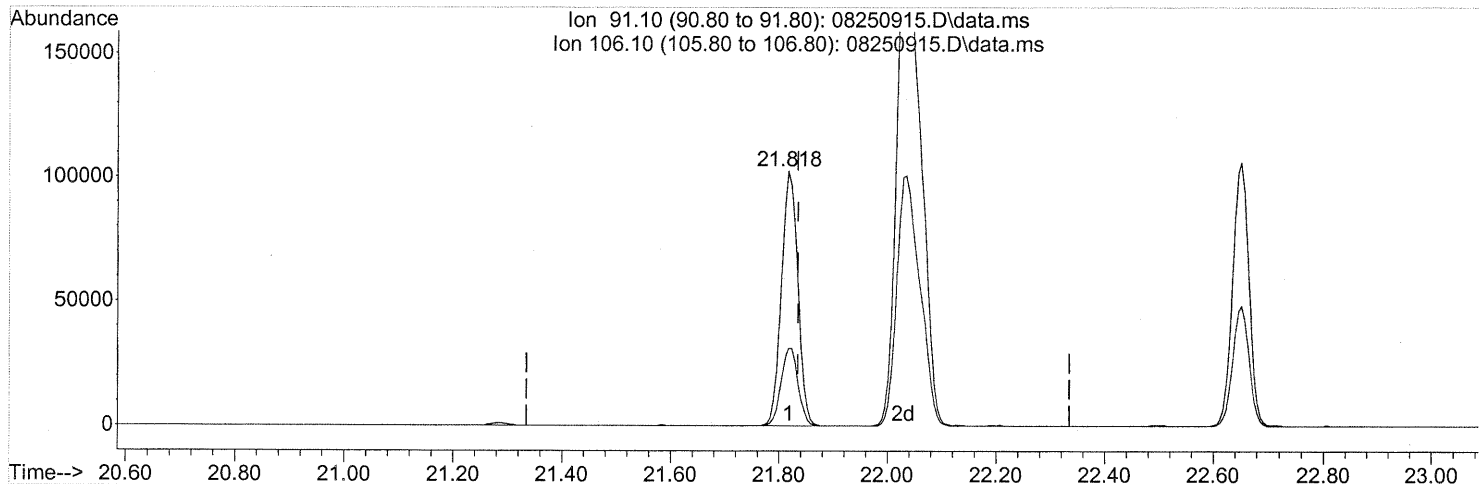
(63) n-Octane (T)  
 20.276min (-0.017) 1.27ng  
 response 13305

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	109.00
71.00	68.10	66.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

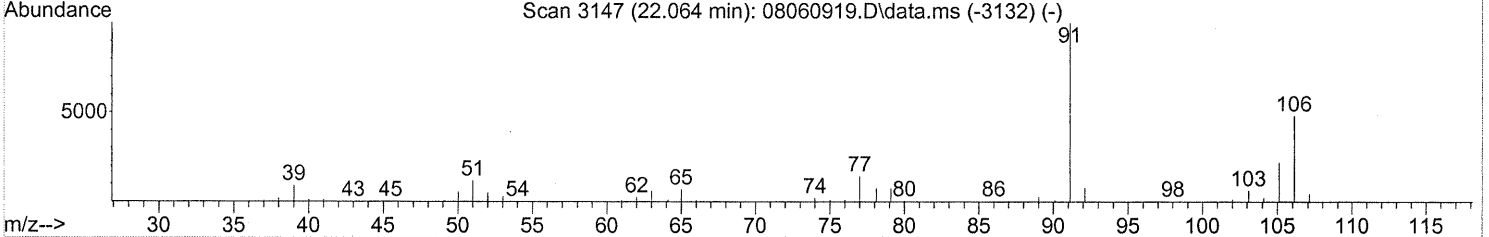
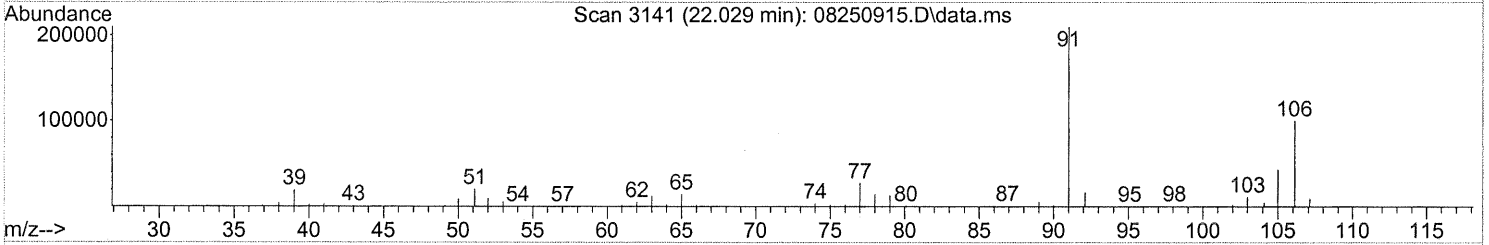
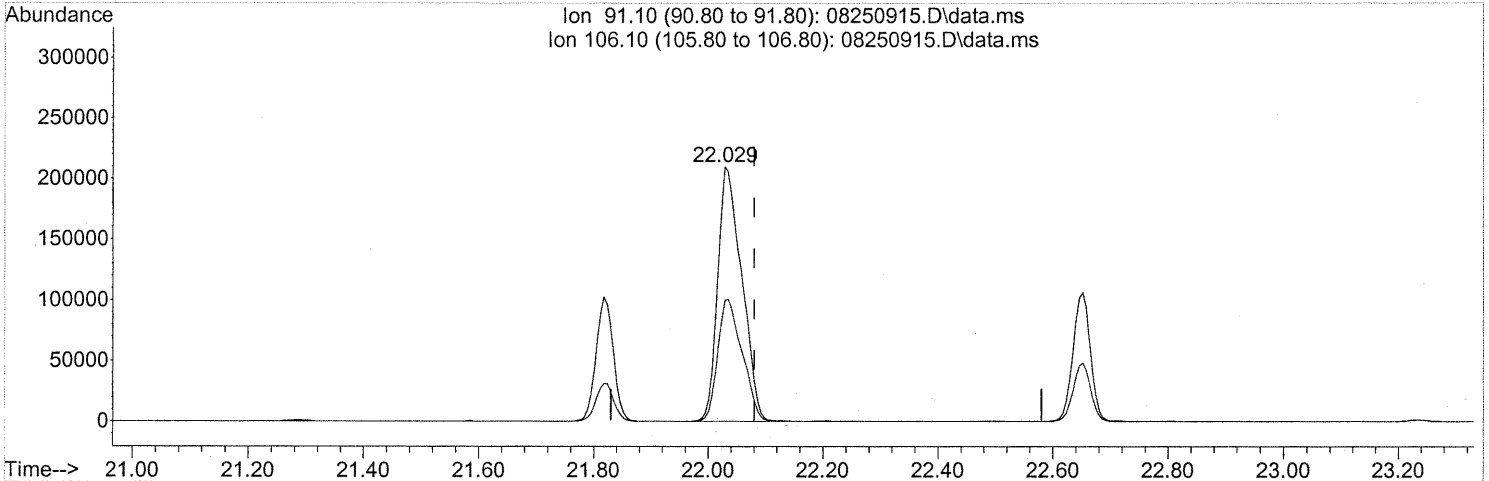
(66) Ethylbenzene (T)  
 21.818min (-0.017) 4.32ng  
 response 214039

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	31.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250915.D  
Acq On : 25 Aug 2009 20:54  
Operator : WA/CC  
Sample : P0902875-006 (1000mL)  
Misc : Environmental Health 102269  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration



TIC: 08250915.D\data.ms

(67) m- & p-Xylenes (T)

22.029min (-0.051) 15.25ng

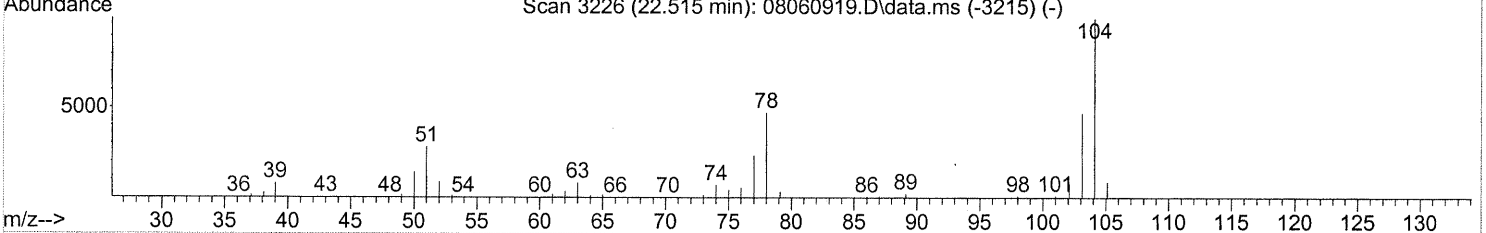
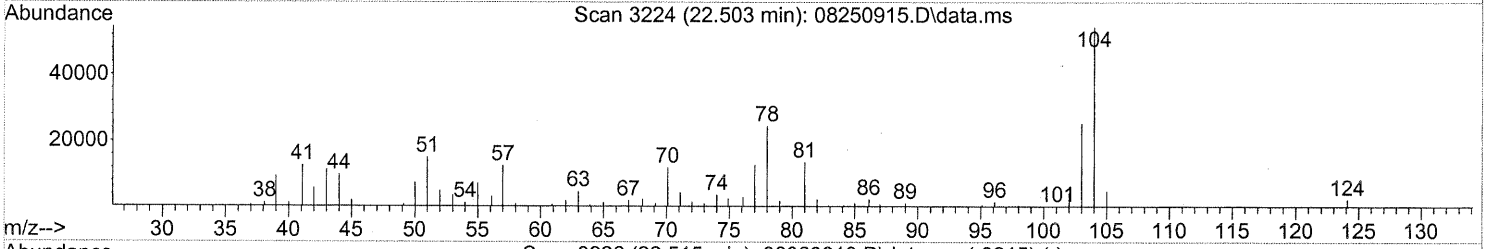
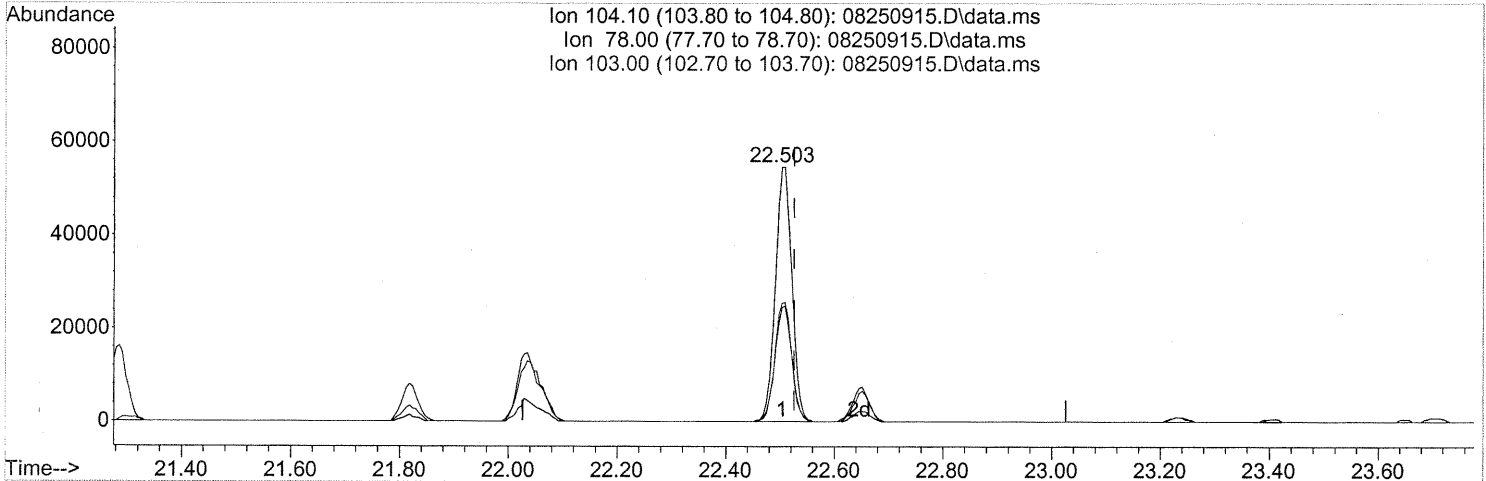
response 611380

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

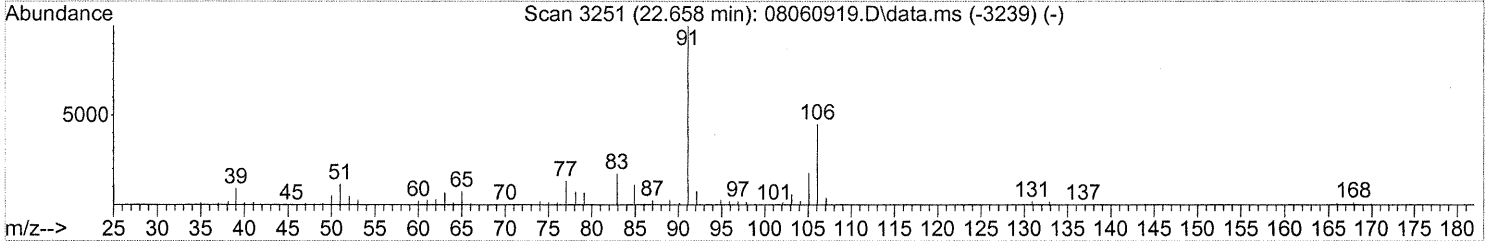
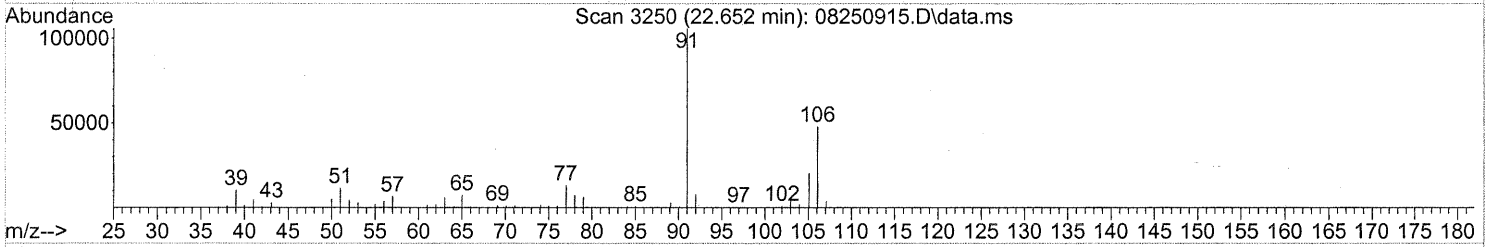
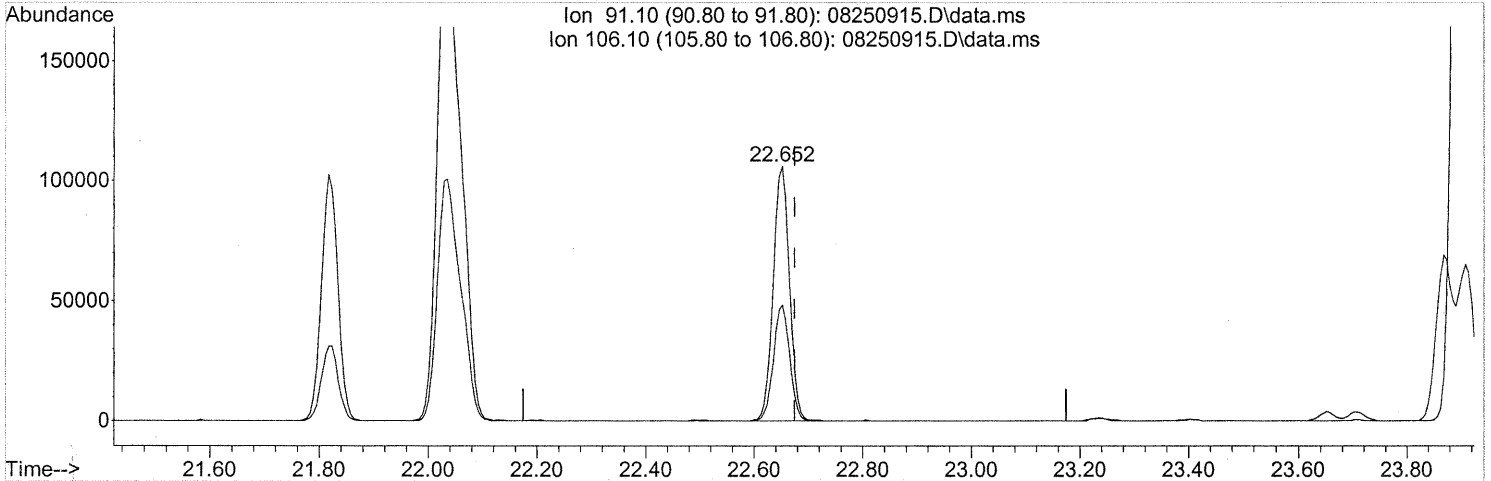
(69) Styrene (T)  
 22.503min (-0.023) 3.97ng  
 response 115103

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	45.92
103.00	46.20	48.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 5.53ng

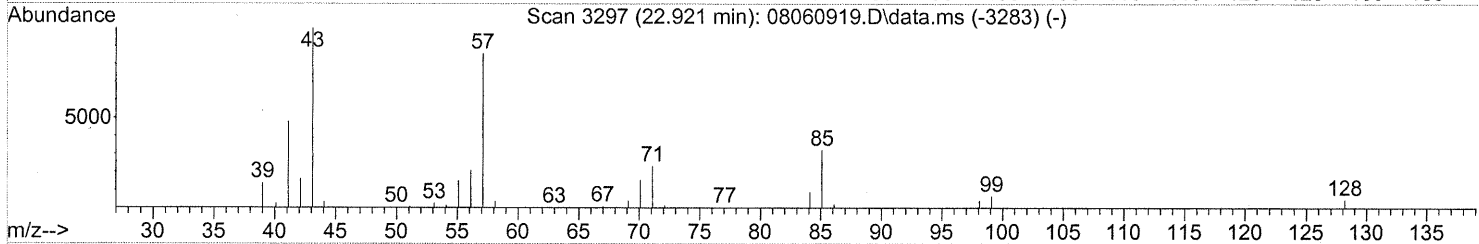
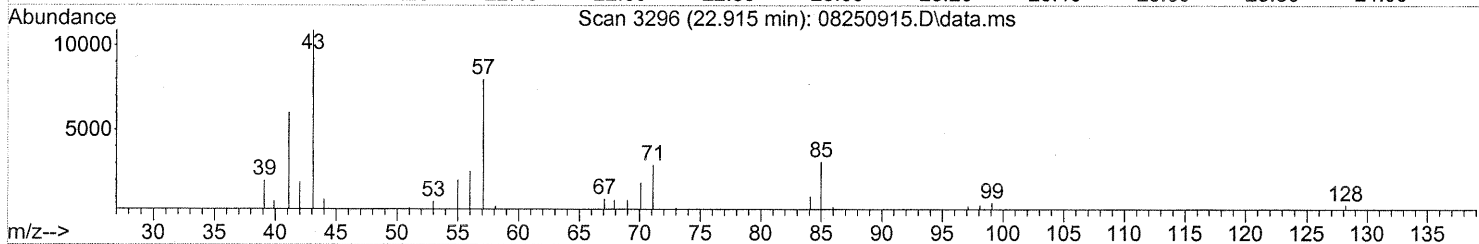
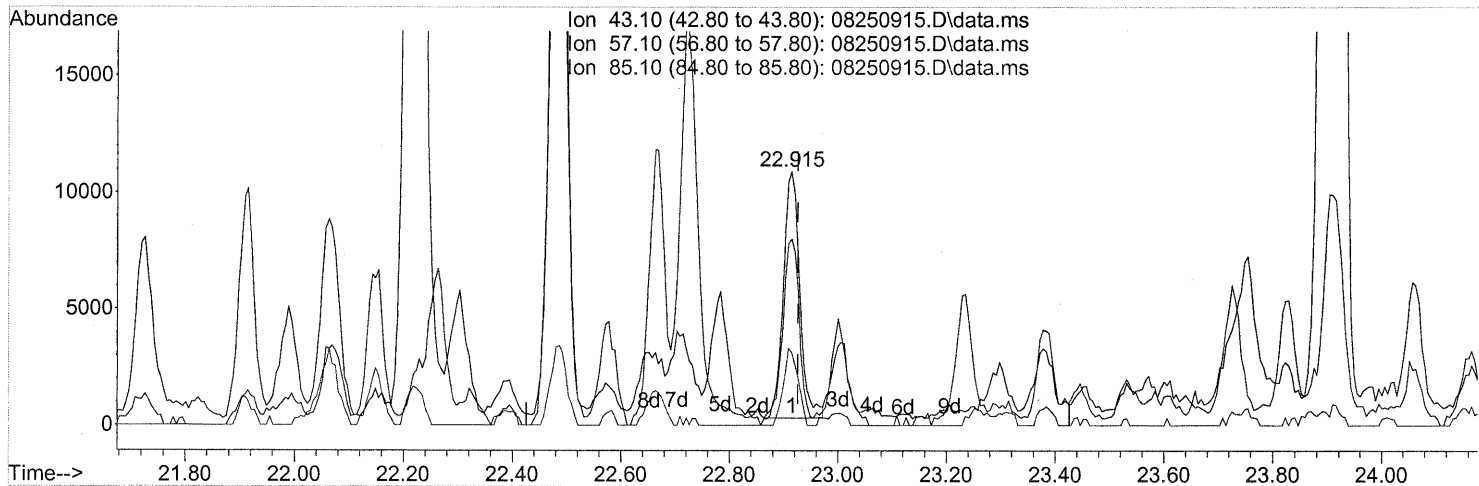
response 222225

Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(71) n-Nonane (T)  
 22.915min (-0.011) 0.84ng  
 response 22384

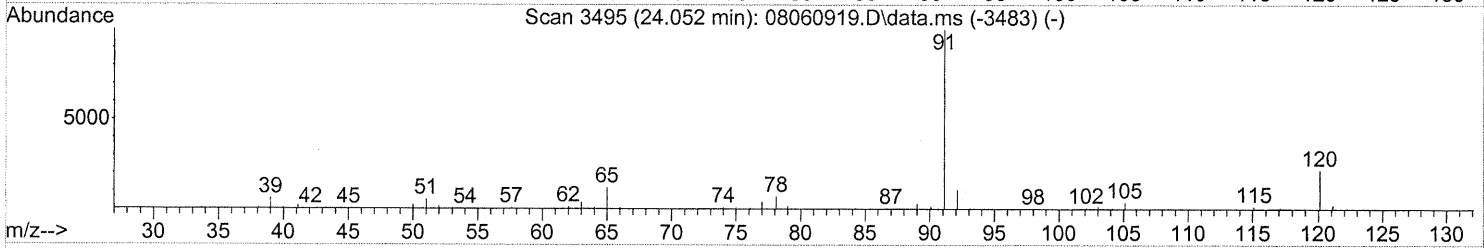
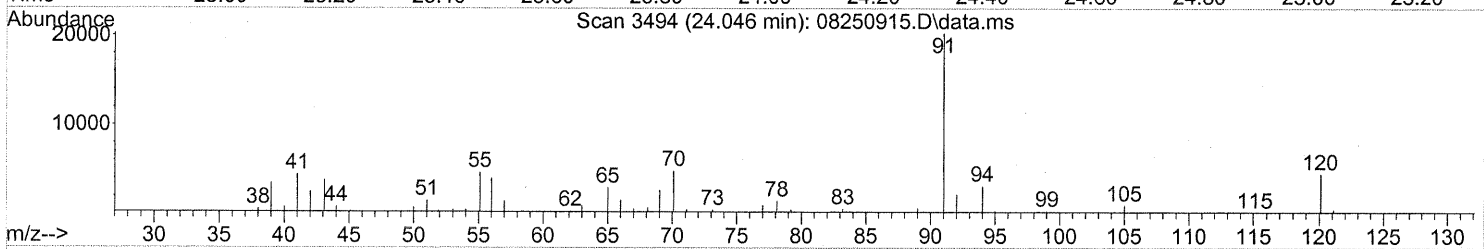
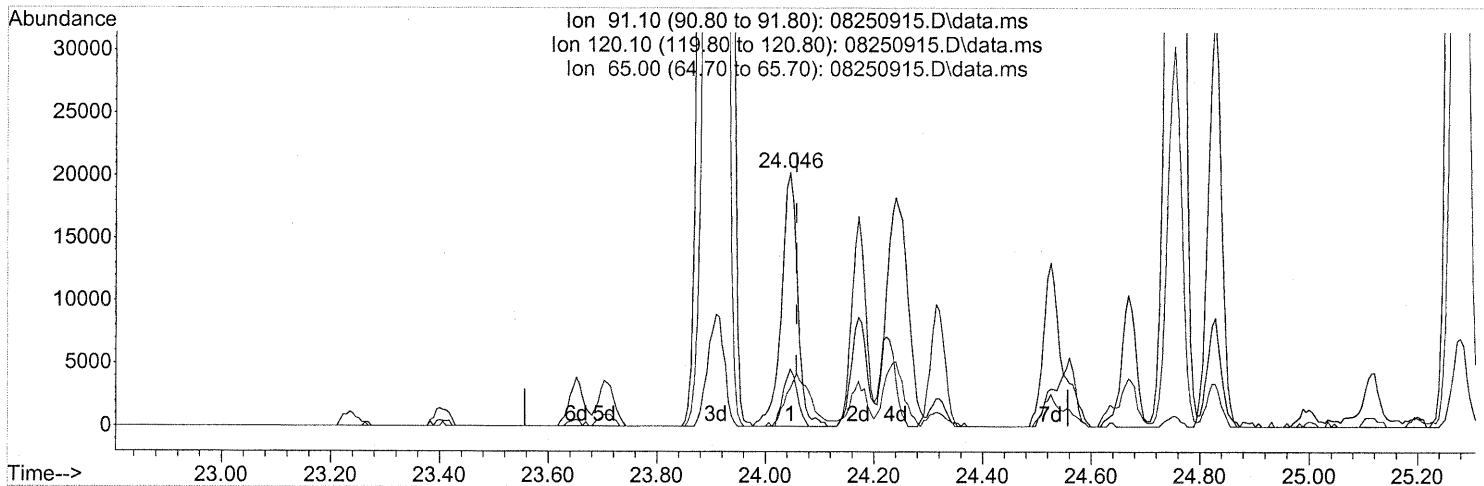
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	77.98
85.10	30.40	27.43
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.65ng

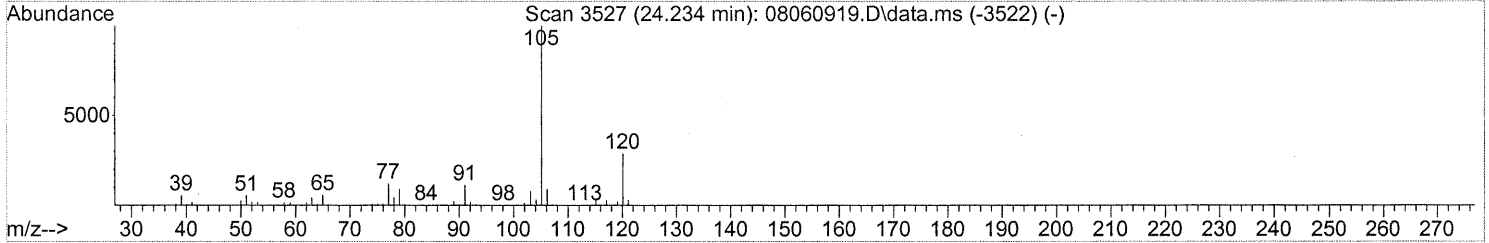
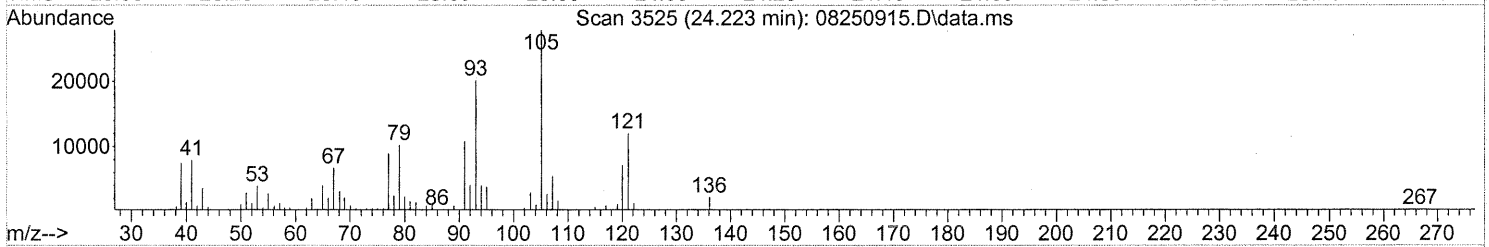
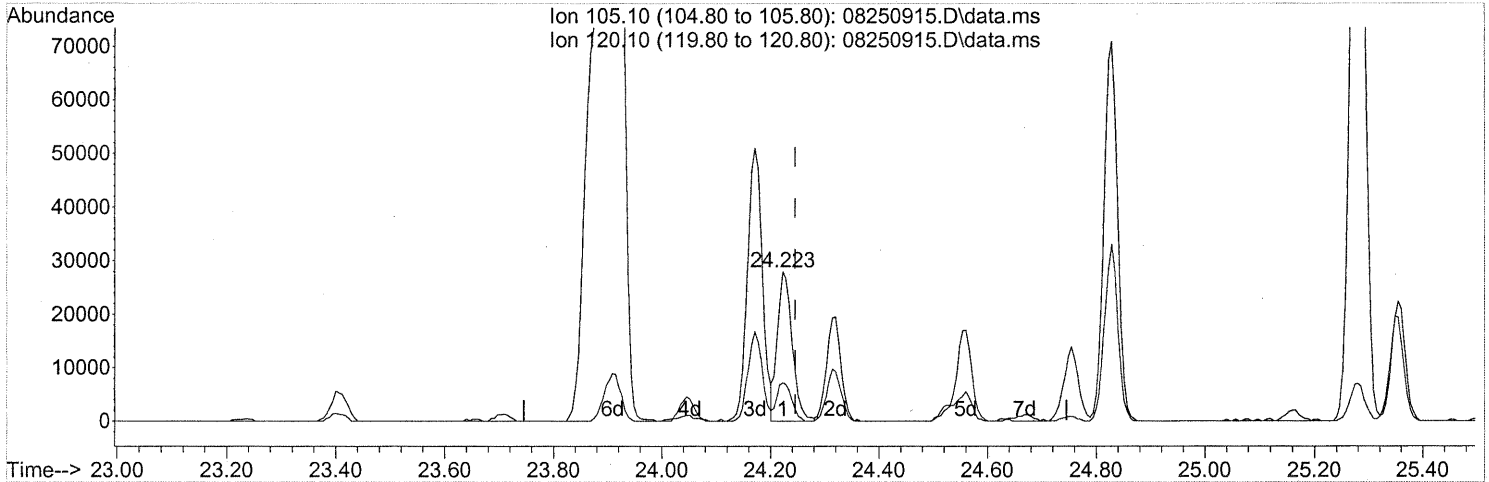
response 41682

Ion	Exp%	Act%
91.10	100	100
120.10	21.60	19.54
65.00	12.00	31.03
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

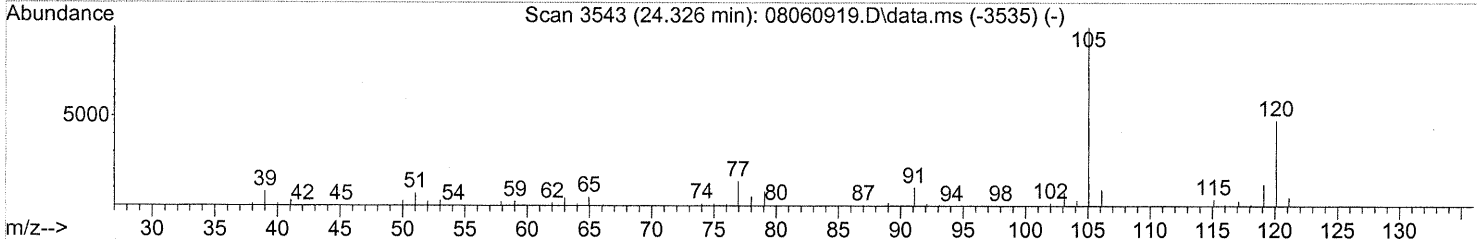
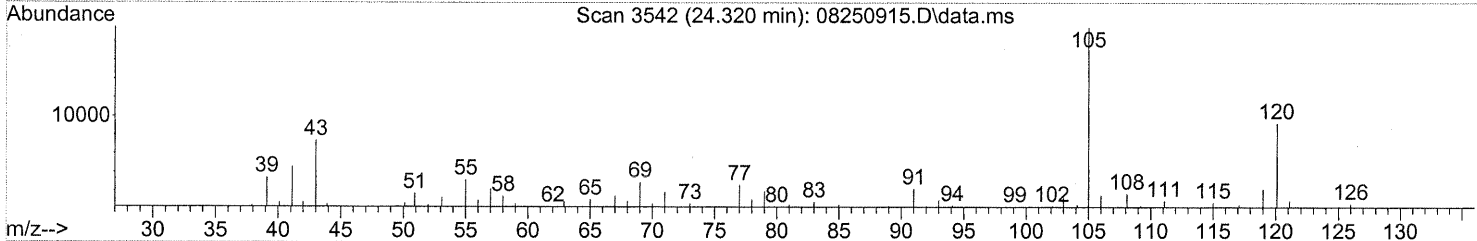
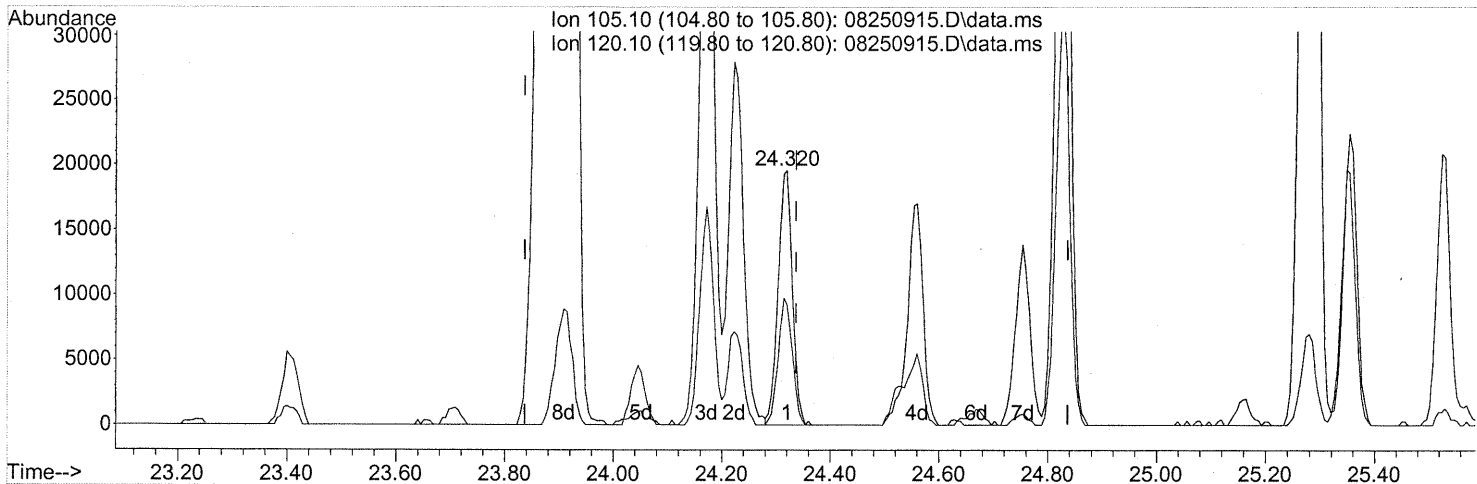
(78) 4-Ethyltoluene (T)  
 24.223min (-0.023) 1.13ng  
 response 53076

Ion	Exp%	Act%
105.10	100	100
120.10	28.40	26.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(79) 1,3,5-Trimethylbenzene (T)

24.320min (-0.017) 0.91ng

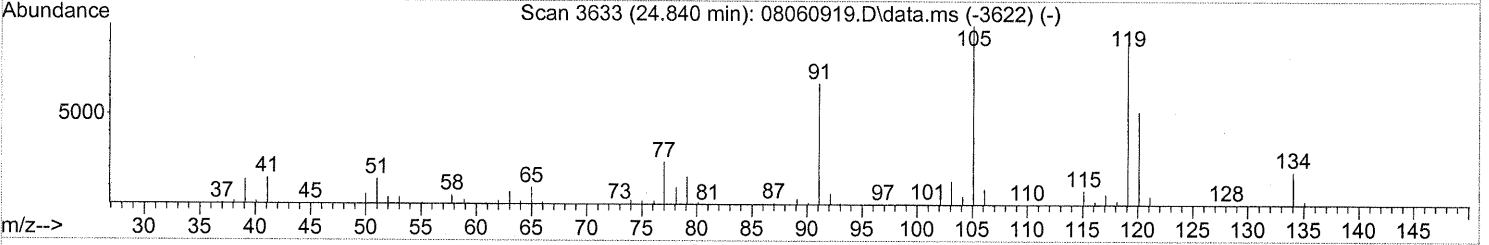
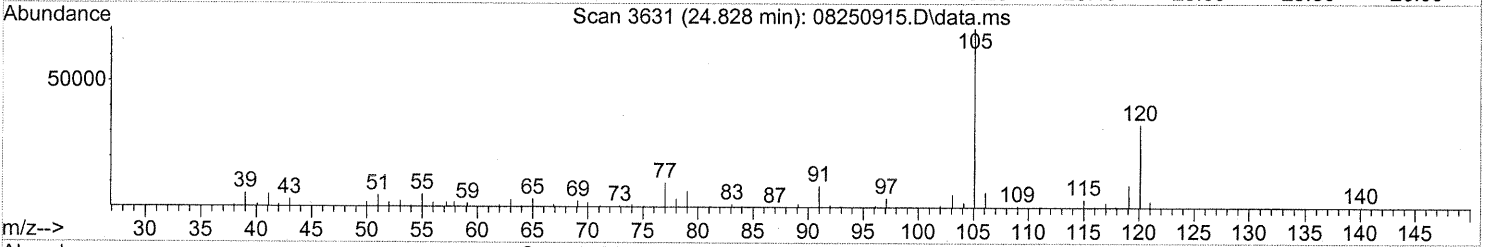
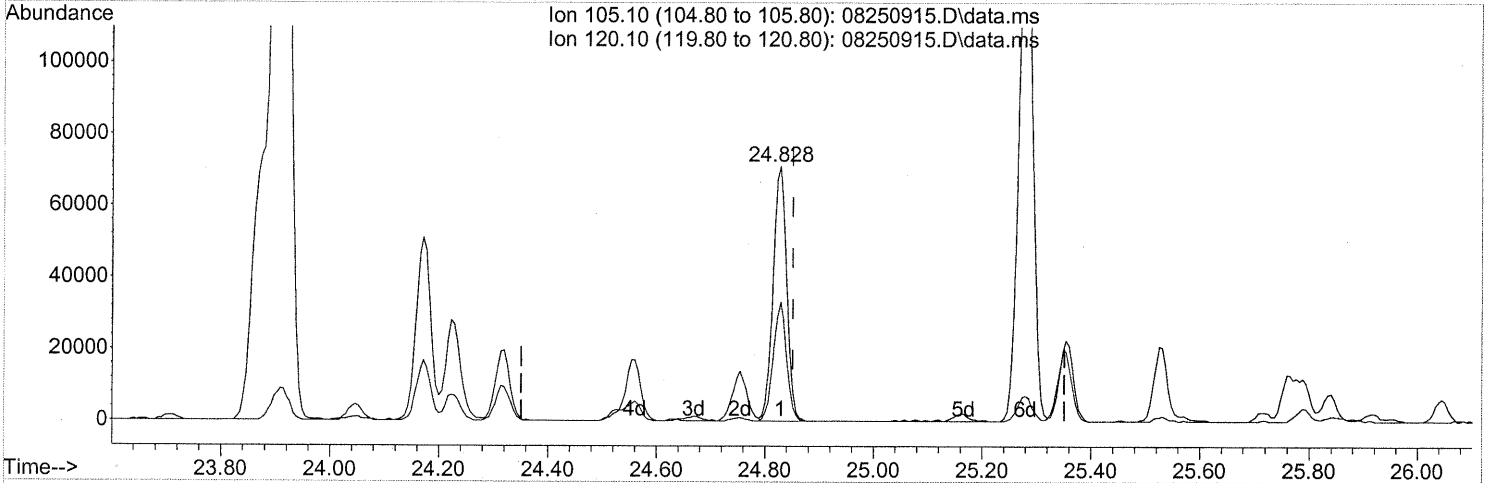
response 35942

