

## LABORATORY REPORT

September 14, 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 19, 2009. For your reference, these analyses have been assigned our service request number P0902857.

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 392 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: P0902857  
Project: 16512

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### CASE NARRATIVE

The samples were received intact under chain of custody on August 19, 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: P0902857

Detailed Sample Information

CAS Sample ID	Client Sample ID	Container Type	P1 (Hg)	P11 (psig)	P1 (Hg)	P12 (psig)	Pf2	Cont ID	Order #	FC ID	Bottle Order #
P0902857-001.01	100452	6.0 L-Summa Canister Ambient	-7.4	-3.6	3.5			AC00902	14274		
P0902857-002.01	100455	6.0 L-Summa Canister Ambient	-7.4	-3.6	3.5			AC01561	14274		
P0902857-003.01	100456	6.0 L-Summa Canister Ambient	-29.3	-14.4	3.6			AC01577	14274		
P0902857-004.01	100459	6.0 L-Summa Canister Ambient	-6.7	-3.3	3.5			AC00723	14274		
P0902857-005.01	100461	6.0 L-Summa Canister Ambient	-6.4	-3.1	3.5			AC01326	14274		
P0902857-006.01	100462	6.0 L-Summa Canister Ambient	-6.0	-2.9	3.5			AC00824	14274		

Miscellaneous Items - received

- FC00447
- FC00536
- AVG00854
- AVG00624
- FC00579
- FC00271
- AVG01038
- AVG01076
- AVG01031
- AVG00862
- FC00346
- FC00398

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

**90902857**

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

SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER: Time/Date/Vol.
① 100452	Summa	EPA TO-15 Full List	120 min
② 100455	↓	↓	↓
③ 100456	↓	↓	↓
④ 100459	↓	↓	↓
⑤ 100461	↓	↓	↓
⑥ 100462	↓	↓	↓

-7.4  
-7.4  
-293  
-6.7  
-6.1  
-6.0

Special instructions:  
 Standard turn around time     Rush by \_\_\_\_\_ date/time     Other \_\_\_\_\_  
 Fax results 781-247-4305     Electronic transfer - datacoordinator@ehinc.com  
 RETURN SAMPLES     Additional report recipient mfraga@ehinc.com

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

Relinquished by: John F. ... of Environmental Health & Engineering, Inc.    Date: 8/18/09  
 Received by: W. F. ... of (company name) CAS    Date: 8/18/09  
 Relinquished by: \_\_\_\_\_ of (company name) \_\_\_\_\_    Date: \_\_\_\_\_  
 Received by: \_\_\_\_\_ of (company name) \_\_\_\_\_    Date: \_\_\_\_\_  
 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: P0902857

Project: 16512

Sample(s) received on: 8/19/2009

Date opened: 8/19/2009

by: MZAMORA

*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 checked="" type="checkbox"/> | <input 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
P0902857-001.01	6.0 L Ambient Can					
P0902857-002.01	6.0 L Ambient Can					
P0902857-003.01	6.0 L Ambient Can					
P0902857-004.01	6.0 L Ambient Can					
P0902857-005.01	6.0 L Ambient Can					
P0902857-006.01	6.0 L Ambient Can					

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

\*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKNT.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12);

## RESULTS OF VOLATILE ORGANIC ANALYSIS

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100452  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00902

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-001

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

CAS #	Compound	Result		MRL		Data Qualifier
		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	ppbV	ppbV	
115-07-1	Propene	ND	0.82	ND	0.48	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.2	0.82	0.44	0.17	
74-87-3	Chloromethane	0.46	0.16	0.22	0.079	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.82	ND	0.12	
75-01-4	Vinyl Chloride	ND	0.16	ND	0.064	
106-99-0	1,3-Butadiene	ND	0.16	ND	0.074	
74-83-9	Bromomethane	ND	0.16	ND	0.042	
75-00-3	Chloroethane	ND	0.16	ND	0.062	
64-17-5	Ethanol	21	8.2	11	4.4	
75-05-8	Acetonitrile	2.3	0.82	1.4	0.49	
107-02-8	Acrolein	1.7	0.82	0.75	0.36	
67-64-1	Acetone	12	8.2	5.1	3.5	M1
75-69-4	Trichlorofluoromethane	1.1	0.16	0.20	0.029	
67-63-0	2-Propanol (Isopropyl Alcohol)	1.1	0.82	0.47	0.33	
107-13-1	Acrylonitrile	ND	0.82	ND	0.38	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.041	
75-09-2	Methylene Chloride	ND	0.82	ND	0.24	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.16	ND	0.052	
76-13-1	Trichlorotrifluoroethane	0.54	0.16	0.071	0.021	
75-15-0	Carbon Disulfide	ND	0.82	ND	0.26	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.041	
75-34-3	1,1-Dichloroethane	ND	0.16	ND	0.041	
1634-04-4	Methyl tert-Butyl Ether	ND	0.16	ND	0.046	
108-05-4	Vinyl Acetate	ND	8.2	ND	2.3	
78-93-3	2-Butanone (MEK)	1.3	0.82	0.45	0.28	

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.

M1 = Matrix interference due to coelution with a non-target compound; results may be biased high.

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

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

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100452  
**Client Project ID:** 16512  
  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00902

**CAS Project ID:** P0902857  
**CAS Sample ID:** P0902857-001

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 1.00 Liter(s)

Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

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	0.16	ND	0.041	
141-78-6	Ethyl Acetate	ND	1.6	ND	0.46	
110-54-3	n-Hexane	ND	0.82	ND	0.23	
67-66-3	Chloroform	ND	0.16	ND	0.034	
109-99-9	Tetrahydrofuran (THF)	ND	0.82	ND	0.28	
107-06-2	1,2-Dichloroethane	ND	0.16	ND	0.041	
71-55-6	1,1,1-Trichloroethane	ND	0.16	ND	0.030	
71-43-2	<b>Benzene</b>	<b>0.22</b>	0.16	<b>0.069</b>	0.051	
56-23-5	<b>Carbon Tetrachloride</b>	<b>0.46</b>	0.16	<b>0.074</b>	0.026	
110-82-7	Cyclohexane	ND	0.82	ND	0.24	
78-87-5	1,2-Dichloropropane	ND	0.16	ND	0.035	
75-27-4	Bromodichloromethane	ND	0.16	ND	0.024	
79-01-6	Trichloroethene	ND	0.16	ND	0.031	
123-91-1	1,4-Dioxane	ND	0.82	ND	0.23	
80-62-6	Methyl Methacrylate	ND	1.6	ND	0.40	
142-82-5	n-Heptane	ND	0.82	ND	0.20	
10061-01-5	cis-1,3-Dichloropropene	ND	0.82	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.82	ND	0.20	
10061-02-6	trans-1,3-Dichloropropene	ND	0.82	ND	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.16	ND	0.030	
108-88-3	<b>Toluene</b>	<b>0.83</b>	0.82	<b>0.22</b>	0.22	
591-78-6	2-Hexanone	ND	0.82	ND	0.20	
124-48-1	Dibromochloromethane	ND	0.16	ND	0.019	
106-93-4	1,2-Dibromoethane	ND	0.16	ND	0.021	
123-86-4	n-Butyl Acetate	ND	0.82	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: 9/10/09



**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100452  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-001

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00902

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 1.00 Liter(s)

Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

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	0.82	ND	0.18	
127-18-4	Tetrachloroethene	ND	0.16	ND	0.024	
108-90-7	Chlorobenzene	ND	0.16	ND	0.036	
100-41-4	Ethylbenzene	ND	0.82	ND	0.19	
179601-23-1	m,p-Xylenes	ND	0.82	ND	0.19	
75-25-2	Bromoform	ND	0.82	ND	0.079	
100-42-5	Styrene	ND	0.82	ND	0.19	
95-47-6	o-Xylene	ND	0.82	ND	0.19	
111-84-2	n-Nonane	ND	0.82	ND	0.16	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.16	ND	0.024	
98-82-8	Cumene	ND	0.82	ND	0.17	
80-56-8	alpha-Pinene	ND	0.82	ND	0.15	
103-65-1	n-Propylbenzene	ND	0.82	ND	0.17	
622-96-8	4-Ethyltoluene	ND	0.82	ND	0.17	
108-67-8	1,3,5-Trimethylbenzene	ND	0.82	ND	0.17	
95-63-6	1,2,4-Trimethylbenzene	ND	0.82	ND	0.17	
100-44-7	Benzyl Chloride	ND	0.16	ND	0.032	
541-73-1	1,3-Dichlorobenzene	ND	0.16	ND	0.027	
106-46-7	1,4-Dichlorobenzene	ND	0.16	ND	0.027	
95-50-1	1,2-Dichlorobenzene	ND	0.16	ND	0.027	
5989-27-5	d-Limonene	ND	0.82	ND	0.15	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.82	ND	0.085	
120-82-1	1,2,4-Trichlorobenzene	ND	0.82	ND	0.11	
91-20-3	Naphthalene	ND	0.82	ND	0.16	
87-68-3	Hexachlorobutadiene	ND	0.82	ND	0.077	

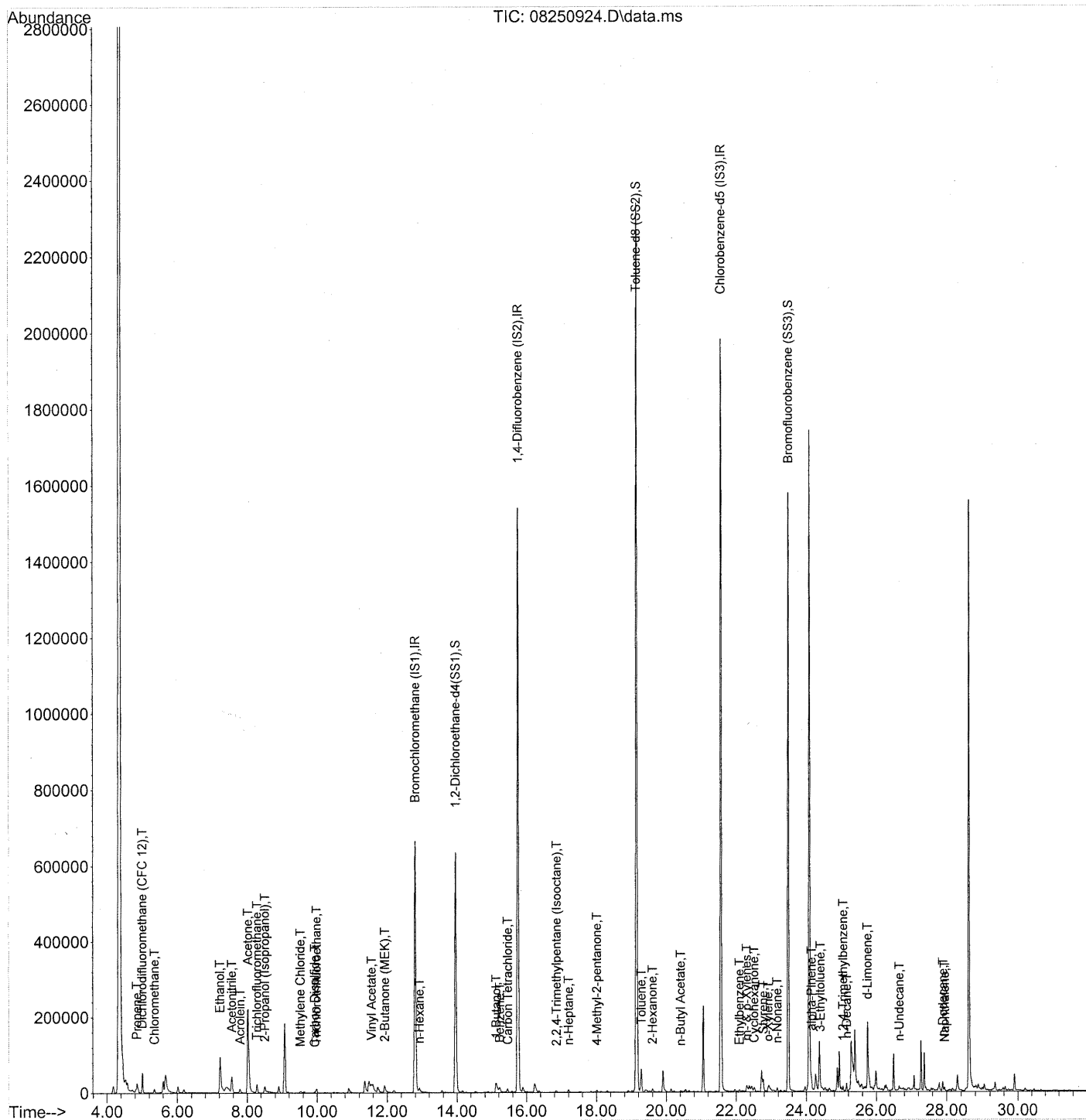
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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

Verified By: \_\_\_\_\_ Date: 9/1/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 14:11:10 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452 ✓  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 14:11:10 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	346209	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.74	114	1796548	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	854998	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	629693	25.723	ng	-0.03 ✓
Spiked Amount	25.000		Recovery	=	102.88%	
57) Toluene-d8 (SS2)	19.14	98	2065660	25.414	ng	-0.02 ✓
Spiked Amount	25.000		Recovery	=	101.64%	
73) Bromofluorobenzene (SS3)	23.49	174	561219	24.381	ng	0.00 ✓
Spiked Amount	25.000		Recovery	=	97.52%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.85	42	8707	<del>0.287</del> ng		93
3) Dichlorodifluoromethan...	5.00	85	57207	1.320 ng		99
4) Chloromethane	5.35	50	11234	0.278 ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1035	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.09	54	358	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.22	45	245046m	12.863 ng		
11) Acetonitrile	7.56	41	65534	1.410 ng		100
12) Acrolein	7.80	56	12940	1.042 ng		100
13) Acetone	8.02	58	143188	7.386 ng		85
14) Trichlorofluoromethane	8.28	101	25774	0.695 ng		97
15) 2-Propanol (Isopropanol)	8.51	45	37008m	0.697 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...	9.50	59	1368	N.D.		
19) Methylene Chloride	9.52	84	2196	<del>0.091</del> ng	#	69
20) 3-Chloro-1-propene (Al...	9.63	41	847	N.D.		
21) Trichlorotrifluoroethane	9.98	151	5479	0.330 ng		98
22) Carbon Disulfide	9.93	76	6285	<del>0.074</del> ng	#	75
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	11.55	86	12825	<del>3.055</del> ng	#	30
27) 2-Butanone (MEK)	11.93	72	10927	0.809 ng	#	63
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	12.92	57	5802	<del>0.136</del> ng		7611

*Em 8/28/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 14:11:10 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.02	83	490	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	106	N.D.		
38) 1,1,1-Trichloroethane	14.53	97	147	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.13	56	37870	1.627 ng		86
41) Benzene	15.23	78	13005	0.135 ng		95
42) Carbon Tetrachloride	15.46	117	7606	0.282 ng		100
43) Cyclohexane	15.66	84	714	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...	16.86	57	5587	0.050 ng		96
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.21	71	1920	0.075 ng	#	80
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.01	58	1858	0.089 ng	#	62
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	19.28	91	49909	0.507 ng		99
59) 2-Hexanone	19.60	43	11709	0.229 ng		81
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.41	43	4715	0.084 ng		80
63) n-Octane	20.56	57	1013	N.D.		
64) Tetrachloroethene	20.76	166	352	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	6997	0.066 ng		90
67) m- & p-Xylenes	22.30	91	18349	0.218 ng		99
68) Bromoform	22.41	173	119	N.D.		
69) Styrene	22.77	104	18965	0.304 ng		98
70) o-Xylene	22.92	91	6384	0.075 ng		71
71) n-Nonane	23.17	43	4439	0.087 ng		84
72) 1,1,2,2-Tetrachloroethane	22.52	83	118	N.D.		
74) Cumene	0.00	105	0	N.D. d		
75) alpha-Pinene	24.15	93	12046	0.222 ng	#	45
76) n-Propylbenzene	24.29	91	1455	N.D.		
77) 3-Ethyltoluene	24.40	105	5899	0.057 ng		83
78) 4-Ethyltoluene	24.45	105	3460	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	3163	N.D.		

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 14:11:10 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

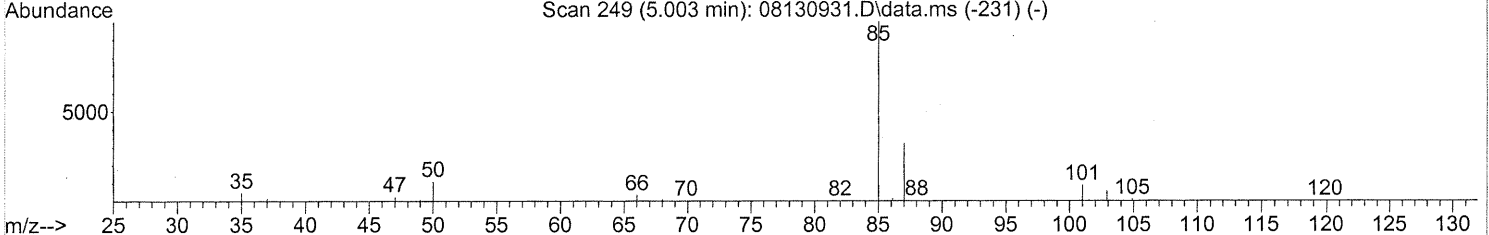
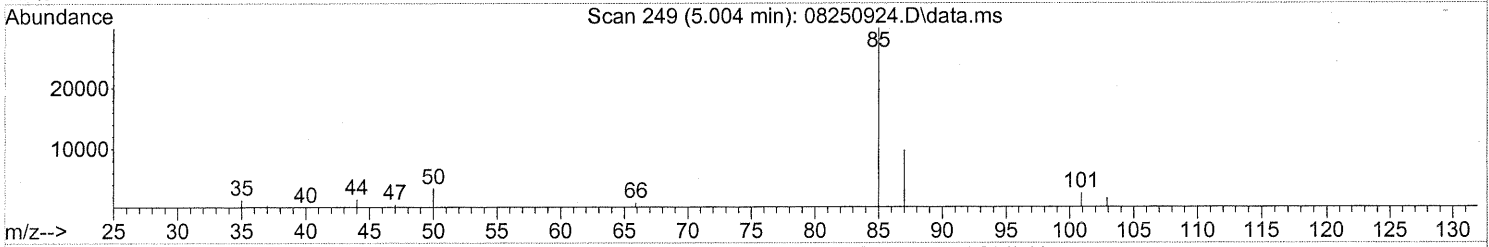
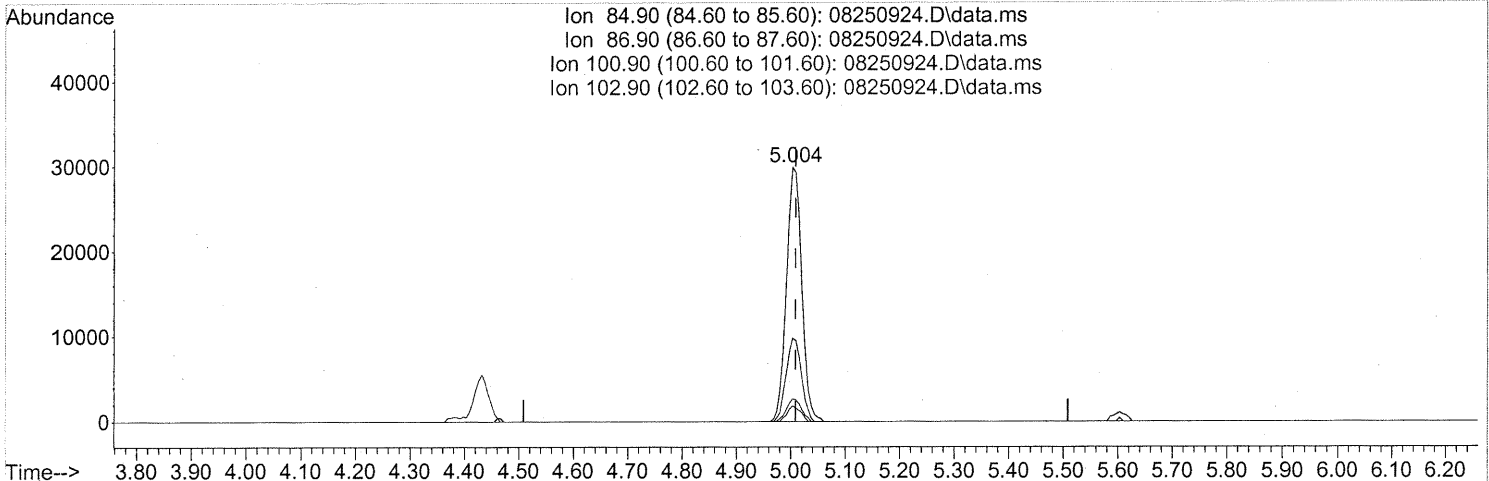
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.73	118	256	N.D.		
81) 2-Ethyltoluene	24.79	105	2143	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	6482	0.071 ng		86
83) n-Decane	25.15	57	9278	0.175 ng		88
84) Benzyl Chloride	25.22	91	210	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	1852	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1852	N.D.		
87) sec-Butylbenzene	25.39	105	1810	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	2230	N.D.		
89) 1,2,3-Trimethylbenzene	25.57	105	3038	N.D.		
90) 1,2-Dichlorobenzene	25.33	146	1852	N.D.		
91) d-Limonene	25.74	68	7580	0.204 ng	#	69
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	3829	0.070 ng	#	63
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	8709	0.071 ng		89
96) n-Dodecane	27.89	57	9870	0.161 ng		89
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	7640	0.246 ng	#	88
99) tert-Butylbenzene	25.05	119	648	N.D.		
100) n-Butylbenzene	26.08	91	2140	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.004min (-0.006) 1.32ng

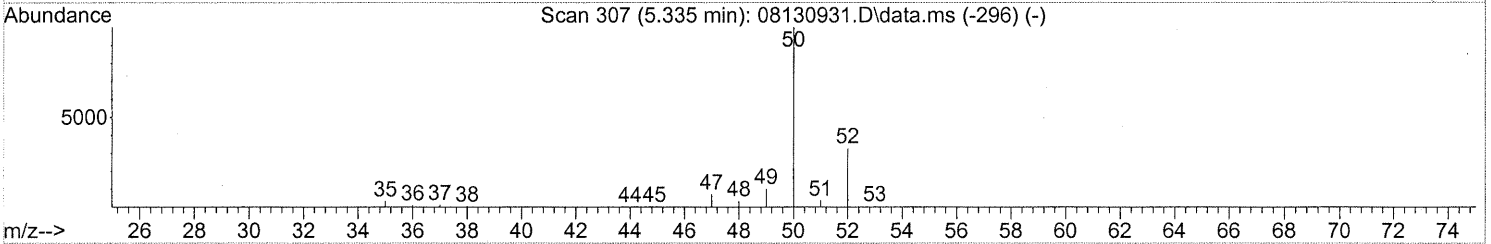
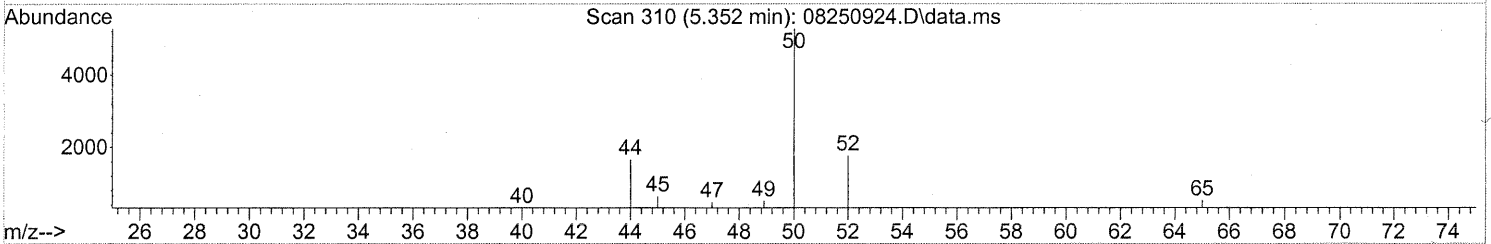
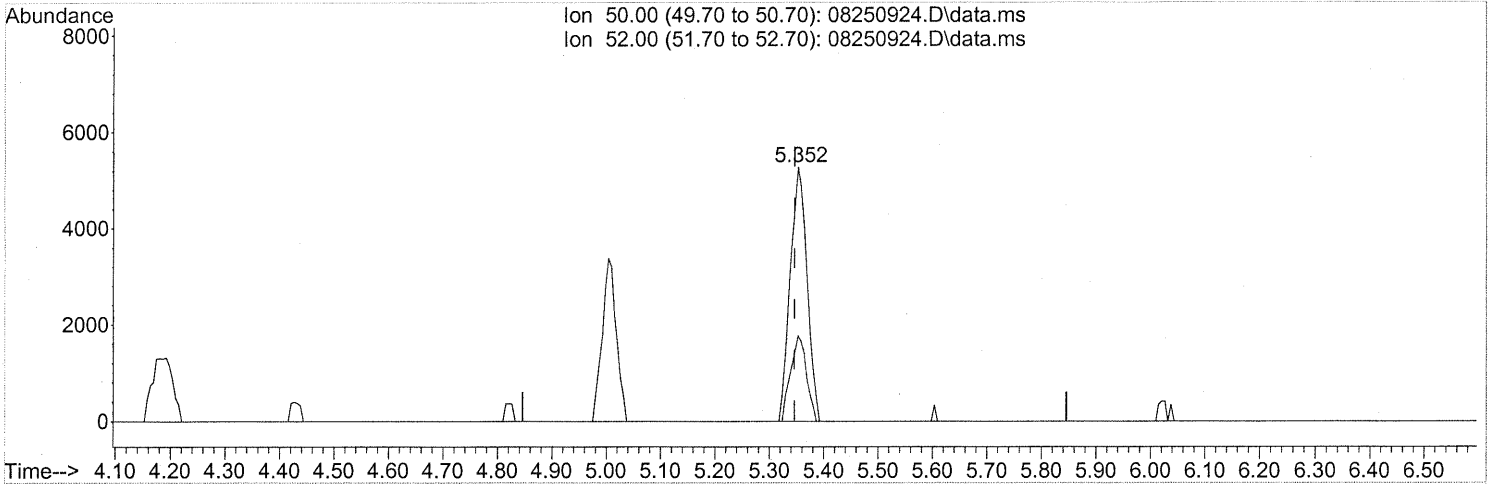
response 57207

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.59
100.90	9.10	8.48
102.90	5.50	5.11

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

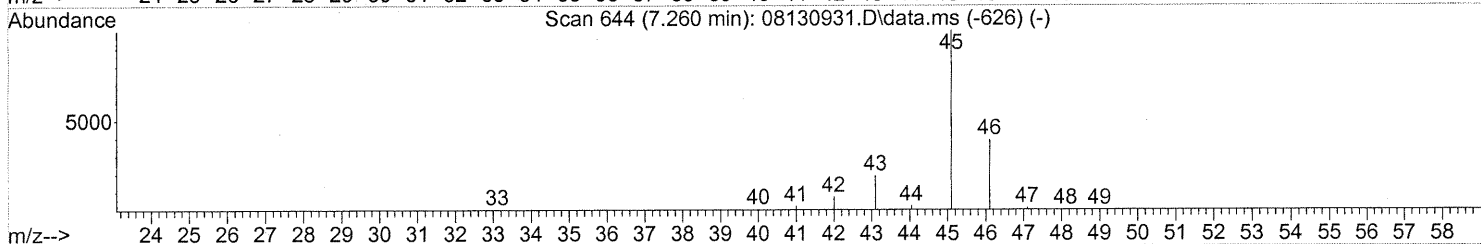
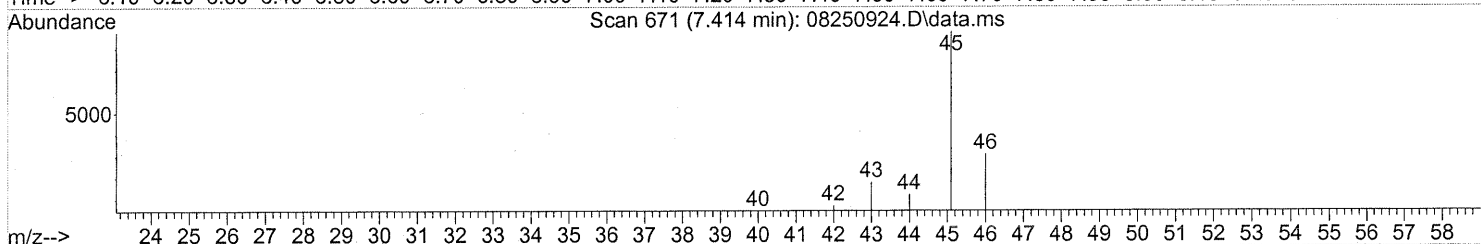
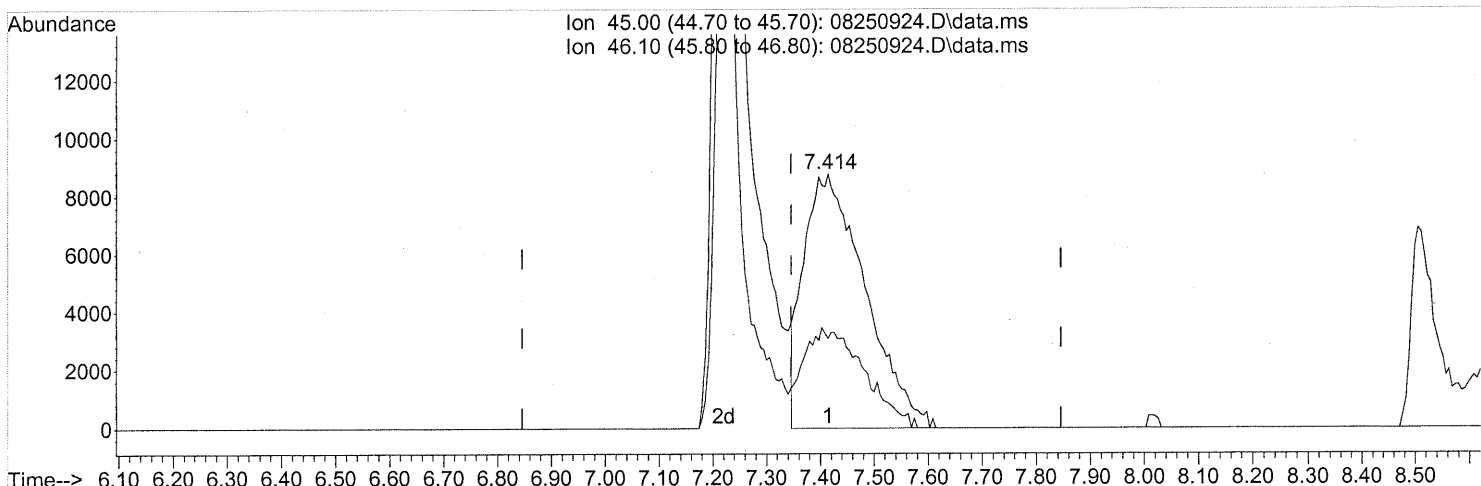
(4) Chloromethane (T)  
 5.352min (+0.006) 0.28ng  
 response 11234

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(10) Ethanol (T)  
 7.414min (+0.069) 3.66ng  
 response 69635

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.37
0.00	0.00	0.00
0.00	0.00	0.00

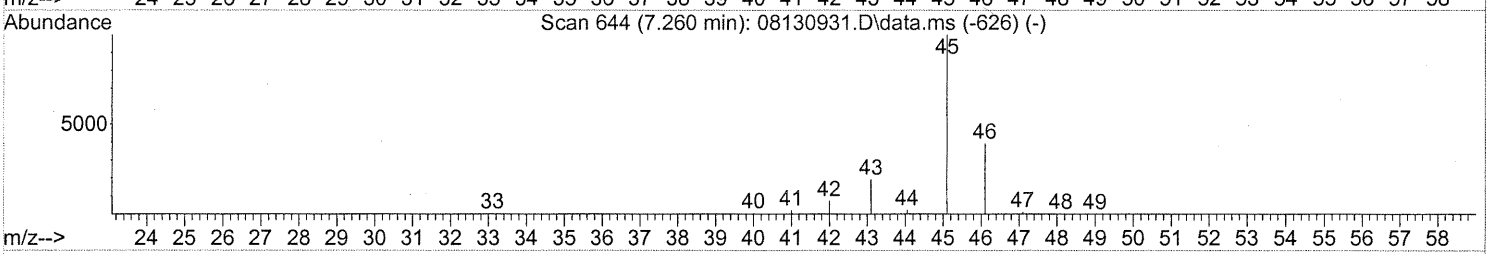
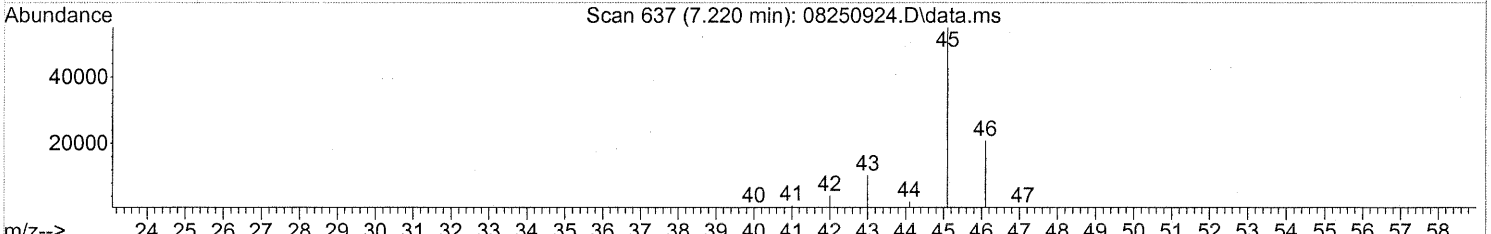
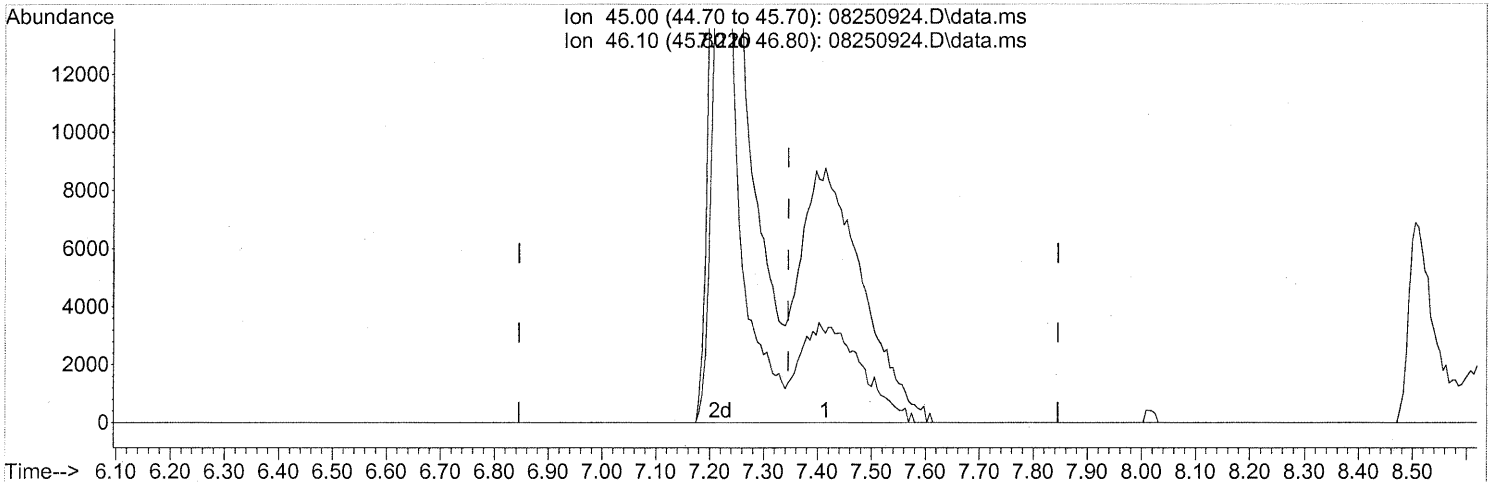
SP



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(10) Ethanol (T)  
 7.220min (-0.126) 12.86ng m  
 response 245046

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	10.90#
0.00	0.00	0.00
0.00	0.00	0.00

*sp → IC*

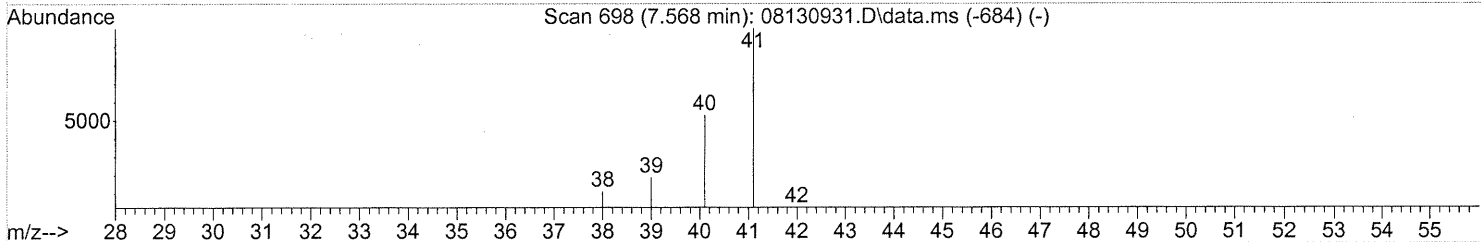
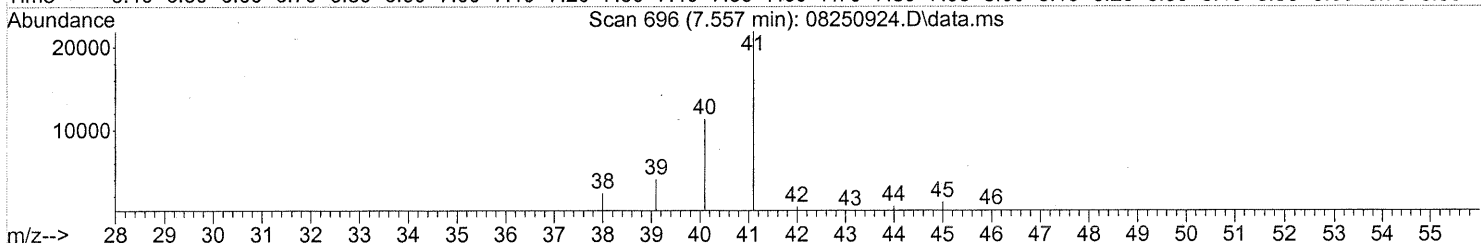
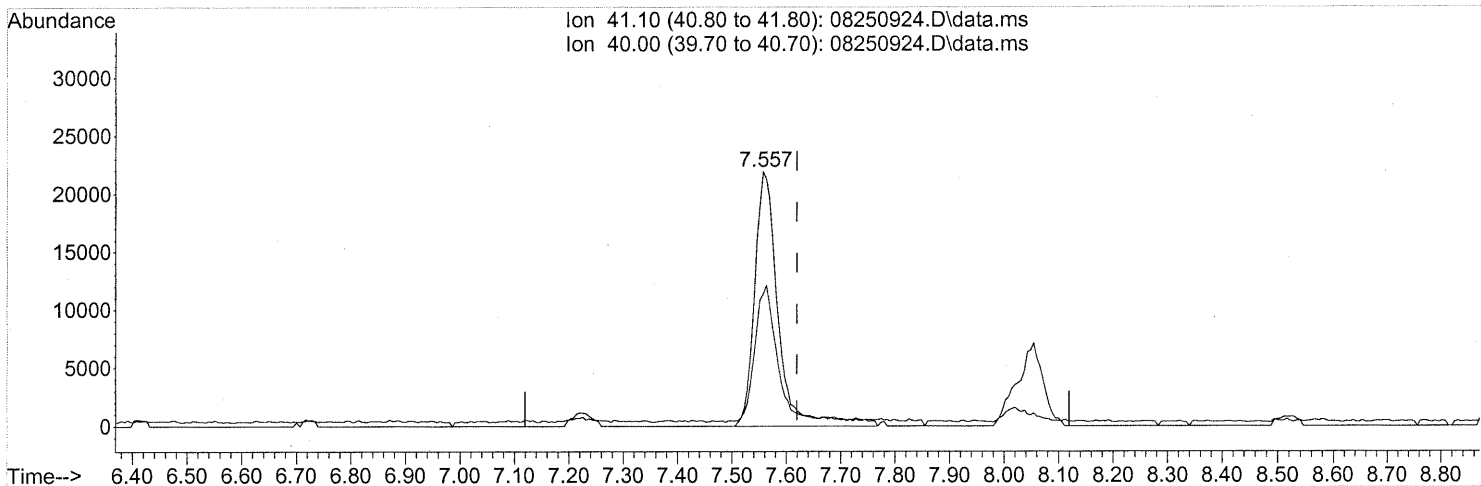
*Em 8/28/09*

*KE 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

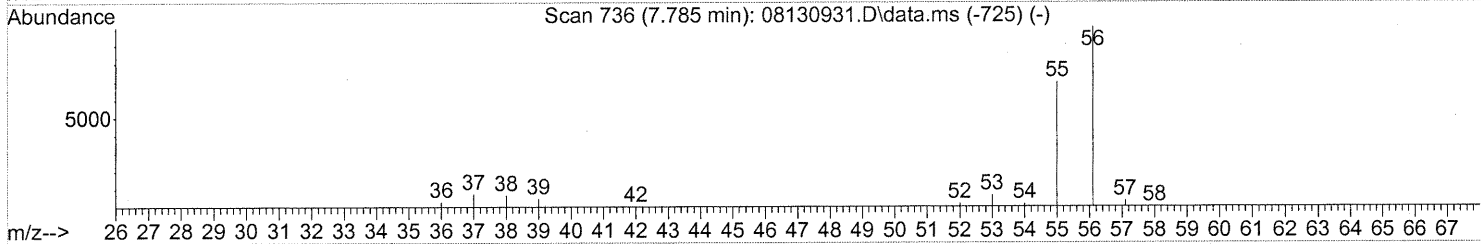
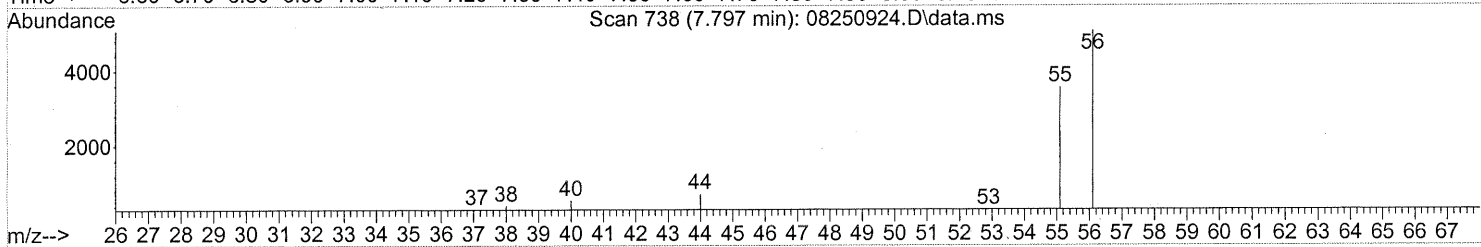
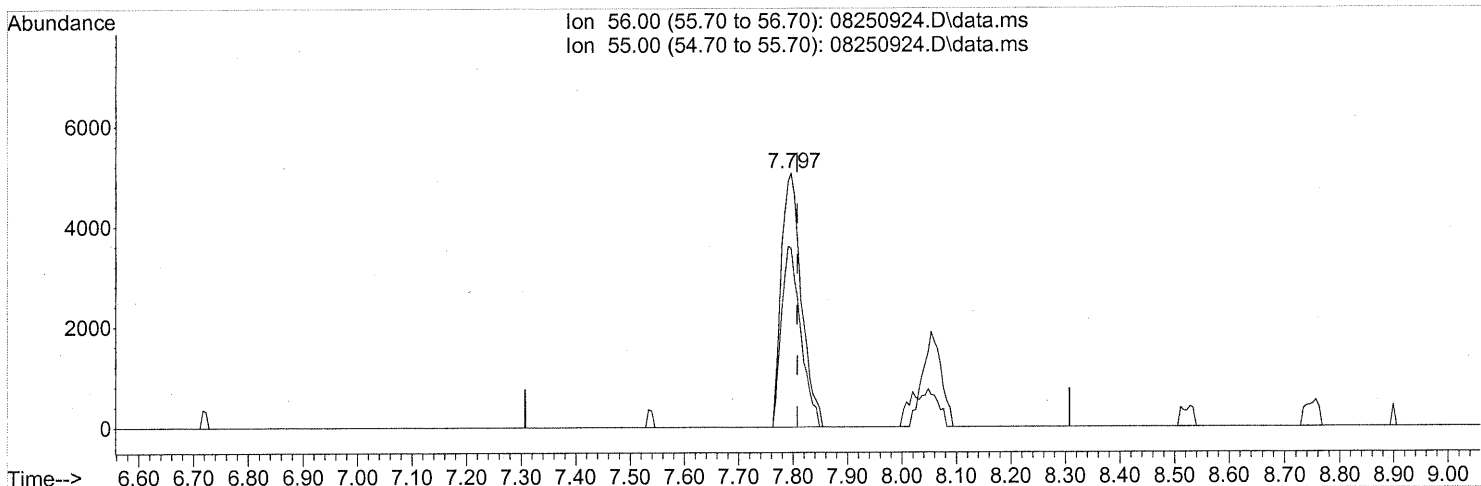
(11) Acetonitrile (T)  
 7.557min (-0.063) 1.41ng  
 response 65534

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250924.D  
Acq On : 25 Aug 2009 19:16  
Operator : EM  
Sample : P0902857-001 (1000ml)  
Misc : Env. H & E 100452  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250924.D\data.ms

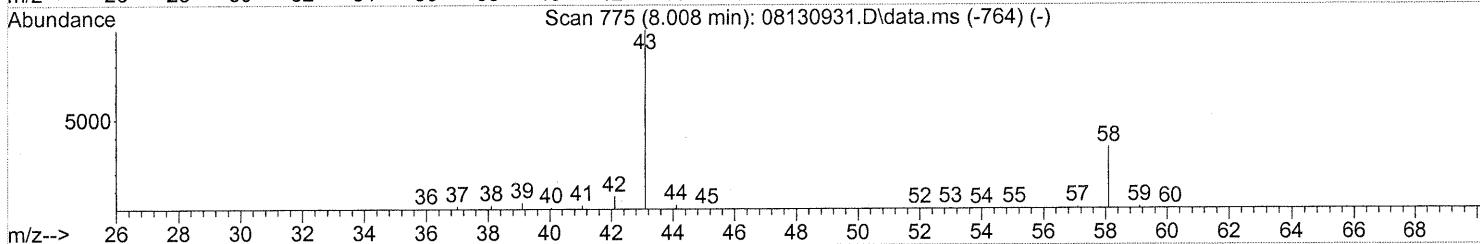
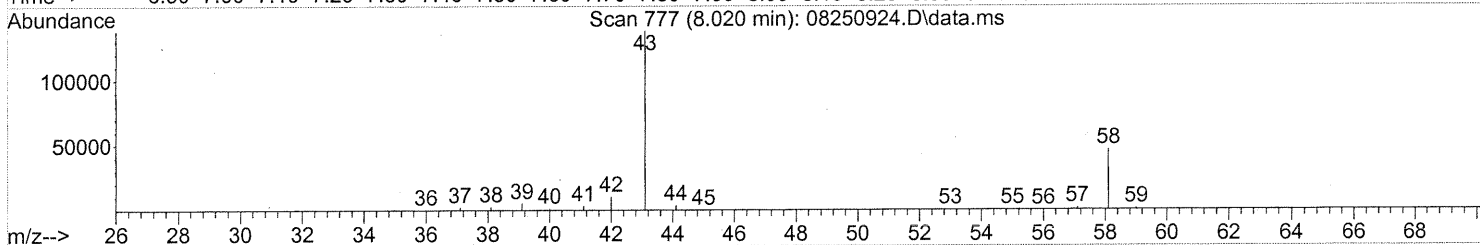
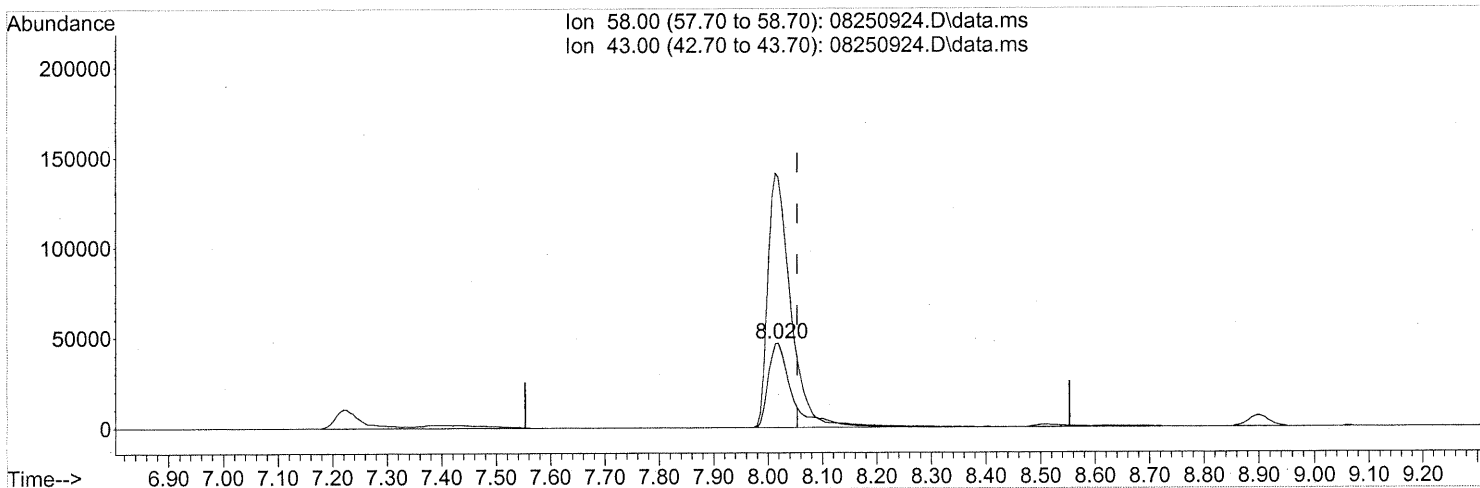
(12) Acrolein (T)  
7.797min (-0.011) 1.04ng  
response 12940

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	67.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(13) Acetone (T)  
 8.020min (-0.034) 7.39ng  
 response 143188

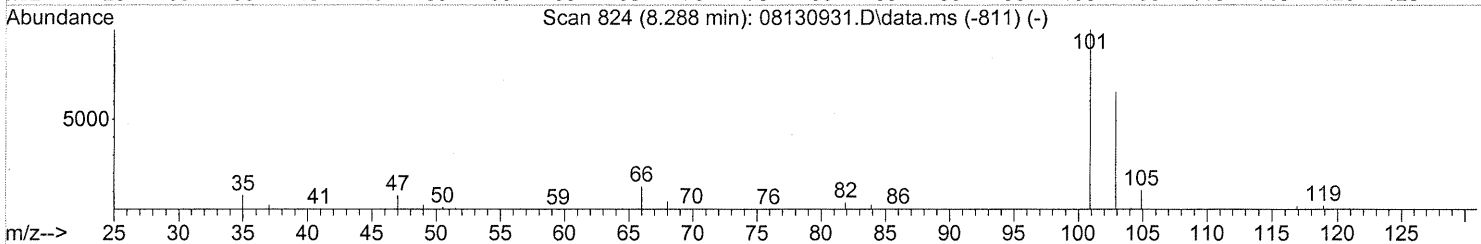
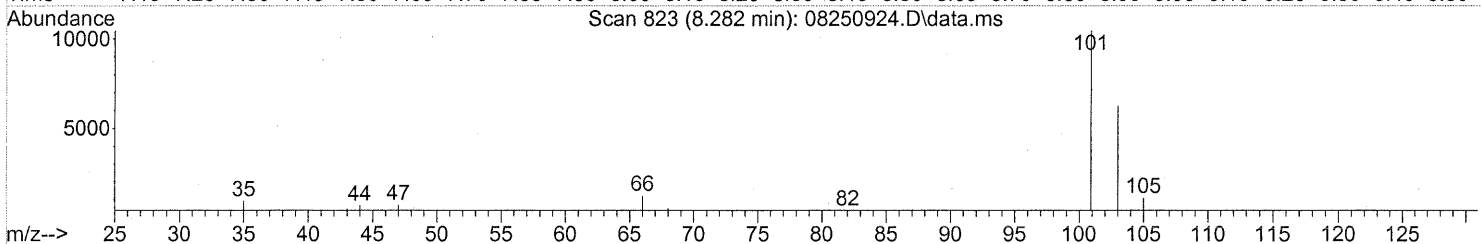
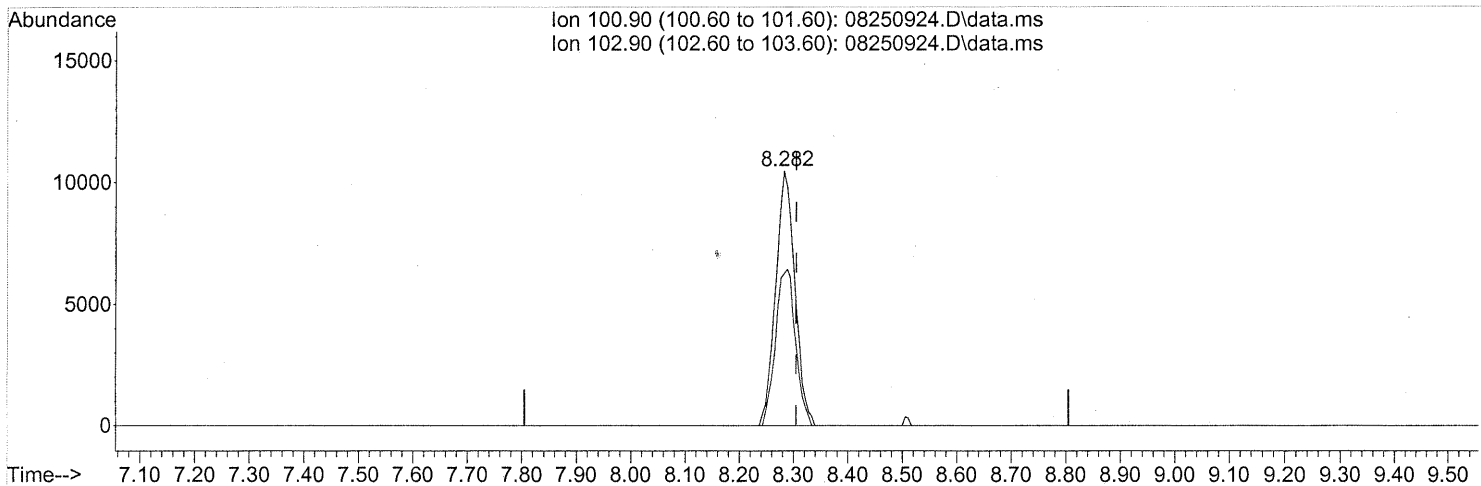
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	288.15
0.00	0.00	0.00
0.00	0.00	0.00

*m*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(14) Trichlorofluoromethane (T)

8.282min (-0.023) 0.70ng

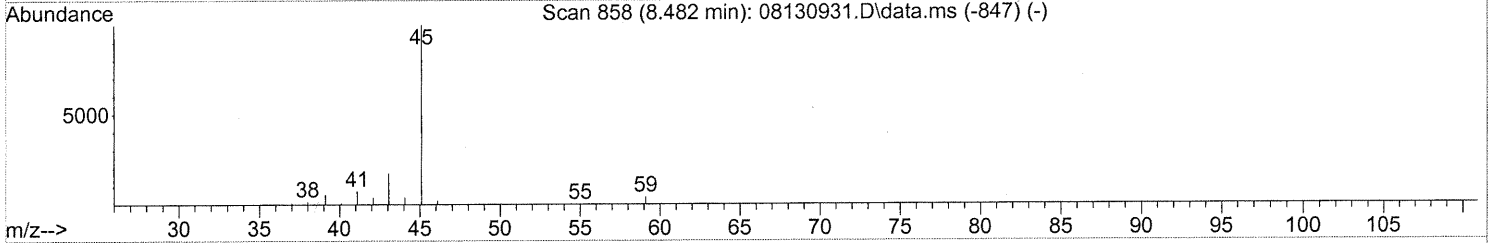
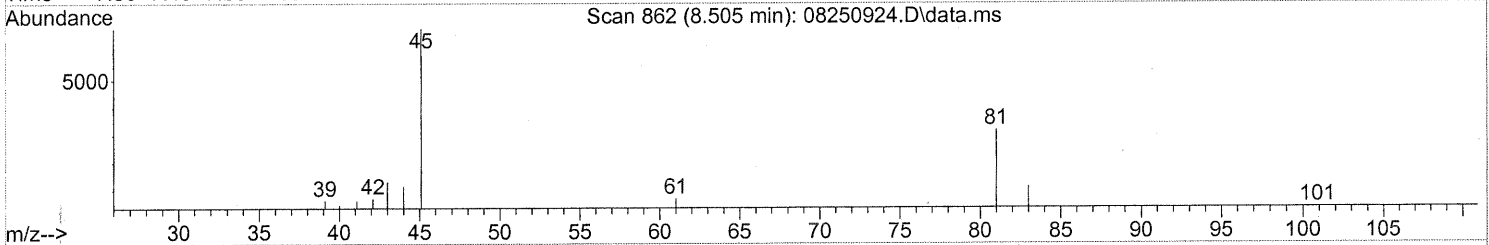
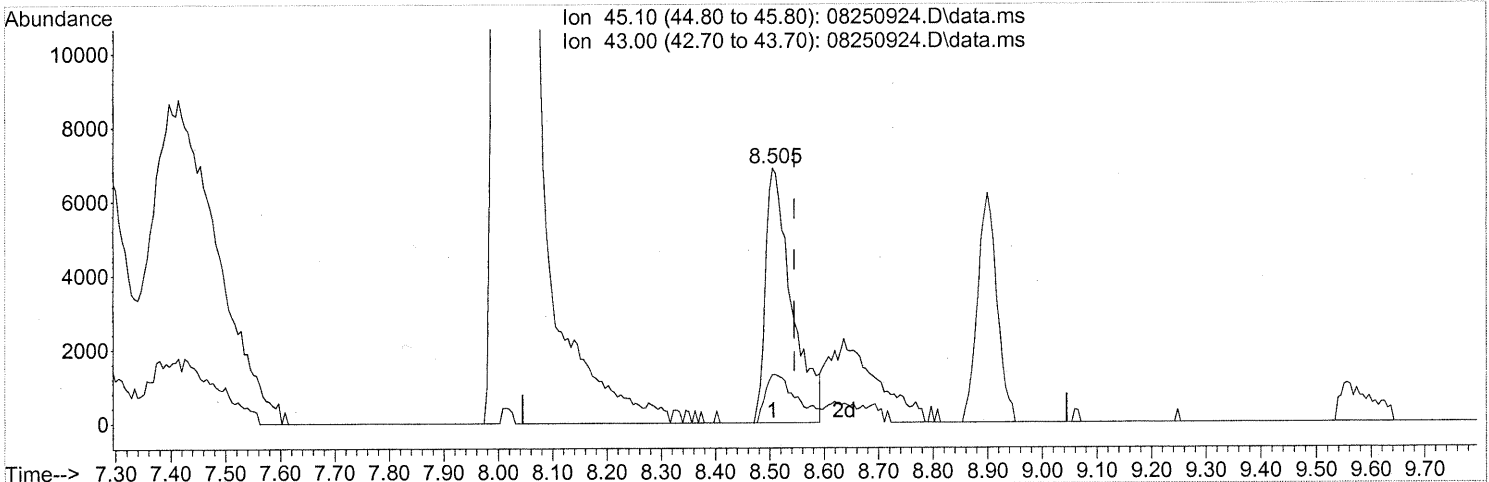
response 25774

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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

8.505min (-0.040) 0.43ng

response 23053

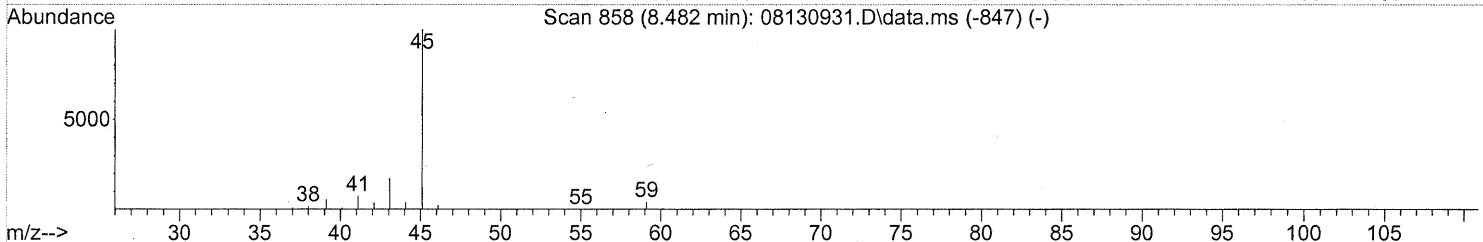
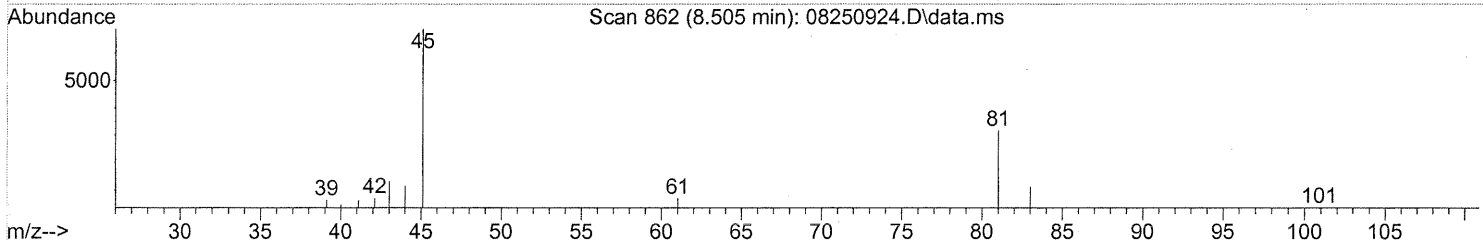
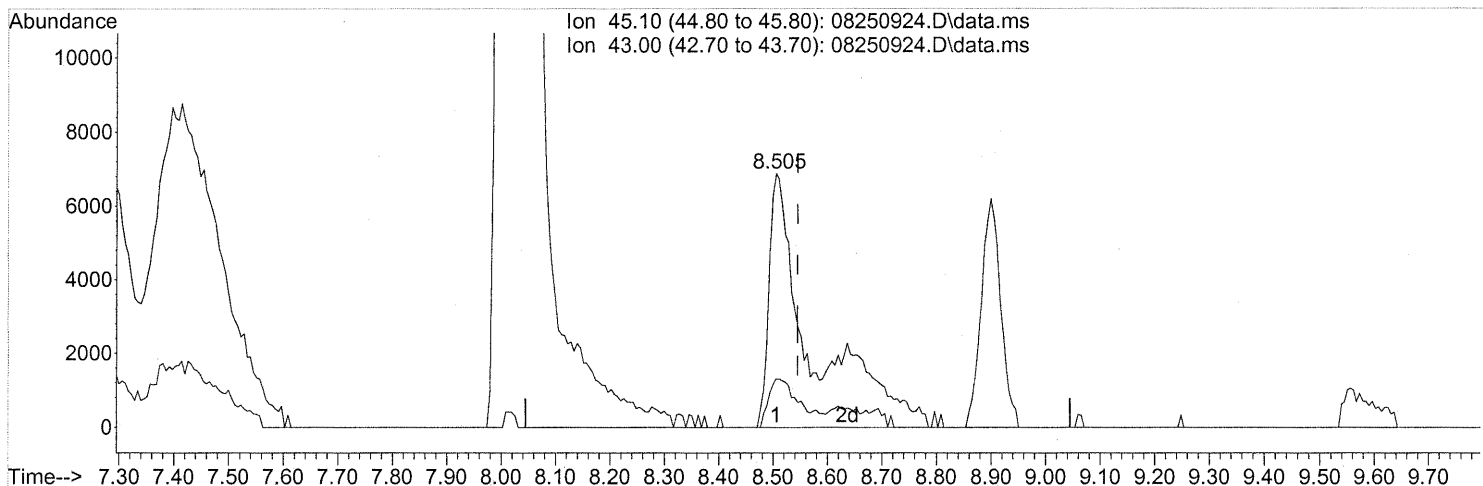
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	23.03
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250924.D  
Acq On : 25 Aug 2009 19:16  
Operator : EM  
Sample : P0902857-001 (1000ml)  
Misc : Env. H & E 100452  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



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

8.505min (-0.040) 0.70ng m

response 37008

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	14.35
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

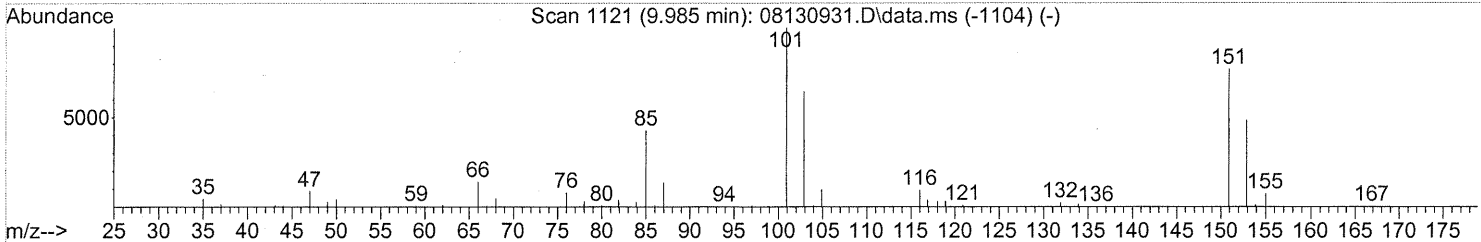
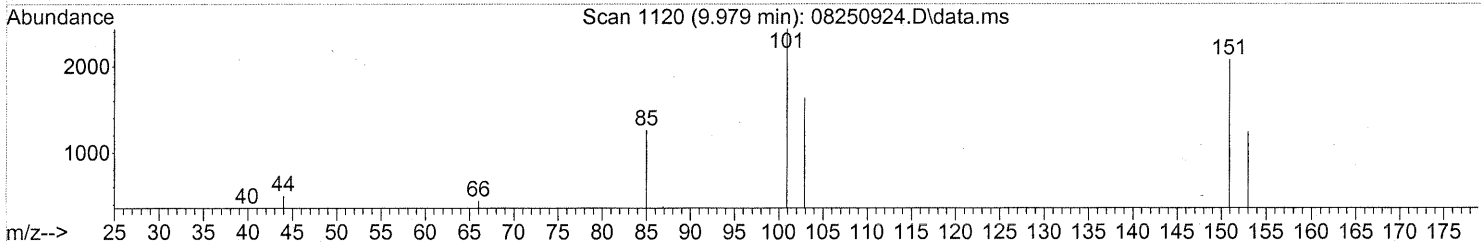
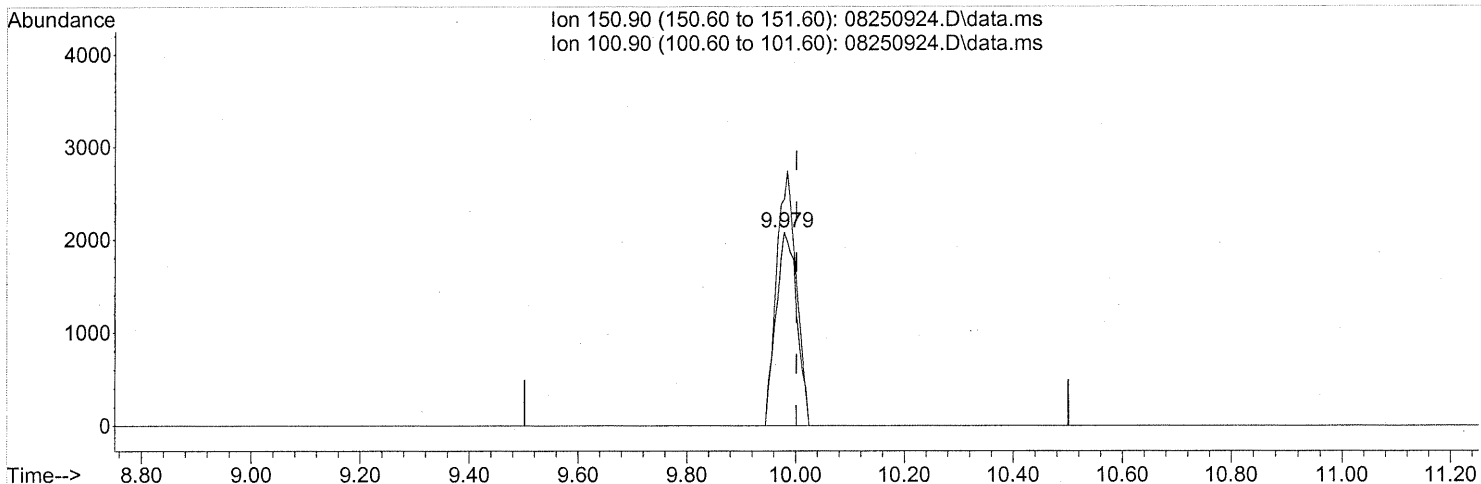
EM 8/28/09

12/8/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.979min (-0.023) 0.33ng

response 5479

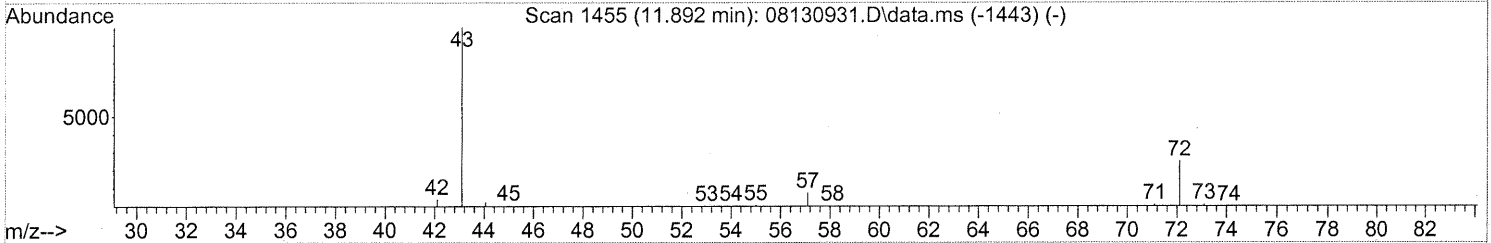
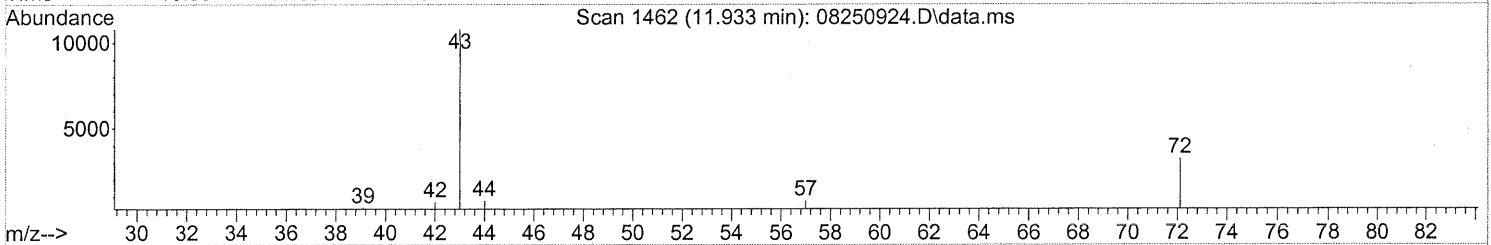
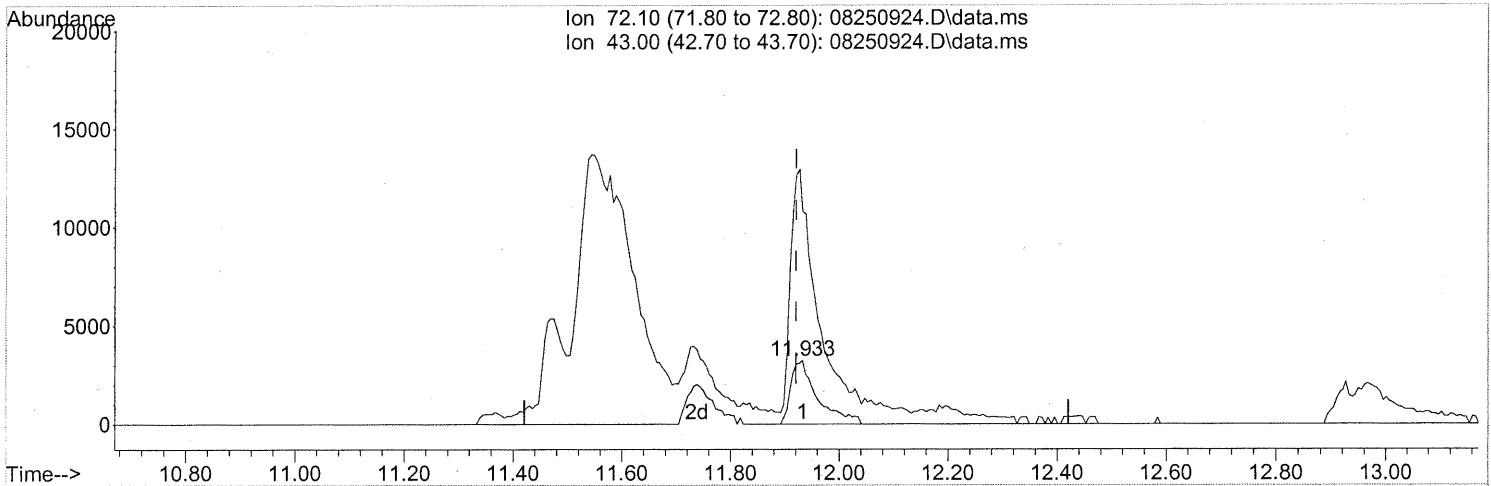
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	125.41
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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

11.933min (+0.012) 0.81ng

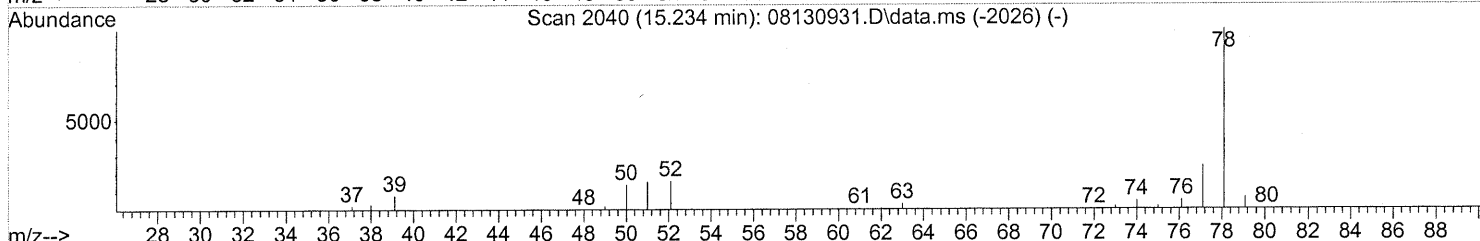
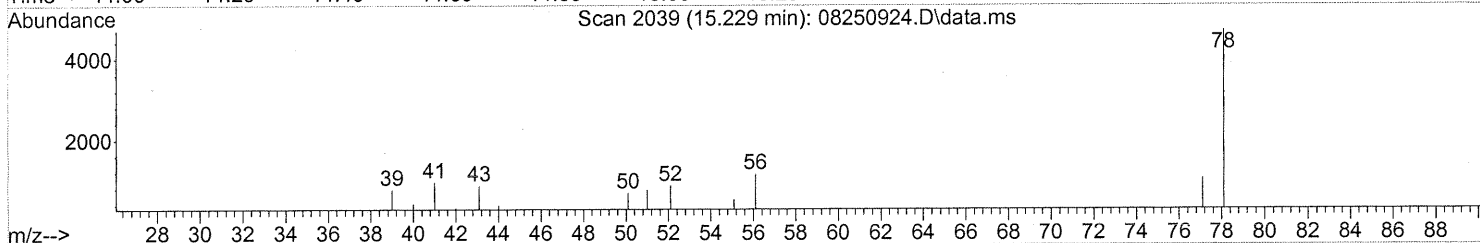
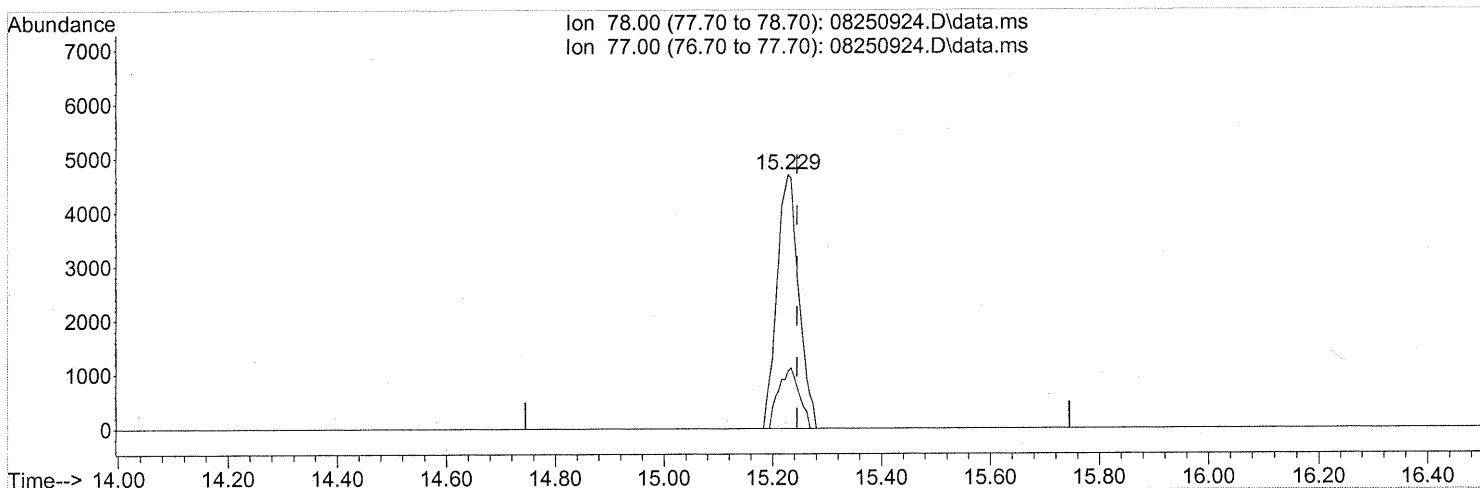
response 10927

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	450.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

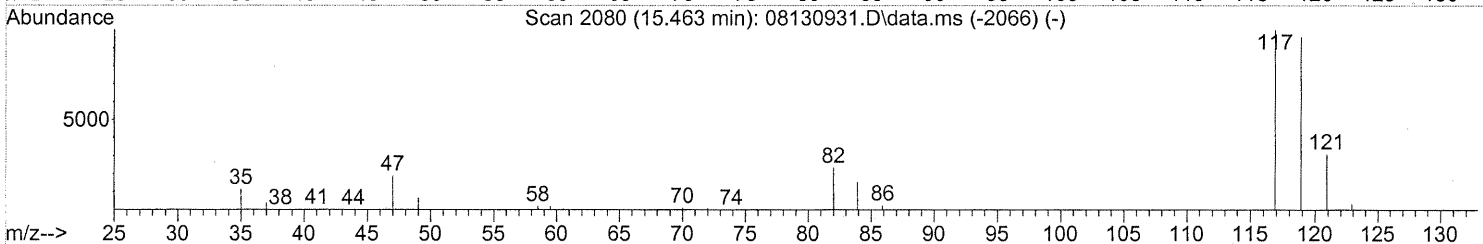
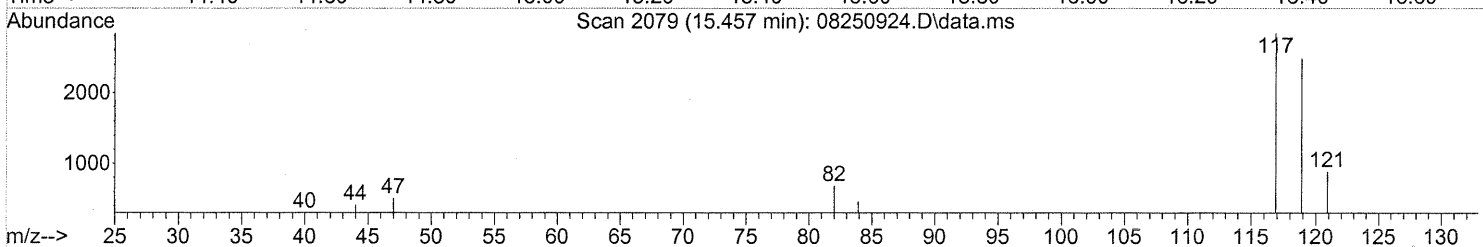
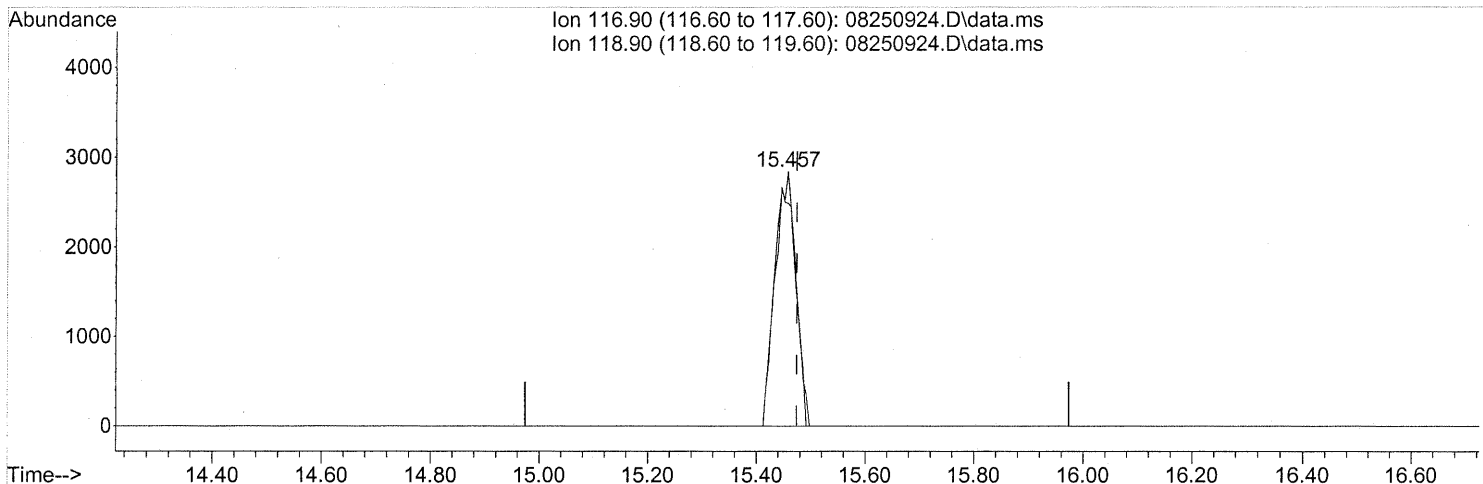
(41) Benzene (T)  
 15.229min (-0.017) 0.13ng  
 response 13005

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	22.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.28ng

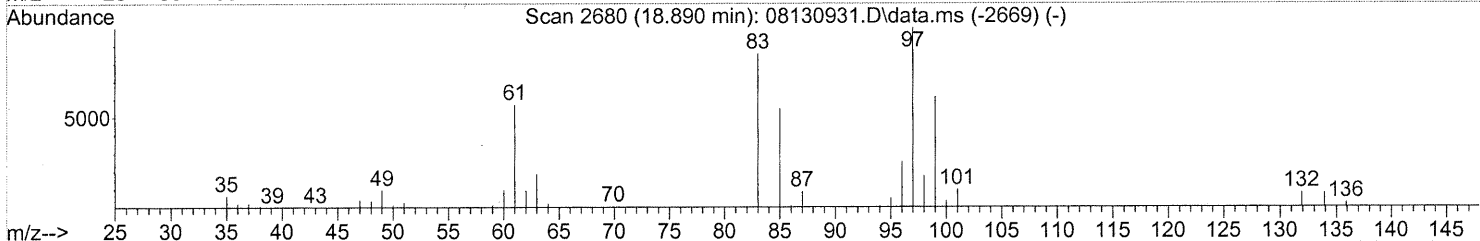
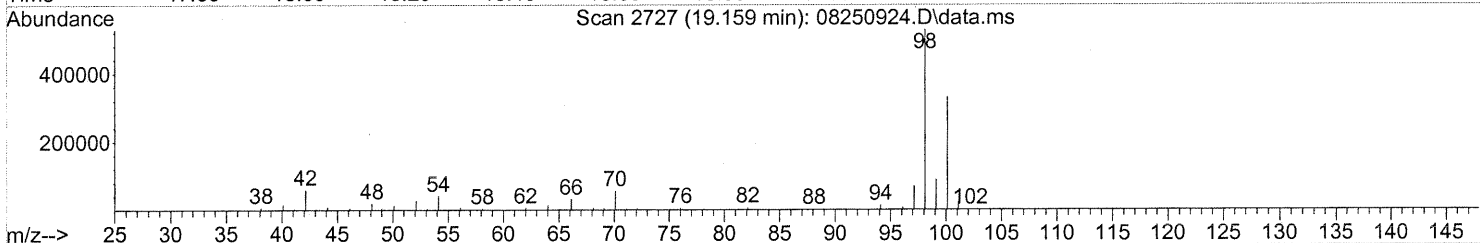
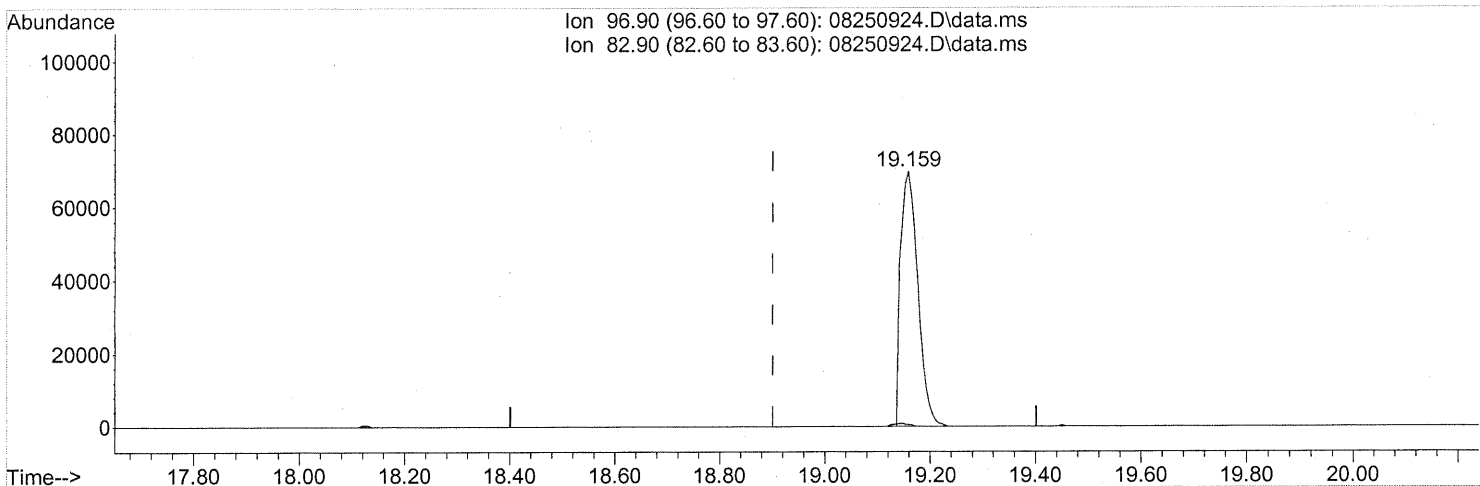
response 7606

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	96.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

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

19.159min (+0.257) 7.66ng

response 158066

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.93#
0.00	0.00	0.00
0.00	0.00	0.00

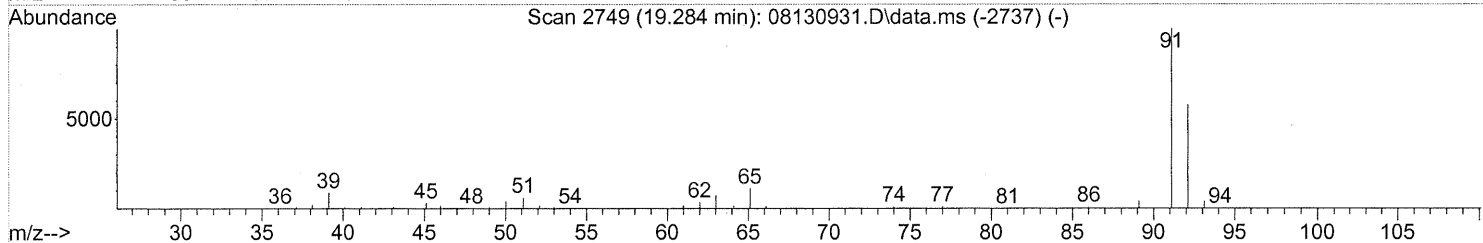
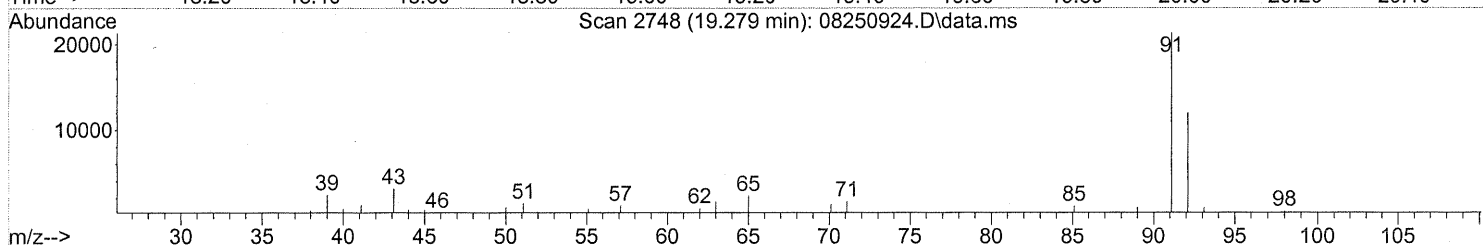
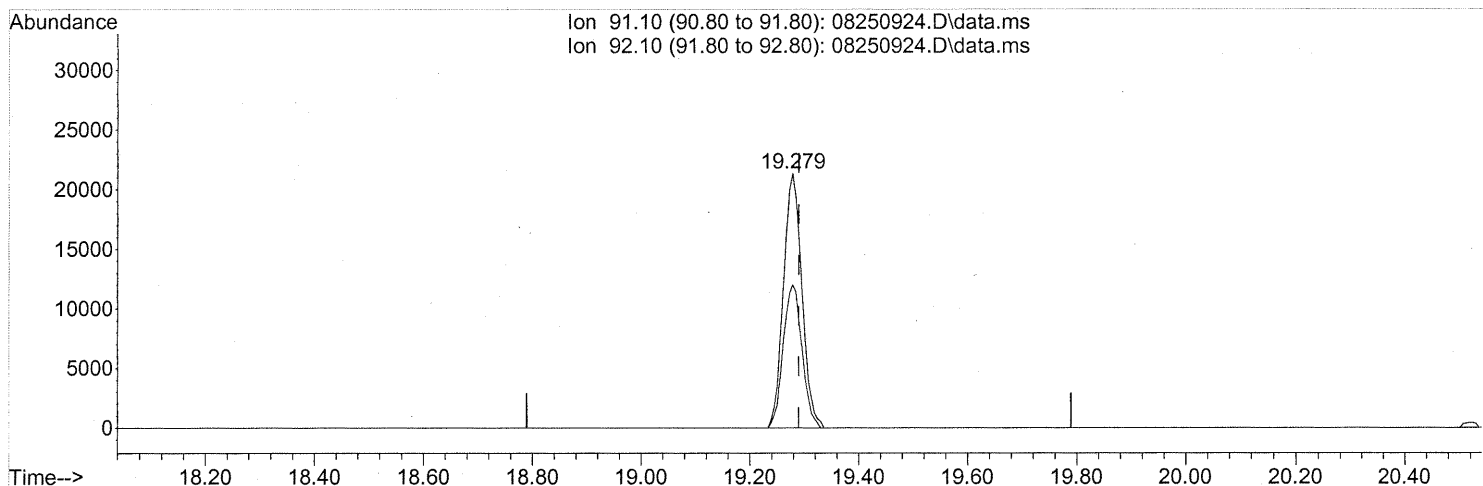
*FP Em 8/28/09*

*KE 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 0.51ng

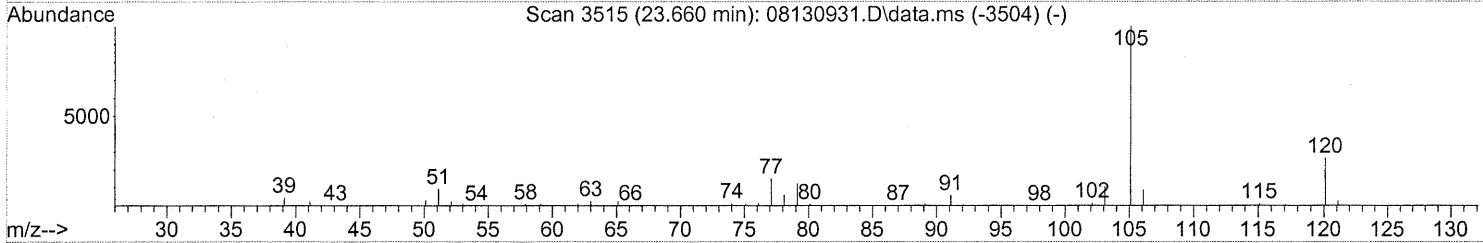
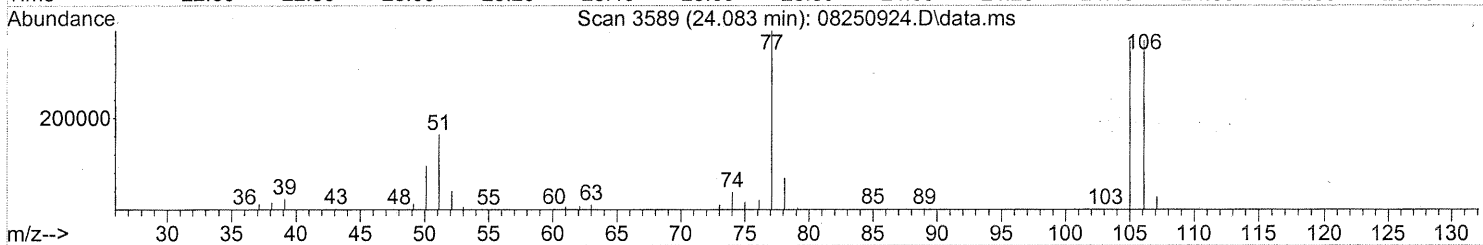
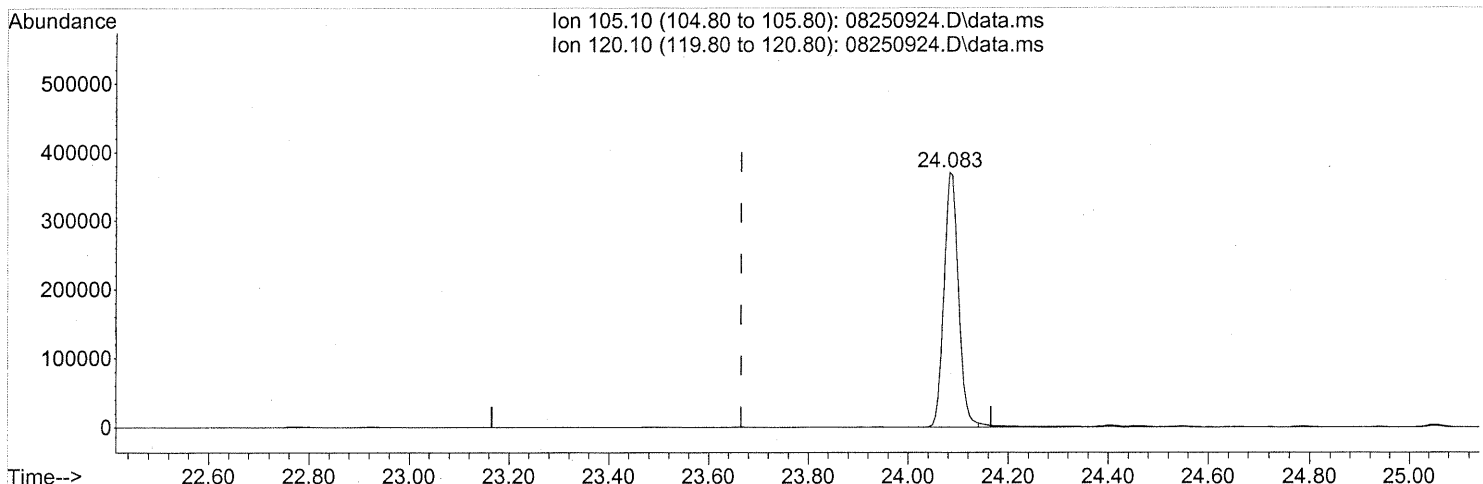
response 49909

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250924.D  
 Acq On : 25 Aug 2009 19:16  
 Operator : EM  
 Sample : P0902857-001 (1000ml)  
 Misc : Env. H & E 100452  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 07:22:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250924.D\data.ms

(74) Cumene (T)  
 24.083min (+0.417) 6.73ng  
 response 740717

*FP em 8/28/09*

Ion	Exp%	Act%
105.10	100	100
120.10	27.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

*11/28/31/09*

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100455  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/M59  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01561

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-002

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	82	1.6	48	0.95	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.9	1.6	0.58	0.33	
74-87-3	Chloromethane	10	0.33	4.8	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.6	ND	0.23	
75-01-4	Vinyl Chloride	ND	0.33	ND	0.13	
106-99-0	1,3-Butadiene	8.4	0.33	3.8	0.15	
74-83-9	Bromomethane	ND	0.33	ND	0.085	
75-00-3	Chloroethane	ND	0.33	ND	0.12	
64-17-5	Ethanol	5,100	16	2,700	8.7	D
75-05-8	Acetonitrile	370	1.6	220	0.98	D
107-02-8	Acrolein	16	1.6	7.0	0.72	
67-64-1	Acetone	260	16	110	6.9	
75-69-4	Trichlorofluoromethane	1.8	0.33	0.33	0.058	
67-63-0	2-Propanol (Isopropyl Alcohol)	340	1.6	140	0.67	
107-13-1	Acrylonitrile	2.4	1.6	1.1	0.76	
75-35-4	1,1-Dichloroethene	0.42	0.33	0.11	0.083	
75-09-2	Methylene Chloride	4.7	1.6	1.3	0.47	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.33	ND	0.10	
76-13-1	Trichlorotrifluoroethane	0.48	0.33	0.062	0.043	
75-15-0	Carbon Disulfide	2.7	1.6	0.85	0.53	
156-60-5	trans-1,2-Dichloroethene	ND	0.33	ND	0.083	
75-34-3	1,1-Dichloroethane	ND	0.33	ND	0.081	
1634-04-4	Methyl tert-Butyl Ether	ND	0.33	ND	0.091	
108-05-4	Vinyl Acetate	26	16	7.3	4.7	
78-93-3	2-Butanone (MEK)	20	1.6	6.8	0.56	

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: 8/1/09

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100455  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01561

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-002

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

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	0.33	ND	0.083	
141-78-6	Ethyl Acetate	34	3.3	9.3	0.91	
110-54-3	n-Hexane	32	1.6	9.1	0.47	
67-66-3	Chloroform	0.90	0.33	0.18	0.067	
109-99-9	Tetrahydrofuran (THF)	2.2	1.6	0.73	0.56	
107-06-2	1,2-Dichloroethane	14	0.33	3.4	0.081	
71-55-6	1,1,1-Trichloroethane	ND	0.33	ND	0.060	
71-43-2	Benzene	29	0.33	9.0	0.10	
56-23-5	Carbon Tetrachloride	0.48	0.33	0.076	0.052	
110-82-7	Cyclohexane	4.9	1.6	1.4	0.48	
78-87-5	1,2-Dichloropropane	ND	0.33	ND	0.071	
75-27-4	Bromodichloromethane	ND	0.33	ND	0.049	
79-01-6	Trichloroethene	7.0	0.33	1.3	0.061	
123-91-1	1,4-Dioxane	ND	1.6	ND	0.46	
80-62-6	Methyl Methacrylate	ND	3.3	ND	0.80	
142-82-5	n-Heptane	12	1.6	3.0	0.40	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	ND	0.36	
108-10-1	4-Methyl-2-pentanone	ND	1.6	ND	0.40	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	ND	0.36	
79-00-5	1,1,2-Trichloroethane	ND	0.33	ND	0.060	
108-88-3	Toluene	98	1.6	26	0.44	
591-78-6	2-Hexanone	2.3	1.6	0.56	0.40	
124-48-1	Dibromochloromethane	ND	0.33	ND	0.039	
106-93-4	1,2-Dibromoethane	ND	0.33	ND	0.043	
123-86-4	n-Butyl Acetate	5.9	1.6	1.2	0.35	

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: \_\_\_\_\_

*9/10/09*



**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100455  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-002

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01561

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 0.50 Liter(s)  
 0.050 Liter(s)


Initial Pressure (psig): -3.6      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

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	5.0	1.6	1.1	0.35	
127-18-4	Tetrachloroethene	4.7	0.33	0.70	0.048	
108-90-7	Chlorobenzene	ND	0.33	ND	0.071	
100-41-4	Ethylbenzene	23	1.6	5.3	0.38	
179601-23-1	m,p-Xylenes	83	1.6	19	0.38	
75-25-2	Bromoform	ND	1.6	ND	0.16	
100-42-5	Styrene	10	1.6	2.4	0.39	
95-47-6	o-Xylene	27	1.6	6.2	0.38	
111-84-2	n-Nonane	5.8	1.6	1.1	0.31	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.33	ND	0.048	
98-82-8	Cumene	ND	1.6	ND	0.33	
80-56-8	alpha-Pinene	74	1.6	13	0.29	
103-65-1	n-Propylbenzene	3.4	1.6	0.70	0.33	
622-96-8	4-Ethyltoluene	6.9	1.6	1.4	0.33	
108-67-8	1,3,5-Trimethylbenzene	5.4	1.6	1.1	0.33	
95-63-6	1,2,4-Trimethylbenzene	19	1.6	3.8	0.33	
100-44-7	Benzyl Chloride	ND	0.33	ND	0.063	
541-73-1	1,3-Dichlorobenzene	ND	0.33	ND	0.055	
106-46-7	1,4-Dichlorobenzene	ND	0.33	ND	0.055	
95-50-1	1,2-Dichlorobenzene	ND	0.33	ND	0.055	
5989-27-5	d-Limonene	25	1.6	4.4	0.29	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.6	ND	0.17	
120-82-1	1,2,4-Trichlorobenzene	ND	1.6	ND	0.22	
91-20-3	Naphthalene	1.8	1.6	0.34	0.31	
87-68-3	Hexachlorobutadiene	ND	1.6	ND	0.15	

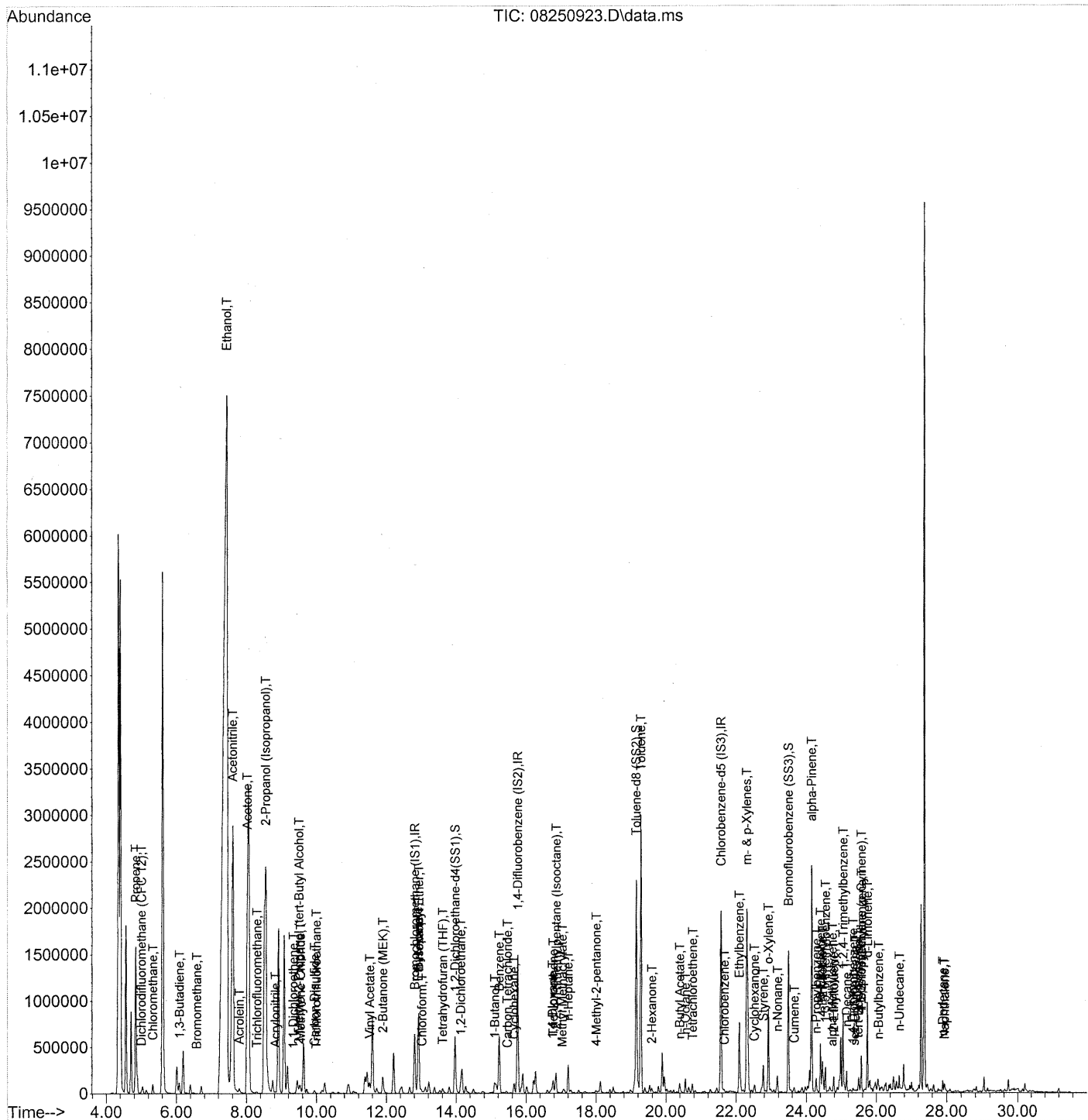
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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

Verified By:  Date: 9/1/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:20:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455 ✓  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:20:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.81	130	344267	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1739034	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	824777	25.000	ng	0.00

## System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.97	65	607403	24.952	ng	-0.02
Spiked Amount	25.000		Recovery	=	99.80%	✓
57) Toluene-d8 (SS2)	19.15	98	1998290	25.486	ng	-0.01
Spiked Amount	25.000		Recovery	=	101.96%	✓
73) Bromofluorobenzene (SS3)	23.49	174	542526	24.432	ng	0.00
Spiked Amount	25.000		Recovery	=	97.72%	✓

## Target Compounds

Target Compounds	R.T.	Q Ion	Response	Conc	Units	Qvalue
2) Propene	4.84	42	755028	25.001	ng	97
3) Dichlorodifluoromethan...	5.00	85	37934	0.880	ng	99
4) Chloromethane	5.33	50	122008	3.037	ng	98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	354	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.09	54	71928	2.555	ng	98
8) Bromomethane	6.58	94	1163	0.056	ng	98
9) Chloroethane	6.93	64	943	N.D.		
10) Ethanol	7.44	45	34525837	1822.579	ng	99
11) Acetonitrile	7.61	41	5870877	126.991	ng	99
12) Acrolein	7.80	56	60130	4.867	ng	100
13) Acetone	8.03	58	1500094	77.818	ng	# 61
14) Trichlorofluoromethane	8.30	101	20522	0.557	ng	97
15) 2-Propanol (Isopropanol)	8.55	45	5466047	103.540	ng	91
16) Acrylonitrile	8.82	53	20072	0.717	ng	100
17) 1,1-Dichloroethene	9.33	96	2787	0.129	ng	# 80
18) 2-Methyl-2-Propanol (t...	9.50	59	80912	1.510	ng	# 68
19) Methylene Chloride	9.54	84	34275	1.425	ng	87
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.	d	
21) Trichlorotrifluoroethane	10.00	151	2390	0.145	ng	92
22) Carbon Disulfide	9.94	76	68677	0.809	ng	99
23) trans-1,2-Dichloroethene	10.94	61	330	N.D.		
24) 1,1-Dichloroethane	11.40	63	905	N.D.		
25) Methyl tert-Butyl Ether	11.42	73	2039	N.D.		
26) Vinyl Acetate	11.52	86	32613m	7.811	ng	
27) 2-Butanone (MEK)	11.90	72	82252	6.120	ng	# 84
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.93	87	5605	0.294	ng	# 1
30) Ethyl Acetate	12.91	61	89450	10.264	ng	98
31) n-Hexane	12.93	57	415144	9.772	ng	94

35

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:20:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.02	83	9750	0.274	ng	99
34) Tetrahydrofuran (THF)	13.61	72	9163	0.656	ng #	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	115065	4.229	ng	100
38) 1,1,1-Trichloroethane	14.53	97	111	N.D.		
39) Isopropyl Acetate	15.09	61	709	N.D.		
40) 1-Butanol	15.10	56	107159	4.755	ng	89
41) Benzene	15.23	78	818096	8.748	ng	98
42) Carbon Tetrachloride	15.46	117	3815	0.146	ng	98
43) Cyclohexane	15.66	84	53963	1.490	ng	86
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. d		
47) Trichloroethene	16.77	130	50819	2.140	ng	99
48) 1,4-Dioxane	16.75	88	1025	0.062	ng	92
49) 2,2,4-Trimethylpentane...	16.86	57	247247	2.297	ng	97
50) Methyl Methacrylate	17.04	100	964	0.103	ng #	1
51) n-Heptane	17.20	71	93265	3.746	ng	94
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.00	58	9432	0.467	ng	91
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	19.28	91	2831074	29.785	ng	100
59) 2-Hexanone	19.59	43	34368	0.696	ng #	63
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	97532	1.809	ng	96
63) n-Octane	20.56	57	32248	1.522	ng	91
64) Tetrachloroethene	20.76	166	33981	1.441	ng	100
65) Chlorobenzene	21.66	112	4571	0.078	ng #	42
66) Ethylbenzene	22.09	91	724012	7.055	ng	98
67) m- & p-Xylenes	22.30	91	2048086	25.175	ng	100
68) Bromoform	22.42	173	236	N.D.		
69) Styrene	22.77	104	184025	3.060	ng	99
70) o-Xylene	22.92	91	668341	8.166	ng	98
71) n-Nonane	23.17	43	87512	1.776	ng	88
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D. d		
74) Cumene	23.66	105	42967	0.405	ng	97
75) alpha-Pinene	24.15	93	1184908	22.632	ng	99
76) n-Propylbenzene	24.28	91	137511	1.048	ng	97
77) 3-Ethyltoluene	24.40	105	367919	3.701	ng	98
78) 4-Ethyltoluene	24.46	105	210446	2.106	ng	99
79) 1,3,5-Trimethylbenzene	24.55	105	136957	1.657	ng	97

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:20:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

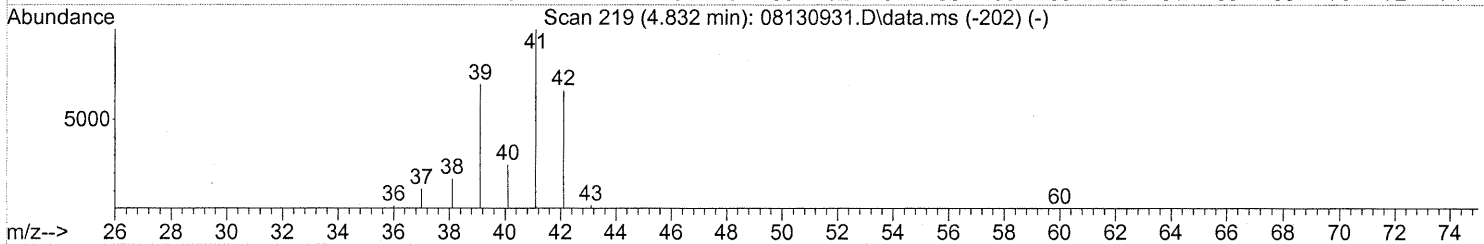
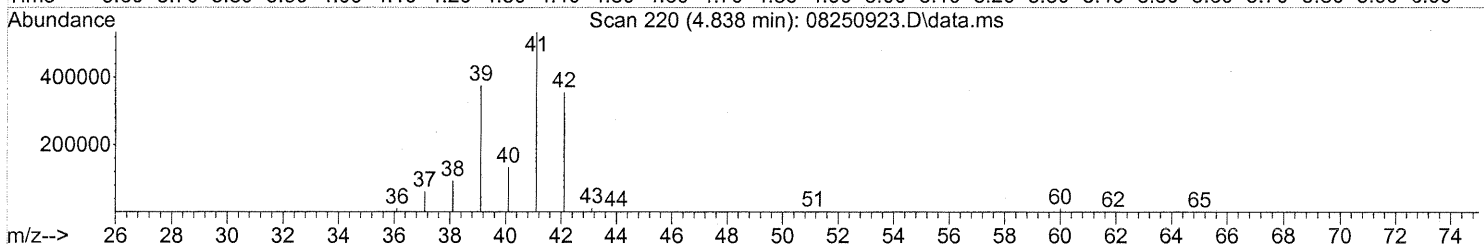
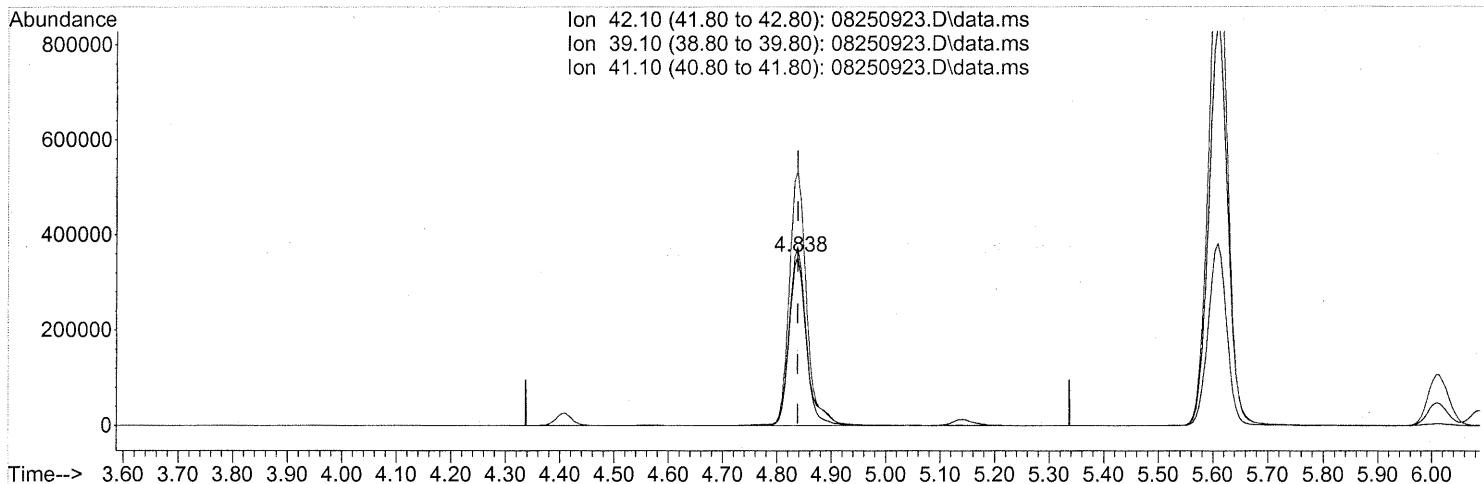
Internal Standards	R.T.	QI on	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.74	118	3053	0.068	ng	88
81) 2-Ethyltoluene	24.79	105	120809	1.177	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	499173	5.689	ng	89
83) n-Decane	25.15	57	81678	1.599	ng	95
84) Benzyl Chloride	25.24	91	714	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	d	
86) 1,4-Dichlorobenzene	25.33	146	4780	0.099	ng	95
87) sec-Butylbenzene	25.38	105	10219	0.088	ng	97
88) 4-Isopropyltoluene (p-...	25.56	119	112996	1.020	ng	96
89) 1,2,3-Trimethylbenzene	25.57	105	117437	1.324	ng	98
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	d	
91) d-Limonene	25.74	68	270709	7.541	ng	96
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	52930	1.003	ng #	75
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	64088	0.544	ng	99
96) n-Dodecane	27.89	57	41453	0.702	ng	97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.52	55	27328	0.913	ng #	88
99) tert-Butylbenzene	25.48	119	18412	0.212	ng	91
100) n-Butylbenzene	26.06	91	37828	0.411	ng #	45

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(2) Propene (T)

4.838min (-0.000) 25.00ng

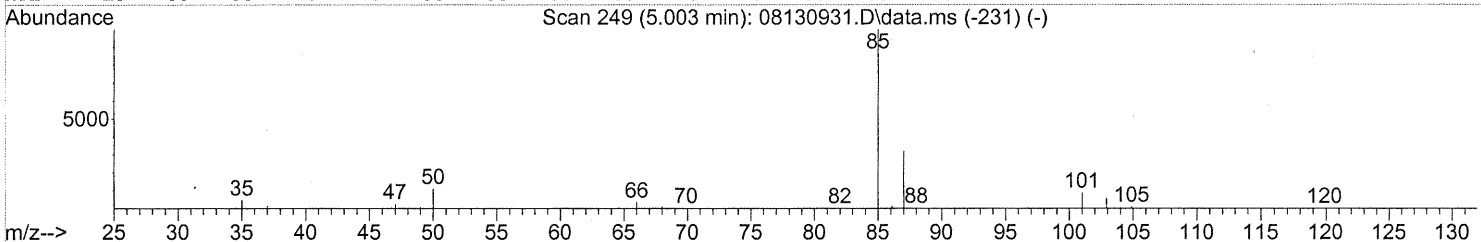
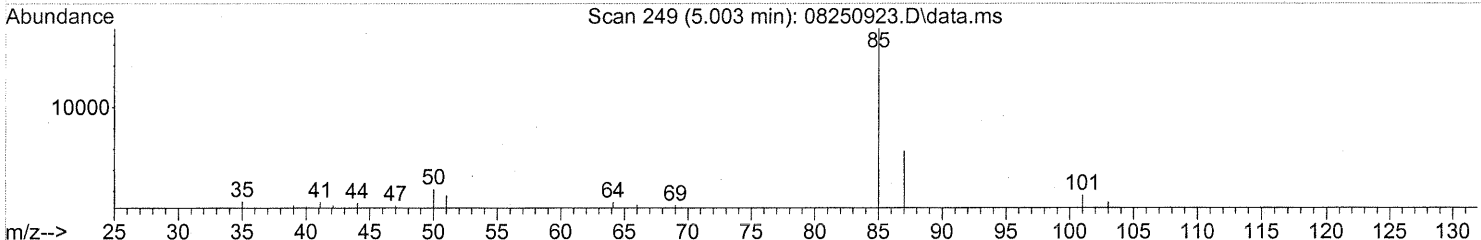
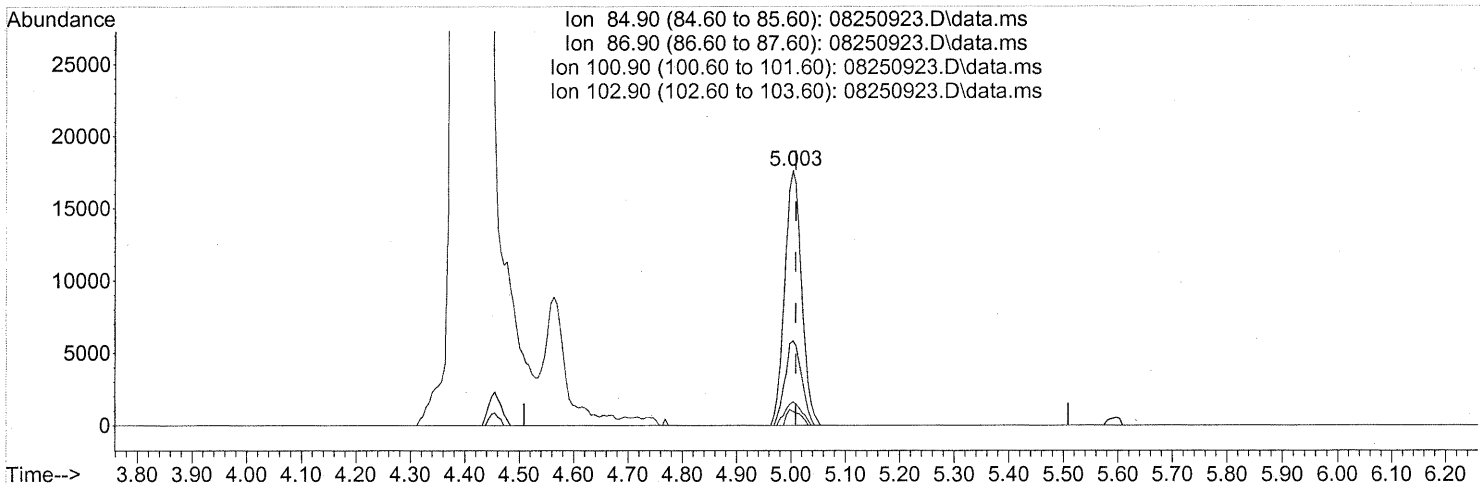
response 755028

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	111.22
41.10	152.70	155.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.003min (-0.006) 0.88ng

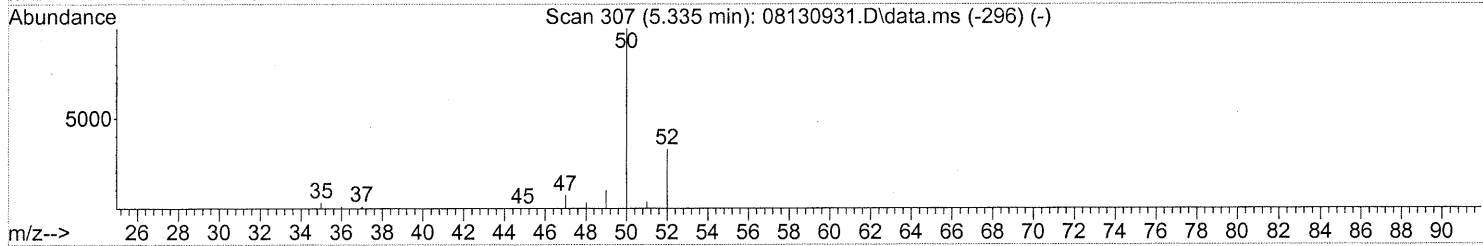
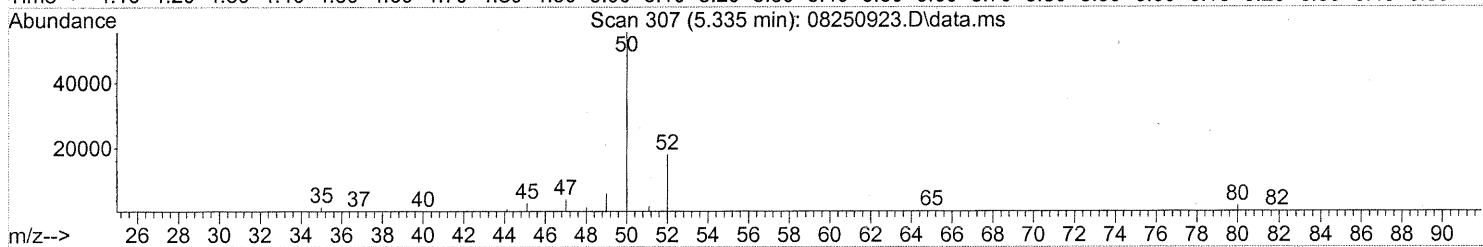
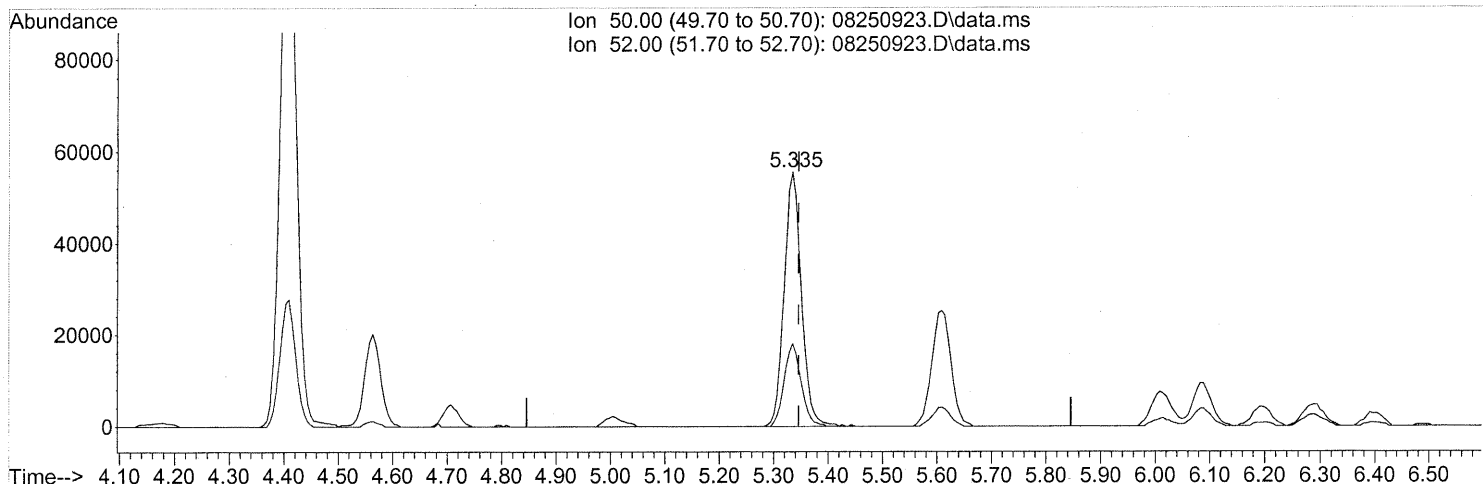
response 37934

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.74
100.90	9.10	8.90
102.90	5.50	4.76

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(4) Chloromethane (T)

5.335min (-0.011) 3.04ng

response 122008

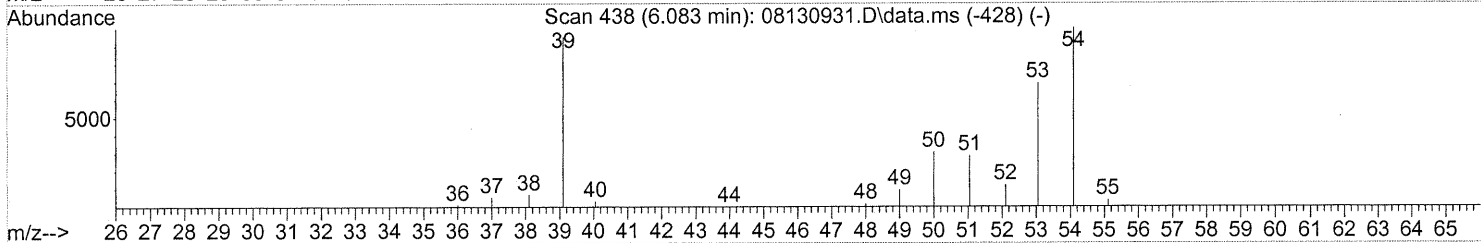
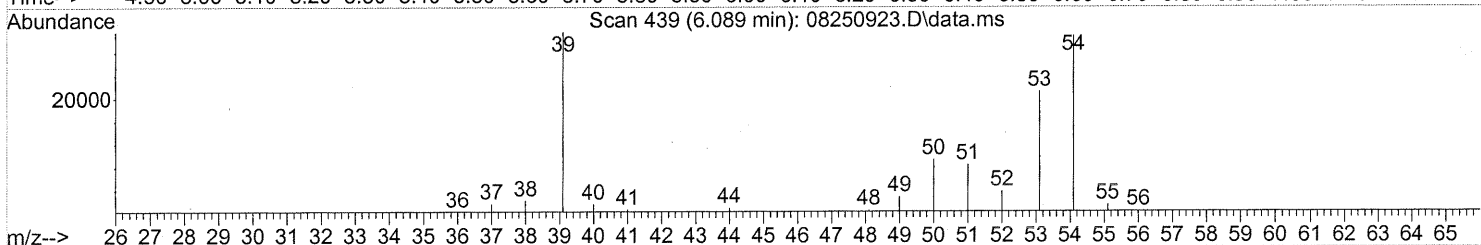
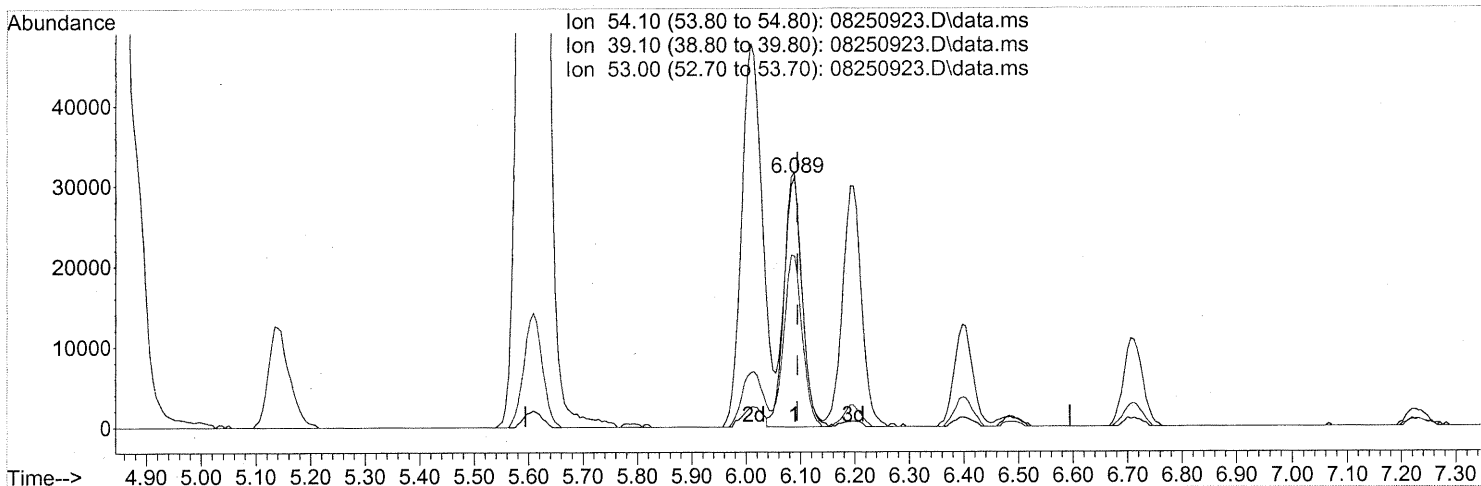
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.95
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

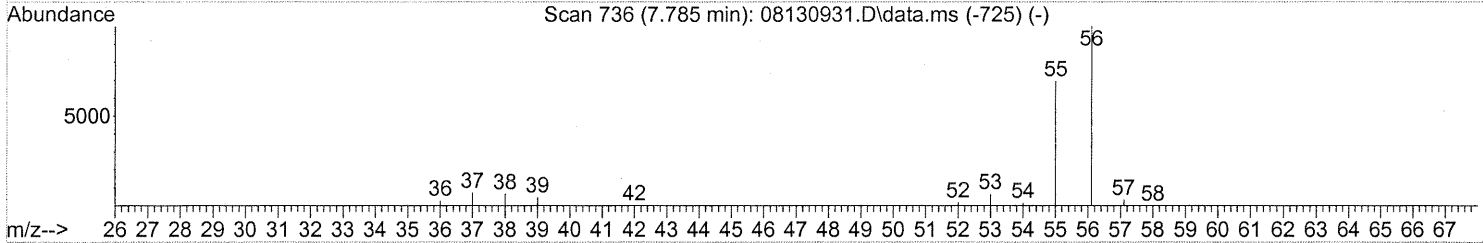
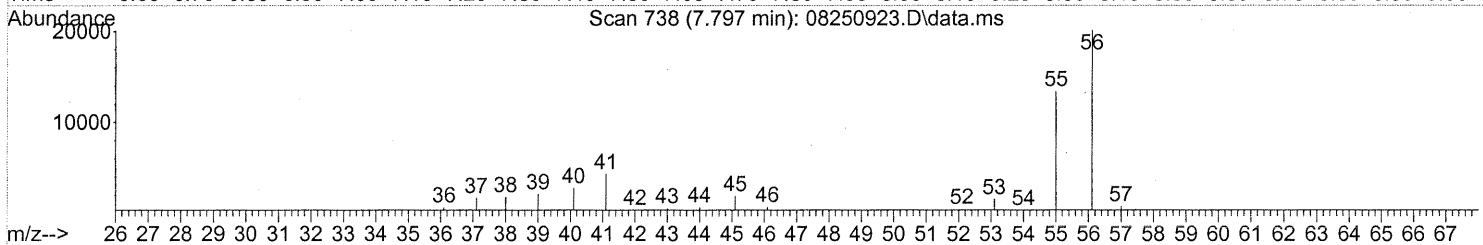
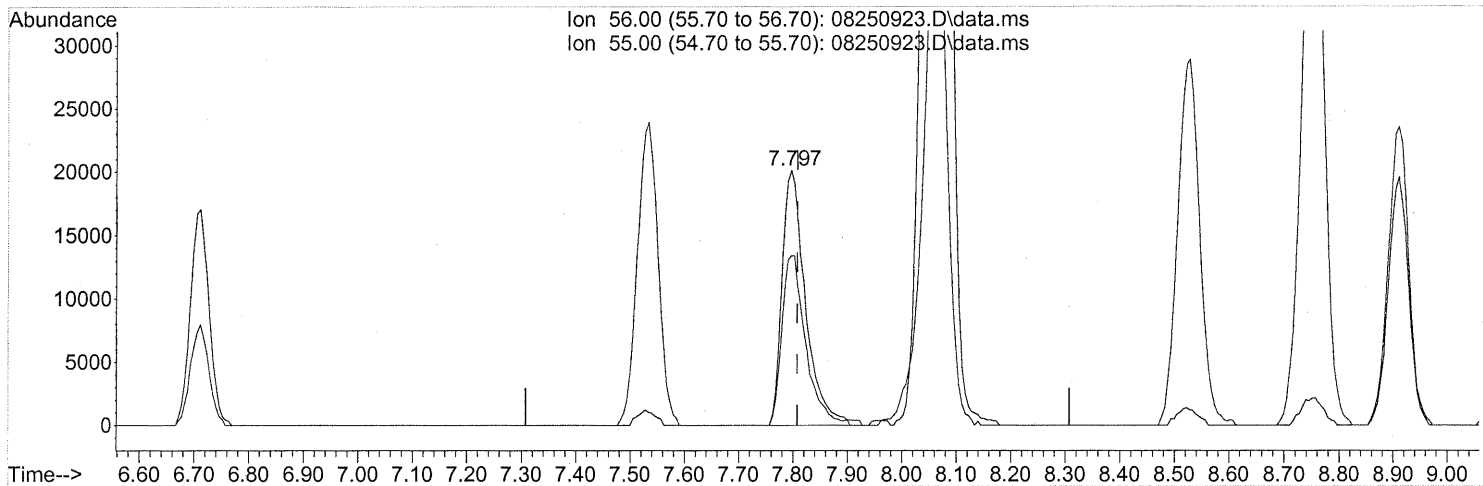
(7) 1,3-Butadiene (T)  
 6.089min (-0.006) 2.56ng  
 response 71928

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	99.21
53.00	69.80	70.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 4.87ng

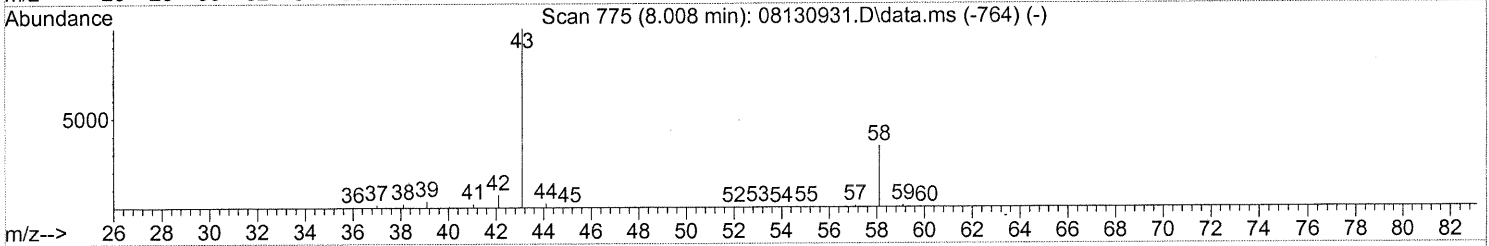
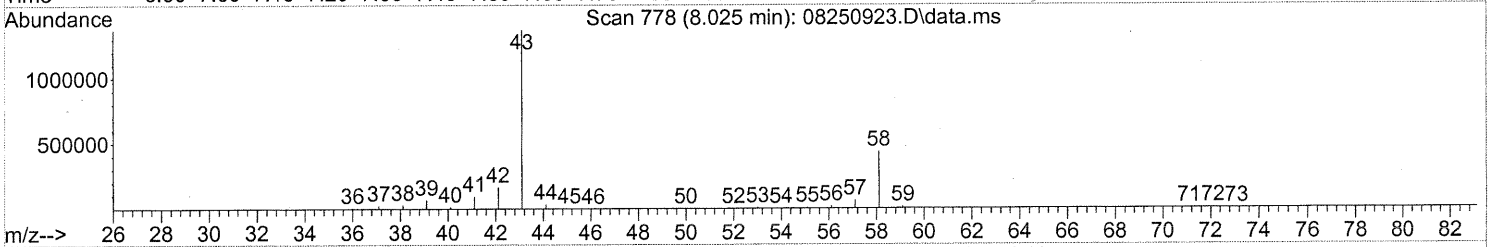
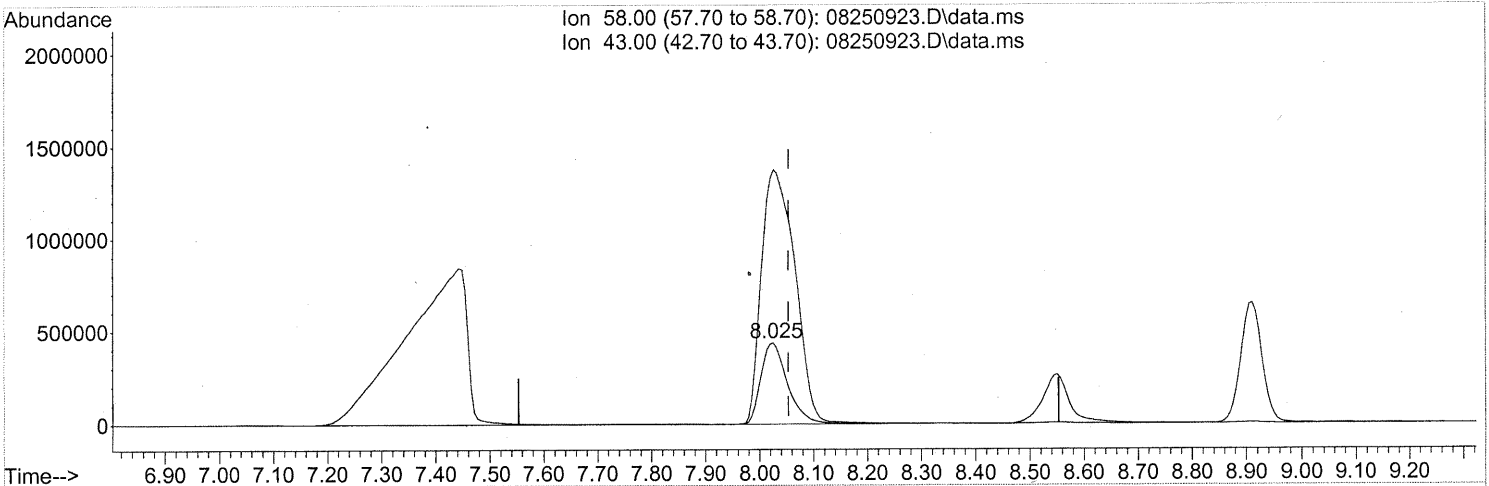
response 60130

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	67.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(13) Acetone (T)

8.025min (-0.029) 77.82ng

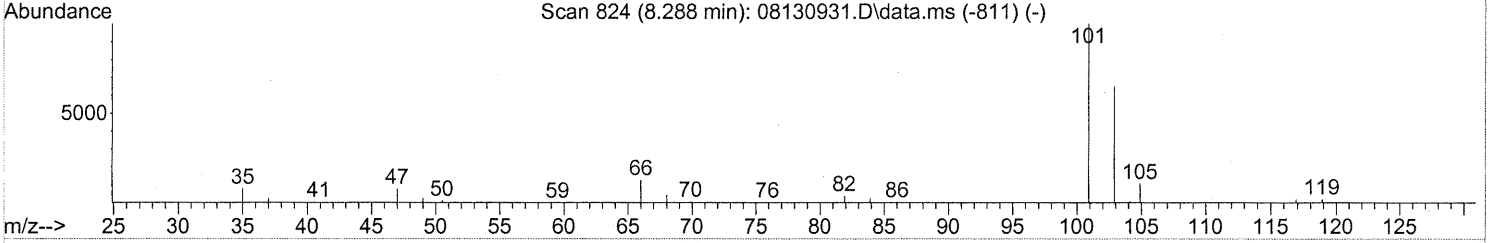
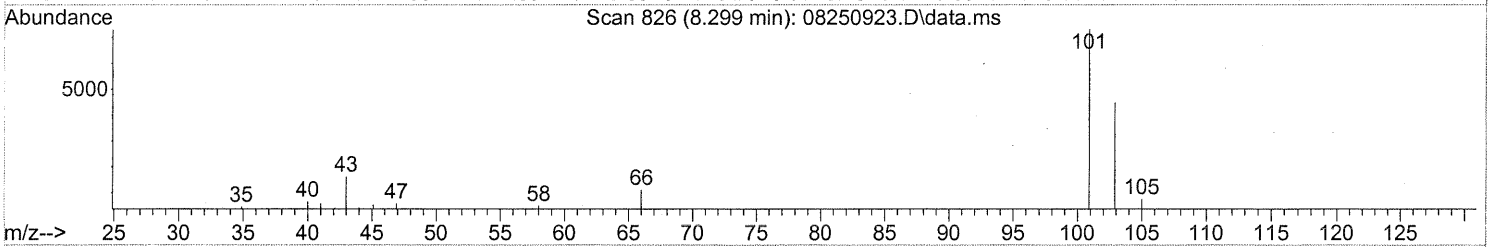
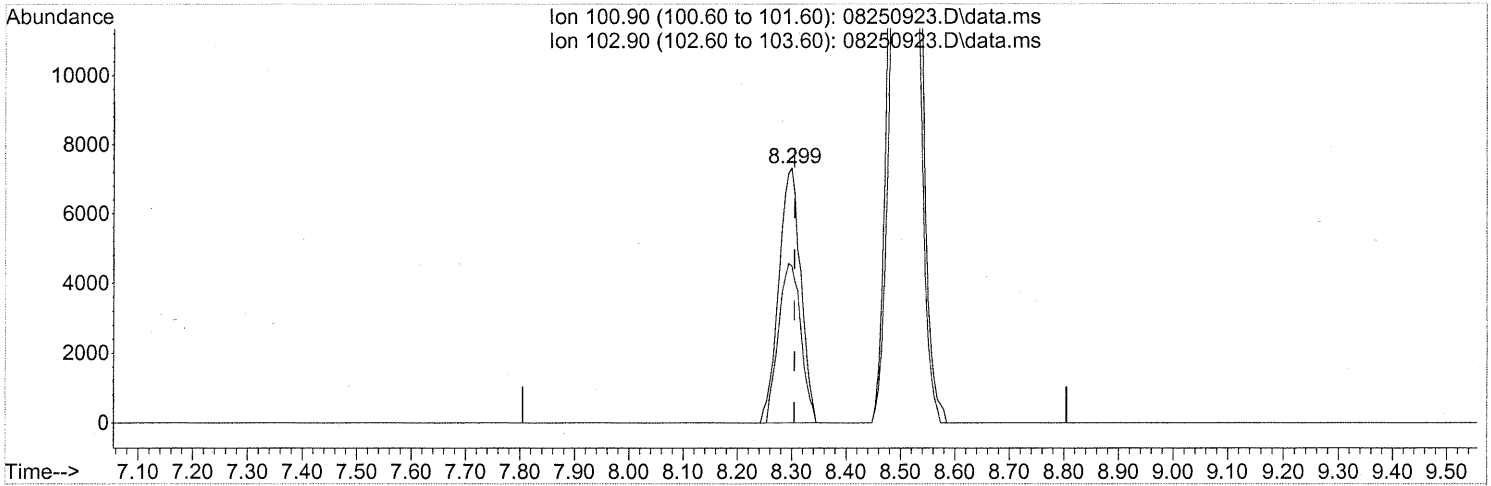
response 1500094

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	397.57#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(14) Trichlorofluoromethane (T)

8.299min (-0.006) 0.56ng

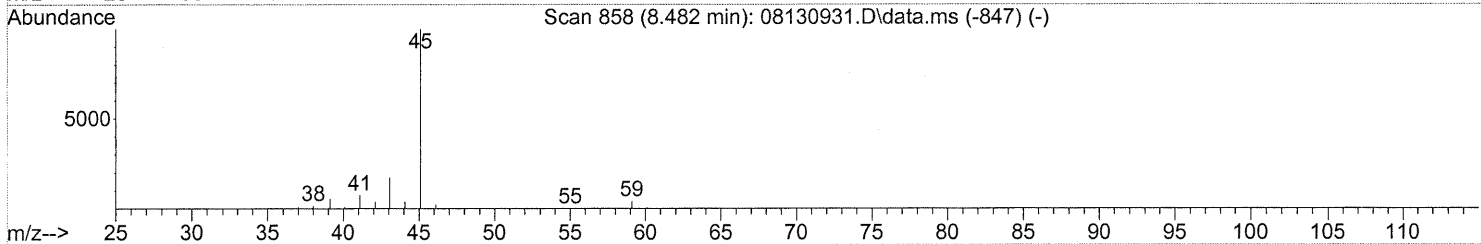
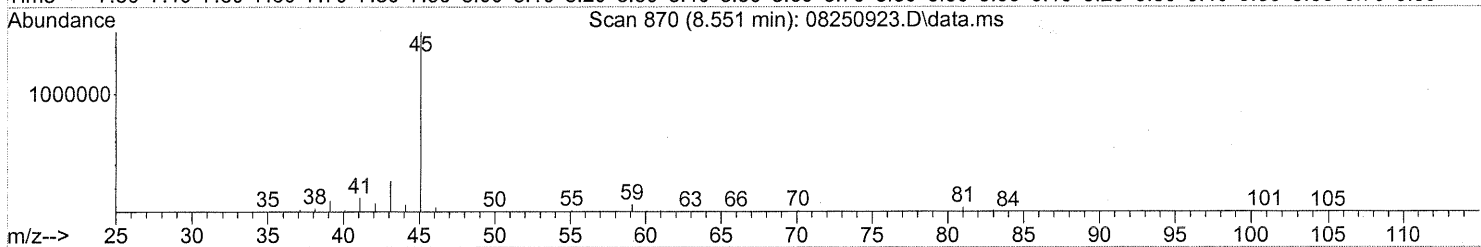
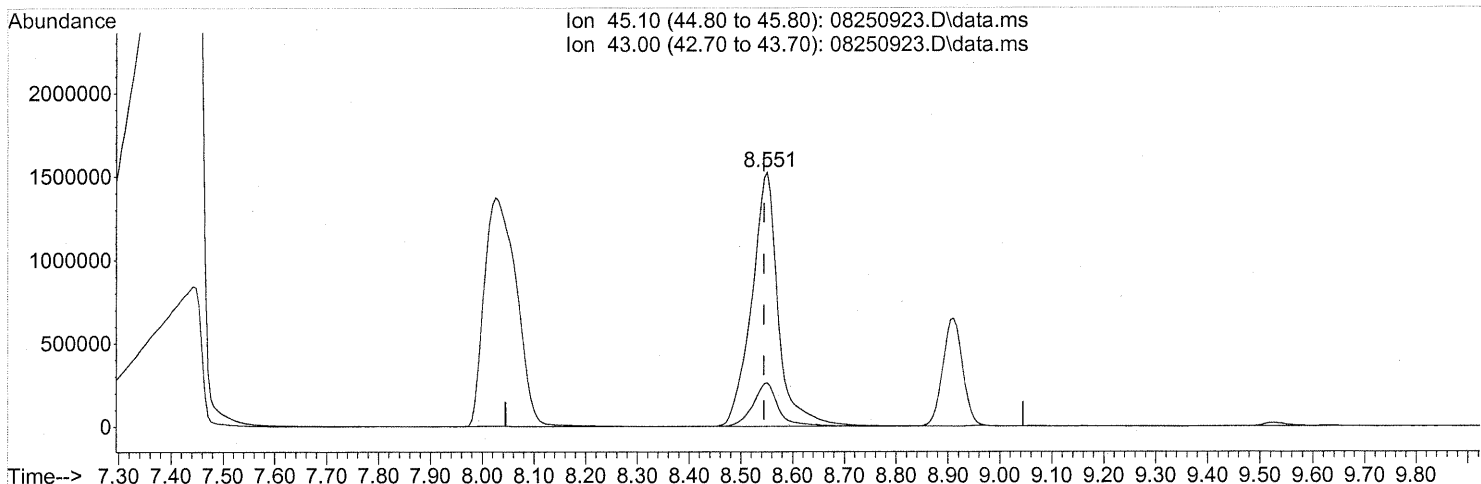
response 20522

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

8.551min (+0.006) 103.54ng

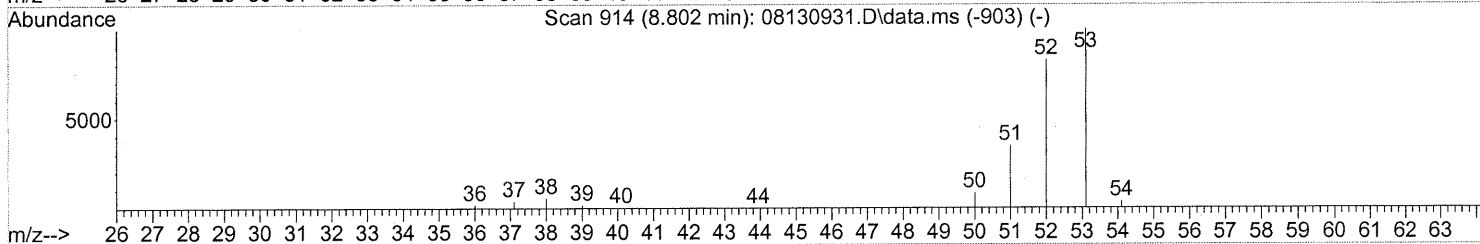
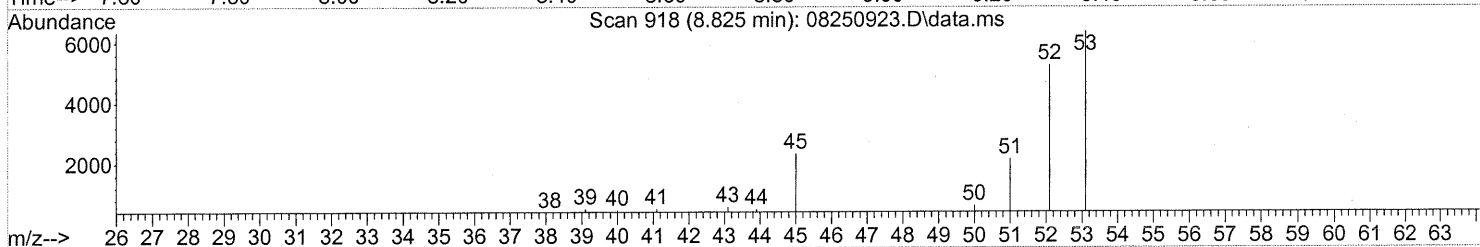
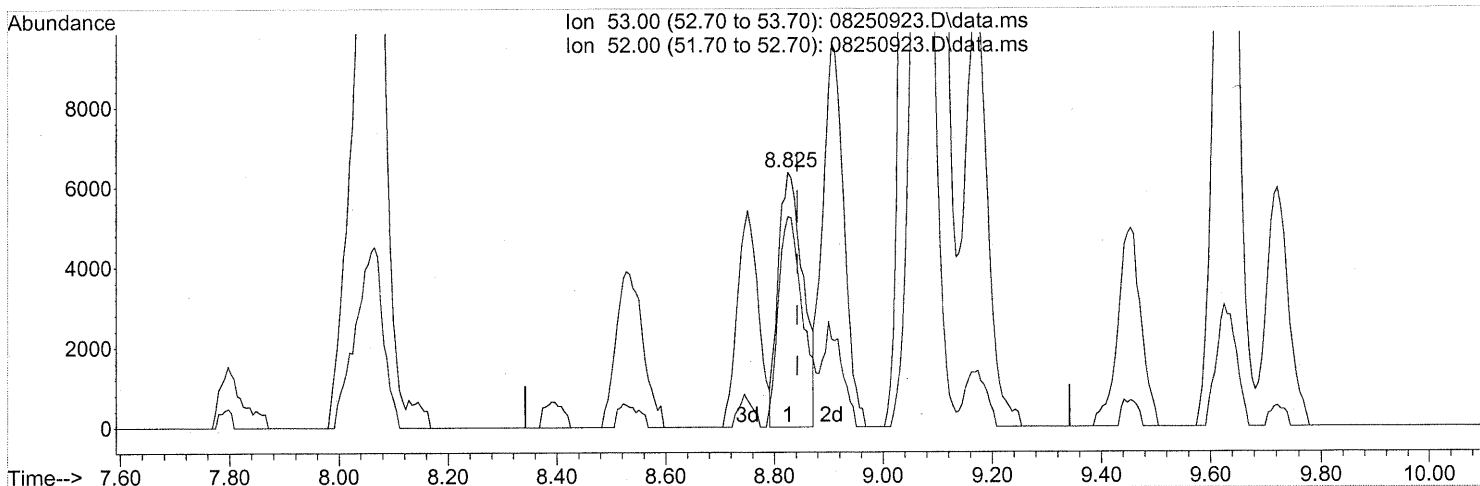
response 5466047

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

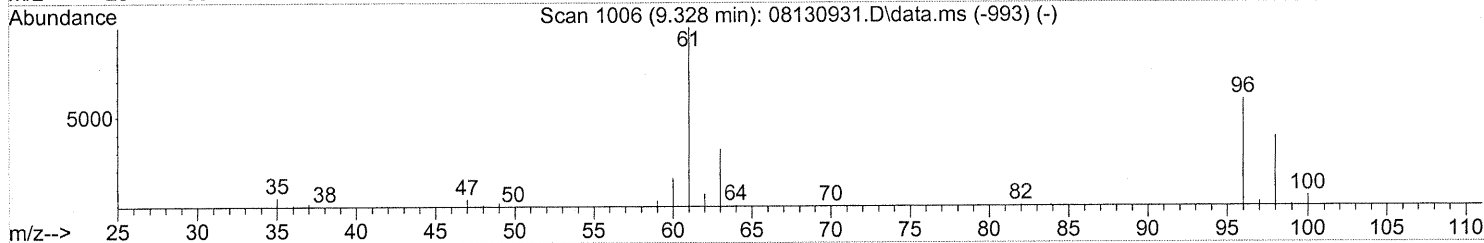
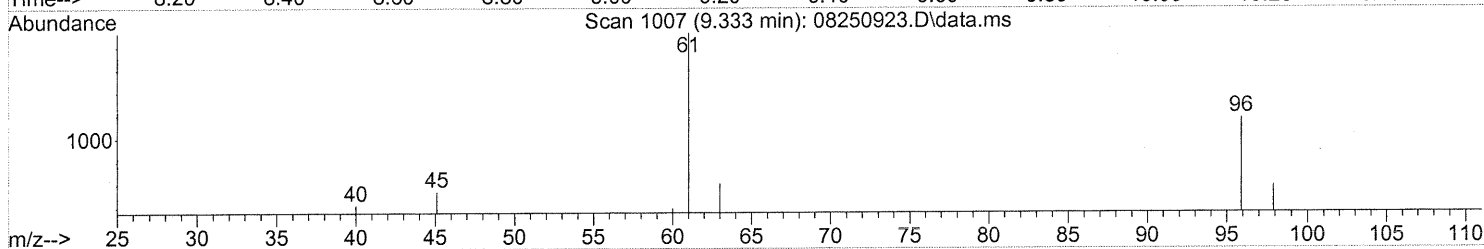
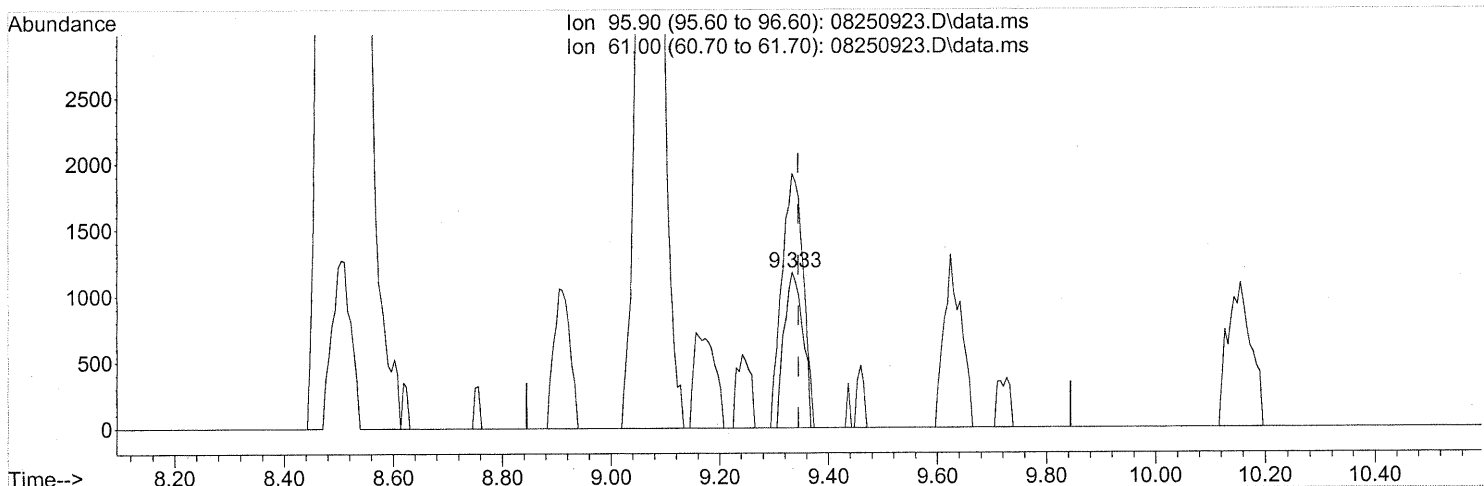
(16) Acrylonitrile (T)  
 8.825min (-0.017) 0.72ng  
 response 20072

Ion	Exp%	Act%
53.00	100	100
52.00	84.50	84.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(17) 1,1-Dichloroethene (T)

9.333min (-0.011) 0.13ng

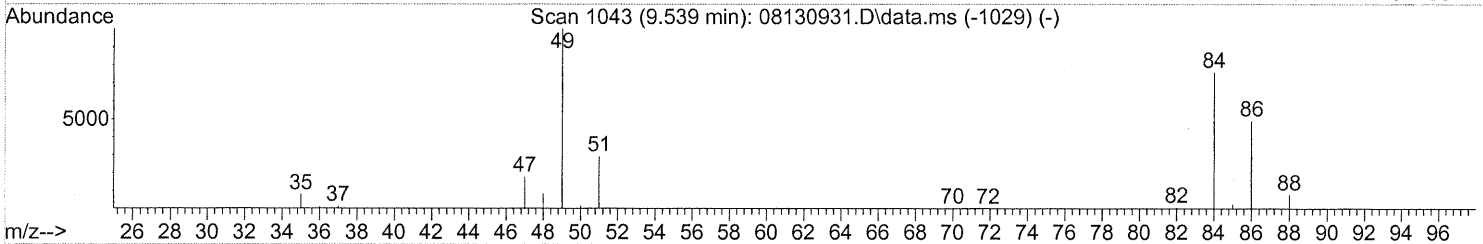
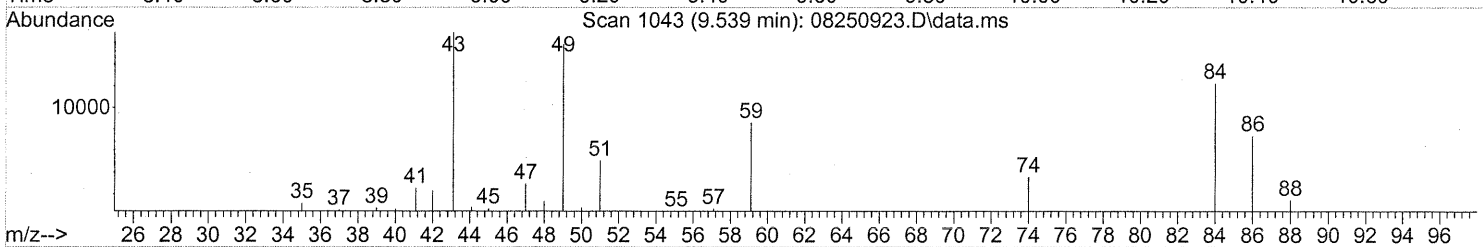
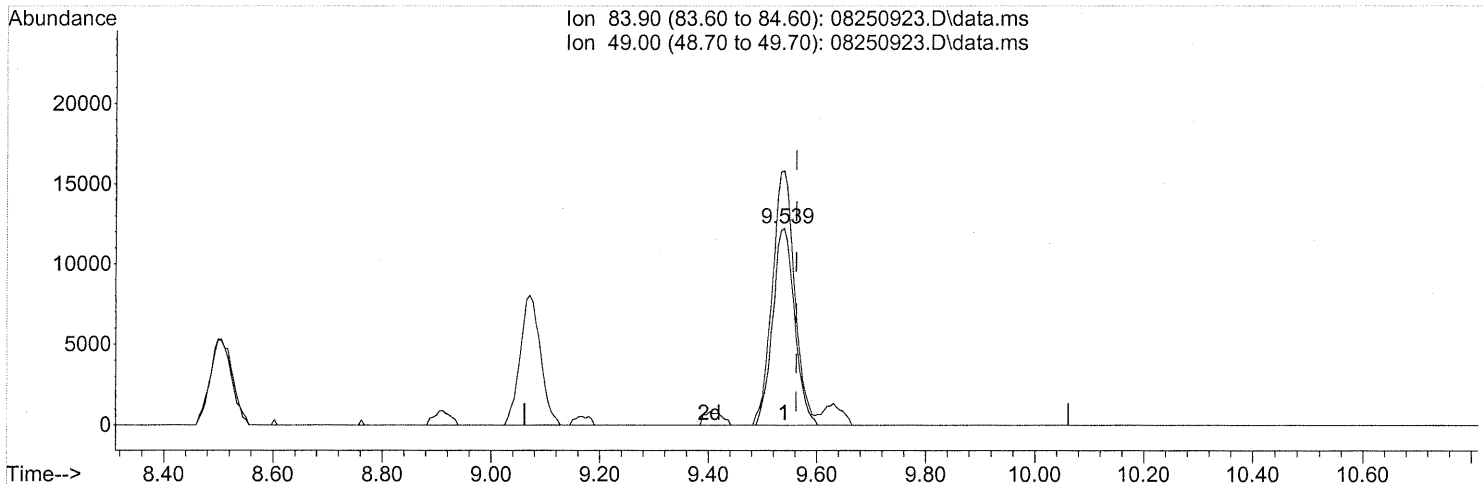
response 2787

Ion	Exp%	Act%
95.90	100	100
61.00	162.50	188.52#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(19) Methylene Chloride (T)

9.539min (-0.023) 1.43ng

response 34275

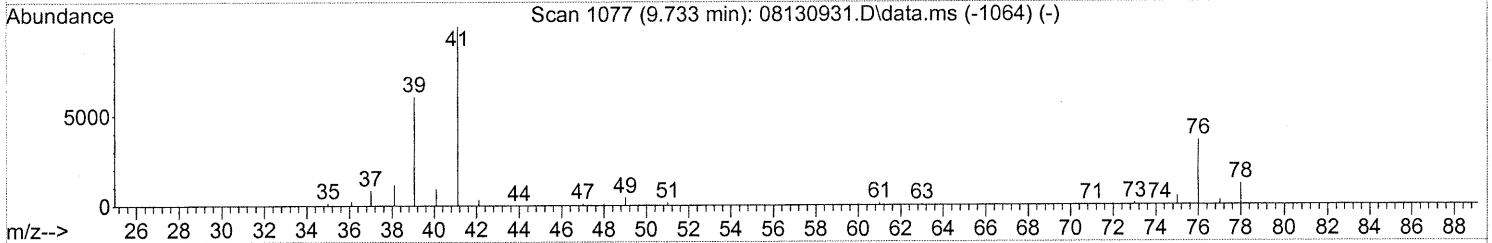
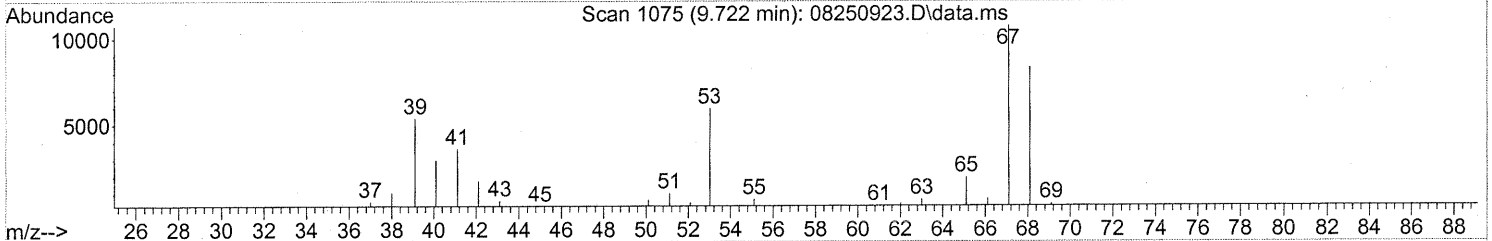
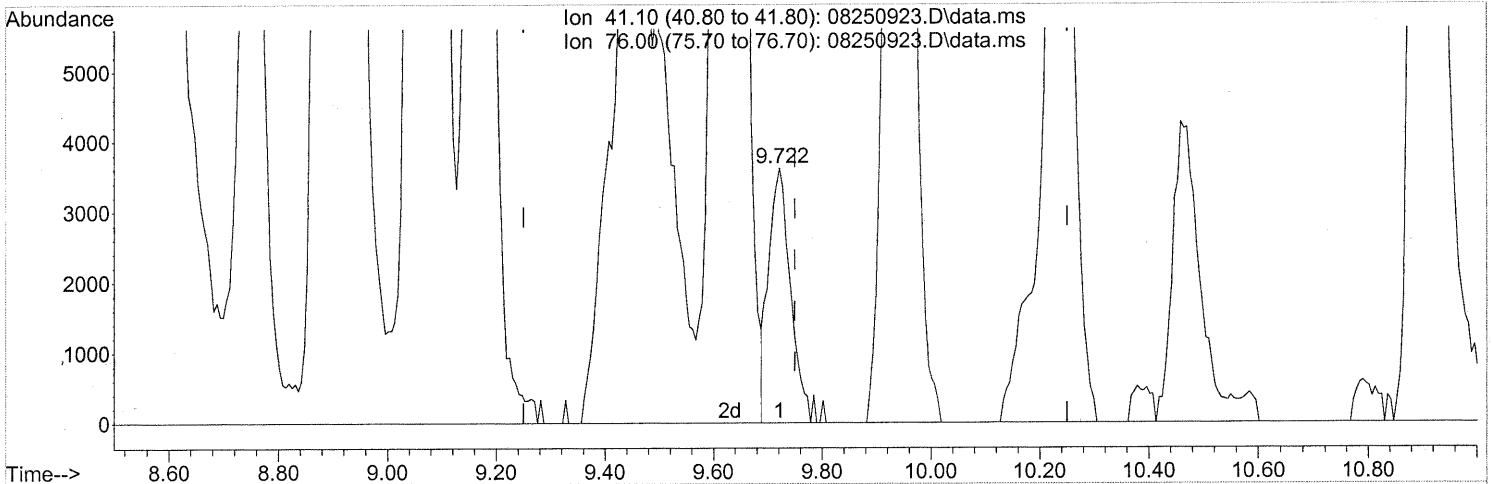
Ion	Exp%	Act%
83.90	100	100
49.00	118.80	132.82
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.722min (-0.029) 0.32ng

response 10272

Ion	Exp%	Act%
41.10	100	100
76.00	41.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

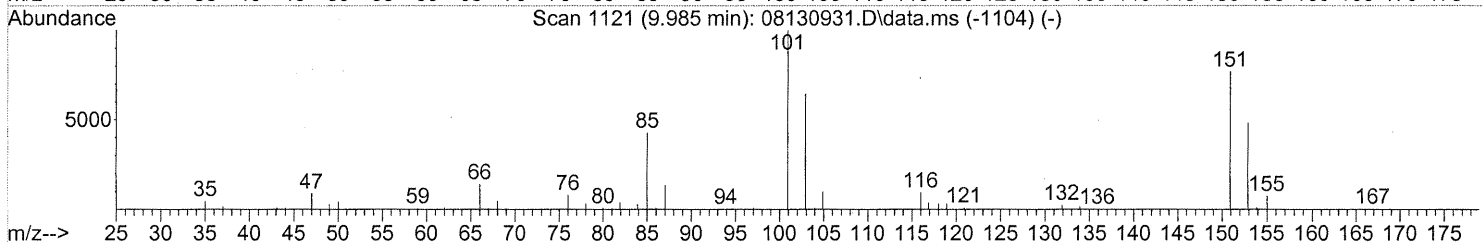
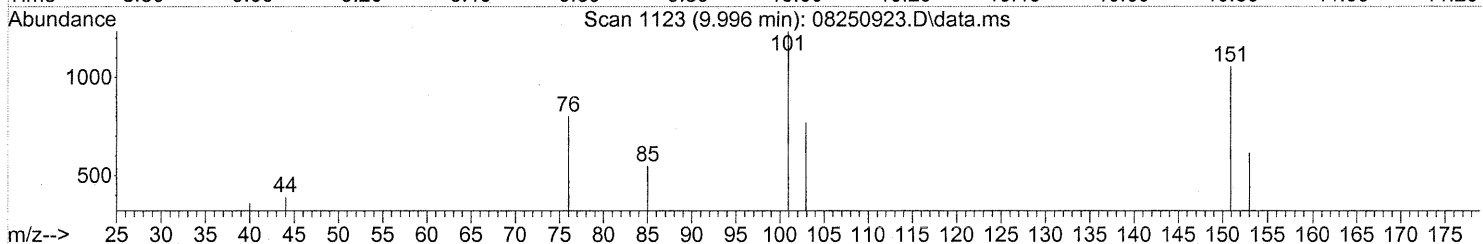
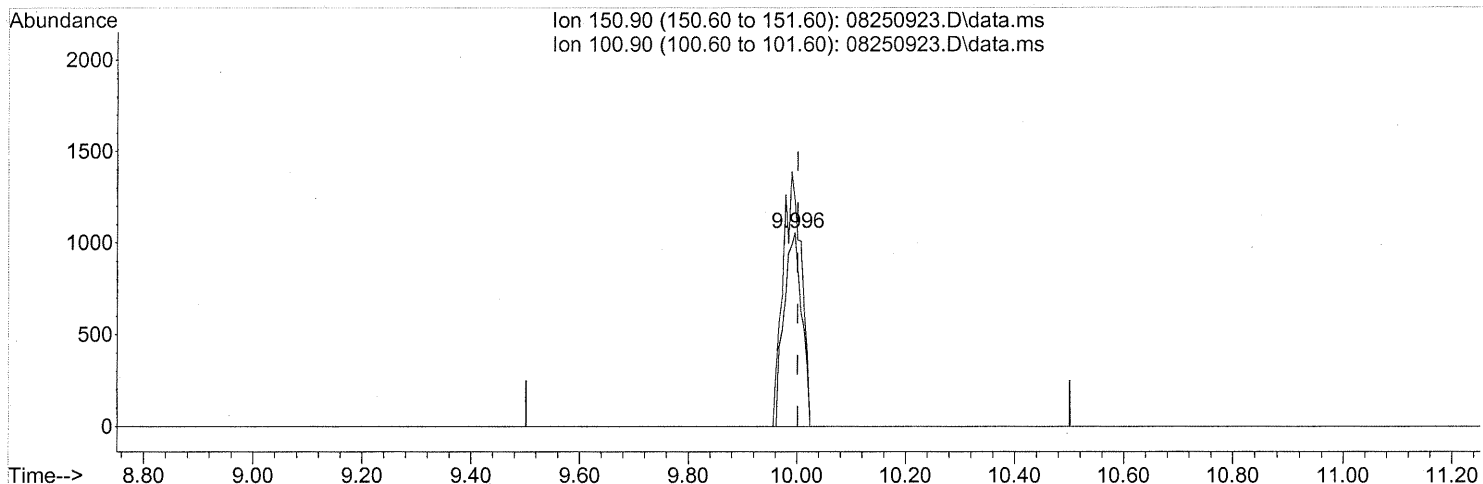
*FP em 8/28/09*

*KR 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.14ng

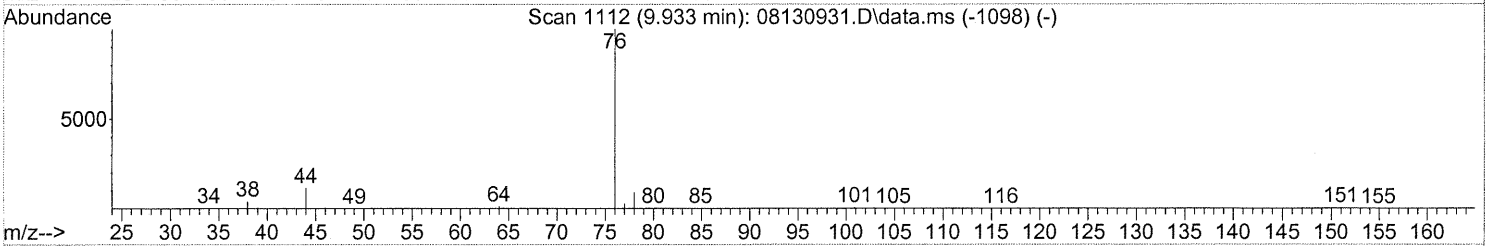
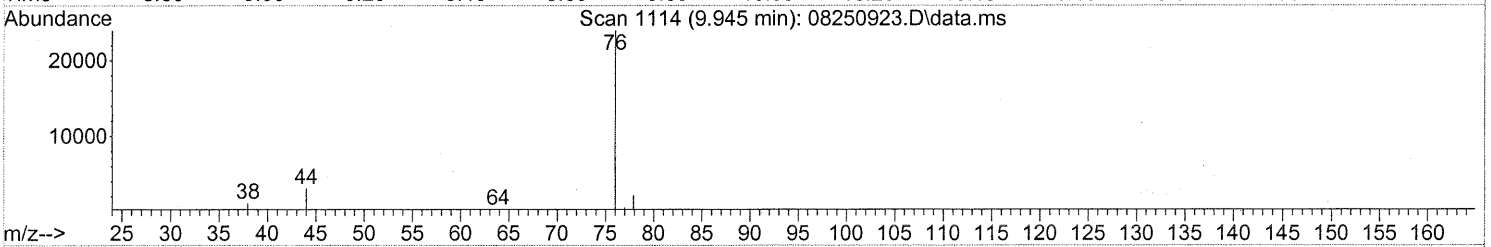
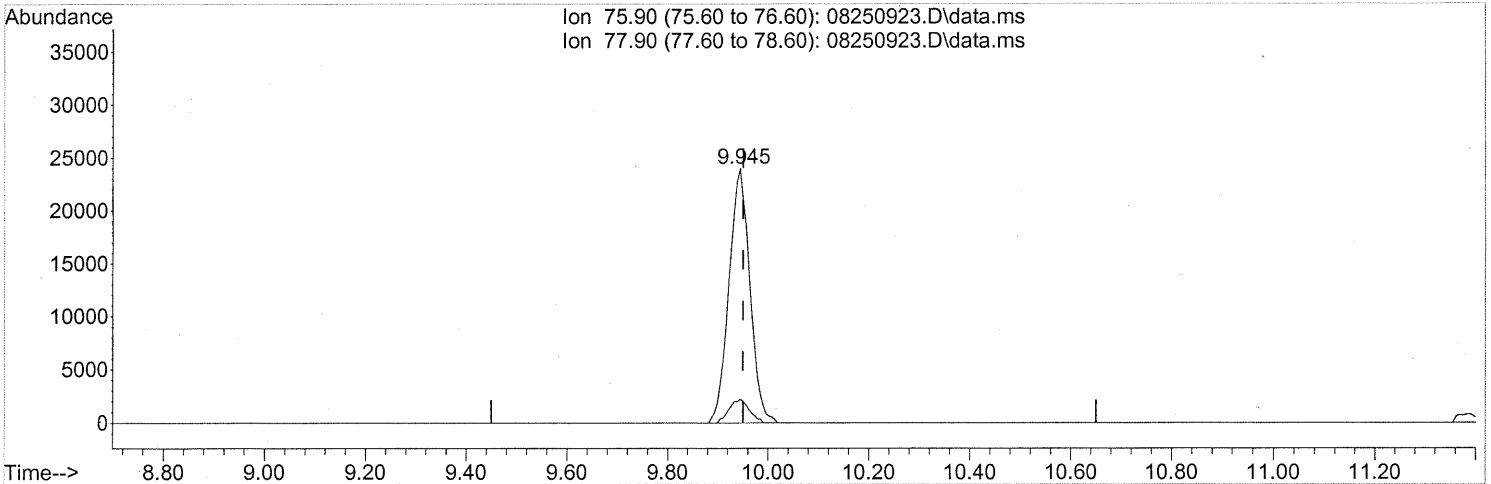
response 2390