Ion	Exp%	Act%
105.10	100	100
120.10	46.80	49.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

(82) 1,2,4-Trimethylbenzene (T)

24.828min (-0.023) 3.08ng

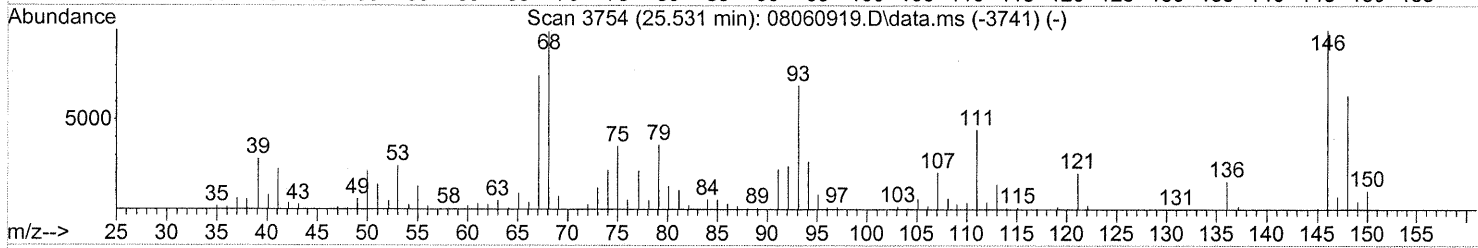
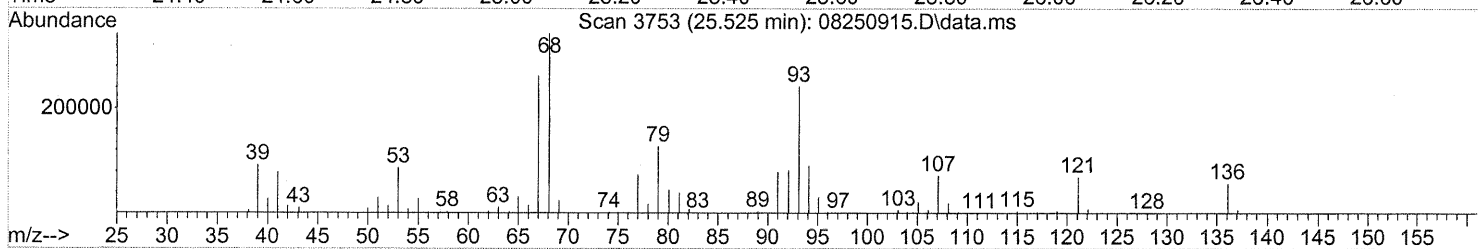
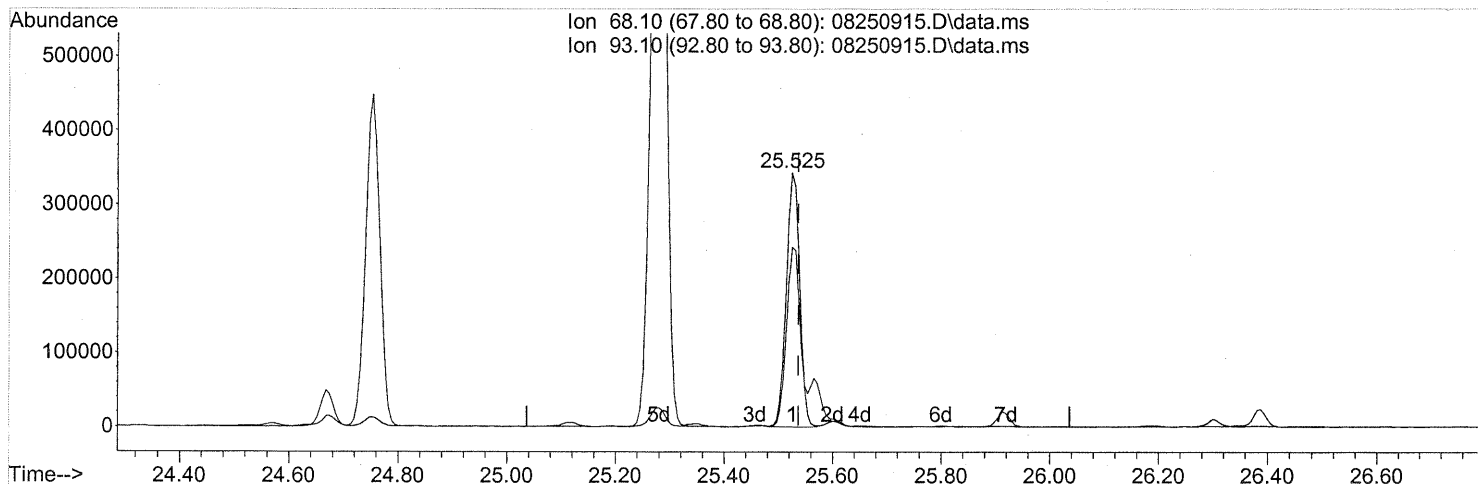
response 124582

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250915.D\data.ms

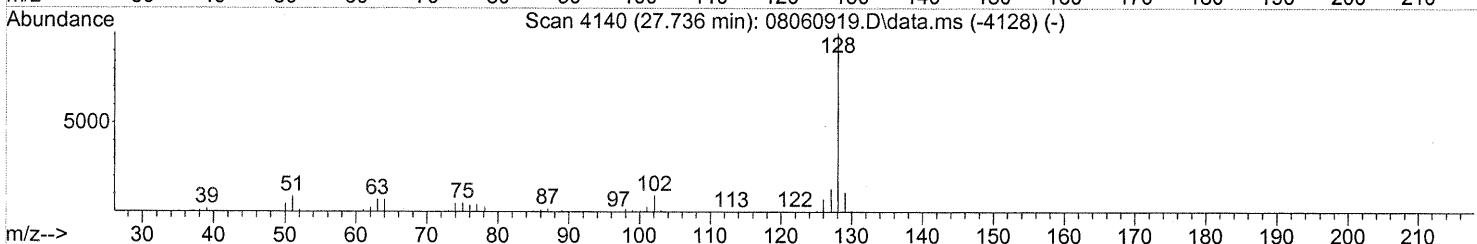
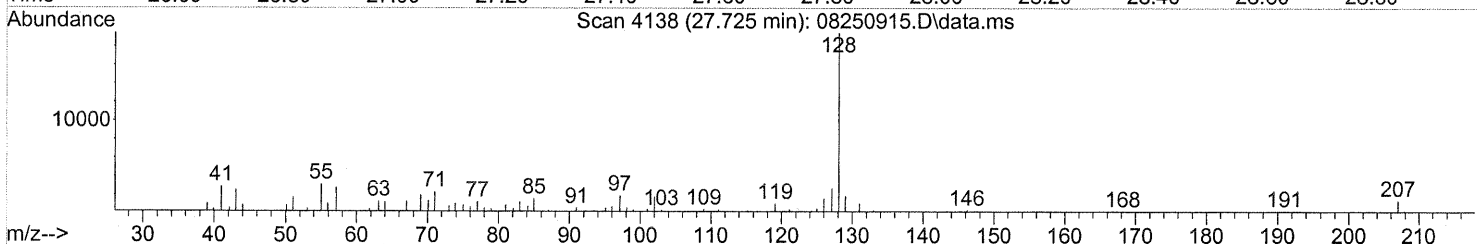
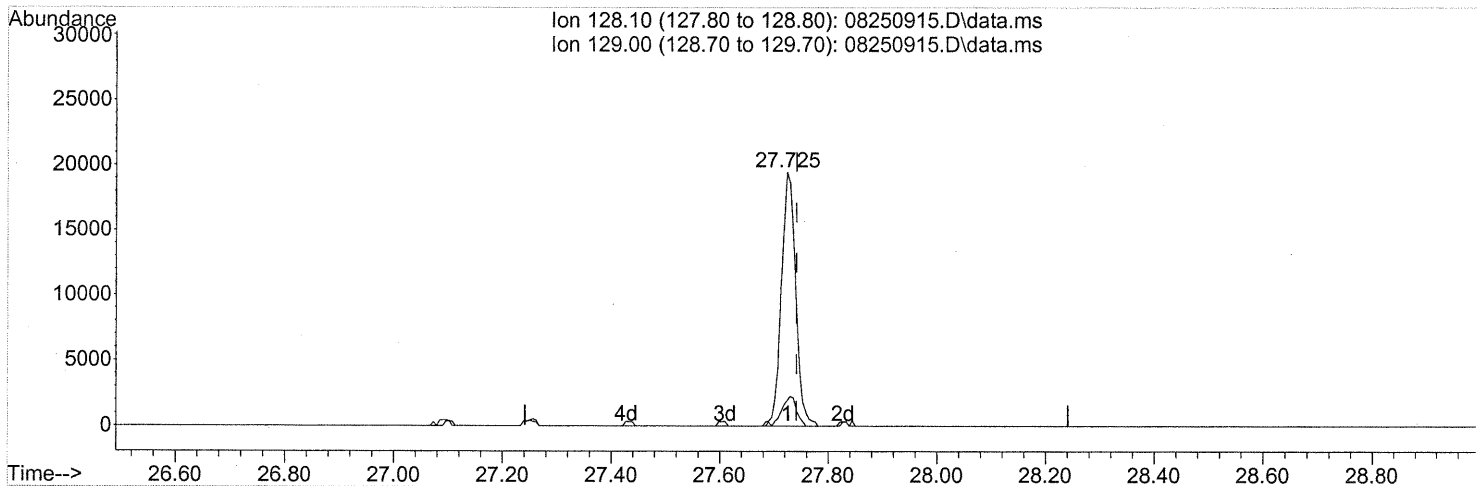
(91) d-Limonene (T)  
 25.525min (-0.011) 33.72ng  
 response 580045

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	92.58#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250915.D  
 Acq On : 25 Aug 2009 20:54  
 Operator : WA/CC  
 Sample : P0902875-006 (1000mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:39:28 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



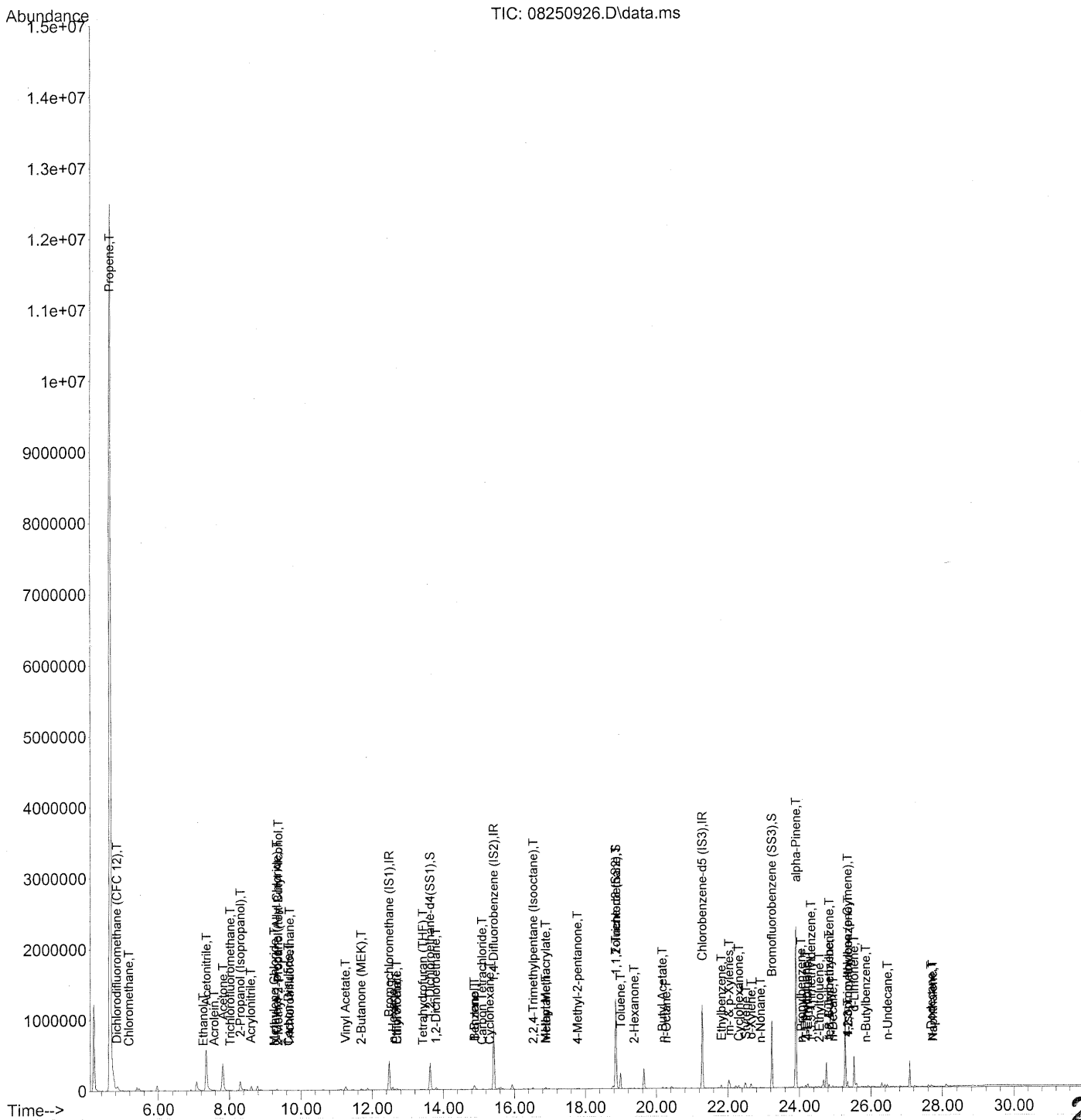
TIC: 08250915.D\data.ms

(95) Naphthalene (T)  
 27.725min (-0.017) 0.64ng  
 response 35317

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.79
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03 am  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03 am  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

*WA 9/3/09*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.47	130	201625	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1009867	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	487902	25.000	ng	-0.02

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.62	65	385344	21.989	ng	-0.04
Spiked Amount	25.000		Recovery	=	87.96%	
57) Toluene-d8 (SS2)	18.85	98	1092394	25.624	ng	-0.02
Spiked Amount	25.000		Recovery	=	102.48%	
73) Bromofluorobenzene (SS3)	23.23	174	315120	28.029	ng	-0.01
Spiked Amount	25.000		Recovery	=	112.12%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.64	42	7468	0.540	ng	# 1
3) Dichlorodifluoromethan...	4.84	85	21132	0.934	ng	99
4) Chloromethane	5.17	50	8267	0.544	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.26	45	16595	1.892	ng	# 37
11) Acetonitrile	7.35	41	961481	37.434	ng	99
12) Acrolein	7.57	56	7481	1.121	ng	99
13) Acetone	7.82	58	211786	25.593	ng	98
14) Trichlorofluoromethane	8.02	101	4981	0.244	ng	98
15) 2-Propanol (Isopropanol)	8.30	45	321470	9.886	ng	99
16) Acrylonitrile	8.60	53	889	0.059	ng	# 9
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.36	59	1645	0.057	ng	# 61
19) Methylene Chloride	9.25	84	1219	0.110	ng	93
20) 3-Chloro-1-propene (Al...	9.32	41	6701	0.313	ng	# 43
21) Trichlorotrifluoroethane	9.68	151	574	0.077	ng	# 67
22) Carbon Disulfide	9.64	76	3506	0.089	ng	# 74
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.24	86	4602	2.733	ng	# 76
27) 2-Butanone (MEK)	11.68	72	7373	0.987	ng	97
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.68	61	3207	0.824	ng	93
31) n-Hexane	12.58	57	21388	1.074	ng	100

**256**



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03 am  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.68	83	3363	0.192	ng	94
34) Tetrahydrofuran (THF)	13.42	72	1234	0.155	ng #	42
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	3599	0.225	ng	93
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.87	56	15023	1.146	ng	85
41) Benzene	14.87	78	54061	1.218	ng	99
42) Carbon Tetrachloride	15.09	117	2906	0.205	ng	86
43) Cyclohexane	15.29	84	3425	0.211	ng	95
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.36	83	93	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	16818	0.322	ng	82
50) Methyl Methacrylate	16.88	100	1660	0.406	ng #	1
51) n-Heptane	16.88	71	5980	0.502	ng	93
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.77	58	1429	0.134	ng	74
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.86	97	95076	9.753	ng #	5
58) Toluene	18.98	91	199152	4.753	ng	99
59) 2-Hexanone	19.37	43	9333	0.335	ng	96
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	18376	0.560	ng	95
63) n-Octane	20.27	57	2491	0.246	ng	91
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.82	91	40806	0.852	ng	95
67) m- & p-Xylenes	22.04	91	118072	3.047	ng	99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.50	104	21662	0.774	ng	98
70) o-Xylene	22.65	91	43277	1.114	ng	100
71) n-Nonane	22.91	43	4796	0.186	ng	93
72) 1,1,2,2-Tetrachloroethane	22.48	83	94	N.D.		
74) Cumene	23.41	105	1990	N.D.		
75) alpha-Pinene	23.90	93	1079136	42.904	ng	97
76) n-Propylbenzene	24.05	91	7913	0.128	ng #	81
77) 3-Ethyltoluene	24.17	105	18690	0.399	ng	99
78) 4-Ethyltoluene	24.22	105	9878	0.217	ng	98
79) 1,3,5-Trimethylbenzene	24.32	105	6907	0.180	ng	99

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03 am  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

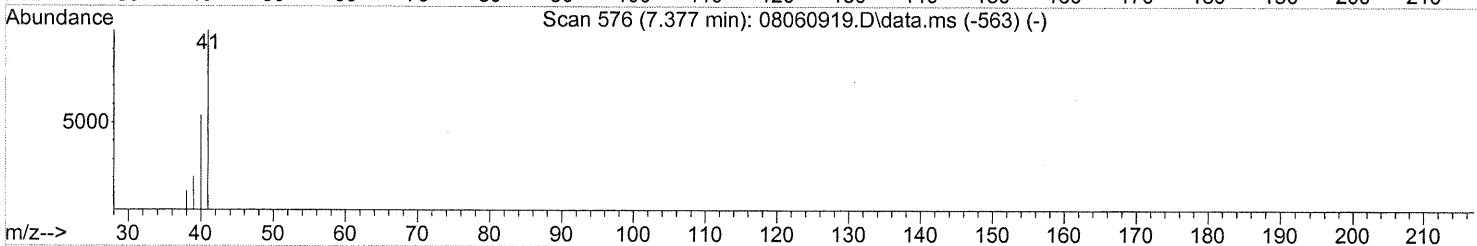
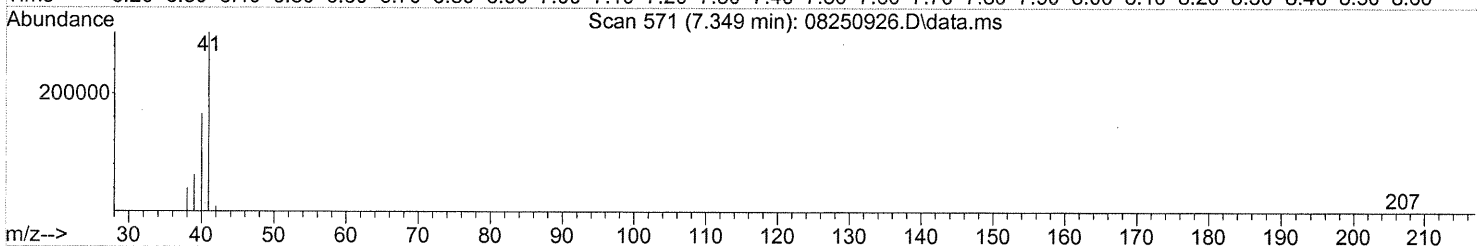
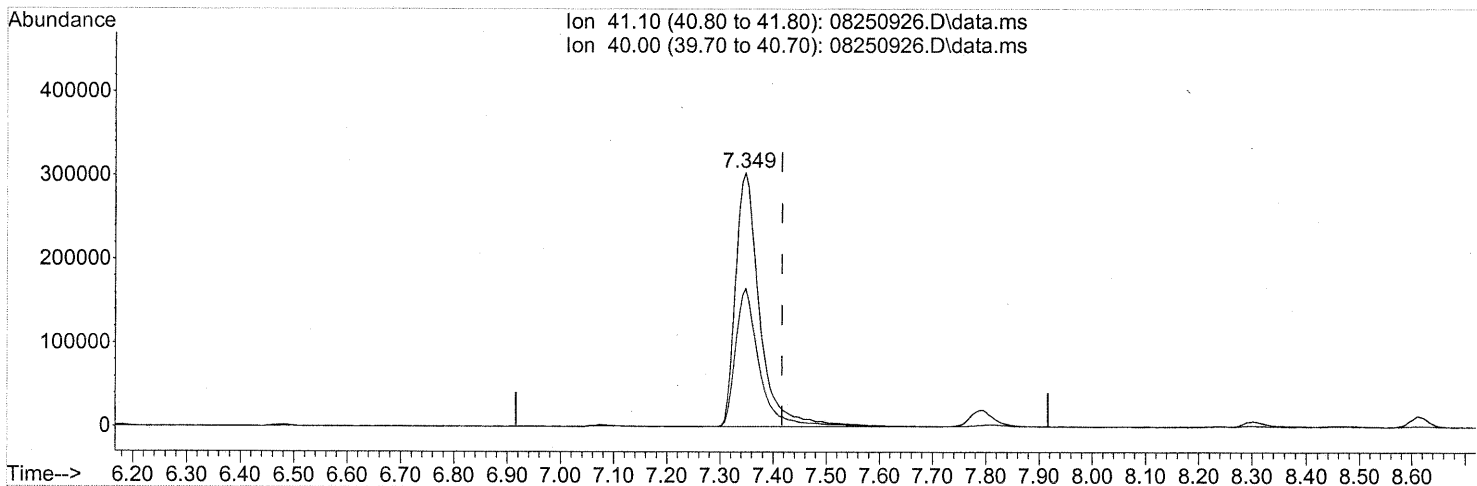
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	174	N.D.		
81) 2-Ethyltoluene	24.55	105	6240	0.132	ng	95
82) 1,2,4-Trimethylbenzene	24.83	105	24311	0.622	ng	87
83) n-Decane	24.93	57	9962	0.392	ng	96
84) Benzyl Chloride	24.99	91	1596	N.D.		
85) 1,3-Dichlorobenzene	25.11	146	109	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	109	N.D.		
87) sec-Butylbenzene	25.15	105	576	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	41931	0.891	ng	94
89) 1,2,3-Trimethylbenzene	25.35	105	8253	0.207	ng	# 57
90) 1,2-Dichlorobenzene	25.11	146	109	N.D.		
91) d-Limonene	25.53	68	111287	6.696	ng	94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	12311	0.455	ng	81
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.73	128	6519	0.123	ng	93
96) n-Dodecane	27.69	57	8371	0.267	ng	# 58
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	19550	1.126	ng	96
99) tert-Butylbenzene	24.82	119	2829	0.075	ng	# 56
100) n-Butylbenzene	25.86	91	3604	0.083	ng	# 52

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250926.D\data.ms

(11) Acetonitrile (T)

7.349min (-0.069) 37.43ng

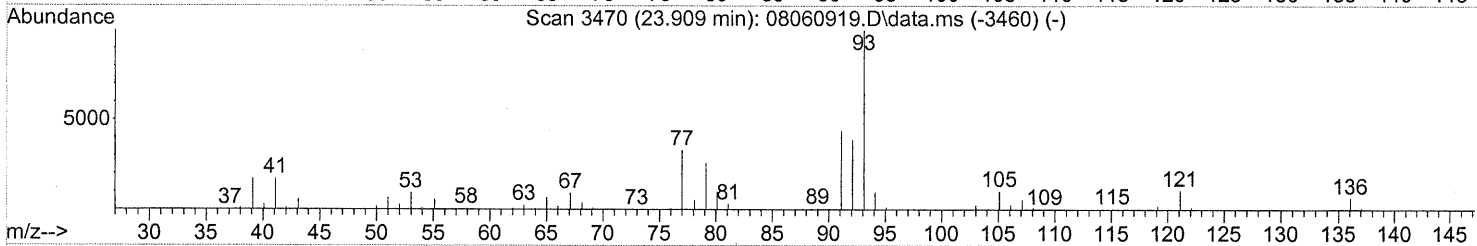
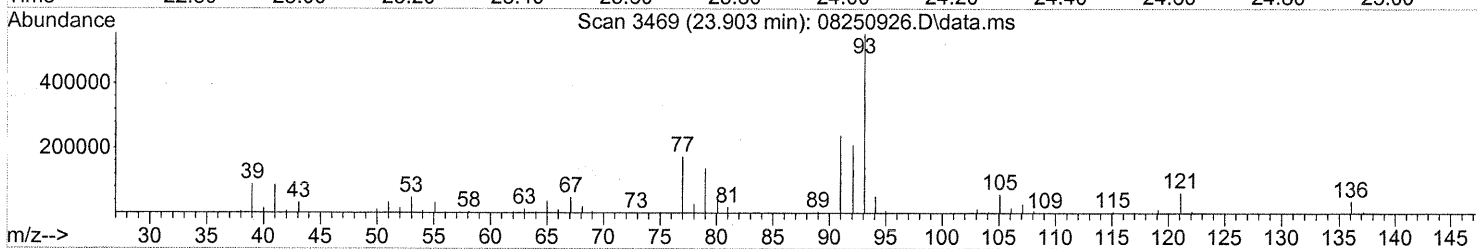
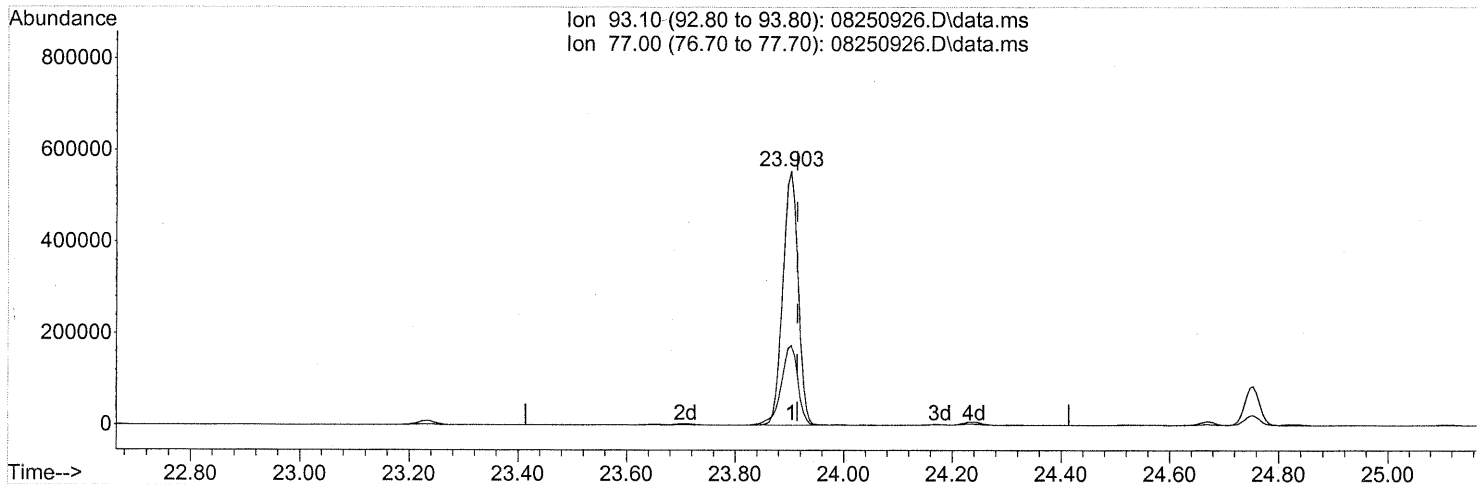
response 961481

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	54.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 26 Aug 2009 6:03  
 Operator : WA/CC  
 Sample : P0902875-006 dil (200mL)  
 Misc : Environmental Health 102269  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 06:40:08 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



TIC: 08250926.D\data.ms

(75) alpha-Pinene (T)  
 23.903min (-0.011) 42.90ng  
 response 1079136

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	33.94
0.00	0.00	0.00
0.00	0.00	0.00

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** Method Blank  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:

CAS Project ID: P0902875  
 CAS Sample ID: P090825-MB

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:  Date: 9/3/09 **261**

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 2 of 3

Client: Environmental Health & Engineering, Inc.

Client Sample ID: Method Blank

Client Project ID: 16512

CAS Project ID: P0902875

CAS Sample ID: P090825-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 8/25/09

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:

P

Date:

8/3/09

TO15scan.xls - 75 Compounds - PageNo.:

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** Method Blank  
**Client Project ID:** 16512

CAS Project ID: P0902875  
 CAS Sample ID: P090825-MB

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**

**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.10	ND	0.019	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

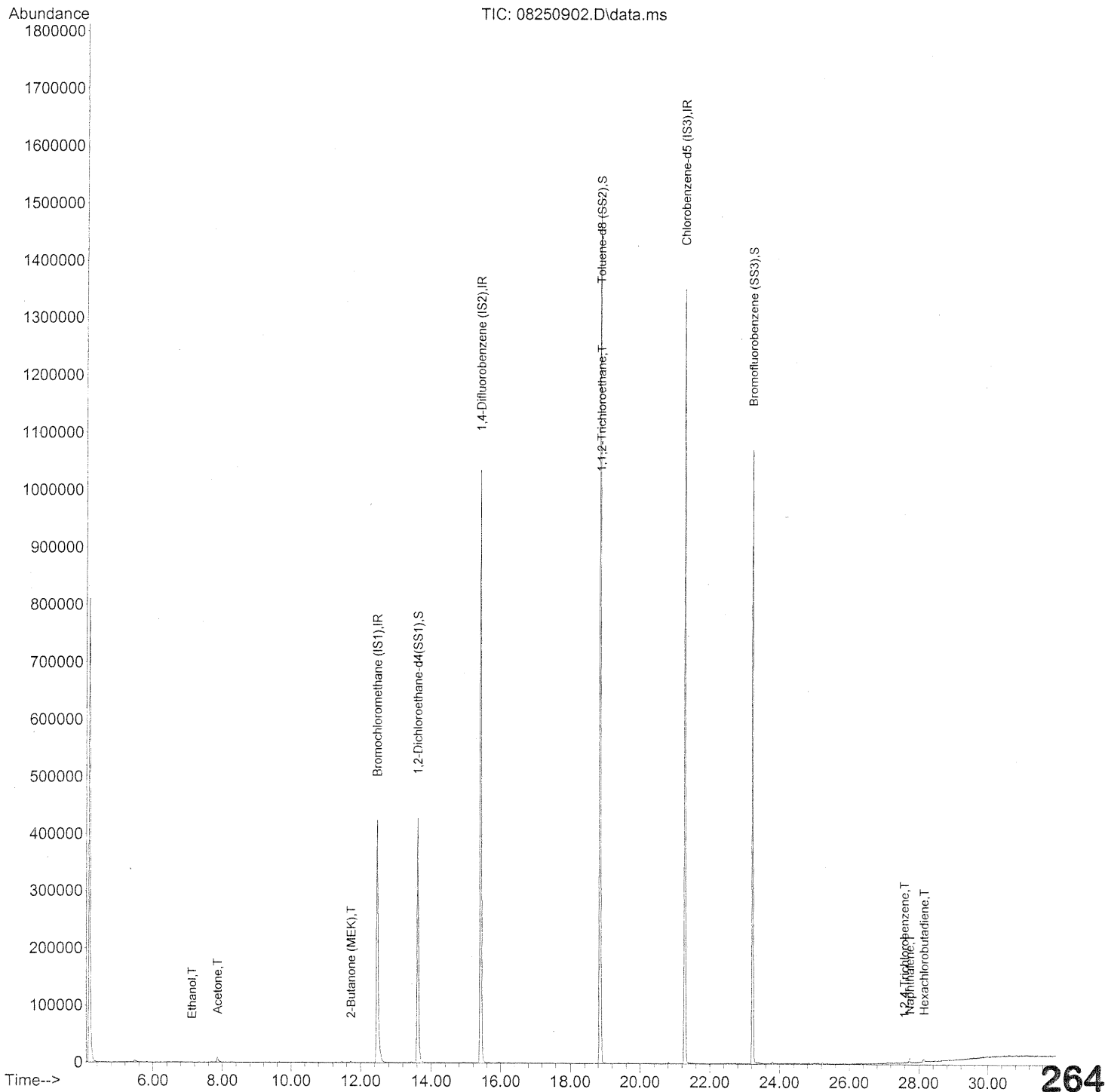
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: \_\_\_\_\_ Date: 9/3/09 **263**

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009\_08\25\  
Data File : 08250902.D  
Acq On : 25 Aug 2009 9:47  
Operator : WA  
Sample : TO-15 Method Blank (1000mL)  
Misc : S20-08140906  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 17:14:07 2009  
Response via : Initial Calibration





Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250902.D  
 Acq On : 25 Aug 2009 9:47  
 Operator : WA  
 Sample : TO-15 Method Blank (1000mL)  
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 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.47	130	246784	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1221355	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	564229	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	466168	21.733	ng	-0.03
Spiked Amount	25.000		Recovery	=	86.92%	✓
57) Toluene-d8 (SS2)	18.85	98	1313832	26.649	ng	-0.02
Spiked Amount	25.000		Recovery	=	106.60%	✓
73) Bromofluorobenzene (SS3)	23.23	174	357352	27.486	ng	-0.01
Spiked Amount	25.000		Recovery	=	109.96%	✓

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.73	42	189	N.D.		
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.13	45	557	0.052	ng	# 37
11) Acetonitrile	7.47	41	104	N.D.		
12) Acrolein	7.65	56	86	N.D.		
13) Acetone	7.87	58	6806	0.672	ng	# 63
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	8.38	45	265	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.		
19) Methylene Chloride	9.25	84	278	N.D.		
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.65	76	196	N.D.		
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.		
27) 2-Butanone (MEK)	11.72	72	551	0.060	ng	# 1
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	0.00	61	0	N.D.		
31) n-Hexane	0.00	57	0	N.D.		

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 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.43	72	113	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.97	56	95	N.D.		
41) Benzene	14.88	78	1307	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.40	84	100	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.86	97	113549	<del>9.631</del> ng <del>7P</del> #		4
58) Toluene	18.98	91	1223	N.D.		
59) 2-Hexanone	19.38	43	1282	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	0.00	43	0	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.82	91	788	N.D.		
67) m- & p-Xylenes	22.07	91	241	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.51	104	505	N.D.		
70) o-Xylene	22.66	91	462	N.D.		
71) n-Nonane	0.00	43	0	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.41	105	2625	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.05	91	830	N.D.		
77) 3-Ethyltoluene	24.17	105	1655	N.D.		
78) 4-Ethyltoluene	24.27	105	256	N.D.		
79) 1,3,5-Trimethylbenzene	24.32	105	1545	N.D.		

Data Path : J:\MS13\DATA\2009\_08\25\  
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 Sample : TO-15 Method Blank (1000mL)  
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 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.55	105	1154	N.D.		
82) 1,2,4-Trimethylbenzene	24.83	105	1151	N.D.		
83) n-Decane	24.94	57	95	N.D.		
84) Benzyl Chloride	24.99	91	1797	N.D.		
85) 1,3-Dichlorobenzene	25.02	146	243	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	720	N.D.		
87) sec-Butylbenzene	25.16	105	551	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	364	N.D.		
89) 1,2,3-Trimethylbenzene	25.35	105	676	N.D.		
90) 1,2-Dichlorobenzene	25.53	146	239	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	175	N.D.		
94) 1,2,4-Trichlorobenzene	27.59	180	1122	0.075 ng	#	74
95) Naphthalene	27.75	128	11145	0.182 ng		89
96) n-Dodecane	27.70	57	843	N.D.		
97) Hexachlorobutadiene	28.15	225	717	0.076 ng		92
98) Cyclohexanone	22.32	55	436	N.D.		
99) tert-Butylbenzene	24.83	119	197	N.D.		
100) n-Butylbenzene	25.87	91	90	N.D.		

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

QC SUMMARY FORMS

**COLUMBIA ANALYTICAL SERVICES, INC.**

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

**Client:** Environmental Health & Engineering, Inc.  
**Client Project ID:** 16512

CAS Project ID: P0902875

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Wida Ang  
**Sampling Media:** 6.0 L Summa Canister(s)  
**Test Notes:**

**Date(s) Collected:** 8/19/09  
**Date(s) Received:** 8/20/09  
**Date(s) Analyzed:** 8/25/09

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P090825-MB	87	70-130	107	70-130	110	70-130	
Lab Control Sample	P090825-LCS	89	70-130	106	70-130	110	70-130	
102028	P0902875-001	87	70-130	105	70-130	109	70-130	
102265	P0902875-002	90	70-130	103	70-130	110	70-130	
102266	P0902875-003	88	70-130	105	70-130	109	70-130	
102267	P0902875-004	87	70-130	106	70-130	111	70-130	
102268	P0902875-005	88	70-130	105	70-130	112	70-130	
102269	P0902875-006	87	70-130	104	70-130	109	70-130	

Verified By: \_\_\_\_\_



Date: \_\_\_\_\_

9/3/09

**COLUMBIA ANALYTICAL SERVICES, INC.**

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** Lab Control Sample  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:

CAS Project ID: P0902875  
 CAS Sample ID: P090825-LCS

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS	Data Qualifier
					Acceptance Limits	
115-07-1	Propene	26.3	20.5	78	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	21.8	84	61-118	
74-87-3	Chloromethane	25.0	25.3	101	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	24.3	93	65-122	
75-01-4	Vinyl Chloride	25.3	22.7	90	57-132	
106-99-0	1,3-Butadiene	26.8	25.0	93	66-161	
74-83-9	Bromomethane	25.8	28.3	110	67-130	
75-00-3	Chloroethane	25.5	22.5	88	68-123	
64-17-5	Ethanol	130	118	91	50-155	
75-05-8	Acetonitrile	26.0	20.4	78	48-148	
107-02-8	Acrolein	26.3	25.0	95	67-138	
67-64-1	Acetone	132	119	90	59-121	
75-69-4	Trichlorofluoromethane	26.3	23.8	90	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	42.8	89	54-126	
107-13-1	Acrylonitrile	25.8	25.0	97	65-134	
75-35-4	1,1-Dichloroethene	27.5	27.5	100	70-123	
75-09-2	Methylene Chloride	26.8	23.2	87	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	20.0	74	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	29.3	107	69-126	
75-15-0	Carbon Disulfide	26.0	24.0	92	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	23.5	92	69-125	
75-34-3	1,1-Dichloroethane	26.5	23.9	90	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	24.2	92	72-132	
108-05-4	Vinyl Acetate	126	184	146	73-158	
78-93-3	2-Butanone (MEK)	26.8	25.7	96	68-126	

**COLUMBIA ANALYTICAL SERVICES, INC.**

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** Lab Control Sample  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:

CAS Project ID: P0902875  
 CAS Sample ID: P090825-LCS

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount	Result	% Recovery	CAS Acceptance	Data
		ng	ng		Limits	Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	25.1	93	69-124	
141-78-6	Ethyl Acetate	52.0	50.9	98	65-126	
110-54-3	n-Hexane	26.0	21.6	83	63-125	
67-66-3	Chloroform	27.5	26.6	97	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	22.9	86	65-124	
107-06-2	1,2-Dichloroethane	26.3	23.8	90	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	24.5	94	69-127	
71-43-2	Benzene	25.8	23.4	91	68-122	
56-23-5	Carbon Tetrachloride	26.3	26.7	102	68-137	
110-82-7	Cyclohexane	51.8	47.9	92	68-121	
78-87-5	1,2-Dichloropropane	26.0	24.3	93	69-128	
75-27-4	Bromodichloromethane	26.3	25.2	96	71-131	
79-01-6	Trichloroethene	25.8	27.8	108	72-122	
123-91-1	1,4-Dioxane	26.0	26.0	100	73-127	
80-62-6	Methyl Methacrylate	52.8	55.8	106	80-133	
142-82-5	n-Heptane	25.8	23.6	91	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	23.5	96	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	24.8	93	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	25.9	96	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	26.0	100	76-125	
108-88-3	Toluene	26.8	27.7	103	74-119	
591-78-6	2-Hexanone	27.0	24.9	92	64-118	
124-48-1	Dibromochloromethane	28.3	32.0	113	79-129	
106-93-4	1,2-Dibromoethane	26.3	29.3	111	79-125	
123-86-4	n-Butyl Acetate	27.5	24.9	91	70-136	

Verified By: \_\_\_\_\_

Date: \_\_\_\_\_

9/3/09

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**COLUMBIA ANALYTICAL SERVICES, INC.**

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** Lab Control Sample  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
 Analyst: Wida Ang  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:

CAS Project ID: P0902875  
 CAS Sample ID: P090825-LCS

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS	Data Qualifier
					Acceptance Limits	
111-65-9	n-Octane	26.3	25.5	97	75-126	
127-18-4	Tetrachloroethene	25.3	29.7	117	72-125	
108-90-7	Chlorobenzene	26.5	29.0	109	74-121	
100-41-4	Ethylbenzene	26.3	27.5	105	76-120	
179601-23-1	m,p-Xylenes	51.5	52.9	103	75-120	
75-25-2	Bromoform	26.5	31.0	117	76-143	
100-42-5	Styrene	26.3	28.8	110	78-124	
95-47-6	o-Xylene	26.0	27.2	105	76-121	
111-84-2	n-Nonane	25.8	22.9	89	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	28.2	104	77-126	
98-82-8	Cumene	25.3	26.7	106	78-125	
80-56-8	alpha-Pinene	24.8	26.2	106	78-125	
103-65-1	n-Propylbenzene	25.3	26.5	105	80-127	
622-96-8	4-Ethyltoluene	26.3	28.5	108	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	28.7	108	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	28.0	110	76-123	
100-44-7	Benzyl Chloride	26.8	29.4	110	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	30.3	117	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	29.0	110	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	29.7	115	75-124	
5989-27-5	d-Limonene	26.5	27.5	104	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	33.2	123	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	33.1	121	70-139	
91-20-3	Naphthalene	25.0	29.3	117	69-141	
87-68-3	Hexachlorobutadiene	26.8	29.6	110	68-138	

Verified By: \_\_\_\_\_

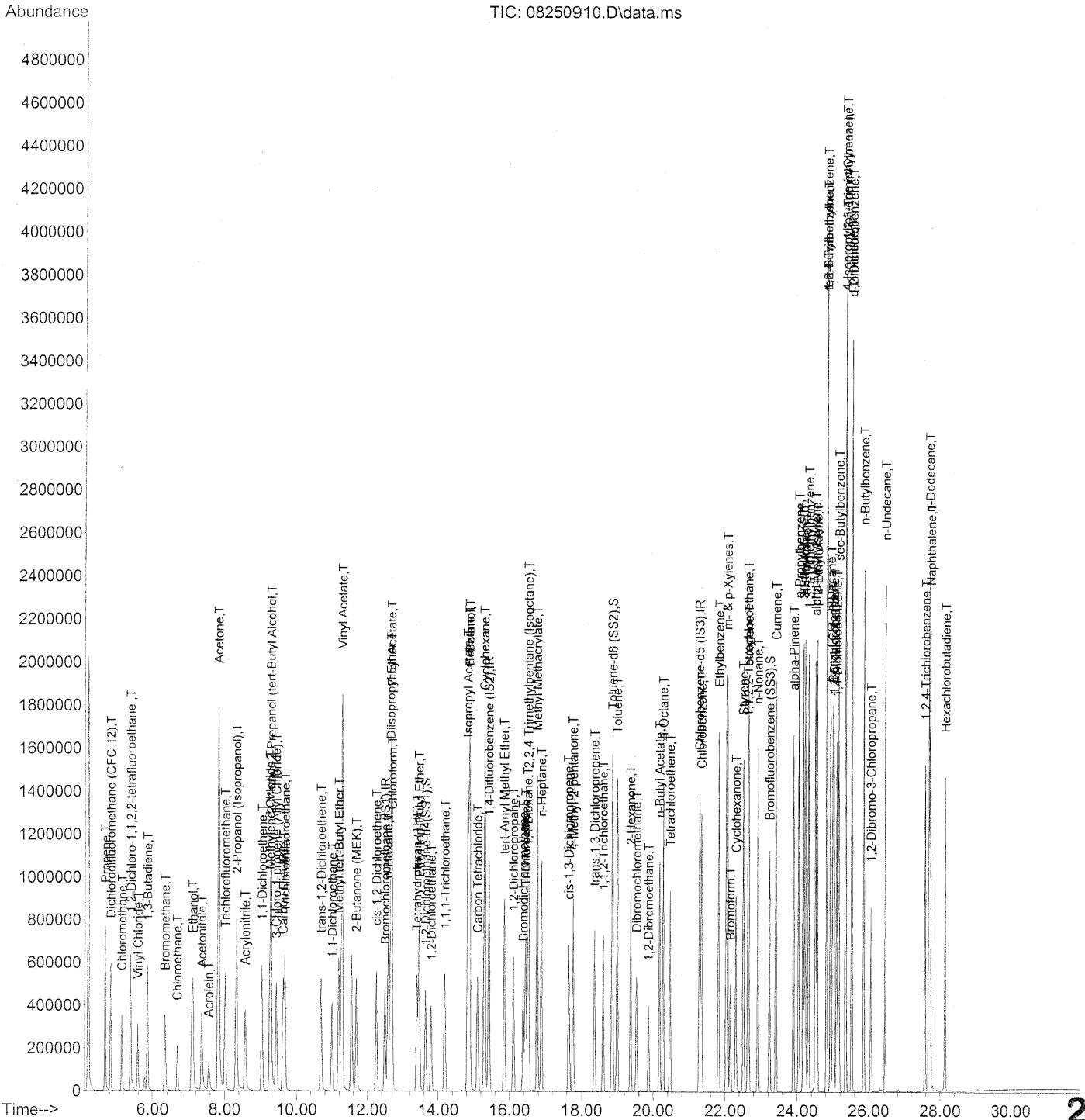
Date: 8/25/09



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250910.D  
 Acq On : 25 Aug 2009 17:17  
 Operator : WA/CC  
 Sample : 25ng TO-15 LCS STD  
 Misc : S20-08140906/S20-08240912  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 18:01:18 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.49	130	248135	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1255711	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	582061	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.64	65	478513	22.187	ng	-0.02
Spiked Amount	25.000		Recovery	= 88.76%		
57) Toluene-d8 (SS2)	18.85	98	1344332	26.432	ng	-0.01
Spiked Amount	25.000		Recovery	= 105.72%		
73) Bromofluorobenzene (SS3)	23.24	174	368860	27.502	ng	0.00
Spiked Amount	25.000		Recovery	= 110.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.67	42	349571	20.530	ng	99
3) Dichlorodifluoromethan...	4.83	85	606238	21.783	ng	99
4) Chloromethane	5.14	50	473460	25.321	ng	98
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	275099	24.330	ng	98
6) Vinyl Chloride	5.59	62	408473	22.738	ng	98
7) 1,3-Butadiene	5.86	54	322148	25.019	ng	100
8) Bromomethane	6.35	94	309524	28.303	ng	99
9) Chloroethane	6.69	64	234711	22.478	ng	98
10) Ethanol	7.11	45	1274569	118.089	ng	100
11) Acetonitrile	7.37	41	646221	20.444	ng	100
12) Acrolein	7.56	56	205114	24.966	ng	99
13) Acetone	7.82	58	1211521	118.964	ng	93
14) Trichlorofluoromethane	8.01	101	599342	23.820	ng	100
15) 2-Propanol (Isopropanol)	8.33	45	1713430	42.814	ng	99
16) Acrylonitrile	8.56	53	460361	25.018	ng	99
17) 1,1-Dichloroethene	9.03	96	321397	27.510	ng	# 84
18) 2-Methyl-2-Propanol (t...	9.28	59	1752614	49.338	ng	97
19) Methylene Chloride	9.25	84	316980	23.177	ng	90
20) 3-Chloro-1-propene (Al...	9.43	41	527728	20.017	ng	93
21) Trichlorotrifluoroethane	9.68	151	267799	29.272	ng	95
22) Carbon Disulfide	9.62	76	1155946	23.973	ng	99
23) trans-1,2-Dichloroethene	10.68	61	484951	23.459	ng	90
24) 1,1-Dichloroethane	10.99	63	599535	23.915	ng	100
25) Methyl tert-Butyl Ether	11.19	73	933322	24.222	ng	100
26) Vinyl Acetate	11.28	86	381417	184.040	ng	# 78
27) 2-Butanone (MEK)	11.67	72	236684	25.740	ng	# 89
28) cis-1,2-Dichloroethene	12.25	61	482209	25.059	ng	91
29) Diisopropyl Ether	12.66	87	327267	26.596	ng	# 1
30) Ethyl Acetate	12.67	61	243955	50.929	ng	99
31) n-Hexane	12.58	57	529796	21.621	ng	9

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Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250910.D  
 Acq On : 25 Aug 2009 17:17  
 Operator : WA/CC  
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 Misc : S20-08140906/S20-08240912  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 18:01:18 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.70	83	573602	26.589	ng	100
34) Tetrahydrofuran (THF)	13.39	72	224624	22.917	ng	94
35) Ethyl tert-Butyl Ether	13.46	87	384245	24.138	ng	91
36) 1,2-Dichloroethane	13.80	62	468464	23.760	ng	96
38) 1,1,1-Trichloroethane	14.19	97	522923	24.549	ng	97
39) Isopropyl Acetate	14.83	61	439977	47.233	ng	# 91
40) 1-Butanol	14.88	56	717834	44.047	ng	# 72
41) Benzene	14.88	78	1289944	23.365	ng	99
42) Carbon Tetrachloride	15.11	117	470445	26.736	ng	99
43) Cyclohexane	15.30	84	968683	47.904	ng	93
44) tert-Amyl Methyl Ether	15.85	73	989123	23.857	ng	96
45) 1,2-Dichloropropane	16.11	63	337386	24.332	ng	100
46) Bromodichloromethane	16.38	83	457888	25.167	ng	99
47) Trichloroethene	16.45	130	346095	27.794	ng	100
48) 1,4-Dioxane	16.51	88	274535	26.019	ng	83
49) 2,2,4-Trimethylpentane...	16.52	57	1478340	22.733	ng	95
50) Methyl Methacrylate	16.77	100	283649	55.810	ng	91
51) n-Heptane	16.89	71	349149	23.565	ng	96
52) cis-1,3-Dichloropropene	17.65	75	539938	23.496	ng	99
53) 4-Methyl-2-pentanone	17.76	58	328438	24.753	ng	99
54) trans-1,3-Dichloropropene	18.36	75	565933	25.901	ng	99
55) 1,1,2-Trichloroethane	18.60	97	315615	26.037	ng	96
58) Toluene	18.98	91	1385901	27.727	ng	99
59) 2-Hexanone	19.36	43	827183	24.886	ng	95
60) Dibromochloromethane	19.53	129	378308	31.989	ng	99
61) 1,2-Dibromoethane	19.86	107	367019	29.273	ng	99
62) n-Butyl Acetate	20.17	43	975176	24.891	ng	98
63) n-Octane	20.28	57	307753	25.468	ng	91
64) Tetrachloroethene	20.47	166	342972	29.652	ng	99
65) Chlorobenzene	21.34	112	896393	28.987	ng	100
66) Ethylbenzene	21.82	91	1569362	27.466	ng	98
67) m- & p-Xylenes	22.06	91	2444907	52.896	ng	97
68) Bromoform	22.15	173	304113	30.971	ng	100
69) Styrene	22.51	104	963453	28.839	ng	98
70) o-Xylene	22.66	91	1260637	27.203	ng	97
71) n-Nonane	22.91	43	706639	22.948	ng	94
72) 1,1,2,2-Tetrachloroethane	22.64	83	579698	28.187	ng	99
74) Cumene	23.41	105	1562320	26.689	ng	100
75) alpha-Pinene	23.90	93	786478	26.210	ng	98
76) n-Propylbenzene	24.05	91	1948358	26.477	ng	98
77) 3-Ethyltoluene	24.18	105	1557928	27.848	ng	100
78) 4-Ethyltoluene	24.23	105	1542925	28.463	ng	97
79) 1,3,5-Trimethylbenzene	24.32	105	1311757	28.692	ng	9

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Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250910.D  
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Quant Time: Aug 25 18:01:18 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.51	118	721654	29.483	ng	96
81) 2-Ethyltoluene	24.56	105	1551342	27.498	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	1306390	28.019	ng	99
83) n-Decane	24.94	57	750916	24.771	ng	97
84) Benzyl Chloride	25.00	91	1283911	29.377	ng	98
85) 1,3-Dichlorobenzene	25.03	146	714313	30.272	ng	97
86) 1,4-Dichlorobenzene	25.11	146	730319	29.027	ng	98
87) sec-Butylbenzene	25.17	105	1759572	27.936	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1569315	27.941	ng	98
89) 1,2,3-Trimethylbenzene	25.36	105	1318564	27.761	ng	95
90) 1,2-Dichlorobenzene	25.53	146	663622	29.663	ng	100
91) d-Limonene	25.53	68	545896	27.533	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.06	157	255155	33.160	ng	83
93) n-Undecane	26.46	57	808311	25.063	ng	97
94) 1,2,4-Trichlorobenzene	27.59	180	508479	33.056	ng	99
95) Naphthalene	27.73	128	1852227	29.252	ng	100
96) n-Dodecane	27.70	57	845668	22.571	ng	98
97) Hexachlorobutadiene	28.15	225	289355	29.575	ng	99
98) Cyclohexanone	22.30	55	498233	24.059	ng	96
99) tert-Butylbenzene	24.83	119	1246322	27.619	ng	99
100) n-Butylbenzene	25.86	91	1469122	28.289	ng	99

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

INITIAL CALIBRATION STANDARDS

Response Factor Report GCMS13

Method : J:\MS13\METHODS\R13080609.M (RTE Integrator)  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Calibration Files

0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D  
 25 =08060919.D 50 =08060920.D 100 =08060921.D

Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
-----ISTD-----										
1) IR Bromochloromethan	2.083	2.046	1.527	1.452	1.677	1.785	1.456	1.699	1.716	14.33
2) T Propene	3.199	3.005	2.791	2.724	2.691	2.912	2.335	2.776	2.804	9.02
3) T Dichlorodifluorom	1.963	2.024	1.872	1.893	1.705	2.186	1.722	1.706	1.884	9.13
4) T Chloromethane	1.177	1.316	1.196	1.051	1.039	1.184	0.985	1.166	1.139	9.39
5) T 1,2-Dichloro-1,1,	1.724	1.755	1.687	1.750	1.769	2.054	1.707	2.034	1.810	8.12
6) T Vinyl Chloride	1.207	1.292	1.234	1.222	1.230	1.502	1.236	1.455	1.297	8.89
7) T 1,3-Butadiene	1.264	1.072	1.027	1.044	1.036	1.293	0.980	1.098	1.102	10.39
8) T Bromomethane	1.075	1.160	0.919	1.000	1.033	1.173	0.945	1.112	1.052	9.00
9) T Chloroethane	1.345	1.232	1.028	1.032	0.995	1.126	0.909	1.031	1.087	12.94
10) T Ethanol	3.791	3.815	3.200	2.940	2.879	3.247	2.591	3.014	3.185	13.55
11) T Acetonitrile	0.735	0.915	0.767	0.793	0.825	0.940	0.758	0.890	0.828	9.42
12) T Acrolein	2.730	2.602	1.167	1.074	1.016	1.100	0.854	0.946	1.026	11.02
13) T Acetone	5.316	4.773	4.266	4.079	3.198	4.177	3.091	3.356	2.535	7.48
14) T Trichlorofluorome	1.226	1.941	1.770	1.848	1.903	2.263	1.804	2.077	4.032	19.47
15) T 2-Propanol (Isopr	1.098	1.161	1.131	1.150	1.132	1.359	1.091	1.293	1.854	16.20
16) T Acrylonitrile	4.615	4.098	3.719	3.708	3.575	4.214	3.280	1.423	1.177	8.20
17) T 1,1-Dichloroethen	1.722	1.622	1.254	1.259	1.232	1.428	1.151	1.356	3.579	26.97
18) T 2-Methyl-2-Propan	2.983	2.989	2.818	2.826	2.401	2.664	2.134	2.435	1.378	14.59
19) T Methylene Chlorid	0.856	0.905	0.889	0.896	0.873	1.064	0.870	1.021	2.656	11.56
20) T 3-Chloro-1-propen	5.485	5.227	4.603	4.594	4.557	5.329	4.218	4.851	0.922	8.37
21) T Trichlorotrifluor	1.848	2.189	1.929	2.047	2.041	2.440	1.938	2.230	4.858	9.16
22) T Carbon Disulfide	2.670	2.757	2.264	2.426	2.360	2.850	2.271	2.607	2.083	9.32
23) T trans-1,2-Dichlor	4.114	4.046	3.646	3.595	3.643	4.360	3.538	4.115	2.526	8.94
24) T 1,1-Dichloroethan	0.230	0.243	0.237	0.239	0.177	0.222	0.165	0.156	3.882	8.02
25) T Methyl tert-Butyl	0.989	1.007	0.915	0.892	0.915	1.072	0.855	0.766	0.209	17.35
26) T Vinyl Acetate	1.913	1.980	1.790	1.854	1.890	2.244	1.789	2.049	0.926	10.32
27) T 2-Butanone (MEK)	1.013	1.376	1.212	1.246	1.214	1.425	1.129	1.303	1.939	7.84
28) T cis-1,2-Dichloroe									1.240	10.65
29) T Diisopropyl Ether										

IDA 8/6/09

Response Factor Report GCMS13

Method : J:\MS13\METHODS\R13080609.M (RTE Integrator)  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Calibration Files

0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D  
 25 =08060919.D 50 =08060920.D 100 =08060921.D

Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
30) T Ethyl Acetate	0.395	0.513	0.492	0.479	0.491	0.561	0.439	0.491	0.483	10.18
31) T n-Hexane	2.766	2.862	2.319	2.390	2.266	2.624	2.095	2.429	2.469	10.60
32) T Chloroform	2.301	2.230	2.080	2.148	2.129	2.436	1.910	2.154	2.174	7.16
33) S 1,2-Dichloroethan	2.180	2.200	2.208	2.191	2.172	2.156	2.144	2.133	2.173	1.24
34) T Tetrahydrofuran (	1.393	1.027	0.901	0.860	1.025	0.804	0.903	0.903	0.988	19.90
35) T Ethyl tert-Butyl	1.747	1.639	1.589	1.578	1.501	1.752	1.405	1.621	1.604	7.26
36) T 1,2-Dichloroethan	2.106	2.083	1.937	1.868	1.850	2.232	1.788	2.028	1.986	7.62
37) IR 1,4-Difluorobenze	-----ISTD-----									
38) T 1,1,1-Trichloroet	0.493	0.438	0.396	0.402	0.392	0.469	0.380	0.422	0.424	9.47
39) T Isopropyl Acetate	0.199	0.203	0.176	0.176	0.176	0.207	0.163	0.183	0.185	8.43
40) T 1-Butanol	0.444	0.385	0.301	0.293	0.285	0.330	0.265	0.291	0.324	18.74
41) T Benzene	1.390	1.294	1.057	1.020	0.989	1.140	0.898	1.005	1.099	15.15
42) T Carbon Tetrachlor	0.346	0.351	0.327	0.329	0.336	0.408	0.329	0.377	0.350	8.13
43) T Cyclohexane	0.465	0.420	0.379	0.382	0.383	0.440	0.351	0.401	0.403	9.21
44) T tert-Amyl Methyl	0.924	0.905	0.814	0.799	0.775	0.901	0.707	0.778	0.825	9.32
45) T 1,2-Dichloropropa	0.283	0.286	0.260	0.268	0.261	0.313	0.251	0.286	0.276	7.20
46) T Bromodichlorometh	0.375	0.388	0.340	0.344	0.339	0.408	0.331	0.371	0.362	7.63
47) T Trichloroethene	0.255	0.248	0.231	0.233	0.233	0.283	0.230	0.270	0.248	8.13
48) T 1,4-Dioxane	0.211	0.210	0.217	0.202	0.205	0.235	0.190	0.211	0.210	6.08
49) T 2,2,4-Trimethylpe	1.459	1.421	1.232	1.243	1.233	1.428	1.112	1.229	1.295	9.62
50) T Methyl Methacryla	0.084	0.106	0.097	0.096	0.098	0.118	0.098	0.112	0.101	10.64
51) T n-Heptane	0.330	0.309	0.283	0.282	0.275	0.328	0.259	0.294	0.295	8.56
52) T cis-1,3-Dichlorop	0.492	0.469	0.422	0.433	0.431	0.517	0.421	0.476	0.458	7.87
53) T 4-Methyl-2-pentan	0.262	0.275	0.257	0.255	0.252	0.302	0.239	0.271	0.264	7.19
54) T trans-1,3-Dichlor	0.492	0.436	0.391	0.413	0.408	0.489	0.399	0.452	0.435	9.06
55) T 1,1,2-Trichloroet	0.248	0.251	0.226	0.234	0.227	0.270	0.220	0.254	0.241	7.12
56) IR Chlorobenzene-d5	-----ISTD-----									
57) S Toluene-d8 (SS2)	2.196	2.196	2.181	2.184	2.176	2.177	2.188	2.177	2.184	0.37

279 (#) Out of Range ### Number of calibration levels exceeded format ###  
 R13080609.M Thu Aug 06 17:21:25 2009 *PA 8/6/09*

Response Factor Report GCMS13

Method : J:\MS13\METHODS\R13080609.M (RTE Integrator)  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Calibration Files

0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D  
 25 =08060919.D 50 =08060920.D 100 =08060921.D

Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
58) T Toluene	2.598	2.282	2.011	2.028	1.956	2.323	1.860	2.115	2.147	11.21
59) T 2-Hexanone	1.631	1.475	1.347	1.365	1.367	1.586	1.255	1.396	1.428	8.91
60) T Dibromochlorometh	0.488	0.496	0.473	0.476	0.482	0.597	0.487	0.566	0.508	9.17
61) T 1,2-Dibromoethane	0.567	0.548	0.480	0.512	0.510	0.617	0.496	0.577	0.539	8.68
62) T n-Butyl Acetate	1.970	1.781	1.544	1.562	1.554	1.839	1.464	1.748	1.683	10.51
63) T n-Octane	0.560	0.571	0.505	0.499	0.491	0.570	0.450	0.506	0.519	8.42
64) T Tetrachloroethene	0.482	0.483	0.476	0.481	0.458	0.568	0.469	0.556	0.497	8.29
65) T Chlorobenzene	1.590	1.363	1.215	1.270	1.217	1.454	1.169	1.348	1.328	10.63
66) T Ethylbenzene	2.854	2.575	2.315	2.330	2.298	2.695	2.145	2.421	2.454	9.60
67) T m- & p-Xylenes	2.378	2.159	1.844	1.903	1.829	2.151	1.706	1.913	1.985	11.21
68) T Bromoform	0.336	0.384	0.393	0.381	0.411	0.521	0.432	0.516	0.422	15.56
69) T Styrene	1.591	1.461	1.301	1.326	1.336	1.629	1.314	1.522	1.435	9.31
70) T o-Xylene	2.315	2.130	1.894	1.892	1.861	2.164	1.722	1.945	1.990	9.78
71) T n-Nonane	1.652	1.463	1.265	1.289	1.228	1.399	1.084	1.200	1.323	13.39
72) T 1,1,2,2-Tetrachlo	0.950	0.931	0.839	0.860	0.839	0.977	0.776	0.894	0.883	7.62
73) S Bromofluorobenz	0.571	0.566	0.563	0.563	0.577	0.579	0.594	0.595	0.576	2.23
74) T Cumene	3.046	2.701	2.336	2.364	2.307	2.723	2.181	2.456	2.514	11.39
75) T alpha-Pinene	1.405	1.389	1.184	1.219	1.220	1.431	1.152	1.311	1.289	8.49
76) T n-Propylbenzene	3.730	3.286	2.971	3.088	2.984	3.473	2.742	3.012	3.161	10.05
77) T 3-Ethyltoluene	2.856	2.585	2.264	2.204	2.239	2.593	2.105	2.377	2.403	10.55
78) T 4-Ethyltoluene	2.821	2.428	2.122	2.235	2.150	2.576	2.035	2.260	2.328	11.34
79) T 1,3,5-Trimethylbe	2.371	1.981	1.833	1.859	1.835	2.153	1.724	1.953	1.964	10.62
80) T alpha-Methylstyre	1.173	1.018	0.919	0.971	1.006	1.205	0.983	1.135	1.051	9.98
81) T 2-Ethyltoluene	2.866	2.524	2.246	2.299	2.267	2.666	2.132	2.386	2.423	10.14
82) T 1,2,4-Trimethylbe	2.204	2.160	1.885	1.969	1.896	2.217	1.758	1.932	2.003	8.49
83) T n-Decane	1.505	1.419	1.273	1.281	1.242	1.408	1.089	1.199	1.302	10.36
84) T Benzyl Chloride	1.924	1.912	1.669	1.773	1.834	2.197	1.749	1.959	1.877	8.66
85) T 1,3-Dichlorobenze	1.163	0.993	0.903	0.959	0.940	1.131	0.925	1.094	1.013	9.96
86) T 1,4-Dichlorobenze	1.251	1.103	0.995	0.996	0.980	1.192	0.979	1.149	1.081	9.99
87) T sec-Butylbenzene	3.139	2.866	2.554	2.575	2.546	2.985	2.364	2.613	2.705	9.71

(#) 280 Out of Range ### Number of calibration levels exceeded format ###  
 R13080609.M Thu Aug 06 17:21:26 2009

DA 8/6/09



Response Factor Report GCMS13

Method : J:\MS13\METHODS\R13080609.M (RTE Integrator)  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Calibration Files

0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D  
 25 =08060919.D 50 =08060920.D 100 =08060921.D

Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
88) T 4-Isopropyltoluen	2.658	2.459	2.338	2.329	2.319	2.712	2.154	2.330	2.412	7.80
89) T 1,2,3-Trimethylbe	2.247	2.205	1.983	1.961	1.936	2.249	1.789	1.951	2.040	8.39
90) T 1,2-Dichlorobenze	1.053	0.935	0.895	0.923	0.908	1.091	0.885	0.997	0.961	8.06
91) T d-Limonene	0.947	0.884	0.819	0.808	0.816	0.953	0.756	0.831	0.852	8.22
92) T 1,2-Dibromo-3-Chl	0.255	0.322	0.281	0.316	0.334	0.407	0.333	0.395	0.330	15.52
93) T n-Undecane	1.637	1.515	1.310	1.387	1.321	1.489	1.157	1.266	1.385	11.15
94) T 1,2,4-Trichlorobe	0.633	0.617	0.569	0.628	0.635	0.782	0.647	0.775	0.661	11.53
95) T Naphthalene	3.212	2.782	2.370	2.515	2.600	3.038	2.466	2.774	2.720	10.71
96) T n-Dodecane	2.008	1.787	1.580	1.604	1.487	1.664	1.312	1.433	1.609	13.47
97) T Hexachlorobutadie	0.508	0.450	0.382	0.370	0.364	0.452	0.378	0.458	0.420	12.69
98) T Cyclohexanone	1.058	0.930	0.839	0.840	0.827	0.975	0.777	0.870	0.889	10.33
99) T tert-Butylbenzene	2.338	1.994	1.824	1.861	1.804	2.116	1.695	1.873	1.938	10.59
100) T n-Butylbenzene	2.495	2.246	2.121	2.16	2.160	2.504	1.975	2.174	2.231	8.20



**Primary Source Standards Concentrations  
(Working & Initial Calibration)**

4ng/L Std. ID: S20-07240912  
20ng/L Std. ID:

200ng/L Std. ID:  
Dilution Factors:

5      50      250

Compounds	Source Std. mg/m <sup>3</sup>	Primary Working Standards			Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source)								
		200ng/L	20ng/L	4ng/L		Injection (L):	4	4	20	20	20	200	200	200
							ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng
Bromoform	1.03	206	20.6	4.12		0.025	0.050	0.025	0.05	0.25	0.125	0.25	0.50	
Styrene	1.07	214	21.4	4.28		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
o-Xylene	1.06	212	21.2	4.24		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
n-Nonane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
1,1,2,2-Tetrachloroethane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Cumene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
alpha-Pinene	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101	
n-Propylbenzene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
3-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
4-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
1,3,5-Trimethylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
alpha-Methylstyrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
2-Ethyltoluene	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
1,2,4-Trimethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
n-Decane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Benzyl Chloride	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
1,3-Dichlorobenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
1,4-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
sec-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
p-Isopropyltoluene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
1,2,3-Trimethylbenzene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
1,2-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
d-Limonene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
chloropropane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
n-Undecane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48		0.112	0.224	0.560	1.12	5.60	28.0	56.0	112	
Naphthalene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
n-Dodecane	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0	
Hexachloro-1,3-butadiene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
Methacrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
Cyclohexanone	0.98	196	19.6	3.92		0.098	0.196	0.490	0.980	4.90	24.5	49.0	98.0	
tert-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
n-Butylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	

\*Enter Information in the Solid Shaded Areas ONLY.

DA 8/11/09

Calibration Status Report GCMS13

Method Path : J:\MS13\METHODS\  
 Method File : R13080609.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS13\DATA\2009_08\06\08060914.D
2	0.2	0	25	J:\MS13\DATA\2009_08\06\08060915.D
3	0.5	1	25	J:\MS13\DATA\2009_08\06\08060916.D
4	1.0	1	25	J:\MS13\DATA\2009_08\06\08060917.D
5	5.0	5	25	J:\MS13\DATA\2009_08\06\08060918.D
6	25	27	25	J:\MS13\DATA\2009_08\06\08060919.D
7	50	54	25	J:\MS13\DATA\2009_08\06\08060920.D
8	100	107	25	J:\MS13\DATA\2009_08\06\08060921.D

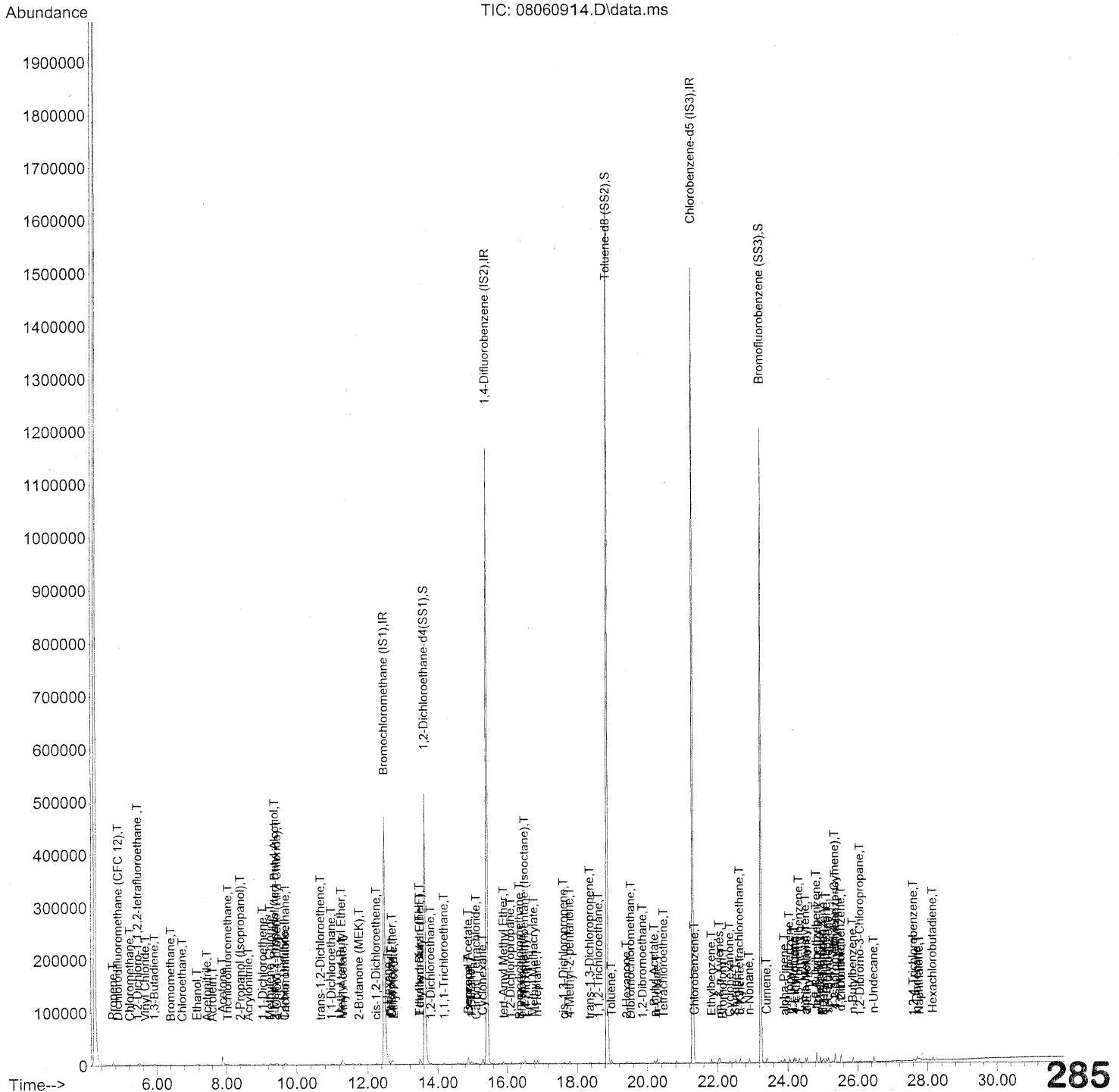
#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Aug 06 17:09 2009	Aug 06 13:44 2009	06 Aug 2009 11:55
2	0.2	Aug 06 17:10 2009	Aug 06 13:51 2009	06 Aug 2009 12:36
3	0.5	Aug 06 17:10 2009	Aug 06 13:52 2009	06 Aug 2009 13:17
4	1.0	Aug 06 17:10 2009	Aug 06 14:32 2009	06 Aug 2009 13:57
5	5.0	Aug 06 17:10 2009	Aug 06 15:06 2009	06 Aug 2009 14:38
6	25	Aug 06 17:11 2009	Aug 06 16:11 2009	06 Aug 2009 15:18
7	50	Aug 06 17:13 2009	Aug 06 17:00 2009	06 Aug 2009 15:59
8	100	Aug 06 17:14 2009	Aug 06 17:08 2009	06 Aug 2009 16:39

R13080609.M Thu Aug 06 17:33:51 2009

*DA 8/6/09*

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	255549	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.42	114	1302832	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	644252	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	557049	23.882	ng	0.00
Spiked Amount	25.000		Recovery	=	95.52%	
57) Toluene-d8 (SS2)	18.85	98	1414545	25.331	ng	0.00
Spiked Amount	25.000		Recovery	=	101.32%	
73) Bromofluorobenzene (SS3)	23.24	174	367818	25.794	ng	0.00
Spiked Amount	25.000		Recovery	=	103.16%	