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	136.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 07:21:56 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(22) Carbon Disulfide (T)

9.945min (-0.006) 0.81ng

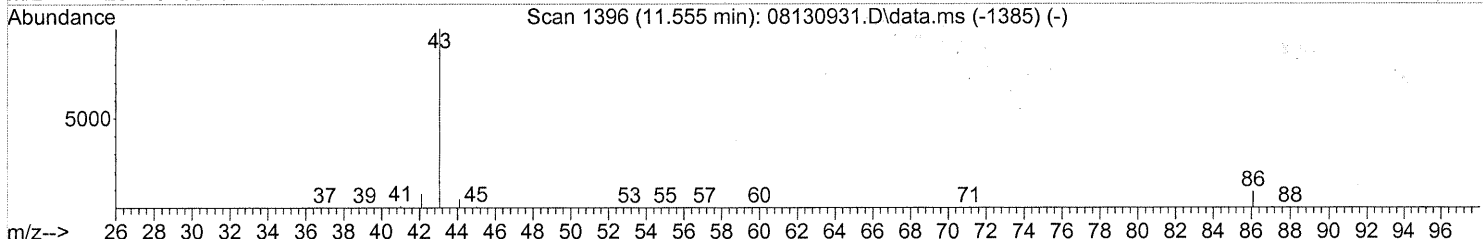
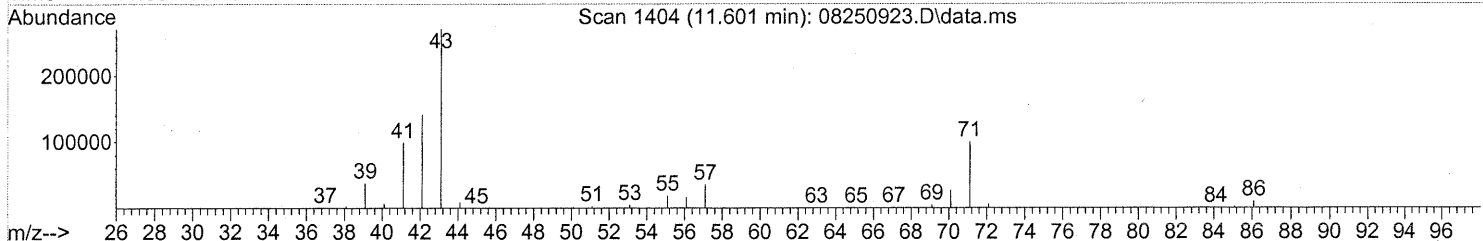
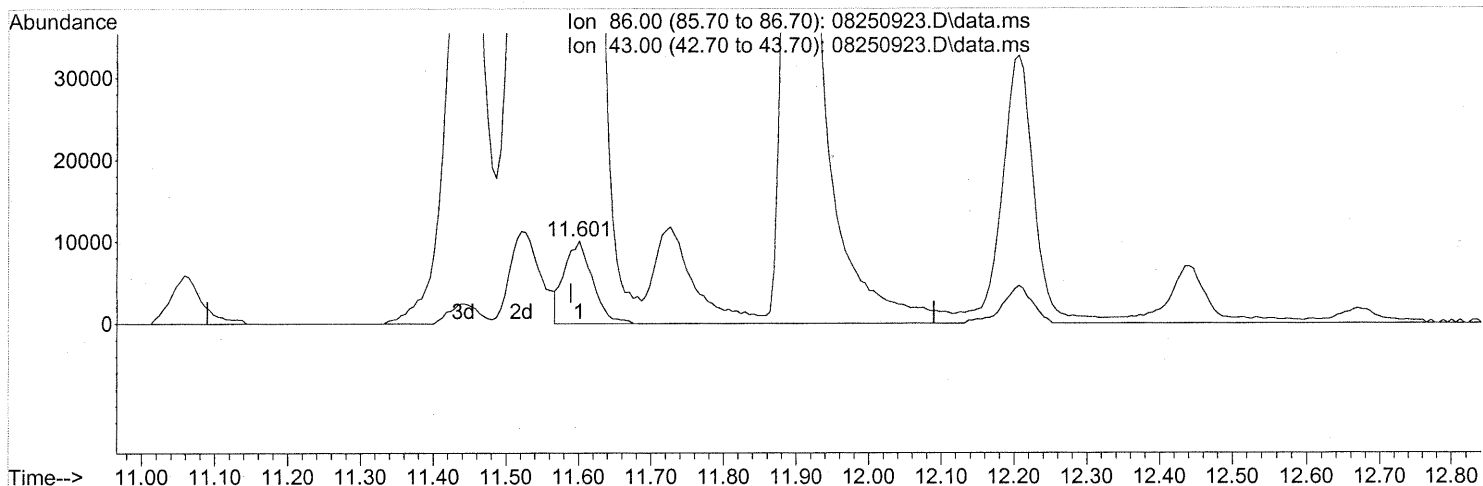
response 68677

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.80
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(26) Vinyl Acetate (T)  
 11.601min (+0.011) 6.47ng  
 response 26999  

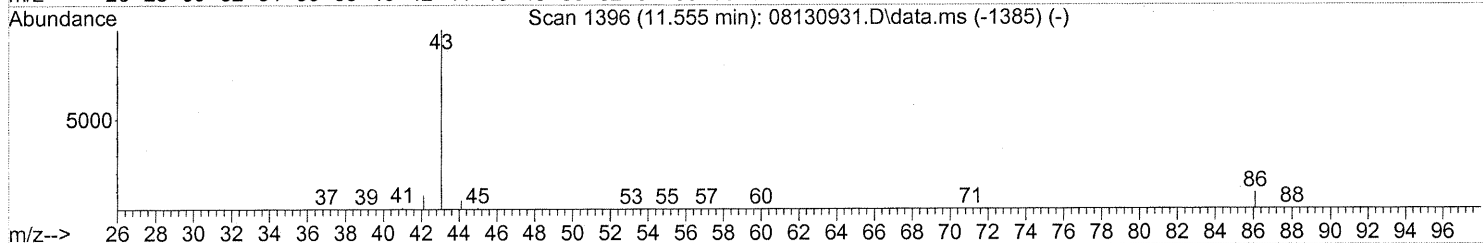
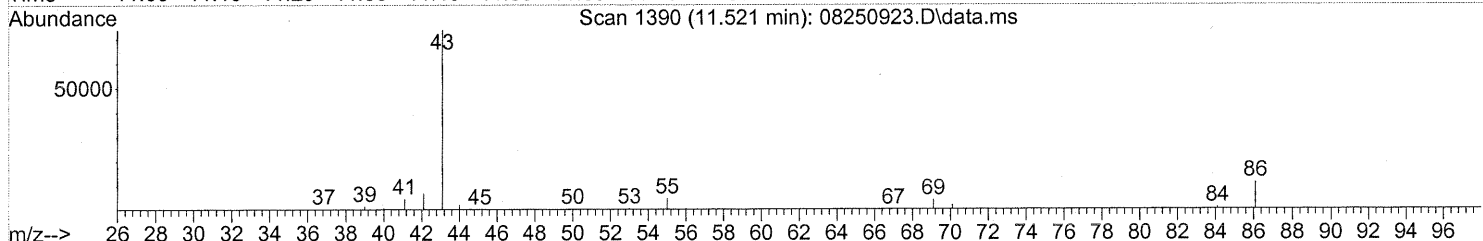
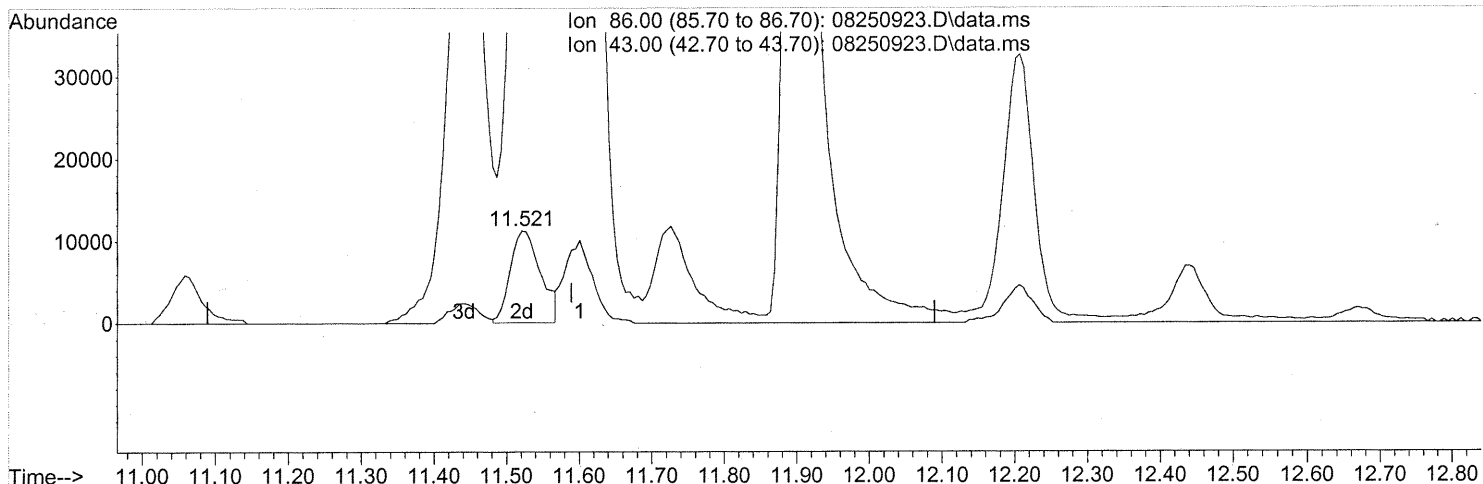
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2855.72#
0.00	0.00	0.00
0.00	0.00	0.00

*mp*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)

11.521min (-0.069) 7.81ng m  
 response 32613

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2364.14#
0.00	0.00	0.00
0.00	0.00	0.00

*mp → IC*

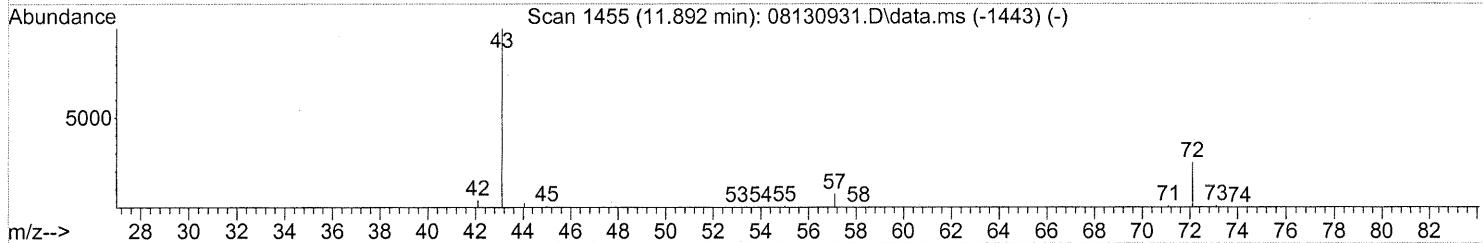
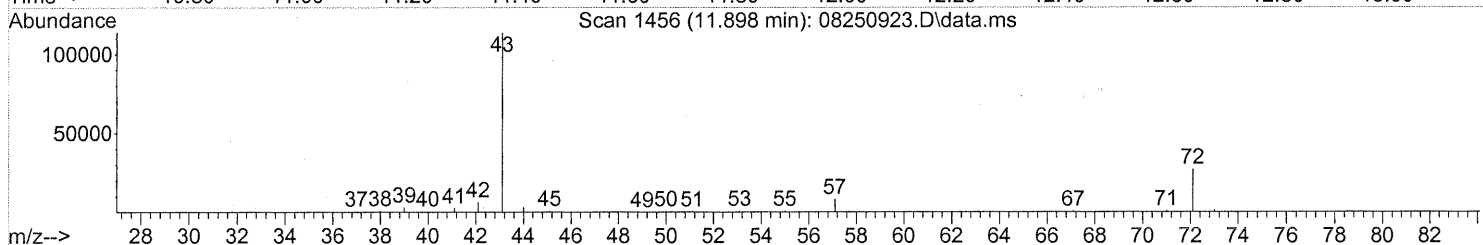
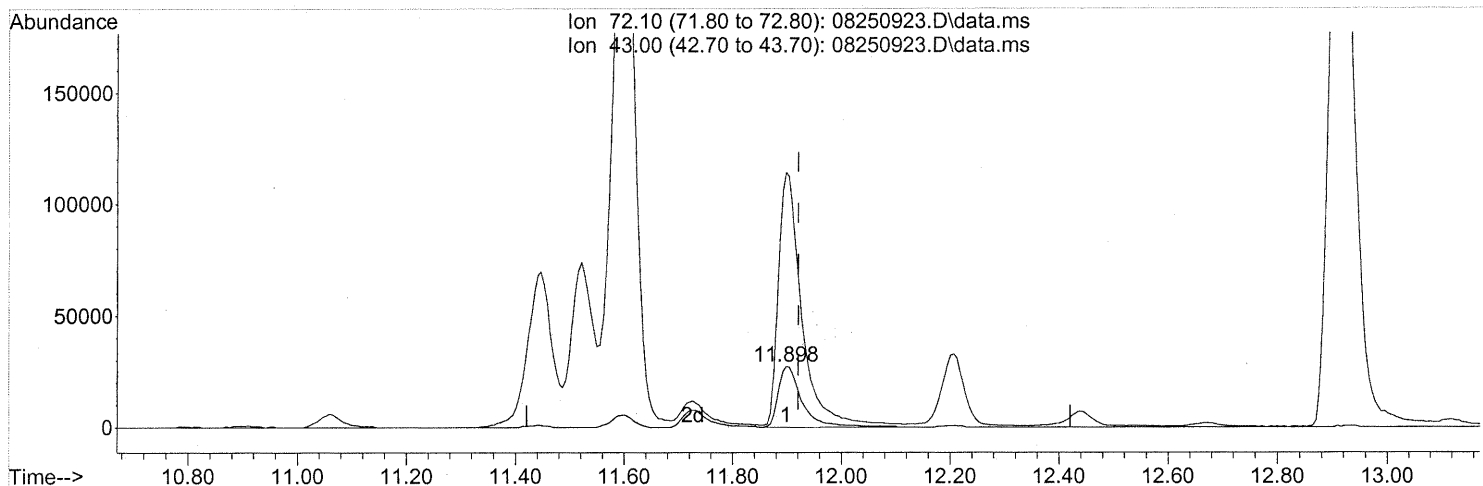
*com 8/28/09*

*KE 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

11.898min (-0.023) 6.12ng

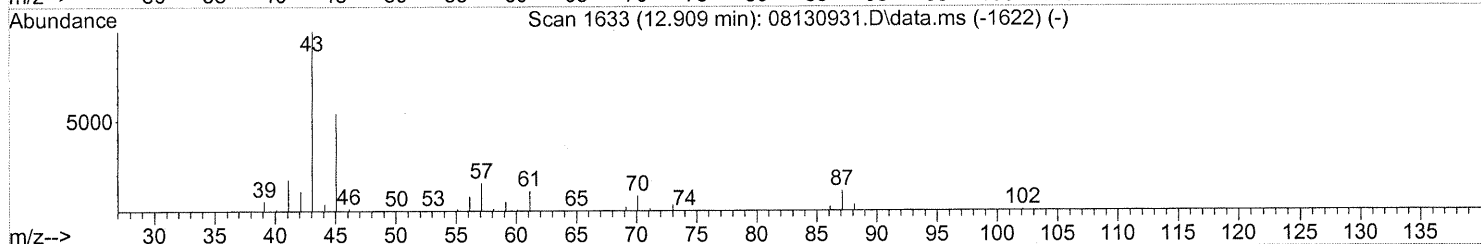
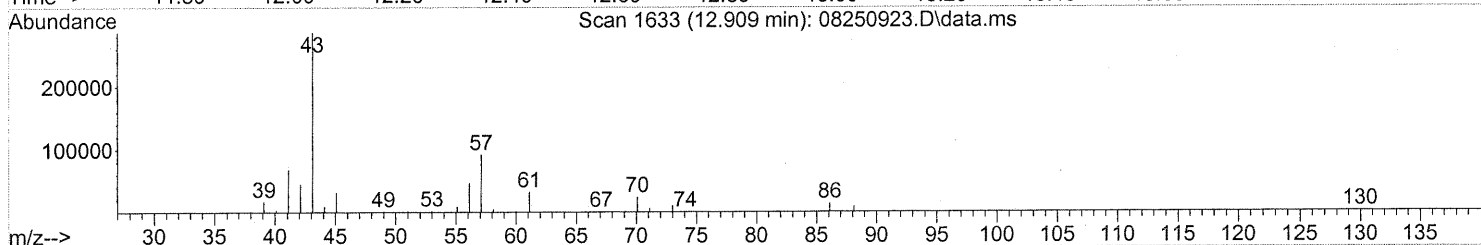
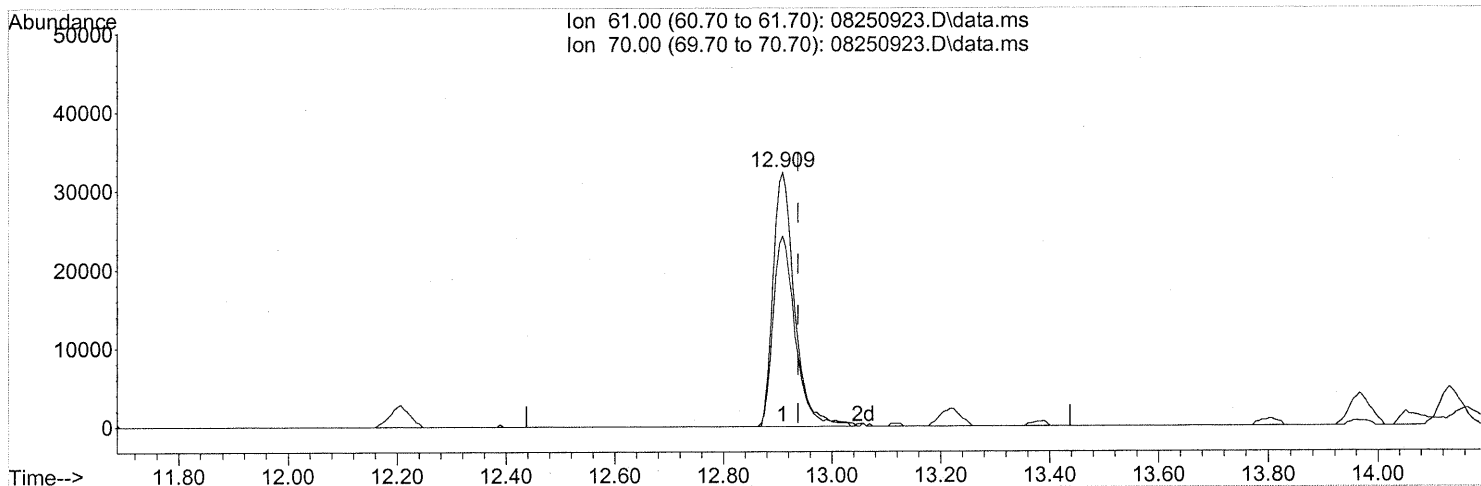
response 82252

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	402.28#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 10.26ng

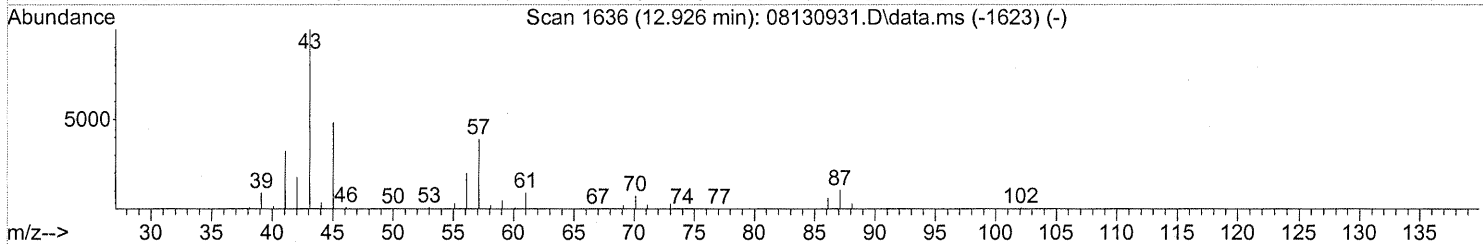
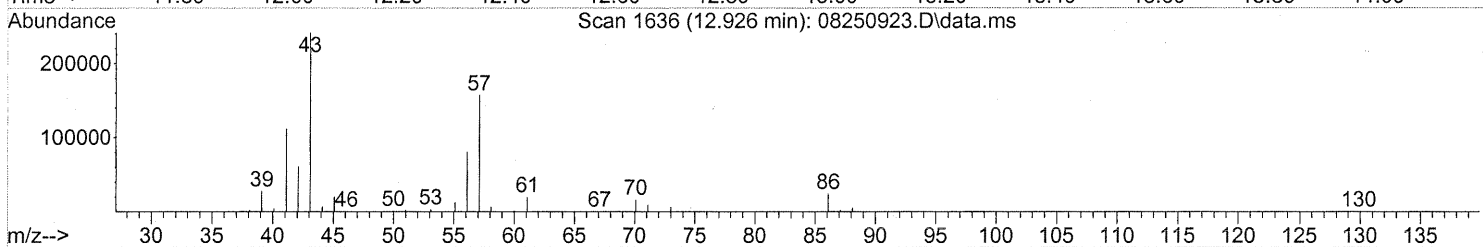
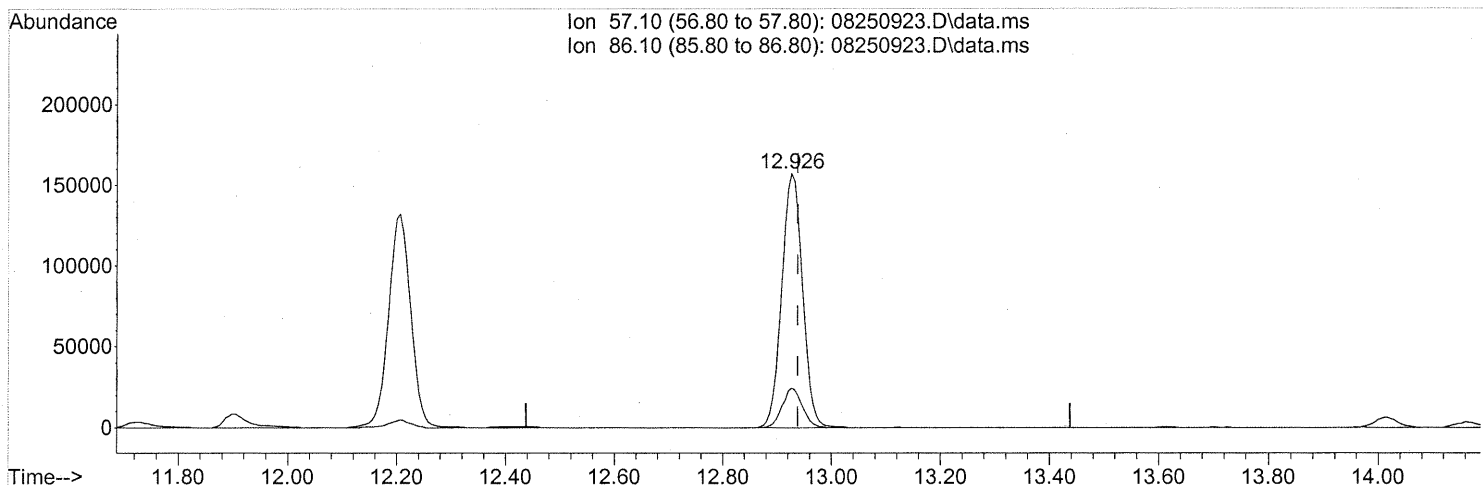
response 89450

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	76.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(31) n-Hexane (T)  
 12.926min (-0.011) 9.77ng  
 response 415144

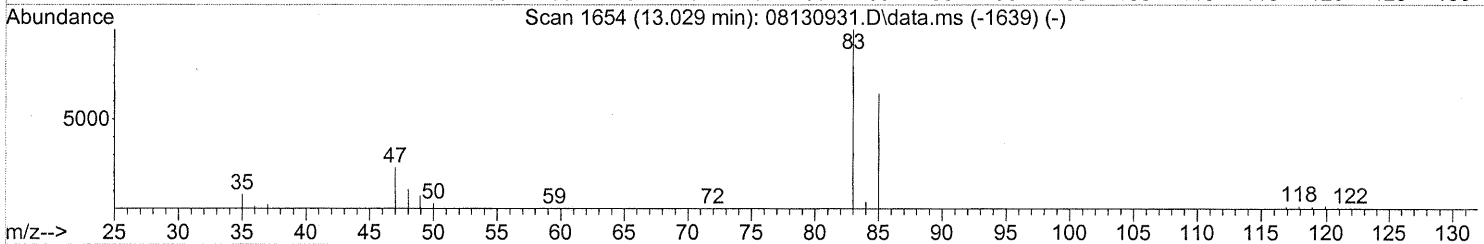
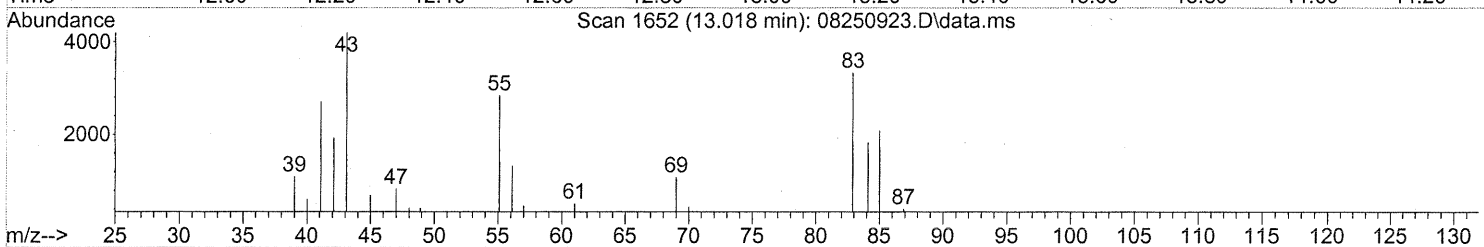
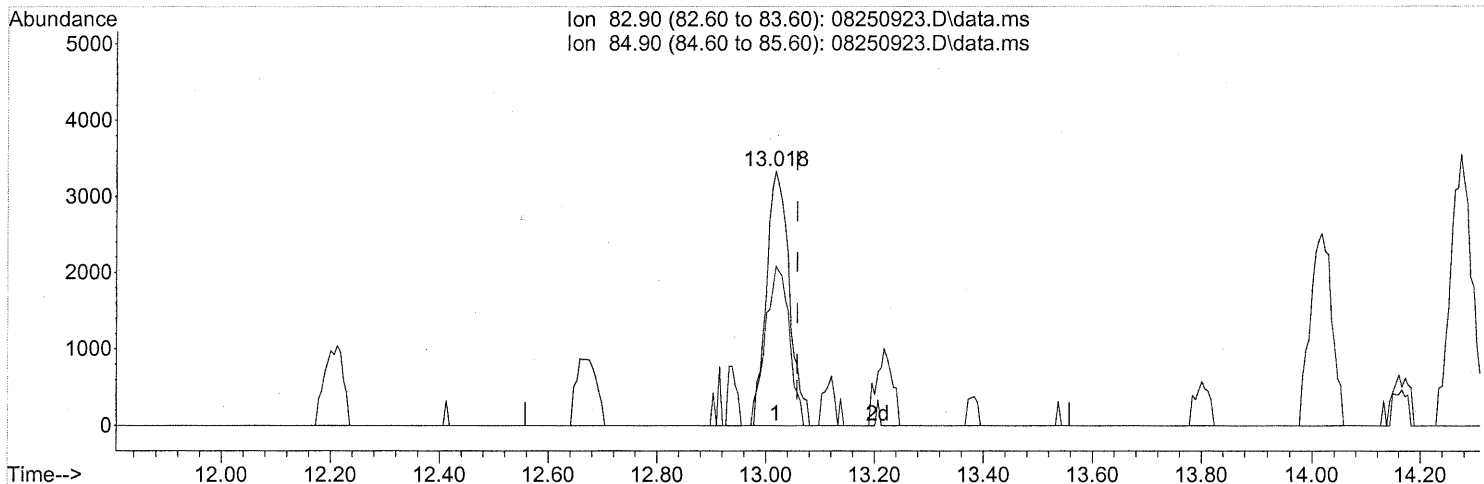
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	14.88
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 0.27ng

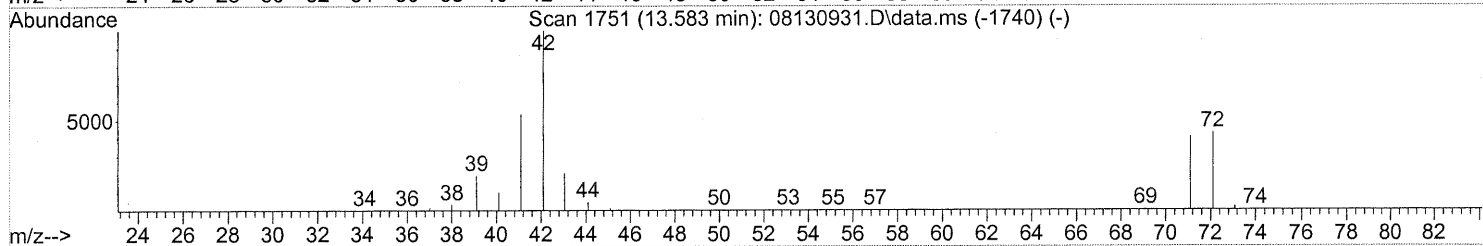
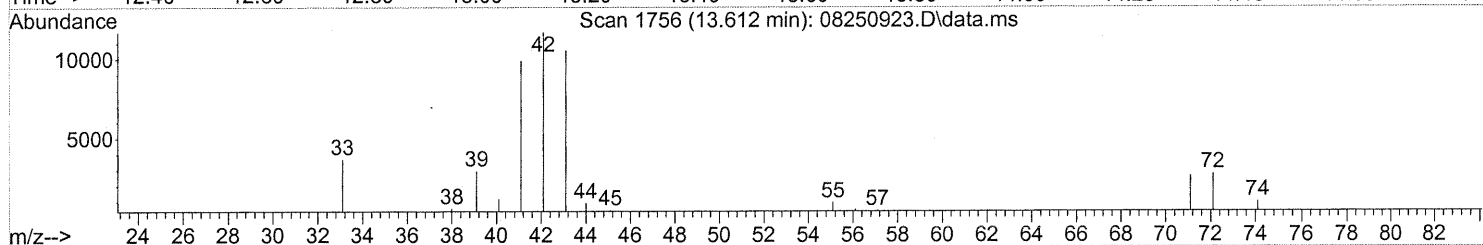
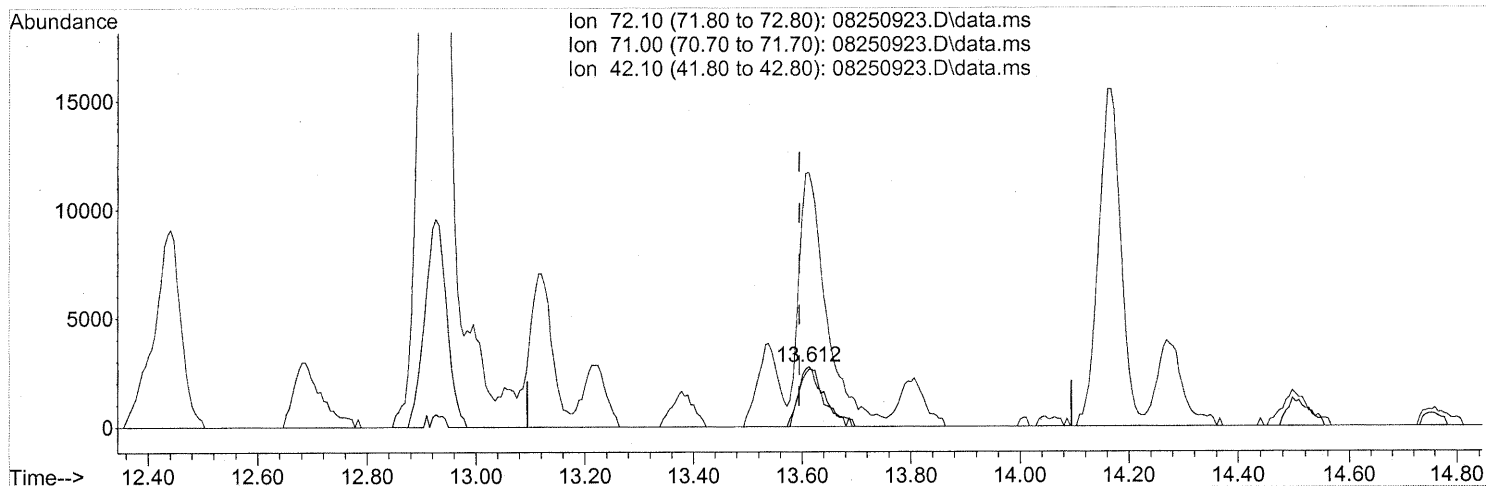
response 9750

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	65.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.612min (+0.017) 0.66ng

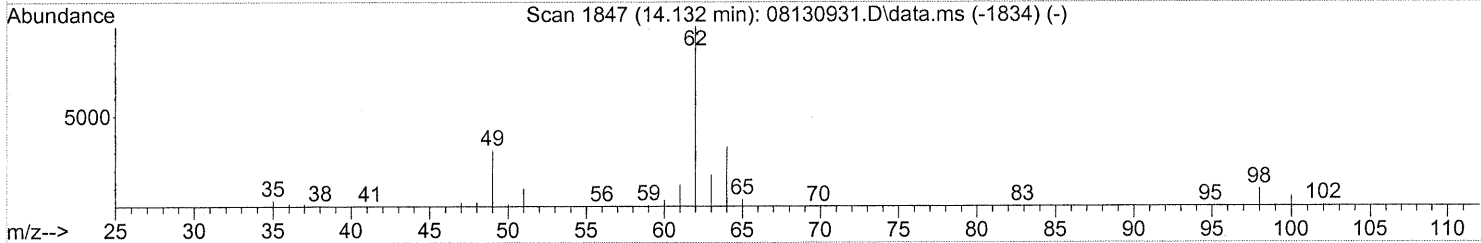
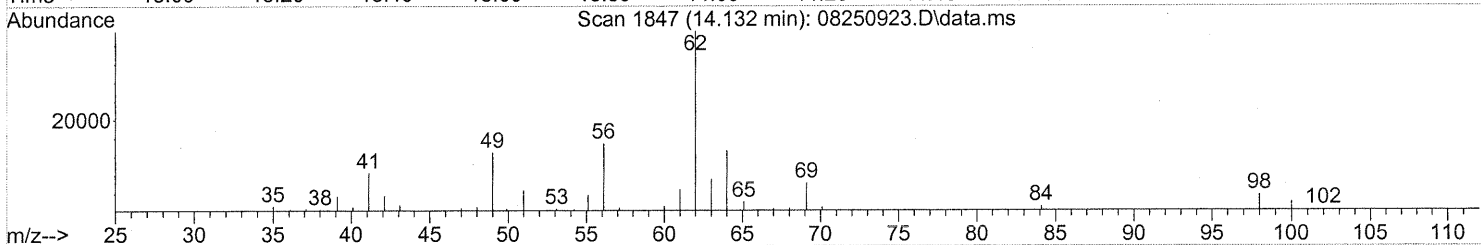
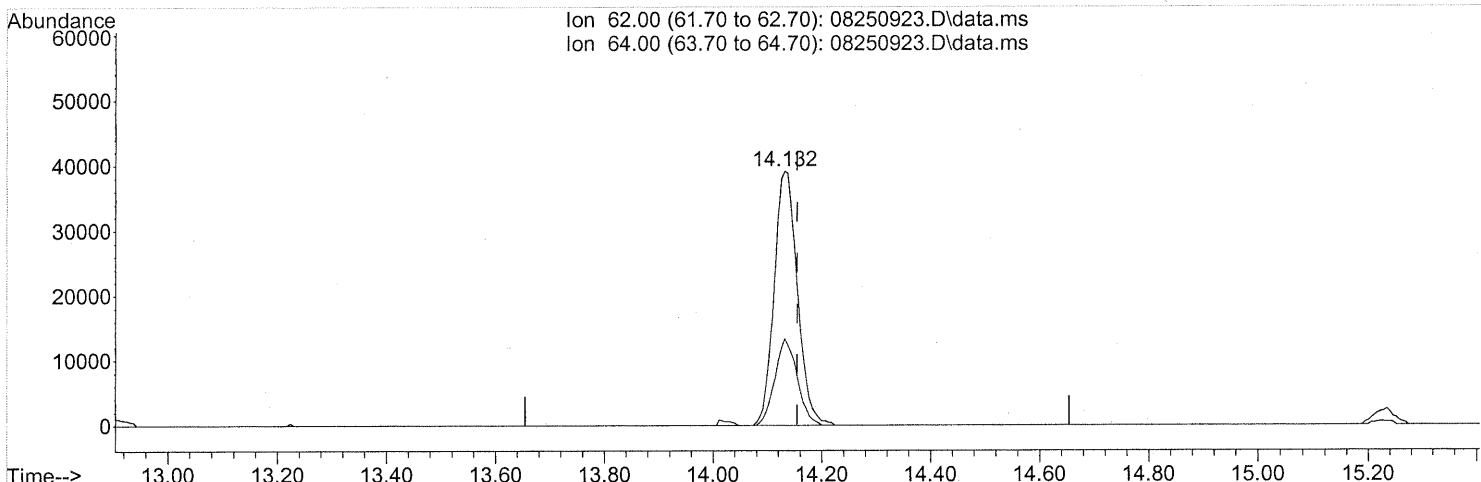
response 9163

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	89.32
42.10	206.50	456.37#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(36) 1,2-Dichloroethane (T)

14.132min (-0.023) 4.23ng

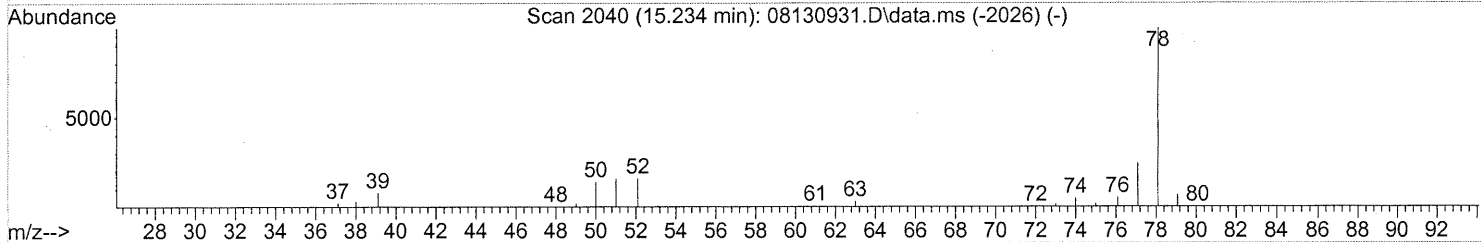
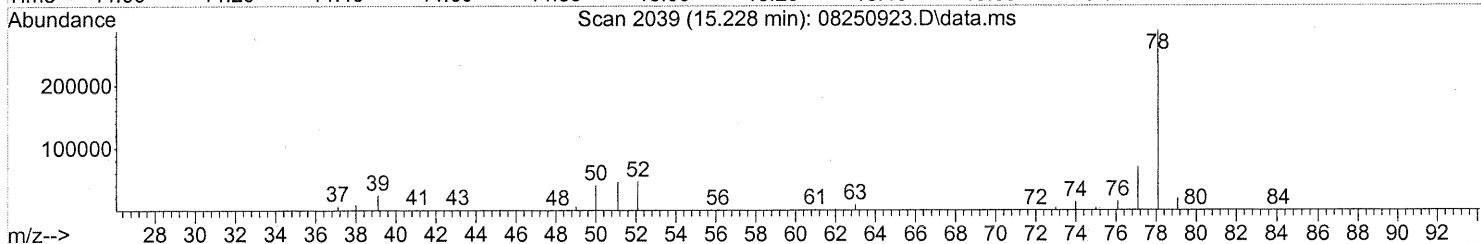
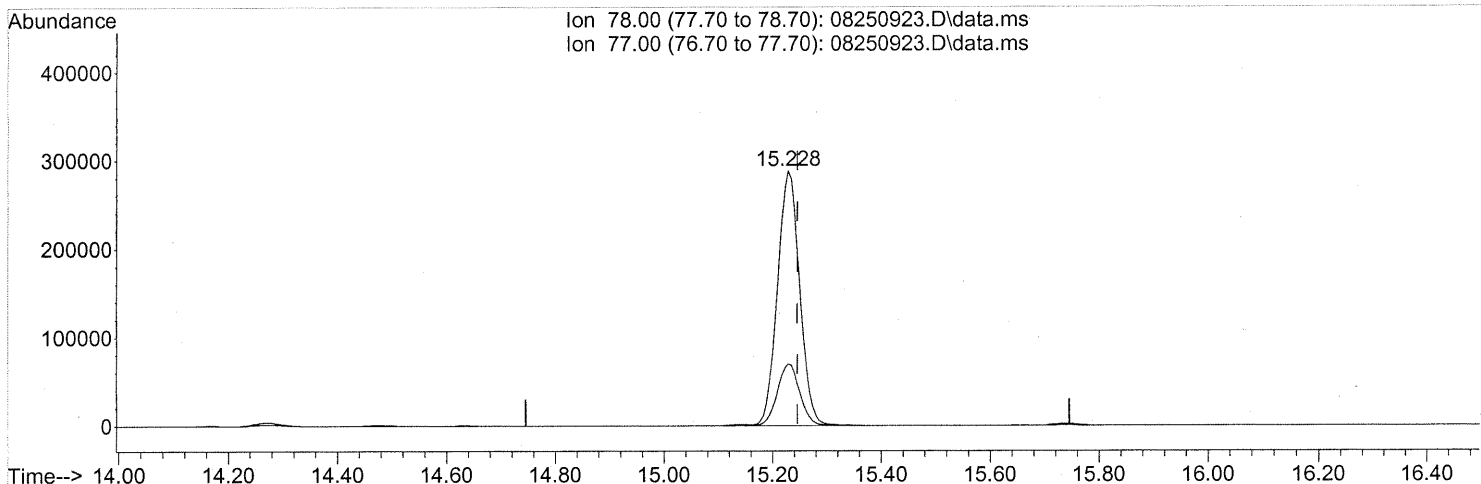
response 115065

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	32.67
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(41) Benzene (T)

15.228min (-0.017) 8.75ng

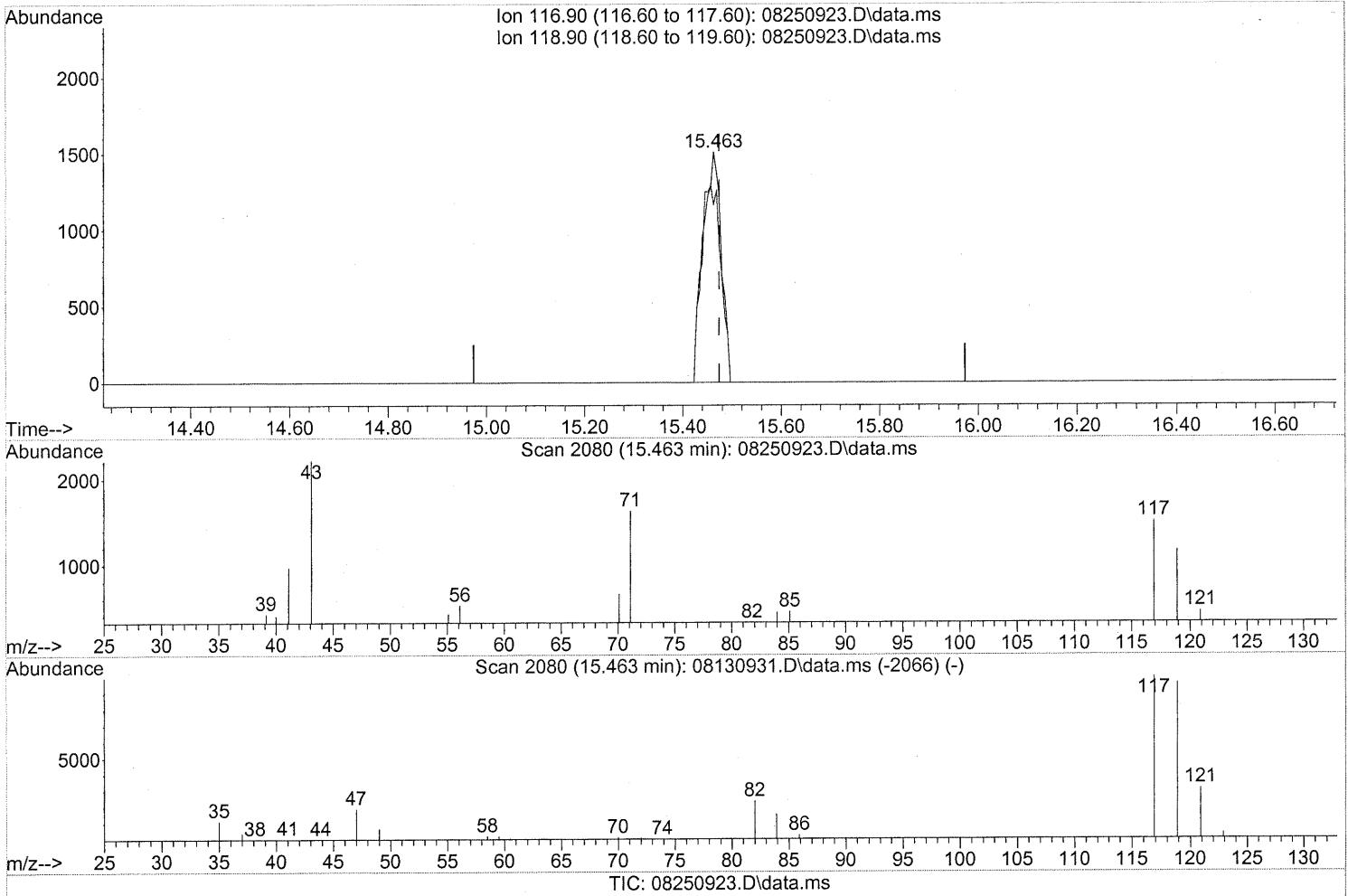
response 818096

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(42) Carbon Tetrachloride (T)

15.463min (-0.011) 0.15ng

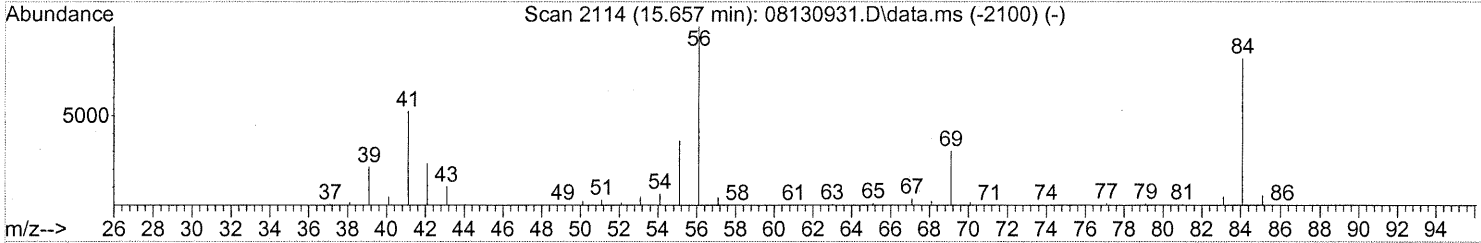
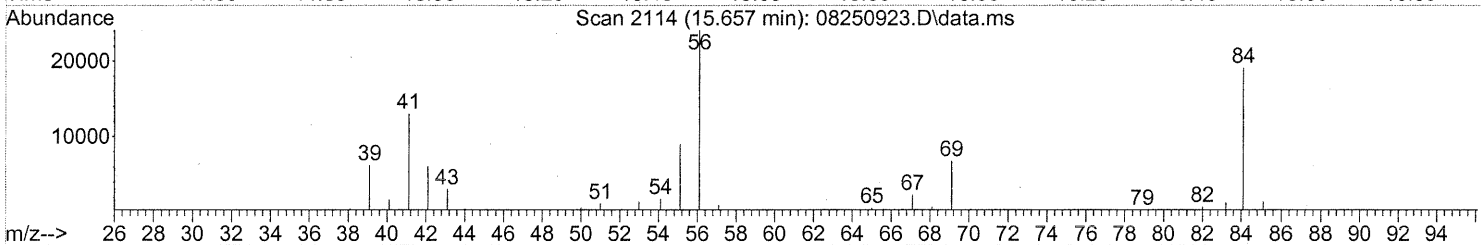
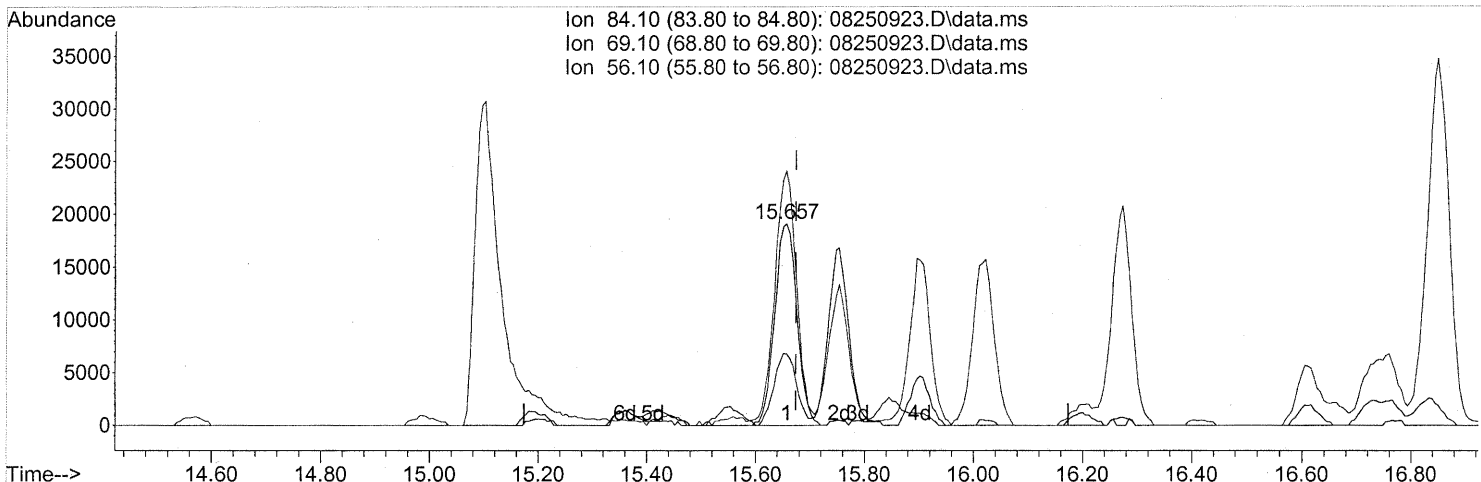
response 3815

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	95.39
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 1.49ng

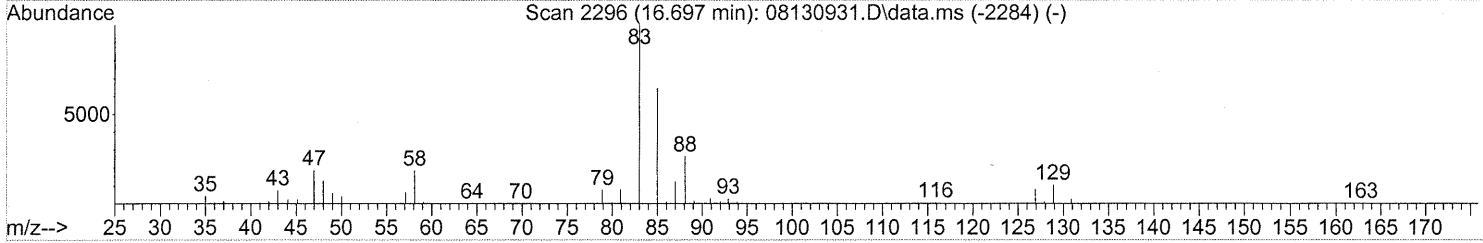
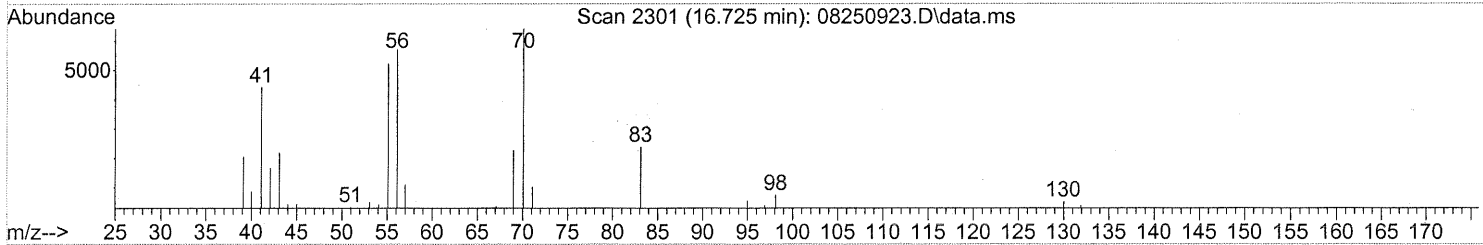
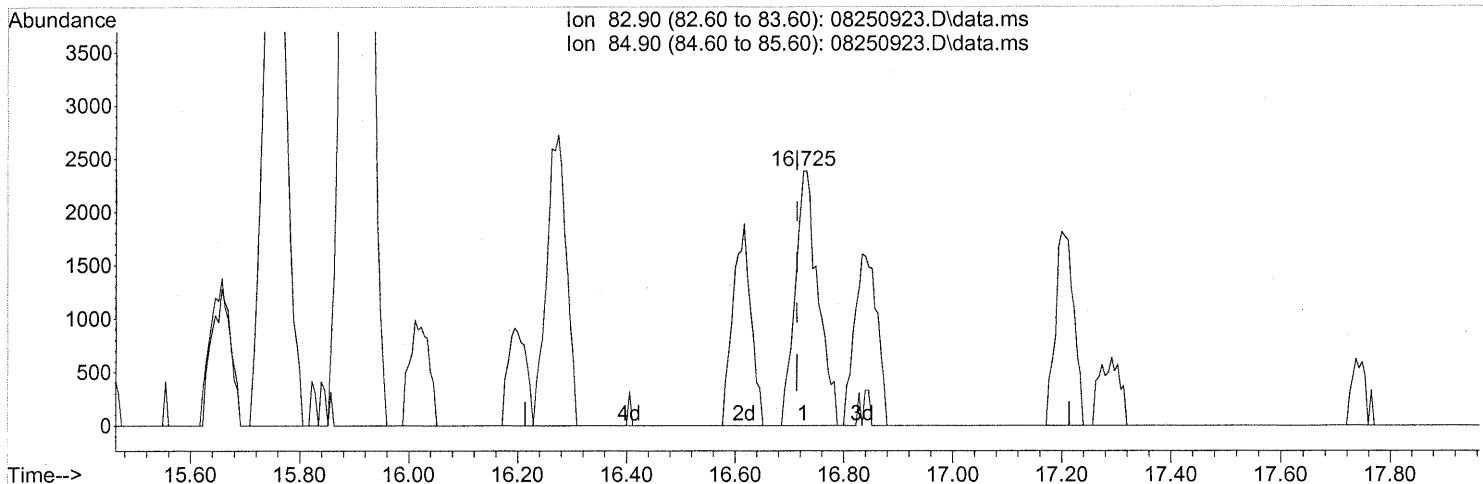
response 53963

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.58
56.10	107.30	125.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.725min (+0.011) 0.26ng

response 6992

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

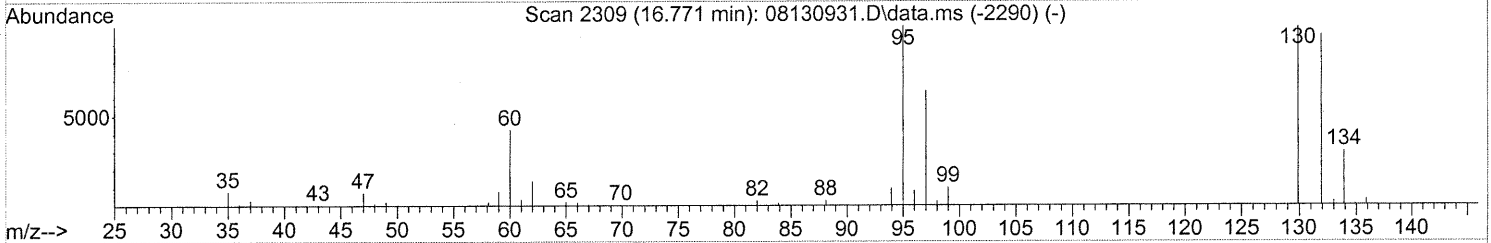
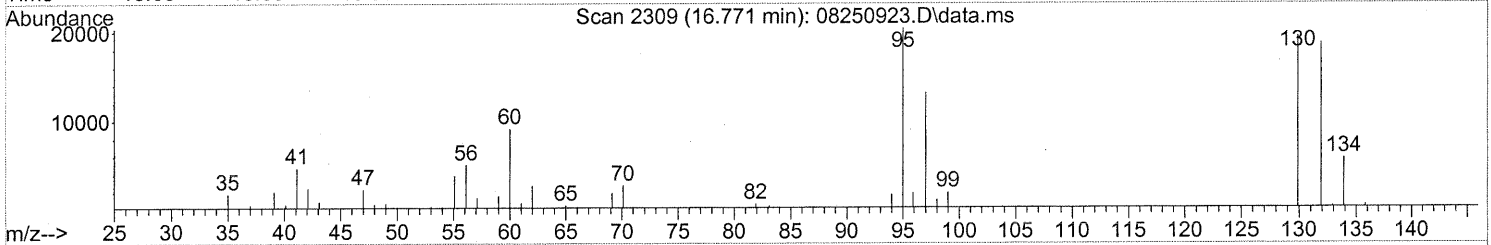
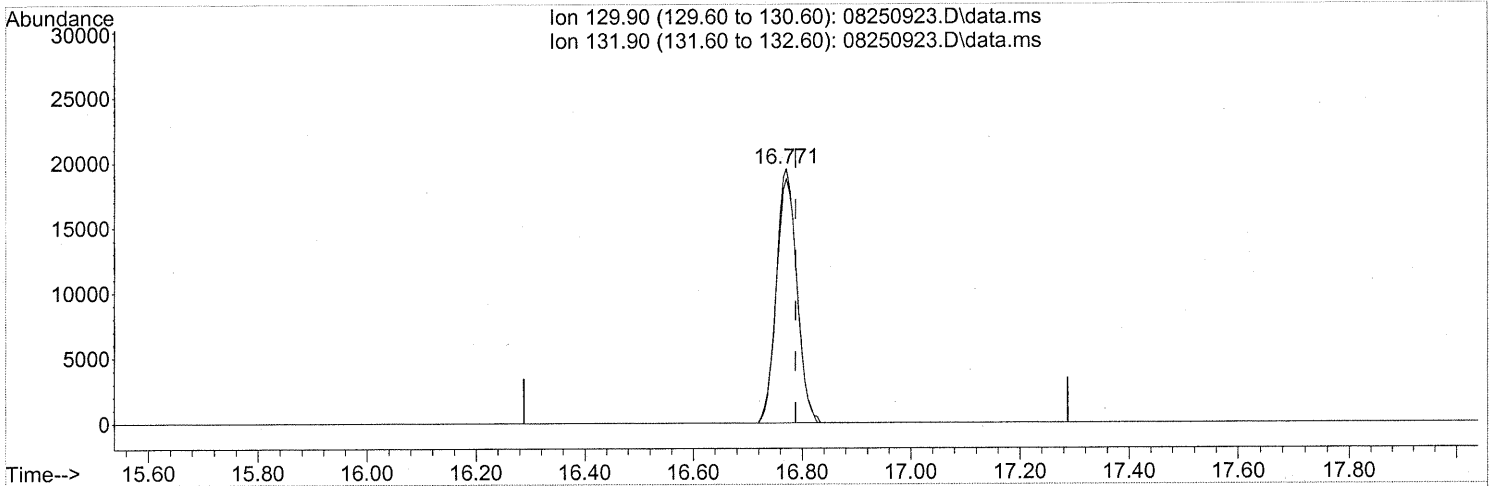
*FP Com 8/28/09*

*11/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(47) Trichloroethene (T)  
 16.771min (-0.017) 2.14ng  
 response 50819

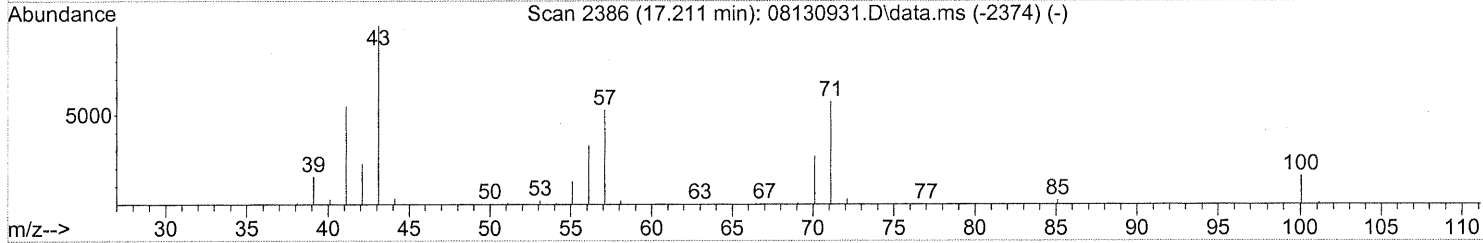
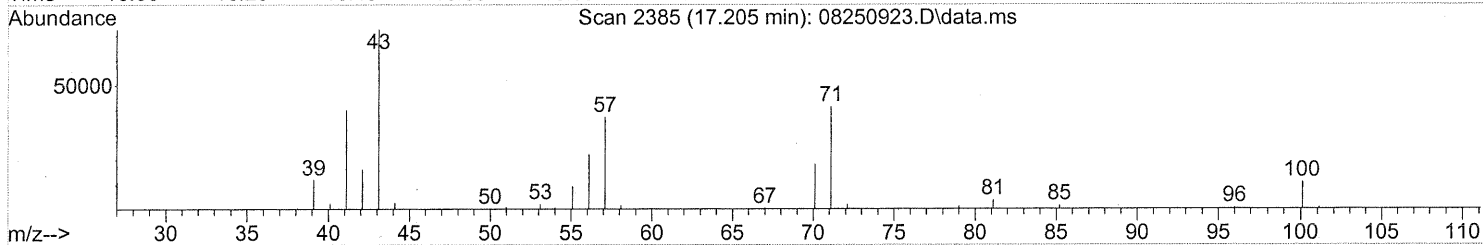
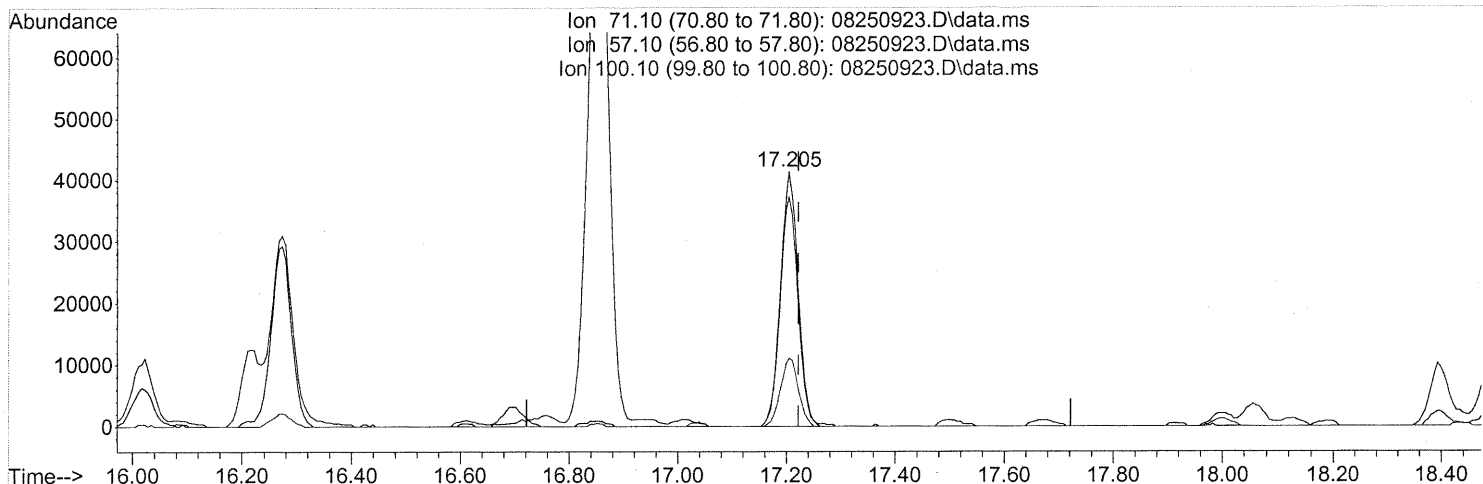
Ion	Exp%	Act%
129.90	100	100
131.90	95.60	96.77
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

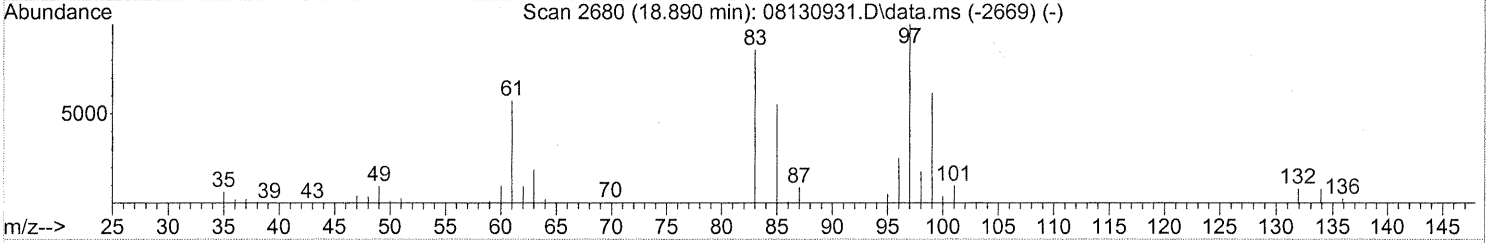
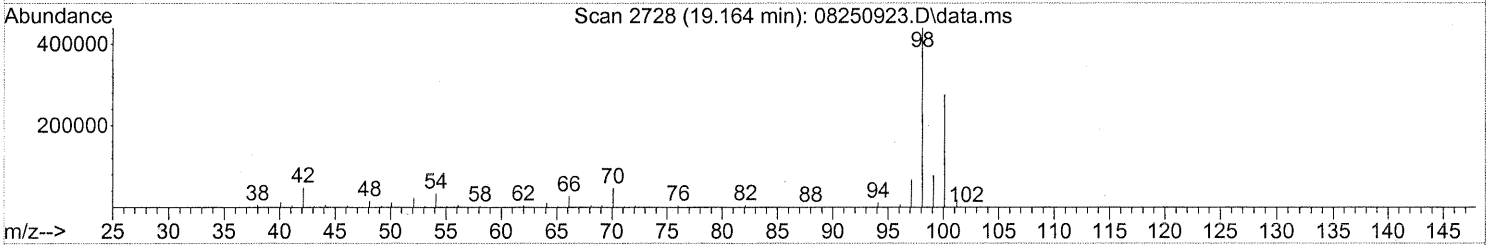
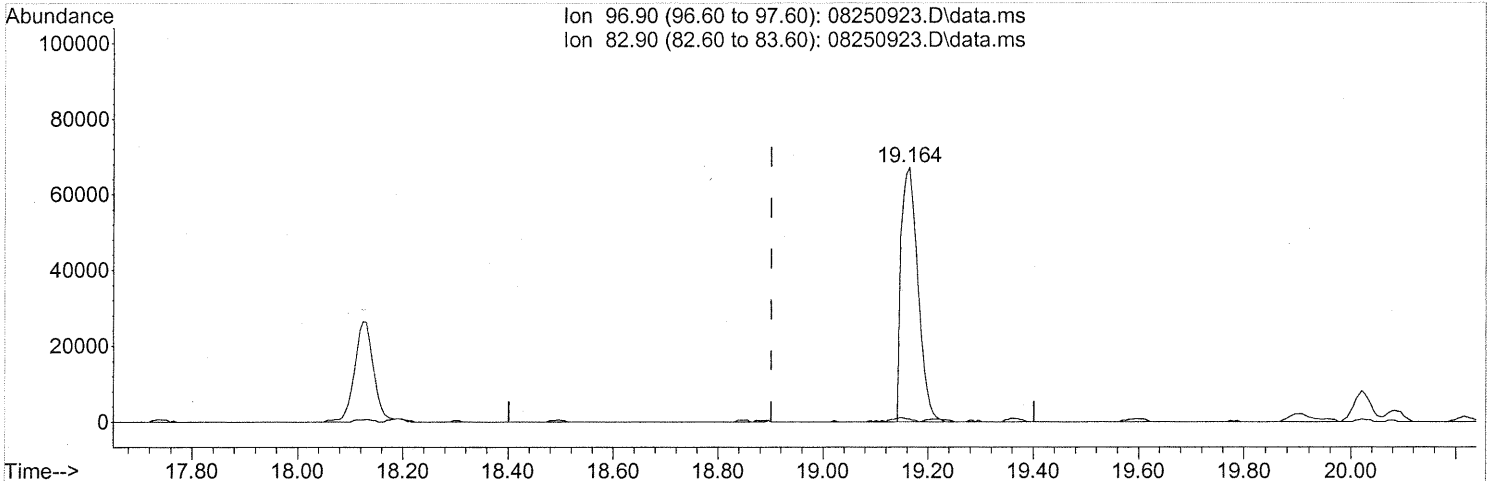
(51) n-Heptane (T)  
 17.205min (-0.017) 3.75ng  
 response 93265

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	92.10
100.10	30.70	27.05
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

19.164min (+0.263) 7.46ng

response 148995

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.60#
0.00	0.00	0.00
0.00	0.00	0.00

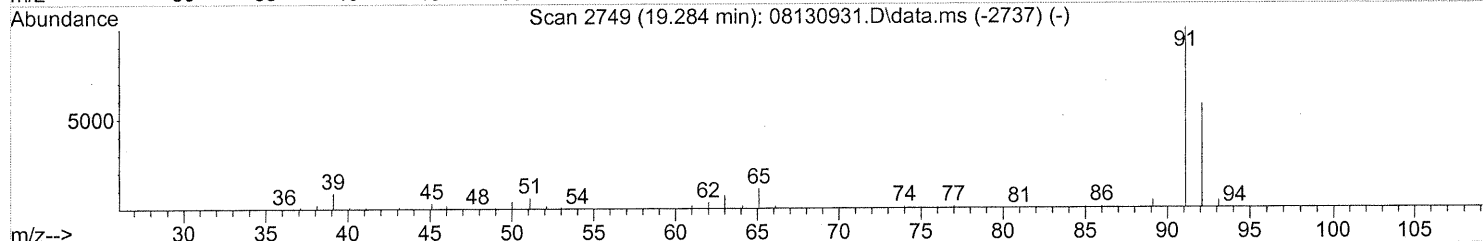
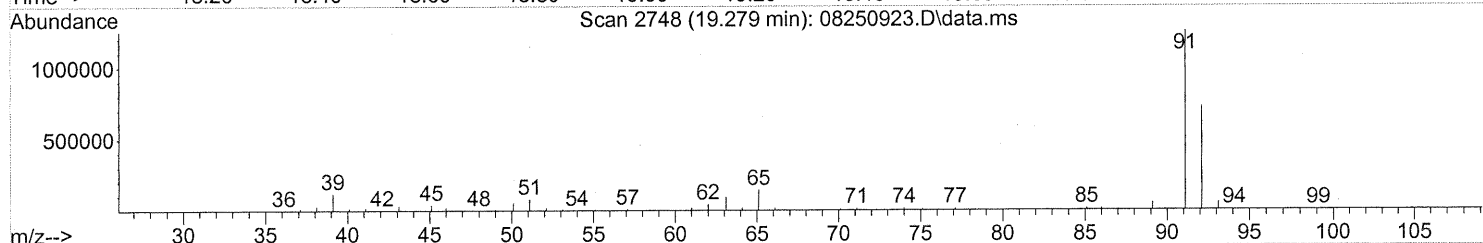
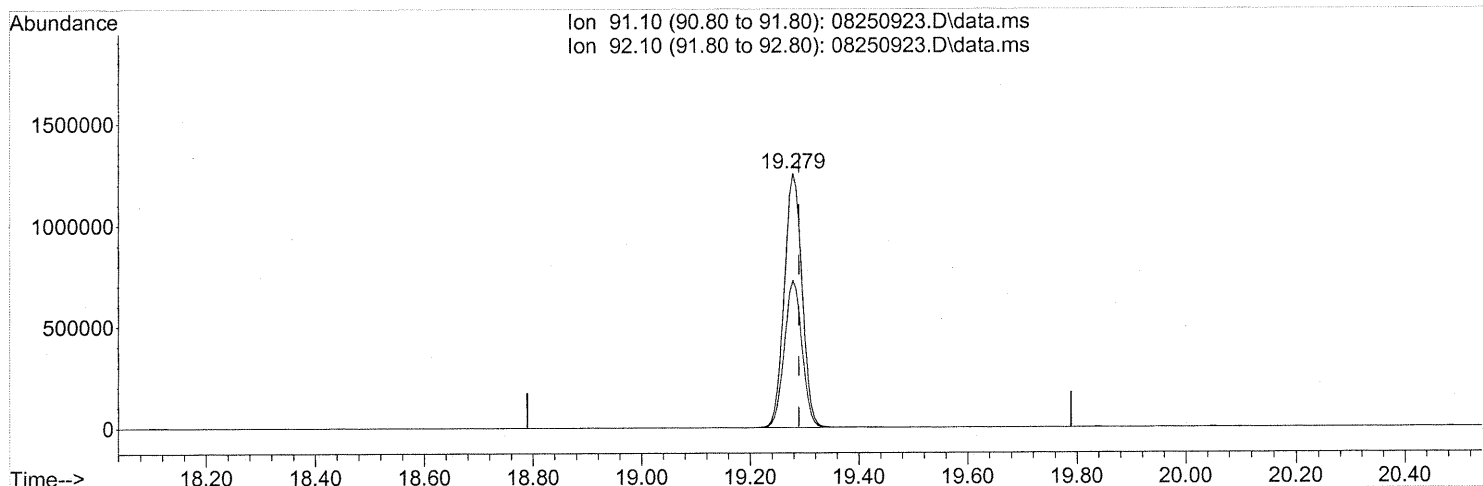
*FP em 8/28/09*

*KK 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 29.79ng

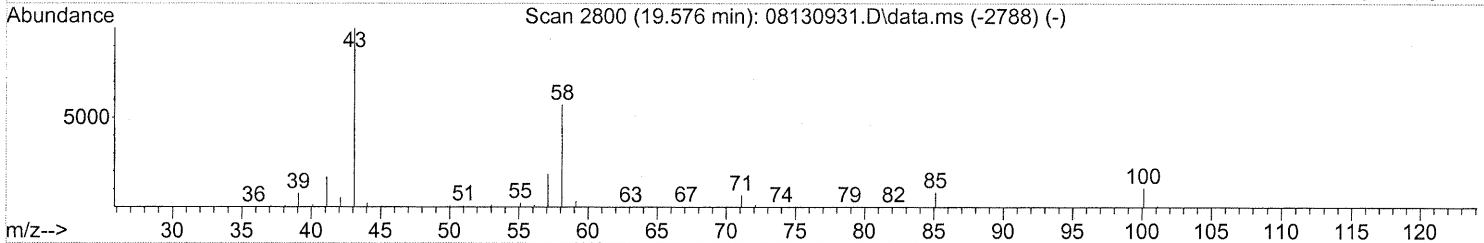
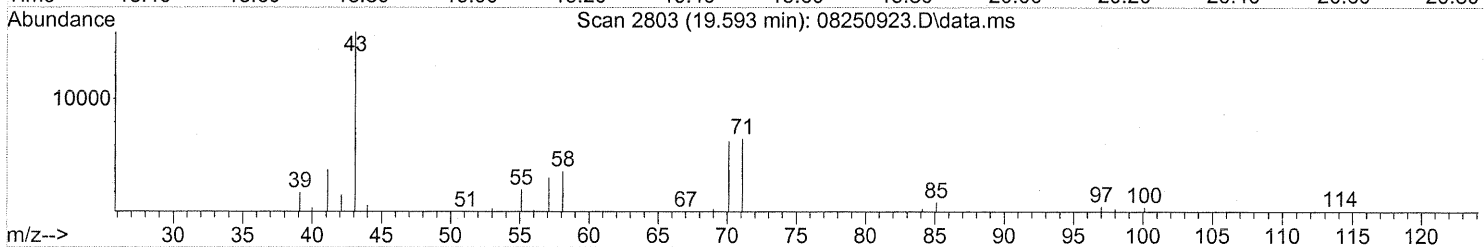
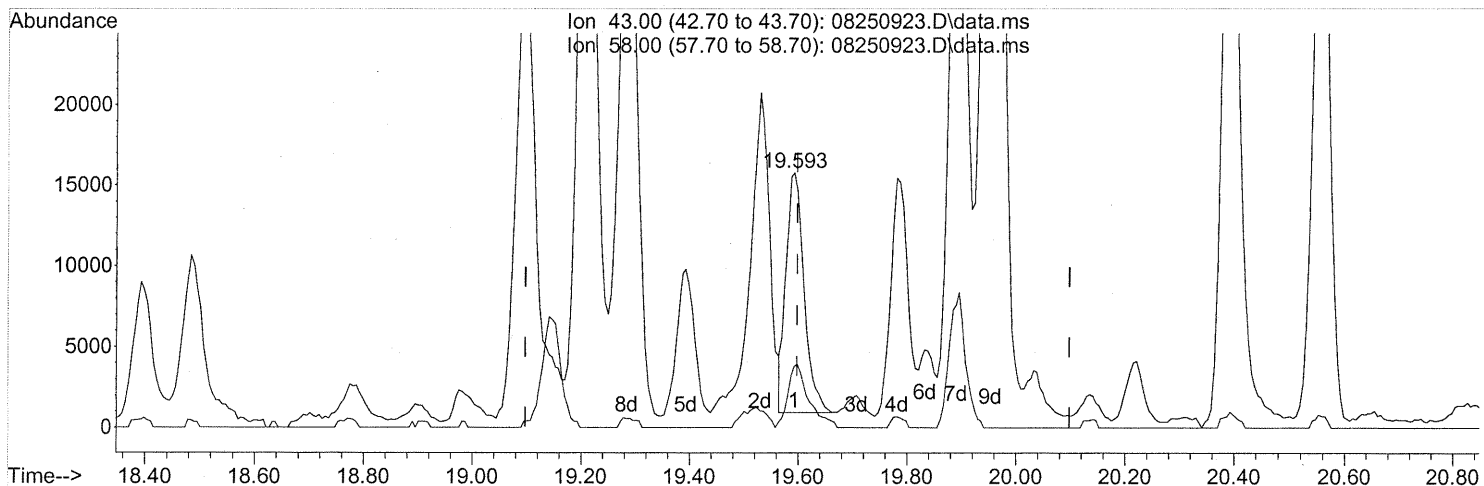
response 2831074

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

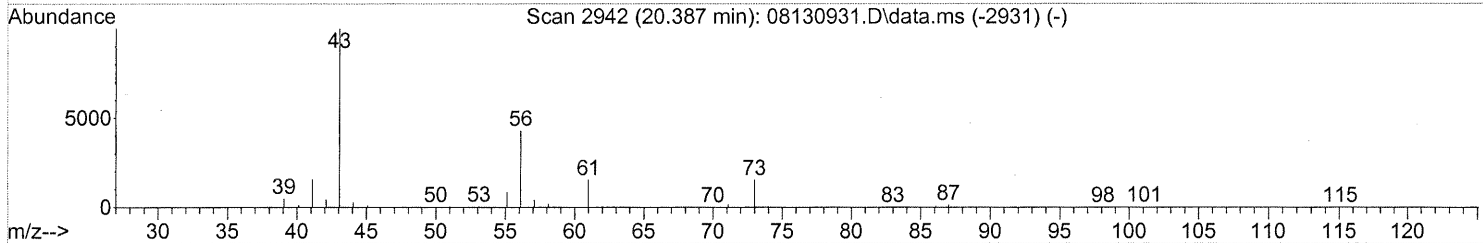
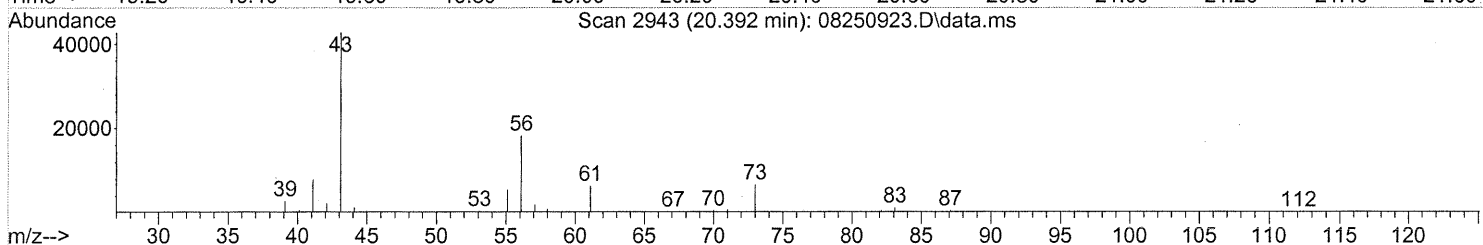
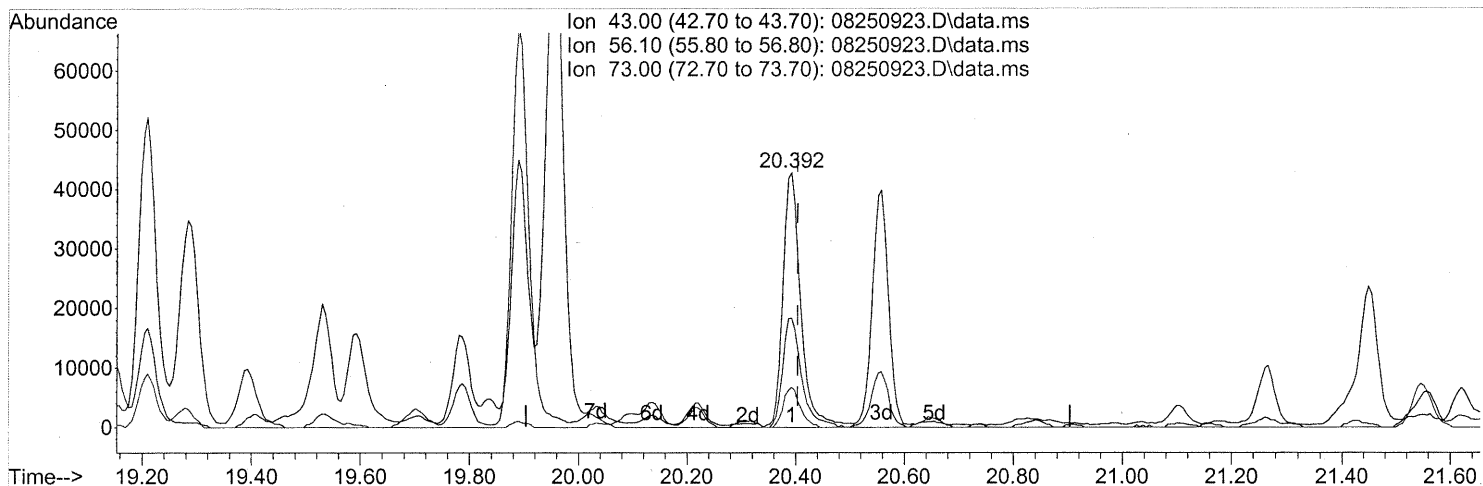
(59) 2-Hexanone (T)  
 19.593min (-0.005) 0.70ng  
 response 34368

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	30.14#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(62) n-Butyl Acetate (T)

20.392min (-0.012) 1.81ng

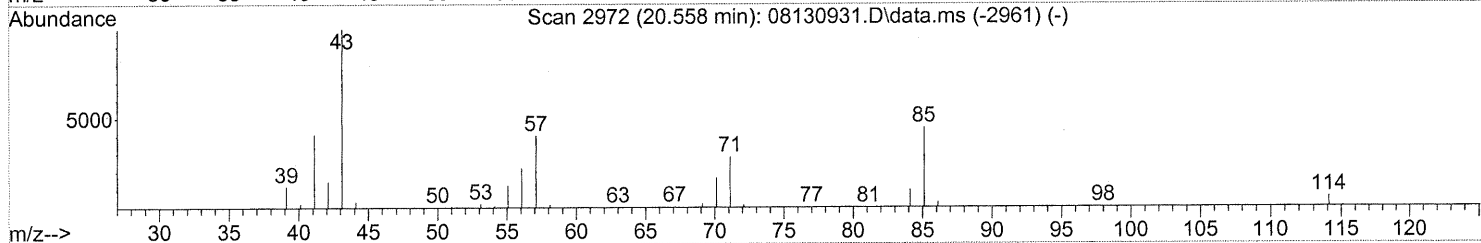
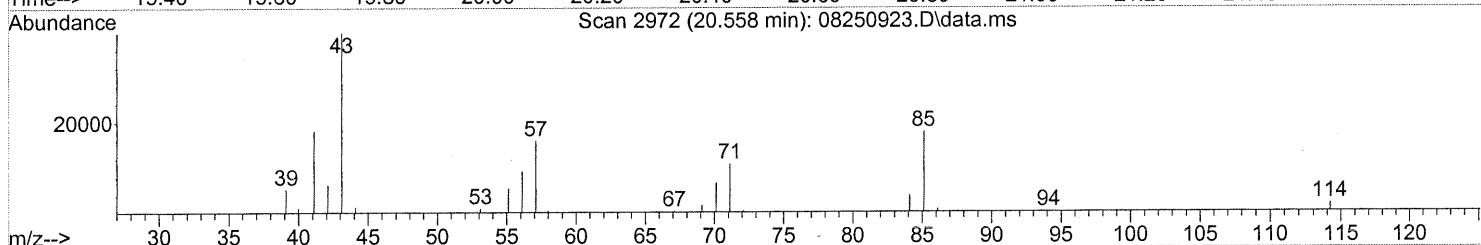
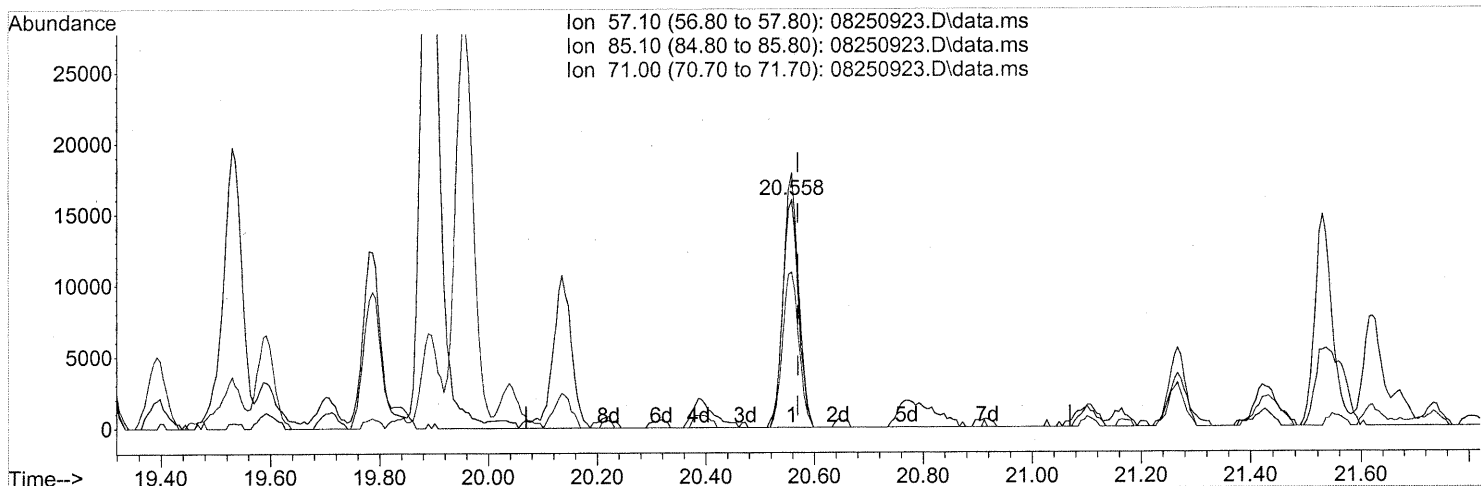
response 97532

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	45.14
73.00	16.90	14.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.52ng

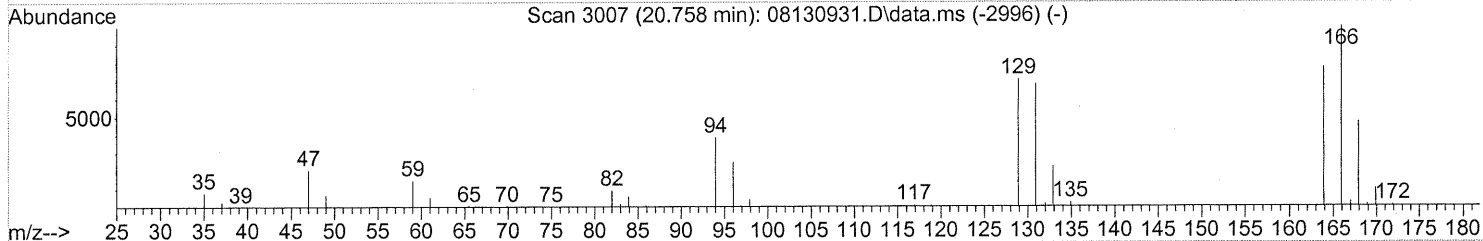
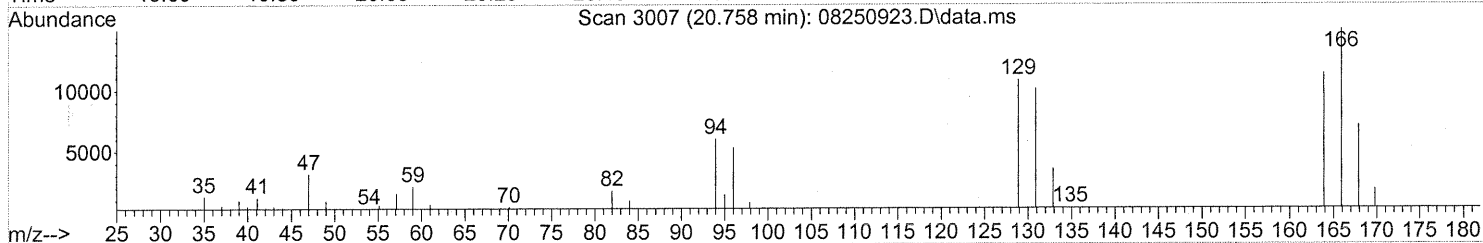
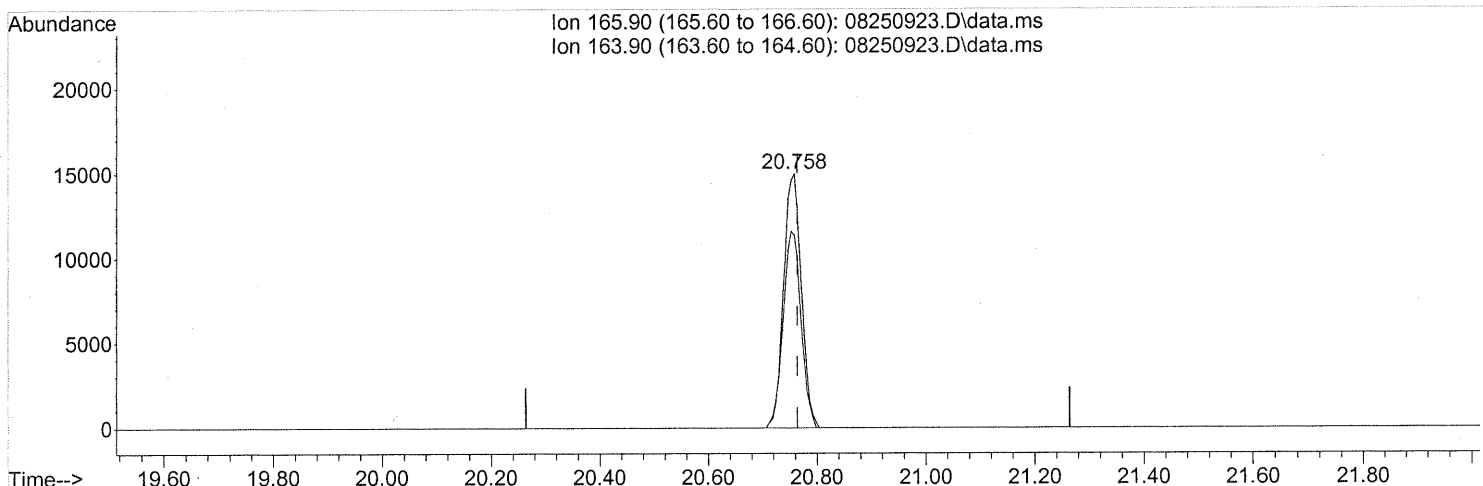
response 32248

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	108.64
71.00	75.10	69.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(64) Tetrachloroethene (T)

20.758min (-0.006) 1.44ng

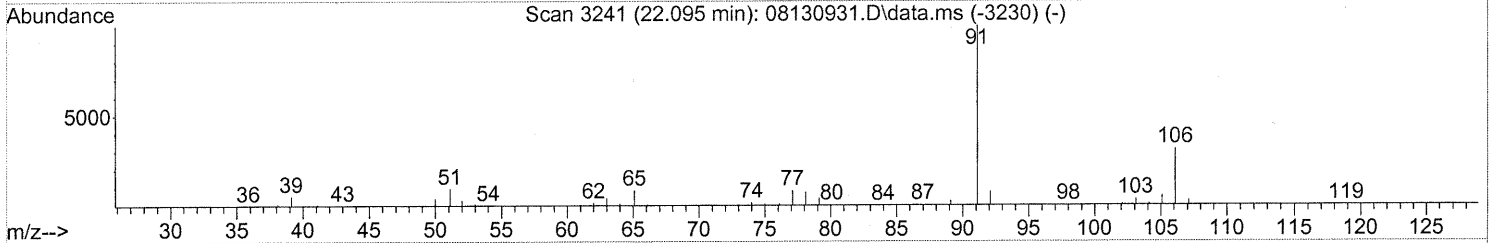
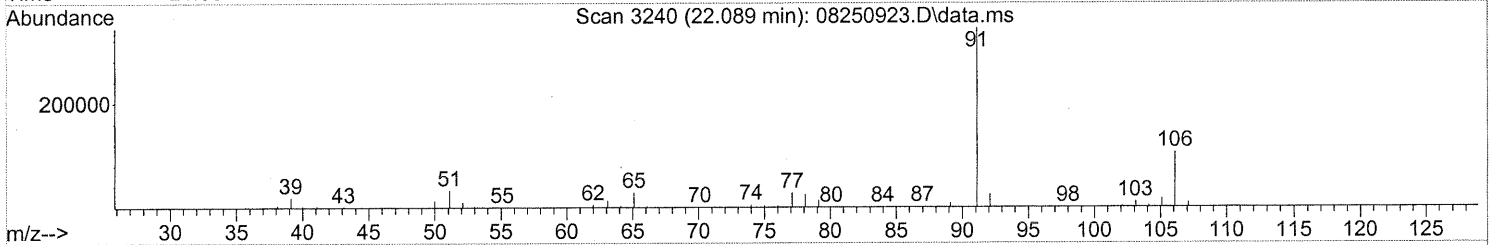
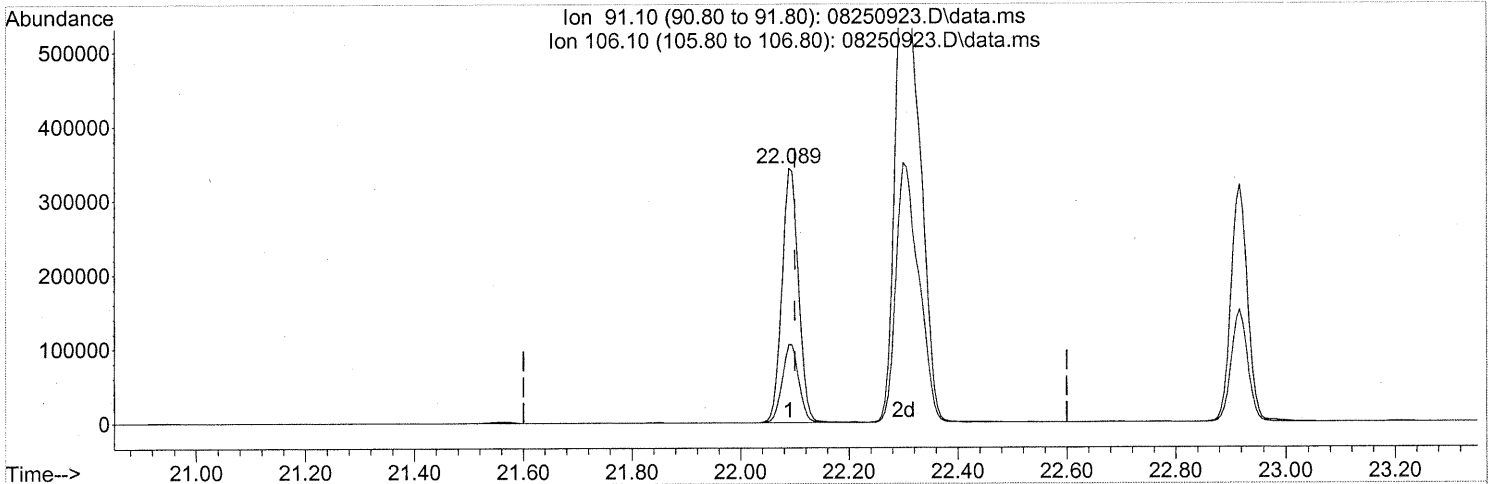
response 33981

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	77.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(66) Ethylbenzene (T)  
 22.089min (-0.011) 7.06ng  
 response 724012

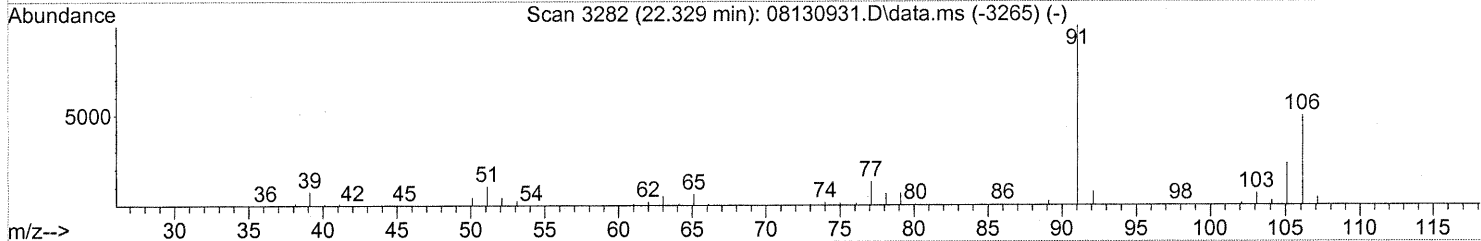
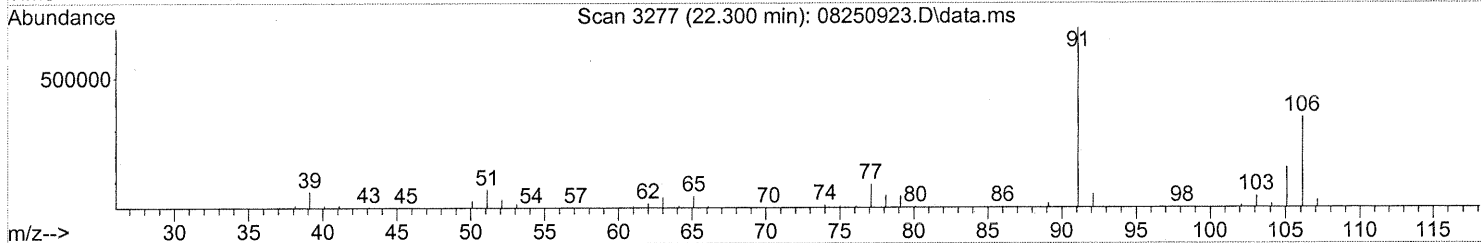
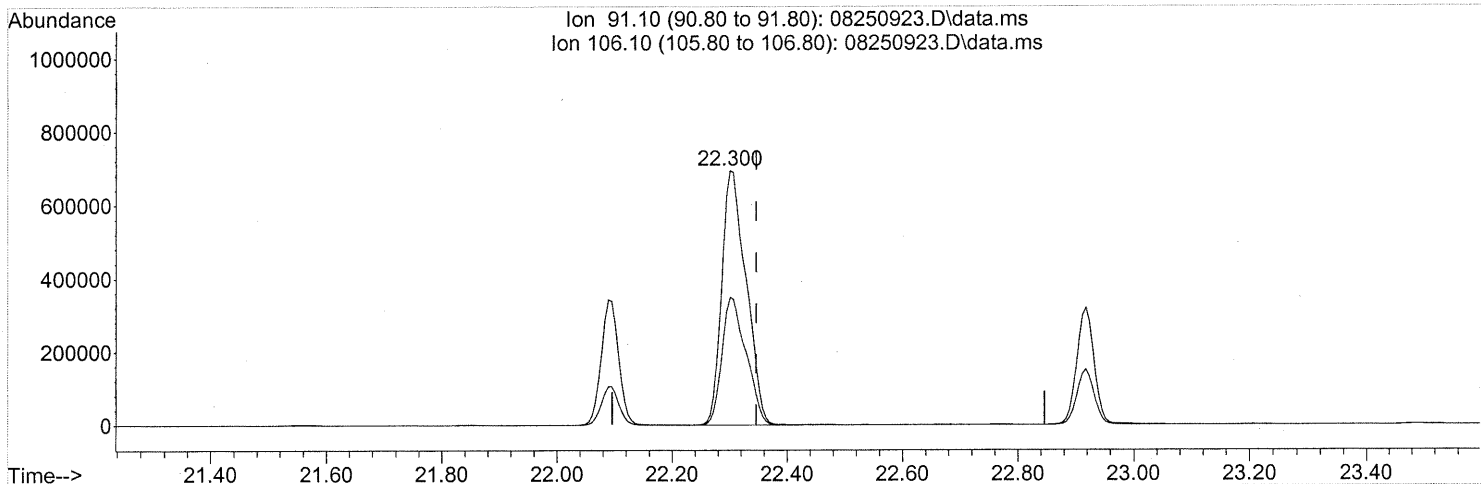
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.70
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

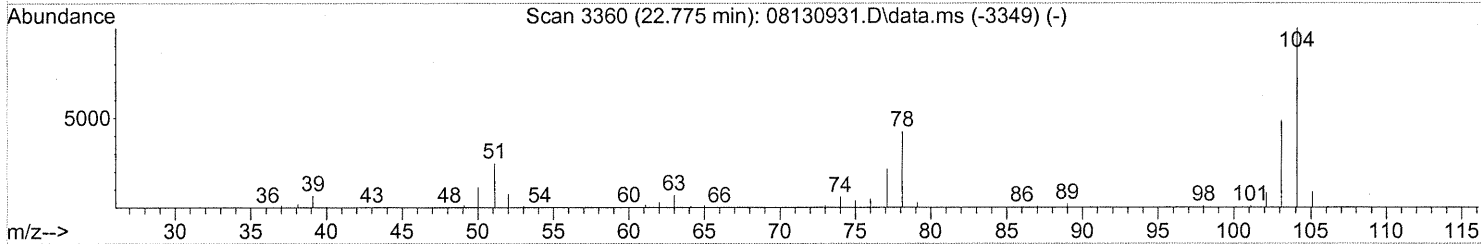
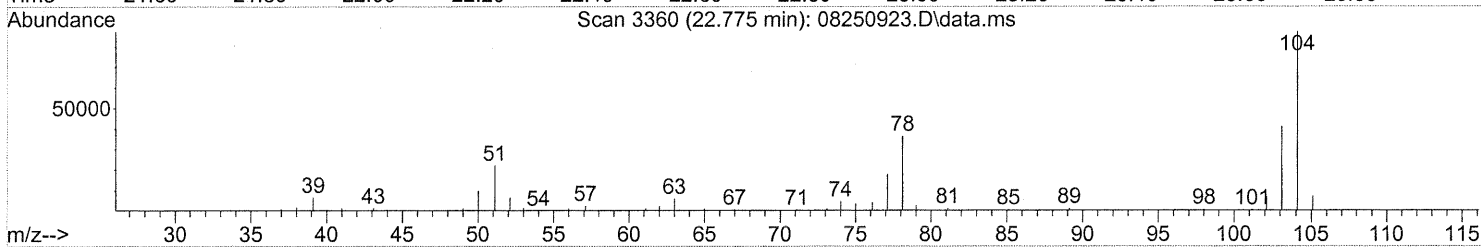
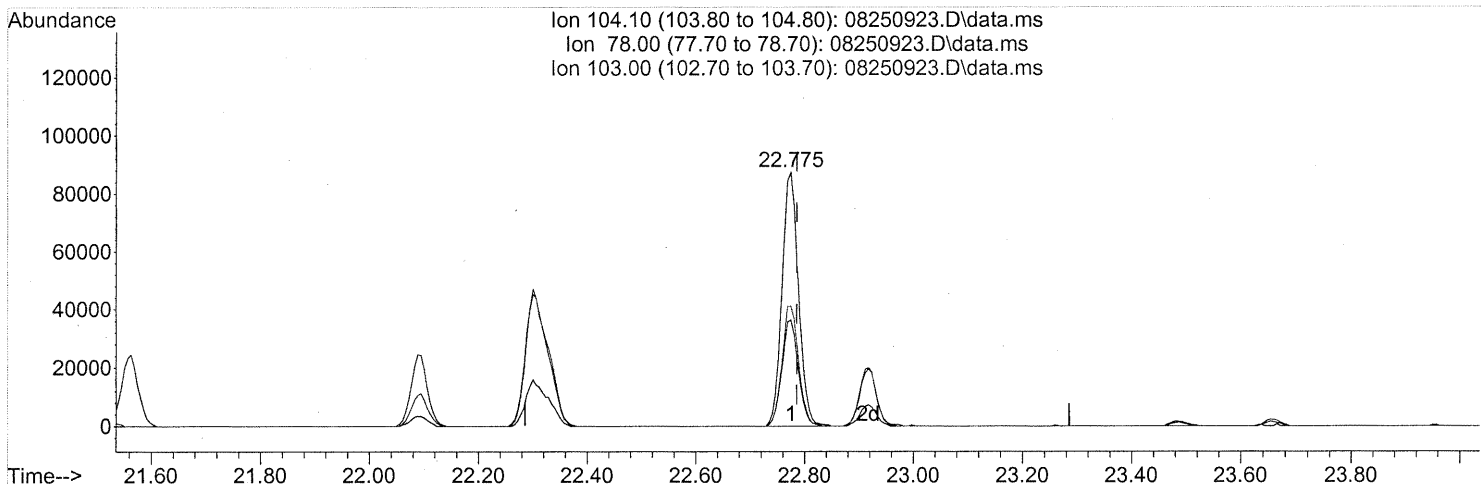
(67) m- & p-Xylenes (T)  
 22.300min (-0.046) 25.17ng  
 response 2048086

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.76
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

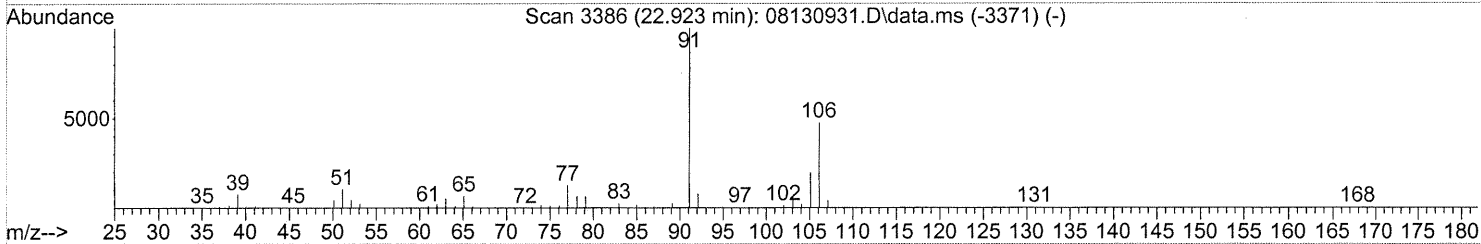
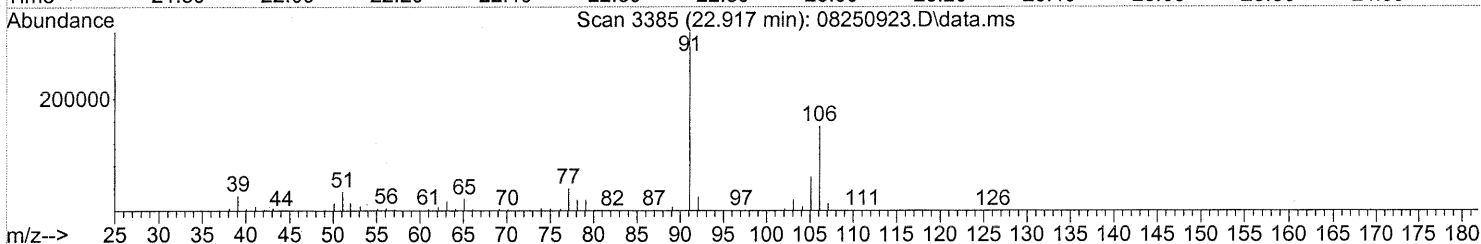
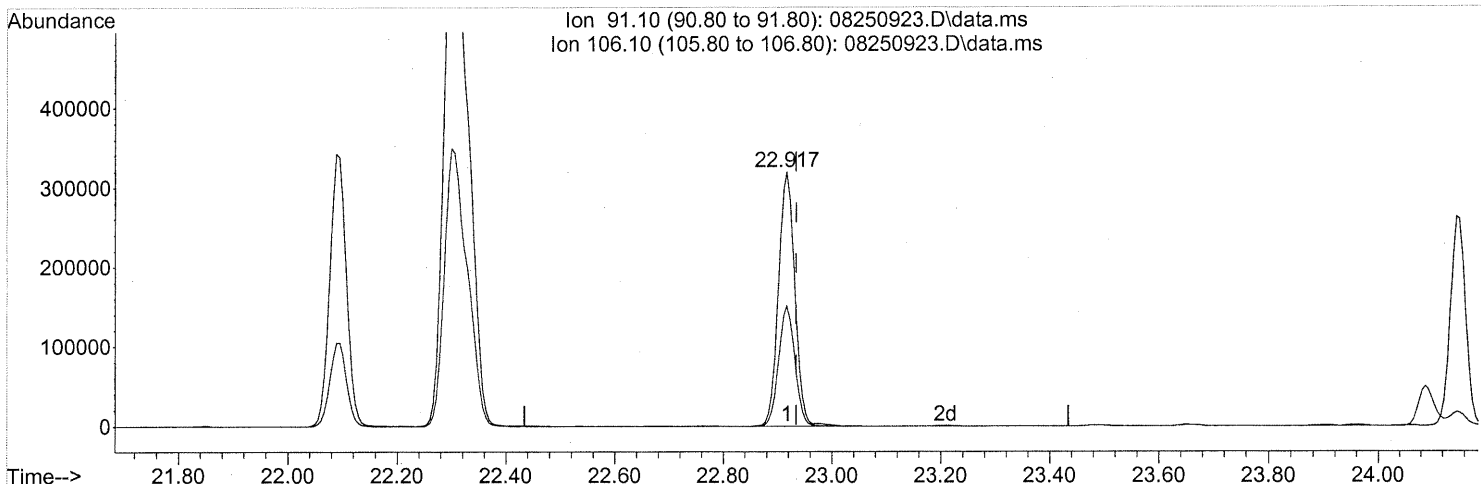
(69) Styrene (T)  
 22.775min (-0.011) 3.06ng  
 response 184025

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.64
103.00	48.70	47.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.17ng

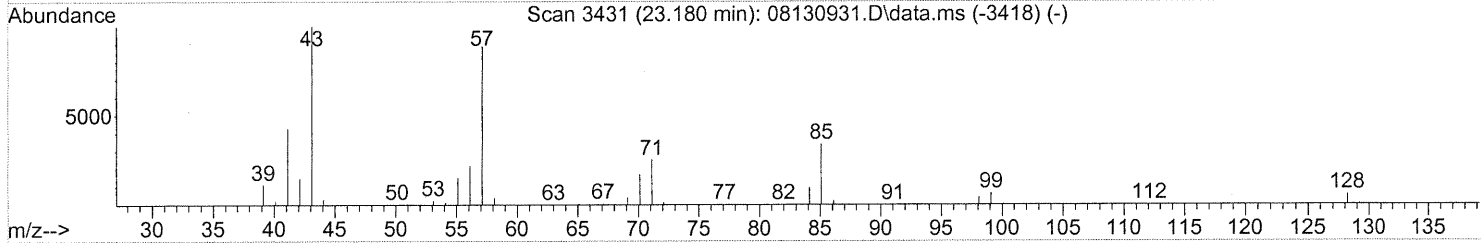
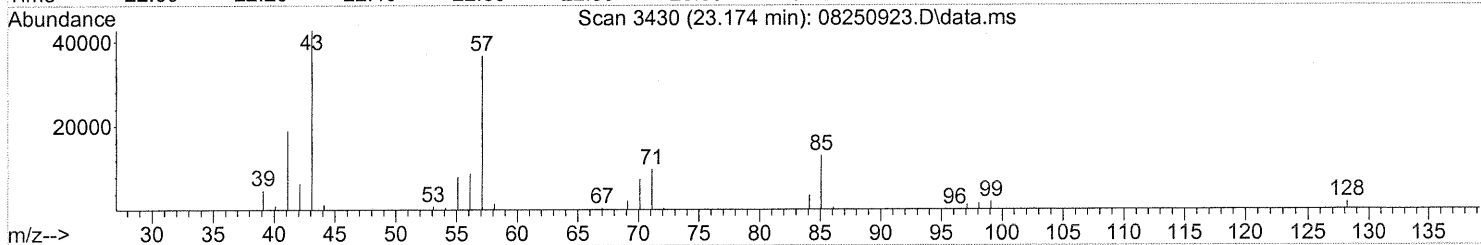
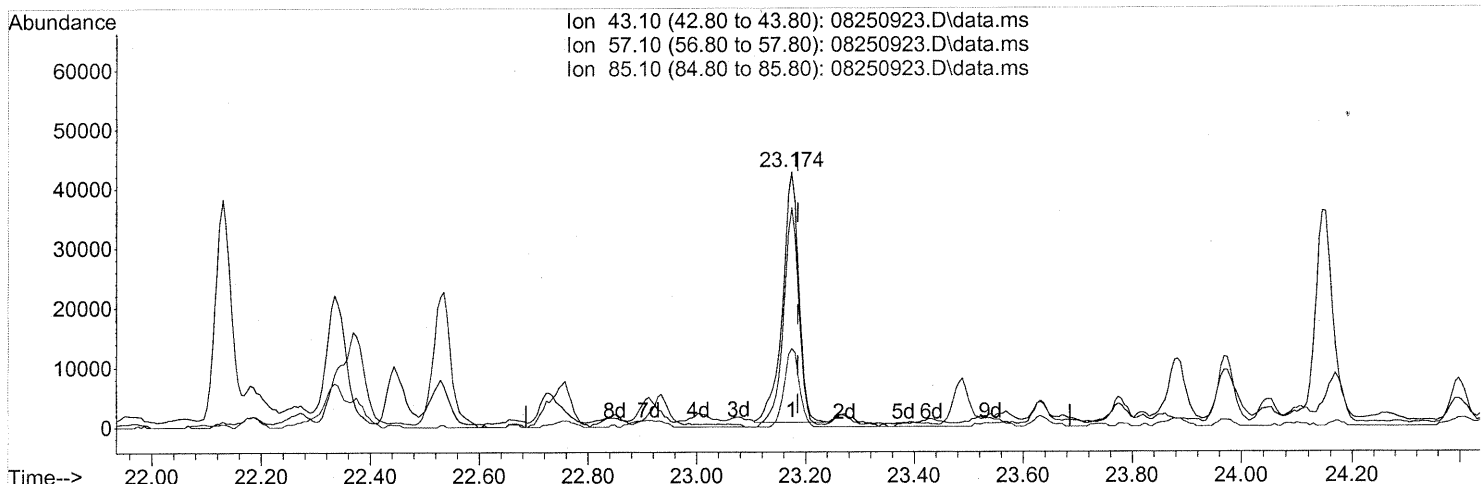
response 668341

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



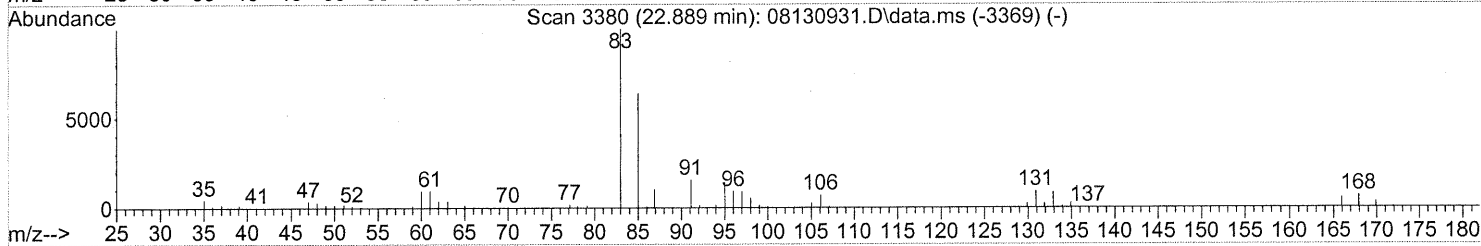
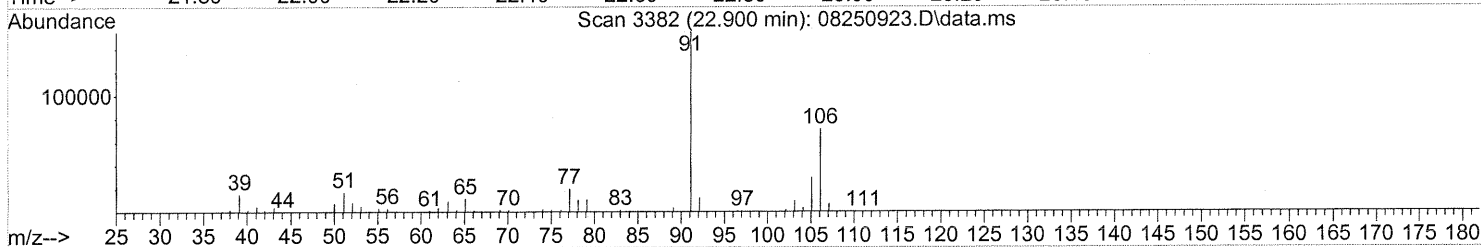
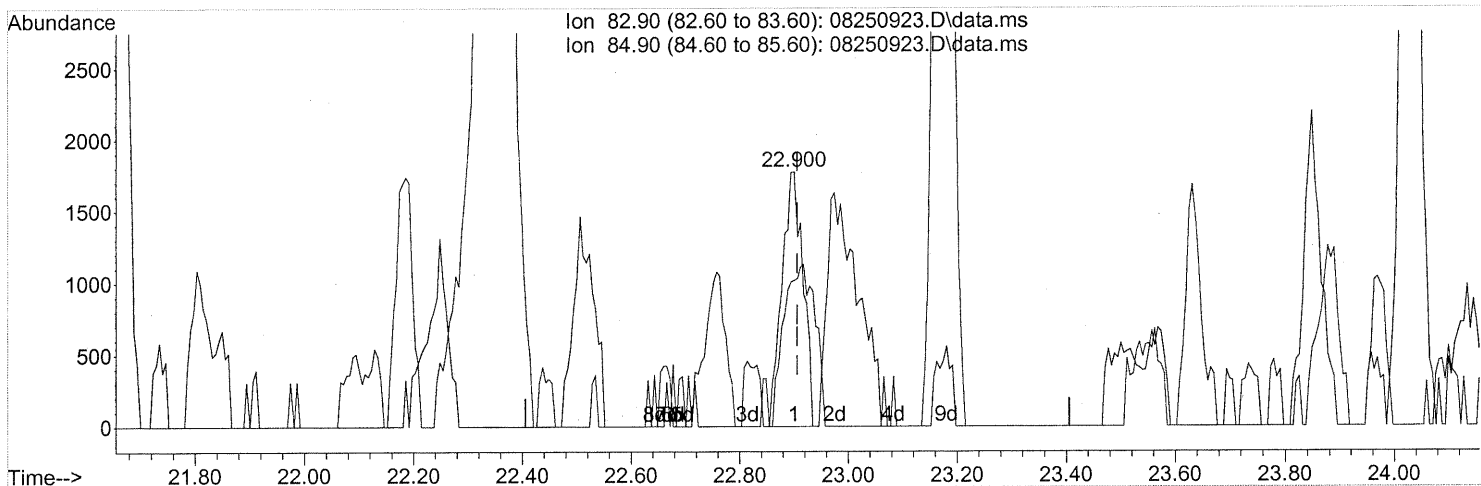
(71) n-Nonane (T)  
 23.174min (-0.011) 1.78ng  
 response 87512

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	83.87
85.10	38.80	28.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(72) 1,1,2,2-Tetrachloroethane (T)

22.900min (-0.006) 0.13ng

response 4746

Ion	Exp%	Act%
82.90	100	100
84.90	63.80	94.27#
0.00	0.00	0.00
0.00	0.00	0.00

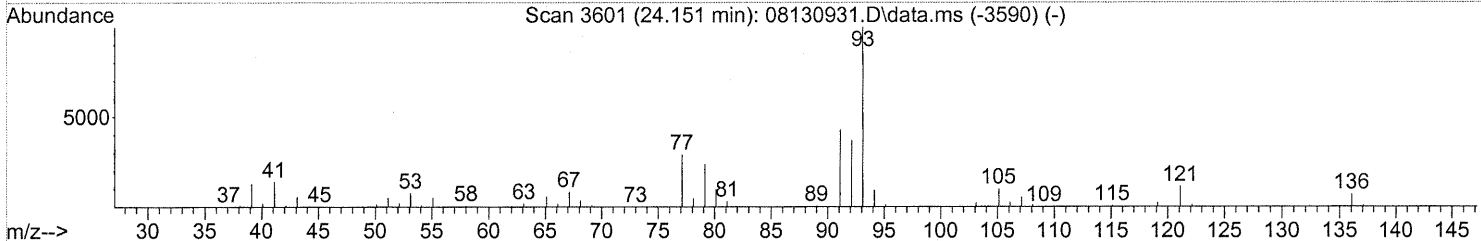
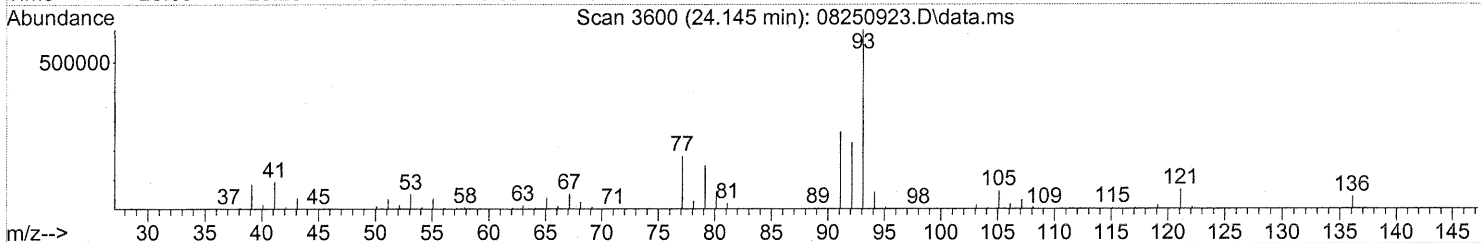
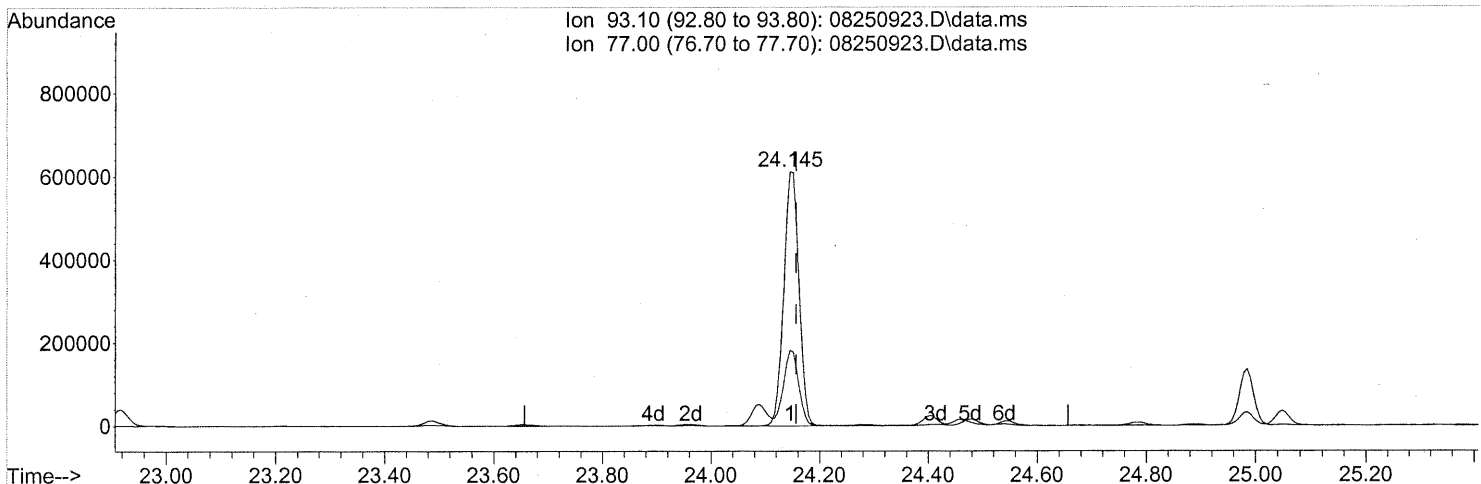
*FP em 8/28/09*

*kes/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

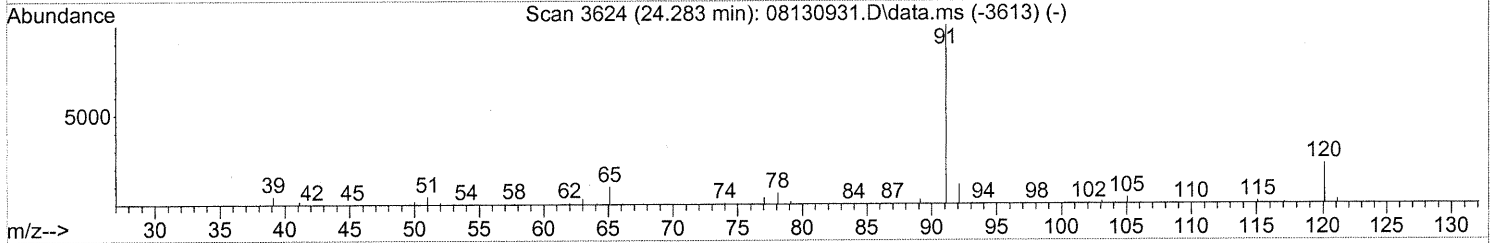
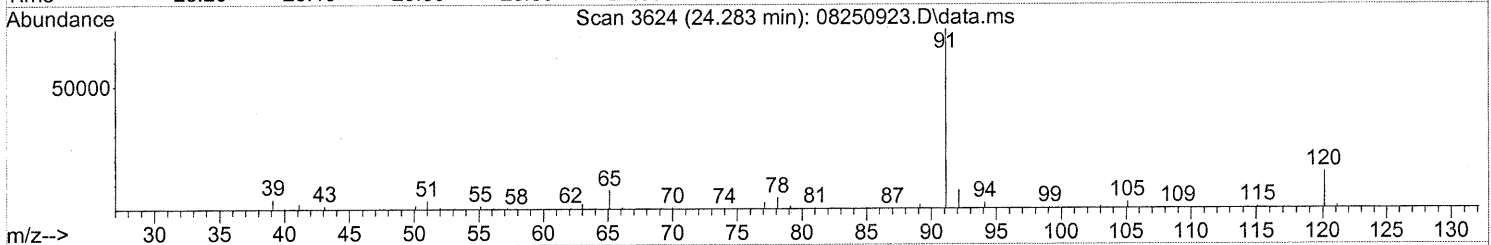
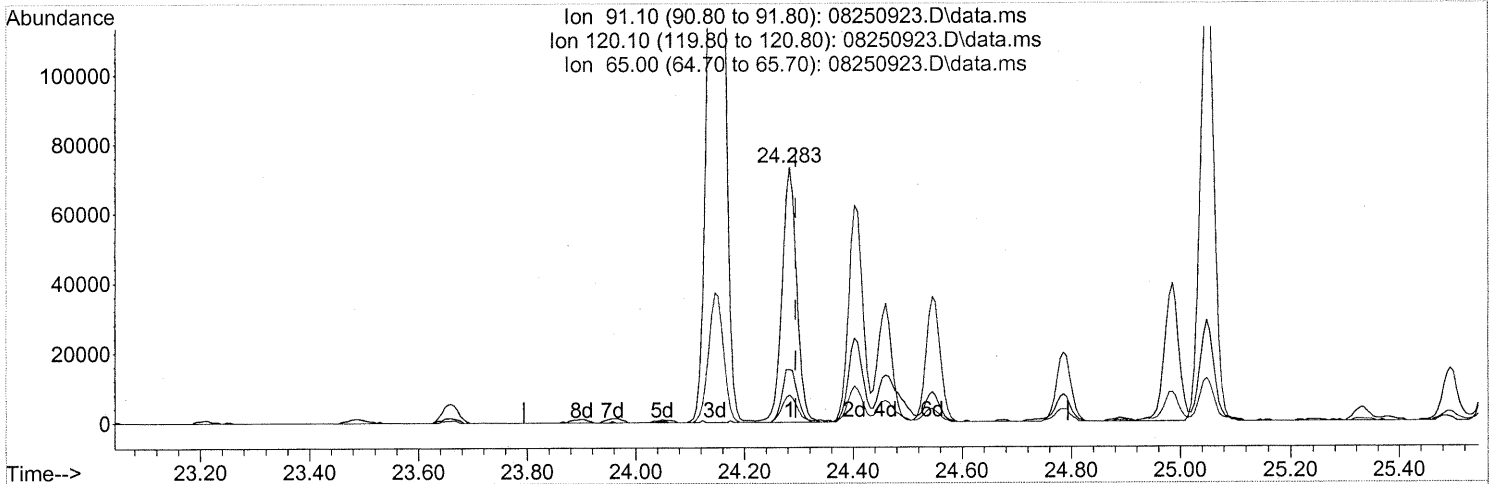
(75) alpha-Pinene (T)  
 24.145min (-0.011) 22.63ng  
 response 1184908

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

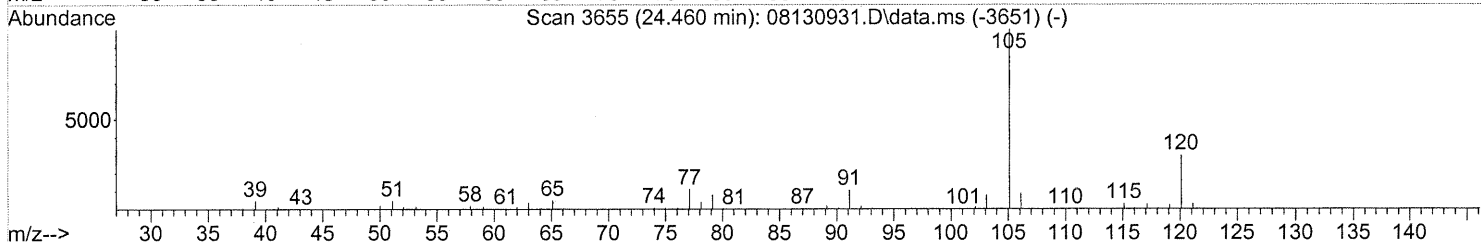
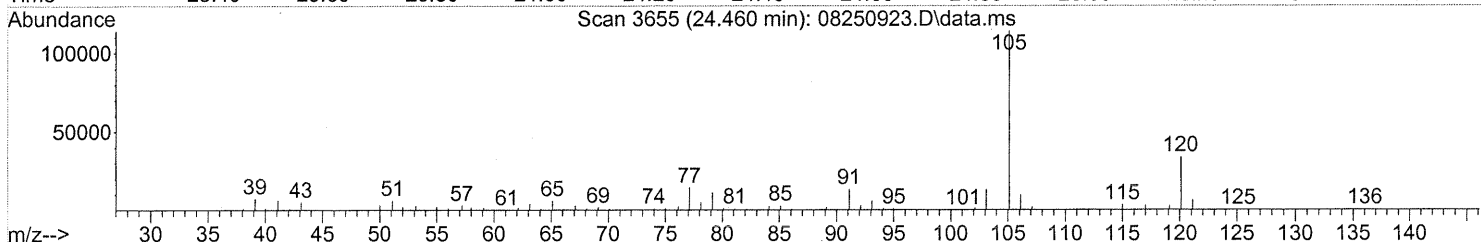
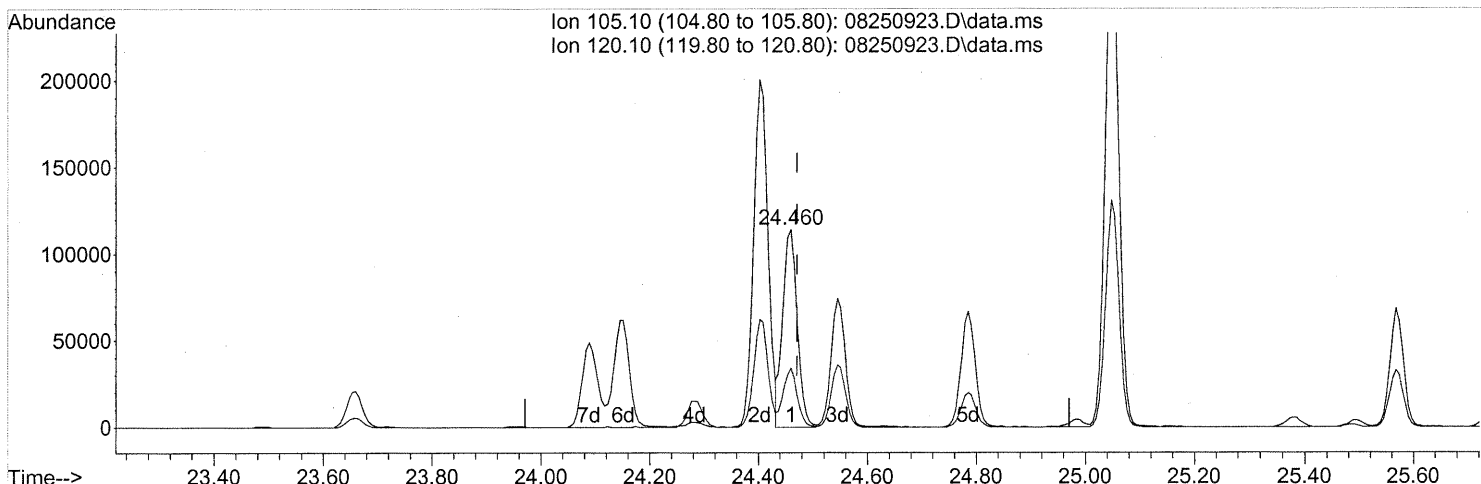
(76) n-Propylbenzene (T)  
 24.283min (-0.011) 1.05ng  
 response 137511

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.35
65.00	10.20	11.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(78) 4-Ethyltoluene (T)  
 24.460min (-0.011) 2.11ng  
 response 210446

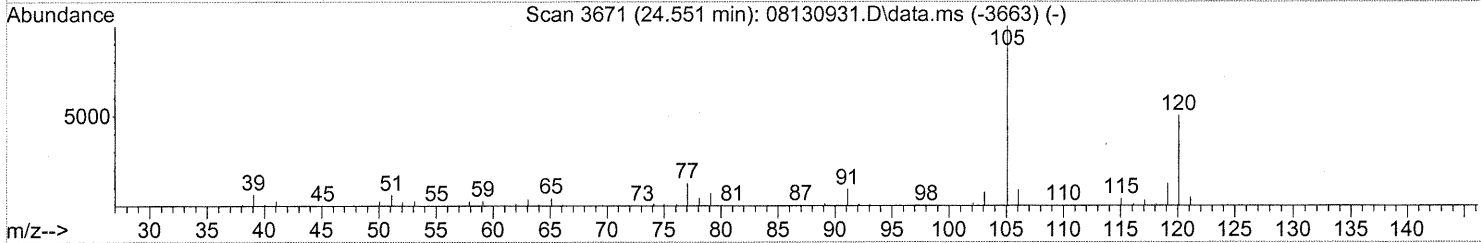
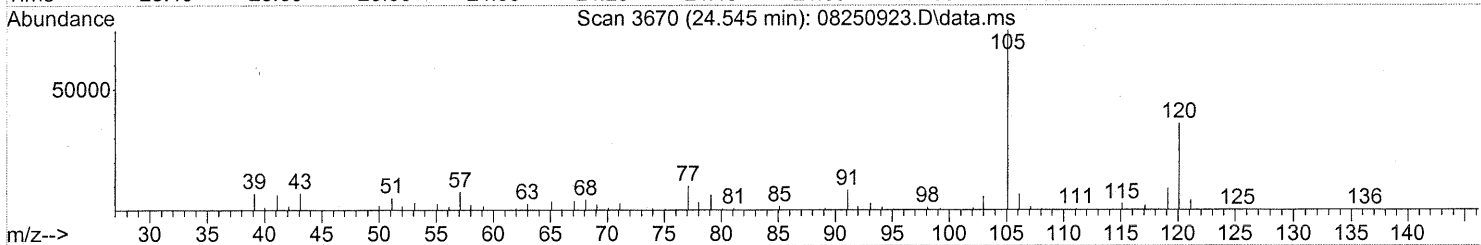
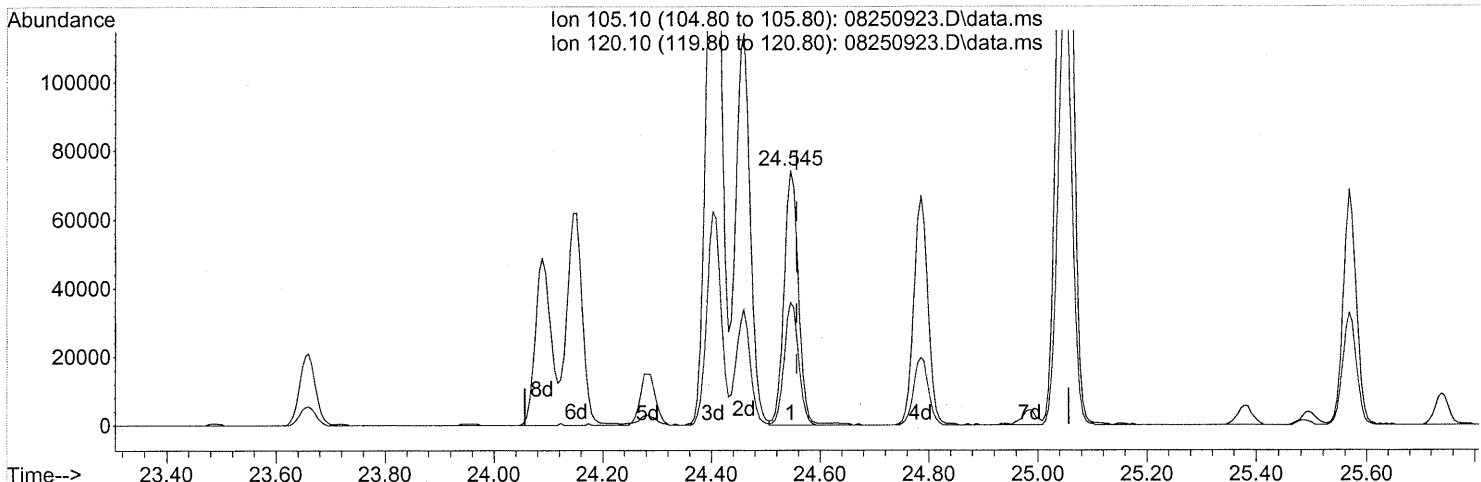
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	29.04
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

24.545min (-0.011) 1.66ng

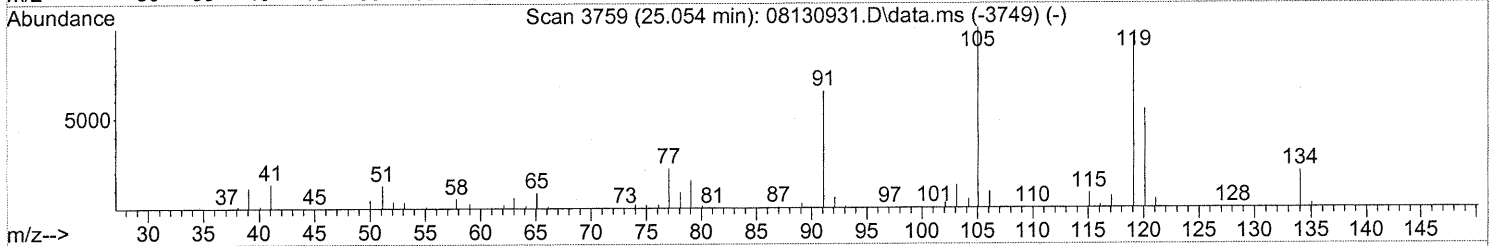
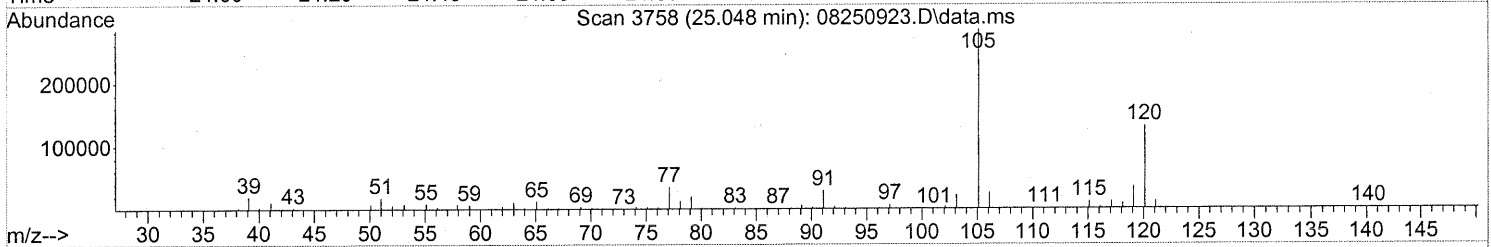
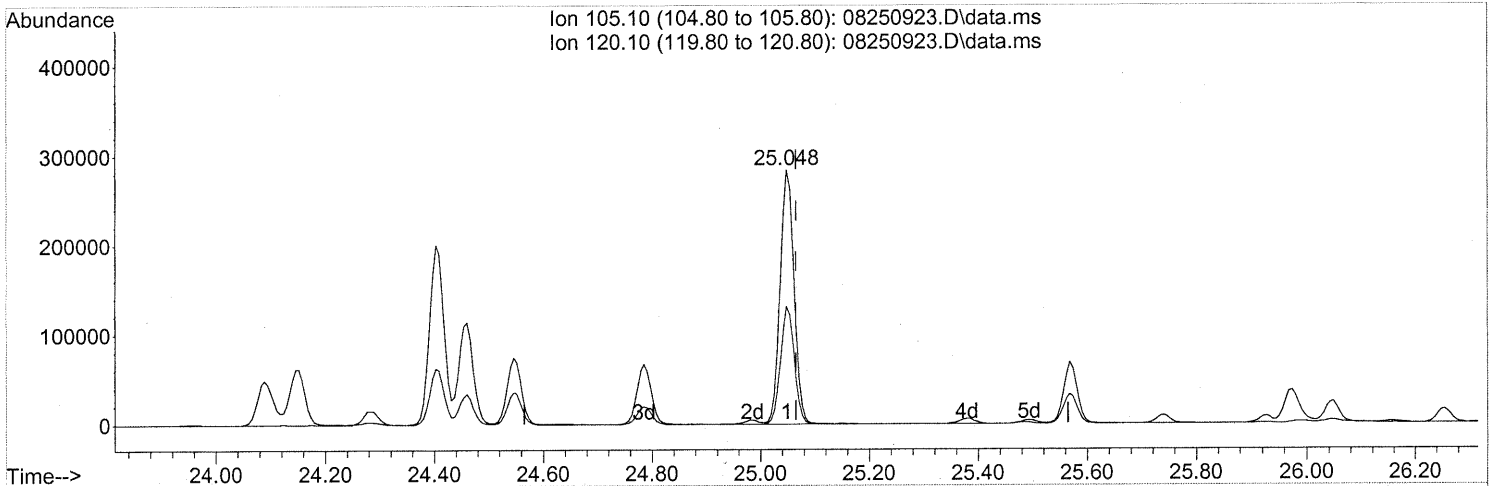
response 136957

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	47.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

25.048min (-0.017) 5.69ng

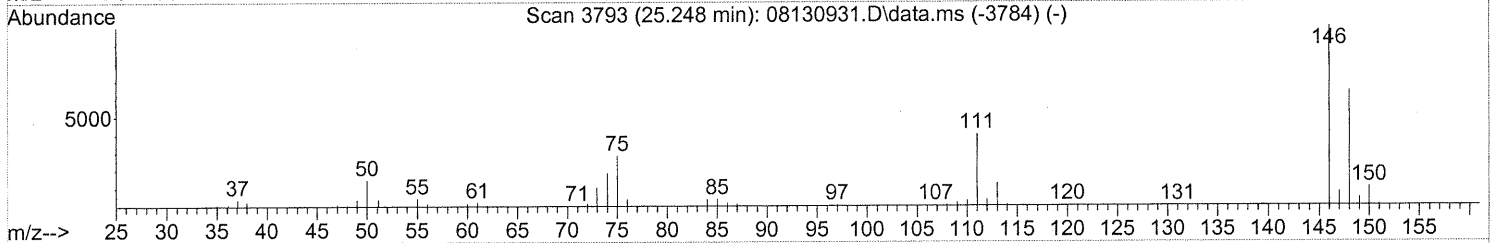
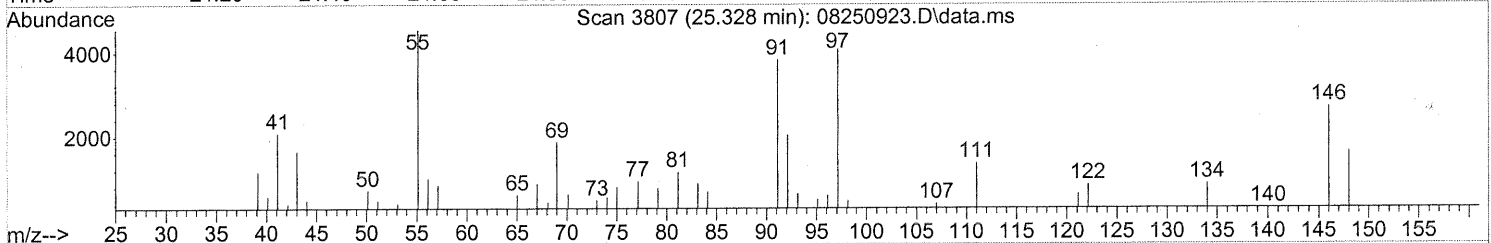
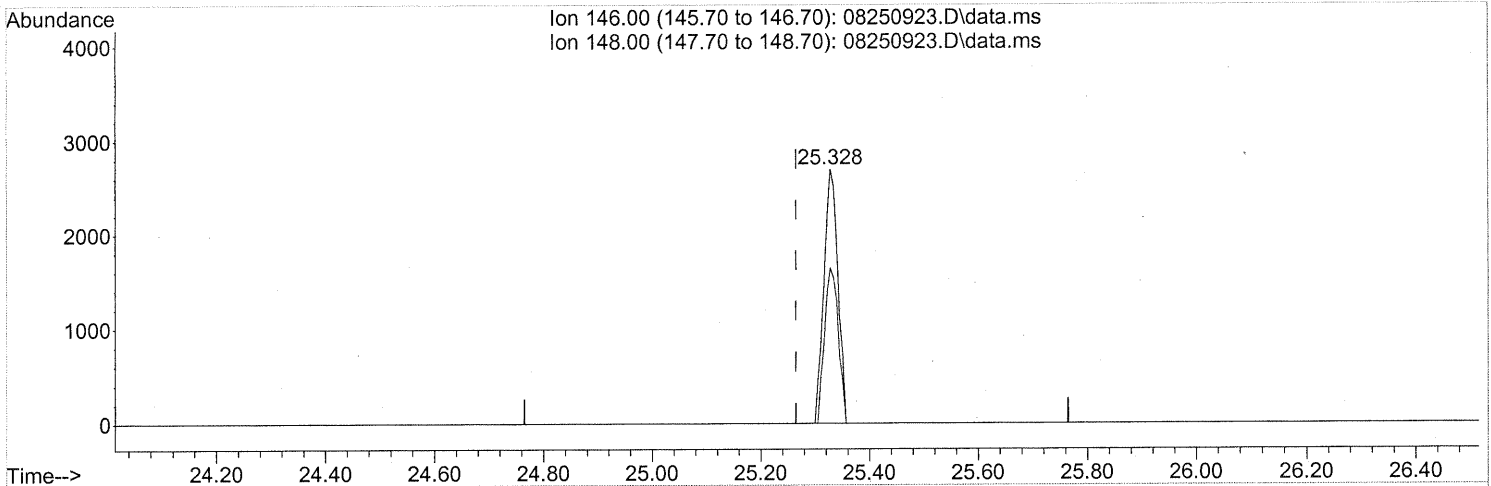
response 499173

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.11ng

response 4780

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	60.00
0.00	0.00	0.00
0.00	0.00	0.00

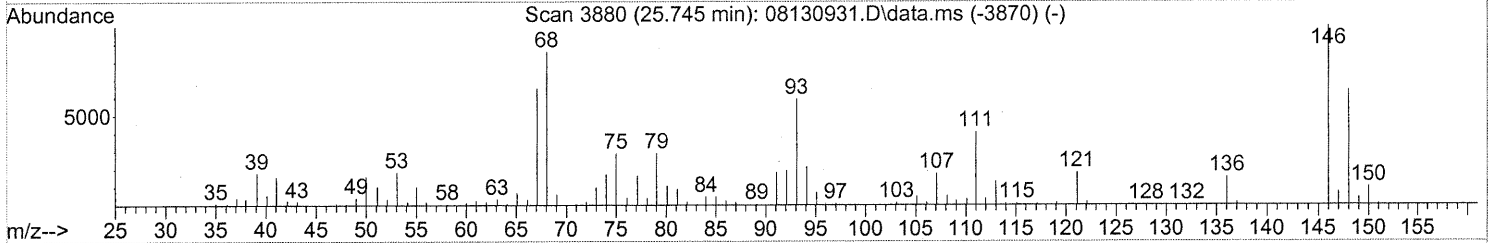
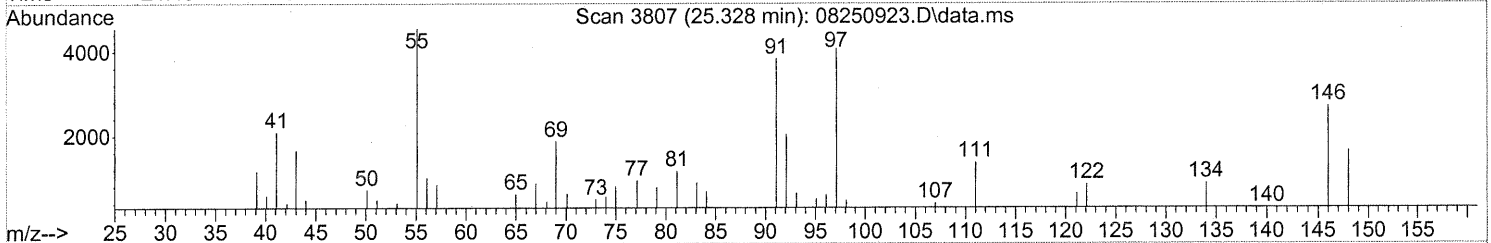
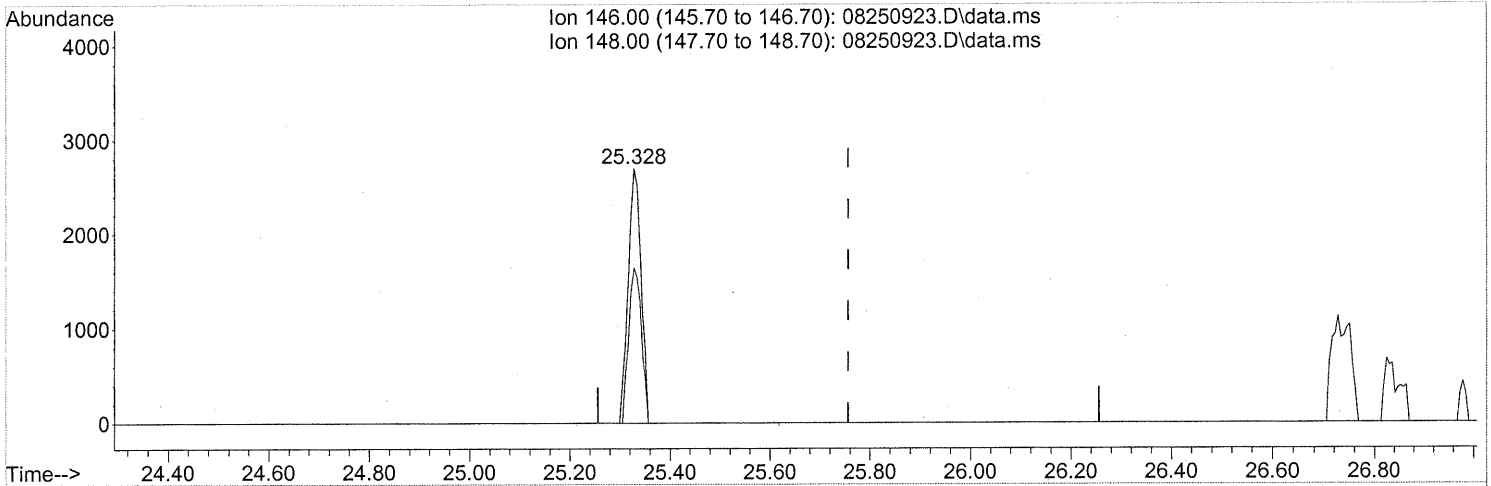
*FP EM 8/28/09*

*228/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.10ng

response 4780

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	60.00
0.00	0.00	0.00
0.00	0.00	0.00

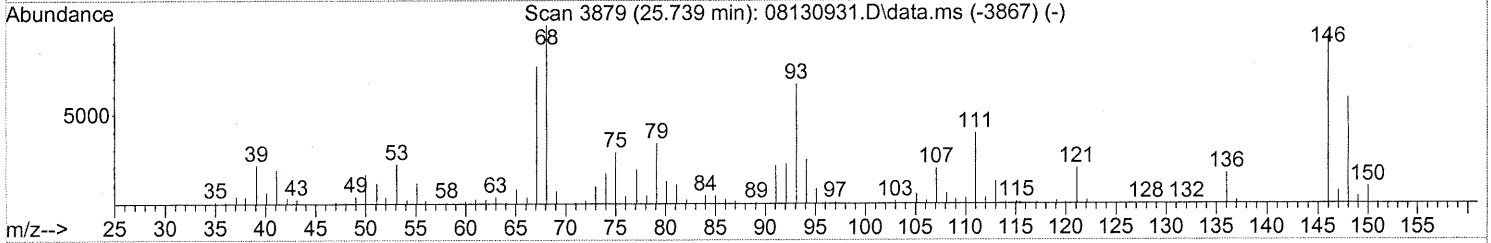
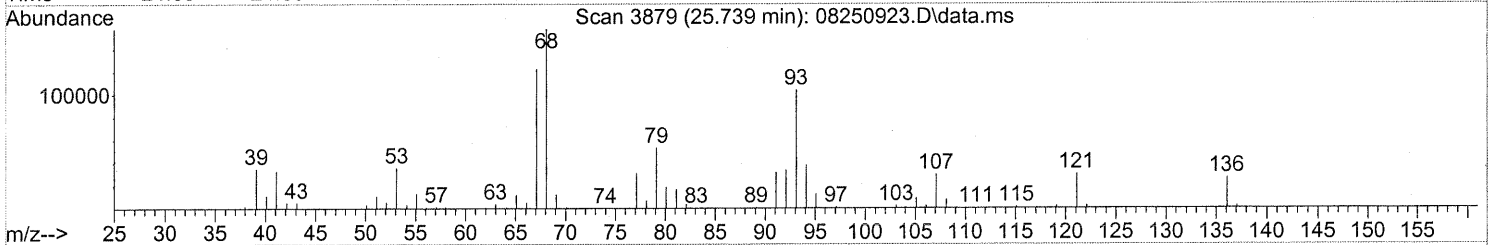
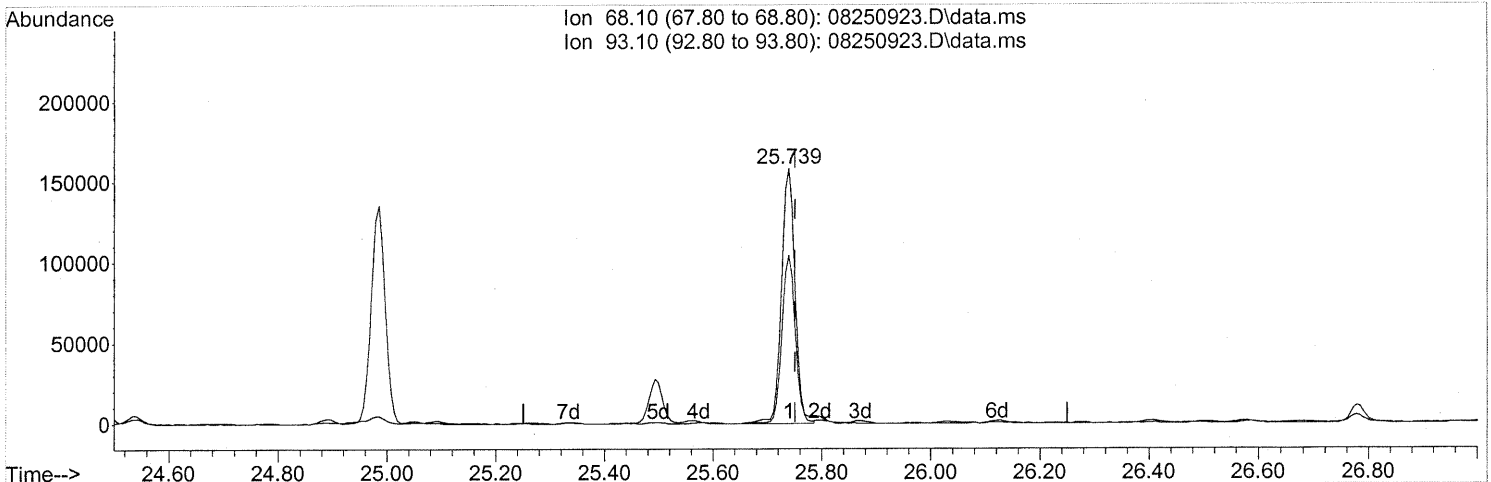
*FP Em 8/28/09*

*8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250923.D  
 Acq On : 25 Aug 2009 18:35  
 Operator : EM  
 Sample : P0902857-002 (500ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250923.D\data.ms

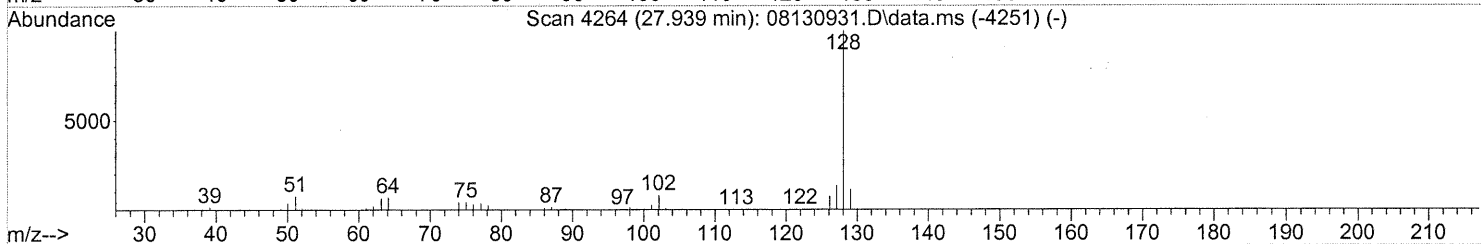
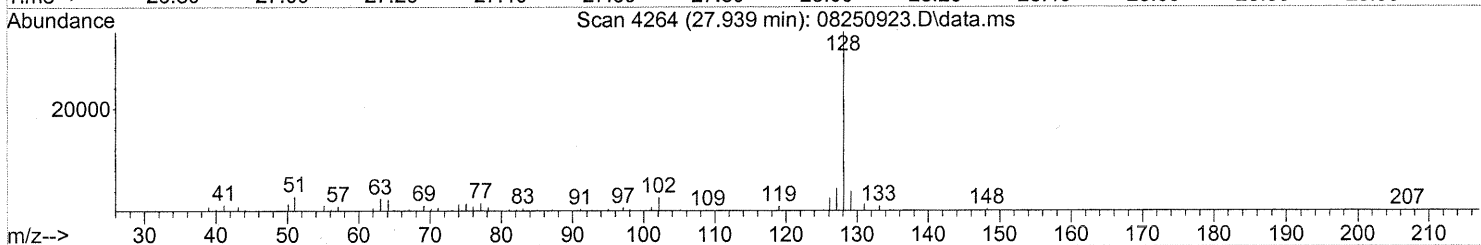
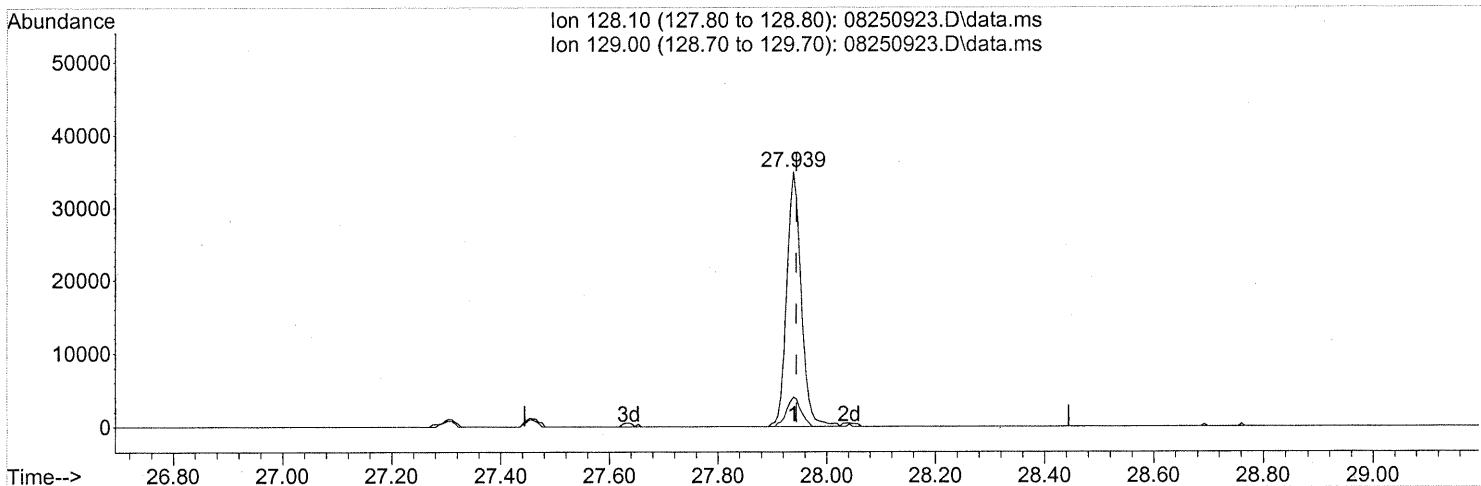
(91) d-Limonene (T)  
 25.739min (-0.011) 7.54ng  
 response 270709

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	68.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250923.D  
Acq On : 25 Aug 2009 18:35  
Operator : EM  
Sample : P0902857-002 (500ml)  
Misc : Env. H & E 100455  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:12:38 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



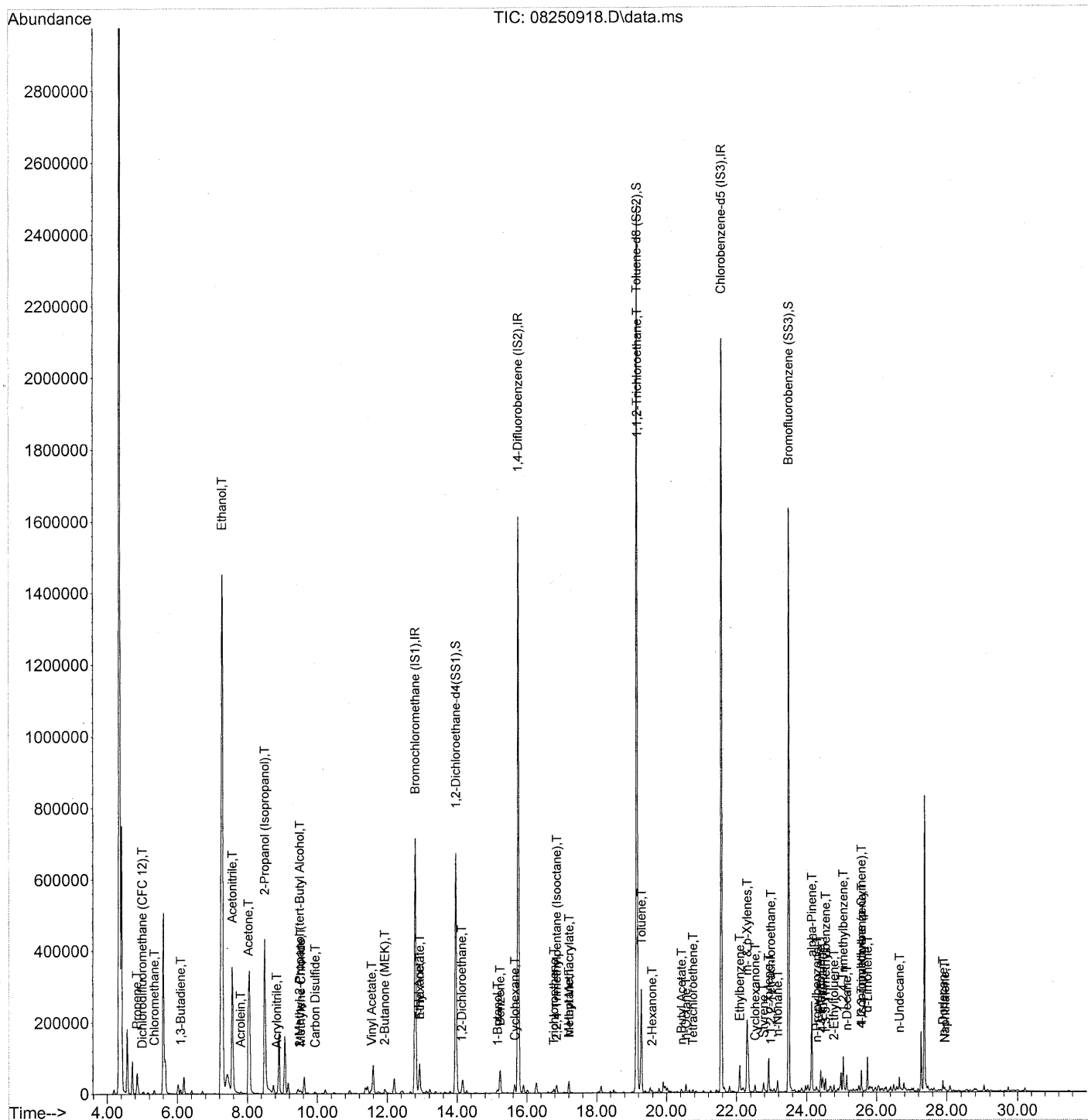
TIC: 08250923.D\data.ms

(95) Naphthalene (T)  
27.939min (-0.006) 0.54ng  
response 64088

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	11.31
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:21:11 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:21:11 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	374287	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1885839	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	904798	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.96	65	667791	25.233	ng	-0.03	
Spiked Amount	25.000			Recovery	=	100.92%	✓
57) Toluene-d8 (SS2)	19.15	98	2187104	25.427	ng	-0.01	✓
Spiked Amount	25.000			Recovery	=	101.72%	
73) Bromofluorobenzene (SS3)	23.49	174	588074	24.141	ng	0.00	✓
Spiked Amount	25.000			Recovery	=	96.56%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.85	42	23485	0.715	ng	94
3) Dichlorodifluoromethan...	5.00	85	3964	0.085	ng	# 87
4) Chloromethane	5.35	50	14730	0.337	ng	98
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	6.10	54	6778	0.221	ng	90
8) Bromomethane	6.60	94	108	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.28	45	3187842m	154.785	ng	
11) Acetonitrile	7.56	41	562986	11.201	ng	98
12) Acrolein	7.81	56	5729	0.427	ng	94
13) Acetone	8.03	58	145340	6.935	ng	# 60
14) Trichlorofluoromethane	8.29	101	1910	N.D.		
15) 2-Propanol (Isopropanol)	8.49	45	708929	12.352	ng	94
16) Acrylonitrile	8.84	53	1627	0.053	ng	# 29
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.49	59	15100	0.259	ng	# 74
19) Methylene Chloride	9.53	84	3930	0.150	ng	# 76
20) 3-Chloro-1-propene (Al...	9.72	41	767	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.94	76	10290	0.112	ng	88
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	11.30	63	1677	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	11.55	86	1835	0.404	ng	# 1
27) 2-Butanone (MEK)	11.93	72	6524	0.447	ng	# 24
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.93	61	6193	0.654	ng	100
31) n-Hexane	12.93	57	38911	0.842	ng	94

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*em 8/28/09*



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:21:11 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	13.03	83	876	N.D.		
34) Tetrahydrofuran (THF)	13.64	72	638	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	11462	0.387	ng	91
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.16	56	9221	0.377	ng	95
41) Benzene	15.23	78	82350	0.812	ng	99
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.66	84	12799	0.326	ng	# 81
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.74	83	103	N.D.		
47) Trichloroethene	16.77	130	4937	0.192	ng	95
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	24969	0.214	ng	86
50) Methyl Methacrylate	17.21	100	2625	0.259	ng	# 1
51) n-Heptane	17.21	71	9668	0.358	ng	92
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.04	58	224	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	171146	7.899	ng	# 8
58) Toluene	19.28	91	283817	2.722	ng	99
59) 2-Hexanone	19.59	43	4198	0.077	ng	# 22
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.43	43	9414	0.159	ng	94
63) n-Octane	20.56	57	4785	0.206	ng	88
64) Tetrachloroethene	20.75	166	3396	0.131	ng	99
65) Chlorobenzene	21.65	112	1584	N.D.		
66) Ethylbenzene	22.09	91	73331	0.651	ng	97
67) m- & p-Xylenes	22.30	91	210827	2.362	ng	98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	17644	0.267	ng	98
70) o-Xylene	22.92	91	72896	0.812	ng	96
71) n-Nonane	23.17	43	14930	0.276	ng	86
72) 1,1,2,2-Tetrachloroethane	22.98	83	2158	0.056	ng	# 18
74) Cumene	23.66	105	5612	N.D.		
75) alpha-Pinene	24.15	93	115780	2.016	ng	83
76) n-Propylbenzene	24.29	91	16348	0.114	ng	97
77) 3-Ethyltoluene	24.40	105	41483	0.380	ng	100
78) 4-Ethyltoluene	24.46	105	24081	0.220	ng	99
79) 1,3,5-Trimethylbenzene	24.55	105	18512	0.204	ng	98

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Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 14:21:11 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

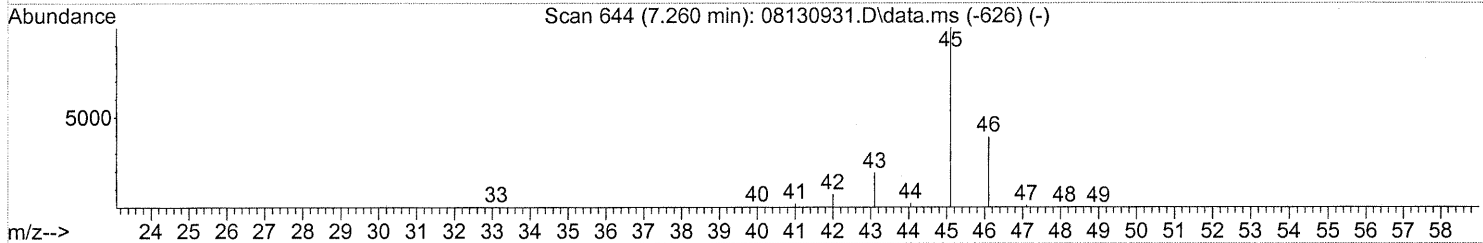
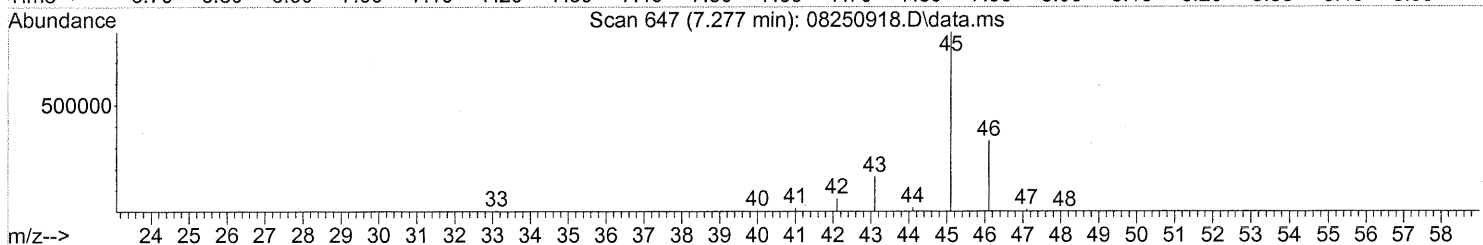
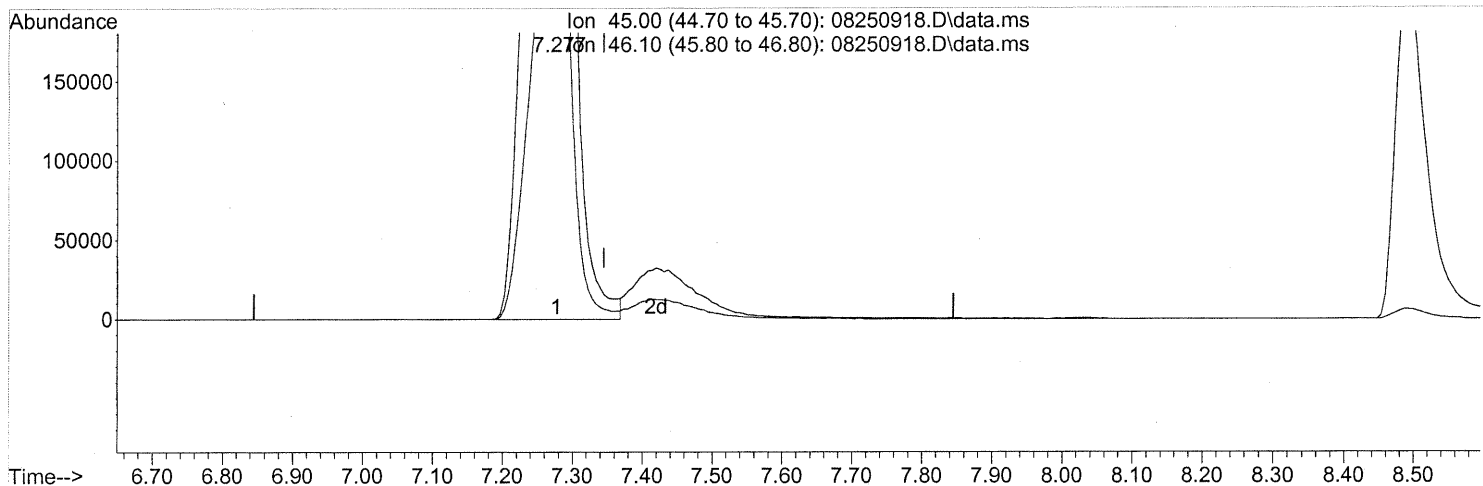
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.74	118	415	N.D.		
81) 2-Ethyltoluene	24.79	105	18996	0.169	ng	87
82) 1,2,4-Trimethylbenzene	25.05	105	56087	0.583	ng	87
83) n-Decane	25.15	57	17024	0.304	ng	91
84) Benzyl Chloride	25.22	91	2057	N.D.		
85) 1,3-Dichlorobenzene	25.25	146	769	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1412	N.D.		
87) sec-Butylbenzene	25.38	105	2218	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	12818	0.105	ng	86
89) 1,2,3-Trimethylbenzene	25.57	105	15197	0.156	ng	98
90) 1,2-Dichlorobenzene	25.75	146	478	N.D.		
91) d-Limonene	25.74	68	26079	0.662	ng	97
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	13709	0.237	ng	88
94) 1,2,4-Trichlorobenzene	27.80	180	593	N.D.		
95) Naphthalene	27.94	128	10596	0.082	ng	95
96) n-Dodecane	27.89	57	11082	0.171	ng	91
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.53	55	5182	0.158	ng	91
99) tert-Butylbenzene	25.48	119	2915	N.D.		
100) n-Butylbenzene	26.08	91	4624	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 15:35:25 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250918.D\data.ms

(10) Ethanol (T)  
 7.277min (-0.068) 144.50ng  
 response 2975958

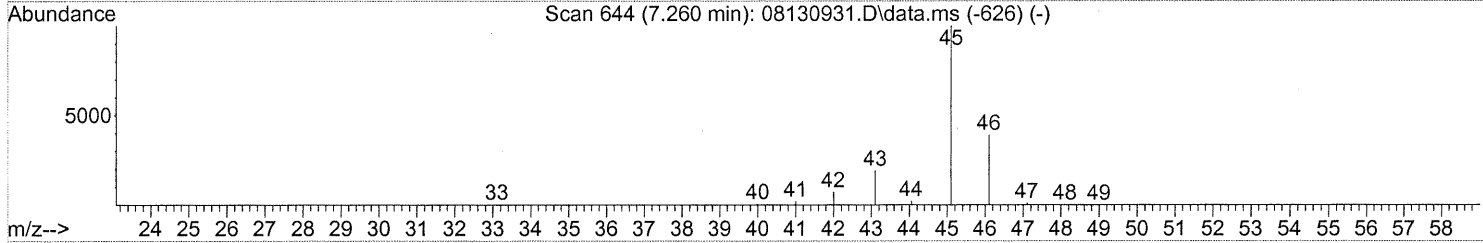
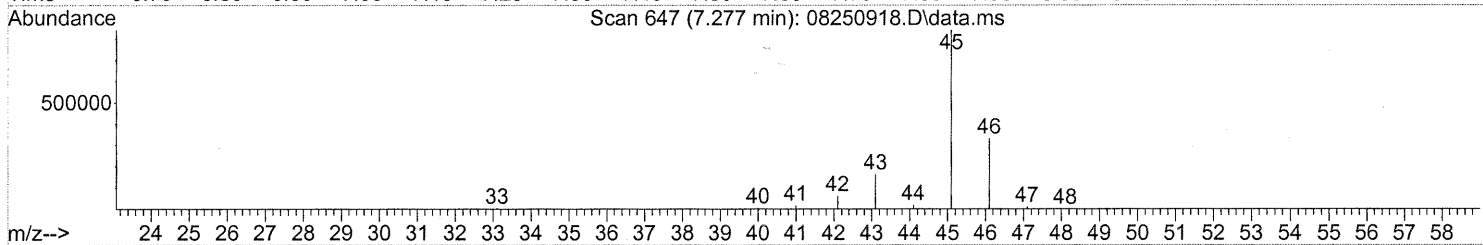
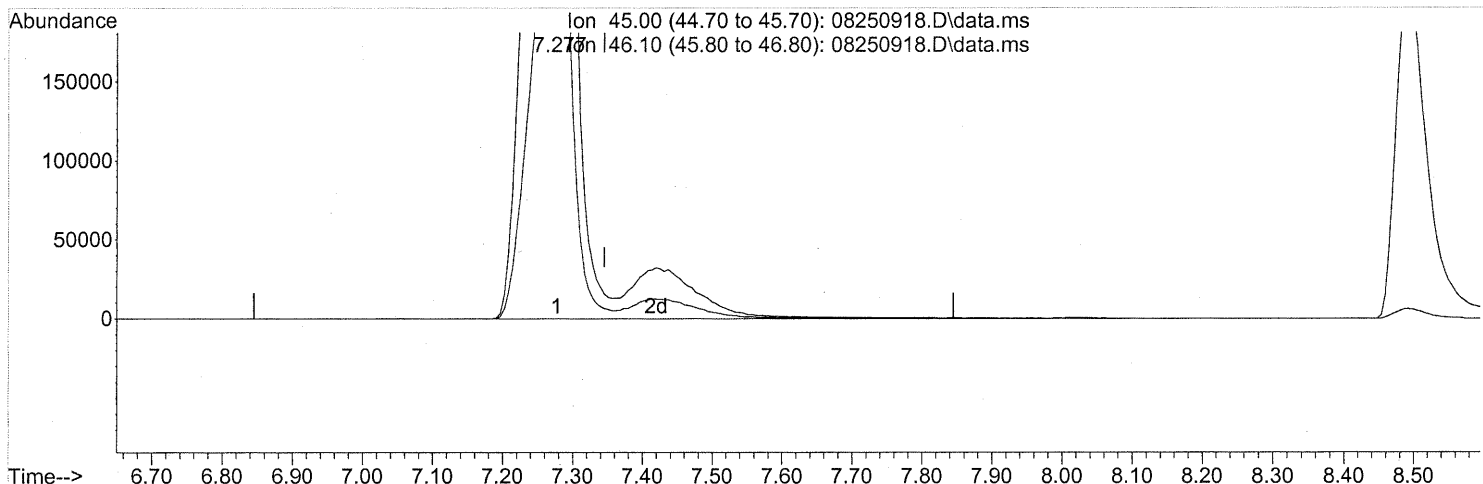
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.26
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 15:35:25 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.277min (-0.068) 154.79ng m

response 3187842

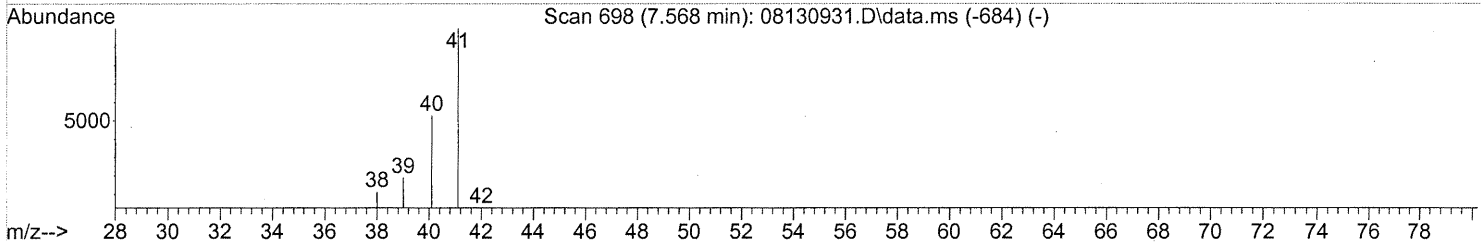
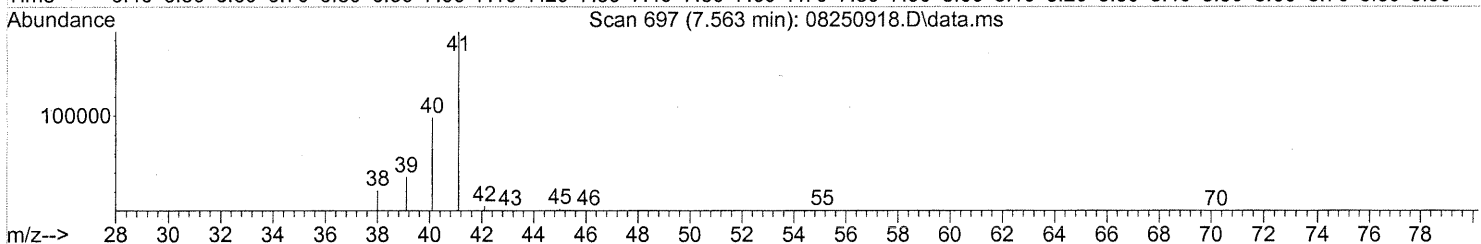
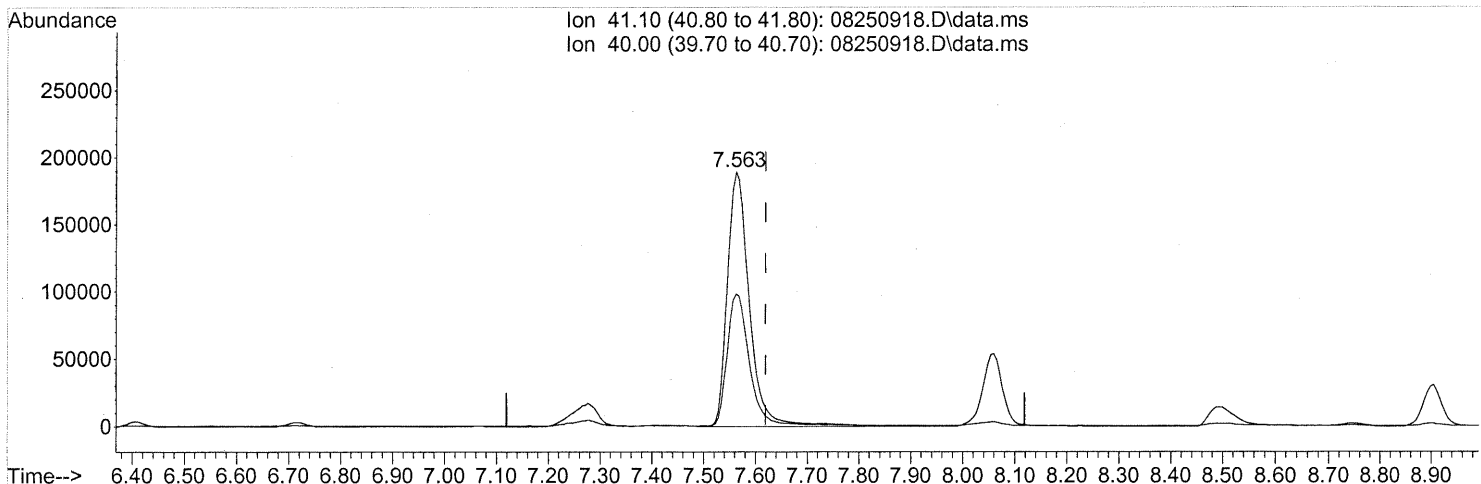
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.65
0.00	0.00	0.00
0.00	0.00	0.00

*PT → IC*  
*com 8/28/09*  
*KR 8/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250918.D  
 Acq On : 25 Aug 2009 14:16  
 Operator : EM  
 Sample : P0902857-002 dil (50ml)  
 Misc : Env. H & E 100455  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 15:35:25 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250918.D\data.ms

(11) Acetonitrile (T)

7.563min (-0.057) 11.20ng

response 562986

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	51.68
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:** 100456  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01577

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-003

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result		MRL		Data Qualifier
		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	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	<b>Acrolein</b>	<b>0.60</b>	0.50	<b>0.26</b>	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	<b>2-Butanone (MEK)</b>	<b>0.60</b>	0.50	<b>0.20</b>	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: 9/1/09

TO15scan.xls - 75 Compounds - PageNo.:

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

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

**Client Sample ID:** 100456

**Client Project ID:** 16512

CAS Project ID: P0902857

CAS Sample ID: P0902857-003

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01577

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

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	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
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	1.0	ND	0.24	
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: \_\_\_\_\_

*9/10/09*

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100456  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-003

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC01577

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 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: 9/1/09

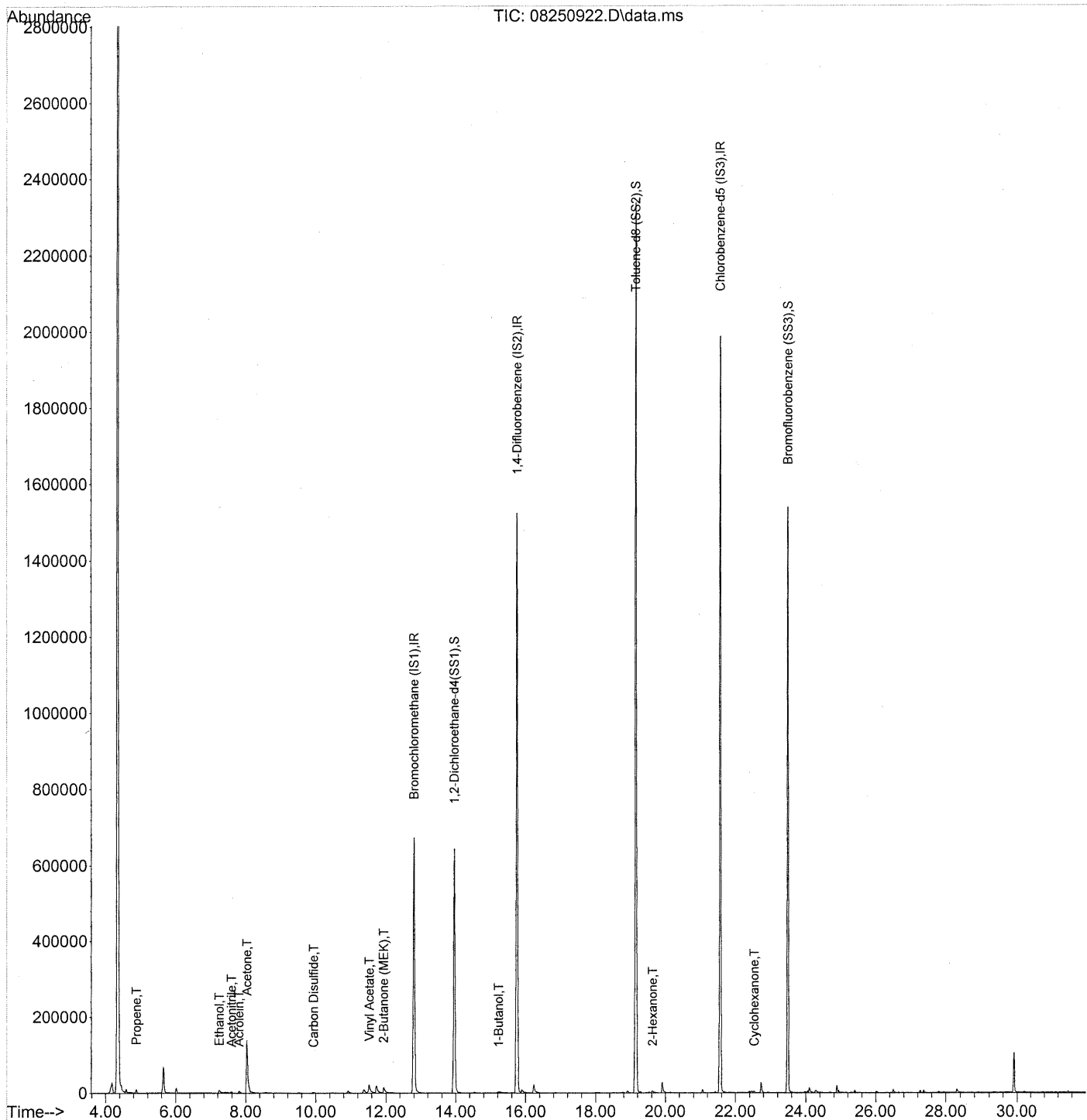
TO15Scan.xls - 75 Compounds - PageNo.:

**96**



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 27 14:30:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 27 14:30:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	354050	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1808173	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	858021	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	633360	25.300	ng	-0.03
Spiked Amount	25.000		Recovery	=	101.20%	✓
57) Toluene-d8 (SS2)	19.14	98	2071870	25.400	ng	-0.02
Spiked Amount	25.000		Recovery	=	101.60%	✓
73) Bromofluorobenzene (SS3)	23.49	174	555809	24.061	ng	0.00
Spiked Amount	25.000		Recovery	=	96.24%	✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.88	42	3374	0.109	ng	95
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	5.37	50	711	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	7.24	45	15774	0.810	ng	93
11) Acetonitrile	7.59	41	5764	0.121	ng	# 1
12) Acrolein	7.81	56	7554	0.595	ng	95
13) Acetone	8.03	58	76450m	3.856	ng	
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	8.58	45	1728	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...	9.54	59	1559	N.D.		
19) Methylene Chloride	9.53	84	406	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	9.94	76	4593	0.053	ng	# 75
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	11.53	86	6775	1.578	ng	# 50
27) 2-Butanone (MEK)	11.94	72	8306	0.601	ng	# 32
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:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 27 14:30:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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)	0.00	72	0	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	15.22	56	3858	0.165	ng	96
41) Benzene	15.23	78	1281	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	789	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...	16.86	57	1209	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	18.04	58	210	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	19.28	91	1698	N.D.		
59) 2-Hexanone	19.63	43	11439	0.223	ng	# 73
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.56	43	407	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	20.76	166	130	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.31	91	104	N.D.		
67) m- & p-Xylenes	22.32	91	226	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	0.00	91	0	N.D.		
71) n-Nonane	23.17	43	940	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.49	105	127	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.55	105	126	N.D.		
78) 4-Ethyltoluene	24.55	105	126	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	126	N.D.		