Target Compounds

						Qvalue
2) Propene	4.73	42	2278m	0.115	ng	
3) Dichlorodifluoromethan...	4.88	85	3433	0.104	ng	# 94
4) Chloromethane	5.22	50	2007	0.097	ng	65
5) 1,2-Dichloro-1,1,2,2-t...	5.44	135	1275	0.099	ng	# 57
6) Vinyl Chloride	5.66	62	1780	0.088	ng	74
7) 1,3-Butadiene	5.93	54	1480	0.102	ng	# 57
8) Bromomethane	6.41	94	1318	0.141	ng	87
9) Chloroethane	6.74	64	1110	0.099	ng	# 41
10) Ethanol	7.16	45	7147	0.588	ng	69
11) Acetonitrile	7.45	41	4069	0.095	ng	91
12) Acrolein	7.61	56	811	0.069	ng	# 31
13) Acetone	7.89	58	11564	0.833	ng	96
14) Trichlorofluoromethane	8.05	101	2930	0.103	ng	93
15) 2-Propanol (Isopropanol)	8.41	45	10270	0.224	ng	74
16) Acrylonitrile	8.64	53	1328m	0.066	ng	
17) 1,1-Dichloroethene	9.05	96	1235	0.096	ng	87
18) 2-Methyl-2-Propanol (t...	9.38	59	9529	0.242	ng	# 74
19) Methylene Chloride	9.25	84	1883	0.126	ng	97
20) 3-Chloro-1-propene (Al...	9.45	41	3293m	0.136	ng	
21) Trichlorotrifluoroethane	9.69	151	962	0.092	ng	# 76
22) Carbon Disulfide	9.66	76	5999	0.117	ng	# 74
23) trans-1,2-Dichloroethene	10.68	61	2002	0.090	ng	97
24) 1,1-Dichloroethane	10.98	63	2893	0.104	ng	89
25) Methyl tert-Butyl Ether	11.26	73	4584	0.102	ng	94
26) Vinyl Acetate	11.31	86	1182	0.392	ng	# 1
27) 2-Butanone (MEK)	11.76	72	1112	0.111	ng	# 28
28) cis-1,2-Dichloroethene	12.25	61	2132	0.099	ng	90
29) Diisopropyl Ether	12.70	87	1108	0.091	ng	# 1
30) Ethyl Acetate	12.74	61	860	0.165	ng	# 73
31) n-Hexane	12.59	57	3082	0.112	ng	

286

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	12.68	83	2517	0.100	ng	93
34) Tetrahydrofuran (THF)	13.49	72	2071	0.175	ng	# 78
35) Ethyl tert-Butyl Ether	13.50	87	1839	0.099	ng	# 87
36) 1,2-Dichloroethane	13.80	62	2282	0.103	ng	# 62
38) 1,1,1-Trichloroethane	14.19	97	2700	0.112	ng	89
39) Isopropyl Acetate	14.88	61	2167	0.217	ng	# 92
40) 1-Butanol	14.97	56	4795	0.282	ng	# 79
41) Benzene	14.88	78	7680	0.120	ng	96
42) Carbon Tetrachloride	15.11	117	1945	0.096	ng	94
43) Cyclohexane	15.30	84	5207	0.231	ng	98
44) tert-Amyl Methyl Ether	15.91	73	5009	0.107	ng	91
45) 1,2-Dichloropropane	16.11	63	1549	0.100	ng	99
46) Bromodichloromethane	16.37	83	2109	0.107	ng	98
47) Trichloroethene	16.45	130	1409	0.106	ng	98
48) 1,4-Dioxane	16.57	88	1174	0.103	ng	# 56
49) 2,2,4-Trimethylpentane...	16.52	57	7907	0.112	ng	98
50) Methyl Methacrylate	16.79	100	927	0.171	ng	# 35
51) n-Heptane	16.89	71	1821	0.109	ng	# 88
52) cis-1,3-Dichloropropene	17.66	75	2536	0.105	ng	86
53) 4-Methyl-2-pentanone	17.81	58	1504	0.104	ng	85
54) trans-1,3-Dichloropropene	18.36	75	2818	0.128	ng	86
55) 1,1,2-Trichloroethane	18.61	97	1358	0.101	ng	92
58) Toluene	18.98	91	7232	0.125	ng	97
59) 2-Hexanone	19.41	43	4623	0.119	ng	91
60) Dibromochloromethane	19.53	129	1445	0.107	ng	97
61) 1,2-Dibromoethane	19.87	107	1548	0.111	ng	98
62) n-Butyl Acetate	20.21	43	5583	0.127	ng	97
63) n-Octane	20.28	57	1545	0.106	ng	95
64) Tetrachloroethene	20.47	166	1267	0.096	ng	98
65) Chlorobenzene	21.35	112	4424	0.127	ng	91
66) Ethylbenzene	21.82	91	7796	0.119	ng	99
67) m- & p-Xylenes	22.06	91	12746	0.242	ng	# 30
68) Bromoform	22.15	173	892	0.081	ng	95
69) Styrene	22.51	104	4388	0.119	ng	97
70) o-Xylene	22.66	91	6325	0.119	ng	98
71) n-Nonane	22.91	43	4513	0.122	ng	93
72) 1,1,2,2-Tetrachloroethane	22.64	83	2620	0.112	ng	100
74) Cumene	23.41	105	8086	0.125	ng	97
75) alpha-Pinene	23.91	93	3657	0.107	ng	94
76) n-Propylbenzene	24.05	91	9900	0.119	ng	97
77) 3-Ethyltoluene	24.18	105	8022	0.131	ng	93
78) 4-Ethyltoluene	24.23	105	7924	0.128	ng	98
79) 1,3,5-Trimethylbenzene	24.33	105	6660	0.126	ng	98

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.52	118	3235	0.121	ng	93
81) 2-Ethyltoluene	24.56	105	7755	0.121	ng	95
82) 1,2,4-Trimethylbenzene	24.83	105	6020	0.114	ng	98
83) n-Decane	24.93	57	4190	0.120	ng	96
84) Benzyl Chloride	25.01	91	5455	0.120	ng	96
85) 1,3-Dichlorobenzene	25.03	146	3266	0.129	ng	95
86) 1,4-Dichlorobenzene	25.11	146	3418	0.127	ng	96
87) sec-Butylbenzene	25.17	105	8575	0.121	ng	94
88) 4-Isopropyltoluene (p-...	25.35	119	7056	0.112	ng	94
89) 1,2,3-Trimethylbenzene	25.36	105	6195	0.115	ng	95
90) 1,2-Dichlorobenzene	25.53	146	2877	0.118	ng	94
91) d-Limonene	25.53	68	2659	0.116	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.07	157	724	0.093	ng	# 73
93) n-Undecane	26.46	57	4598	0.129	ng	92
94) 1,2,4-Trichlorobenzene	27.61	180	1826	0.118	ng	# 75
95) Naphthalene	27.77	128	8775	0.145	ng	72
96) n-Dodecane	27.71	57	5122m	0.135	ng	
97) Hexachlorobutadiene	28.15	225	1439	0.145	ng	94
98) Cyclohexanone	22.35	55	2671	0.101	ng	91
99) tert-Butylbenzene	24.83	119	6387	0.126	ng	92
100) n-Butylbenzene	25.86	91	7008	0.122	ng	96

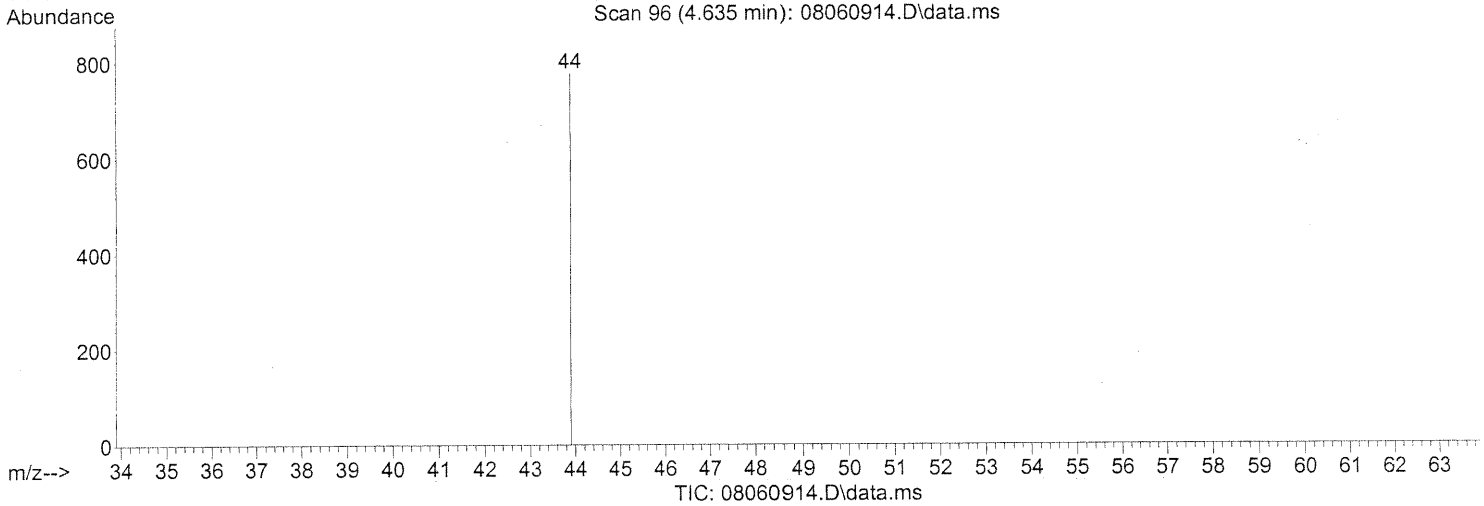
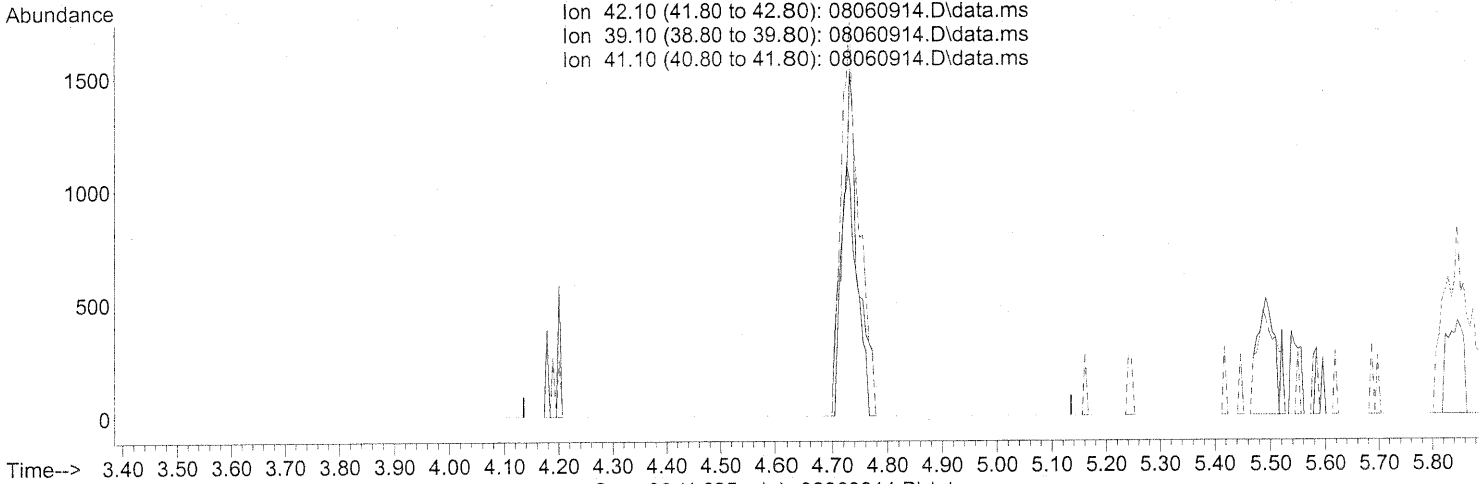
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
Data File : 08060914.D  
Acq On : 6 Aug 2009 11:55  
Operator : WA  
Sample : 0.1ng TO-15 ICAL STD  
Misc : S20-07200902/S20-07240912  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 07:59:49 2009  
Response via : Initial Calibration



(2) Propene (T)

4.635min (-4.635) 0.00ng

response 0

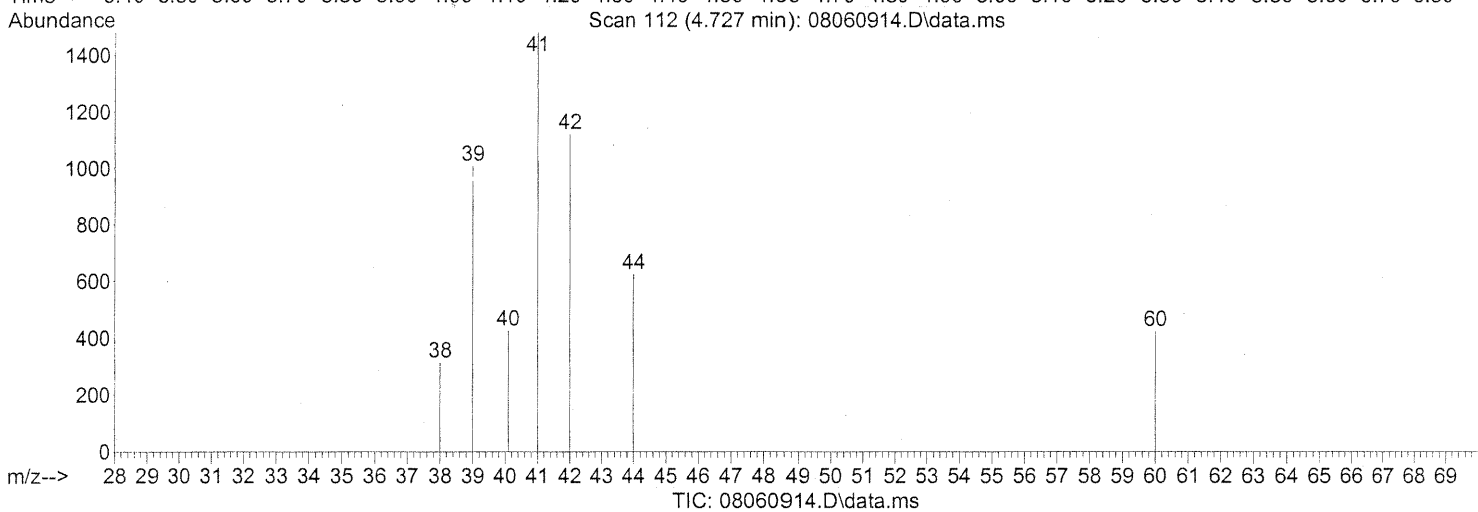
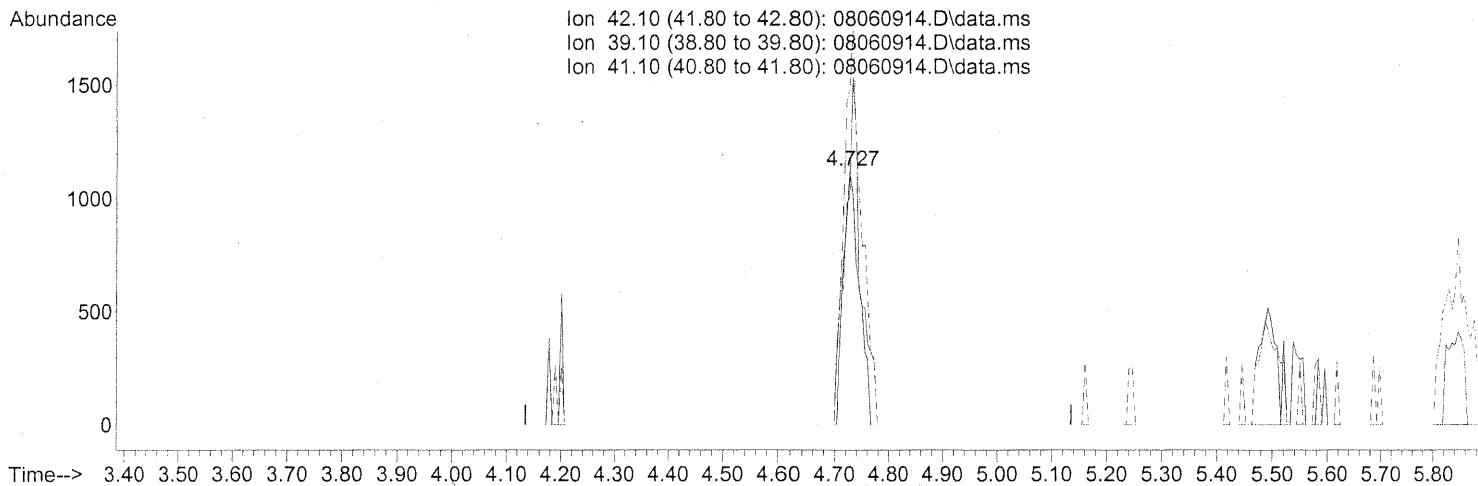
MP

Ion	Exp%	Act%
42.10	100	0.00
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(2) Propene (T)

4.727min (+0.092) 0.12ng m

response 2278

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

HP → IC

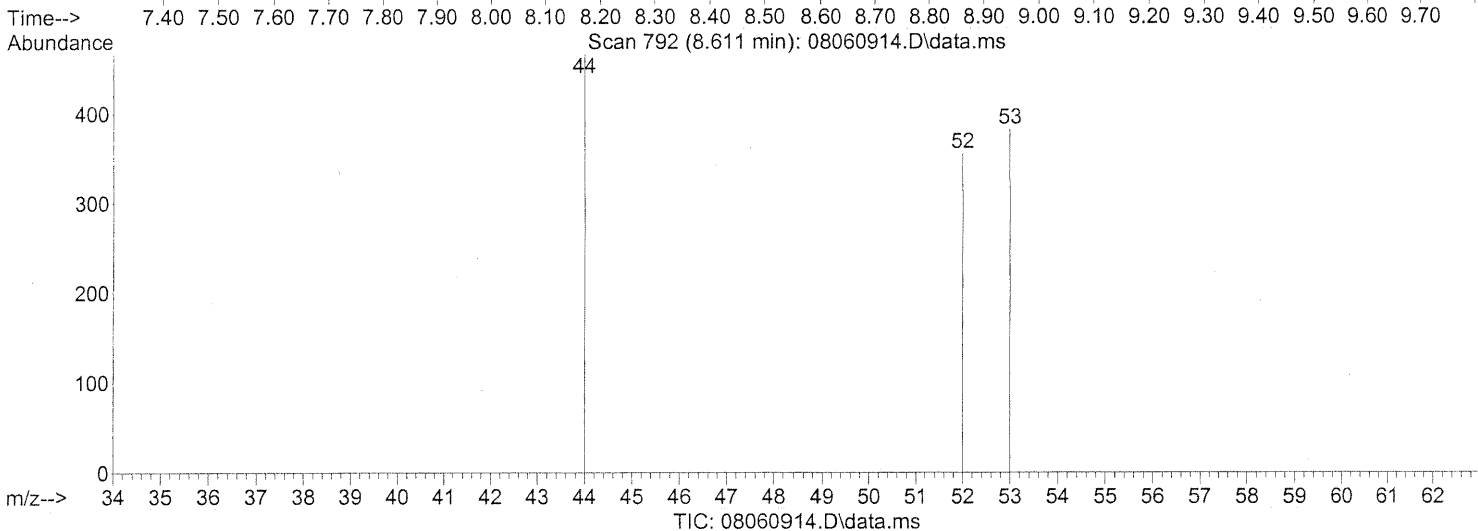
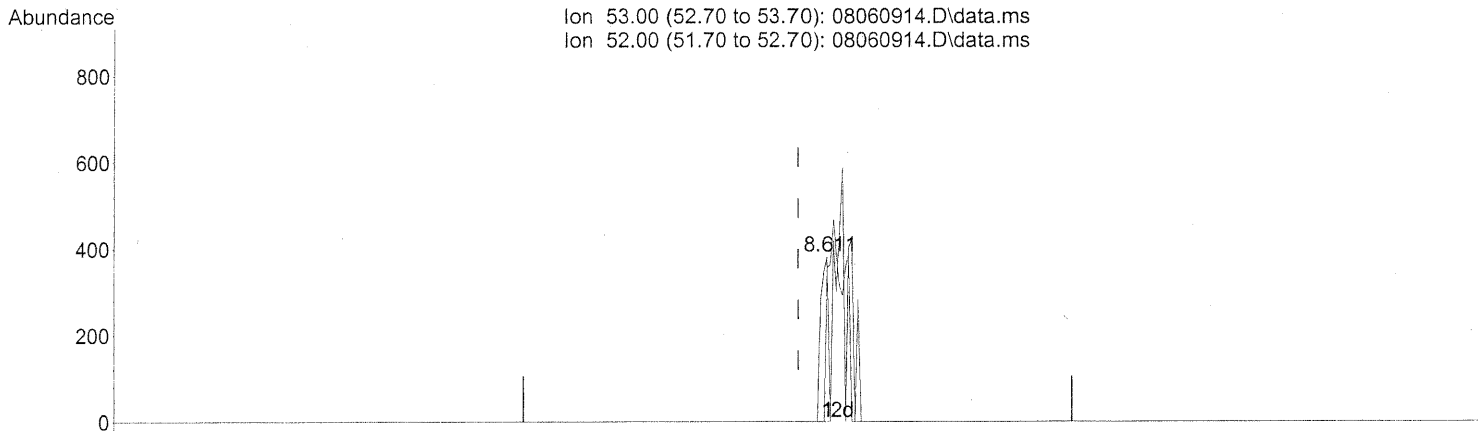
WA 8/6/09

WA 8/11/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
Data File : 08060914.D  
Acq On : 6 Aug 2009 11:55  
Operator : WA  
Sample : 0.1ng TO-15 ICAL STD  
Misc : S20-07200902/S20-07240912  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 07:59:49 2009  
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.611min (+0.052) 0.02ng

response 347

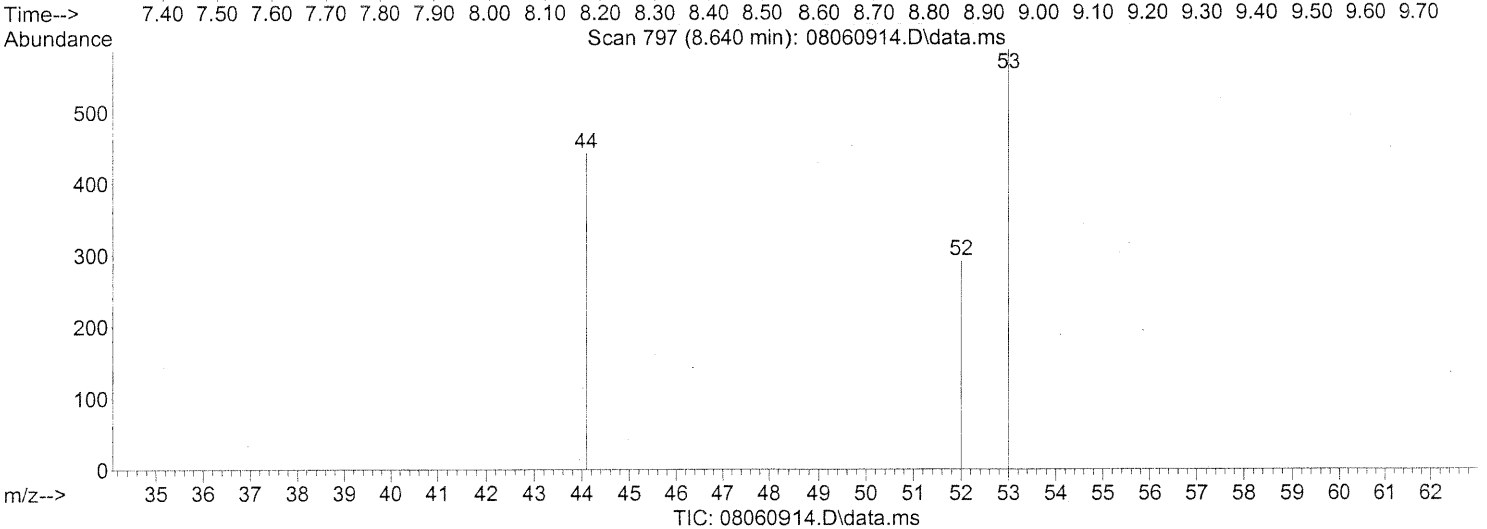
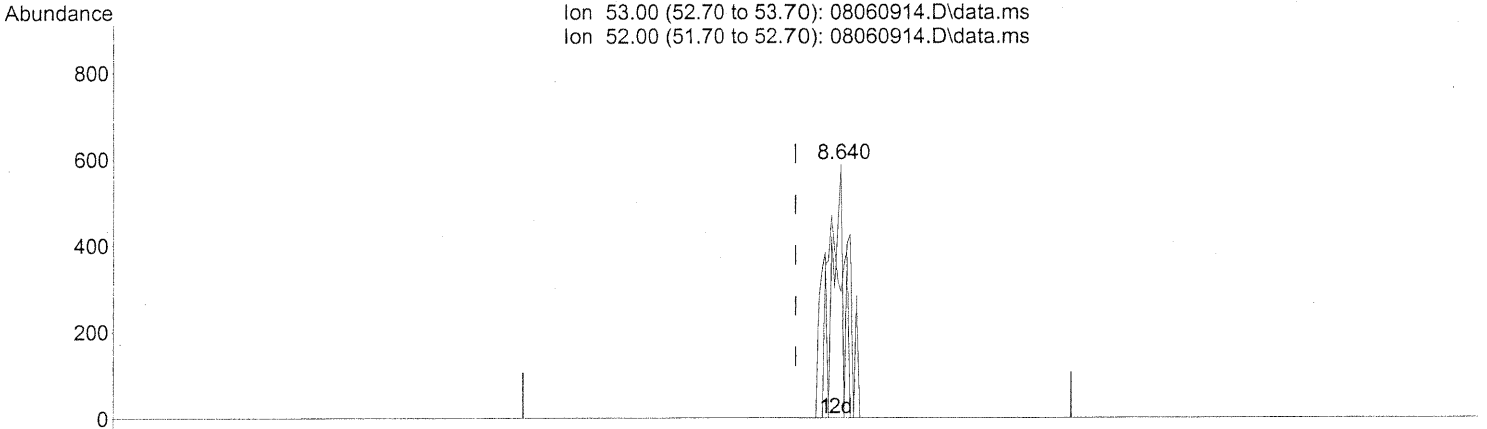
MP

Ion	Exp%	Act%
53.00	100	100
52.00	81.20	289.91#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(16) Acrylonitrile (T)

8.640min (+0.080) 0.07ng m

response 1328

Ion	Exp%	Act%
53.00	100	100
52.00	81.20	75.75
0.00	0.00	0.00
0.00	0.00	0.00

HP → IC

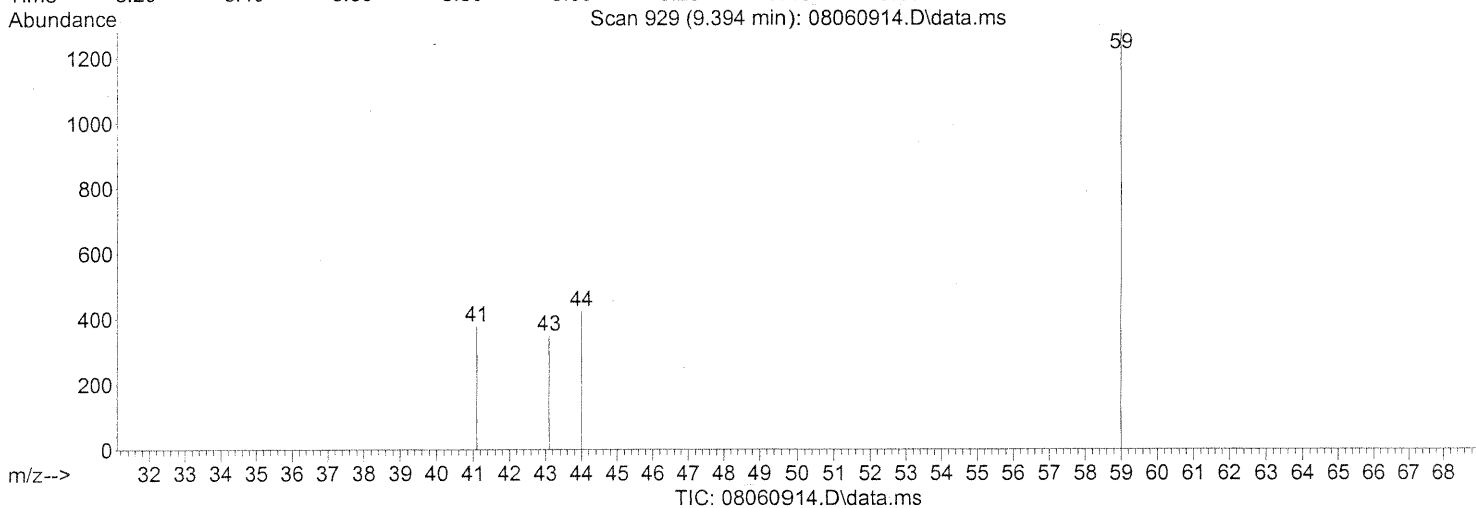
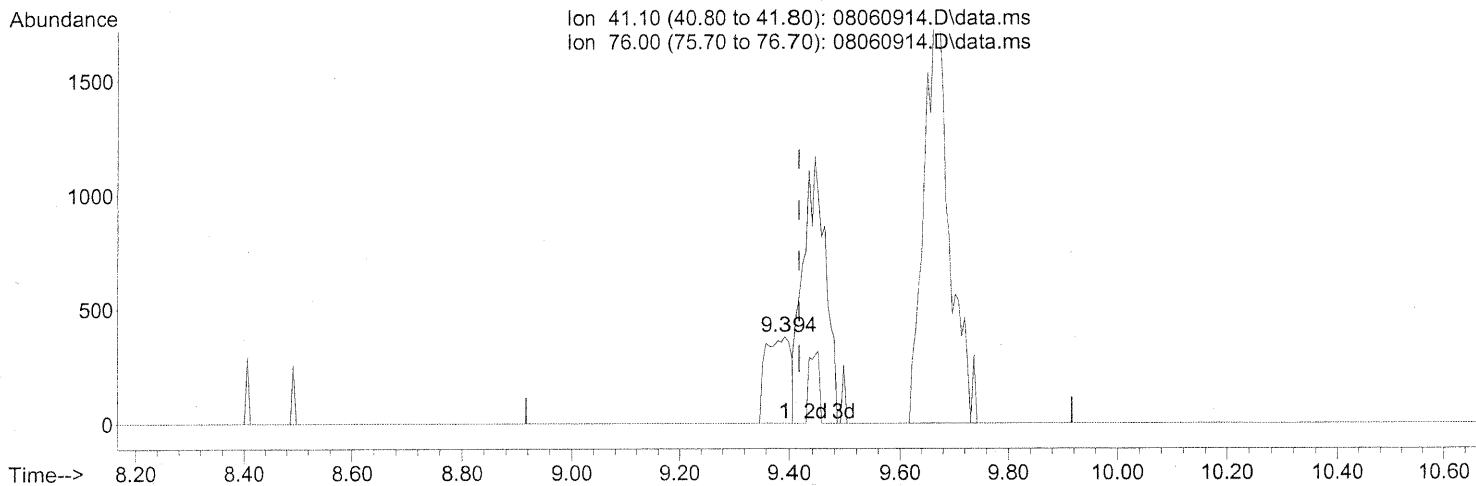
WA 8/6/09

WA 8/11/09

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.394min (-0.023) 0.05ng

response 1147

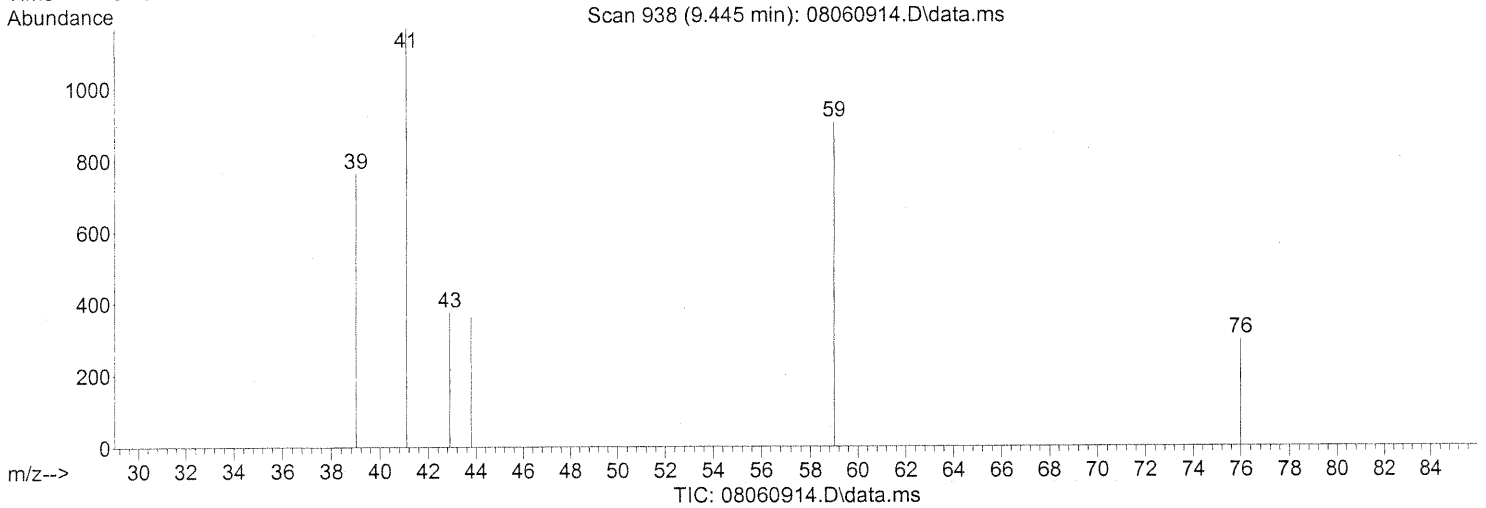
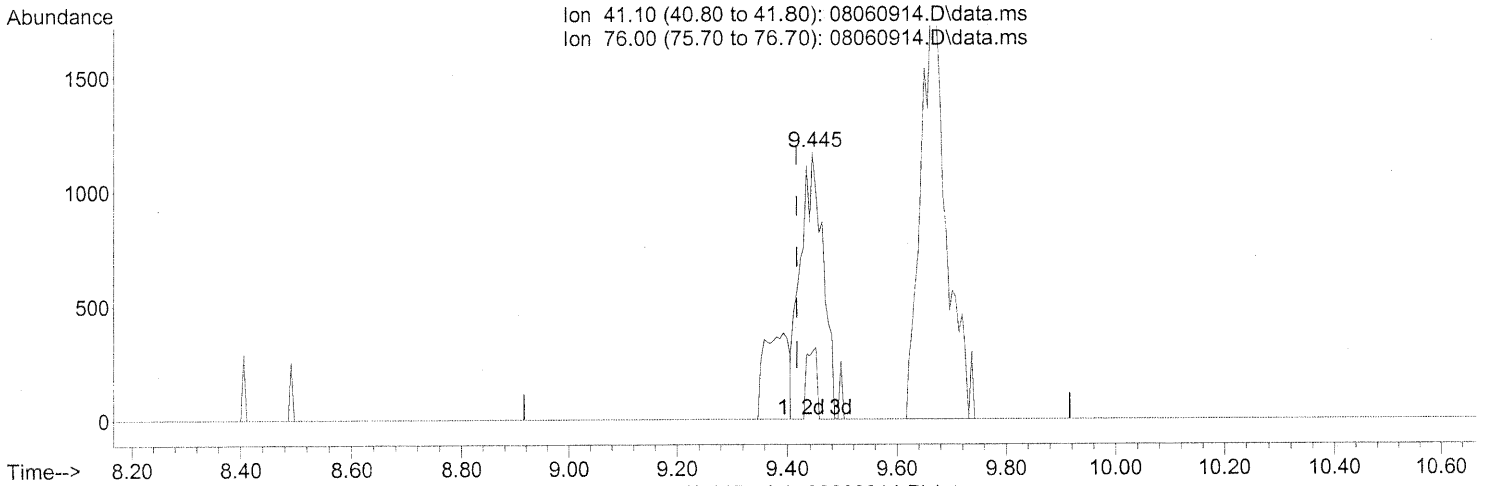
*IP1*