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 27 14:30:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

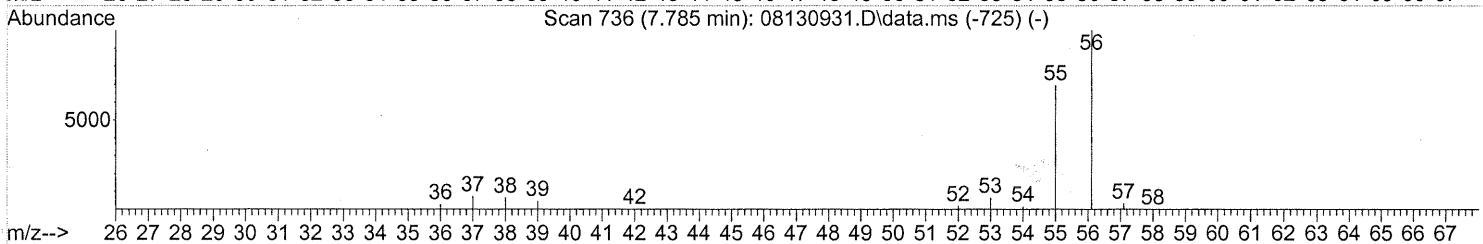
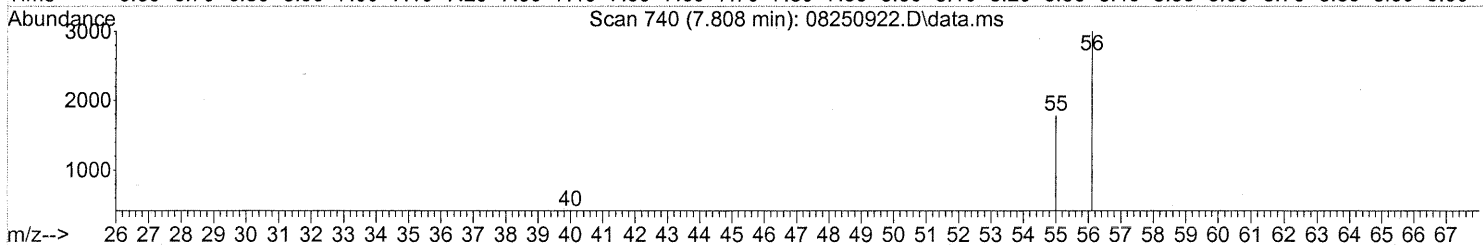
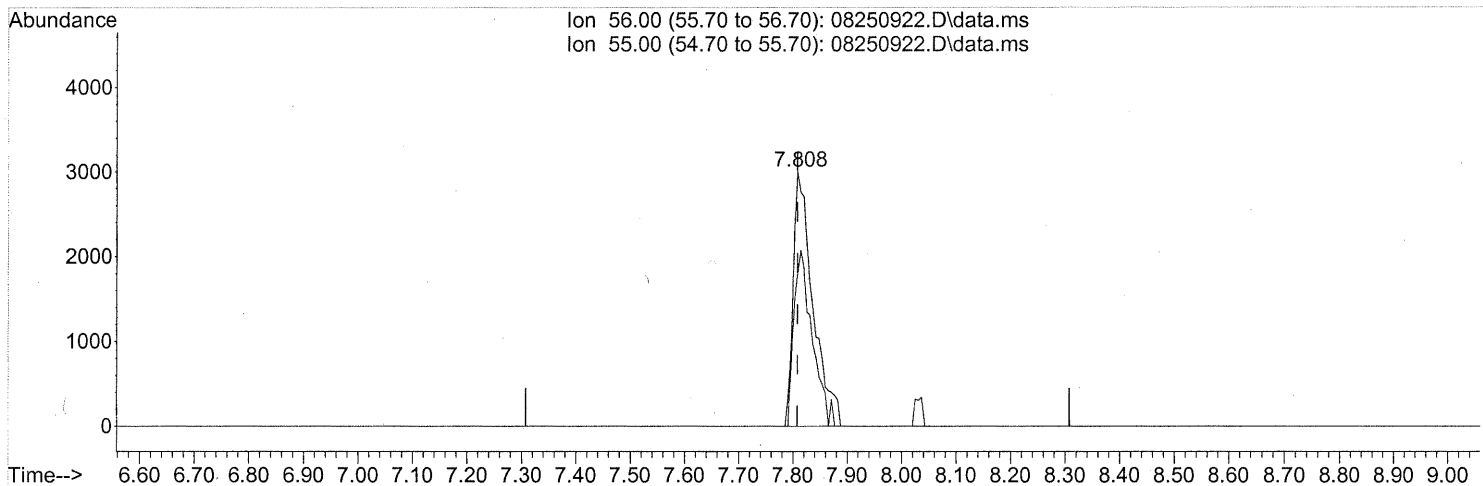
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0		N.D.	
81) 2-Ethyltoluene	25.06	105	482		N.D.	
82) 1,2,4-Trimethylbenzene	25.06	105	482		N.D.	
83) n-Decane	25.15	57	275		N.D.	
84) Benzyl Chloride	0.00	91	0		N.D.	
85) 1,3-Dichlorobenzene	25.34	146	105		N.D.	
86) 1,4-Dichlorobenzene	25.34	146	105		N.D.	
87) sec-Butylbenzene	25.57	105	106		N.D.	
88) 4-Isopropyltoluene (p-...	0.00	119	0		N.D.	
89) 1,2,3-Trimethylbenzene	25.57	105	106		N.D.	
90) 1,2-Dichlorobenzene	25.34	146	105		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	26.65	57	474		N.D.	
94) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
95) Naphthalene	27.94	128	2140		N.D.	
96) n-Dodecane	27.89	57	413		N.D.	
97) Hexachlorobutadiene	0.00	225	0		N.D.	
98) Cyclohexanone	22.53	55	2319	0.074	ng	# 62
99) tert-Butylbenzene	0.00	119	0		N.D.	
100) n-Butylbenzene	26.02	91	254		N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 07:21:51 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250922.D\data.ms

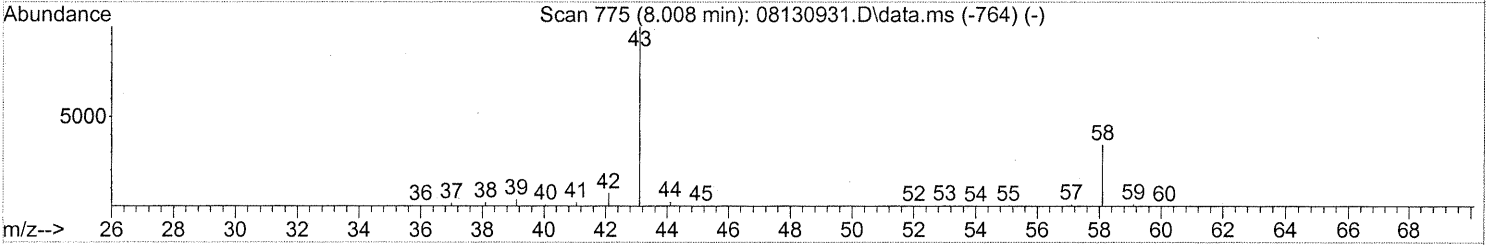
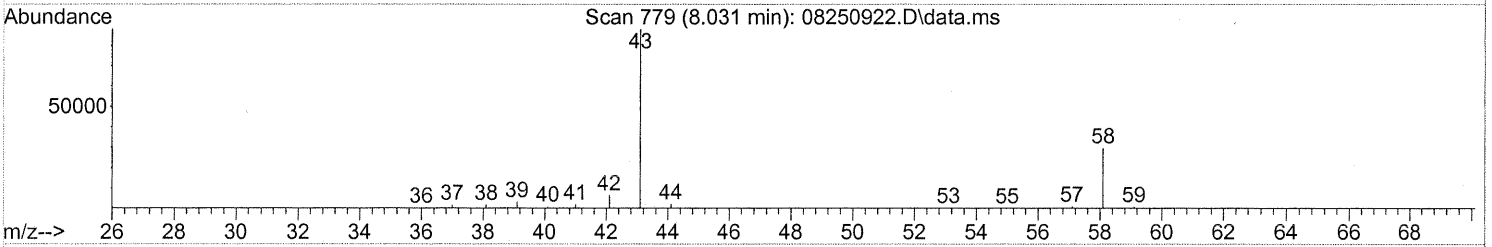
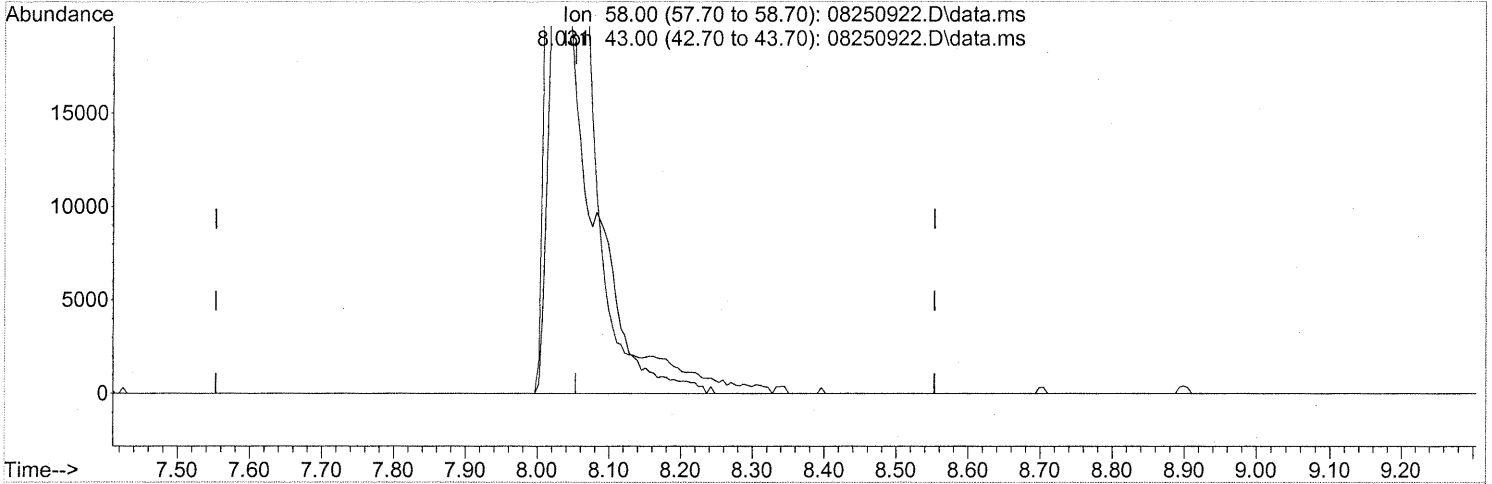
(12) Acrolein (T)  
 7.808min (-0.000) 0.59ng  
 response 7554

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	64.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250922.D  
Acq On : 25 Aug 2009 17:53  
Operator : EM  
Sample : P0902857-003 (1000ml)  
Misc : Env. H & E 100456  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 07:21:51 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(13) Acetone (T)  
8.031min (-0.023) 5.10ng  
response 101177

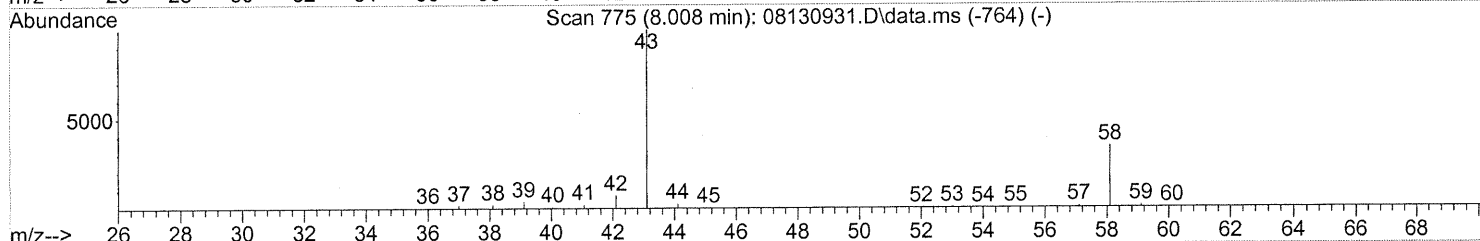
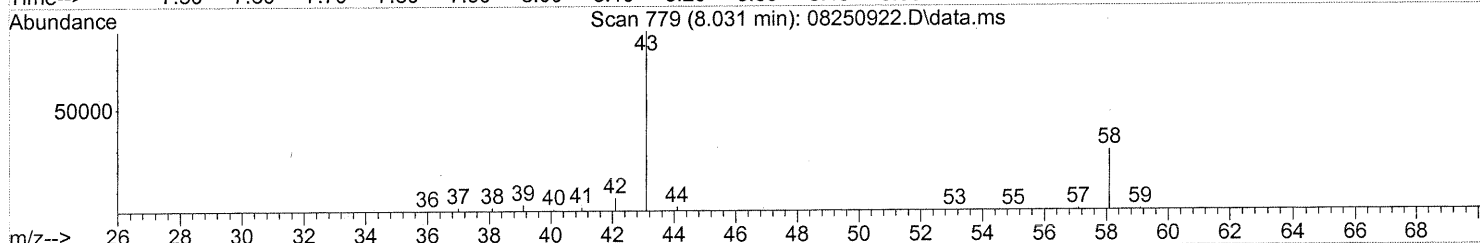
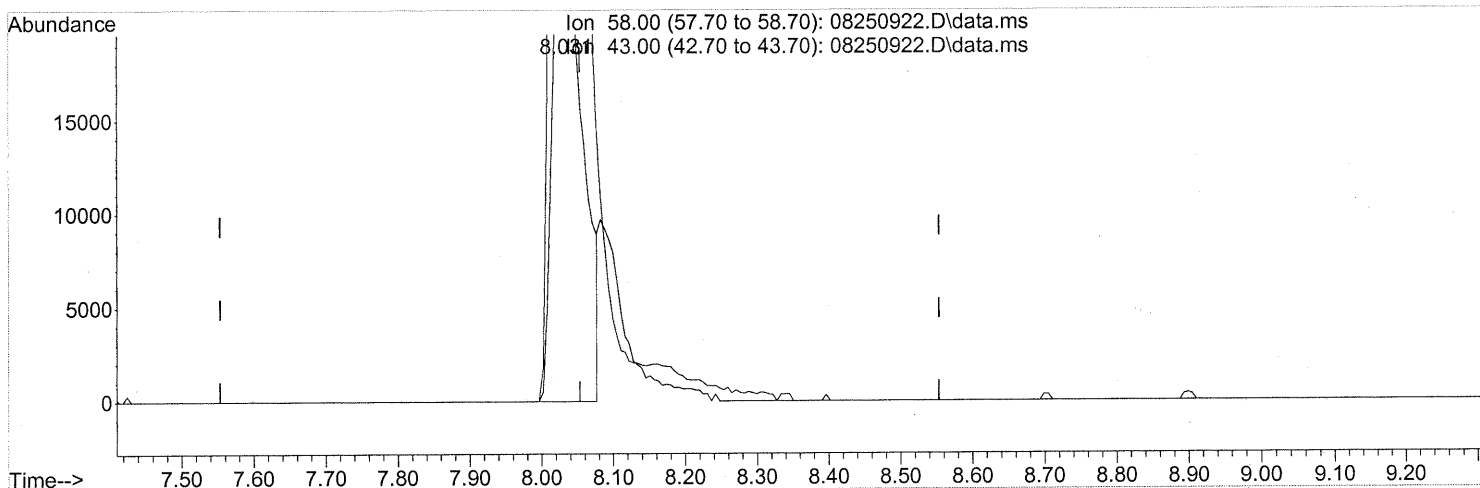
SH

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	249.56#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 07:21:51 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250922.D\data.ms

(13) Acetone (T)  
 8.031min (-0.023) 3.86ng m  
 response 76450

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	330.28
0.00	0.00	0.00
0.00	0.00	0.00

SH → IC

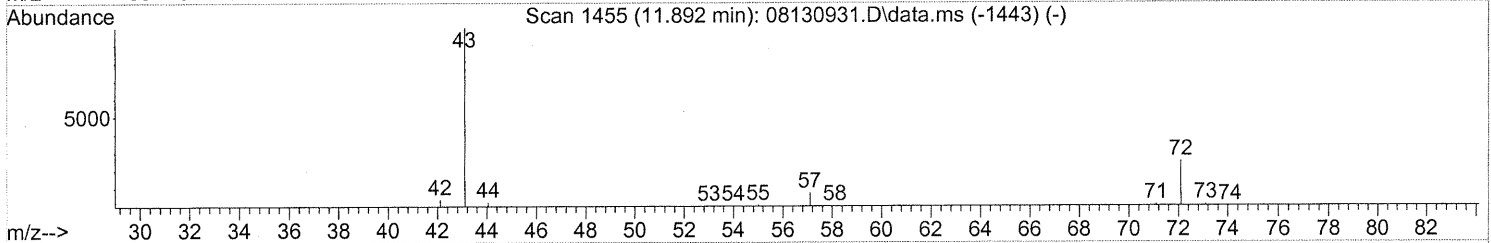
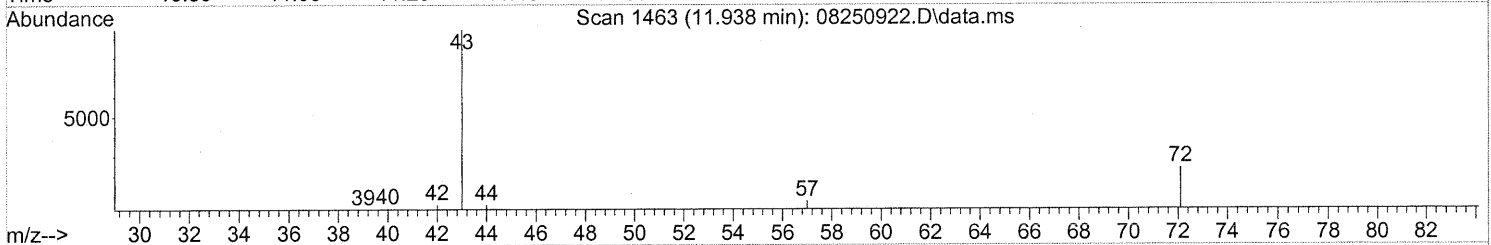
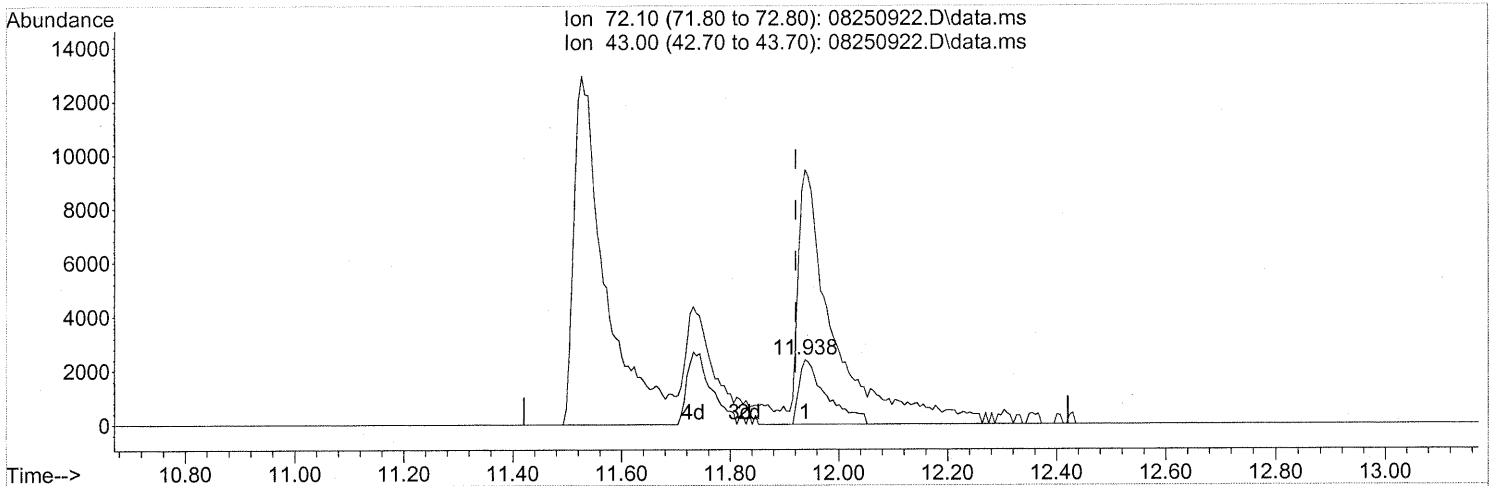
em 8/28/09

KE 8/29/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 07:21:51 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250922.D\data.ms

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

11.938min (+0.017) 0.60ng

response 8306

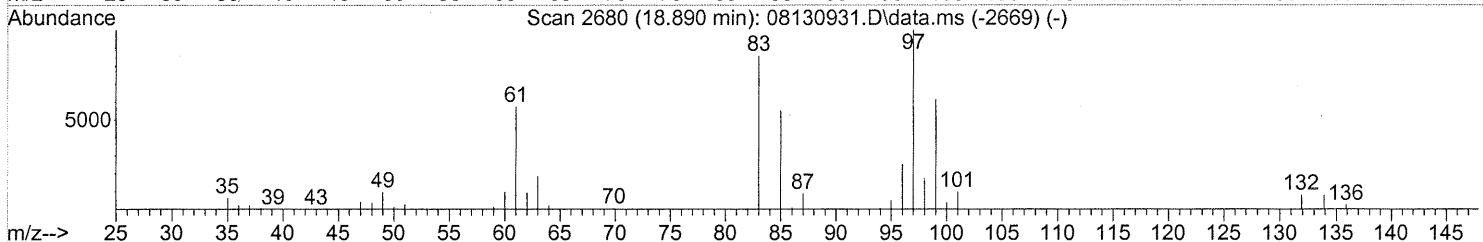
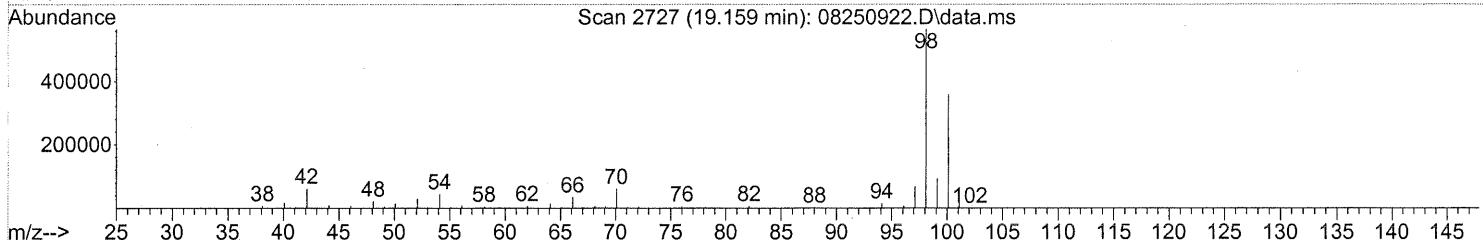
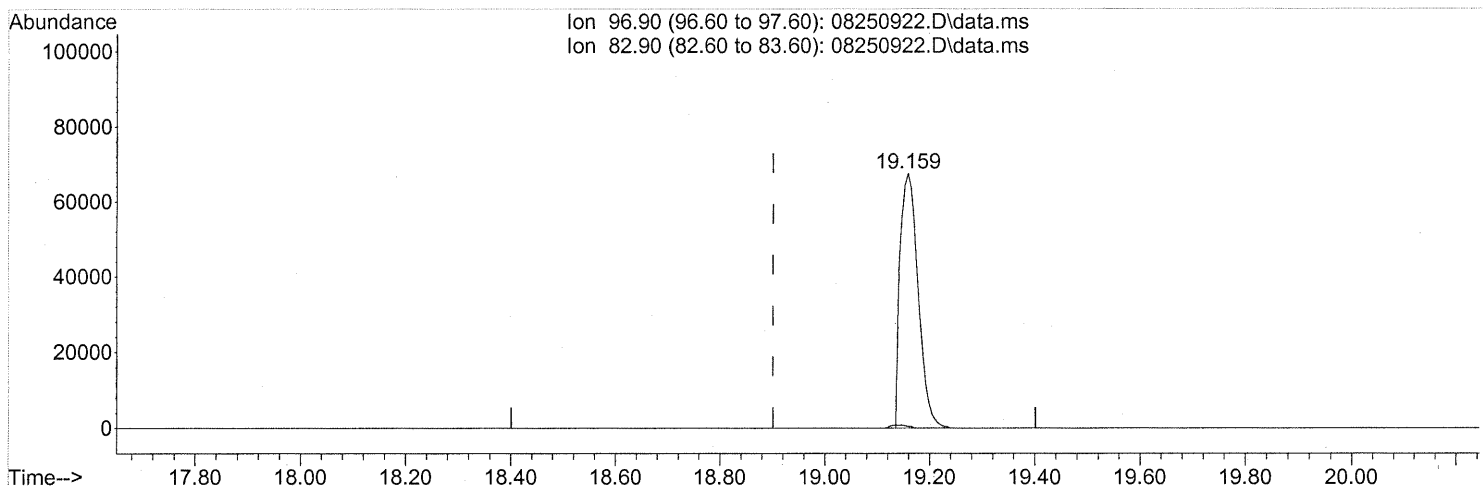
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	519.38#
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250922.D  
 Acq On : 25 Aug 2009 17:53  
 Operator : EM  
 Sample : P0902857-003 (1000ml)  
 Misc : Env. H & E 100456  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 07:21:51 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250922.D\data.ms

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

19.159min (+0.257) 7.68ng

response 159503

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.99#
0.00	0.00	0.00
0.00	0.00	0.00

*FP Cam 8/28/09*

*KEB/21/09*

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100459  
**Client Project ID:** 16512  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00723

**CAS Project ID:** P0902857  
**CAS Sample ID:** P0902857-004

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	74	1.6	43	0.93	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.9	1.6	0.59	0.32	
74-87-3	Chloromethane	9.5	0.32	4.6	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.6	ND	0.23	
75-01-4	Vinyl Chloride	ND	0.32	ND	0.13	
106-99-0	1,3-Butadiene	8.1	0.32	3.6	0.14	
74-83-9	Bromomethane	ND	0.32	ND	0.082	
75-00-3	Chloroethane	ND	0.32	ND	0.12	
64-17-5	Ethanol	5,000	16	2,600	8.5	D
75-05-8	Acetonitrile	380	1.6	220	0.95	D
107-02-8	Acrolein	14	1.6	6.1	0.70	
67-64-1	Acetone	200	16	85	6.7	
75-69-4	Trichlorofluoromethane	1.8	0.32	0.32	0.057	
67-63-0	2-Propanol (Isopropyl Alcohol)	380	1.6	160	0.65	
107-13-1	Acrylonitrile	2.4	1.6	1.1	0.74	
75-35-4	1,1-Dichloroethene	ND	0.32	ND	0.081	
75-09-2	Methylene Chloride	4.5	1.6	1.3	0.46	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.32	ND	0.10	
76-13-1	Trichlorotrifluoroethane	0.50	0.32	0.065	0.042	
75-15-0	Carbon Disulfide	2.6	1.6	0.84	0.51	
156-60-5	trans-1,2-Dichloroethene	ND	0.32	ND	0.081	
75-34-3	1,1-Dichloroethane	ND	0.32	ND	0.079	
1634-04-4	Methyl tert-Butyl Ether	ND	0.32	ND	0.089	
108-05-4	Vinyl Acetate	18	16	5.2	4.5	
78-93-3	2-Butanone (MEK)	18	1.6	6.2	0.54	

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: 8/11/09 **106**

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100459  
**Client Project ID:** 16512

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00723

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-004

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

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	0.32	ND	0.081	
141-78-6	<b>Ethyl Acetate</b>	<b>34</b>	3.2	<b>9.3</b>	0.89	
110-54-3	<b>n-Hexane</b>	<b>32</b>	1.6	<b>9.0</b>	0.45	
67-66-3	<b>Chloroform</b>	<b>0.84</b>	0.32	<b>0.17</b>	0.066	
109-99-9	<b>Tetrahydrofuran (THF)</b>	<b>2.1</b>	1.6	<b>0.71</b>	0.54	
107-06-2	<b>1,2-Dichloroethane</b>	<b>14</b>	0.32	<b>3.5</b>	0.079	
71-55-6	1,1,1-Trichloroethane	ND	0.32	ND	0.059	
71-43-2	<b>Benzene</b>	<b>28</b>	0.32	<b>8.8</b>	0.10	
56-23-5	<b>Carbon Tetrachloride</b>	<b>0.47</b>	0.32	<b>0.075</b>	0.051	
110-82-7	<b>Cyclohexane</b>	<b>4.7</b>	1.6	<b>1.4</b>	0.47	
78-87-5	1,2-Dichloropropane	ND	0.32	ND	0.069	
75-27-4	Bromodichloromethane	ND	0.32	ND	0.048	
79-01-6	<b>Trichloroethene</b>	<b>6.9</b>	0.32	<b>1.3</b>	0.060	
123-91-1	1,4-Dioxane	ND	1.6	ND	0.44	
80-62-6	Methyl Methacrylate	ND	3.2	ND	0.78	
142-82-5	<b>n-Heptane</b>	<b>12</b>	1.6	<b>2.9</b>	0.39	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	ND	0.35	
108-10-1	4-Methyl-2-pentanone	ND	1.6	ND	0.39	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	ND	0.35	
79-00-5	1,1,2-Trichloroethane	ND	0.32	ND	0.059	
108-88-3	<b>Toluene</b>	<b>98</b>	1.6	<b>26</b>	0.42	
591-78-6	<b>2-Hexanone</b>	<b>2.2</b>	1.6	<b>0.55</b>	0.39	
124-48-1	Dibromochloromethane	ND	0.32	ND	0.038	
106-93-4	1,2-Dibromoethane	ND	0.32	ND	0.042	
123-86-4	<b>n-Butyl Acetate</b>	<b>6.3</b>	1.6	<b>1.3</b>	0.34	

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: 9/10/09 **107**

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100459  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-004

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC00723

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.3      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

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	5.3	1.6	1.1	0.34	
127-18-4	Tetrachloroethene	4.7	0.32	0.70	0.047	
108-90-7	Chlorobenzene	ND	0.32	ND	0.070	
100-41-4	Ethylbenzene	23	1.6	5.4	0.37	
179601-23-1	m,p-Xylenes	84	1.6	19	0.37	
75-25-2	Bromoform	ND	1.6	ND	0.15	
100-42-5	Styrene	10	1.6	2.4	0.38	
95-47-6	o-Xylene	27	1.6	6.3	0.37	
111-84-2	n-Nonane	5.4	1.6	1.0	0.31	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.32	ND	0.047	
98-82-8	Cumene	ND	1.6	ND	0.33	
80-56-8	alpha-Pinene	82	1.6	15	0.29	
103-65-1	n-Propylbenzene	3.5	1.6	0.71	0.33	
622-96-8	4-Ethyltoluene	7.2	1.6	1.5	0.33	
108-67-8	1,3,5-Trimethylbenzene	5.5	1.6	1.1	0.33	
95-63-6	1,2,4-Trimethylbenzene	19	1.6	4.0	0.33	
100-44-7	Benzyl Chloride	ND	0.32	ND	0.062	
541-73-1	1,3-Dichlorobenzene	ND	0.32	ND	0.053	
106-46-7	1,4-Dichlorobenzene	0.32	0.32	0.054	0.053	
95-50-1	1,2-Dichlorobenzene	ND	0.32	ND	0.053	
5989-27-5	d-Limonene	37	1.6	6.6	0.29	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.6	ND	0.17	
120-82-1	1,2,4-Trichlorobenzene	ND	1.6	ND	0.22	
91-20-3	Naphthalene	2.0	1.6	0.39	0.31	
87-68-3	Hexachlorobutadiene	ND	1.6	ND	0.15	

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: \_\_\_\_\_

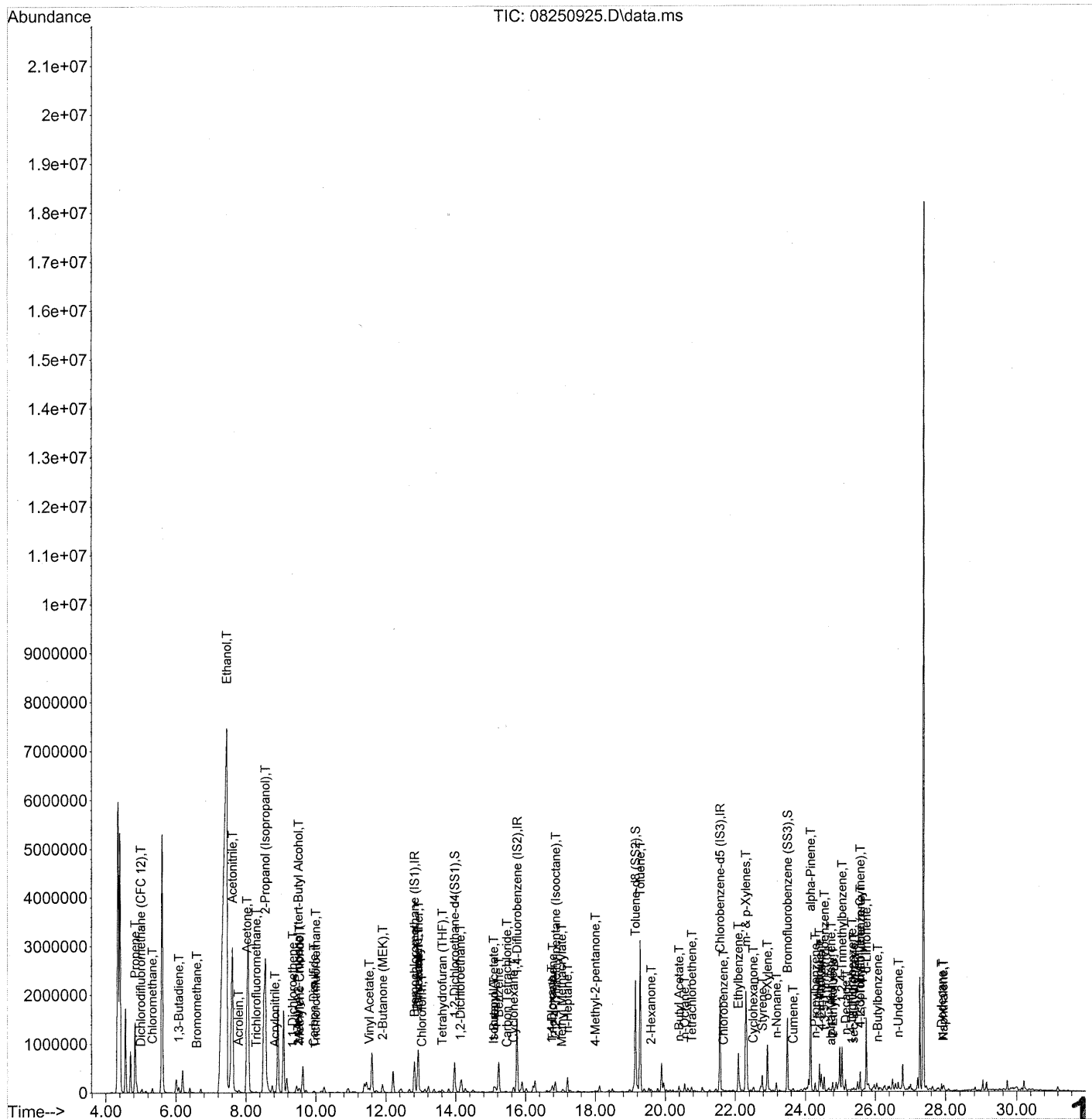
Date: \_\_\_\_\_

9/1/09

**108**

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:52:57 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459 ✓  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:52:57 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.81	130	338976	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1729707	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	813959	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.97	65	601753	25.106	ng	-0.02 ✓
Spiked Amount	25.000		Recovery	=	100.44%	
57) Toluene-d8 (SS2)	19.15	98	1977923	25.561	ng	-0.01 ✓
Spiked Amount	25.000		Recovery	=	102.24%	
73) Bromofluorobenzene (SS3)	23.49	174	531671	24.262	ng	0.00 ✓
Spiked Amount	25.000		Recovery	=	97.04%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	687170	23.110	ng	97
3) Dichlorodifluoromethan...	5.00	85	38846	0.915	ng	99
4) Chloromethane	5.33	50	116893	2.955	ng	98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	120	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.08	54	69822	2.519	ng	98
8) Bromomethane	6.59	94	1180	0.058	ng	84
9) Chloroethane	6.93	64	885	N.D.		
10) Ethanol	7.44	45	34338891	1841.004	ng	99 See Dil
11) Acetonitrile	7.61	41	6002007	131.854	ng	99 See Dil
12) Acrolein	7.79	56	53129	4.368	ng	98
13) Acetone	8.03	58	1203419	63.402	ng	# 50
14) Trichlorofluoromethane	8.29	101	20249	0.558	ng	99
15) 2-Propanol (Isopropanol)	8.55	45	6204551	119.364	ng	91
16) Acrylonitrile	8.82	53	20514	0.744	ng	95
17) 1,1-Dichloroethene	9.34	96	2040	0.096	ng	# 81
18) 2-Methyl-2-Propanol (t...	9.50	59	63140	1.196	ng	# 68
19) Methylene Chloride	9.53	84	33079	1.397	ng	83
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.	d	
21) Trichlorotrifluoroethane	10.00	151	2534	0.156	ng	96
22) Carbon Disulfide	9.94	76	68371	0.818	ng	99
23) trans-1,2-Dichloroethene	10.93	61	252	N.D.		
24) 1,1-Dichloroethane	11.39	63	942	N.D.		
25) Methyl tert-Butyl Ether	11.42	73	1833	N.D.		
26) Vinyl Acetate	11.53	86	23570m	5.734	ng	
27) 2-Butanone (MEK)	11.90	72	75478	5.704	ng	# 83
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.93	87	5573	0.297	ng	# 1
30) Ethyl Acetate	12.91	61	89852	10.471	ng	98
31) n-Hexane	12.93	57	413835	9.894	ng	9110

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:52:57 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QI	on	Response	Conc	Units	Dev (Min)
32) Chloroform	13.02	83		9201	0.263 ng		97
34) Tetrahydrofuran (THF)	13.61	72		9033	0.657 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87		0	N.D.		
36) 1,2-Dichloroethane	14.13	62		117137	4.373 ng		99
38) 1,1,1-Trichloroethane	0.00	97		0	N.D.		
39) Isopropyl Acetate	15.09	61		805	0.057 ng	#	1
40) 1-Butanol	15.10	56		112008	4.997 ng		89
41) Benzene	15.23	78		819146	8.806 ng		98
42) Carbon Tetrachloride	15.46	117		3838	0.148 ng		98
43) Cyclohexane	15.65	84		53293	1.479 ng		86
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.	d	
47) Trichloroethene	16.77	130		50947	2.157 ng		97
48) 1,4-Dioxane	16.75	88		1047	0.063 ng	#	66
49) 2,2,4-Trimethylpentane...	16.86	57		241923	2.260 ng		97
50) Methyl Methacrylate	17.03	100		1147	0.123 ng	#	1
51) n-Heptane	17.20	71		91517	3.696 ng		93
52) cis-1,3-Dichloropropene	0.00	75		0	N.D.		
53) 4-Methyl-2-pentanone	18.00	58		9154	0.455 ng		85
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	19.28	91		2874980	30.649 ng		100
59) 2-Hexanone	19.59	43		34153	0.701 ng	#	62
60) Dibromochloromethane	0.00	129		0	N.D.		
61) 1,2-Dibromoethane	0.00	107		0	N.D.		
62) n-Butyl Acetate	20.39	43		104557	1.966 ng		96
63) n-Octane	20.56	57		34372	1.644 ng		90
64) Tetrachloroethene	20.76	166		34378	1.477 ng		97
65) Chlorobenzene	21.66	112		4132	0.072 ng	#	42
66) Ethylbenzene	22.09	91		740224	7.309 ng		99
67) m- & p-Xylenes	22.30	91		2113703	26.327 ng		99
68) Bromoform	22.42	173		208	N.D.		
69) Styrene	22.77	104		193177	3.255 ng		100
70) o-Xylene	22.92	91		690287	8.546 ng		98
71) n-Nonane	23.17	43		81779	1.681 ng		89
72) 1,1,2,2-Tetrachloroethane	0.00	83		0	N.D.	d	
74) Cumene	23.65	105		44146	0.422 ng		97
75) alpha-Pinene	24.15	93		1324625	25.637 ng		100
76) n-Propylbenzene	24.28	91		141682	1.095 ng		96
77) 3-Ethyltoluene	24.40	105		386821	3.943 ng		97
78) 4-Ethyltoluene	24.45	105		221908	2.250 ng		99
79) 1,3,5-Trimethylbenzene	24.55	105		140801	1.726 ng		9111

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
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 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:52:57 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.73	118	4396	0.099	ng	90
81) 2-Ethyltoluene	24.79	105	128152	1.265	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	525617	6.070	ng	89
83) n-Decane	25.15	57	84856	1.684	ng	96
84) Benzyl Chloride	25.24	91	2655	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	d	
86) 1,4-Dichlorobenzene	25.33	146	4791	0.101	ng	98
87) sec-Butylbenzene	25.38	105	10689	0.094	ng	84
88) 4-Isopropyltoluene (p-...	25.56	119	113036	1.034	ng	94
89) 1,2,3-Trimethylbenzene	25.57	105	123077	1.406	ng	98
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	d	
91) d-Limonene	25.74	68	406283	11.468	ng	95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	59194	1.137	ng	84
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	73281	0.631	ng	96
96) n-Dodecane	27.89	57	45188	0.775	ng	97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	33593	1.137	ng	# 92
99) tert-Butylbenzene	24.94	119	1550	N.D.		
100) n-Butylbenzene	26.06	91	36770	0.405	ng	# 41

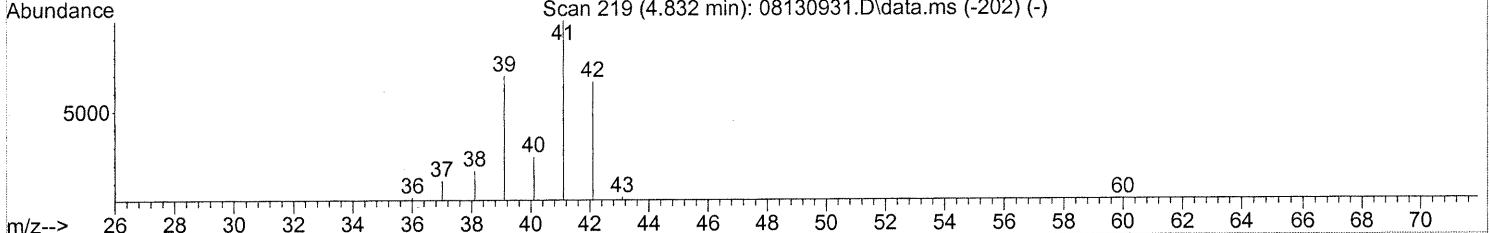
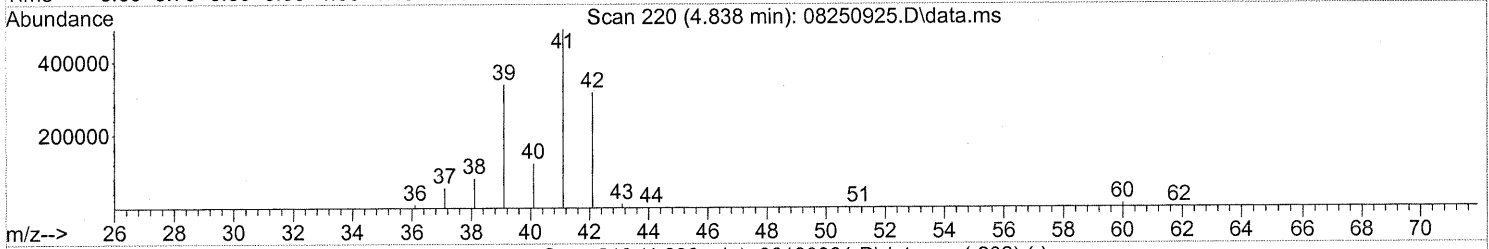
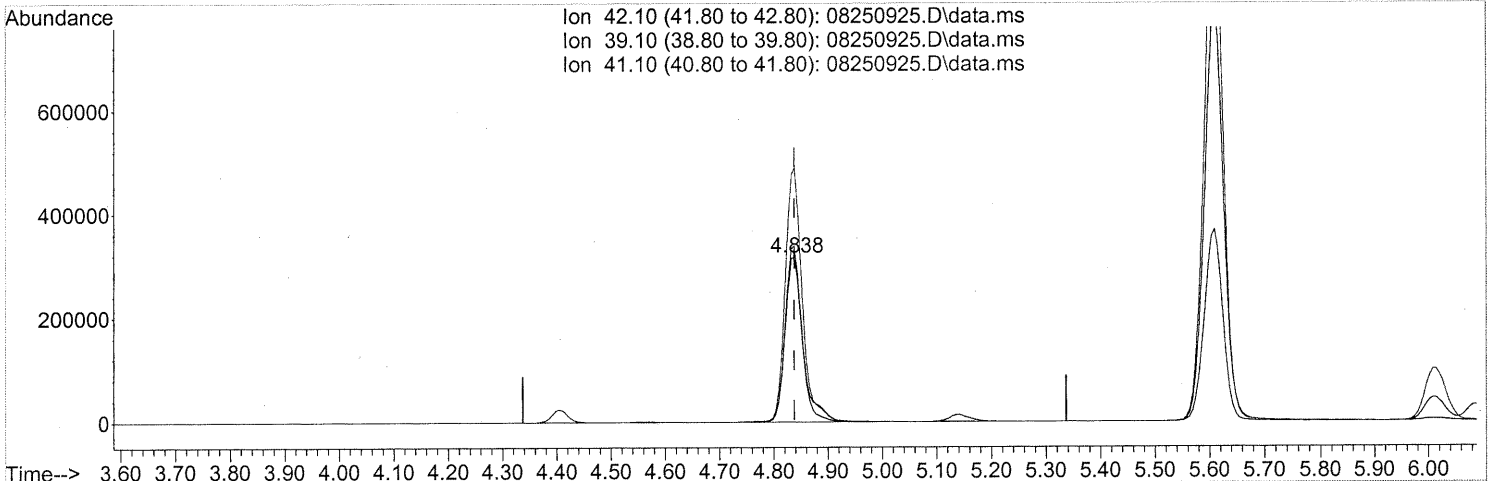
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
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 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(2) Propene (T)

4.838min (-0.000) 23.11ng

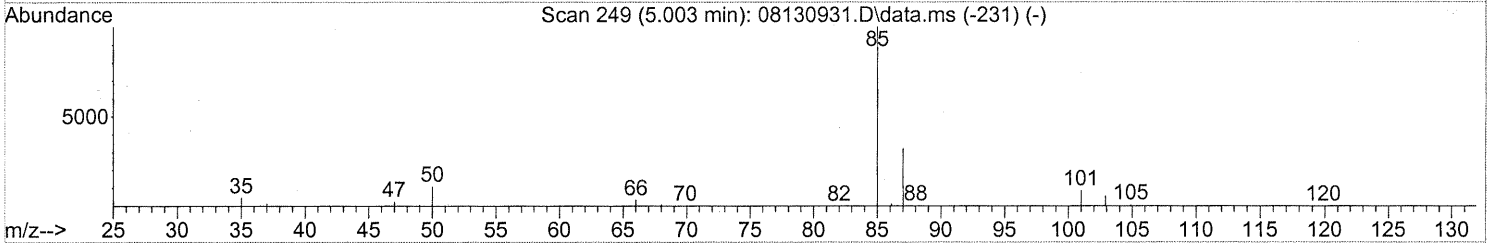
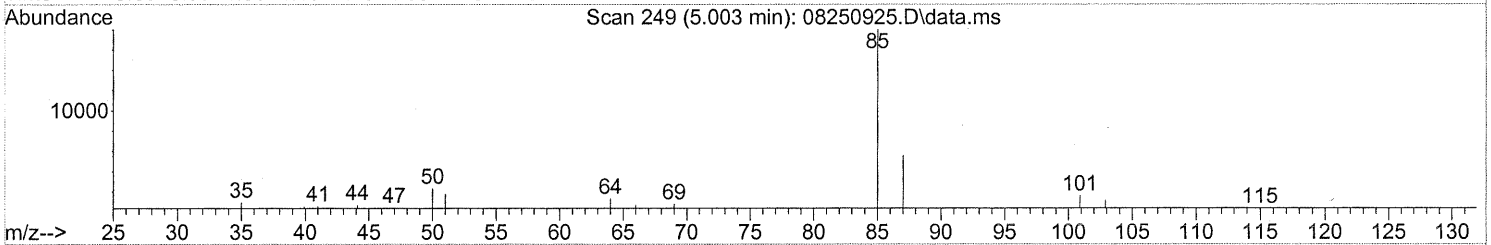
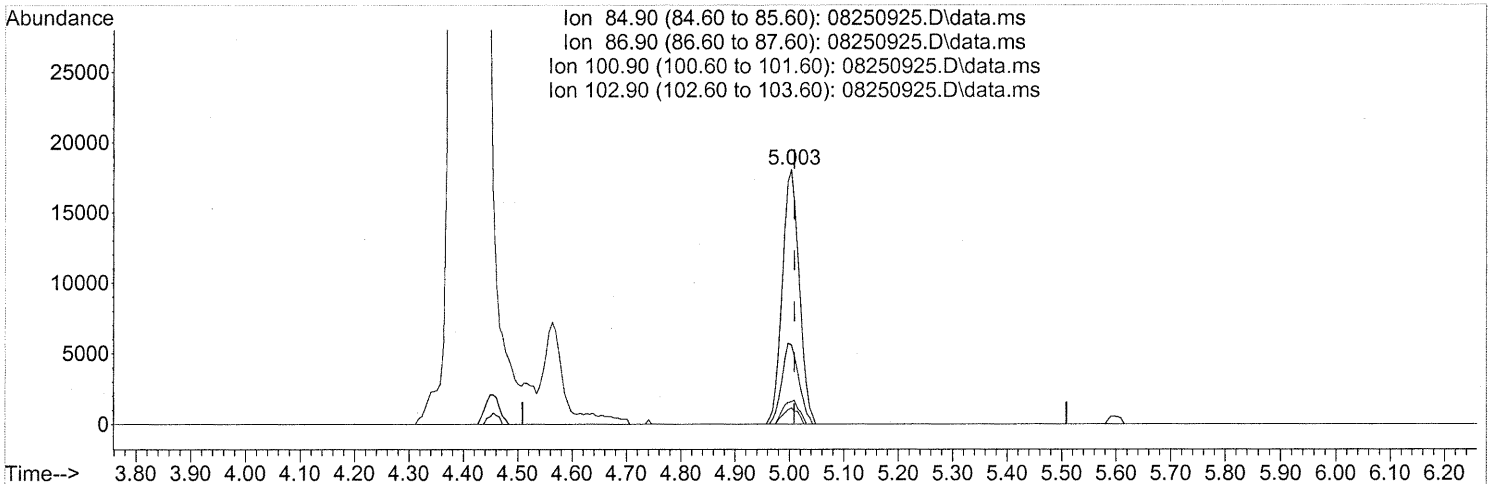
response 687170

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	111.16
41.10	152.70	155.50
0.00	0.00	0.00

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TIC: 08250925.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.003min (-0.006) 0.92ng

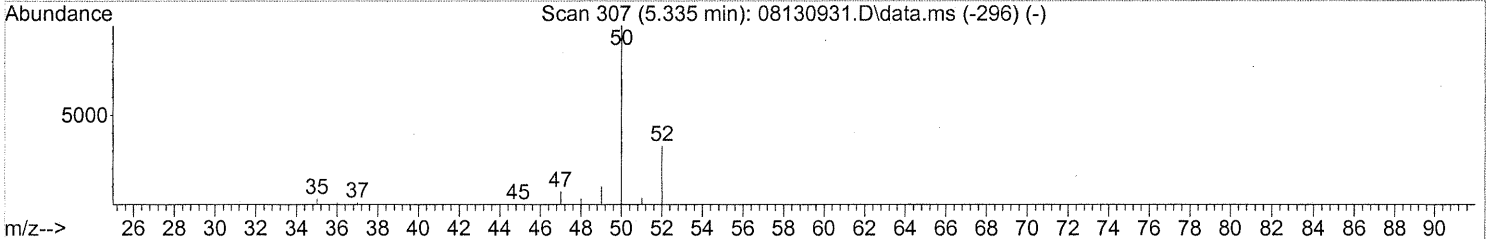
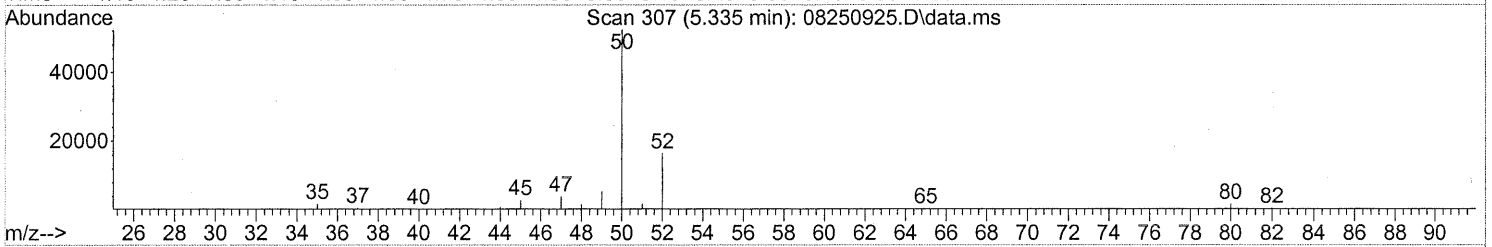
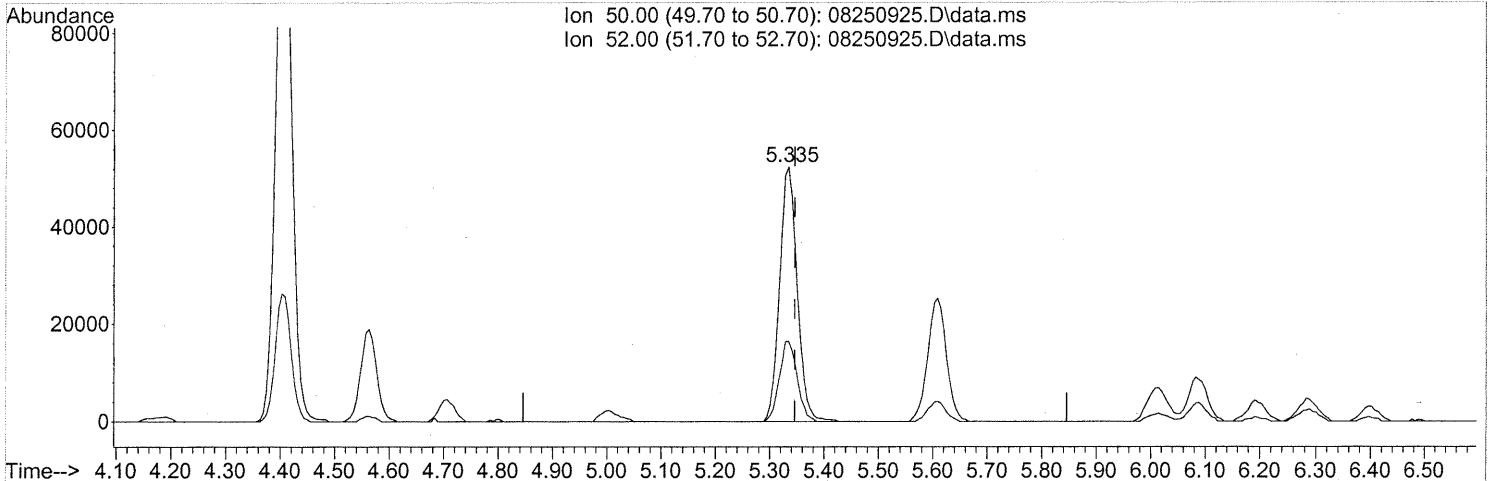
response 38846

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.41
100.90	9.10	8.67
102.90	5.50	5.32

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TIC: 08250925.D\data.ms

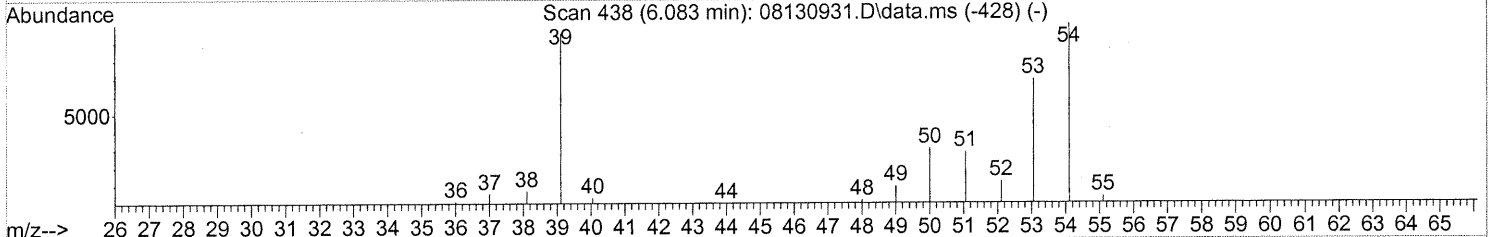
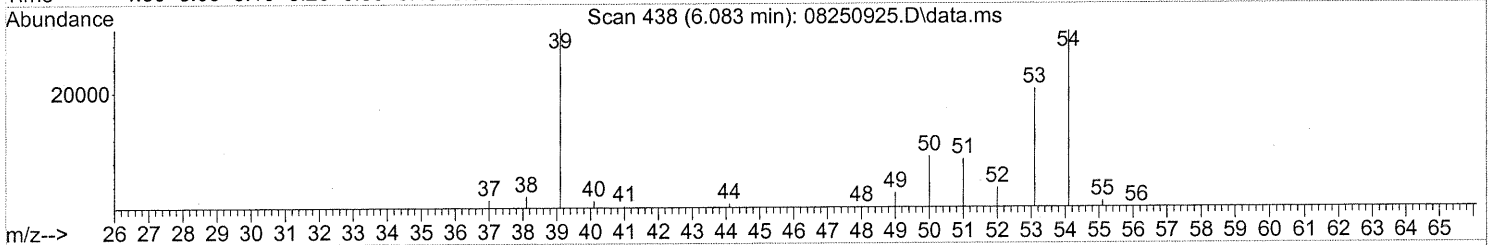
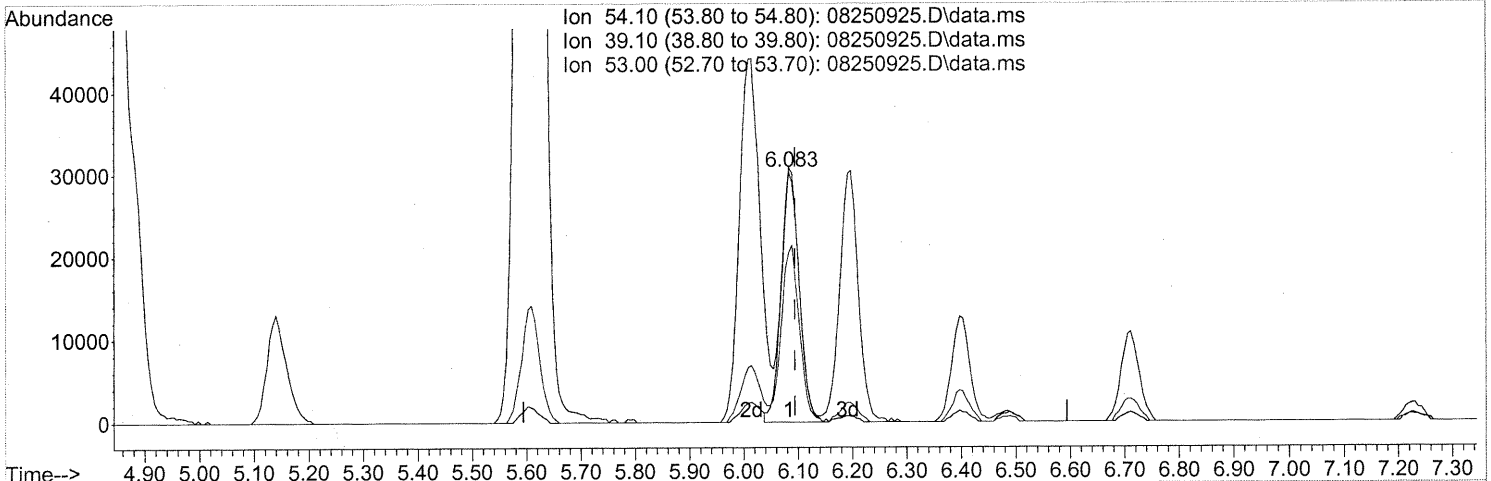
(4) Chloromethane (T)  
 5.335min (-0.011) 2.95ng  
 response 116893

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.85
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
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TIC: 08250925.D\data.ms

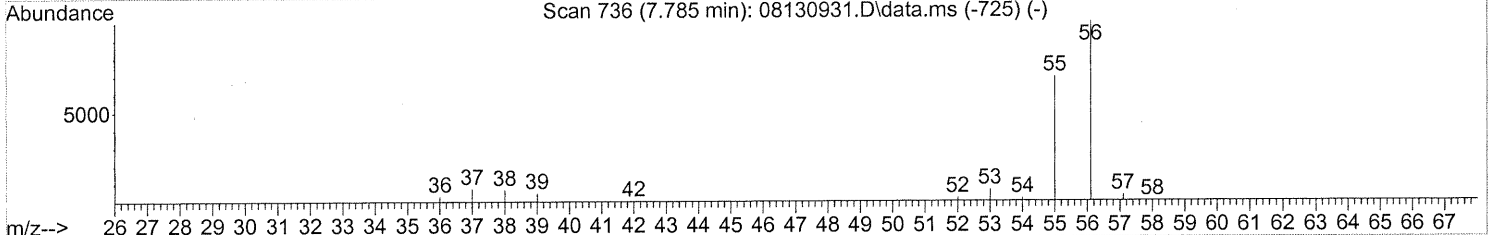
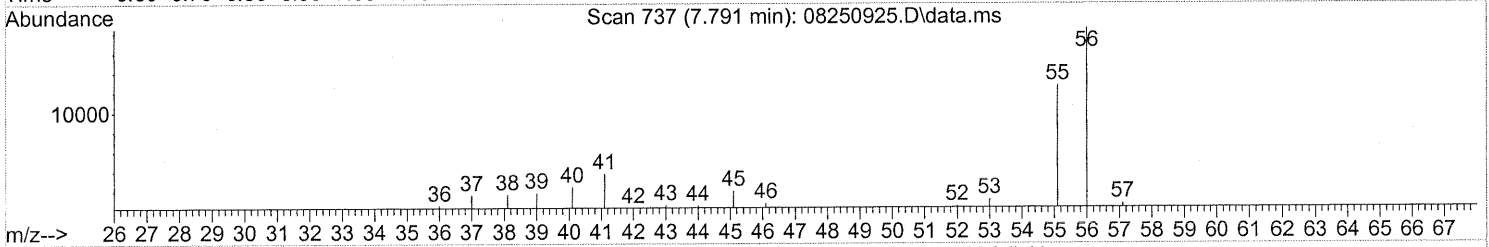
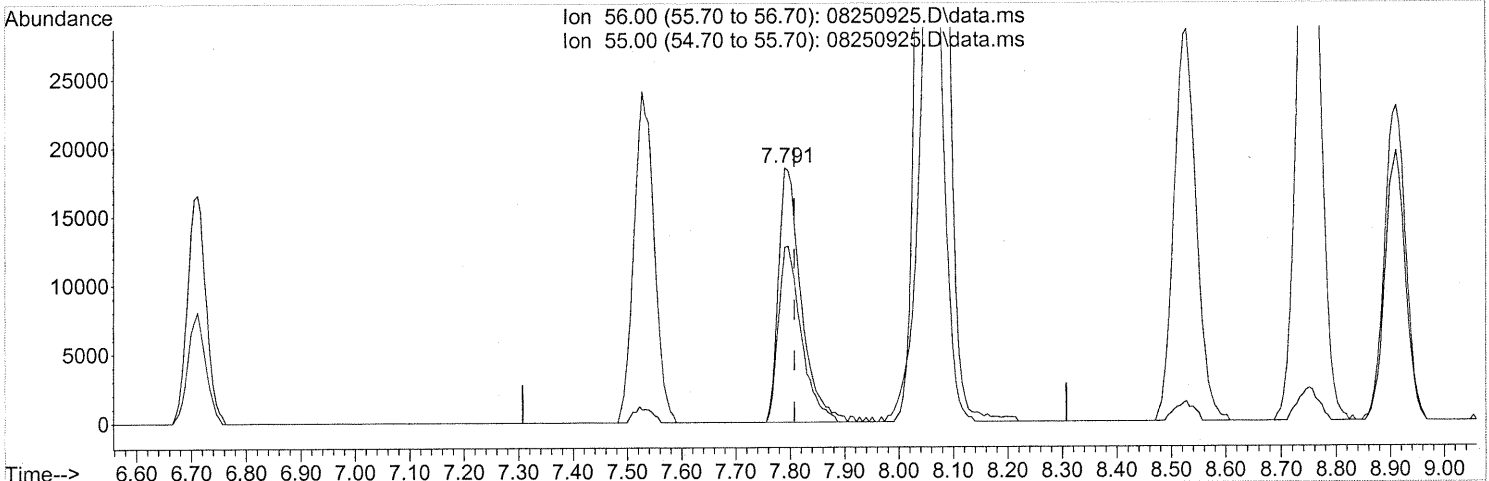
(7) 1,3-Butadiene (T)  
 6.083min (-0.011) 2.52ng  
 response 69822

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	100.06
53.00	69.80	69.80
0.00	0.00	0.00

Quantitation Report (Qedit)

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Quant Time: Aug 26 07:22:04 2009  
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 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



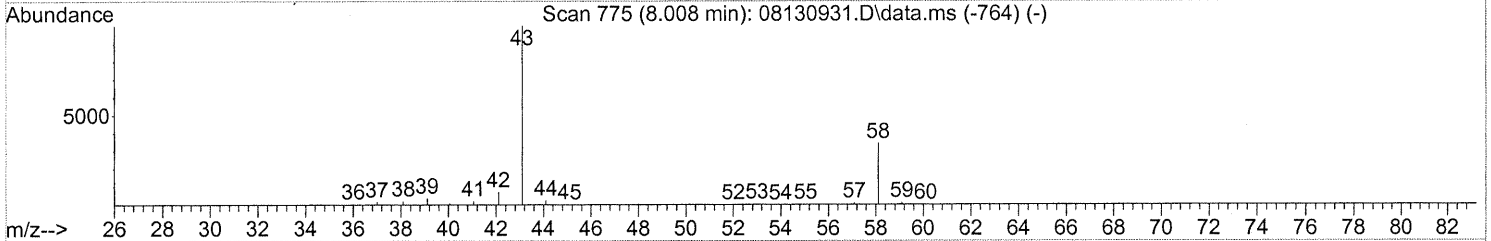
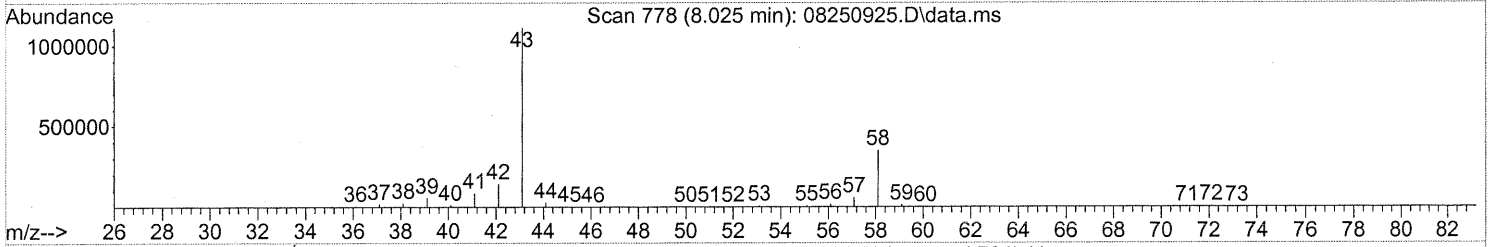
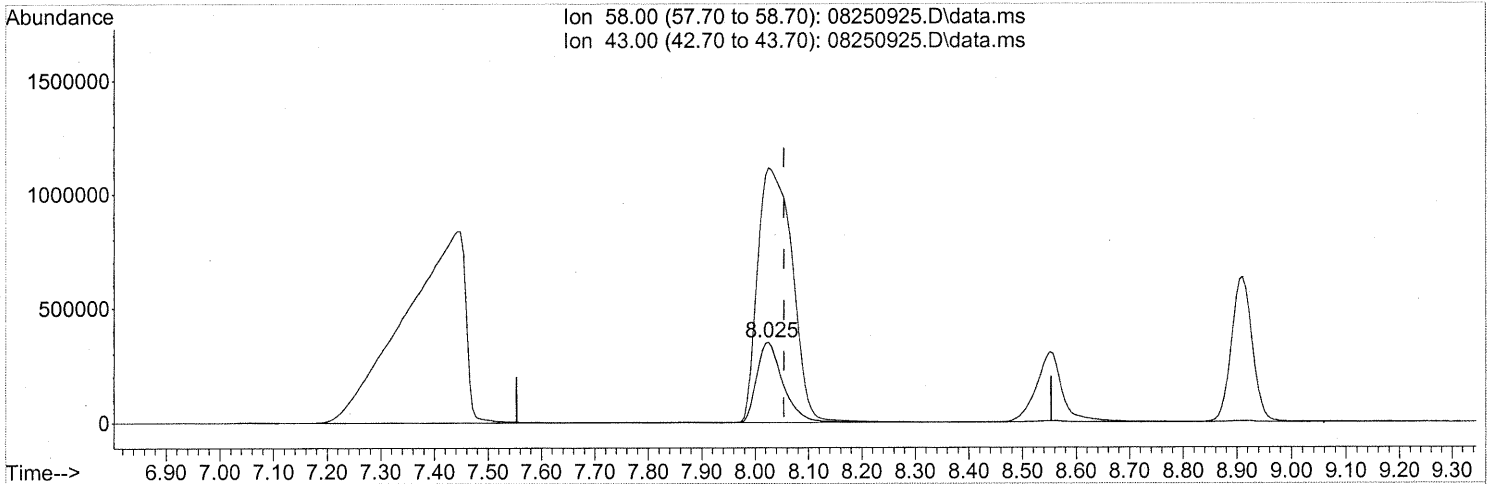
(12) Acrolein (T)  
 7.791min (-0.017) 4.37ng  
 response 53129

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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 Acq On : 25 Aug 2009 19:58  
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 QLast Update : Fri Aug 14 07:39:36 2009  
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TIC: 08250925.D\data.ms

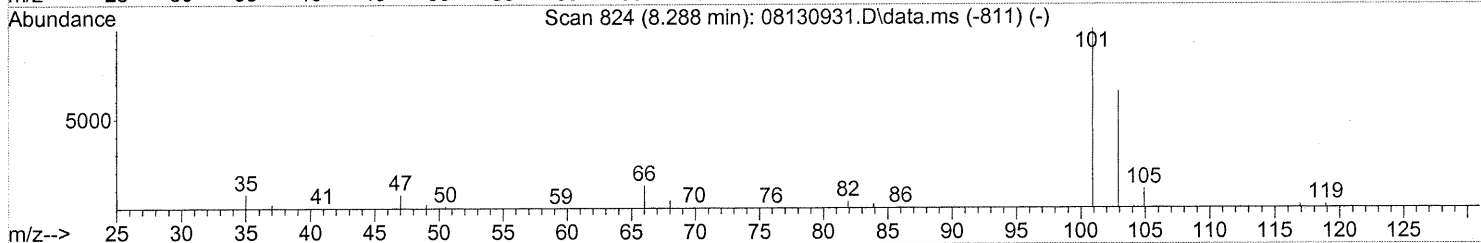
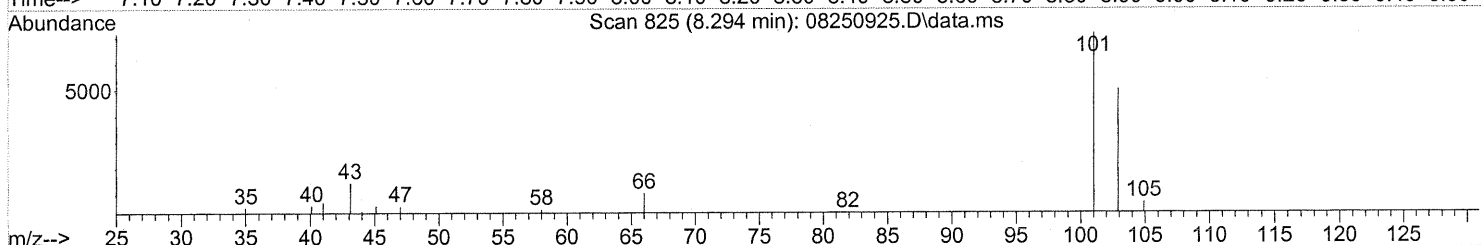
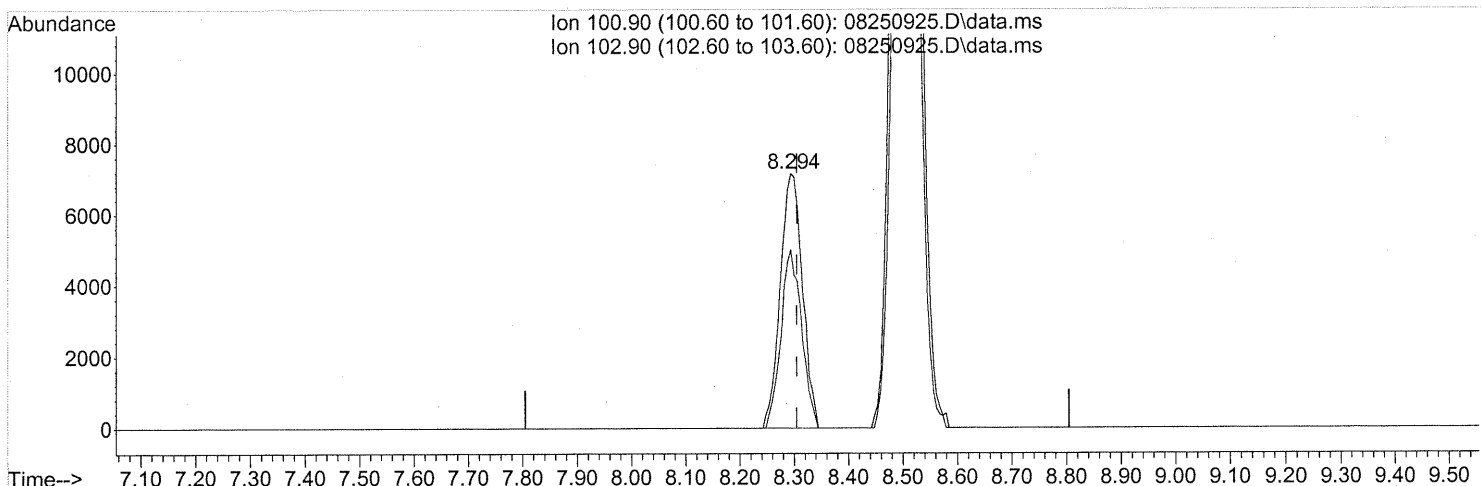
(13) Acetone (T)  
 8.025min (-0.029) 63.40ng  
 response 1203419

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	420.55#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(14) Trichlorofluoromethane (T)

8.294min (-0.011) 0.56ng

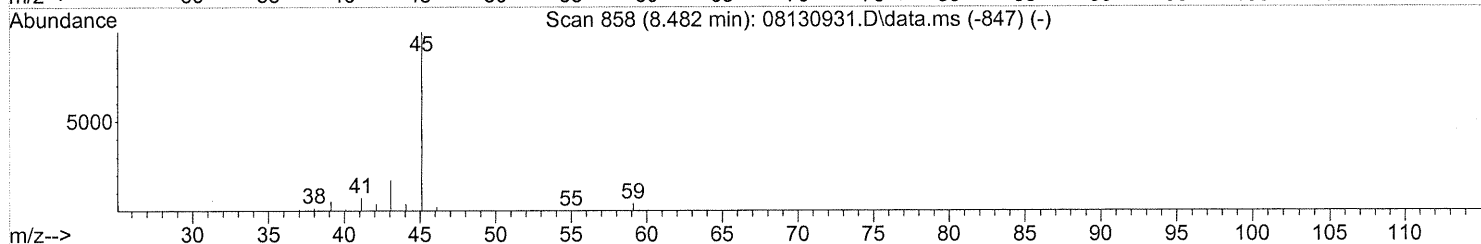
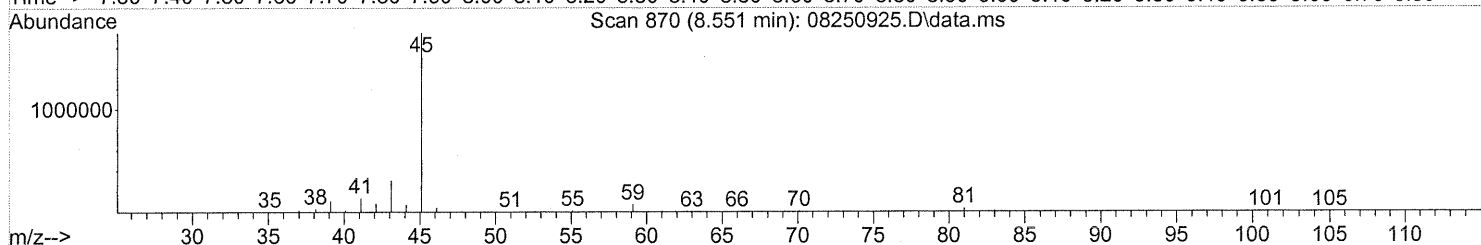
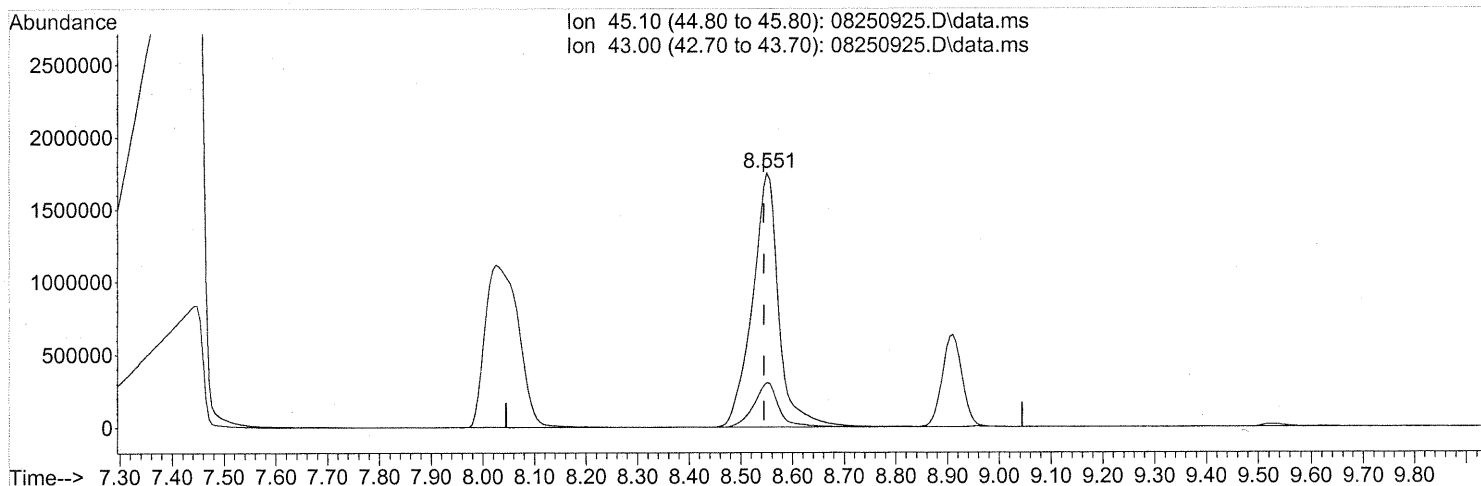
response 20249

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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 Response via : Initial Calibration



TIC: 08250925.D\data.ms

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

8.551min (+0.006) 119.36ng

response 6204551

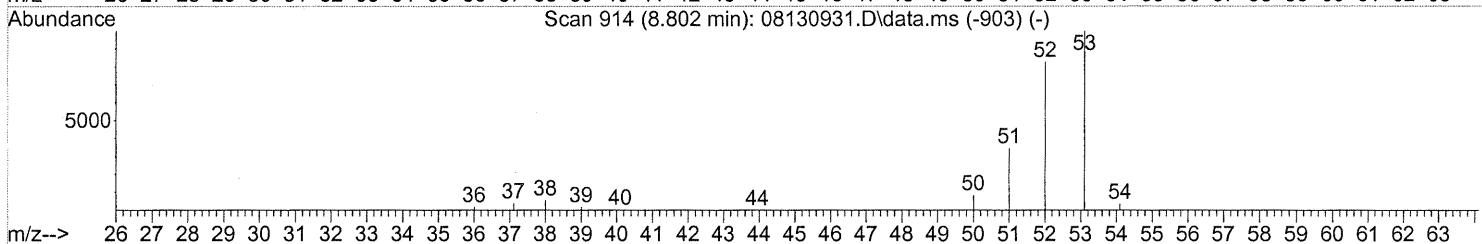
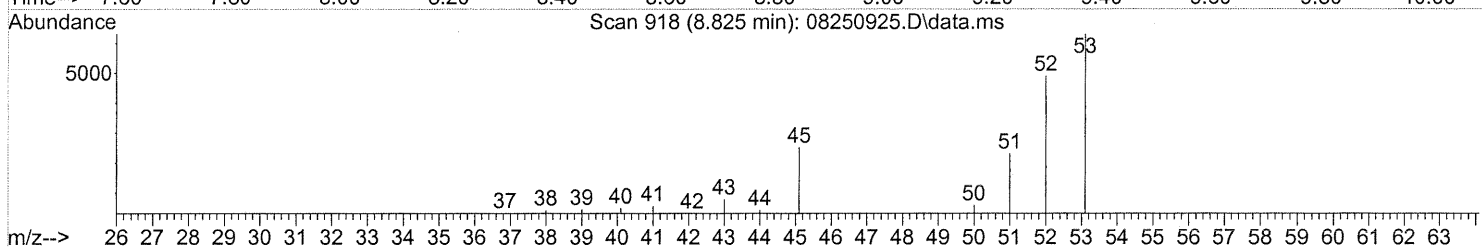
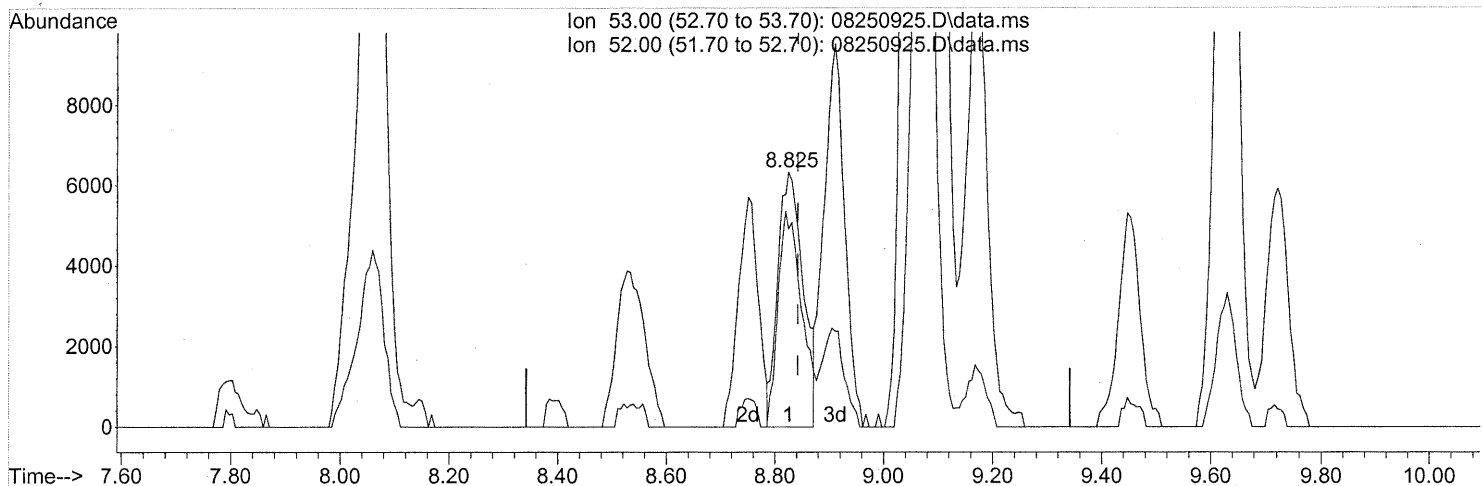
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.52
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

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TIC: 08250925.D\data.ms

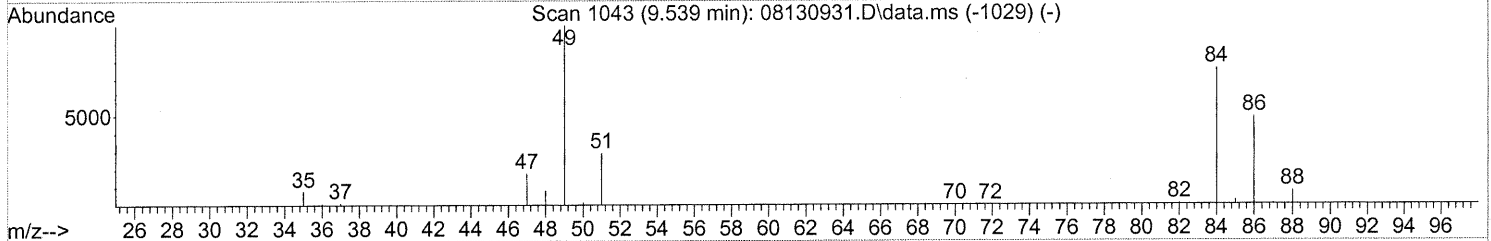
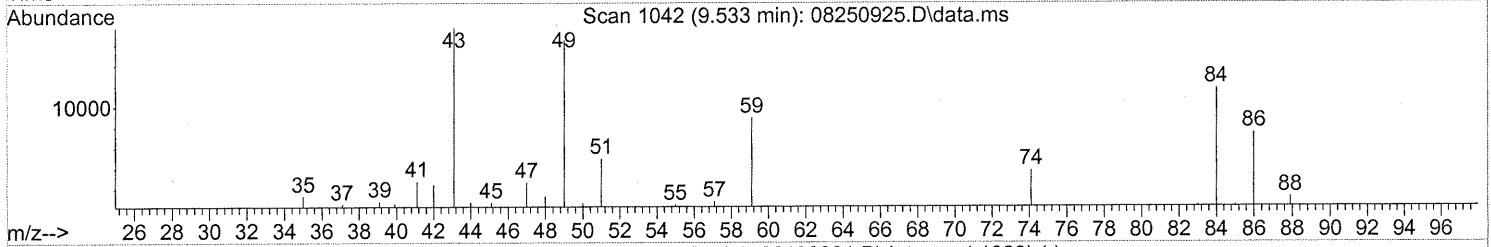
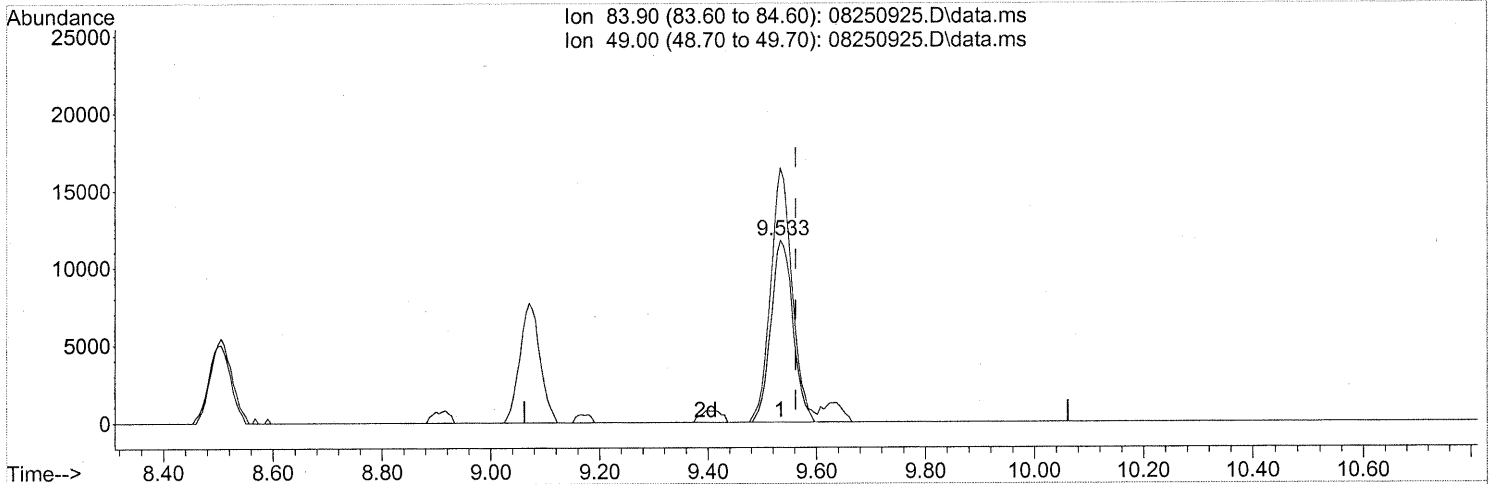
(16) Acrylonitrile (T)  
 8.825min (-0.017) 0.74ng  
 response 20514

Ion	Exp%	Act%
53.00	100	100
52.00	84.50	80.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(19) Methylene Chloride (T)

9.533min (-0.029) 1.40ng

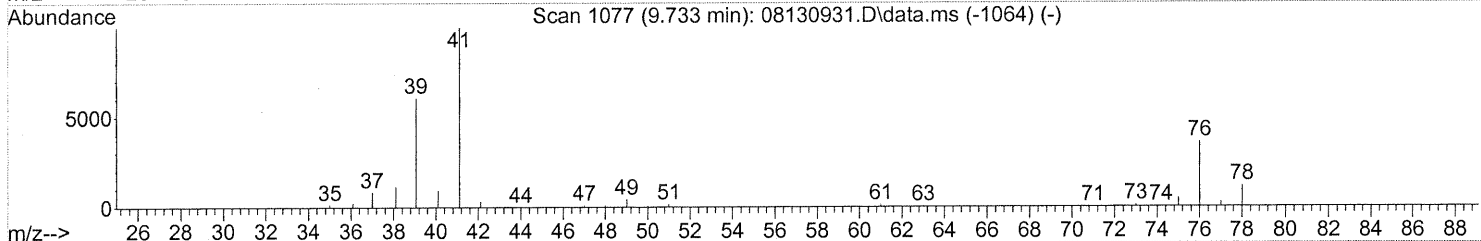
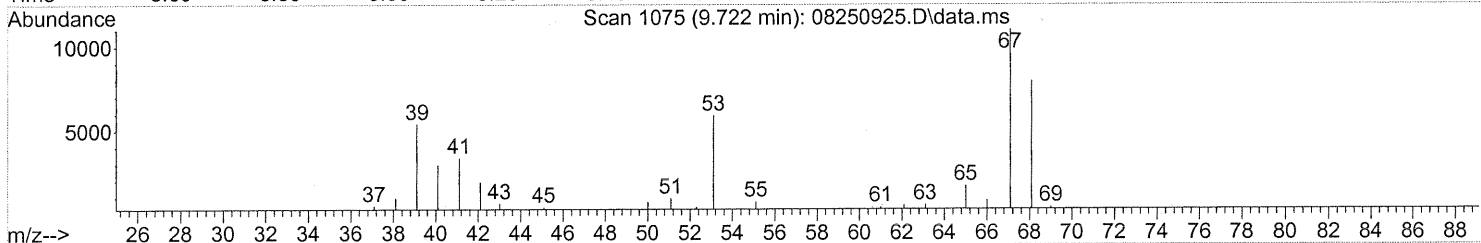
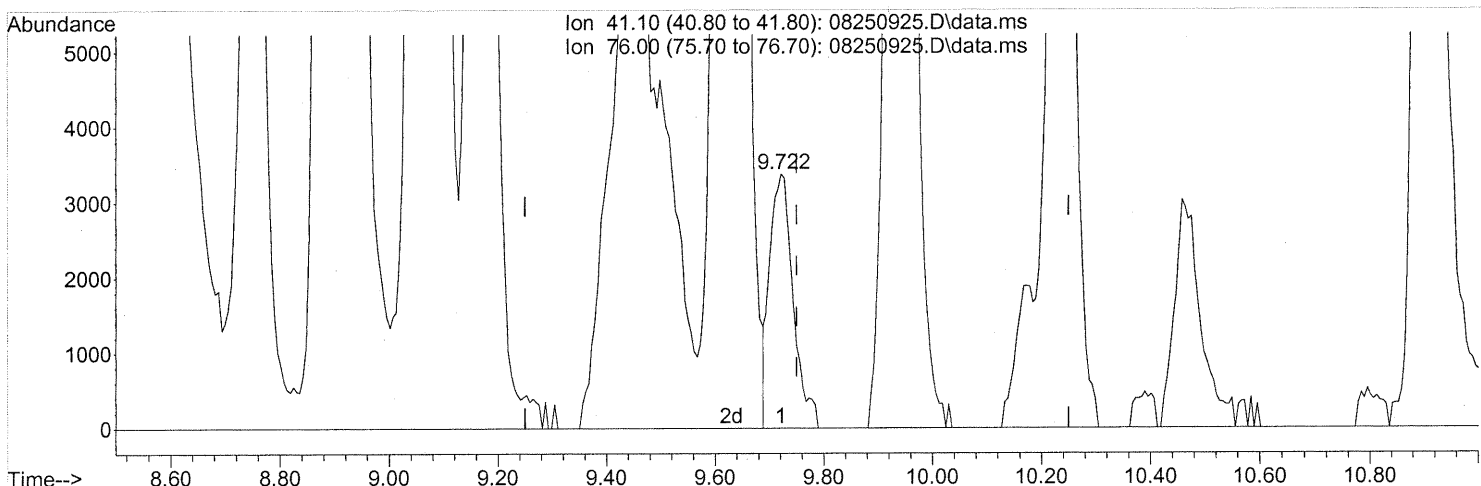
response 33079

Ion	Exp%	Act%
83.90	100	100
49.00	118.80	137.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.722min (-0.029) 0.32ng

response 10213

Ion	Exp%	Act%
41.10	100	100
76.00	41.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

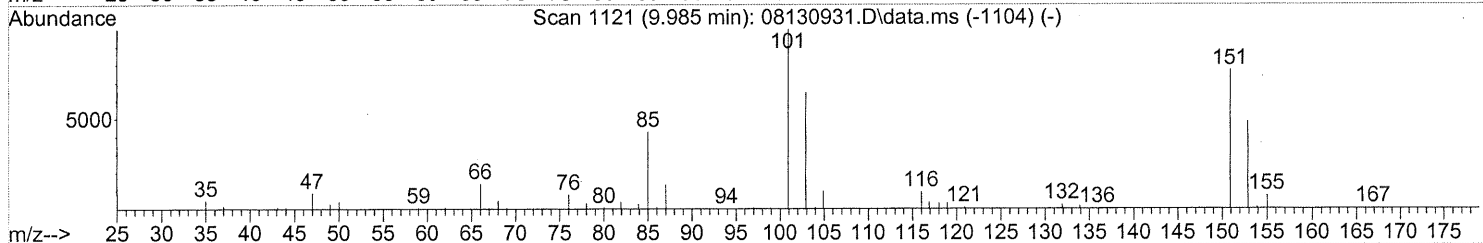
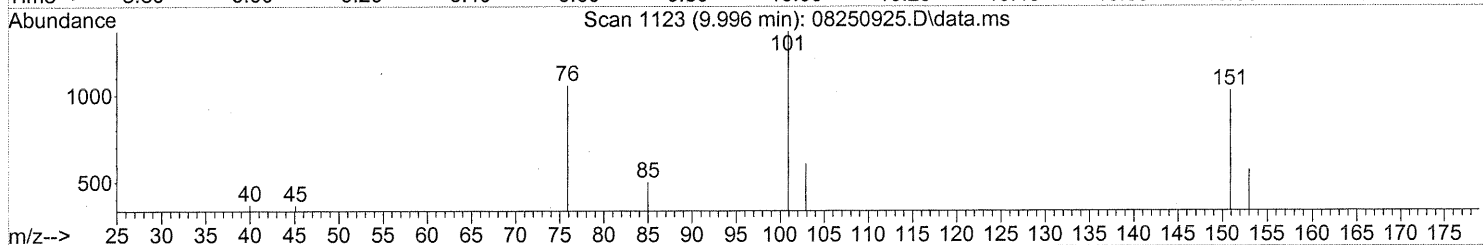
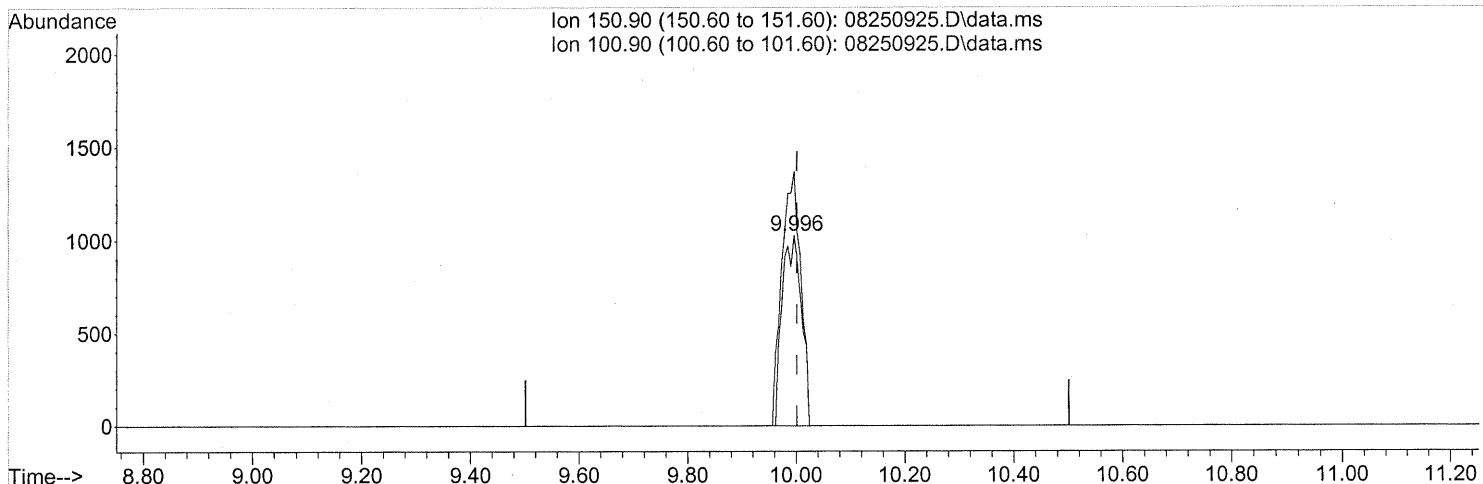
*FP Em 8/28/09*

*428/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.16ng

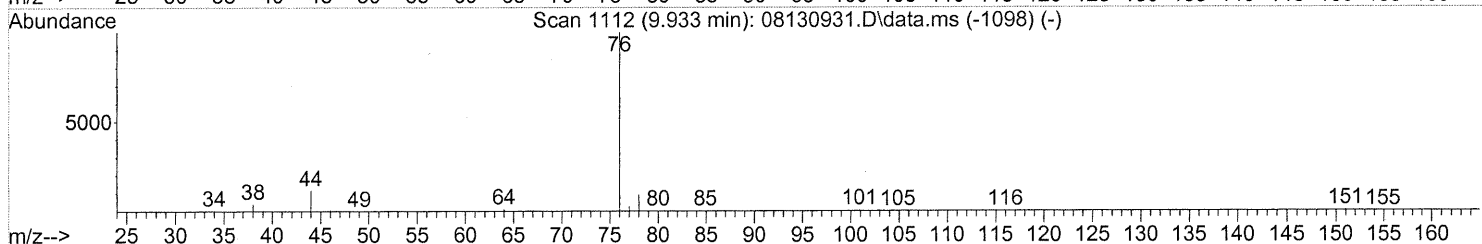
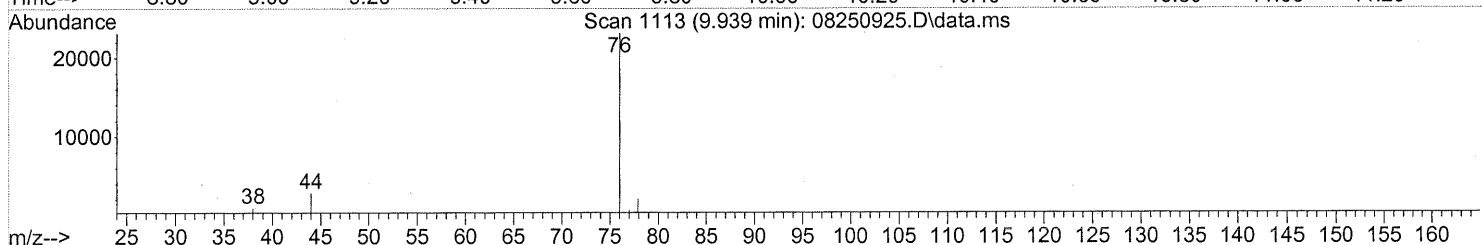
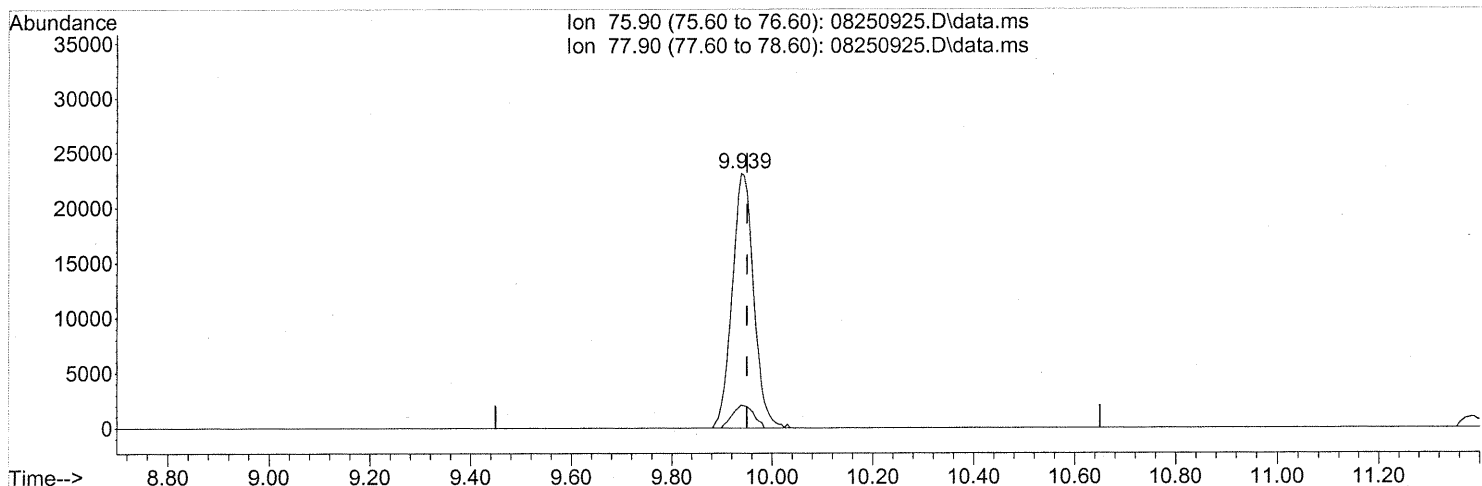
response 2534

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	131.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 0.82ng

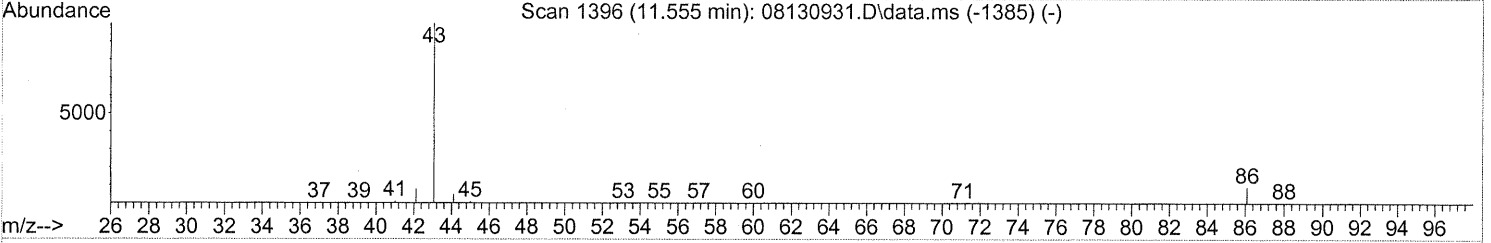
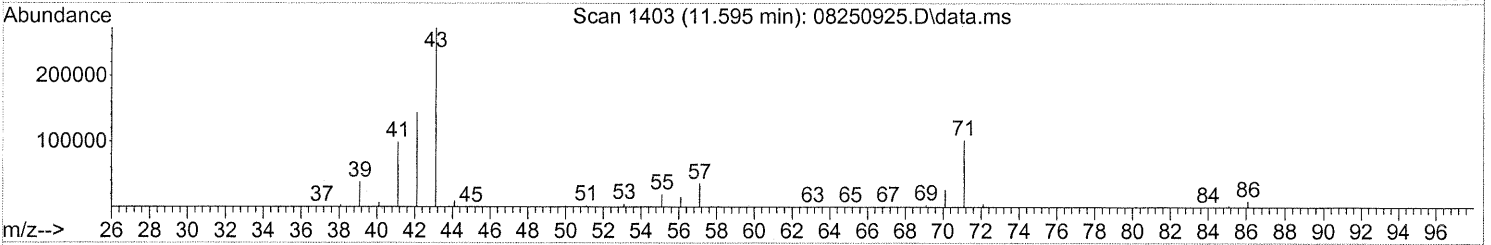
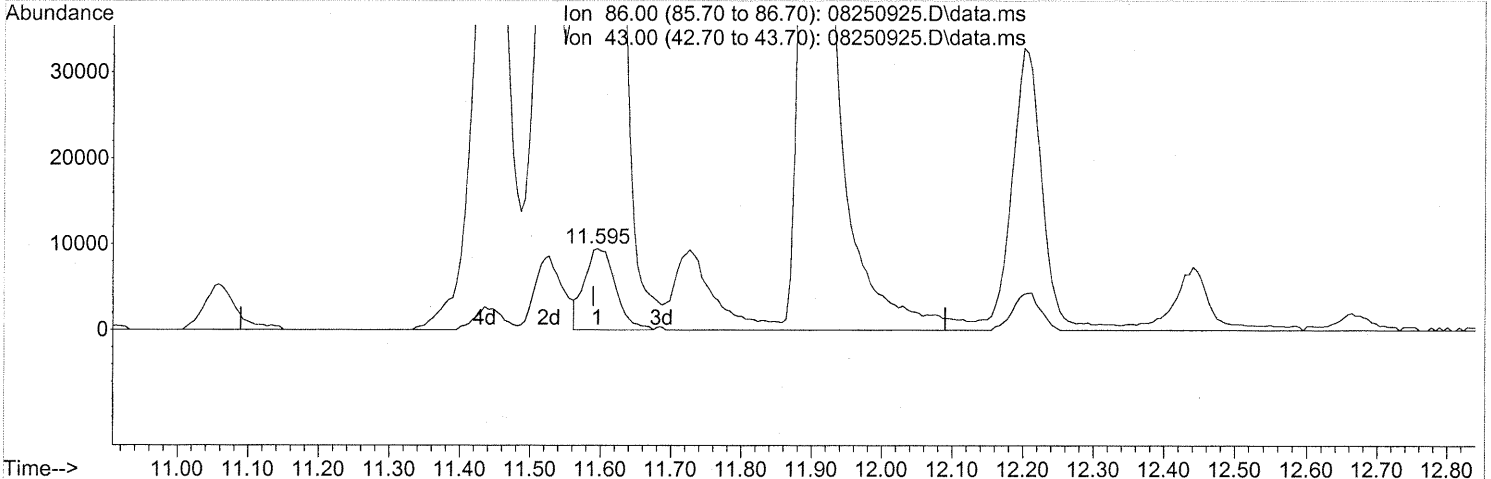
response 68371

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(26) Vinyl Acetate (T)  
 11.595min (+0.005) 7.07ng  
 response 29048  

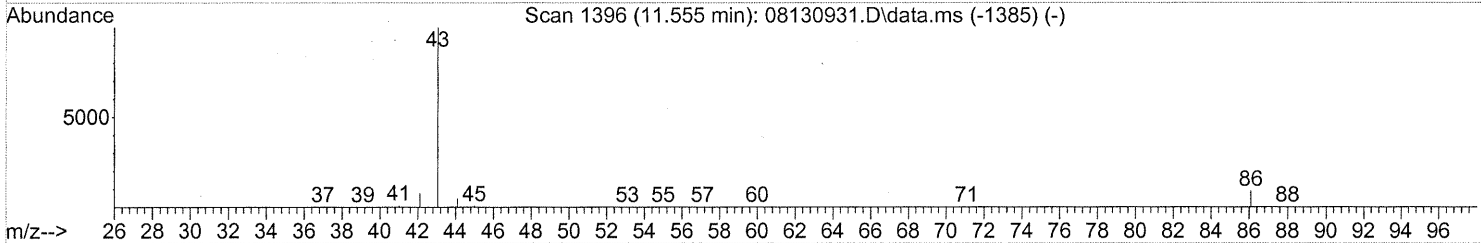
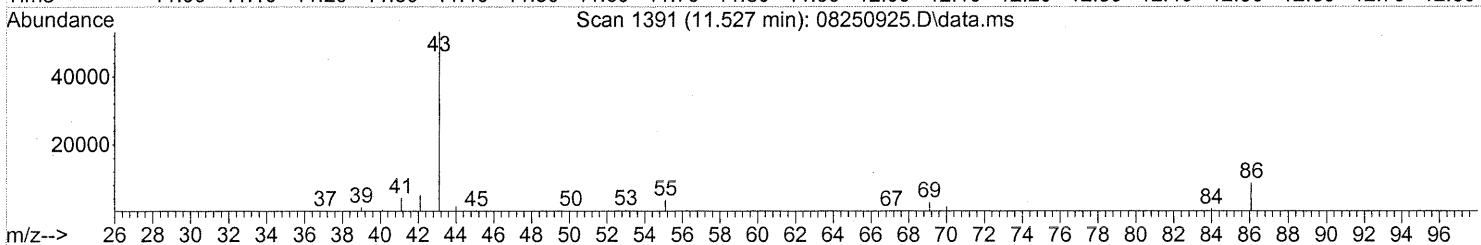
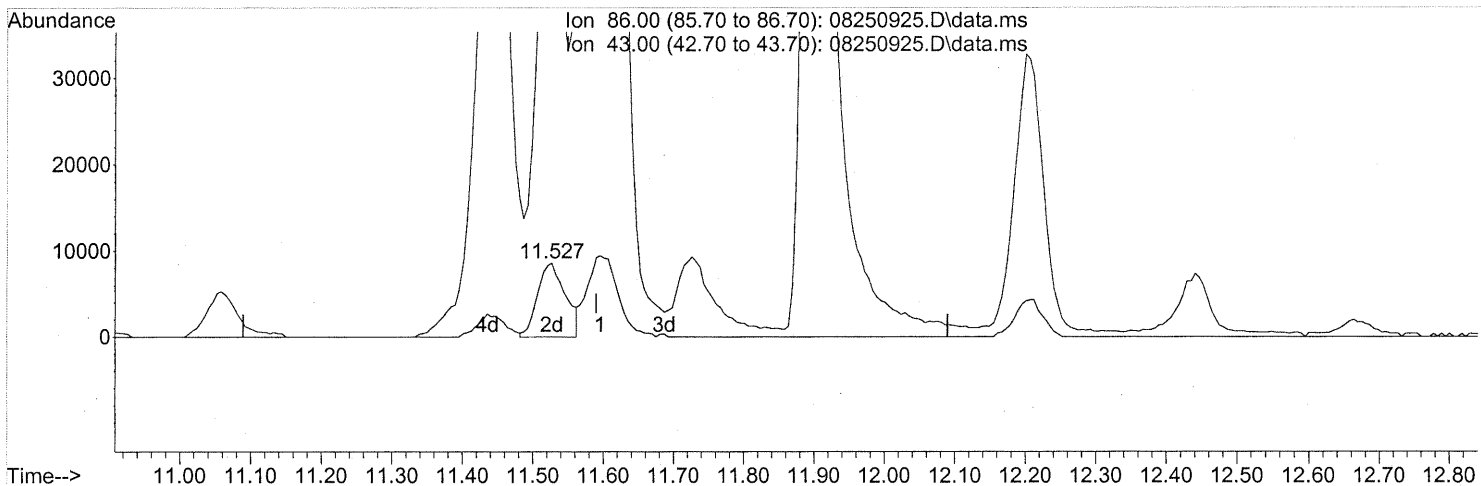
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2657.04#
0.00	0.00	0.00
0.00	0.00	0.00

*mp*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)  
 11.527min (-0.063) 5.73ng m  
 response 23570

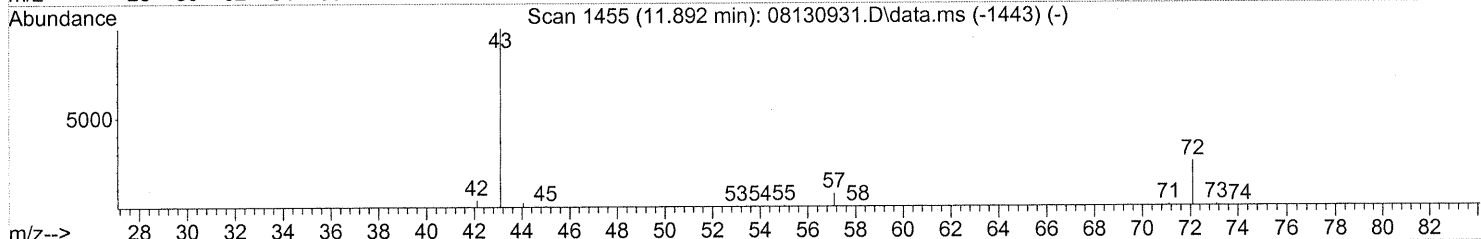
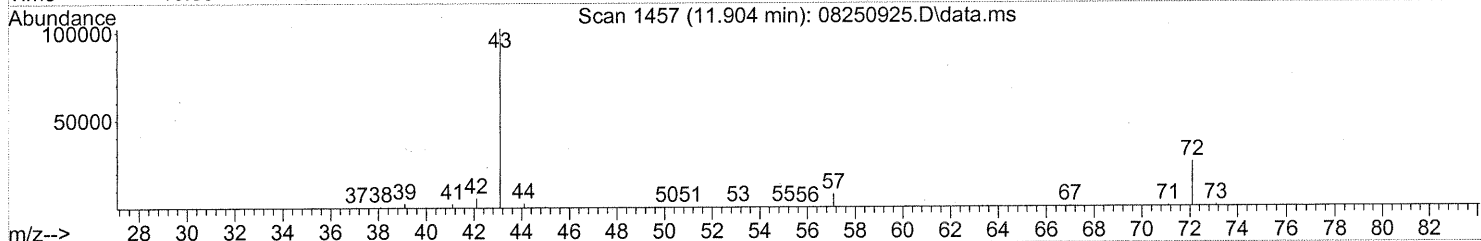
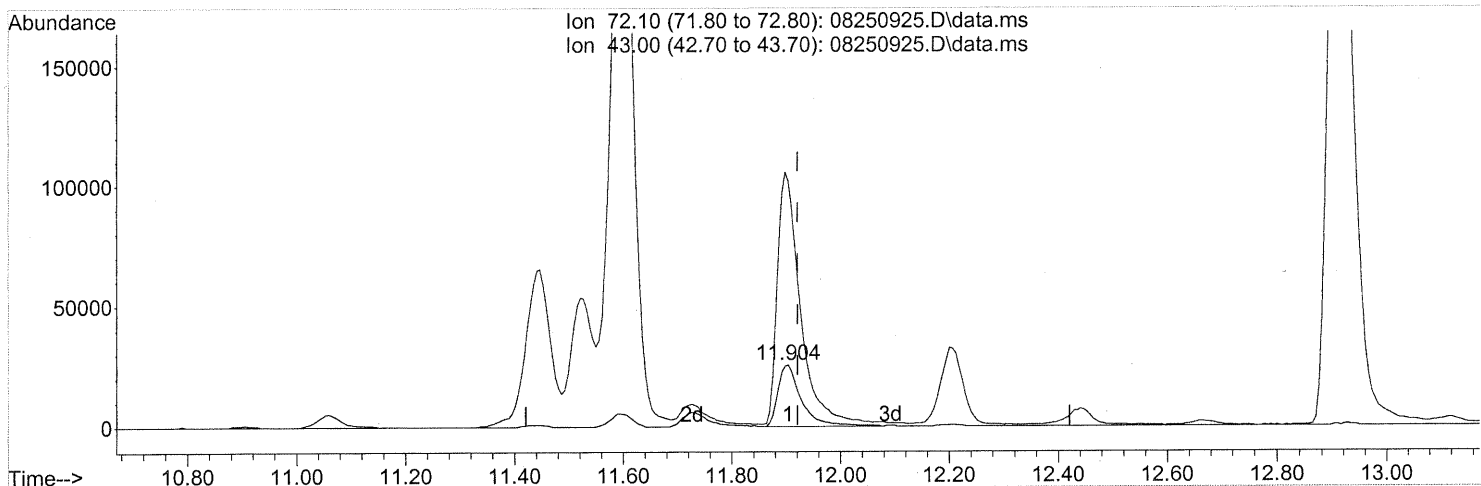
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	3274.57#
0.00	0.00	0.00
0.00	0.00	0.00

*mp → LC*  
*com 8/28/09*  
*428/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

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

11.904min (-0.017) 5.70ng

response 75478

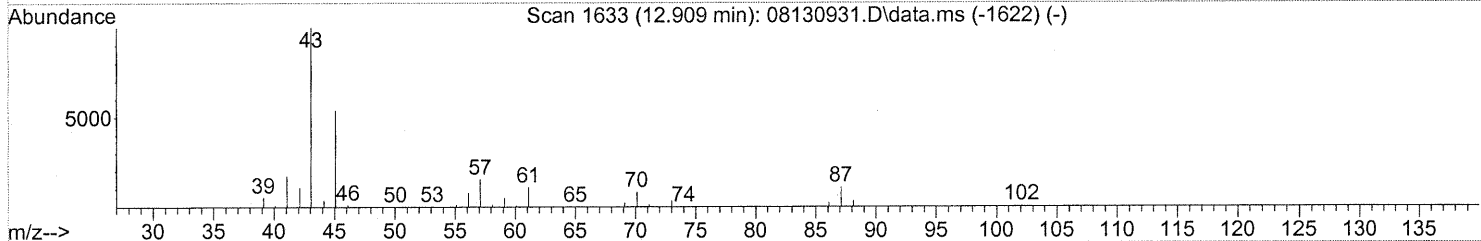
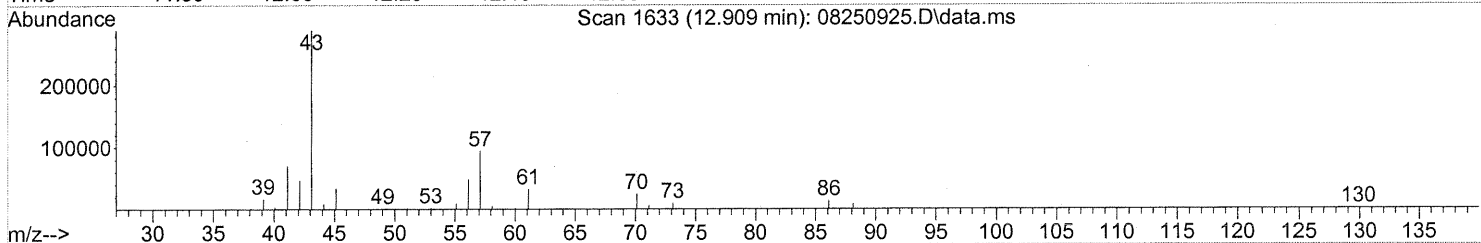
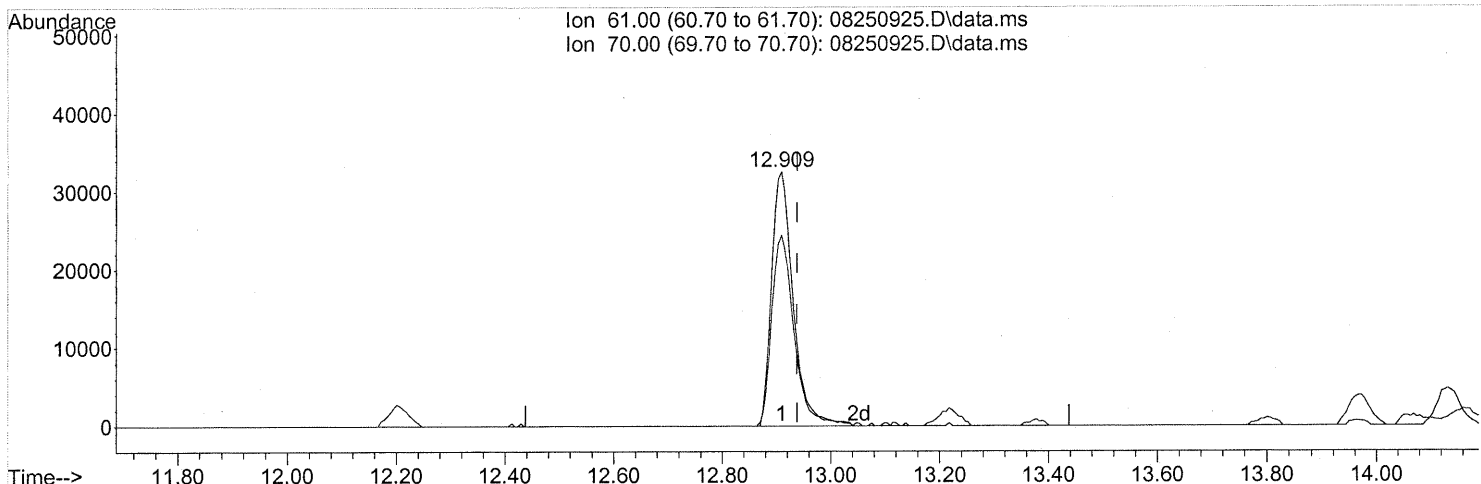
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	405.11#
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 10.47ng

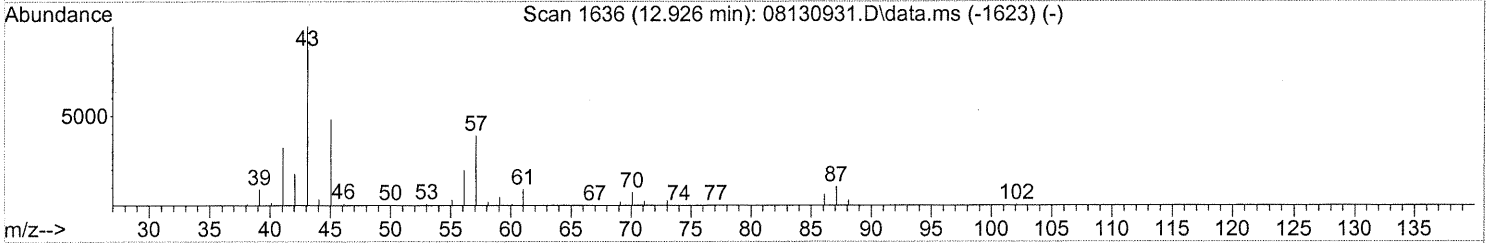
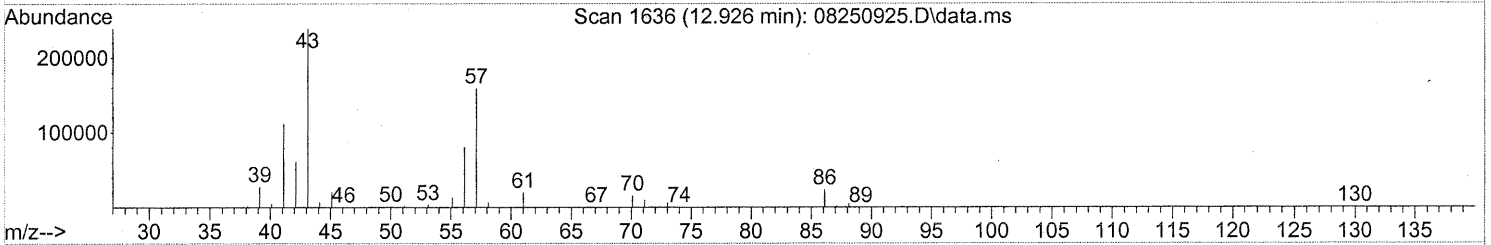
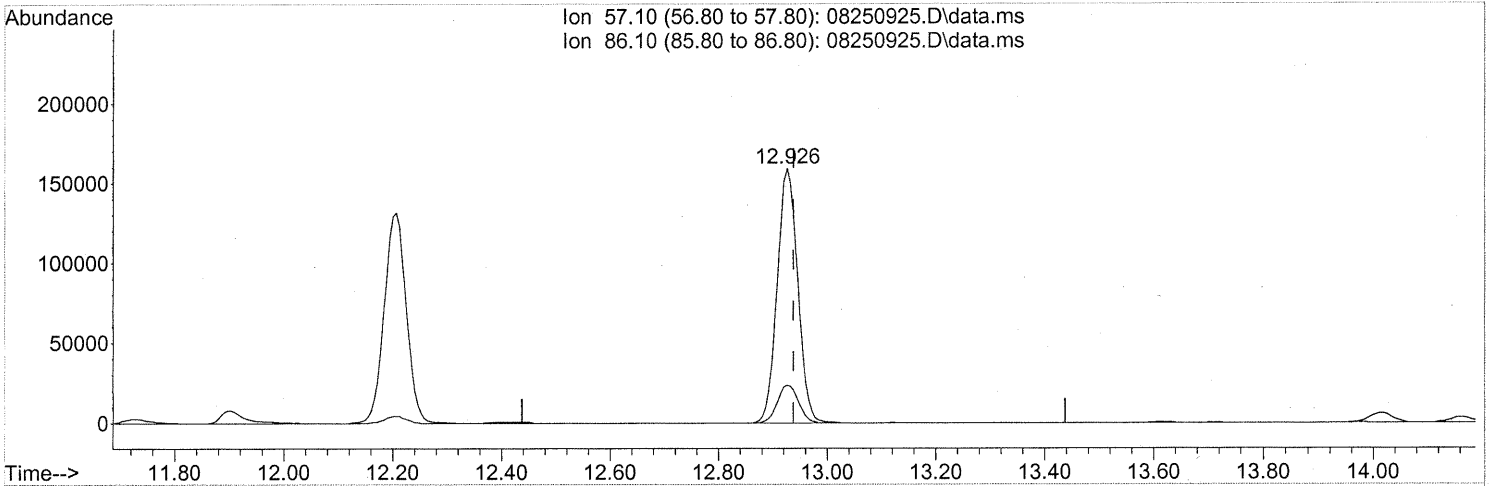
response 89852

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	77.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

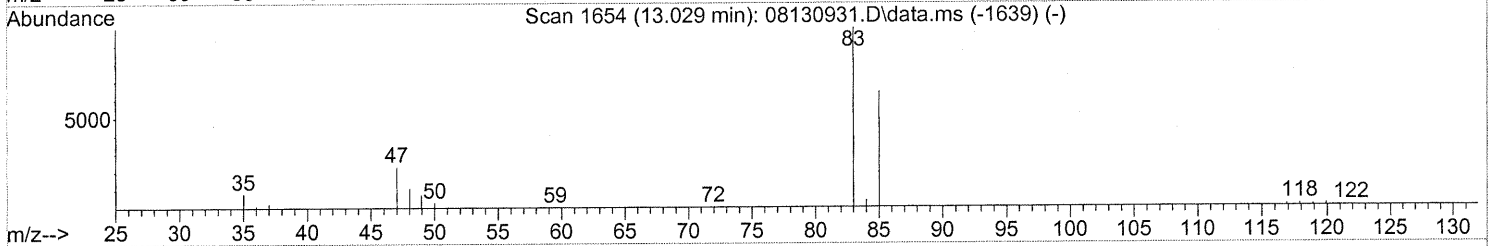
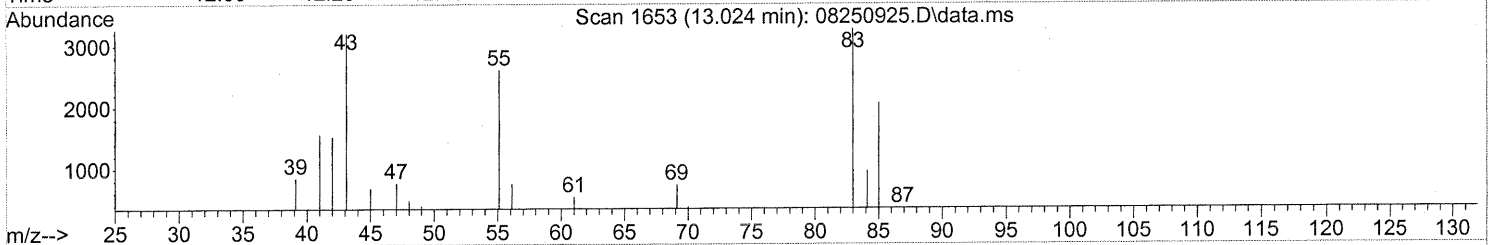
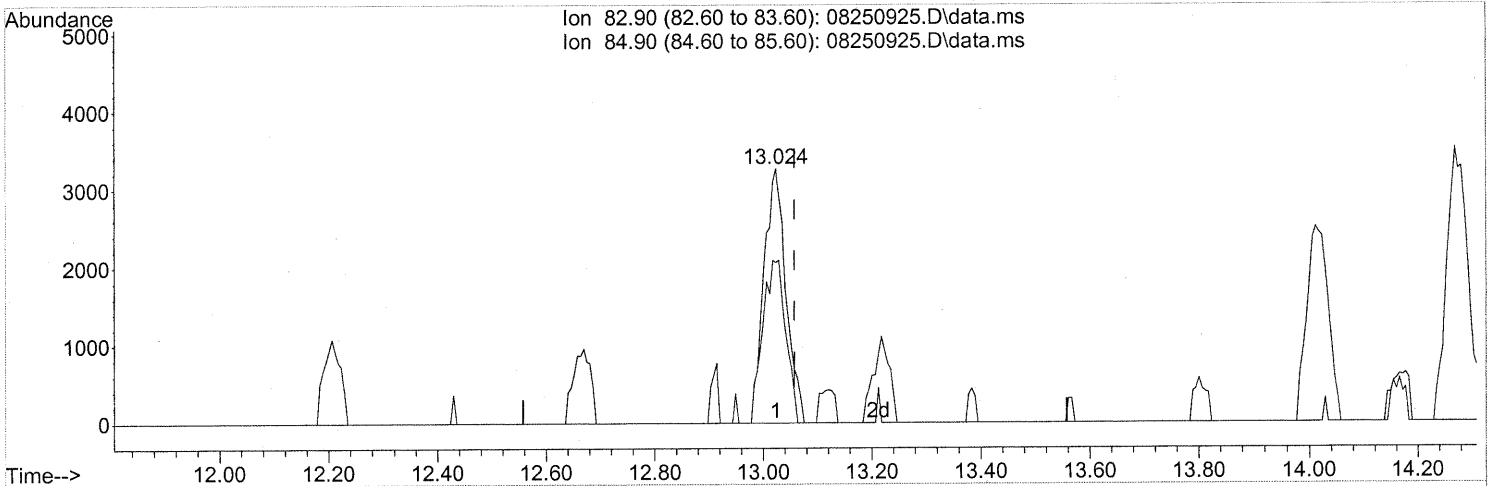
(31) n-Hexane (T)  
 12.926min (-0.011) 9.89ng  
 response 413835

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

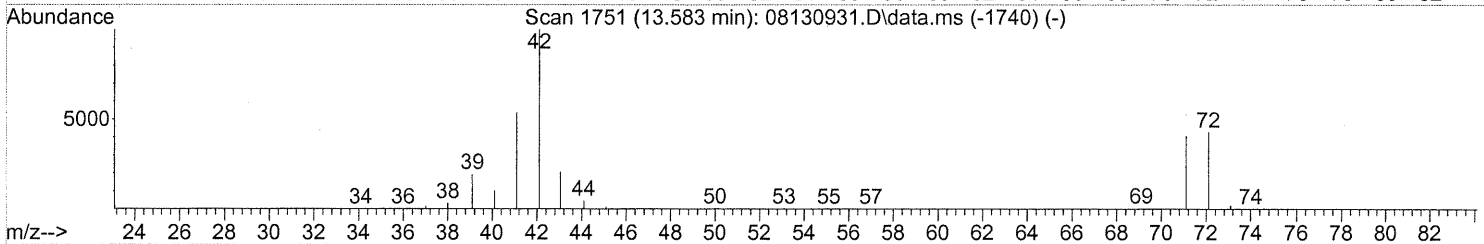
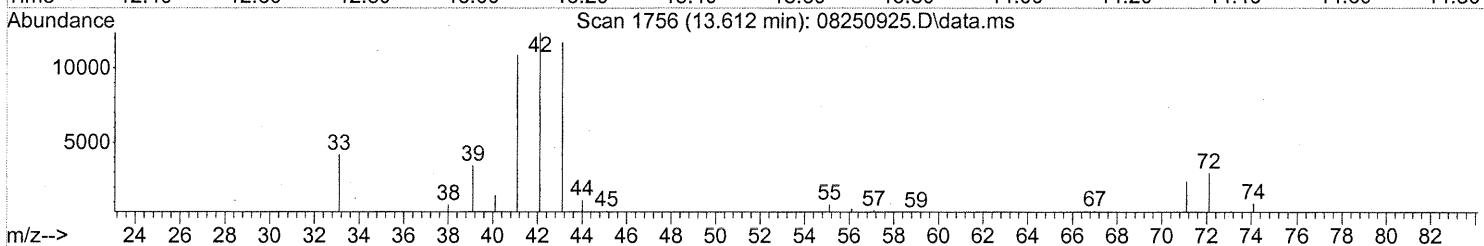
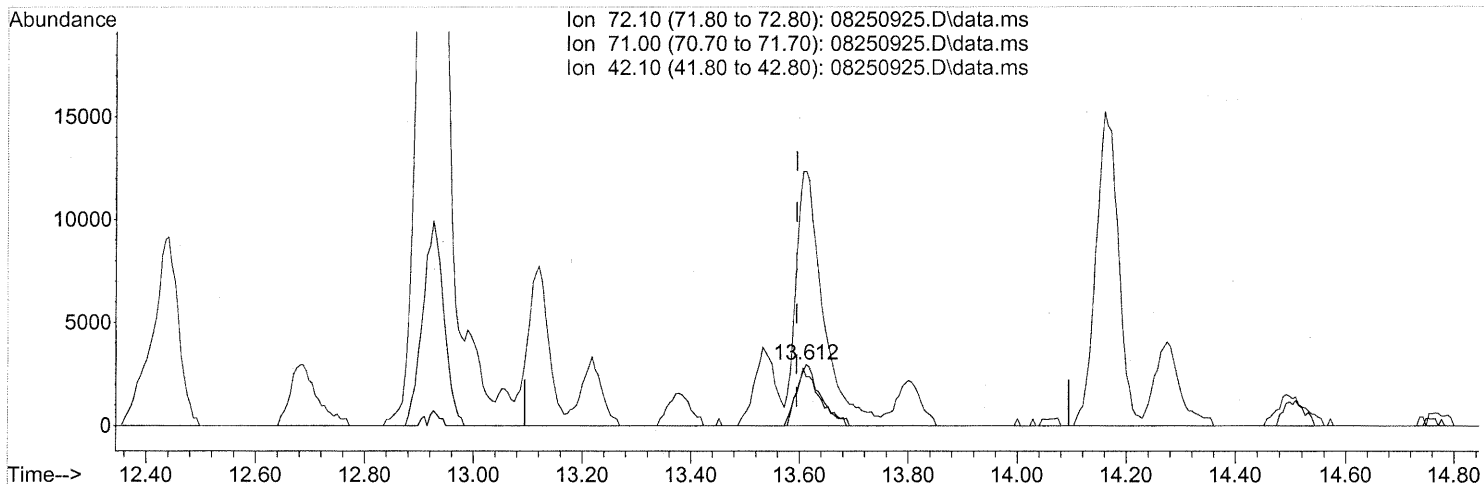
(32) Chloroform (T)  
 13.024min (-0.034) 0.26ng  
 response 9201

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	66.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.612min (+0.017) 0.66ng

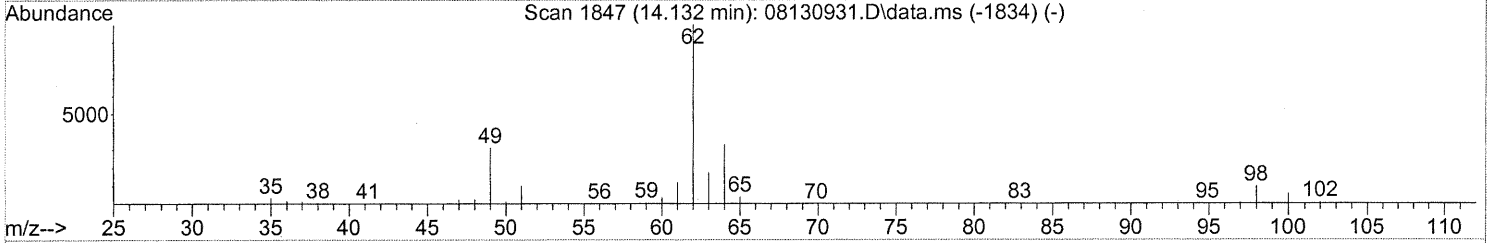
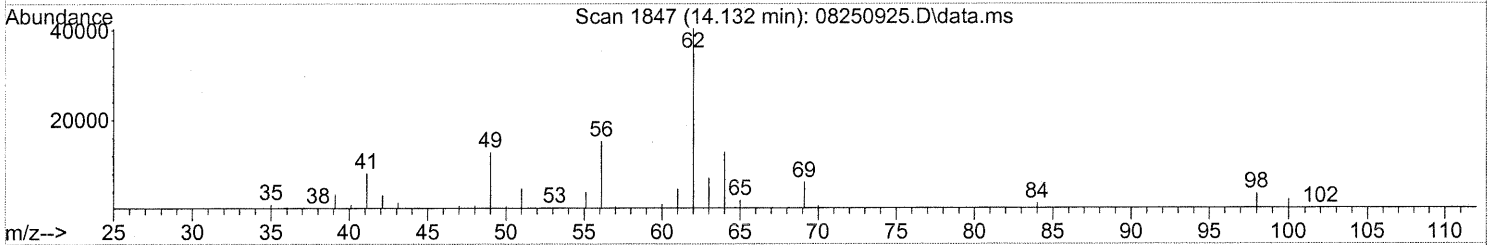
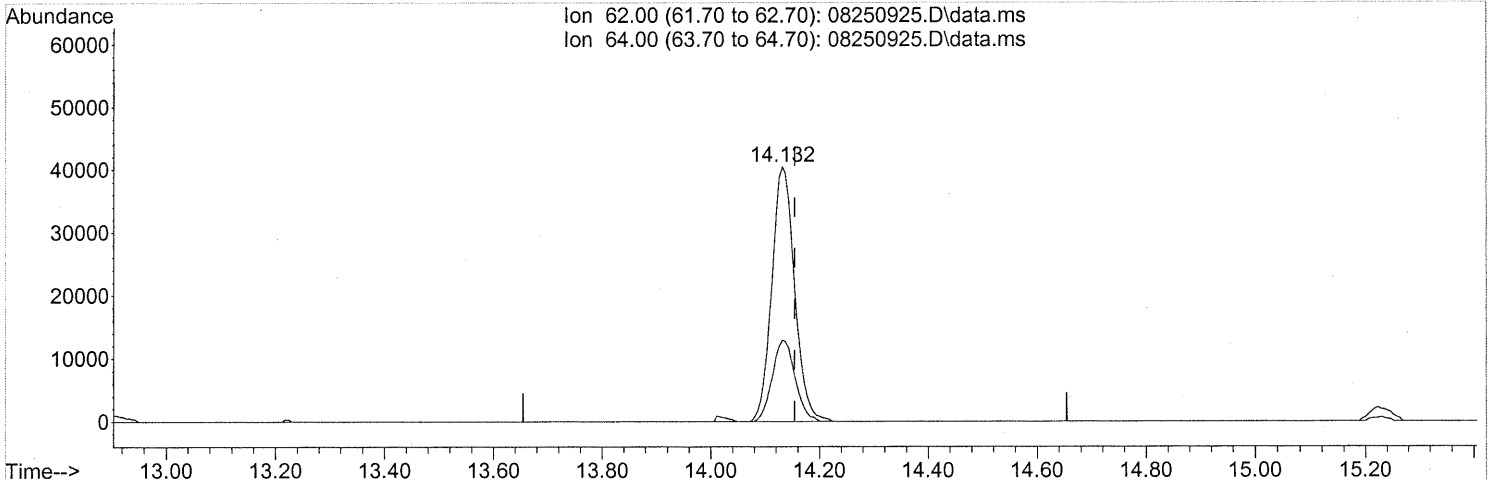
response 9033

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	89.29
42.10	206.50	476.31#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(36) 1,2-Dichloroethane (T)

14.132min (-0.023) 4.37ng

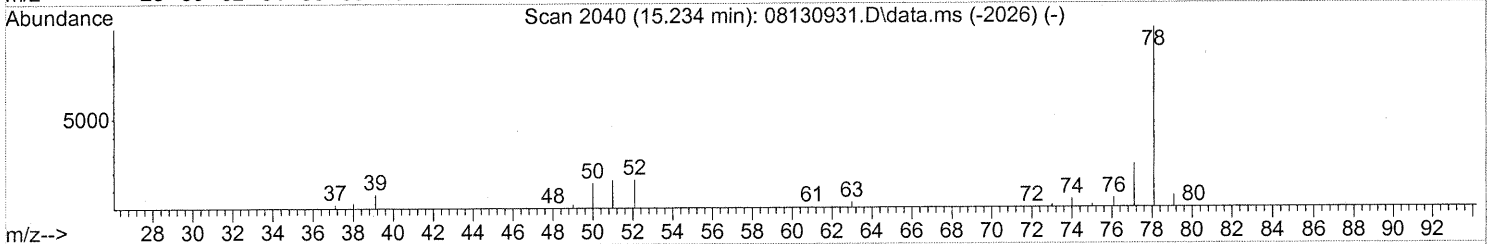
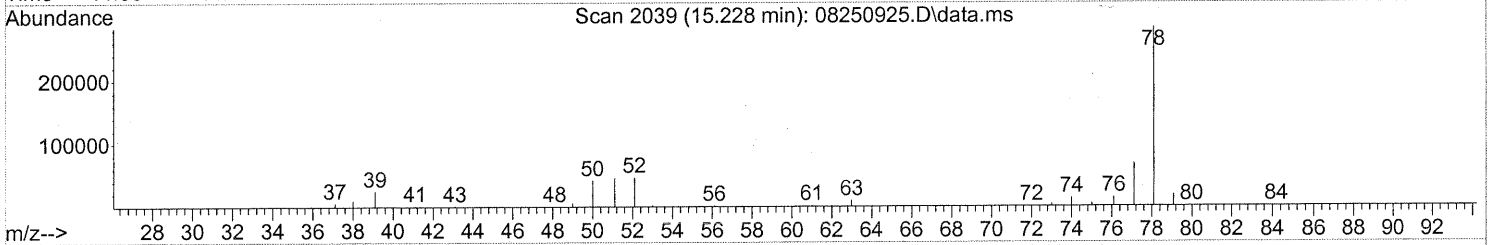
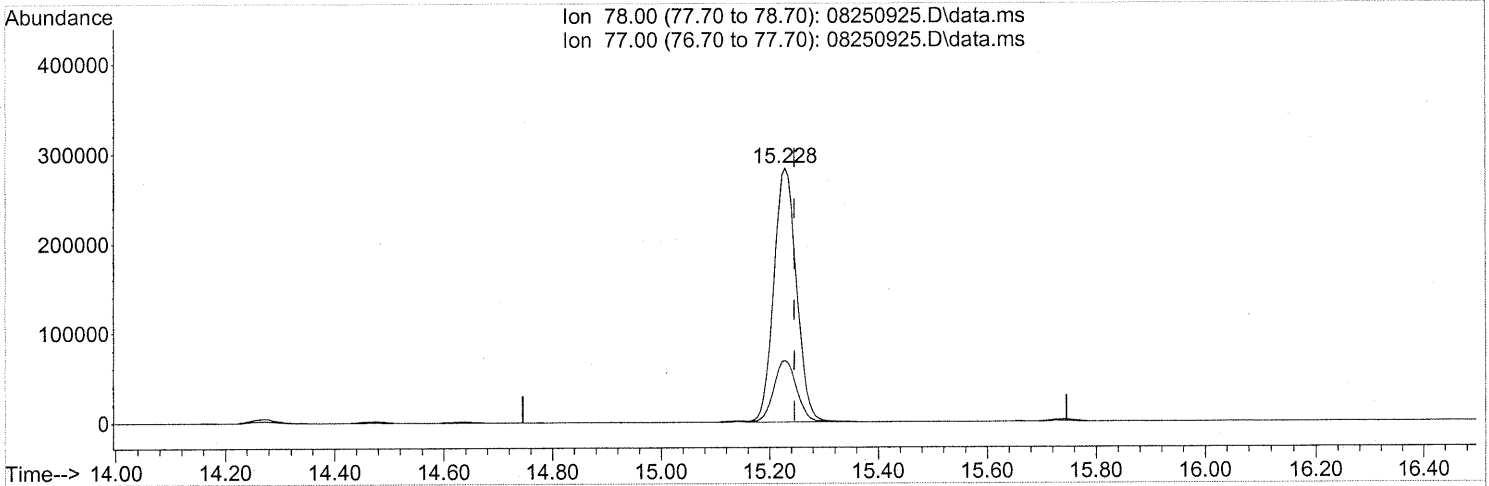
response 117137

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	31.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(41) Benzene (T)

15.228min (-0.017) 8.81ng

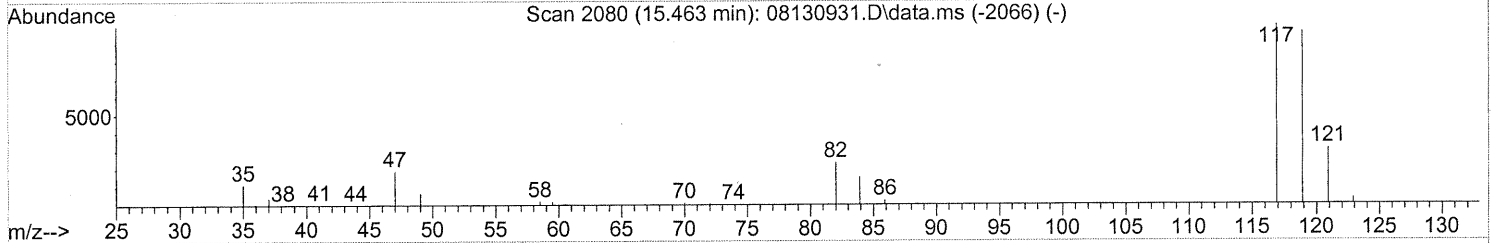
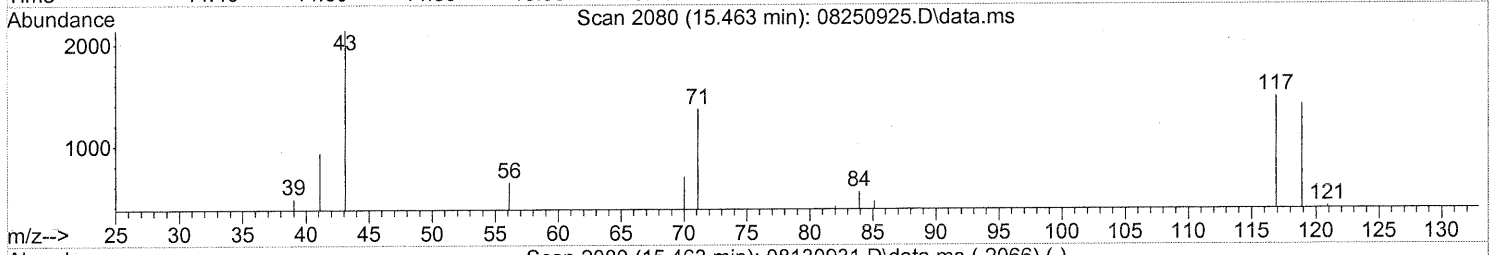
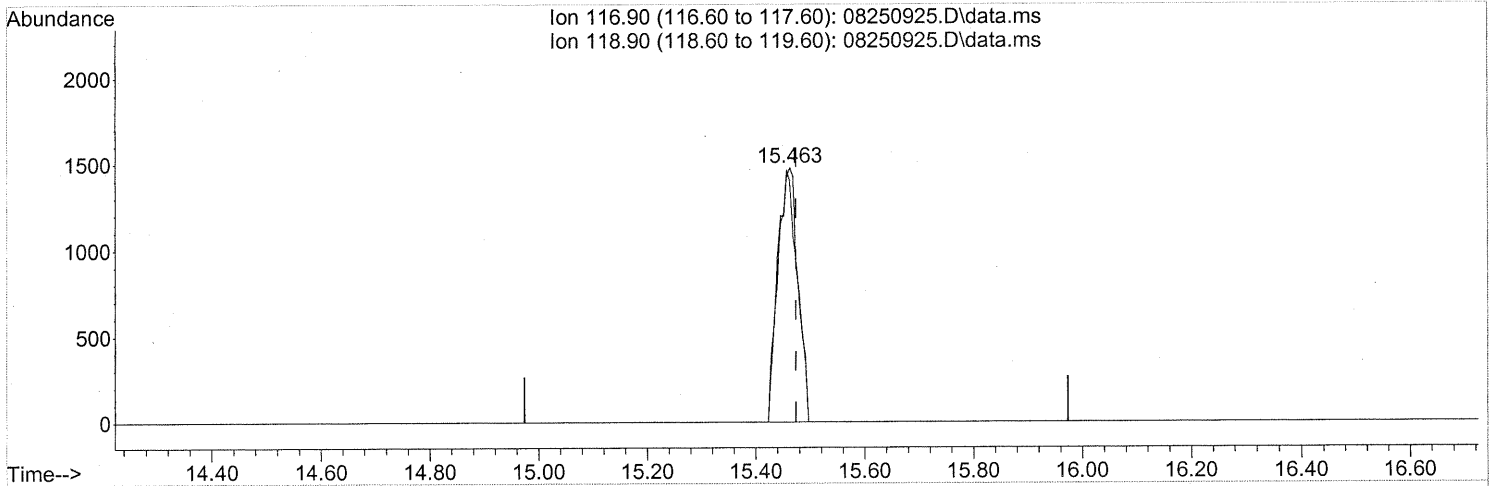
response 819146

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(42) Carbon Tetrachloride (T)

15.463min (-0.011) 0.15ng

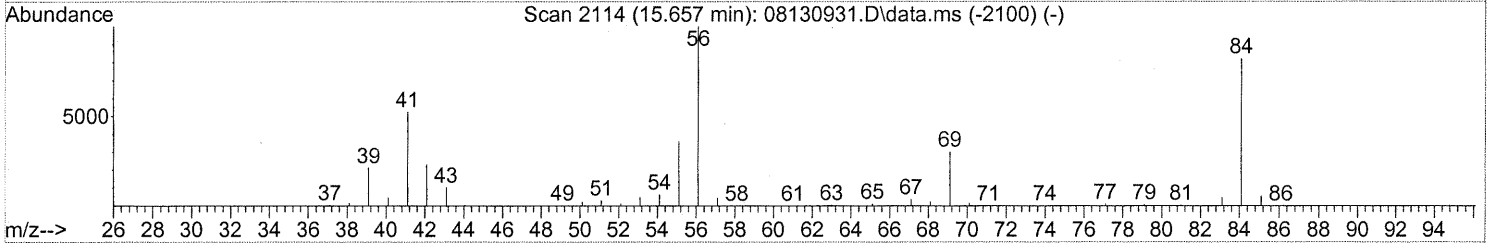
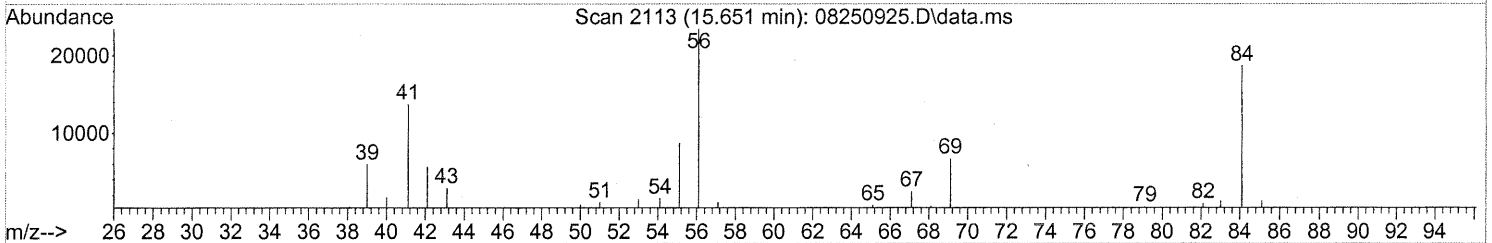
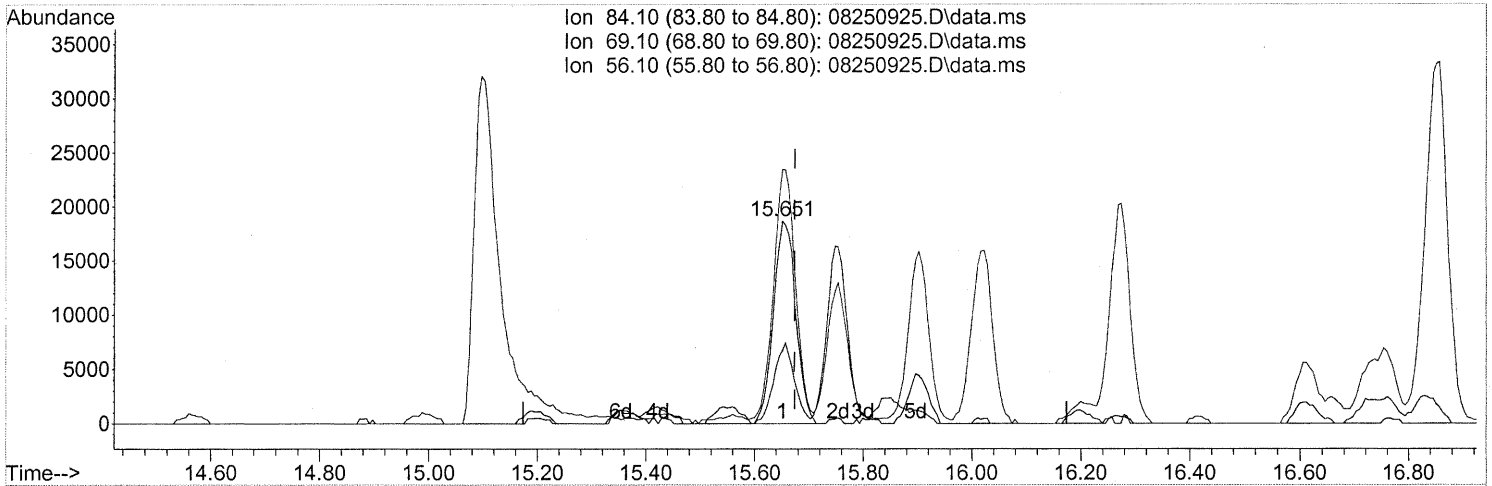
response 3838