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.445min (+0.029) 0.14ng m

response 3293

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

*IP1 → IC*

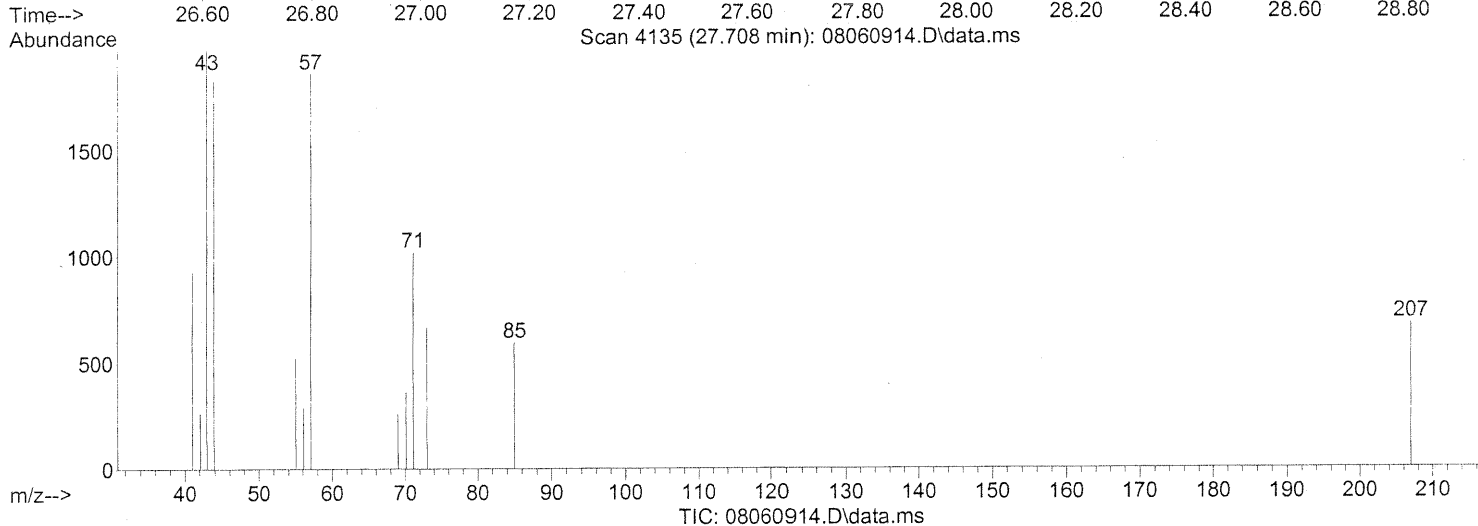
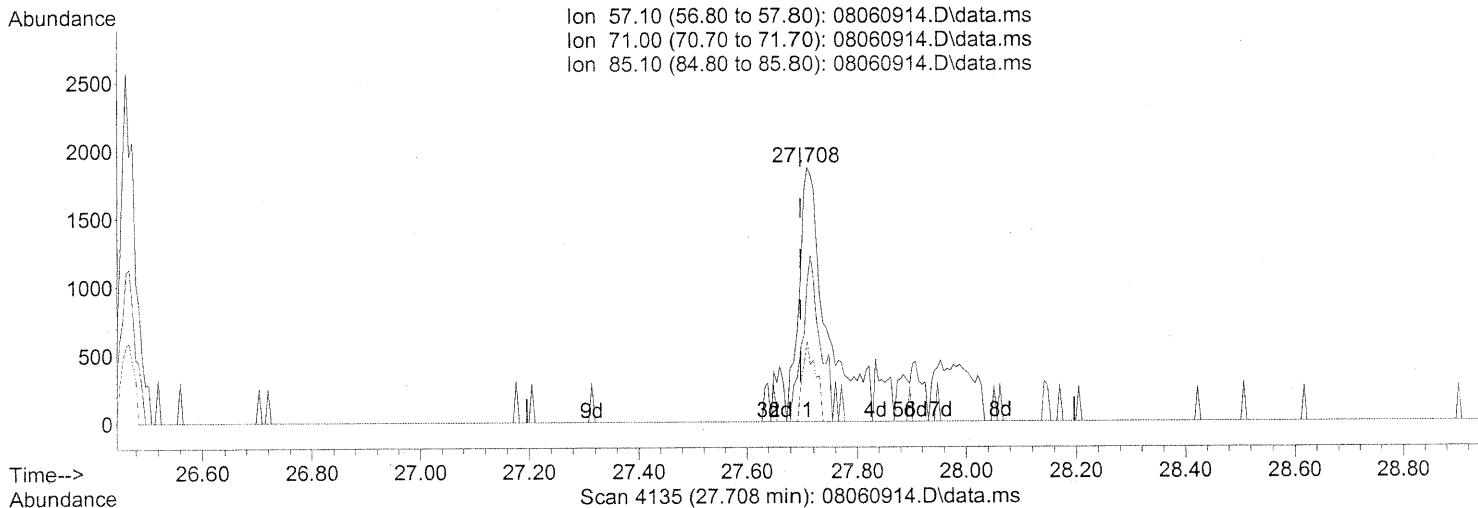
*WA 8/6/09*

*LN 8/11/09*

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
Data File : 08060914.D  
Acq On : 6 Aug 2009 11:55  
Operator : WA  
Sample : 0.1ng TO-15 ICAL STD  
Misc : S20-07200902/S20-07240912  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
Quant Method : J:\MS13\METHODS\R13080609.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Thu Aug 06 07:59:49 2009  
Response via : Initial Calibration



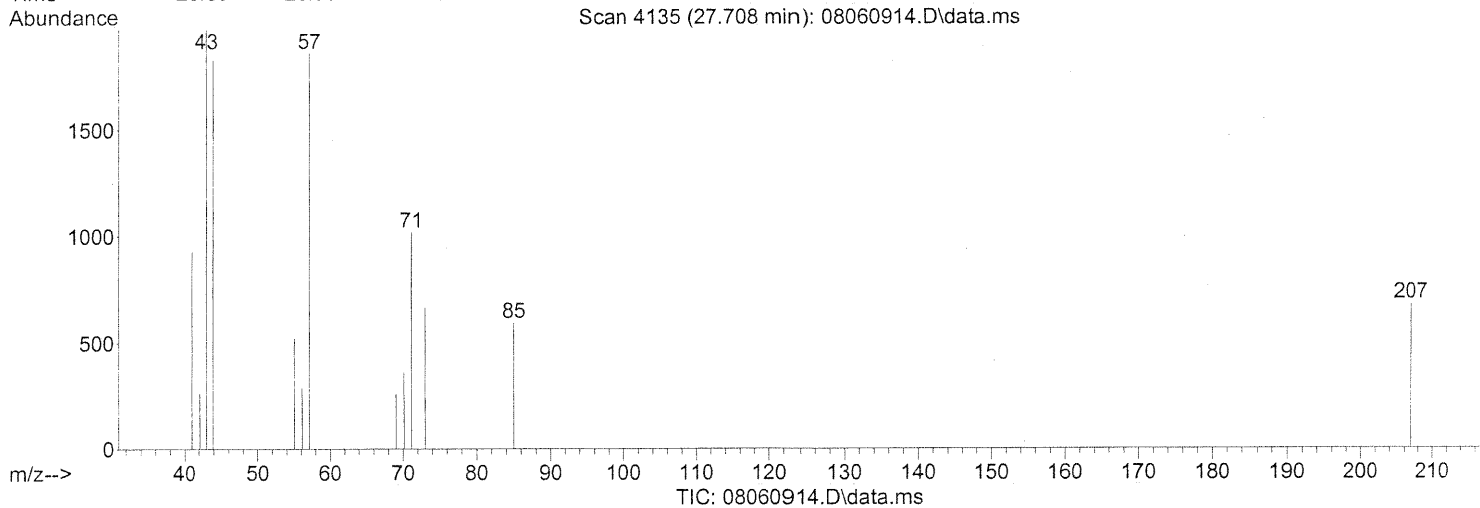
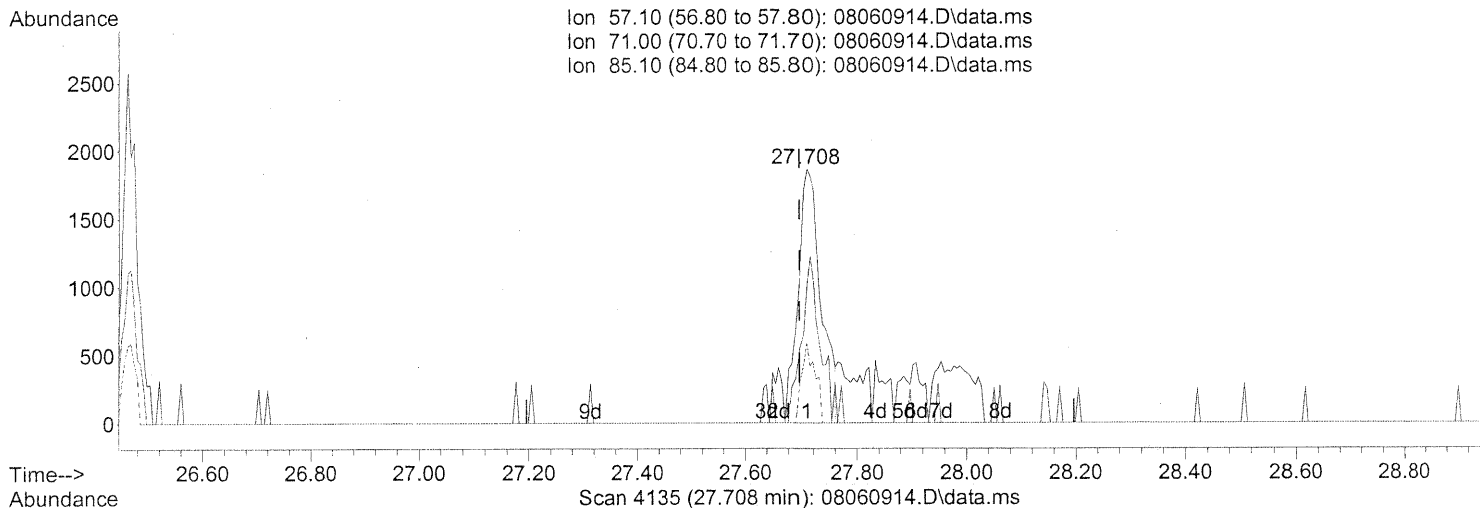
(96) n-Dodecane (T)  
27.708min (+0.012) 0.17ng  
response 6461  
Ion Exp% Act%  
57.10 100 100  
71.00 55.20 44.30  
85.10 31.00 15.03  
0.00 0.00 0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060914.D  
 Acq On : 6 Aug 2009 11:55  
 Operator : WA  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(96) n-Dodecane (T)

27.708min (+0.012) 0.14ng m

response 5122

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	55.88
85.10	31.00	18.96
0.00	0.00	0.00

*PT -> IC*

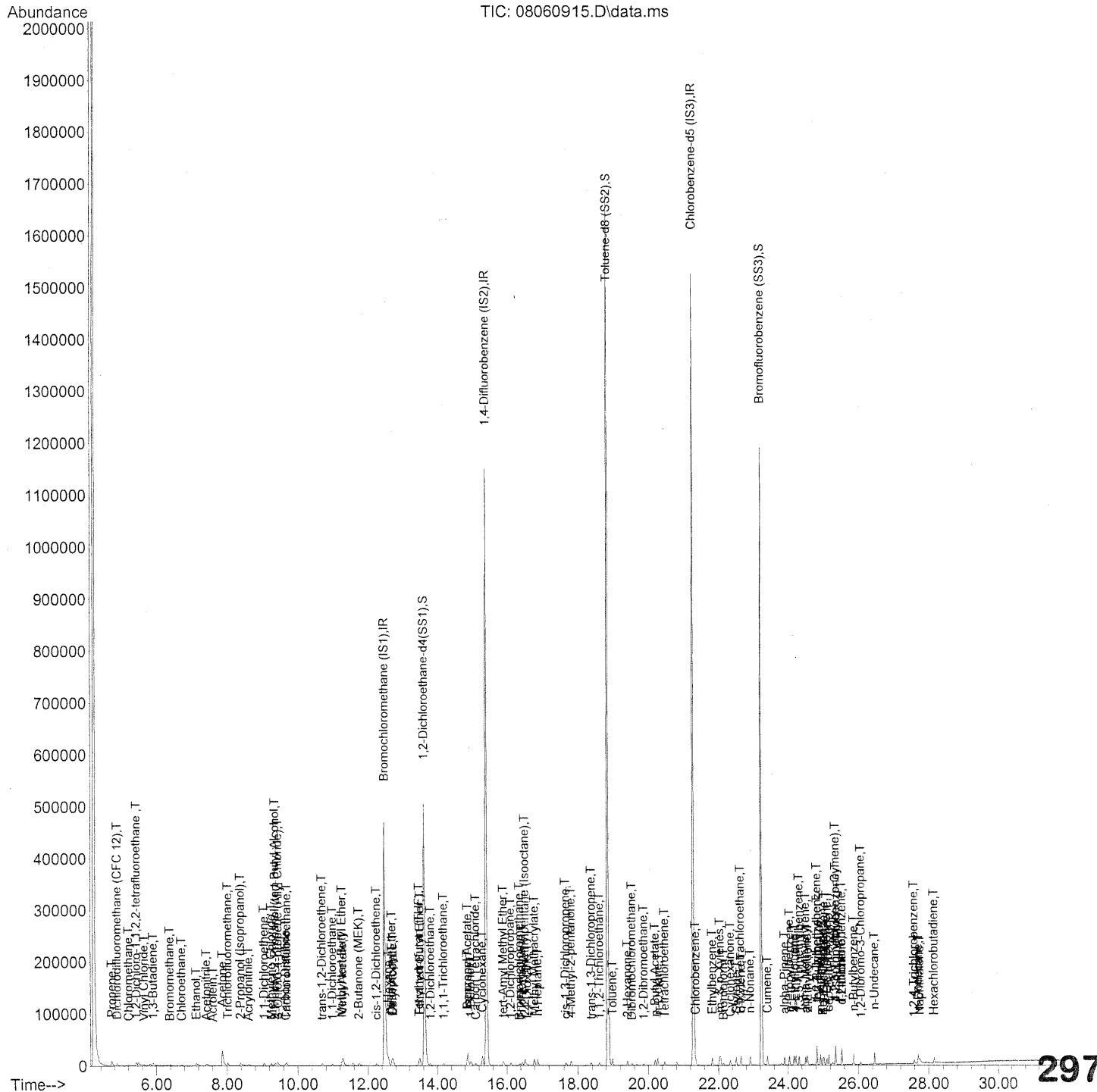
*WA 8/6/09*

*WA 8/11/09*



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	252357	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1287515	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	648408	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	555188	24.104	ng	-0.01
Spiked Amount	25.000			Recovery =		96.40%
57) Toluene-d8 (SS2)	18.85	98	1423881	25.335	ng	0.00
Spiked Amount	25.000			Recovery =		101.32%
73) Bromofluorobenzene (SS3)	23.24	174	367233	25.587	ng	0.00
Spiked Amount	25.000			Recovery =		102.36%

Target Compounds

						Qvalue
2) Propene	4.72	42	4419	0.226	ng	95
3) Dichlorodifluoromethan...	4.88	85	6369	0.196	ng	# 87
4) Chloromethane	5.21	50	4086	0.199	ng	83
5) 1,2-Dichloro-1,1,2,2-t...	5.43	135	2817	0.221	ng	91
6) Vinyl Chloride	5.65	62	3579	0.178	ng	98
7) 1,3-Butadiene	5.92	54	3131	0.218	ng	# 84
8) Bromomethane	6.39	94	2208	0.240	ng	96
9) Chloroethane	6.73	64	2365	0.214	ng	76
10) Ethanol	7.14	45	12938	1.079	ng	90
11) Acetonitrile	7.43	41	8087	0.191	ng	98
12) Acrolein	7.61	56	1996	0.172	ng	97
13) Acetone	7.88	58	19631	1.432	ng	90
14) Trichlorofluoromethane	8.03	101	5515	0.196	ng	100
15) 2-Propanol (Isopropanol)	8.39	45	18213	0.402	ng	92
16) Acrylonitrile	8.61	53	4154	0.208	ng	# 68
17) 1,1-Dichloroethene	9.06	96	2579	0.203	ng	95
18) 2-Methyl-2-Propanol (t...	9.36	59	16711	0.430	ng	# 72
19) Methylene Chloride	9.26	84	3503	0.237	ng	87
20) 3-Chloro-1-propene (Al...	9.45	41	6518	0.274	ng	75
21) Trichlorotrifluoroethane	9.70	151	2010	0.194	ng	88
22) Carbon Disulfide	9.66	76	11291	0.222	ng	89
23) trans-1,2-Dichloroethene	10.69	61	4685	0.213	ng	98
24) 1,1-Dichloroethane	10.99	63	5901	0.215	ng	94
25) Methyl tert-Butyl Ether	11.26	73	8904	0.200	ng	96
26) Vinyl Acetate	11.29	86	2463	0.826	ng	# 18
27) 2-Butanone (MEK)	11.74	72	2236	0.225	ng	# 50
28) cis-1,2-Dichloroethene	12.24	61	4357	0.205	ng	93
29) Diisopropyl Ether	12.69	87	2973	0.247	ng	# 1
30) Ethyl Acetate	12.72	61	2207	0.428	ng	92
31) n-Hexane	12.59	57	6299	0.232	ng	94

298

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	12.68	83	4817	0.193	ng	98
34) Tetrahydrofuran (THF)	13.47	72	3093	0.264	ng	# 79
35) Ethyl tert-Butyl Ether	13.50	87	3408	0.185	ng	93
36) 1,2-Dichloroethane	13.80	62	4457	0.203	ng	93
38) 1,1,1-Trichloroethane	14.18	97	4737	0.198	ng	94
39) Isopropyl Acetate	14.88	61	4379	0.444	ng	# 93
40) 1-Butanol	14.96	56	8215	0.489	ng	83
41) Benzene	14.87	78	14131	0.224	ng	100
42) Carbon Tetrachloride	15.11	117	3903	0.195	ng	90
43) Cyclohexane	15.30	84	9304	0.418	ng	95
44) tert-Amyl Methyl Ether	15.90	73	9698	0.210	ng	97
45) 1,2-Dichloropropane	16.11	63	3093	0.202	ng	90
46) Bromodichloromethane	16.37	83	4318	0.222	ng	99
47) Trichloroethene	16.43	130	2706	0.206	ng	96
48) 1,4-Dioxane	16.59	88	2311	0.204	ng	80
49) 2,2,4-Trimethylpentane...	16.52	57	15224	0.219	ng	98
50) Methyl Methacrylate	16.80	100	2319	0.433	ng	# 89
51) n-Heptane	16.89	71	3376	0.205	ng	94
52) cis-1,3-Dichloropropene	17.65	75	4783	0.201	ng	95
53) 4-Methyl-2-pentanone	17.81	58	3120	0.219	ng	83
54) trans-1,3-Dichloropropene	18.37	75	4944	0.227	ng	98
55) 1,1,2-Trichloroethane	18.61	97	2714	0.205	ng	97
58) Toluene	18.98	91	12787	0.220	ng	99
59) 2-Hexanone	19.41	43	8414	0.215	ng	94
60) Dibromochloromethane	19.53	129	2958	0.217	ng	97
61) 1,2-Dibromoethane	19.87	107	3012	0.214	ng	96
62) n-Butyl Acetate	20.20	43	10164	0.229	ng	95
63) n-Octane	20.28	57	3172	0.216	ng	90
64) Tetrachloroethene	20.47	166	2555	0.193	ng	91
65) Chlorobenzene	21.35	112	7635	0.217	ng	94
66) Ethylbenzene	21.82	91	14159	0.215	ng	100
67) m- & p-Xylenes	22.04	91	23298	0.439	ng	# 30
68) Bromoform	22.15	173	2052	0.184	ng	92
69) Styrene	22.51	104	8110	0.219	ng	96
70) o-Xylene	22.65	91	11714	0.220	ng	99
71) n-Nonane	22.91	43	8045	0.216	ng	83
72) 1,1,2,2-Tetrachloroethane	22.63	83	5167	0.220	ng	91
74) Cumene	23.41	105	14433	0.222	ng	97
75) alpha-Pinene	23.91	93	7275	0.211	ng	82
76) n-Propylbenzene	24.05	91	17557	0.210	ng	99
77) 3-Ethyltoluene	24.18	105	14616	0.237	ng	95
78) 4-Ethyltoluene	24.23	105	13728	0.220	ng	98
79) 1,3,5-Trimethylbenzene	24.33	105	11202	0.210	ng	98

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

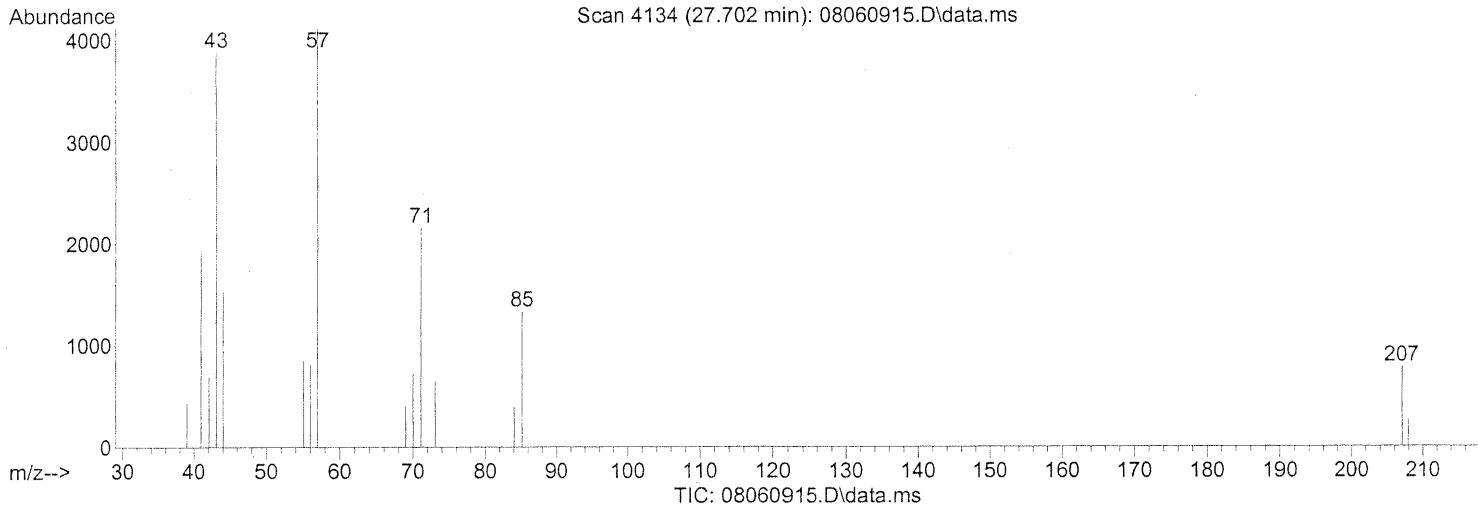
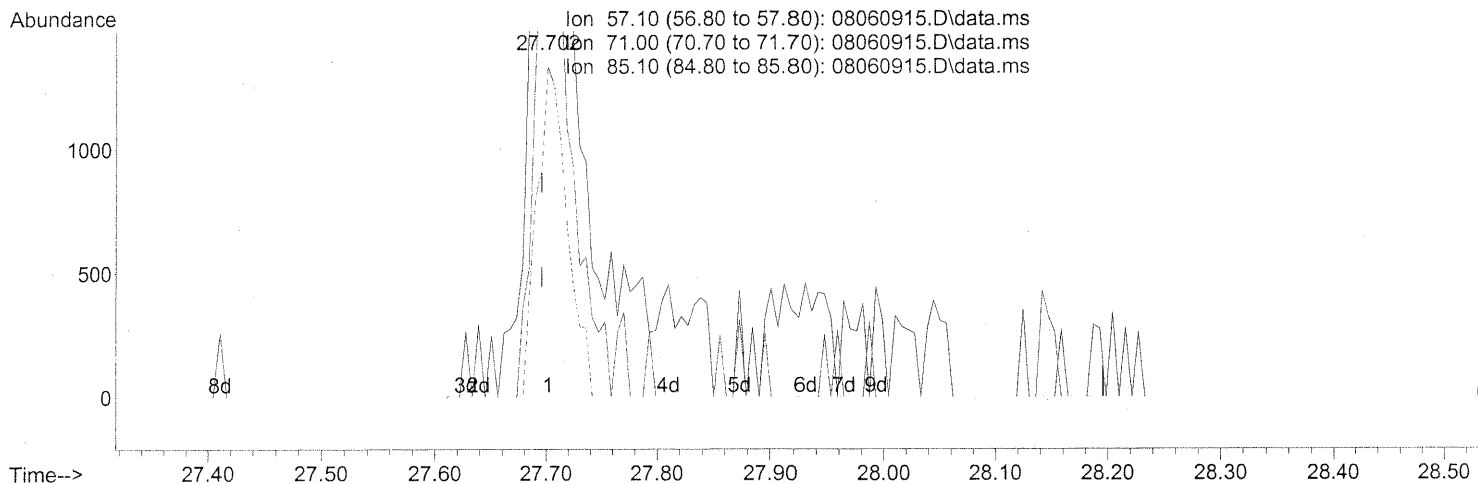
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	5651	0.210	ng	99
81) 2-Ethyltoluene	24.57	105	13747	0.213	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	11876	0.224	ng	98
83) n-Decane	24.93	57	7948	0.226	ng	95
84) Benzyl Chloride	25.00	91	10911	0.238	ng	97
85) 1,3-Dichlorobenzene	25.03	146	5614	0.221	ng	98
86) 1,4-Dichlorobenzene	25.11	146	6064	0.225	ng	94
87) sec-Butylbenzene	25.17	105	15761	0.221	ng	96
88) 4-Isopropyltoluene (p-...	25.35	119	13140	0.207	ng	95
89) 1,2,3-Trimethylbenzene	25.36	105	12238	0.227	ng	97
90) 1,2-Dichlorobenzene	25.53	146	5142	0.209	ng	95
91) d-Limonene	25.53	68	5001	0.217	ng	93
92) 1,2-Dibromo-3-Chloropr...	26.07	157	1840	0.234	ng	93
93) n-Undecane	26.46	57	8565	0.238	ng	94
94) 1,2,4-Trichlorobenzene	27.58	180	3584	0.231	ng	# 89
95) Naphthalene	27.74	128	15295	0.251	ng	84
96) n-Dodecane	27.70	57	9176m	0.241	ng	
97) Hexachlorobutadiene	28.14	225	2566	0.257	ng	96
98) Cyclohexanone	22.34	55	4726	0.178	ng	94
99) tert-Butylbenzene	24.83	119	10963	0.214	ng	100
100) n-Butylbenzene	25.87	91	12700	0.219	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:57 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(96) n-Dodecane (T)  
 27.702min (+0.006) 0.27ng  
 response 10324  

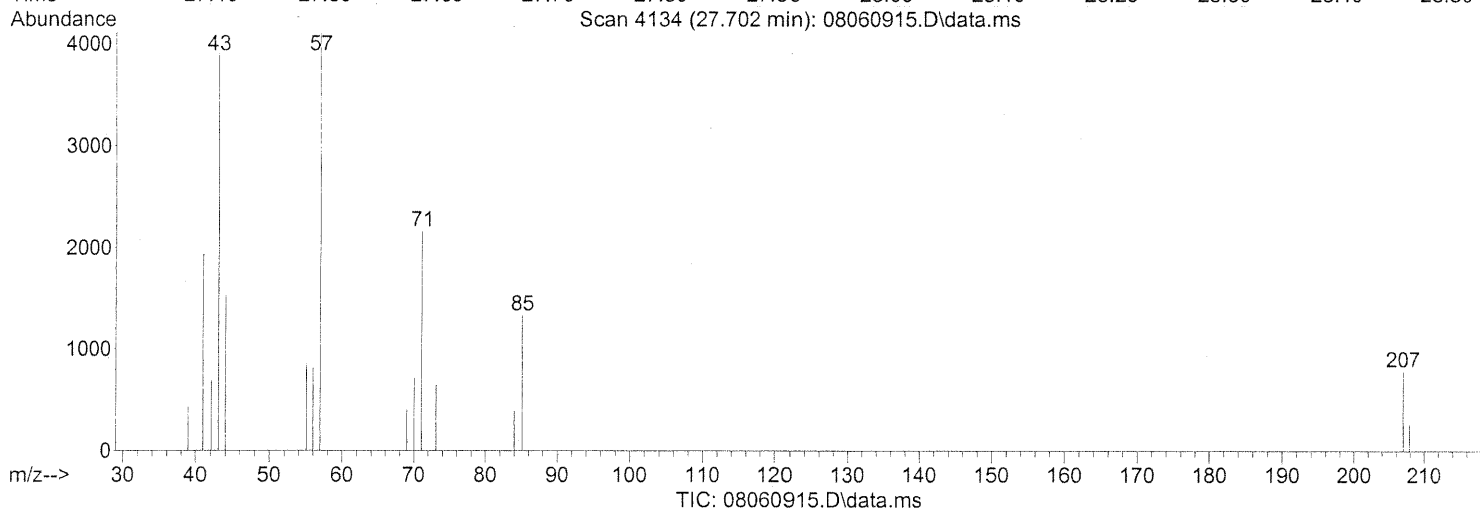
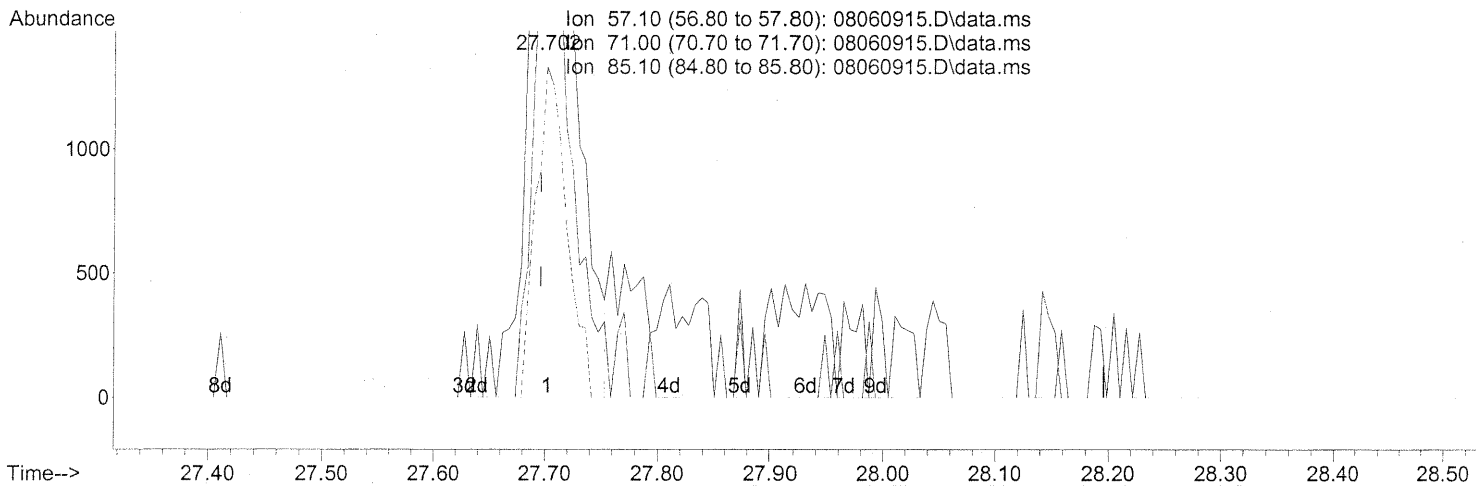
Ion	Exp%	Act%
57.10	100	100
71.00	55.20	48.39
85.10	31.00	24.76
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060915.D  
 Acq On : 6 Aug 2009 12:36  
 Operator : WA  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07240912  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:57 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



(96) n-Dodecane (T)

27.702min (+0.006) 0.24ng m

response 9176

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	54.45
85.10	31.00	27.86
0.00	0.00	0.00

*PT → IC*

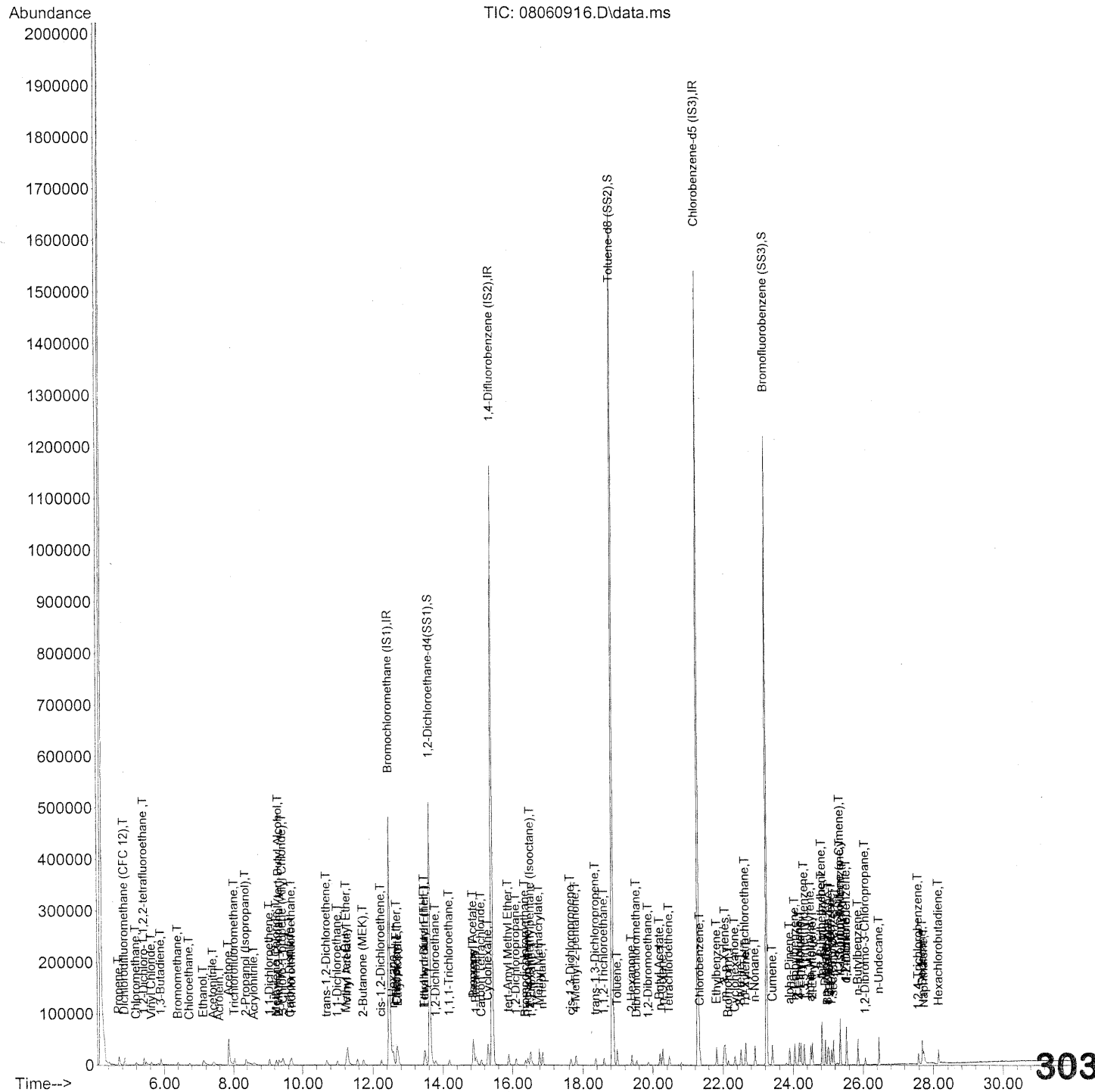
*DA 8/6/09*

*UA 8/11/09*

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060916.D  
 Acq On : 6 Aug 2009 13:17  
 Operator : WA  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060916.D  
 Acq On : 6 Aug 2009 13:17  
 Operator : WA  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.48	130	251360	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1297306	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	659325	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	555033	24.193	ng	0.00
Spiked Amount	25.000		Recovery	=	96.76%	
57) Toluene-d8 (SS2)	18.85	98	1438185	25.165	ng	0.00
Spiked Amount	25.000		Recovery	=	100.68%	
73) Bromofluorobenzene (SS3)	23.24	174	371243	25.439	ng	0.00
Spiked Amount	25.000		Recovery	=	101.76%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.70	42	8216	0.422	ng	95
3) Dichlorodifluoromethan...	4.86	85	14734	0.455	ng	97
4) Chloromethane	5.20	50	9411	0.460	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	6371	0.503	ng	100
6) Vinyl Chloride	5.64	62	8565	0.428	ng	99
7) 1,3-Butadiene	5.91	54	7445	0.520	ng	95
8) Bromomethane	6.40	94	5266	0.574	ng	94
9) Chloroethane	6.73	64	4665	0.424	ng	97
10) Ethanol	7.13	45	26864	2.249	ng	95
11) Acetonitrile	7.42	41	16894	0.401	ng	99
12) Acrolein	7.61	56	4162	0.360	ng	96
13) Acetone	7.87	58	32266	2.363	ng	95
14) Trichlorofluoromethane	8.03	101	13358	0.476	ng	98
15) 2-Propanol (Isopropanol)	8.37	45	40537	0.898	ng	83
16) Acrylonitrile	8.59	53	9433	0.475	ng	98
17) 1,1-Dichloroethene	9.06	96	6255	0.494	ng	91
18) 2-Methyl-2-Propanol (t...	9.33	59	37768	0.976	ng	82
19) Methylene Chloride	9.26	84	6743	0.459	ng	98
20) 3-Chloro-1-propene (Al...	9.44	41	15298	0.645	ng	80
21) Trichlorotrifluoroethane	9.70	151	4915	0.477	ng	96
22) Carbon Disulfide	9.65	76	24760	0.489	ng	# 74
23) trans-1,2-Dichloroethene	10.69	61	10278	0.469	ng	99
24) 1,1-Dichloroethane	10.99	63	12065	0.442	ng	98
25) Methyl tert-Butyl Ether	11.25	73	19979	0.451	ng	99
26) Vinyl Acetate	11.29	86	5981	2.014	ng	# 48
27) 2-Butanone (MEK)	11.74	72	5062	0.512	ng	# 88
28) cis-1,2-Dichloroethene	12.24	61	9809	0.463	ng	99
29) Diisopropyl Ether	12.69	87	6520	0.544	ng	# 1
30) Ethyl Acetate	12.72	61	5291	1.030	ng	87
31) n-Hexane	12.58	57	12706	0.470	ng	91

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060916.D  
 Acq On : 6 Aug 2009 13:17  
 Operator : WA  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.68	83	11191	0.451	ng	99
34) Tetrahydrofuran (THF)	13.48	72	5678	0.487	ng #	86
35) Ethyl tert-Butyl Ether	13.49	87	8229	0.448	ng	97
36) 1,2-Dichloroethane	13.80	62	10322	0.472	ng	97
38) 1,1,1-Trichloroethane	14.18	97	10785	0.448	ng	98
39) Isopropyl Acetate	14.87	61	9606	0.968	ng #	90
40) 1-Butanol	14.96	56	16246	0.959	ng	85
41) Benzene	14.88	78	29072	0.458	ng	99
42) Carbon Tetrachloride	15.11	117	9173	0.455	ng	100
43) Cyclohexane	15.30	84	21267	0.948	ng	99
44) tert-Amyl Methyl Ether	15.89	73	21956	0.472	ng	98
45) 1,2-Dichloropropane	16.11	63	7082	0.459	ng	98
46) Bromodichloromethane	16.37	83	9525	0.486	ng	99
47) Trichloroethene	16.45	130	6343	0.479	ng	98
48) 1,4-Dioxane	16.57	88	6011	0.528	ng	89
49) 2,2,4-Trimethylpentane...	16.52	57	33244	0.475	ng	99
50) Methyl Methacrylate	16.79	100	5377	0.998	ng	95
51) n-Heptane	16.88	71	7790	0.470	ng	99
52) cis-1,3-Dichloropropene	17.66	75	10842	0.453	ng	98
53) 4-Methyl-2-pentanone	17.80	58	7333	0.511	ng	91
54) trans-1,3-Dichloropropene	18.36	75	11151	0.509	ng	100
55) 1,1,2-Trichloroethane	18.61	97	6160	0.462	ng	98
58) Toluene	18.99	91	28640	0.484	ng	99
59) 2-Hexanone	19.40	43	19538	0.492	ng	97
60) Dibromochloromethane	19.53	129	7167	0.517	ng	93
61) 1,2-Dibromoethane	19.87	107	6714	0.470	ng	98
62) n-Butyl Acetate	20.20	43	22390	0.496	ng	99
63) n-Octane	20.28	57	7129	0.478	ng	100
64) Tetrachloroethene	20.46	166	6404	0.475	ng	100
65) Chlorobenzene	21.34	112	17302	0.484	ng	100
66) Ethylbenzene	21.82	91	32353	0.484	ng	98
67) m- & p-Xylenes	22.06	91	50569	0.938	ng #	30
68) Bromoform	22.15	173	5337	0.471	ng	97
69) Styrene	22.51	104	18352	0.488	ng	98
70) o-Xylene	22.65	91	26471	0.488	ng	97
71) n-Nonane	22.91	43	17683	0.467	ng	93
72) 1,1,2,2-Tetrachloroethane	22.63	83	11841	0.496	ng	95
74) Cumene	23.41	105	31734	0.479	ng	97
75) alpha-Pinene	23.90	93	15763	0.450	ng	95
76) n-Propylbenzene	24.05	91	40346	0.474	ng	99
77) 3-Ethyltoluene	24.18	105	32540	0.519	ng	95
78) 4-Ethyltoluene	24.23	105	30506	0.480	ng	100
79) 1,3,5-Trimethylbenzene	24.32	105	26350	0.487	ng	100