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	94.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 1.48ng

response 53293

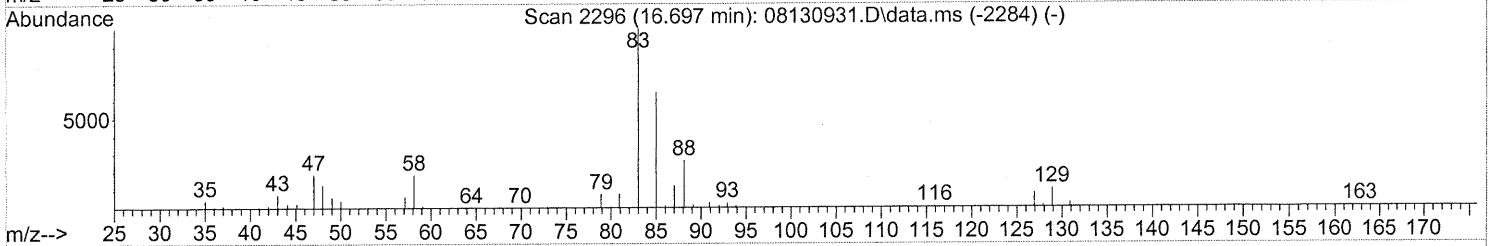
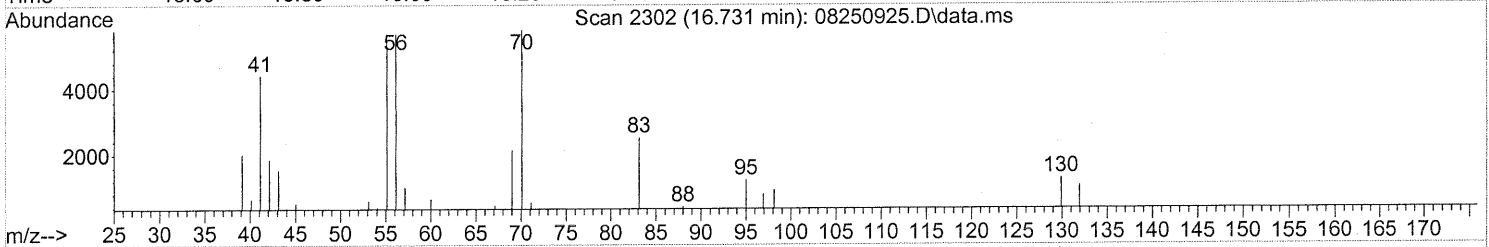
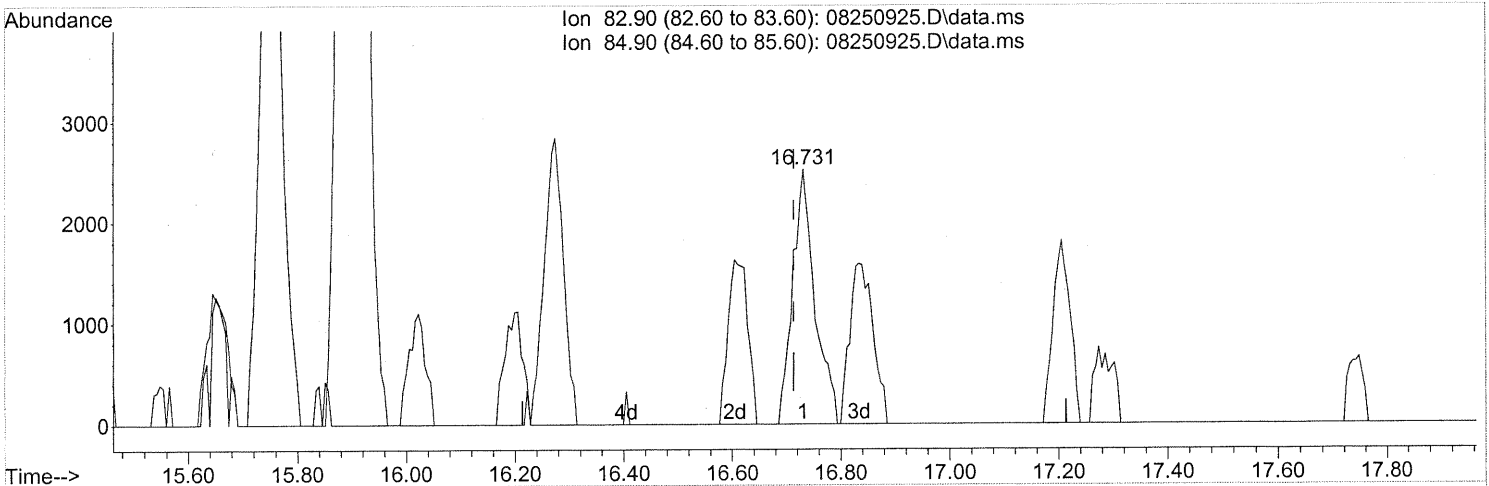
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.60
56.10	107.30	125.62
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.731min (+0.017) 0.26ng

response 7163

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

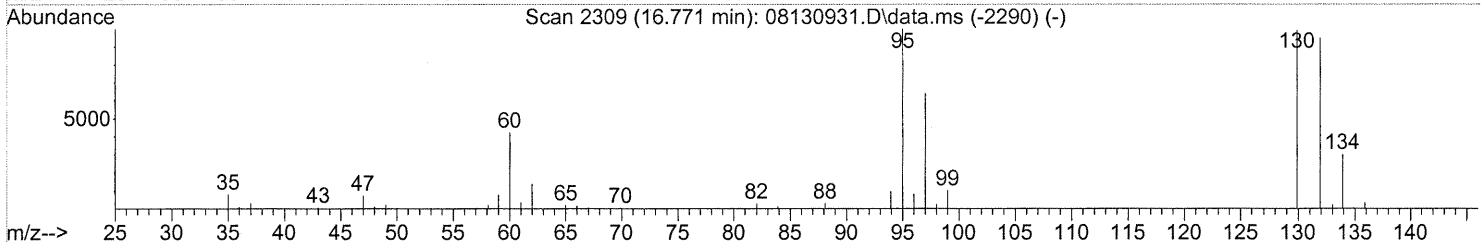
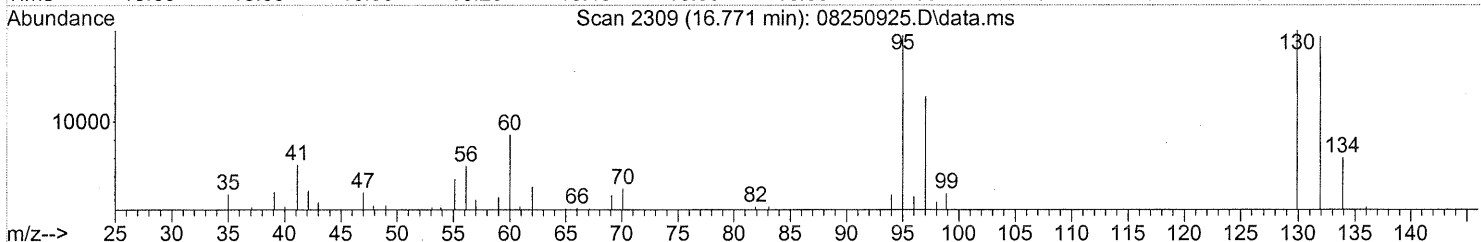
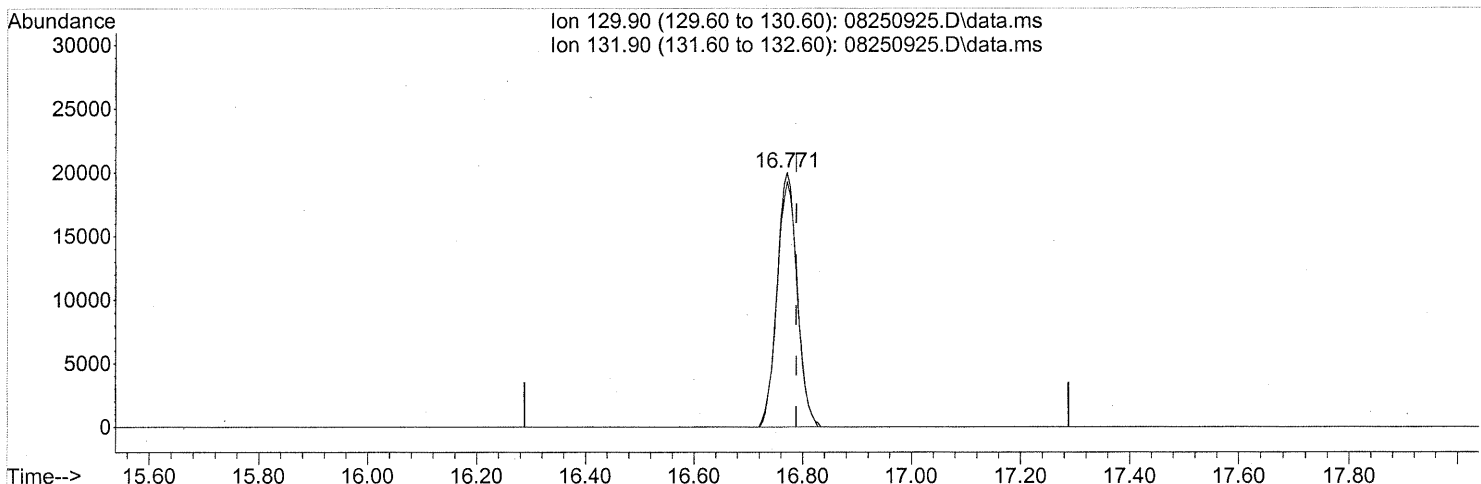
*TP em 8/28/09*

*8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

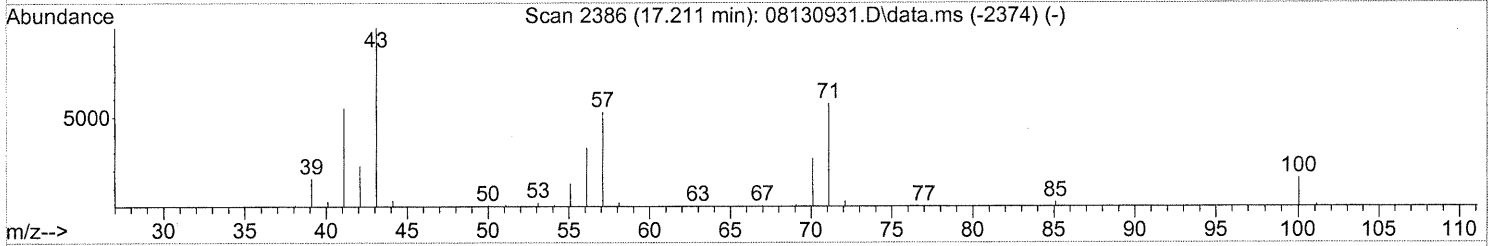
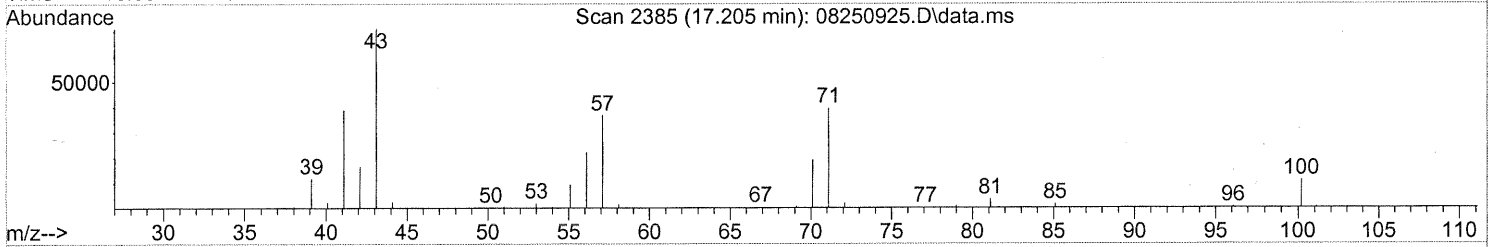
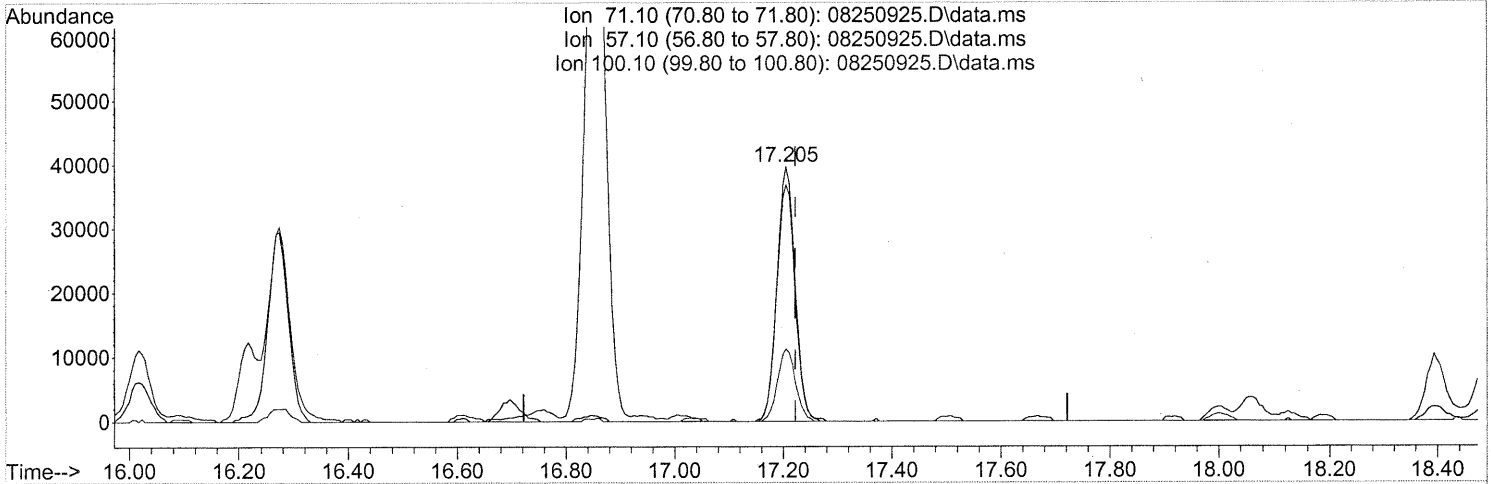
(47) Trichloroethene (T)  
 16.771min (-0.017) 2.16ng  
 response 50947

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	98.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

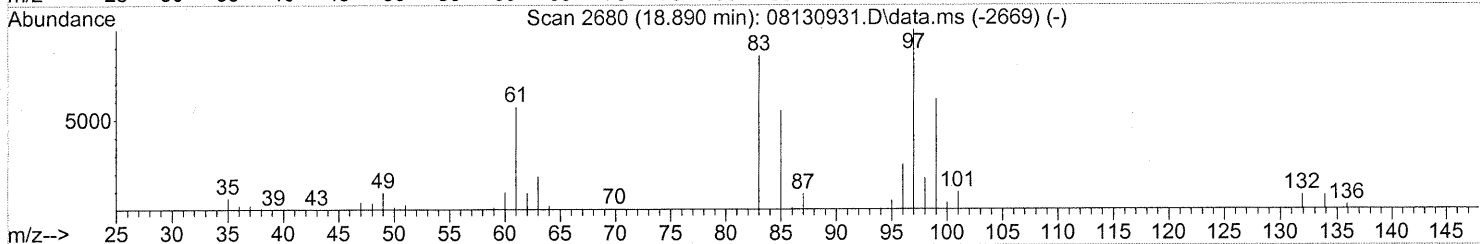
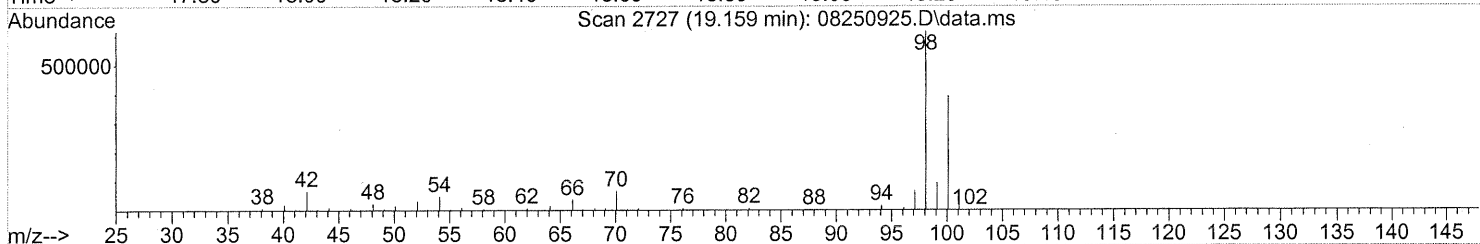
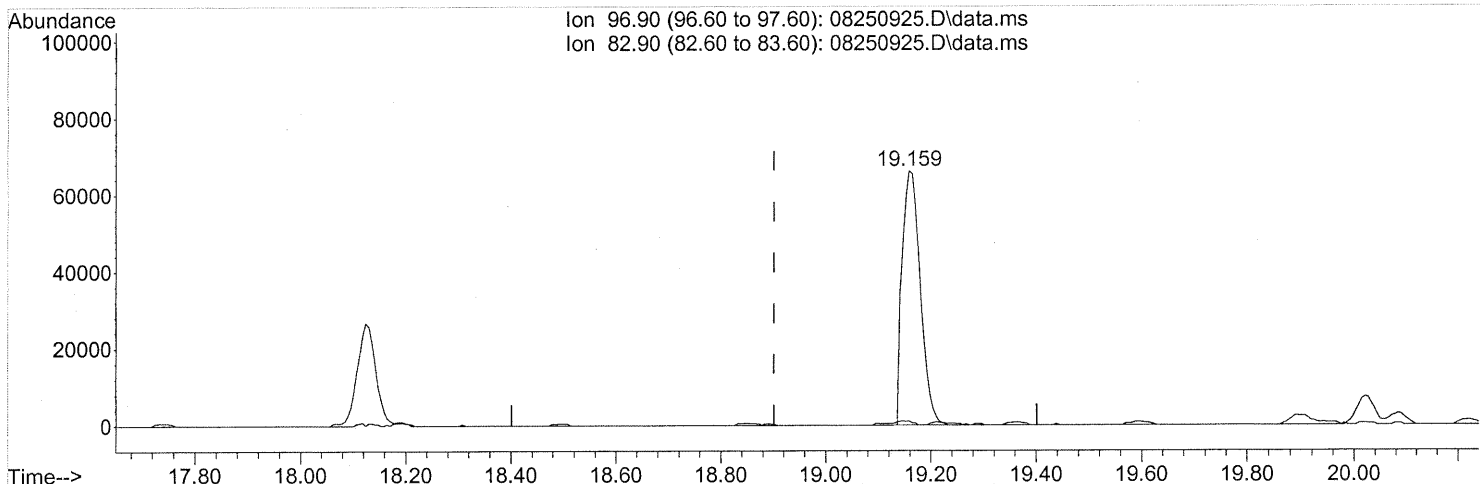
(51) n-Heptane (T)  
 17.205min (-0.017) 3.70ng  
 response 91517

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	94.60
100.10	30.70	28.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

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

19.159min (+0.257) 7.98ng

response 158552

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.50#
0.00	0.00	0.00
0.00	0.00	0.00

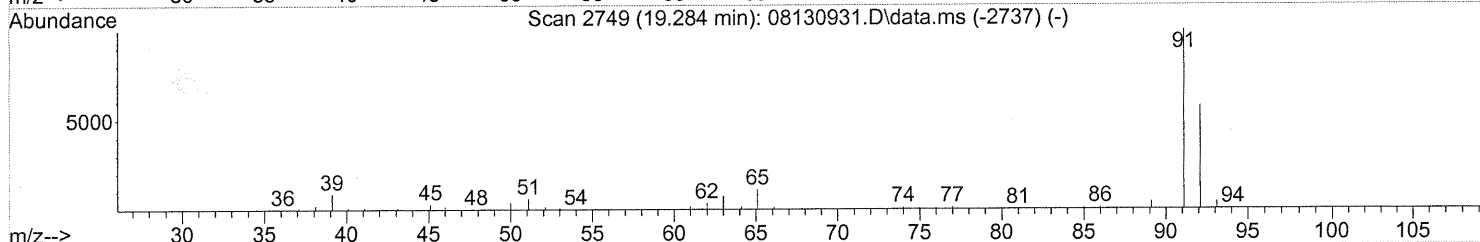
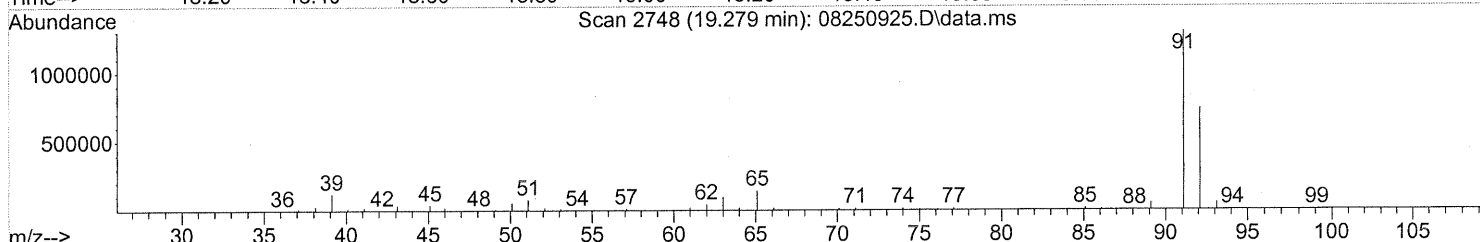
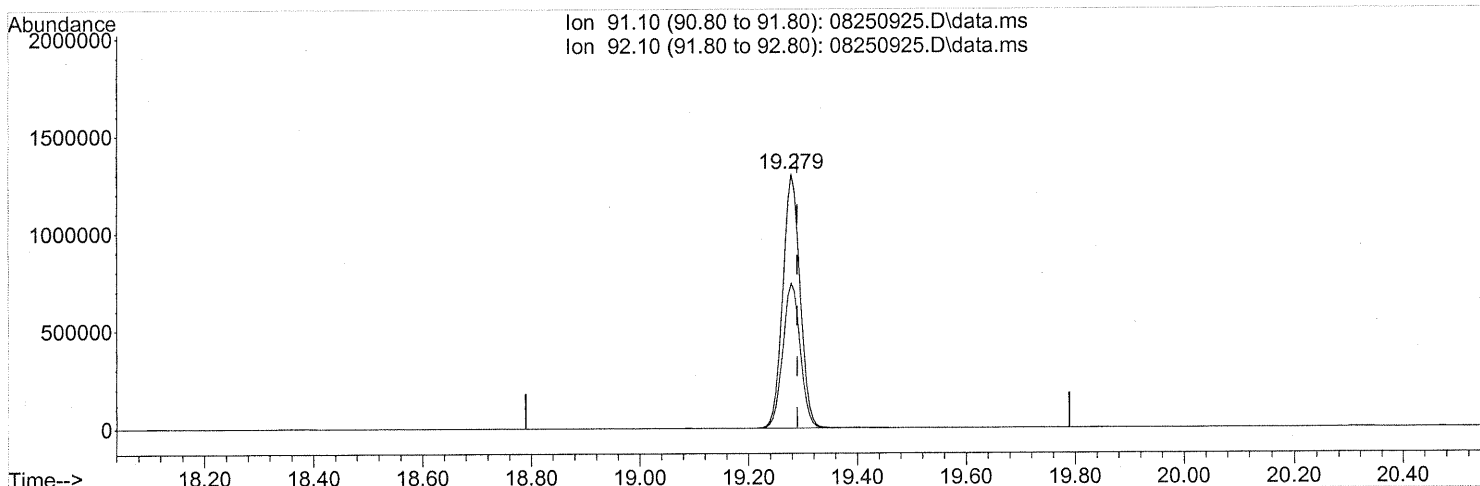
*FP Em 8/28/09*

*KE 8/21/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 30.65ng

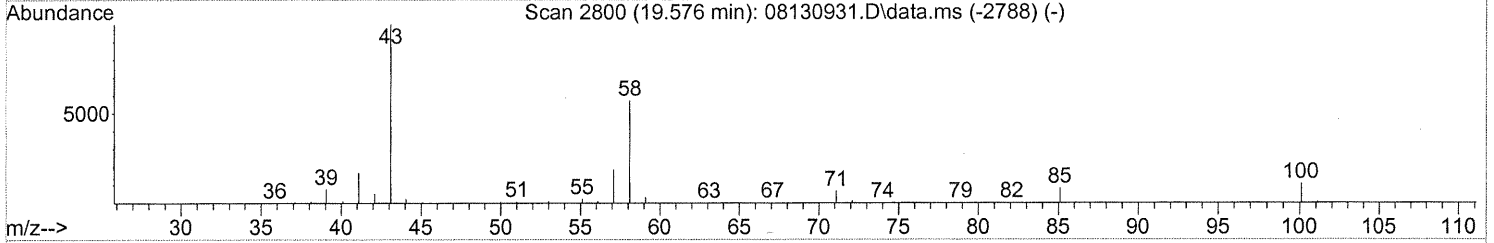
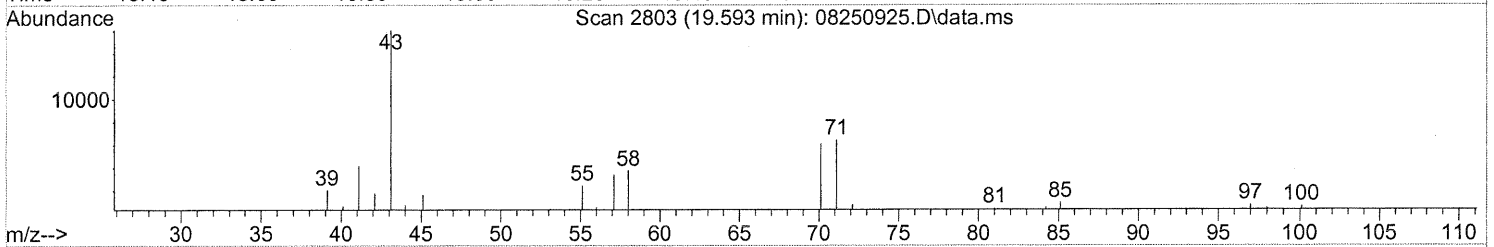
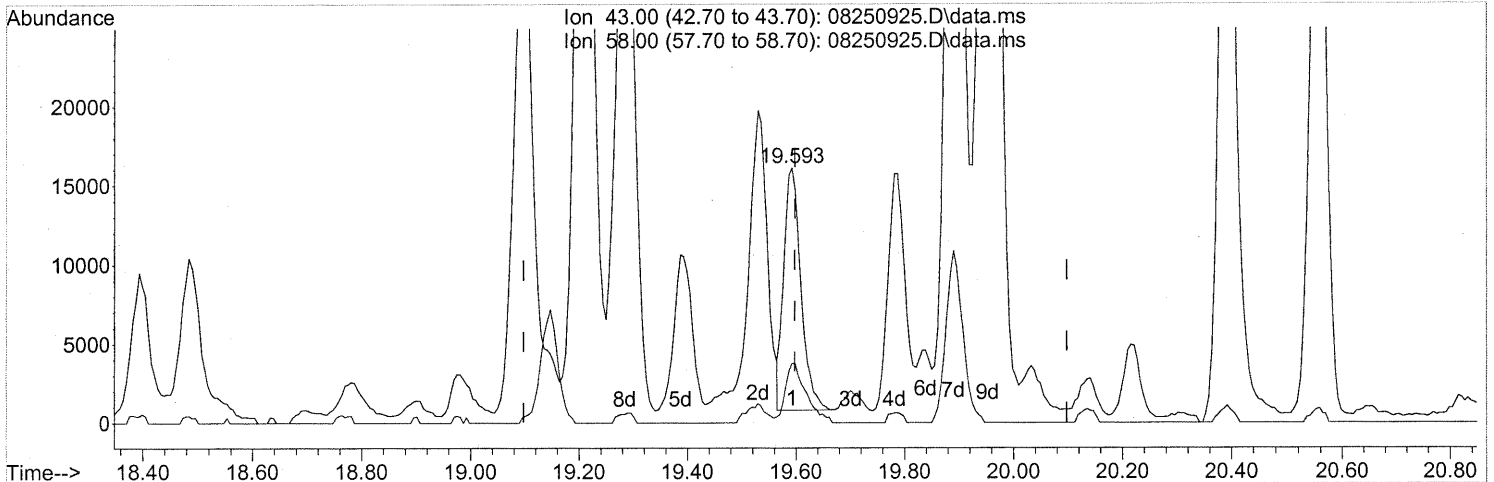
response 2874980

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

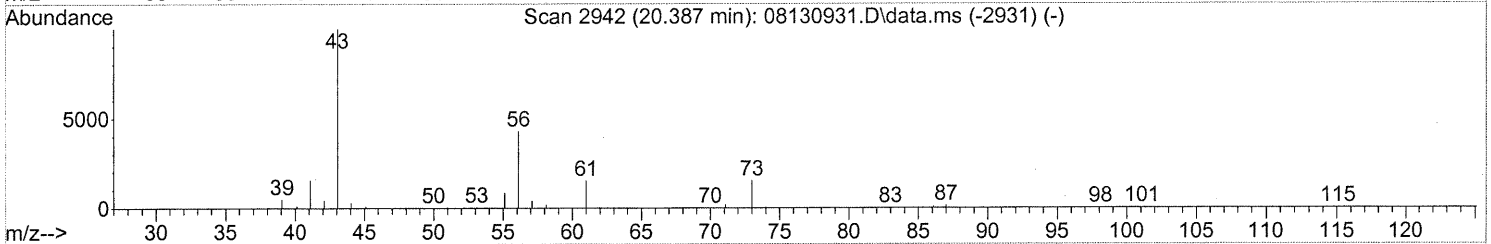
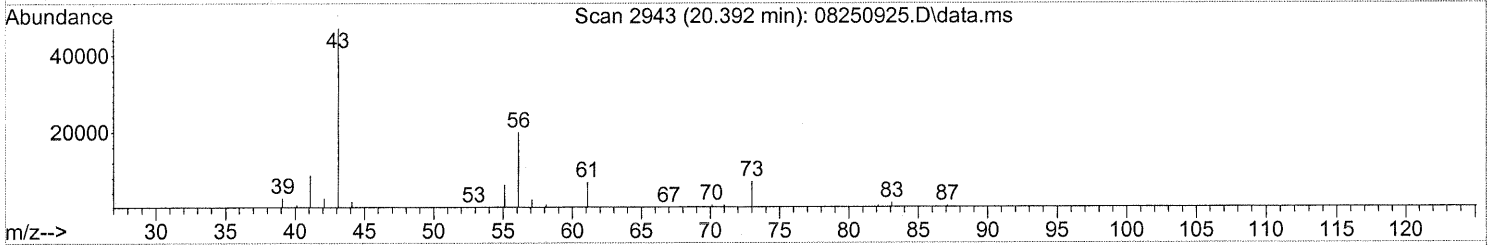
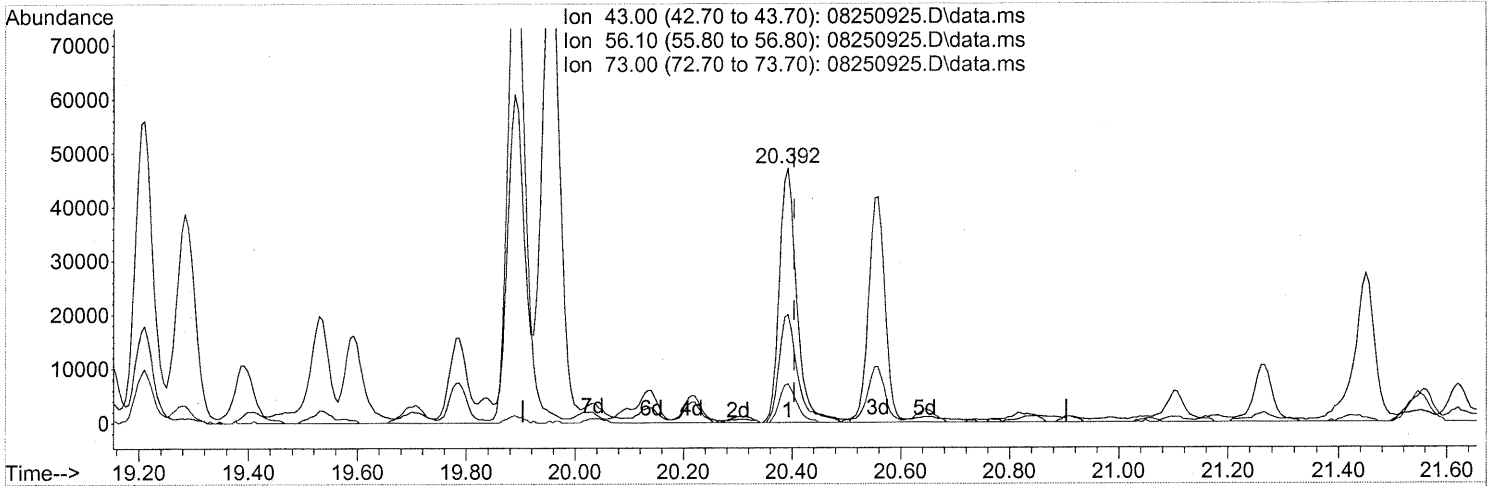
(59) 2-Hexanone (T)  
 19.593min (-0.005) 0.70ng  
 response 34153

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	29.47#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

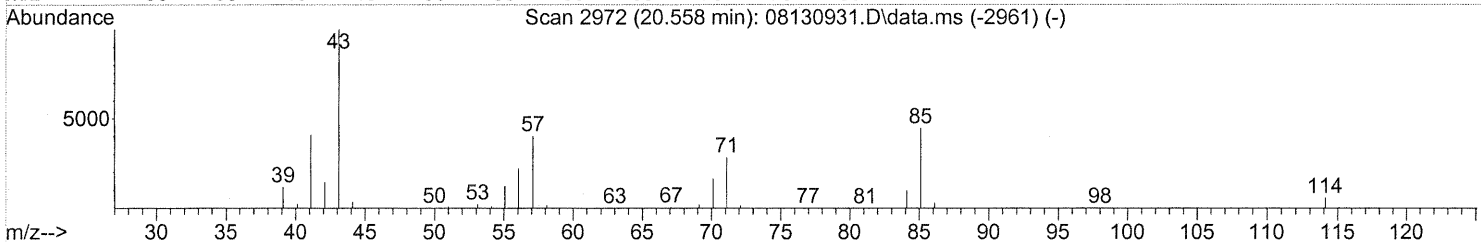
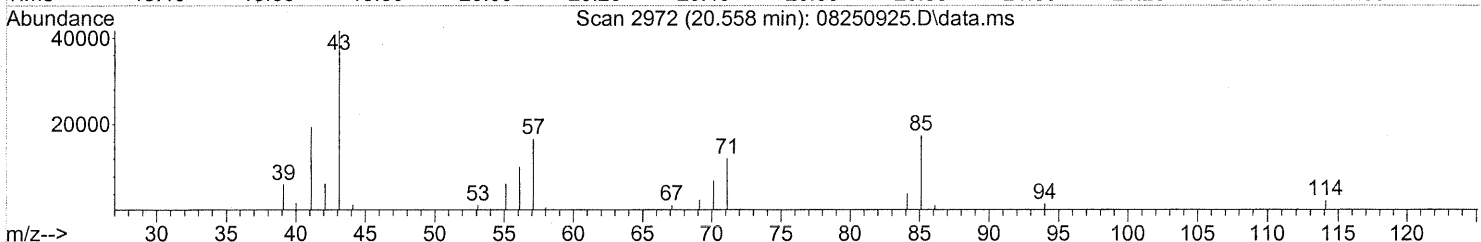
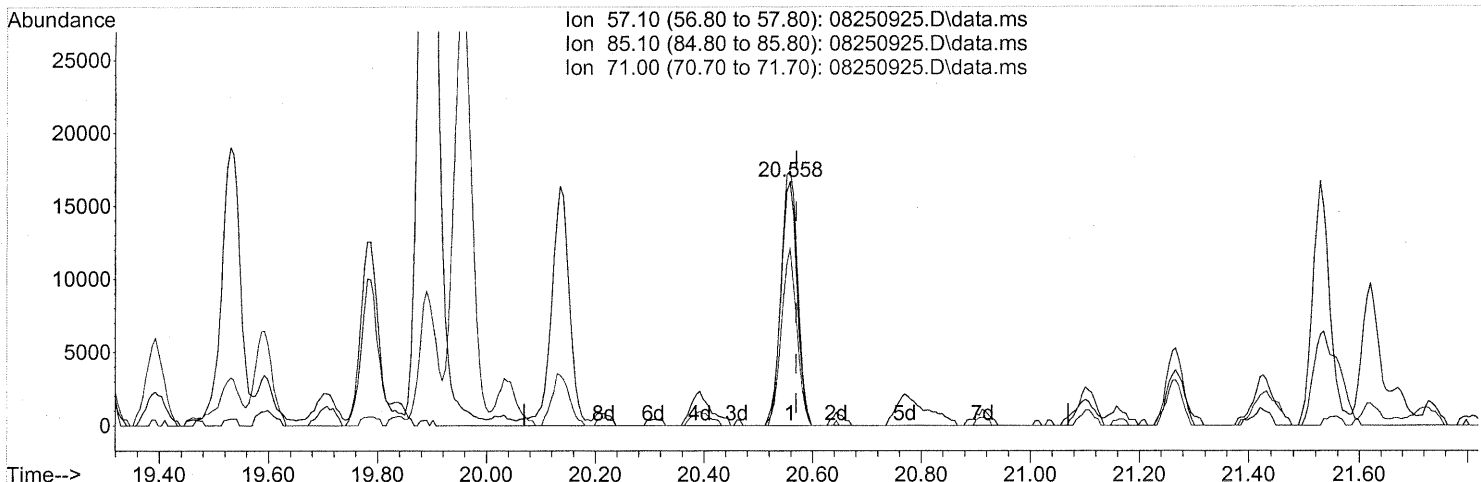
(62) n-Butyl Acetate (T)  
 20.392min (-0.012) 1.97ng  
 response 104557

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	44.99
73.00	16.90	14.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.64ng

response 34372

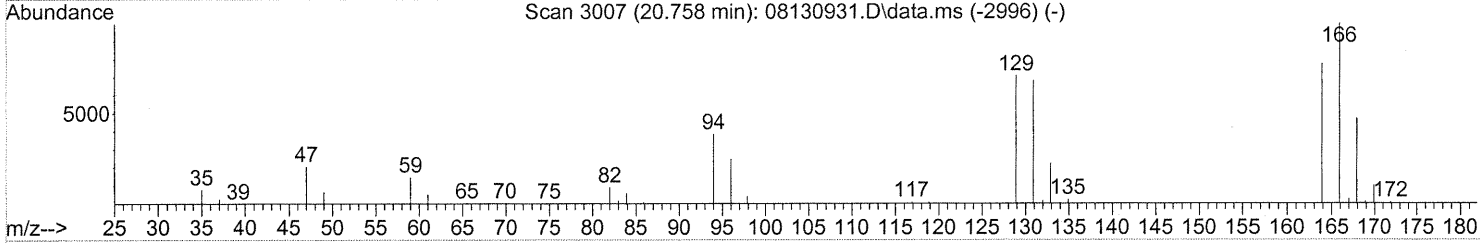
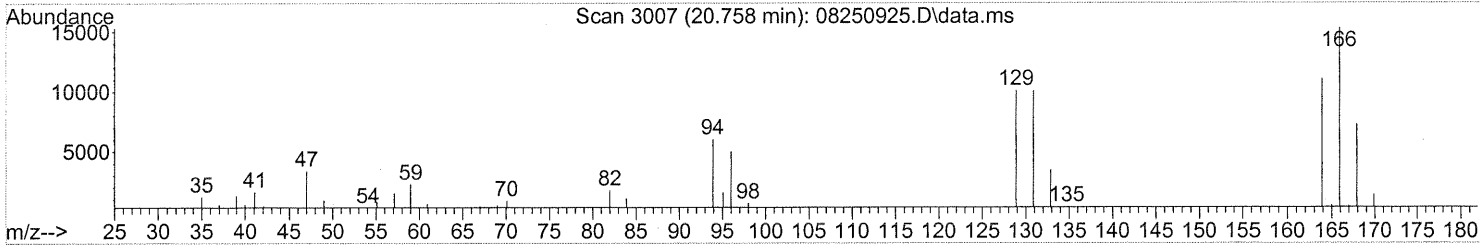
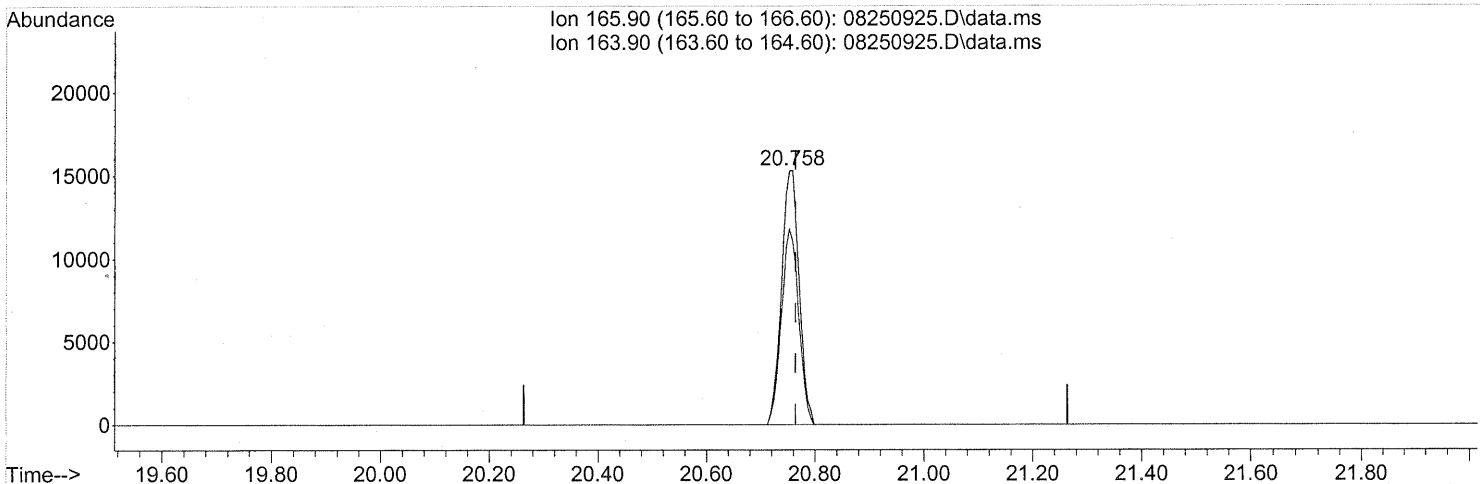
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	106.98
71.00	75.10	69.25
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(64) Tetrachloroethene (T)

20.758min (-0.006) 1.48ng

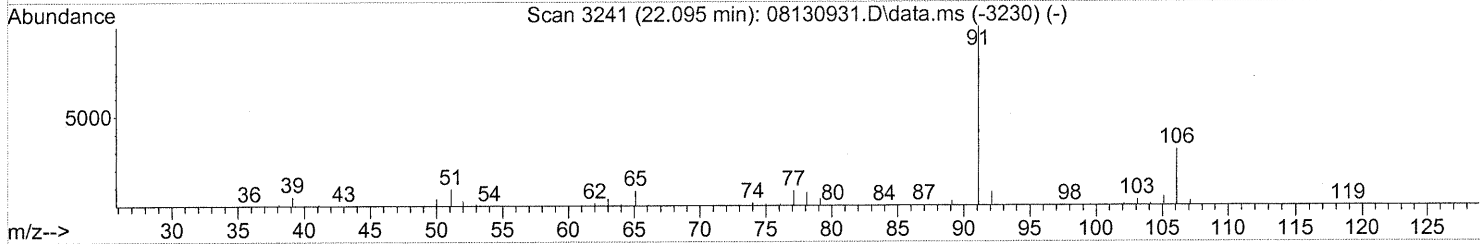
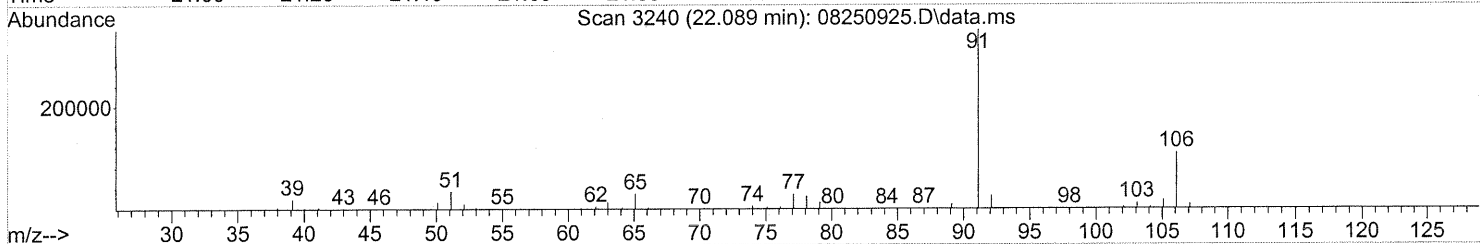
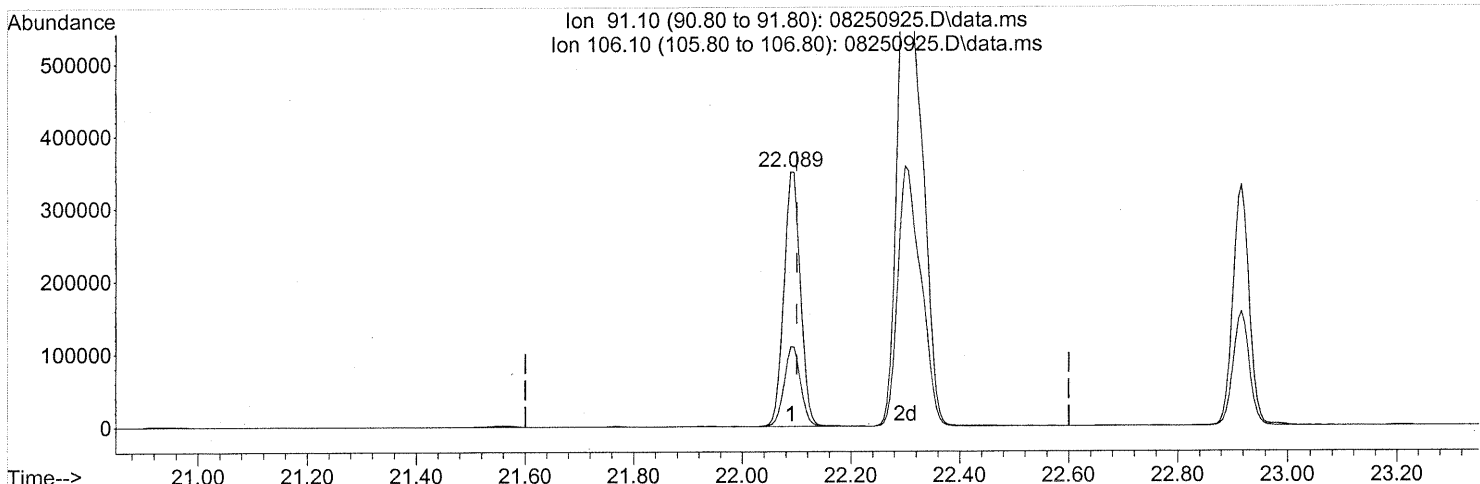
response 34378

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

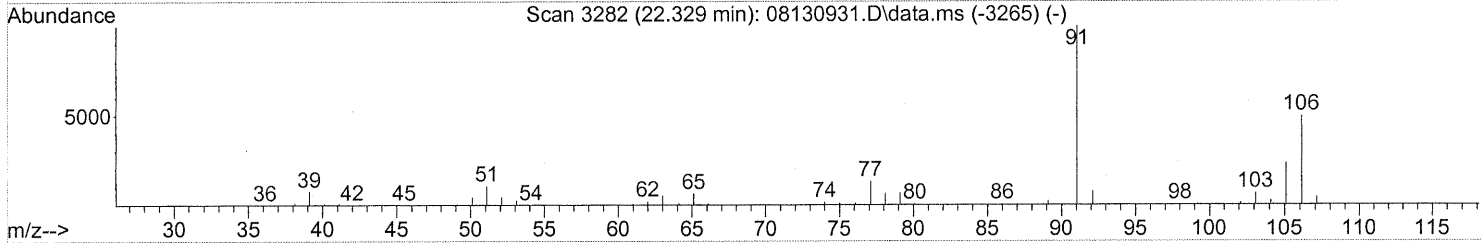
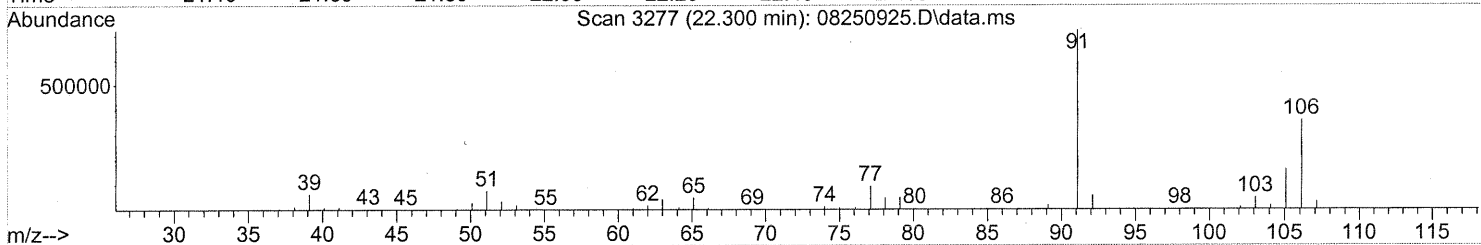
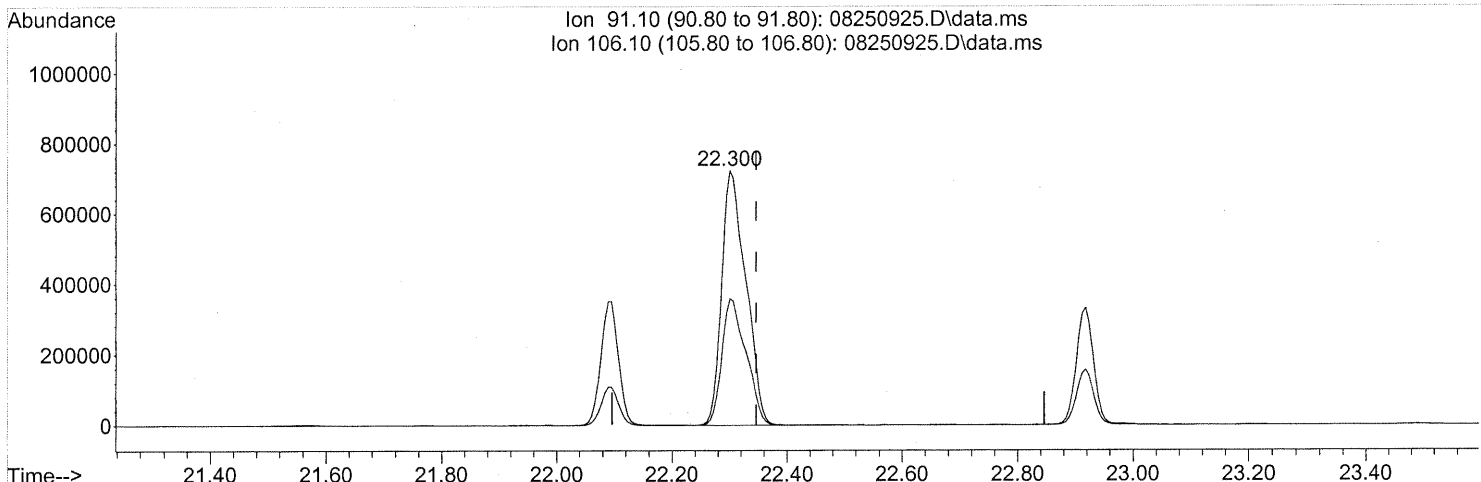
(66) Ethylbenzene (T)  
 22.089min (-0.011) 7.31ng  
 response 740224

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

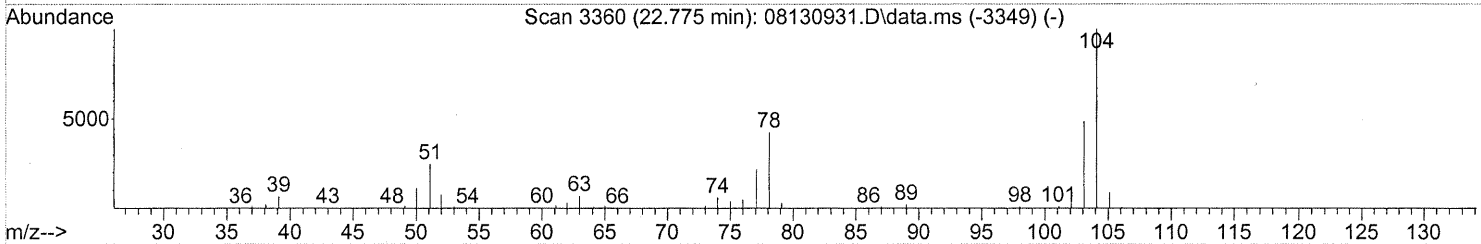
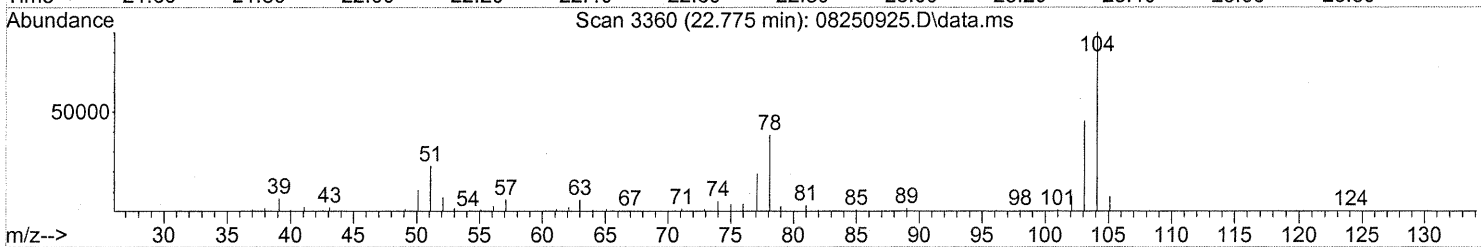
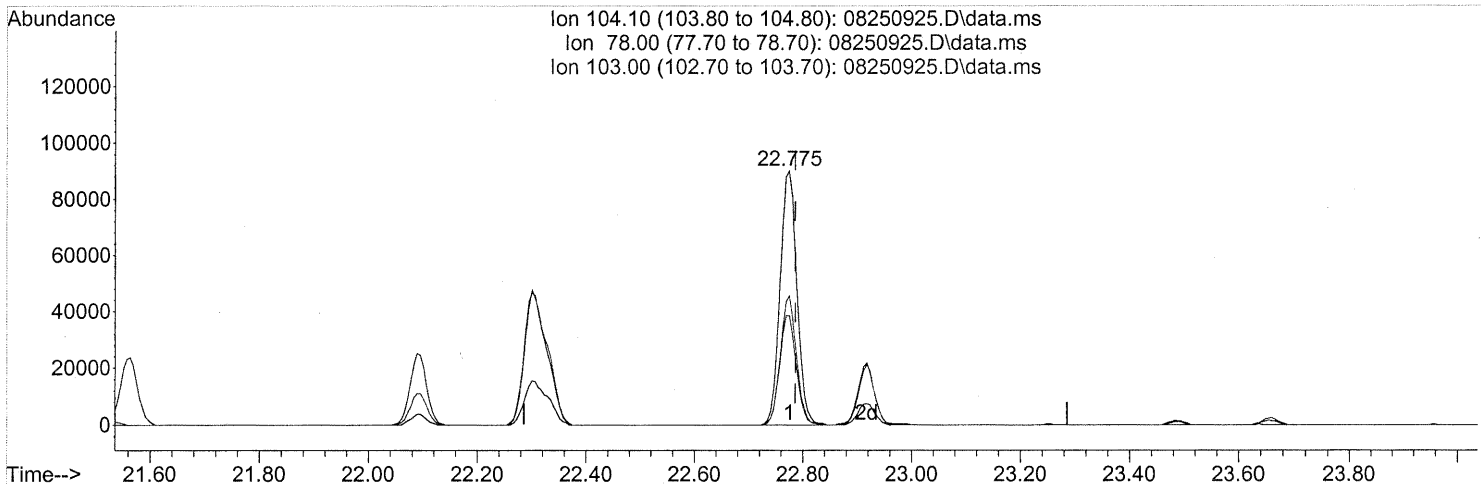
(67) m- & p-Xylenes (T)  
 22.300min (-0.046) 26.33ng  
 response 2113703

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

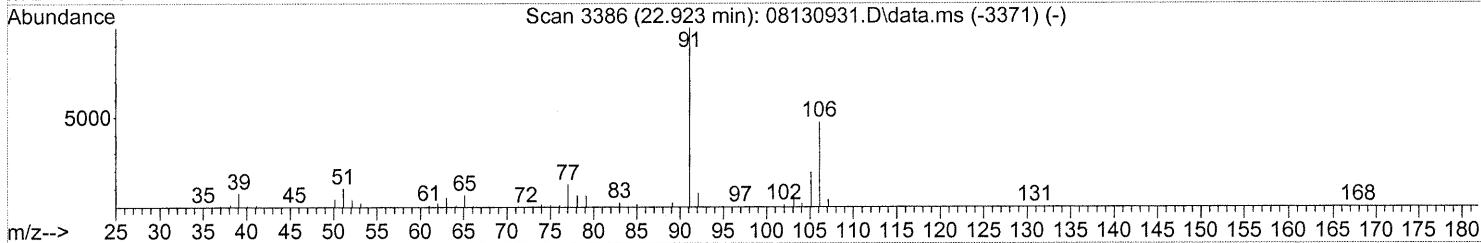
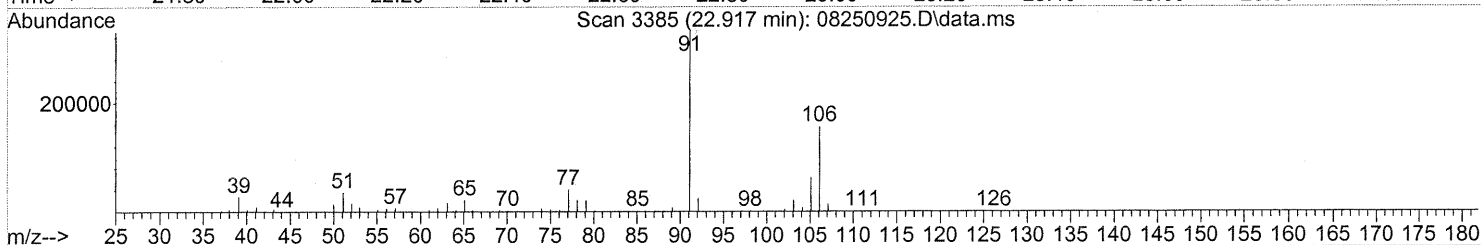
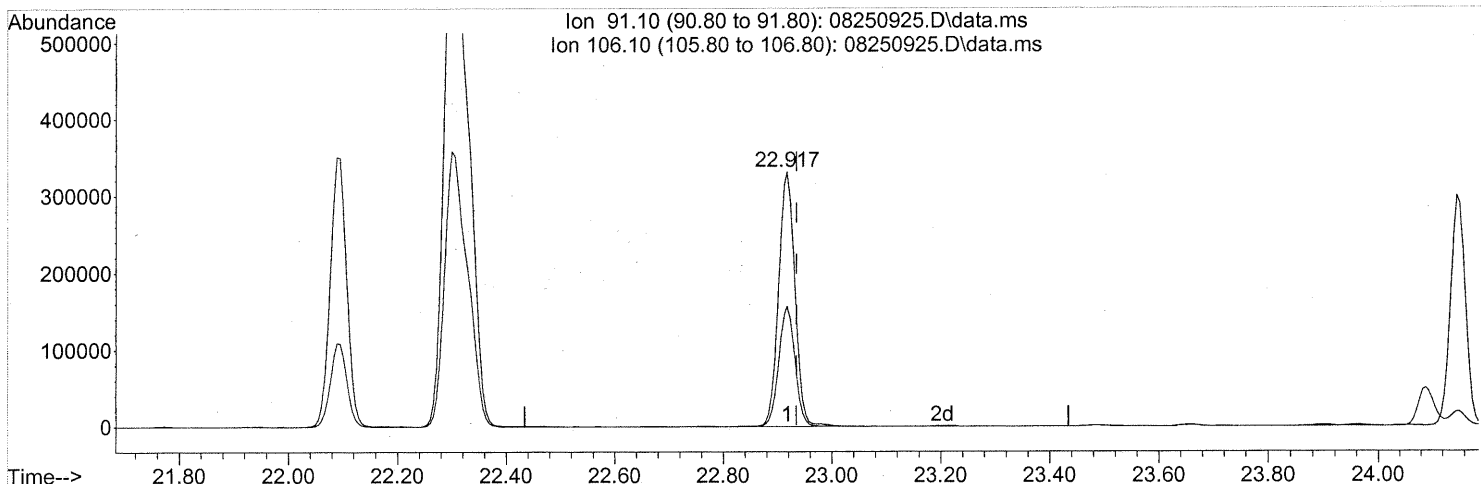
(69) Styrene (T)  
 22.775min (-0.011) 3.26ng  
 response 193177

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.46
103.00	48.70	48.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.55ng

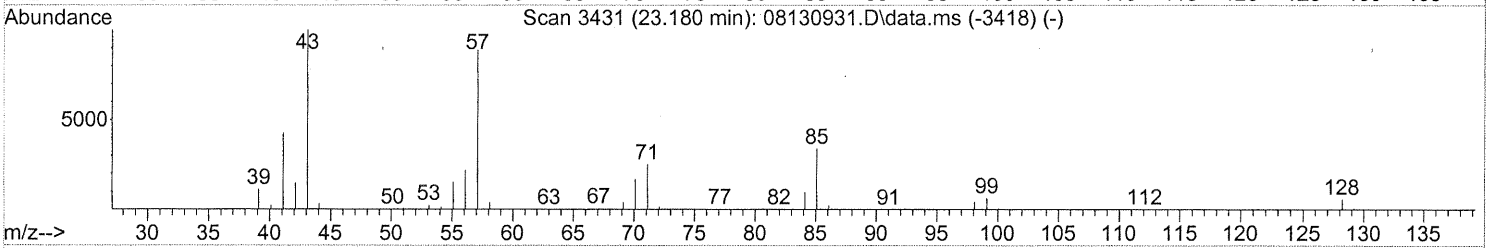
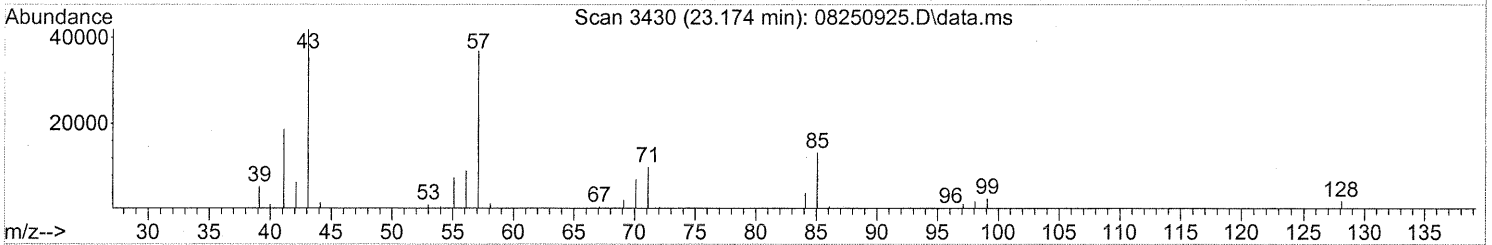
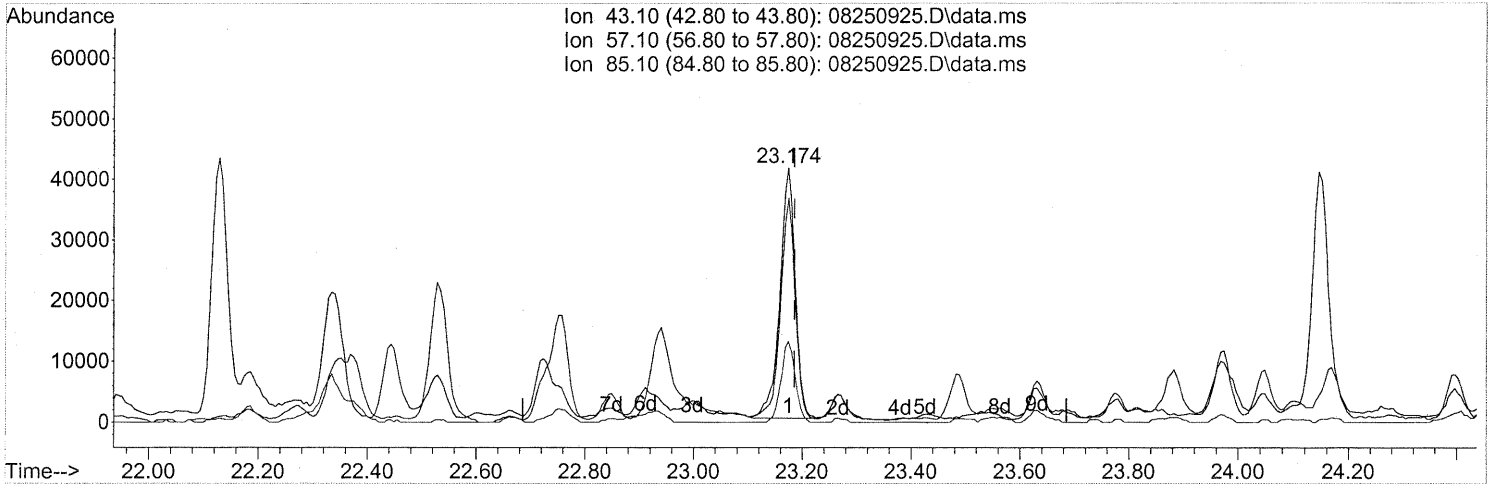
response 690287

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

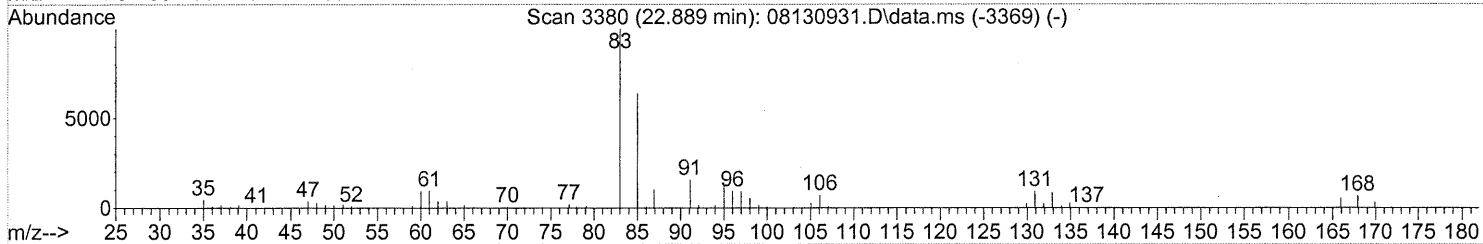
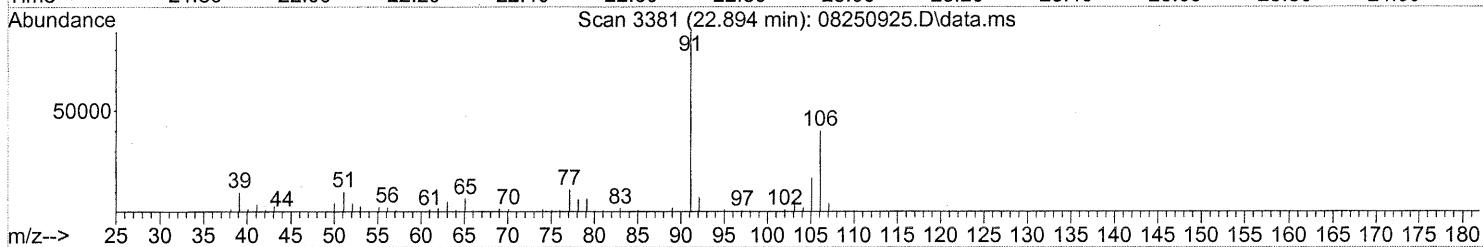
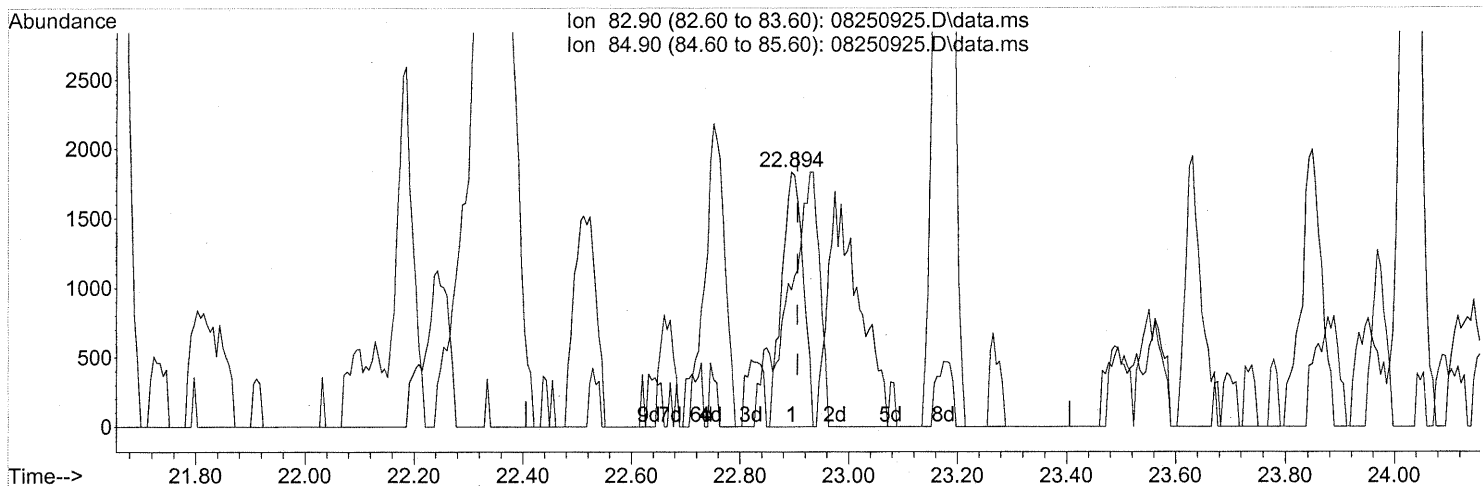
(71) n-Nonane (T)  
 23.174min (-0.011) 1.68ng  
 response 81779

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	85.00
85.10	38.80	29.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(72) 1,1,2,2-Tetrachloroethane (T)

22.894min (-0.011) 0.14ng

response 4997

Ion	Exp%	Act%
82.90	100	100
84.90	63.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

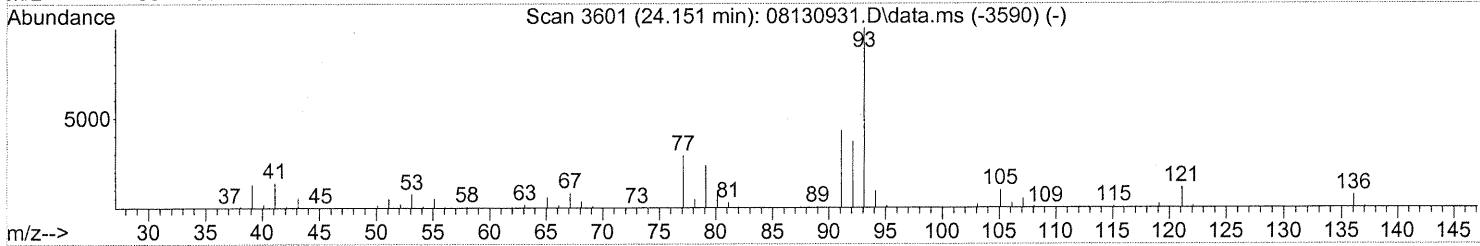
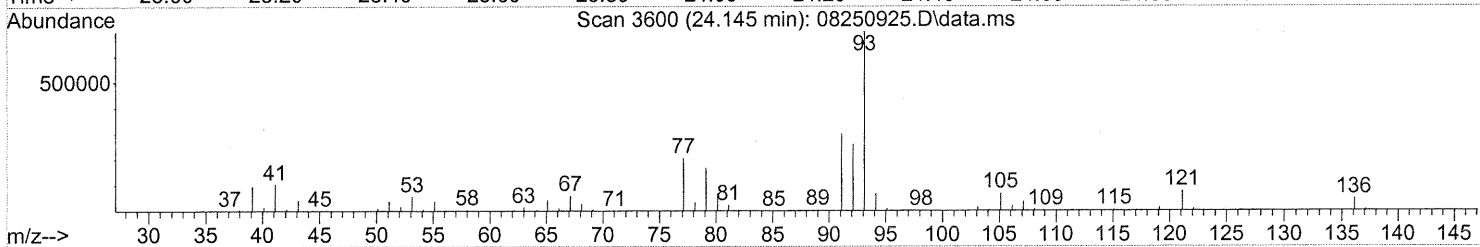
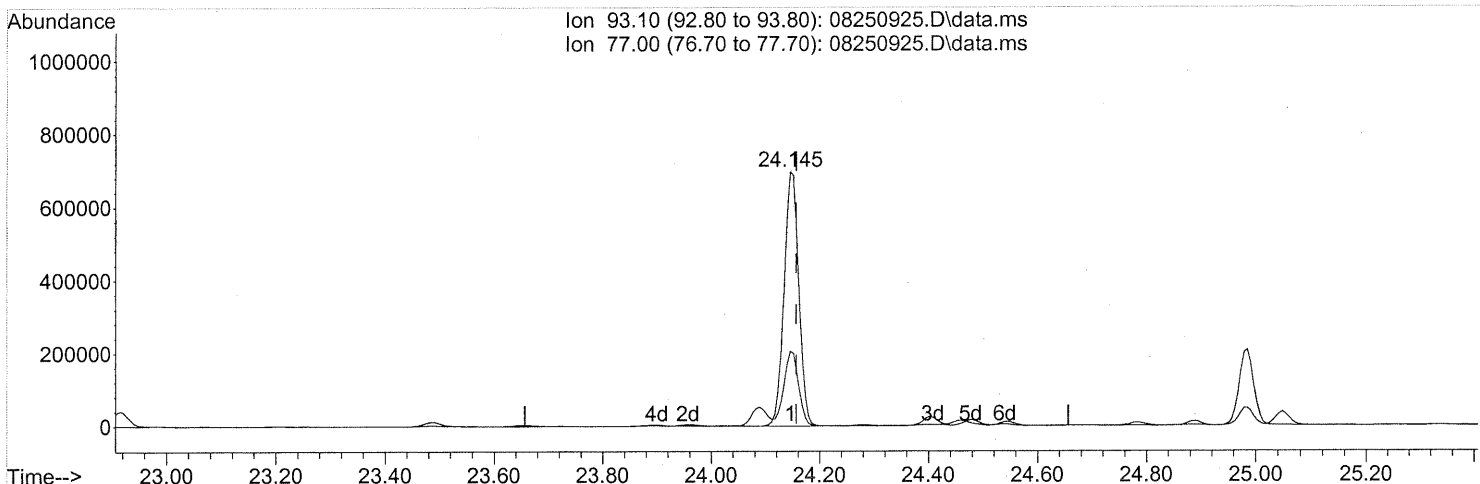
*FP Em 8/28/09*

*8/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(75) alpha-Pinene (T)  
 24.145min (-0.011) 25.64ng  
 response 1324625

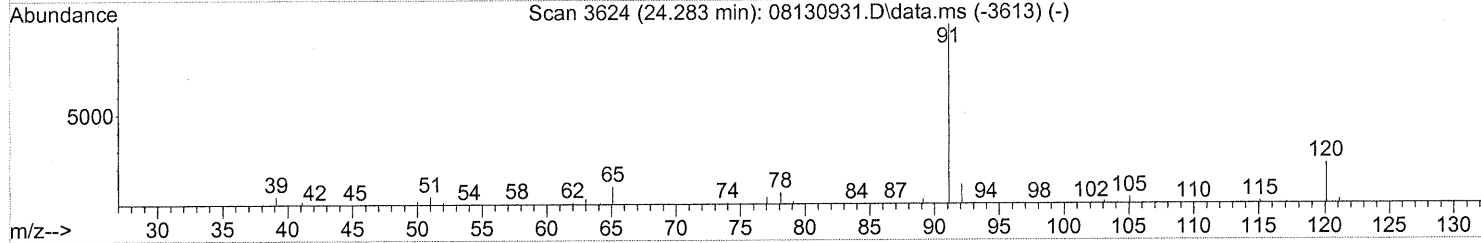
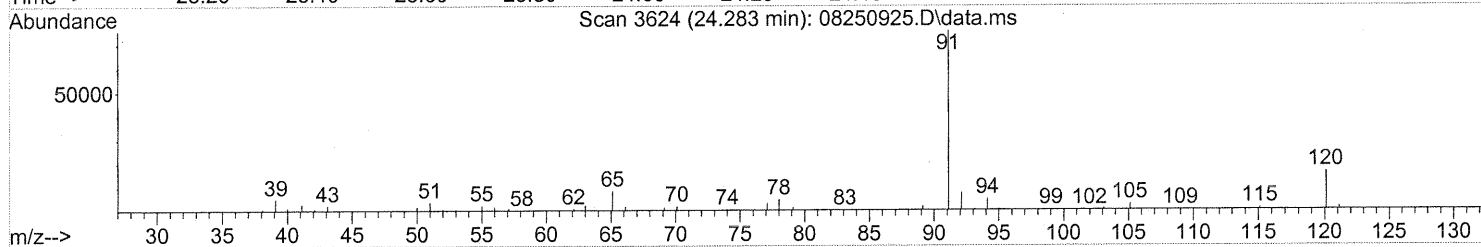
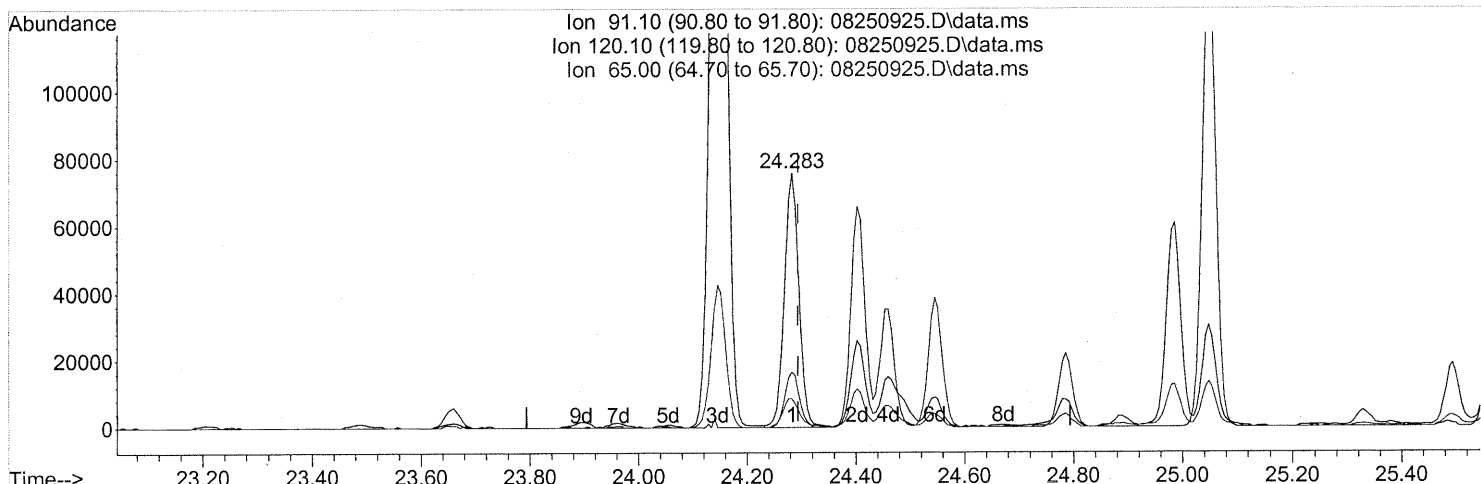
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	29.67
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

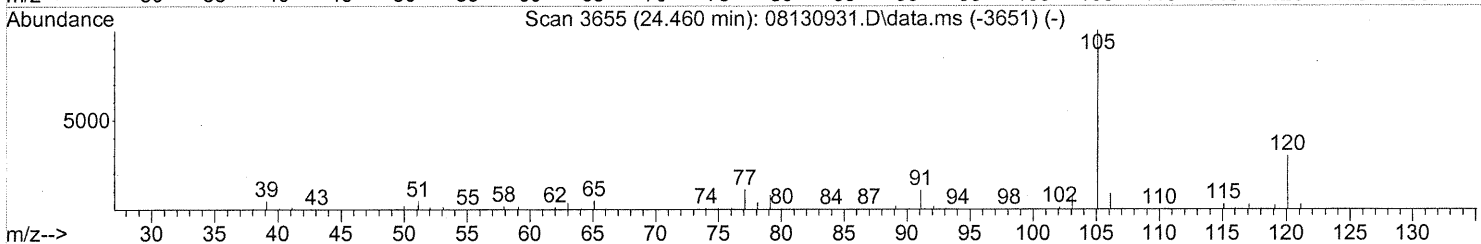
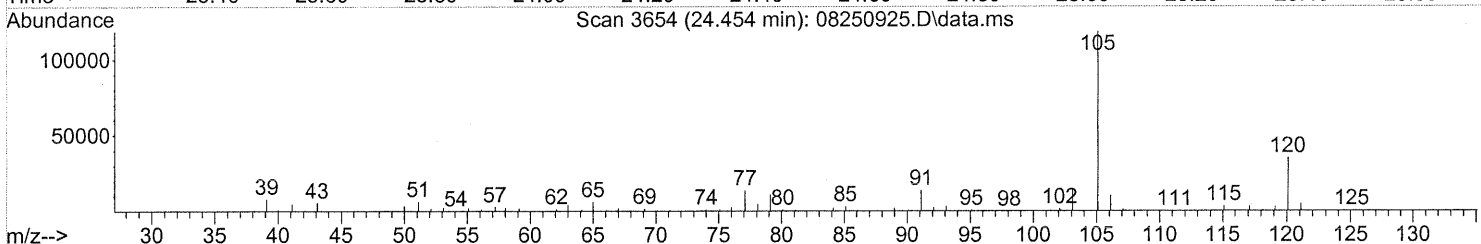
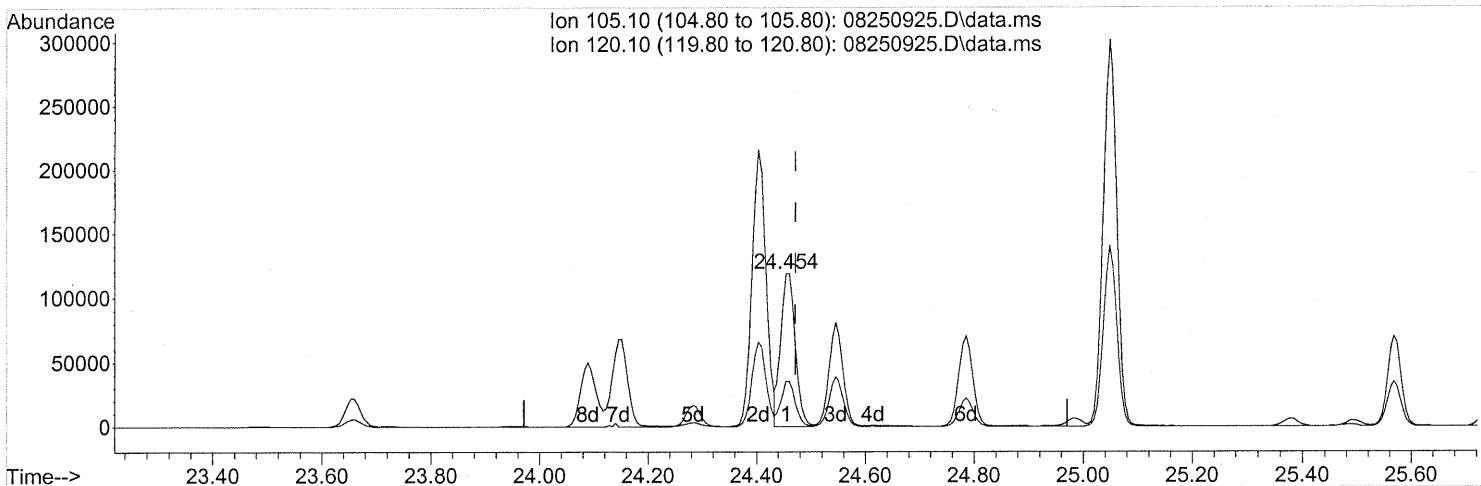
(76) n-Propylbenzene (T)  
 24.283min (-0.011) 1.09ng  
 response 141682

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.68
65.00	10.20	12.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(78) 4-Ethyltoluene (T)

24.454min (-0.017) 2.25ng

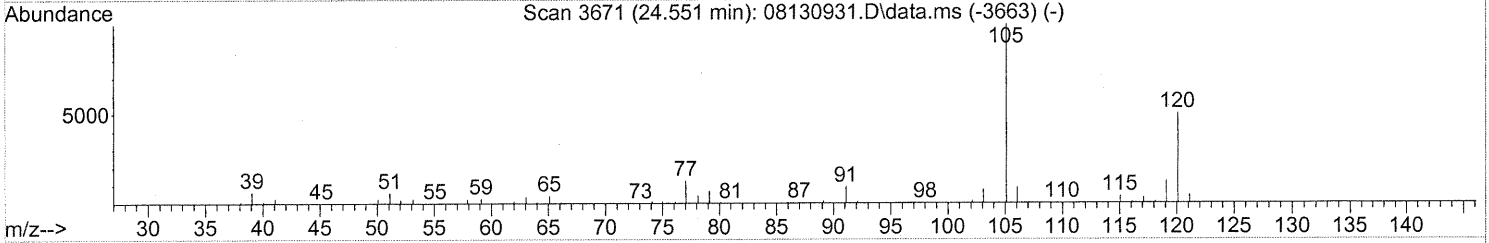
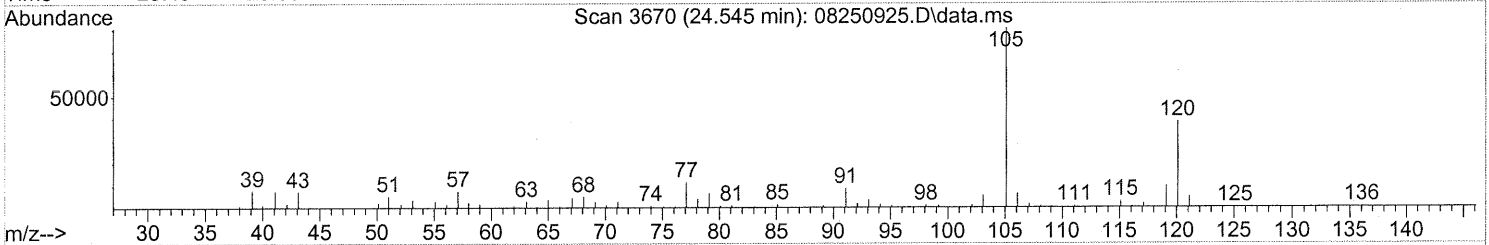
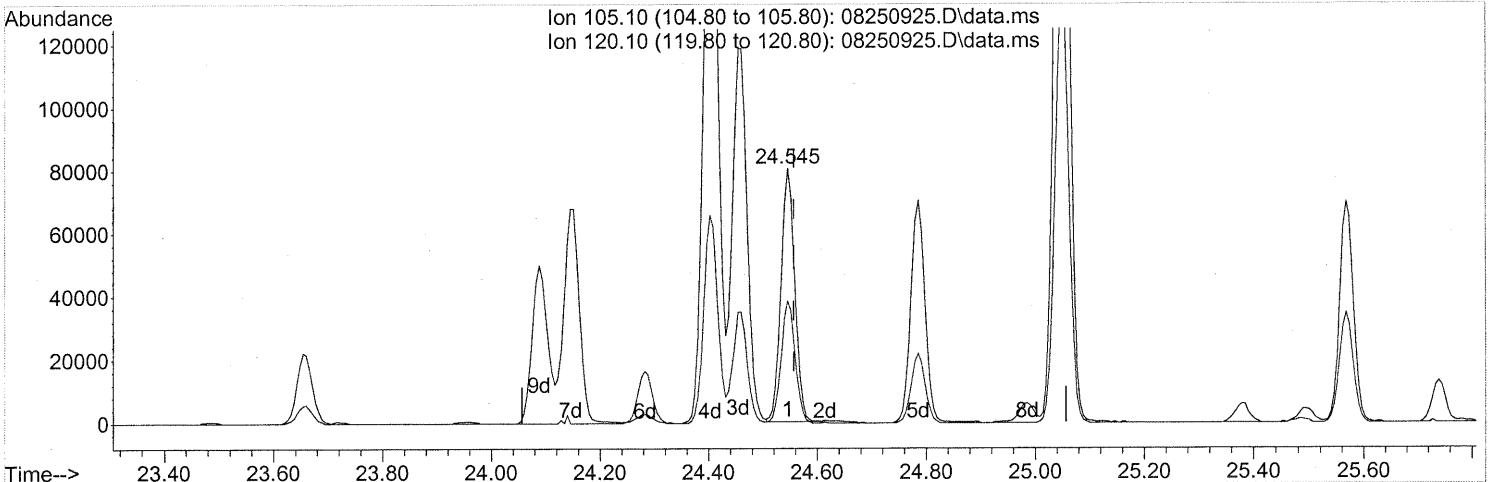
response 221908

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	29.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

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

24.545min (-0.011) 1.73ng

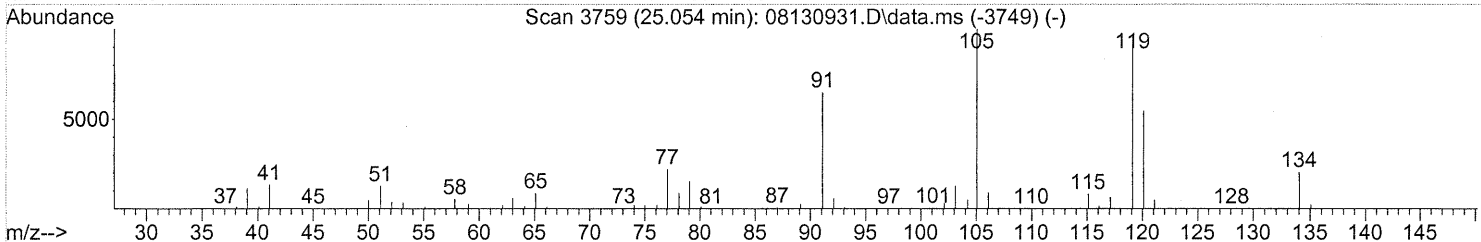
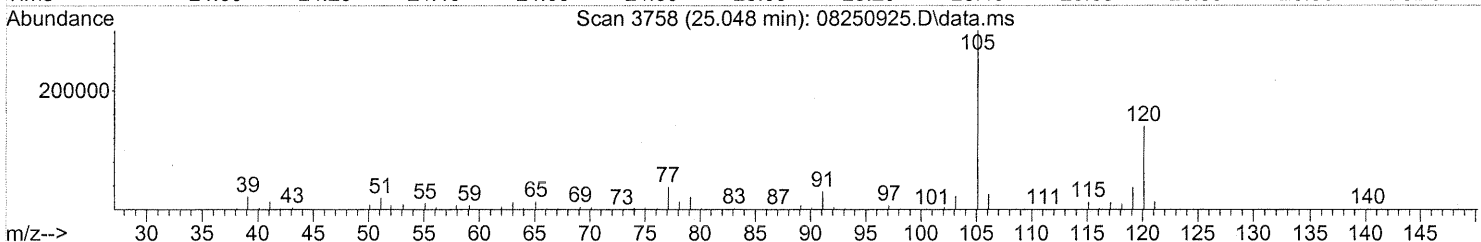
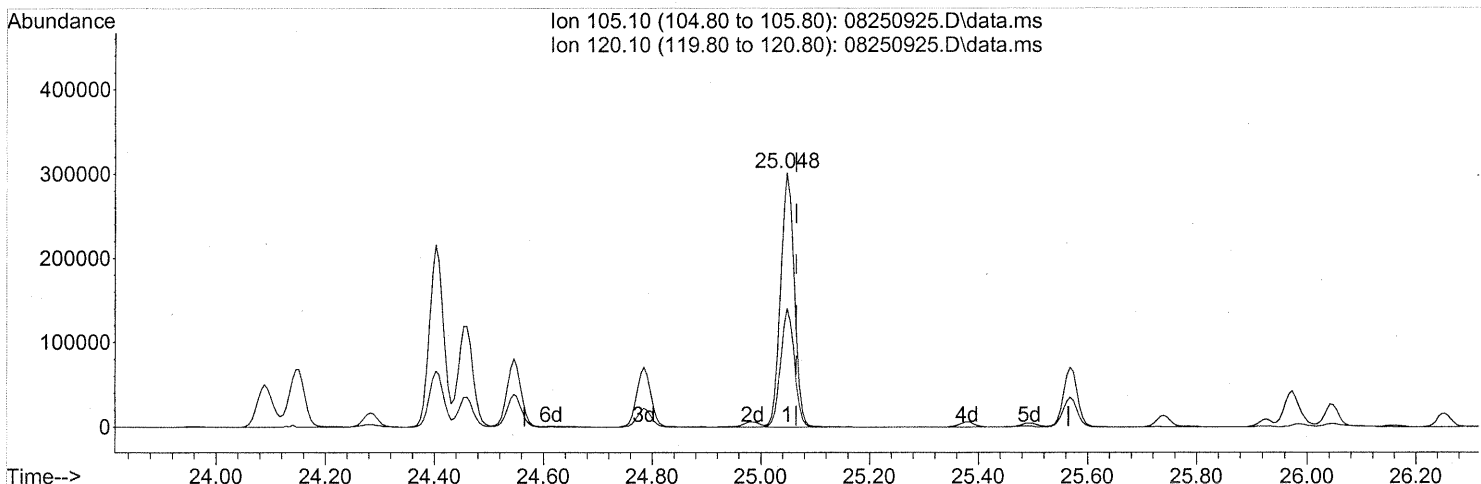
response 140801

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.97
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

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

25.048min (-0.017) 6.07ng

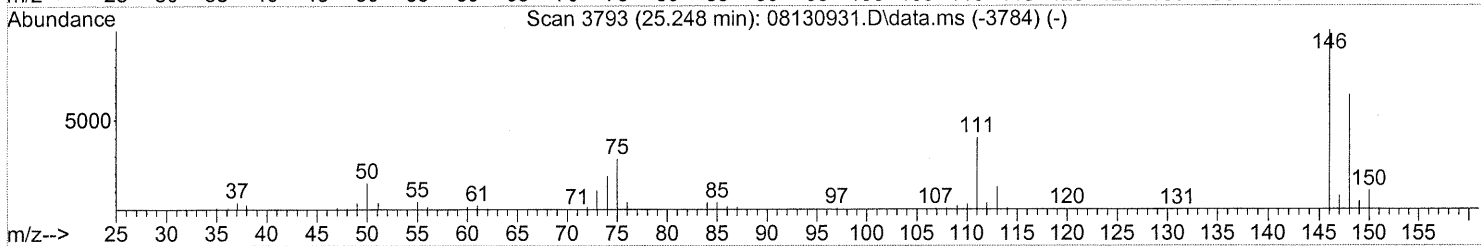
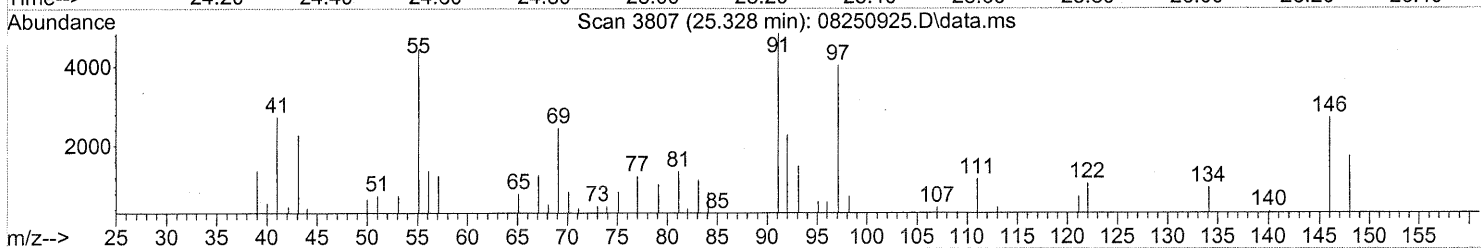
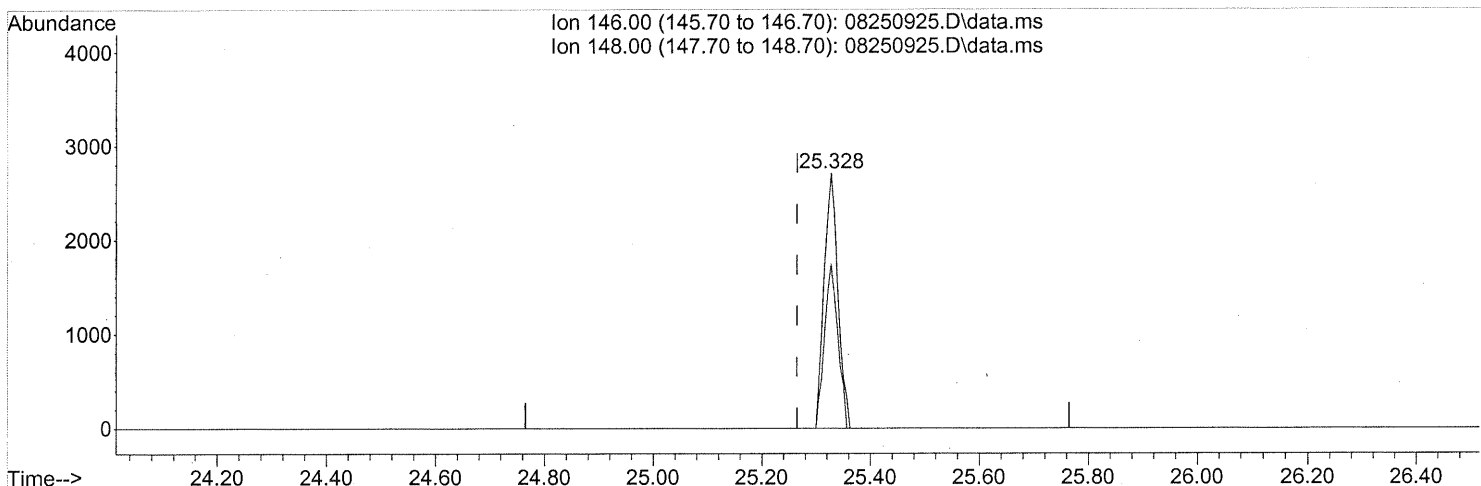
response 525617

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.11ng

response 4791

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	62.30
0.00	0.00	0.00
0.00	0.00	0.00

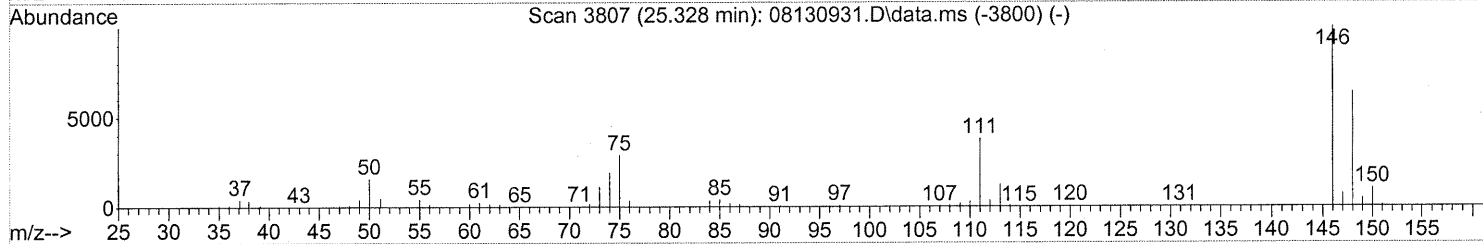
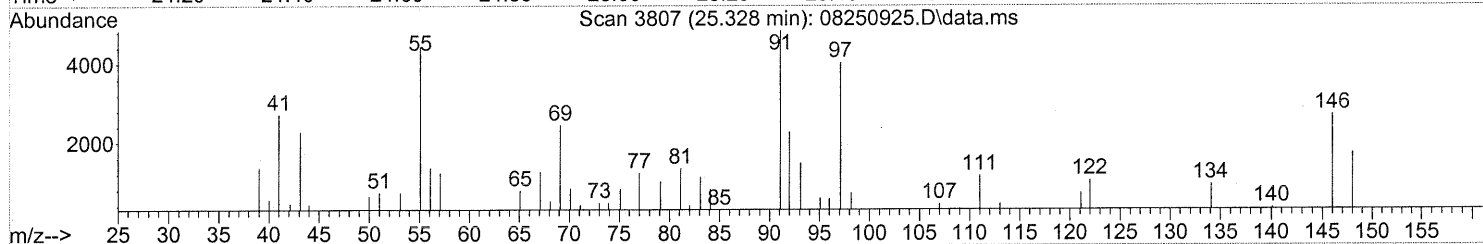
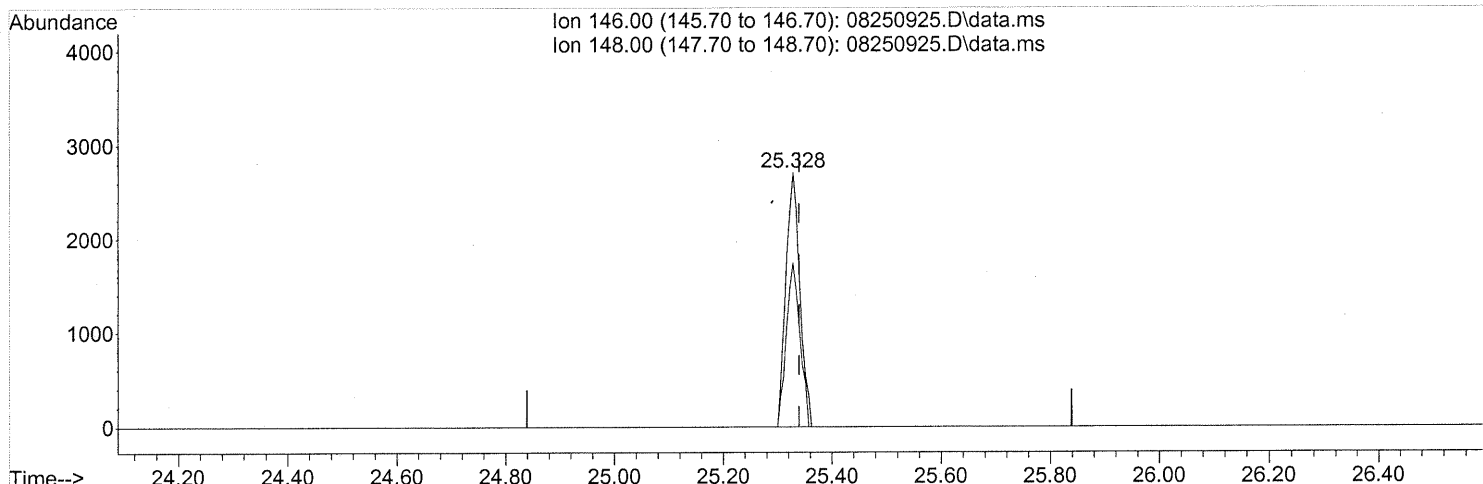
*FP em 8/28/09*

*KE 8/21/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.10ng

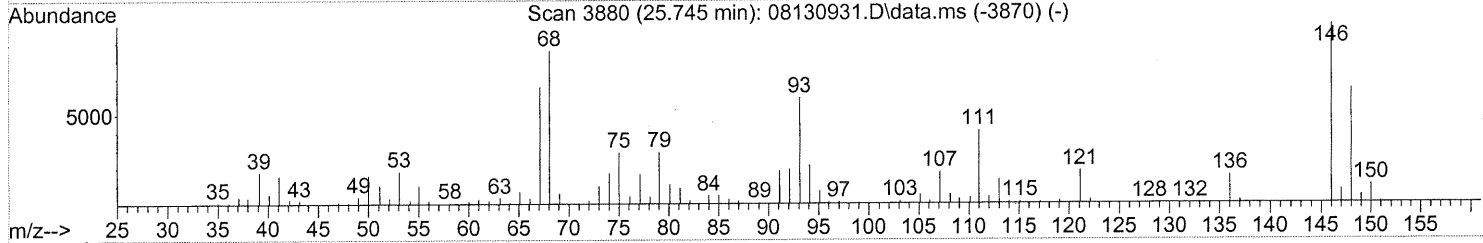
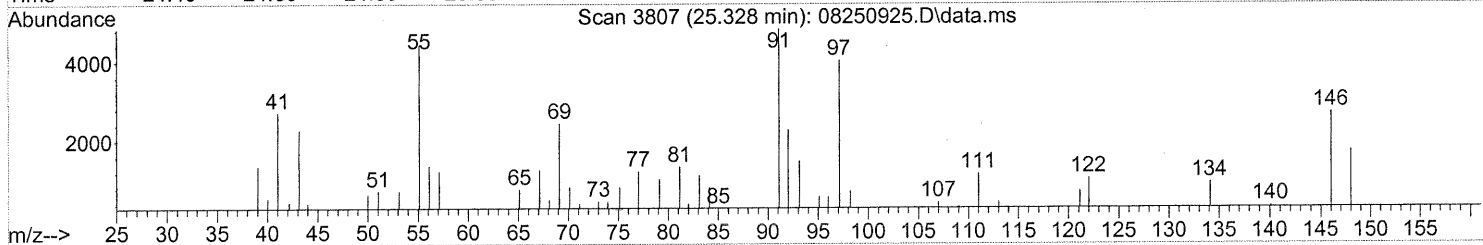
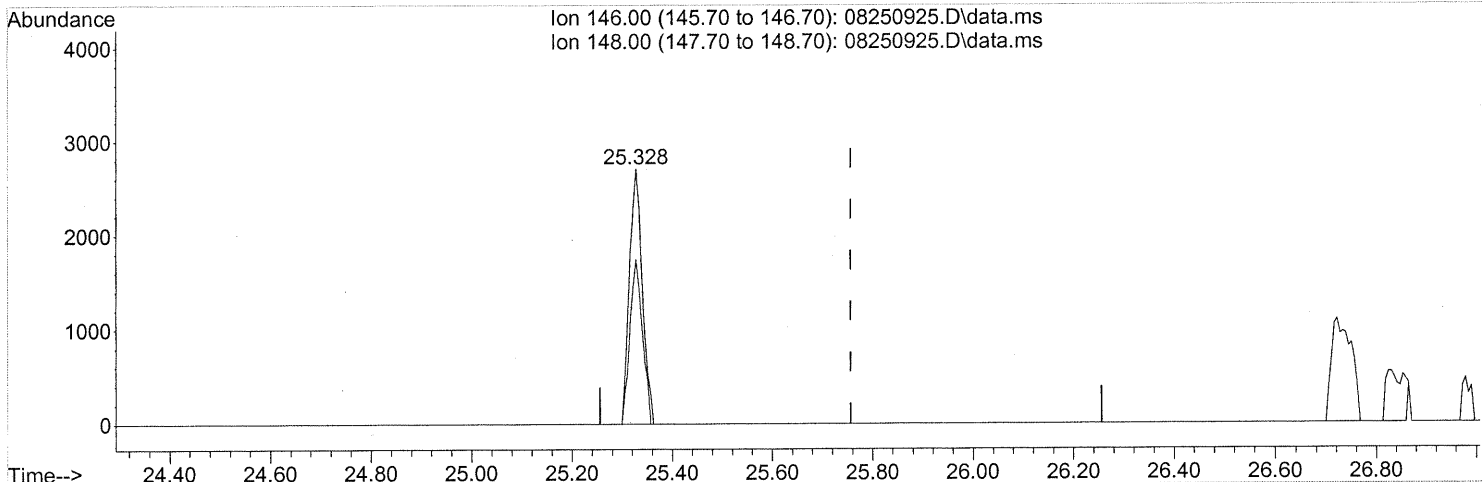
response 4791

Ion	Exp%	Act%
146.00	100	100
148.00	64.00	62.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.11ng

response 4791

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	62.30
0.00	0.00	0.00
0.00	0.00	0.00

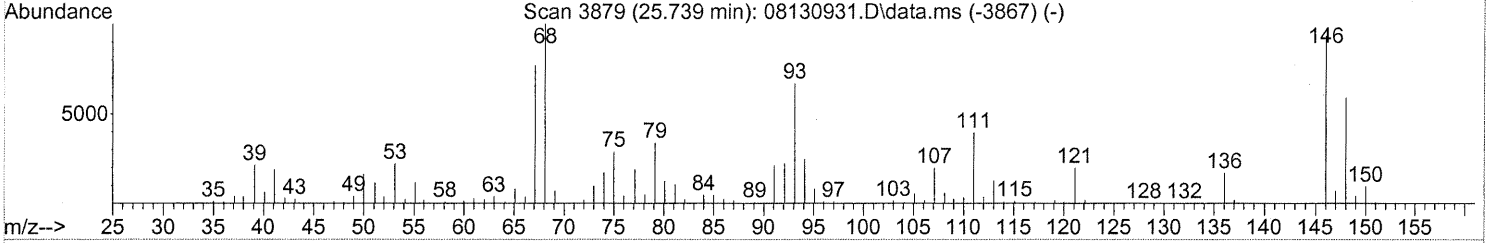
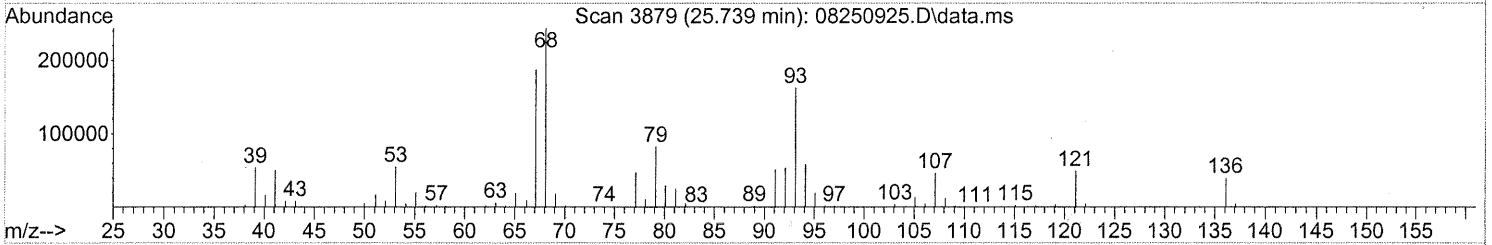
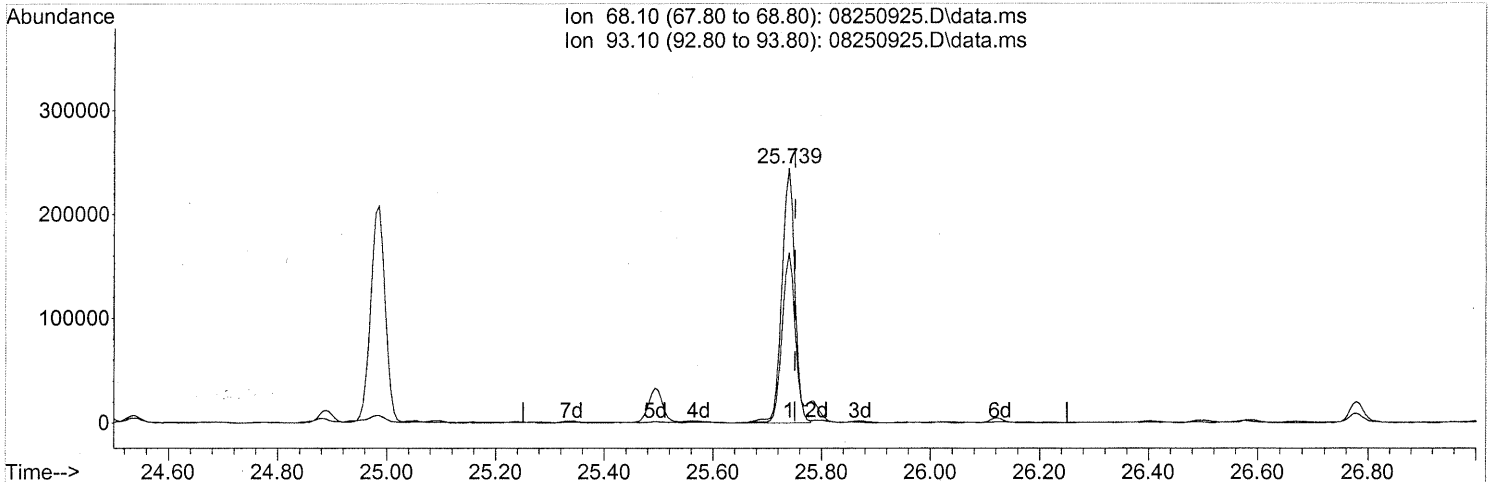
*FP Em 8/28/09*

*11/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250925.D\data.ms

(91) d-Limonene (T)  
 25.739min (-0.011) 11.47ng  
 response 406283

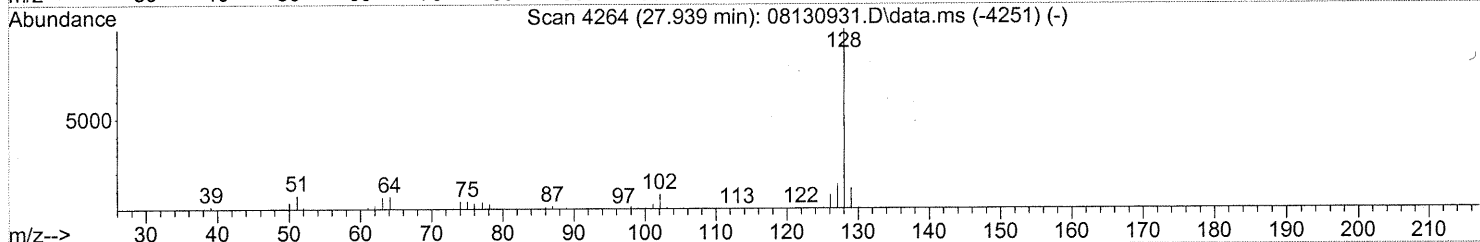
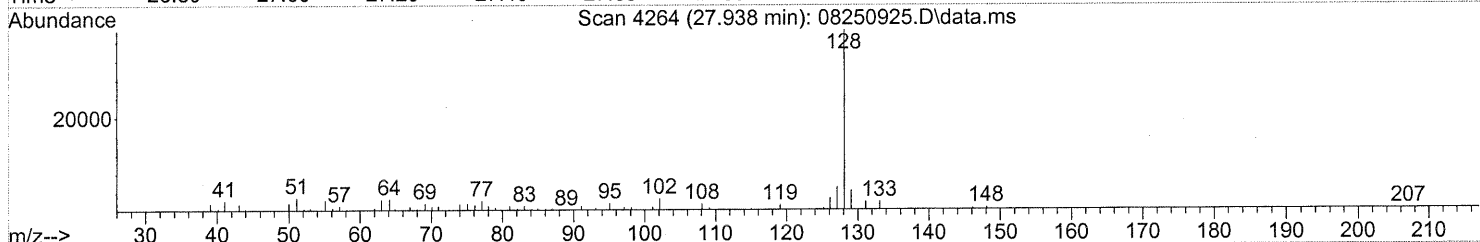
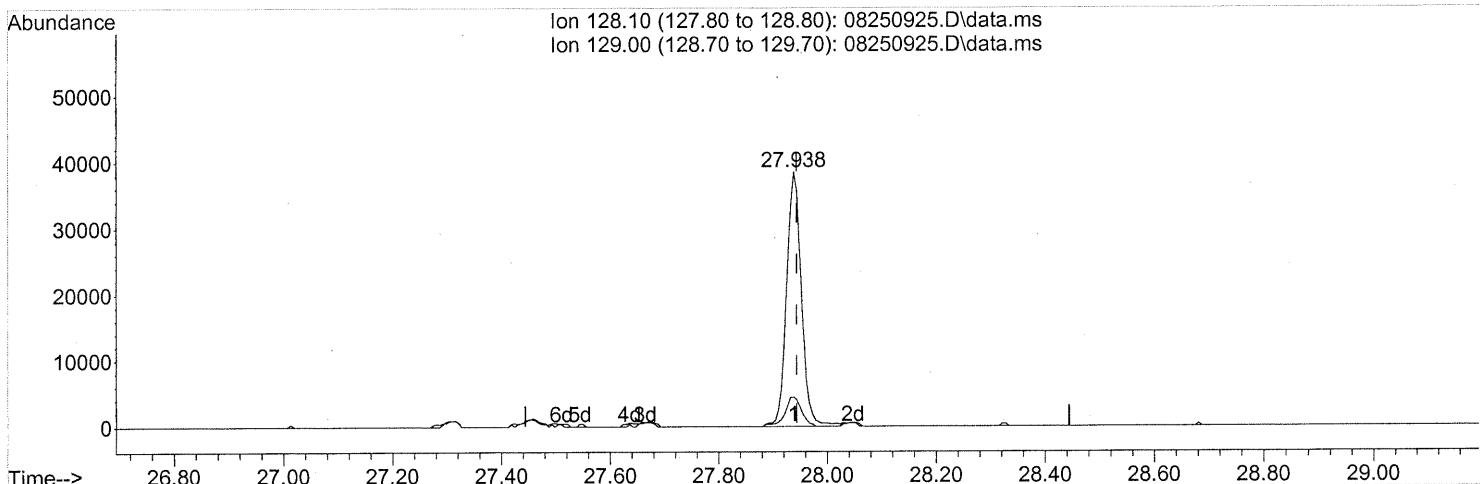
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	75.66
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250925.D  
 Acq On : 25 Aug 2009 19:58  
 Operator : EM  
 Sample : P0902857-004 (500ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:04 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



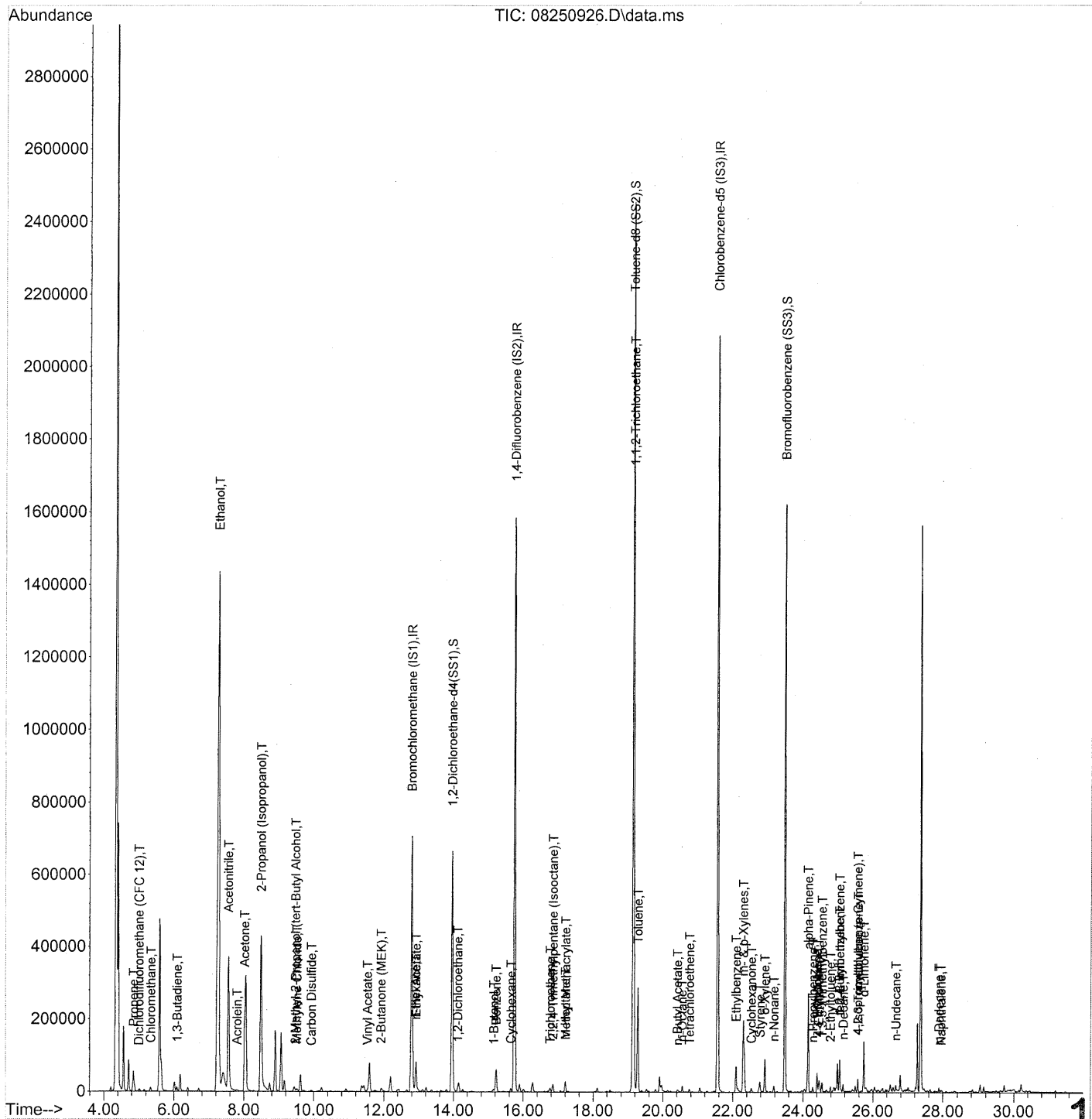
TIC: 08250925.D\data.ms

(95) Naphthalene (T)  
 27.938min (-0.006) 0.63ng  
 response 73281

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.69
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:53:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:53:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.79	130	373428	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.75	114	1884199	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	906558	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.95	65	660054	24.998	ng	-0.03
Spiked Amount	25.000		Recovery	=	100.00%	✓
57) Toluene-d8 (SS2)	19.14	98	2184607	25.348	ng	-0.02
Spiked Amount	25.000		Recovery	=	101.40%	✓
73) Bromofluorobenzene (SS3)	23.49	174	593354	24.311	ng	0.00
Spiked Amount	25.000		Recovery	=	97.24%	✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.85	42	21968	0.671	ng	95
3) Dichlorodifluoromethan...	5.00	85	3054	0.065	ng	# 91
4) Chloromethane	5.34	50	13481	0.309	ng	97
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	6.09	54	6260	0.205	ng	92
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.27	45	3181111m	154.814	ng	
11) Acetonitrile	7.55	41	587726	11.720	ng	98
12) Acrolein	7.80	56	4729	0.353	ng	97
13) Acetone	8.02	58	112354	5.373	ng	# 46
14) Trichlorofluoromethane	8.28	101	1658	N.D.		
15) 2-Propanol (Isopropanol)	8.48	45	741285	12.945	ng	93
16) Acrylonitrile	8.84	53	941	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.47	59	10264	0.177	ng	# 67
19) Methylene Chloride	9.52	84	3974	0.152	ng	91
20) 3-Chloro-1-propene (Al...	9.71	41	489	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.93	76	7835	0.085	ng	# 75
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	11.53	86	713	0.157	ng	# 1
27) 2-Butanone (MEK)	11.92	72	5196	0.356	ng	# 15
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.92	61	5903	0.624	ng	95
31) n-Hexane	12.91	57	38976	0.846	ng	94

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*Em 8/28/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:53:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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)	13.64	72	238	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	10758	0.365	ng	96
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.16	56	7101	0.291	ng	97
41) Benzene	15.22	78	80220	0.792	ng	99
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	5083	0.130	ng	# 83
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	16.77	130	4730	0.184	ng	98
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	23926	0.205	ng	94
50) Methyl Methacrylate	17.22	100	2364	0.233	ng	# 1
51) n-Heptane	17.20	71	9004	0.334	ng	93
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	19.16	97	168129	7.766	ng	# 8
58) Toluene	19.28	91	279238	2.673	ng	99
59) 2-Hexanone	19.59	43	2423	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.42	43	9123	0.154	ng	91
63) n-Octane	20.55	57	3462	0.149	ng	83
64) Tetrachloroethene	20.76	166	3388	0.131	ng	94
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	71428	0.633	ng	98
67) m- & p-Xylenes	22.30	91	204502	2.287	ng	99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	17830	0.270	ng	99
70) o-Xylene	22.92	91	67682	0.752	ng	99
71) n-Nonane	23.17	43	8714	0.161	ng	83
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.66	105	4496	N.D.		
75) alpha-Pinene	24.15	93	127539	2.216	ng	87
76) n-Propylbenzene	24.28	91	13923	0.097	ng	96
77) 3-Ethyltoluene	24.41	105	38361	0.351	ng	97
78) 4-Ethyltoluene	24.45	105	21971	0.200	ng	98
79) 1,3,5-Trimethylbenzene	24.55	105	14673	0.162	ng	96

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 14:53:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

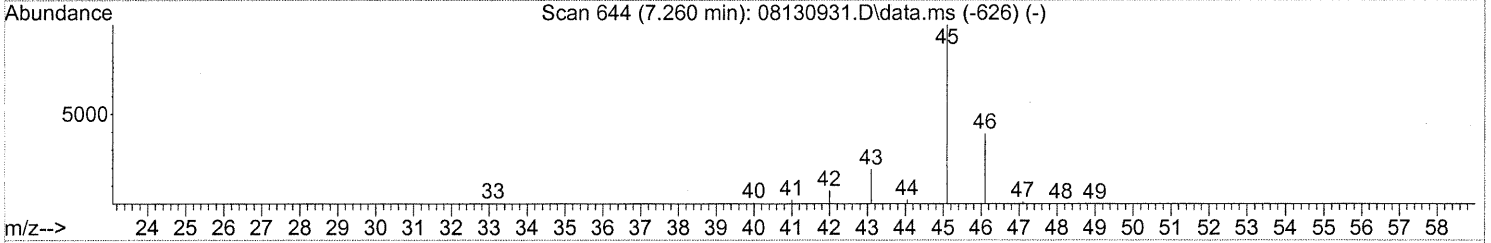
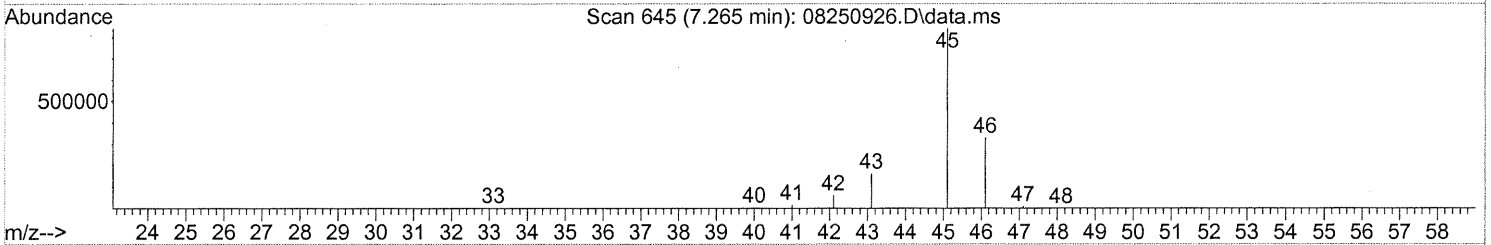
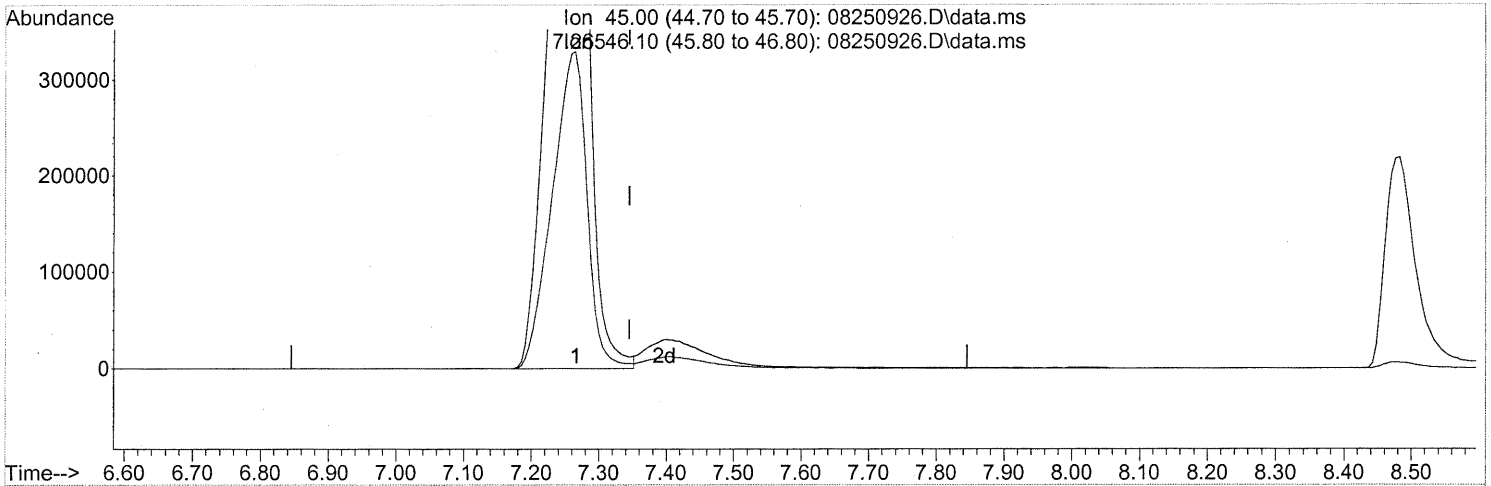
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.75	118	138		N.D.	
81) 2-Ethyltoluene	24.79	105	12432	0.110	ng	96
82) 1,2,4-Trimethylbenzene	25.05	105	51908	0.538	ng	89
83) n-Decane	25.15	57	9501	0.169	ng	88
84) Benzyl Chloride	25.33	91	881		N.D.	
85) 1,3-Dichlorobenzene	25.34	146	106		N.D.	
86) 1,4-Dichlorobenzene	25.34	146	106		N.D.	
87) sec-Butylbenzene	25.39	105	978		N.D.	
88) 4-Isopropyltoluene (p-...	25.56	119	11608	0.095	ng	92
89) 1,2,3-Trimethylbenzene	25.57	105	12438	0.128	ng	97
90) 1,2-Dichlorobenzene	25.34	146	106		N.D.	
91) d-Limonene	25.74	68	38625	0.979	ng	97
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0		N.D.	
93) n-Undecane	26.65	57	5749	0.099	ng	85
94) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
95) Naphthalene	27.94	128	7237	0.056	ng	86
96) n-Dodecane	27.89	57	5476	0.084	ng	81
97) Hexachlorobutadiene	0.00	225	0		N.D.	
98) Cyclohexanone	22.53	55	3971	0.121	ng	88
99) tert-Butylbenzene	25.05	119	6629	0.069	ng	# 54
100) n-Butylbenzene	26.06	91	3606		N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:07 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 145.29ng

response 2985437

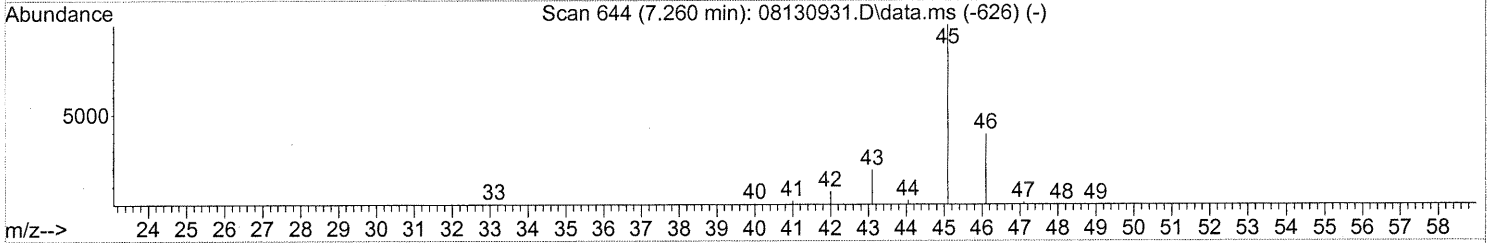
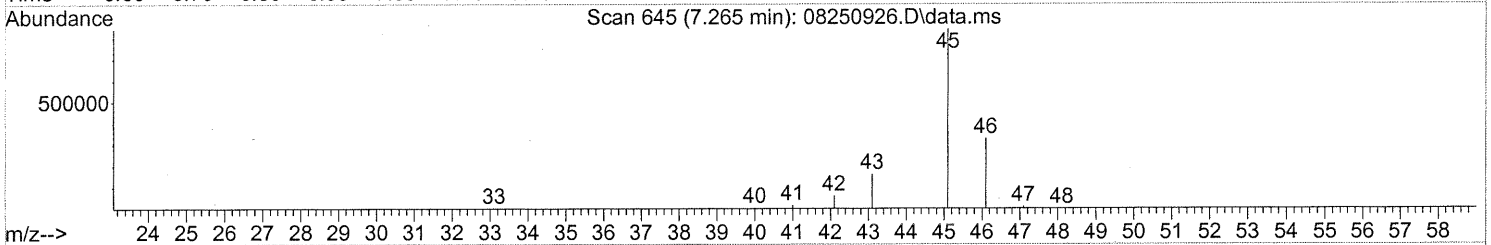
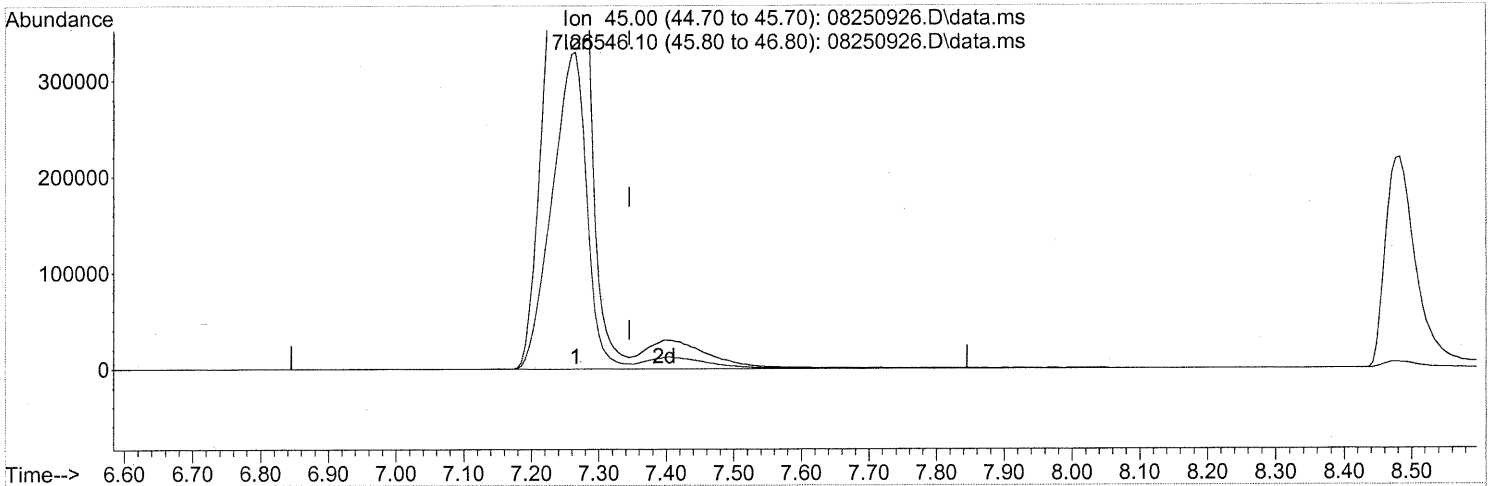
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.10
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:07 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)  
 7.265min (-0.080) 154.81ng m  
 response 3181111

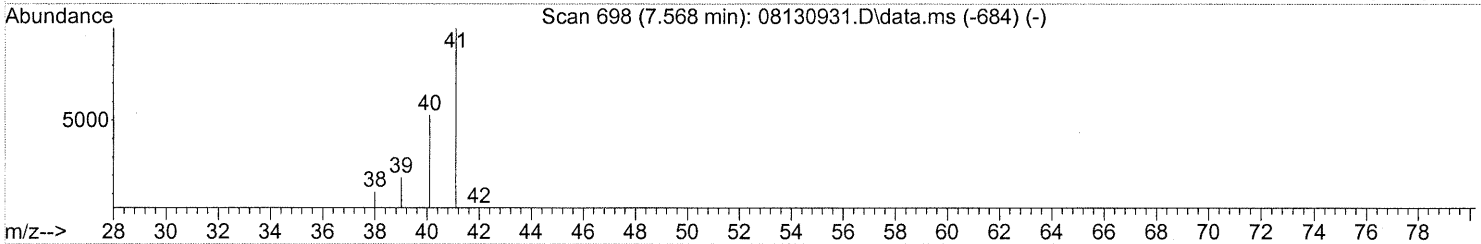
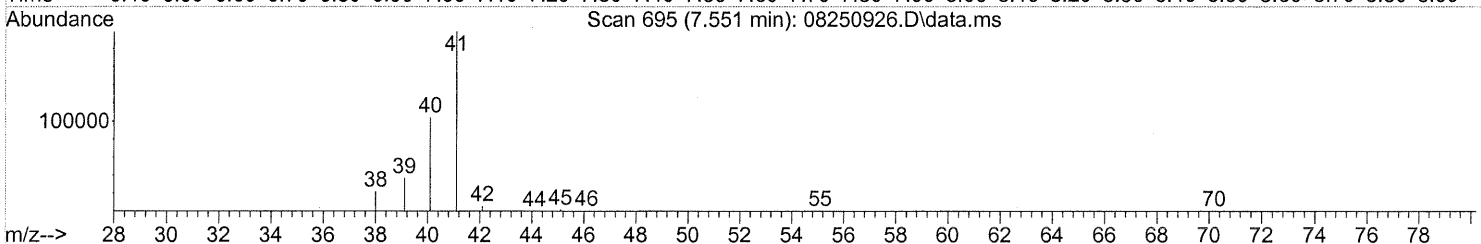
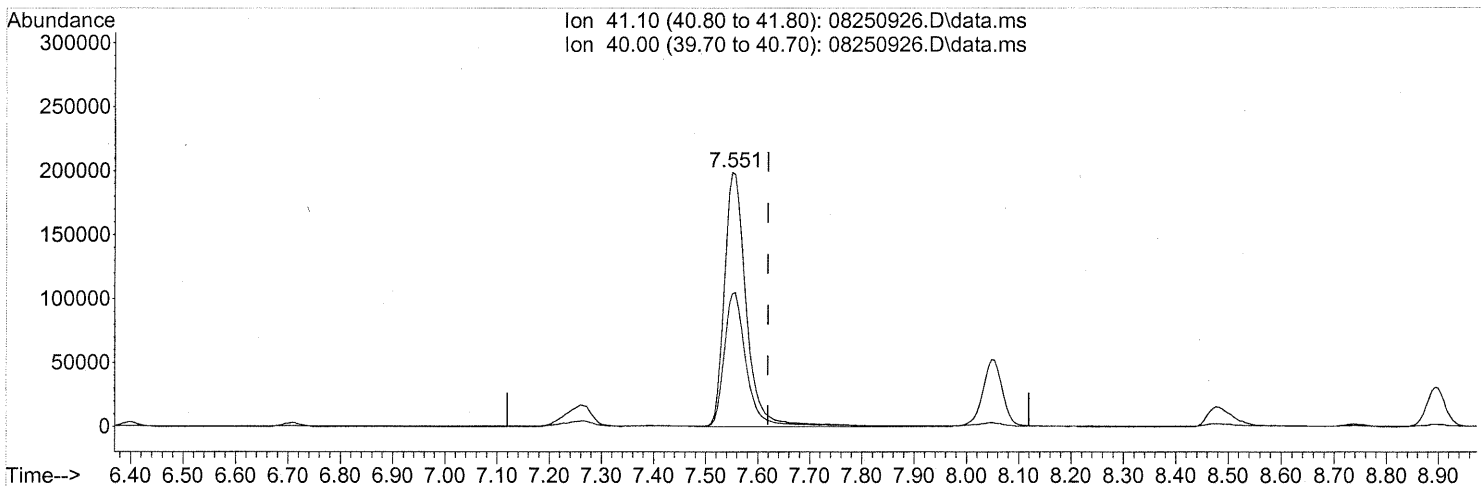
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.69
0.00	0.00	0.00
0.00	0.00	0.00

*PT → IC*  
*Com 8/28/09*  
*KR 8/21/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250926.D  
 Acq On : 25 Aug 2009 20:40  
 Operator : EM  
 Sample : P0902857-004 dil (50ml)  
 Misc : Env. H & E 100459  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 07:22:07 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250926.D\data.ms

(11) Acetonitrile (T)

7.551min (-0.069) 11.72ng

response 587726

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	52.20
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:** 100461  
**Client Project ID:** 16512  
**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01326

**CAS Project ID:** P0902857  
**CAS Sample ID:** P0902857-005

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 0.50 Liter(s)  
 0.050 Liter(s)

**Initial Pressure (psig):** -3.1      **Final Pressure (psig):** 3.5

**Canister Dilution Factor:** 1.57

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	73	1.6	42	0.91	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.9	1.6	0.58	0.32	
74-87-3	Chloromethane	9.4	0.31	4.5	0.15	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.6	ND	0.22	
75-01-4	Vinyl Chloride	ND	0.31	ND	0.12	
106-99-0	1,3-Butadiene	7.9	0.31	3.6	0.14	
74-83-9	Bromomethane	ND	0.31	ND	0.081	
75-00-3	Chloroethane	ND	0.31	ND	0.12	
64-17-5	Ethanol	5,000	16	2,700	8.3	D
75-05-8	Acetonitrile	400	1.6	240	0.94	D
107-02-8	Acrolein	14	1.6	6.2	0.69	
67-64-1	Acetone	200	16	83	6.6	
75-69-4	Trichlorofluoromethane	1.8	0.31	0.32	0.056	
67-63-0	2-Propanol (Isopropyl Alcohol)	350	1.6	140	0.64	
107-13-1	Acrylonitrile	2.3	1.6	1.1	0.72	
75-35-4	1,1-Dichloroethene	0.41	0.31	0.10	0.079	
75-09-2	Methylene Chloride	4.8	1.6	1.4	0.45	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.31	ND	0.10	
76-13-1	Trichlorotrifluoroethane	0.48	0.31	0.062	0.041	
75-15-0	Carbon Disulfide	2.5	1.6	0.82	0.50	
156-60-5	trans-1,2-Dichloroethene	ND	0.31	ND	0.079	
75-34-3	1,1-Dichloroethane	ND	0.31	ND	0.078	
1634-04-4	Methyl tert-Butyl Ether	ND	0.31	ND	0.087	
108-05-4	Vinyl Acetate	ND	16	ND	4.5	
78-93-3	2-Butanone (MEK)	18	1.6	6.0	0.53	

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: 9/1/09 **169**

**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 2 of 3

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

**Client Sample ID:** 100461

**Client Project ID:** 16512

CAS Project ID: P0902857

CAS Sample ID: P0902857-005

Test Code: EPA TO-15

Date Collected: 8/18/09

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Date Received: 8/19/09

Analyst: Elsa Moctezuma

Date Analyzed: 8/25/09

Sampling Media: 6.0 L Summa Canister

Volume(s) Analyzed: 0.50 Liter(s)

Test Notes:

0.050 Liter(s)

Container ID: AC01326

Initial Pressure (psig): -3.1      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.57

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	0.31	ND	0.079	
141-78-6	<b>Ethyl Acetate</b>	<b>32</b>	3.1	<b>9.0</b>	0.87	
110-54-3	<b>n-Hexane</b>	<b>31</b>	1.6	<b>8.8</b>	0.45	
67-66-3	<b>Chloroform</b>	<b>0.87</b>	0.31	<b>0.18</b>	0.064	
109-99-9	<b>Tetrahydrofuran (THF)</b>	<b>2.0</b>	1.6	<b>0.68</b>	0.53	
107-06-2	<b>1,2-Dichloroethane</b>	<b>14</b>	0.31	<b>3.5</b>	0.078	
71-55-6	1,1,1-Trichloroethane	ND	0.31	ND	0.058	
71-43-2	<b>Benzene</b>	<b>28</b>	0.31	<b>8.8</b>	0.098	
56-23-5	<b>Carbon Tetrachloride</b>	<b>0.44</b>	0.31	<b>0.069</b>	0.050	
110-82-7	<b>Cyclohexane</b>	<b>4.7</b>	1.6	<b>1.4</b>	0.46	
78-87-5	1,2-Dichloropropane	ND	0.31	ND	0.068	
75-27-4	Bromodichloromethane	ND	0.31	ND	0.047	
79-01-6	<b>Trichloroethene</b>	<b>7.3</b>	0.31	<b>1.4</b>	0.058	
123-91-1	1,4-Dioxane	ND	1.6	ND	0.44	
80-62-6	Methyl Methacrylate	ND	3.1	ND	0.77	
142-82-5	<b>n-Heptane</b>	<b>12</b>	1.6	<b>2.9</b>	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	ND	0.35	
108-10-1	4-Methyl-2-pentanone	ND	1.6	ND	0.38	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	ND	0.35	
79-00-5	1,1,2-Trichloroethane	ND	0.31	ND	0.058	
108-88-3	<b>Toluene</b>	<b>94</b>	1.6	<b>25</b>	0.42	
591-78-6	<b>2-Hexanone</b>	<b>1.9</b>	1.6	<b>0.47</b>	0.38	
124-48-1	Dibromochloromethane	ND	0.31	ND	0.037	
106-93-4	1,2-Dibromoethane	ND	0.31	ND	0.041	
123-86-4	<b>n-Butyl Acetate</b>	<b>5.7</b>	1.6	<b>1.2</b>	0.33	

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: \_\_\_\_\_

*9/10/09*

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100461  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-005

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**  
**Container ID:** AC01326

**Date Collected:** 8/18/09  
**Date Received:** 8/19/09  
**Date Analyzed:** 8/25/09  
**Volume(s) Analyzed:** 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -3.1      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.57

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	5.1	1.6	1.1	0.34	
127-18-4	Tetrachloroethene	4.8	0.31	0.71	0.046	
108-90-7	Chlorobenzene	ND	0.31	ND	0.068	
100-41-4	Ethylbenzene	23	1.6	5.2	0.36	
179601-23-1	m,p-Xylenes	80	1.6	19	0.36	
75-25-2	Bromoform	ND	1.6	ND	0.15	
100-42-5	Styrene	10	1.6	2.4	0.37	
95-47-6	o-Xylene	26	1.6	6.0	0.36	
111-84-2	n-Nonane	5.6	1.6	1.1	0.30	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.31	ND	0.046	
98-82-8	Cumene	ND	1.6	ND	0.32	
80-56-8	alpha-Pinene	78	1.6	14	0.28	
103-65-1	n-Propylbenzene	3.3	1.6	0.67	0.32	
622-96-8	4-Ethyltoluene	6.8	1.6	1.4	0.32	
108-67-8	1,3,5-Trimethylbenzene	5.2	1.6	1.1	0.32	
95-63-6	1,2,4-Trimethylbenzene	18	1.6	3.7	0.32	
100-44-7	Benzyl Chloride	ND	0.31	ND	0.061	
541-73-1	1,3-Dichlorobenzene	ND	0.31	ND	0.052	
106-46-7	1,4-Dichlorobenzene	0.33	0.31	0.055	0.052	
95-50-1	1,2-Dichlorobenzene	ND	0.31	ND	0.052	
5989-27-5	d-Limonene	36	1.6	6.5	0.28	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.6	ND	0.16	
120-82-1	1,2,4-Trichlorobenzene	ND	1.6	ND	0.21	
91-20-3	Naphthalene	1.9	1.6	0.36	0.30	
87-68-3	Hexachlorobutadiene	ND	1.6	ND	0.15	

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: \_\_\_\_\_

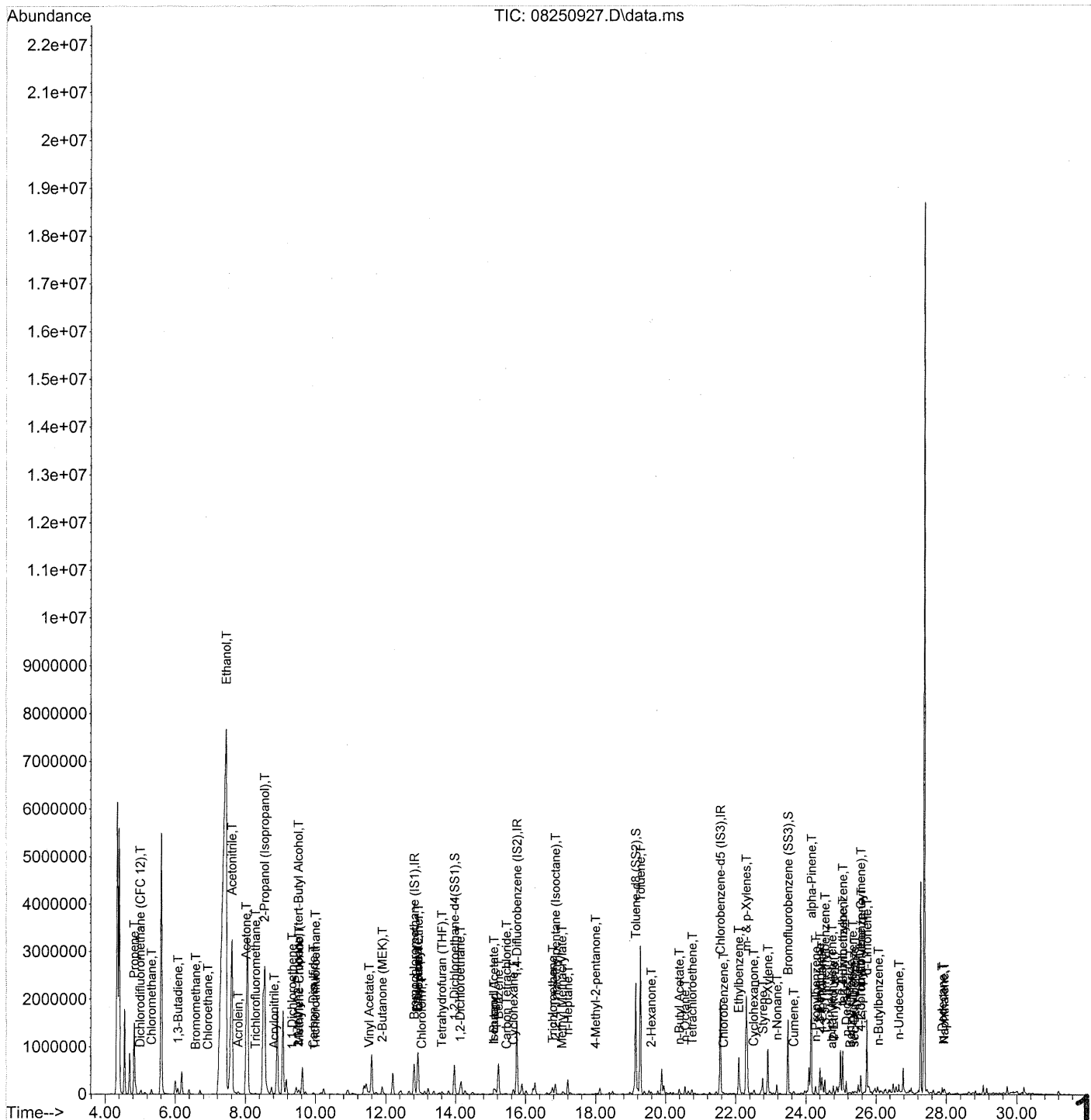
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9/1/09

**171**

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250927.D  
Acq On : 25 Aug 2009 21:22  
Operator : EM  
Sample : P0902857-005 (500ml)  
Misc : Env. H & E 100461  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:57:27 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:57:27 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.81	130	347654	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1760367	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	844967	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.97	65	614238	24.987	ng	-0.02
Spiked Amount	25.000			Recovery =	99.96%	
57) Toluene-d8 (SS2)	19.15	98	2026729	25.231	ng	-0.01
Spiked Amount	25.000			Recovery =	100.92%	
73) Bromofluorobenzene (SS3)	23.49	174	563517	24.771	ng	0.00
Spiked Amount	25.000			Recovery =	99.08%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.83	42	709079	23.251	ng	97
3) Dichlorodifluoromethan...	5.00	85	39761	0.913	ng	99
4) Chloromethane	5.33	50	121333	2.991	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	239	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.08	54	71426	2.513	ng	96
8) Bromomethane	6.58	94	1150	0.055	ng	100
9) Chloroethane	6.93	64	1055	0.053	ng	# 43
10) Ethanol	7.44	45	35820857	1872.519	ng	See Dil 99
11) Acetonitrile	7.61	41	6588063	141.116	ng	See Dil 99
12) Acrolein	7.79	56	56304	4.513	ng	96
13) Acetone	8.02	58	1225855	62.972	ng	# 49
14) Trichlorofluoromethane	8.29	101	21518	0.578	ng	94
15) 2-Propanol (Isopropanol)	8.55	45	5970810	112.000	ng	91
16) Acrylonitrile	8.82	53	21029	0.744	ng	96
17) 1,1-Dichloroethene	9.33	96	2809	0.129	ng	88
18) 2-Methyl-2-Propanol (t...	9.50	59	61557	1.137	ng	# 68
19) Methylene Chloride	9.53	84	36882	1.519	ng	88
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.	d	
21) Trichlorotrifluoroethane	10.00	151	2539	0.152	ng	87
22) Carbon Disulfide	9.94	76	69634	0.812	ng	99
23) trans-1,2-Dichloroethene	10.93	61	371	N.D.		
24) 1,1-Dichloroethane	11.38	63	867	N.D.		
25) Methyl tert-Butyl Ether	11.43	73	2062	N.D.		
26) Vinyl Acetate	11.53	86	9597m	2.276	ng	
27) 2-Butanone (MEK)	11.90	72	76751	5.655	ng	# 84
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.93	87	5675	0.295	ng	# 1
30) Ethyl Acetate	12.91	61	90862	10.325	ng	100
31) n-Hexane	12.93	57	424719	9.900	ng	173

*em* 8/28/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:57:27 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev (Min)
32) Chloroform	13.02	83	9899	0.276 ng	98
34) Tetrahydrofuran (THF)	13.61	72	9076	0.643 ng #	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	14.13	62	122723	4.467 ng	99
38) 1,1,1-Trichloroethane	14.53	97	110	N.D.	
39) Isopropyl Acetate	15.10	61	791	0.055 ng #	1
40) 1-Butanol	15.10	56	114827	5.034 ng	87
41) Benzene	15.23	78	845793	8.934 ng	98
42) Carbon Tetrachloride	15.46	117	3684	0.139 ng	96
43) Cyclohexane	15.65	84	54750	1.493 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	0.00	83	0	N.D. d	
47) Trichloroethene	16.77	130	56256	2.340 ng	98
48) 1,4-Dioxane	16.75	88	819	N.D.	
49) 2,2,4-Trimethylpentane...	16.85	57	246940	2.266 ng	97
50) Methyl Methacrylate	17.04	100	960	0.101 ng #	1
51) n-Heptane	17.21	71	94684	3.757 ng	93
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	18.00	58	8989	0.439 ng	86
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	19.28	91	2917079	29.957 ng	100
59) 2-Hexanone	19.59	43	31320	0.619 ng #	62
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	20.39	43	100441	1.819 ng	94
63) n-Octane	20.56	57	35419	1.632 ng	90
64) Tetrachloroethene	20.76	166	37143	1.537 ng	99
65) Chlorobenzene	21.66	112	4641	0.078 ng #	42
66) Ethylbenzene	22.09	91	754092	7.173 ng	98
67) m- & p-Xylenes	22.30	91	2136206	25.631 ng	99
68) Bromoform	22.41	173	240	N.D.	
69) Styrene	22.77	104	199596	3.240 ng	99
70) o-Xylene	22.92	91	697210	8.315 ng	98
71) n-Nonane	23.17	43	90504	1.792 ng	90
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D. d	
74) Cumene	23.65	105	43762	0.403 ng	99
75) alpha-Pinene	24.15	93	1339927	24.981 ng	100
76) n-Propylbenzene	24.28	91	139890	1.041 ng	96
77) 3-Ethyltoluene	24.40	105	385753	3.788 ng	98
78) 4-Ethyltoluene	24.46	105	221818	2.166 ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	140410	1.659 ng	100

174

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:57:27 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

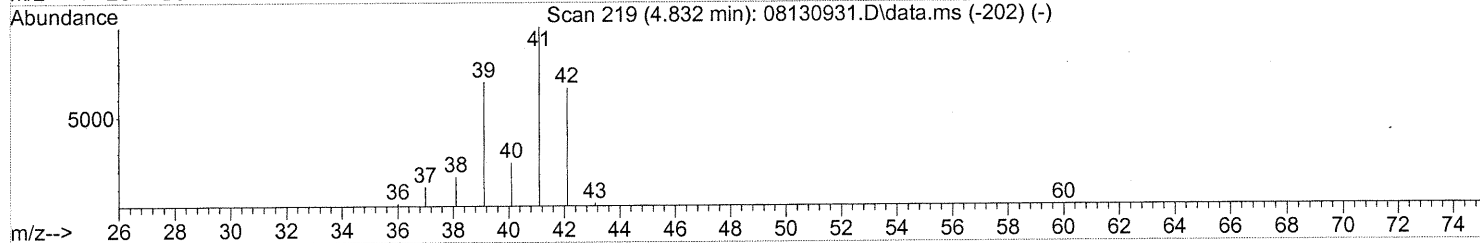
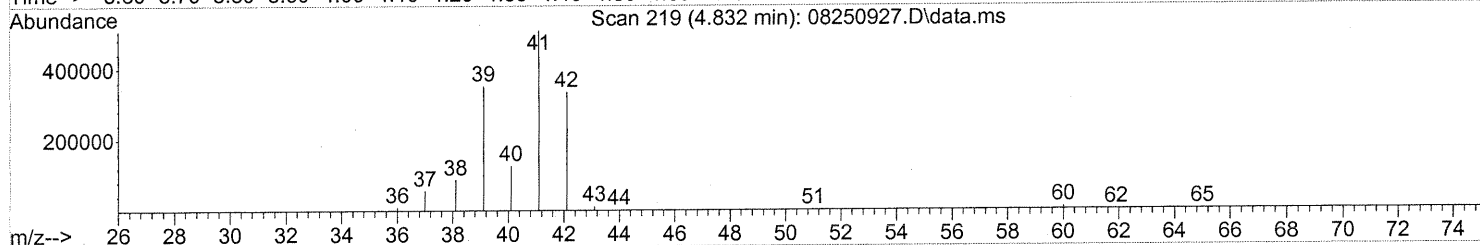
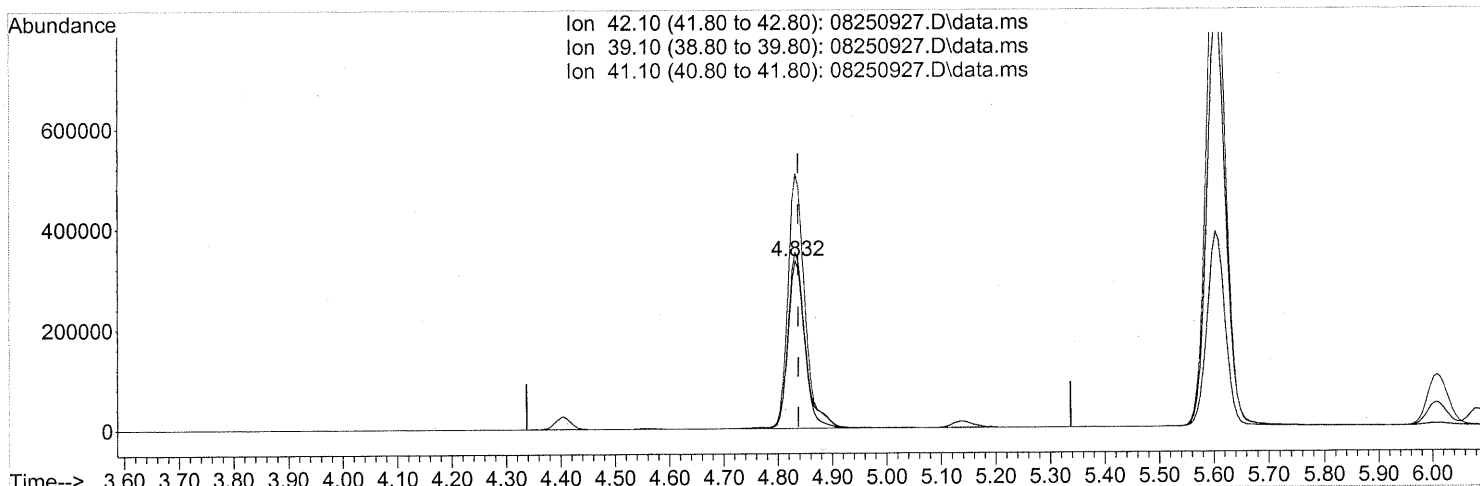
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.74	118	4249	0.092	ng #	78
81) 2-Ethyltoluene	24.79	105	128422	1.221	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	525796	5.849	ng	89
83) n-Decane	25.15	57	99373	1.899	ng	94
84) Benzyl Chloride	25.27	91	4040	0.058	ng #	55
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	d	
86) 1,4-Dichlorobenzene	25.33	146	5231	0.106	ng	96
87) sec-Butylbenzene	25.38	105	11392	0.096	ng	88
88) 4-Isopropyltoluene (p-...	25.56	119	110201	0.971	ng	94
89) 1,2,3-Trimethylbenzene	25.57	105	125439	1.381	ng	96
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	d	
91) d-Limonene	25.74	68	423849	11.525	ng	96
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	66695	1.234	ng	88
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	72497	0.601	ng	96
96) n-Dodecane	27.89	57	43529	0.719	ng	96
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	31061	1.013	ng #	90
99) tert-Butylbenzene	25.05	119	65393	0.734	ng #	54
100) n-Butylbenzene	26.06	91	35215	0.374	ng #	64

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(2) Propene (T)  
 4.832min (-0.006) 23.25ng  
 response 709079

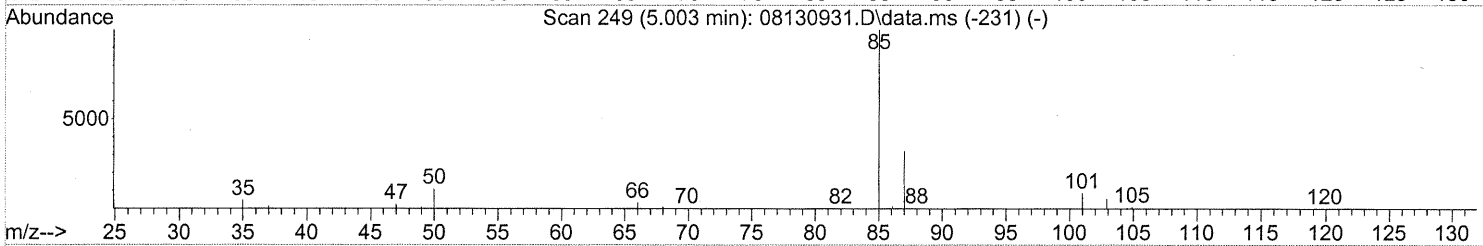
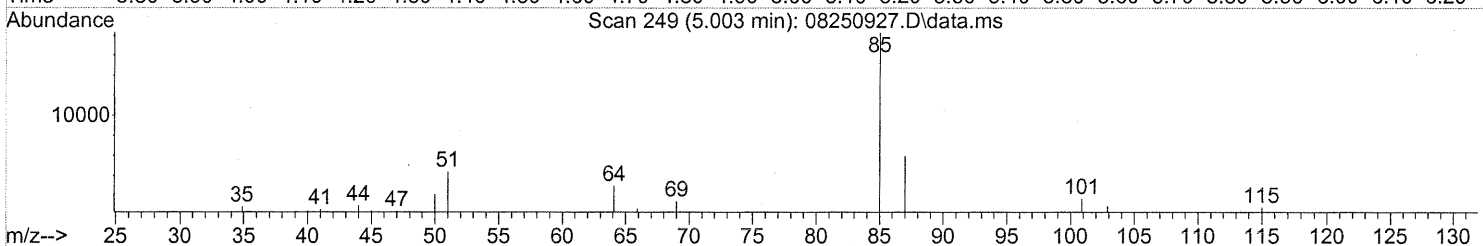
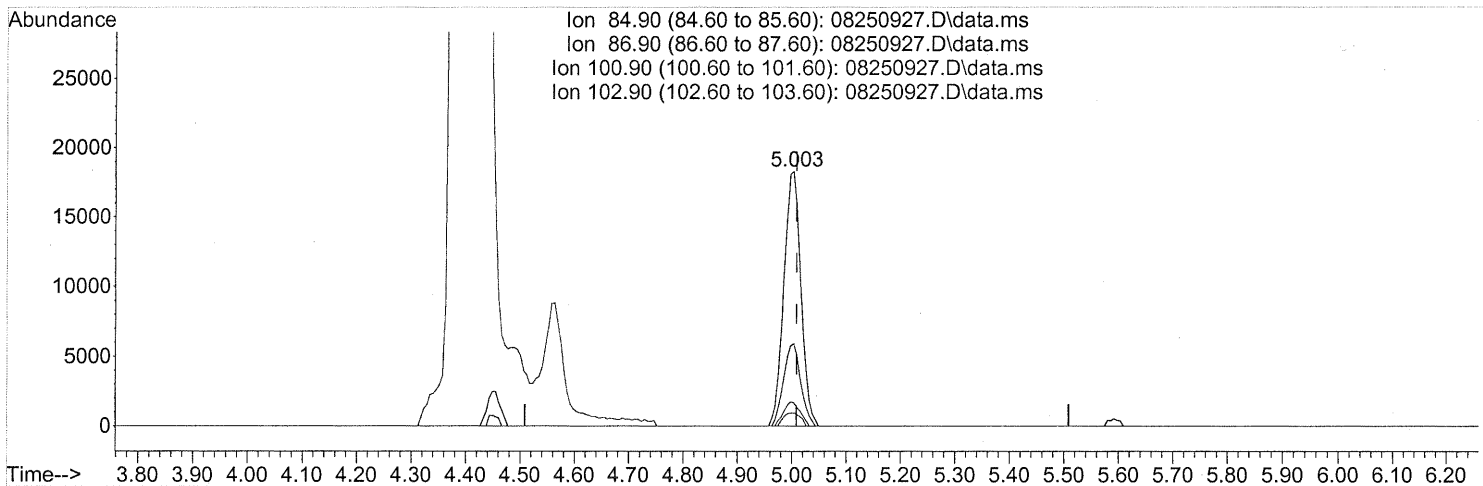
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	111.14
41.10	152.70	156.03
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.003min (-0.006) 0.91ng

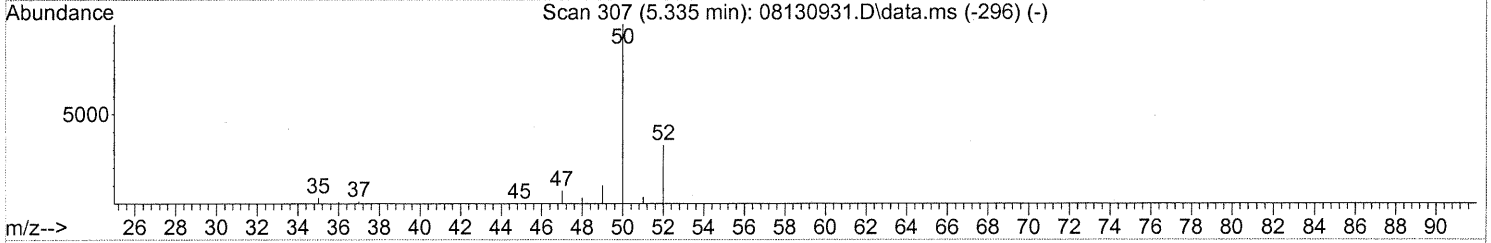
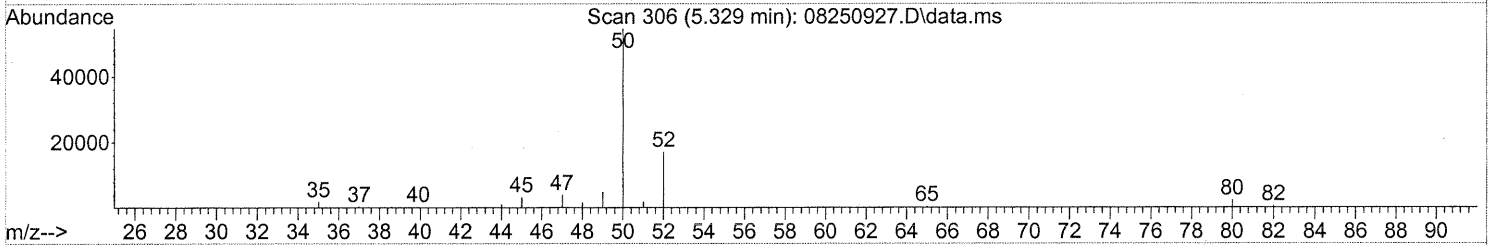
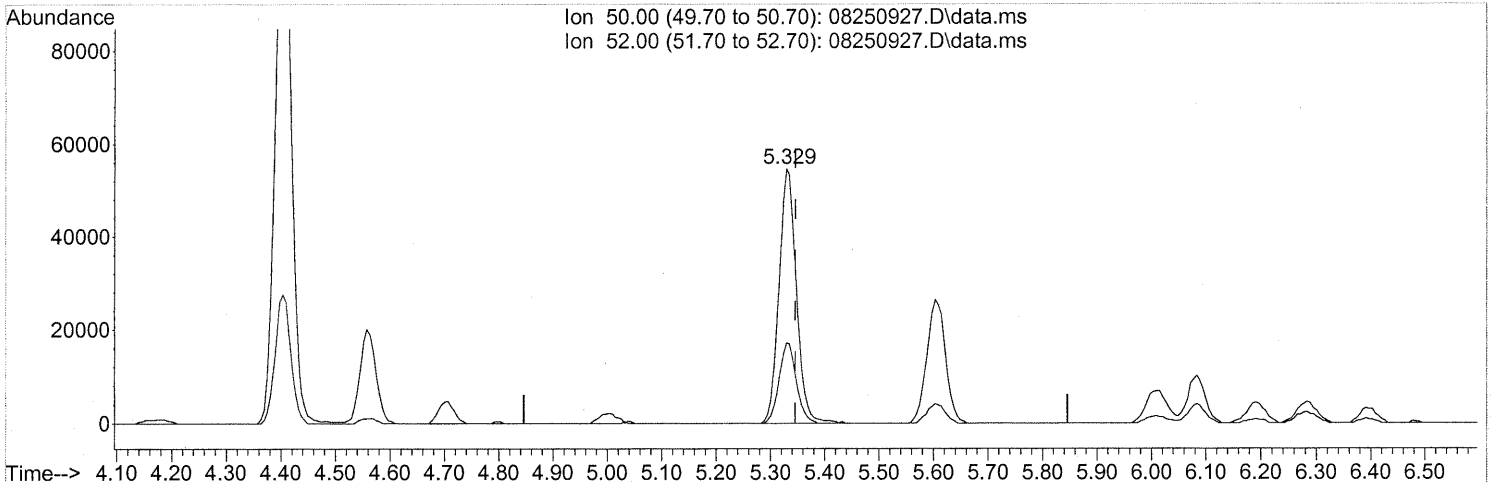
response 39761

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.46
100.90	9.10	9.02
102.90	5.50	4.95

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

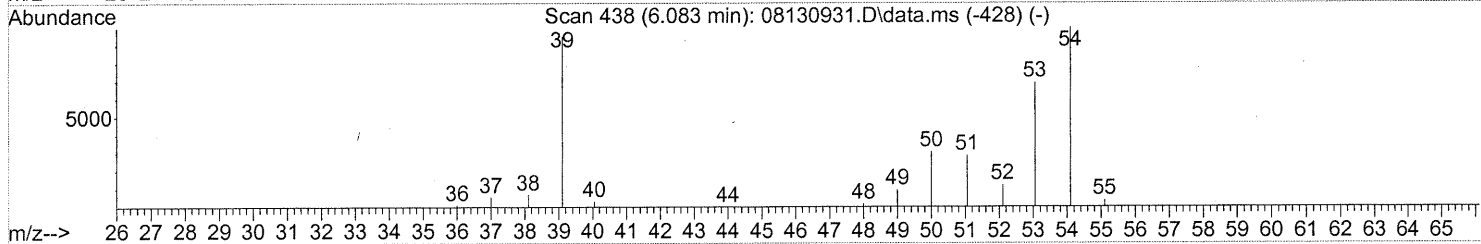
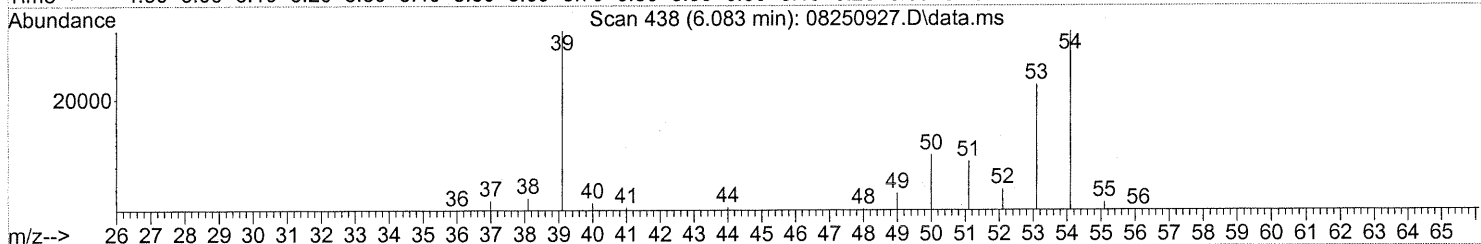
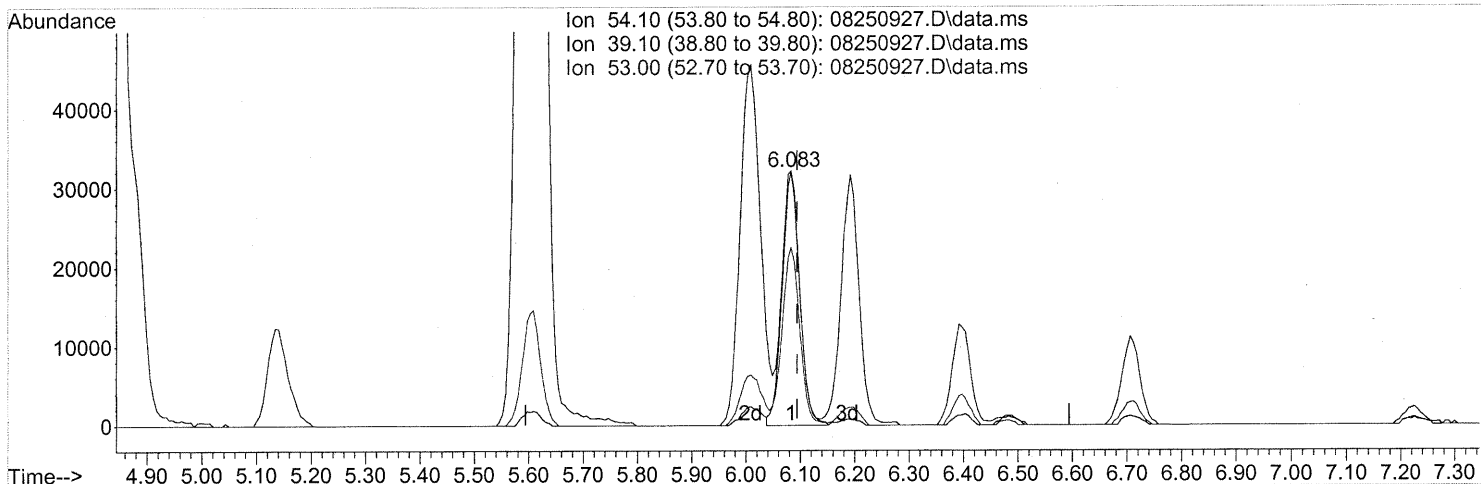
(4) Chloromethane (T)  
 5.329min (-0.017) 2.99ng  
 response 121333

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.15
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

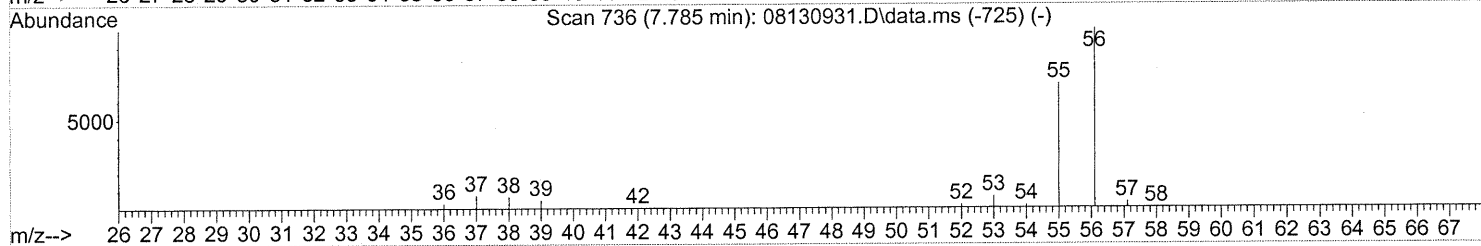
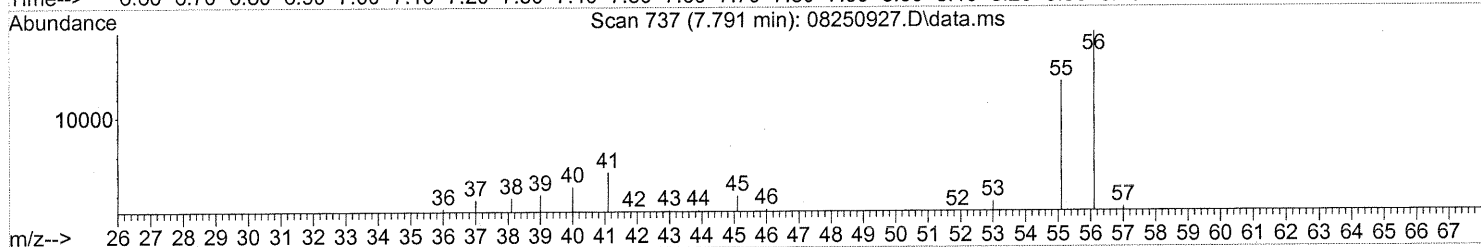
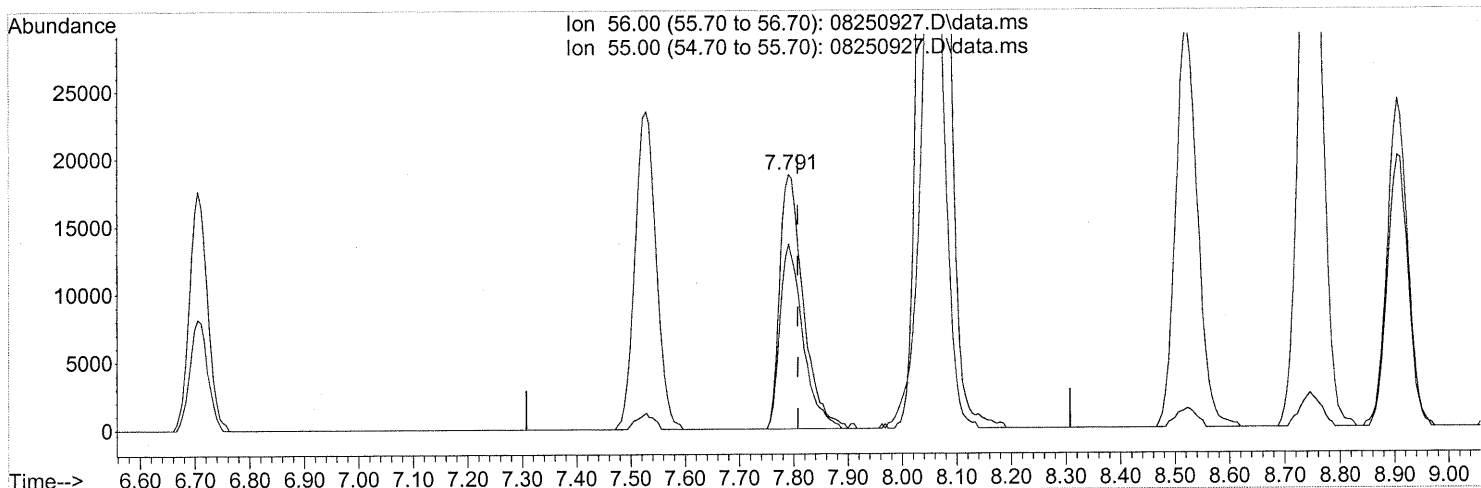
(7) 1,3-Butadiene (T)  
 6.083min (-0.011) 2.51ng  
 response 71426

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	102.73
53.00	69.80	71.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

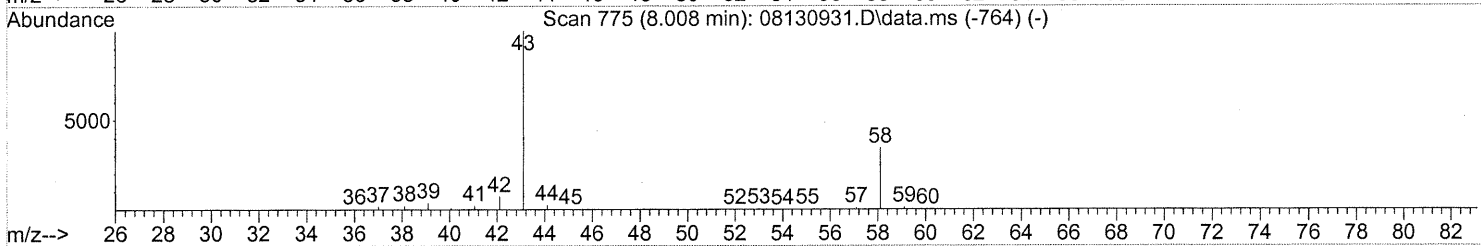
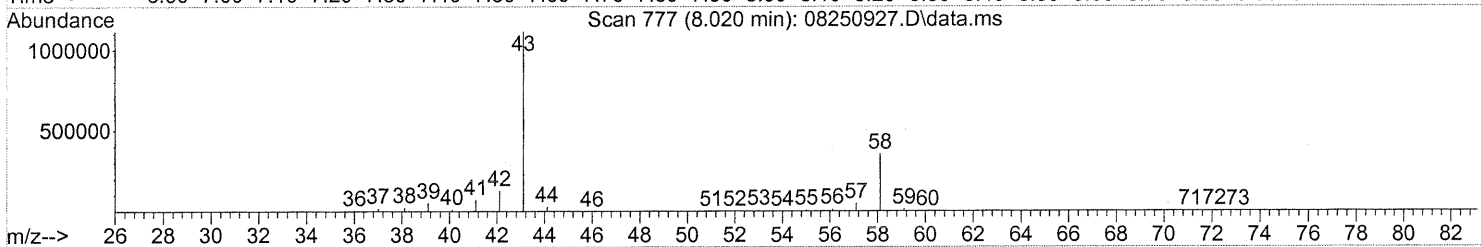
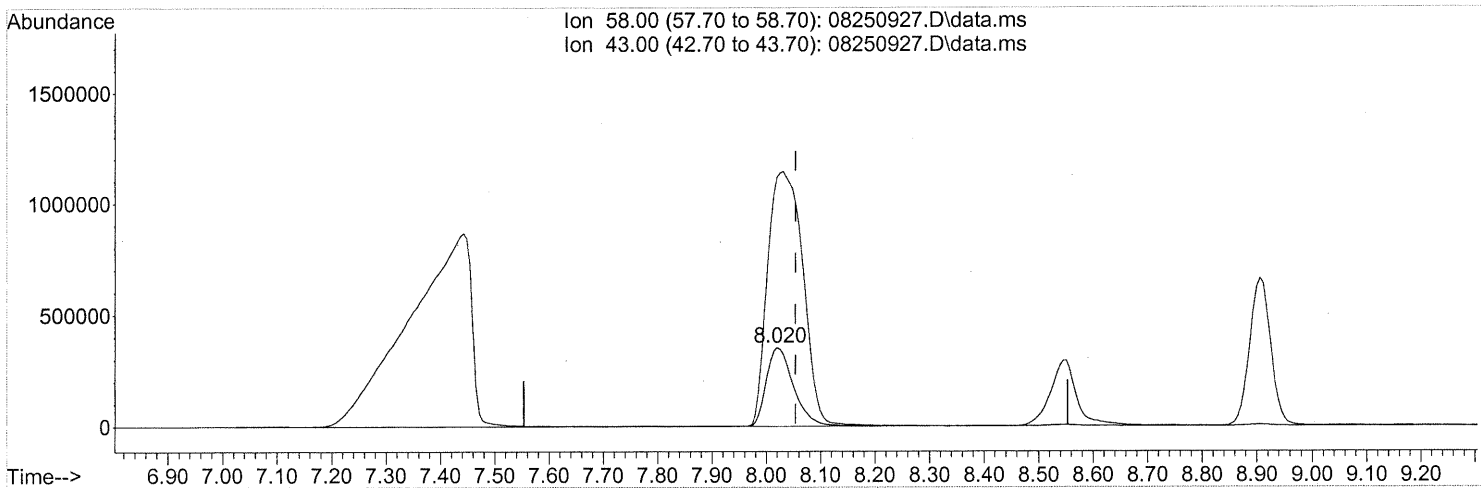
(12) Acrolein (T)  
 7.791min (-0.017) 4.51ng  
 response 56304

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.72
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

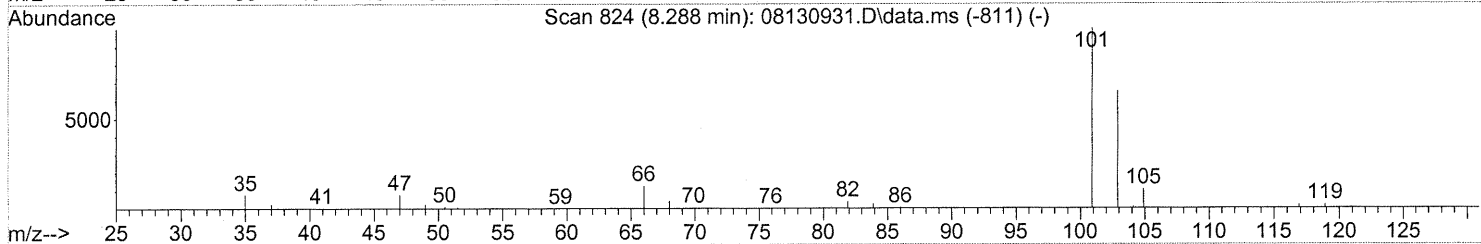
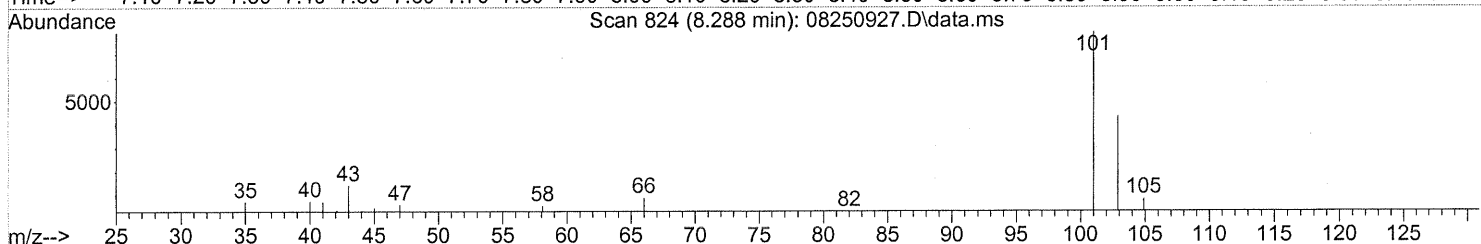
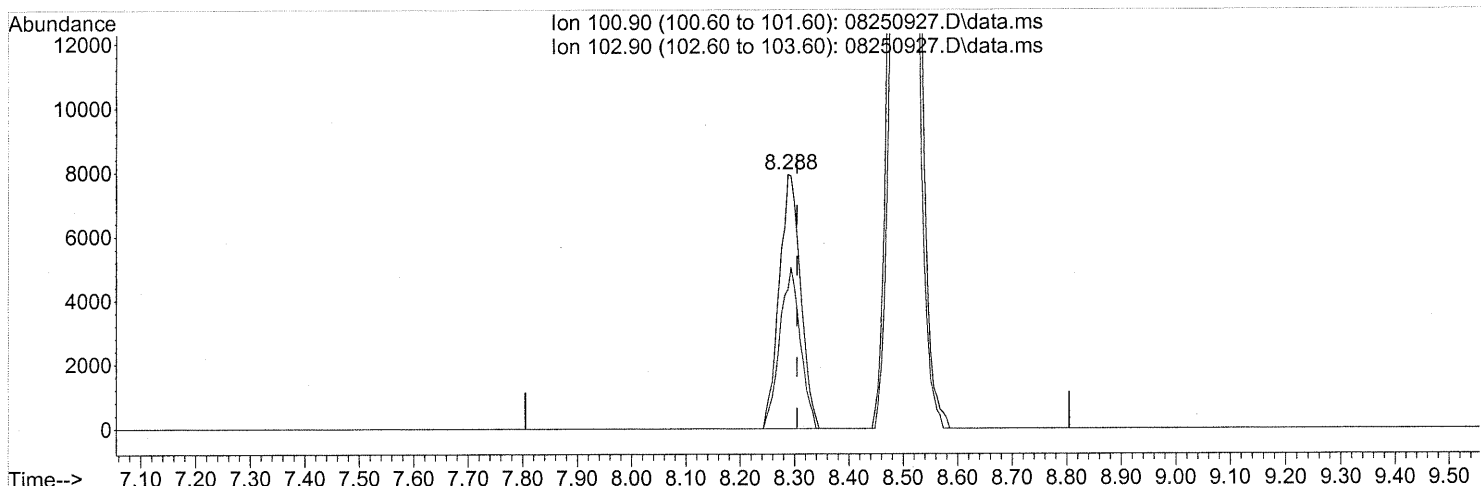
(13) Acetone (T)  
 8.020min (-0.034) 62.97ng  
 response 1225855

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	422.48#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(14) Trichlorofluoromethane (T)

8.288min (-0.017) 0.58ng

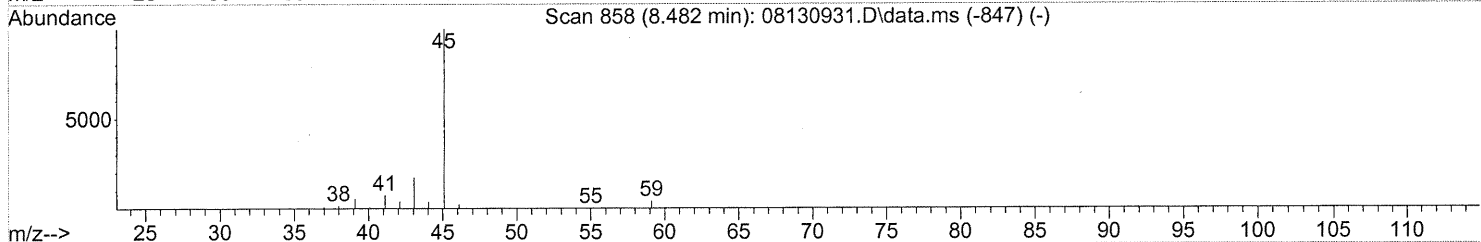
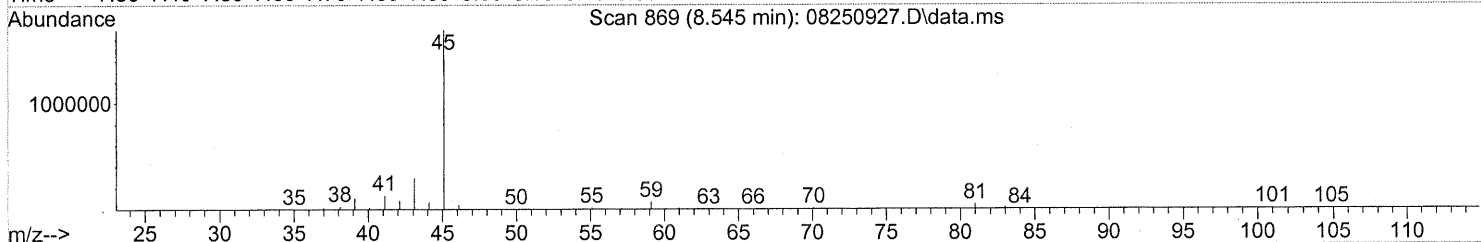
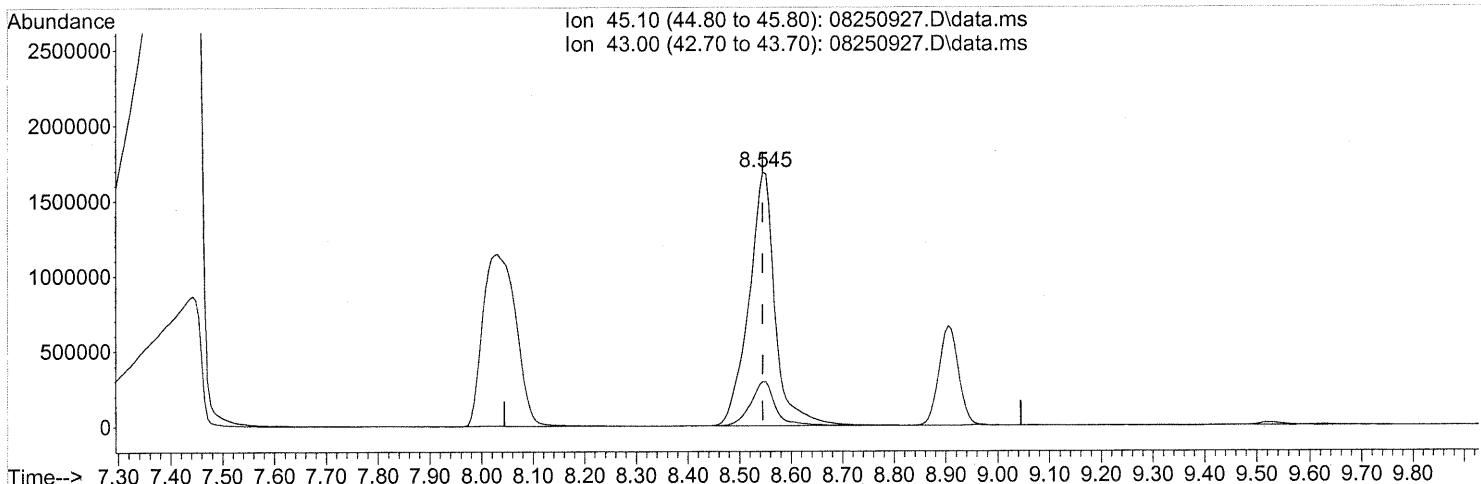
response 21518

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	61.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

8.545min (+0.000) 112.00ng

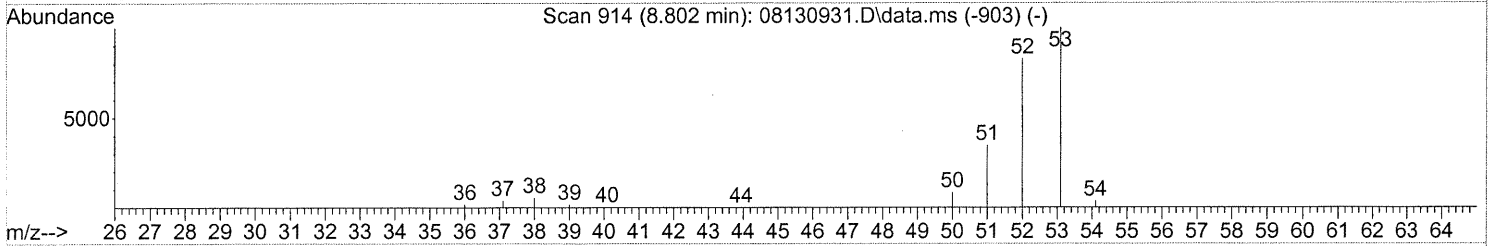
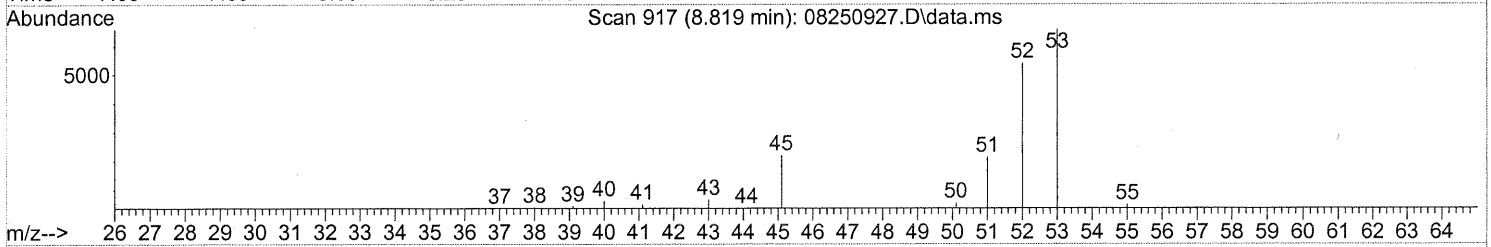
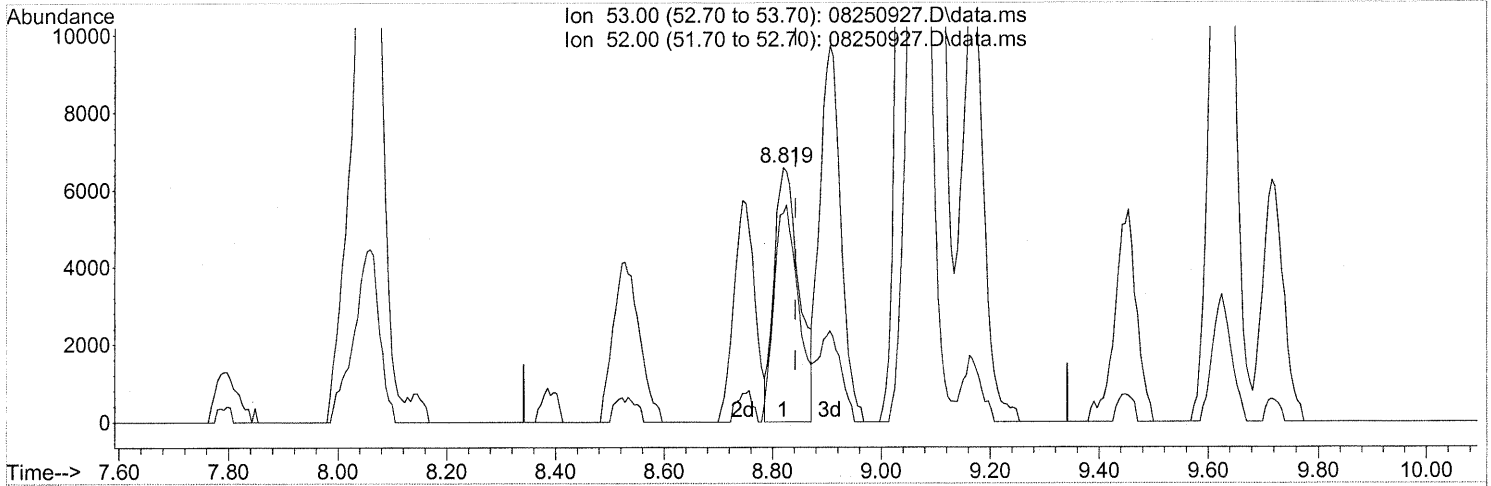
response 5970810

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(16) Acrylonitrile (T)

8.819min (-0.023) 0.74ng

response 21029

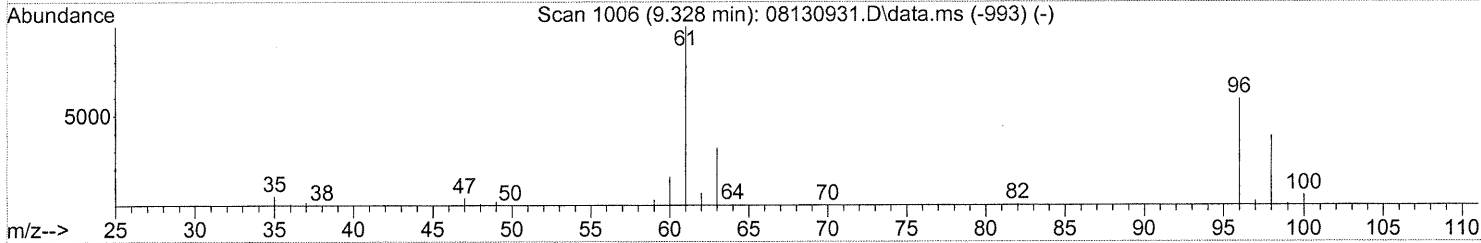
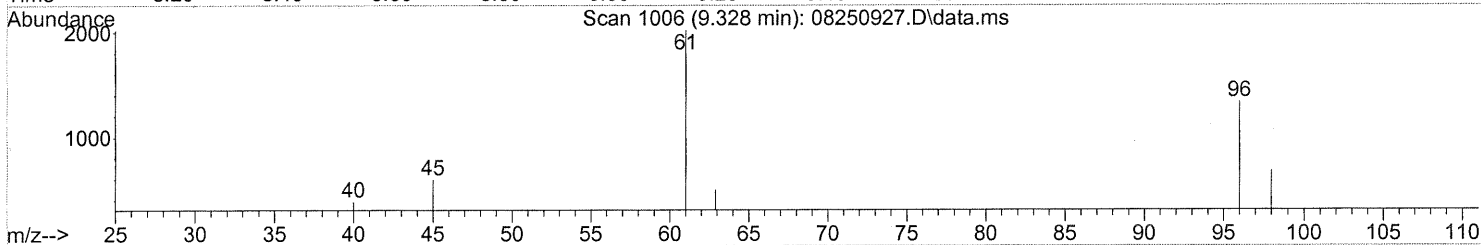
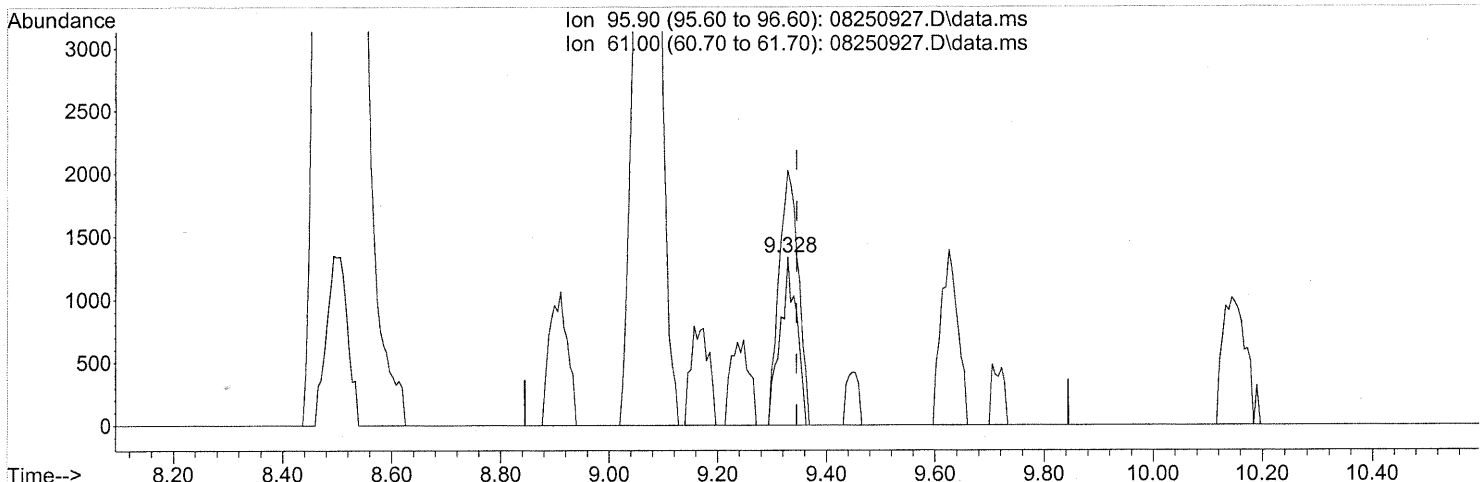
Ion	Exp%	Act%
53.00	100	100
52.00	84.50	88.41
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250927.D  
Acq On : 25 Aug 2009 21:22  
Operator : EM  
Sample : P0902857-005 (500ml)  
Misc : Env. H & E 100461  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250927.D\data.ms

(17) 1,1-Dichloroethene (T)

9.328min (-0.017) 0.13ng

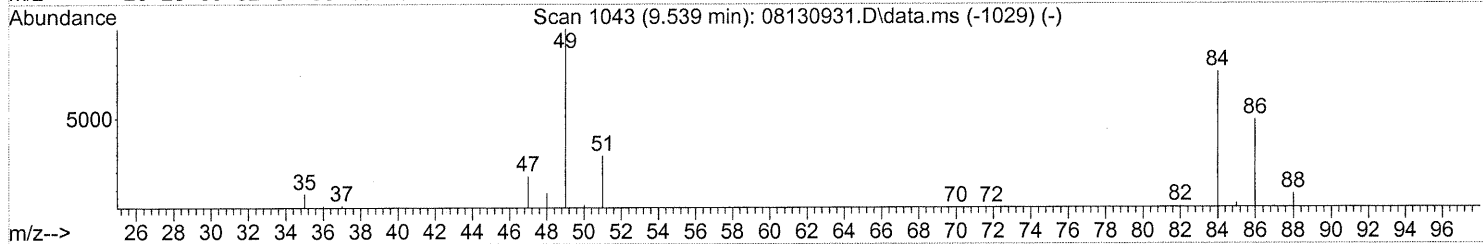
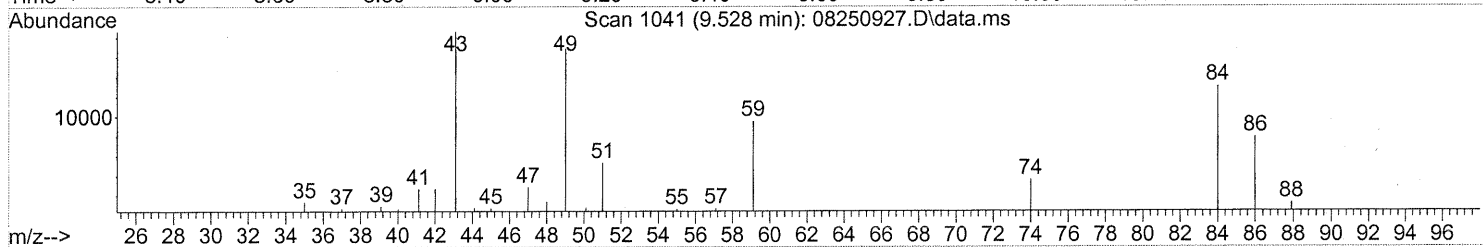
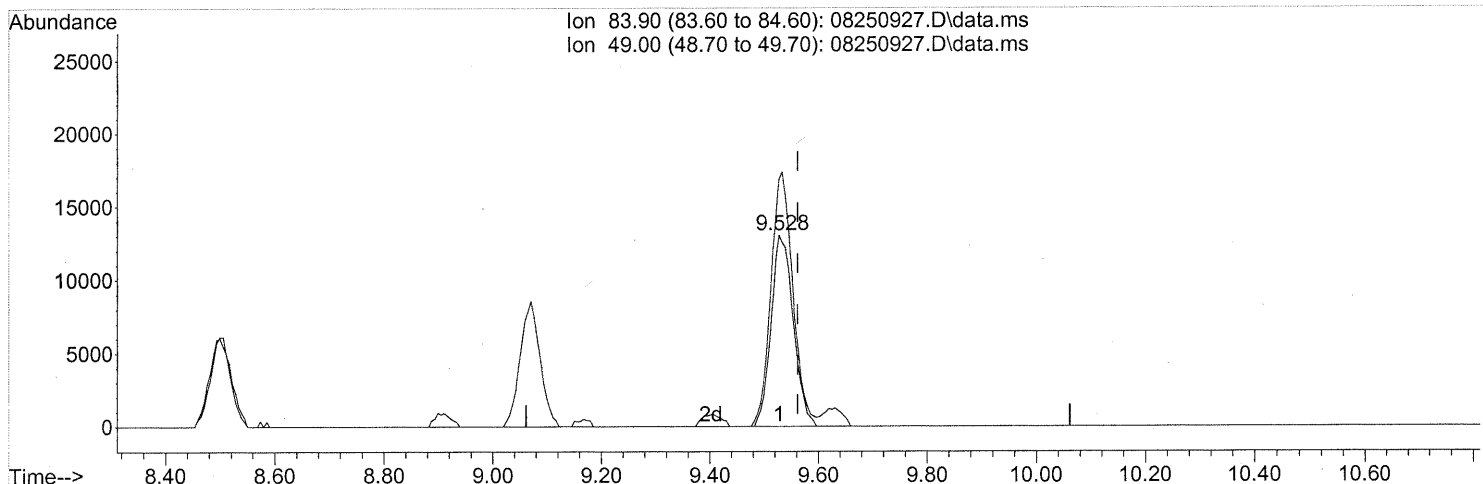
response 2809

Ion	Exp%	Act%
95.90	100	100
61.00	162.50	178.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(19) Methylene Chloride (T)

9.528min (-0.034) 1.52ng

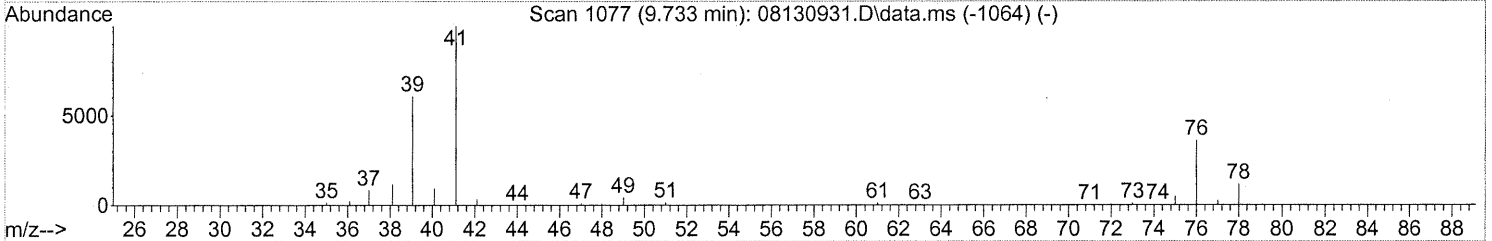
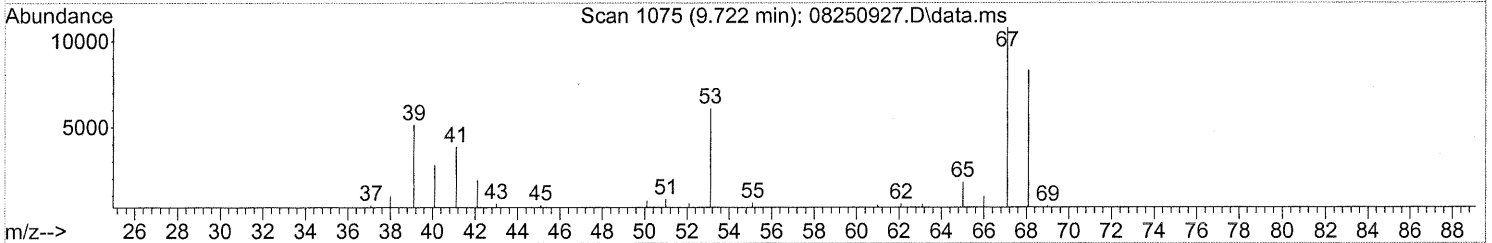
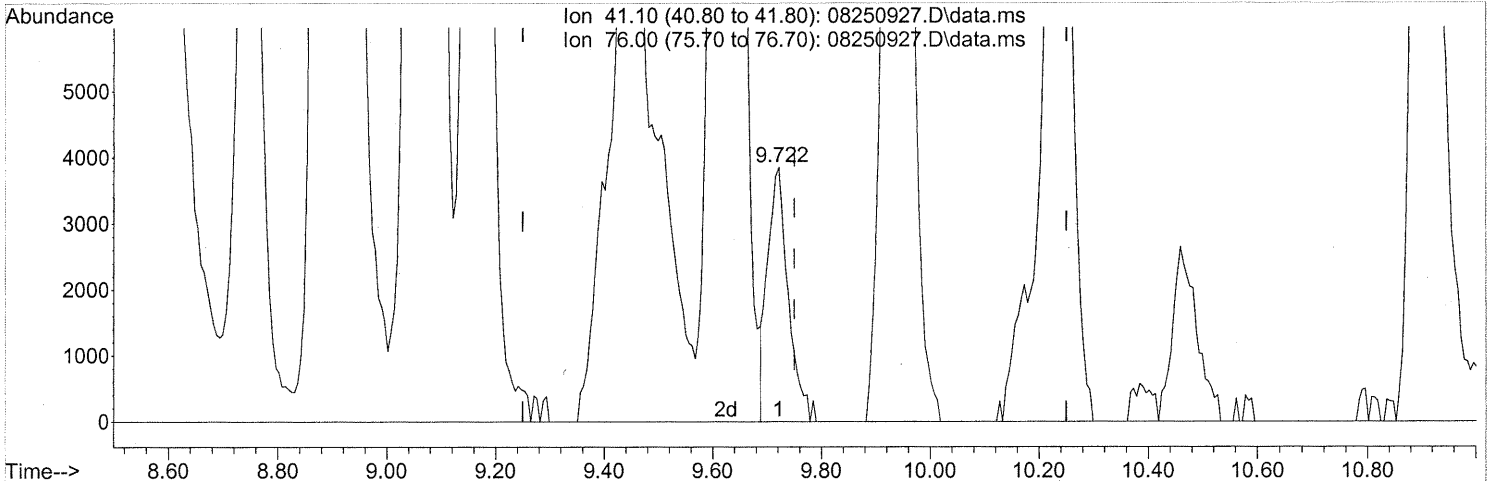
response 36882

Ion	Exp%	Act%
83.90	100	100
49.00	118.80	132.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.722min (-0.028) 0.31ng

response 10198

Ion	Exp%	Act%
41.10	100	100
76.00	41.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

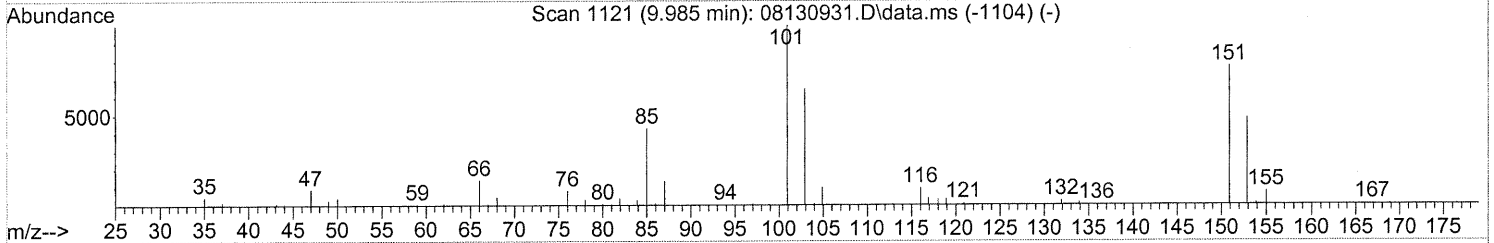
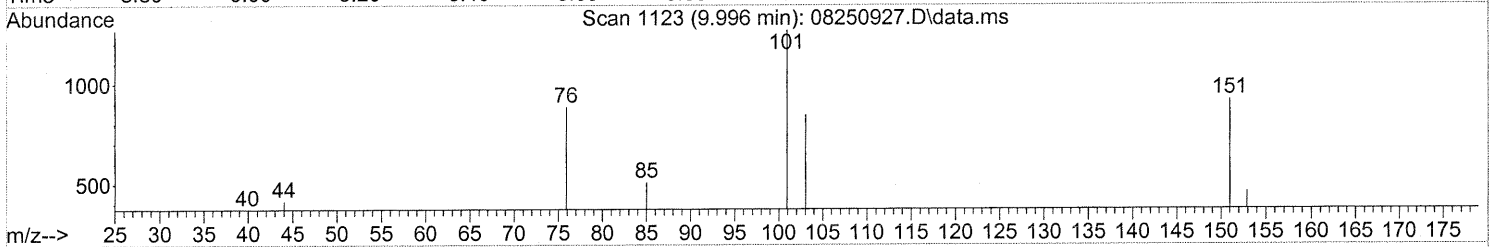
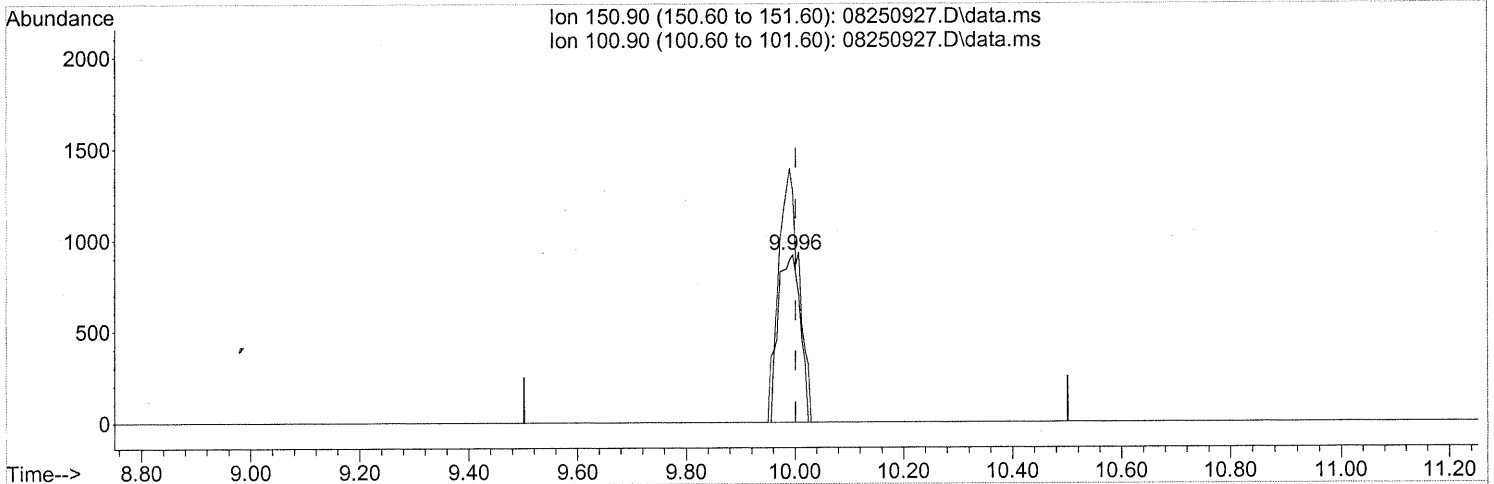
*FP em 8/28/09*

*KK 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.15ng

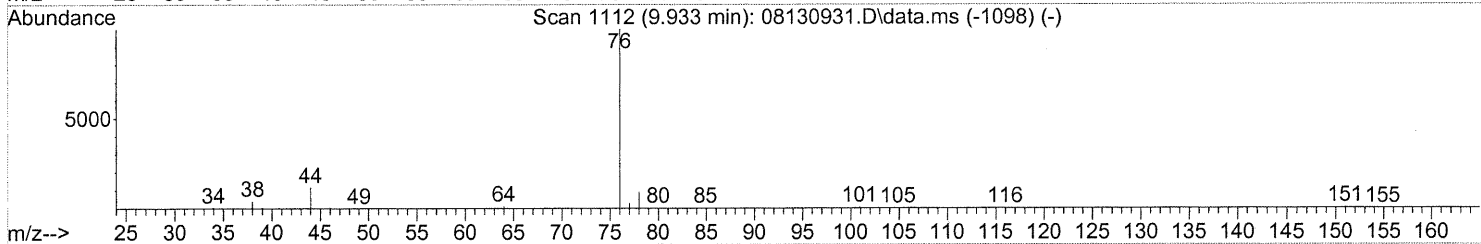
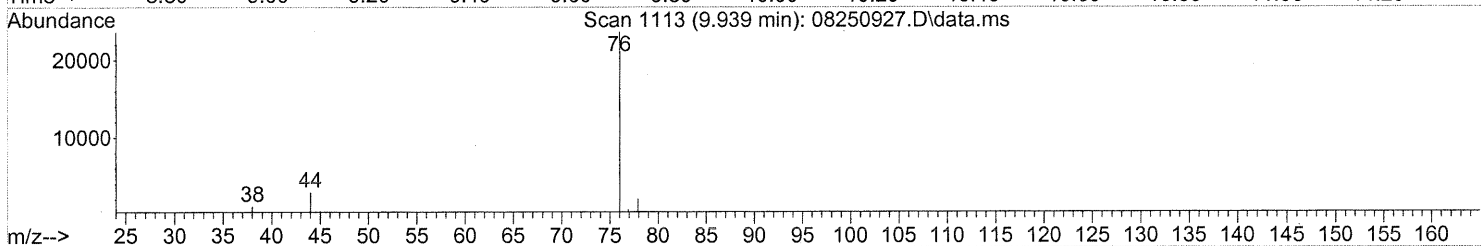
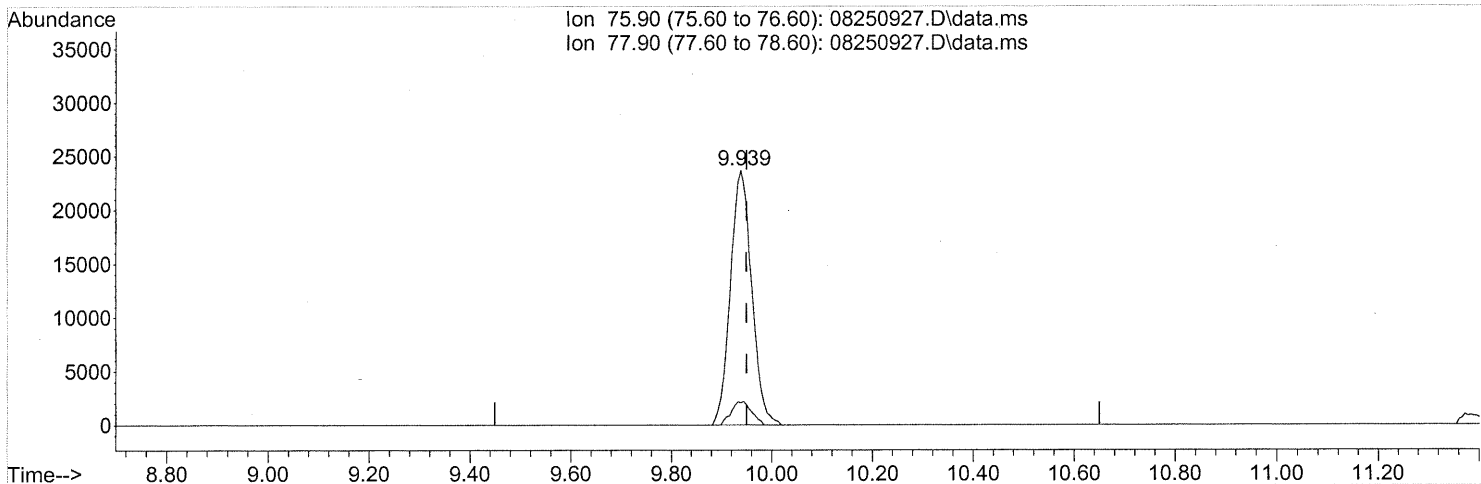
response 2539

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	142.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 0.81ng

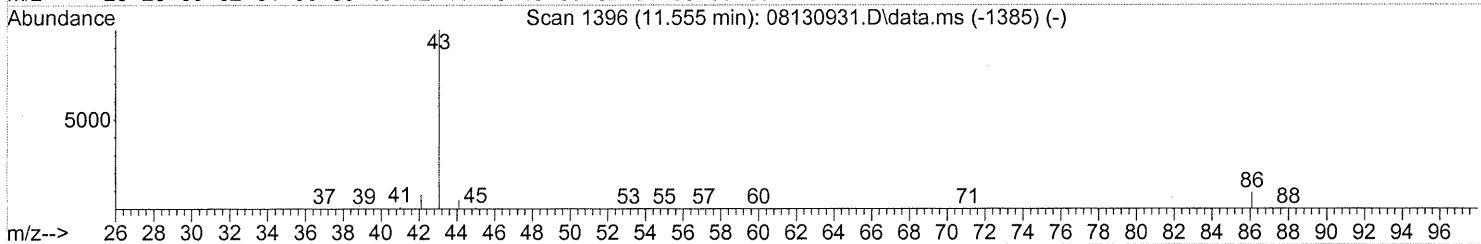
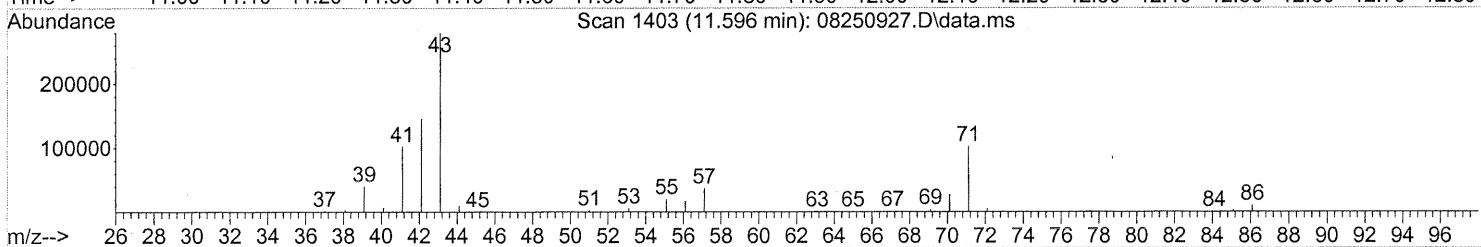
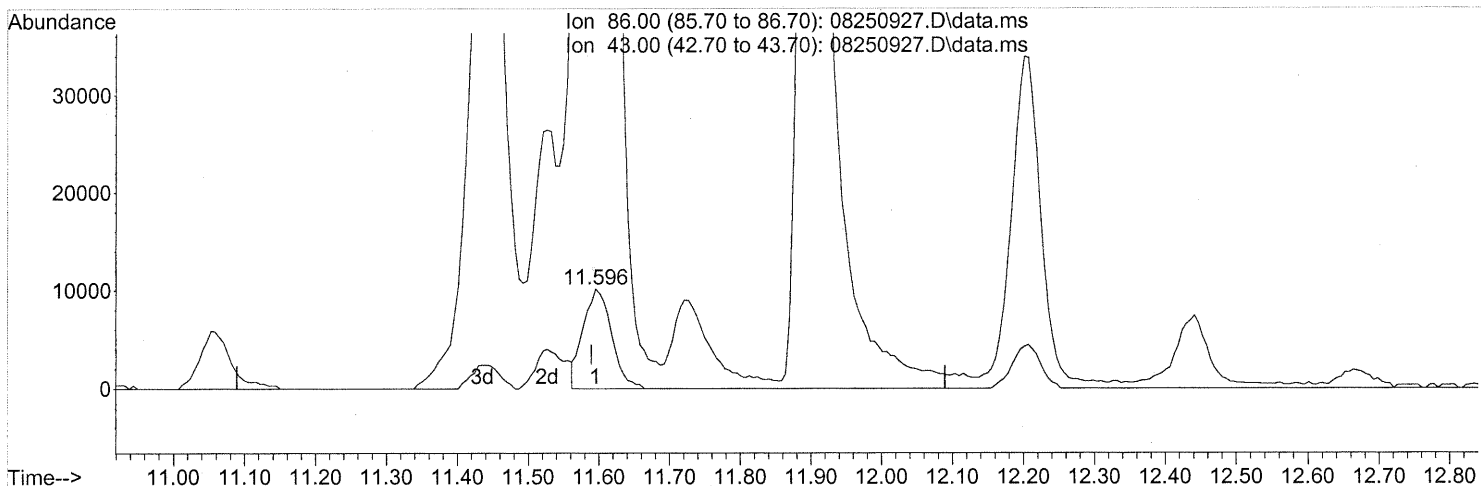
response 69634

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(26) Vinyl Acetate (T)  
 11.596min (+0.006) 6.71ng  
 response 28284  

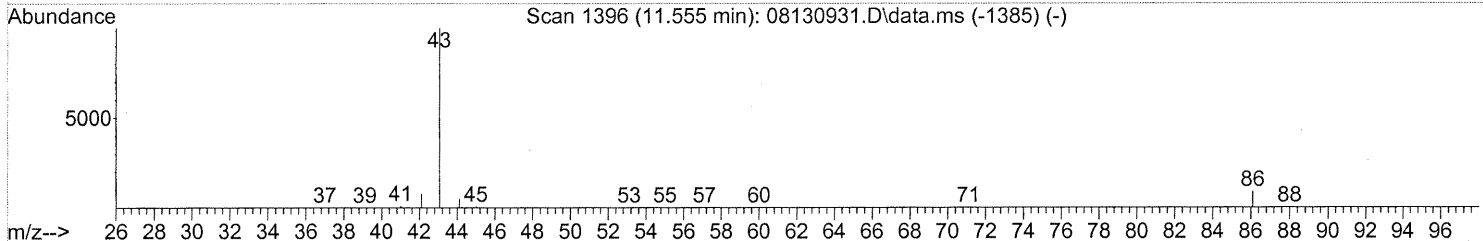
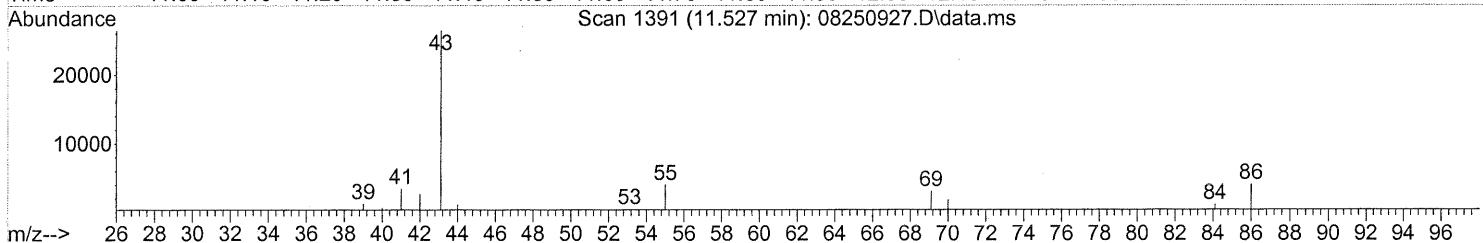
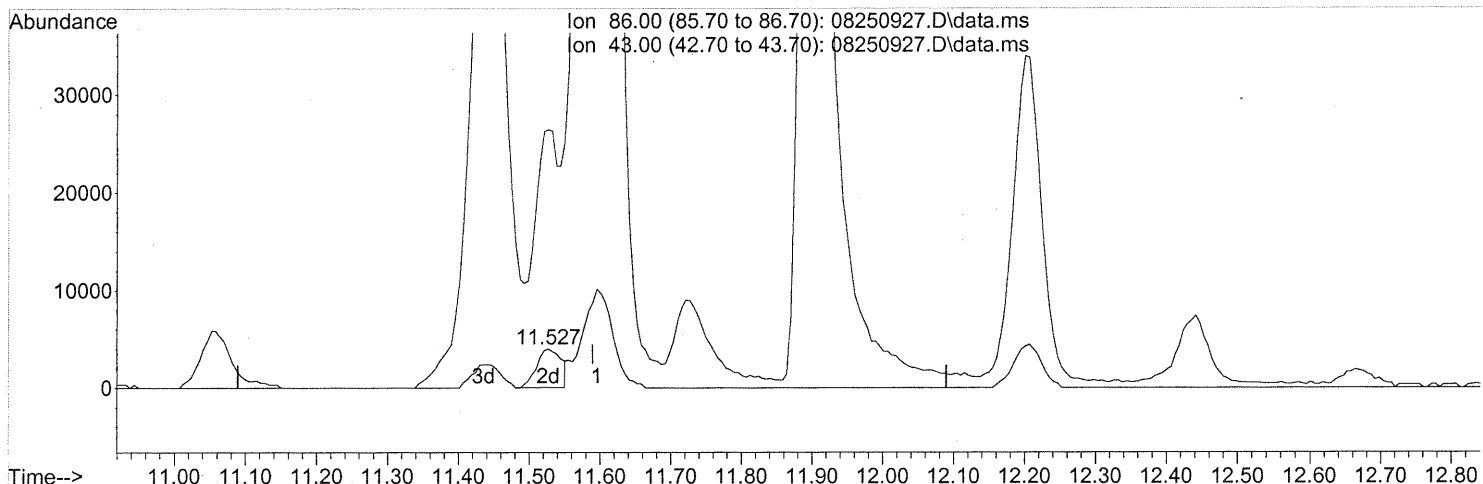
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2753.07#
0.00	0.00	0.00
0.00	0.00	0.00

*mp*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(26) Vinyl Acetate (T)  
 11.527min (-0.063) 2.28ng m  
 response 9597

*CRL*

*MP → IC*

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	8113.76#
0.00	0.00	0.00
0.00	0.00	0.00

*em*

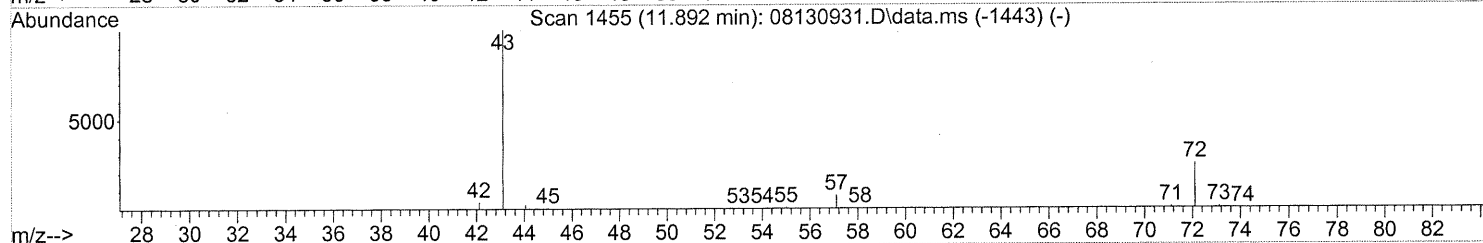
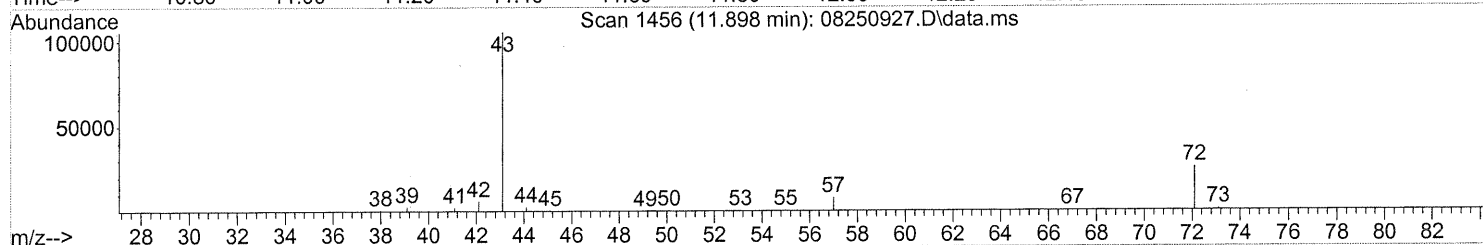
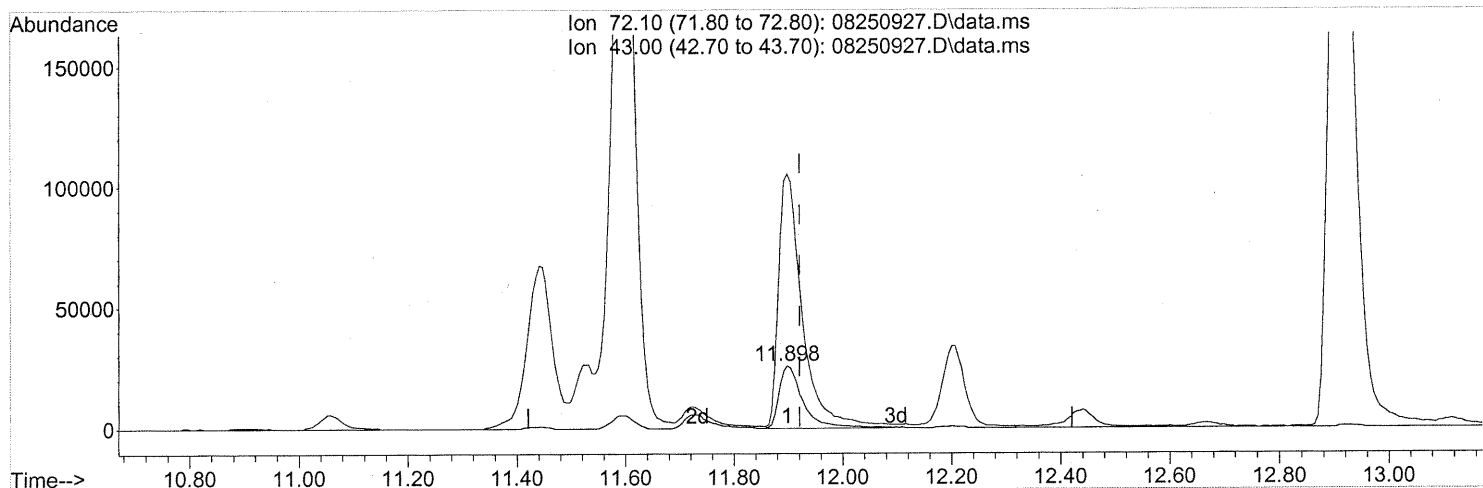
*8/28/09*

*KE 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

11.898min (-0.023) 5.66ng

response 76751

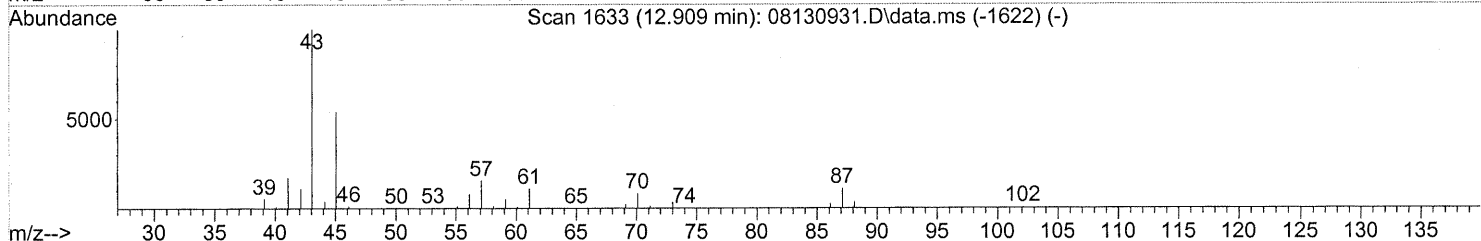
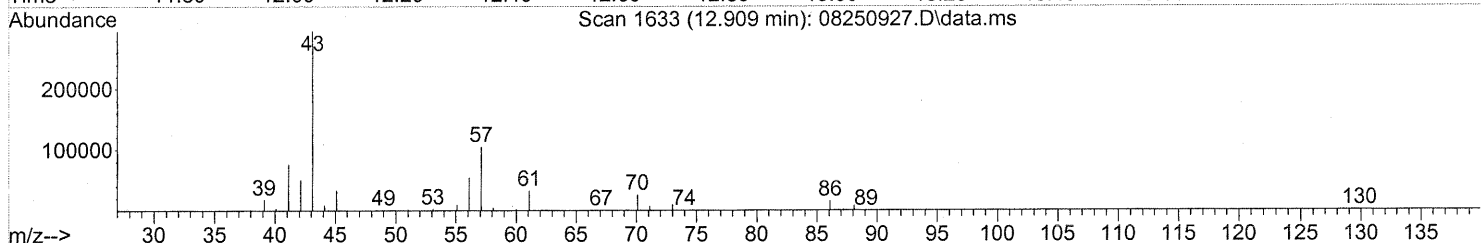
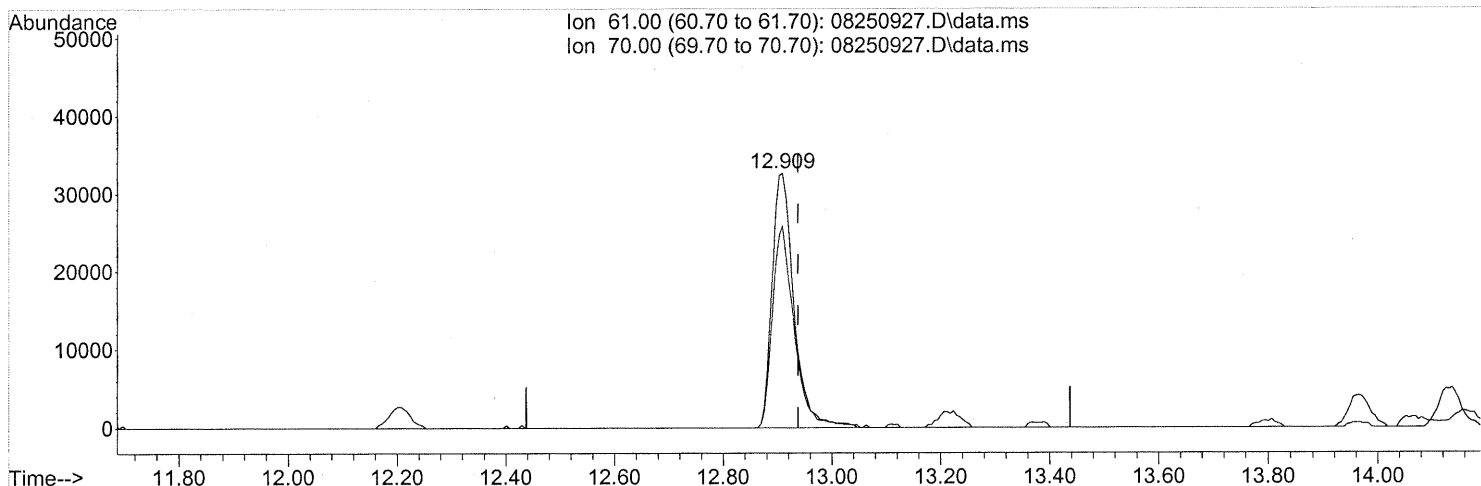
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	402.52#
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 10.32ng

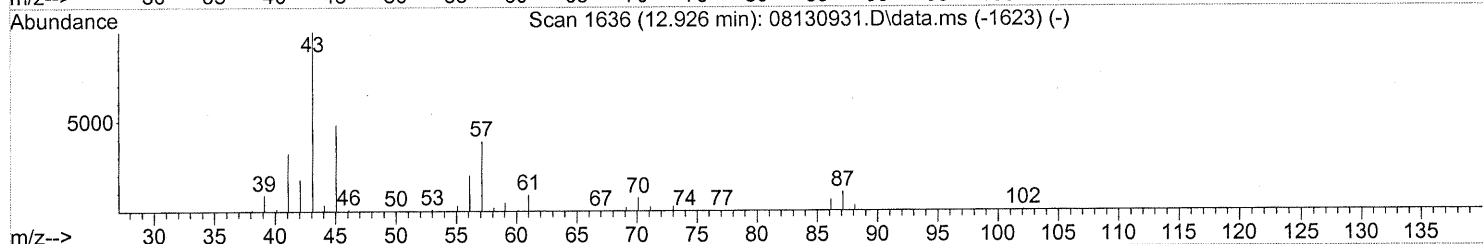
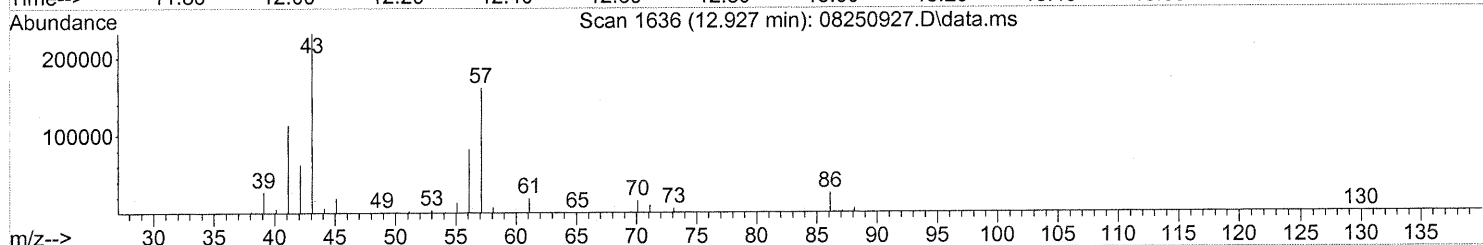
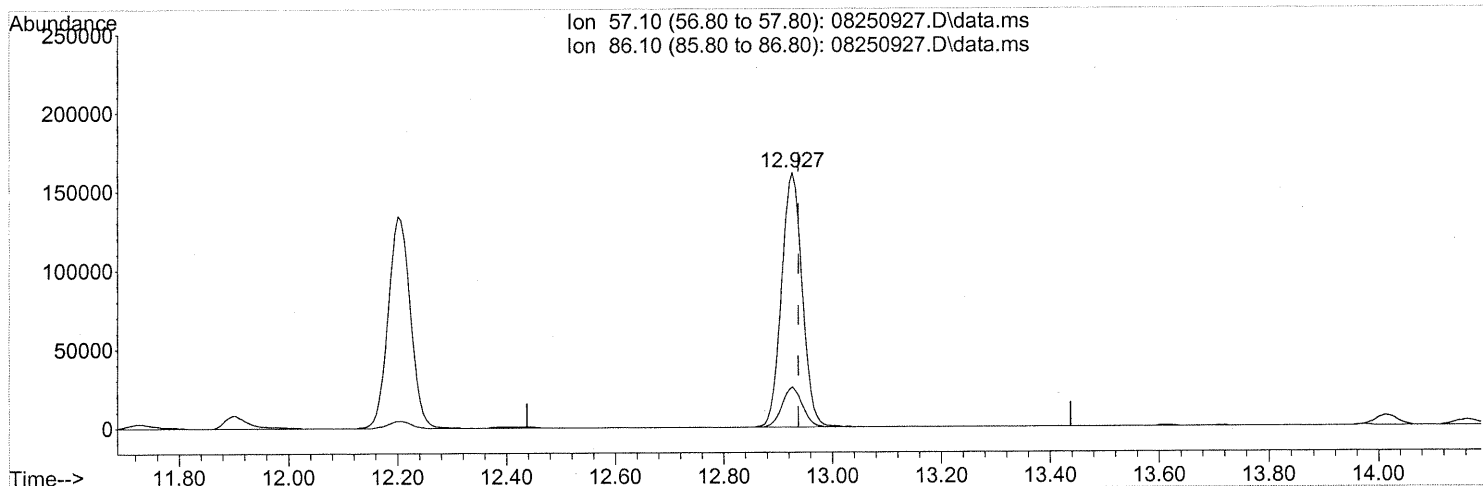
response 90862

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	78.73
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

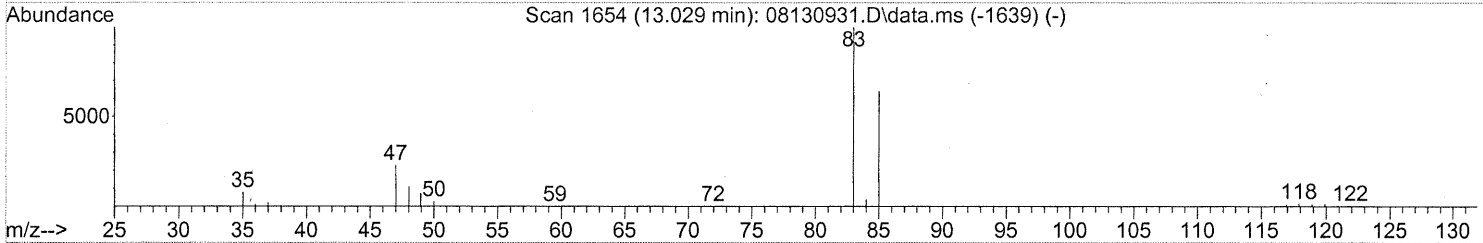
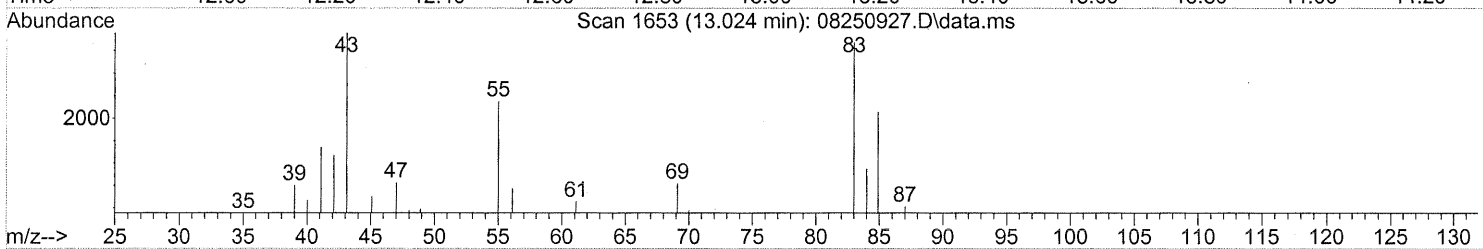
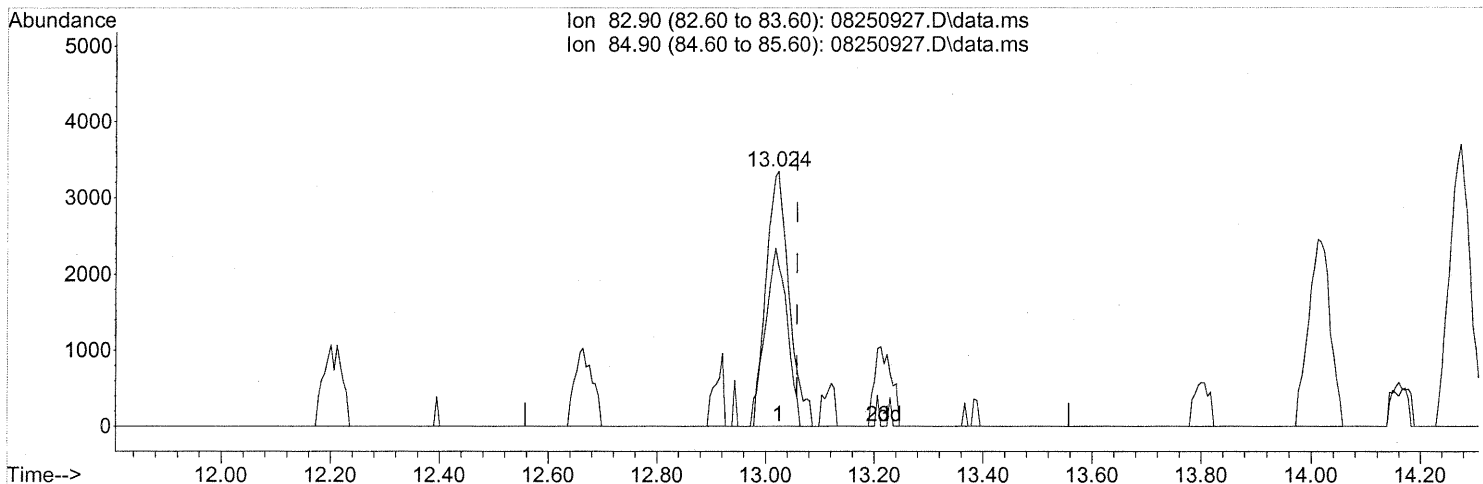
(31) n-Hexane (T)  
 12.927min (-0.011) 9.90ng  
 response 424719

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

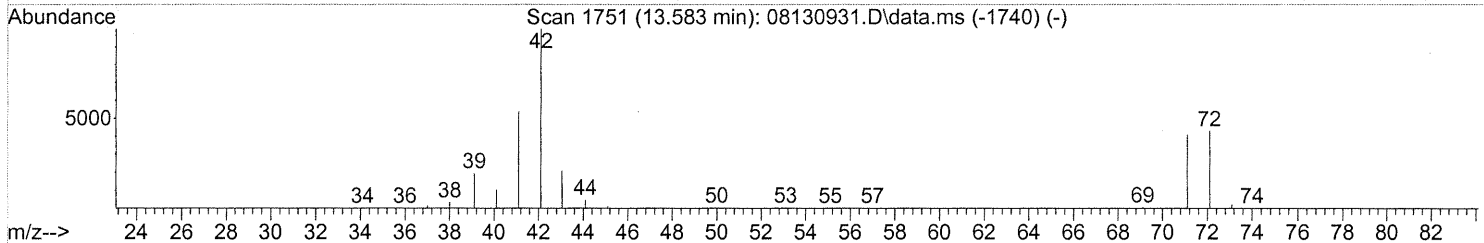
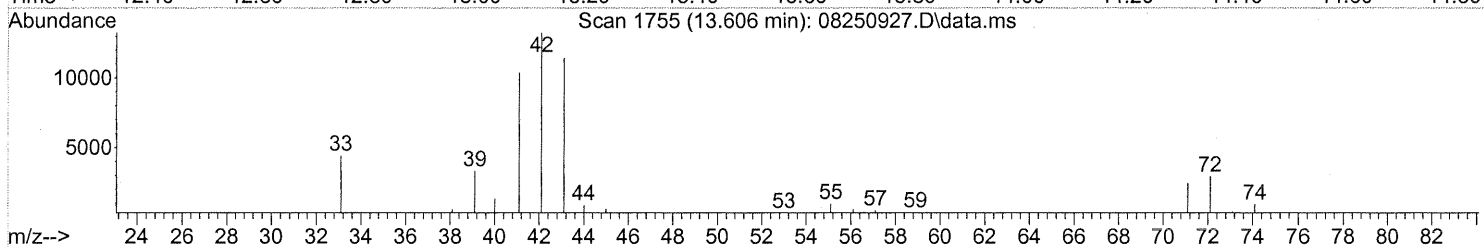
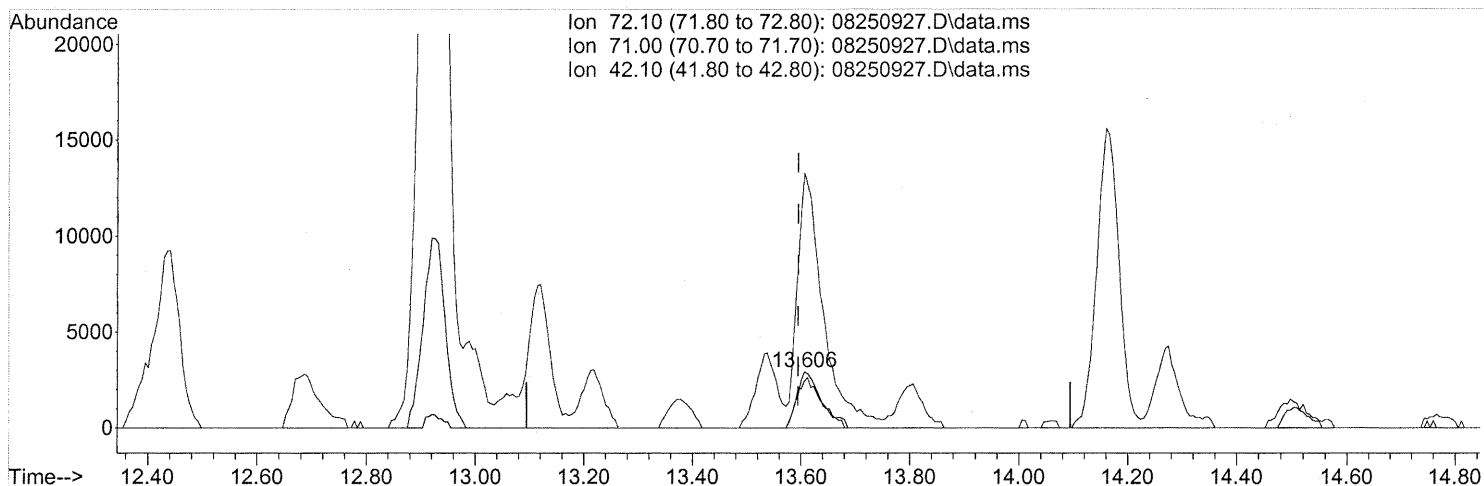
(32) Chloroform (T)  
 13.024min (-0.034) 0.28ng  
 response 9899

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	66.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.606min (+0.012) 0.64ng

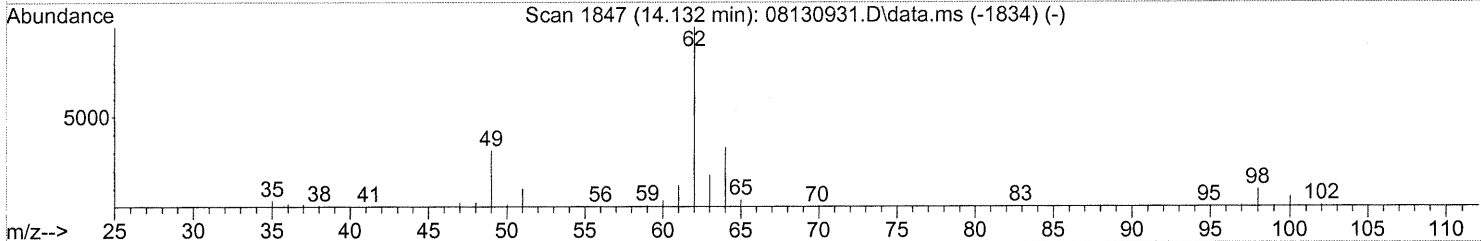
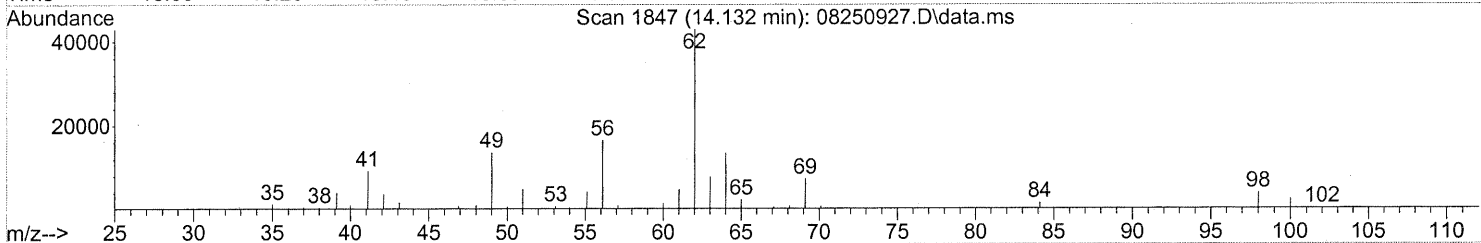
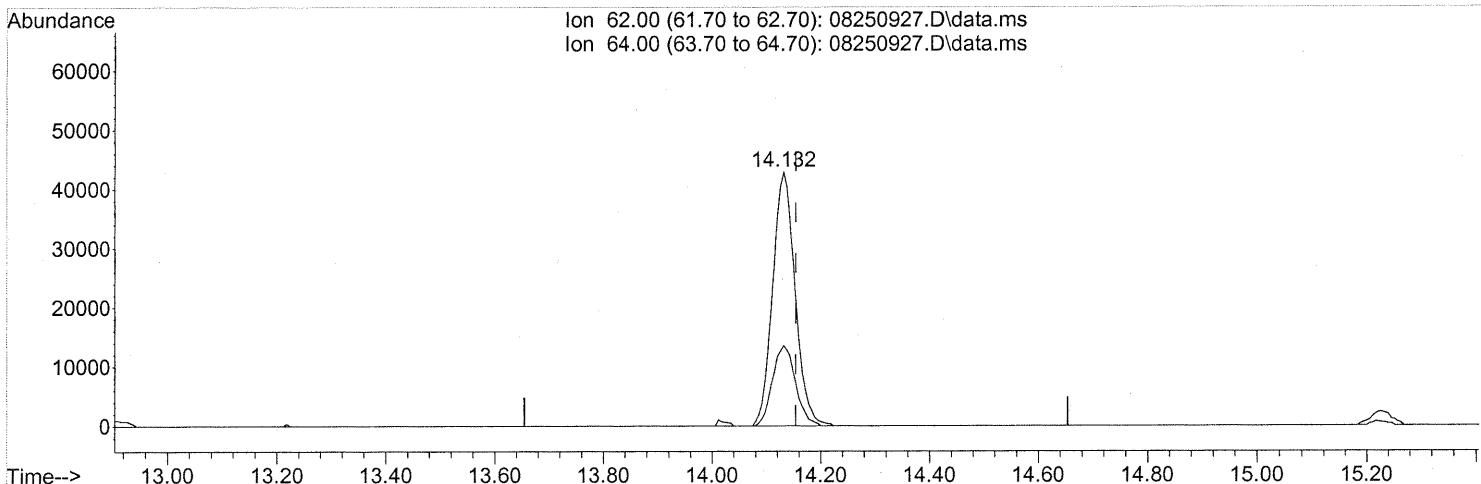
response 9076

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	90.20
42.10	206.50	486.35#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(36) 1,2-Dichloroethane (T)

14.132min (-0.023) 4.47ng

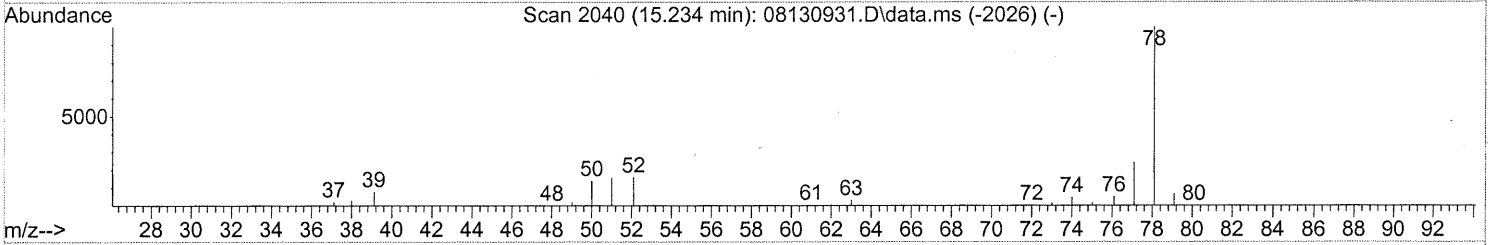
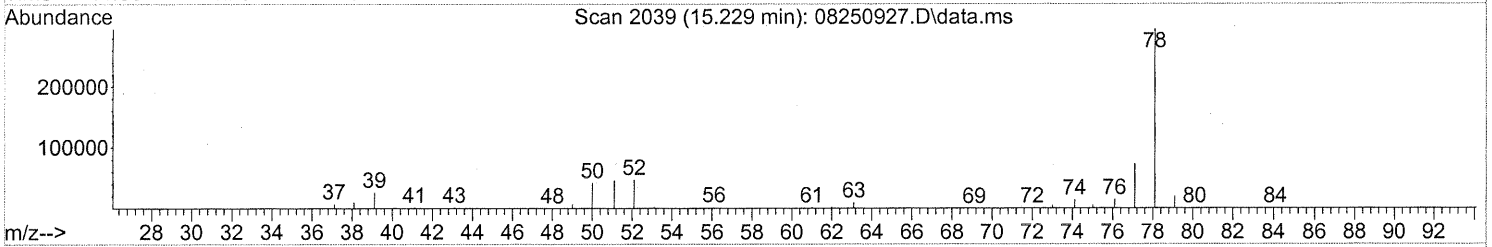
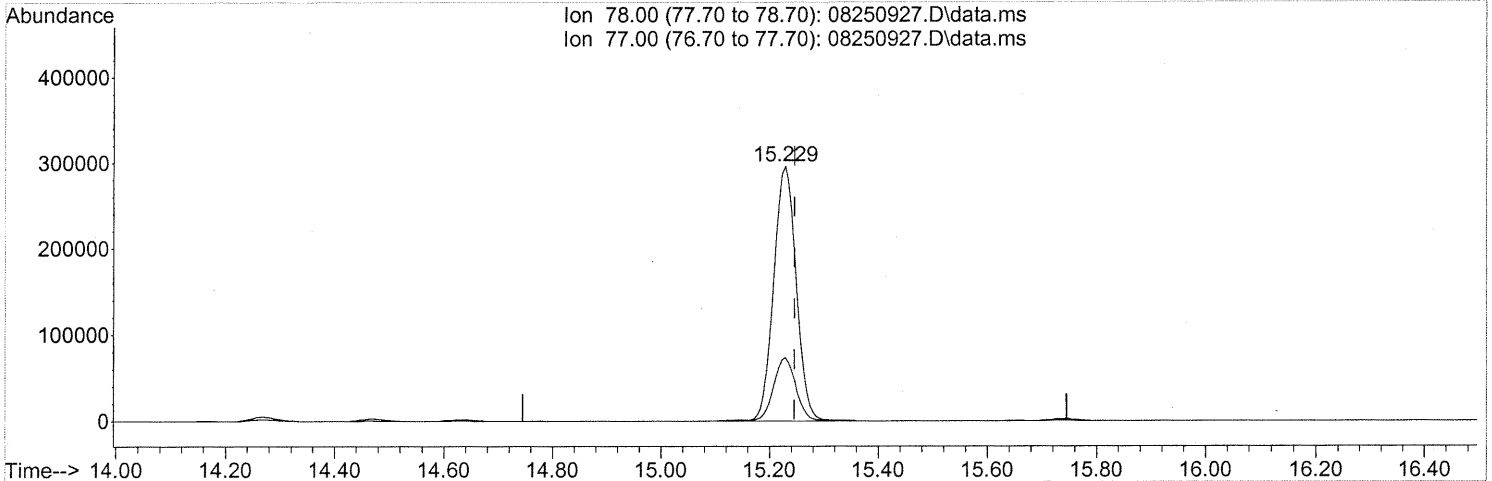
response 122723

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	32.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(41) Benzene (T)

15.229min (-0.017) 8.93ng

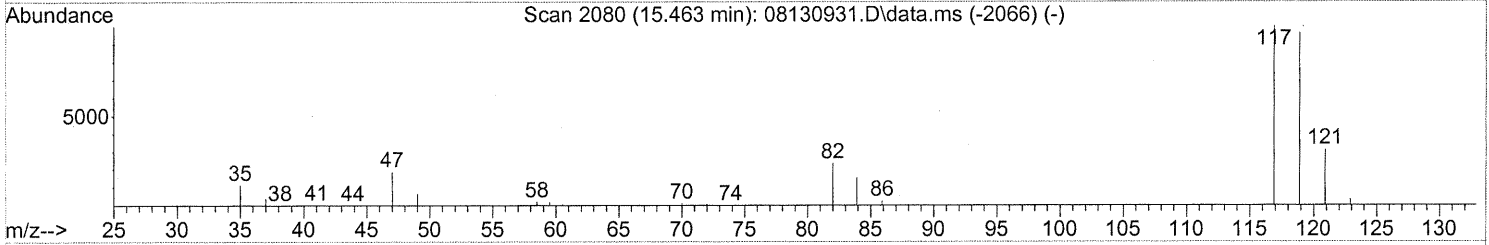
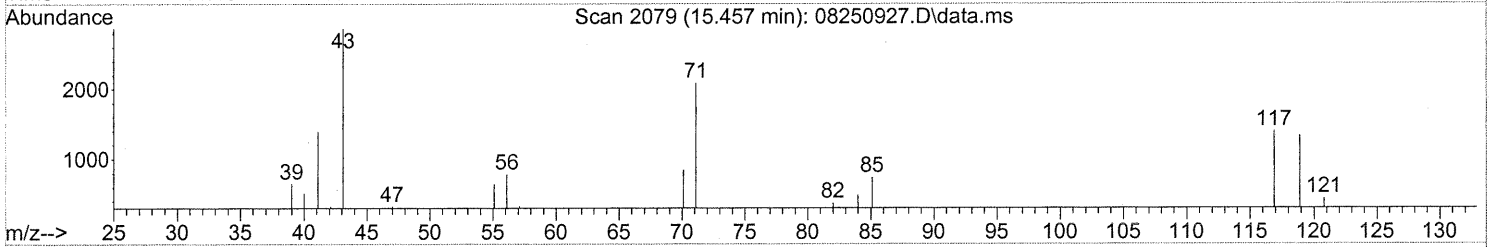
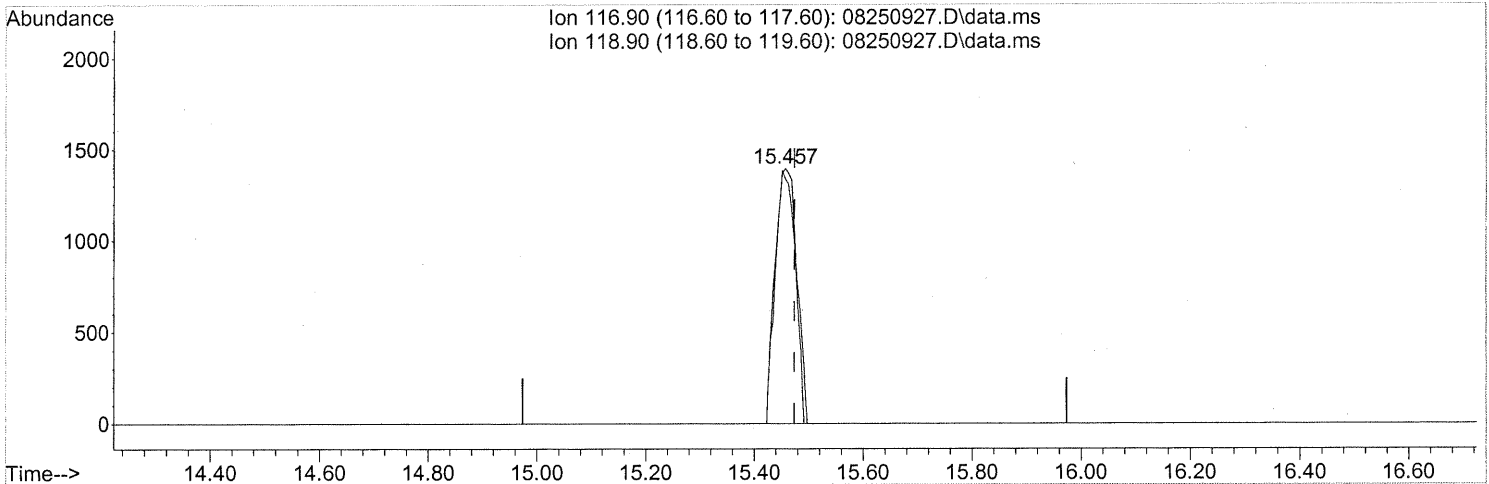
response 845793

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.14ng

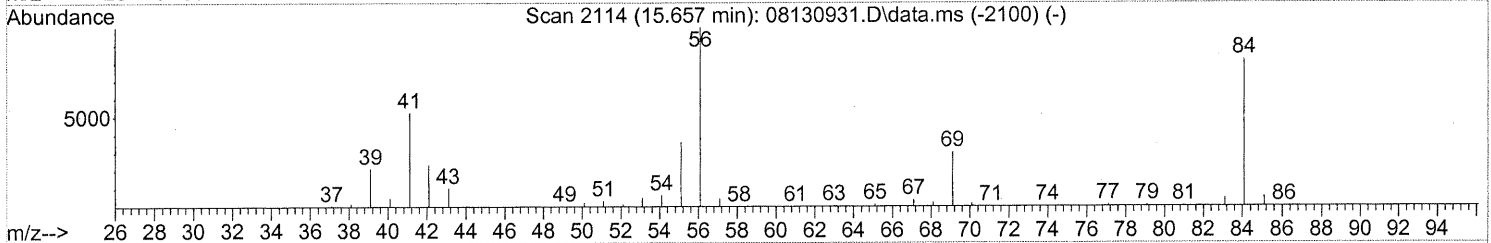
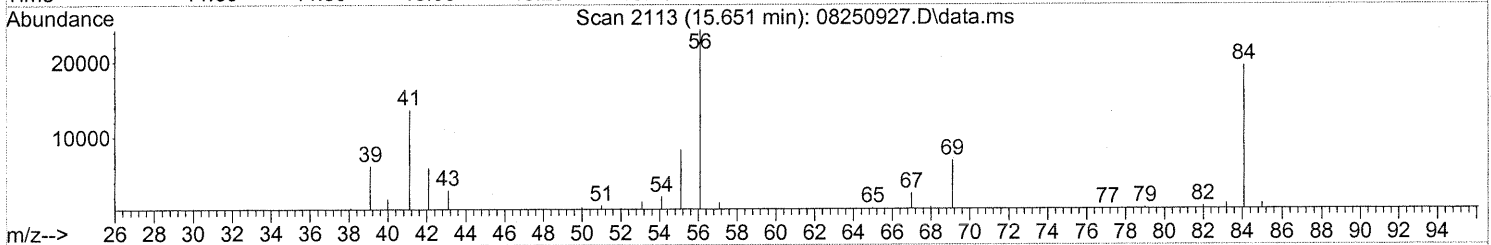
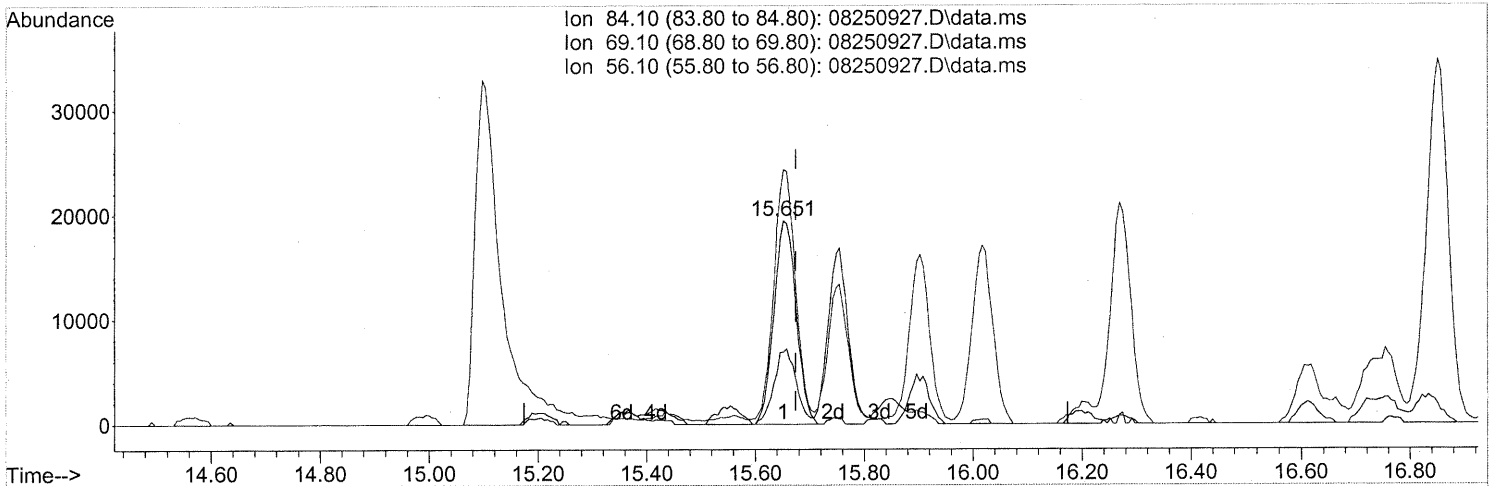
response 3684

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	100.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(43) Cyclohexane (T)  
 15.651min (-0.023) 1.49ng  
 response 54750

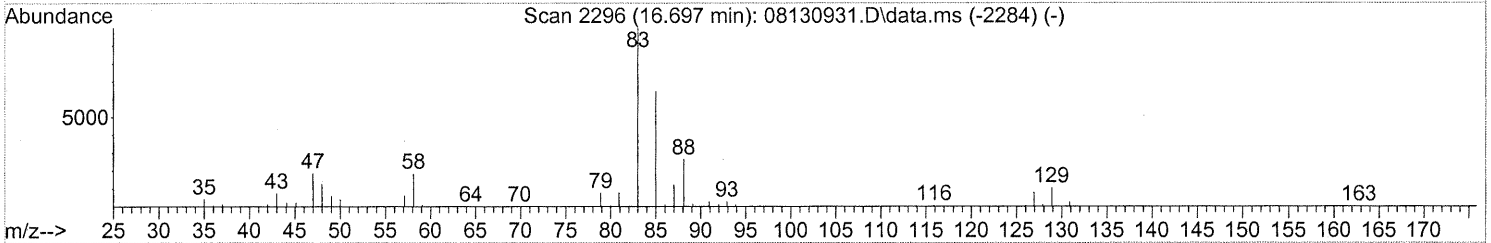
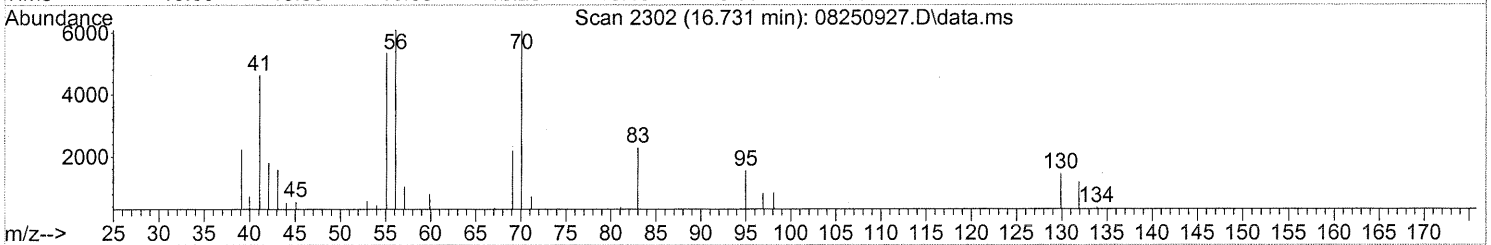
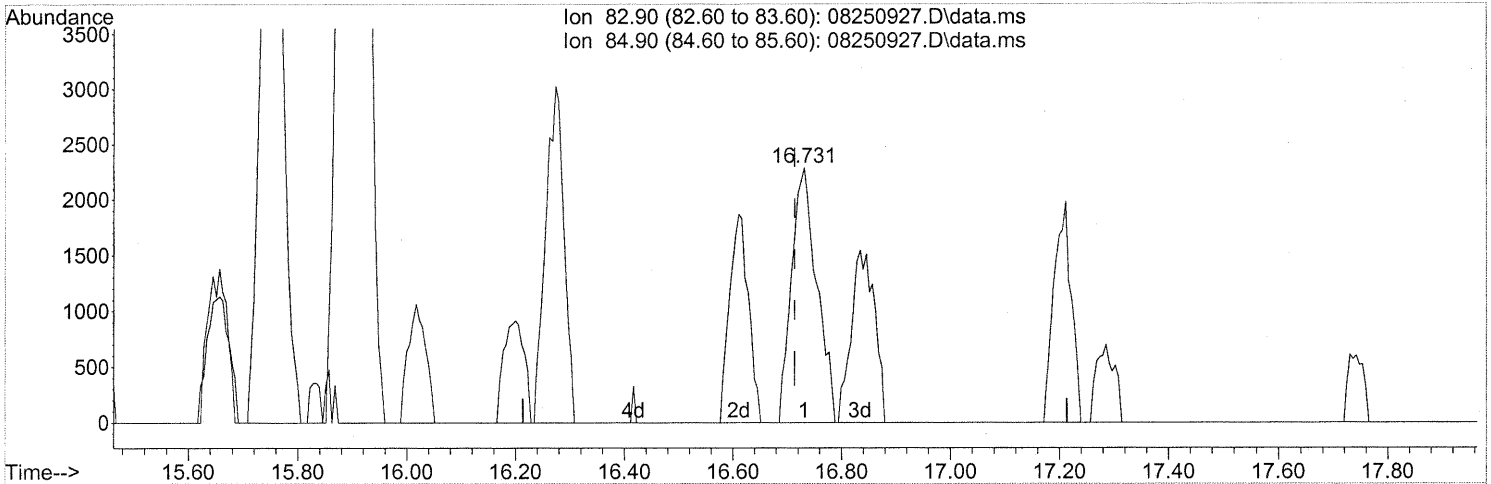
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.83
56.10	107.30	121.95
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.731min (+0.017) 0.27ng

response 7401

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

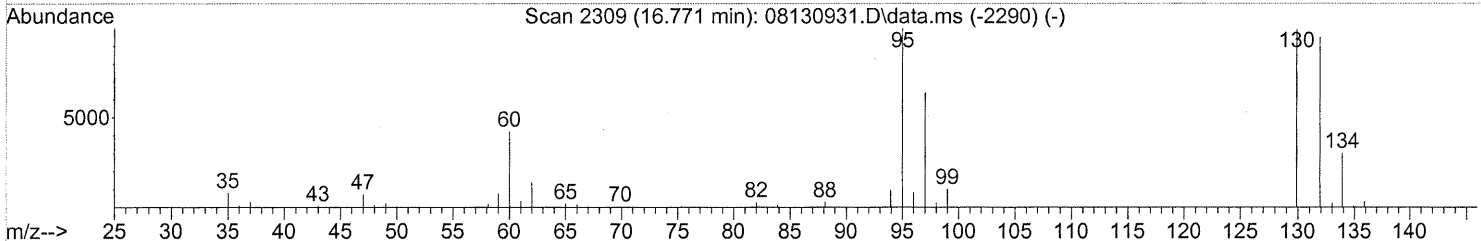
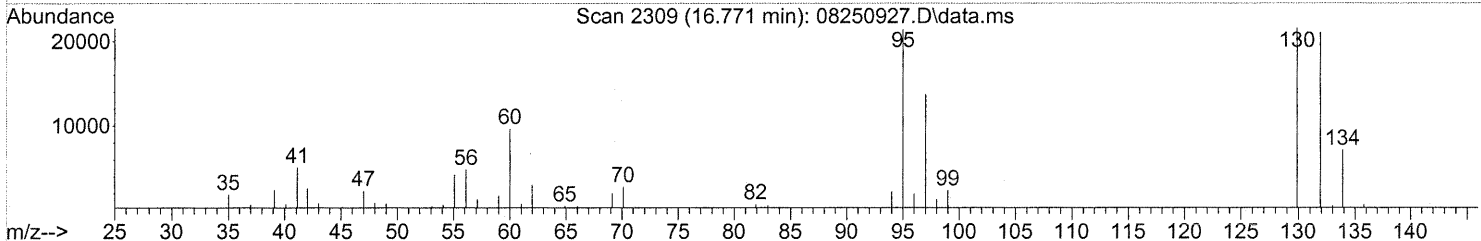
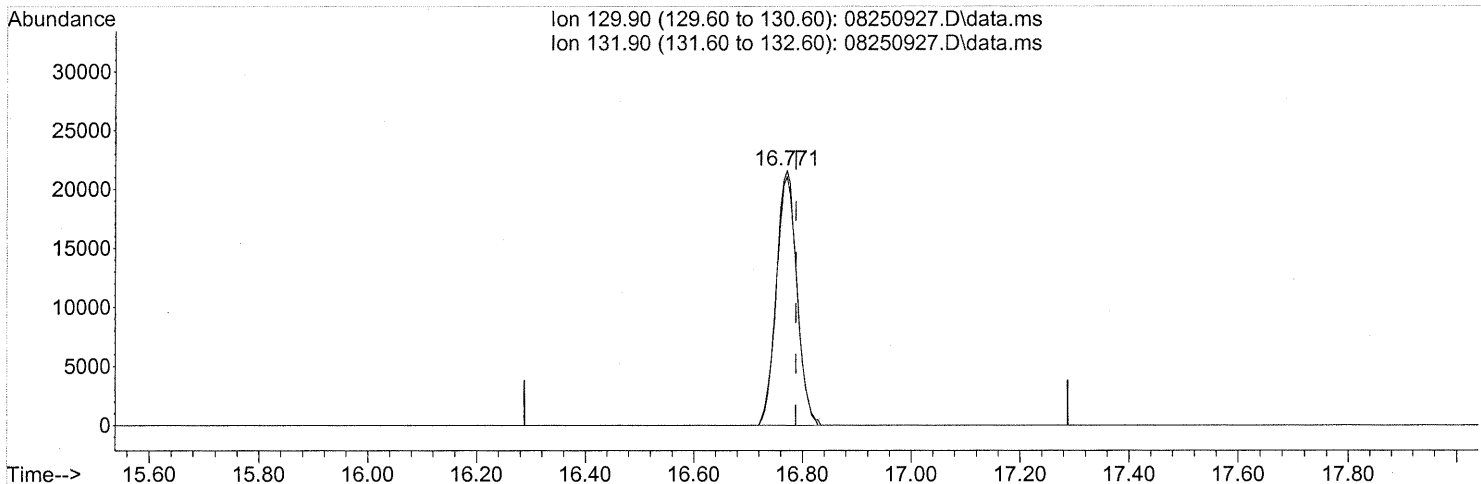
*FP* *Sam* *8/28/09*

*11/23/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(47) Trichloroethene (T)

16.771min (-0.017) 2.34ng

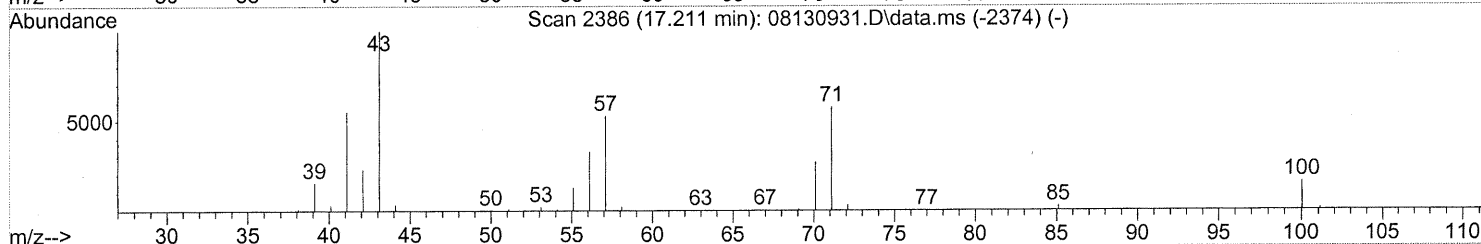
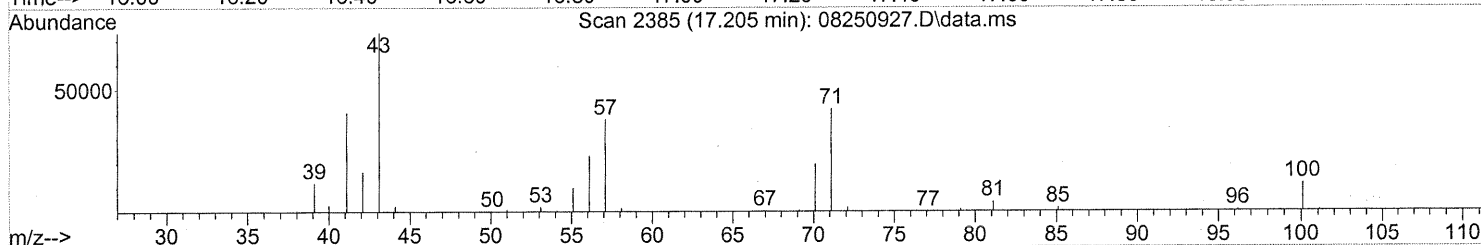
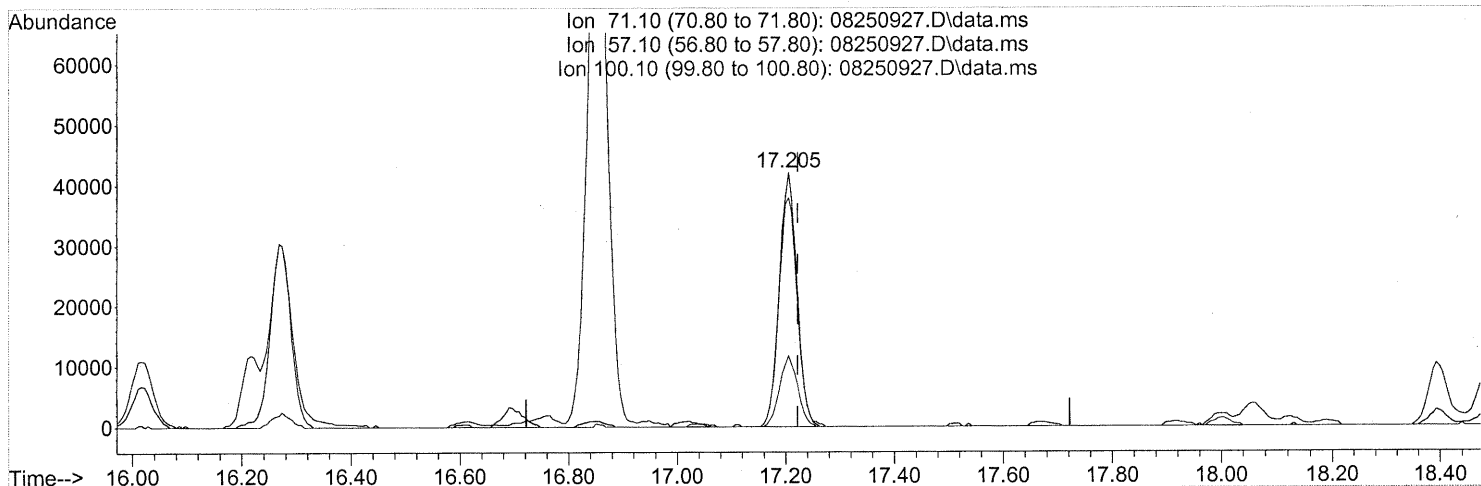
response 56256

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	97.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

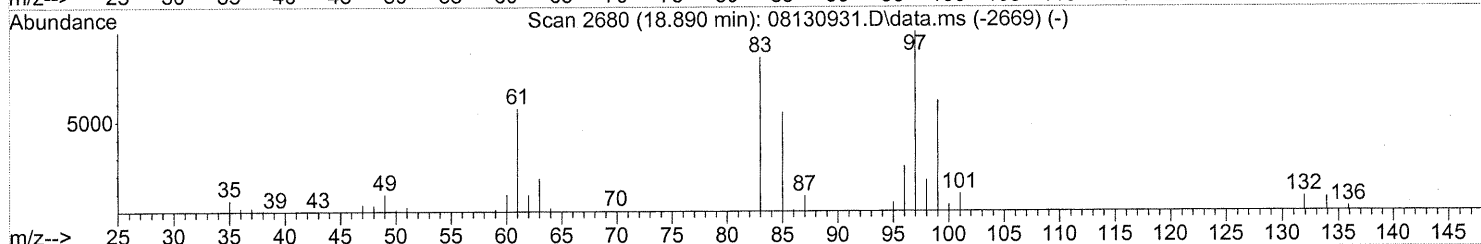
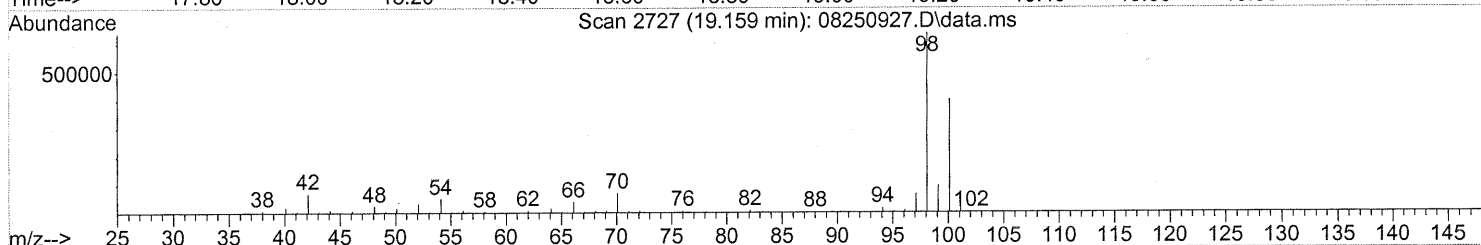
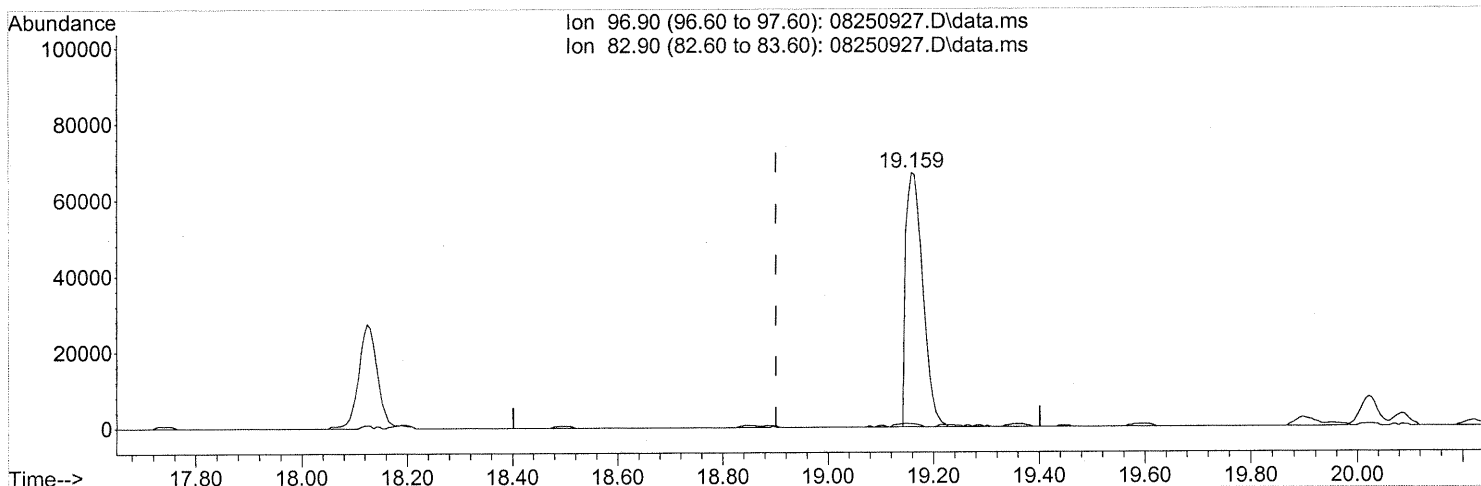
(51) n-Heptane (T)  
 17.205min (-0.017) 3.76ng  
 response 94684

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	93.80
100.10	30.70	28.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

19.159min (+0.257) 7.38ng

response 149201

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.50#
0.00	0.00	0.00
0.00	0.00	0.00

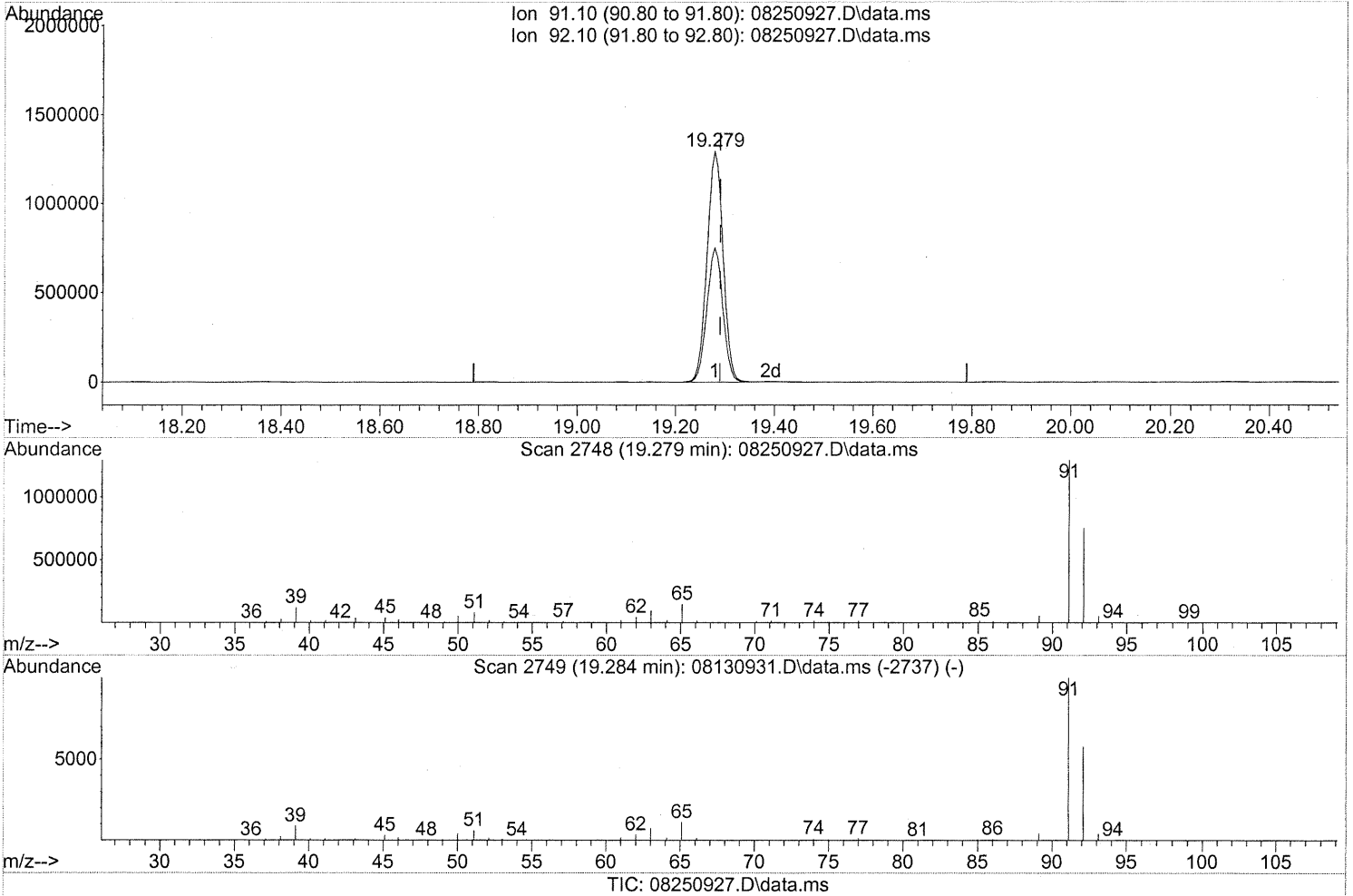
*FP on 8/28/09*

*8/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(58) Toluene (T)

19.279min (-0.011) 29.96ng

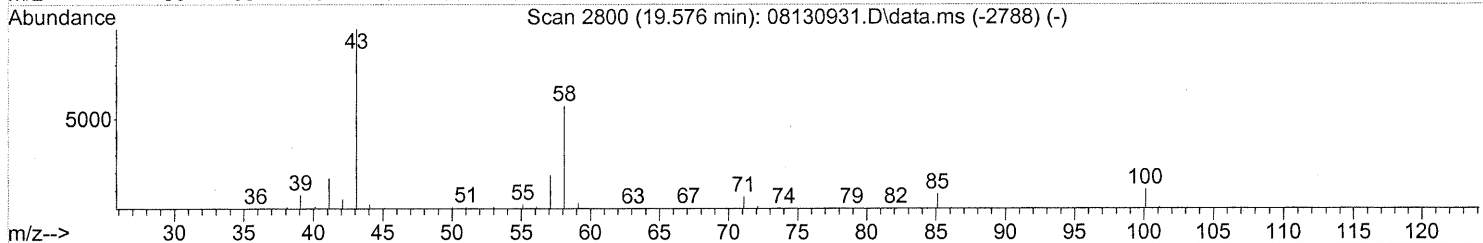
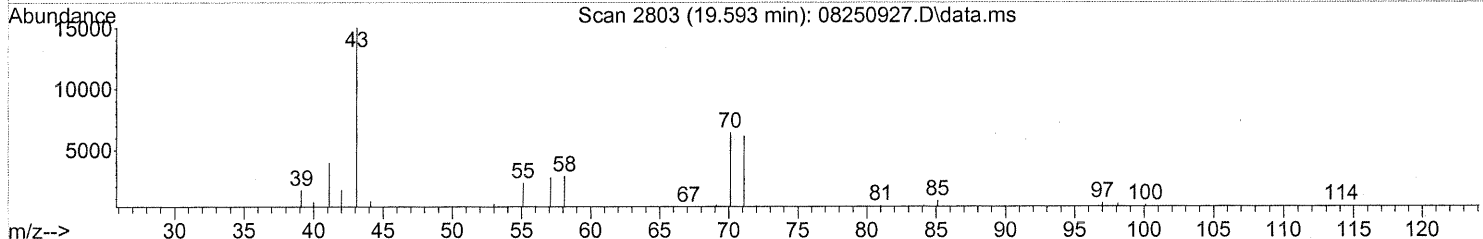
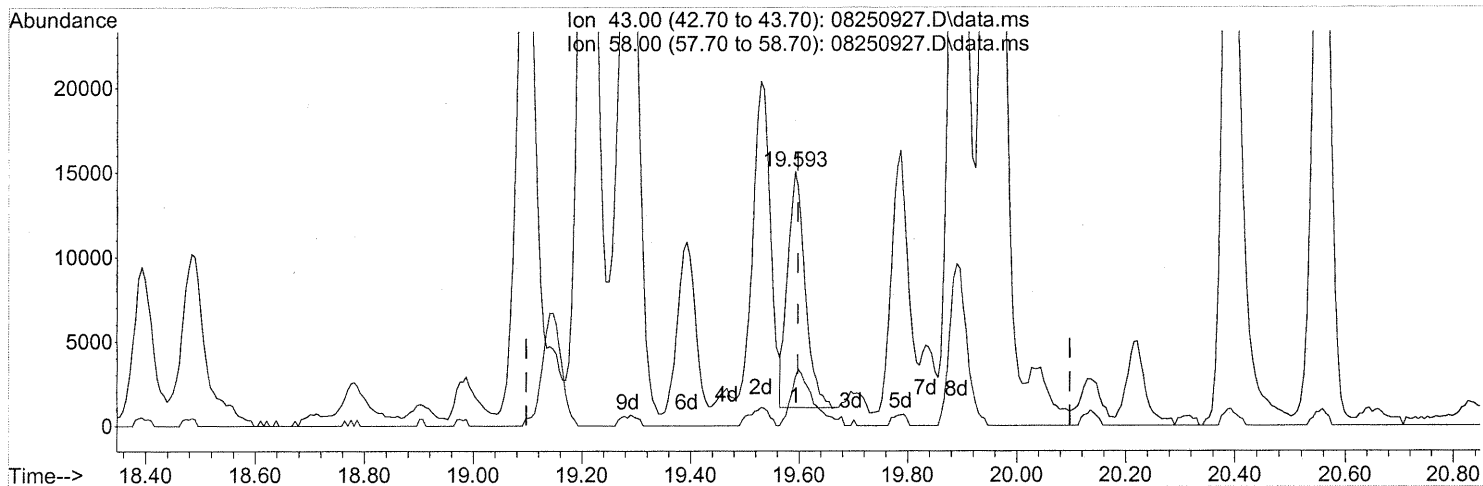
response 2917079

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.62ng

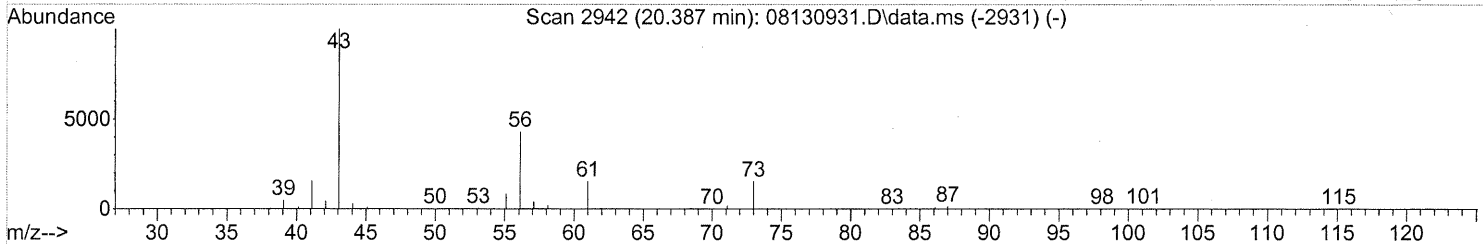
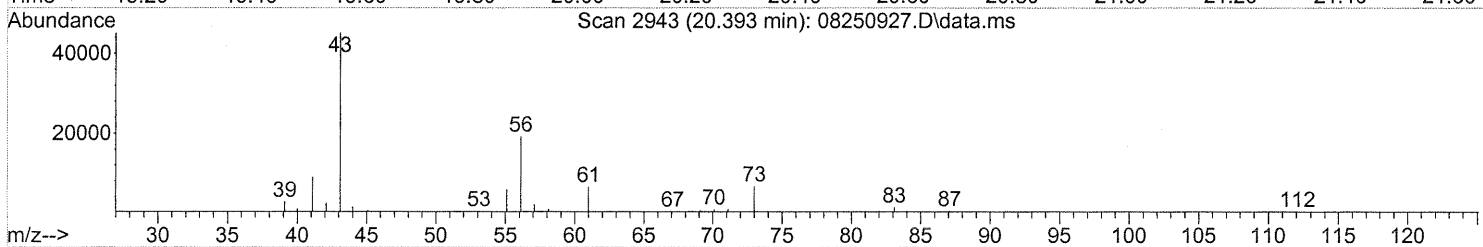
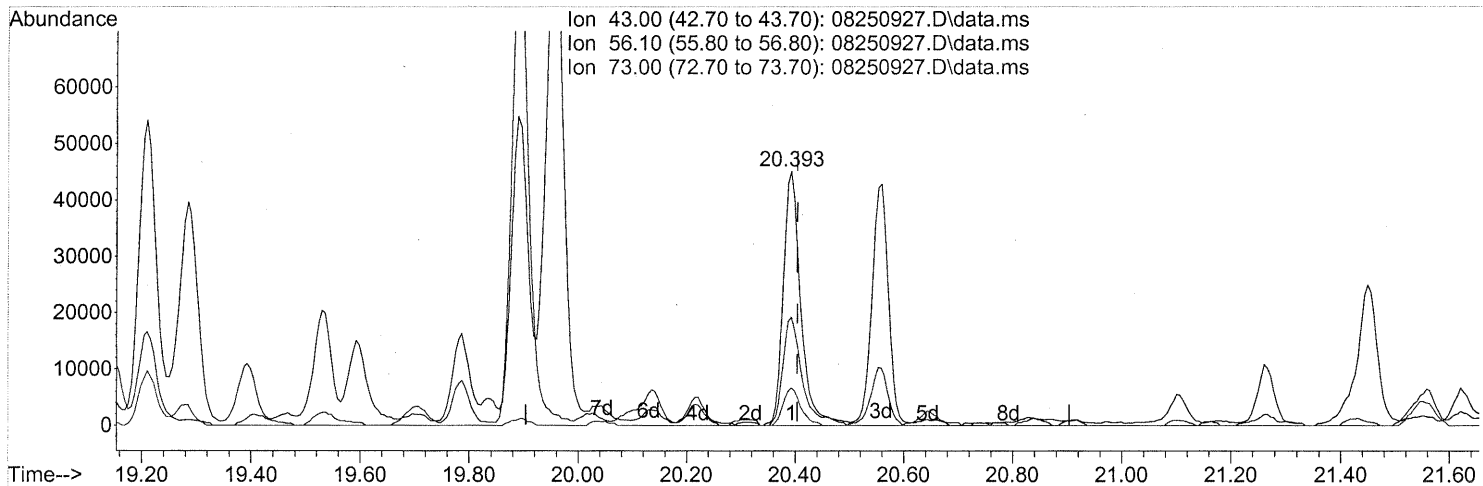
response 31320

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	29.79#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

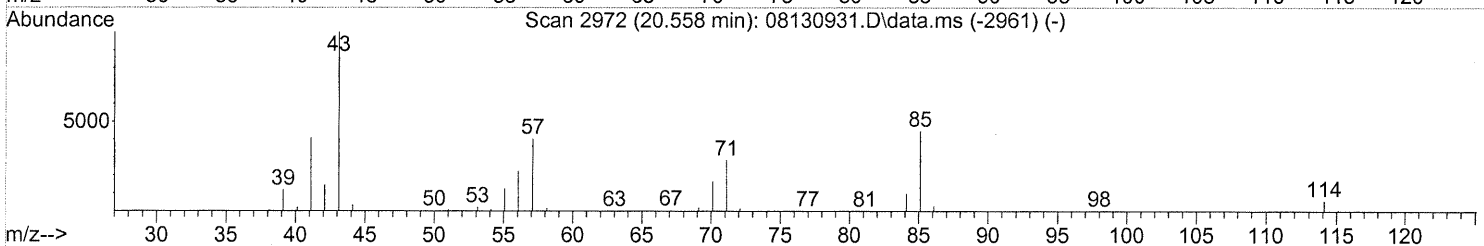
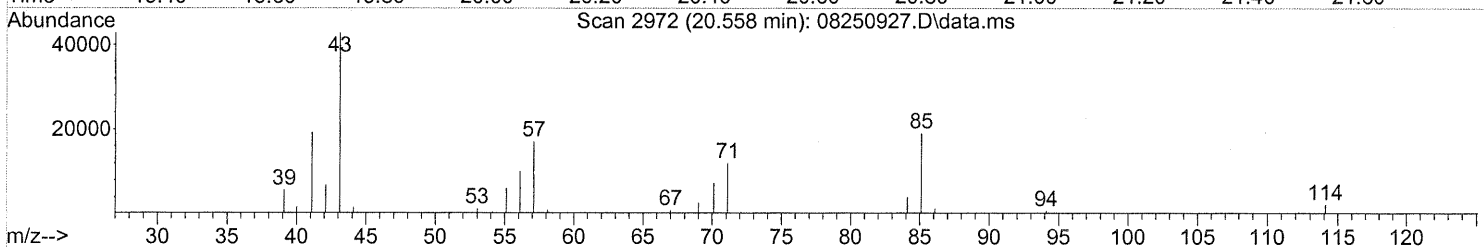
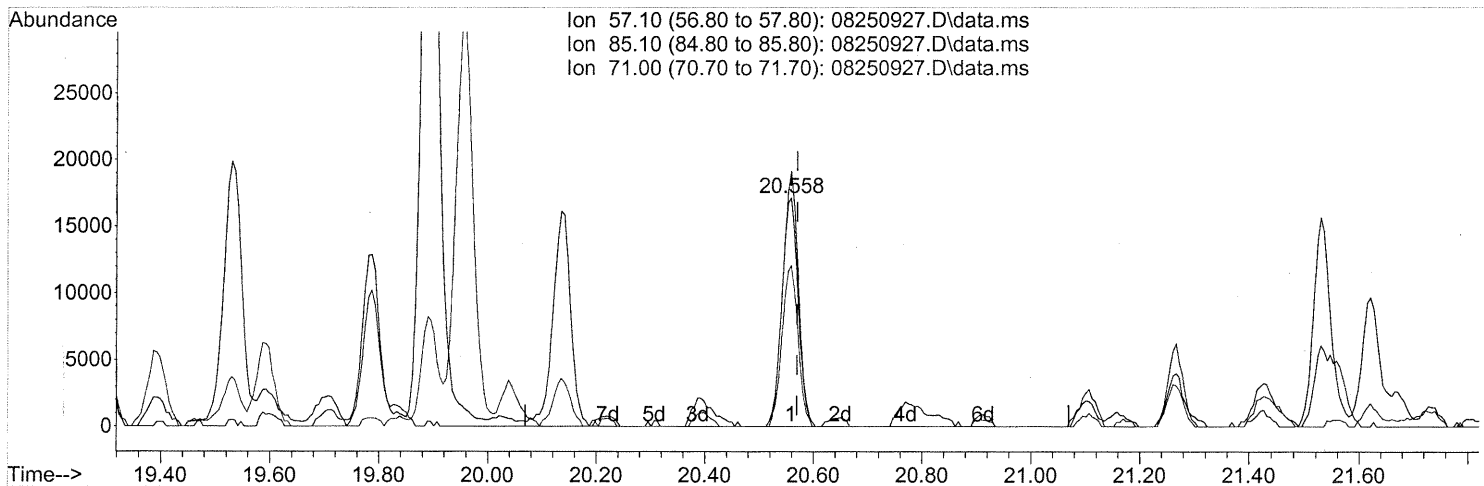
(62) n-Butyl Acetate (T)  
 20.393min (-0.011) 1.82ng  
 response 100441

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	46.71
73.00	16.90	14.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(63) n-Octane (T)  
 20.558min (-0.011) 1.63ng  
 response 35419

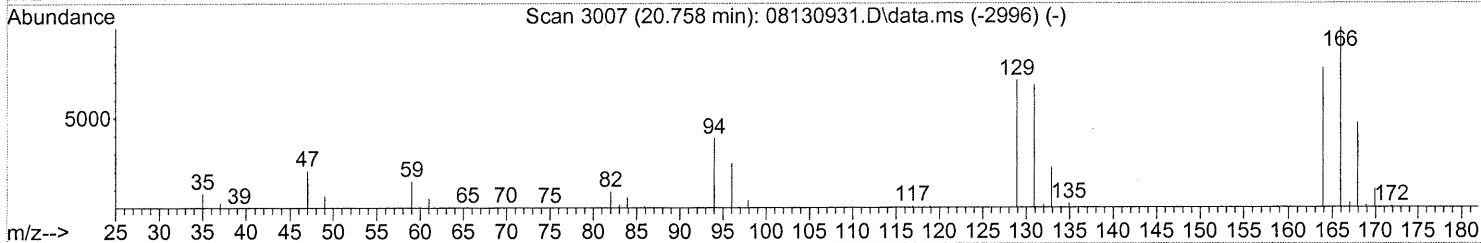
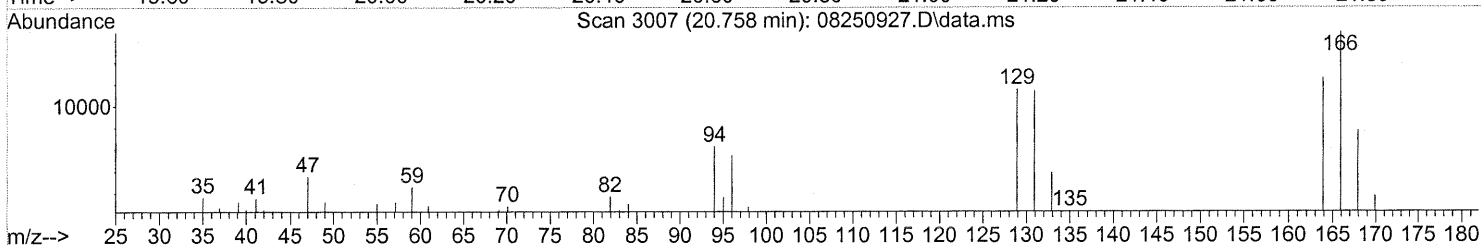
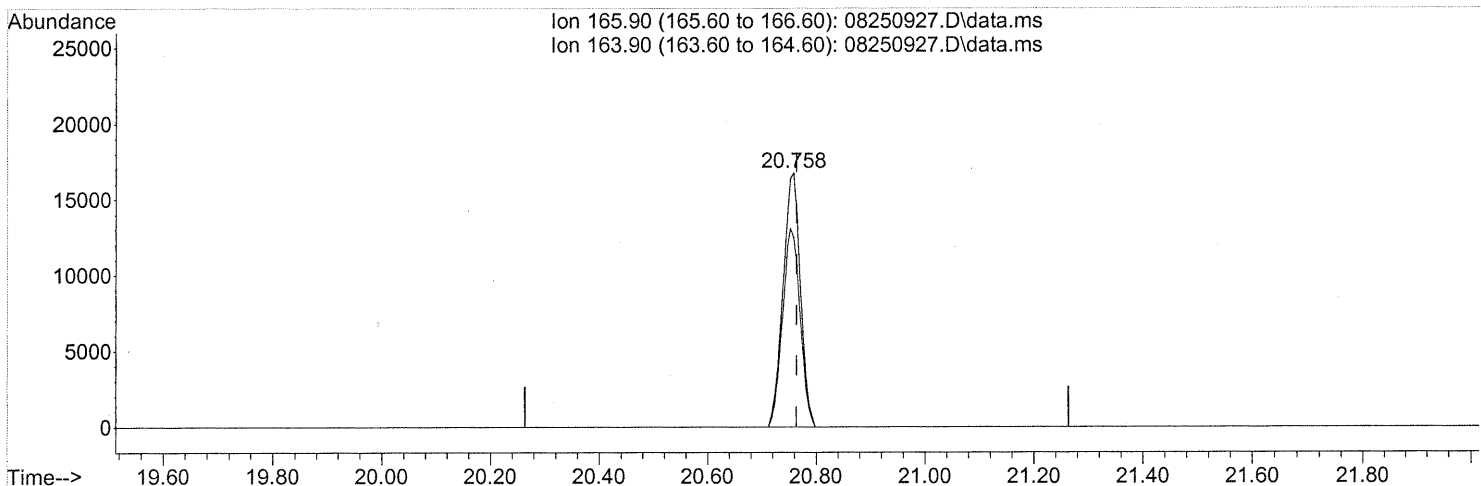
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	107.74
71.00	75.10	69.56
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(64) Tetrachloroethene (T)

20.758min (-0.006) 1.54ng

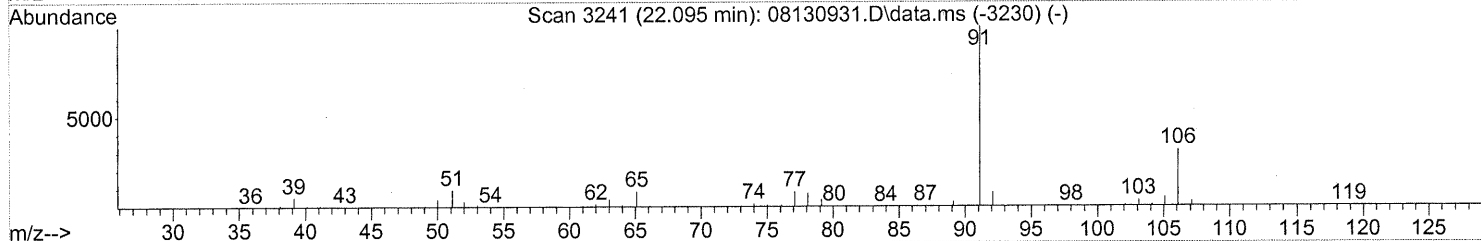
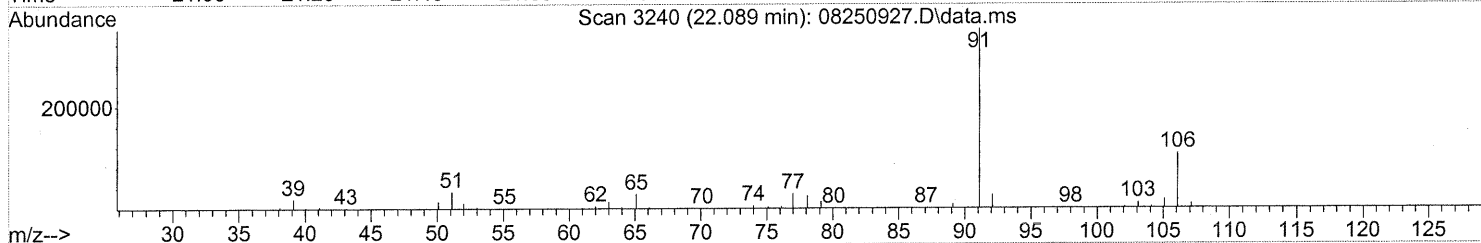
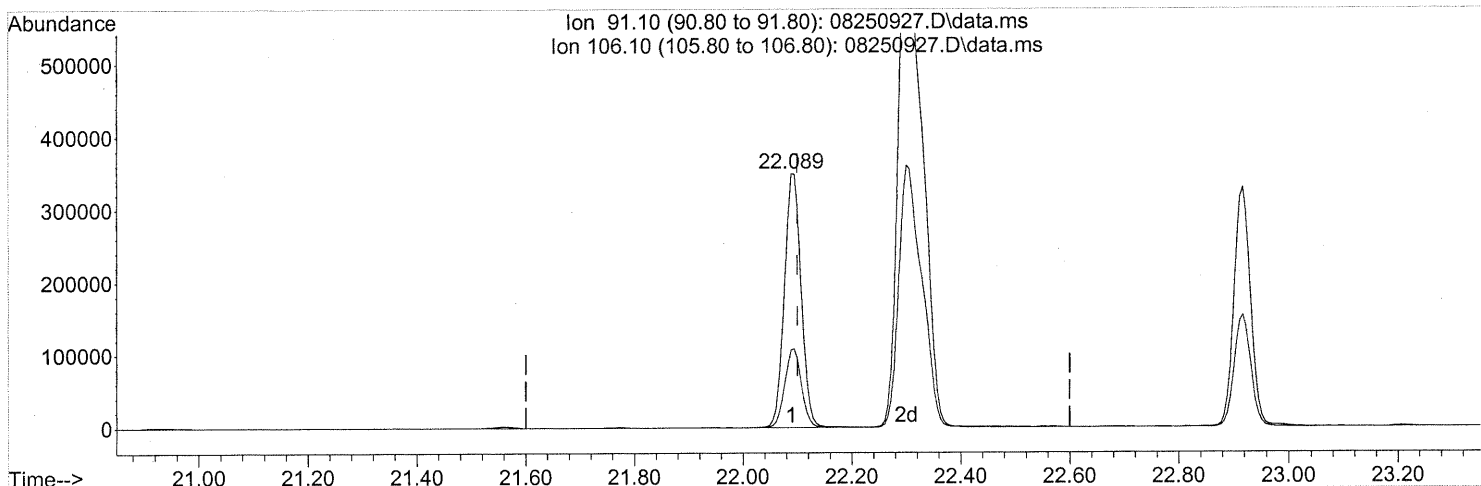
response 37143

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	78.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 7.17ng

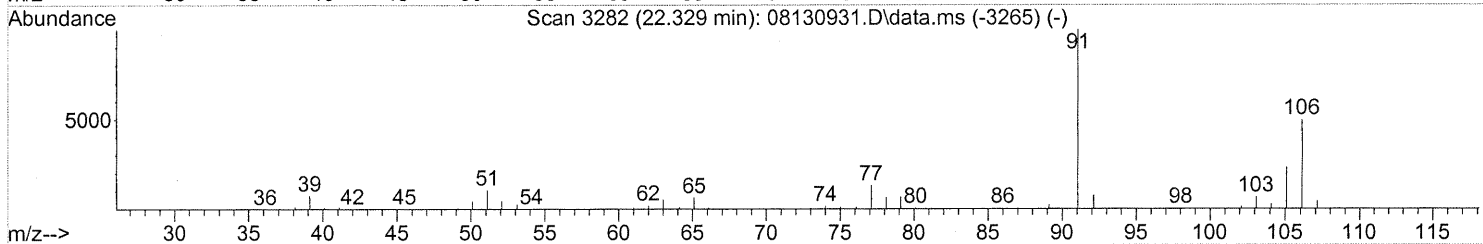
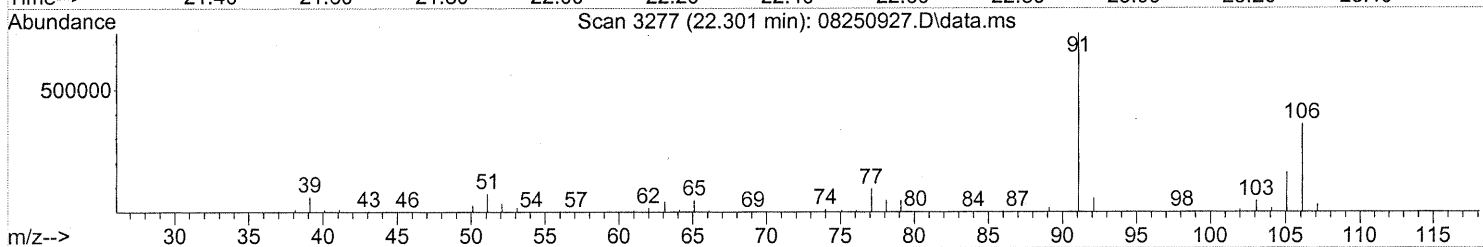
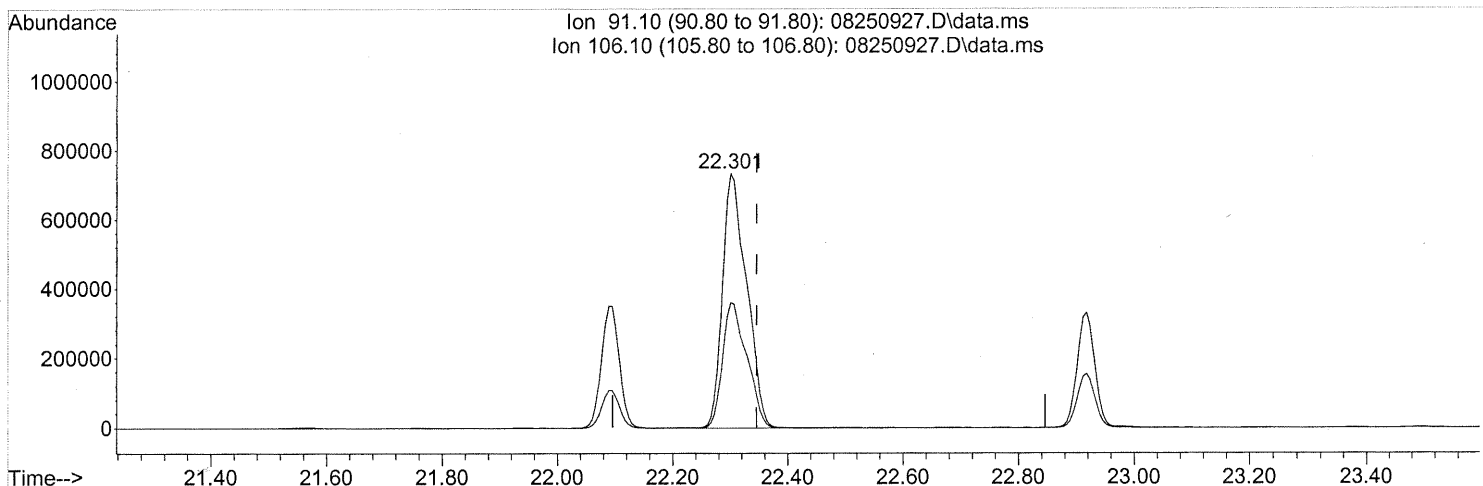
response 754092

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

22.301min (-0.046) 25.63ng

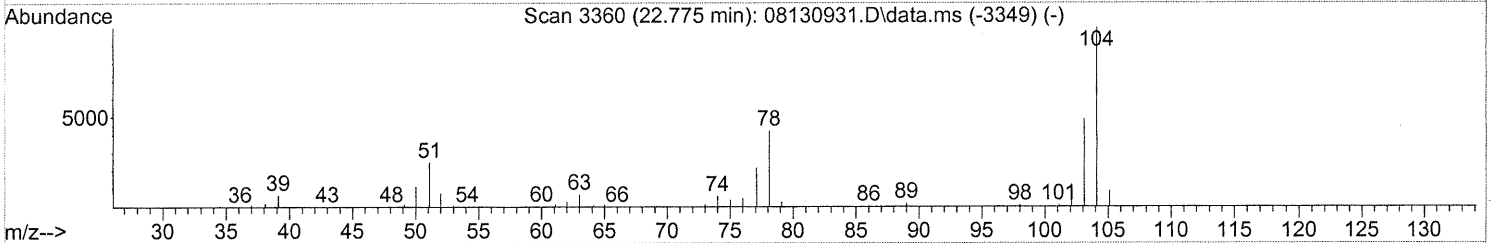
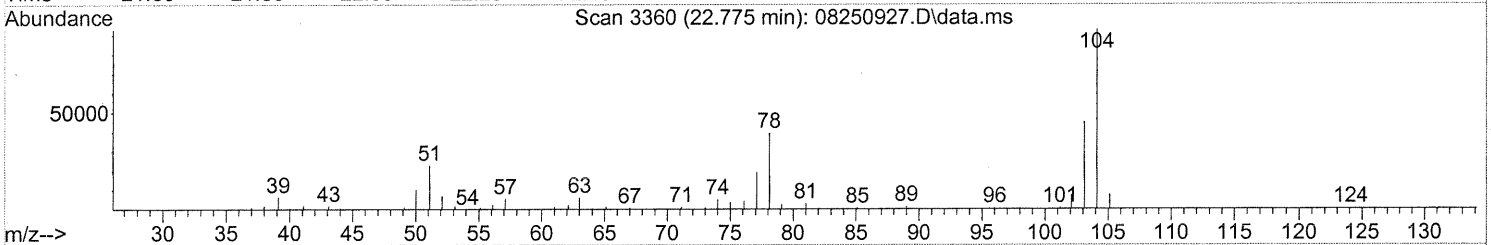
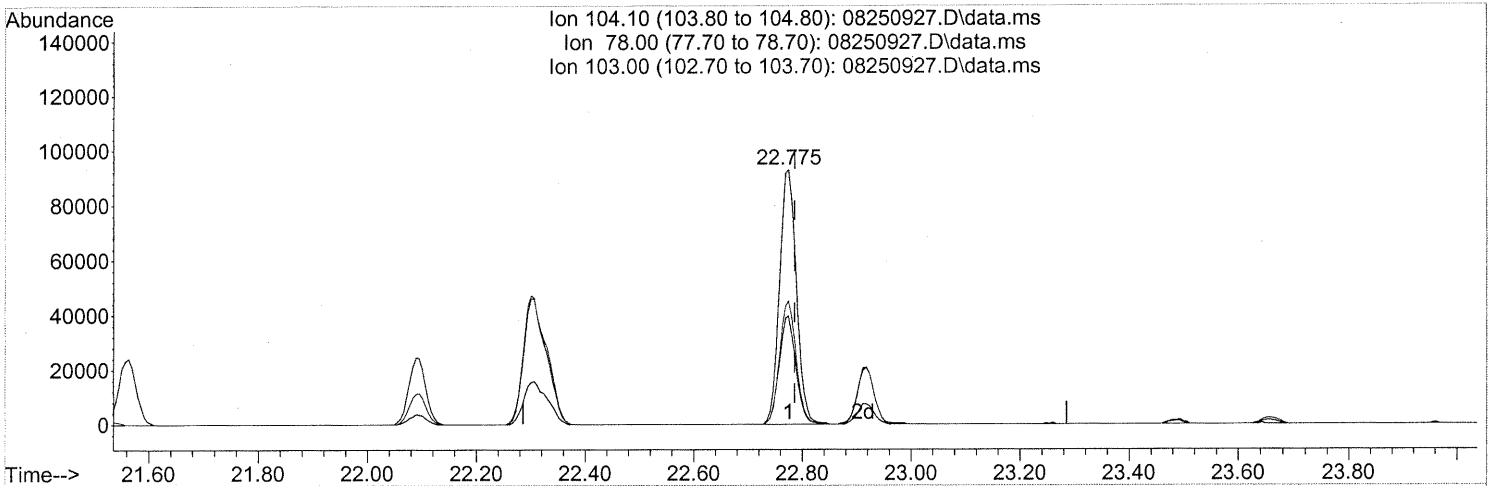
response 2136206

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.27
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

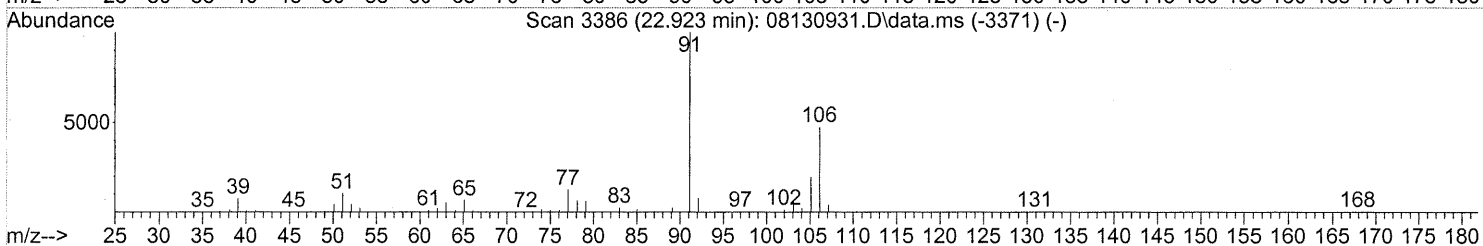
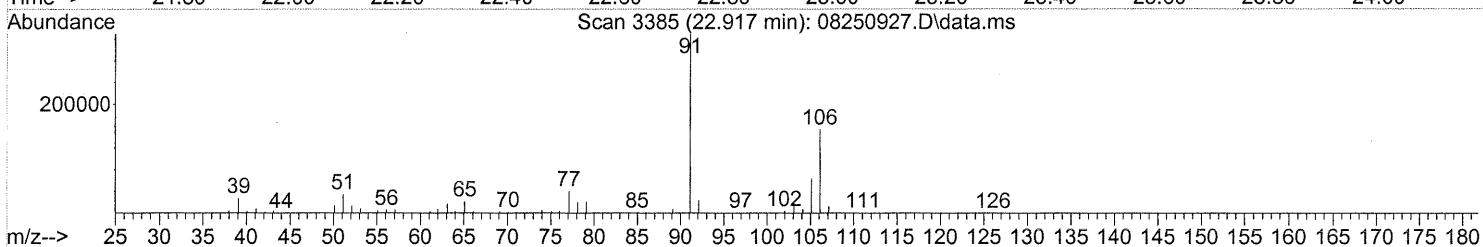
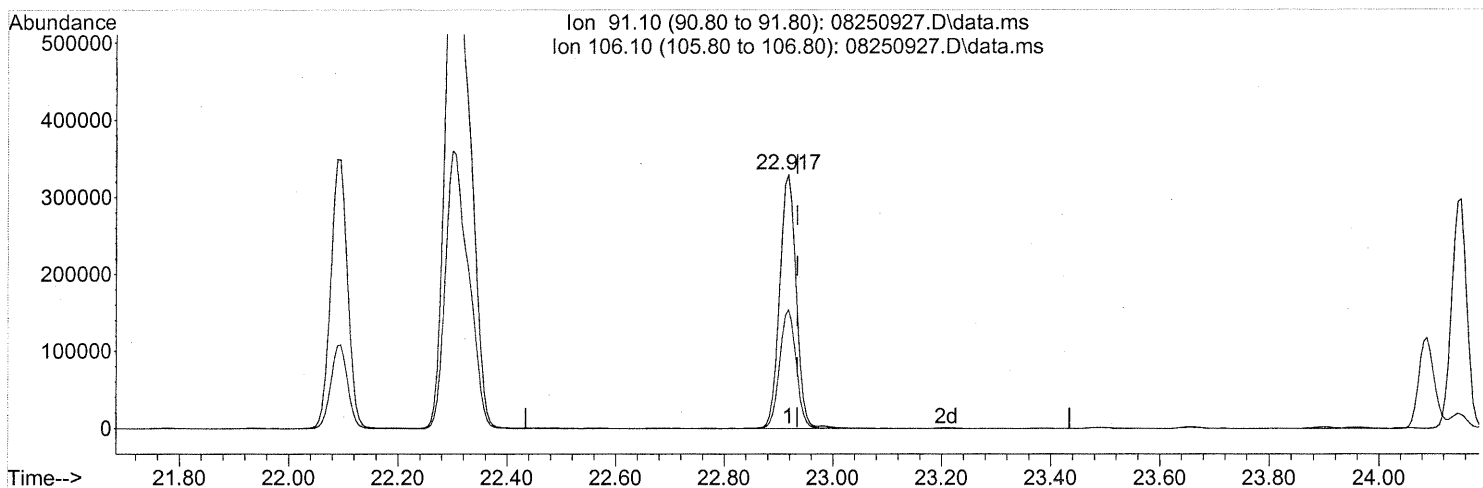
(69) Styrene (T)  
 22.775min (-0.011) 3.24ng  
 response 199596

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.86
103.00	48.70	47.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.32ng

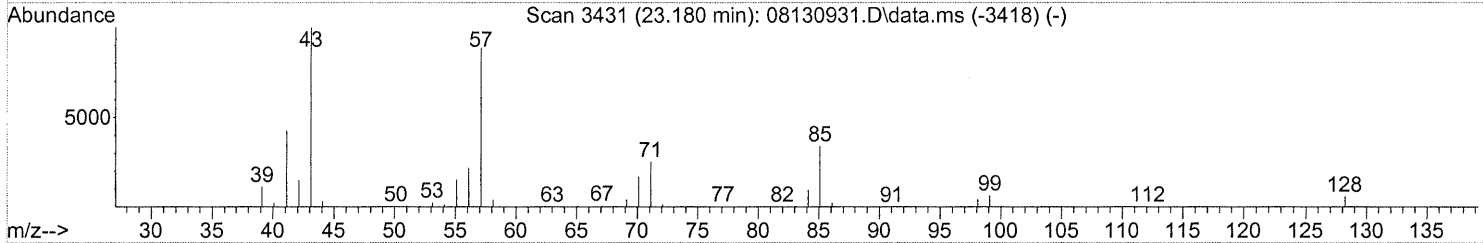
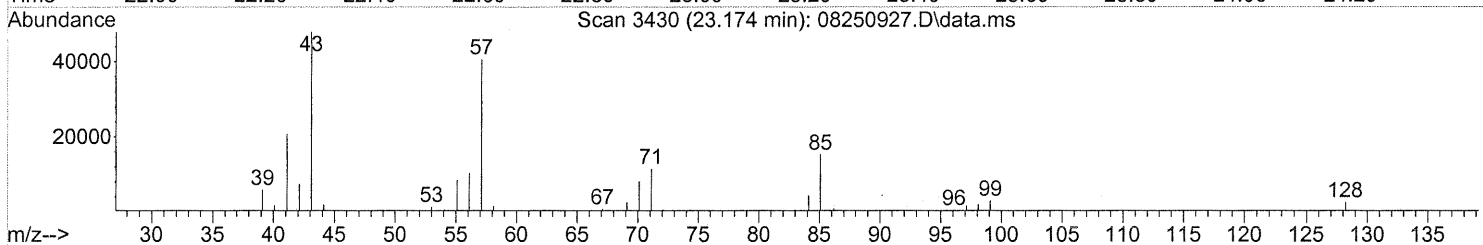
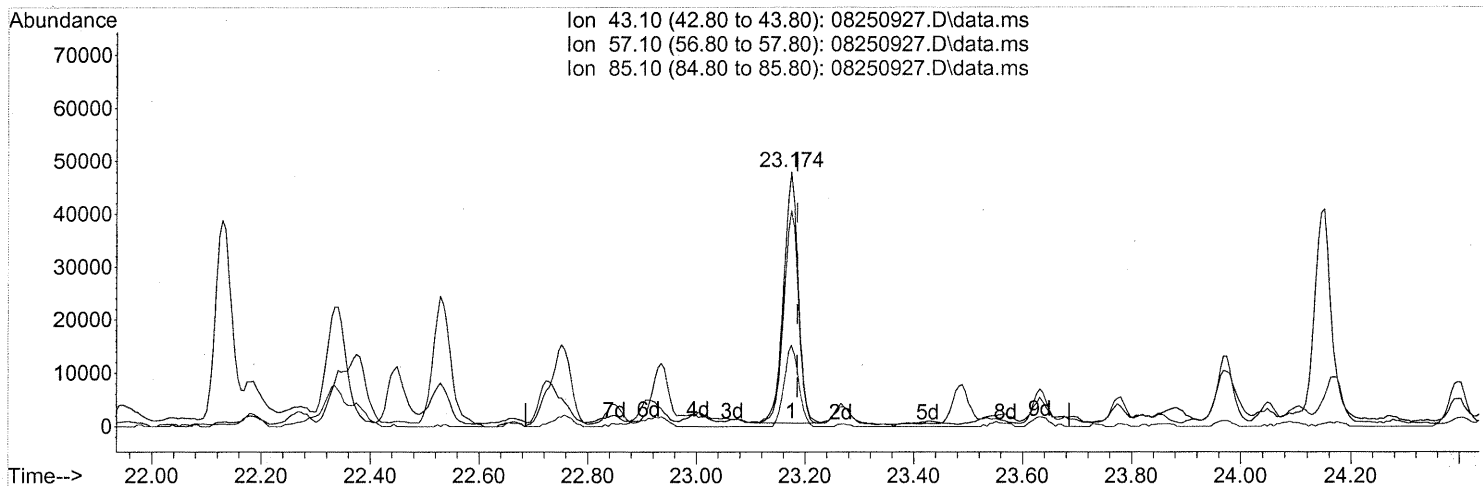
response 697210

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

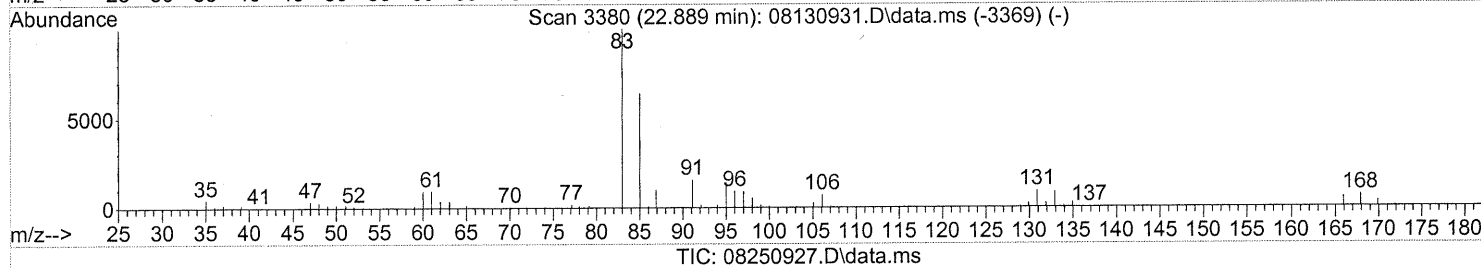
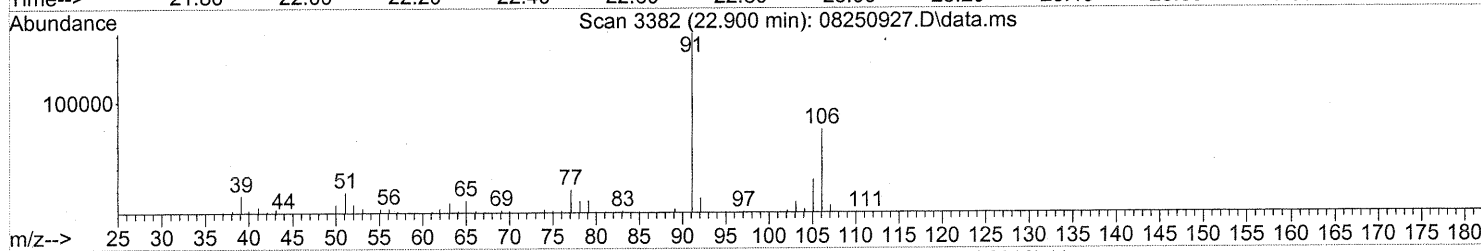
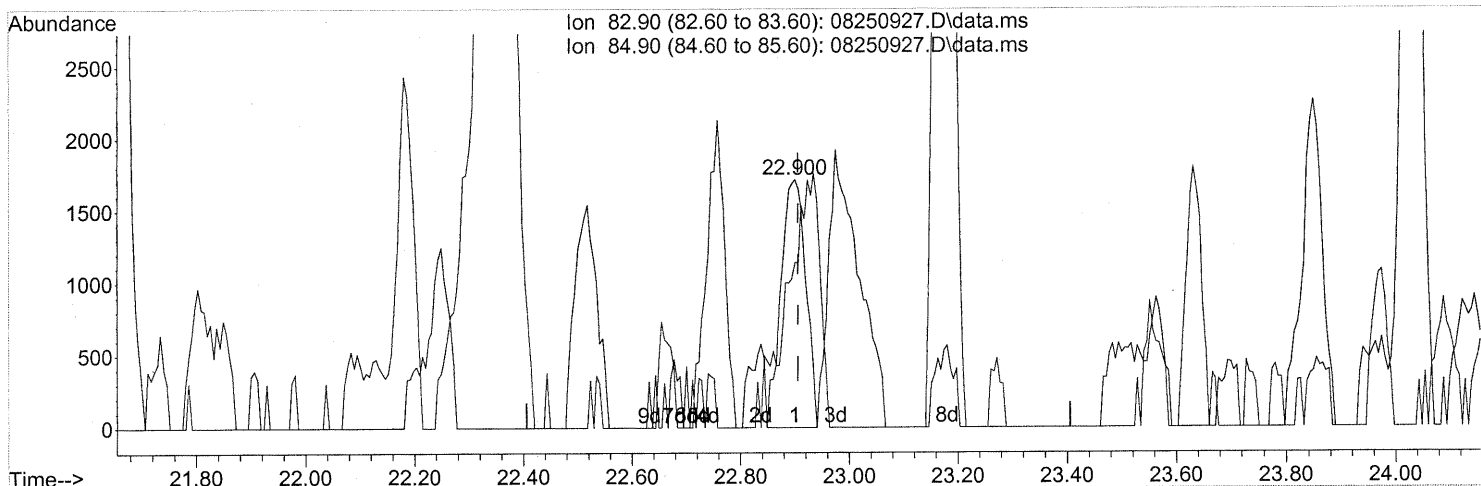
(71) n-Nonane (T)  
 23.174min (-0.011) 1.79ng  
 response 90504

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	85.59
85.10	38.80	31.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(72) 1,1,2,2-Tetrachloroethane (T)

22.900min (-0.006) 0.15ng

response 5400

Ion	Exp%	Act%
82.90	100	100
84.90	63.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

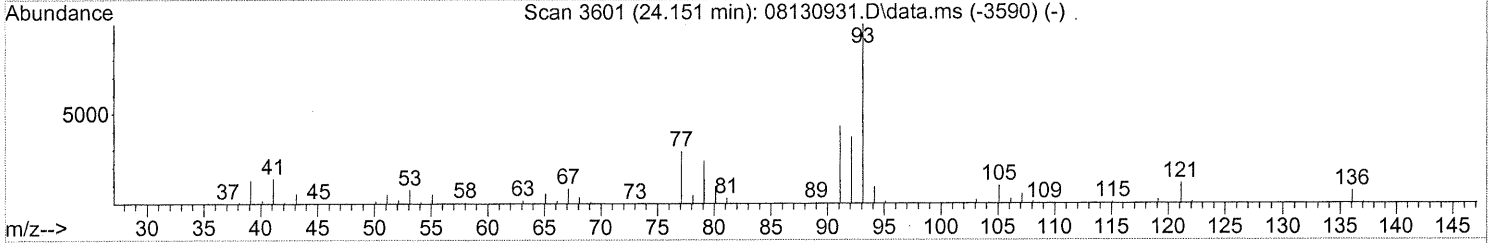
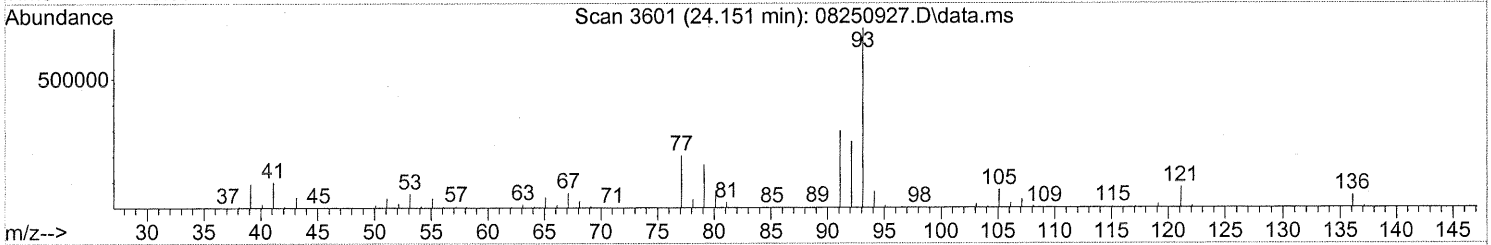
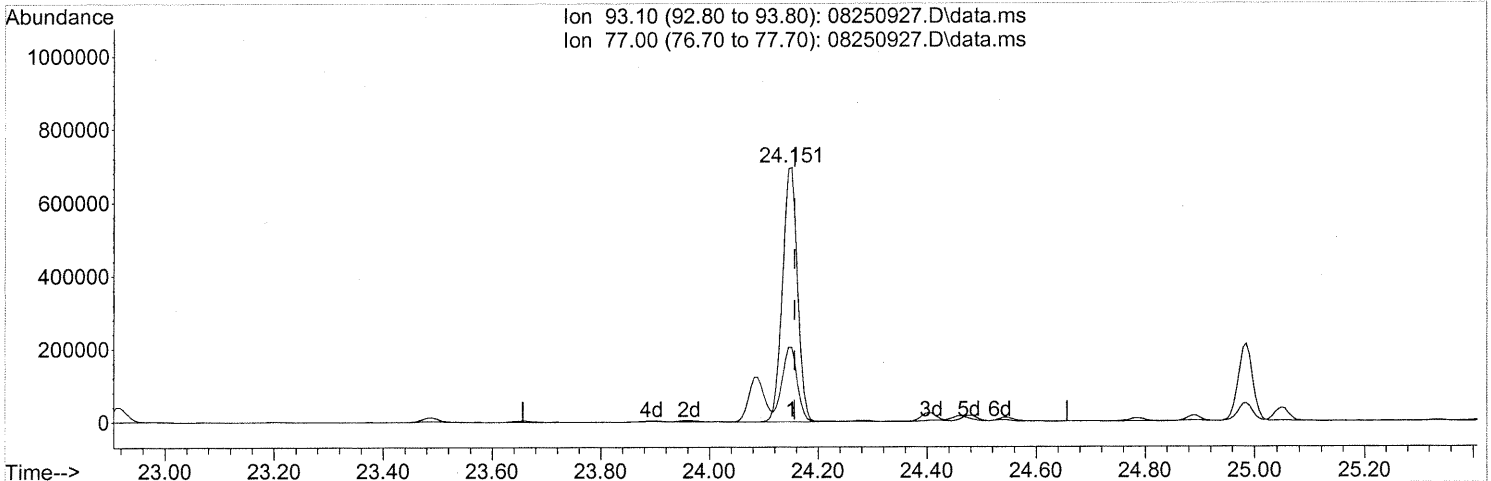
*FP em 8/28/09*

*KES/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(75) alpha-Pinene (T)  
 24.151min (-0.006) 24.98ng  
 response 1339927

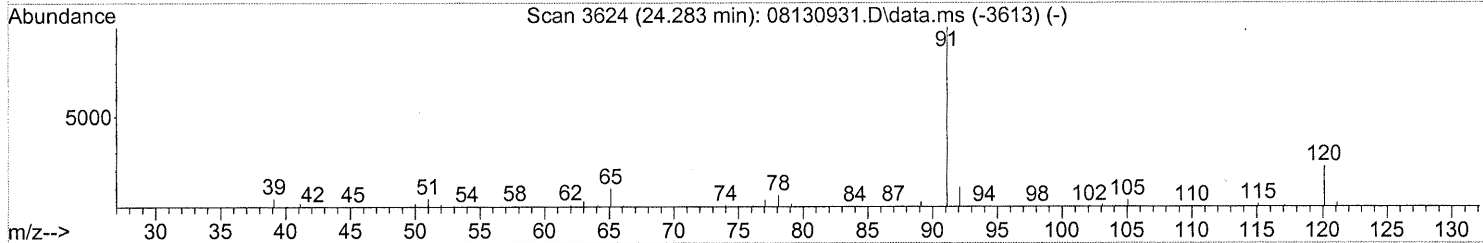
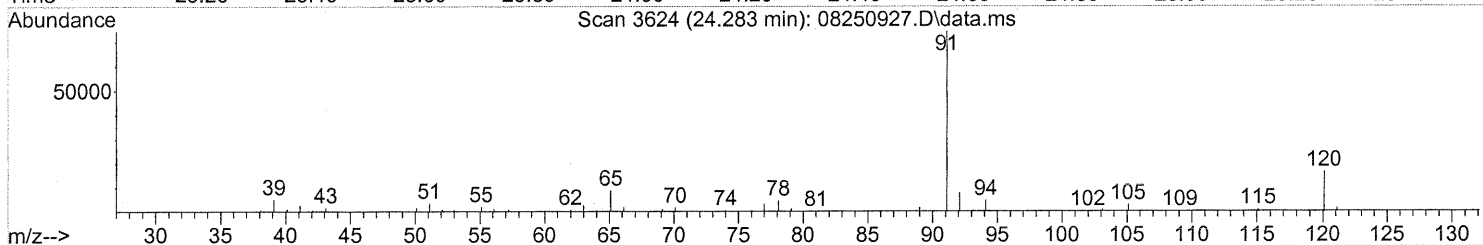
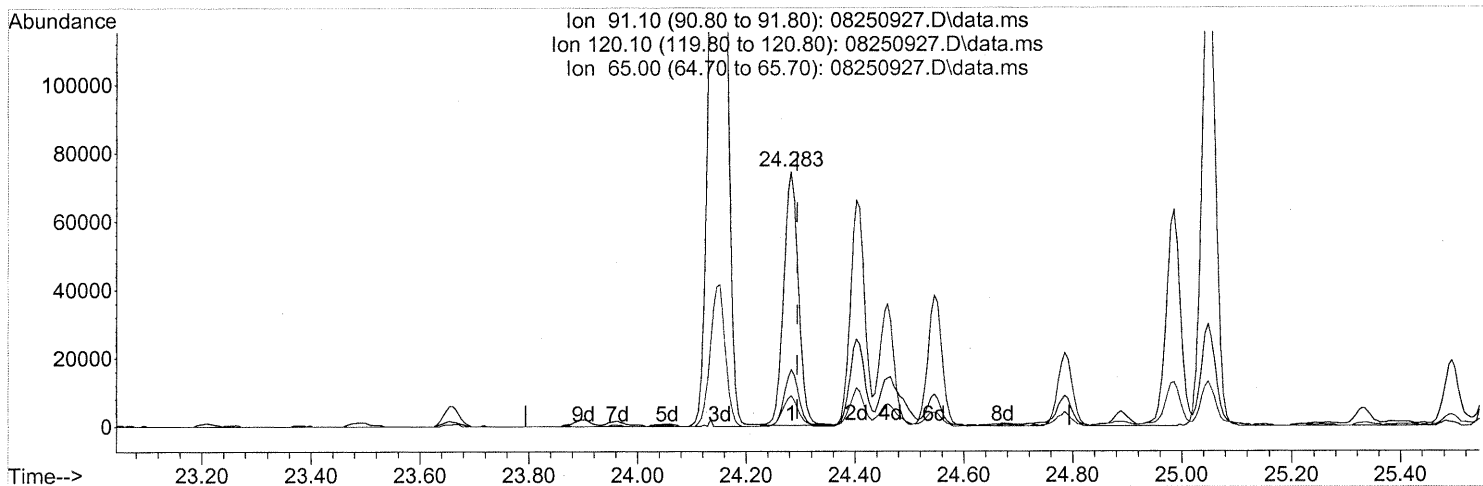
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	29.66
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.04ng