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060916.D  
 Acq On : 6 Aug 2009 13:17  
 Operator : WA  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

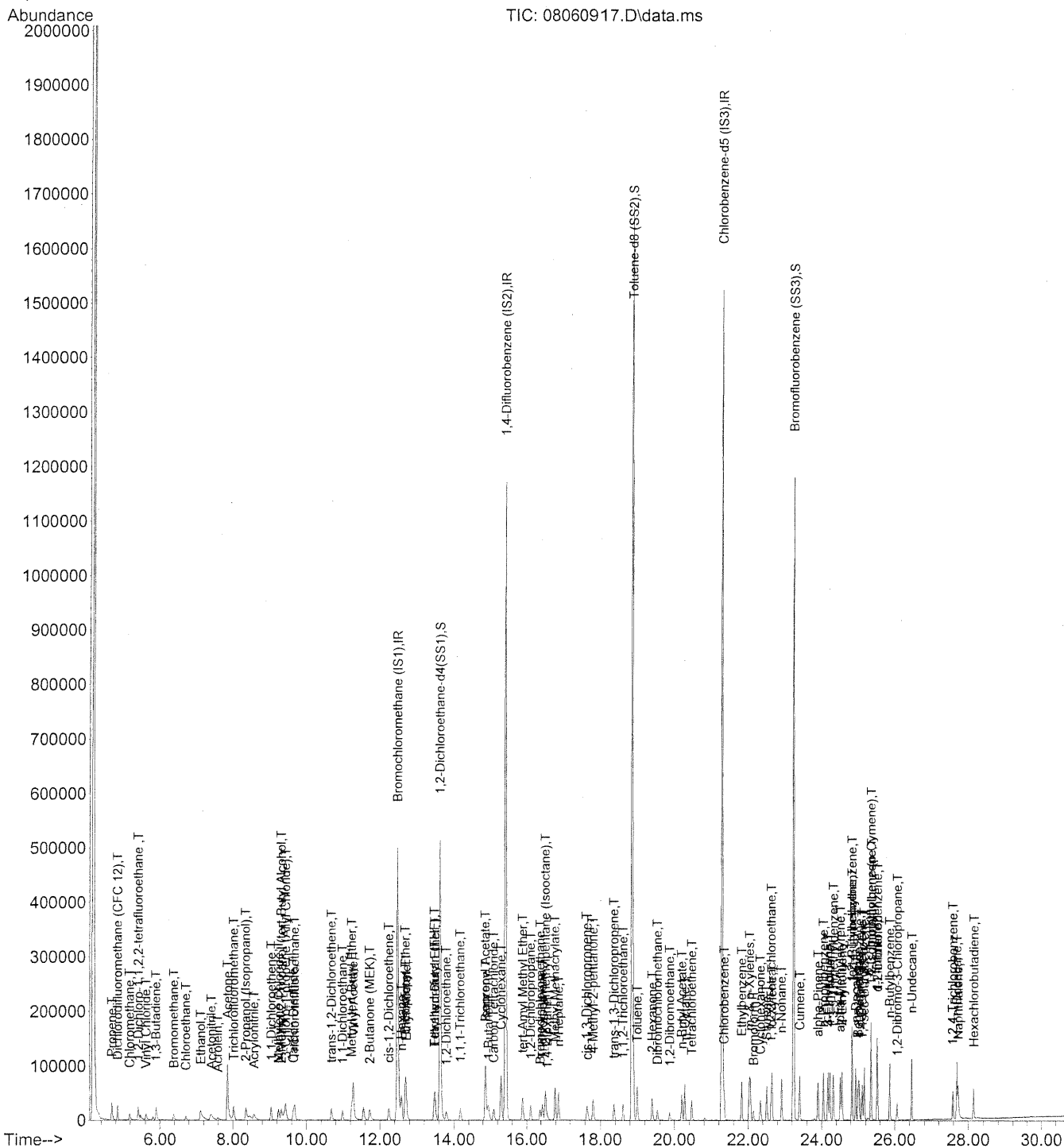
Quant Time: Aug 06 13:52:36 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	12971	0.473	ng	97
81) 2-Ethyltoluene	24.57	105	31095	0.473	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	26353	0.488	ng	96
83) n-Decane	24.94	57	18126	0.506	ng	98
84) Benzyl Chloride	25.00	91	24206	0.520	ng	100
85) 1,3-Dichlorobenzene	25.03	146	12977	0.502	ng	98
86) 1,4-Dichlorobenzene	25.11	146	13901	0.506	ng	97
87) sec-Butylbenzene	25.17	105	35698	0.493	ng	98
88) 4-Isopropyltoluene (p-...	25.35	119	31753	0.493	ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	27977	0.510	ng	100
90) 1,2-Dichlorobenzene	25.53	146	12508	0.501	ng	98
91) d-Limonene	25.53	68	11768	0.502	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.07	157	4075	0.510	ng	90
93) n-Undecane	26.46	57	18836	0.515	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	8410	0.533	ng	97
95) Naphthalene	27.74	128	33134	0.535	ng	93
96) n-Dodecane	27.70	57	20632	0.533	ng	95
97) Hexachlorobutadiene	28.15	225	5535	0.546	ng	100
98) Cyclohexanone	22.34	55	10843	0.402	ng	97
99) tert-Butylbenzene	24.83	119	25490	0.490	ng	97
100) n-Butylbenzene	25.86	91	30481	0.517	ng	98

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

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060917.D  
 Acq On : 6 Aug 2009 13:57  
 Operator : WA  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060917.D  
 Acq On : 6 Aug 2009 13:57  
 Operator : WA  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	253159	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.42	114	1287874	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	650609	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.63	65	554603	24.002	ng	-0.01
Spiked Amount	25.000		Recovery	=	96.00%	
57) Toluene-d8 (SS2)	18.85	98	1420867	25.196	ng	0.00
Spiked Amount	25.000		Recovery	=	100.80%	
73) Bromofluorobenzene (SS3)	23.24	174	366142	25.425	ng	0.00
Spiked Amount	25.000		Recovery	=	101.72%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.70	42	15729	0.803	ng	98
3) Dichlorodifluoromethan...	4.86	85	28962	0.889	ng	99
4) Chloromethane	5.18	50	19165	0.931	ng	97
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	11280	0.884	ng	99
6) Vinyl Chloride	5.62	62	17901	0.889	ng	98
7) 1,3-Butadiene	5.89	54	14844	1.029	ng	95
8) Bromomethane	6.38	94	10788	1.167	ng	95
9) Chloroethane	6.71	64	10224	0.923	ng	92
10) Ethanol	7.12	45	54360	4.518	ng	98
11) Acetonitrile	7.42	41	31256	0.737	ng	99
12) Acrolein	7.59	56	8675	0.746	ng	98
13) Acetone	7.86	58	59842	4.351	ng	99
14) Trichlorofluoromethane	8.03	101	25722	0.909	ng	98
15) 2-Propanol (Isopropanol)	8.35	45	78074	1.717	ng	95
16) Acrylonitrile	8.58	53	19833	0.991	ng	100
17) 1,1-Dichloroethene	9.05	96	12813	1.005	ng	91
18) 2-Methyl-2-Propanol (t...	9.32	59	75842	1.947	ng	80
19) Methylene Chloride	9.25	84	13644	0.922	ng	99
20) 3-Chloro-1-propene (Al...	9.44	41	30907	1.293	ng	82
21) Trichlorotrifluoroethane	9.68	151	9982	0.961	ng	98
22) Carbon Disulfide	9.65	76	49774	0.977	ng	100
23) trans-1,2-Dichloroethene	10.68	61	21976	0.995	ng	99
24) 1,1-Dichloroethane	10.98	63	26037	0.946	ng	100
25) Methyl tert-Butyl Ether	11.24	73	39678	0.890	ng	100
26) Vinyl Acetate	11.28	86	12172	4.070	ng	# 63
27) 2-Butanone (MEK)	11.72	72	9933	0.997	ng	# 84
28) cis-1,2-Dichloroethene	12.24	61	20467	0.958	ng	96
29) Diisopropyl Ether	12.68	87	13497	1.117	ng	# 1
30) Ethyl Acetate	12.71	61	10334	1.998	ng	99
31) n-Hexane	12.58	57	26377	0.968	ng	95

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060917.D  
 Acq On : 6 Aug 2009 13:57  
 Operator : WA  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.68	83	23278	0.931	ng	100
34) Tetrahydrofuran (THF)	13.47	72	10036	0.854	ng	# 89
35) Ethyl tert-Butyl Ether	13.49	87	16455	0.890	ng	99
36) 1,2-Dichloroethane	13.79	62	20046	0.910	ng	98
38) 1,1,1-Trichloroethane	14.17	97	21730	0.909	ng	96
39) Isopropyl Acetate	14.87	61	18933	1.921	ng	# 82
40) 1-Butanol	14.95	56	31282	1.861	ng	83
41) Benzene	14.88	78	55682	0.883	ng	99
42) Carbon Tetrachloride	15.10	117	18312	0.914	ng	99
43) Cyclohexane	15.30	84	42338	1.901	ng	99
44) tert-Amyl Methyl Ether	15.89	73	42797	0.926	ng	98
45) 1,2-Dichloropropane	16.11	63	14488	0.946	ng	100
46) Bromodichloromethane	16.38	83	19155	0.984	ng	98
47) Trichloroethene	16.44	130	12738	0.969	ng	99
48) 1,4-Dioxane	16.57	88	11142	0.985	ng	# 68
49) 2,2,4-Trimethylpentane...	16.52	57	66591	0.958	ng	97
50) Methyl Methacrylate	16.79	100	10587	1.978	ng	96
51) n-Heptane	16.89	71	15425	0.937	ng	99
52) cis-1,3-Dichloropropene	17.65	75	22102	0.930	ng	100
53) 4-Methyl-2-pentanone	17.80	58	14470	1.016	ng	94
54) trans-1,3-Dichloropropene	18.36	75	23424	1.078	ng	99
55) 1,1,2-Trichloroethane	18.61	97	12640	0.955	ng	96
58) Toluene	18.99	91	57012	0.977	ng	99
59) 2-Hexanone	19.40	43	39077	0.996	ng	99
60) Dibromochloromethane	19.54	129	14256	1.042	ng	99
61) 1,2-Dibromoethane	19.87	107	14117	1.001	ng	100
62) n-Butyl Acetate	20.20	43	44725	1.004	ng	99
63) n-Octane	20.28	57	13890	0.944	ng	97
64) Tetrachloroethene	20.47	166	12781	0.961	ng	97
65) Chlorobenzene	21.35	112	35691	1.012	ng	99
66) Ethylbenzene	21.82	91	64286	0.974	ng	100
67) m- & p-Xylenes	22.04	91	102993	1.935	ng	# 30
68) Bromoform	22.16	173	10221	0.914	ng	96
69) Styrene	22.51	104	36918	0.995	ng	98
70) o-Xylene	22.65	91	52204	0.975	ng	100
71) n-Nonane	22.91	43	35568	0.951	ng	96
72) 1,1,2,2-Tetrachloroethane	22.63	83	23941	1.017	ng	98
74) Cumene	23.41	105	63375	0.970	ng	98
75) alpha-Pinene	23.90	93	32053	0.926	ng	96
76) n-Propylbenzene	24.05	91	82766	0.986	ng	98
77) 3-Ethyltoluene	24.18	105	62532	1.011	ng	99
78) 4-Ethyltoluene	24.23	105	63400	1.011	ng	100
79) 1,3,5-Trimethylbenzene	24.32	105	52731	0.987	ng	100

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060917.D  
 Acq On : 6 Aug 2009 13:57  
 Operator : WA  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

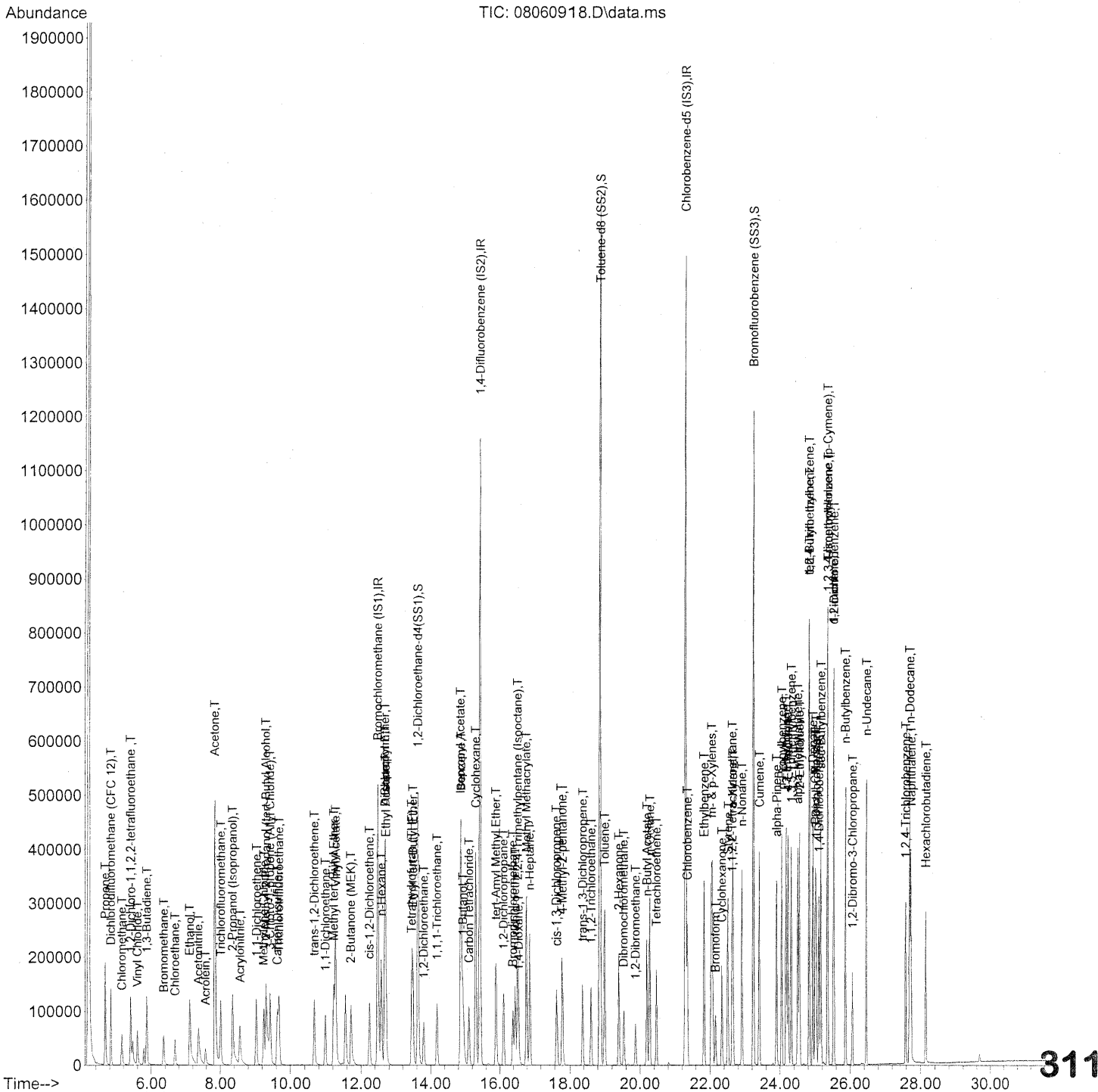
Quant Time: Aug 06 14:32:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	27052	1.000	ng	96
81) 2-Ethyltoluene	24.56	105	62808	0.968	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	54320	1.019	ng	99
83) n-Decane	24.94	57	36002	1.019	ng	99
84) Benzyl Chloride	25.00	91	50759	1.106	ng	97
85) 1,3-Dichlorobenzene	25.03	146	27203	1.066	ng	98
86) 1,4-Dichlorobenzene	25.11	146	27477	1.014	ng	100
87) sec-Butylbenzene	25.17	105	71023	0.994	ng	98
88) 4-Isopropyltoluene (p-...	25.35	119	62425	0.982	ng	97
89) 1,2,3-Trimethylbenzene	25.36	105	54604	1.008	ng	98
90) 1,2-Dichlorobenzene	25.53	146	25453	1.032	ng	99
91) d-Limonene	25.53	68	22906	0.991	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.07	157	9032	1.145	ng	96
93) n-Undecane	26.46	57	39335	1.089	ng	97
94) 1,2,4-Trichlorobenzene	27.59	180	18307	1.175	ng	98
95) Naphthalene	27.74	128	69383	1.134	ng	97
96) n-Dodecane	27.70	57	41338	1.082	ng	95
97) Hexachlorobutadiene	28.15	225	10594	1.059	ng	98
98) Cyclohexanone	22.34	55	21416	0.805	ng	99
99) tert-Butylbenzene	24.83	119	51340	1.000	ng	98
100) n-Butylbenzene	25.86	91	61539	1.058	ng	99

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

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060918.D  
 Acq On : 6 Aug 2009 14:38  
 Operator : WA  
 Sample : 5.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060918.D  
 Acq On : 6 Aug 2009 14:38  
 Operator : WA  
 Sample : 5.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	249215	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1269404	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	640609	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.63	65	541276	23.796	ng	0.00
Spiked Amount	25.000		Recovery	=	95.20%	
57) Toluene-d8 (SS2)	18.86	98	1393939	25.104	ng	0.00
Spiked Amount	25.000		Recovery	=	100.40%	
73) Bromofluorobenzene (SS3)	23.24	174	369692	26.072	ng	0.00
Spiked Amount	25.000		Recovery	=	104.28%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.67	42	89432	4.636	ng	99
3) Dichlorodifluoromethan...	4.84	85	140828	4.390	ng	99
4) Chloromethane	5.15	50	84961	4.191	ng	100
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	54919	4.370	ng	97
6) Vinyl Chloride	5.59	62	89033	4.491	ng	100
7) 1,3-Butadiene	5.87	54	73562	5.181	ng	98
8) Bromomethane	6.36	94	52677	5.786	ng	99
9) Chloroethane	6.69	64	52005	4.770	ng	95
10) Ethanol	7.11	45	258014	21.785	ng	100
11) Acetonitrile	7.37	41	150692	3.611	ng	99
12) Acrolein	7.57	56	44402	3.876	ng	99
13) Acetone	7.84	58	278483	20.568	ng	96
14) Trichlorofluoromethane	8.02	101	123504	4.435	ng	99
15) 2-Propanol (Isopropanol)	8.35	45	301287	6.731	ng	97
16) Acrylonitrile	8.57	53	100540	5.104	ng	100
17) 1,1-Dichloroethene	9.04	96	62068	4.946	ng	93
18) 2-Methyl-2-Propanol (t...	9.31	59	359931	9.384	ng	95
19) Methylene Chloride	9.24	84	65696	4.508	ng	99
20) 3-Chloro-1-propene (Al...	9.43	41	129259	5.493	ng	92
21) Trichlorotrifluoroethane	9.68	151	47871	4.683	ng	96
22) Carbon Disulfide	9.63	76	243057	4.846	ng	100
23) trans-1,2-Dichloroethene	10.68	61	107824	4.959	ng	99
24) 1,1-Dichloroethane	10.99	63	124688	4.604	ng	99
25) Methyl tert-Butyl Ether	11.23	73	197911	4.509	ng	99
26) Vinyl Acetate	11.28	86	44312	15.052	ng	# 69
27) 2-Butanone (MEK)	11.71	72	50182	5.115	ng	# 92
28) cis-1,2-Dichloroethene	12.24	61	102666	4.883	ng	99
29) Diisopropyl Ether	12.68	87	64732	5.444	ng	# 1
30) Ethyl Acetate	12.71	61	52338	10.281	ng	97
31) n-Hexane	12.58	57	123098	4.588	ng	98

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060918.D  
 Acq On : 6 Aug 2009 14:38  
 Operator : WA  
 Sample : 5.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	12.69	83	113521	4.612	ng	99
34) Tetrahydrofuran (THF)	13.46	72	47151	4.075	ng	95
35) Ethyl tert-Butyl Ether	13.48	87	77046	4.234	ng	99
36) 1,2-Dichloroethane	13.80	62	97747	4.510	ng	97
38) 1,1,1-Trichloroethane	14.18	97	104481	4.435	ng	98
39) Isopropyl Acetate	14.86	61	94088	9.685	ng	# 84
40) 1-Butanol	14.92	56	150422	9.077	ng	82
41) Benzene	14.88	78	266073	4.281	ng	99
42) Carbon Tetrachloride	15.11	117	92233	4.673	ng	99
43) Cyclohexane	15.30	84	209843	9.557	ng	98
44) tert-Amyl Methyl Ether	15.89	73	204750	4.496	ng	100
45) 1,2-Dichloropropane	16.11	63	69671	4.617	ng	100
46) Bromodichloromethane	16.38	83	93085	4.854	ng	99
47) Trichloroethene	16.45	130	62720	4.839	ng	98
48) 1,4-Dioxane	16.56	88	55737	5.001	ng	# 73
49) 2,2,4-Trimethylpentane...	16.52	57	325558	4.752	ng	96
50) Methyl Methacrylate	16.79	100	53436	10.131	ng	96
51) n-Heptane	16.88	71	74028	4.561	ng	98
52) cis-1,3-Dichloropropene	17.65	75	108231	4.619	ng	99
53) 4-Methyl-2-pentanone	17.79	58	70345	5.011	ng	97
54) trans-1,3-Dichloropropene	18.36	75	114007	5.321	ng	99
55) 1,1,2-Trichloroethane	18.61	97	60472	4.636	ng	100
58) Toluene	18.99	91	270680	4.712	ng	99
59) 2-Hexanone	19.39	43	192690	4.989	ng	99
60) Dibromochloromethane	19.53	129	70986	5.272	ng	98
61) 1,2-Dibromoethane	19.87	107	69321	4.990	ng	98
62) n-Butyl Acetate	20.20	43	218998	4.994	ng	100
63) n-Octane	20.28	57	67291	4.644	ng	97
64) Tetrachloroethene	20.47	166	59893	4.573	ng	98
65) Chlorobenzene	21.35	112	168463	4.853	ng	99
66) Ethylbenzene	21.82	91	312047	4.800	ng	100
67) m- & p-Xylenes	22.04	91	487391	9.302	ng	# 30
68) Bromoform	22.15	173	54281	4.930	ng	100
69) Styrene	22.51	104	183096	5.011	ng	97
70) o-Xylene	22.66	91	252696	4.794	ng	98
71) n-Nonane	22.91	43	166786	4.529	ng	98
72) 1,1,2,2-Tetrachloroethane	22.63	83	115016	4.963	ng	100
74) Cumene	23.41	105	304404	4.730	ng	99
75) alpha-Pinene	23.90	93	157830	4.632	ng	98
76) n-Propylbenzene	24.05	91	393830	4.766	ng	99
77) 3-Ethyltoluene	24.18	105	312687	5.133	ng	99
78) 4-Ethyltoluene	24.23	105	300258	4.865	ng	99
79) 1,3,5-Trimethylbenzene	24.32	105	256223	4.871	ng	1313

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060918.D  
 Acq On : 6 Aug 2009 14:38  
 Operator : WA  
 Sample : 5.0ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310903  
 ALS Vial : 4 Sample Multiplier: 1

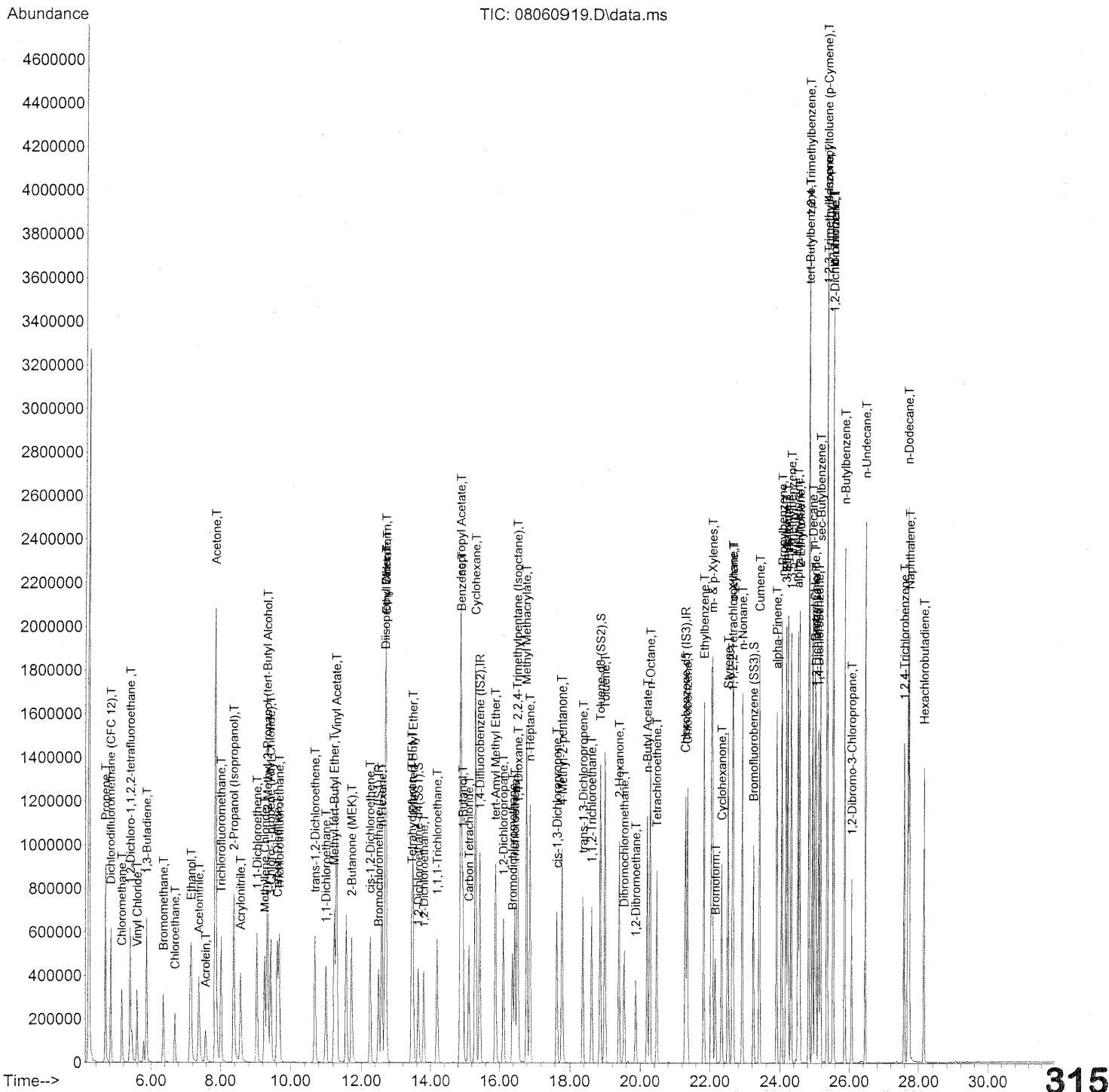
Quant Time: Aug 06 15:06:30 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	137848	5.174	ng	98
81) 2-Ethyltoluene	24.56	105	305024	4.773	ng	100
82) 1,2,4-Trimethylbenzene	24.83	105	257449	4.905	ng	99
83) n-Decane	24.94	57	171862	4.941	ng	99
84) Benzyl Chloride	25.01	91	258427	5.717	ng	99
85) 1,3-Dichlorobenzene	25.03	146	131275	5.227	ng	97
86) 1,4-Dichlorobenzene	25.11	146	133153	4.993	ng	100
87) sec-Butylbenzene	25.17	105	345740	4.915	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	305963	4.889	ng	98
89) 1,2,3-Trimethylbenzene	25.36	105	265359	4.975	ng	98
90) 1,2-Dichlorobenzene	25.53	146	123261	5.077	ng	100
91) d-Limonene	25.53	68	113934	5.005	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	47123	6.066	ng	96
93) n-Undecane	26.46	57	184521	5.189	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	91111	5.938	ng	99
95) Naphthalene	27.73	128	353074	5.862	ng	100
96) n-Dodecane	27.70	57	188594	5.016	ng	99
97) Hexachlorobutadiene	28.15	225	51370	5.213	ng	100
98) Cyclohexanone	22.33	55	103876	3.963	ng	99
99) tert-Butylbenzene	24.83	119	245043	4.847	ng	99
100) n-Butylbenzene	25.86	91	301669	5.270	ng	100

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

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060919.D  
 Acq On : 6 Aug 2009 15:18  
 Operator : WA  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060919.D  
 Acq On : 6 Aug 2009 15:18  
 Operator : WA  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.50	130	207495	25.000	ng	0.01
37) 1,4-Difluorobenzene (IS2)	15.43	114	1056146	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	528644	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.64	65	447374	23.622	ng	0.00
Spiked Amount	25.000		Recovery	=	94.48%	
57) Toluene-d8 (SS2)	18.86	98	1150944	25.118	ng	0.00
Spiked Amount	25.000		Recovery	=	100.48%	
73) Bromofluorobenzene (SS3)	23.24	174	306340	26.180	ng	0.00
Spiked Amount	25.000		Recovery	=	104.72%	

Target Compounds

						Qvalue
2) Propene	4.67	42	397150	24.727	ng	100
3) Dichlorodifluoromethan...	4.83	85	635550	23.796	ng	99
4) Chloromethane	5.15	50	453590	26.875	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	260375	24.887	ng	98
6) Vinyl Chloride	5.59	62	431248	26.129	ng	98
7) 1,3-Butadiene	5.87	54	374047	31.641	ng	98
8) Bromomethane	6.35	94	273614	36.099	ng	99
9) Chloroethane	6.69	64	246290	27.134	ng	97
10) Ethanol	7.15	45	1215448	123.257	ng	100
11) Acetonitrile	7.38	41	708708	20.399	ng	100
12) Acrolein	7.57	56	210551	22.077	ng	98
13) Acetone	7.85	58	1259513	111.728	ng	97
14) Trichlorofluoromethane	8.01	101	614629	26.506	ng	100
15) 2-Propanol (Isopropanol)	8.38	45	1639705	43.999	ng	99
16) Acrylonitrile	8.57	53	497820	30.352	ng	99
17) 1,1-Dichloroethene	9.03	96	310280	29.696	ng	93
18) 2-Methyl-2-Propanol (t...	9.34	59	1766301	55.312	ng	98
19) Methylene Chloride	9.26	84	317656	26.180	ng	98
20) 3-Chloro-1-propene (Al...	9.43	41	596921	30.468	ng	99
21) Trichlorotrifluoroethane	9.68	151	242878	28.535	ng	100
22) Carbon Disulfide	9.63	76	1185465	28.386	ng	98
23) trans-1,2-Dichloroethene	10.69	61	536758	29.651	ng	99
24) 1,1-Dichloroethane	10.99	63	626914	27.802	ng	100
25) Methyl tert-Butyl Ether	11.23	73	988001	27.035	ng	99
26) Vinyl Acetate	11.29	86	232023	94.663	ng	# 94
27) 2-Butanone (MEK)	11.71	72	244752	29.962	ng	99
28) cis-1,2-Dichloroethene	12.25	61	508498	29.050	ng	99
29) Diisopropyl Ether	12.68	87	316984	32.016	ng	# 1
30) Ethyl Acetate	12.71	61	248217	58.562	ng	99
31) n-Hexane	12.59	57	594541	26.616	ng	99

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060919.D  
 Acq On : 6 Aug 2009 15:18  
 Operator : WA  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.70	83	541847	26.440	ng	100
34) Tetrahydrofuran (THF)	13.45	72	234041	24.295	ng	95
35) Ethyl tert-Butyl Ether	13.48	87	375069	24.759	ng	99
36) 1,2-Dichloroethane	13.80	62	490990	27.208	ng	98
38) 1,1,1-Trichloroethane	14.19	97	521245	26.595	ng	98
39) Isopropyl Acetate	14.87	61	456771	56.511	ng	# 86
40) 1-Butanol	14.93	56	723046	52.443	ng	80
41) Benzene	14.88	78	1276338	24.685	ng	99
42) Carbon Tetrachloride	15.11	117	465095	28.320	ng	98
43) Cyclohexane	15.31	84	1000496	54.769	ng	99
44) tert-Amyl Methyl Ether	15.89	73	989673	26.122	ng	99
45) 1,2-Dichloropropane	16.12	63	347675	27.694	ng	99
46) Bromodichloromethane	16.39	83	465949	29.201	ng	98
47) Trichloroethene	16.45	130	316970	29.394	ng	99
48) 1,4-Dioxane	16.55	88	266033	28.691	ng	# 71
49) 2,2,4-Trimethylpentane...	16.53	57	1568435	27.515	ng	96
50) Methyl Methacrylate	16.79	100	266630	60.760	ng	100
51) n-Heptane	16.89	71	366787	27.159	ng	99
52) cis-1,3-Dichloropropene	17.66	75	541590	27.780	ng	99
53) 4-Methyl-2-pentanone	17.79	58	350647	30.023	ng	98
54) trans-1,3-Dichloropropene	18.37	75	568419	31.884	ng	98
55) 1,1,2-Trichloroethane	18.61	97	299989	27.639	ng	98
58) Toluene	18.99	91	1326296	27.980	ng	99
59) 2-Hexanone	19.39	43	922020	28.929	ng	99
60) Dibromochloromethane	19.54	129	363307	32.695	ng	99
61) 1,2-Dibromoethane	19.87	107	346018	30.184	ng	99
62) n-Butyl Acetate	20.20	43	1069244	29.546	ng	99
63) n-Octane	20.28	57	322871	27.000	ng	96
64) Tetrachloroethene	20.47	166	306228	28.331	ng	99
65) Chlorobenzene	21.35	112	830316	28.987	ng	100
66) Ethylbenzene	21.83	91	1510329	28.156	ng	99
67) m- & p-Xylenes	22.06	91	2364755	54.690	ng	99
68) Bromoform	22.16	173	284337	31.297	ng	99
69) Styrene	22.52	104	922923	30.607	ng	99
70) o-Xylene	22.66	91	1212719	27.879	ng	98
71) n-Nonane	22.92	43	783849	25.792	ng	99
72) 1,1,2,2-Tetrachloroethane	22.64	83	553928	28.964	ng	100
74) Cumene	23.41	105	1485450	27.968	ng	99
75) alpha-Pinene	23.91	93	765795	27.237	ng	100
76) n-Propylbenzene	24.05	91	1894473	27.785	ng	100
77) 3-Ethyltoluene	24.18	105	1496922	29.775	ng	100
78) 4-Ethyltoluene	24.23	105	1487030	29.196	ng	99
79) 1,3,5-Trimethylbenzene	24.33	105	1242874	28.633	ng	99

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060919.D  
 Acq On : 6 Aug 2009 15:18  
 Operator : WA  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

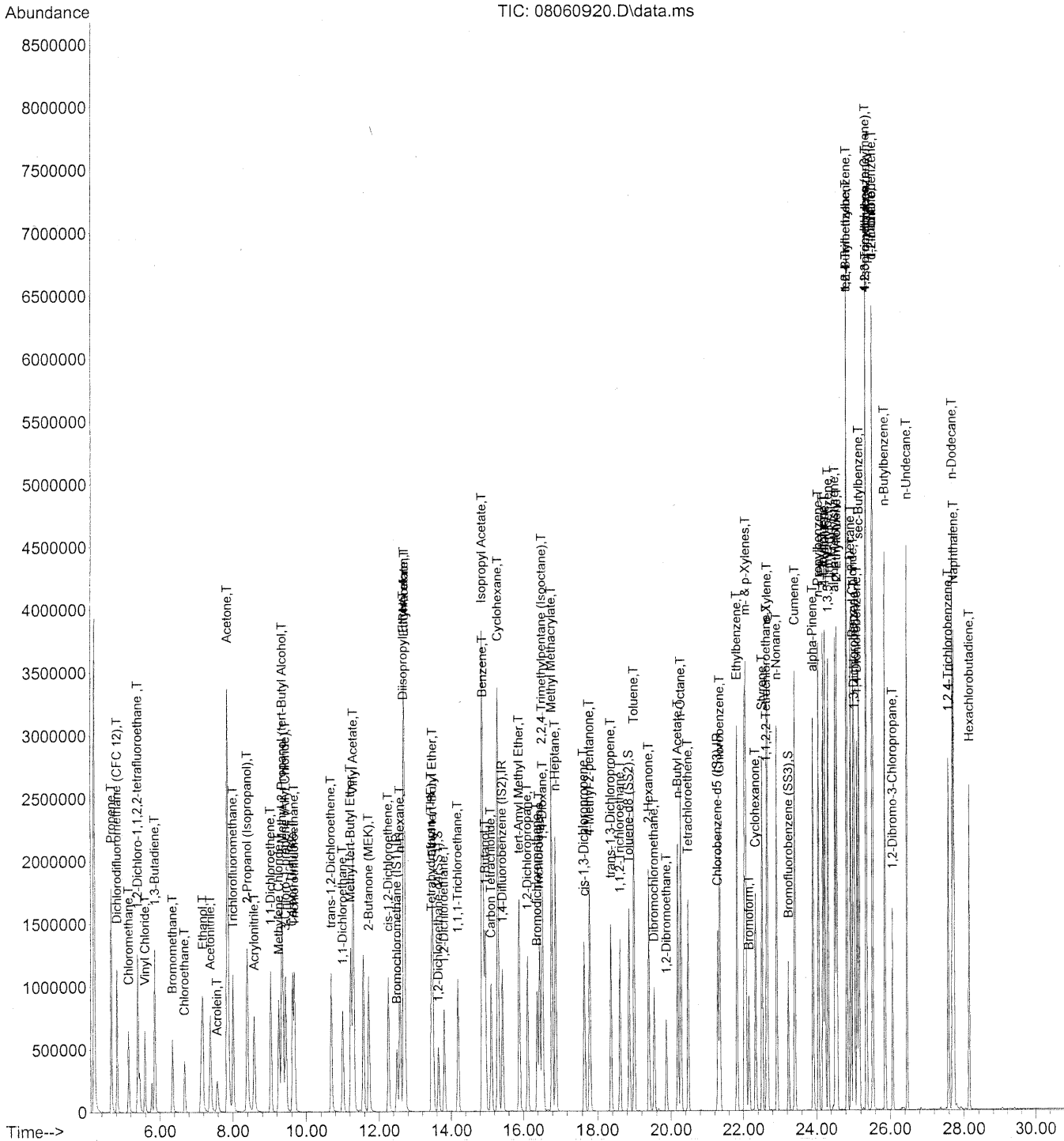
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	682695	31.049	ng	99
81) 2-Ethyltoluene	24.57	105	1482611	28.115	ng	99
82) 1,2,4-Trimethylbenzene	24.84	105	1242291	28.679	ng	100
83) n-Decane	24.94	57	804056	28.011	ng	100
84) Benzyl Chloride	25.01	91	1277690	34.250	ng	100
85) 1,3-Dichlorobenzene	25.03	146	652647	31.489	ng	97
86) 1,4-Dichlorobenzene	25.11	146	668115	30.359	ng	99
87) sec-Butylbenzene	25.17	105	1672528	28.809	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1479621	28.648	ng	100
89) 1,2,3-Trimethylbenzene	25.36	105	1274600	28.960	ng	97
90) 1,2-Dichlorobenzene	25.54	146	611625	30.525	ng	99
91) d-Limonene	25.53	68	550190	29.286	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.07	157	236587	36.905	ng	94
93) n-Undecane	26.46	57	859590	29.294	ng	100
94) 1,2,4-Trichlorobenzene	27.59	180	463024	36.569	ng	100
95) Naphthalene	27.74	128	1702428	34.252	ng	100
96) n-Dodecane	27.70	57	872418	28.116	ng	99
97) Hexachlorobutadiene	28.15	225	262946	32.338	ng	99
98) Cyclohexanone	22.33	55	505166	23.356	ng	99
99) tert-Butylbenzene	24.83	119	1185720	28.423	ng	99
100) n-Butylbenzene	25.87	91	1445418	30.597	ng	99