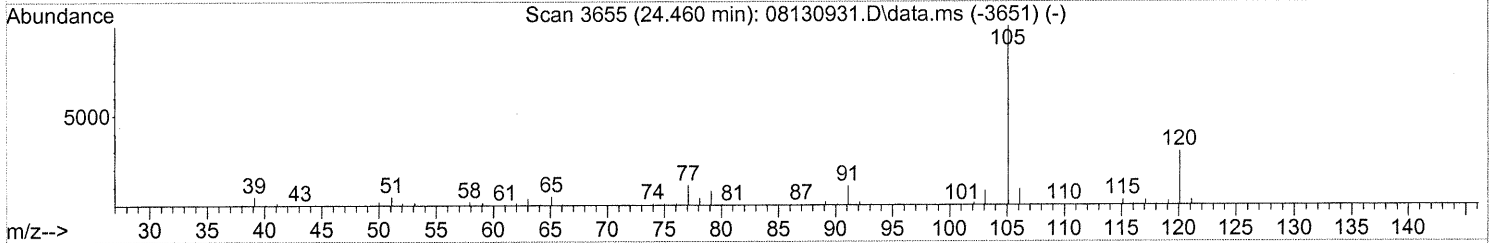
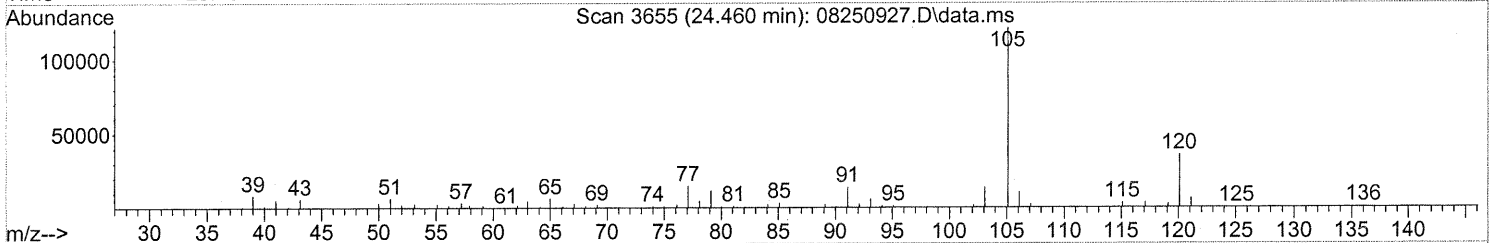
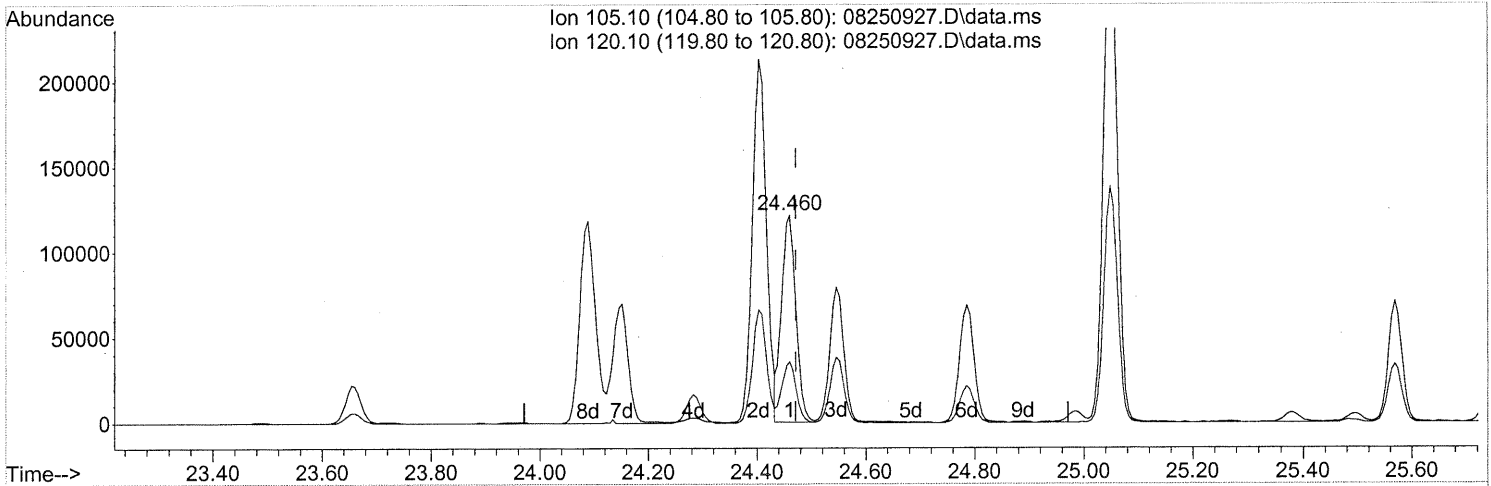
response 139890

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.67
65.00	10.20	13.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

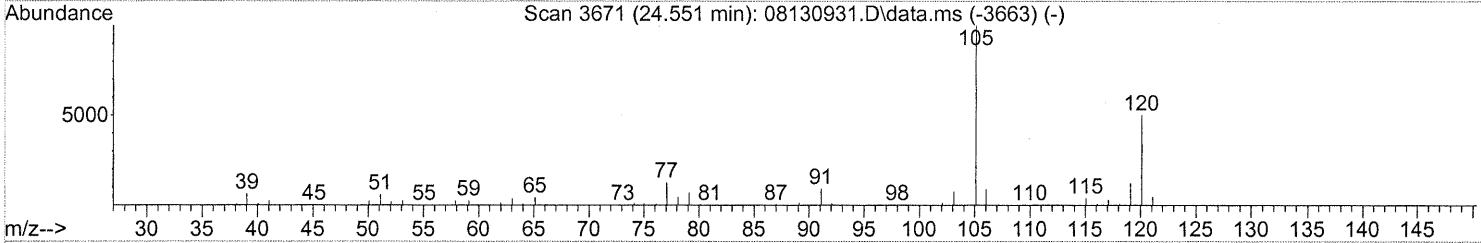
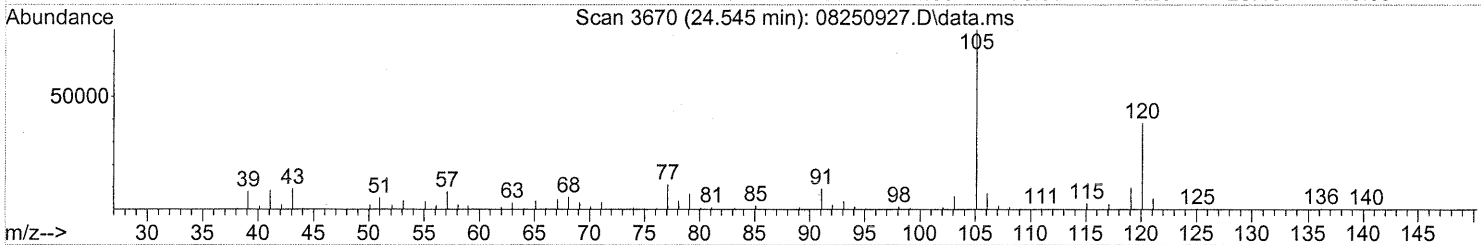
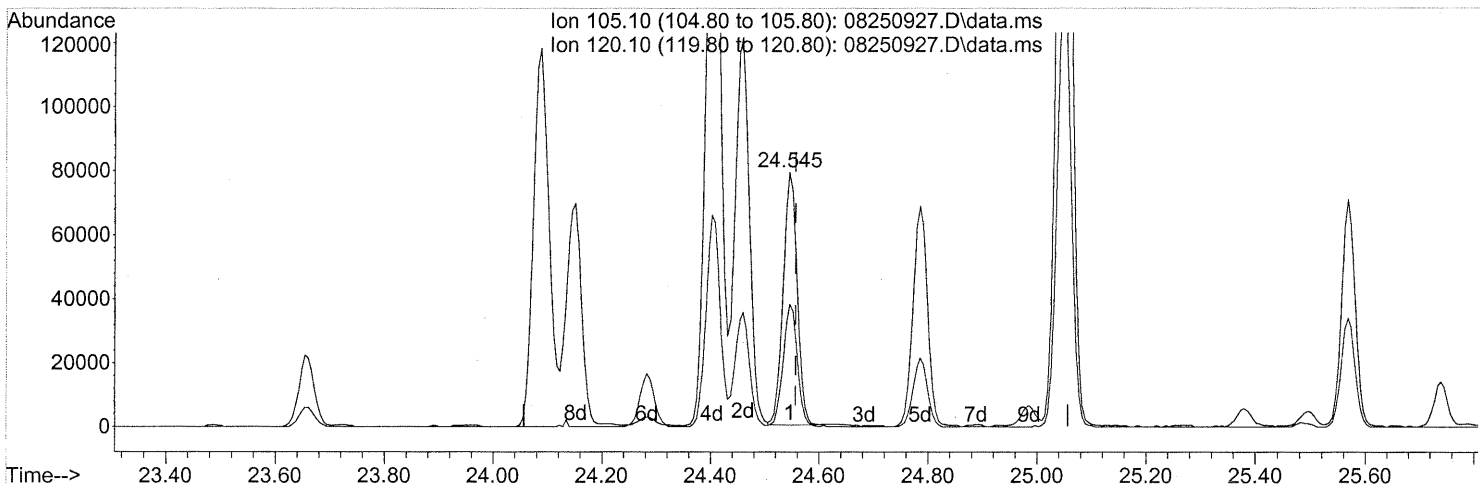
(78) 4-Ethyltoluene (T)  
 24.460min (-0.011) 2.17ng  
 response 221818

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	29.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

24.545min (-0.011) 1.66ng

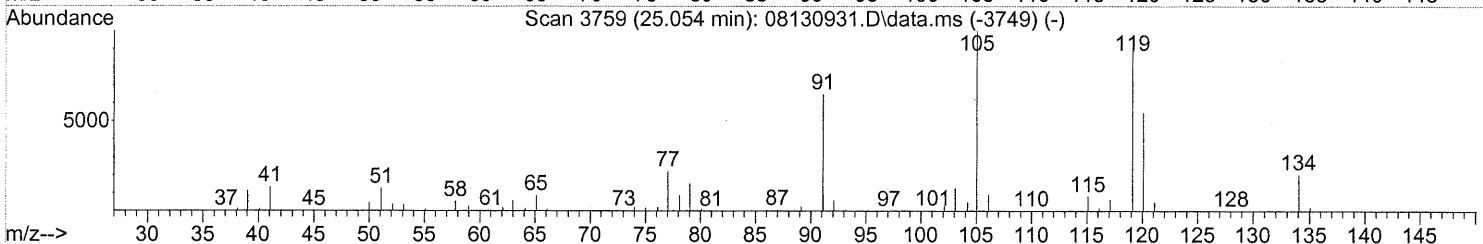
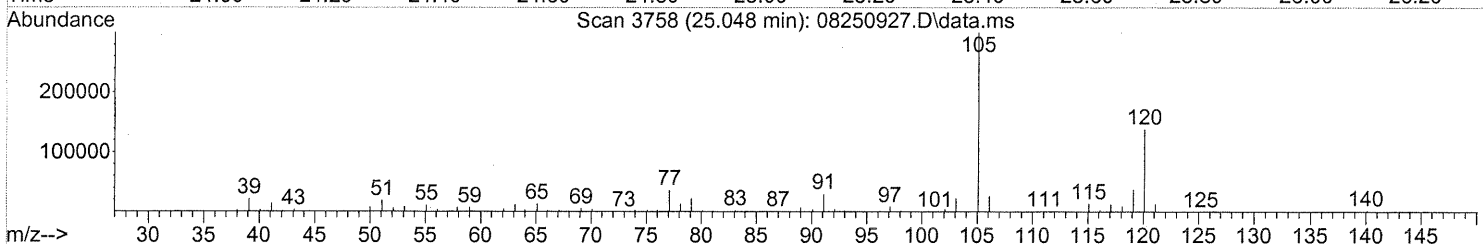
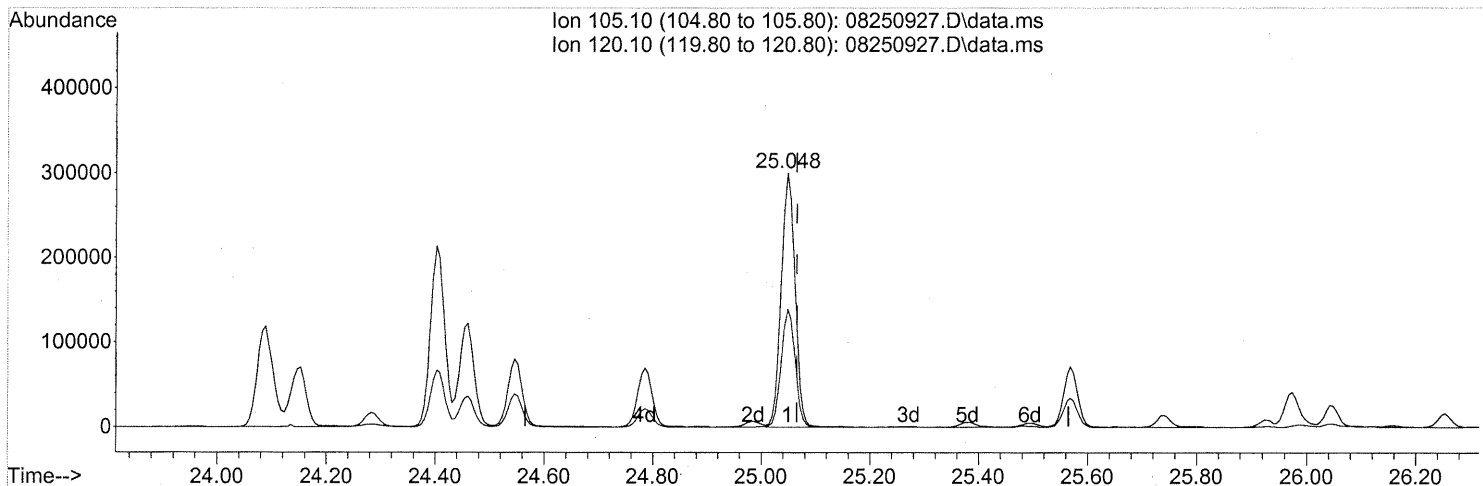
response 140410

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	49.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

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

25.048min (-0.017) 5.85ng

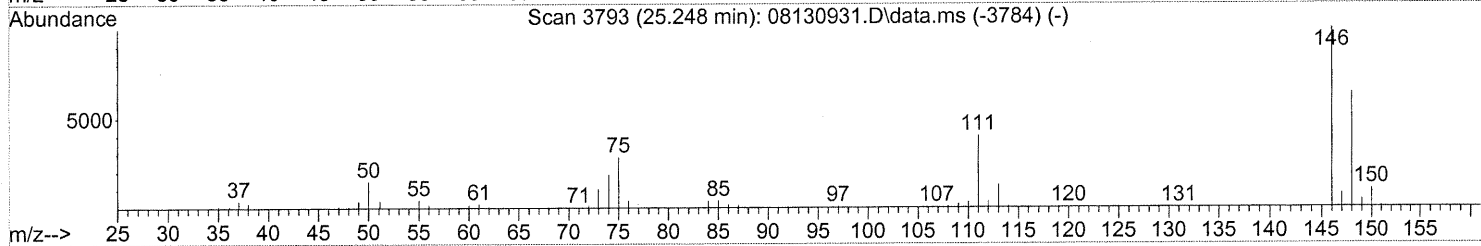
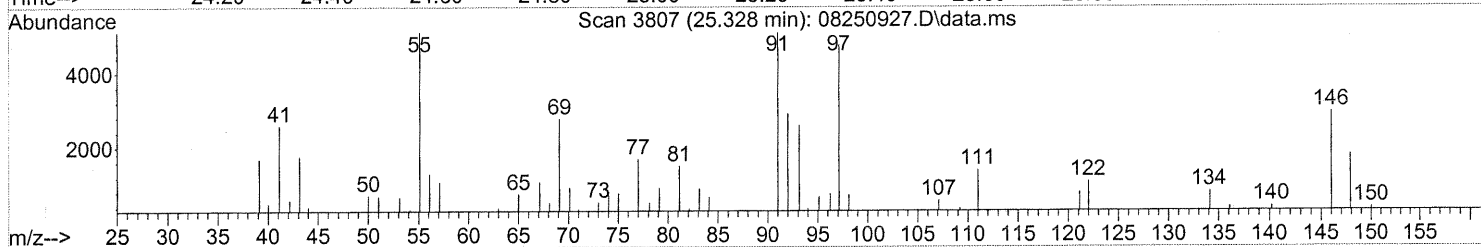
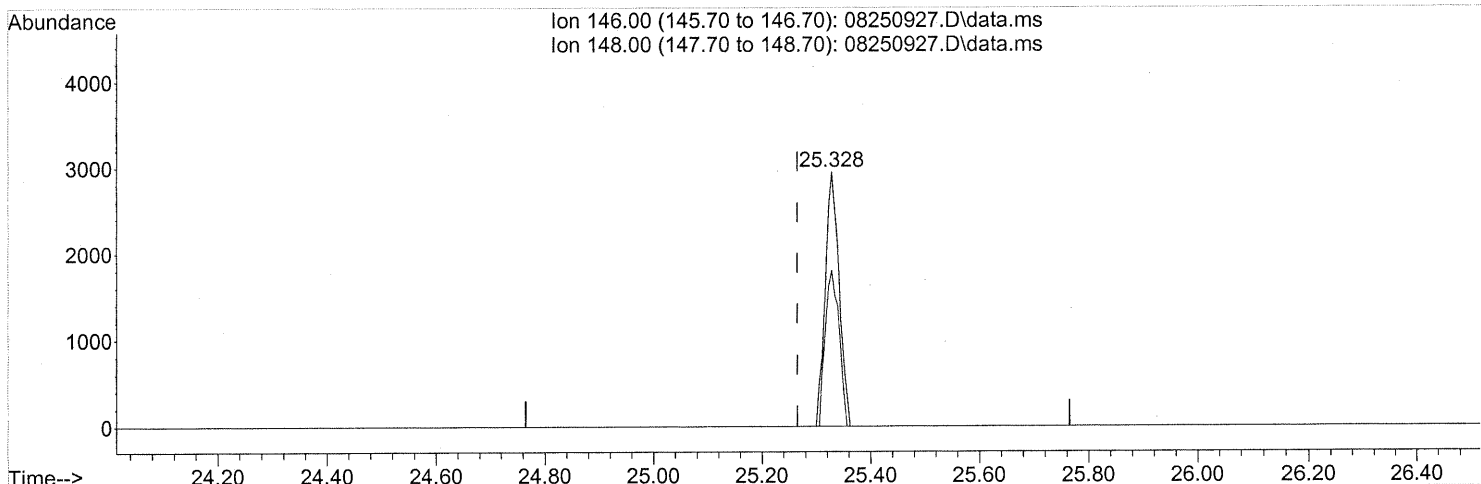
response 525796

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.11ng

response 5231

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	60.81
0.00	0.00	0.00
0.00	0.00	0.00

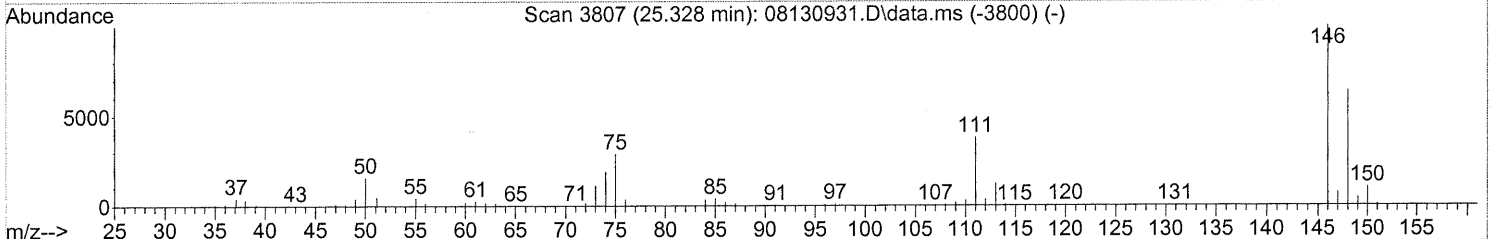
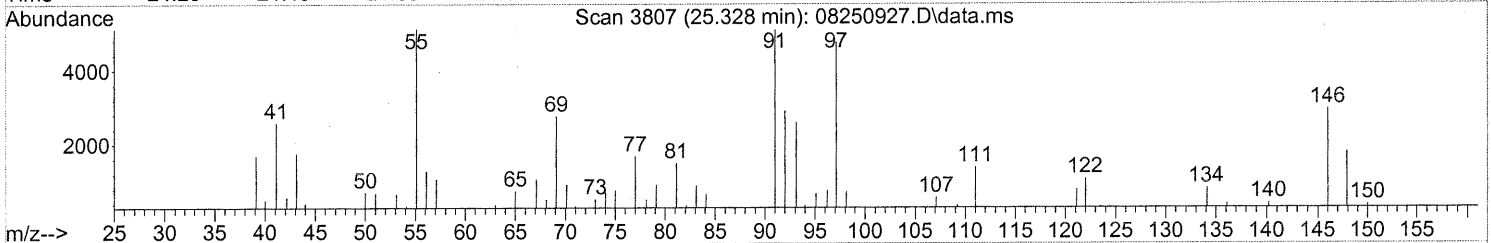
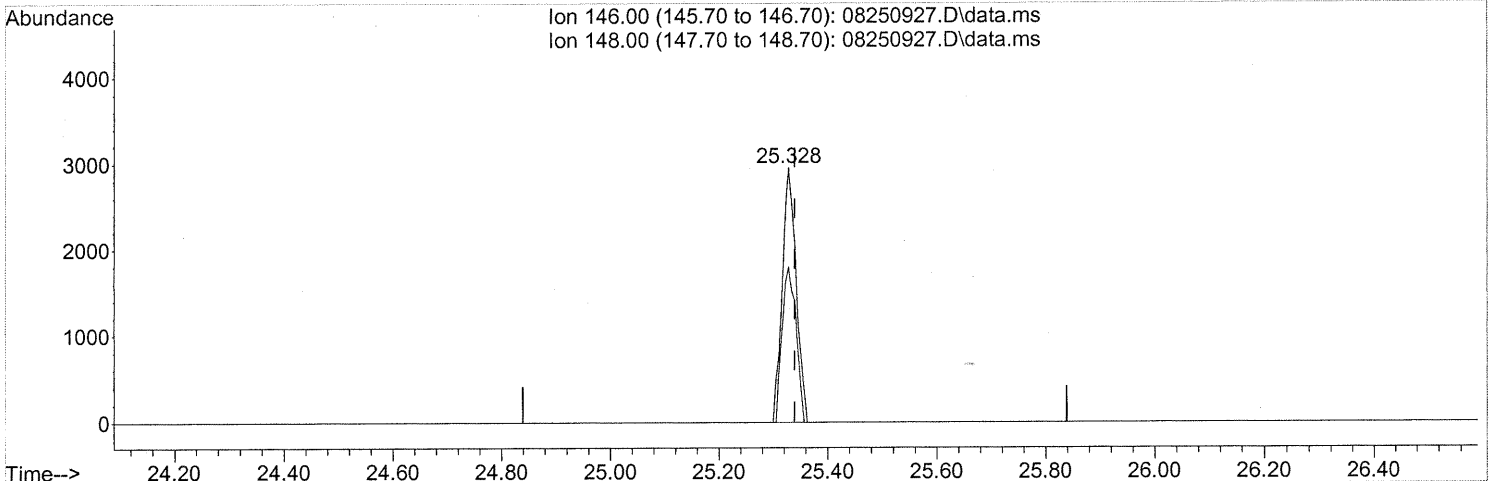
*FP Em 8/28/09*

*KP8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.11ng

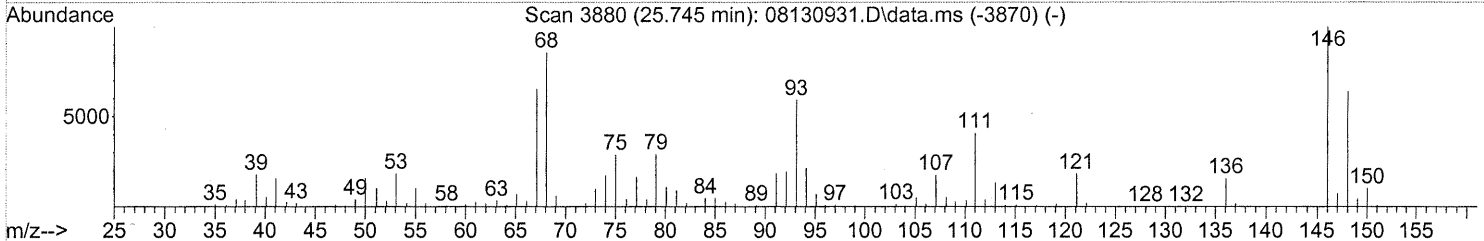
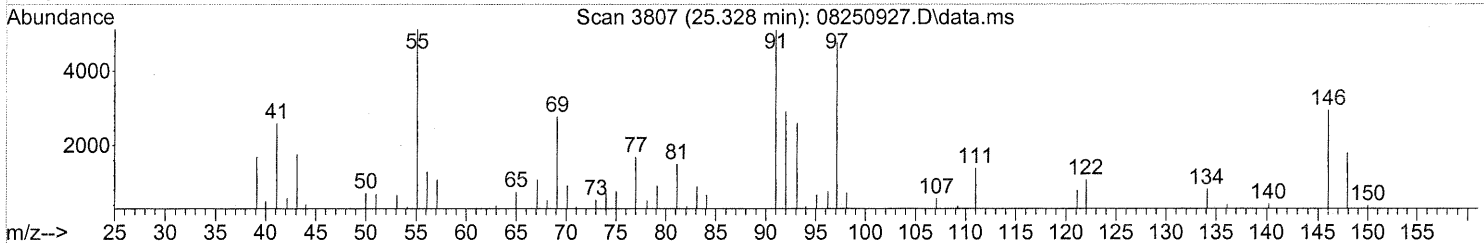
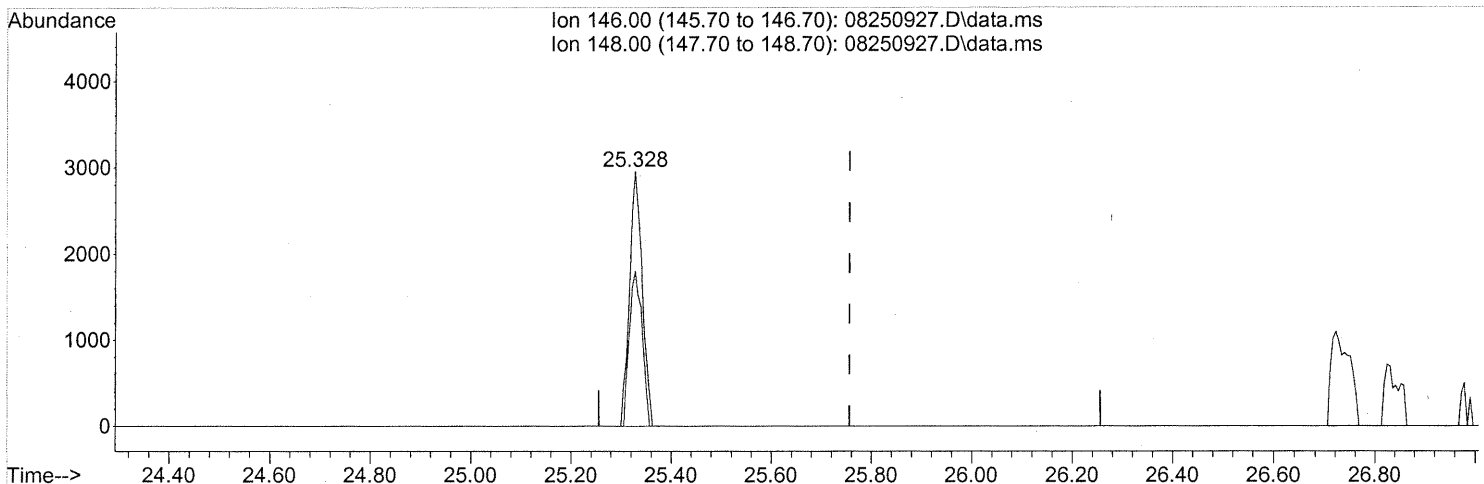
response 5231

Ion	Exp%	Act%
146.00	100	100
148.00	64.00	60.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.11ng

response 5231

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	60.81
0.00	0.00	0.00
0.00	0.00	0.00

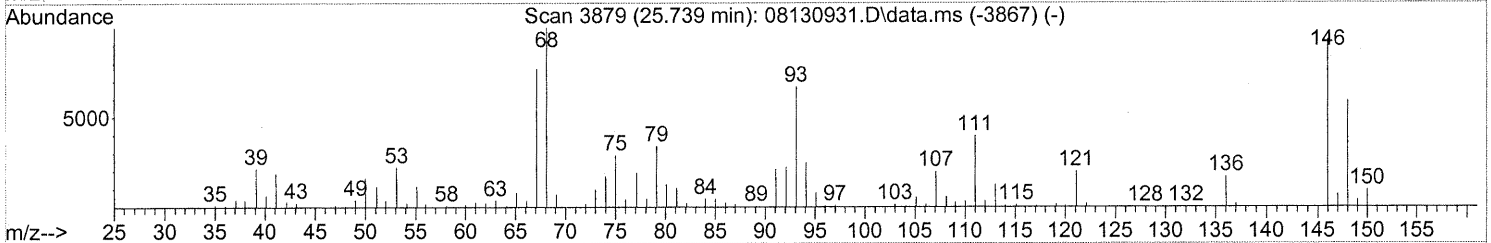
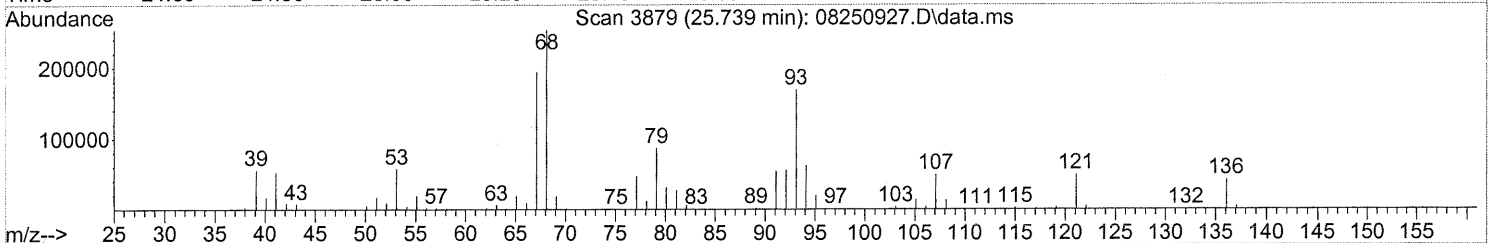
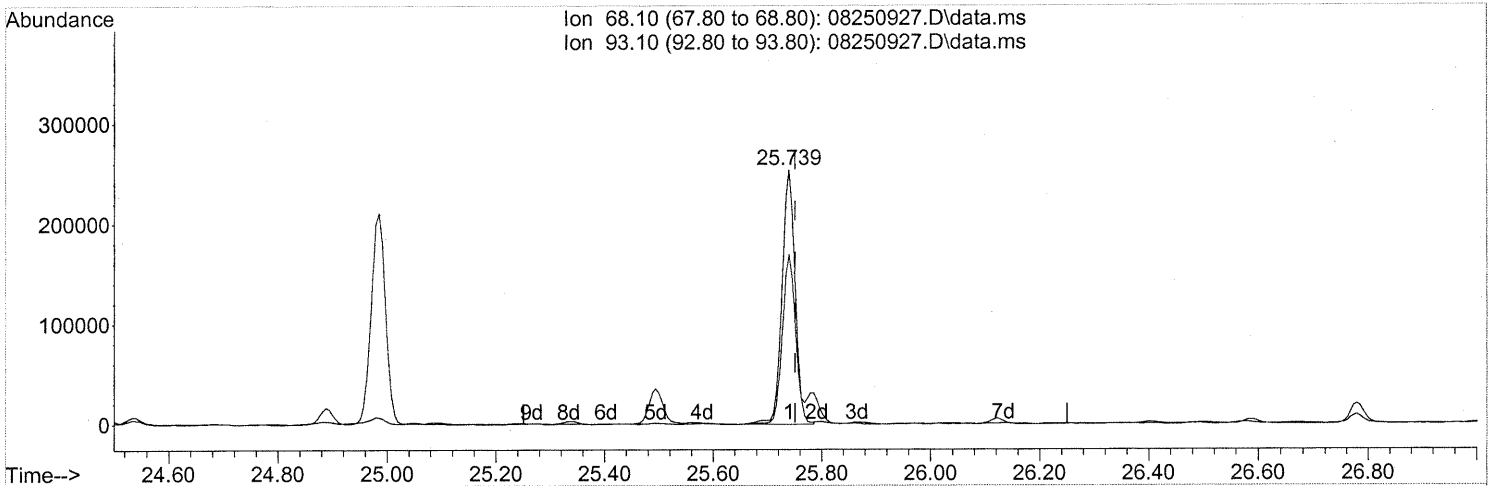
*FP Em 8/28/09*

*128/21/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250927.D  
 Acq On : 25 Aug 2009 21:22  
 Operator : EM  
 Sample : P0902857-005 (500ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250927.D\data.ms

(91) d-Limonene (T)  
 25.739min (-0.011) 11.52ng  
 response 423849

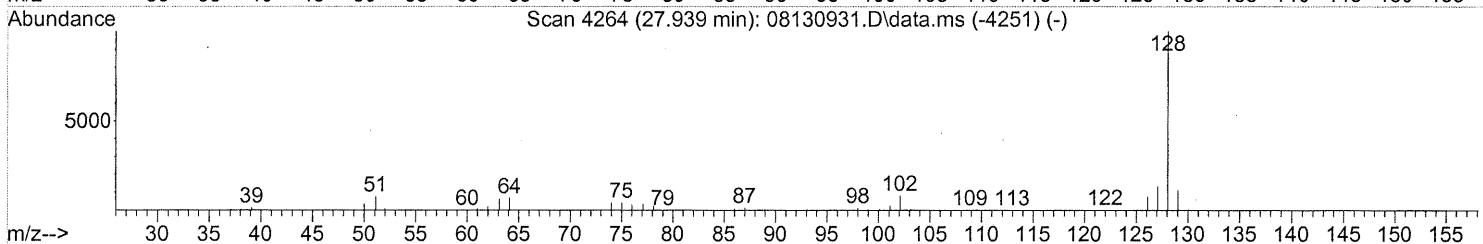
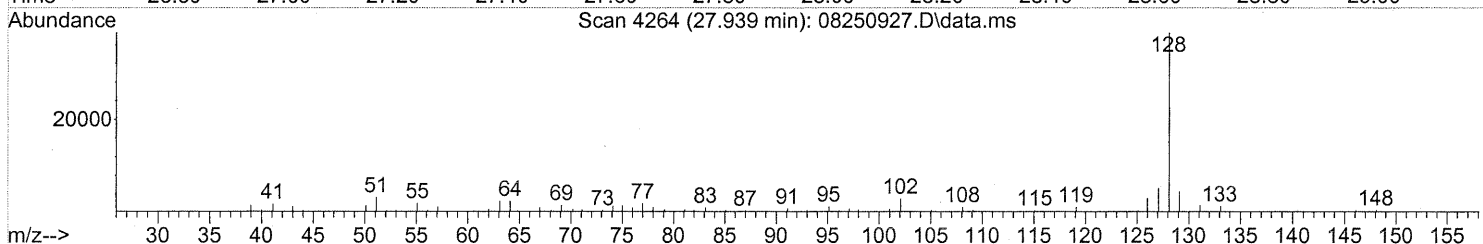
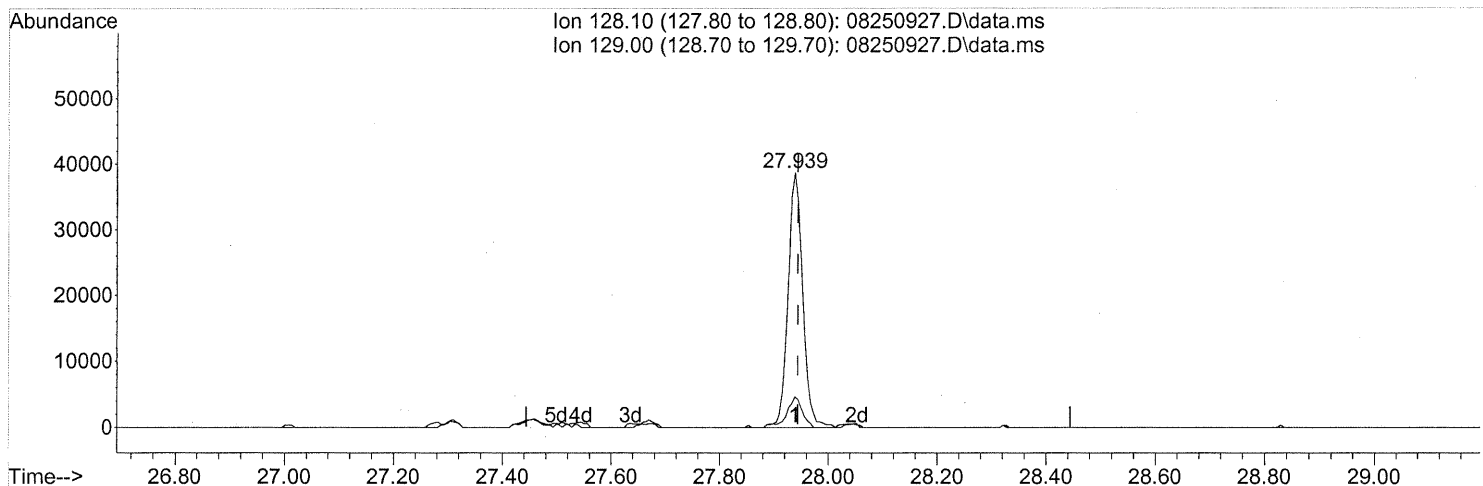
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	68.16
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250927.D  
Acq On : 25 Aug 2009 21:22  
Operator : EM  
Sample : P0902857-005 (500ml)  
Misc : Env. H & E 100461  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:12 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250927.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 0.60ng

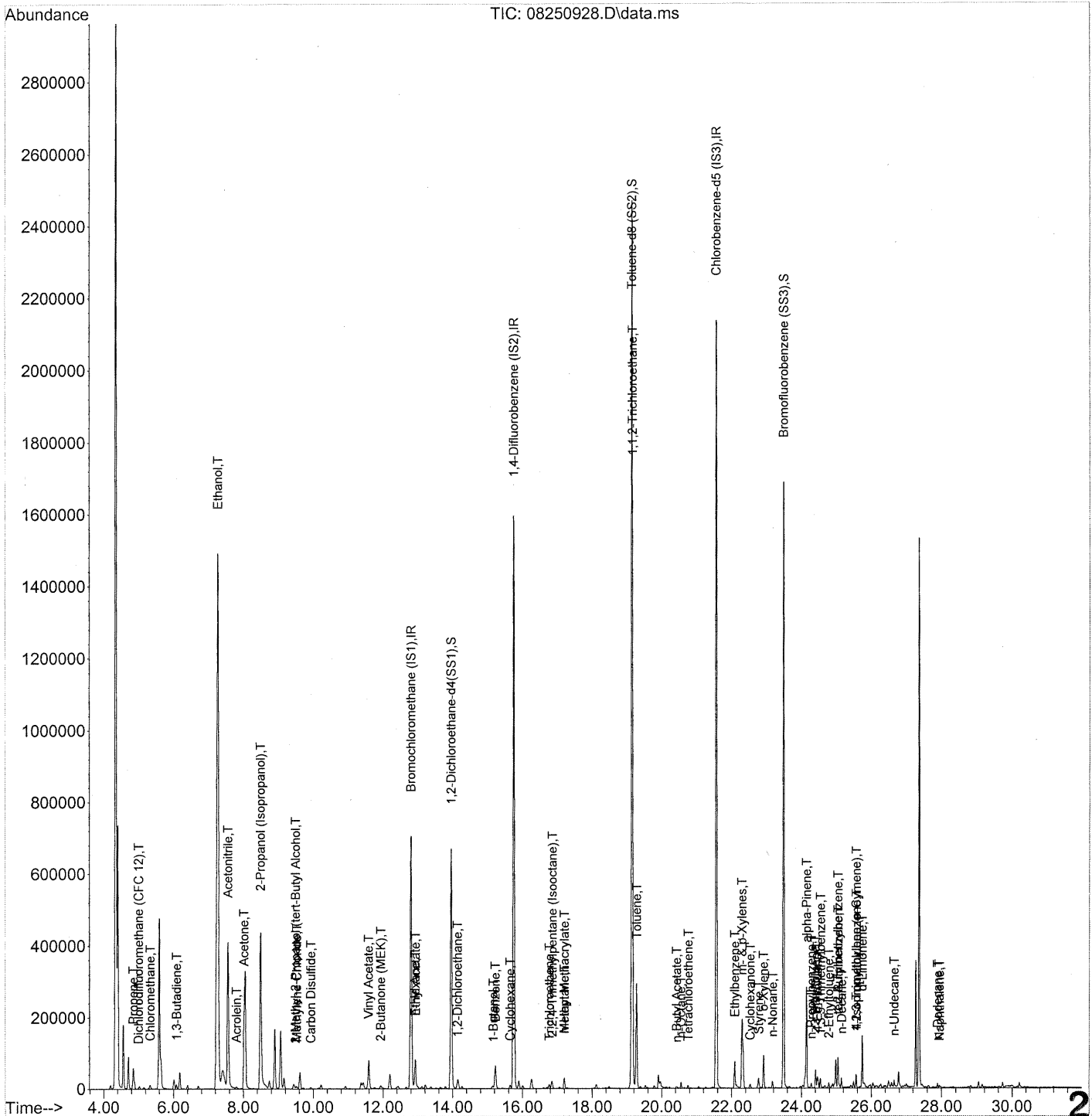
response 72497

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:58:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:58:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	375568	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1895045	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	925791	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	666820	25.110	ng	-0.03
Spiked Amount	25.000		Recovery	=	100.44%	✓
57) Toluene-d8 (SS2)	19.14	98	2201470	25.013	ng	-0.02
Spiked Amount	25.000		Recovery	=	100.04%	✓
73) Bromofluorobenzene (SS3)	23.49	174	612932	24.591	ng	0.00
Spiked Amount	25.000		Recovery	=	98.36%	✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.85	42	22820	0.693	ng	94
3) Dichlorodifluoromethan...	5.00	85	3541	0.075	ng	# 89
4) Chloromethane	5.34	50	14047	0.320	ng	95
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	6.09	54	6405	0.209	ng	92
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.27	45	3313258	160.326	ng	
11) Acetonitrile	7.56	41	642049	12.731	ng	98
12) Acrolein	7.80	56	4962	0.368	ng	93
13) Acetone	8.02	58	114967	5.467	ng	# 48
14) Trichlorofluoromethane	8.28	101	1849	N.D.		
15) 2-Propanol (Isopropanol)	8.48	45	725035	12.589	ng	93
16) Acrylonitrile	8.84	53	1033	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.49	59	9849	0.168	ng	# 67
19) Methylene Chloride	9.53	84	4116	0.157	ng	84
20) 3-Chloro-1-propene (Al...	9.72	41	348	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.93	76	8328	0.090	ng	83
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	11.58	86	2848	0.625	ng	# 1
27) 2-Butanone (MEK)	11.93	72	4853	0.331	ng	# 12
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.93	61	6000	0.631	ng	97
31) n-Hexane	12.92	57	39607	0.855	ng	<b>227</b>

*Em 8/28/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:58:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.01	83	497	N.D.		
34) Tetrahydrofuran (THF)	13.65	72	351	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	11606	0.391	ng	95
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.17	56	6128	0.250	ng	91
41) Benzene	15.22	78	82891	0.813	ng	98
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	5145	0.130	ng	# 77
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	16.78	130	5272	0.204	ng	98
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.86	57	24184	0.206	ng	95
50) Methyl Methacrylate	17.20	100	2376	0.233	ng	# 1
51) n-Heptane	17.20	71	8626	0.318	ng	88
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	19.16	97	170732	7.841	ng	# 8
58) Toluene	19.28	91	284748	2.669	ng	100
59) 2-Hexanone	19.59	43	2496	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.43	43	7934	0.131	ng	87
63) n-Octane	20.56	57	3446	0.145	ng	87
64) Tetrachloroethene	20.76	166	3721	0.141	ng	88
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	72516	0.630	ng	98
67) m- & p-Xylenes	22.30	91	208037	2.278	ng	98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	18233	0.270	ng	99
70) o-Xylene	22.92	91	68852	0.749	ng	97
71) n-Nonane	23.17	43	8971	0.162	ng	87
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.67	105	4571	N.D.		
75) alpha-Pinene	24.15	93	130430	2.219	ng	88
76) n-Propylbenzene	24.28	91	13846	0.094	ng	98
77) 3-Ethyltoluene	24.40	105	38460	0.345	ng	96
78) 4-Ethyltoluene	24.46	105	21759	0.194	ng	97
79) 1,3,5-Trimethylbenzene	24.55	105	15004	0.162	ng	92

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 27 14:58:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

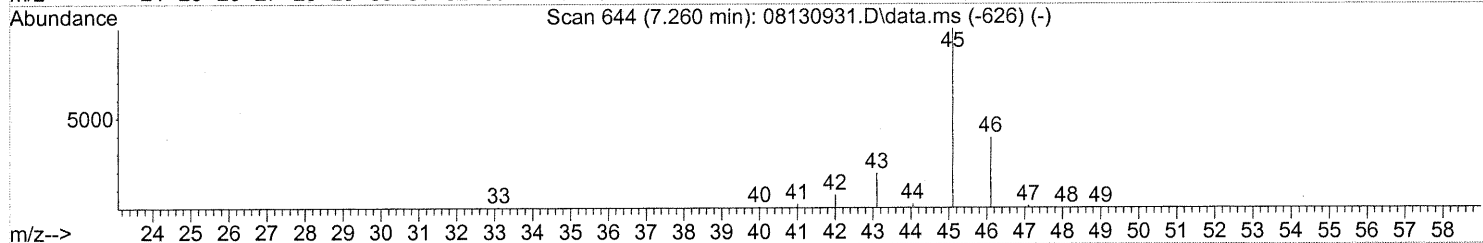
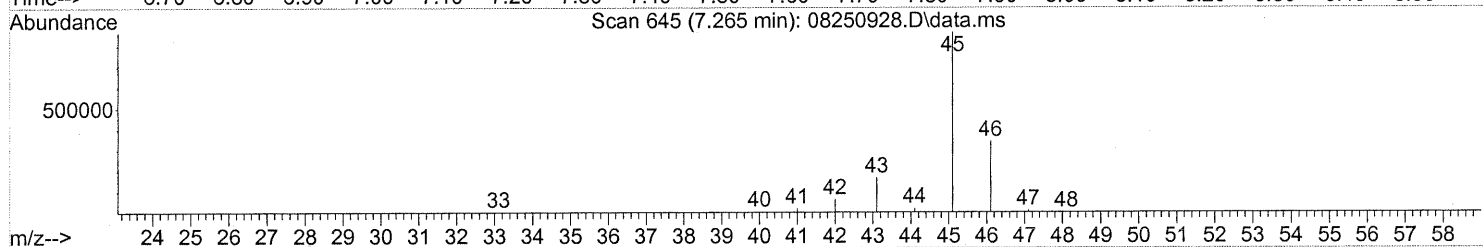
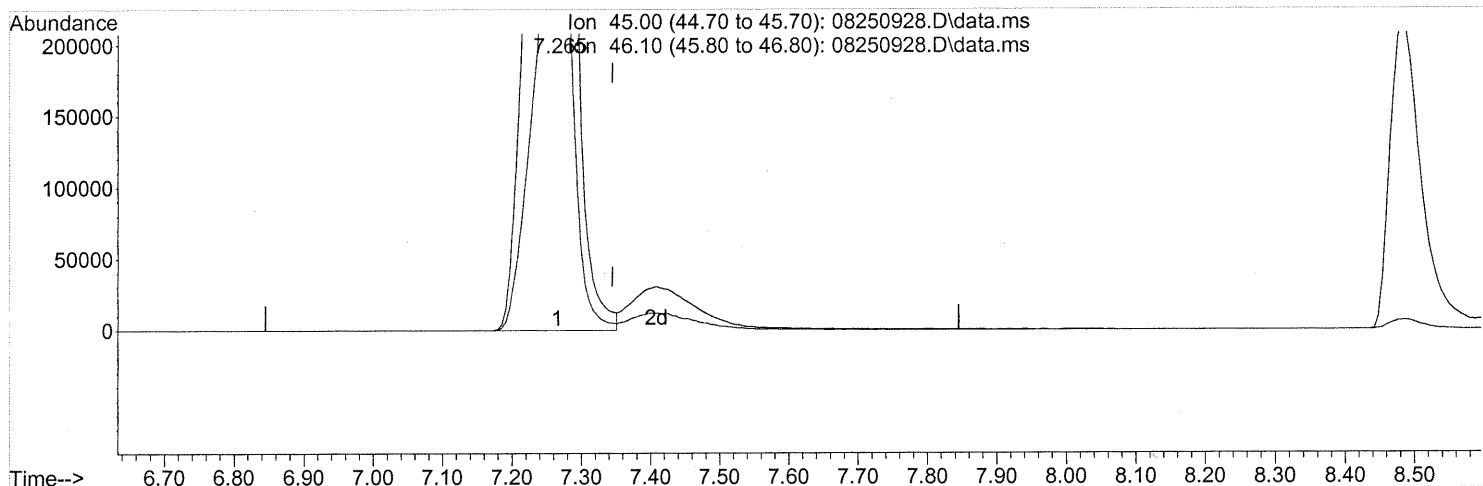
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	115	N.D.		
81) 2-Ethyltoluene	24.79	105	12915	0.112	ng	92
82) 1,2,4-Trimethylbenzene	25.05	105	51154	0.519	ng	90
83) n-Decane	25.15	57	10321	0.180	ng	93
84) Benzyl Chloride	25.33	91	960	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	117	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	117	N.D.		
87) sec-Butylbenzene	25.38	105	1021	N.D.		
88) 4-Isopropyltoluene (p-...	25.57	119	11168	0.090	ng	93
89) 1,2,3-Trimethylbenzene	25.57	105	11860	0.119	ng	96
90) 1,2-Dichlorobenzene	25.33	146	117	N.D.		
91) d-Limonene	25.74	68	40401	1.003	ng	94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	7722	0.130	ng	92
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	6992	0.053	ng	85
96) n-Dodecane	27.89	57	4675	0.071	ng	93
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.53	55	3589	0.107	ng	92
99) tert-Butylbenzene	25.05	119	6246	0.064	ng	# 54
100) n-Butylbenzene	26.06	91	3421	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:15 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250928.D\data.ms

(10) Ethanol (T)  
 7.265min (-0.080) 150.35ng  
 response 3107002

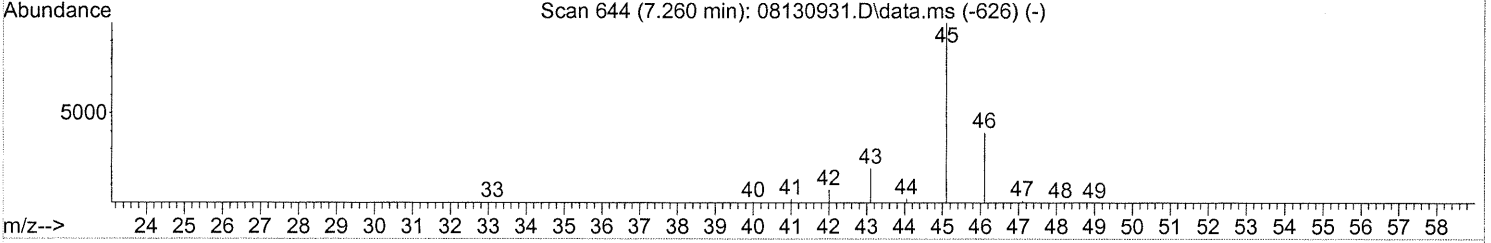
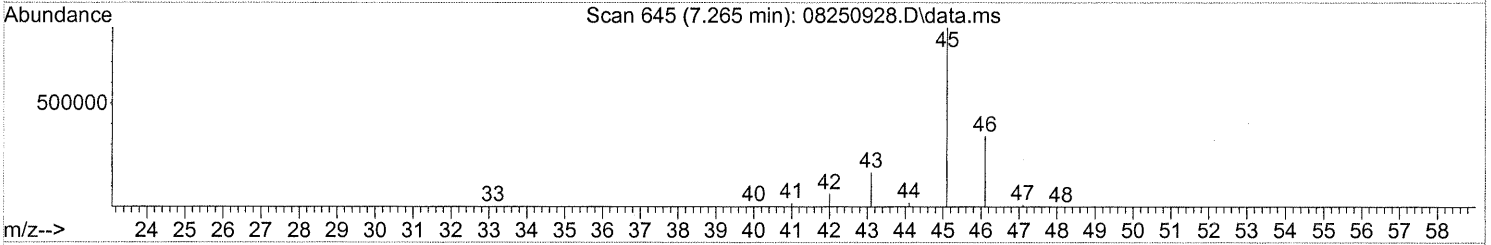
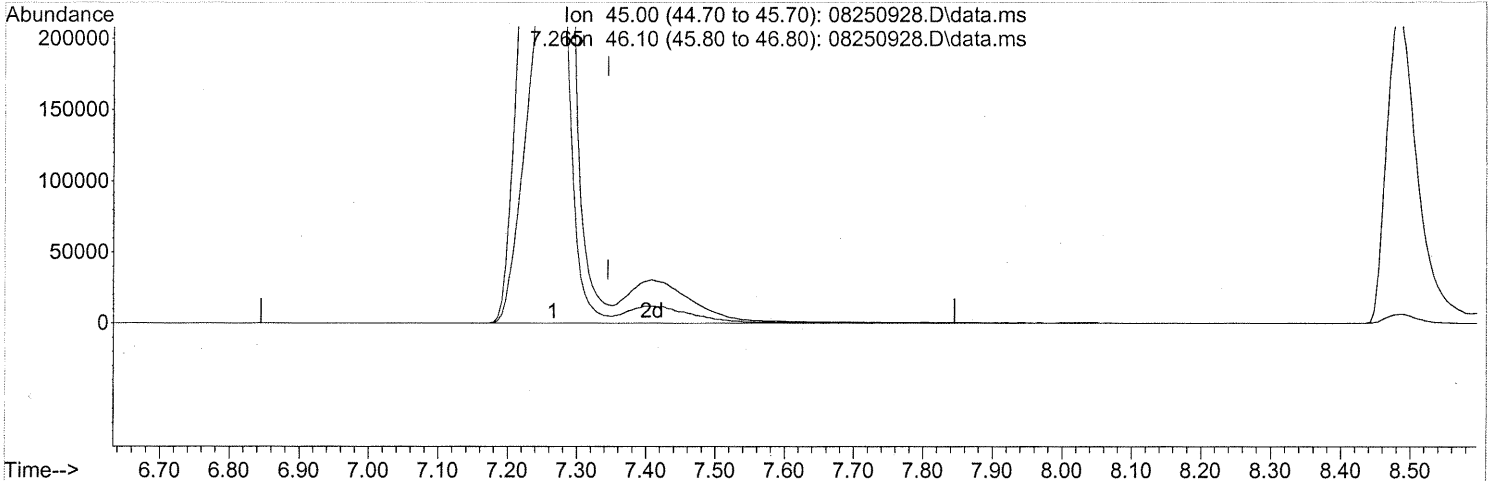
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.25
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:15 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250928.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 160.33ng m

response 3313258

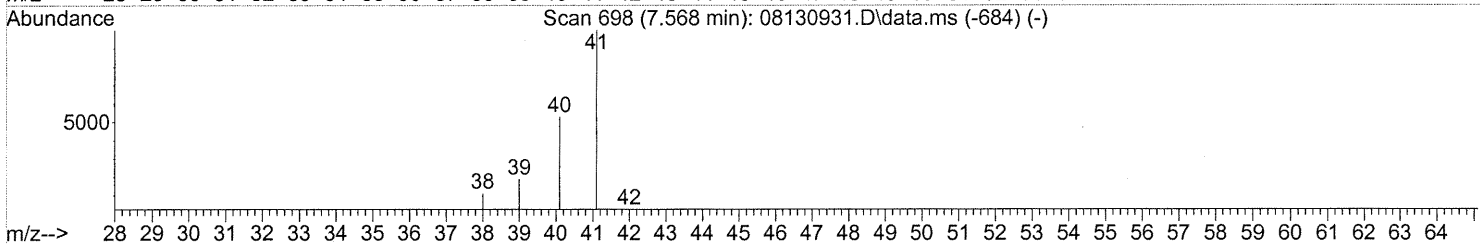
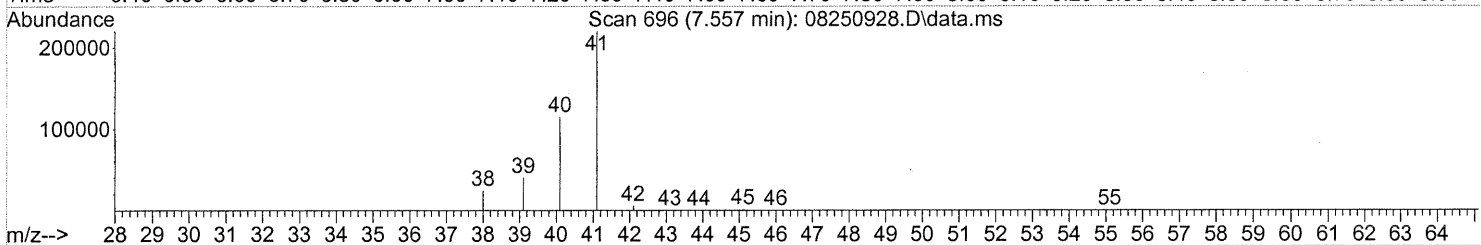
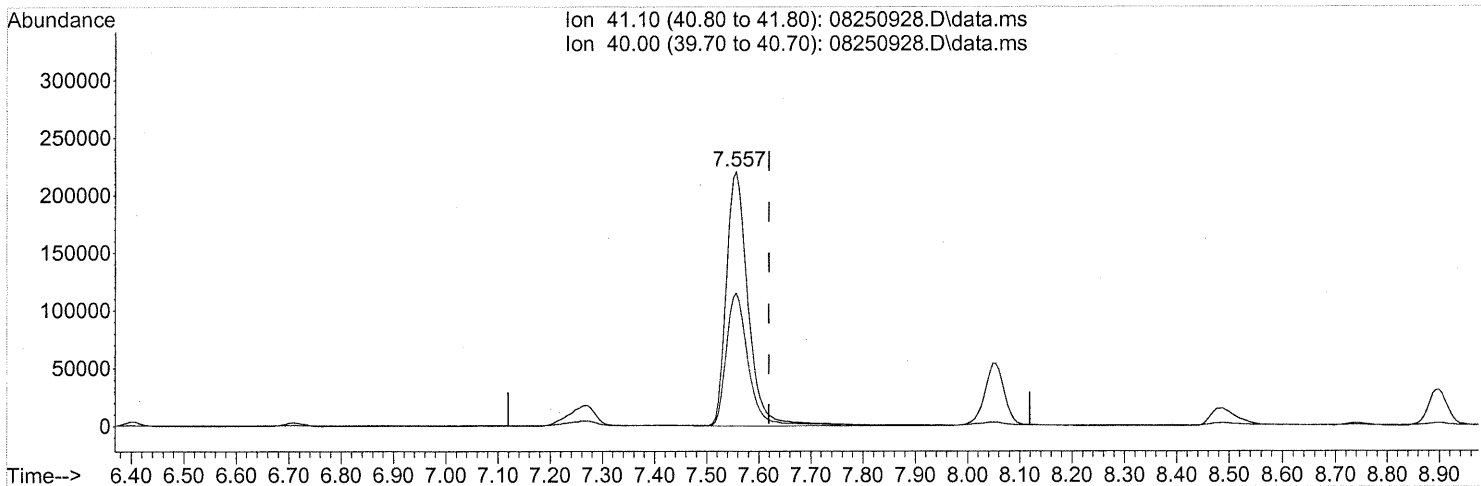
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.81
0.00	0.00	0.00
0.00	0.00	0.00

*PT → IC*  
*Em 8/28/09*  
*KE 8/21/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250928.D  
 Acq On : 25 Aug 2009 22:03  
 Operator : EM  
 Sample : P0902857-005 dil (50ml)  
 Misc : Env. H & E 100461  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 07:22:15 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250928.D\data.ms

(11) Acetonitrile (T)

7.557min (-0.063) 12.73ng

response 642049

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	51.59
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:** 100462

**Client Project ID:** 16512

CAS Project ID: P0902857

CAS Sample ID: P0902857-006

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00824

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -2.9      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	
115-07-1	Propene	79	1.5	46	0.90	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.8	1.5	0.57	0.31	
74-87-3	Chloromethane	9.6	0.31	4.7	0.15	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.5	ND	0.22	
75-01-4	Vinyl Chloride	ND	0.31	ND	0.12	
106-99-0	1,3-Butadiene	8.0	0.31	3.6	0.14	
74-83-9	Bromomethane	ND	0.31	ND	0.079	
75-00-3	Chloroethane	ND	0.31	ND	0.12	
64-17-5	Ethanol	5,100	15	2,700	8.2	D
75-05-8	Acetonitrile	400	1.5	240	0.92	D
107-02-8	Acrolein	14	1.5	6.1	0.67	
67-64-1	Acetone	200	15	84	6.5	
75-69-4	Trichlorofluoromethane	1.8	0.31	0.33	0.055	
67-63-0	2-Propanol (Isopropyl Alcohol)	340	1.5	140	0.63	
107-13-1	Acrylonitrile	2.3	1.5	1.1	0.71	
75-35-4	1,1-Dichloroethene	0.40	0.31	0.10	0.078	
75-09-2	Methylene Chloride	4.7	1.5	1.4	0.44	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.31	ND	0.098	
76-13-1	Trichlorotrifluoroethane	0.50	0.31	0.065	0.040	
75-15-0	Carbon Disulfide	2.7	1.5	0.86	0.49	
156-60-5	trans-1,2-Dichloroethene	ND	0.31	ND	0.078	
75-34-3	1,1-Dichloroethane	ND	0.31	ND	0.076	
1634-04-4	Methyl tert-Butyl Ether	ND	0.31	ND	0.085	
108-05-4	Vinyl Acetate	16	15	4.6	4.4	
78-93-3	2-Butanone (MEK)	18	1.5	6.0	0.52	

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: \_\_\_\_\_

9/1/09

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

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

**Client Sample ID:** 100462

**Client Project ID:** 16512

CAS Project ID: P0902857

CAS Sample ID: P0902857-006

Test Code: EPA TO-15

Date Collected: 8/18/09

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Date Received: 8/19/09

Analyst: Elsa Moctezuma

Date Analyzed: 8/25/09

Sampling Media: 6.0 L Summa Canister

Volume(s) Analyzed: 0.50 Liter(s)

Test Notes:

0.050 Liter(s)

Container ID: AC00824

Initial Pressure (psig): -2.9


Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

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	0.31	ND	0.078	
141-78-6	<b>Ethyl Acetate</b>	<b>33</b>	3.1	<b>9.2</b>	0.86	
110-54-3	<b>n-Hexane</b>	<b>31</b>	1.5	<b>8.8</b>	0.44	
67-66-3	<b>Chloroform</b>	<b>0.82</b>	0.31	<b>0.17</b>	0.063	
109-99-9	<b>Tetrahydrofuran (THF)</b>	<b>2.1</b>	1.5	<b>0.70</b>	0.52	
107-06-2	<b>1,2-Dichloroethane</b>	<b>14</b>	0.31	<b>3.4</b>	0.076	
71-55-6	1,1,1-Trichloroethane	ND	0.31	ND	0.056	
71-43-2	<b>Benzene</b>	<b>28</b>	0.31	<b>8.8</b>	0.096	
56-23-5	<b>Carbon Tetrachloride</b>	<b>0.48</b>	0.31	<b>0.076</b>	0.049	
110-82-7	<b>Cyclohexane</b>	<b>4.6</b>	1.5	<b>1.3</b>	0.45	
78-87-5	1,2-Dichloropropane	ND	0.31	ND	0.067	
75-27-4	Bromodichloromethane	ND	0.31	ND	0.046	
79-01-6	<b>Trichloroethene</b>	<b>7.5</b>	0.31	<b>1.4</b>	0.057	
123-91-1	1,4-Dioxane	ND	1.5	ND	0.43	
80-62-6	Methyl Methacrylate	ND	3.1	ND	0.75	
142-82-5	<b>n-Heptane</b>	<b>12</b>	1.5	<b>2.9</b>	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ND	0.34	
108-10-1	4-Methyl-2-pentanone	ND	1.5	ND	0.38	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ND	0.34	
79-00-5	1,1,2-Trichloroethane	ND	0.31	ND	0.056	
108-88-3	<b>Toluene</b>	<b>94</b>	1.5	<b>25</b>	0.41	
591-78-6	<b>2-Hexanone</b>	<b>2.0</b>	1.5	<b>0.48</b>	0.38	
124-48-1	Dibromochloromethane	ND	0.31	ND	0.036	
106-93-4	1,2-Dibromoethane	ND	0.31	ND	0.040	
123-86-4	<b>n-Butyl Acetate</b>	<b>5.7</b>	1.5	<b>1.2</b>	0.32	

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: 9/10/09

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**COLUMBIA ANALYTICAL SERVICES, INC.**

RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Environmental Health & Engineering, Inc.  
**Client Sample ID:** 100462  
**Client Project ID:** 16512

CAS Project ID: P0902857  
 CAS Sample ID: P0902857-006

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 Sampling Media: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AC00824

Date Collected: 8/18/09  
 Date Received: 8/19/09  
 Date Analyzed: 8/25/09  
 Volume(s) Analyzed: 0.50 Liter(s)  
 0.050 Liter(s)

Initial Pressure (psig): -2.9      Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

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	5.1	1.5	1.1	0.33	
127-18-4	Tetrachloroethene	4.9	0.31	0.72	0.045	
108-90-7	Chlorobenzene	ND	0.31	ND	0.067	
100-41-4	Ethylbenzene	22	1.5	5.2	0.35	
179601-23-1	m,p-Xylenes	81	1.5	19	0.35	
75-25-2	Bromoform	ND	1.5	ND	0.15	
100-42-5	Styrene	10	1.5	2.4	0.36	
95-47-6	o-Xylene	26	1.5	6.0	0.35	
111-84-2	n-Nonane	5.5	1.5	1.1	0.29	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.31	ND	0.045	
98-82-8	Cumene	ND	1.5	ND	0.31	
80-56-8	alpha-Pinene	79	1.5	14	0.28	
103-65-1	n-Propylbenzene	3.4	1.5	0.68	0.31	
622-96-8	4-Ethyltoluene	6.9	1.5	1.4	0.31	
108-67-8	1,3,5-Trimethylbenzene	5.6	1.5	1.1	0.31	
95-63-6	1,2,4-Trimethylbenzene	19	1.5	3.8	0.31	
100-44-7	Benzyl Chloride	ND	0.31	ND	0.060	
541-73-1	1,3-Dichlorobenzene	ND	0.31	ND	0.051	
106-46-7	1,4-Dichlorobenzene	ND	0.31	ND	0.051	
95-50-1	1,2-Dichlorobenzene	ND	0.31	ND	0.051	
5989-27-5	d-Limonene	37	1.5	6.7	0.28	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.5	ND	0.16	
120-82-1	1,2,4-Trichlorobenzene	ND	1.5	ND	0.21	
91-20-3	Naphthalene	2.0	1.5	0.38	0.29	
87-68-3	Hexachlorobutadiene	ND	1.5	ND	0.14	

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: \_\_\_\_\_

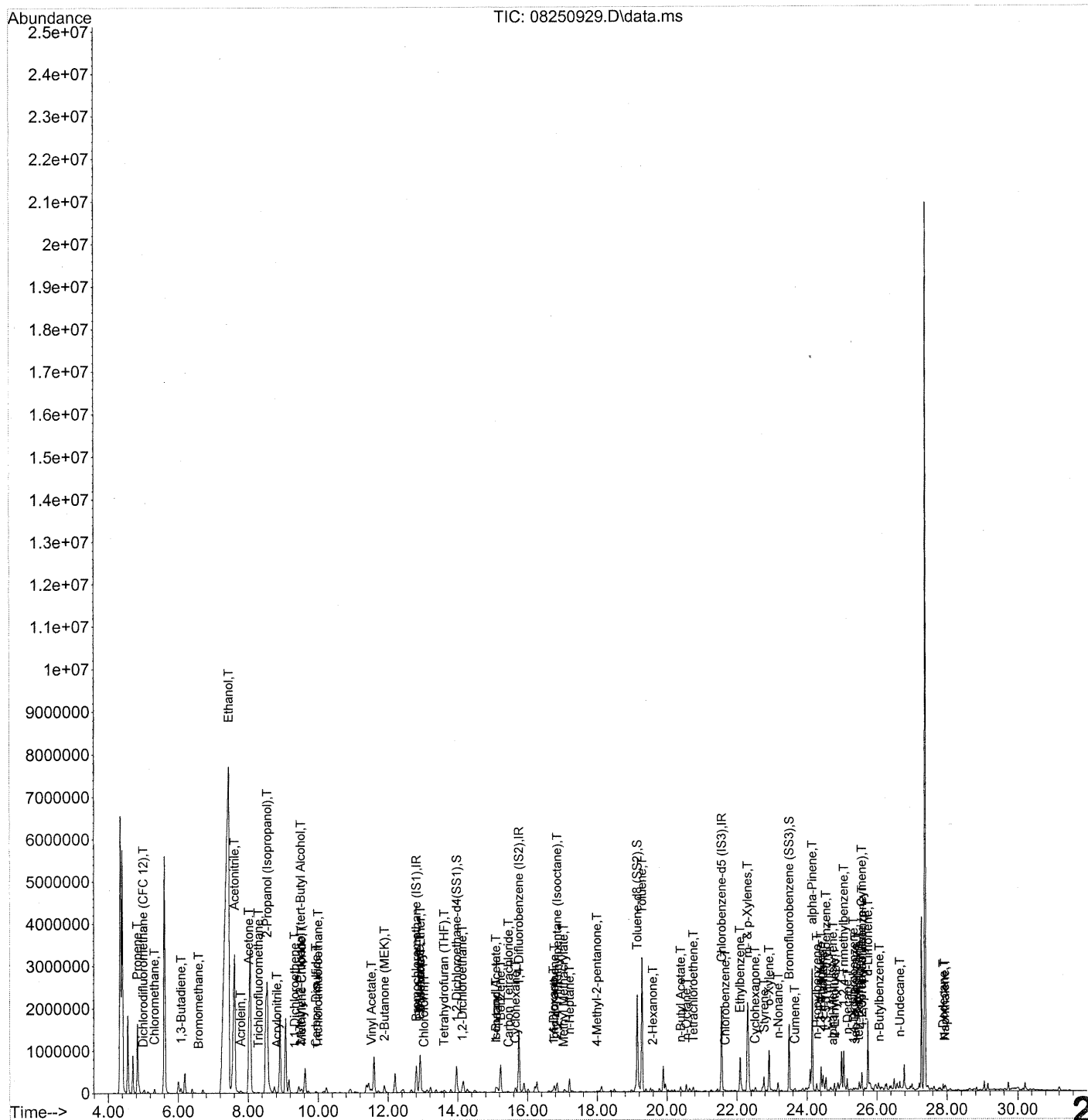
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9/1/09

**235**

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:01:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462 ✓  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:01:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.81	130	345475	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1750672	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	843428	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.97	65	610262	24.982	ng	-0.02 ✓
Spiked Amount	25.000			Recovery =	99.92%	
57) Toluene-d8 (SS2)	19.15	98	2026487	25.274	ng	-0.01 ✓
Spiked Amount	25.000			Recovery =	101.08%	
73) Bromofluorobenzene (SS3)	23.49	174	567010	24.970	ng	0.00 ✓
Spiked Amount	25.000			Recovery =	99.88%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.83	42	772836	25.502	ng	97
3) Dichlorodifluoromethan...	5.00	85	39850	0.921	ng	99
4) Chloromethane	5.33	50	125970	3.124	ng	96
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	131	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.08	54	73233	2.592	ng	98
8) Bromomethane	6.58	94	1161	0.056	ng	90
9) Chloroethane	6.92	64	897	N.D.		
10) Ethanol	7.44	45	36249122	1906.858	ng See Dil	99
11) Acetonitrile	7.61	41	6662963	143.621	ng See Dil	99
12) Acrolein	7.79	56	56510	4.558	ng	98
13) Acetone	8.02	58	1254004	64.824	ng #	49
14) Trichlorofluoromethane	8.29	101	21972	0.594	ng	97
15) 2-Propanol (Isopropanol)	8.54	45	5833108	110.107	ng	91
16) Acrylonitrile	8.82	53	21064	0.750	ng	96
17) 1,1-Dichloroethene	9.33	96	2817	0.130	ng #	84
18) 2-Methyl-2-Propanol (t...	9.50	59	66049	1.228	ng #	68
19) Methylene Chloride	9.53	84	37090	1.537	ng	86
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.	d	
21) Trichlorotrifluoroethane	10.00	151	2681	0.162	ng	95
22) Carbon Disulfide	9.94	76	74024	0.869	ng	99
23) trans-1,2-Dichloroethene	10.93	61	575	N.D.		
24) 1,1-Dichloroethane	11.39	63	1055	N.D.		
25) Methyl tert-Butyl Ether	11.42	73	1917	N.D.		
26) Vinyl Acetate	11.52	86	22105m	5.276	ng	
27) 2-Butanone (MEK)	11.90	72	77314	5.733	ng #	81
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.93	87	5918	0.309	ng #	1
30) Ethyl Acetate	12.90	61	93913	10.739	ng	98
31) n-Hexane	12.93	57	430788	10.105	ng	98

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EM 8/28/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:01:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev (Min)
32) Chloroform	13.02	83	9518	0.267 ng	96
34) Tetrahydrofuran (THF)	13.61	72	9378	0.669 ng #	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	14.13	62	123091	4.508 ng	99
38) 1,1,1-Trichloroethane	14.53	97	127	N.D.	
39) Isopropyl Acetate	15.10	61	808	0.057 ng #	1
40) 1-Butanol	15.10	56	117830	5.194 ng	87
41) Benzene	15.23	78	854824	9.080 ng	98
42) Carbon Tetrachloride	15.46	117	4118	0.156 ng	98
43) Cyclohexane	15.66	84	54728	1.501 ng	87
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. d	
47) Trichloroethene	16.77	130	57969	2.425 ng	100
48) 1,4-Dioxane	16.74	88	1107	0.066 ng #	62
49) 2,2,4-Trimethylpentane...	16.85	57	250567	2.312 ng	97
50) Methyl Methacrylate	17.03	100	994	0.106 ng #	1
51) n-Heptane	17.20	71	96672	3.857 ng	95
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	17.99	58	9325	0.458 ng	89
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	19.28	91	2965198	30.507 ng	100
59) 2-Hexanone	19.59	43	32281	0.639 ng #	63
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	20.39	43	101373	1.839 ng	93
63) n-Octane	20.56	57	35967	1.660 ng	89
64) Tetrachloroethene	20.75	166	38165	1.582 ng	99
65) Chlorobenzene	21.66	112	4573	0.077 ng #	42
66) Ethylbenzene	22.09	91	765986	7.299 ng	98
67) m- & p-Xylenes	22.30	91	2178194	26.182 ng	99
68) Bromoform	22.42	173	132	N.D.	
69) Styrene	22.77	104	204668	3.328 ng	98
70) o-Xylene	22.92	91	706888	8.446 ng	98
71) n-Nonane	23.17	43	90531	1.796 ng	91
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D. d	
74) Cumene	23.65	105	45720	0.421 ng	99
75) alpha-Pinene	24.15	93	1373307	25.650 ng	100
76) n-Propylbenzene	24.28	91	146006	1.089 ng	96
77) 3-Ethyltoluene	24.40	105	394306	3.879 ng	98
78) 4-Ethyltoluene	24.46	105	230273	2.253 ng	98
79) 1,3,5-Trimethylbenzene	24.55	105	154893	1.833 ng	9

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:01:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

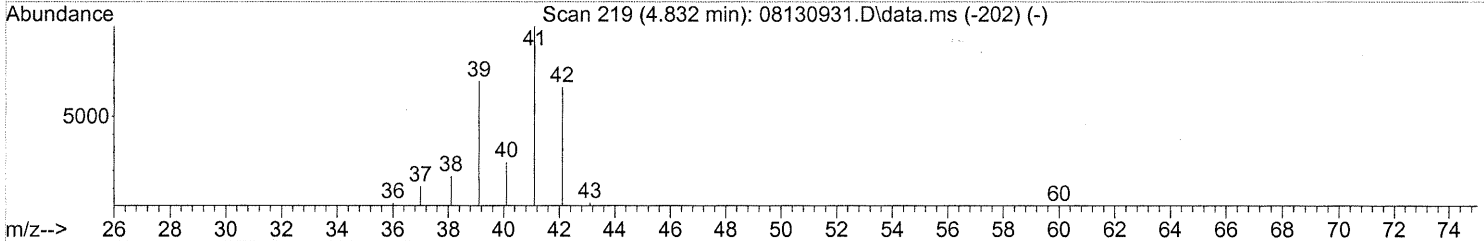
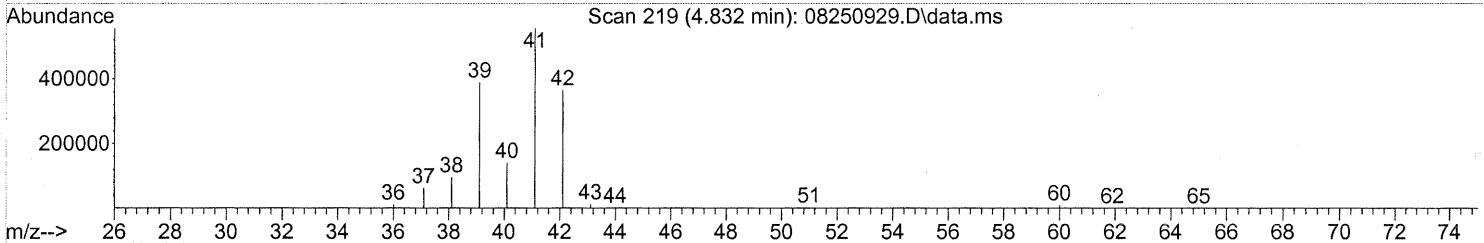
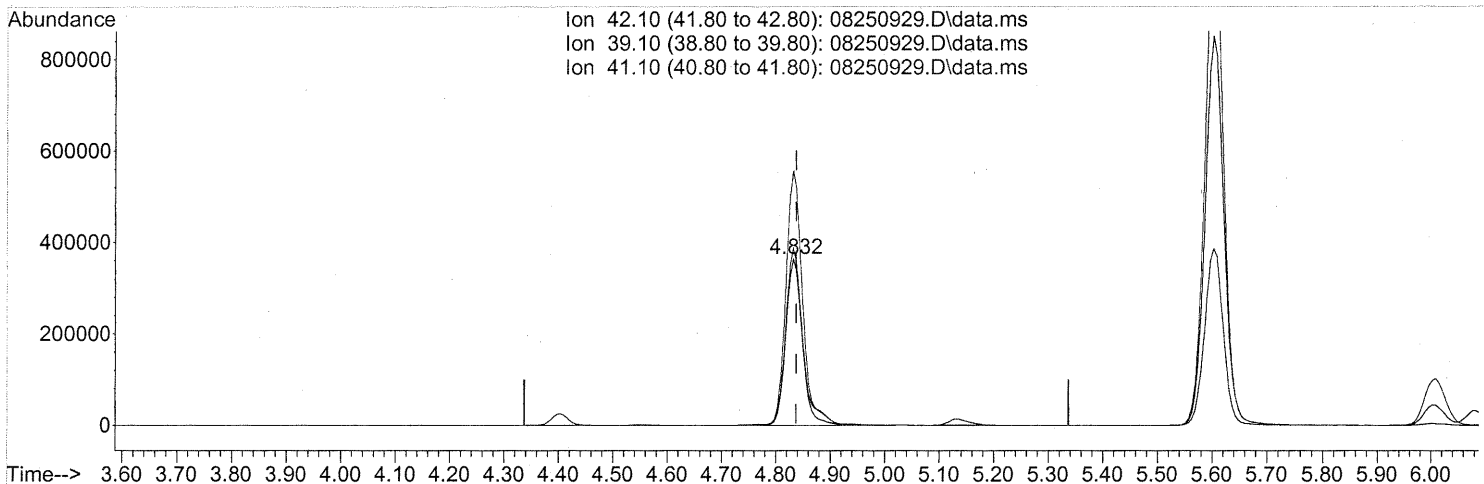
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	4413	0.096	ng	82
81) 2-Ethyltoluene	24.79	105	129927	1.238	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	540553	6.025	ng	89
83) n-Decane	25.15	57	104235	1.996	ng	96
84) Benzyl Chloride	25.23	91	1685	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	d	
86) 1,4-Dichlorobenzene	25.33	146	4801	0.097	ng	99
87) sec-Butylbenzene	25.38	105	14187	0.120	ng	# 80
88) 4-Isopropyltoluene (p-...	25.56	119	117981	1.041	ng	93
89) 1,2,3-Trimethylbenzene	25.57	105	134239	1.480	ng	97
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	d	
91) d-Limonene	25.74	68	442064	12.042	ng	94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	71124	1.318	ng	90
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	77199	0.641	ng	96
96) n-Dodecane	27.89	57	48261	0.799	ng	97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	32762	1.070	ng	# 90
99) tert-Butylbenzene	25.48	119	22233	0.250	ng	93
100) n-Butylbenzene	26.06	91	41612	0.442	ng	# 39

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(2) Propene (T)

4.832min (-0.006) 25.50ng  
 response 772836

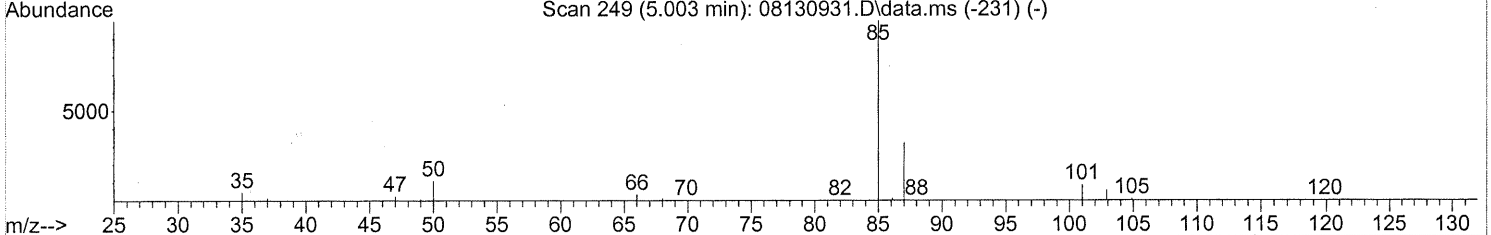
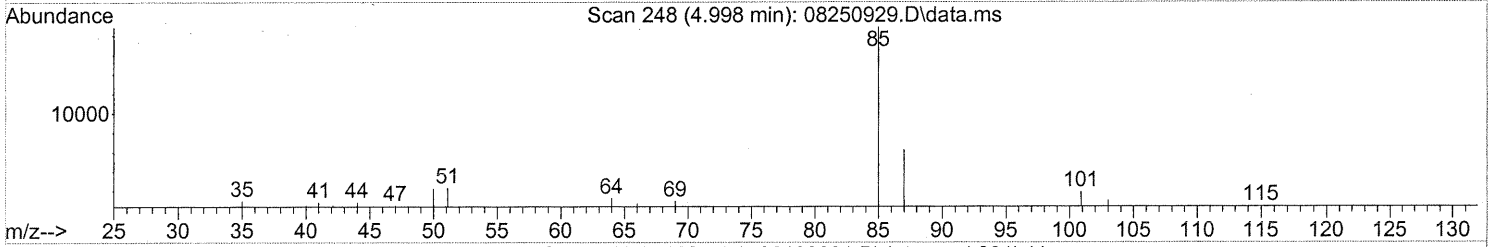
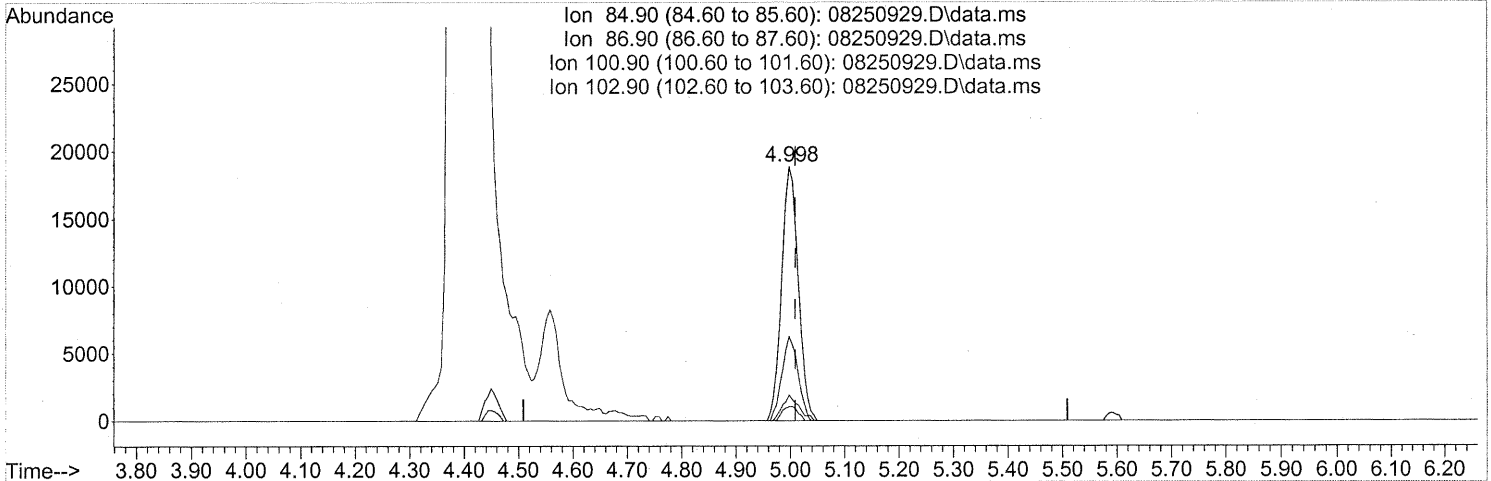
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	111.56
41.10	152.70	155.83
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.998min (-0.011) 0.92ng

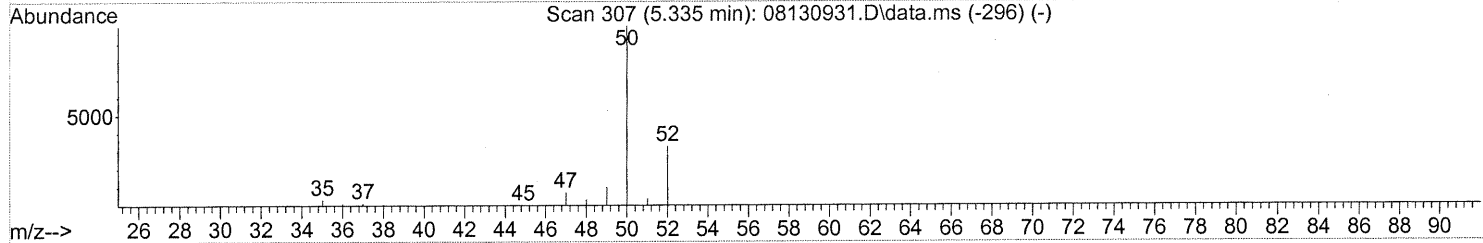
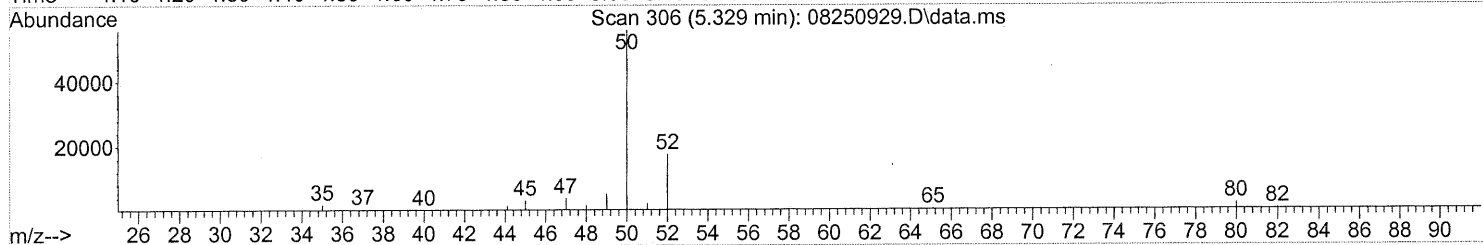
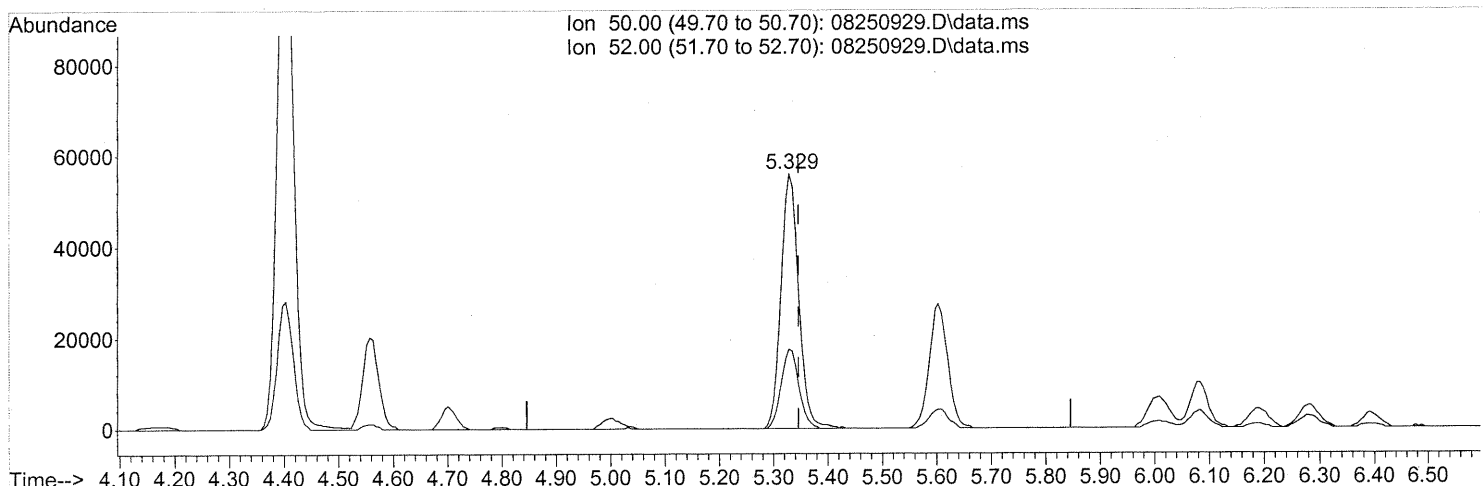
response 39850

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.24
100.90	9.10	9.36
102.90	5.50	5.01

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

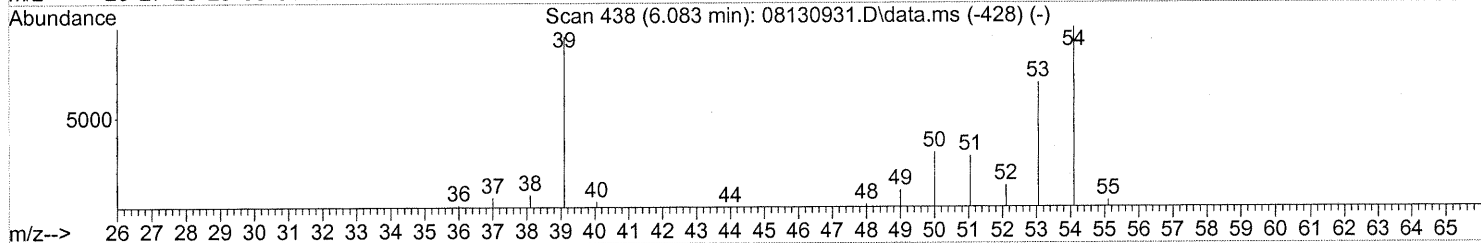
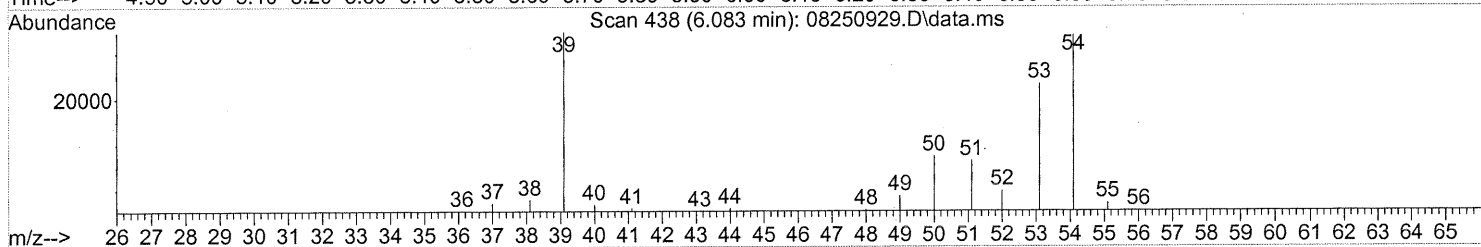
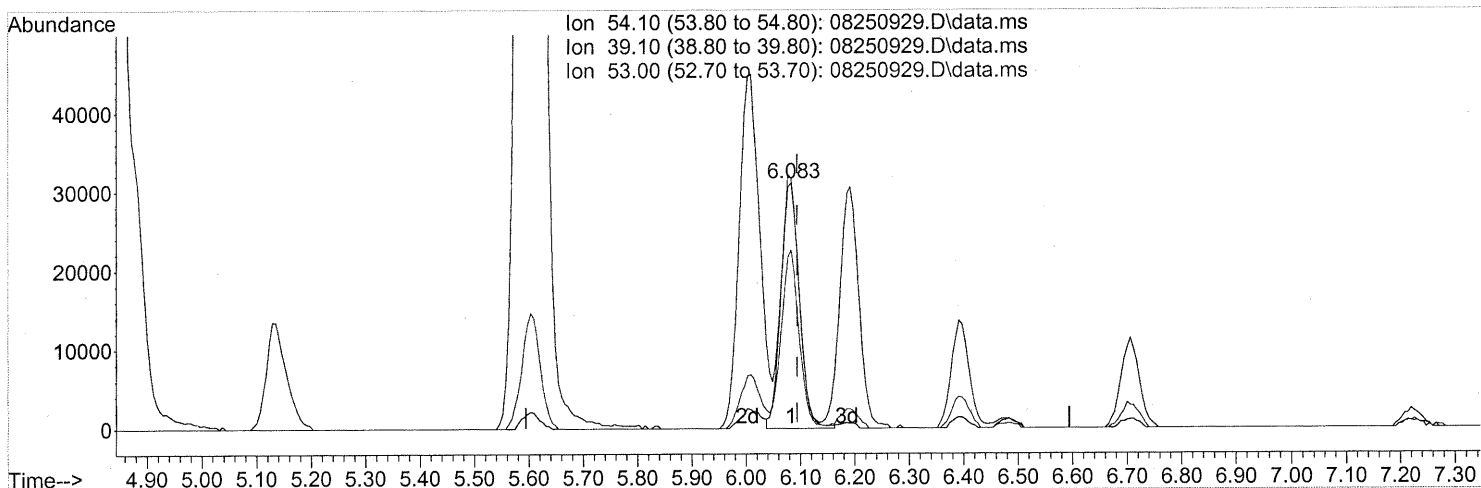
(4) Chloromethane (T)  
 5.329min (-0.017) 3.12ng  
 response 125970

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(7) 1,3-Butadiene (T)

6.083min (-0.011) 2.59ng

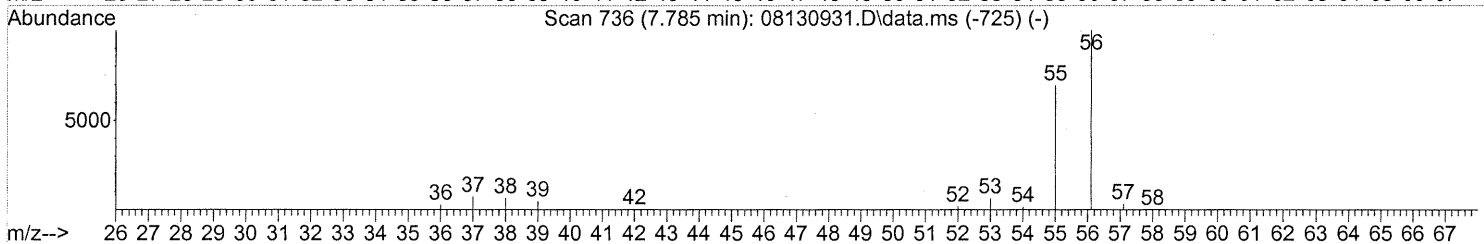
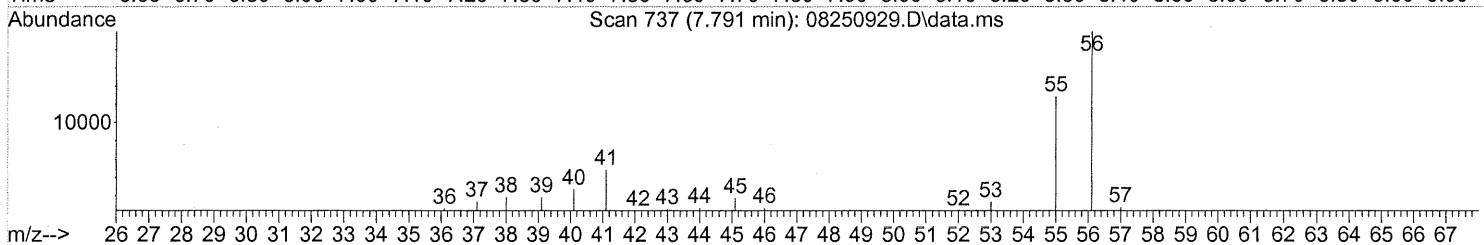
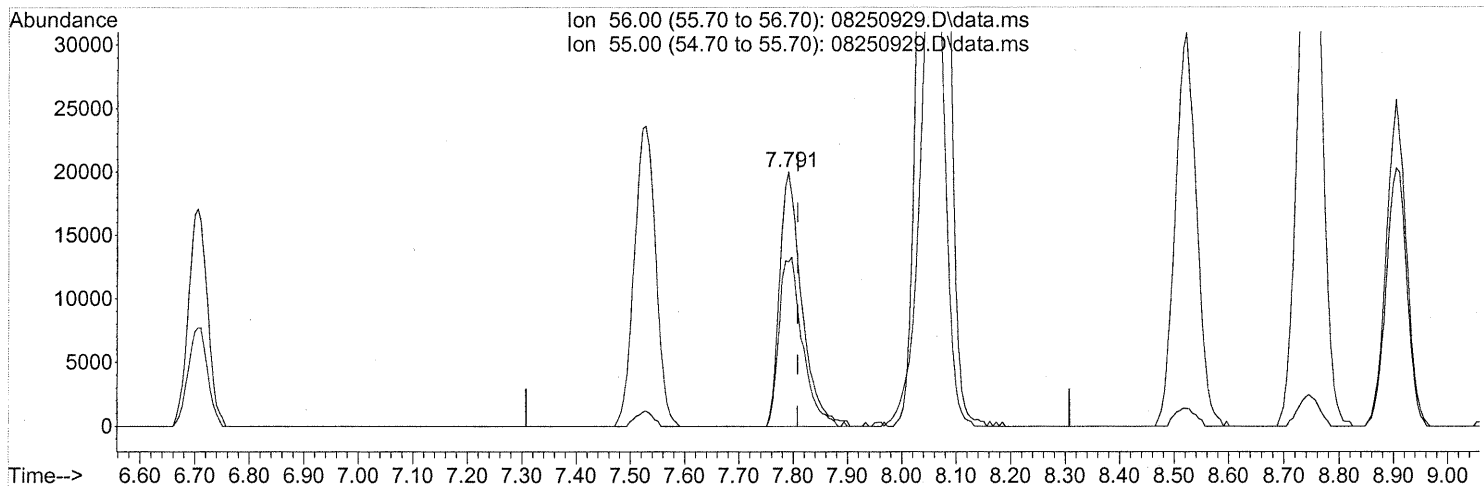
response 73233

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	100.17
53.00	69.80	70.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(12) Acrolein (T)

7.791min (-0.017) 4.56ng

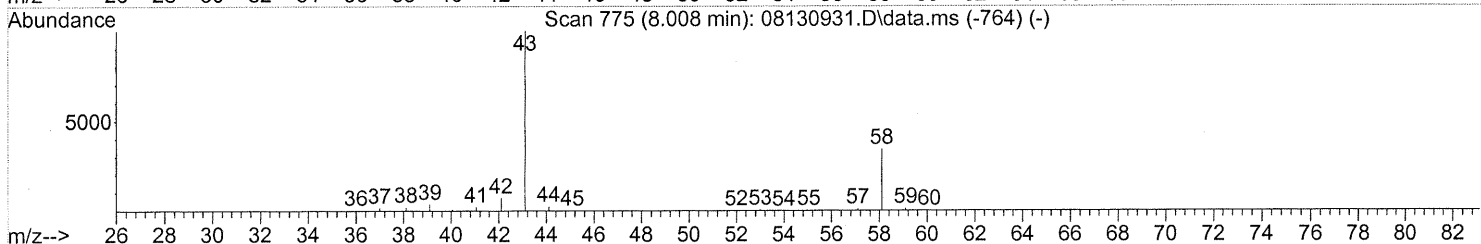
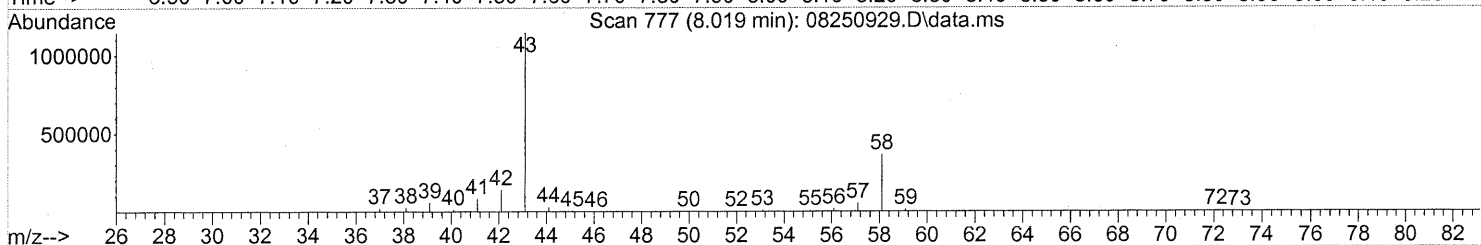
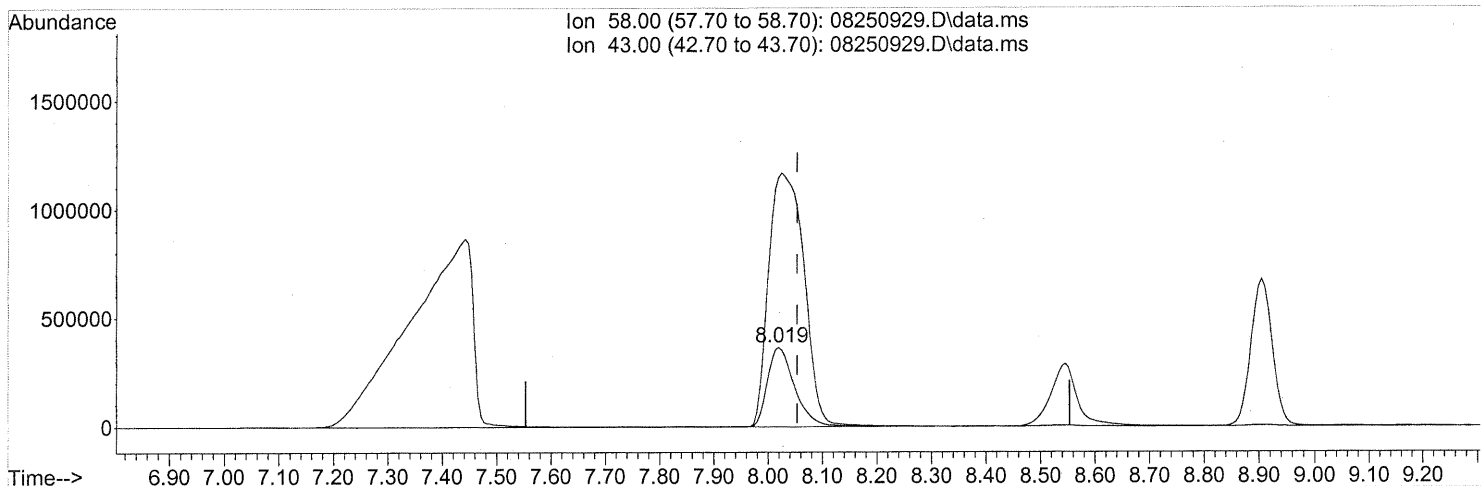
response 56510

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

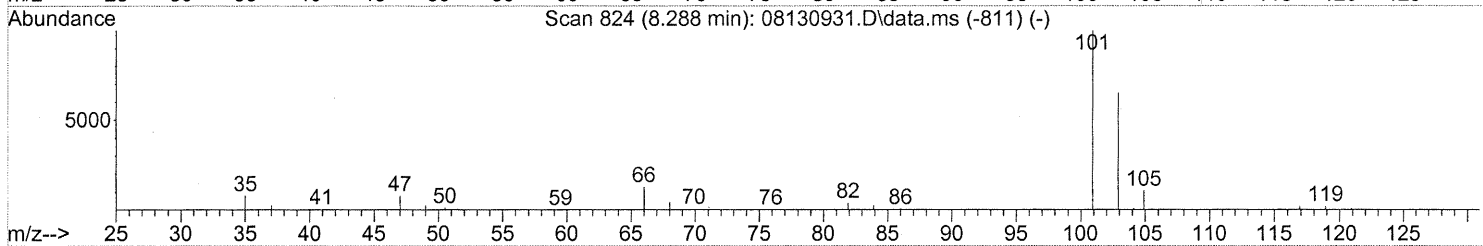
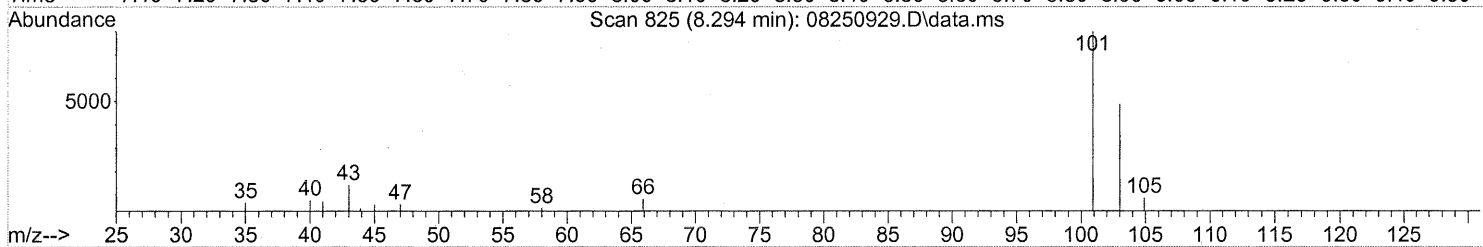
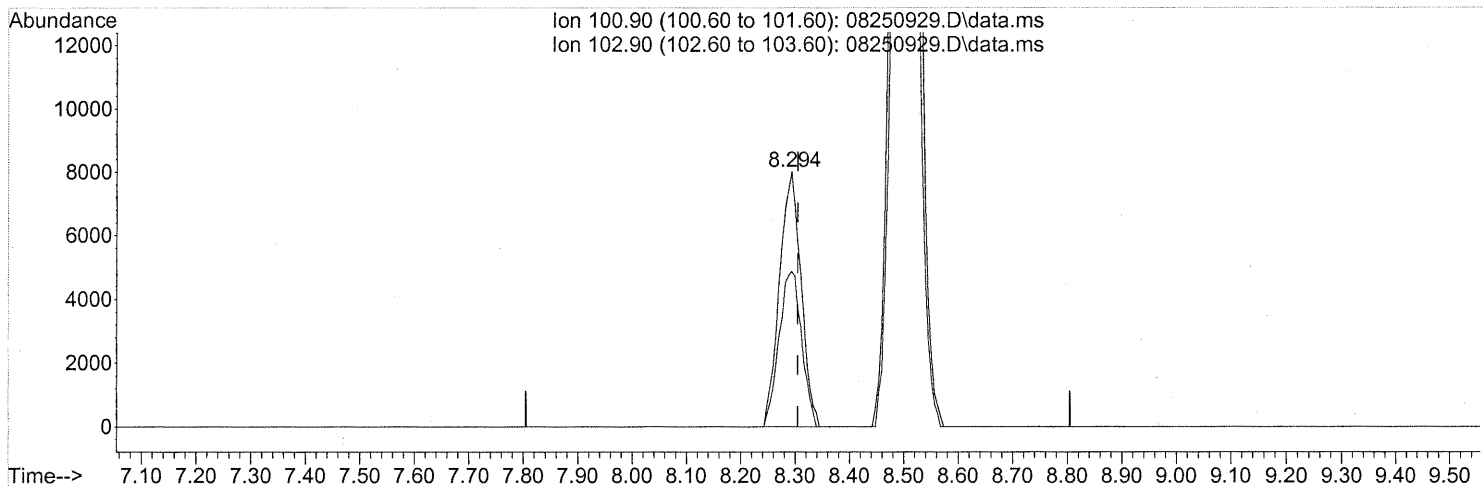
(13) Acetone (T)  
 8.019min (-0.034) 64.82ng  
 response 1254004

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	420.77#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(14) Trichlorofluoromethane (T)

8.294min (-0.011) 0.59ng

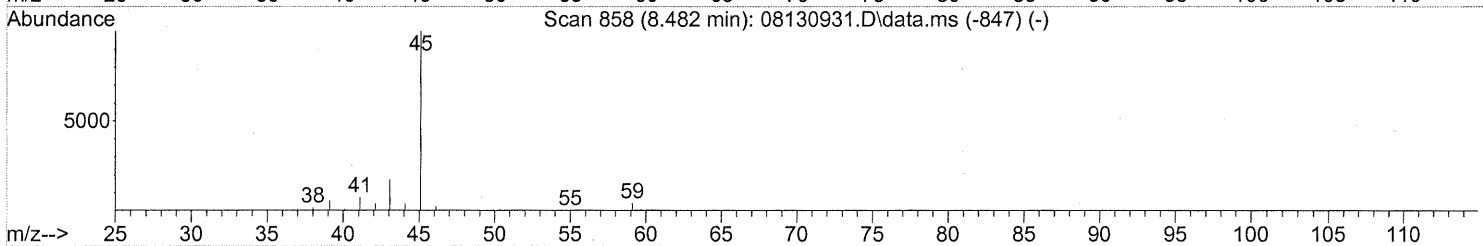
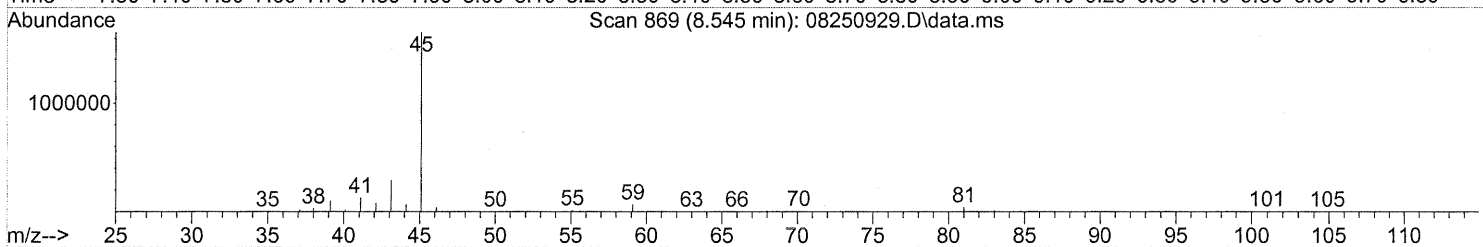
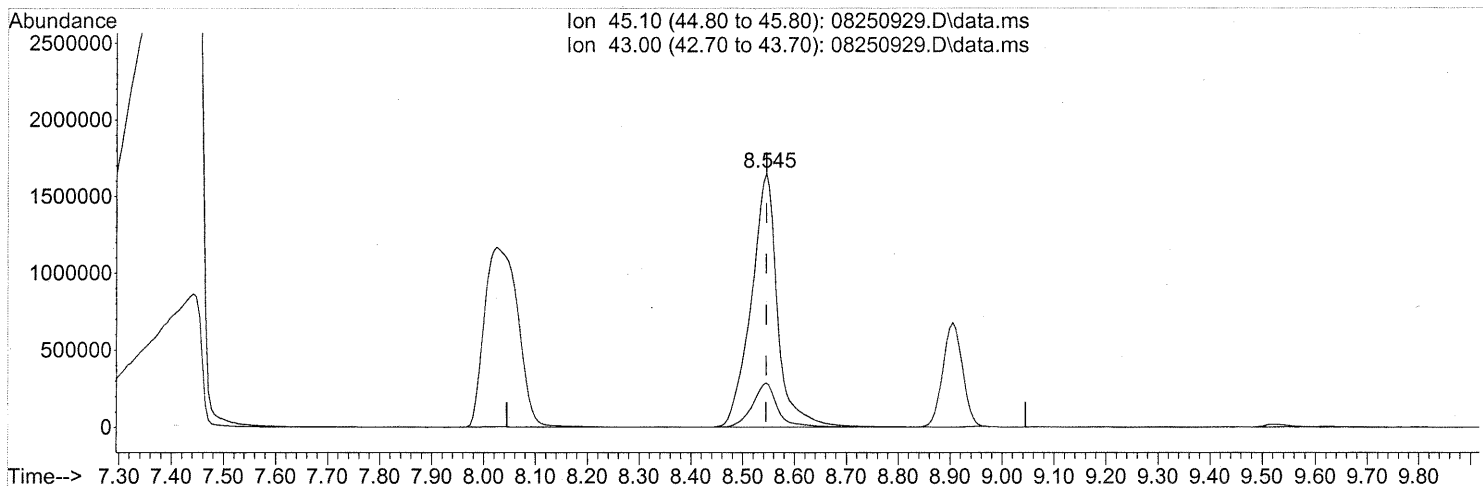
response 21972

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

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

8.545min (-0.000) 110.11ng

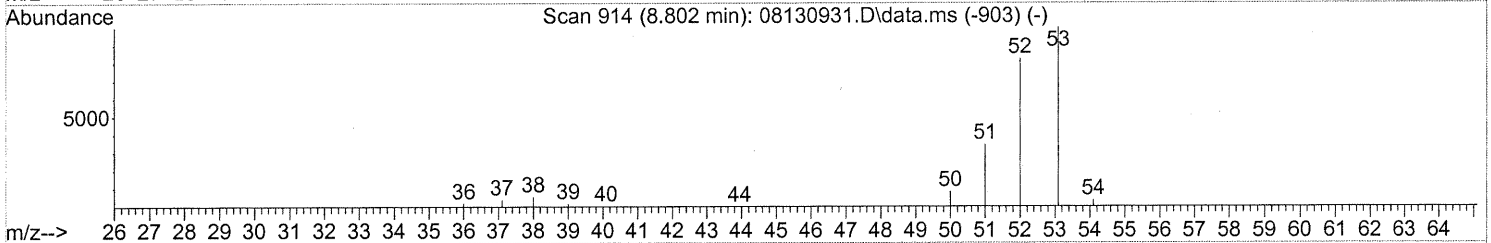
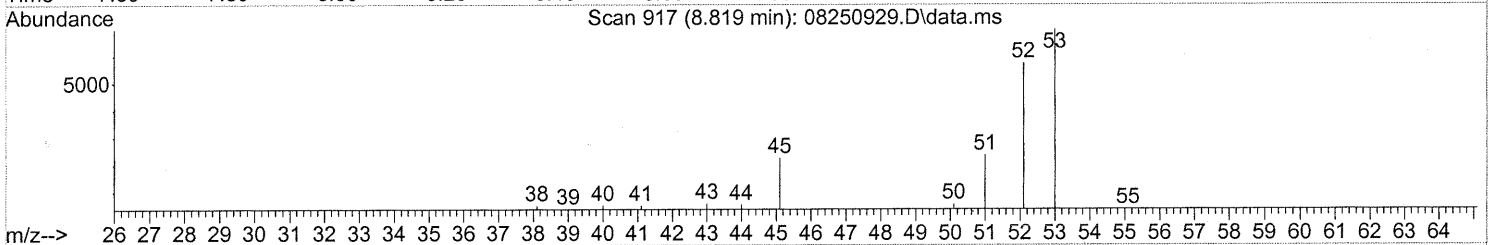
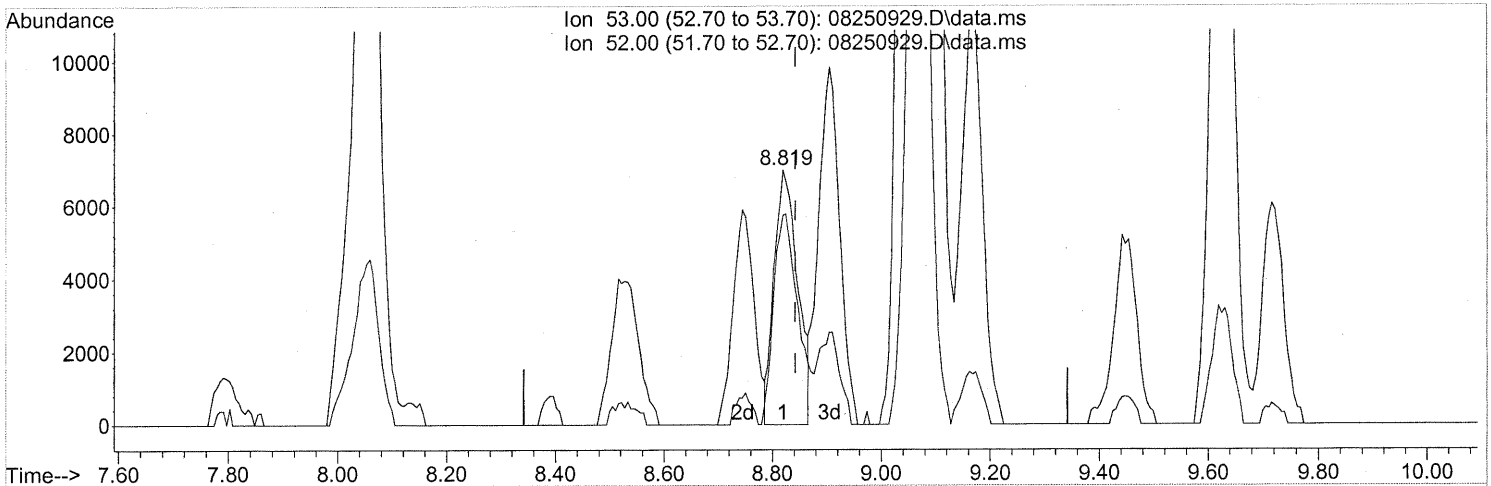
response 5833108

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(16) Acrylonitrile (T)

8.819min (-0.023) 0.75ng

response 21064

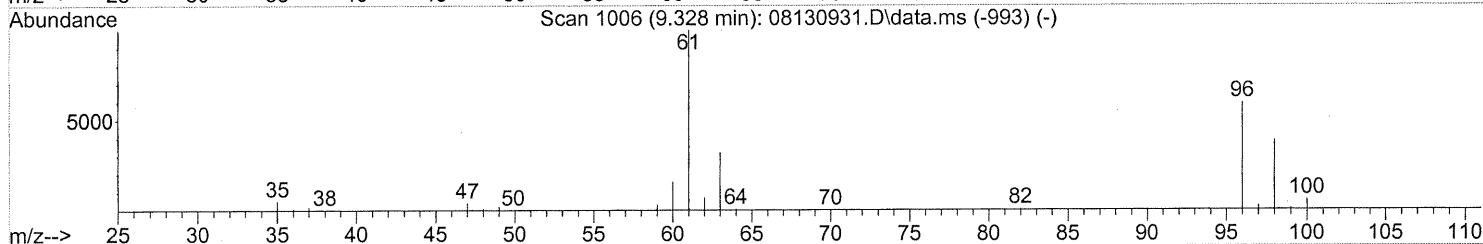
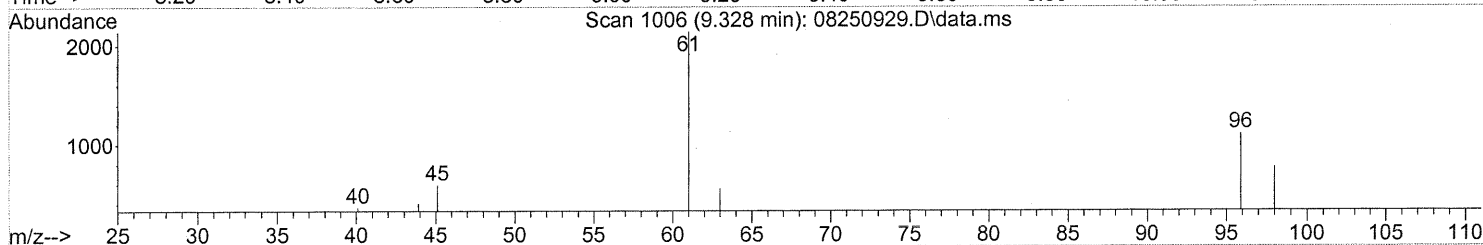
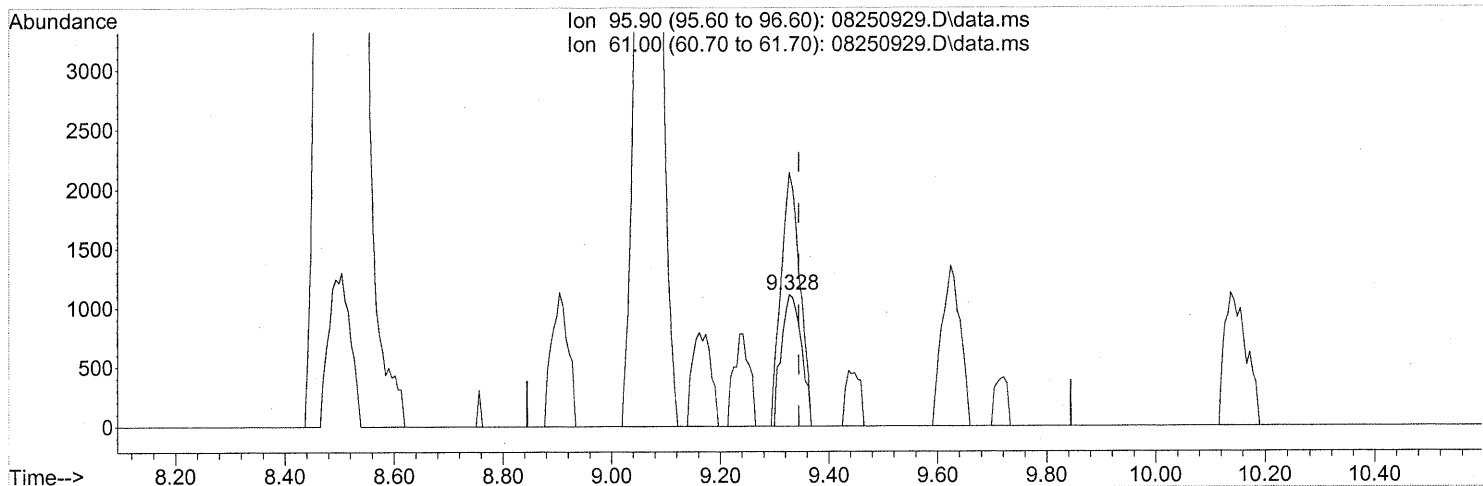
Ion	Exp%	Act%
53.00	100	100
52.00	84.50	87.96
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(17) 1,1-Dichloroethene (T)

9.328min (-0.017) 0.13ng

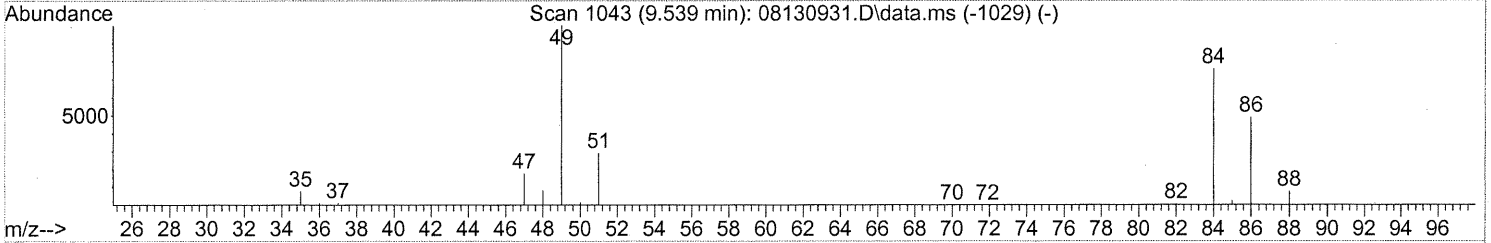
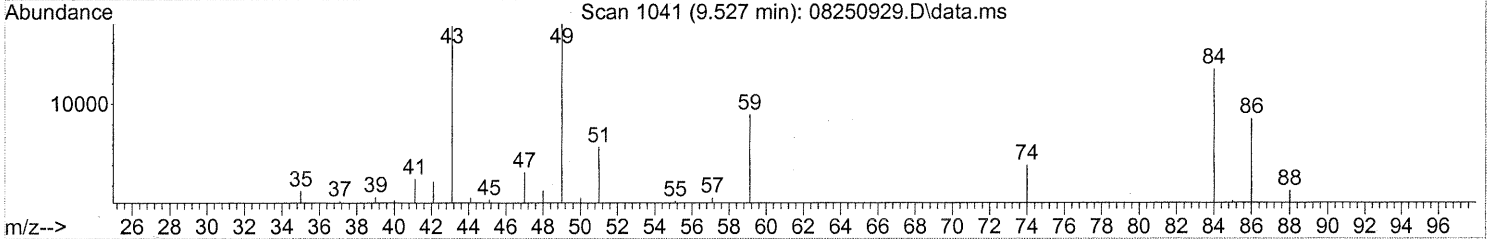
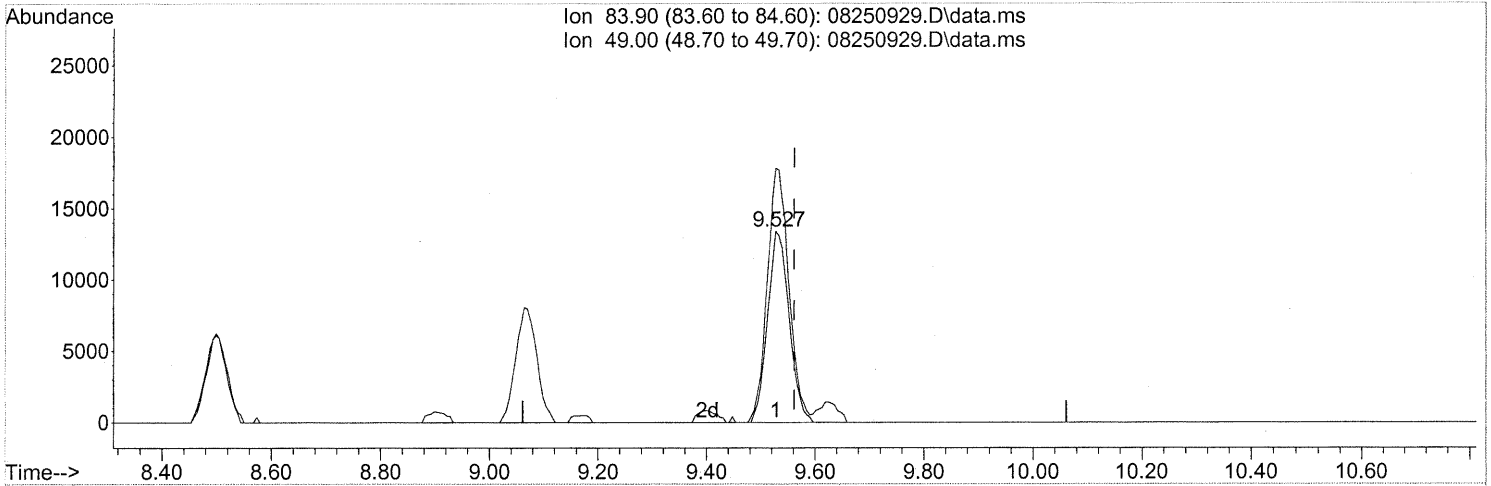
response 2817

Ion	Exp%	Act%
95.90	100	100
61.00	162.50	184.06#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(19) Methylene Chloride (T)

9.527min (-0.034) 1.54ng

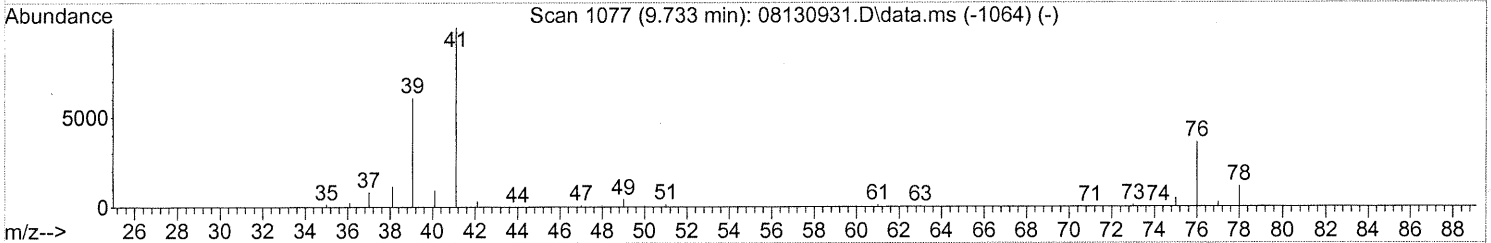
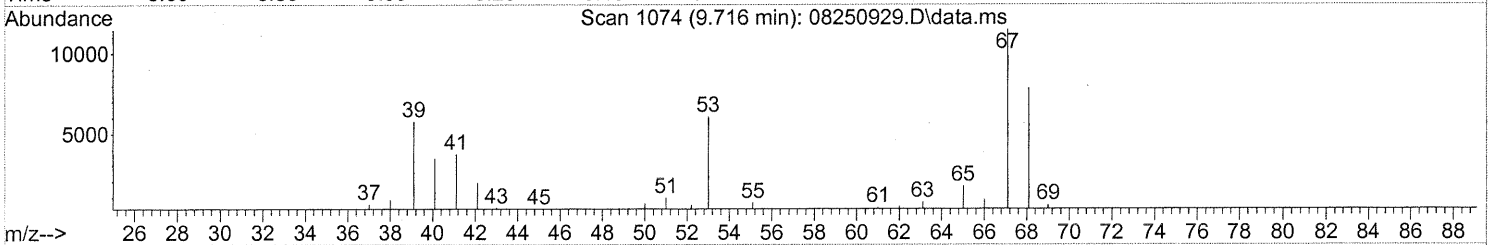
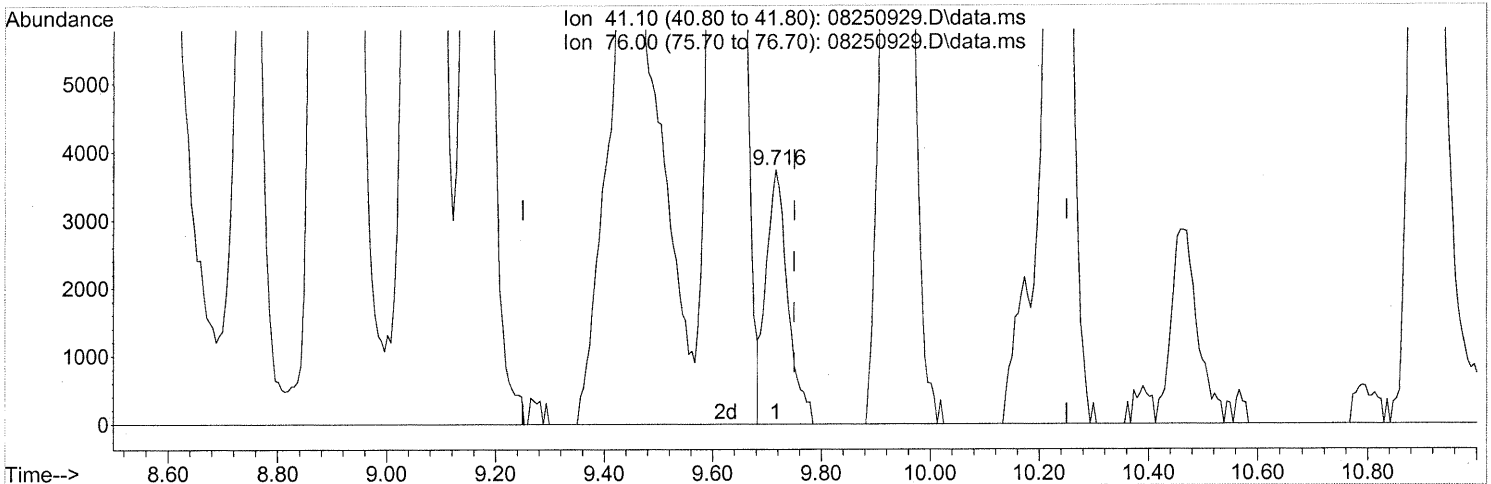
response 37090

Ion	Exp%	Act%
83.90	100	100
49.00	118.80	134.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(20) 3-Chloro-1-propene (Allyl Chloride) (T)

9.716min (-0.034) 0.32ng

response 10419

Ion	Exp%	Act%
41.10	100	100
76.00	41.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

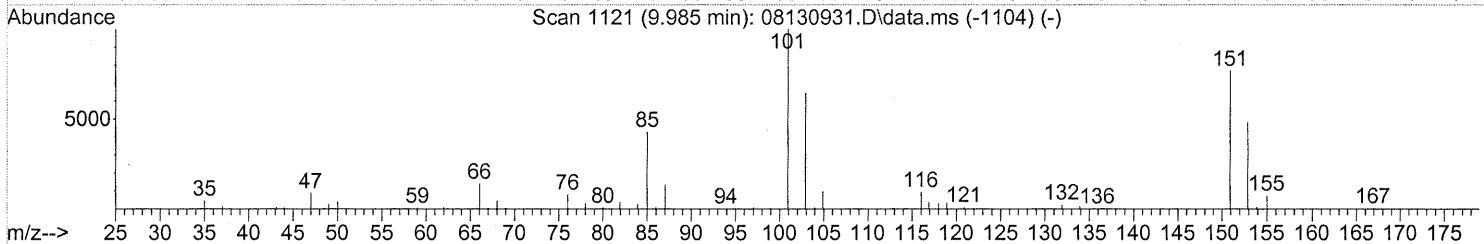
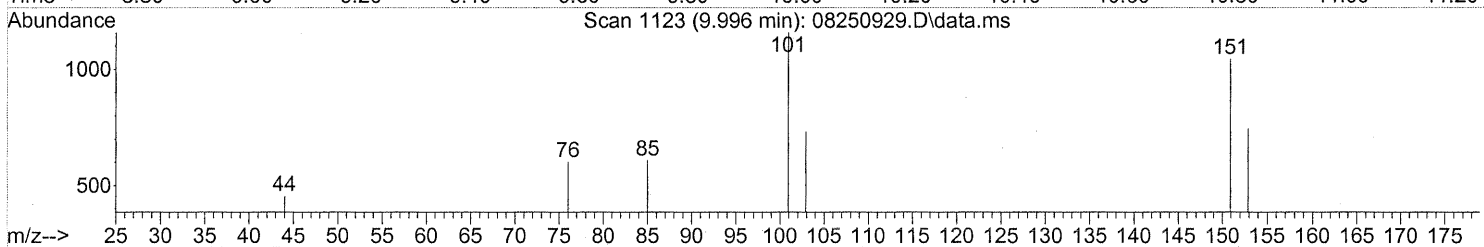
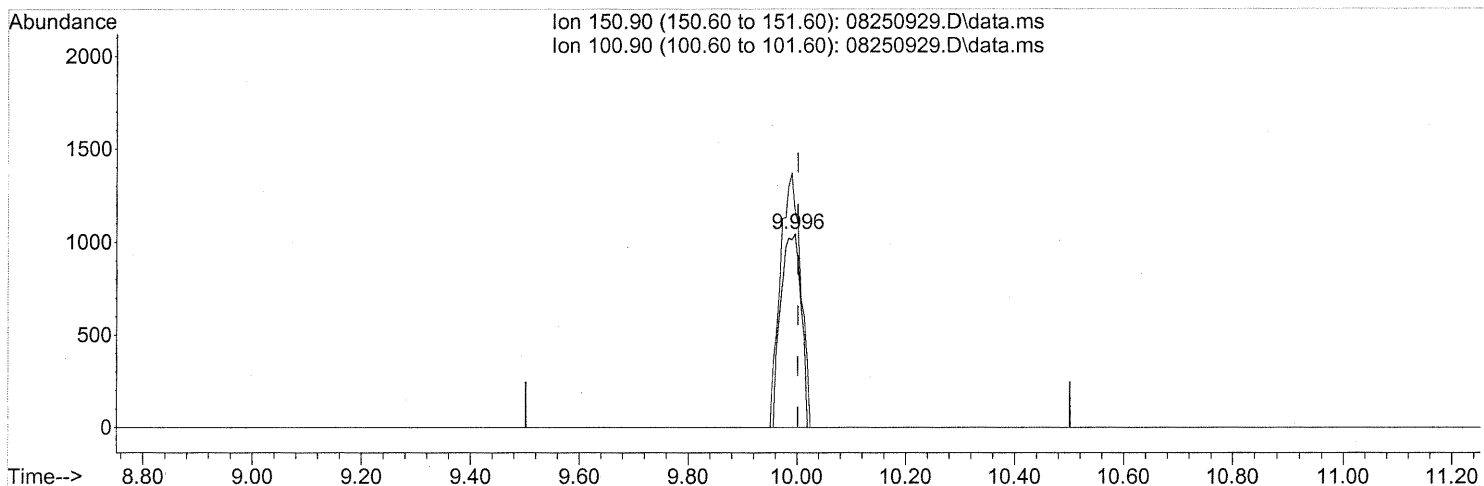
*FP Em 8/28/09*

*KE 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.16ng

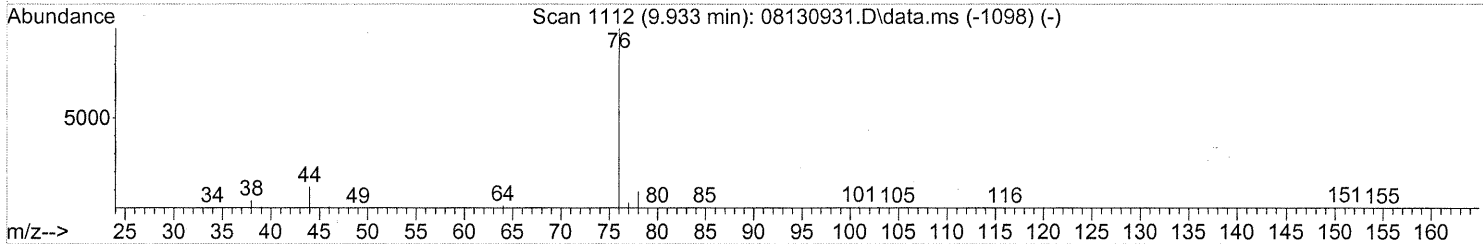
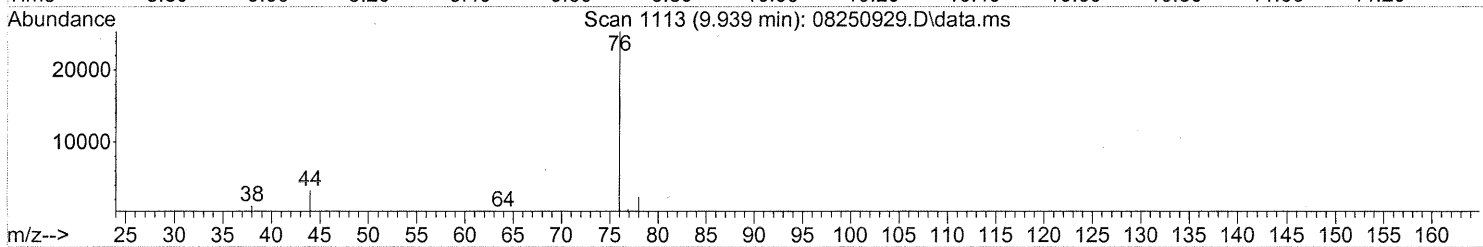
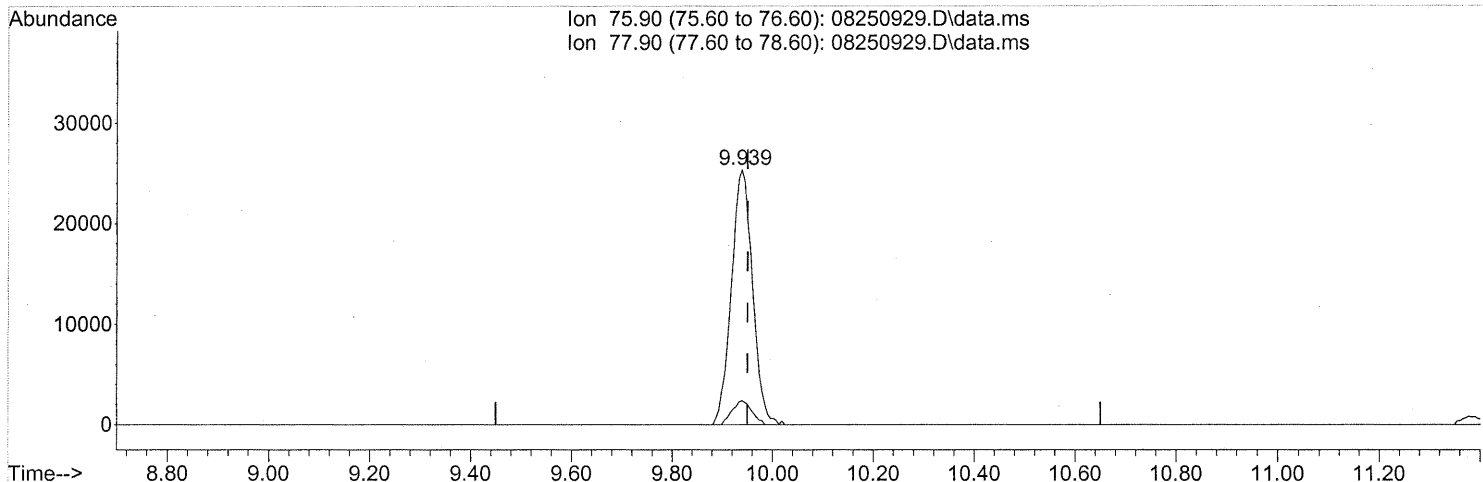
response 2681

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	132.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 0.87ng

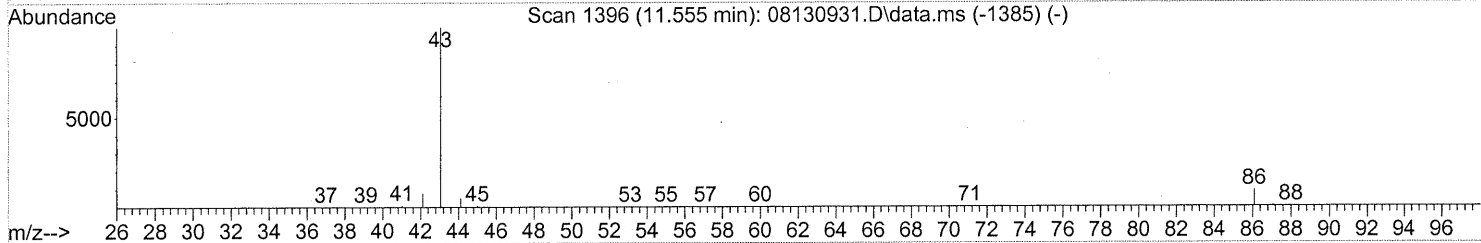
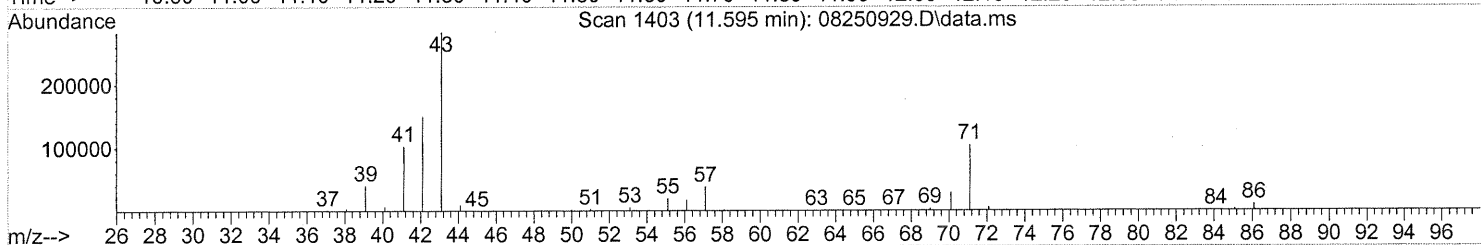
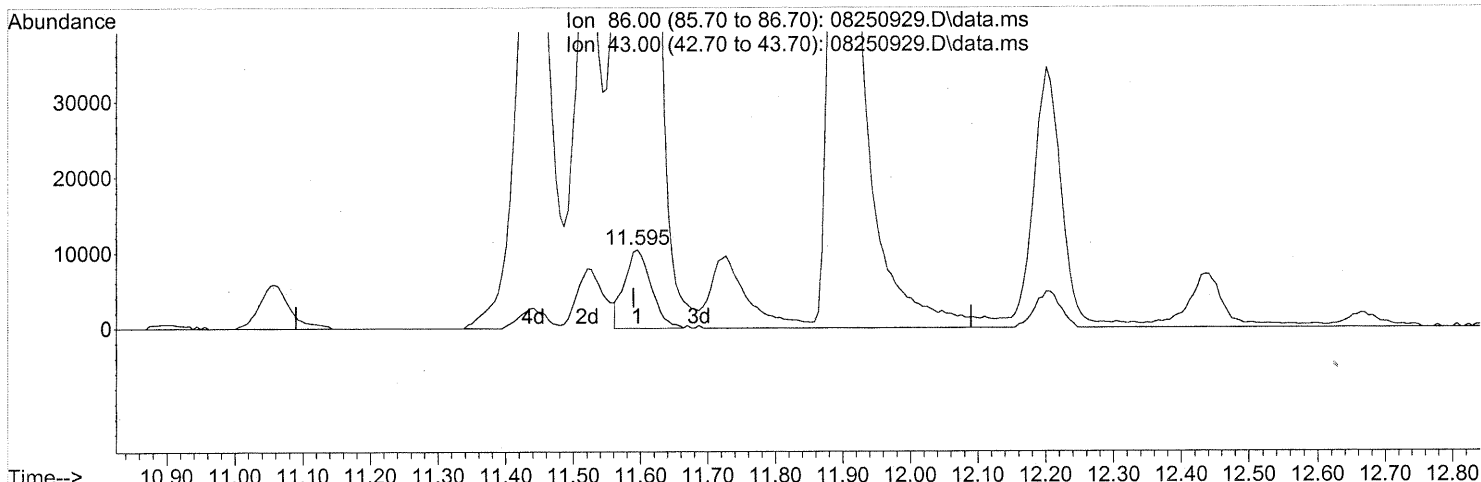
response 74024

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)  
 11.595min (+0.005) 6.78ng  
 response 28395  

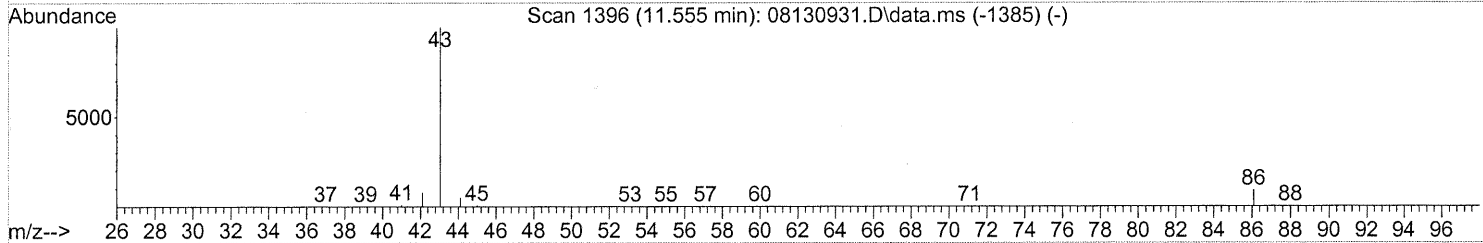
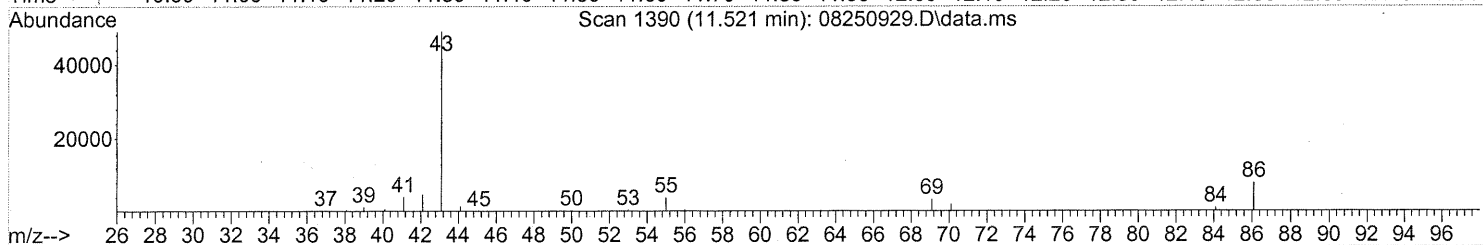
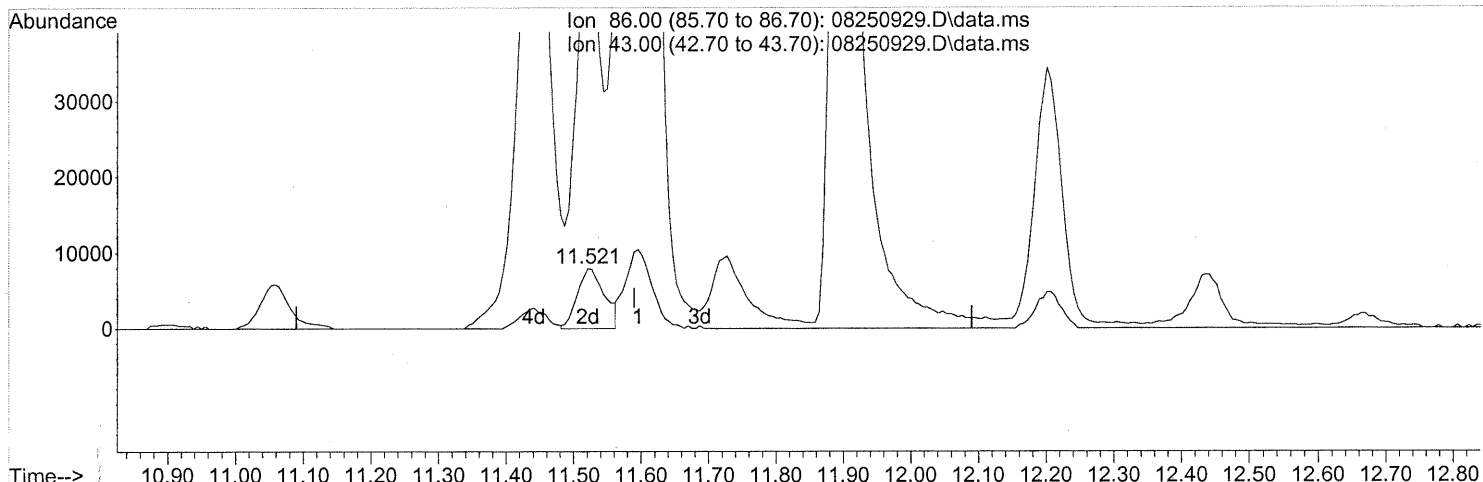
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2767.84#
0.00	0.00	0.00
0.00	0.00	0.00

*MP*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(26) Vinyl Acetate (T)  
 11.521min (-0.069) 5.28ng m  
 response 22105

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	3555.43#
0.00	0.00	0.00
0.00	0.00	0.00

*mp → IC*

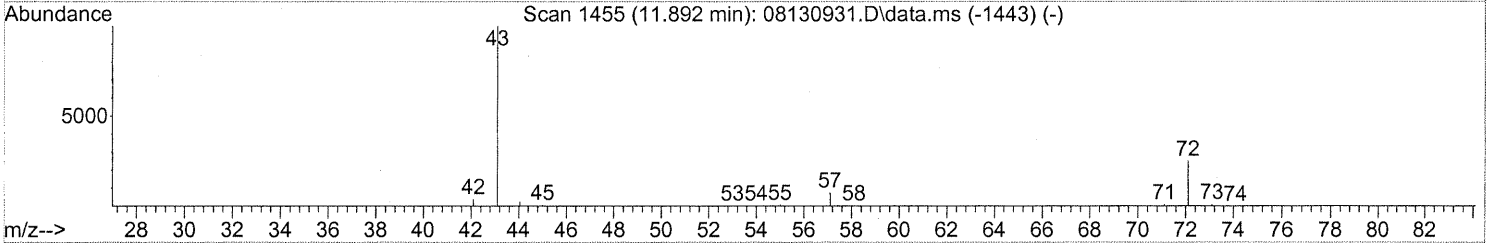
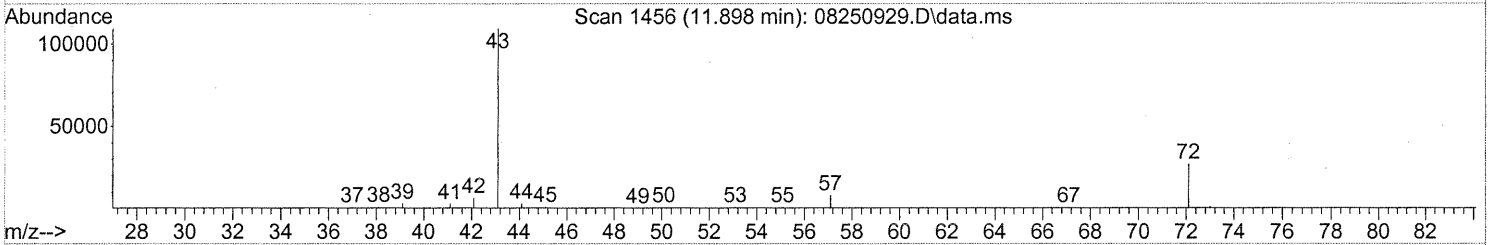
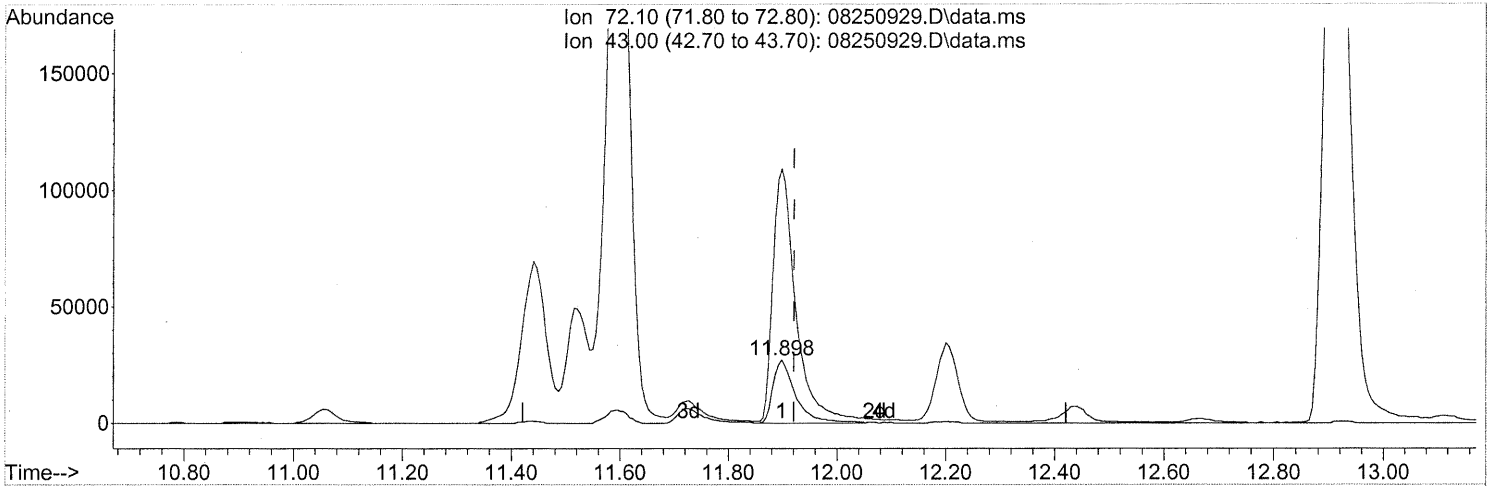
*Com 8/28/09*

*ves 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

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

11.898min (-0.023) 5.73ng

response 77314

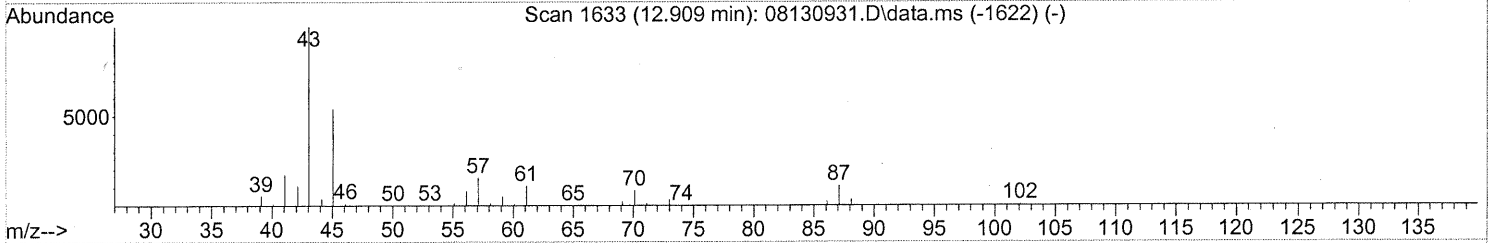
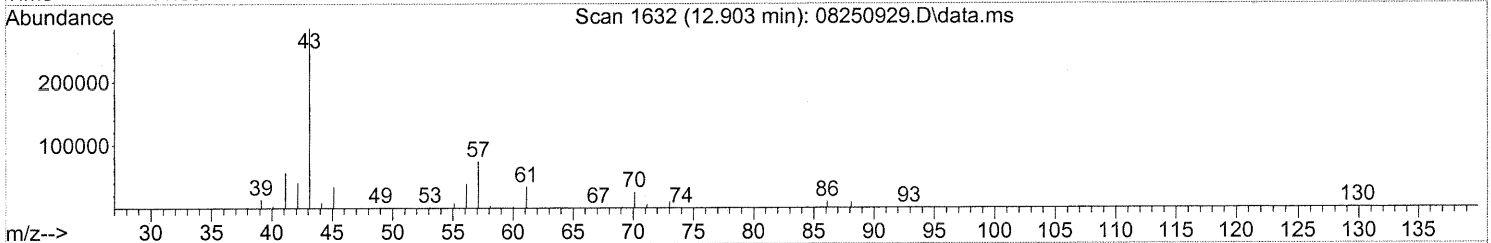
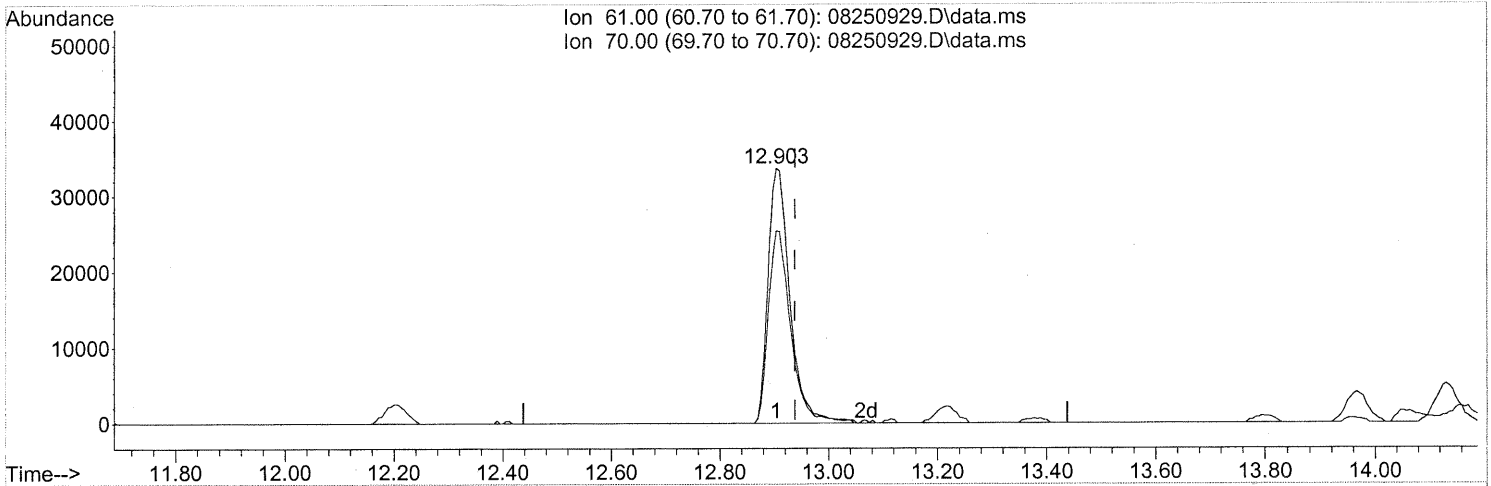
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	409.59#
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(30) Ethyl Acetate (T)

12.903min (-0.035) 10.74ng

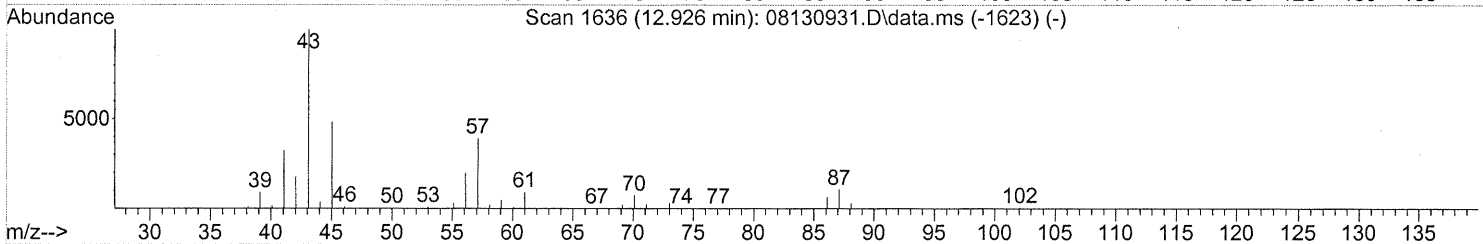
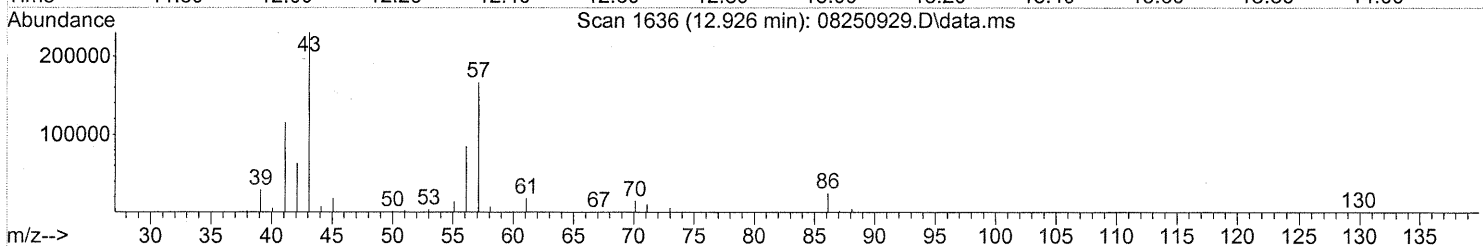
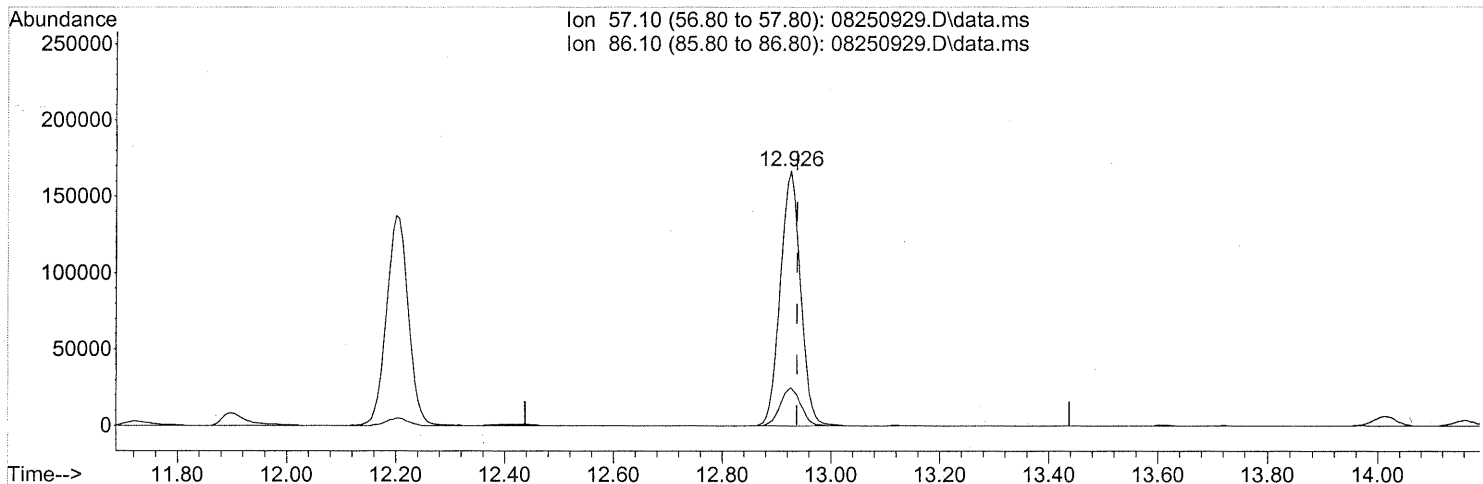
response 93913

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	76.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(31) n-Hexane (T)

12.926min (-0.011) 10.11ng

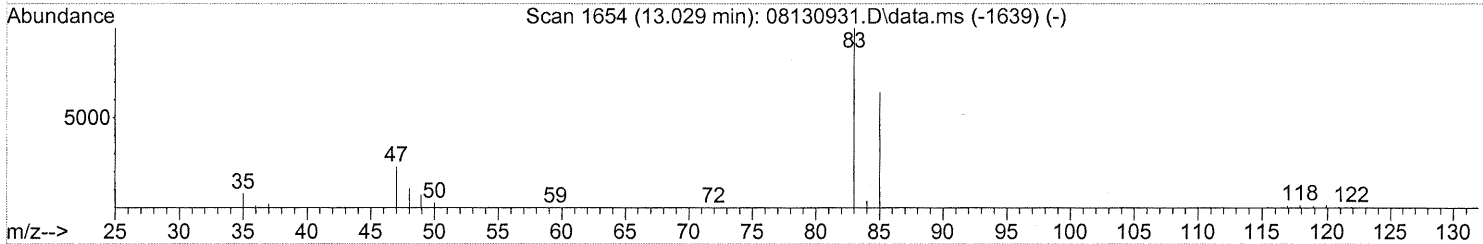
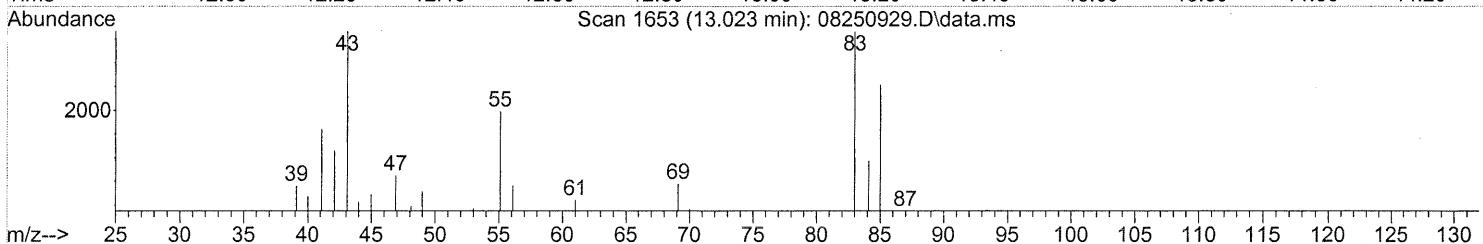
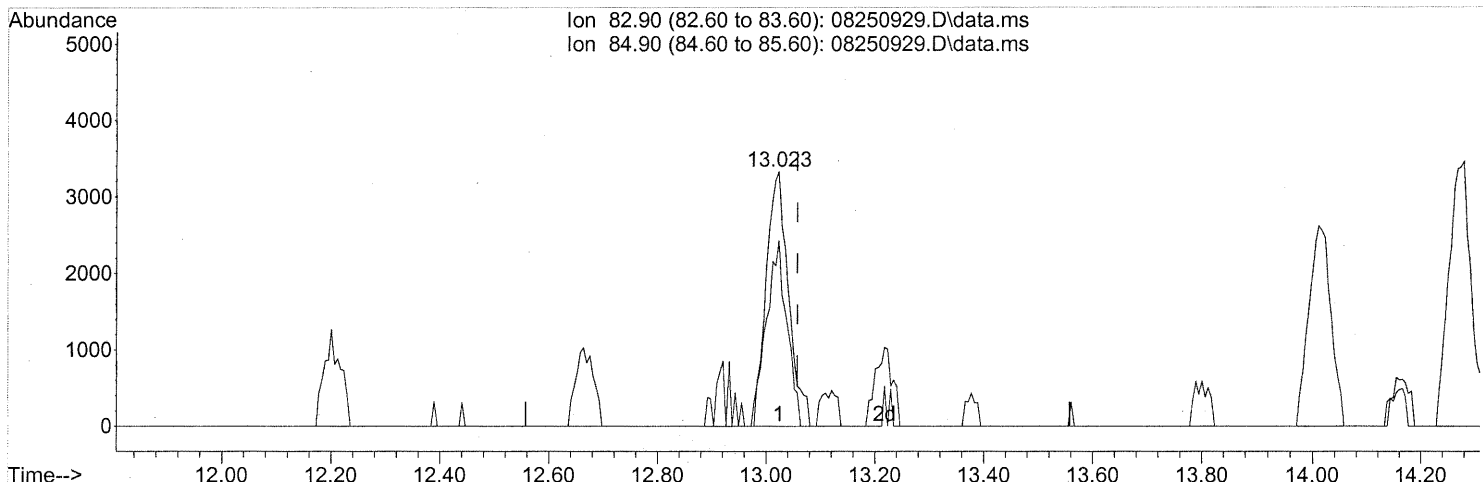
response 430788

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	14.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250929.D  
Acq On : 25 Aug 2009 22:45  
Operator : EM  
Sample : P0902857-006 (500ml)  
Misc : Env. H & E 100462  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250929.D\data.ms

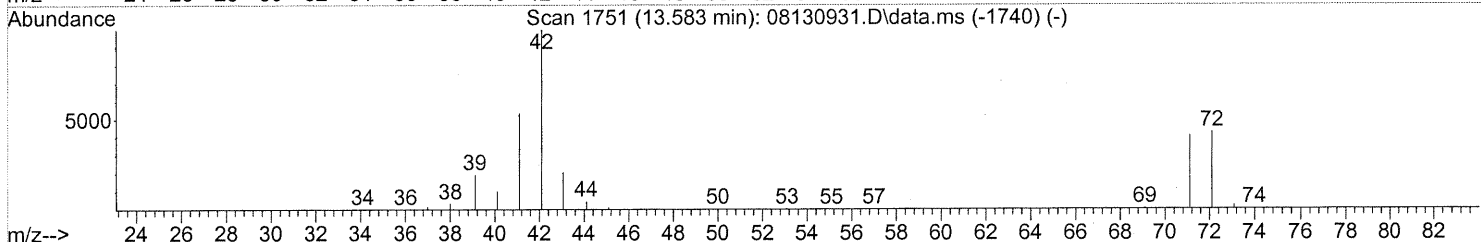
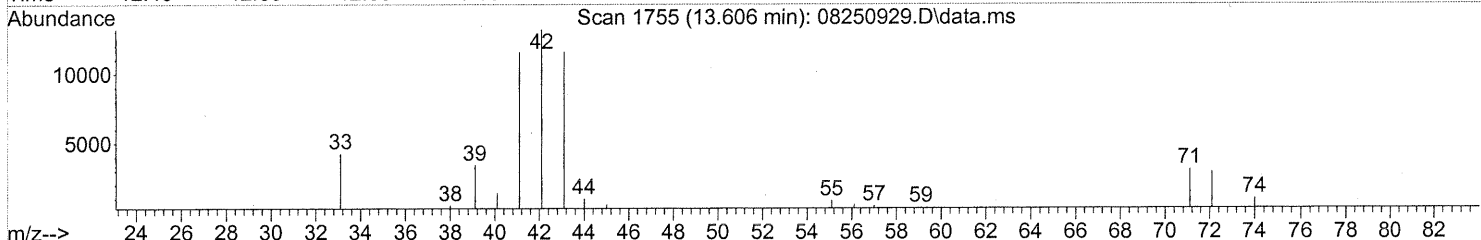
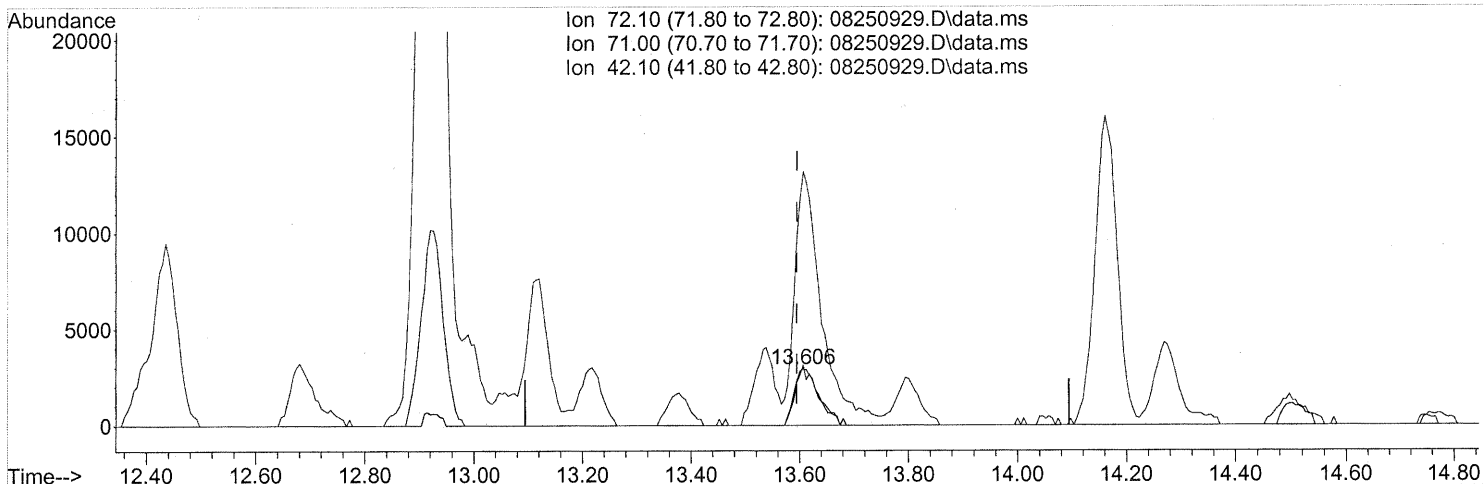
(32) Chloroform (T)  
13.023min (-0.034) 0.27ng  
response 9518

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	67.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.606min (+0.011) 0.67ng