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060920.D  
 Acq On : 6 Aug 2009 15:59  
 Operator : WA  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060920.D  
 Acq On : 6 Aug 2009 15:59  
 Operator : WA  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.50	130	246064	25.000	ng	0.02
37) 1,4-Difluorobenzene (IS2)	15.44	114	1247385	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	628572	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.65	65	527588	23.491	ng	0.01
Spiked Amount	25.000		Recovery	=	93.96%	
57) Toluene-d8 (SS2)	18.86	98	1375416	25.245	ng	0.00
Spiked Amount	25.000		Recovery	=	100.96%	
73) Bromofluorobenzene (SS3)	23.25	174	373273	26.829	ng	0.00
Spiked Amount	25.000		Recovery	=	107.32%	

Target Compounds

						Qvalue
2) Propene	4.66	42	766697	40.253	ng	99
3) Dichlorodifluoromethan...	4.82	85	1206456	38.091	ng	99
4) Chloromethane	5.14	50	847645	42.351	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	513921	41.422	ng	99
6) Vinyl Chloride	5.59	62	848331	43.343	ng	98
7) 1,3-Butadiene	5.87	54	730169	52.084	ng	99
8) Bromomethane	6.35	94	491871	54.723	ng	99
9) Chloroethane	6.69	64	469575	43.625	ng	97
10) Ethanol	7.18	45	2326754	198.970	ng	100
11) Acetonitrile	7.39	41	1338822	32.495	ng	100
12) Acrolein	7.58	56	402755	35.611	ng	97
13) Acetone	7.86	58	2311019	172.872	ng	95
14) Trichlorofluoromethane	8.01	101	1159734	42.175	ng	100
15) 2-Propanol (Isopropanol)	8.40	45	2875108	65.056	ng	100
16) Acrylonitrile	8.58	53	940966	48.379	ng	98
17) 1,1-Dichloroethene	9.03	96	590850	47.685	ng	92
18) 2-Methyl-2-Propanol (t...	9.35	59	3260768	86.106	ng	99
19) Methylene Chloride	9.26	84	606273	42.136	ng	98
20) 3-Chloro-1-propene (Al...	9.44	41	1134104	48.813	ng	100
21) Trichlorotrifluoroethane	9.68	151	470831	46.646	ng	99
22) Carbon Disulfide	9.63	76	2221081	44.848	ng	98
23) trans-1,2-Dichloroethene	10.69	61	1011038	47.097	ng	98
24) 1,1-Dichloroethane	11.00	63	1184763	44.306	ng	99
25) Methyl tert-Butyl Ether	11.23	73	1897731	43.789	ng	99
26) Vinyl Acetate	11.30	86	408724	140.617	ng	100
27) 2-Butanone (MEK)	11.72	72	462913	47.786	ng	99
28) cis-1,2-Dichloroethene	12.26	61	959785	46.237	ng	98
29) Diisopropyl Ether	12.69	87	594750	50.655	ng	# 1
30) Ethyl Acetate	12.71	61	462477	92.010	ng	99
31) n-Hexane	12.59	57	1123585	42.416	ng	99

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060920.D  
 Acq On : 6 Aug 2009 15:59  
 Operator : WA  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.71	83	1005869	41.389	ng	99
34) Tetrahydrofuran (THF)	13.45	72	435280	38.102	ng	97
35) Ethyl tert-Butyl Ether	13.49	87	712110	39.639	ng	97
36) 1,2-Dichloroethane	13.81	62	932796	43.588	ng	98
38) 1,1,1-Trichloroethane	14.19	97	995605	43.010	ng	98
39) Isopropyl Acetate	14.87	61	855760	89.642	ng	# 86
40) 1-Butanol	14.96	56	1373976	84.377	ng	# 79
41) Benzene	14.89	78	2375406	38.898	ng	99
42) Carbon Tetrachloride	15.12	117	885200	45.637	ng	99
43) Cyclohexane	15.31	84	1889680	87.585	ng	98
44) tert-Amyl Methyl Ether	15.89	73	1834473	40.996	ng	99
45) 1,2-Dichloropropane	16.12	63	658137	44.386	ng	99
46) Bromodichloromethane	16.39	83	892711	47.368	ng	99
47) Trichloroethene	16.45	130	608434	47.772	ng	98
48) 1,4-Dioxane	16.55	88	507842	46.373	ng	# 75
49) 2,2,4-Trimethylpentane...	16.53	57	2886330	42.872	ng	97
50) Methyl Methacrylate	16.80	100	522781	100.868	ng	93
51) n-Heptane	16.89	71	684826	42.934	ng	99
52) cis-1,3-Dichloropropene	17.66	75	1039036	45.124	ng	99
53) 4-Methyl-2-pentanone	17.80	58	654840	47.472	ng	99
54) trans-1,3-Dichloropropene	18.37	75	1094561	51.984	ng	99
55) 1,1,2-Trichloroethane	18.61	97	577490	45.049	ng	97
58) Toluene	19.00	91	2525620	44.811	ng	98
59) 2-Hexanone	19.40	43	1735363	45.792	ng	99
60) Dibromochloromethane	19.54	129	703485	53.244	ng	98
61) 1,2-Dibromoethane	19.88	107	661208	48.510	ng	98
62) n-Butyl Acetate	20.20	43	2024198	47.042	ng	99
63) n-Octane	20.28	57	605076	42.555	ng	96
64) Tetrachloroethene	20.48	166	601947	46.837	ng	99
65) Chlorobenzene	21.36	112	1587286	46.604	ng	100
66) Ethylbenzene	21.83	91	2858886	44.823	ng	99
67) m- & p-Xylenes	22.07	91	4460386	86.756	ng	98
68) Bromoform	22.16	173	558777	51.727	ng	99
69) Styrene	22.52	104	1767058	49.286	ng	99
70) o-Xylene	22.66	91	2294449	44.361	ng	97
71) n-Nonane	22.92	43	1444078	39.962	ng	98
72) 1,1,2,2-Tetrachloroethane	22.64	83	1043616	45.894	ng	100
74) Cumene	23.42	105	2823456	44.709	ng	100
75) alpha-Pinene	23.91	93	1462451	43.746	ng	99
76) n-Propylbenzene	24.06	91	3551148	43.802	ng	99
77) 3-Ethyltoluene	24.18	105	2884181	48.248	ng	99
78) 4-Ethyltoluene	24.24	105	2788015	46.037	ng	98
79) 1,3,5-Trimethylbenzene	24.33	105	2362085	45.766	ng	98

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060920.D  
 Acq On : 6 Aug 2009 15:59  
 Operator : WA  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

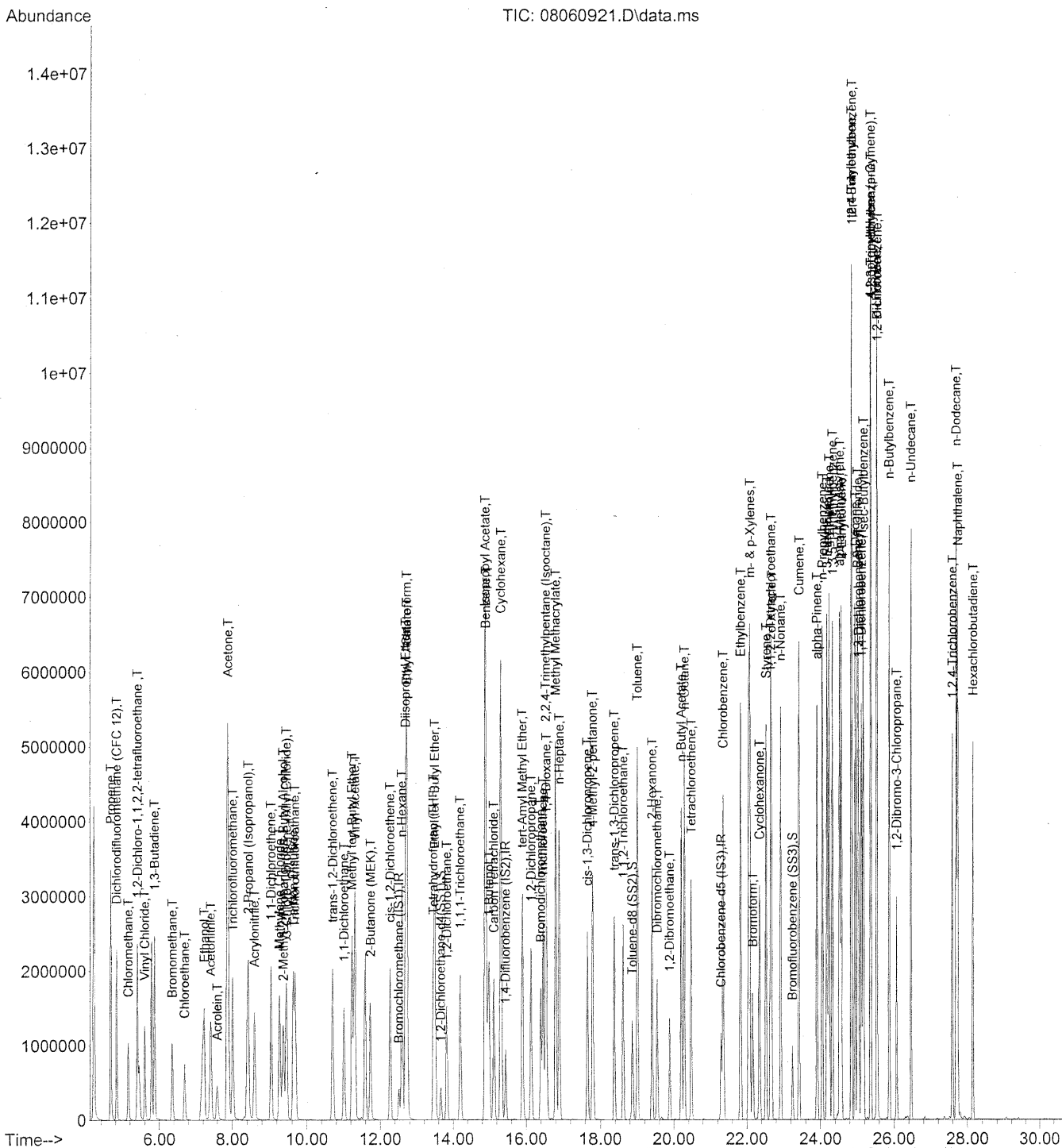
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.52	118	1322010	50.567	ng	96
81) 2-Ethyltoluene	24.57	105	2813751	44.875	ng	99
82) 1,2,4-Trimethylbenzene	24.84	105	2342546	45.481	ng	99
83) n-Decane	24.94	57	1477979	43.303	ng	99
84) Benzyl Chloride	25.01	91	2418762	54.530	ng	99
85) 1,3-Dichlorobenzene	25.04	146	1268117	51.457	ng	97
86) 1,4-Dichlorobenzene	25.11	146	1304869	49.866	ng	99
87) sec-Butylbenzene	25.17	105	3150159	45.635	ng	99
88) 4-Isopropyltoluene (p-...	25.36	119	2788519	45.407	ng	99
89) 1,2,3-Trimethylbenzene	25.37	105	2406323	45.982	ng	97
90) 1,2-Dichlorobenzene	25.54	146	1179498	49.508	ng	100
91) d-Limonene	25.54	68	1035586	46.360	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	460773	60.449	ng	91
93) n-Undecane	26.46	57	1584968	45.428	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	910868	60.503	ng	99
95) Naphthalene	27.74	128	3285610	55.597	ng	99
96) n-Dodecane	27.70	57	1632372	44.244	ng	99
97) Hexachlorobutadiene	28.15	225	522278	54.021	ng	99
98) Cyclohexanone	22.34	55	957787	37.242	ng	98
99) tert-Butylbenzene	24.84	119	2258738	45.537	ng	99
100) n-Butylbenzene	25.87	91	2706705	48.188	ng	99

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060921.D  
 Acq On : 6 Aug 2009 16:39  
 Operator : WA  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060921.D  
 Acq On : 6 Aug 2009 16:39  
 Operator : WA  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.51	130	204063	25.000	ng	0.02
37) 1,4-Difluorobenzene (IS2)	15.44	114	1040695	25.000	ng	0.01
56) Chlorobenzene-d5 (IS3)	21.30	82	521975	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.66	65	435176	23.365	ng	0.02
Spiked Amount	25.000		Recovery	=	93.44%	
57) Toluene-d8 (SS2)	18.86	98	1136569	25.121	ng	0.00
Spiked Amount	25.000		Recovery	=	100.48%	
73) Bromofluorobenzene (SS3)	23.25	174	310567	26.881	ng	0.00
Spiked Amount	25.000		Recovery	=	107.52%	

Target Compounds

						Qvalue
2) Propene	4.66	42	1483597	93.924	ng	99
3) Dichlorodifluoromethan...	4.83	85	2379344	90.583	ng	99
4) Chloromethane	5.15	50	1392812	83.913	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	1008644	98.029	ng	98
6) Vinyl Chloride	5.59	62	1677099	103.322	ng	98
7) 1,3-Butadiene	5.87	54	1425350	122.599	ng	98
8) Bromomethane	6.36	94	914093	122.628	ng	99
9) Chloroethane	6.70	64	916786	102.702	ng	98
10) Ethanol	7.23	45	4377562	451.390	ng	100
11) Acetonitrile	7.42	41	2583362	75.607	ng	100
12) Acrolein	7.59	56	784600	83.651	ng	96
13) Acetone	7.89	58	4244786	382.878	ng	87
14) Trichlorofluoromethane	8.02	101	2210255	96.921	ng	99
15) 2-Propanol (Isopropanol)	8.43	45	5177262	141.260	ng	100
16) Acrylonitrile	8.60	53	1796721	111.390	ng	97
17) 1,1-Dichloroethene	9.04	96	1160669	112.953	ng	90
18) 2-Methyl-2-Propanol (t...	9.37	59	2345913	74.698	ng	100
19) Methylene Chloride	9.27	84	1184348	99.253	ng	96
20) 3-Chloro-1-propene (Al...	9.45	41	2146772	111.416	ng	98
21) Trichlorotrifluoroethane	9.68	151	916963	109.542	ng	96
22) Carbon Disulfide	9.63	76	4236854	103.158	ng	98
23) trans-1,2-Dichloroethene	10.70	61	1929408	108.376	ng	96
24) 1,1-Dichloroethane	11.01	63	2255773	101.720	ng	100
25) Methyl tert-Butyl Ether	11.23	73	3661547	101.878	ng	99
26) Vinyl Acetate	11.31	86	640109	265.549	ng	# 93
27) 2-Butanone (MEK)	11.73	72	687553	85.584	ng	97
28) cis-1,2-Dichloroethene	12.27	61	1822976	105.896	ng	97
29) Diisopropyl Ether	12.70	87	1137931	116.867	ng	# 1
30) Ethyl Acetate	12.73	61	853386	204.726	ng	100
31) n-Hexane	12.59	57	2161223	98.379	ng	100

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060921.D  
 Acq On : 6 Aug 2009 16:39  
 Operator : WA  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.72	83	1880936	93.325	ng	100
34) Tetrahydrofuran (THF)	13.45	72	810456	85.544	ng	98
35) Ethyl tert-Butyl Ether	13.50	87	1363054	91.490	ng	96
36) 1,2-Dichloroethane	13.82	62	1754433	98.856	ng	97
38) 1,1,1-Trichloroethane	14.20	97	1846555	95.614	ng	98
39) Isopropyl Acetate	14.88	61	1588242	199.413	ng	95
40) 1-Butanol	14.99	56	2511497	184.865	ng	# 77
41) Benzene	14.90	78	4433680	87.021	ng	100
42) Carbon Tetrachloride	15.12	117	1694678	104.722	ng	99
43) Cyclohexane	15.32	84	3585086	199.167	ng	97
44) tert-Amyl Methyl Ether	15.90	73	3367820	90.211	ng	99
45) 1,2-Dichloropropane	16.13	63	1250257	101.067	ng	99
46) Bromodichloromethane	16.40	83	1669484	106.178	ng	99
47) Trichloroethene	16.47	130	1192304	112.208	ng	99
48) 1,4-Dioxane	16.56	88	940853	102.975	ng	# 76
49) 2,2,4-Trimethylpentane...	16.54	57	5320898	94.731	ng	97
50) Methyl Methacrylate	16.81	100	995395	230.200	ng	# 90
51) n-Heptane	16.91	71	1295628	97.360	ng	98
52) cis-1,3-Dichloropropene	17.67	75	1960789	102.068	ng	99
53) 4-Methyl-2-pentanone	17.80	58	1240802	107.815	ng	100
54) trans-1,3-Dichloropropene	18.38	75	2068198	117.733	ng	99
55) 1,1,2-Trichloroethane	18.62	97	1112067	103.980	ng	96
58) Toluene	19.00	91	4768847	101.891	ng	98
59) 2-Hexanone	19.41	43	3205631	101.863	ng	97
60) Dibromochloromethane	19.54	129	1359408	123.901	ng	98
61) 1,2-Dibromoethane	19.88	107	1277917	112.901	ng	99
62) n-Butyl Acetate	20.21	43	4015589	112.379	ng	98
63) n-Octane	20.29	57	1130161	95.715	ng	95
64) Tetrachloroethene	20.48	166	1184412	110.979	ng	99
65) Chlorobenzene	21.36	112	3039056	107.452	ng	100
66) Ethylbenzene	21.84	91	5357238	101.146	ng	97
67) m- & p-Xylenes	22.08	91	8307914	194.593	ng	96
68) Bromoform	22.17	173	1108833	123.609	ng	99
69) Styrene	22.53	104	3401279	114.239	ng	98
70) o-Xylene	22.67	91	4304194	100.212	ng	96
71) n-Nonane	22.93	43	2656292	88.519	ng	97
72) 1,1,2,2-Tetrachloroethane	22.65	83	1997850	105.799	ng	100
74) Cumene	23.42	105	5281477	100.712	ng	99
75) alpha-Pinene	23.91	93	2764527	99.583	ng	98
76) n-Propylbenzene	24.06	91	6477041	96.207	ng	97
77) 3-Ethyltoluene	24.19	105	5409334	108.970	ng	98
78) 4-Ethyltoluene	24.25	105	5142381	102.255	ng	95
79) 1,3,5-Trimethylbenzene	24.34	105	4445745	103.729	ng	95

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060921.D  
 Acq On : 6 Aug 2009 16:39  
 Operator : WA  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-07200902/S20-07310901  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 07:59:49 2009  
 Response via : Initial Calibration

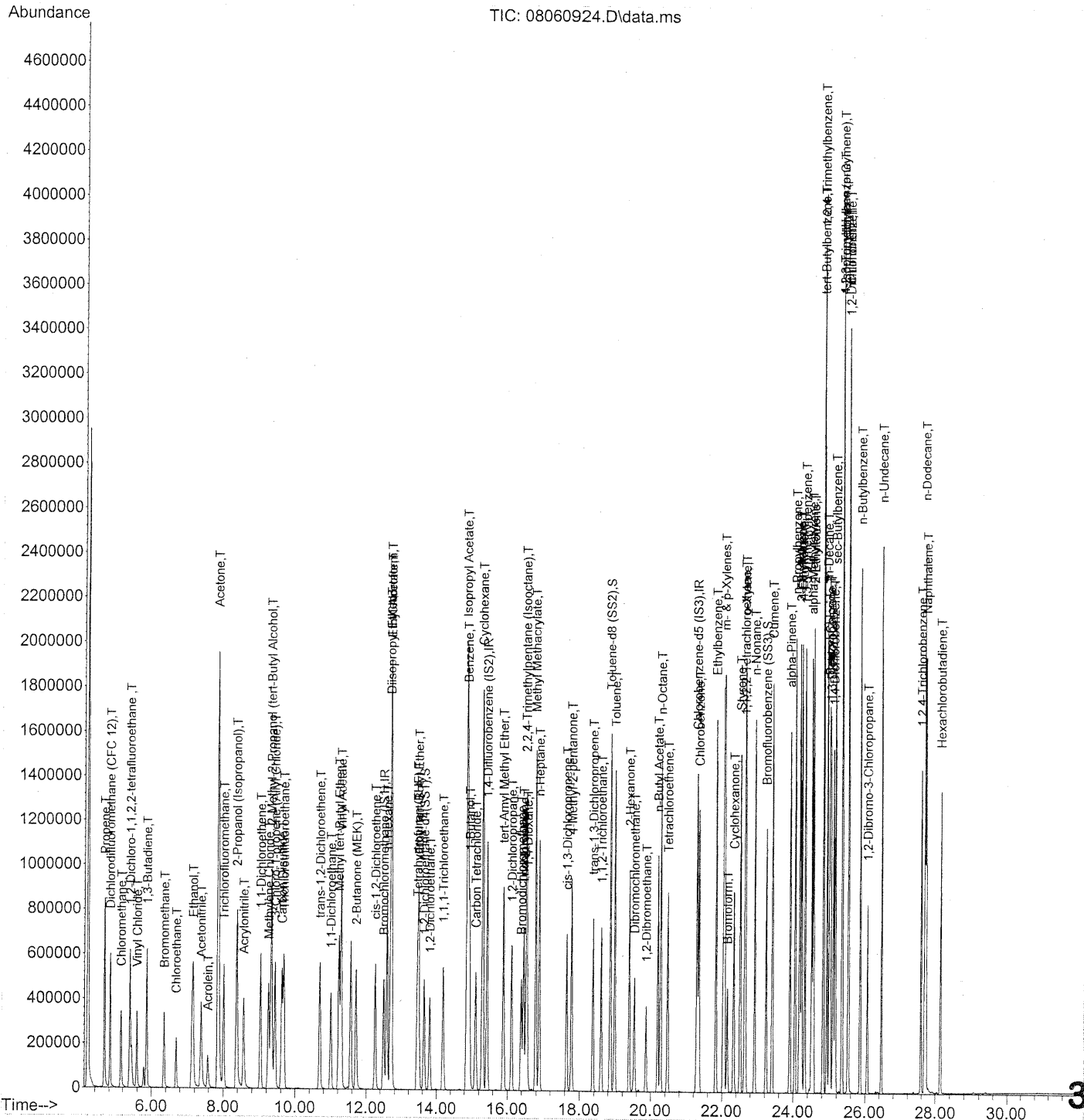
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.53	118	2536487	116.834	ng	96
81) 2-Ethyltoluene	24.58	105	5229998	100.443	ng	97
82) 1,2,4-Trimethylbenzene	24.85	105	4275494	99.962	ng	98
83) n-Decane	24.95	57	2704263	95.412	ng	98
84) Benzyl Chloride	25.02	91	4499020	122.142	ng	97
85) 1,3-Dichlorobenzene	25.05	146	2490794	121.712	ng	97
86) 1,4-Dichlorobenzene	25.13	146	2542028	116.984	ng	98
87) sec-Butylbenzene	25.18	105	5783982	100.902	ng	98
88) 4-Isopropyltoluene (p-...	25.37	119	5010569	98.251	ng	99
89) 1,2,3-Trimethylbenzene	25.37	105	4359650	100.320	ng	95
90) 1,2-Dichlorobenzene	25.55	146	2206686	111.538	ng	100
91) d-Limonene	25.54	68	1890339	101.906	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	907634	143.389	ng	86
93) n-Undecane	26.47	57	2880684	99.426	ng	99
94) 1,2,4-Trichlorobenzene	27.60	180	1811250	144.878	ng	100
95) Naphthalene	27.74	128	6139171	125.097	ng	98
96) n-Dodecane	27.70	57	2961251	96.654	ng	98
97) Hexachlorobutadiene	28.15	225	1052824	131.135	ng	99
98) Cyclohexanone	22.35	55	1779789	83.337	ng	98
99) tert-Butylbenzene	24.85	119	4145655	100.646	ng	98
100) n-Butylbenzene	25.87	91	4947974	106.080	ng	97

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060924.D  
 Acq On : 6 Aug 2009 18:51  
 Operator : WA  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-07200902/S20-07240917  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060924.D  
 Acq On : 6 Aug 2009 18:51  
 Operator : WA  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-07200902/S20-07240917  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.50	130	238664	25.000	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	15.43	114	1224547	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	614774	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.64	65	510896	24.629	ng	-0.02
Spiked Amount	25.000					
				Recovery	=	98.52%
57) Toluene-d8 (SS2)	18.86	98	1345950	25.056	ng	0.00
Spiked Amount	25.000					
				Recovery	=	100.24%
73) Bromofluorobenzene (SS3)	23.24	174	365031	25.768	ng	0.00
Spiked Amount	25.000					
				Recovery	=	103.08%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.67	42	372783	22.762	ng	99
3) Dichlorodifluoromethan...	4.83	85	610303	22.800	ng	99
4) Chloromethane	5.15	50	470357	26.153	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	266041	24.462	ng	98
6) Vinyl Chloride	5.59	62	440187	25.475	ng	98
7) 1,3-Butadiene	5.87	54	341677	27.589	ng	98
8) Bromomethane	6.35	94	287643	27.346	ng	99
9) Chloroethane	6.69	64	244762	24.371	ng	98
10) Ethanol	7.15	45	1296320	124.871	ng	100
11) Acetonitrile	7.38	41	687211	22.604	ng	100
12) Acrolein	7.58	56	203458	25.747	ng	98
13) Acetone	7.85	58	1224977	125.059	ng	98
14) Trichlorofluoromethane	8.01	101	586848	24.249	ng	100
15) 2-Propanol (Isopropanol)	8.38	45	1711755	44.469	ng	100
16) Acrylonitrile	8.57	53	479431	27.089	ng	99
17) 1,1-Dichloroethene	9.03	96	310330	27.616	ng	92
18) 2-Methyl-2-Propanol (t...	9.33	59	1753114	51.311	ng	98
19) Methylene Chloride	9.26	84	314029	23.873	ng	98
20) 3-Chloro-1-propene (Al...	9.43	41	592052	23.348	ng	99
21) Trichlorotrifluoroethane	9.68	151	249618	28.368	ng	98
22) Carbon Disulfide	9.63	76	1135664	24.487	ng	99
23) trans-1,2-Dichloroethene	10.69	61	514272	25.864	ng	97
24) 1,1-Dichloroethane	11.00	63	617936	25.628	ng	99
25) Methyl tert-Butyl Ether	11.23	73	950000	25.633	ng	100
26) Vinyl Acetate	11.30	86	177094	88.842	ng	# 94
27) 2-Butanone (MEK)	11.71	72	233396	26.390	ng	98
28) cis-1,2-Dichloroethene	12.26	61	497051	26.856	ng	98
29) Diisopropyl Ether	12.68	87	313290	26.470	ng	# 1
30) Ethyl Acetate	12.71	61	234351	50.865	ng	100
31) n-Hexane	12.59	57	571801	24.261	ng	99

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060924.D  
 Acq On : 6 Aug 2009 18:51  
 Operator : WA  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-07200902/S20-07240917  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	12.70	83	539974	26.023	ng	100
34) Tetrahydrofuran (THF)	13.45	72	224798	23.845	ng	97
35) Ethyl tert-Butyl Ether	13.49	87	370406	24.192	ng	97
36) 1,2-Dichloroethane	13.80	62	484412	25.544	ng	98
38) 1,1,1-Trichloroethane	14.19	97	519036	24.987	ng	98
39) Isopropyl Acetate	14.87	61	451344	49.686	ng	# 86
40) 1-Butanol	14.94	56	736605	46.349	ng	81
41) Benzene	14.89	78	1265289	23.502	ng	99
42) Carbon Tetrachloride	15.11	117	450418	26.249	ng	100
43) Cyclohexane	15.31	84	972612	49.322	ng	98
44) tert-Amyl Methyl Ether	15.89	73	971883	24.038	ng	100
45) 1,2-Dichloropropane	16.12	63	344710	25.493	ng	100
46) Bromodichloromethane	16.39	83	451868	25.469	ng	99
47) Trichloroethene	16.45	130	316605	26.073	ng	98
48) 1,4-Dioxane	16.55	88	267355	25.984	ng	# 75
49) 2,2,4-Trimethylpentane...	16.53	57	1523182	24.019	ng	97
50) Methyl Methacrylate	16.79	100	272103	54.901	ng	95
51) n-Heptane	16.89	71	350866	24.283	ng	99
52) cis-1,3-Dichloropropene	17.66	75	537674	23.993	ng	99
53) 4-Methyl-2-pentanone	17.79	58	336616	26.015	ng	99
54) trans-1,3-Dichloropropene	18.37	75	569561	26.731	ng	99
55) 1,1,2-Trichloroethane	18.61	97	303093	25.641	ng	97
58) Toluene	18.99	91	1339186	25.367	ng	99
59) 2-Hexanone	19.39	43	883623	25.170	ng	98
60) Dibromochloromethane	19.54	129	352845	28.249	ng	98
61) 1,2-Dibromoethane	19.87	107	345699	26.105	ng	98
62) n-Butyl Acetate	20.20	43	981251	23.714	ng	100
63) n-Octane	20.28	57	319723	25.050	ng	97
64) Tetrachloroethene	20.48	166	313916	25.696	ng	99
65) Chlorobenzene	21.35	112	837660	25.646	ng	100
66) Ethylbenzene	21.83	91	1521202	25.207	ng	99
67) m- & p-Xylenes	22.07	91	2387430	48.904	ng	99
68) Bromoform	22.16	173	274178	26.436	ng	99
69) Styrene	22.52	104	931476	26.398	ng	100
70) o-Xylene	22.66	91	1225251	25.032	ng	98
71) n-Nonane	22.92	43	765549	23.539	ng	98
72) 1,1,2,2-Tetrachloroethane	22.64	83	551441	25.386	ng	100
74) Cumene	23.41	105	1481888	23.968	ng	99
75) alpha-Pinene	23.91	93	760032	23.981	ng	100
76) n-Propylbenzene	24.05	91	1878570	24.170	ng	100
77) 3-Ethyltoluene	24.18	105	1492441	25.257	ng	99
78) 4-Ethyltoluene	24.23	105	1464128	25.572	ng	99
79) 1,3,5-Trimethylbenzene	24.33	105	1255212	25.994	ng	99

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Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060924.D  
 Acq On : 6 Aug 2009 18:51  
 Operator : WA  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-07200902/S20-07240917  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	680016	26.303	ng	97
81) 2-Ethyltoluene	24.57	105	1474596	24.747	ng	100
82) 1,2,4-Trimethylbenzene	24.84	105	1248319	25.349	ng	100
83) n-Decane	24.94	57	783579	24.473	ng	99
84) Benzyl Chloride	25.01	91	1232630	26.703	ng	100
85) 1,3-Dichlorobenzene	25.03	146	665342	26.696	ng	98
86) 1,4-Dichlorobenzene	25.11	146	674734	25.391	ng	98
87) sec-Butylbenzene	25.17	105	1664439	25.020	ng	100
88) 4-Isopropyltoluene (p-...	25.36	119	1472106	24.816	ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	1264769	25.211	ng	97
90) 1,2-Dichlorobenzene	25.54	146	618612	26.180	ng	100
91) d-Limonene	25.53	68	540824	25.826	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	235275	28.950	ng	92
93) n-Undecane	26.46	57	834523	24.499	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	459074	28.256	ng	99
95) Naphthalene	27.74	128	1677315	25.080	ng	100
96) n-Dodecane	27.70	57	837508	21.164	ng	99
97) Hexachlorobutadiene	28.15	225	258900	25.054	ng	99
98) Cyclohexanone	22.34	55	491779	22.484	ng	98
99) tert-Butylbenzene	24.83	119	1186643	24.898	ng	99
100) n-Butylbenzene	25.87	91	1423055	25.944	ng	100

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

**INITIAL CALIBRATION VERIFICATION CHECK SHEET**

Data File Name: 08060924.D

Acq. Method File: TO15.M

Data File Path: J:\MS13\DATA\2009\_08\06\

Name: 25ng TO-15 ICV STD

Operator: WA

Misc Info: S20-07200902/S20-07240917

Date Acquired: 8/6/09 18:51

Instrument Name: GCMS13

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.67	22.8	26.3	86.7	70	130	*
3)	Dichlorodifluoromethane (CFC	4.83	22.8	26.0	87.7	70	130	*
4)	Chloromethane	5.15	26.2	25.0	104.8	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro	5.40	24.5	26.0	94.2	70	130	*
6)	Vinyl Chloride	5.60	25.5	25.3	100.8	70	130	*
7)	1,3-Butadiene	5.87	27.6	26.8	103.0	70	130	*
8)	Bromomethane	6.35	27.3	25.8	105.8	70	130	*
9)	Chloroethane	6.69	24.4	25.5	95.7	70	130	*
10)	Ethanol	7.15	124.9	130.0	96.1	70	130	*
11)	Acetonitrile	7.38	22.6	26.0	86.9	70	130	*
12)	Acrolein	7.58	25.7	26.3	97.7	70	130	*
13)	Acetone	7.85	125.1	132.0	94.8	70	130	*
14)	Trichlorofluoromethane	8.01	24.2	26.3	92.0	70	130	*
15)	2-Propanol (Isopropanol)	8.38	44.5	48.0	92.7	70	130	*
16)	Acrylonitrile	8.57	27.1	25.8	105.0	70	130	*
17)	1,1-Dichloroethene	9.03	27.6	27.5	100.4	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	9.33	51.3	50.0	102.6	70	130	*
19)	Methylene Chloride	9.26	23.9	26.8	89.2	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.43	23.3	27.0	86.3	70	130	*
21)	Trichlorotrifluoroethane	9.68	28.4	27.5	103.3	70	130	*
22)	Carbon Disulfide	9.63	24.5	26.0	94.2	70	130	*
23)	trans-1,2-Dichloroethene	10.69	25.9	25.5	101.6	70	130	*
24)	1,1-Dichloroethane	11.00	25.6	26.5	96.6	70	130	*
25)	Methyl tert-Butyl Ether	11.23	25.6	26.3	97.3	70	130	*
26)	Vinyl Acetate	11.30	88.8	126.0	70.5	70	130	*
27)	2-Butanone (MEK)	11.71	26.4	26.8	98.5	70	130	*
28)	cis-1,2-Dichloroethene	12.26	26.9	27.0	99.6	70	130	*
29)	Diisopropyl Ether	12.68	26.5	26.5	100.0	70	130	*
30)	Ethyl Acetate	12.71	50.9	52.0	97.9	70	130	*
31)	n-Hexane	12.59	24.3	26.0	93.5	70	130	*
32)	Chloroform	12.70	26.0	27.5	94.5	70	130	*
34)	Tetrahydrofuran (THF)	13.45	23.8	26.5	89.8	70	130	*
35)	Ethyl tert-Butyl Ether	13.49	24.2	25.5	94.9	70	130	*
36)	1,2-Dichloroethane	13.80	25.5	26.3	97.0	70	130	*
38)	1,1,1-Trichloroethane	14.19	25.0	26.0	96.2	70	130	*
39)	Isopropyl Acetate	14.87	49.7	52.3	95.0	70	130	*
40)	1-Butanol	14.94	46.3	52.8	87.7	70	130	*
41)	Benzene	14.89	23.5	25.8	91.1	70	130	*
42)	Carbon Tetrachloride	15.11	26.2	26.3	99.6	70	130	*
43)	Cyclohexane	15.31	49.3	51.8	95.2	70	130	*
44)	tert-Amyl Methyl Ether	15.89	24.0	25.5	94.1	70	130	*
45)	1,2-Dichloropropane	16.12	25.5	26.0	98.1	70	130	*
46)	Bromodichloromethane	16.39	25.5	26.3	97.0	70	130	*
47)	Trichloroethene	16.45	26.1	25.8	101.2	70	130	*
48)	1,4-Dioxane	16.55	26.0	26.0	100.0	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.53	24.0	25.8	93.0	70	130	*
50)	Methyl Methacrylate	16.79	54.9	52.8	104.0	70	130	*

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DA 8/6/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08060924.D

Acq. Method File: TO15.M

Data File Path: J:\MS13\DATA\2009\_08\06\

Name: 25ng TO-15 ICV STD

Operator: WA

Misc Info: S20-07200902/S20-07240917

Date Acquired: 8/6/09 18:51

Instrument Name: GCMS13

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	16.89	24.3	25.8	94.2	70	130	*
52)	cis-1,3-Dichloropropene	17.66	24.0	24.5	98.0	70	130	*
53)	4-Methyl-2-pentanone	17.79	26.0	26.8	97.0	70	130	*
54)	trans-1,3-Dichloropropene	18.37	26.7	27.0	98.9	70	130	*
55)	1,1,2-Trichloroethane	18.61	25.6	26.0	98.5	70	130	*
58)	Toluene	18.99	25.4	26.8	94.8	70	130	*
59)	2-Hexanone	19.39	25.2	27.0	93.3	70	130	*
60)	Dibromochloromethane	19.54	28.2	28.3	99.6	70	130	*
61)	1,2-Dibromoethane	19.87	26.1	26.3	99.2	70	130	*
62)	n-Butyl Acetate	20.20	23.7	27.5	86.2	70	130	*
63)	n-Octane	20.28	25.1	26.3	95.4	70	130	*
64)	Tetrachloroethene	20.48	25.7	25.3	101.6	70	130	*
65)	Chlorobenzene	21.35	25.6	26.5	96.6	70	130	*
66)	Ethylbenzene	21.83	25.2	26.3	95.8	70	130	*
67)	m- & p-Xylenes	22.07	48.9	51.5	95.0	70	130	*
68)	Bromoform	22.16	26.4	26.5	99.6	70	130	*
69)	Styrene	22.52	26.4	26.3	100.4	70	130	*
70)	o-Xylene	22.66	25.0	26.0	96.2	70	130	*
71)	n-Nonane	22.92	23.5	25.8	91.1	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.64	25.4	27.0	94.1	70	130	*
74)	Cumene	23.41	24.0	25.3	94.9	70	130	*
75)	alpha-Pinene	23.91	24.0	24.8	96.8	70	130	*
76)	n-Propylbenzene	24.05	24.2	25.3	95.7	70	130	*
77)	3-Ethyltoluene	24.18	25.3	26.3	96.2	70	130	*
78)	4-Ethyltoluene	24.23	25.6	26.3	97.3	70	130	*
79)	1,3,5-Trimethylbenzene	24.33	26.0	26.5	98.1	70	130	*
80)	alpha-Methylstyrene	24.51	26.3	26.0	101.2	70	130	*
81)	2-Ethyltoluene	24.57	24.7	26.0	95.0	70	130	*
82)	1,2,4-Trimethylbenzene	24.84	25.3	25.5	99.2	70	130	*
83)	n-Decane	24.94	24.5	26.3	93.2	70	130	*
84)	Benzyl Chloride	25.01	26.7	26.8	99.6	70	130	*
85)	1,3-Dichlorobenzene	25.03	26.7	26.0	102.7	70	130	*
86)	1,4-Dichlorobenzene	25.11	25.4	26.3	96.6	70	130	*
87)	sec-Butylbenzene	25.17	25.0	25.8	96.9	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.36	24.8	25.0	99.2	70	130	*
89)	1,2,3-Trimethylbenzene	25.36	25.2	26.0	96.9	70	130	*
90)	1,2-Dichlorobenzene	25.54	26.2	25.8	101.6	70	130	*
91)	d-Limonene	25.53	25.8	26.5	97.4	70	130	*
92)	1,2-Dibromo-3-Chloropropane	26.07	28.9	27.0	107.0	70	130	*
93)	n-Undecane	26.46	24.5	26.3	93.2	70	130	*
94)	1,2,4-Trichlorobenzene	27.59	28.3	27.3	103.7	70	130	*
95)	Naphthalene	27.74	25.1	25.0	100.4	70	130	*
96)	n-Dodecane	27.70	21.2	24.3	87.2	70	130	*
97)	Hexachlorobutadiene	28.15	25.1	26.8	93.7	70	130	*
98)	Cyclohexanone	22.34	22.5	24.8	90.7	70	130	*
99)	tert-Butylbenzene	24.83	24.9	26.5	94.0	70	130	*
100)	n-Butylbenzene	25.87	25.9	26.5	97.7	70	130	*

\* Denotes Passing Criterion

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CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR Bromochloromethane (IS1)	1.000	1.000	0.0	118	-0.02
2	T Propene	1.716	1.431	16.6	94	0.00
3	T Dichlorodifluoromethane (CF	2.804	2.444	12.8	99	0.00
4	T Chloromethane	1.884	1.770	6.1	95	0.00
5	T 1,2-Dichloro-1,1,2,2-tetra	1.139	1.068	6.2	106	0.00
6	T Vinyl Chloride	1.810	1.673	7.6	96	0.00
7	T 1,3-Butadiene	1.297	1.258	3.0	99	0.00
8	T Bromomethane	1.102	1.174	-6.5	107	-0.01
9	T Chloroethane	1.052	0.931	11.5	94	-0.01
10	T Ethanol	1.087	0.909	16.4	95	-0.11
11	T Acetonitrile	3.185	2.416	24.1	88	-0.05
12	T Acrolein	0.828	0.722	12.8	90	-0.03
13	T Acetone	1.026	0.882	14.0	94	-0.07
14	T Trichlorofluoromethane	2.535	2.341	7.7	98	0.00
15	T 2-Propanol (Isopropanol)	4.032	2.919	27.6	82	-0.10
16	T Acrylonitrile	1.854	1.704	8.1	89	-0.04
17	T 1,1-Dichloroethene	1.177	1.145	2.7	99	-0.01
18	T 2-Methyl-2-Propanol (tert-B	3.579	3.218	10.1	90	-0.09
19	T Methylene Chloride	1.378	1.164	15.5	96	-0.02
20	T 3-Chloro-1-propene (Allyl C	2.656	1.901	28.4	84	-0.02
21	T Trichlorotrifluoroethane	0.922	0.968	-5.0	107	0.00
22	T Carbon Disulfide	4.858	4.439	8.6	98	-0.01
23	T trans-1,2-Dichloroethene	2.083	1.844	11.5	89	-0.02
24	T 1,1-Dichloroethane	2.526	2.214	12.4	91	-0.02
25	T Methyl tert-Butyl Ether	3.882	3.514	9.5	95	-0.05
26	T Vinyl Acetate	0.209	0.249	-19.1	132	-0.03
27	T 2-Butanone (MEK)	0.926	0.854	7.8	94	-0.06
28	T cis-1,2-Dichloroethene	1.939	1.717	11.4	90	-0.02
29	T Diisopropyl Ether	1.240	1.196	3.5	99	-0.04
30	T Ethyl Acetate	0.483	0.460	4.8	97	-0.06
31	T n-Hexane	2.469	2.028	17.9	91	-0.01
32	T Chloroform	2.174	2.062	5.2	100	-0.02
33	S 1,2-Dichloroethane-d4 (SS1)	2.173	1.916	11.8	105	-0.02
34	T Tetrahydrofuran (THF)	0.988	0.828	16.2	95	-0.06
35	T Ethyl tert-Butyl Ether	1.604	1.452	9.5	98	-0.04
36	T 1,2-Dichloroethane	1.986	1.733	12.7	91	-0.02
37	IR 1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	116	-0.02
38	T 1,1,1-Trichloroethane	0.424	0.391	7.8	97	-0.01

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WA 8/25/09

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39 T	Isopropyl Acetate	0.185	0.162	12.4	91	-0.05
40 T	1-Butanol	0.324	0.260	19.8	91	-0.10
41 T	Benzene	1.099	0.942	14.3	96	-0.02
42 T	Carbon Tetrachloride	0.350	0.344	1.7	98	-0.01
43 T	Cyclohexane	0.403	0.371	7.9	98	-0.01
44 T	tert-Amyl Methyl Ether	0.825	0.732	11.3	94	-0.05
45 T	1,2-Dichloropropane	0.276	0.248	10.1	92	-0.02
46 T	Bromodichloromethane	0.362	0.339	6.4	96	-0.02
47 T	Trichloroethene	0.248	0.256	-3.2	105	-0.02
48 T	1,4-Dioxane	0.210	0.202	3.8	100	-0.05
49 T	2,2,4-Trimethylpentane (Iso	1.295	1.108	14.4	90	-0.02
50 T	Methyl Methacrylate	0.101	0.102	-1.0	100	-0.04
51 T	n-Heptane	0.295	0.262	11.2	93	-0.02
52 T	cis-1,3-Dichloropropene	0.458	0.425	7.2	95	-0.02
53 T	4-Methyl-2-pentanone	0.264	0.236	10.6	91	-0.04
54 T	trans-1,3-Dichloropropene	0.435	0.403	7.4	96	-0.02
55 T	1,1,2-Trichloroethane	0.241	0.234	2.9	101	-0.02
56 IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	109	-0.01
57 S	Toluene-d8 (SS2)	2.184	2.281	-4.4	114	-0.01
58 T	Toluene	2.147	2.105	2.0	98	-0.02
59 T	2-Hexanone	1.428	1.262	11.6	86	-0.05
60 T	Dibromochloromethane	0.508	0.564	-11.0	103	-0.01
61 T	1,2-Dibromoethane	0.539	0.577	-7.1	101	-0.02
62 T	n-Butyl Acetate	1.683	1.433	14.9	85	-0.03
63 T	n-Octane	0.519	0.478	7.9	91	-0.02
64 T	Tetrachloroethene	0.497	0.558	-12.3	107	-0.01
65 T	Chlorobenzene	1.328	1.381	-4.0	103	-0.01
66 T	Ethylbenzene	2.454	2.454	0.0	99	-0.01
67 T	m- & p-Xylenes	1.985	1.965	1.0	99	-0.02
68 T	Bromoform	0.422	0.506	-19.9	105	-0.02
69 T	Styrene	1.435	1.509	-5.2	101	-0.02
70 T	o-Xylene	1.990	1.984	0.3	99	-0.02
71 T	n-Nonane	1.323	1.115	15.7	86	-0.01
72 T	1,1,2,2-Tetrachloroethane	0.883	0.905	-2.5	100	-0.02
73 S	Bromofluorobenzene (SS3)	0.576	0.642	-11.5	120	-0.01
74 T	Cumene	2.514	2.548	-1.4	102	-0.02
75 T	alpha-Pinene	1.289	1.301	-0.9	99	-0.01
76 T	n-Propylbenzene	3.161	3.197	-1.1	100	-0.01

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Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)
77 T	3-Ethyltoluene	2.403	2.419	-0.7	101	-0.01
78 T	4-Ethyltoluene	2.328	2.427	-4.3	102	-0.02
79 T	1,3,5-Trimethylbenzene	1.964	2.007	-2.2	101	-0.02
80 T	alpha-Methylstyrene	1.051	1.143	-8.8	103	-0.02
81 T	2-Ethyltoluene	2.423	2.490	-2.8	101	-0.02
82 T	1,2,4-Trimethylbenzene	2.003	2.067	-3.2	101	-0.02
83 T	n-Decane	1.302	1.176	9.7	91	-0.01
84 T	Benzyl Chloride	1.877	2.003	-6.7	99	-0.02
85 T	1,3-Dichlorobenzene	1.013	1.110	-9.6	107	-0.02
86 T	1,4-Dichlorobenzene	1.081	1.165	-7.8	106	-0.02
87 T	sec-Butylbenzene	2.705	2.818	-4.2	102	-0.02
88 T	4-Isopropyltoluene (p-Cymen)	2.412	2.572	-6.6	103	-0.01
89 T	1,2,3-Trimethylbenzene	2.040	2.107	-3.3	102	-0.01
90 T	1,2-Dichlorobenzene	0.961	1.062	-10.5	106	-0.02
91 T	d-Limonene	0.852	0.847	0.6	96	-0.01
92 T	1,2-Dibromo-3-Chloropropane	0.330	0.407	-23.3	109	-0.01
93 T	n-Undecane	1.385	1.276	7.9	93	-0.01
94 T	1,2,4-Trichlorobenzene	0.661	0.791	-19.7	110	-0.02
95 T	Naphthalene	2.720	3.055	-12.3	109	-0.01
96 T	n-Dodecane	1.609	1.448	10.0	94	0.00
97 T	Hexachlorobutadiene	0.420	0.451	-7.4	108	0.00
98 T	Cyclohexanone	0.889	0.797	10.3	89	-0.05
99 T	tert-Butylbenzene	1.938	1.997	-3.0	102	-0.02
100 T	n-Butylbenzene	2.231	2.307	-3.4	100	-0.01

(#) = Out of Range

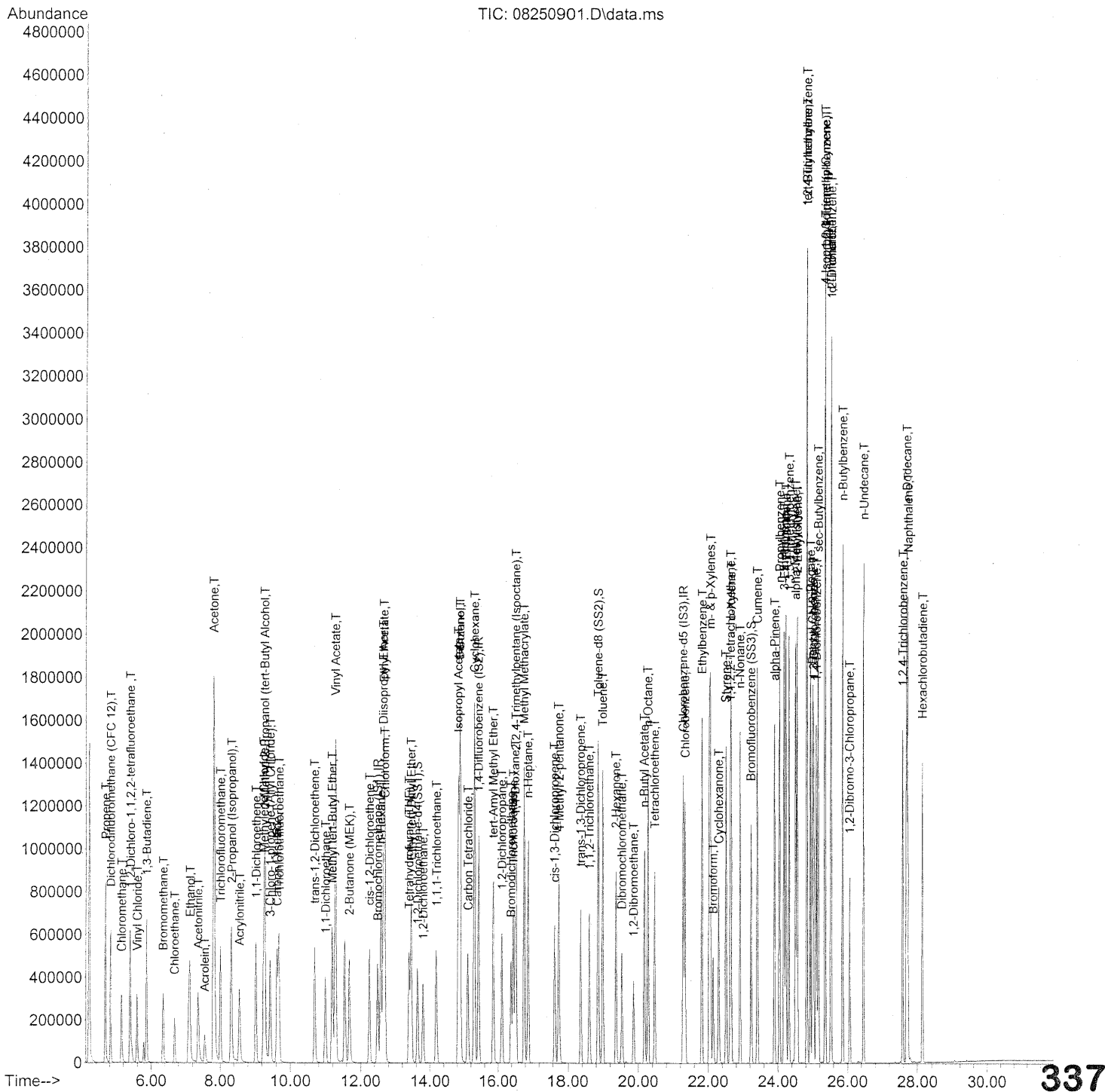
SPCC's out = 0 CCC's out = 0

WA 8/25/09



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration



Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.49	130	244365	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1224563	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	573637	25.000	ng	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
33) 1,2-Dichloroethane-d4 (...)	13.64	65	468095	22.039	ng	-0.02
Spiked Amount	25.000		Recovery	=	88.16%	
57) Toluene-d8 (SS2)	18.85	98	1308374	26.103	ng	-0.01
Spiked Amount	25.000		Recovery	=	104.40%	
73) Bromofluorobenzene (SS3)	23.23	174	368137	27.851	ng	-0.01
Spiked Amount	25.000		Recovery	=	111.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.66	42	374952	22.360	ng	100
3) Dichlorodifluoromethan...	4.83	85	628331	22.926	ng	99
4) Chloromethane	5.15	50	432504	23.487	ng	98
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	276713	24.850	ng	98
6) Vinyl Chloride	5.59	62	413674	23.382	ng	98
7) 1,3-Butadiene	5.86	54	368835	29.087	ng	100
8) Bromomethane	6.35	94	292601	27.169	ng	98
9) Chloroethane	6.69	64	230320	22.398	ng	98
10) Ethanol	7.12	45	1155623	108.721	ng	100
11) Acetonitrile	7.37	41	621183	19.955	ng	100
12) Acrolein	7.56	56	190484	23.543	ng	98
13) Acetone	7.82	58	1189653	118.619	ng	92
14) Trichlorofluoromethane	8.01	101	601874	24.290	ng	100
15) 2-Propanol (Isopropanol)	8.33	45	1349716	34.246	ng	99
16) Acrylonitrile	8.56	53	441294	24.352	ng	99
17) 1,1-Dichloroethene	9.03	96	307762	26.749	ng	# 83
18) 2-Methyl-2-Propanol (t...	9.28	59	1588645	45.412	ng	98
19) Methylene Chloride	9.25	84	304861	22.635	ng	89
20) 3-Chloro-1-propene (Al...	9.43	41	501745	19.325	ng	93
21) Trichlorotrifluoroethane	9.68	151	260151	28.875	ng	94
22) Carbon Disulfide	9.62	76	1162834	24.488	ng	99
23) trans-1,2-Dichloroethene	10.68	61	477650	23.462	ng	89
24) 1,1-Dichloroethane	10.99	63	573480	23.229	ng	100
25) Methyl tert-Butyl Ether	11.18	73	937718	24.711	ng	99
26) Vinyl Acetate	11.28	86	307137	150.485	ng	# 77
27) 2-Butanone (MEK)	11.67	72	229529	25.347	ng	# 87
28) cis-1,2-Dichloroethene	12.25	61	458100	24.174	ng	90
29) Diisopropyl Ether	12.66	87	313223	25.847	ng	# 1
30) Ethyl Acetate	12.67	61	239703	50.813	ng	98
31) n-Hexane	12.58	57	541178	22.426	ng	98

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BA 8/25/09

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	12.70	83	540098	25.422	ng	99
34) Tetrahydrofuran (THF)	13.39	72	222572	23.058	ng	92
35) Ethyl tert-Butyl Ether	13.46	87	366240	23.362	ng	91
36) 1,2-Dichloroethane	13.80	62	448913	23.120	ng	98
38) 1,1,1-Trichloroethane	14.19	97	503861	24.256	ng	96
39) Isopropyl Acetate	14.83	61	415598	45.751	ng #	92
40) 1-Butanol	14.88	56	659865	41.520	ng	84
41) Benzene	14.88	78	1222902	22.714	ng	99
42) Carbon Tetrachloride	15.11	117	454568	26.491	ng	99
43) Cyclohexane	15.31	84	977448	49.567	ng	92
44) tert-Amyl Methyl Ether	15.85	73	932403	23.061	ng	97
45) 1,2-Dichloropropane	16.11	63	319464	23.626	ng	99
46) Bromodichloromethane	16.38	83	447773	25.238	ng	98
47) Trichloroethene	16.45	130	332325	27.367	ng	100
48) 1,4-Dioxane	16.51	88	265298	25.784	ng	83
49) 2,2,4-Trimethylpentane...	16.52	57	1411665	22.260	ng	94
50) Methyl Methacrylate	16.77	100	266177	53.704	ng	91
51) n-Heptane	16.88	71	340423	23.560	ng	96
52) cis-1,3-Dichloropropene	17.65	75	516189	23.034	ng	100
53) 4-Methyl-2-pentanone	17.76	58	317692	24.552	ng	99
54) trans-1,3-Dichloropropene	18.36	75	542896	25.479	ng	99
55) 1,1,2-Trichloroethane	18.60	97	301733	25.525	ng	96
58) Toluene	18.98	91	1304410	26.480	ng	99
59) 2-Hexanone	19.36	43	796585	24.318	ng	95
60) Dibromochloromethane	19.53	129	372559	31.966	ng	99
61) 1,2-Dibromoethane	19.86	107	350986	28.405	ng	98
62) n-Butyl Acetate	20.17	43	904032	23.414	ng	97
63) n-Octane	20.28	57	294117	24.697	ng	92
64) Tetrachloroethene	20.47	166	326669	28.657	ng	99
65) Chlorobenzene	21.34	112	855575	28.073	ng	100
66) Ethylbenzene	21.82	91	1492068	26.497	ng	98
67) m- & p-Xylenes	22.06	91	2344010	51.458	ng	97
68) Bromoform	22.15	173	299646	30.964	ng	99
69) Styrene	22.51	104	928130	28.189	ng	98
70) o-Xylene	22.65	91	1206508	26.417	ng	96
71) n-Nonane	22.91	43	677712	22.332	ng	93
72) 1,1,2,2-Tetrachloroethane	22.63	83	556587	27.461	ng	100
74) Cumene	23.41	105	1508257	26.143	ng	99
75) alpha-Pinene	23.90	93	755286	25.540	ng	98
76) n-Propylbenzene	24.05	91	1892687	26.098	ng	98
77) 3-Ethyltoluene	24.18	105	1515141	27.480	ng	99
78) 4-Ethyltoluene	24.23	105	1520563	28.462	ng	97
79) 1,3,5-Trimethylbenzene	24.32	105	1257469	27.908	ng	99

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Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009  
 Quant Method : J:\MS13\METHODS\R13080609.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Thu Aug 06 17:14:07 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	702636	29.127	ng	96
81) 2-Ethyltoluene	24.56	105	1502773	27.029	ng	98
82) 1,2,4-Trimethylbenzene	24.83	105	1256822	27.352	ng	99
83) n-Decane	24.94	57	728366	24.380	ng	97
84) Benzyl Chloride	25.00	91	1263770	29.340	ng	98
85) 1,3-Dichlorobenzene	25.03	146	695348	29.901	ng	98
86) 1,4-Dichlorobenzene	25.11	146	708668	28.580	ng	98
87) sec-Butylbenzene	25.16	105	1713334	27.602	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1522535	27.507	ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	1295772	27.681	ng	96
90) 1,2-Dichlorobenzene	25.53	146	645884	29.294	ng	99
91) d-Limonene	25.53	68	530538	27.152	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.06	157	257042	33.896	ng	82
93) n-Undecane	26.46	57	799339	25.149	ng	97
94) 1,2,4-Trichlorobenzene	27.58	180	508494	33.542	ng	99
95) Naphthalene	27.73	128	1857814	29.771	ng	100
96) n-Dodecane	27.70	57	824123	22.319	ng	98
97) Hexachlorobutadiene	28.15	225	284495	29.505	ng	100
98) Cyclohexanone	22.30	55	448113	21.956	ng	95
99) tert-Butylbenzene	24.83	119	1214172	27.302	ng	99
100) n-Butylbenzene	25.86	91	1445358	28.240	ng	99

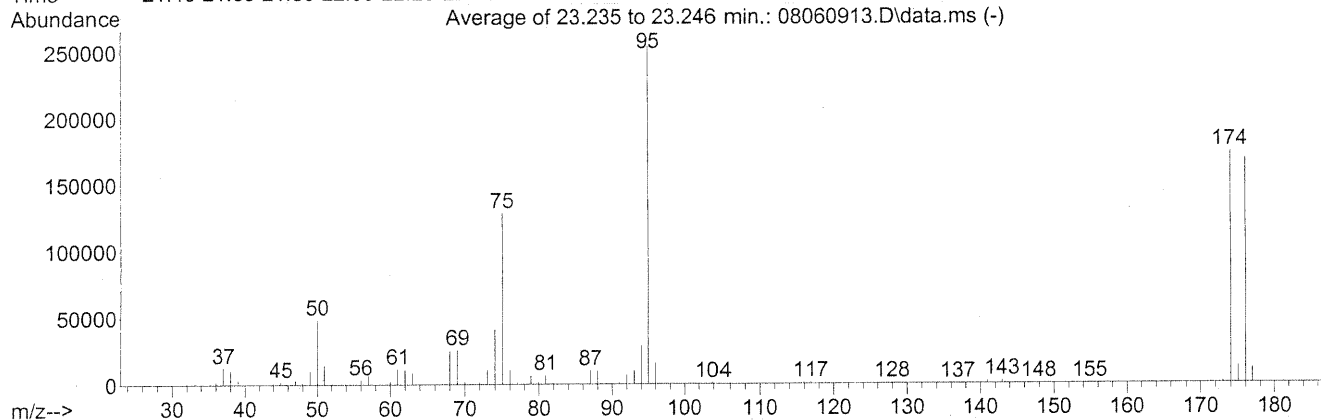
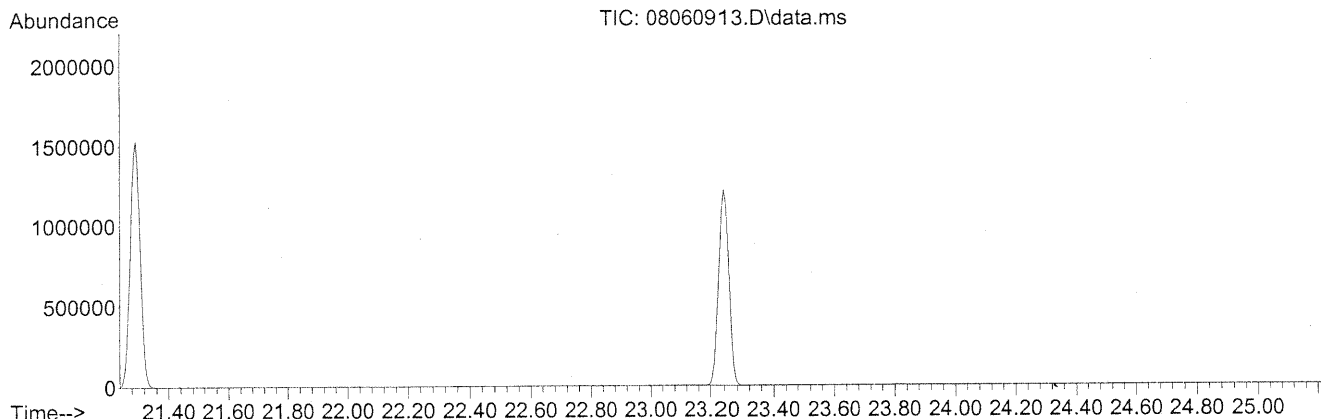
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS13\DATA\2009\_08\06\  
 Data File : 08060913.D  
 Acq On : 6 Aug 2009 11:15  
 Operator : WA  
 Sample : 25ng BFB STD  
 Misc : S20-07200902  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS13\METHODS\R13080609.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 07:59:49 2009



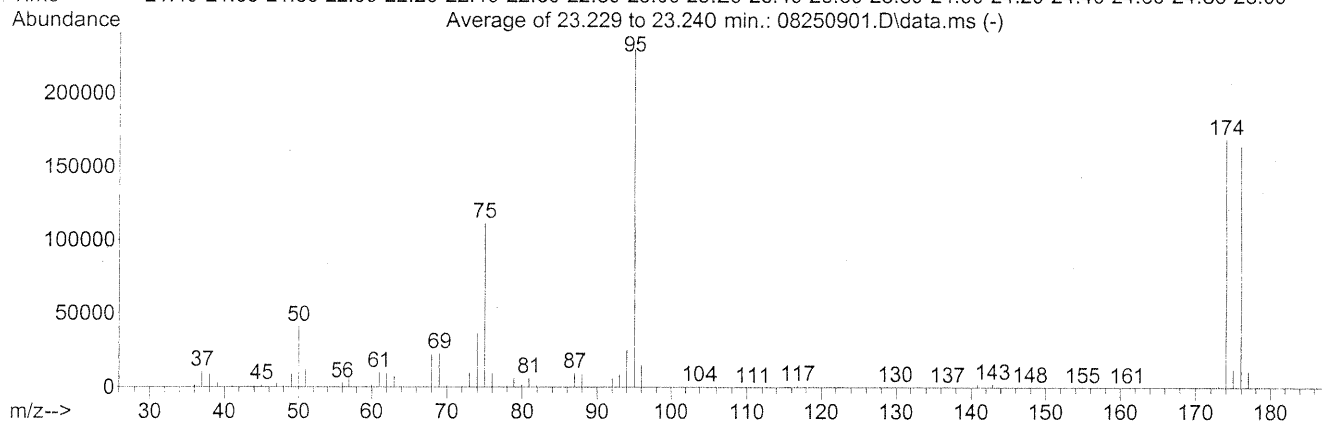
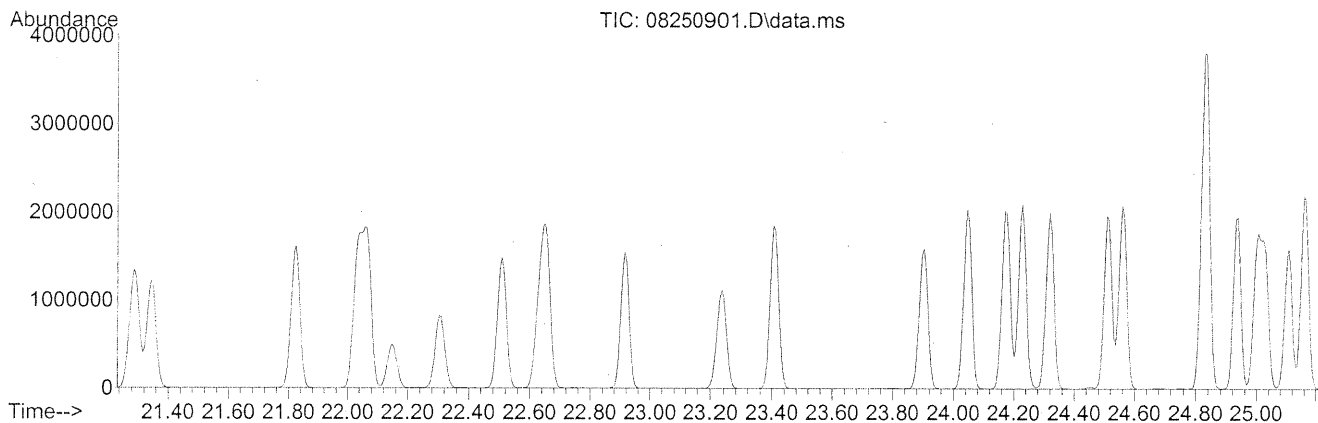
AutoFind: Scans 3352, 3353, 3354; Background Corrected with Scan 3342

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	48845	PASS
75	95	30	66	50.6	128627	PASS
95	95	100	100	100.0	254165	PASS
96	95	5	9	6.3	16094	PASS
173	174	0.00	2	0.9	1624	PASS
174	95	50	120	68.4	173931	PASS
175	174	4	9	7.5	13043	PASS
176	174	93	101	97.2	168981	PASS
177	176	5	9	6.6	11200	PASS

Data Path : J:\MS13\DATA\2009\_08\25\  
 Data File : 08250901.D  
 Acq On : 25 Aug 2009 8:51  
 Operator : WA  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08140906/S20-08100903  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS13\METHODS\R13080609.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Thu Aug 06 17:14:07 2009



AutoFind: Scans 3351, 3352, 3353; Background Corrected with Scan 3341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.0	41328	PASS
75	95	30	66	48.5	111672	PASS
95	95	100	100	100.0	230123	PASS
96	95	5	9	6.6	15137	PASS
173	174	0.00	2	1.0	1684	PASS
174	95	50	120	73.6	169323	PASS
175	174	4	9	7.4	12463	PASS
176	174	93	101	97.3	164693	PASS
177	176	5	9	6.7	11054	PASS

RUN LOGS



	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
13	08/06/09 11:15	08060913.D	25ng BFB STD	S20-07200902	WA	4	Passed
14	08/06/09 11:55	08060914.D	0.1ng TO-15 ICAL STD	S20-07200902/S20-07240912	WA	1	
15	08/06/09 12:36	08060915.D	0.2ng TO-15 ICAL STD	S20-07200902/S20-07240912	WA	1	
16	08/06/09 13:17	08060916.D	0.5ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
17	08/06/09 13:57	08060917.D	1.0ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
18	08/06/09 14:38	08060918.D	5.0ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
19	08/06/09 15:18	08060919.D	25ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
20	08/06/09 15:59	08060920.D	50ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
21	08/06/09 16:39	08060921.D	100ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
ICAL saved as R13080609.M; Good from 0.1ng --> 100ng, except: Acetone: 2.5ng -->500ng and THF: 0.2ng -->100ng							
22	08/06/09 17:20	08060922.D	25ng TO-15 ICV STD	S20-07200902/S20-07240916	WA	2	failed, case file
23	08/06/09 18:10	08060923.D	Blank	S20-07200902	WA	4	
24	08/06/09 18:51	08060924.D	25ng TO-15 ICV STD	S20-07200902/S20-07240917	WA	2	Passed all cmpds.
25	08/06/09 19:31	08060925.D	1.0ng TO-15 LOQ Verification	S20-07200902/S20-07310903	WA	4	
26	08/06/09 20:11	08060926.D	1.0ng TO-15 LOQ Verification	S20-07200902/S20-07310903	WA	4	
27	08/06/09 20:53	08060927.D	CAS QC CAN/FC/Gauge (1000mL)	AC00687/FC00232/AVG00940	WA	5	
28	08/06/09 21:35	08060928.D	CAS QC CAN/FC/Gauge (1000mL)	AC00705/FC00189/AVG00655	WA	6	
29	08/06/09 22:17	08060929.D	CAS QC CAN/FC/Gauge (1000mL)	AC00931/FC00407/AVG01149	WA	7	
30	08/06/09 22:59	08060930.D	CAS QC CAN/FC/Gauge (1000mL)	AC00672/FC00783/AVG00900	WA	8	
31	08/06/09 23:41	08060931.D	CAS QC CAN/FC/Gauge (1000mL)	AC01257/FC00515/AVG00906	WA	9	
32	08/07/09 0:23	08060932.D	CAS QC CAN/FC/Gauge (1000mL)	AC00958/FC00678/AVG01072	WA	10	
33	08/07/09 1:04	08060933.D	CAS QC CAN/FC/Gauge (1000mL)	AC01527/FC00508/AVG01046	WA	11	
34	08/07/09 1:46	08060934.D	CAS QC CAN/FC/Gauge (1000mL)	AC01172/FC00256/AVG00986	WA	12	
35	08/07/09 2:27	08060935.D	0.2ng LOD Verification	S20-07200902/S20-07240912	WA	1	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
16	08/24/09 22:19	08240916.D	P0902842-006 (1000mL)	[REDACTED]	WA	8	
17	08/24/09 23:01	08240917.D	P0902842-008 (1000mL)	[REDACTED]	WA	11	
18	08/24/09 23:43	08240918.D	P0902842-010 (1000mL)	[REDACTED]	WA	15	
19	08/25/09 0:24	08240919.D	Blank		WA	4	
20	08/25/09 1:06	08240920.D	P0902842-011 (1000mL)	[REDACTED]	WA	14	
21	08/25/09 1:46	08240921.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA	13	Passed
22	08/25/09 5:24	08240922.D	P0902842-008 dup (1000mL)	[REDACTED]	WA	11	Passed
23	08/25/09 6:04	08240923.D	P0902842-002 (35mL)	[REDACTED]	WA	3	
24	08/25/09 6:47	08240924.D	P0902842-009 dil (3.0mL)	[REDACTED]	WA	12	
25	08/25/09 7:31	08240925.D	P0902842-009 dil (3.0mL)	[REDACTED]	WA	4	

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	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/25/09 8:51	08250901.D	25ng TO-15 CCV STD	S20-08140906/S20-08100903	WA	4	Passed
2	08/25/09 9:47	08250902.D	TO-15 Method Blank (1000mL)	S20-08140906	WA	4	Passed
3	08/25/09 10:52	08250903.D	P0902856-002 (1.0mL)	[REDACTED]	WA/CC	4	not used
4	08/25/09 11:55	08250904.D	P0902875-001 (100.0mL) screen only	Environmental Health 102028	WA/CC	1	screen
5	08/25/09 12:35	08250905.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	2	case file
6	08/25/09 13:15	08250906.D	Blank		WA/CC	4	
7	08/25/09 13:57	08250907.D	P0902875-001 (1000mL)	Environmental Health 102028	WA/CC	1	
8	08/25/09 14:39	08250908.D	P0902875-002 (1000mL)	Environmental Health 102265	WA/CC	2	
9	08/25/09 16:14	08250909.D	Blank		WA/CC	4	
10	08/25/09 17:17	08250910.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	13	Passed
11	08/25/09 18:06	08250911.D	Blank		WA/CC	4	
12	08/25/09 18:48	08250912.D	P0902875-003 (1000mL)	Environmental Health 102266	WA/CC	3	
13	08/25/09 19:30	08250913.D	P0902875-004 (1000mL)	Environmental Health 102267	WA/CC	5	
14	08/25/09 20:12	08250914.D	P0902875-005 (1000mL)	Environmental Health 102268	WA/CC	6	
15	08/25/09 20:54	08250915.D	P0902875-006 (1000mL)	Environmental Health 102269	WA/CC	7	
16	08/25/09 21:35	08250916.D	System		WA/CC	16	
17	08/25/09 22:17	08250917.D	P0902876-001 (1000mL)	[REDACTED]	WA/CC	8	
18	08/25/09 22:59	08250918.D	P0902876-002 (1000mL)	[REDACTED]	WA/CC	10	
19	08/25/09 23:41	08250919.D	P0902876-002 dup (1000mL)	[REDACTED]	WA/CC	10	Passed
20	08/26/09 0:23	08250920.D	P0902876-003 (1000mL)	[REDACTED]	WA/CC	11	
21	08/26/09 1:05	08250921.D	P0902876-004 (1000mL)	[REDACTED]	WA/CC	12	
22	08/26/09 1:47	08250922.D	P0902876-005 (1000mL)	[REDACTED]	WA/CC	14	
23	08/26/09 2:28	08250923.D	P0902876-006 (1000mL)	[REDACTED]	WA/CC	15	
24	08/26/09 3:09	08250924.D	P0902875-003 dil (100mL)	Environmental Health 102266	WA/CC	3	
25	08/26/09 5:22	08250925.D	P0902875-005 dil (200mL)	Environmental Health 102268	WA/CC	6	
26	08/26/09 6:03	08250926.D	P0902875-006 dil (200mL)	Environmental Health 102269	WA/CC	7	
27	08/26/09 7:04	08250927.D	P0902875-002 dil (200mL)	Environmental Health 102265	WA/CC	2	

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