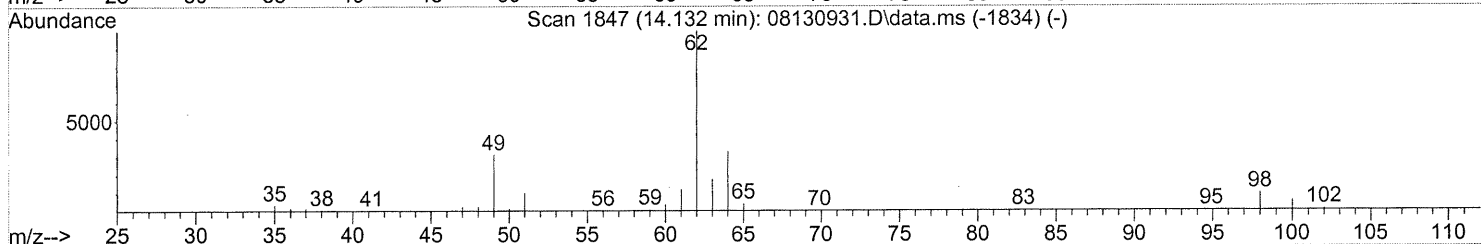
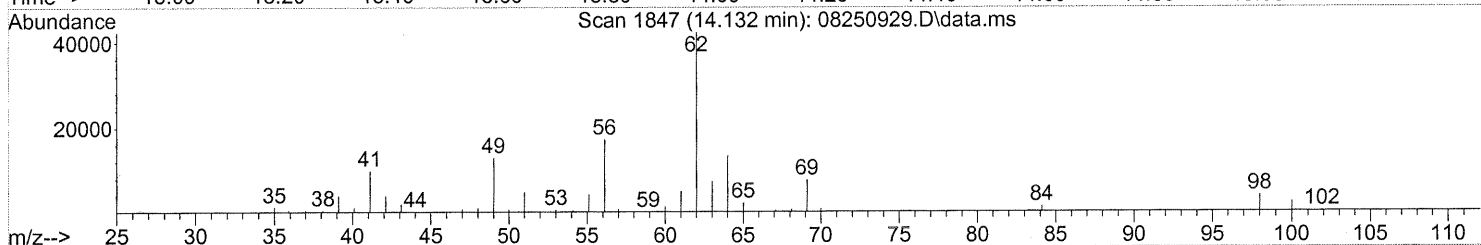
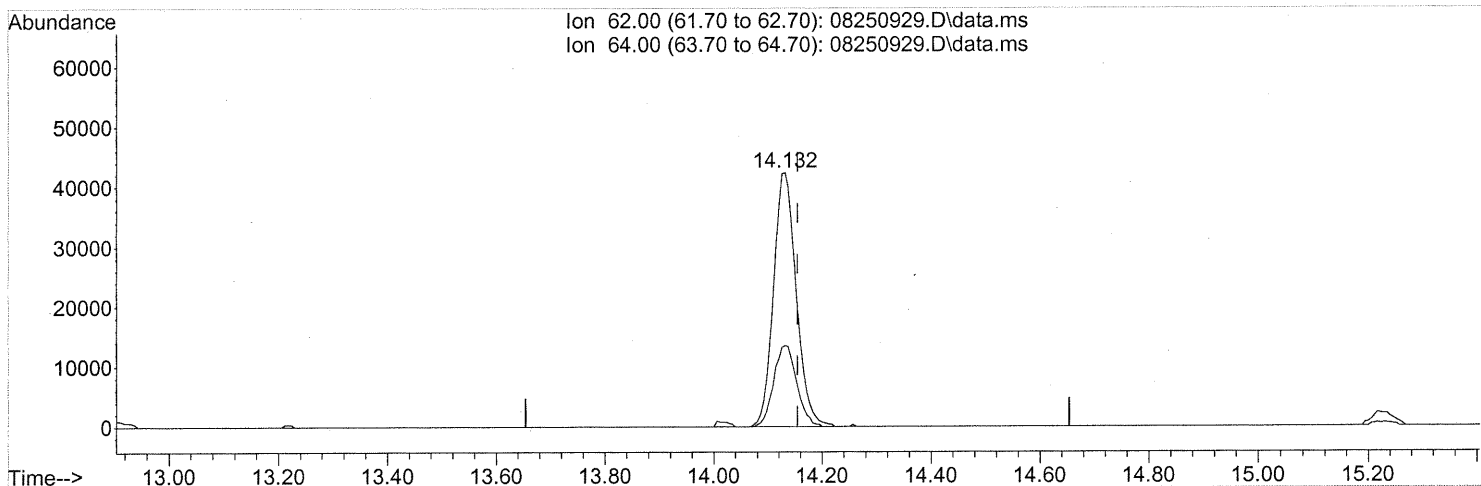
response 9378

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	92.14
42.10	206.50	485.99#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(36) 1,2-Dichloroethane (T)

14.132min (-0.023) 4.51ng

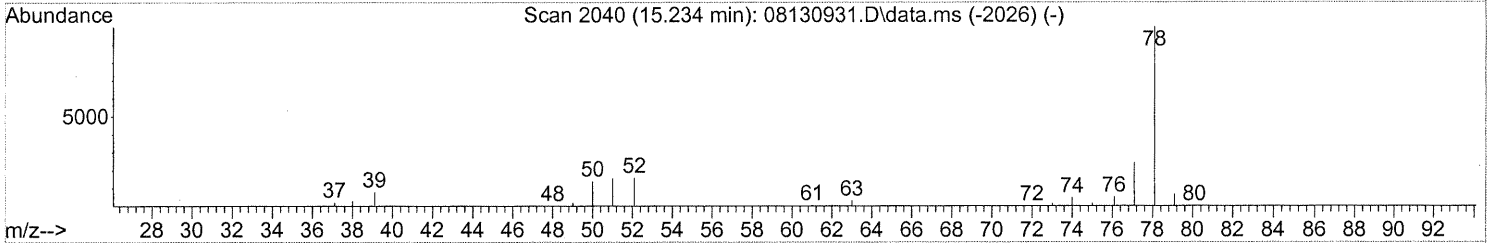
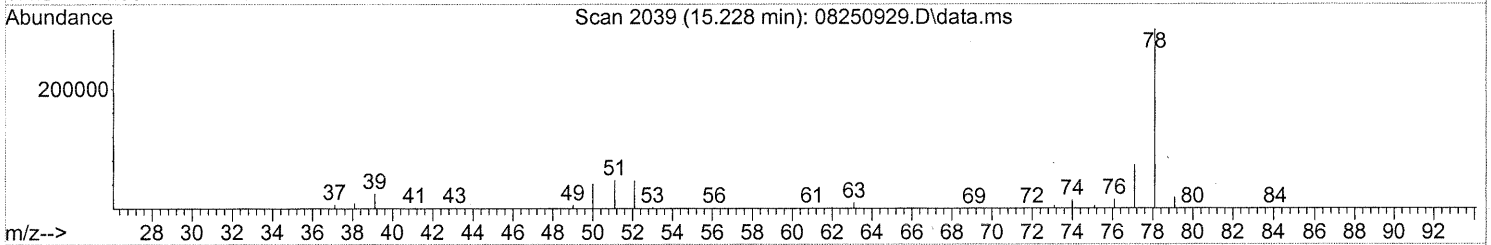
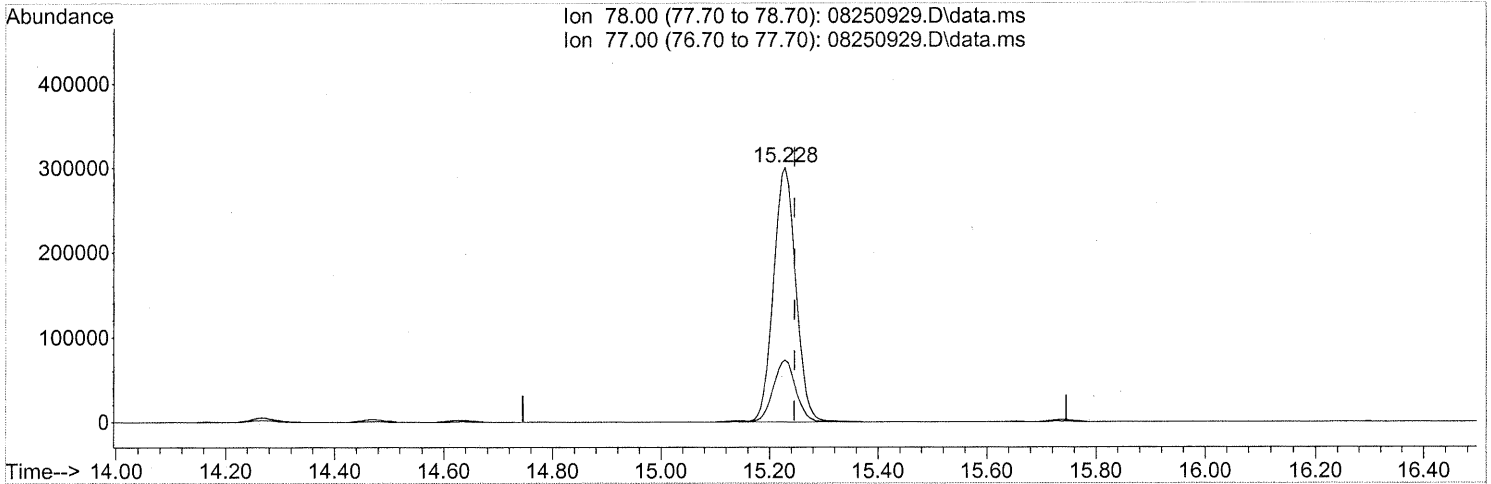
response 123091

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	32.40
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

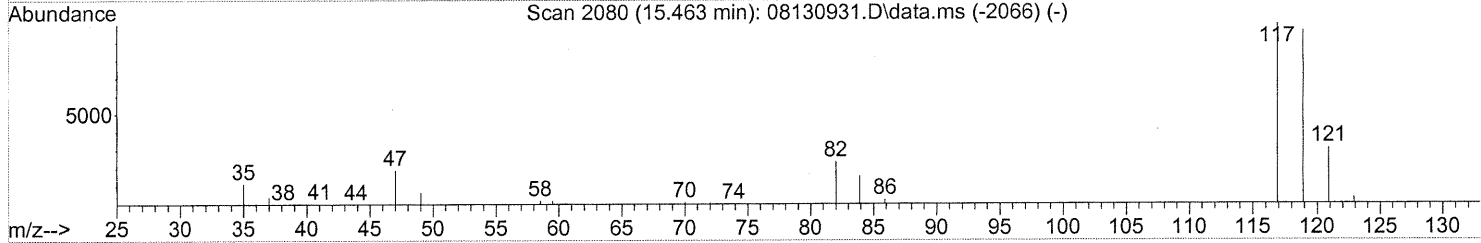
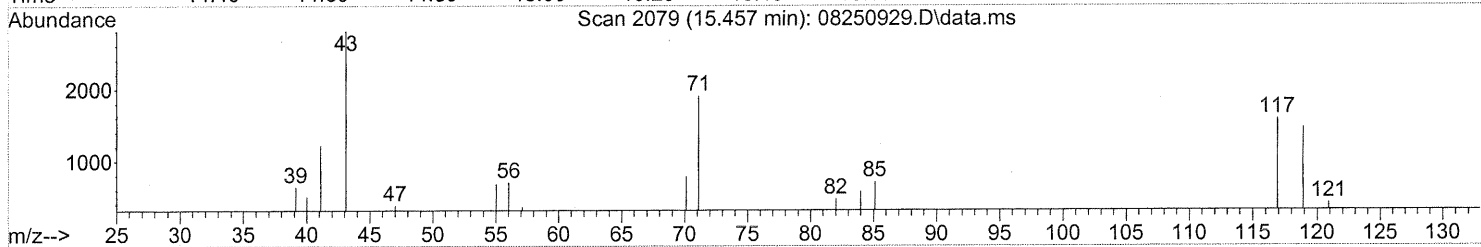
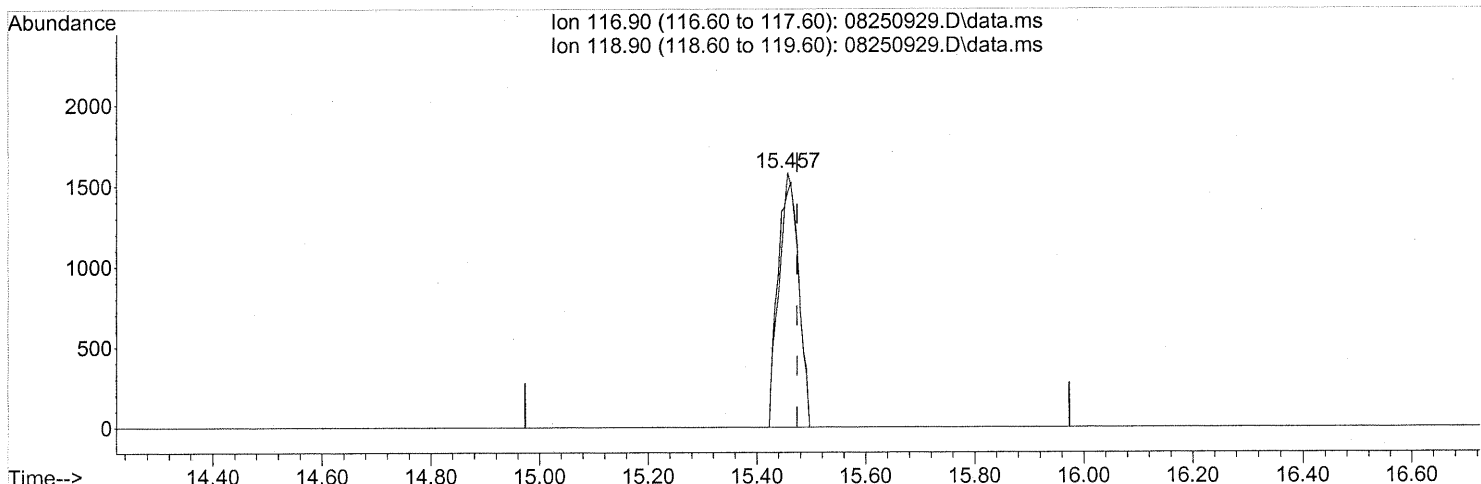
(41) Benzene (T)  
 15.228min (-0.017) 9.08ng  
 response 854824

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250929.D  
Acq On : 25 Aug 2009 22:45  
Operator : EM  
Sample : P0902857-006 (500ml)  
Misc : Env. H & E 100462  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250929.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.16ng

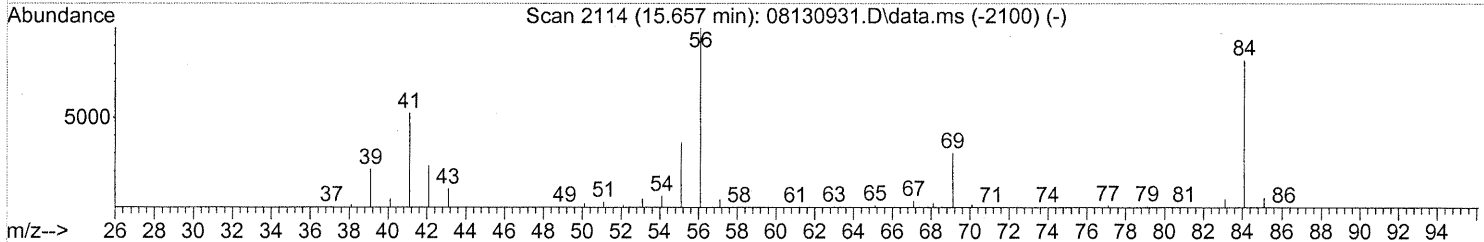
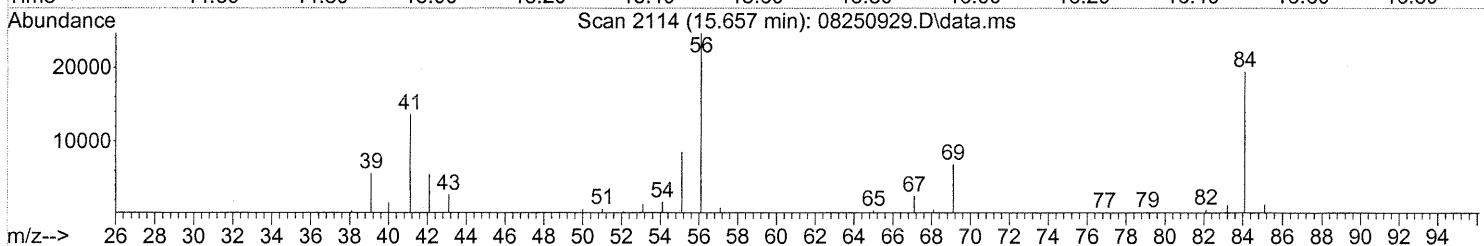
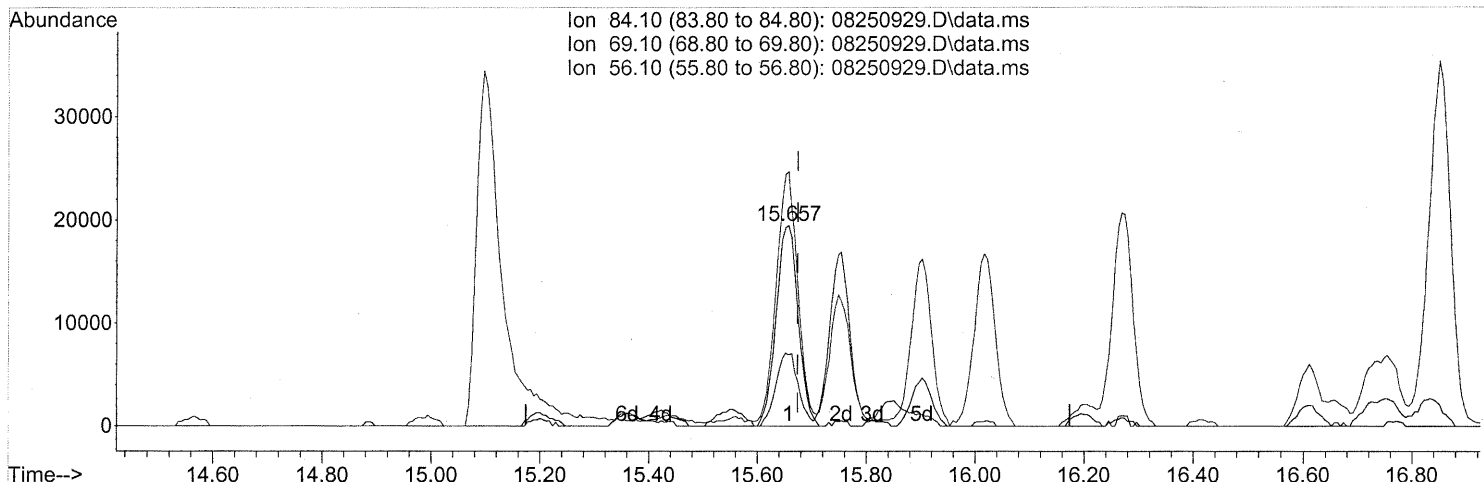
response 4118

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	94.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 1.50ng

response 54728

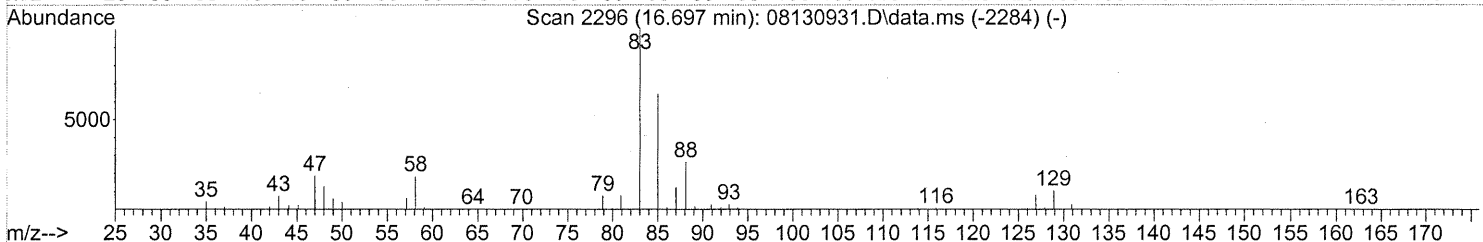
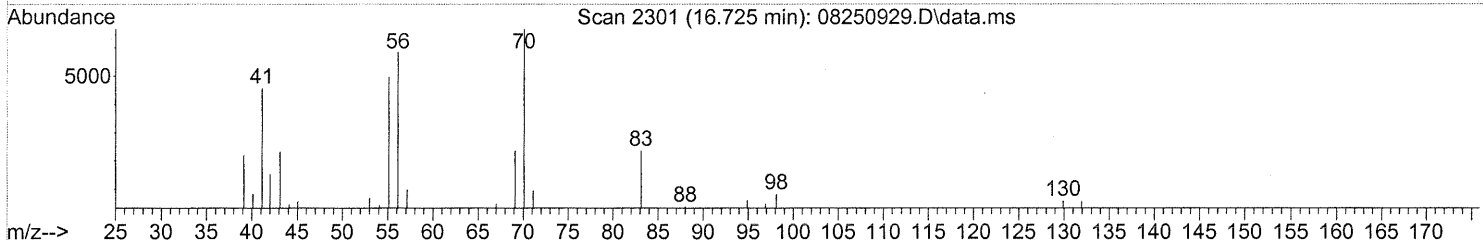
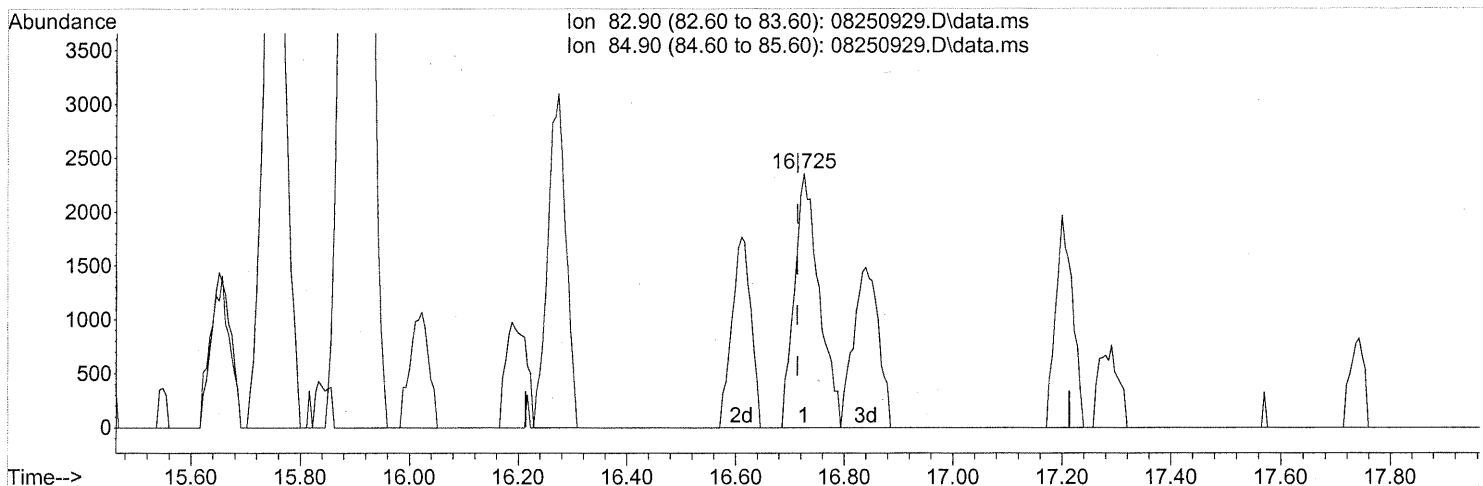
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	37.14
56.10	107.30	123.33
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(46) Bromodichloromethane (T)

16.725min (+0.011) 0.27ng

response 7442

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

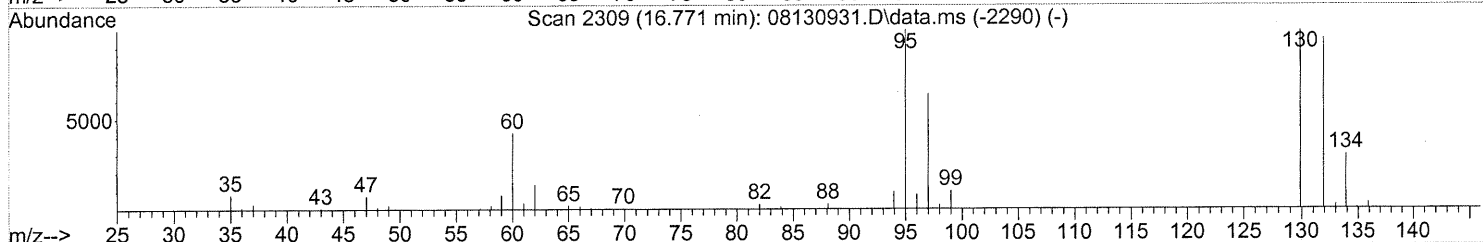
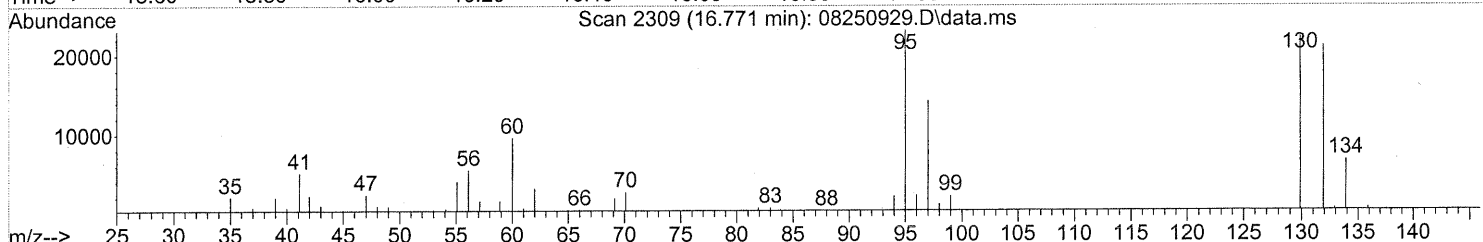
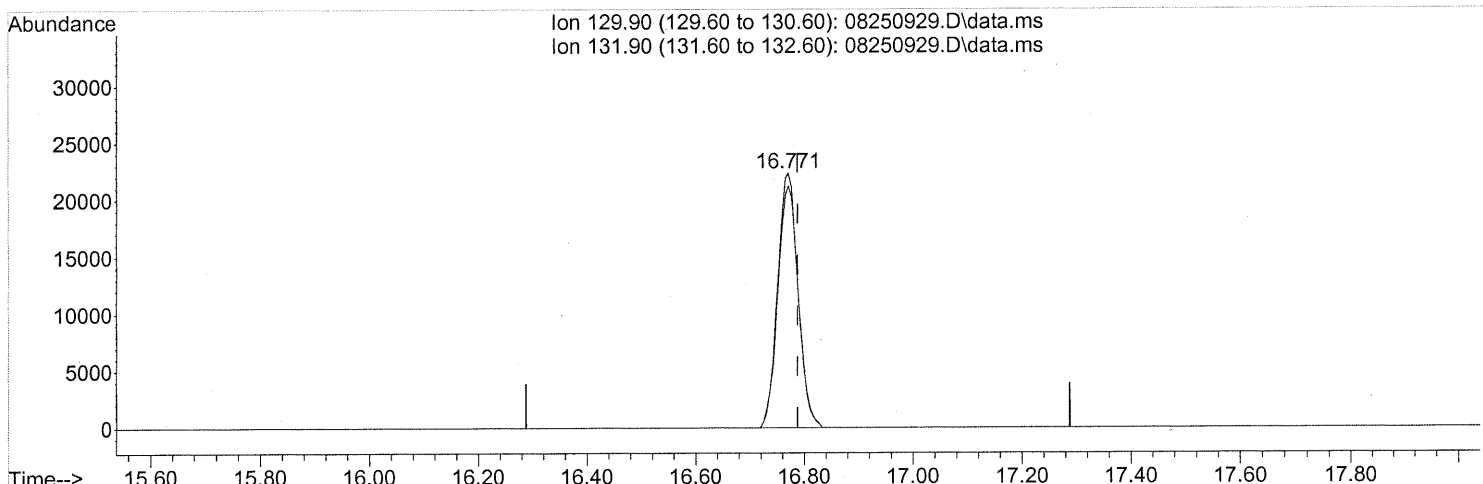
*FP em 8/28/09*

*11/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

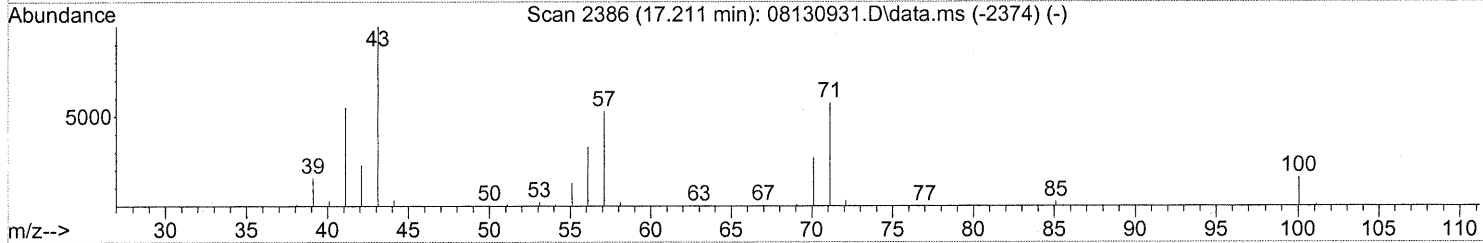
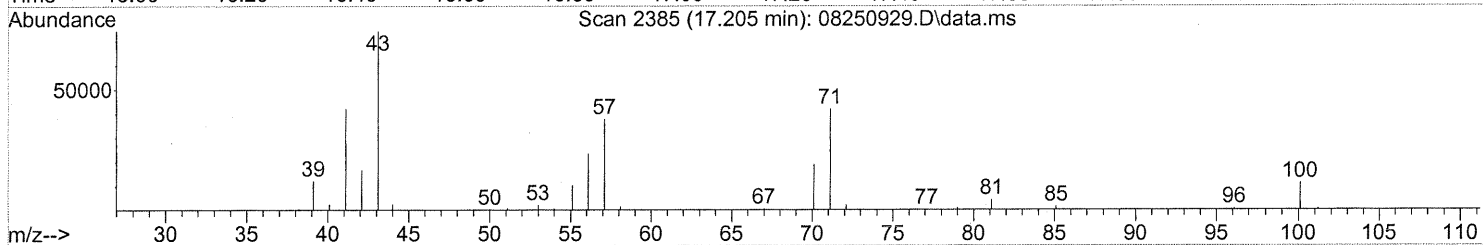
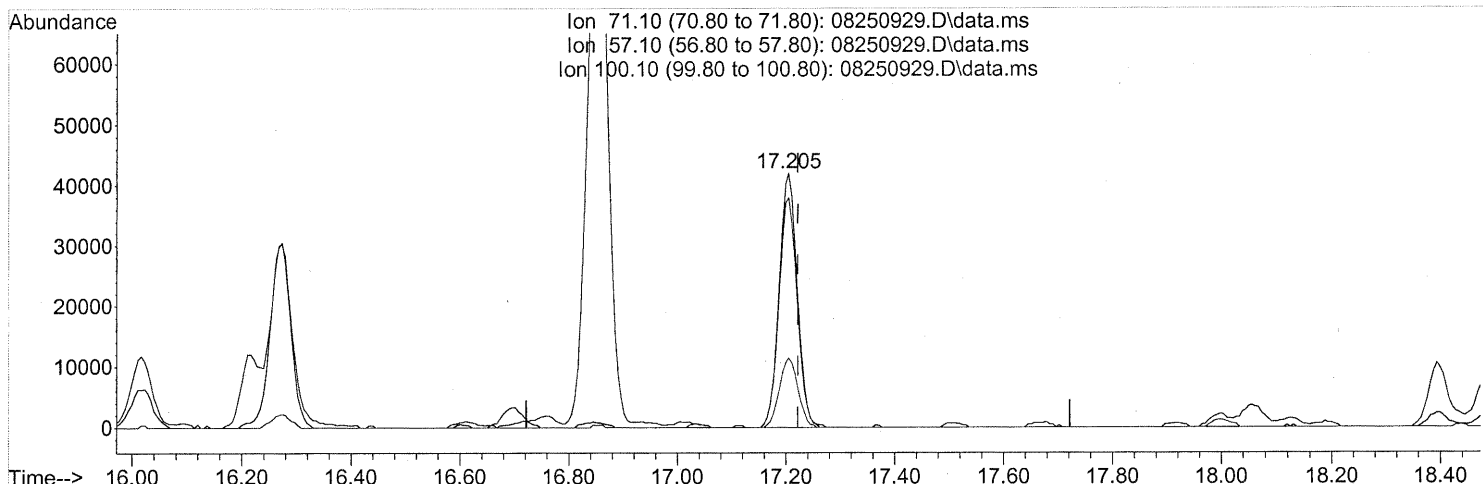
(47) Trichloroethene (T)  
 16.771min (-0.017) 2.43ng  
 response 57969

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	95.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

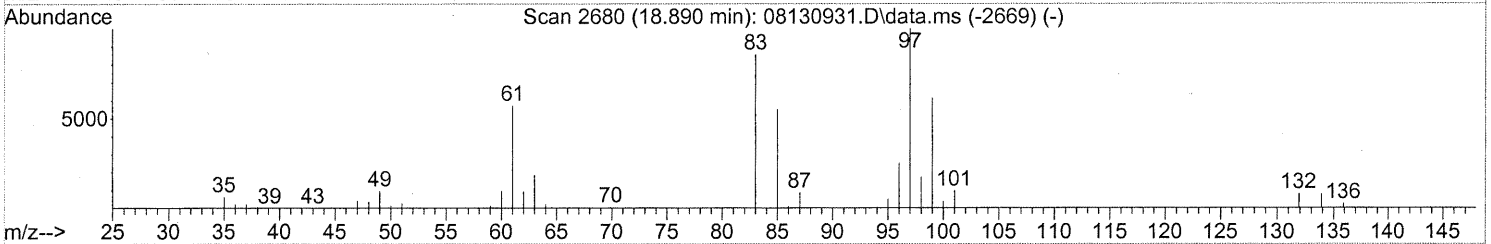
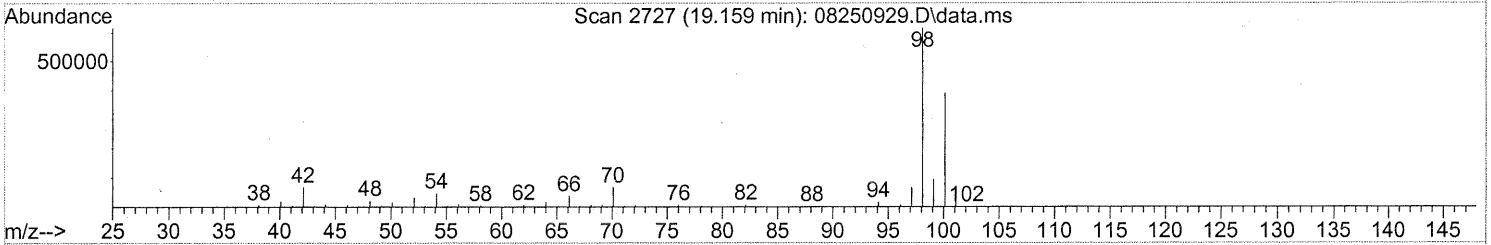
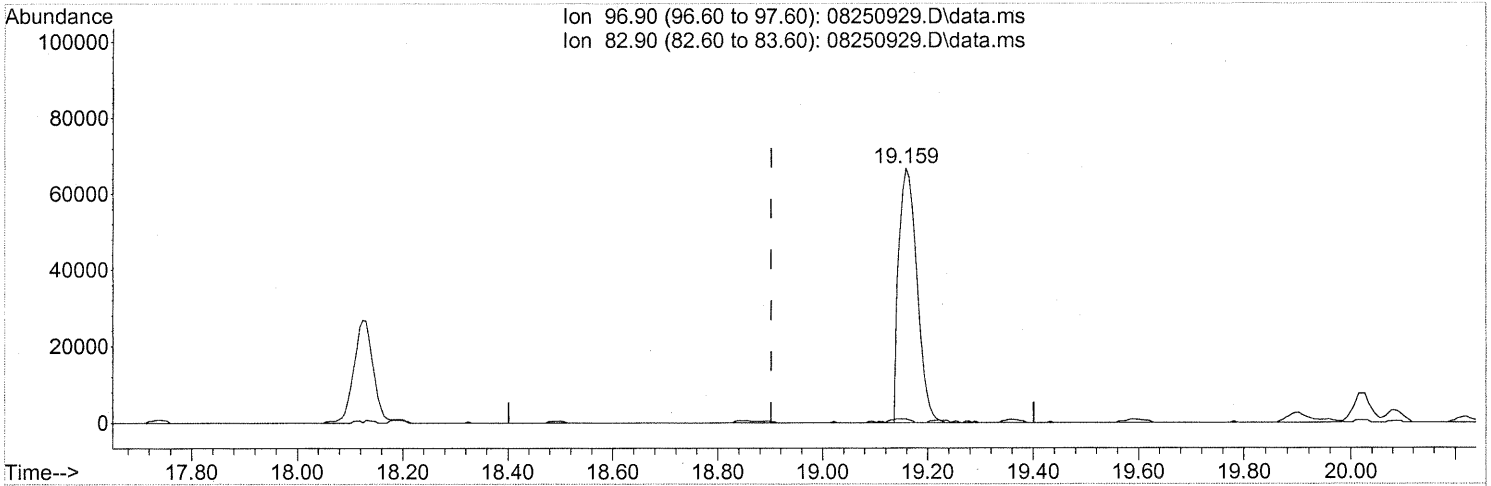
(51) n-Heptane (T)  
 17.205min (-0.017) 3.86ng  
 response 96672

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	92.01
100.10	30.70	27.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

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

19.159min (+0.257) 7.95ng

response 159824

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.43#
0.00	0.00	0.00
0.00	0.00	0.00

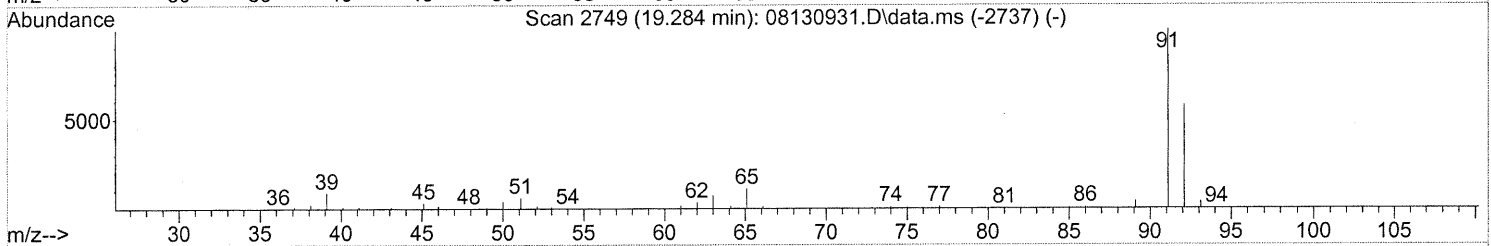
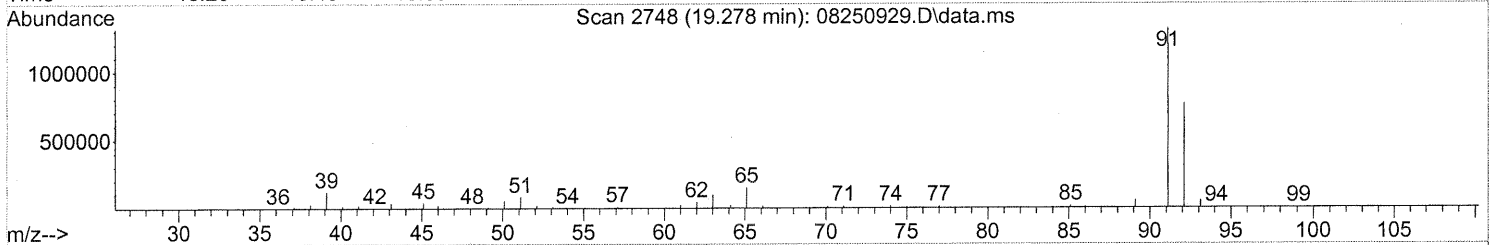
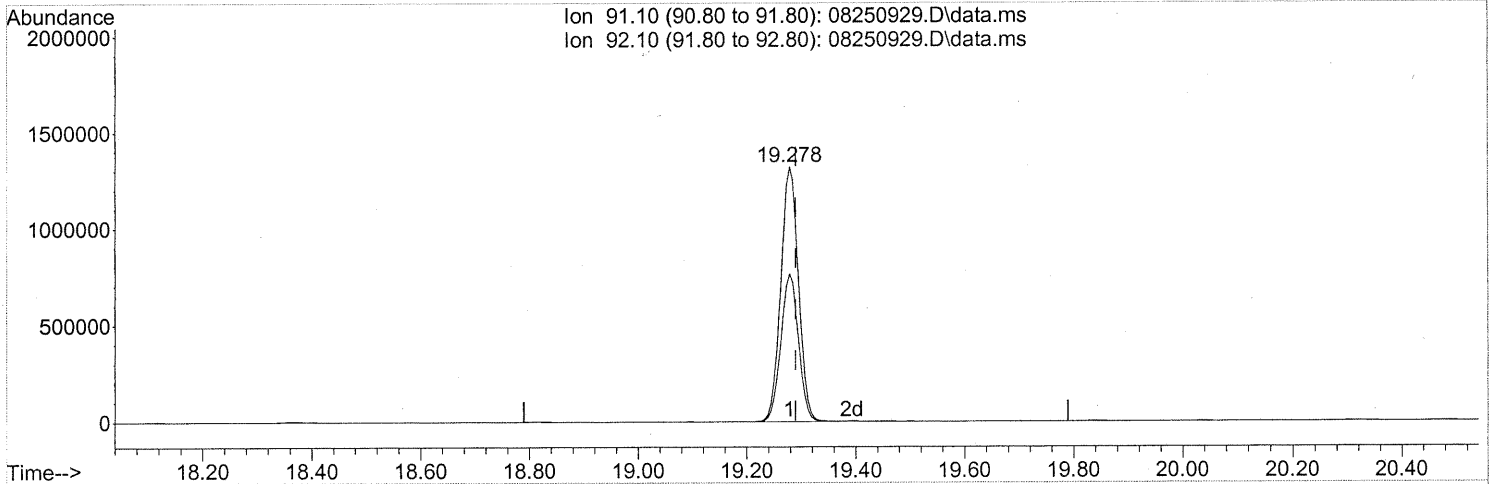
FP EM 8/28/09

KE 8/31/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(58) Toluene (T)

19.278min (-0.011) 30.51ng

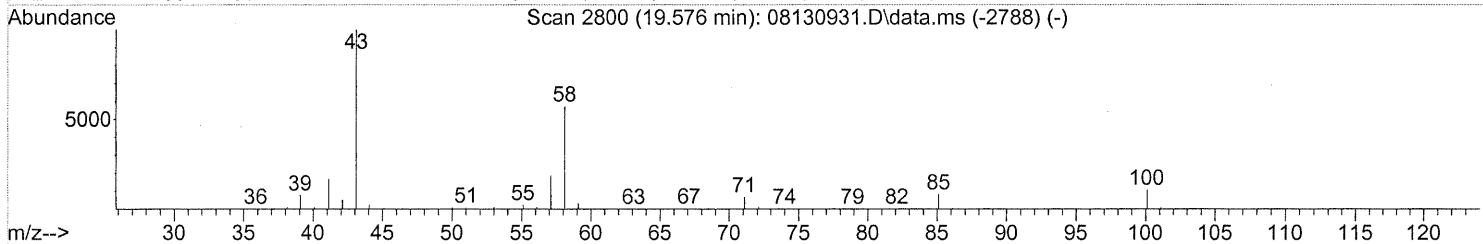
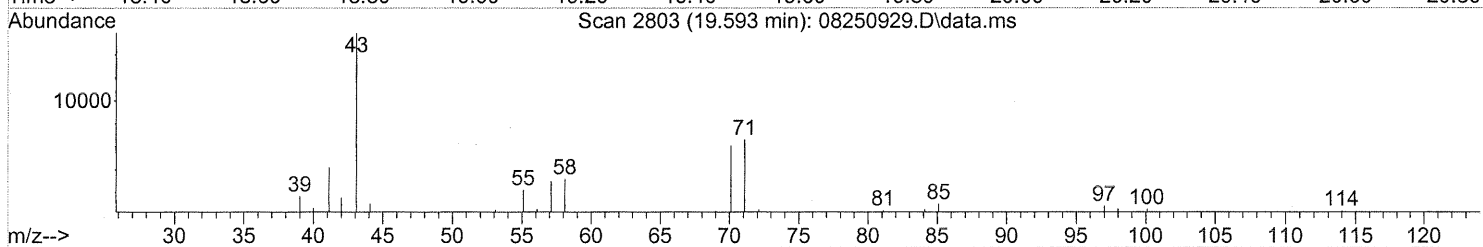
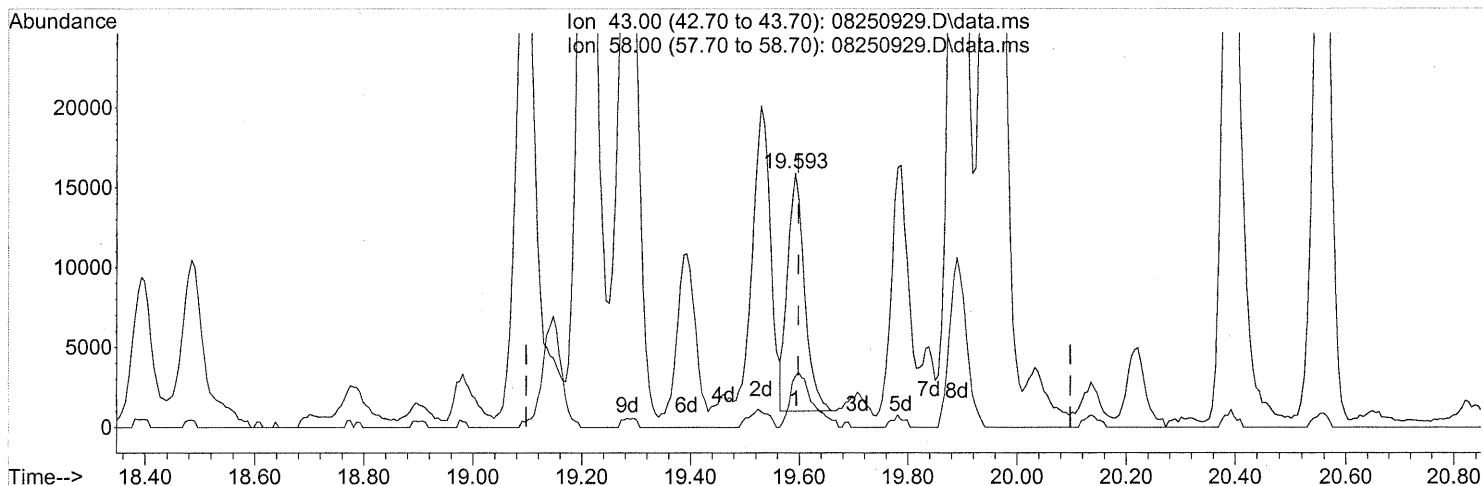
response 2965198

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.64ng

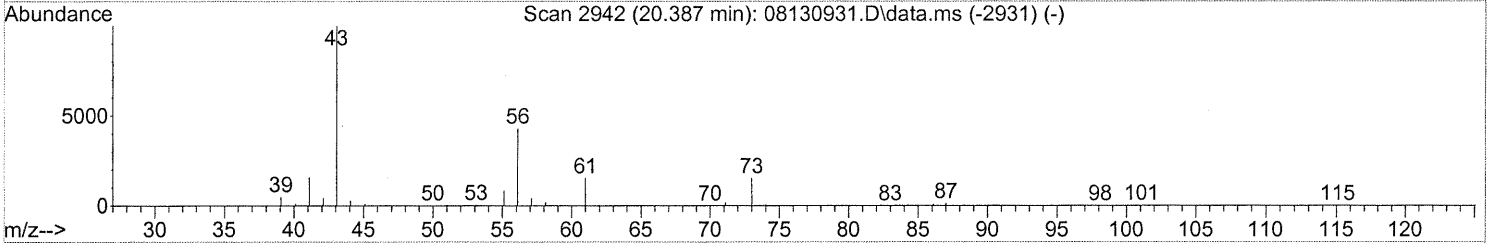
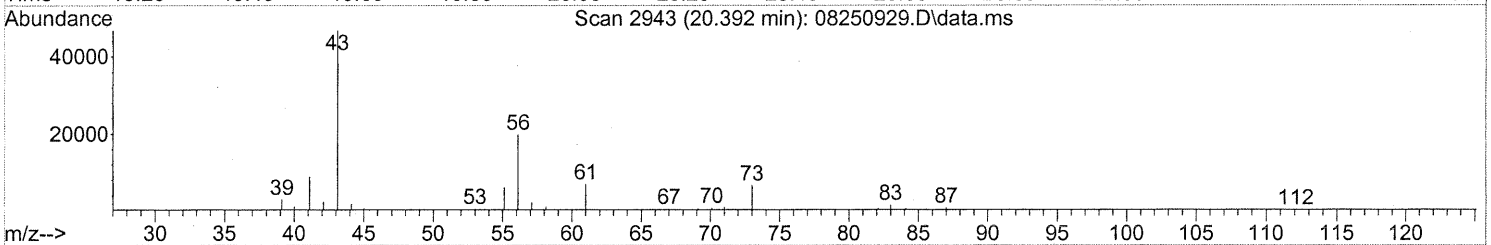
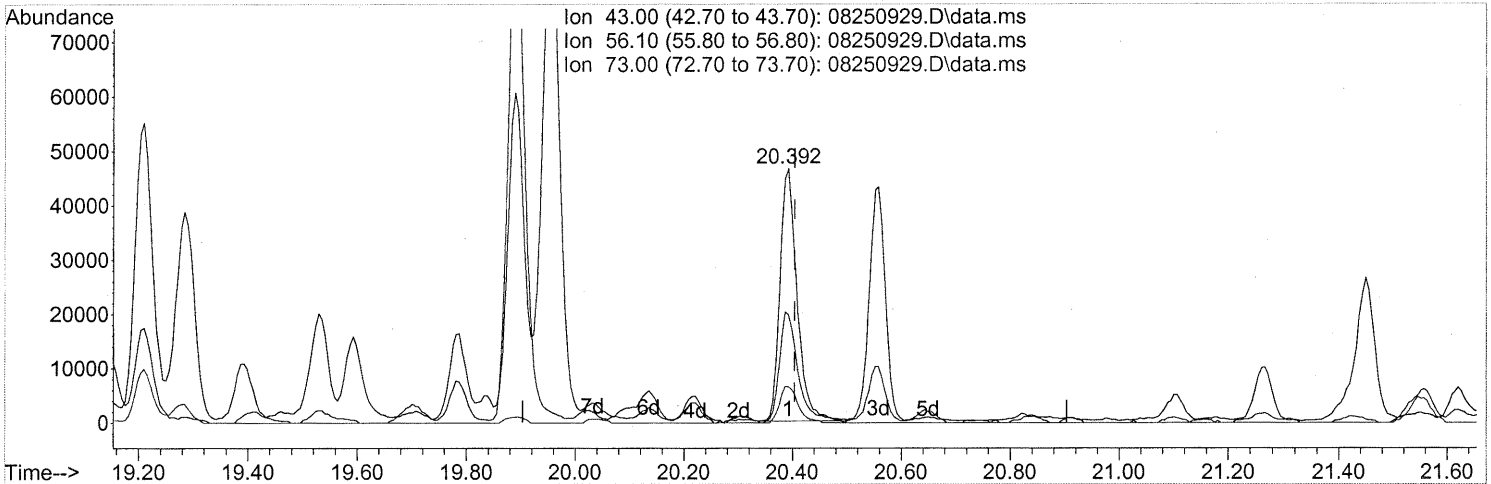
response 32281

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	29.94#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

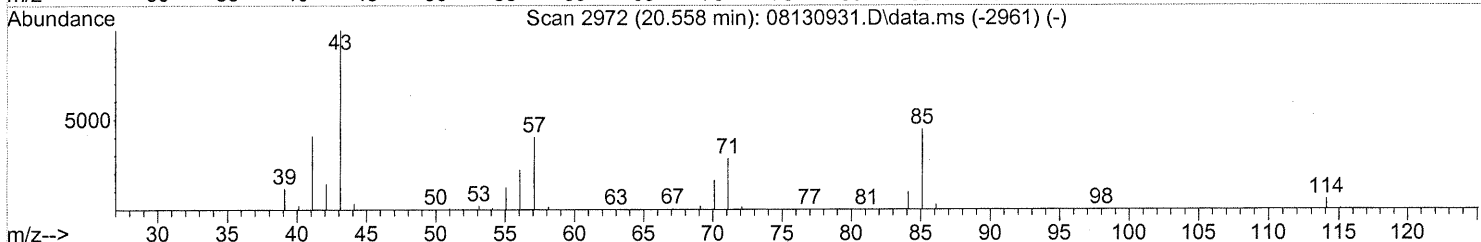
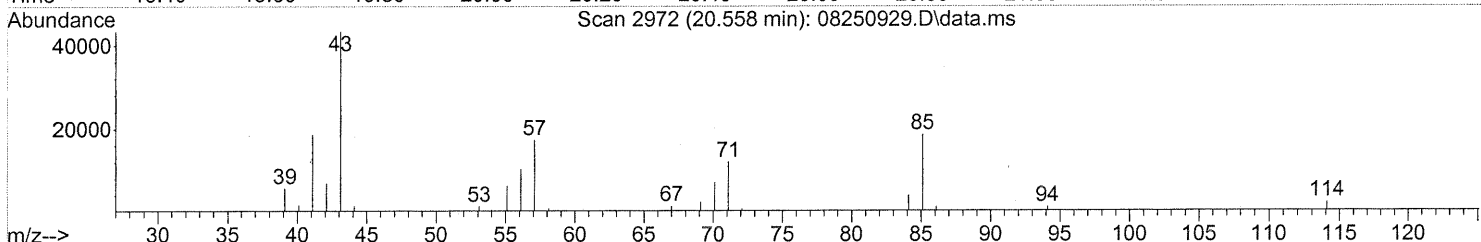
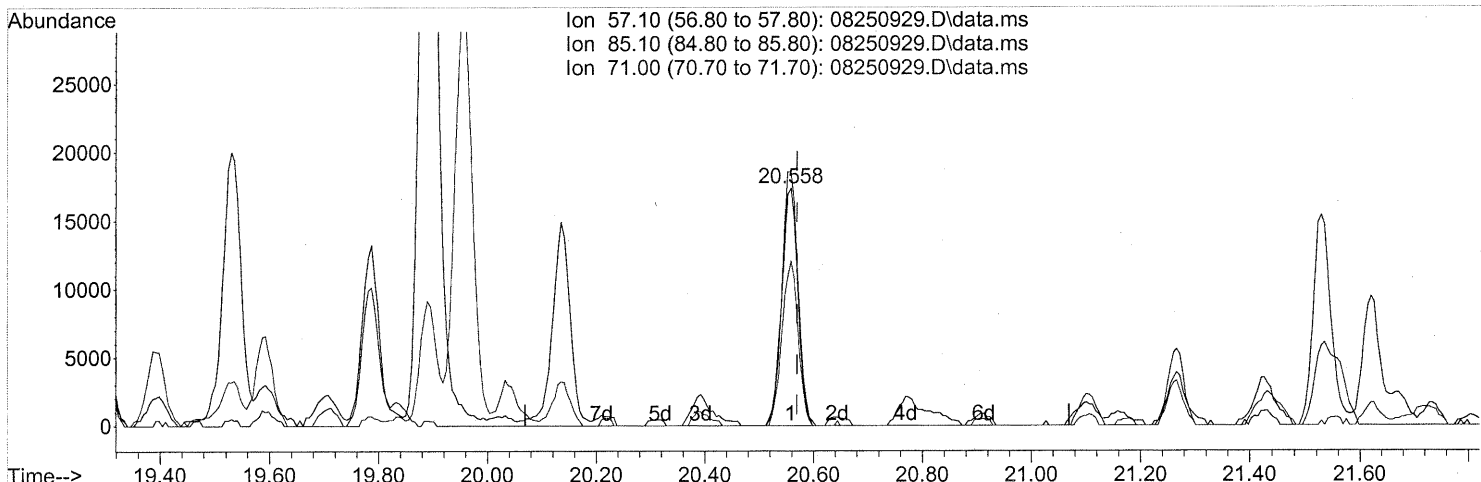
(62) n-Butyl Acetate (T)  
 20.392min (-0.012) 1.84ng  
 response 101373

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	48.24
73.00	16.90	15.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(63) n-Octane (T)  
 20.558min (-0.011) 1.66ng  
 response 35967

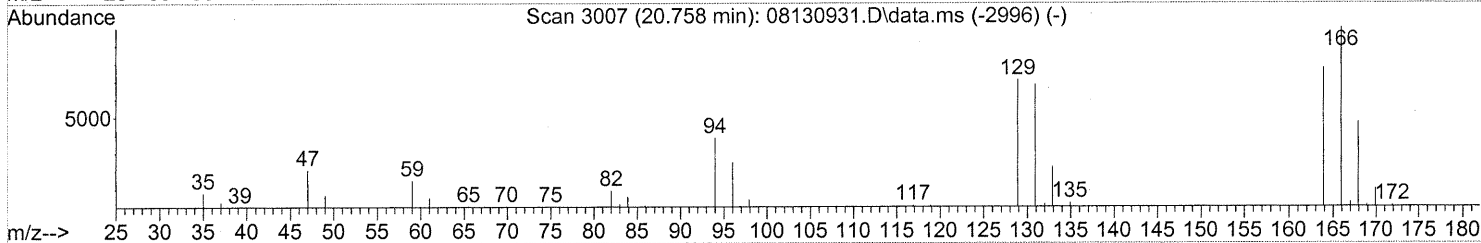
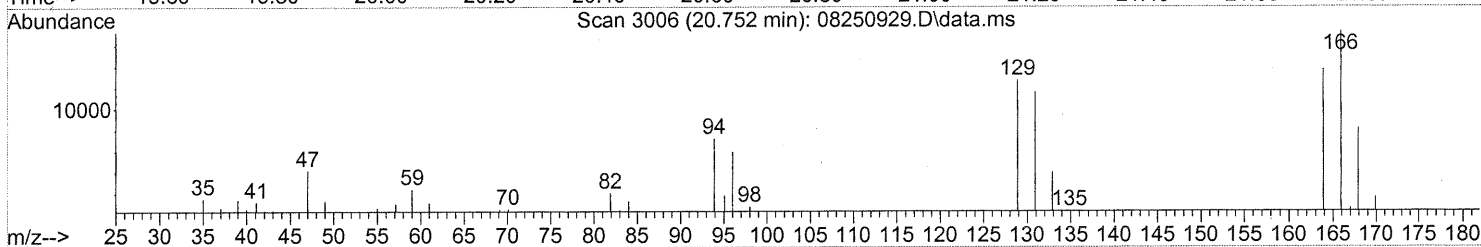
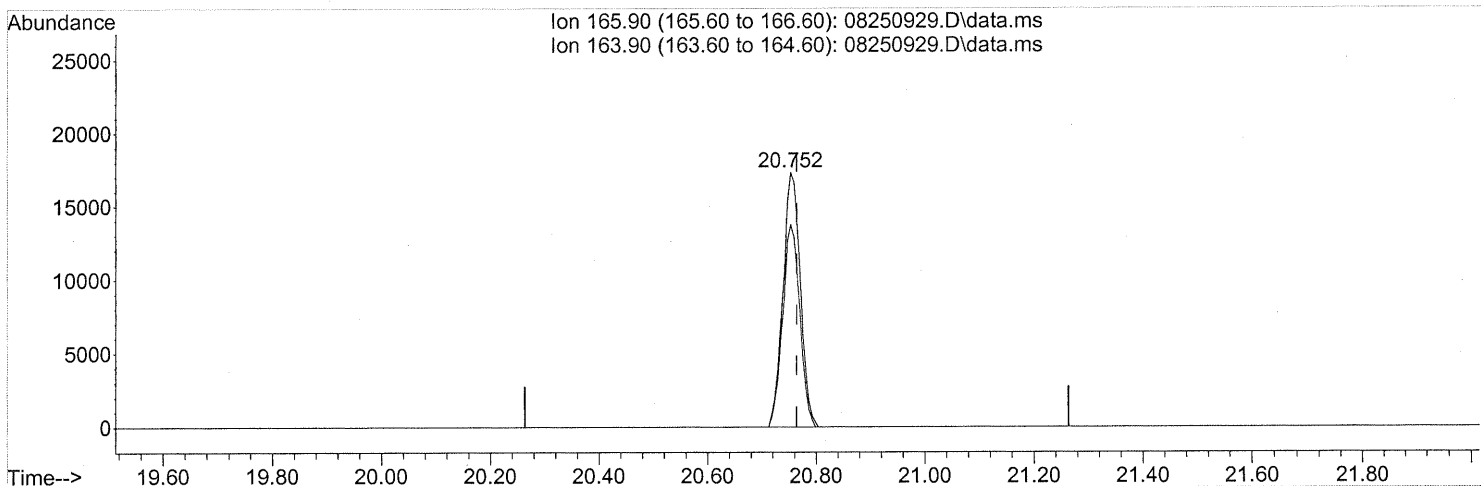
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	106.13
71.00	75.10	69.20
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 1.58ng

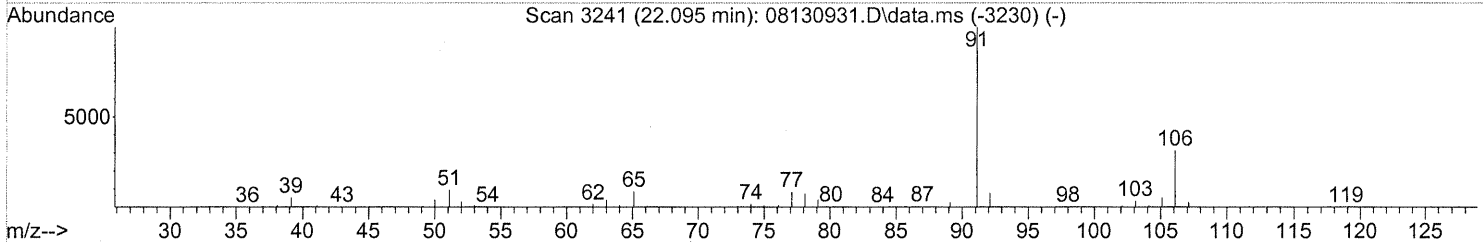
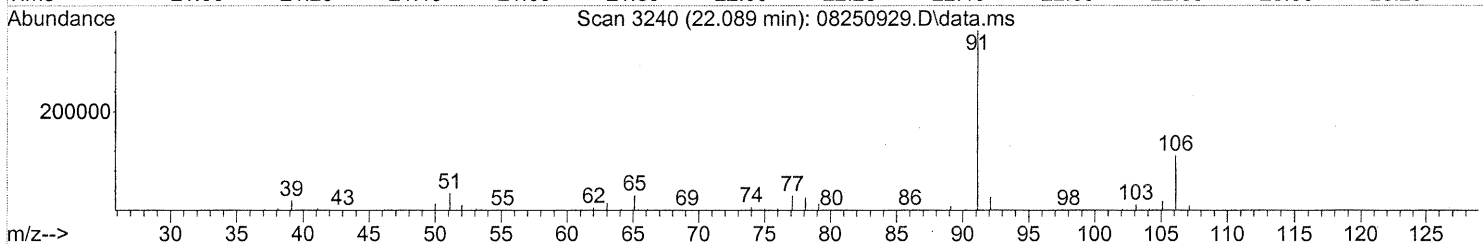
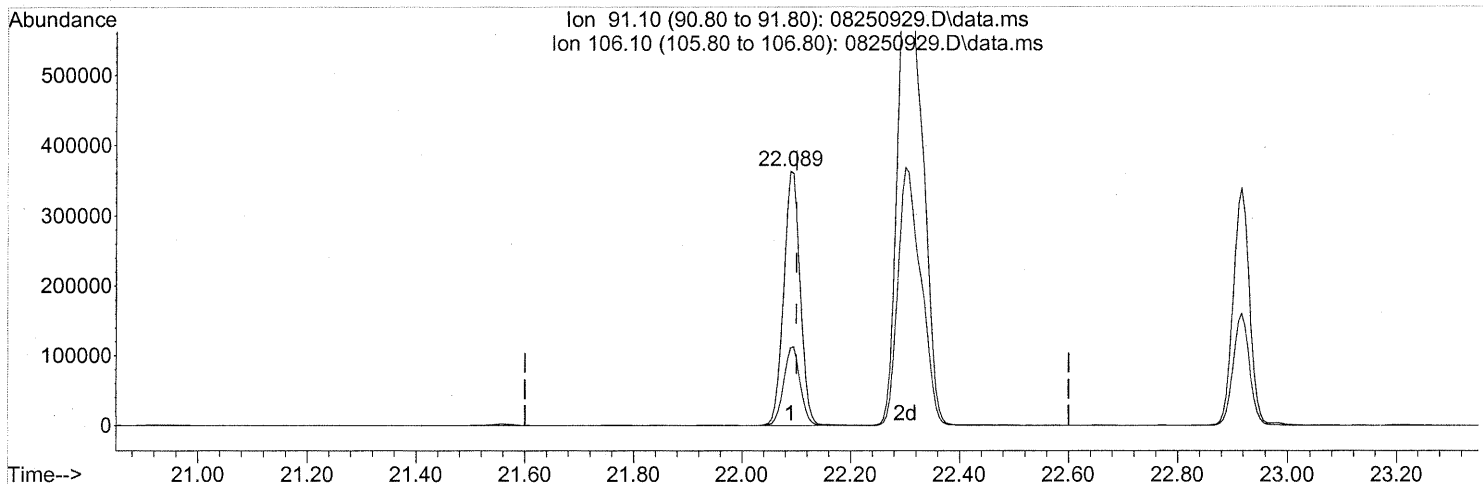
response 38165

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	78.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

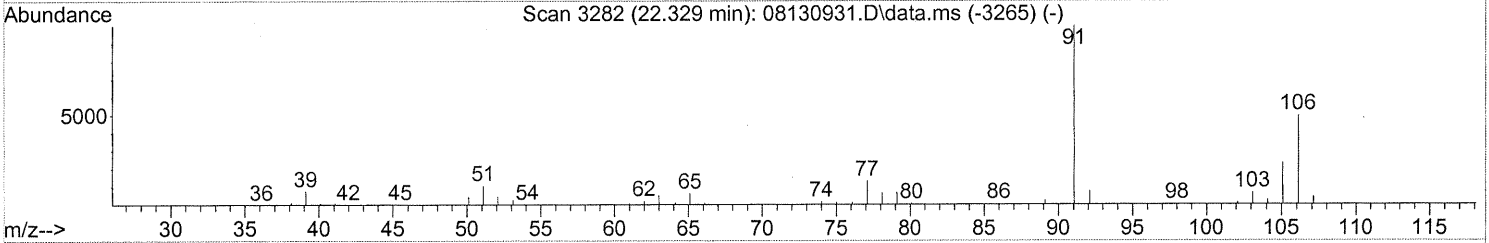
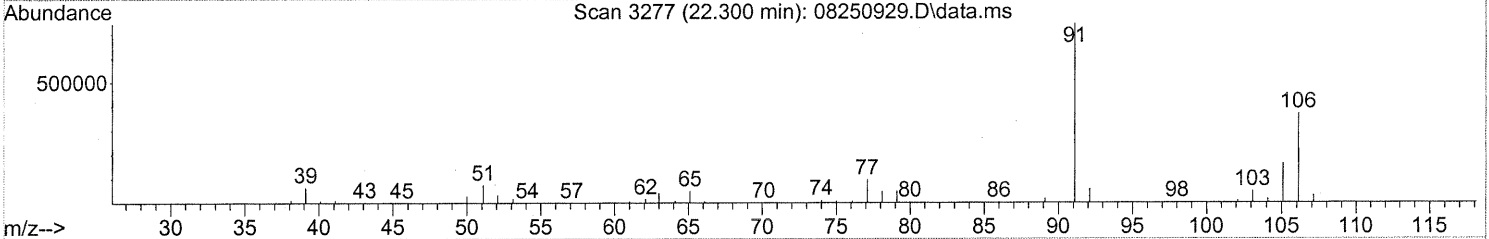
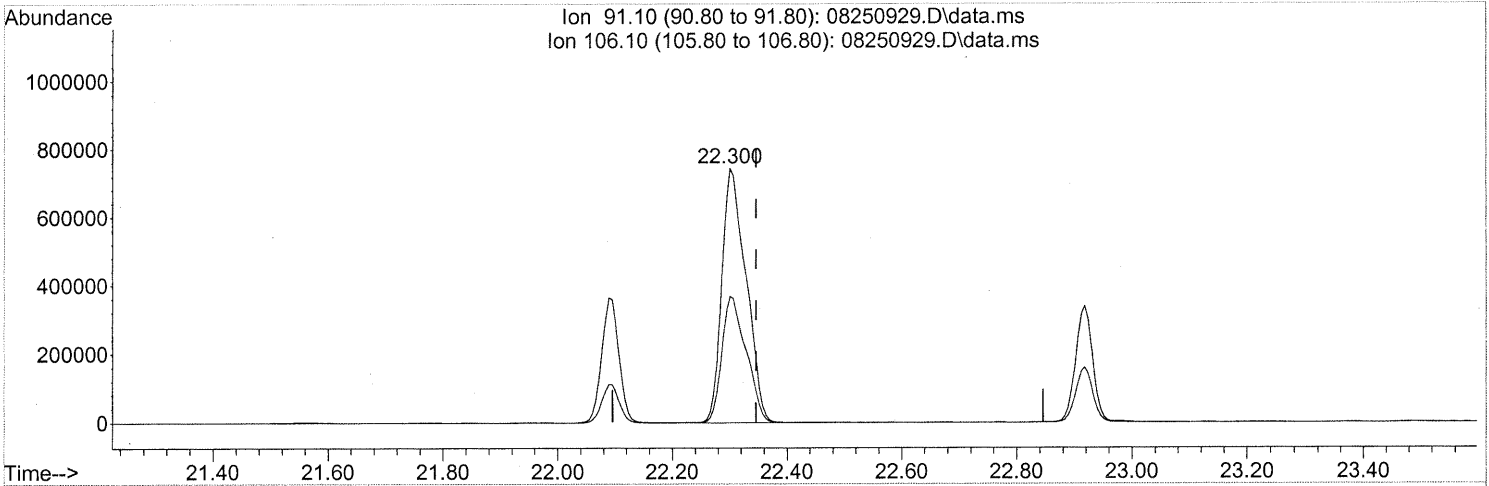
(66) Ethylbenzene (T)  
 22.089min (-0.011) 7.30ng  
 response 765986

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

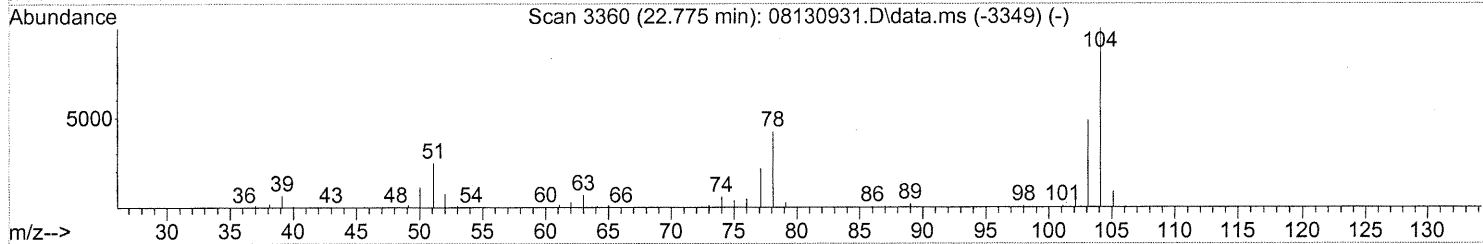
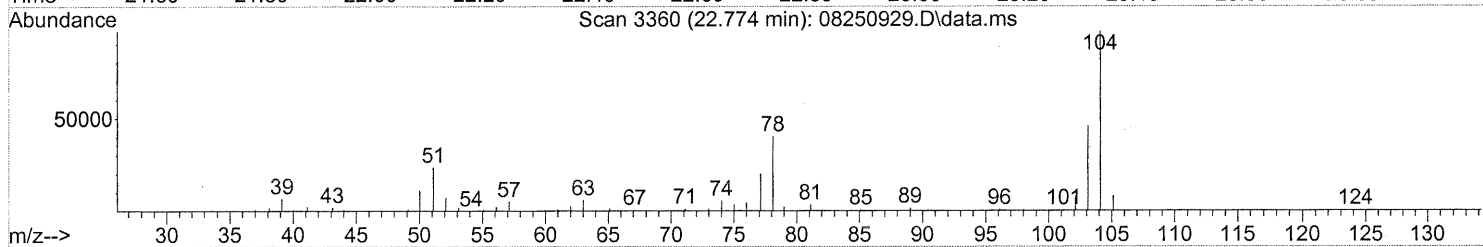
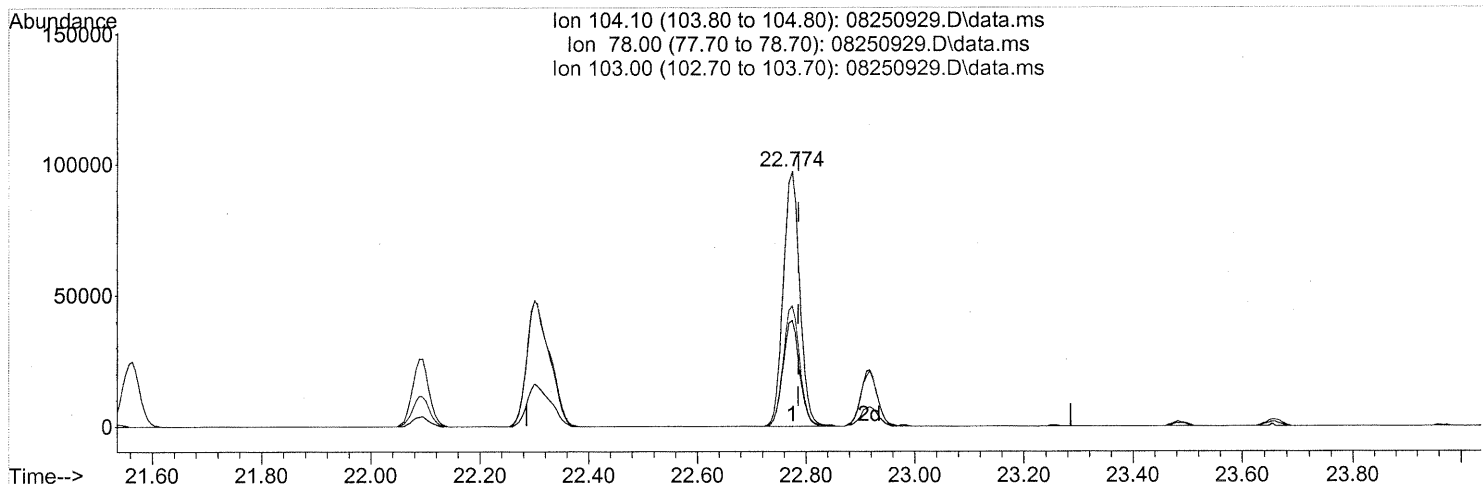
(67) m- & p-Xylenes (T)  
 22.300min (-0.046) 26.18ng  
 response 2178194

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

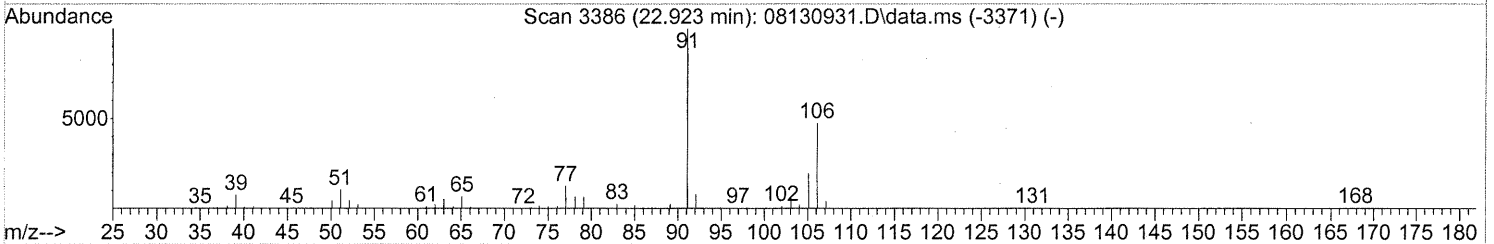
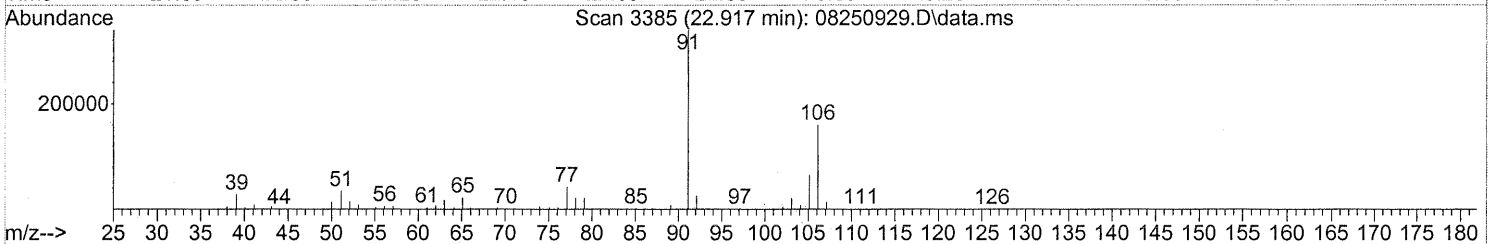
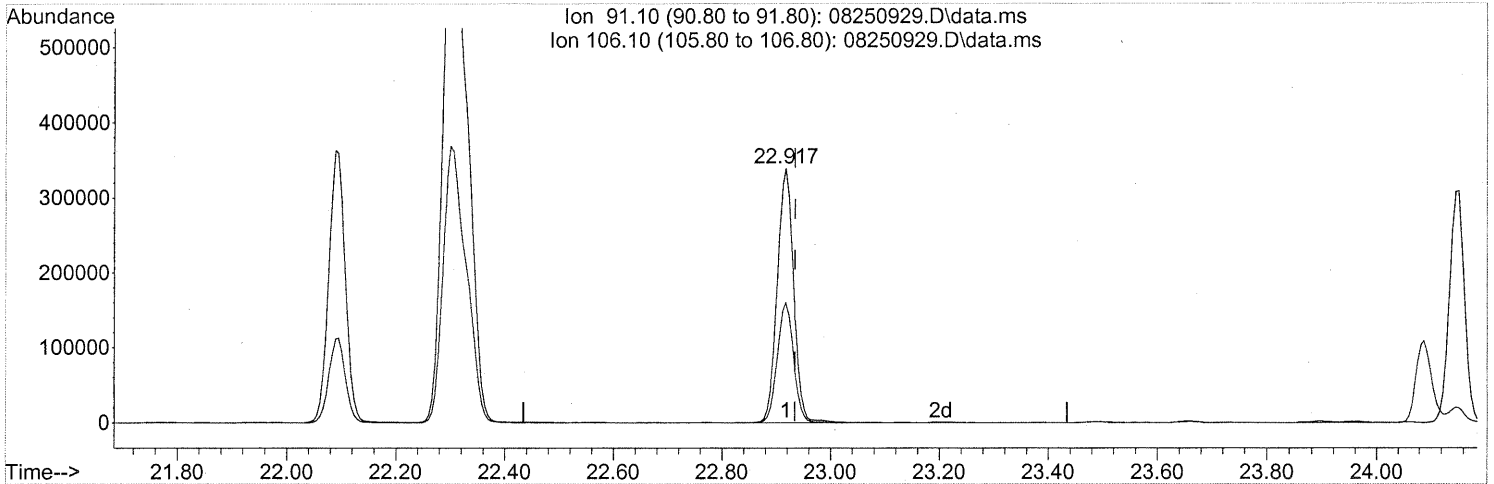
(69) Styrene (T)  
 22.774min (-0.011) 3.33ng  
 response 204668

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.46
103.00	48.70	47.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.45ng

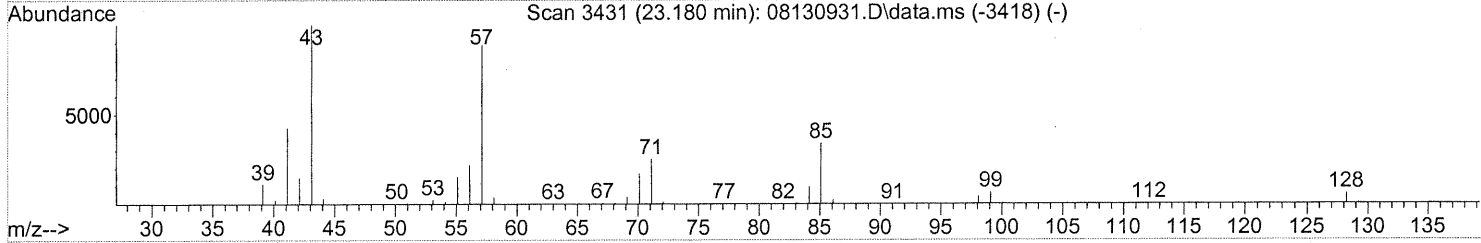
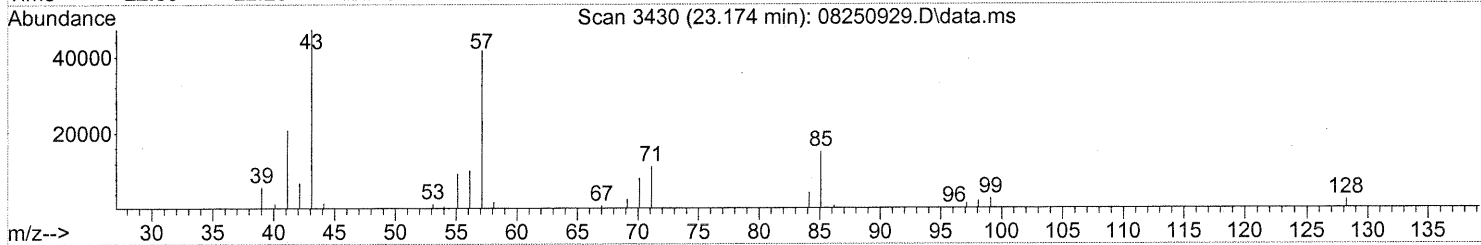
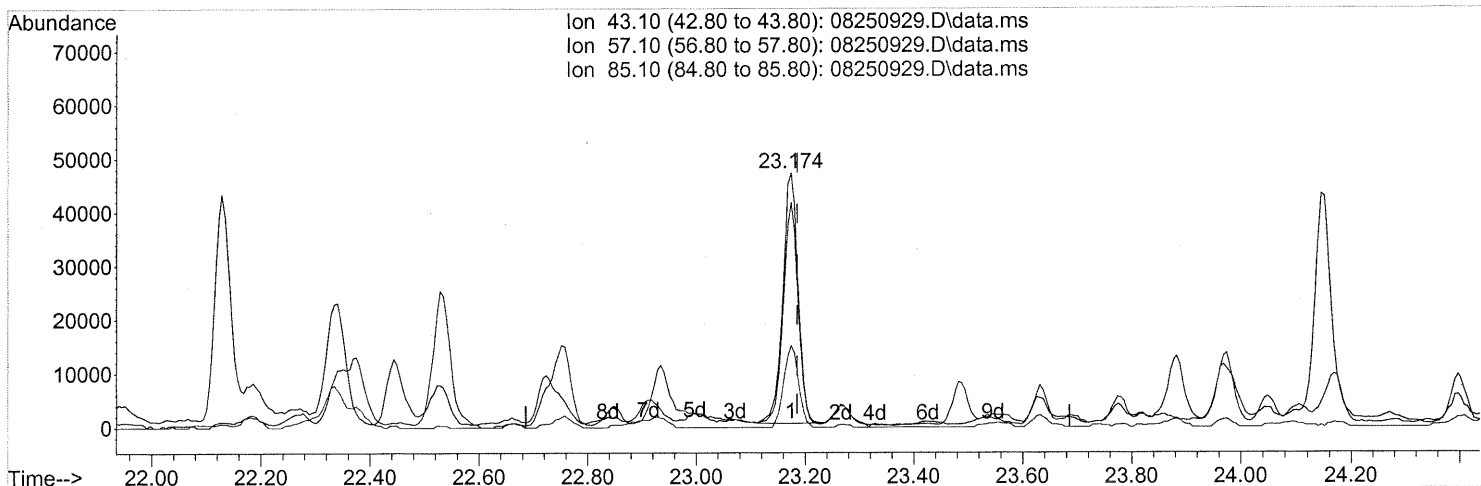
response 706888

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

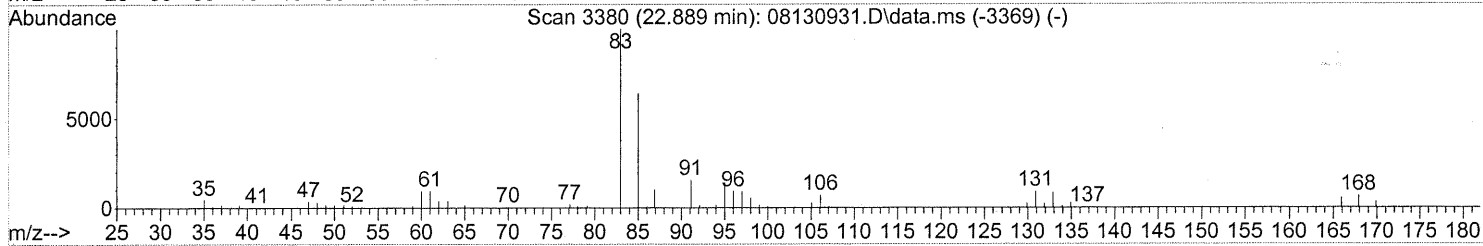
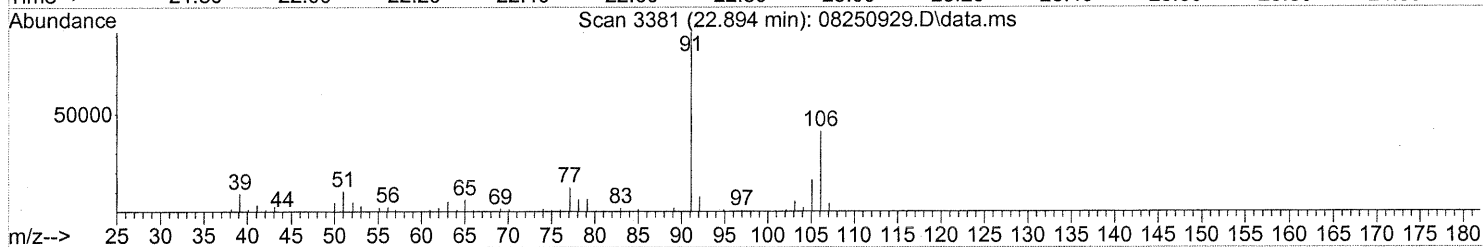
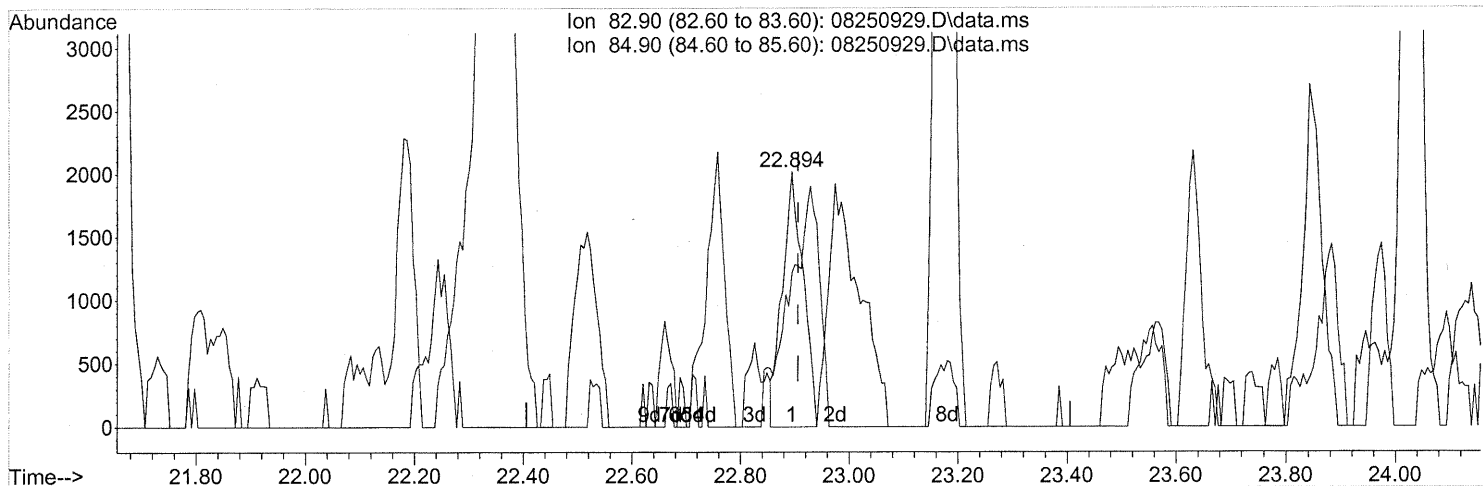
(71) n-Nonane (T)  
 23.174min (-0.011) 1.80ng  
 response 90531

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	86.81
85.10	38.80	31.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(72) 1,1,2,2-Tetrachloroethane (T)

22.894min (-0.011) 0.15ng

response 5348

Ion	Exp%	Act%
82.90	100	100
84.90	63.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

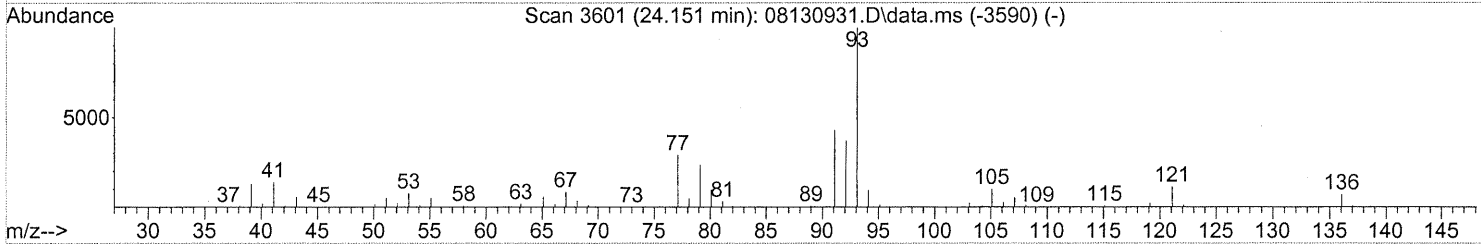
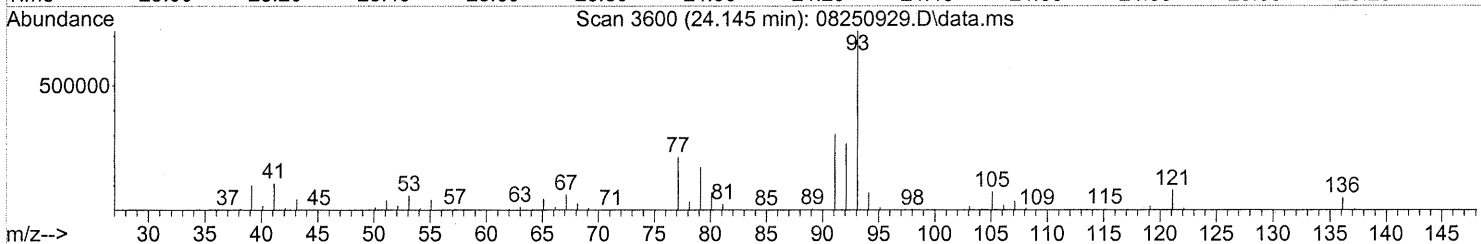
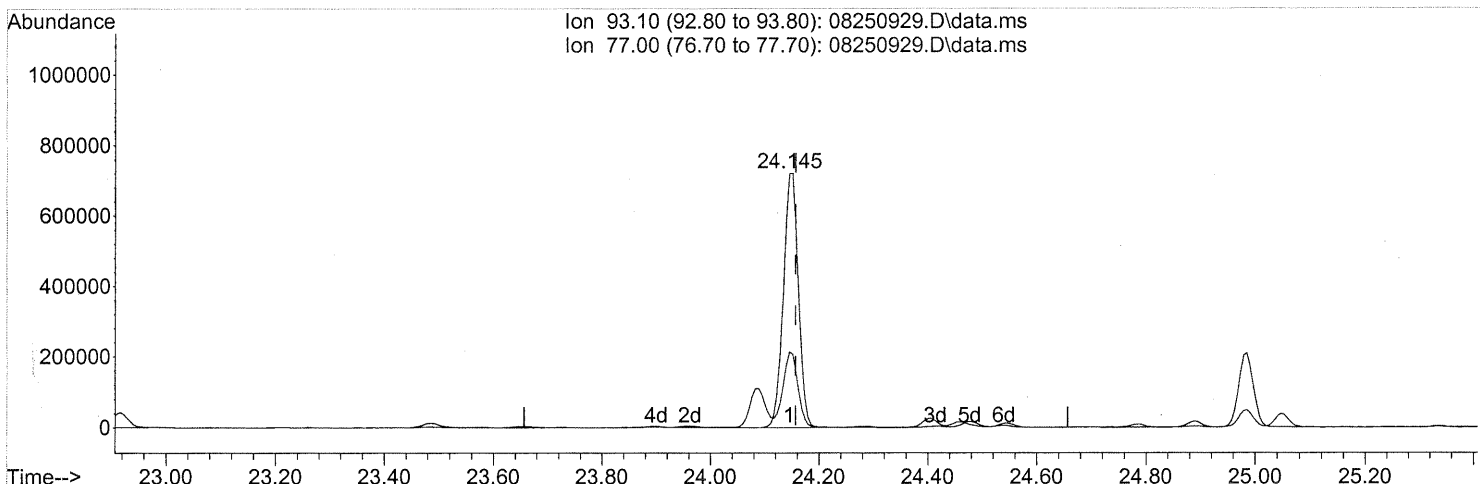
*FP em 8/28/09*

*10/28/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(75) alpha-Pinene (T)  
 24.145min (-0.011) 25.65ng  
 response 1373307

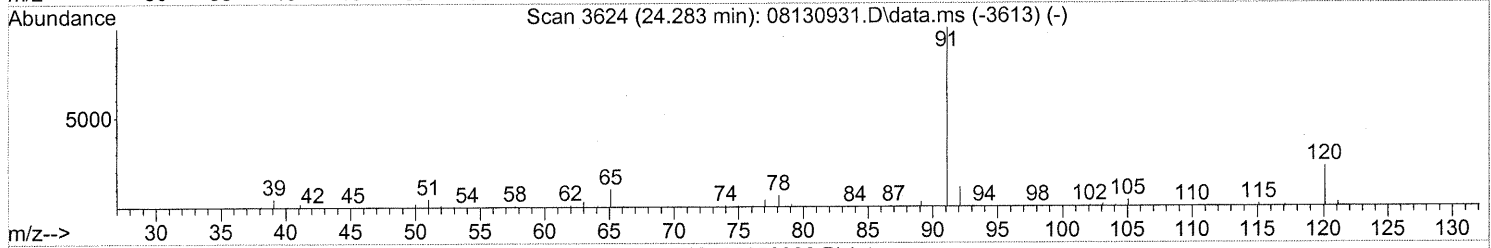
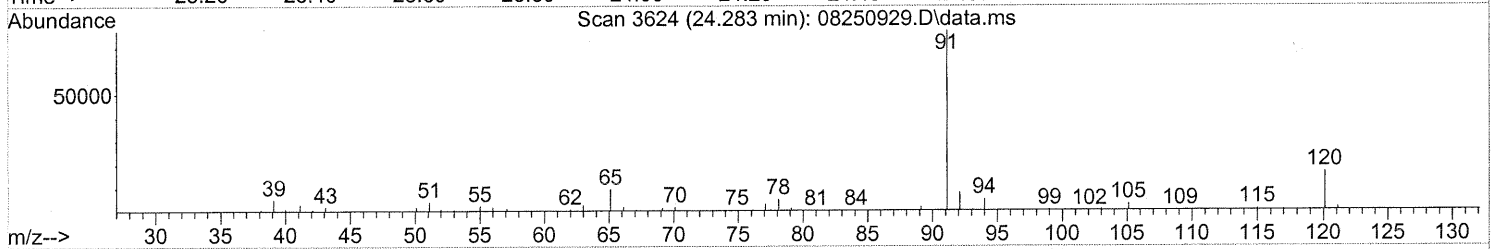
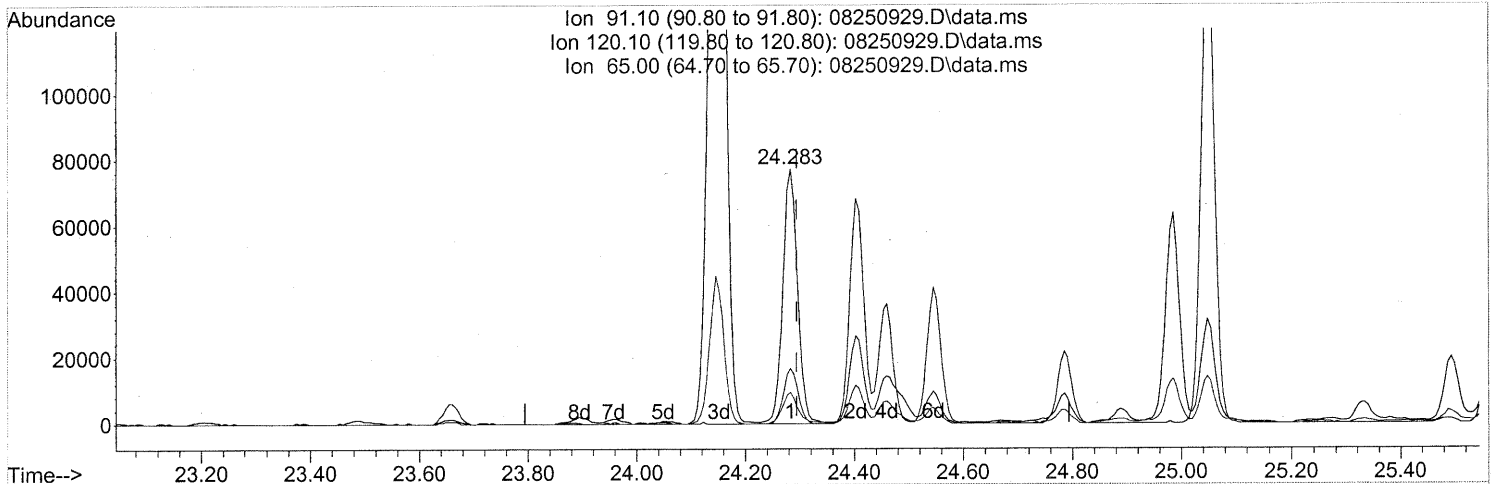
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	29.36
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

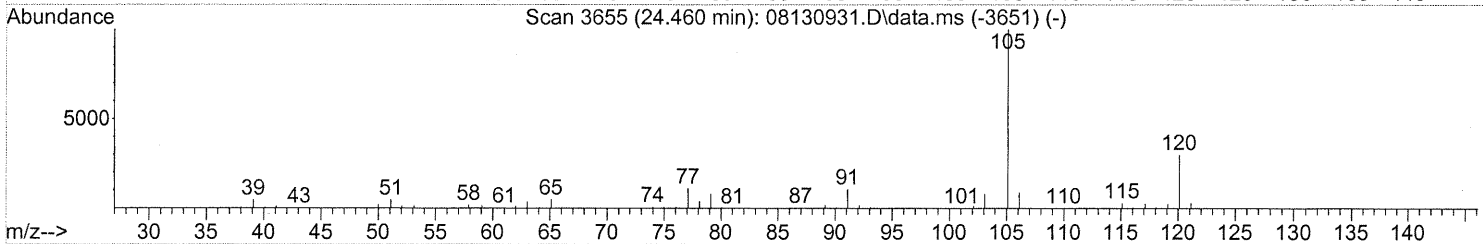
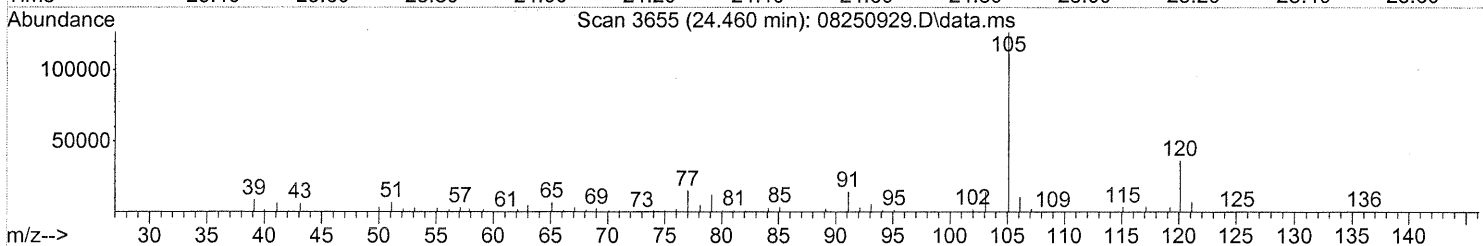
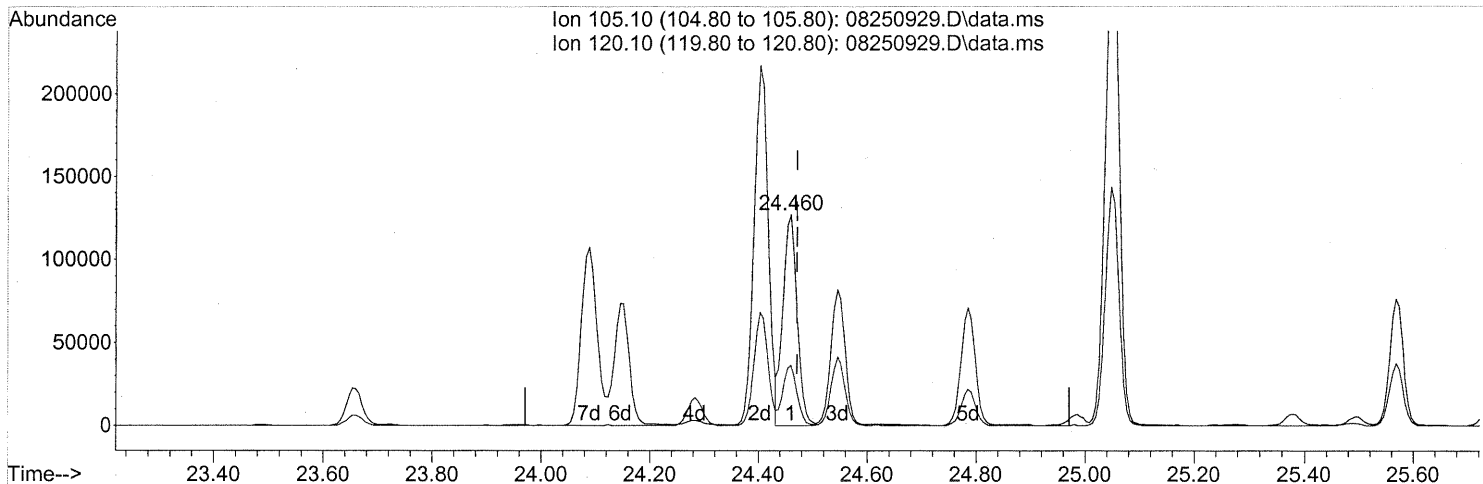
(76) n-Propylbenzene (T)  
 24.283min (-0.011) 1.09ng  
 response 146006

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.37
65.00	10.20	12.98
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

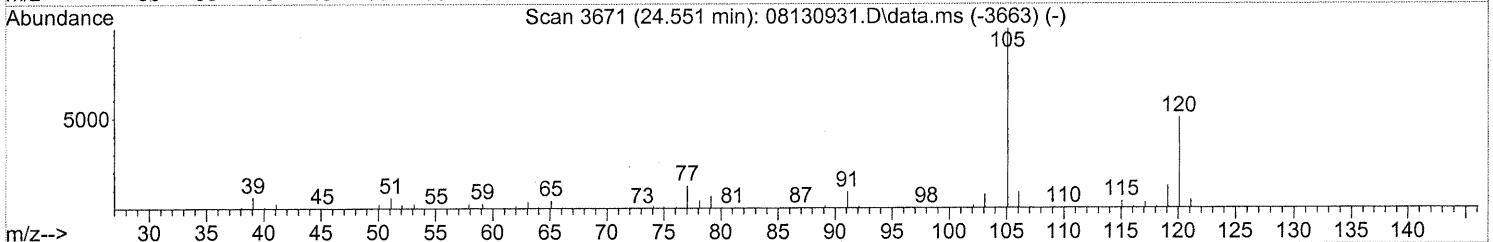
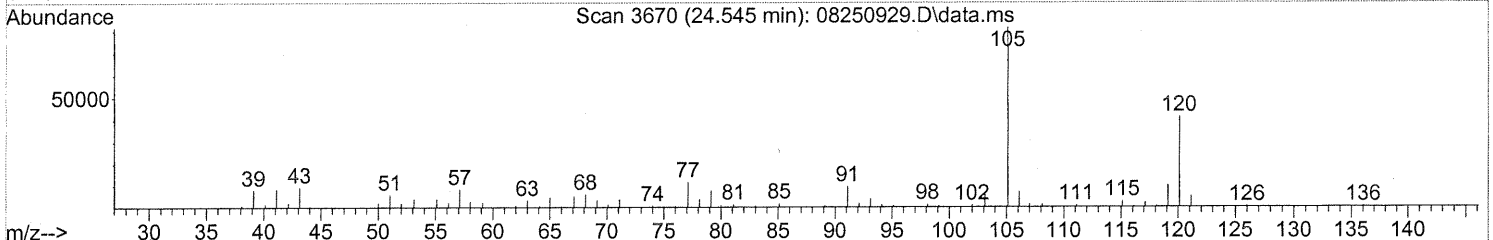
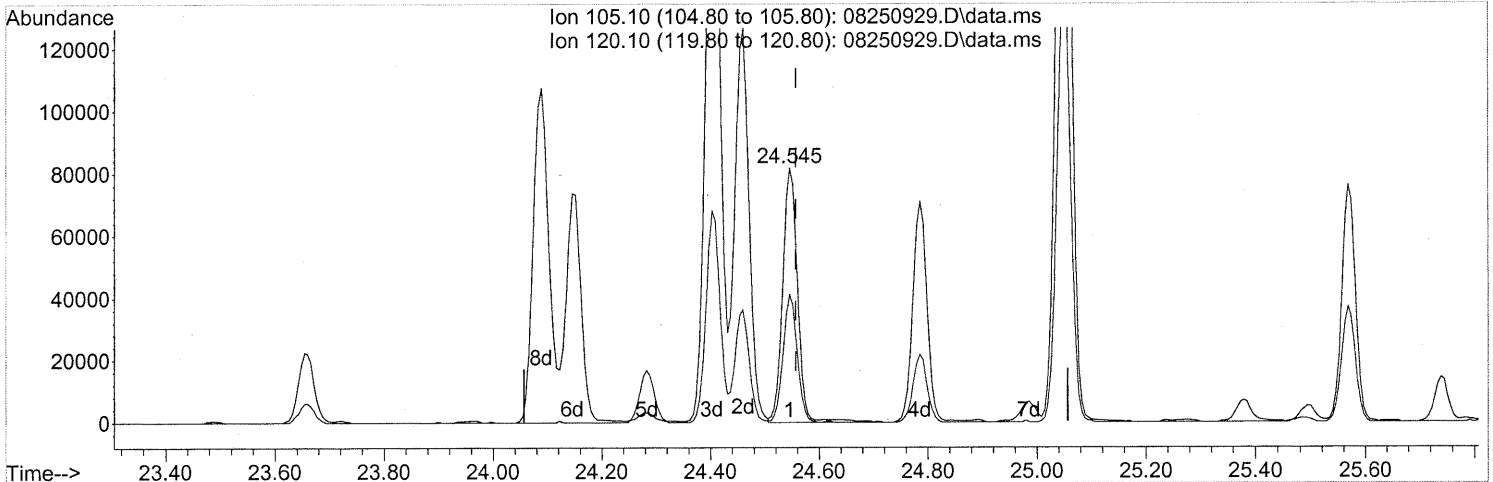
(78) 4-Ethyltoluene (T)  
 24.460min (-0.011) 2.25ng  
 response 230273

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250929.D  
Acq On : 25 Aug 2009 22:45  
Operator : EM  
Sample : P0902857-006 (500ml)  
Misc : Env. H & E 100462  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250929.D\data.ms

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

24.545min (-0.011) 1.83ng

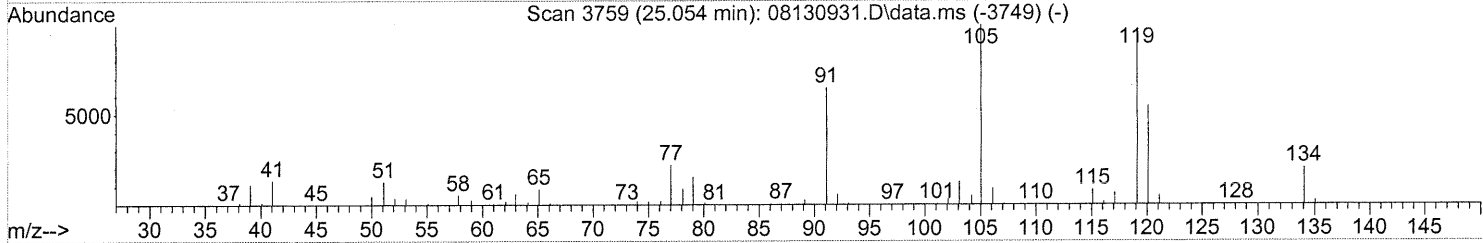
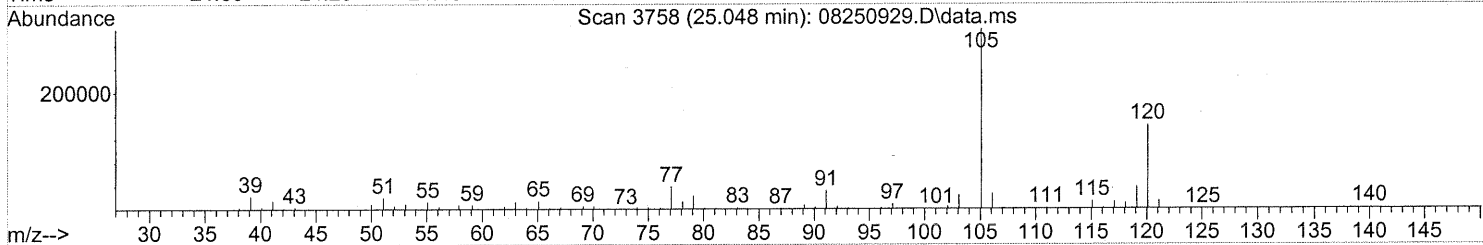
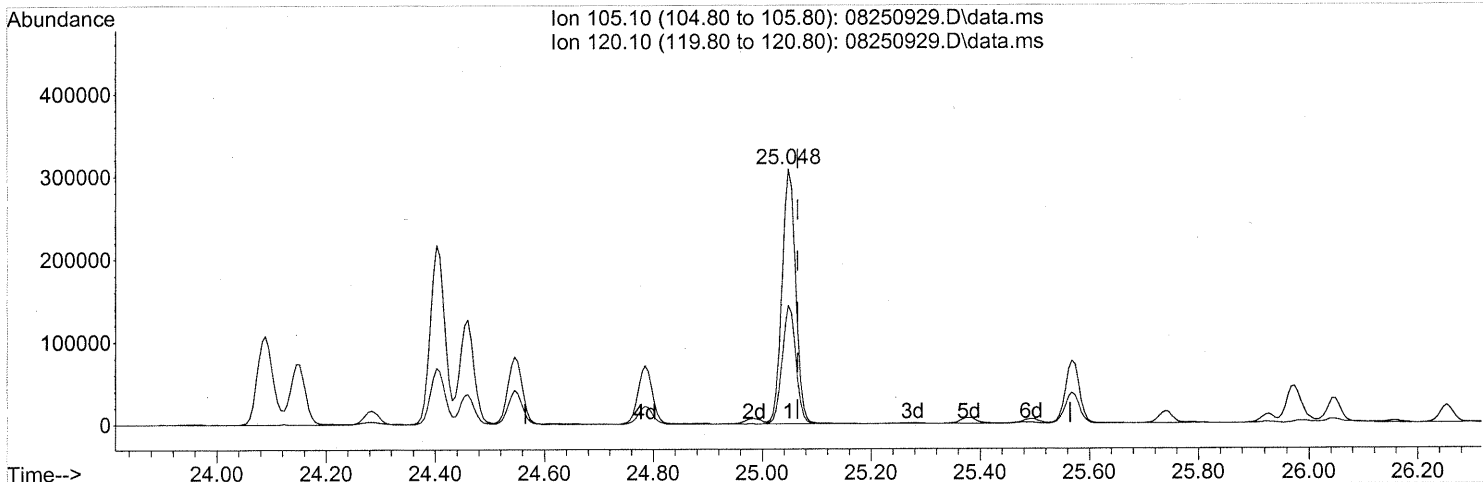
response 154893

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	47.67
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

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

25.048min (-0.017) 6.02ng

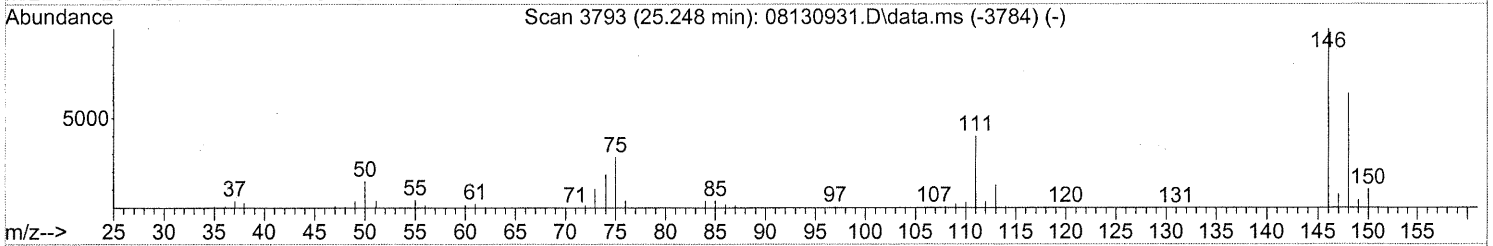
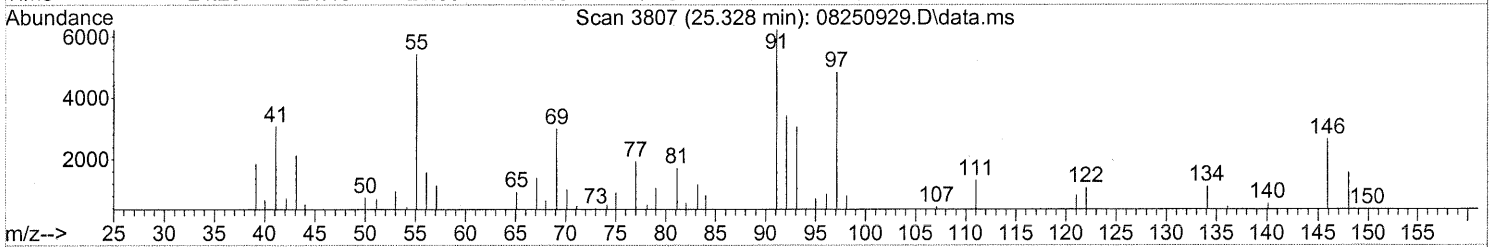
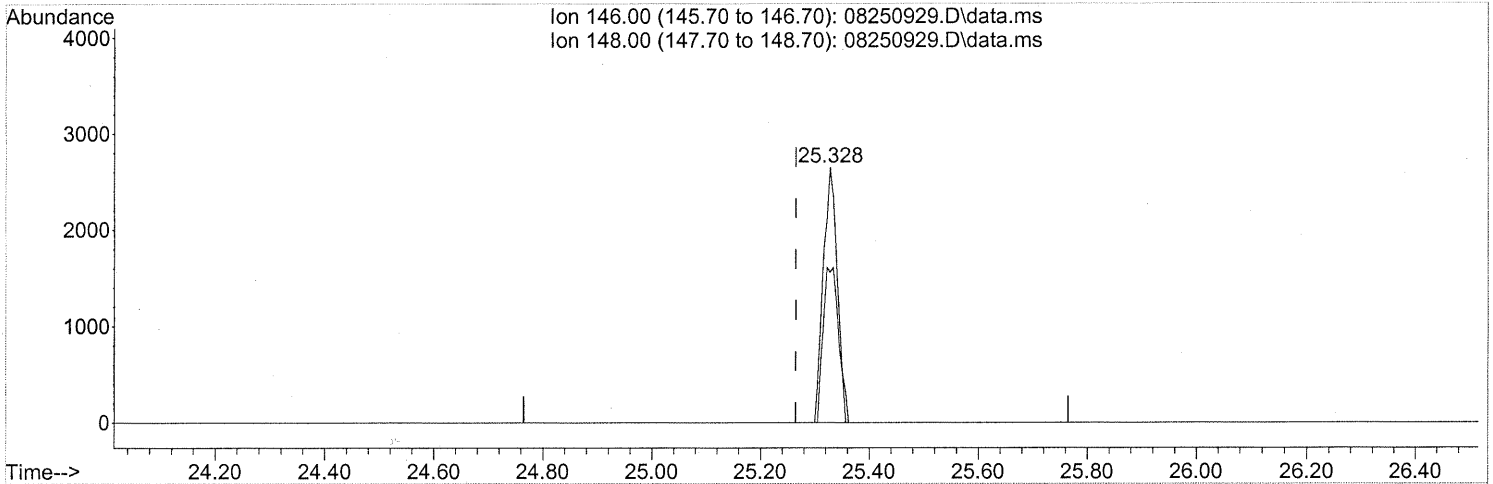
response 540553

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250929.D  
Acq On : 25 Aug 2009 22:45  
Operator : EM  
Sample : P0902857-006 (500ml)  
Misc : Env. H & E 100462  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



TIC: 08250929.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.10ng

response 4801

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.42
0.00	0.00	0.00
0.00	0.00	0.00

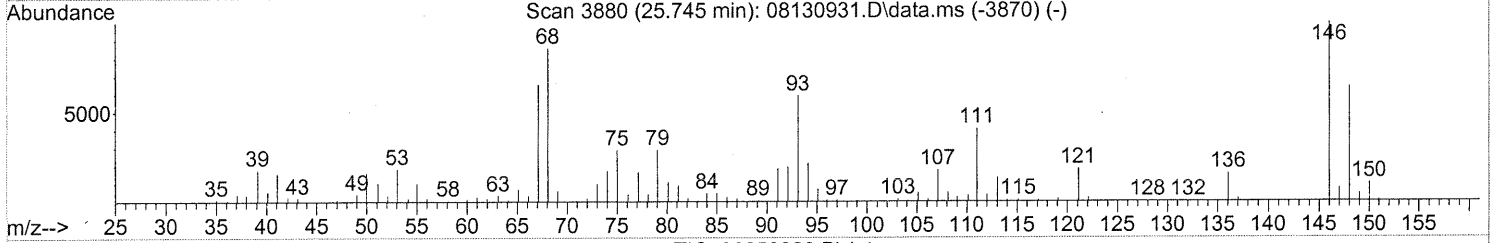
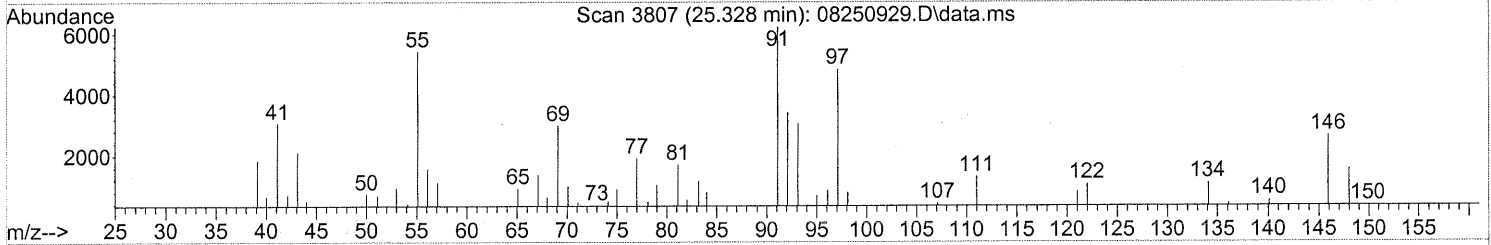
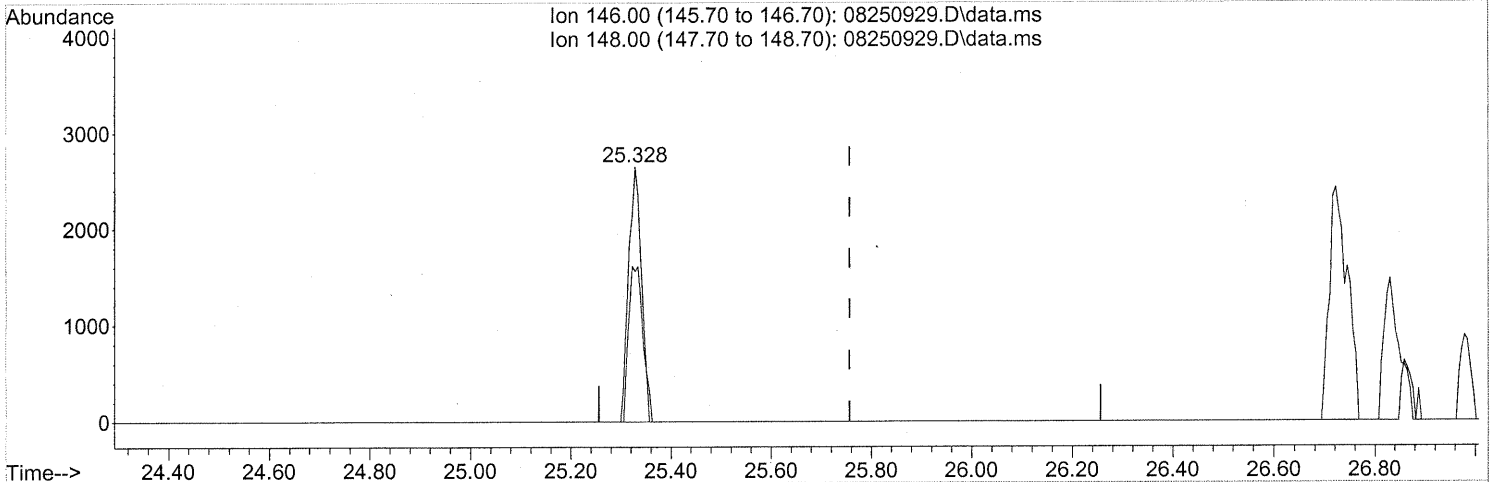
*FP em 8/28/09*

*148/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.10ng

response 4801

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.42
0.00	0.00	0.00
0.00	0.00	0.00

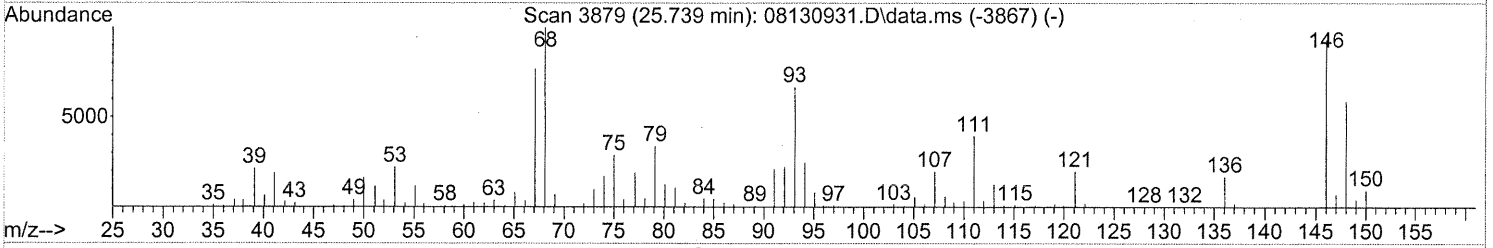
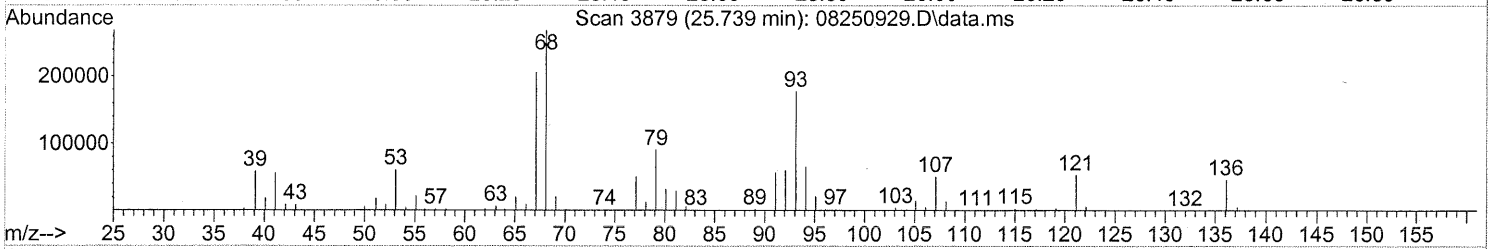
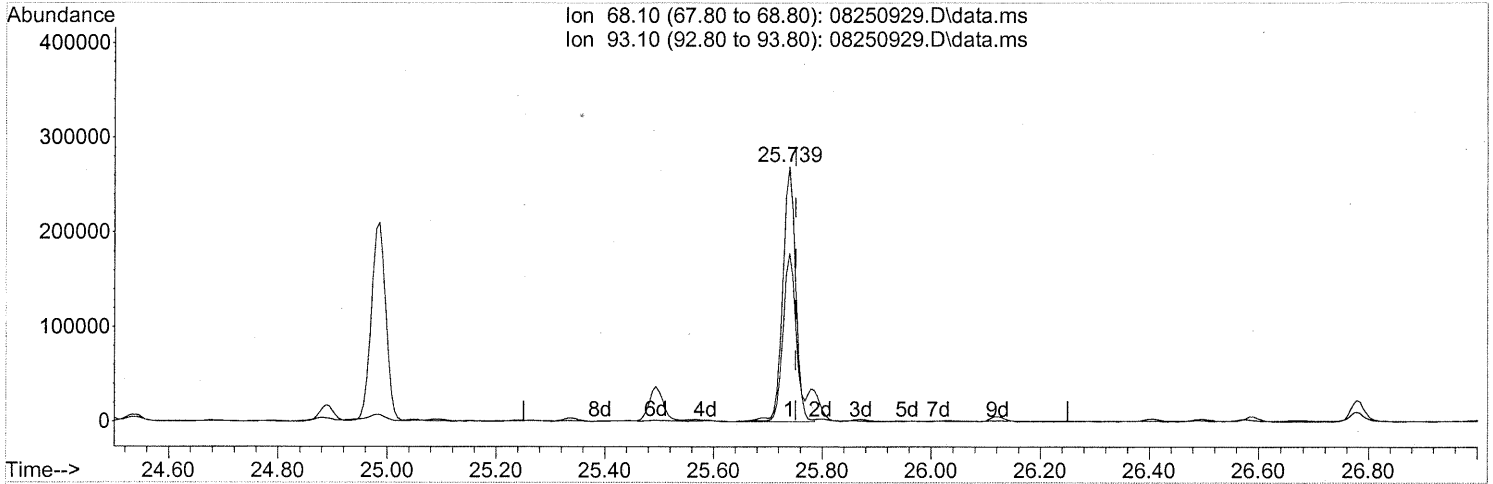
*TP em 8/28/09*

*ves 8/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

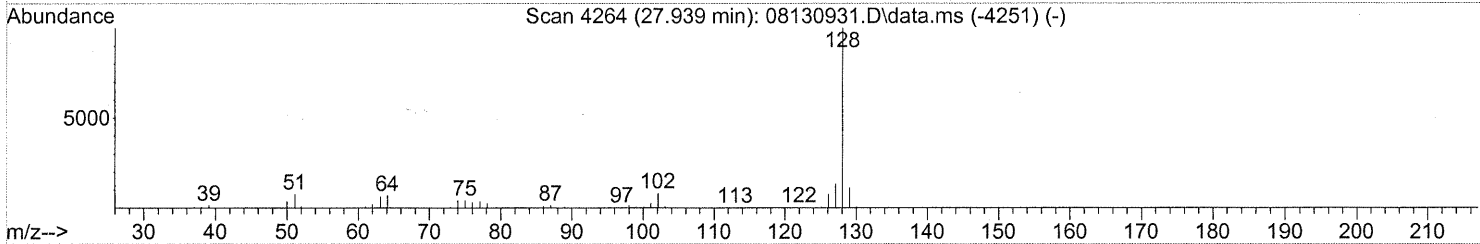
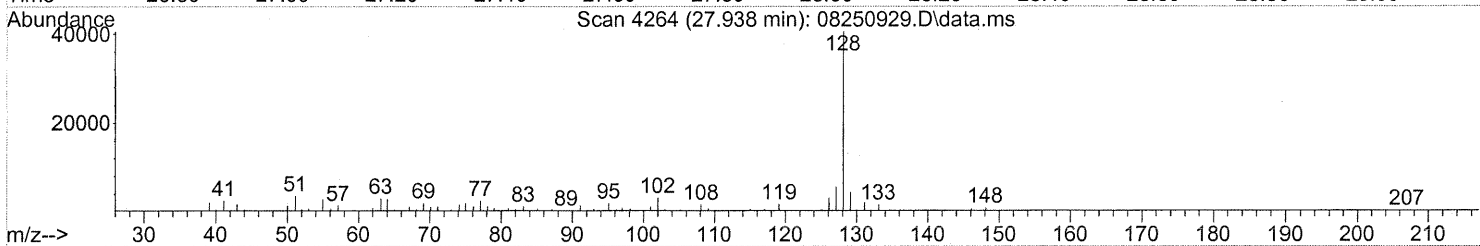
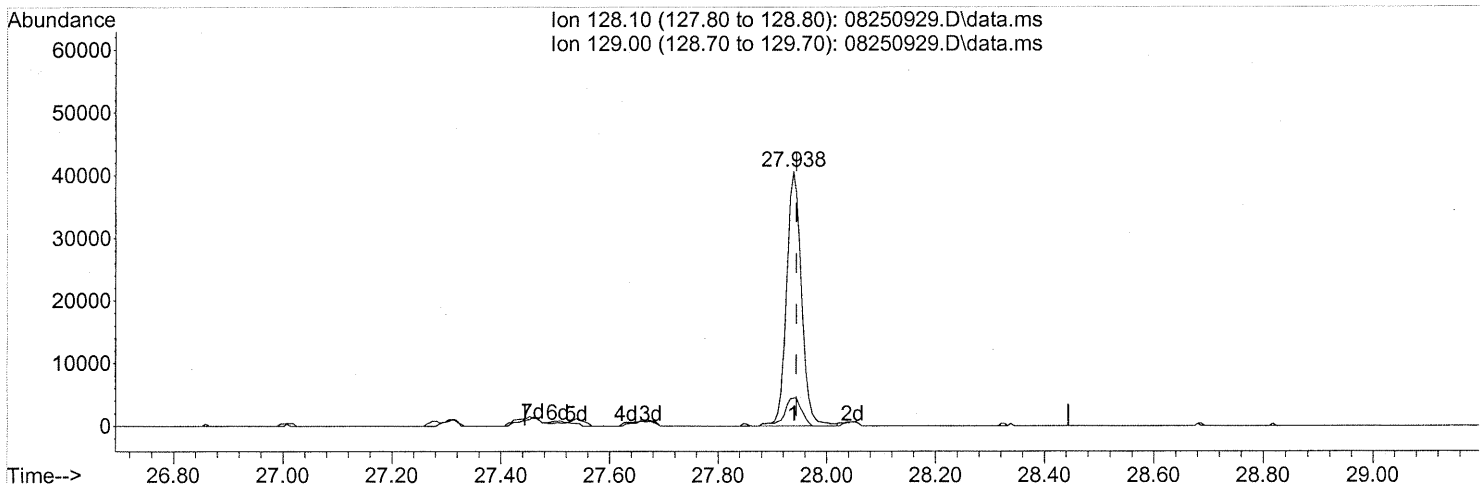
(91) d-Limonene (T)  
 25.739min (-0.011) 12.04ng  
 response 442064

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	67.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250929.D  
 Acq On : 25 Aug 2009 22:45  
 Operator : EM  
 Sample : P0902857-006 (500ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:20 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250929.D\data.ms

(95) Naphthalene (T)  
 27.938min (-0.006) 0.64ng  
 response 77199

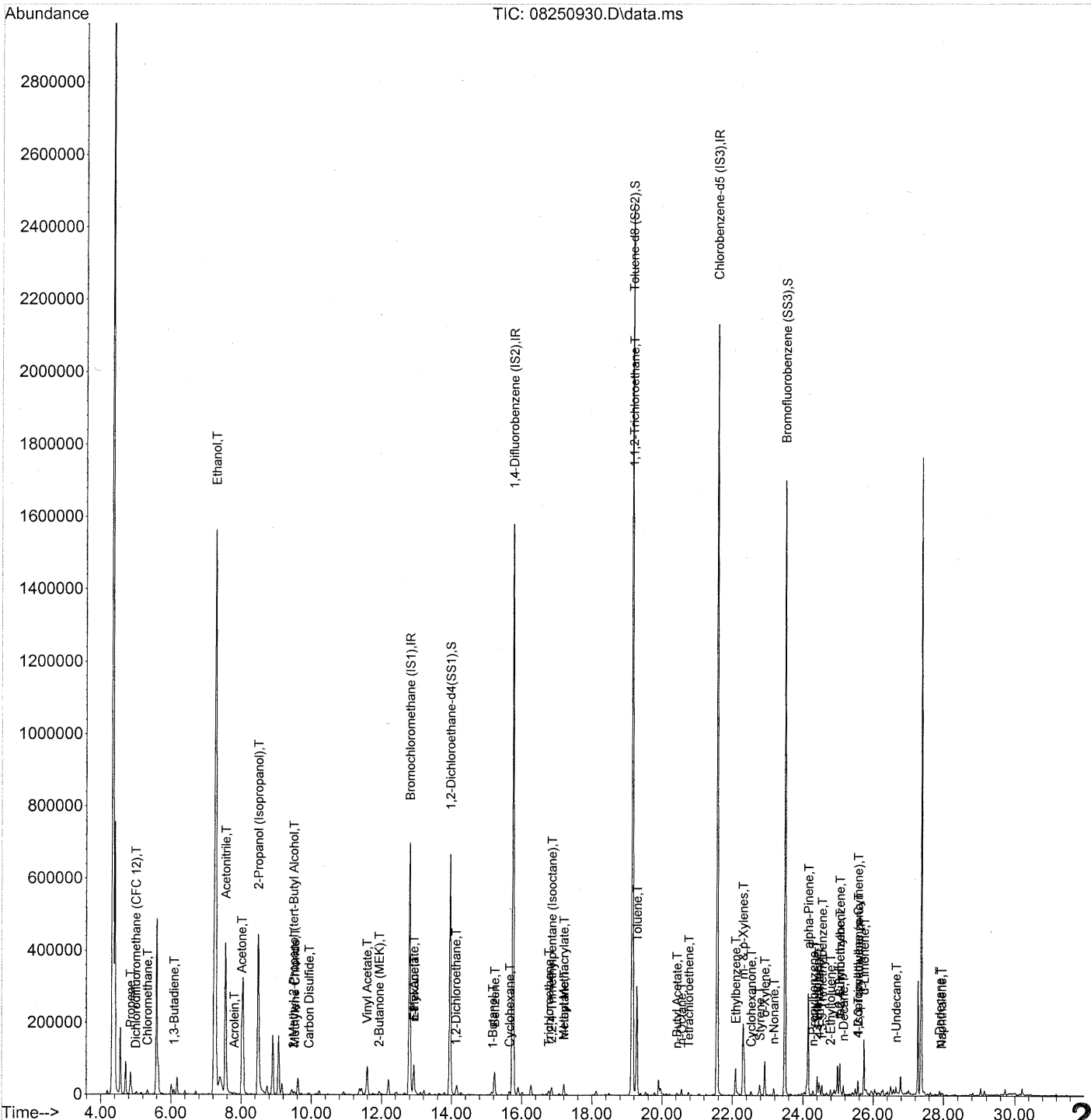
Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.65
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:02:21 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:02:21 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	373419	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1873606	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	923338	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	661334	25.047	ng	-0.03	
Spiked Amount	25.000		Recovery	=	100.20%		✓
57) Toluene-d8 (SS2)	19.14	98	2190150	24.951	ng	-0.02	✓
Spiked Amount	25.000		Recovery	=	99.80%		✓
73) Bromofluorobenzene (SS3)	23.49	174	612435	24.636	ng	0.00	✓
Spiked Amount	25.000		Recovery	=	98.56%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.85	42	23475	0.717	ng	97
3) Dichlorodifluoromethan...	5.00	85	3615	0.077	ng	# 85
4) Chloromethane	5.33	50	14171	0.325	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	6.09	54	6516	0.213	ng	93
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.27	45	3391779	165.070	ng	
11) Acetonitrile	7.56	41	653670	13.036	ng	99
12) Acrolein	7.80	56	5008	0.374	ng	99
13) Acetone	8.01	58	118378	5.661	ng	# 49
14) Trichlorofluoromethane	8.28	101	1836	N.D.		
15) 2-Propanol (Isopropanol)	8.48	45	744860	13.008	ng	93
16) Acrylonitrile	8.84	53	1191	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.48	59	10783	0.185	ng	# 65
19) Methylene Chloride	9.53	84	4204	0.161	ng	83
20) 3-Chloro-1-propene (Al...	9.72	41	456	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.93	76	9652	0.105	ng	79
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	11.58	86	3663	0.809	ng	# 1
27) 2-Butanone (MEK)	11.93	72	5271	0.362	ng	# 21
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	12.92	61	6030	0.638	ng	100
31) n-Hexane	12.93	57	39866	0.865	ng	94

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*EM 8/28/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:02:21 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.00	83	251	N.D.		
34) Tetrahydrofuran (THF)	13.64	72	400	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	11670	0.395	ng	99
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.17	56	7784	0.321	ng	# 5
41) Benzene	15.23	78	83870	0.832	ng	98
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	5047	0.129	ng	# 75
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	16.77	130	5295	0.207	ng	97
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	24875	0.215	ng	94
50) Methyl Methacrylate	17.20	100	2506	0.249	ng	# 1
51) n-Heptane	17.20	71	9334	0.348	ng	91
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	19.16	97	169983	7.896	ng	# 8
58) Toluene	19.28	91	291089	2.736	ng	100
59) 2-Hexanone	19.59	43	2405	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.42	43	8811	0.146	ng	91
63) n-Octane	20.56	57	3403	0.143	ng	88
64) Tetrachloroethene	20.76	166	3664	0.139	ng	93
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	75777	0.660	ng	96
67) m- & p-Xylenes	22.30	91	210902	2.316	ng	100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	18919	0.281	ng	99
70) o-Xylene	22.92	91	70126	0.765	ng	98
71) n-Nonane	23.17	43	9547	0.173	ng	87
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.66	105	4593	N.D.		
75) alpha-Pinene	24.15	93	134321	2.292	ng	72
76) n-Propylbenzene	24.29	91	14539	0.099	ng	96
77) 3-Ethyltoluene	24.40	105	39317	0.353	ng	99
78) 4-Ethyltoluene	24.46	105	22799	0.204	ng	97
79) 1,3,5-Trimethylbenzene	24.55	105	16034	0.173	ng	9291

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 27 15:02:21 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

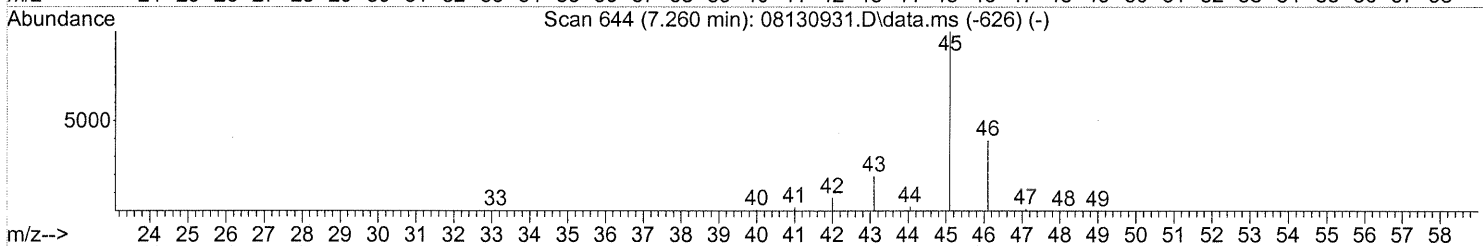
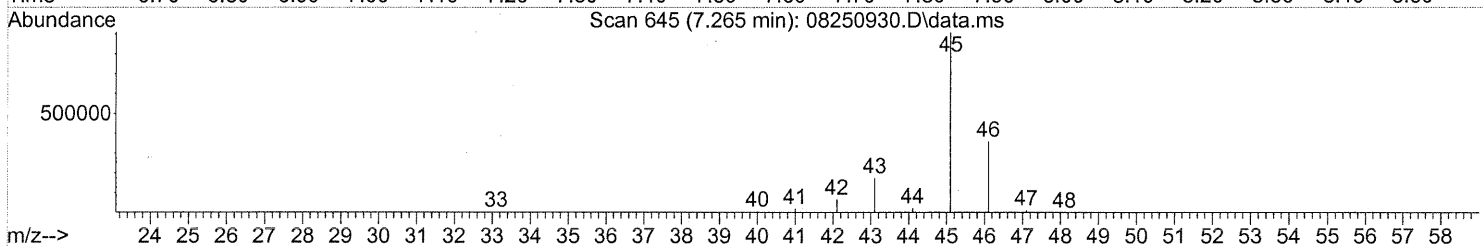
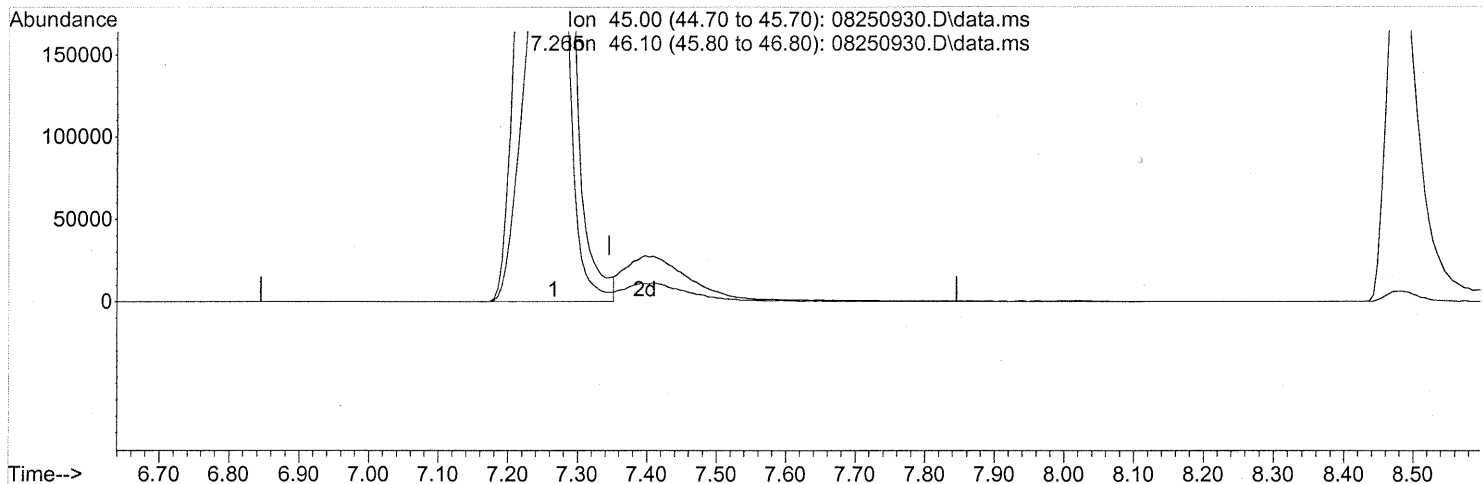
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	25.00	118	1033	N.D.		
81) 2-Ethyltoluene	24.79	105	13457	0.117	ng	94
82) 1,2,4-Trimethylbenzene	25.05	105	53382	0.543	ng	89
83) n-Decane	25.15	57	11293	0.198	ng	90
84) Benzyl Chloride	25.33	91	1177	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	118	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	118	N.D.		
87) sec-Butylbenzene	25.38	105	1360	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	12084	0.097	ng	90
89) 1,2,3-Trimethylbenzene	25.57	105	13634	0.137	ng	95
90) 1,2-Dichlorobenzene	25.33	146	118	N.D.		
91) d-Limonene	25.74	68	43276	1.077	ng	92
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	8772	0.148	ng	91
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	7499	0.057	ng	89
96) n-Dodecane	27.89	57	5390	0.082	ng	87
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.53	55	4101	0.122	ng	86
99) tert-Butylbenzene	25.05	119	6850	0.070	ng	# 54
100) n-Butylbenzene	26.06	91	4267	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 156.09ng

response 3207274

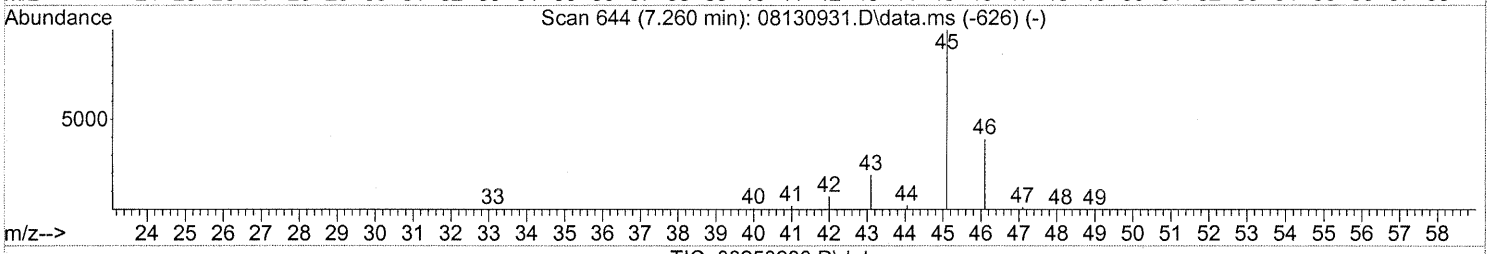
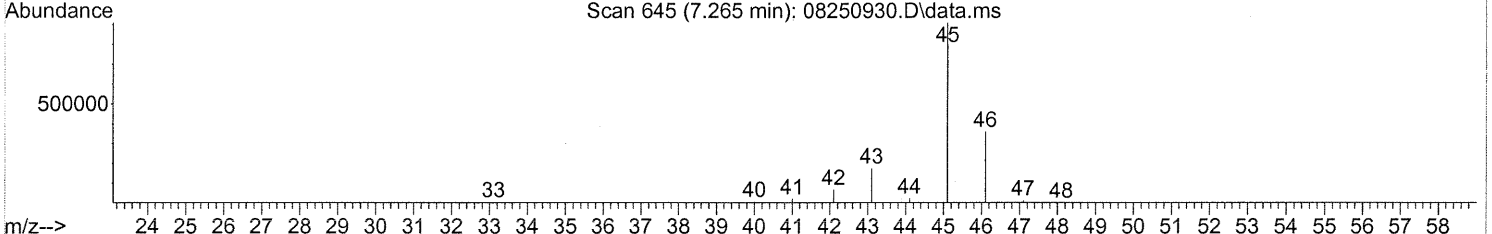
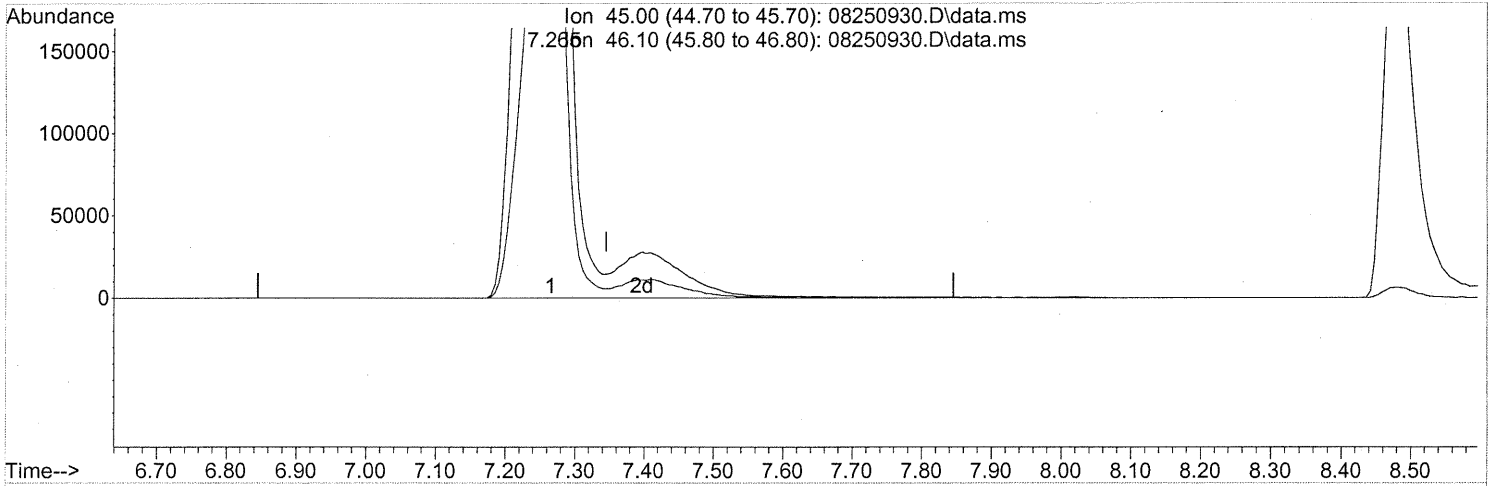
PT

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 165.07ng m

response 3391779

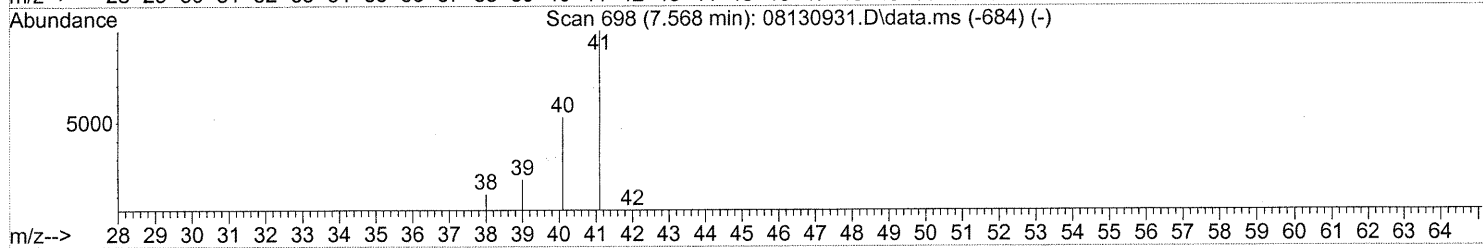
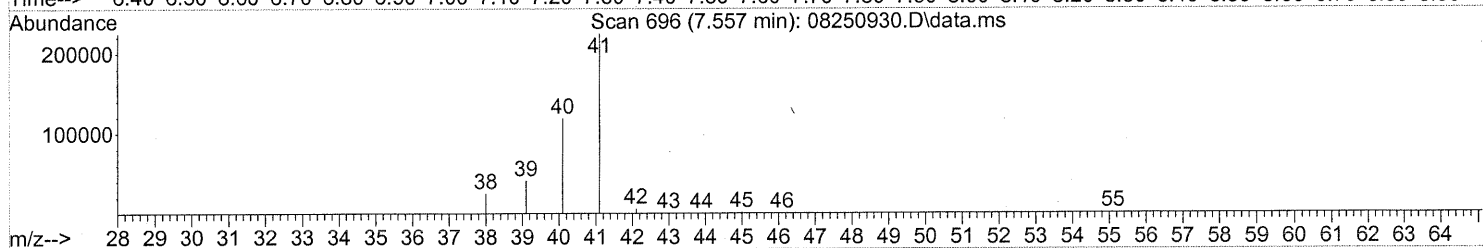
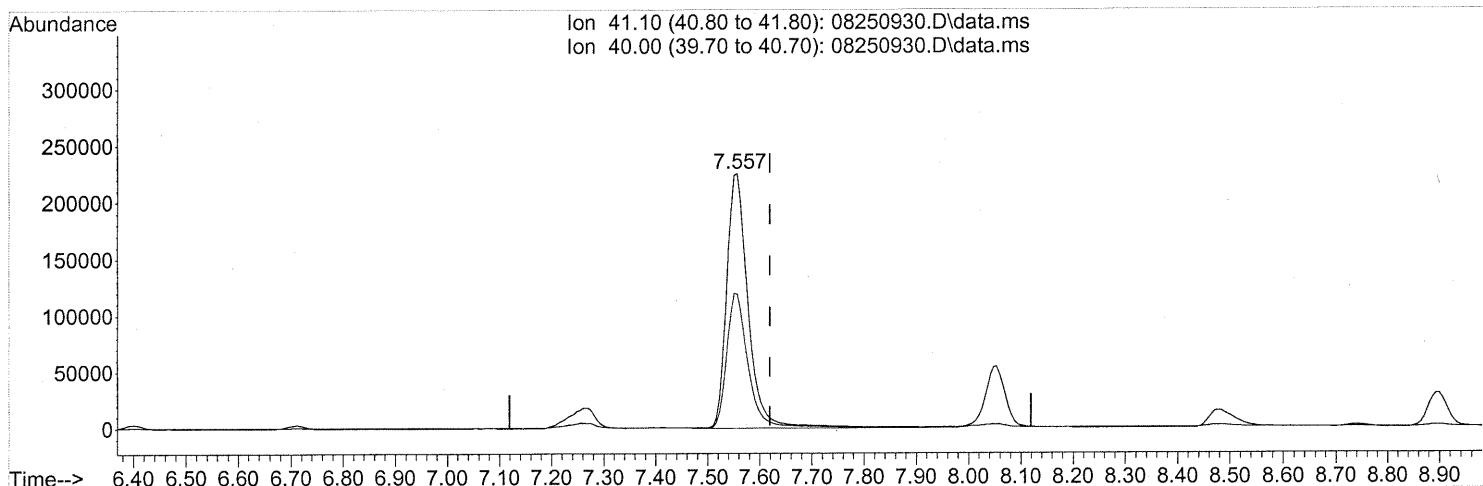
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.00
0.00	0.00	0.00
0.00	0.00	0.00

*PT → IC*  
*Em 8/28/09*  
*ves/31/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250930.D  
 Acq On : 25 Aug 2009 23:27  
 Operator : EM  
 Sample : P0902857-006 dil (50ml)  
 Misc : Env. H & E 100462  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 07:22:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250930.D\data.ms

(11) Acetonitrile (T)  
 7.557min (-0.063) 13.04ng  
 response 653670

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	52.43
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

CAS Project ID: P0902857

CAS Sample ID: P090825-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Elsa Moctezuma

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		MRL		Data Qualifier
		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	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: \_\_\_\_\_

9/1/09

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**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: P0902857  
 CAS Sample ID: P090825-MB

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Elsa Moctezuma  
 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	1.0	ND	0.28	
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	1.0	ND	0.24	
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: 9/10/09 **297**

**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: P0902857  
 CAS Sample ID: P090825-MB

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**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: \_\_\_\_\_

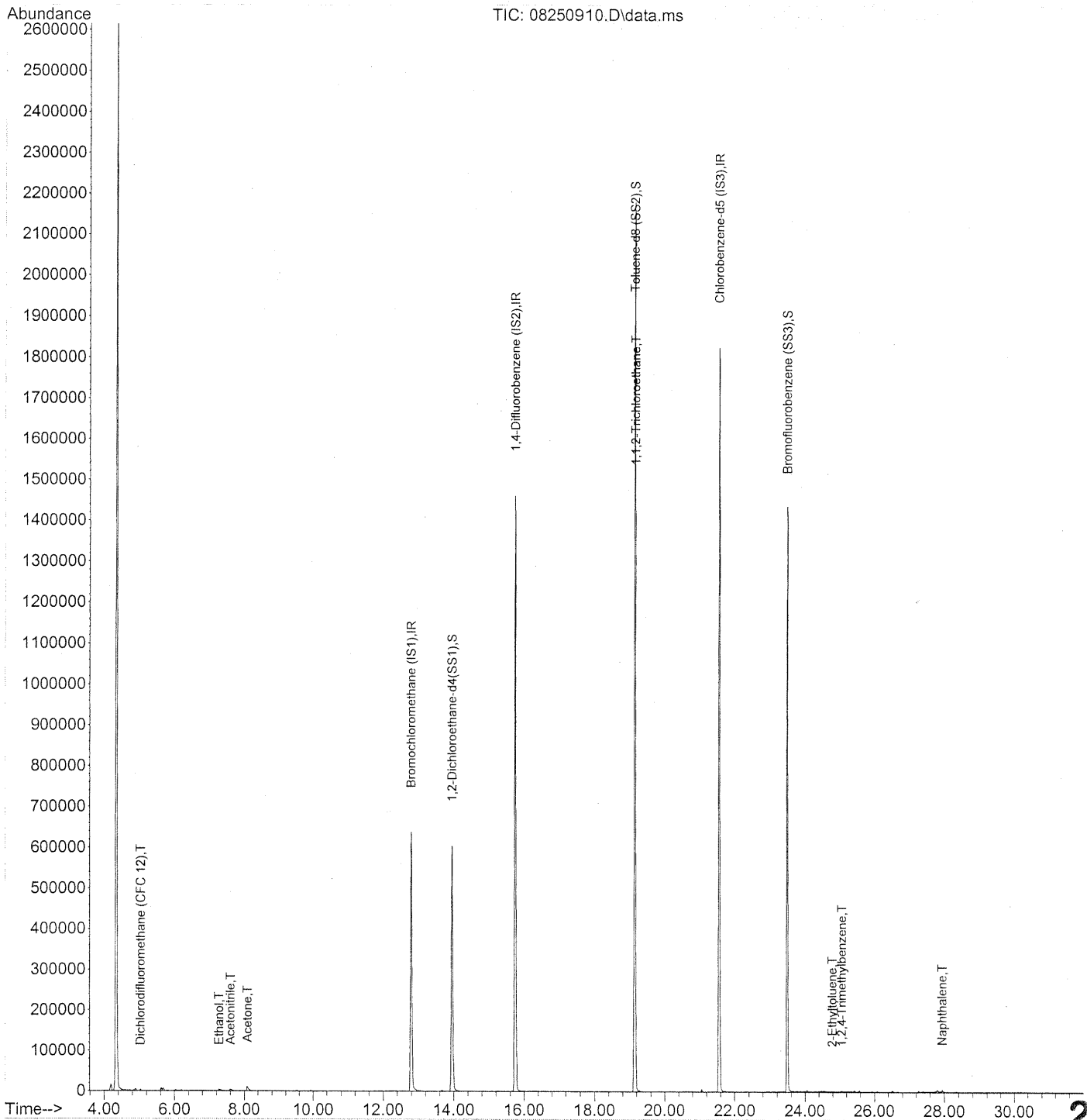
Date: \_\_\_\_\_

9/1/09

**298**

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250910.D  
Acq On : 25 Aug 2009 8:18  
Operator : EM  
Sample : TO-15 Method Blank (1000ml)  
Misc : S20-08130905  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 09:02:46 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250910.D  
 Acq On : 25 Aug 2009 8:18  
 Operator : EM  
 Sample : TO-15 Method Blank (1000ml)  
 Misc : S20-08130905  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 09:02:46 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	337337	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1723386	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	795568	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.95	65	595940	24.984	ng	-0.03 ✓
Spiked Amount	25.000		Recovery	=	99.92%	
57) Toluene-d8 (SS2)	19.14	98	1946649	25.739	ng	-0.02 ✓
Spiked Amount	25.000		Recovery	=	102.96%	
73) Bromofluorobenzene (SS3)	23.49	174	521489	24.347	ng	0.00 ✓
Spiked Amount	25.000		Recovery	=	97.40%	

Target Compounds

						Qvalue
2) Propene	4.88	42	1149	N.D.		
3) Dichlorodifluoromethan...	5.03	85	2849	0.067 ng	#	81
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	7.28	45	8990	0.484 ng		86
11) Acetonitrile	7.61	41	7749	0.171 ng	#	1
12) Acrolein	0.00	56	0	N.D.		
13) Acetone	8.09	58	7408	0.392 ng		96
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D.		
16) Acrylonitrile	8.88	53	513	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	9.54	84	505	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	9.94	76	1998	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)	0.00	72	0	N.D.		
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.		

300

Em 8/25/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250910.D  
 Acq On : 25 Aug 2009 8:18  
 Operator : EM  
 Sample : TO-15 Method Blank (1000ml)  
 Misc : S20-08130905  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 09:02:46 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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)	13.67	72	566	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	0.00	56	0	N.D.		
41) Benzene	15.24	78	2882	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.66	84	219	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...	16.86	57	341	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	19.16	97	152112	<del>7.682</del> ng	FP #	8
58) Toluene	19.28	91	1213	N.D.		
59) 2-Hexanone	0.00	43	0	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.55	43	111	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	22.10	91	404	N.D.		
67) m- & p-Xylenes	22.35	91	727	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.93	91	1360	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	23.67	105	1508	N.D.		
75) alpha-Pinene	24.15	93	227	N.D.		
76) n-Propylbenzene	24.29	91	1492	N.D.		
77) 3-Ethyltoluene	24.42	105	1870	N.D.		
78) 4-Ethyltoluene	24.46	105	1972	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	3785	N.D.		

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250910.D  
 Acq On : 25 Aug 2009 8:18  
 Operator : EM  
 Sample : TO-15 Method Blank (1000ml)  
 Misc : S20-08130905  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 09:02:46 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	108	N.D.		
81) 2-Ethyltoluene	24.79	105	7448	0.075	ng #	49
82) 1,2,4-Trimethylbenzene	25.06	105	5146	0.061	ng #	42
83) n-Decane	25.15	57	228	N.D.		
84) Benzyl Chloride	25.24	91	3182	N.D.		
85) 1,3-Dichlorobenzene	25.25	146	873	N.D.		
86) 1,4-Dichlorobenzene	25.34	146	1404	N.D.		
87) sec-Butylbenzene	25.39	105	893	N.D.		
88) 4-Isopropyltoluene (p-...	25.57	119	1128	N.D.		
89) 1,2,3-Trimethylbenzene	25.57	105	2230	N.D.		
90) 1,2-Dichlorobenzene	25.76	146	215	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	26.66	57	607	N.D.		
94) 1,2,4-Trichlorobenzene	27.80	180	1097	N.D.		
95) Naphthalene	27.94	128	8462	0.075	ng	84
96) n-Dodecane	27.89	57	1387	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.56	55	983	N.D.		
99) tert-Butylbenzene	25.05	119	988	N.D.		
100) n-Butylbenzene	26.08	91	808	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: P0902857

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister(s)  
**Test Notes:**

**Date(s) Collected:** 8/18/09  
**Date(s) Received:** 8/19/09  
**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	100	70-130	103	70-130	97	70-130	
Lab Control Sample	P090825-LCS	100	70-130	101	70-130	98	70-130	
100452	P0902857-001	103	70-130	102	70-130	98	70-130	
100455	P0902857-002	100	70-130	102	70-130	98	70-130	
100456	P0902857-003	101	70-130	102	70-130	96	70-130	
100459	P0902857-004	100	70-130	102	70-130	97	70-130	
100461	P0902857-005	100	70-130	101	70-130	99	70-130	
100462	P0902857-006	100	70-130	101	70-130	100	70-130	



**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

CAS Project ID: P0902857

CAS Sample ID: P090825-LCS

Test Code: EPA TO-15

Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Date Received: NA

Analyst: Elsa Moctezuma

Date Analyzed: 8/25/09

Sampling Media: 6.0 L Summa Canister

Volume(s) Analyzed: NA Liter(s)

Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS	Data Qualifier
					Acceptance Limits	
115-07-1	Propene	26.3	26.7	102	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	23.2	89	61-118	
74-87-3	Chloromethane	25.0	23.8	95	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	23.3	90	65-122	
75-01-4	Vinyl Chloride	25.3	22.7	90	57-132	
106-99-0	1,3-Butadiene	26.8	26.1	97	66-161	
74-83-9	Bromomethane	25.8	24.2	94	67-130	
75-00-3	Chloroethane	25.5	23.2	91	68-123	
64-17-5	Ethanol	130	120	92	50-155	
75-05-8	Acetonitrile	26.0	24.4	94	48-148	
107-02-8	Acrolein	26.3	27.4	104	67-138	
67-64-1	Acetone	132	115	87	59-121	
75-69-4	Trichlorofluoromethane	26.3	22.9	87	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	42.1	88	54-126	
107-13-1	Acrylonitrile	25.8	27.9	108	65-134	
75-35-4	1,1-Dichloroethene	27.5	24.4	89	70-123	
75-09-2	Methylene Chloride	26.8	22.7	85	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	27.5	102	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	25.9	94	69-126	
75-15-0	Carbon Disulfide	26.0	23.8	92	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	24.3	95	69-125	
75-34-3	1,1-Dichloroethane	26.5	24.9	94	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	25.2	96	72-132	
108-05-4	Vinyl Acetate	126	140	111	73-158	
78-93-3	2-Butanone (MEK)	26.8	28.2	105	68-126	

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

Date: 8/1/09

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**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

CAS Project ID: P0902857  
 CAS Sample ID: P090825-LCS

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Elsa Moctezuma  
**Sampling Media:** 6.0 L Summa Canister  
**Test Notes:**

**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	
156-59-2	cis-1,2-Dichloroethene	27.0	25.2	93	69-124	
141-78-6	Ethyl Acetate	52.0	50.7	98	65-126	
110-54-3	n-Hexane	26.0	24.1	93	63-125	
67-66-3	Chloroform	27.5	24.5	89	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	25.6	97	65-124	
107-06-2	1,2-Dichloroethane	26.3	25.0	95	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	24.1	93	69-127	
71-43-2	Benzene	25.8	23.4	91	68-122	
56-23-5	Carbon Tetrachloride	26.3	24.5	93	68-137	
110-82-7	Cyclohexane	51.8	49.2	95	68-121	
78-87-5	1,2-Dichloropropane	26.0	24.7	95	69-128	
75-27-4	Bromodichloromethane	26.3	25.0	95	71-131	
79-01-6	Trichloroethene	25.8	23.1	90	72-122	
123-91-1	1,4-Dioxane	26.0	26.9	103	73-127	
80-62-6	Methyl Methacrylate	52.8	50.2	95	80-133	
142-82-5	n-Heptane	25.8	23.8	92	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	24.8	101	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	27.6	103	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	28.5	106	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	25.2	97	76-125	
108-88-3	Toluene	26.8	24.5	91	74-119	
591-78-6	2-Hexanone	27.0	27.2	101	64-118	
124-48-1	Dibromochloromethane	28.3	27.4	97	79-129	
106-93-4	1,2-Dibromoethane	26.3	26.4	100	79-125	
123-86-4	n-Butyl Acetate	27.5	29.2	106	70-136	

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



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

9/1/09

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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

CAS Project ID: P0902857

CAS Sample ID: P090825-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Elsa Moctezuma

Sampling Media: 6.0 L Summa Canister

Test Notes:

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
111-65-9	n-Octane	26.3	25.3	96	75-126	
127-18-4	Tetrachloroethene	25.3	23.4	92	72-125	
108-90-7	Chlorobenzene	26.5	24.5	92	74-121	
100-41-4	Ethylbenzene	26.3	25.1	95	76-120	
179601-23-1	m,p-Xylenes	51.5	48.8	95	75-120	
75-25-2	Bromoform	26.5	25.7	97	76-143	
100-42-5	Styrene	26.3	26.4	100	78-124	
95-47-6	o-Xylene	26.0	25.0	96	76-121	
111-84-2	n-Nonane	25.8	25.4	98	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	26.7	99	77-126	
98-82-8	Cumene	25.3	24.0	95	78-125	
80-56-8	alpha-Pinene	24.8	23.7	96	78-125	
103-65-1	n-Propylbenzene	25.3	24.1	95	80-127	
622-96-8	4-Ethyltoluene	26.3	25.0	95	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	25.2	95	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	25.1	98	76-123	
100-44-7	Benzyl Chloride	26.8	28.1	105	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	25.4	98	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	24.4	93	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	24.6	95	75-124	
5989-27-5	d-Limonene	26.5	26.2	99	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	28.7	106	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	27.0	99	70-139	
91-20-3	Naphthalene	25.0	25.6	102	69-141	
87-68-3	Hexachlorobutadiene	26.8	26.2	98	68-138	

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

Date: 8/1/09

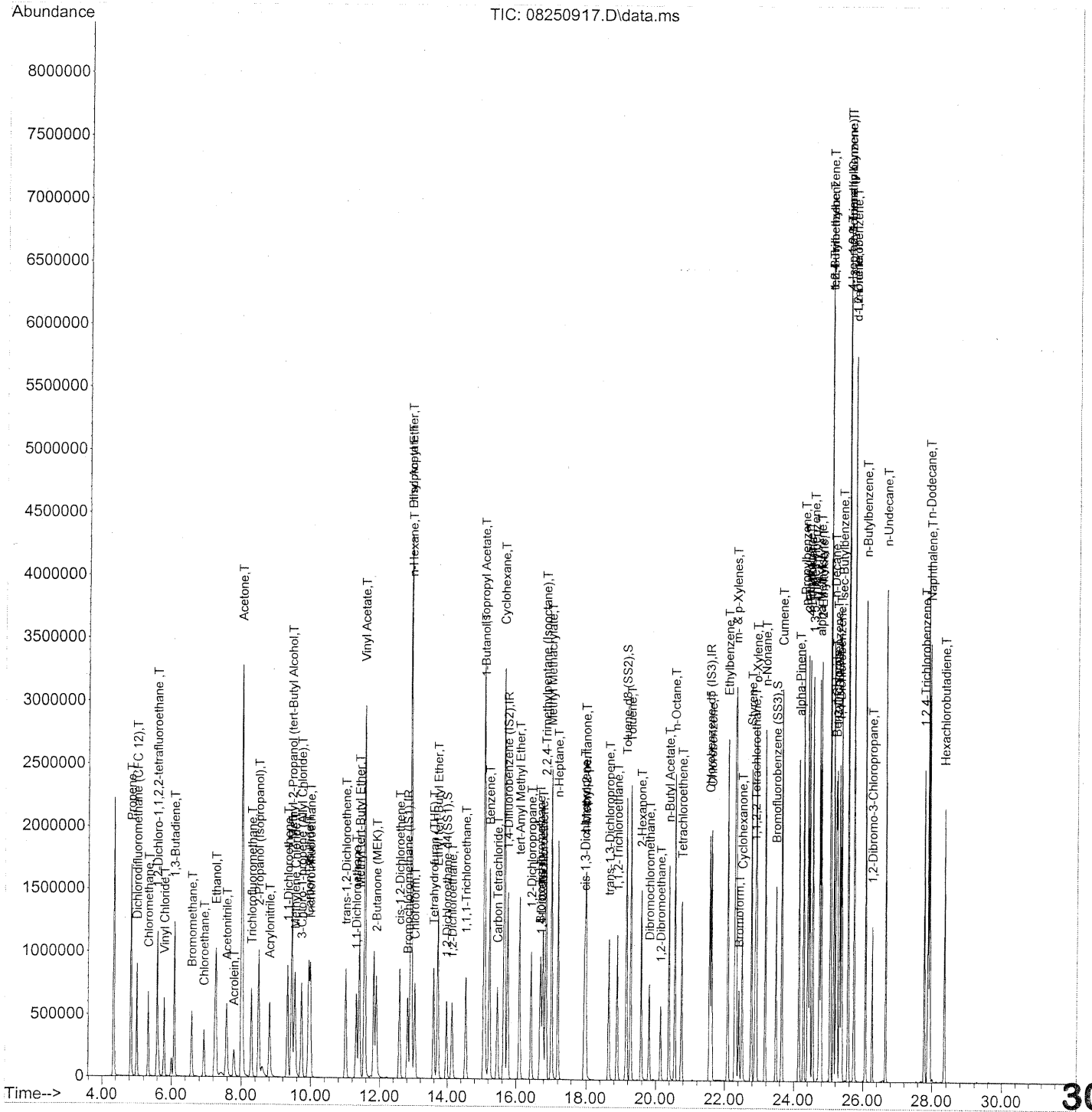
TO15scan.xls - 75 Compounds - PageNo.:

**307**

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:32:09 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:32:09 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	346379	25.000	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1757526	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	828675	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.97	65	612416	25.005	ng	-0.02
Spiked Amount	25.000		Recovery	=	100.00%	
57) Toluene-d8 (SS2)	19.15	98	1995292	25.328	ng	-0.01
Spiked Amount	25.000		Recovery	=	101.32%	
73) Bromofluorobenzene (SS3)	23.49	174	548251	24.574	ng	0.00
Spiked Amount	25.000		Recovery	=	98.28%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	809783	26.651	ng	96
3) Dichlorodifluoromethan...	5.01	85	1006620	23.209	ng	99
4) Chloromethane	5.34	50	961926	23.797	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	533491	23.277	ng	100
6) Vinyl Chloride	5.80	62	907084	22.748	ng	98
7) 1,3-Butadiene	6.09	54	739617	26.113	ng	97
8) Bromomethane	6.59	94	504639	24.202	ng	100
9) Chloroethane	6.93	64	458955	23.200	ng	99
10) Ethanol	7.28	45	2282553m	119.759	ng	
11) Acetonitrile	7.59	41	1134712	24.395	ng	98
12) Acrolein	7.79	56	341137	27.445	ng	99
13) Acetone	8.01	58	2238439	115.412	ng	91
14) Trichlorofluoromethane	8.29	101	848040	22.865	ng	98
15) 2-Propanol (Isopropanol)	8.50	45	2237524m	42.126	ng	
16) Acrylonitrile	8.81	53	785923	27.897	ng	99
17) 1,1-Dichloroethene	9.33	96	532087	24.446	ng	96
18) 2-Methyl-2-Propanol (t...	9.45	59	2782388	51.599	ng	97
19) Methylene Chloride	9.55	84	549193	22.695	ng	87
20) 3-Chloro-1-propene (Al...	9.73	41	891334	27.467	ng	88
21) Trichlorotrifluoroethane	9.99	151	430028	25.905	ng	97
22) Carbon Disulfide	9.94	76	2031956	23.794	ng	99
23) trans-1,2-Dichloroethene	11.01	61	811067	24.283	ng	92
24) 1,1-Dichloroethane	11.32	63	1018047	24.887	ng	100
25) Methyl tert-Butyl Ether	11.40	73	1671790	25.221	ng	96
26) Vinyl Acetate	11.56	86	588605	140.122	ng	# 65
27) 2-Butanone (MEK)	11.90	72	381518	28.216	ng	# 83
28) cis-1,2-Dichloroethene	12.58	61	784035	25.155	ng	93
29) Diisopropyl Ether	12.91	87	477477	24.873	ng	# 66
30) Ethyl Acetate	12.91	61	444207	50.660	ng	96
31) n-Hexane	12.93	57	1029435	24.085	ng	99

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EM 8/24/09  
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Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:32:09 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.03	83	876010	24.488	ng	100
34) Tetrahydrofuran (THF)	13.59	72	359882	25.601	ng	# 84
35) Ethyl tert-Butyl Ether	13.71	87	656956	23.986	ng	# 86
36) 1,2-Dichloroethane	14.14	62	684958	25.022	ng	99
38) 1,1,1-Trichloroethane	14.54	97	770883	24.116	ng	99
39) Isopropyl Acetate	15.07	61	769342	53.636	ng	# 79
40) 1-Butanol	15.09	56	1282479	56.310	ng	85
41) Benzene	15.23	78	2213799	23.422	ng	99
42) Carbon Tetrachloride	15.46	117	646166	24.458	ng	99
43) Cyclohexane	15.66	84	1800001	49.175	ng	87
44) tert-Amyl Methyl Ether	16.11	73	1608768	24.217	ng	99
45) 1,2-Dichloropropane	16.44	63	572313	24.683	ng	99
46) Bromodichloromethane	16.70	83	691792	25.019	ng	99
47) Trichloroethene	16.78	130	554177	23.092	ng	100
48) 1,4-Dioxane	16.72	88	452620	26.924	ng	88
49) 2,2,4-Trimethylpentane...	16.86	57	2567772	23.605	ng	94
50) Methyl Methacrylate	17.02	100	473866	50.174	ng	90
51) n-Heptane	17.21	71	597828	23.760	ng	94
52) cis-1,3-Dichloropropene	17.95	75	866796	24.810	ng	100
53) 4-Methyl-2-pentanone	17.99	58	563792	27.604	ng	94
54) trans-1,3-Dichloropropene	18.65	75	871617	28.518	ng	100
55) 1,1,2-Trichloroethane	18.89	97	508107	25.162	ng	98
58) Toluene	19.28	91	2341498	24.519	ng	100
59) 2-Hexanone	19.58	43	1349061	27.181	ng	98
60) Dibromochloromethane	19.82	129	559135	27.420	ng	100
61) 1,2-Dibromoethane	20.15	107	567709	26.414	ng	99
62) n-Butyl Acetate	20.39	43	1580722	29.188	ng	98
63) n-Octane	20.56	57	537919	25.270	ng	91
64) Tetrachloroethene	20.76	166	554550	23.401	ng	99
65) Chlorobenzene	21.62	112	1438078	24.521	ng	100
66) Ethylbenzene	22.09	91	2583234	25.054	ng	99
67) m- & p-Xylenes	22.33	91	3991137	48.828	ng	100
68) Bromoform	22.42	173	455680	25.744	ng	100
69) Styrene	22.77	104	1594342	26.388	ng	100
70) o-Xylene	22.92	91	2054430	24.984	ng	98
71) n-Nonane	23.17	43	1258918	25.423	ng	92
72) 1,1,2,2-Tetrachloroethane	22.89	83	942225	26.674	ng	99
74) Cumene	23.66	105	2553514	23.950	ng	99
75) alpha-Pinene	24.15	93	1244157	23.652	ng	100
76) n-Propylbenzene	24.28	91	3179675	24.130	ng	99
77) 3-Ethyltoluene	24.41	105	2509338	25.123	ng	100
78) 4-Ethyltoluene	24.46	105	2507989	24.977	ng	98
79) 1,3,5-Trimethylbenzene	24.55	105	2092239	25.199	ng	100

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*Em 8/25/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:32:09 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

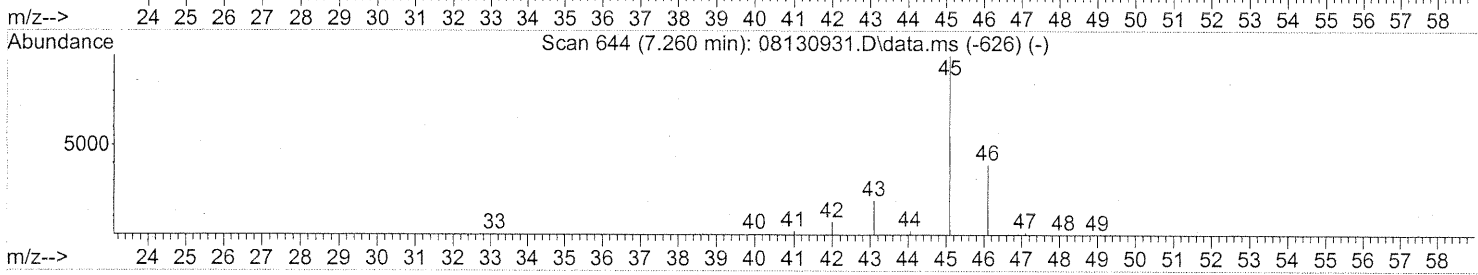
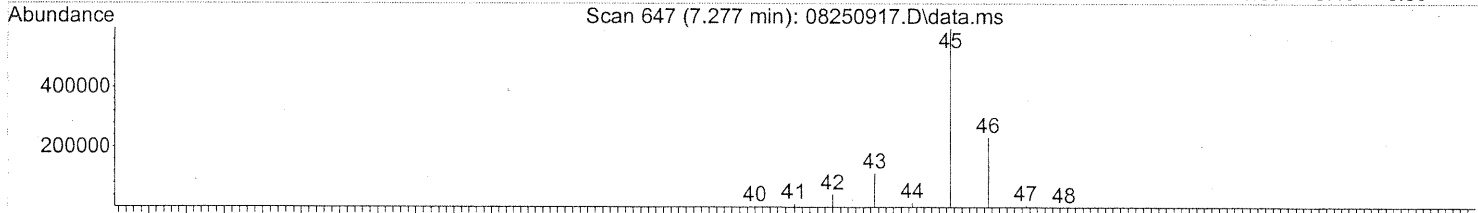
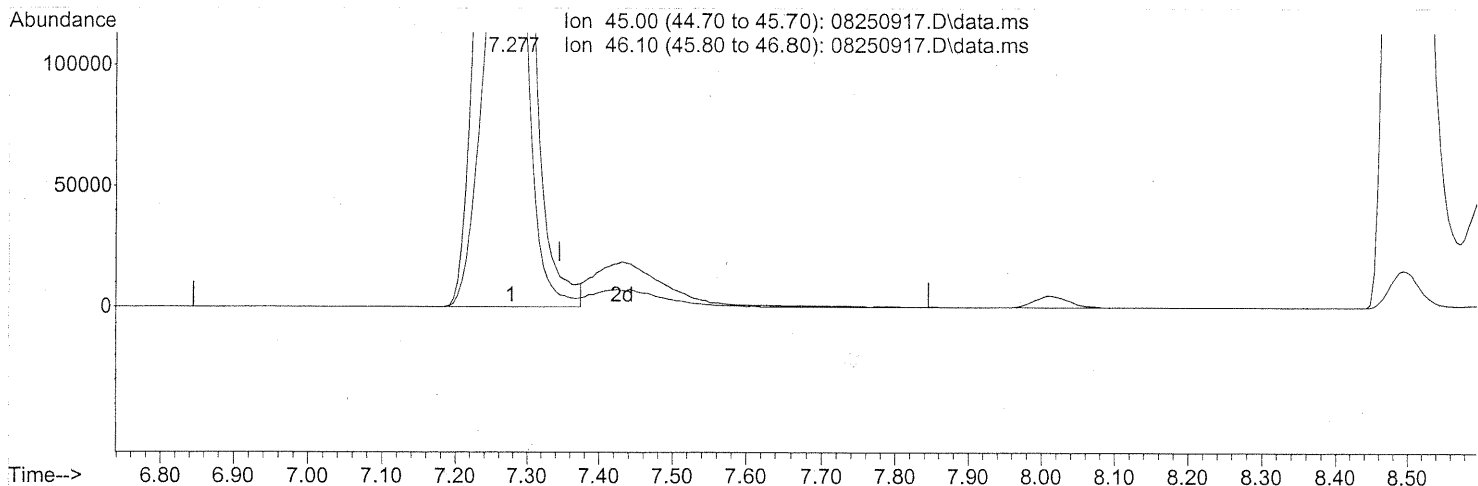
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.74	118	1157629	25.696	ng	99
81) 2-Ethyltoluene	24.79	105	2484856	24.090	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2216975	25.149	ng	99
83) n-Decane	25.15	57	1289845	25.138	ng	94
84) Benzyl Chloride	25.22	91	1914251	28.067	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1160358	25.425	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1179212	24.352	ng	100
87) sec-Butylbenzene	25.38	105	2824912	24.318	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2692580	24.192	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2229029	25.016	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1128223	24.620	ng	100
91) d-Limonene	25.74	68	944701	26.193	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	396482	28.650	ng	96
93) n-Undecane	26.65	57	1369203	25.824	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	865121	27.023	ng	99
95) Naphthalene	27.94	128	3027575	25.596	ng	100
96) n-Dodecane	27.89	57	1430375	24.101	ng	96
97) Hexachlorobutadiene	28.36	225	479479	26.228	ng	99
98) Cyclohexanone	22.51	55	764807	25.429	ng	95
99) tert-Butylbenzene	25.05	119	2156536	24.667	ng	99
100) n-Butylbenzene	26.07	91	2350757	25.425	ng	100

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:31:18 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.277min (-0.069) 113.16ng

response 2156791

PT

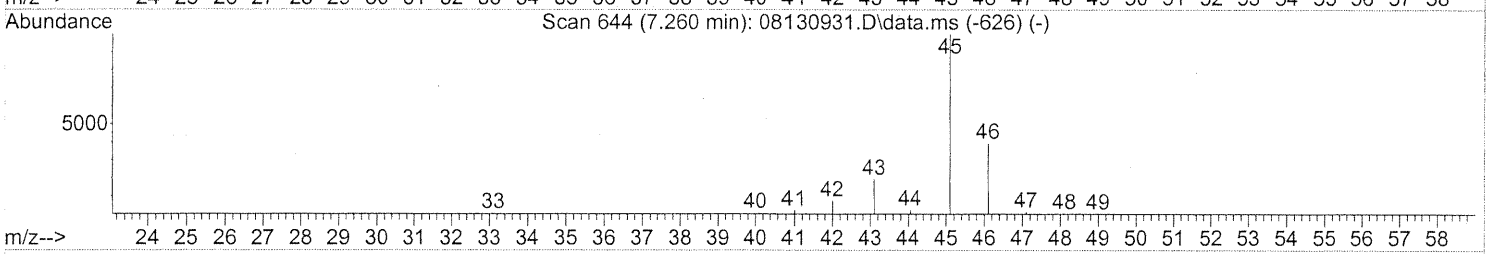
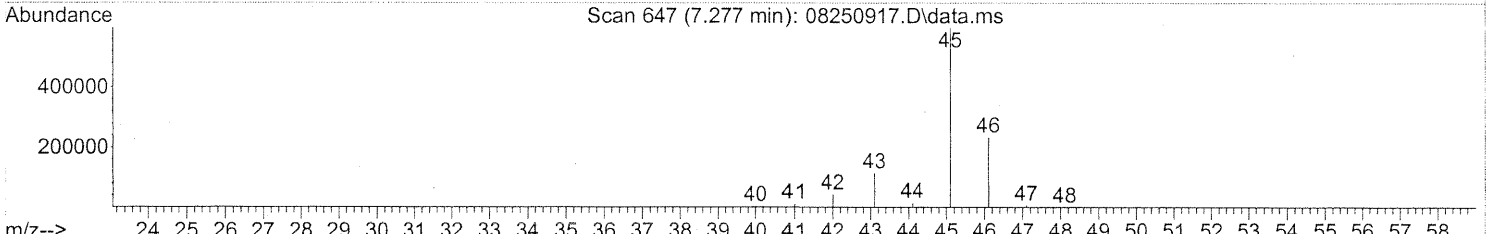
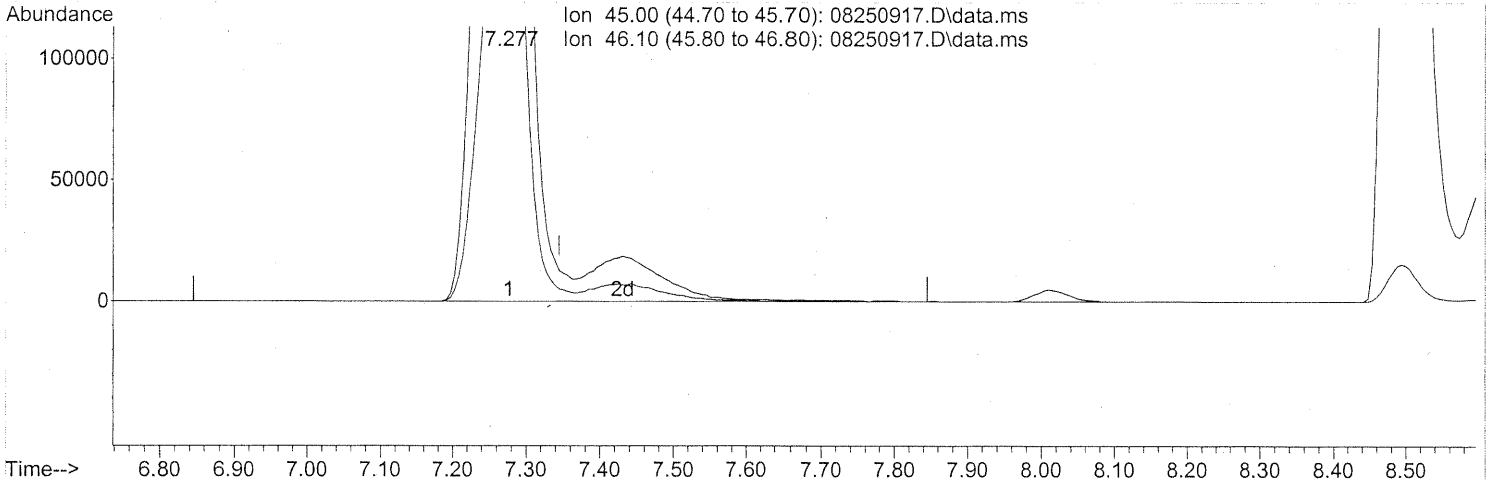
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.20
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:31:18 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



TIC: 08250917.D\data.ms

(10) Ethanol (T)

7.277min (-0.069) 119.76ng m  
 response 2282553

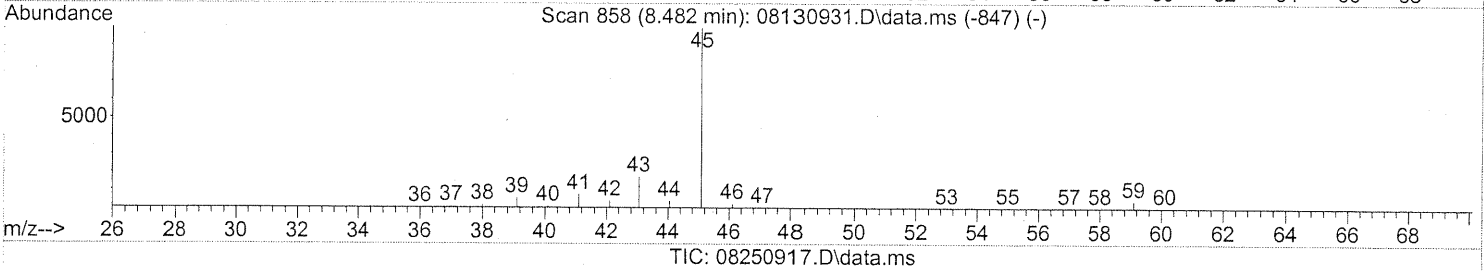
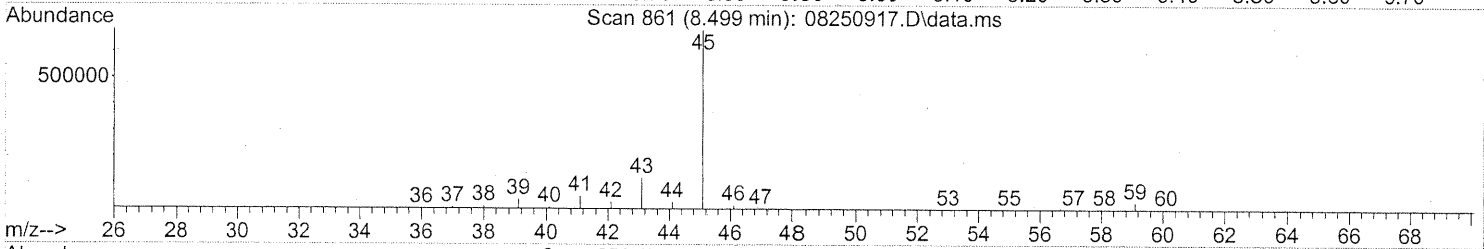
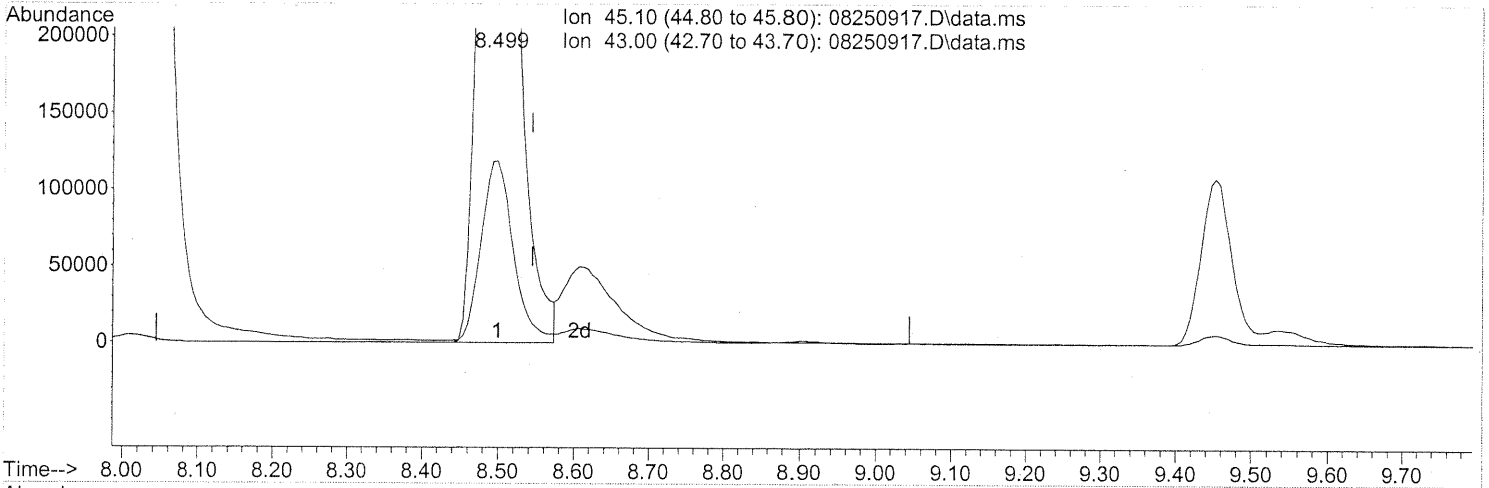
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.04
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC  
 em 8/25/09  
 L 8/26/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:31:18 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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

8.499min (-0.046) 37.30ng

response 1981455

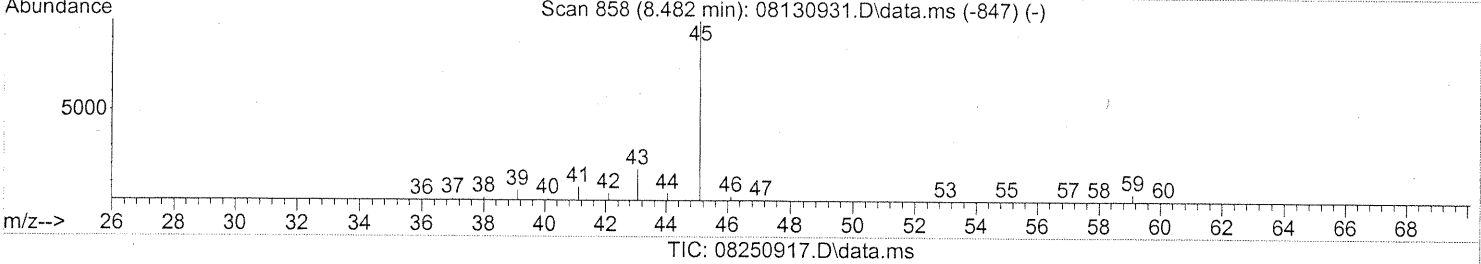
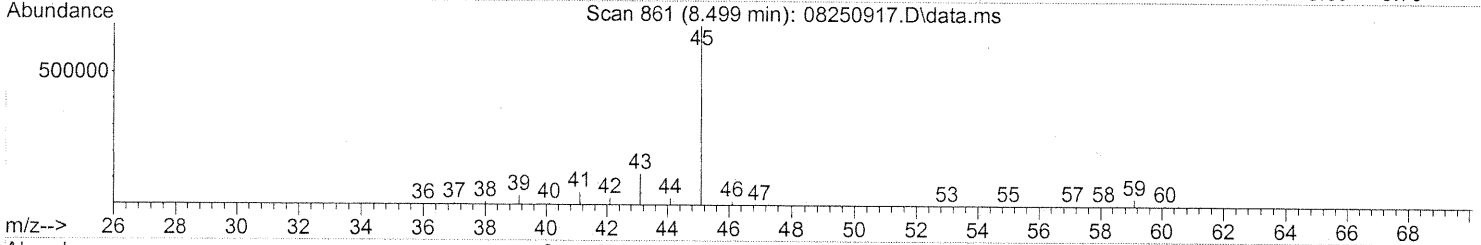
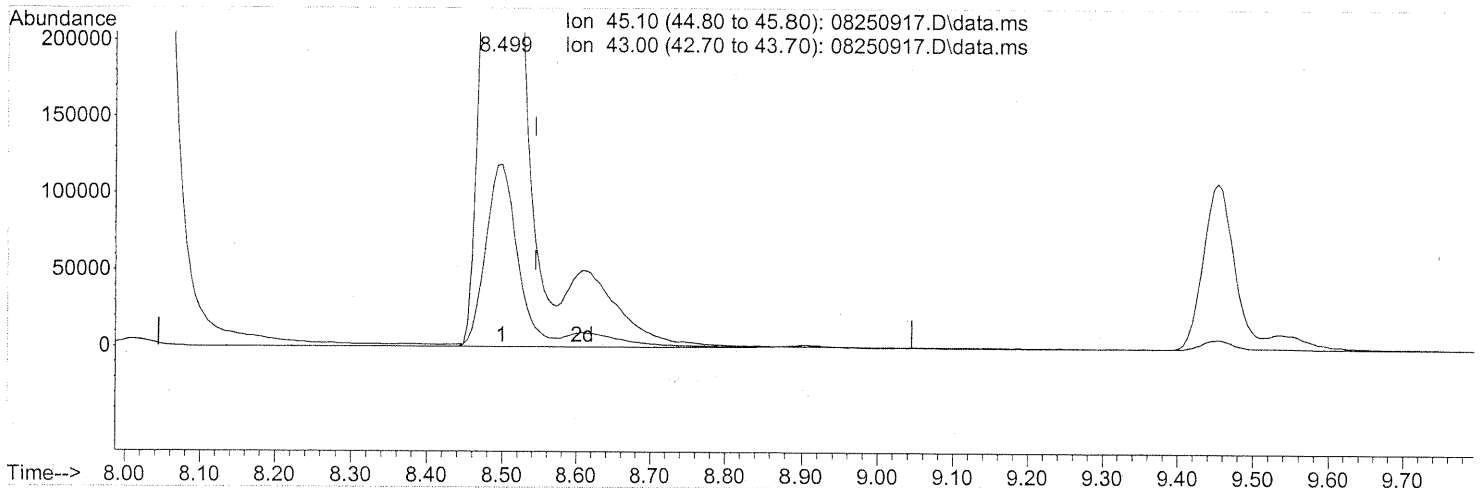
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.26
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250917.D  
 Acq On : 25 Aug 2009 13:35  
 Operator : EM  
 Sample : 25ng TO-15/MAPH LCS STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 25 14:31:18 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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

8.499min (-0.046) 42.13ng m

response 2237524

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.29
0.00	0.00	0.00
0.00	0.00	0.00

PT → TIC

em 8/24/09

R 8/26/09

## INITIAL CALIBRATION STANDARDS

Method Path : J:\MS09\Methods\  
 Method File : R9081309.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Fri Aug 14 07:31:29 2009  
 Response Via : Initial Calibration

Calibration Files

0.1 =08130926.D 0.2 =08130927.D 0.5 =08130928.D 1.0 =08130929.D 5.0 =08130930.D 25 =08130931.D  
 50 =08130932.D 100 =08130933.D

Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1) IR Bromochloromethane...				ISTD						
2) T Propene	2.174	2.059	2.094	1.808	2.232	2.290	2.446	2.441	2.193	9.63
3) T Dichlorodifluo...	3.035	3.114	3.770	3.266	3.072	2.931	2.923	2.931	3.130	9.06
4) T Chloromethane	2.821	2.880	3.586	3.105	2.875	2.912	2.723	2.438	2.918	11.31
5) T 1,2-Dichloro-1...	1.540	1.594	1.974	1.722	1.584	1.592	1.618	1.608	1.654	8.41
6) T Vinyl Chloride	2.832	2.792	3.468	3.004	2.799	2.744	2.731	2.654	2.878	8.99
7) T 1,3-Butadiene	1.798	1.830	2.433	2.110	2.037	2.073	2.052	2.021	2.044	9.50
8) T Bromomethane	1.454	1.354	1.828	1.539	1.457	1.488	1.450	1.470	1.505	9.32
9) T Chloroethane	1.288	1.353	1.704	1.532	1.407	1.388	1.372	1.378	1.428	9.16
10) T Ethanol	1.327	1.340	1.502	1.355	1.359	1.397	1.382	1.343	1.376	4.08
11) T Acetonitrile	3.225	3.235	3.880	3.469	3.312	3.308	3.278	3.151	3.357	6.86
12) T Acrolein	0.587	0.838	1.022	0.925	0.938	0.968	0.960	0.938	0.897	15.10
13) T Acetone	1.737	1.573	1.514	1.326	1.242	1.261	1.272	1.274	1.400	13.19
14) T Trichlorofluor...	2.460	2.470	3.217	2.781	2.602	2.632	2.617	2.637	2.677	8.99
15) T 2-Propanol (Is...	3.909	4.076	5.169	4.663	3.537	3.561	2.938	2.816	3.834	21.00
16) T Acrylonitrile	1.184	1.544	2.296	2.130	2.248	2.314	2.290	2.261	2.033	21.03
17) T 1,1-Dichloroet...	1.628	1.534	1.819	1.557	1.481	1.503	1.505	1.541	1.571	6.98
18) T 2-Methyl-2-Pro...	3.719	3.691	4.575	4.109	4.026	4.261	2.863		3.892	14.06
19) T Methylene Chlo...	2.075	1.791	2.042	1.702	1.591	1.591	1.590	1.589	1.747	11.79
20) T 3-Chloro-1-pro...	1.881	1.974	2.644	2.375	2.386	2.488	2.495	2.494	2.342	11.52
21) T Trichlorotrifl...	1.029	1.052	1.425	1.232	1.189	1.220	1.226	1.212	1.198	10.17
22) T Carbon Disulfide	6.127	5.864	7.192	6.199	5.928	5.960	5.995	6.042	6.163	6.96
23) T trans-1,2-Dich...	2.076	2.186	2.809	2.490	2.391	2.447	2.447	2.439	2.411	9.02
24) T 1,1-Dichloroet...	2.858	2.714	3.451	2.979	2.870	2.922	2.925	2.901	2.952	7.32
25) T Methyl tert-Bu...	4.501	4.369	5.328	4.761	4.707	4.811	4.903	4.894	4.784	6.03
26) T Vinyl Acetate			0.219	0.227	0.282	0.357	0.377	0.356	0.303	23.05
27) T 2-Butanone (MEK)			0.903	0.913	1.059	1.121	1.122	0.739	0.976	15.54
28) T cis-1,2-Dichlo...	2.018	2.033	2.703	2.314	2.205	2.250	2.252	2.222	2.250	9.40
29) T Diisopropyl Ether	1.155	1.224	1.532	1.408	1.329	1.407	1.482	1.548	1.386	10.24
30) T Ethyl Acetate			0.547	0.527	0.598	0.673	0.712	0.741	0.633	14.01
31) T n-Hexane	2.858	2.878	3.605	3.054	2.887	2.950	3.149	3.298	3.085	8.42

Method Path : J:\MS09\Methods\  
 Method File : R9081309.M

Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

Title	2.288	2.357	3.101	2.678	2.528	2.559	2.566	2.581	2.582	9.48
32) T Chloroform	2.288	2.357	3.101	2.678	2.528	2.559	2.566	2.581	2.582	9.48
33) S 1,2-Dichloroet...	1.783	1.785	1.775	1.777	1.772	1.756	1.748	1.745	1.768	0.87
34) T Tetrahydrofura...	0.777	0.944	1.132	1.091	1.068	1.060	1.025	1.021	1.015	10.94
35) T Ethyl tert-But...	1.774	1.706	2.202	2.019	1.944	2.017	2.064	2.089	1.977	8.34
36) T 1,2-Dichloroet...	1.727	1.673	2.296	2.056	1.996	2.029	2.021	2.008	1.976	9.92
-----ISTD-----										
37) IR 1,4-Difluorobenzen...	0.444	0.420	0.523	0.463	0.437	0.451	0.456	0.445	0.455	6.67
38) T 1,1,1-Trichlor...	0.140	0.170	0.218	0.205	0.205	0.228	0.231	0.236	0.204	16.31
39) T Isopropyl Acetate	0.193	0.296	0.289	0.324	0.324	0.388	0.392	0.385	0.324	22.49
40) T 1-Butanol	1.392	1.274	1.620	1.363	1.255	1.281	1.288	1.283	1.344	9.01
41) T Benzene	0.325	0.355	0.434	0.386	0.359	0.378	0.384	0.386	0.376	8.32
42) T Carbon Tetrach...	0.487	0.473	0.597	0.520	0.494	0.516	0.530	0.548	0.521	7.54
43) T Cyclohexane	0.885	0.846	1.058	0.930	0.920	0.958	0.977	0.986	0.945	6.91
44) T tert-Amyl Meth...	0.287	0.294	0.386	0.342	0.323	0.336	0.336	0.335	0.330	9.28
45) T 1,2-Dichloropr...	0.310	0.343	0.460	0.400	0.392	0.412	0.417	0.413	0.393	11.87
46) T Bromodichlorom...	0.350	0.332	0.393	0.342	0.315	0.328	0.331	0.341	0.341	6.80
47) T Trichloroethene	0.149	0.181	0.262	0.247	0.250	0.272	0.277	0.275	0.239	19.91
48) T 1,4-Dioxane	1.490	1.428	1.805	1.593	1.481	1.519	1.540	1.522	1.547	7.41
49) T 2,2,4-Trimethy...	0.126	0.120	0.127	0.120	0.127	0.140	0.144	0.149	0.134	8.76
50) T Methyl Methacr...	0.318	0.311	0.430	0.377	0.344	0.357	0.362	0.363	0.358	10.30
51) T n-Heptane	0.369	0.393	0.562	0.496	0.513	0.543	0.550	0.550	0.497	15.11
52) T cis-1,3-Dichlo...	0.183	0.286	0.279	0.295	0.295	0.328	0.332	0.330	0.291	18.02
53) T 4-Methyl-2-pen...	0.279	0.328	0.475	0.439	0.461	0.496	0.501	0.498	0.435	19.49
54) T trans-1,3-Dich...	0.220	0.242	0.336	0.299	0.290	0.302	0.303	0.305	0.287	13.09
55) T 1,1,2-Trichlor...	2.389	2.355	2.357	2.374	2.368	2.378	2.373	2.420	2.377	0.87
56) IR Chlorobenzene-d5 (...)	2.992	2.615	3.218	2.870	2.713	2.825	2.847	2.969	2.881	6.39
57) S Toluene-d8 (SS2)	1.374	1.315	1.424	1.424	1.424	1.609	1.622	1.640	1.497	9.52
58) T Toluene	0.498	0.484	0.692	0.611	0.611	0.658	0.666	0.701	0.615	13.57
59) T 2-Hexanone	0.480	0.540	0.721	0.653	0.655	0.697	0.706	0.736	0.648	14.14
60) T Dibromochlorom...	0.946	1.471	1.454	1.644	1.644	1.883	1.948	2.090	1.634	23.73
61) T 1,2-Dibromoethane	0.573	0.534	0.733	0.656	0.631	0.651	0.665	0.695	0.642	9.96
62) T n-Butyl Acetate	0.653	0.633	0.813	0.718	0.674	0.715	0.728	0.785	0.715	8.69
63) T n-Octane	1.711	1.658	1.998	1.775	1.674	1.736	1.755	1.847	1.769	6.22
64) T Tetrachloroethene	2.866	2.701	3.479	3.120	3.007	3.146	3.209	3.355	3.111	8.11
65) T Chlorobenzene	2.202	2.207	2.735	2.430	2.352	2.488	2.570	2.744	2.466	8.56
66) T Ethylbenzene	0.379	0.408	0.568	0.518	0.530	0.592	0.616	0.661	0.534	18.39
67) T m- & p-Xylenes	1.461	1.519	1.980	1.784	1.806	1.936	1.981	2.115	1.823	12.67
68) T Bromoform	2.290	2.120	2.774	2.457	2.356	2.507	2.579	2.763	2.481	9.13
69) T Styrene										
70) T o-Xylene										

Method Path : J:\MS09\Methods\  
 Method File : R9081309.M

Title	: EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)														
71) T	n-Nonane	1.391	1.313	1.710	1.525	1.444	1.512	1.522	1.535	1.494	7.85				
72) T	1,1,2,2-Tetrac...	0.879	0.869	1.168	1.042	1.050	1.120	1.157	1.240	1.066	12.60				
73) S	Bromofluoroben...	0.673	0.671	0.674	0.671	0.671	0.677	0.676	0.671	0.673	0.39				
74) T	Cumene	2.984	2.848	3.575	3.168	3.066	3.250	3.329	3.513	3.217	7.84				
75) T	alpha-Pinene	1.402	1.392	1.723	1.533	1.537	1.629	1.680	1.799	1.587	9.28				
76) T	n-Propylbenzene	3.674	3.502	4.445	3.969	3.822	4.041	4.126	4.224	3.975	7.65				
77) T	3-Ethyltoluene	2.729	2.641	3.288	2.935	2.885	3.119	3.151	3.357	3.013	8.56				
78) T	4-Ethyltoluene	2.922	2.595	3.364	2.976	2.853	2.991	3.174	3.361	3.029	8.63				
79) T	1,3,5-Trimethy...	2.363	2.252	2.746	2.471	2.345	2.495	2.579	2.787	2.505	7.61				
80) T	alpha-Methylst...	1.104	1.096	1.433	1.304	1.329	1.447	1.506	1.655	1.359	14.20				
81) T	2-Ethyltoluene	2.902	2.717	3.467	3.084	2.953	3.115	3.211	3.445	3.112	8.35				
82) T	1,2,4-Trimethy...	2.333	2.241	2.782	2.509	2.448	2.756	2.954	3.253	2.660	12.81				
83) T	n-Decane	1.406	1.408	1.725	1.551	1.487	1.557	1.583	1.667	1.548	7.34				
84) T	Benzyl Chloride	1.491	1.511	2.028	1.926	2.036	2.350	2.447	2.671	2.058	20.55				
85) T	1,3-Dichlorobe...	1.210	1.172	1.550	1.346	1.295	1.384	1.445	1.613	1.377	11.26				
86) T	1,4-Dichlorobe...	1.347	1.288	1.627	1.448	1.360	1.452	1.505	1.660	1.461	9.06				
87) T	sec-Butylbenzene	3.353	3.011	3.930	3.477	3.335	3.526	3.611	3.794	3.505	8.16				
88) T	4-Isopropyltol...	2.950	2.839	3.579	3.210	3.135	3.474	3.717	3.960	3.358	11.59				
89) T	1,2,3-Trimethy...	2.386	2.250	2.845	2.562	2.467	2.766	2.966	3.263	2.688	12.46				
90) T	1,2-Dichlorobe...	1.220	1.146	1.485	1.306	1.278	1.394	1.496	1.734	1.382	13.57				
91) T	d-Limonene	0.937	0.883	1.147	1.025	1.046	1.162	1.214	1.291	1.088	12.84				
92) T	1,2-Dibromo-3-...	0.295	0.296	0.441	0.401	0.429	0.466	0.485	0.526	0.417	20.10				
93) T	n-Undecane	1.416	1.402	1.777	1.589	1.558	1.633	1.676	1.747	1.600	8.68				
94) T	1,2,4-Trichlor...	0.808	0.826	1.050	0.940	0.928	0.973	1.039	1.161	0.966	12.19				
95) T	Naphthalene	3.242	3.022	3.838	3.521	3.475	3.603	3.831	4.017	3.568	9.23				
96) T	n-Dodecane	1.632	1.515	1.880	1.777	1.765	1.836	1.917	2.002	1.790	8.78				
97) T	Hexachlorobuta...	0.472	0.478	0.593	0.532	0.519	0.556	0.594	0.670	0.552	12.05				
98) T	Cyclohexanone	0.755	0.834	0.846	0.808	0.815	1.045	1.063	1.092	0.907	14.91				
99) T	tert-Butylbenzene	2.347	2.275	2.769	2.506	2.410	2.702	2.885	3.206	2.638	11.91				
100) T	n-Butylbenzene	2.446	2.495	3.071	2.751	2.686	2.854	2.924	3.088	2.789	8.64				

(#) = Out of Range

### Primary Source Standards Concentrations (Working & Initial Calibration)

4ng/L Std. ID: S20-07240912  
 20ng/L Std. ID: S20-08100907

200ng/L Std. ID: S20-08100907  
 Dilution Factors: 5 50 250

Compounds	Source Std. mg/m <sup>3</sup>	Primary Working Standards			Working STD Conc.(ng/L): Injection (L):	ICAL Concentrations (Primary Source)								
		200ng/L	20ng/L	4ng/L		0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50	
Propene	1.07	214	21.4	4.28	ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng	
Dichlorodifluoromethane	1.05	210	21.0	4.20		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Chloromethane	1.00	200	20.0	4.00		0.100	0.200	0.500	1.00	5.00	25.0	50.0	100	
Freon-114	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
Vinyl Chloride	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101	
1,3-Butadiene	1.20	240	24.0	4.80		0.120	0.240	0.600	1.20	6.00	30.0	60.0	120	
Bromomethane	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102	
Chloroethane	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101	
Ethanol	5.20	1040	104	20.8		0.520	1.040	2.60	5.20	26.0	130	260	520	
Acetonitrile	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
Acrolein	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Acetone	5.50	1100	110	22.0		0.550	1.100	2.75	5.50	27.5	138	275	550	
Trichlorofluoromethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
Isopropanol	1.89	378	37.8	7.56		0.189	0.378	0.945	1.89	9.45	47.3	94.5	189	
Acrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
1,1-Dichloroethene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
tert-Butanol	2.02	404	40.4	8.08		0.202	0.404	1.01	2.02	10.1	50.5	101	202	
Methylene Chloride	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Allyl Chloride	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Trichlorotrifluoroethane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
Carbon Disulfide	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
trans-1,2-Dichloroethene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
1,1-Dichloroethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
Methyl tert-Butyl Ether	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
Vinyl Acetate	5.02	1004	100	20.1		0.502	1.004	2.51	5.02	25.1	126	251	502	
2-Butanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
cis-1,2-Dichloroethene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
Diisopropyl Ether	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Ethyl Acetate	2.13	426	42.6	8.52		0.213	0.426	1.07	2.13	10.7	53.3	107	213	
n-Hexane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109	
Chloroform	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Tetrahydrofuran	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
Ethyl tert-Butyl Ether	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
1,2-Dichloroethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
1,1,1-Trichloroethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
Isopropyl Acetate	2.09	418	41.8	8.36		0.209	0.418	1.05	2.09	10.5	52.3	105	209	
1-Butanol	2.07	414	41.4	8.28		0.207	0.414	1.04	2.07	10.4	51.8	104	207	
Benzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
Carbon Tetrachloride	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Cyclohexane	2.15	430	43.0	8.60		0.215	0.430	1.08	2.15	10.8	53.8	108	215	
tert-Amyl Methyl Ether	1.04	208	20.8	4.16		0.104	0.208	0.520	1.04	5.20	26.0	52.0	104	
1,2-Dichloropropane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
Bromodichloromethane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Trichloroethene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
1,4-Dioxane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Isooctane	1.04	208	20.8	4.16		0.104	0.208	0.520	1.04	5.20	26.0	52.0	104	
Methyl Methacrylate	2.13	426	42.6	8.52		0.213	0.426	1.07	2.13	10.7	53.3	107	213	
n-Heptane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
cis-1,3-Dichloropropene	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0	
4-Methyl-2-pentanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
trans-1,3-Dichloropropene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
1,1,2-Trichloroethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105	
Toluene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
2-Hexanone	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
Dibromochloromethane	1.15	230	23.0	4.60		0.115	0.230	0.575	1.15	5.75	28.8	57.5	115	
1,2-Dibromoethane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
n-Butyl Acetate	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110	
n-Octane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
Tetrachloroethene	1.02	204	20.4	4.08		0.102	0.204	0.510	1.02	5.10	25.5	51.0	102	
Chlorobenzene	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108	
Ethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
m-&p-Xylene	2.08	416	41.6	8.32		0.208	0.416	1.04	2.08	10.4	52.0	104	208	

*em 8/14/09*



**Primary Source Standards Concentrations  
(Working & Initial Calibration)**

4ng/L Std. ID: S20-07240912  
20ng/L Std. ID: S20-08100904

200ng/L Std. ID: S20-08100902  
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		ICAL Points:								
		5	50	250		0.025	0.050	0.025	0.05	0.25	0.125	200	200	200
Bromoform	1.03	206	20.6	4.12	Injection (L):	0.025	0.050	0.025	0.05	0.25	0.125	200	200	200
Styrene	1.07	214	21.4	4.28	ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng	
o-Xylene	1.06	212	21.2	4.24		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103	
n-Nonane	1.06	212	21.2	4.24		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107	
						0.106	0.212	0.530	1.06	5.30	26.5	53.0	106	
						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.

*Sam 8/14/09*

Calibration Status Report MS09

Method Path : J:\MS09\Methods\  
 Method File : R9081309.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Fri Aug 14 07:31:29 2009  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS09\Data\2009_08\13\08130926.D
2	0.2	0	25	J:\MS09\Data\2009_08\13\08130927.D
3	0.5	1	25	J:\MS09\Data\2009_08\13\08130928.D
4	1.0	1	25	J:\MS09\Data\2009_08\13\08130929.D
5	5.0	5	25	J:\MS09\Data\2009_08\13\08130930.D
6	25	27	25	J:\MS09\Data\2009_08\13\08130931.D
7	50	54	25	J:\MS09\Data\2009_08\13\08130932.D
8	100	107	25	J:\MS09\Data\2009_08\13\08130933.D

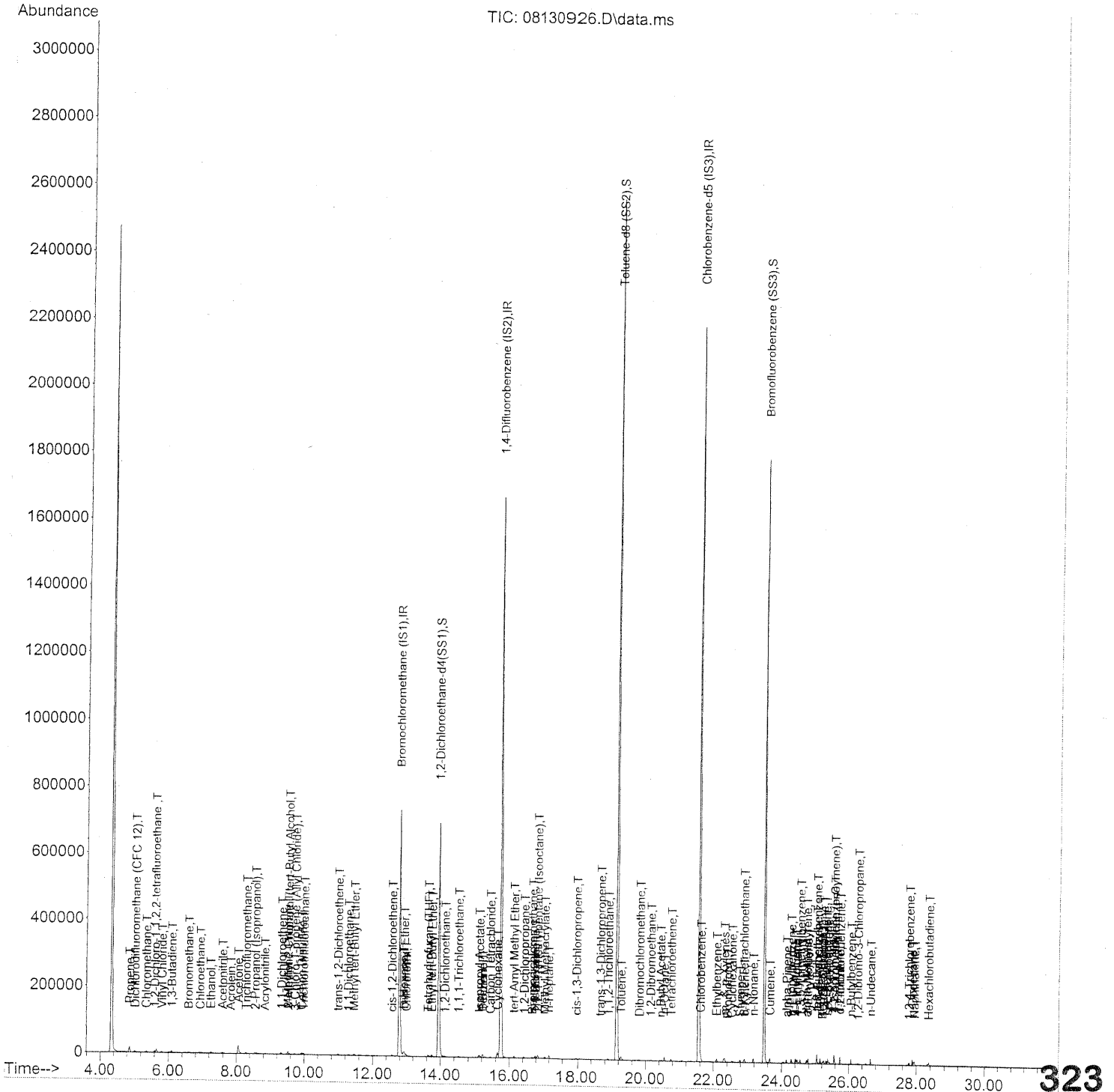
#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Aug 14 07:29 2009	Aug 14 07:05 2009	14 Aug 2009 1:56
2	0.2	Aug 14 07:30 2009	Aug 14 07:14 2009	14 Aug 2009 2:38
3	0.5	Aug 14 07:30 2009	Aug 14 07:20 2009	14 Aug 2009 3:19
4	1.0	Aug 14 07:30 2009	Aug 14 07:21 2009	14 Aug 2009 4:01
5	5.0	Aug 14 07:30 2009	Aug 14 07:23 2009	14 Aug 2009 4:43
6	25	Aug 14 07:31 2009	Aug 14 07:26 2009	14 Aug 2009 5:24
7	50	Aug 14 07:31 2009	Aug 14 07:27 2009	14 Aug 2009 6:06
8	100	Aug 14 07:31 2009	Aug 14 07:28 2009	14 Aug 2009 6:47

R9081309.M Fri Aug 14 07:48:55 2009

*em 8/14/09*

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130926.D  
 Acq On : 14 Aug 2009 1:56  
 Operator : EM  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130926.D  
 Acq On : 14 Aug 2009 1:56  
 Operator : EM  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	388910	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1986864	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	961494	25.000	ng	-0.01

## System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	13.95	65	693371	25.200	ng	-0.04
Spiked Amount	25.000			Recovery =	100.80%	
57) Toluene-d8 (SS2)	19.14	98	2296672	24.144	ng	-0.02
Spiked Amount	25.000			Recovery =	96.56%	
73) Bromofluorobenzene (SS3)	23.49	174	646809	22.617	ng	0.00
Spiked Amount	25.000			Recovery =	90.48%	

## Target Compounds

						Qvalue
2) Propene	4.87	42	3618	0.147	ng	98
3) Dichlorodifluoromethan...	5.03	85	4958	0.101	ng	# 88
4) Chloromethane	5.36	50	4388	0.120	ng	94
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	2540	0.092	ng	85
6) Vinyl Chloride	5.81	62	4449	0.114	ng	88
7) 1,3-Butadiene	6.11	54	3356	0.119	ng	97
8) Bromomethane	6.60	94	2307	0.100	ng	99
9) Chloroethane	6.94	64	2024	0.103	ng	# 53
10) Ethanol	7.25	45	10733m	0.659	ng	
11) Acetonitrile	7.59	41	5267	0.143	ng	82
12) Acrolein	7.83	56	986	0.083	ng	87
13) Acetone	8.06	58	14865	0.803	ng	89
14) Trichlorofluoromethane	8.29	101	4018	0.094	ng	99
15) 2-Propanol (Isopropanol)	8.56	45	11494	0.236	ng	77
16) Acrylonitrile	8.84	53	1953	0.079	ng	89
17) 1,1-Dichloroethene	9.33	96	2785	0.128	ng	91
18) 2-Methyl-2-Propanol (t...	9.53	59	11686	0.213	ng	# 84
19) Methylene Chloride	9.53	84	3454	0.141	ng	90
20) 3-Chloro-1-propene (Al...	9.73	41	3161	0.119	ng	68
21) Trichlorotrifluoroethane	9.98	151	1761	0.091	ng	# 81
22) Carbon Disulfide	9.93	76	10199	0.122	ng	81
23) trans-1,2-Dichloroethene	10.99	61	3423	0.107	ng	87
24) 1,1-Dichloroethane	11.29	63	4712	0.121	ng	83
25) Methyl tert-Butyl Ether	11.46	73	7632	0.111	ng	94
26) Vinyl Acetate	0.00	86	0	N.D.		
27) 2-Butanone (MEK)	0.00	72	0	N.D.		
28) cis-1,2-Dichloroethene	12.57	61	3421	0.111	ng	88
29) Diisopropyl Ether	12.94	87	1922	0.088	ng	# 89
30) Ethyl Acetate	0.00	61	0	N.D.		
31) n-Hexane	12.93	57	4846	0.113	ng	

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130926.D  
 Acq On : 14 Aug 2009 1:56  
 Operator : EM  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.01	83	3808	0.098	ng	92
34) Tetrahydrofuran (THF)	13.65	72	1329	0.100	ng	# 49
35) Ethyl tert-Butyl Ether	13.75	87	2842	0.097	ng	# 88
36) 1,2-Dichloroethane	14.14	62	2848	0.091	ng	# 63
38) 1,1,1-Trichloroethane	14.53	97	3702	0.102	ng	86
39) Isopropyl Acetate	15.13	61	2323	0.161	ng	# 40
40) 1-Butanol	15.23	56	2885	0.117	ng	# 48
41) Benzene	15.23	78	11726	0.111	ng	95
42) Carbon Tetrachloride	15.45	117	2792	0.090	ng	94
43) Cyclohexane	15.65	84	8323	0.210	ng	# 85
44) tert-Amyl Methyl Ether	16.14	73	7312	0.104	ng	95
45) 1,2-Dichloropropane	16.45	63	2391	0.107	ng	92
46) Bromodichloromethane	16.69	83	2661	0.087	ng	93
47) Trichloroethene	16.77	130	2951	0.109	ng	96
48) 1,4-Dioxane	16.78	88	1271	0.071	ng	# 58
49) 2,2,4-Trimethylpentane...	16.85	57	12314	0.120	ng	92
50) Methyl Methacrylate	17.07	100	553	0.056	ng	# 1
51) n-Heptane	17.21	71	2682	0.105	ng	93
52) cis-1,3-Dichloropropene	17.97	75	2905	0.078	ng	# 57
53) 4-Methyl-2-pentanone	18.04	58	915	N.D.		
54) trans-1,3-Dichloropropene	18.67	75	2439	0.075	ng	# 60
55) 1,1,2-Trichloroethane	18.90	97	1838	0.083	ng	99
58) Toluene	19.28	91	12428	0.107	ng	98
59) 2-Hexanone	19.68	43	1480	N.D.		
60) Dibromochloromethane	19.83	129	2204	0.084	ng	85
61) 1,2-Dibromoethane	20.15	107	1955	0.072	ng	94
62) n-Butyl Acetate	20.44	43	2958	0.053	ng	# 49
63) n-Octane	20.56	57	2356	0.104	ng	88
64) Tetrachloroethene	20.76	166	2562	0.083	ng	98
65) Chlorobenzene	21.62	112	7106	0.097	ng	98
66) Ethylbenzene	22.09	91	11683	0.092	ng	94
67) m- & p-Xylenes	22.32	91	17613	0.169	ng	99
68) Bromoform	22.42	173	1501	0.064	ng	# 65
69) Styrene	22.79	104	6011	0.078	ng	94
70) o-Xylene	22.92	91	9337	0.090	ng	95
71) n-Nonane	23.17	43	5669	0.112	ng	87
72) 1,1,2,2-Tetrachloroethane	22.89	83	3618	0.084	ng	92
74) Cumene	23.66	105	11820	0.086	ng	93
75) alpha-Pinene	24.15	93	5445	0.082	ng	99
76) n-Propylbenzene	24.28	91	14553	0.087	ng	93
77) 3-Ethyltoluene	24.41	105	11442	0.087	ng	100
78) 4-Ethyltoluene	24.46	105	12248	0.093	ng	95
79) 1,3,5-Trimethylbenzene	24.55	105	9904	0.091	ng	95

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EM 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130926.D  
 Acq On : 14 Aug 2009 1:56  
 Operator : EM  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	4543	0.074	ng	98
81) 2-Ethyltoluene	24.79	105	11719	0.085	ng	95
82) 1,2,4-Trimethylbenzene	25.05	105	9509	0.078	ng	100
83) n-Decane	25.15	57	5840	0.099	ng	89
84) Benzyl Chloride	25.22	91	6309	0.072	ng	92
85) 1,3-Dichlorobenzene	25.25	146	5071	0.079	ng	100
86) 1,4-Dichlorobenzene	25.33	146	5490	0.082	ng	97
87) sec-Butylbenzene	25.38	105	13671	0.089	ng	96
88) 4-Isopropyltoluene (p-...	25.56	119	11685	0.076	ng	96
89) 1,2,3-Trimethylbenzene	25.57	105	9819	0.079	ng	99
90) 1,2-Dichlorobenzene	25.75	146	4975	0.075	ng	99
91) d-Limonene	25.74	68	3927	0.081	ng	84
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1250	0.067	ng	# 78
93) n-Undecane	26.65	57	5934	0.098	ng	93
94) 1,2,4-Trichlorobenzene	27.79	180	3482	0.081	ng	# 95
95) Naphthalene	27.94	128	13216	0.088	ng	98
96) n-Dodecane	27.89	57	6214	0.096	ng	91
97) Hexachlorobutadiene	28.36	225	1995	0.081	ng	96
98) Cyclohexanone	22.55	55	2844	0.081	ng	# 82
99) tert-Butylbenzene	25.05	119	9567	0.077	ng	93
100) n-Butylbenzene	26.07	91	10255	0.084	ng	99

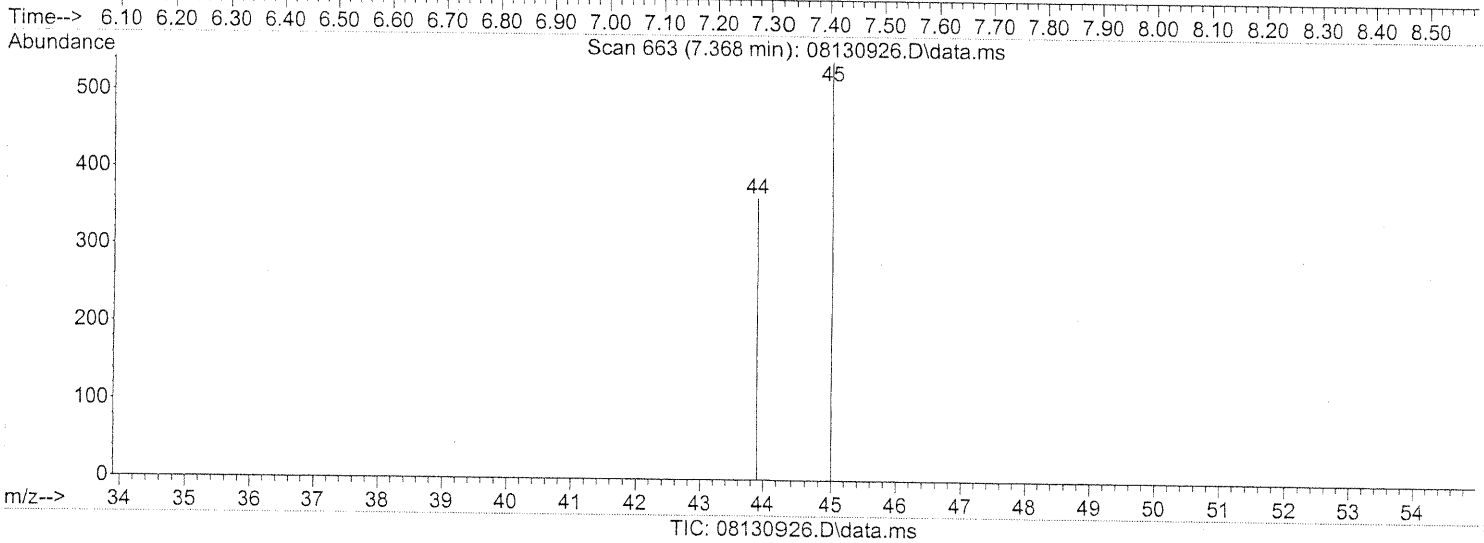
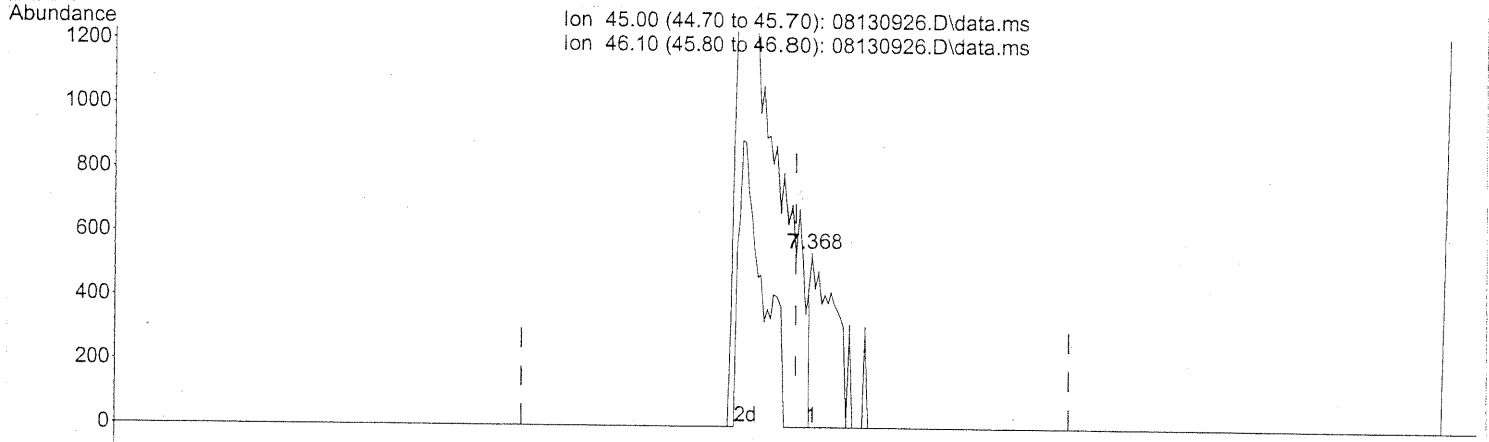
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*EM 8/14/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130926.D  
Acq On : 14 Aug 2009 1:56  
Operator : EM  
Sample : 0.1ng TO-15 ICAL STD  
Misc : S20-08130905/S20-07240912  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Mon Jul 27 09:38:25 2009  
Response via : Initial Calibration



(10) Ethanol (T)

7.368min (+0.029) 0.10ng

response 1639

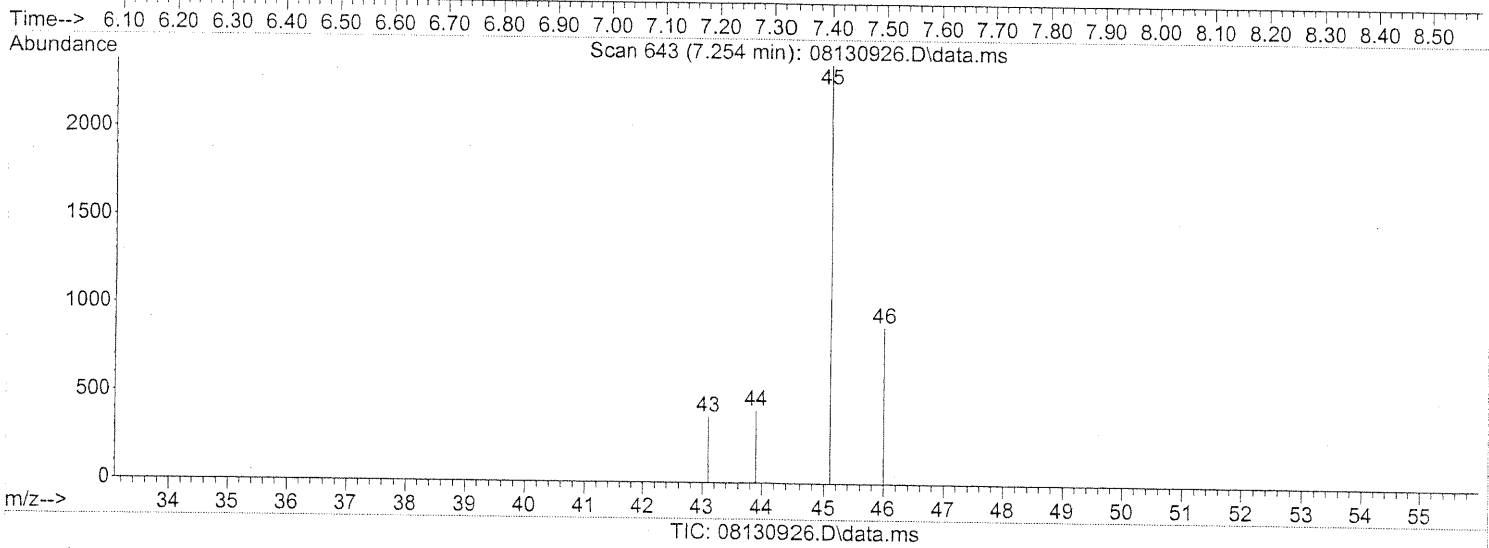
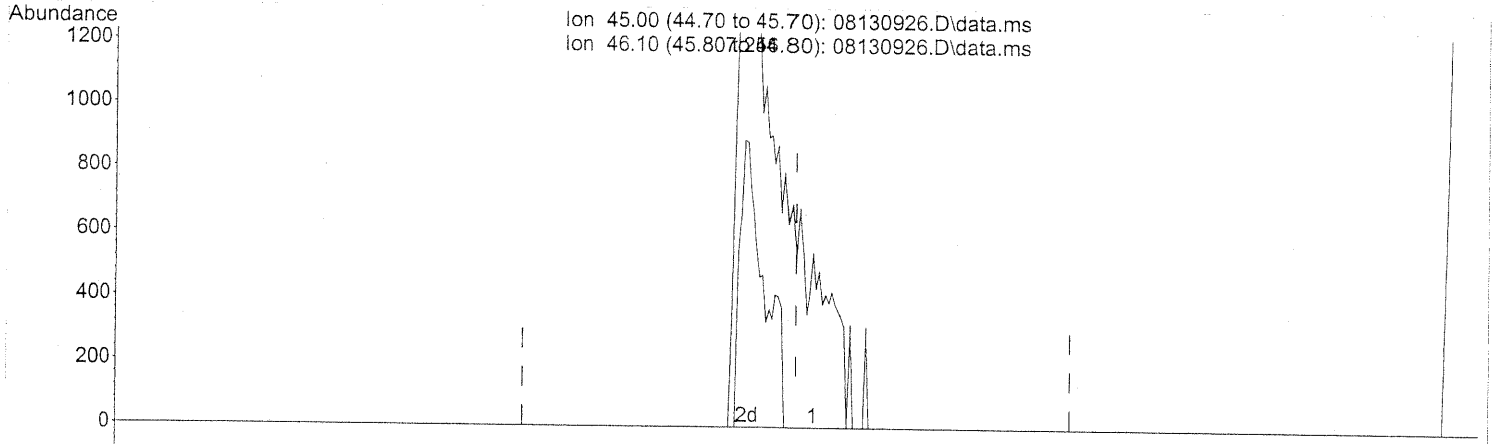
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130926.D  
 Acq On : 14 Aug 2009 1:56  
 Operator : EM  
 Sample : 0.1ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



(10) Ethanol (T)  
 7.254min (-0.086) 0.66ng m  
 response 10733

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

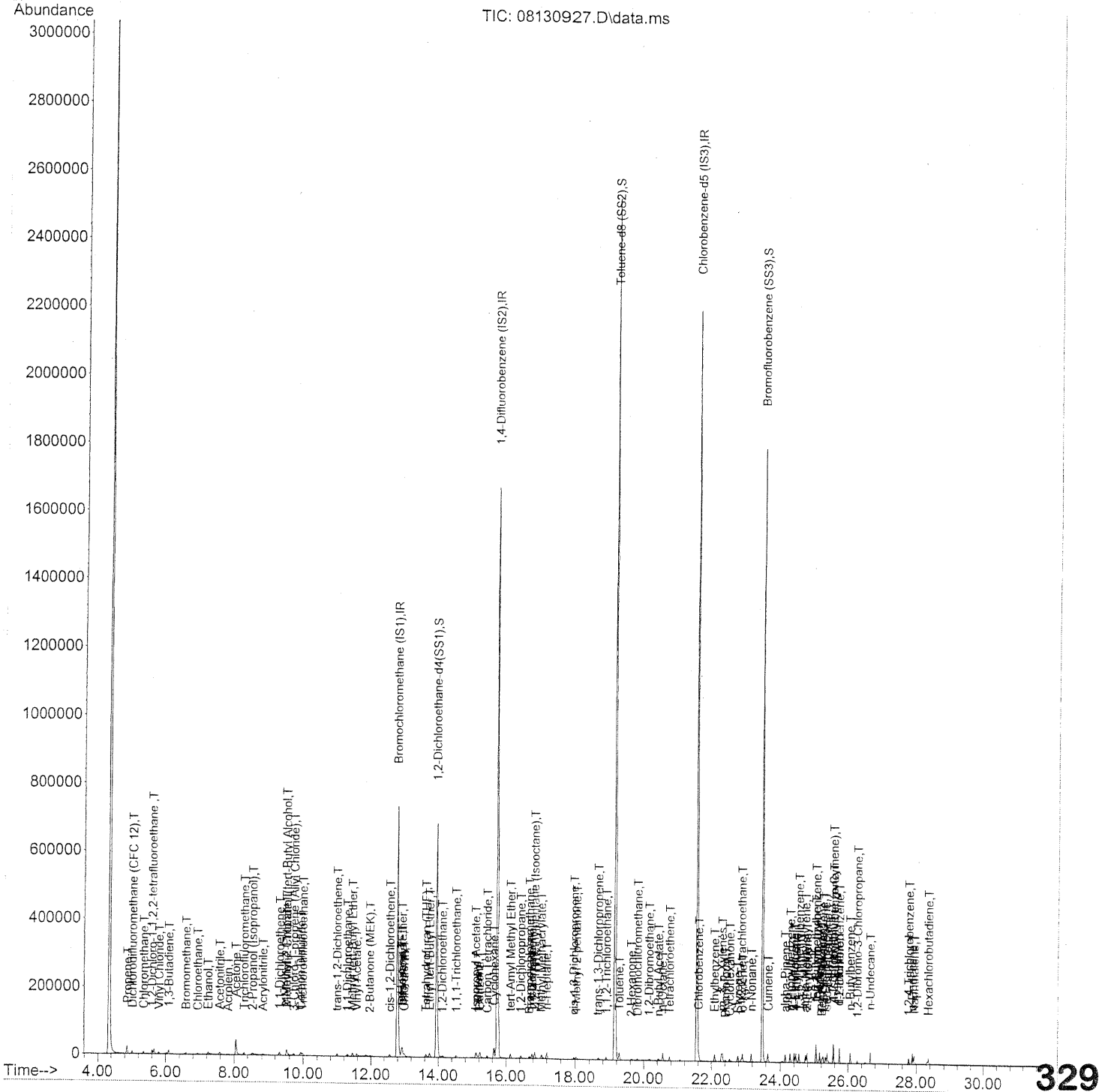
SP → IC  
 em 8/14/09

DA 8/15/09



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130927.D  
 Acq On : 14 Aug 2009 2:38  
 Operator : EM  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130927.D  
 Acq On : 14 Aug 2009 2:38  
 Operator : EM  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	387904	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1988065	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	969971	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	692264	25.225	ng	-0.03
Spiked Amount	25.000		Recovery	=	100.92%	
57) Toluene-d8 (SS2)	19.14	98	2284146	23.803	ng	-0.02
Spiked Amount	25.000		Recovery	=	95.20%	
73) Bromofluorobenzene (SS3)	23.49	174	650502	22.548	ng	0.00
Spiked Amount	25.000		Recovery	=	90.20%	

Target Compounds

						Qvalue
2) Propene	4.87	42	6837	0.279	ng	97
3) Dichlorodifluoromethan...	5.02	85	10147	0.208	ng	95
4) Chloromethane	5.36	50	8936	0.244	ng	97
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	5244	0.191	ng	89
6) Vinyl Chloride	5.81	62	8752	0.224	ng	91
7) 1,3-Butadiene	6.10	54	6814	0.243	ng	94
8) Bromomethane	6.60	94	4286	0.186	ng	92
9) Chloroethane	6.94	64	4242	0.217	ng	84
10) Ethanol	7.24	45	21624	1.332	ng	85
11) Acetonitrile	7.58	41	10541	0.287	ng	86
12) Acrolein	7.82	56	2810	0.237	ng	96
13) Acetone	8.05	58	26843	1.453	ng	93
14) Trichlorofluoromethane	8.29	101	8048	0.189	ng	100
15) 2-Propanol (Isopropanol)	8.53	45	23904	0.492	ng	96
16) Acrylonitrile	8.83	53	5080	0.205	ng	92
17) 1,1-Dichloroethene	9.32	96	5237	0.242	ng	94
18) 2-Methyl-2-Propanol (t...	9.52	59	23137	0.423	ng	93
19) Methylene Chloride	9.52	84	5947	0.243	ng	88
20) 3-Chloro-1-propene (Al...	9.73	41	6616	0.251	ng	84
21) Trichlorotrifluoroethane	9.98	151	3591	0.186	ng	91
22) Carbon Disulfide	9.93	76	19471	0.234	ng	95
23) trans-1,2-Dichloroethene	10.99	61	7192	0.226	ng	85
24) 1,1-Dichloroethane	11.30	63	8927	0.230	ng	93
25) Methyl tert-Butyl Ether	11.45	73	14779	0.216	ng	98
26) Vinyl Acetate	11.58	86	1274	0.289	ng	# 1
27) 2-Butanone (MEK)	11.97	72	1592	0.113	ng	# 1
28) cis-1,2-Dichloroethene	12.57	61	6876	0.224	ng	90
29) Diisopropyl Ether	12.94	87	4063	0.186	ng	# 86
30) Ethyl Acetate	12.95	61	1611	0.175	ng	96
31) n-Hexane	12.93	57	9734	0.228	ng	8

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Em 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130927.D  
 Acq On : 14 Aug 2009 2:38  
 Operator : EM  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	13.00	83	7826	0.202	ng	98
34) Tetrahydrofuran (THF)	13.64	72	3221	0.243	ng #	69
35) Ethyl tert-Butyl Ether	13.75	87	5452	0.186	ng #	80
36) 1,2-Dichloroethane	14.13	62	5503	0.177	ng	92
38) 1,1,1-Trichloroethane	14.53	97	7018	0.192	ng	98
39) Isopropyl Acetate	15.10	61	5649	0.390	ng #	69
40) 1-Butanol	15.17	56	6339	0.257	ng	89
41) Benzene	15.22	78	21485	0.203	ng	96
42) Carbon Tetrachloride	15.45	117	6103	0.196	ng	91
43) Cyclohexane	15.65	84	16172	0.408	ng	86
44) tert-Amyl Methyl Ether	16.14	73	13999	0.200	ng	94
45) 1,2-Dichloropropane	16.43	63	4918	0.220	ng	99
46) Bromodichloromethane	16.69	83	5890	0.192	ng	95
47) Trichloroethene	16.77	130	5590	0.206	ng	98
48) 1,4-Dioxane	16.77	88	3080	0.173	ng	100
49) 2,2,4-Trimethylpentane...	16.85	57	23620	0.230	ng	93
50) Methyl Methacrylate	17.05	100	2700	0.272	ng #	80
51) n-Heptane	17.20	71	5246	0.204	ng	91
52) cis-1,3-Dichloropropene	17.96	75	6183	0.166	ng	93
53) 4-Methyl-2-pentanone	18.03	58	3201	0.159	ng	70
54) trans-1,3-Dichloropropene	18.66	75	5739	0.175	ng	84
55) 1,1,2-Trichloroethane	18.90	97	4035	0.181	ng	90
58) Toluene	19.28	91	21913	0.187	ng	99
59) 2-Hexanone	19.64	43	6660	0.132	ng	82
60) Dibromochloromethane	19.82	129	4315	0.163	ng	96
61) 1,2-Dibromoethane	20.15	107	4442	0.163	ng	99
62) n-Butyl Acetate	20.43	43	8074	0.144	ng	86
63) n-Octane	20.55	57	4432	0.193	ng	95
64) Tetrachloroethene	20.75	166	5009	0.161	ng	96
65) Chlorobenzene	21.62	112	13897	0.188	ng	94
66) Ethylbenzene	22.09	91	22216	0.174	ng	99
67) m- & p-Xylenes	22.32	91	35625	0.338	ng	96
68) Bromoform	22.42	173	3262	0.139	ng	90
69) Styrene	22.78	104	12611	0.162	ng	95
70) o-Xylene	22.92	91	17434	0.166	ng	97
71) n-Nonane	23.17	43	10801	0.211	ng	93
72) 1,1,2,2-Tetrachloroethane	22.89	83	7219	0.165	ng	100
74) Cumene	23.66	105	22760	0.163	ng	98
75) alpha-Pinene	24.15	93	10911	0.164	ng	97
76) n-Propylbenzene	24.29	91	27992	0.167	ng	100
77) 3-Ethyltoluene	24.41	105	22341	0.169	ng	99
78) 4-Ethyltoluene	24.46	105	21950	0.166	ng	99
79) 1,3,5-Trimethylbenzene	24.55	105	19048	0.173	ng	99

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130927.D  
 Acq On : 14 Aug 2009 2:38  
 Operator : EM  
 Sample : 0.2ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-07240912  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
80) alpha-Methylstyrene	24.73	118	9096	0.148	ng	94
81) 2-Ethyltoluene	24.79	105	22138	0.160	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	18432	0.150	ng	99
83) n-Decane	25.15	57	11801	0.198	ng	93
84) Benzyl Chloride	25.22	91	12901	0.146	ng	92
85) 1,3-Dichlorobenzene	25.25	146	9910	0.153	ng	99
86) 1,4-Dichlorobenzene	25.33	146	10593	0.157	ng	99
87) sec-Butylbenzene	25.38	105	24768	0.161	ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	22687	0.146	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	18683	0.149	ng	99
90) 1,2-Dichlorobenzene	25.74	146	9423	0.140	ng	99
91) d-Limonene	25.74	68	7469	0.153	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	2528	0.134	ng	79
93) n-Undecane	26.65	57	11857	0.194	ng	93
94) 1,2,4-Trichlorobenzene	27.79	180	7181	0.165	ng	94
95) Naphthalene	27.94	128	24854	0.164	ng	98
96) n-Dodecane	27.89	57	11636	0.179	ng	92
97) Hexachlorobutadiene	28.36	225	4076	0.164	ng	100
98) Cyclohexanone	22.54	55	6345	0.179	ng	# 80
99) tert-Butylbenzene	25.05	119	18711	0.150	ng	97
100) n-Butylbenzene	26.07	91	21106	0.172	ng	97

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



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130928.D  
 Acq On : 14 Aug 2009 3:19  
 Operator : EM  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Bromochloromethane (IS1)	12.80	130	387943	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1964748	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	963338	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	688763	25.095	ng	-0.03
Spiked Amount	25.000					
				Recovery =		100.40%
57) Toluene-d8 (SS2)	19.14	98	2270133	23.819	ng	-0.02
Spiked Amount	25.000					
				Recovery =		95.28%
73) Bromofluorobenzene (SS3)	23.49	174	649766	22.677	ng	0.00
Spiked Amount	25.000					
				Recovery =		90.72%

Target Compounds

						Qvalue
2) Propene	4.86	42	17385	0.710	ng	95
3) Dichlorodifluoromethan...	5.01	85	30715	0.629	ng	99
4) Chloromethane	5.35	50	27825	0.761	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	16234	0.590	ng	100
6) Vinyl Chloride	5.80	62	27174	0.697	ng	98
7) 1,3-Butadiene	6.09	54	22656	0.808	ng	97
8) Bromomethane	6.59	94	14465	0.629	ng	99
9) Chloroethane	6.94	64	13353	0.684	ng	98
10) Ethanol	7.23	45	60616	3.733	ng	99
11) Acetonitrile	7.56	41	31606	0.861	ng	97
12) Acrolein	7.80	56	8567	0.724	ng	99
13) Acetone	8.03	58	64613	3.498	ng	95
14) Trichlorofluoromethane	8.29	101	26206	0.616	ng	99
15) 2-Propanol (Isopropanol)	8.50	45	75804	1.560	ng	98
16) Acrylonitrile	8.80	53	18881	0.762	ng	99
17) 1,1-Dichloroethene	9.32	96	15523	0.716	ng	96
18) 2-Methyl-2-Propanol (t...	9.48	59	71705	1.310	ng	# 68
19) Methylene Chloride	9.52	84	16956	0.693	ng	88
20) 3-Chloro-1-propene (Al...	9.72	41	22154	0.839	ng	86
21) Trichlorotrifluoroethane	9.98	151	12159	0.630	ng	94
22) Carbon Disulfide	9.93	76	59708	0.717	ng	99
23) trans-1,2-Dichloroethene	10.98	61	23100	0.727	ng	91
24) 1,1-Dichloroethane	11.30	63	28384	0.733	ng	98
25) Methyl tert-Butyl Ether	11.42	73	45062	0.660	ng	96
26) Vinyl Acetate	11.56	86	8549	1.941	ng	# 31
27) 2-Butanone (MEK)	11.93	72	7703	0.547	ng	# 14
28) cis-1,2-Dichloroethene	12.56	61	22859	0.746	ng	91
29) Diisopropyl Ether	12.92	87	12722	0.581	ng	# 75
30) Ethyl Acetate	12.93	61	9081	0.984	ng	98
31) n-Hexane	12.92	57	30486	0.714	ng	99

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*em* 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130928.D  
 Acq On : 14 Aug 2009 3:19  
 Operator : EM  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	13.01	83	25741	0.664	ng	99
34) Tetrahydrofuran (THF)	13.61	72	9662	0.728	ng	# 69
35) Ethyl tert-Butyl Ether	13.73	87	17600	0.600	ng	# 86
36) 1,2-Dichloroethane	14.13	62	18883	0.608	ng	98
38) 1,1,1-Trichloroethane	14.53	97	21567	0.598	ng	99
39) Isopropyl Acetate	15.09	61	18003	1.258	ng	# 76
40) 1-Butanol	15.14	56	24186	0.991	ng	# 5
41) Benzene	15.23	78	67490	0.644	ng	97
42) Carbon Tetrachloride	15.45	117	18399	0.598	ng	99
43) Cyclohexane	15.65	84	50652	1.293	ng	87
44) tert-Amyl Methyl Ether	16.12	73	43234	0.624	ng	98
45) 1,2-Dichloropropane	16.43	63	15929	0.721	ng	99
46) Bromodichloromethane	16.69	83	19513	0.644	ng	99
47) Trichloroethene	16.77	130	16351	0.611	ng	99
48) 1,4-Dioxane	16.75	88	11029	0.625	ng	88
49) 2,2,4-Trimethylpentane...	16.86	57	73776	0.727	ng	94
50) Methyl Methacrylate	17.03	100	10559	1.075	ng	90
51) n-Heptane	17.21	71	17902	0.706	ng	96
52) cis-1,3-Dichloropropene	17.95	75	21881	0.596	ng	96
53) 4-Methyl-2-pentanone	18.00	58	12377	0.624	ng	89
54) trans-1,3-Dichloropropene	18.66	75	20538	0.635	ng	94
55) 1,1,2-Trichloroethane	18.89	97	13863	0.630	ng	98
58) Toluene	19.28	91	66952	0.574	ng	99
59) 2-Hexanone	19.60	43	29124	0.580	ng	87
60) Dibromochloromethane	19.82	129	15336	0.585	ng	96
61) 1,2-Dibromoethane	20.15	107	14720	0.545	ng	97
62) n-Butyl Acetate	20.40	43	31166	0.559	ng	97
63) n-Octane	20.56	57	15118	0.663	ng	92
64) Tetrachloroethene	20.76	166	15982	0.518	ng	98
65) Chlorobenzene	21.62	112	41581	0.567	ng	100
66) Ethylbenzene	22.09	91	71057	0.560	ng	96
67) m- & p-Xylenes	22.31	91	109600	1.048	ng	99
68) Bromoform	22.42	173	11272	0.482	ng	99
69) Styrene	22.77	104	40825	0.529	ng	99
70) o-Xylene	22.92	91	56661	0.544	ng	99
71) n-Nonane	23.17	43	34926	0.686	ng	91
72) 1,1,2,2-Tetrachloroethane	22.89	83	24083	0.556	ng	98
74) Cumene	23.65	105	70945	0.513	ng	98
75) alpha-Pinene	24.15	93	33531	0.507	ng	99
76) n-Propylbenzene	24.28	91	88210	0.529	ng	99
77) 3-Ethyltoluene	24.40	105	69045	0.526	ng	98
78) 4-Ethyltoluene	24.46	105	70642	0.537	ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	57676	0.527	ng	100

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*em* 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130928.D  
 Acq On : 14 Aug 2009 3:19  
 Operator : EM  
 Sample : 0.5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	29532	0.482	ng	96
81) 2-Ethyltoluene	24.79	105	70128	0.510	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	56820	0.464	ng	97
83) n-Decane	25.15	57	35901	0.607	ng	95
84) Benzyl Chloride	25.22	91	42984	0.490	ng	98
85) 1,3-Dichlorobenzene	25.25	146	32555	0.507	ng	99
86) 1,4-Dichlorobenzene	25.33	146	33227	0.496	ng	100
87) sec-Butylbenzene	25.38	105	80257	0.524	ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	71025	0.460	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	58655	0.470	ng	99
90) 1,2-Dichlorobenzene	25.75	146	30332	0.454	ng	100
91) d-Limonene	25.74	68	24087	0.495	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.27	157	9351	0.498	ng	89
93) n-Undecane	26.65	57	37313	0.616	ng	95
94) 1,2,4-Trichlorobenzene	27.79	180	22652	0.526	ng	99
95) Naphthalene	27.94	128	78387	0.522	ng	100
96) n-Dodecane	27.89	57	35864	0.554	ng	97
97) Hexachlorobutadiene	28.36	225	12566	0.510	ng	97
98) Cyclohexanone	22.53	55	15980	0.454	ng	92
99) tert-Butylbenzene	25.05	119	56558	0.457	ng	100
100) n-Butylbenzene	26.07	91	64485	0.529	ng	98

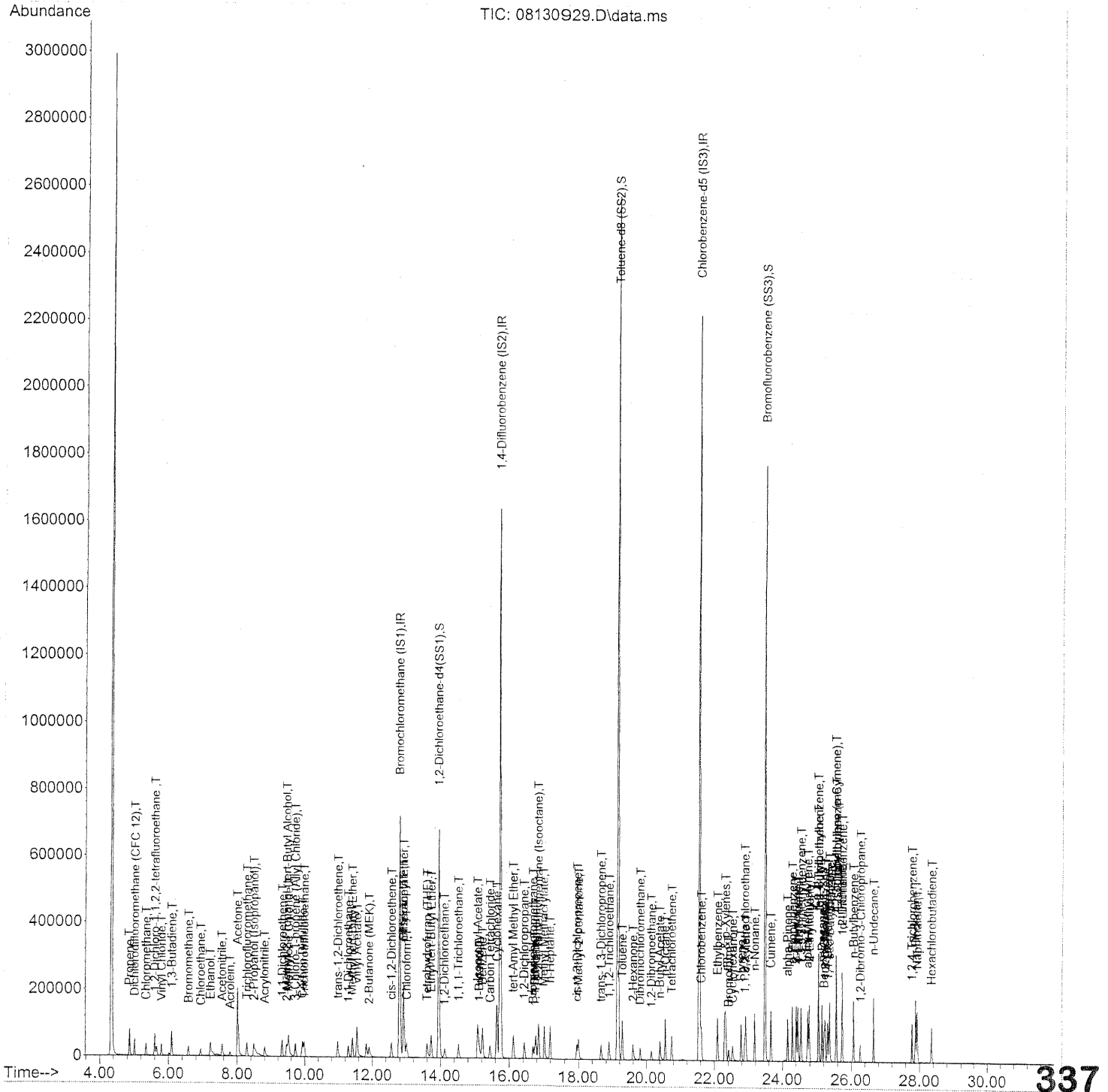
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*Em 8/14/09*



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130929.D  
 Acq On : 14 Aug 2009 4:01  
 Operator : EM  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130929.D  
 Acq On : 14 Aug 2009 4:01  
 Operator : EM  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	385393	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1968754	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	961740	25.000	ng	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.95	65	684680	25.111	ng	-0.03
Spiked Amount	25.000		Recovery	=	100.44%	
57) Toluene-d8 (SS2)	19.14	98	2283397	23.998	ng	-0.02
Spiked Amount	25.000		Recovery	=	96.00%	
73) Bromofluorobenzene (SS3)	23.49	174	645460	22.564	ng	0.00
Spiked Amount	25.000		Recovery	=	90.24%	

Target Compounds

						Qvalue
2) Propene	4.86	42	29829	1.227	ng	97
3) Dichlorodifluoromethan...	5.01	85	52865	1.090	ng	99
4) Chloromethane	5.35	50	47868	1.317	ng	100
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	28143	1.030	ng	98
6) Vinyl Chloride	5.80	62	46770	1.207	ng	98
7) 1,3-Butadiene	6.09	54	39034	1.402	ng	96
8) Bromomethane	6.59	94	24199	1.059	ng	99
9) Chloroethane	6.94	64	23852	1.231	ng	99
10) Ethanol	7.22	45	108628	6.734	ng	100
11) Acetonitrile	7.56	41	56154	1.539	ng	98
12) Acrolein	7.80	56	15400	1.309	ng	97
13) Acetone	8.01	58	112407	6.126	ng	94
14) Trichlorofluoromethane	8.29	101	45022	1.065	ng	99
15) 2-Propanol (Isopropanol)	8.48	45	135858	2.814	ng	99
16) Acrylonitrile	8.80	53	34799	1.414	ng	99
17) 1,1-Dichloroethene	9.32	96	26402	1.227	ng	95
18) 2-Methyl-2-Propanol (t...	9.46	59	127946	2.353	ng	95
19) Methylene Chloride	9.52	84	28073	1.155	ng	86
20) 3-Chloro-1-propene (Al...	9.72	41	39535	1.508	ng	89
21) Trichlorotrifluoroethane	9.98	151	20891	1.090	ng	95
22) Carbon Disulfide	9.93	76	102252	1.236	ng	98
23) trans-1,2-Dichloroethene	10.99	61	40695	1.289	ng	93
24) 1,1-Dichloroethane	11.30	63	48687	1.265	ng	98
25) Methyl tert-Butyl Ether	11.42	73	79993	1.179	ng	96
26) Vinyl Acetate	11.56	86	17582	4.017	ng	# 44
27) 2-Butanone (MEK)	11.91	72	15476	1.106	ng	# 70
28) cis-1,2-Dichloroethene	12.57	61	38880	1.276	ng	94
29) Diisopropyl Ether	12.91	87	23217	1.067	ng	# 79
30) Ethyl Acetate	12.91	61	17295	1.887	ng	98
31) n-Hexane	12.92	57	51322	1.211	ng	98

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130929.D  
 Acq On : 14 Aug 2009 4:01  
 Operator : EM  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	13.01	83	44169	1.147	ng	99
34) Tetrahydrofuran (THF)	13.61	72	18493	1.402	ng	# 78
35) Ethyl tert-Butyl Ether	13.73	87	32059	1.099	ng	# 88
36) 1,2-Dichloroethane	14.13	62	33602	1.089	ng	100
38) 1,1,1-Trichloroethane	14.53	97	38262	1.060	ng	99
39) Isopropyl Acetate	15.09	61	33761	2.355	ng	# 85
40) 1-Butanol	15.13	56	47102	1.925	ng	# 74
41) Benzene	15.23	78	113746	1.083	ng	99
42) Carbon Tetrachloride	15.46	117	32803	1.064	ng	98
43) Cyclohexane	15.65	84	88044	2.243	ng	87
44) tert-Amyl Methyl Ether	16.11	73	76135	1.097	ng	97
45) 1,2-Dichloropropane	16.43	63	28251	1.276	ng	100
46) Bromodichloromethane	16.69	83	33986	1.120	ng	99
47) Trichloroethene	16.77	130	28512	1.063	ng	100
48) 1,4-Dioxane	16.74	88	20845	1.180	ng	92
49) 2,2,4-Trimethylpentane...	16.85	57	130464	1.282	ng	93
50) Methyl Methacrylate	17.02	100	20121	2.044	ng	# 88
51) n-Heptane	17.20	71	31494	1.239	ng	96
52) cis-1,3-Dichloropropene	17.95	75	38638	1.049	ng	99
53) 4-Methyl-2-pentanone	18.00	58	24206	1.218	ng	89
54) trans-1,3-Dichloropropene	18.65	75	38043	1.174	ng	99
55) 1,1,2-Trichloroethane	18.89	97	24731	1.121	ng	97
58) Toluene	19.28	91	119238	1.024	ng	99
59) 2-Hexanone	19.60	43	55664	1.111	ng	92
60) Dibromochloromethane	19.82	129	27040	1.032	ng	99
61) 1,2-Dibromoethane	20.15	107	26630	0.987	ng	99
62) n-Butyl Acetate	20.40	43	61529	1.105	ng	98
63) n-Octane	20.56	57	26993	1.186	ng	92
64) Tetrachloroethene	20.75	166	28187	0.915	ng	99
65) Chlorobenzene	21.62	112	73763	1.007	ng	100
66) Ethylbenzene	22.09	91	127246	1.005	ng	97
67) m- & p-Xylenes	22.32	91	194401	1.861	ng	99
68) Bromoform	22.41	173	20518	0.879	ng	99
69) Styrene	22.77	104	73446	0.954	ng	100
70) o-Xylene	22.92	91	100172	0.963	ng	98
71) n-Nonane	23.17	43	62203	1.225	ng	92
72) 1,1,2,2-Tetrachloroethane	22.89	83	42899	0.991	ng	100
74) Cumene	23.65	105	125520	0.908	ng	97
75) alpha-Pinene	24.15	93	59580	0.902	ng	99
76) n-Propylbenzene	24.28	91	157275	0.945	ng	98
77) 3-Ethyltoluene	24.40	105	123089	0.940	ng	99
78) 4-Ethyltoluene	24.46	105	124771	0.950	ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	103623	0.948	ng	99

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130929.D  
 Acq On : 14 Aug 2009 4:01  
 Operator : EM  
 Sample : 1.0ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	53658	0.878	ng	96
81) 2-Ethyltoluene	24.79	105	124584	0.908	ng	97
82) 1,2,4-Trimethylbenzene	25.05	105	102293	0.837	ng	100
83) n-Decane	25.15	57	64455	1.092	ng	94
84) Benzyl Chloride	25.21	91	81497	0.930	ng	98
85) 1,3-Dichlorobenzene	25.25	146	56441	0.880	ng	100
86) 1,4-Dichlorobenzene	25.33	146	59032	0.883	ng	98
87) sec-Butylbenzene	25.38	105	141772	0.928	ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	127195	0.826	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	105475	0.847	ng	99
90) 1,2-Dichlorobenzene	25.74	146	53268	0.799	ng	100
91) d-Limonene	25.74	68	42966	0.885	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.27	157	16960	0.906	ng	91
93) n-Undecane	26.65	57	66615	1.102	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	40513	0.942	ng	100
95) Naphthalene	27.94	128	143580	0.957	ng	99
96) n-Dodecane	27.89	57	67663	1.047	ng	94
97) Hexachlorobutadiene	28.36	225	22500	0.914	ng	97
98) Cyclohexanone	22.52	55	30464	0.867	ng	93
99) tert-Butylbenzene	25.05	119	102193	0.827	ng	100
100) n-Butylbenzene	26.06	91	115342	0.948	ng	99

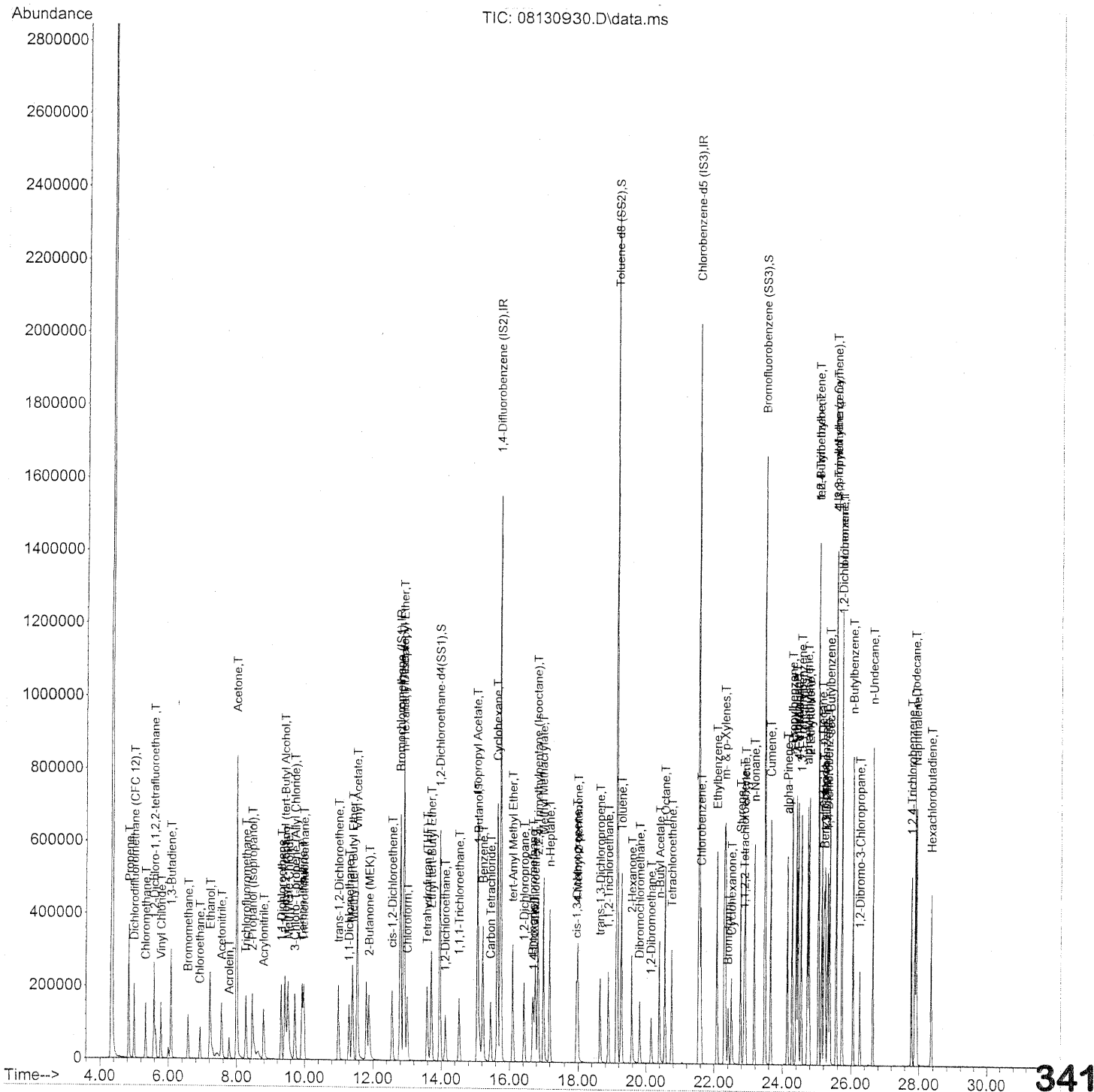
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*em* 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	356661	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1839686	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	890260	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.96	65	631936	25.044	ng	-0.03
Spiked Amount	25.000			Recovery =	100.16%	
57) Toluene-d8 (SS2)	19.15	98	2108383	23.938	ng	-0.01
Spiked Amount	25.000			Recovery =	95.76%	
73) Bromofluorobenzene (SS3)	23.49	174	597126	22.551	ng	0.00
Spiked Amount	25.000			Recovery =	90.20%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	170359	7.571	ng	96
3) Dichlorodifluoromethan...	5.00	85	230084	5.124	ng	99
4) Chloromethane	5.33	50	205078	6.099	ng	97
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	119794	4.737	ng	99
6) Vinyl Chloride	5.79	62	201673	5.626	ng	98
7) 1,3-Butadiene	6.08	54	174352	6.764	ng	98
8) Bromomethane	6.57	94	105980	5.012	ng	99
9) Chloroethane	6.92	64	101343	5.650	ng	100
10) Ethanol	7.22	45	503955m	33.755	ng	
11) Acetonitrile	7.55	41	248065	7.348	ng	100
12) Acrolein	7.78	56	72285	6.641	ng	98
13) Acetone	8.00	58	487378	28.701	ng	91
14) Trichlorofluoromethane	8.28	101	194921	4.983	ng	99
15) 2-Propanol (Isopropanol)	8.46	45	476882m	10.673	ng	
16) Acrylonitrile	8.79	53	169954	7.460	ng	97
17) 1,1-Dichloroethene	9.32	96	116215	5.835	ng	97
18) 2-Methyl-2-Propanol (t...	9.43	59	580085	11.527	ng	96
19) Methylene Chloride	9.53	84	121460	5.402	ng	88
20) 3-Chloro-1-propene (Al...	9.72	41	183785	7.574	ng	88
21) Trichlorotrifluoroethane	9.98	151	93260	5.256	ng	96
22) Carbon Disulfide	9.93	76	452470	5.908	ng	98
23) trans-1,2-Dichloroethene	10.99	61	180824	6.190	ng	92
24) 1,1-Dichloroethane	11.30	63	216980	6.093	ng	99
25) Methyl tert-Butyl Ether	11.40	73	365953	5.827	ng	96
26) Vinyl Acetate	11.54	86	100963	24.928	ng	# 65
27) 2-Butanone (MEK)	11.89	72	83061	6.413	ng	# 77
28) cis-1,2-Dichloroethene	12.57	61	171418	6.081	ng	93
29) Diisopropyl Ether	12.90	87	101448	5.039	ng	# 66
30) Ethyl Acetate	12.90	61	91320	10.764	ng	99
31) n-Hexane	12.92	57	224482	5.722	ng	93

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.01	83	192914	5.415	ng	99
34) Tetrahydrofuran (THF)	13.58	72	83814	6.867	ng	# 86
35) Ethyl tert-Butyl Ether	13.71	87	142829	5.293	ng	# 86
36) 1,2-Dichloroethane	14.13	62	150902	5.284	ng	99
38) 1,1,1-Trichloroethane	14.53	97	168717	5.000	ng	99
39) Isopropyl Acetate	15.06	61	158534	11.834	ng	# 79
40) 1-Butanol	15.09	56	248323	10.863	ng	81
41) Benzene	15.23	78	489432	4.989	ng	98
42) Carbon Tetrachloride	15.46	117	142799	4.955	ng	100
43) Cyclohexane	15.65	84	392518	10.699	ng	89
44) tert-Amyl Methyl Ether	16.10	73	352122	5.430	ng	98
45) 1,2-Dichloropropane	16.43	63	124973	6.043	ng	98
46) Bromodichloromethane	16.69	83	155746	5.492	ng	98
47) Trichloroethene	16.77	130	122841	4.899	ng	99
48) 1,4-Dioxane	16.72	88	98401	5.959	ng	91
49) 2,2,4-Trimethylpentane...	16.85	57	566857	5.963	ng	93
50) Methyl Methacrylate	17.02	100	99872	10.855	ng	90
51) n-Heptane	17.21	71	134268	5.652	ng	95
52) cis-1,3-Dichloropropene	17.95	75	186847	5.431	ng	98
53) 4-Methyl-2-pentanone	17.99	58	119233	6.420	ng	95
54) trans-1,3-Dichloropropene	18.64	75	186516	6.159	ng	98
55) 1,1,2-Trichloroethane	18.88	97	112218	5.445	ng	99
58) Toluene	19.28	91	521746	4.839	ng	100
59) 2-Hexanone	19.58	43	278990	6.017	ng	99
60) Dibromochloromethane	19.82	129	125108	5.160	ng	99
61) 1,2-Dibromoethane	20.15	107	123637	4.951	ng	100
62) n-Butyl Acetate	20.39	43	322004	6.246	ng	98
63) n-Octane	20.56	57	120268	5.709	ng	91
64) Tetrachloroethene	20.75	166	122324	4.291	ng	100
65) Chlorobenzene	21.62	112	321850	4.745	ng	99
66) Ethylbenzene	22.09	91	567585	4.841	ng	98
67) m- & p-Xylenes	22.32	91	871075	9.010	ng	100
68) Bromoform	22.41	173	97277	4.503	ng	100
69) Styrene	22.77	104	344065	4.826	ng	99
70) o-Xylene	22.92	91	444727	4.618	ng	99
71) n-Nonane	23.17	43	272588	5.797	ng	93
72) 1,1,2,2-Tetrachloroethane	22.88	83	199967	4.992	ng	100
74) Cumene	23.65	105	562278	4.396	ng	98
75) alpha-Pinene	24.15	93	276329	4.521	ng	99
76) n-Propylbenzene	24.28	91	700875	4.549	ng	99
77) 3-Ethyltoluene	24.40	105	559902	4.619	ng	98
78) 4-Ethyltoluene	24.46	105	553680	4.552	ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	455198	4.500	ng	100

843

*em 8/14/09*

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	253262	4.476	ng	99
81) 2-Ethyltoluene	24.79	105	552087	4.348	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	462116	4.084	ng	99
83) n-Decane	25.15	57	285891	5.231	ng	94
84) Benzyl Chloride	25.21	91	398762	4.917	ng	98
85) 1,3-Dichlorobenzene	25.25	146	251311	4.232	ng	100
86) 1,4-Dichlorobenzene	25.32	146	256766	4.150	ng	100
87) sec-Butylbenzene	25.38	105	629377	4.449	ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	574902	4.031	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	470067	4.080	ng	98
90) 1,2-Dichlorobenzene	25.75	146	241180	3.907	ng	100
91) d-Limonene	25.74	68	203082	4.518	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	84105	4.852	ng	96
93) n-Undecane	26.65	57	302353	5.403	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	185058	4.646	ng	99
95) Naphthalene	27.94	128	655899	4.724	ng	99
96) n-Dodecane	27.89	57	311207	5.204	ng	96
97) Hexachlorobutadiene	28.36	225	101578	4.458	ng	98
98) Cyclohexanone	22.51	55	142237	4.374	ng	94
99) tert-Butylbenzene	25.05	119	454889	3.978	ng	99
100) n-Butylbenzene	26.06	91	521247	4.628	ng	99

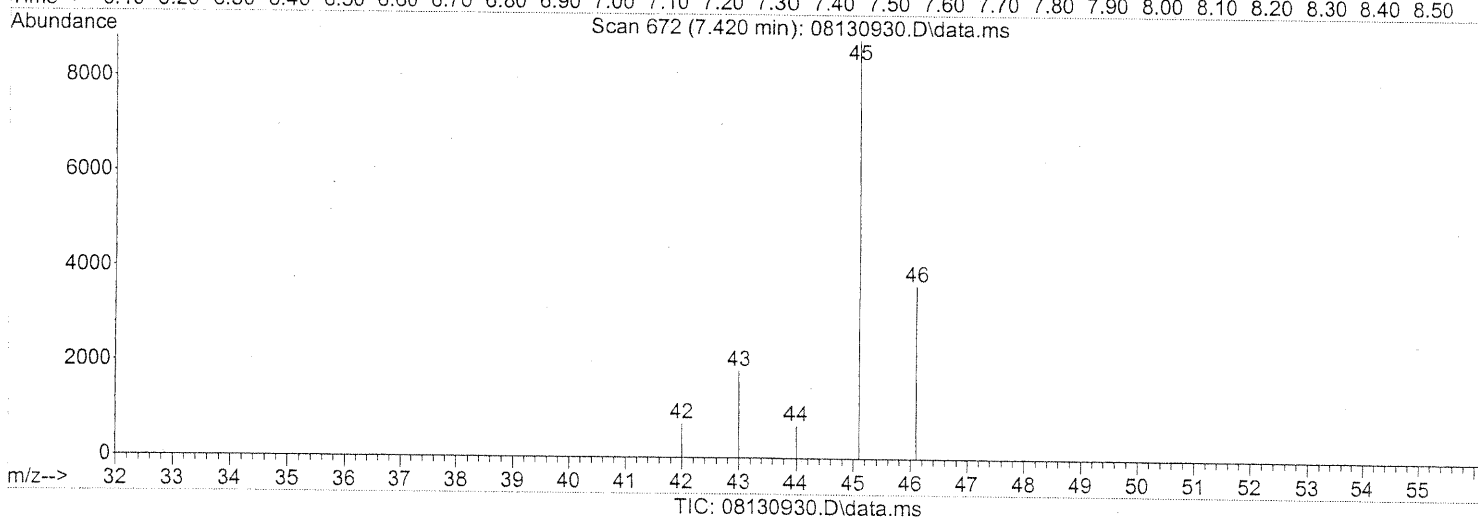
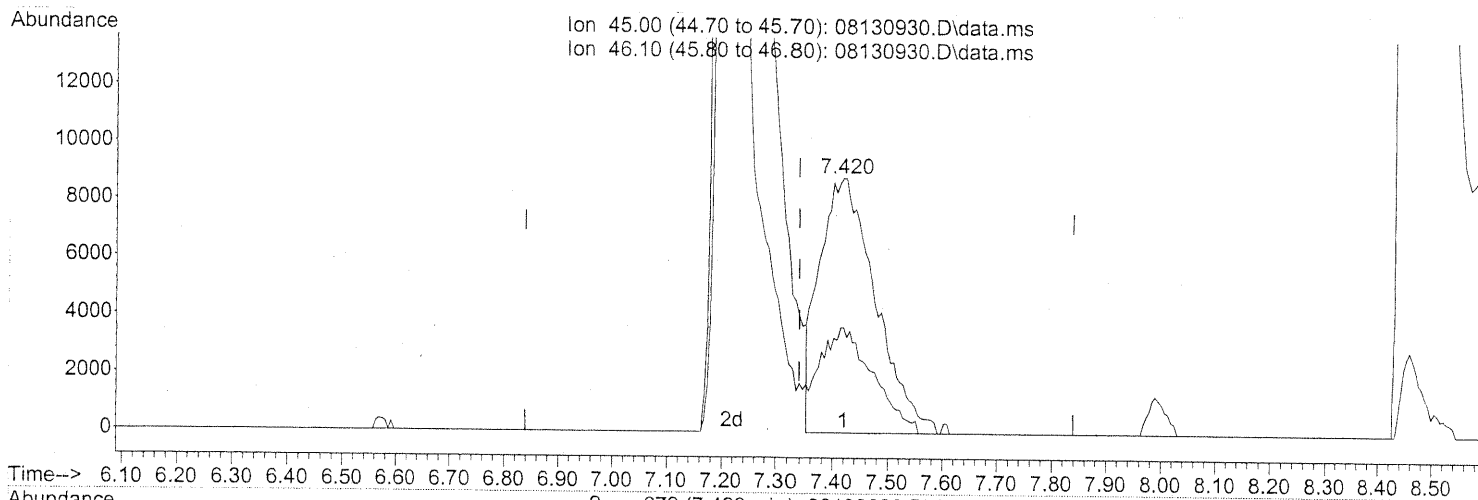
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.420min (+0.080) 4.20ng

response 62719

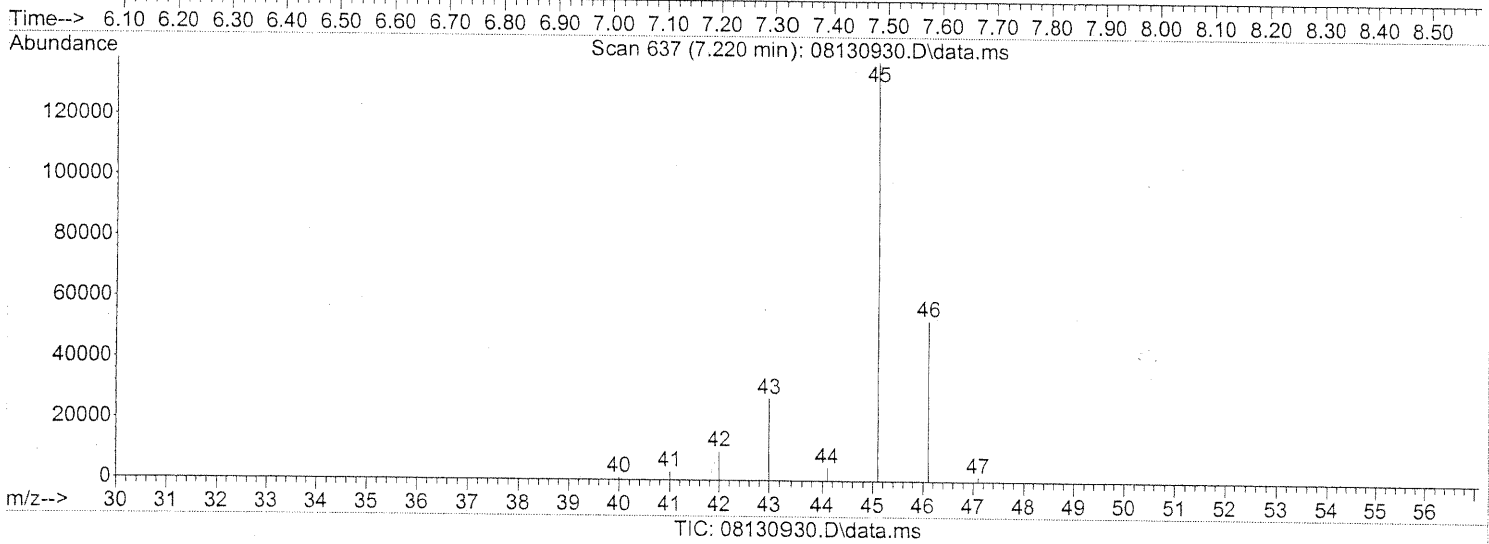
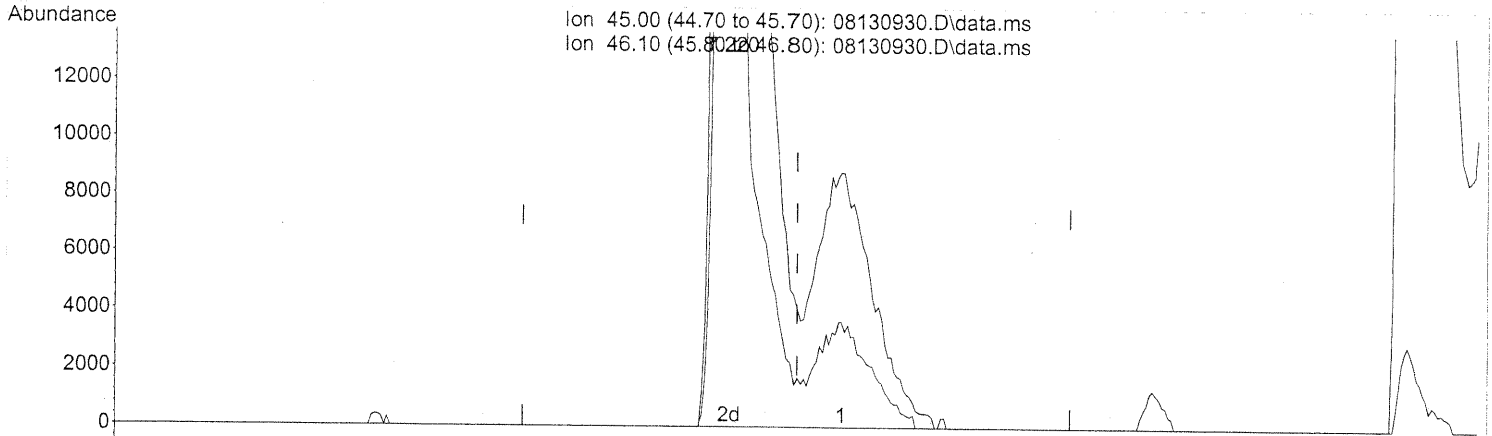
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.29
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130930.D  
Acq On : 14 Aug 2009 4:43  
Operator : EM  
Sample : 5ng TO-15 ICAL STD  
Misc : S20-08130905/S20-08100904  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Mon Jul 27 09:38:25 2009  
Response via : Initial Calibration



(10) Ethanol (T)  
7.220min (-0.120) 33.76ng m

response 503955

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	4.77#
0.00	0.00	0.00
0.00	0.00	0.00

*SP -> IC*  
*Em 8/14/09*

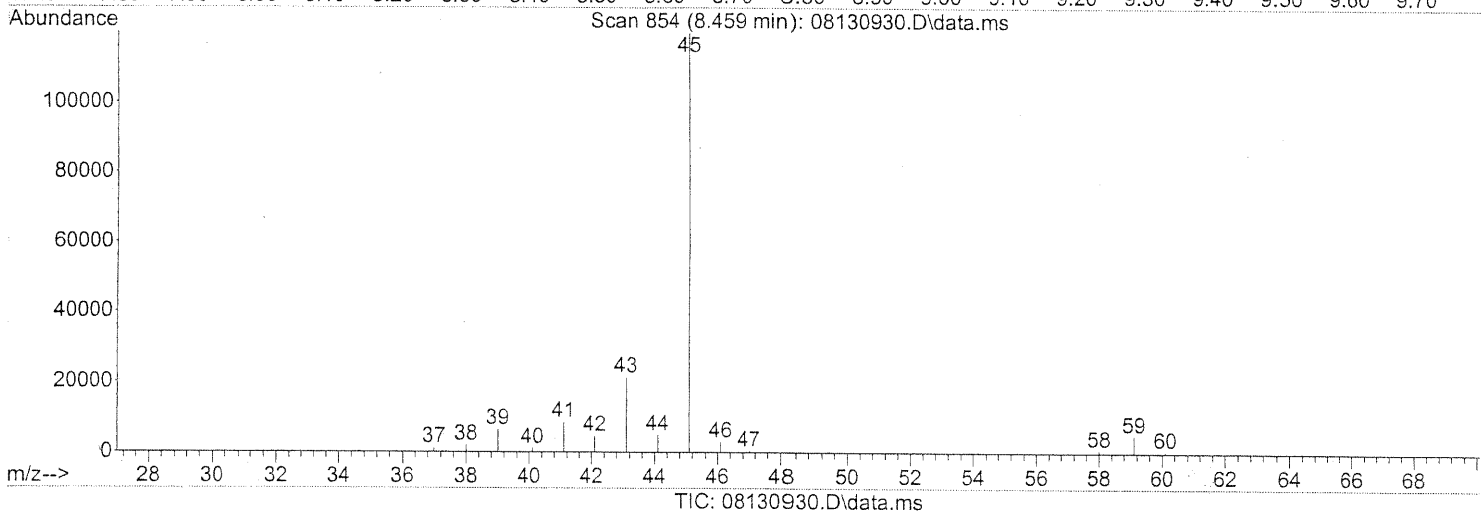
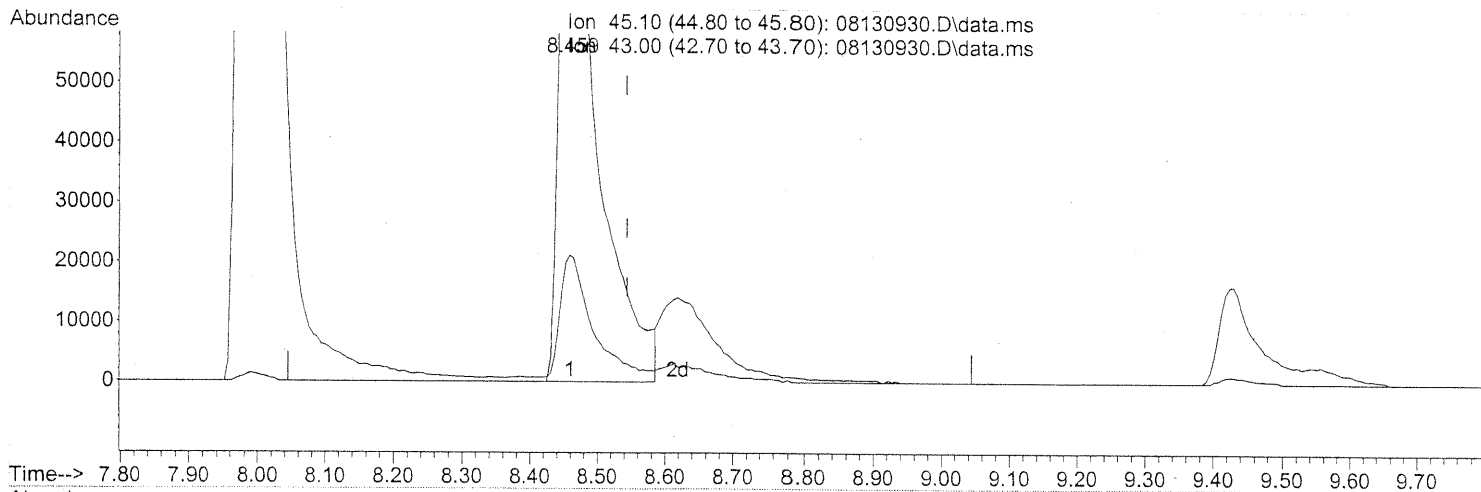
*DA 8/15/09*

**346**

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130930.D  
 Acq On : 14 Aug 2009 4:43  
 Operator : EM  
 Sample : 5ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100904  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



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

8.459min (-0.086) 8.88ng

response 396677

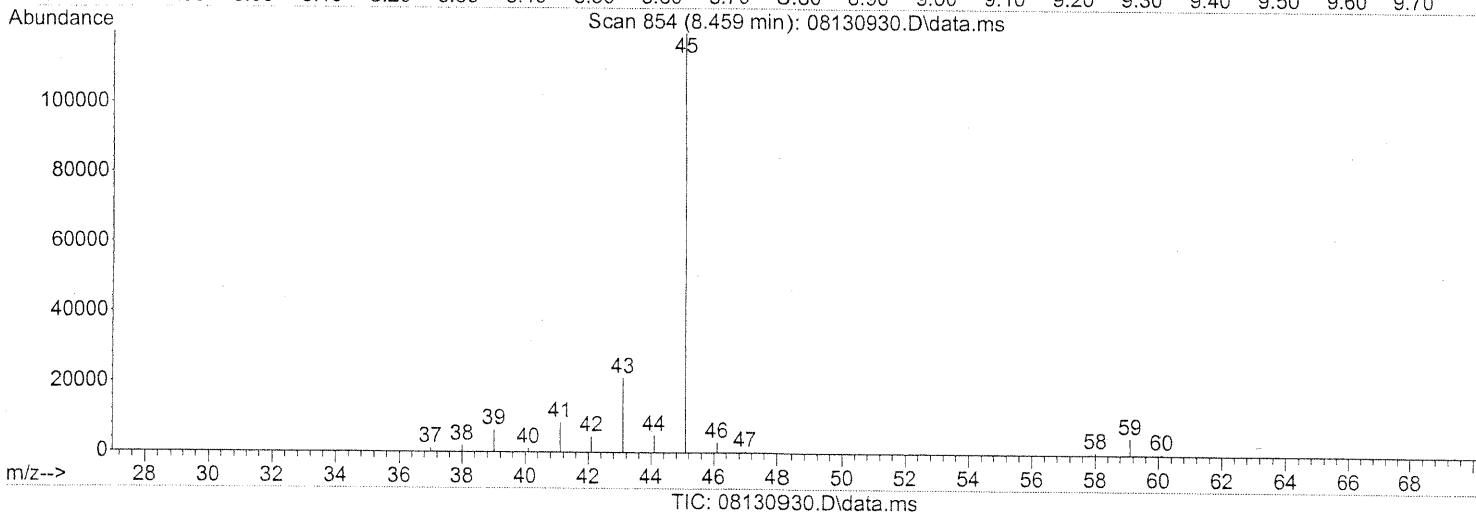
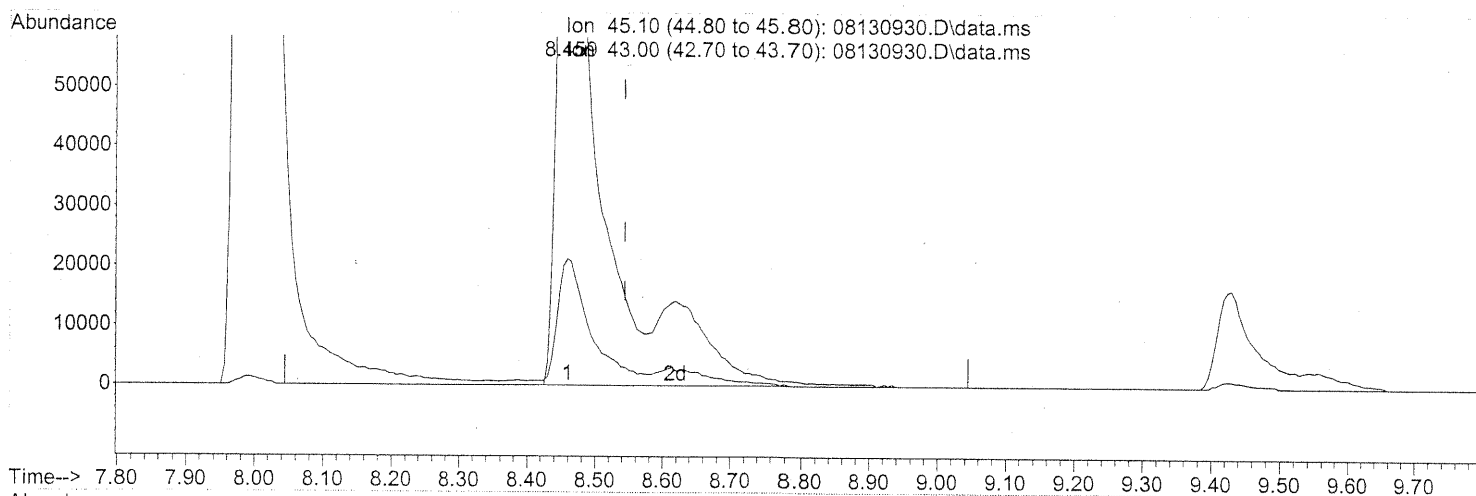
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.32
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130930.D  
Acq On : 14 Aug 2009 4:43  
Operator : EM  
Sample : 5ng TO-15 ICAL STD  
Misc : S20-08130905/S20-08100904  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Mon Jul 27 09:38:25 2009  
Response via : Initial Calibration



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

8.459min (-0.086) 10.67ng m

response 476882

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	14.41
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC  
Em 8/14/09

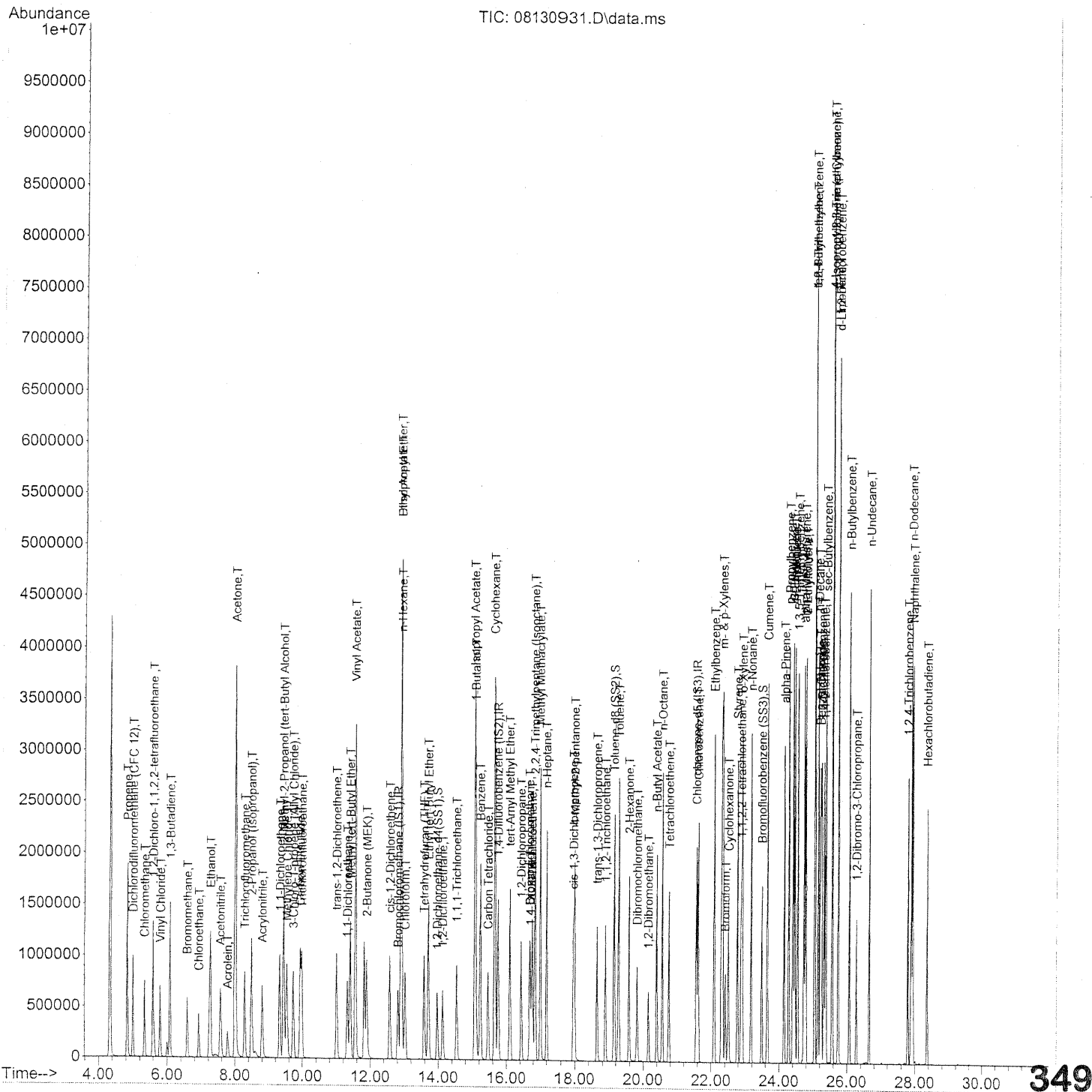
BA 8/15/09

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	364116	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1865895	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	897905	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.97	65	639555	24.827	ng	-0.02
Spiked Amount	25.000		Recovery	=	99.32%	
57) Toluene-d8 (SS2)	19.15	98	2134862	24.032	ng	-0.01
Spiked Amount	25.000		Recovery	=	96.12%	
73) Bromofluorobenzene (SS3)	23.49	174	608116	22.770	ng	0.00
Spiked Amount	25.000		Recovery	=	91.08%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.83	42	893813	38.911	ng	96
3) Dichlorodifluoromethan...	5.00	85	1122799	24.492	ng	99
4) Chloromethane	5.33	50	1060306	30.886	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	614382	23.795	ng	100
6) Vinyl Chloride	5.80	62	1011049	27.626	ng	99
7) 1,3-Butadiene	6.08	54	905992	34.431	ng	99
8) Bromomethane	6.58	94	552570	25.596	ng	100
9) Chloroethane	6.93	64	511522	27.936	ng	100
10) Ethanol	7.26	45	2645495m	173.570	ng	
11) Acetonitrile	7.57	41	1267304	36.772	ng	98
12) Acrolein	7.79	56	380570	34.250	ng	98
13) Acetone	8.01	58	2533900	146.162	ng	88
14) Trichlorofluoromethane	8.29	101	1008004	25.243	ng	98
15) 2-Propanol (Isopropanol)	8.48	45	2453135m	53.777	ng	
16) Acrylonitrile	8.80	53	893242	38.407	ng	98
17) 1,1-Dichloroethene	9.33	96	601910	29.600	ng	97
18) 2-Methyl-2-Propanol (t...	9.44	59	3134377	61.010	ng	97
19) Methylene Chloride	9.54	84	621124	27.058	ng	89
20) 3-Chloro-1-propene (Al...	9.73	41	978578	39.503	ng	90
21) Trichlorotrifluoroethane	9.98	151	488676	26.977	ng	97
22) Carbon Disulfide	9.93	76	2326514	29.756	ng	99
23) trans-1,2-Dichloroethene	11.00	61	944327	31.664	ng	92
24) 1,1-Dichloroethane	11.31	63	1127620	31.017	ng	100
25) Methyl tert-Butyl Ether	11.40	73	1913053	29.838	ng	96
26) Vinyl Acetate	11.56	86	656008	158.651	ng	# 71
27) 2-Butanone (MEK)	11.89	72	449156	33.967	ng	# 85
28) cis-1,2-Dichloroethene	12.58	61	894671	31.087	ng	93
29) Diisopropyl Ether	12.91	87	549290	26.727	ng	# 69
30) Ethyl Acetate	12.91	61	522358	60.309	ng	97
31) n-Hexane	12.93	57	1172996	29.289	ng	98

350

em 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.03	83	998779	27.462	ng	100
34) Tetrahydrofuran (THF)	13.58	72	424555	34.073	ng	# 88
35) Ethyl tert-Butyl Ether	13.71	87	757840	27.508	ng	# 88
36) 1,2-Dichloroethane	14.13	62	783128	26.860	ng	99
38) 1,1,1-Trichloroethane	14.54	97	885515	25.875	ng	99
39) Isopropyl Acetate	15.07	61	888654	65.401	ng	# 83
40) 1-Butanol	15.09	56	1501433	64.760	ng	88
41) Benzene	15.23	78	2534149	25.468	ng	98
42) Carbon Tetrachloride	15.46	117	761579	26.057	ng	99
43) Cyclohexane	15.66	84	2072518	55.700	ng	89
44) tert-Amyl Methyl Ether	16.10	73	1859147	28.269	ng	99
45) 1,2-Dichloropropane	16.43	63	658884	31.411	ng	99
46) Bromodichloromethane	16.70	83	830347	28.871	ng	99
47) Trichloroethene	16.77	130	648588	25.505	ng	100
48) 1,4-Dioxane	16.72	88	543245	32.435	ng	89
49) 2,2,4-Trimethylpentane...	16.86	57	2947745	30.571	ng	93
50) Methyl Methacrylate	17.02	100	558743	59.877	ng	92
51) n-Heptane	17.21	71	706671	29.331	ng	94
52) cis-1,3-Dichloropropene	17.95	75	1004919	28.799	ng	100
53) 4-Methyl-2-pentanone	17.99	58	673431	35.750	ng	95
54) trans-1,3-Dichloropropene	18.64	75	1018443	33.158	ng	100
55) 1,1,2-Trichloroethane	18.89	97	592726	28.354	ng	99
58) Toluene	19.28	91	2739340	25.191	ng	100
59) 2-Hexanone	19.58	43	1588763	33.971	ng	99
60) Dibromochloromethane	19.82	129	680507	27.831	ng	99
61) 1,2-Dibromoethane	20.15	107	663705	26.350	ng	99
62) n-Butyl Acetate	20.39	43	1860228	35.779	ng	99
63) n-Octane	20.56	57	626246	29.472	ng	92
64) Tetrachloroethene	20.76	166	654987	22.781	ng	99
65) Chlorobenzene	21.62	112	1683217	24.606	ng	100
66) Ethylbenzene	22.09	91	2994707	25.325	ng	99
67) m- & p-Xylenes	22.33	91	4647270	47.659	ng	100
68) Bromoform	22.42	173	548438	25.169	ng	100
69) Styrene	22.77	104	1863220	25.911	ng	100
70) o-Xylene	22.92	91	2385962	24.562	ng	99
71) n-Nonane	23.18	43	1438625	30.334	ng	93
72) 1,1,2,2-Tetrachloroethane	22.89	83	1078529	26.696	ng	100
74) Cumene	23.66	105	3011318	23.343	ng	99
75) alpha-Pinene	24.15	93	1480597	24.016	ng	99
76) n-Propylbenzene	24.28	91	3744994	24.101	ng	99
77) 3-Ethyltoluene	24.41	105	3058348	25.017	ng	99
78) 4-Ethyltoluene	24.46	105	2932516	23.903	ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	2446240	23.977	ng	100

1851

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1393210	24.411	ng	99
81) 2-Ethyltoluene	24.79	105	2942387	22.975	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2623418	22.990	ng	99
83) n-Decane	25.16	57	1509811	27.388	ng	95
84) Benzyl Chloride	25.22	91	2320976	28.376	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1356990	22.655	ng	99
86) 1,4-Dichlorobenzene	25.33	146	1381988	22.145	ng	100
87) sec-Butylbenzene	25.38	105	3356026	23.524	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3219478	22.384	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2662217	22.911	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1327033	21.315	ng	100
91) d-Limonene	25.74	68	1139413	25.133	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.27	157	460372	26.331	ng	95
93) n-Undecane	26.65	57	1601142	28.367	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	978833	24.366	ng	99
95) Naphthalene	27.94	128	3428876	24.487	ng	100
96) n-Dodecane	27.89	57	1635236	27.111	ng	96
97) Hexachlorobutadiene	28.36	225	549265	23.899	ng	99
98) Cyclohexanone	22.51	55	919787	28.042	ng	94
99) tert-Butylbenzene	25.05	119	2572033	22.302	ng	100
100) n-Butylbenzene	26.07	91	2798242	24.631	ng	100

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

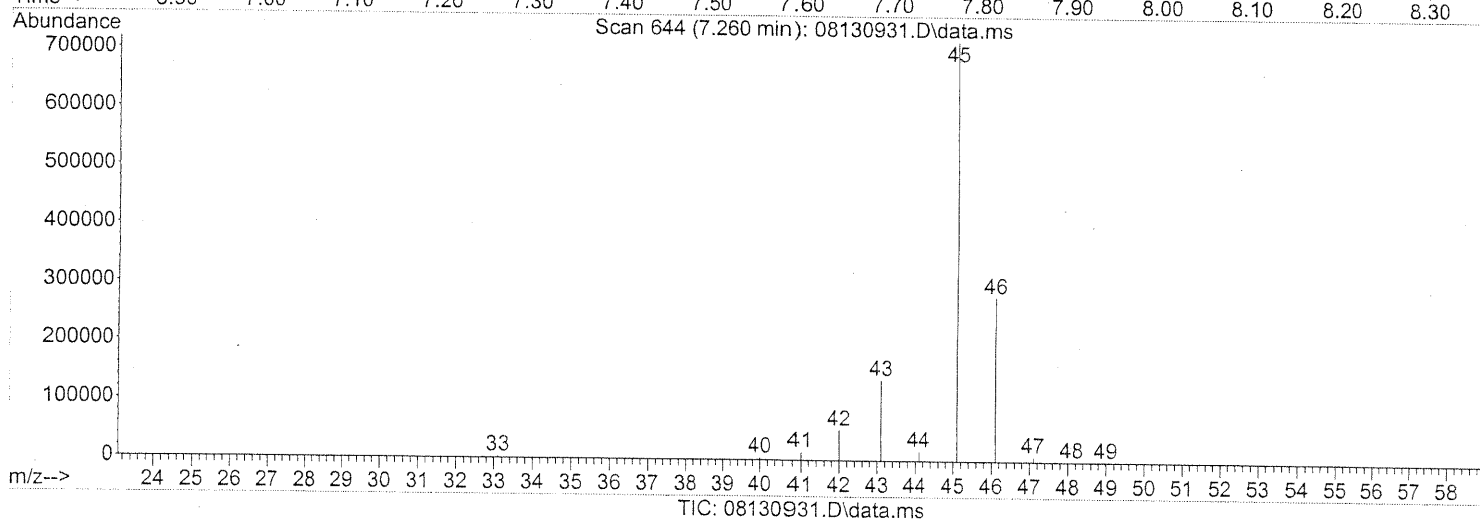
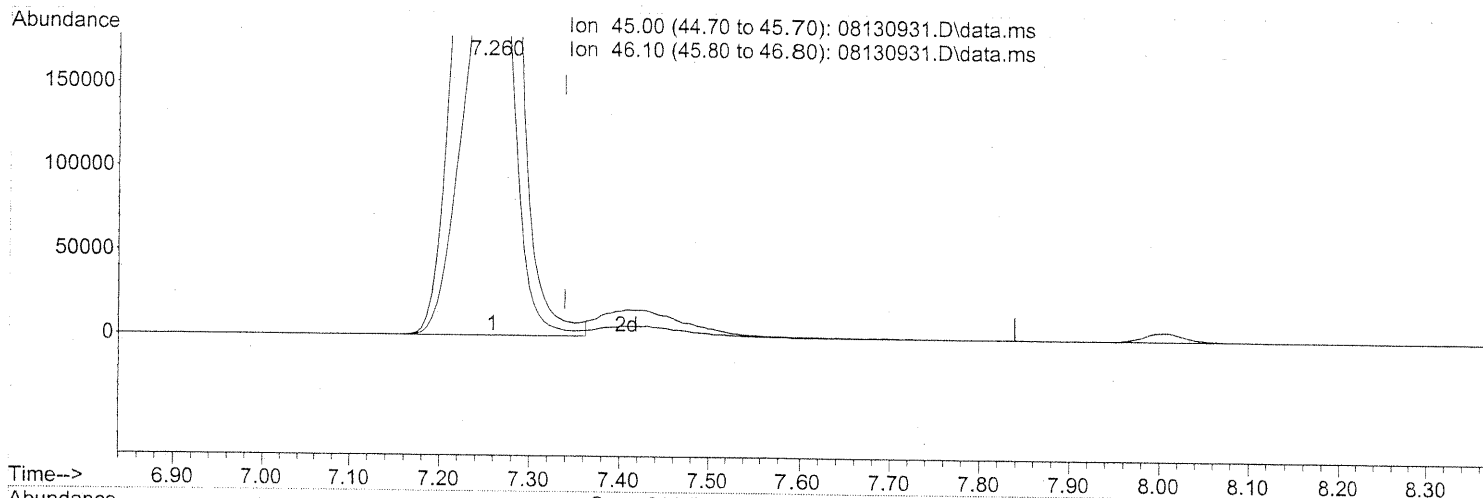
*em 8/14/09*



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



(10) Ethanol (T)  
 7.260min (-0.080) 166.43ng  
 response 2536739

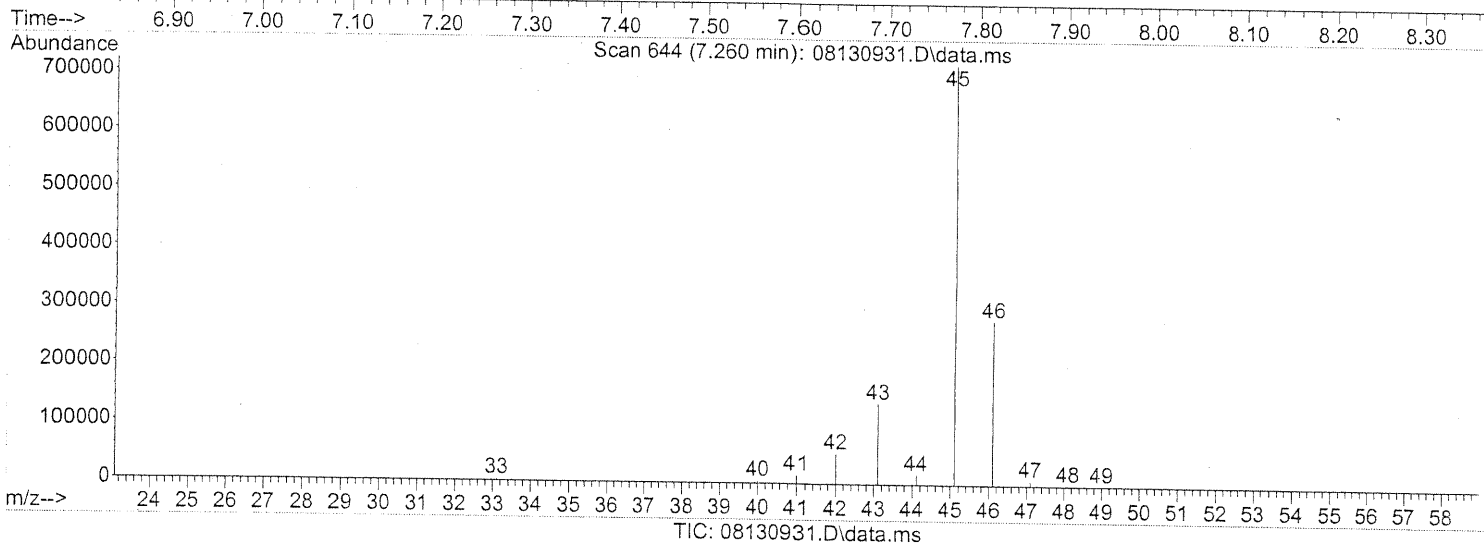
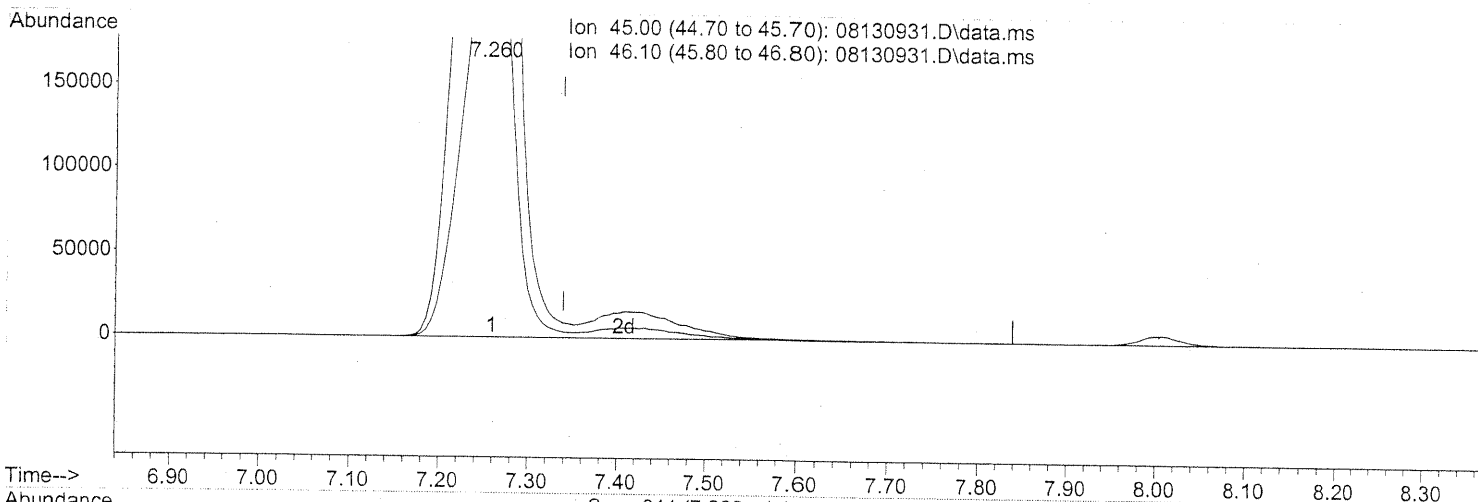
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.10
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130931.D  
 Acq On : 14 Aug 2009 5:24  
 Operator : EM  
 Sample : 25ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.260min (-0.080) 173.57ng m

response 2645495

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.49
0.00	0.00	0.00
0.00	0.00	0.00

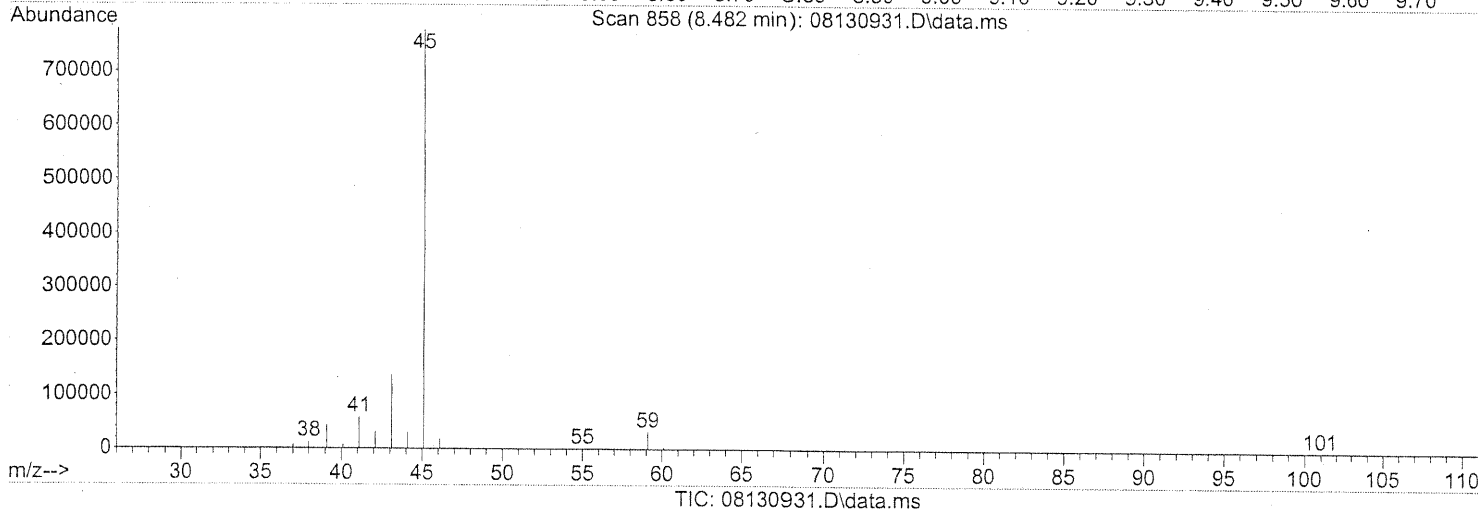
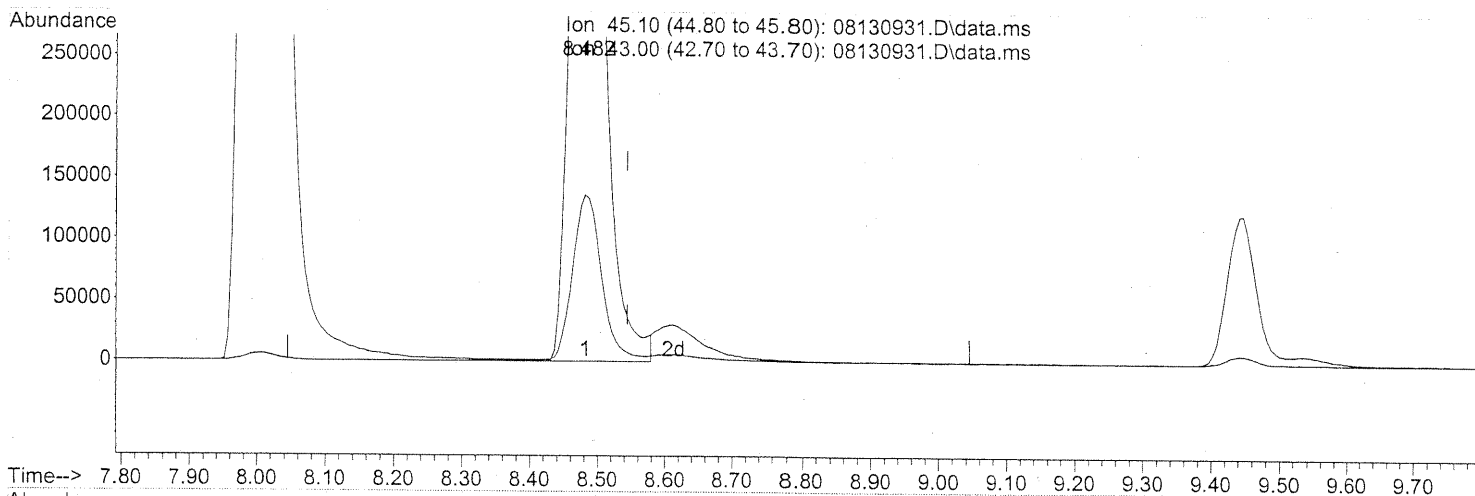
*PT → LC*  
*em 8/14/09*

*em 8/15/09*

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130931.D  
Acq On : 14 Aug 2009 5:24  
Operator : EM  
Sample : 25ng TO-15 ICAL STD  
Misc : S20-08130905/S20-08100902  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Mon Jul 27 09:38:25 2009  
Response via : Initial Calibration



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

8.482min (-0.063) 50.45ng

response 2301319

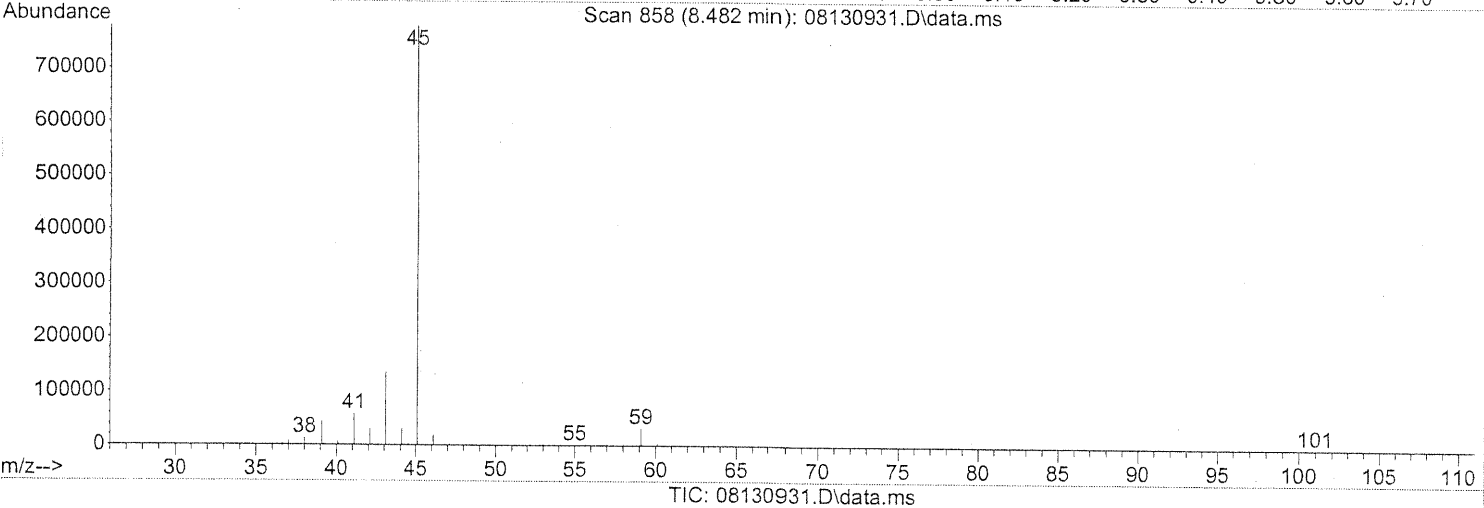
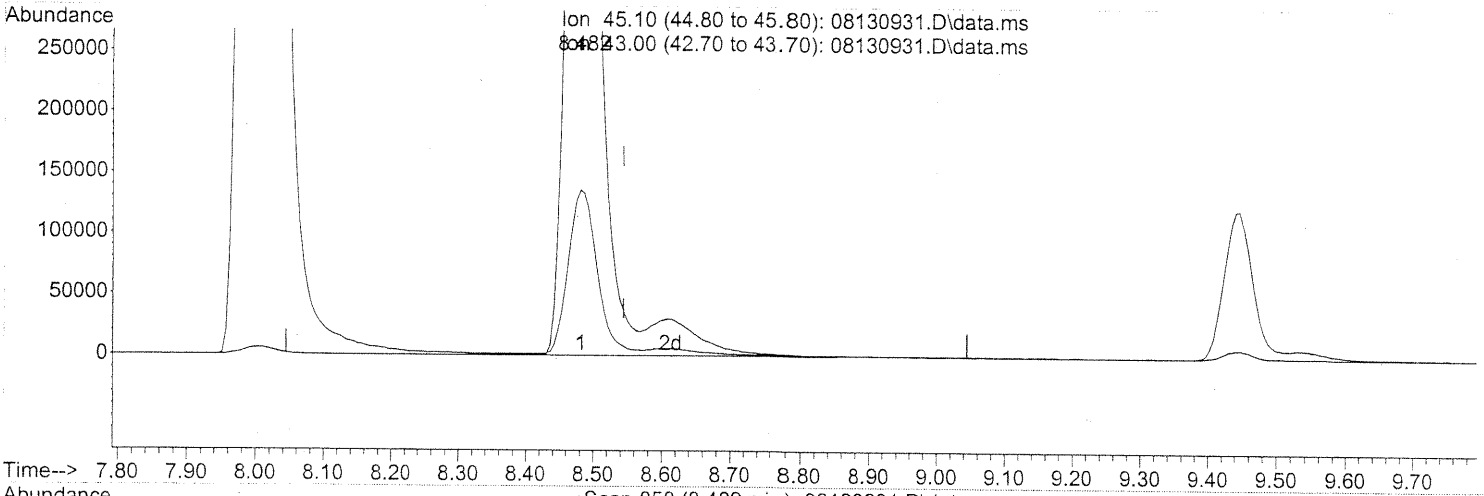
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.19
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130931.D  
Acq On : 14 Aug 2009 5:24  
Operator : EM  
Sample : 25ng TO-15 ICAL STD  
Misc : S20-08130905/S20-08100902  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Mon Jul 27 09:38:25 2009  
Response via : Initial Calibration



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

8.482min (-0.063) 53.78ng m

response 2453135

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.00
0.00	0.00	0.00
0.00	0.00	0.00

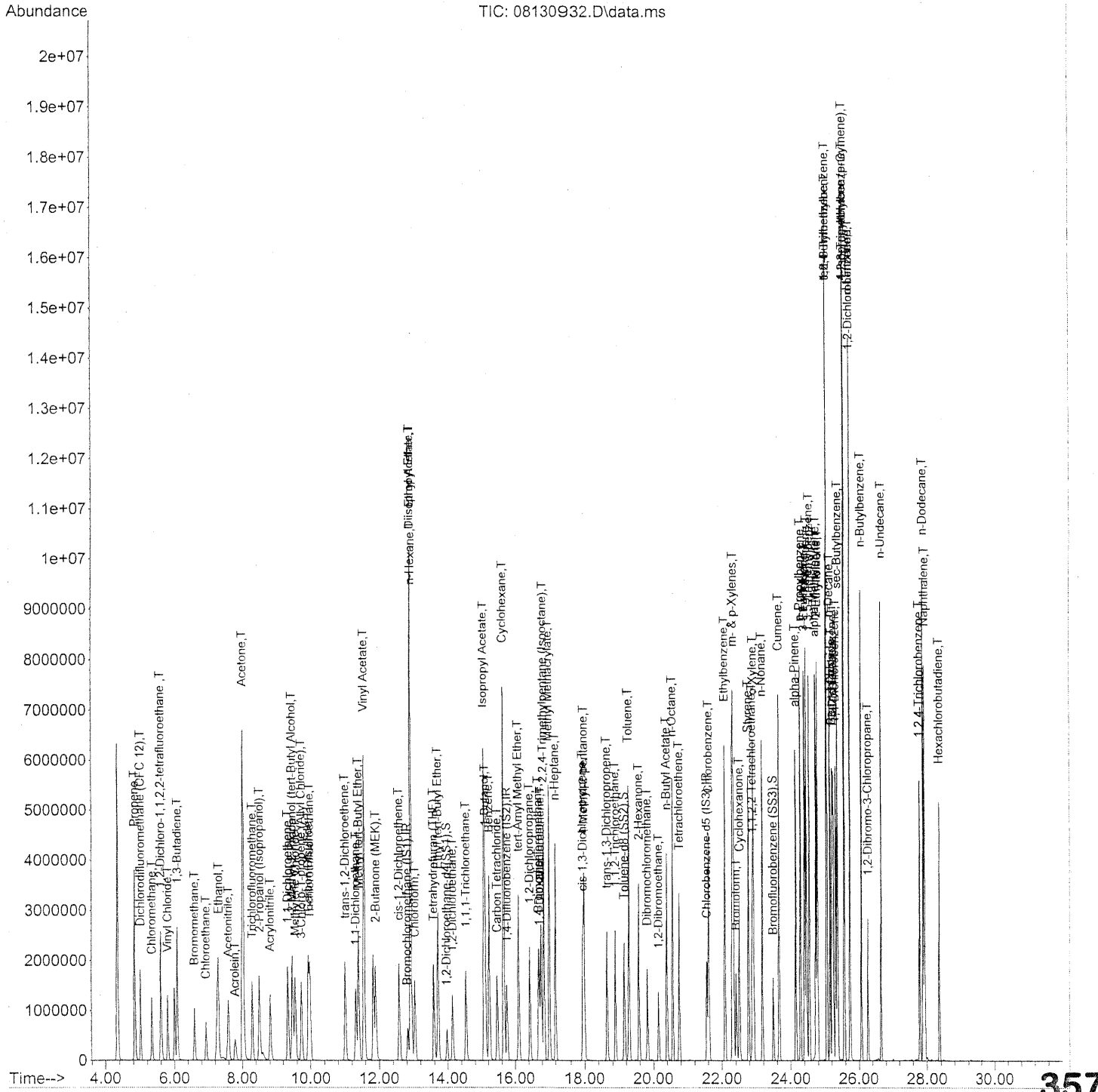
PT → TIC  
Em 8/14/09

EM 8/15/09

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130932.D  
 Acq On : 14 Aug 2009 6:06  
 Operator : EM  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130932.D  
 Acq On : 14 Aug 2009 6:06  
 Operator : EM  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-T015 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	350547	25.000	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	15.77	114	1802547	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	865291	25.000	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4 (...)	13.98	65	612890	24.713	ng	-0.01
Spiked Amount				25.000		
Recovery						98.84%
57) Toluene-d8 (SS2)	19.15	98	2053608	23.989	ng	0.00
Spiked Amount				25.000		
Recovery						95.96%
73) Bromofluorobenzene (SS3)	23.49	174	585162	22.737	ng	0.00
Spiked Amount				25.000		
Recovery						90.96%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	1835063	82.979	ng	96
3) Dichlorodifluoromethan...	5.01	85	2152098	48.762	ng	99
4) Chloromethane	5.34	50	1909302	57.769	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1202790	48.388	ng	100
6) Vinyl Chloride	5.80	62	1933734	54.883	ng	99
7) 1,3-Butadiene	6.09	54	1726352	68.147	ng	99
8) Bromomethane	6.59	94	1036817	49.887	ng	100
9) Chloroethane	6.93	64	971424	55.107	ng	100
10) Ethanol	7.30	45	5039053	343.407	ng	100
11) Acetonitrile	7.59	41	2412776	72.719	ng	99
12) Acrolein	7.79	56	727129	67.972	ng	98
13) Acetone	8.03	58	4904508	293.855	ng	87
14) Trichlorofluoromethane	8.29	101	1926285	50.107	ng	98
15) 2-Propanol (Isopropanol)	8.51	45	3892928	88.644	ng	94
16) Acrylonitrile	8.82	53	1701577	75.996	ng	99
17) 1,1-Dichloroethene	9.33	96	1160521	59.280	ng	98
18) 2-Methyl-2-Propanol (t...	9.46	59	4054207	81.969	ng	97
19) Methylene Chloride	9.56	84	1192968	53.981	ng	89
20) 3-Chloro-1-propene (Al...	9.74	41	1889044	79.209	ng	90
21) Trichlorotrifluoroethane	9.99	151	945670	54.226	ng	97
22) Carbon Disulfide	9.94	76	4497151	59.746	ng	98
23) trans-1,2-Dichloroethene	11.01	61	1818529	63.338	ng	93
24) 1,1-Dichloroethane	11.32	63	2174072	62.117	ng	100
25) Methyl tert-Butyl Ether	11.40	73	3746603	60.699	ng	96
26) Vinyl Acetate	11.57	86	1327059	333.362	ng	# 78
27) 2-Butanone (MEK)	11.90	72	865059	67.951	ng	# 86
28) cis-1,2-Dichloroethene	12.58	61	1721120	62.119	ng	94
29) Diisopropyl Ether	12.92	87	1111656	56.184	ng	# 74
30) Ethyl Acetate	12.92	61	1067973	128.075	ng	97
31) n-Hexane	12.93	57	2406714	62.420	ng	97

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Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130932.D  
 Acq On : 14 Aug 2009 6:06  
 Operator : EM  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Chloroform	13.04	83	1924717	54.970	ng	100
34) Tetrahydrofuran (THF)	13.59	72	790606	65.907	ng #	87
35) Ethyl tert-Butyl Ether	13.72	87	1490436	56.193	ng #	88
36) 1,2-Dichloroethane	14.14	62	1501599	53.495	ng	99
38) 1,1,1-Trichloroethane	14.54	97	1725003	52.176	ng	100
39) Isopropyl Acetate	15.08	61	1746401	133.045	ng #	85
40) 1-Butanol	15.11	56	2940898	131.304	ng	88
41) Benzene	15.24	78	4920242	51.185	ng	99
42) Carbon Tetrachloride	15.47	117	1493939	52.911	ng	99
43) Cyclohexane	15.66	84	4129214	114.874	ng	88
44) tert-Amyl Methyl Ether	16.11	73	3664090	57.672	ng	99
45) 1,2-Dichloropropane	16.44	63	1271414	62.743	ng	98
46) Bromodichloromethane	16.70	83	1623042	58.416	ng	99
47) Trichloroethene	16.78	130	1266559	51.557	ng	100
48) 1,4-Dioxane	16.73	88	1067524	65.978	ng	89
49) 2,2,4-Trimethylpentane...	16.86	57	5774283	61.989	ng	93
50) Methyl Methacrylate	17.03	100	1111183	123.264	ng	93
51) n-Heptane	17.22	71	1384269	59.475	ng	95
52) cis-1,3-Dichloropropene	17.95	75	1961714	58.194	ng	100
53) 4-Methyl-2-pentanone	17.99	58	1317291	72.388	ng	95
54) trans-1,3-Dichloropropene	18.65	75	1988137	67.004	ng	100
55) 1,1,2-Trichloroethane	18.90	97	1148732	56.882	ng	98
58) Toluene	19.28	91	5320486	50.772	ng	100
59) 2-Hexanone	19.59	43	3087649	68.509	ng	100
60) Dibromochloromethane	19.82	129	1325208	56.240	ng	100
61) 1,2-Dibromoethane	20.15	107	1295084	53.355	ng	100
62) n-Butyl Acetate	20.39	43	3708971	74.026	ng	99
63) n-Octane	20.56	57	1231350	60.134	ng	92
64) Tetrachloroethene	20.76	166	1285349	46.390	ng	99
65) Chlorobenzene	21.63	112	3279777	49.753	ng	100
66) Ethylbenzene	22.09	91	5886739	51.658	ng	99
67) m- & p-Xylenes	22.33	91	9252004	98.458	ng	100
68) Bromoform	22.42	173	1097931	52.286	ng	100
69) Styrene	22.78	104	3668340	52.938	ng	100
70) o-Xylene	22.92	91	4731058	50.539	ng	99
71) n-Nonane	23.18	43	2791725	61.083	ng	94
72) 1,1,2,2-Tetrachloroethane	22.89	83	2141569	55.006	ng	100
74) Cumene	23.66	105	5934180	47.735	ng	99
75) alpha-Pinene	24.15	93	2936785	49.431	ng	100
76) n-Propylbenzene	24.29	91	7354011	49.110	ng	100
77) 3-Ethyltoluene	24.41	105	5944493	50.459	ng	99
78) 4-Ethyltoluene	24.47	105	5986526	50.636	ng	100
79) 1,3,5-Trimethylbenzene	24.55	105	4865603	49.487	ng	100

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Em 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130932.D  
 Acq On : 14 Aug 2009 6:06  
 Operator : EM  
 Sample : 50ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	2788713	50.704	ng	98
81) 2-Ethyltoluene	24.79	105	5835415	47.282	ng	100
82) 1,2,4-Trimethylbenzene	25.06	105	5419555	49.283	ng	98
83) n-Decane	25.16	57	2958484	55.690	ng	96
84) Benzyl Chloride	25.23	91	4657935	59.094	ng	100
85) 1,3-Dichlorobenzene	25.25	146	2725906	47.225	ng	100
86) 1,4-Dichlorobenzene	25.33	146	2761502	45.918	ng	100
87) sec-Butylbenzene	25.39	105	6623319	48.176	ng	100
88) 4-Isopropyltoluene (p-....	25.57	119	6624766	47.796	ng	100
89) 1,2,3-Trimethylbenzene	25.57	105	5491766	49.043	ng	97
90) 1,2-Dichlorobenzene	25.75	146	2744516	45.744	ng	100
91) d-Limonene	25.75	68	2289426	52.402	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	922457	54.748	ng	95
93) n-Undecane	26.66	57	3160860	58.111	ng	98
94) 1,2,4-Trichlorobenzene	27.80	180	2014621	52.040	ng	99
95) Naphthalene	27.94	128	7027186	52.076	ng	100
96) n-Dodecane	27.89	57	3283767	56.494	ng	97
97) Hexachlorobutadiene	28.36	225	1130021	51.021	ng	99
98) Cyclohexanone	22.52	55	1802415	57.022	ng	95
99) tert-Butylbenzene	25.06	119	5291689	47.613	ng	100
100) n-Butylbenzene	26.07	91	5516279	50.386	ng	99

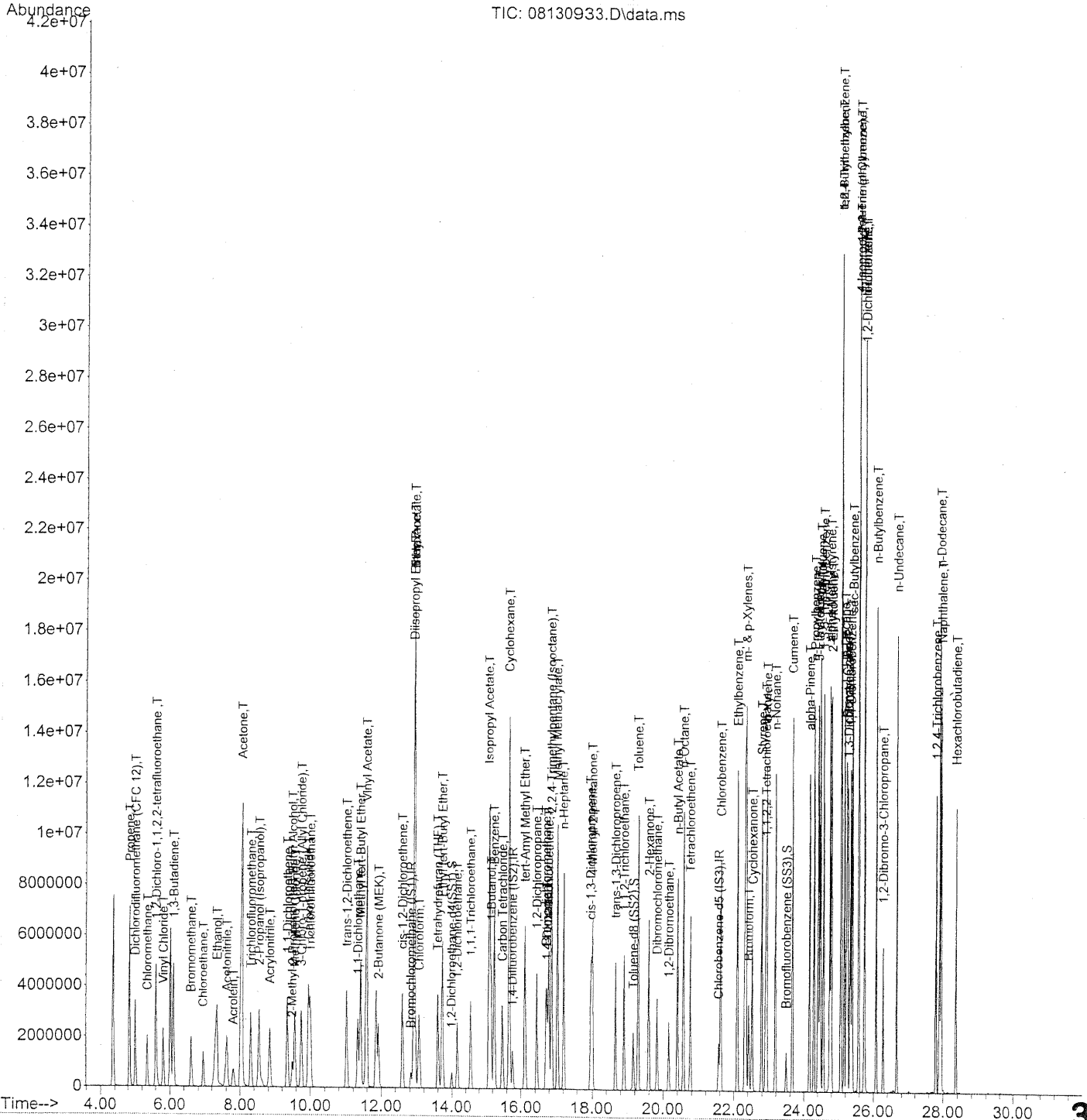
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*EM* 8/14/09



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130933.D  
 Acq On : 14 Aug 2009 6:47  
 Operator : EM  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130933.D  
 Acq On : 14 Aug 2009 6:47  
 Operator : EM  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.84	130	348166	25.000	ng	0.00
37) 1,4-Difluorobenzene (IS2)	15.77	114	1791529	25.000	ng	0.00
56) Chlorobenzene-d5 (IS3)	21.57	82	827819	25.000	ng	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...)	13.99	65	607715	24.672	ng	0.00
Spiked Amount	25.000			Recovery =		98.68%
57) Toluene-d8 (SS2)	19.16	98	2003126	24.459	ng	0.00
Spiked Amount	25.000			Recovery =		97.84%
73) Bromofluorobenzene (SS3)	23.49	174	555754	22.571	ng	0.00
Spiked Amount	25.000			Recovery =		90.28%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	3637379	165.601	ng	96
3) Dichlorodifluoromethan...	5.01	85	4285891	97.773	ng	99
4) Chloromethane	5.35	50	3395552	103.441	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	2374269	96.170	ng	100
6) Vinyl Chloride	5.81	62	3733511	106.688	ng	99
7) 1,3-Butadiene	6.09	54	3376996	134.217	ng	100
8) Bromomethane	6.60	94	2088575	101.180	ng	99
9) Chloroethane	6.94	64	1938501	110.719	ng	100
10) Ethanol	7.35	45	9723278	667.164	ng	100
11) Acetonitrile	7.62	41	4607769	139.823	ng	99
12) Acrolein	7.81	56	1410648	132.769	ng	98
13) Acetone	8.05	58	9758235	588.667	ng	# 81
14) Trichlorofluoromethane	8.31	101	3855506	100.976	ng	98
15) 2-Propanol (Isopropanol)	8.54	45	7411494	169.917	ng	94
16) Acrylonitrile	8.84	53	3337367	150.073	ng	98
17) 1,1-Dichloroethene	9.34	96	2361373	121.445	ng	99
18) 2-Methyl-2-Propanol (t...	9.49	59	1930576	39.300	ng	94
19) Methylene Chloride	9.56	84	2367946	107.882	ng	91
20) 3-Chloro-1-propene (Al...	9.75	41	3751505	158.379	ng	90
21) Trichlorotrifluoroethane	10.00	151	1857232	107.225	ng	98
22) Carbon Disulfide	9.95	76	9003969	120.438	ng	98
23) trans-1,2-Dichloroethene	11.02	61	3600834	126.271	ng	94
24) 1,1-Dichloroethane	11.33	63	4282531	123.196	ng	100
25) Methyl tert-Butyl Ether	11.41	73	7429243	121.184	ng	96
26) Vinyl Acetate	11.59	86	2488460	629.386	ng	# 93
27) 2-Butanone (MEK)	11.92	72	1131449	89.484	ng	# 88
28) cis-1,2-Dichloroethene	12.60	61	3373649	122.596	ng	95
29) Diisopropyl Ether	12.92	87	2306270	117.357	ng	# 89
30) Ethyl Acetate	12.94	61	2196811	265.252	ng	98
31) n-Hexane	12.94	57	5006652	130.739	ng	98

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*em* 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130933.D  
 Acq On : 14 Aug 2009 6:47  
 Operator : EM  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.06	83	3845350	110.575	ng	100
34) Tetrahydrofuran (THF)	13.59	72	1563630	131.239	ng	# 88
35) Ethyl tert-Butyl Ether	13.73	87	2996398	113.745	ng	90
36) 1,2-Dichloroethane	14.15	62	2964635	106.339	ng	100
38) 1,1,1-Trichloroethane	14.55	97	3345979	101.827	ng	99
39) Isopropyl Acetate	15.10	61	3529470	270.537	ng	# 92
40) 1-Butanol	15.15	56	5716126	256.782	ng	# 5
41) Benzene	15.25	78	9743540	101.985	ng	99
42) Carbon Tetrachloride	15.47	117	2984668	106.359	ng	99
43) Cyclohexane	15.67	84	8447133	236.444	ng	90
44) tert-Amyl Methyl Ether	16.11	73	7344919	116.318	ng	99
45) 1,2-Dichloropropane	16.45	63	2518901	125.070	ng	98
46) Bromodichloromethane	16.71	83	3199002	115.846	ng	99
47) Trichloroethene	16.79	130	2587187	105.962	ng	100
48) 1,4-Dioxane	16.74	88	2105550	130.933	ng	89
49) 2,2,4-Trimethylpentane...	16.87	57	11343752	122.528	ng	93
50) Methyl Methacrylate	17.05	100	2277585	254.207	ng	95
51) n-Heptane	17.22	71	2756301	119.152	ng	95
52) cis-1,3-Dichloropropene	17.96	75	3903750	116.517	ng	99
53) 4-Methyl-2-pentanone	18.00	58	2601880	143.858	ng	96
54) trans-1,3-Dichloropropene	18.66	75	3928268	133.204	ng	100
55) 1,1,2-Trichloroethane	18.90	97	2295248	114.353	ng	99
58) Toluene	19.29	91	10619232	105.924	ng	98
59) 2-Hexanone	19.60	43	5972025	138.505	ng	99
60) Dibromochloromethane	19.83	129	2671138	118.490	ng	99
61) 1,2-Dibromoethane	20.16	107	2581710	111.177	ng	100
62) n-Butyl Acetate	20.40	43	7613756	158.839	ng	98
63) n-Octane	20.57	57	2463694	125.762	ng	94
64) Tetrachloroethene	20.76	166	2651443	100.026	ng	98
65) Chlorobenzene	21.63	112	6606674	104.758	ng	99
66) Ethylbenzene	22.10	91	11775803	108.015	ng	99
67) m- & p-Xylenes	22.35	91	18896858	210.199	ng	98
68) Bromoform	22.43	173	2253843	112.193	ng	100
69) Styrene	22.79	104	7494579	113.049	ng	100
70) o-Xylene	22.93	91	9698083	108.288	ng	100
71) n-Nonane	23.19	43	5386497	123.192	ng	98
72) 1,1,2,2-Tetrachloroethane	22.91	83	4392172	117.919	ng	99
74) Cumene	23.67	105	11982041	100.747	ng	99
75) alpha-Pinene	24.16	93	6016933	105.858	ng	99
76) n-Propylbenzene	24.29	91	14406754	100.564	ng	98
77) 3-Ethyltoluene	24.41	105	12117897	107.517	ng	99
78) 4-Ethyltoluene	24.47	105	12131828	107.260	ng	97
79) 1,3,5-Trimethylbenzene	24.56	105	10058671	106.936	ng	97

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EM 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130933.D  
 Acq On : 14 Aug 2009 6:47  
 Operator : EM  
 Sample : 100ng TO-15 ICAL STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Mon Jul 27 09:38:25 2009  
 Response via : Initial Calibration

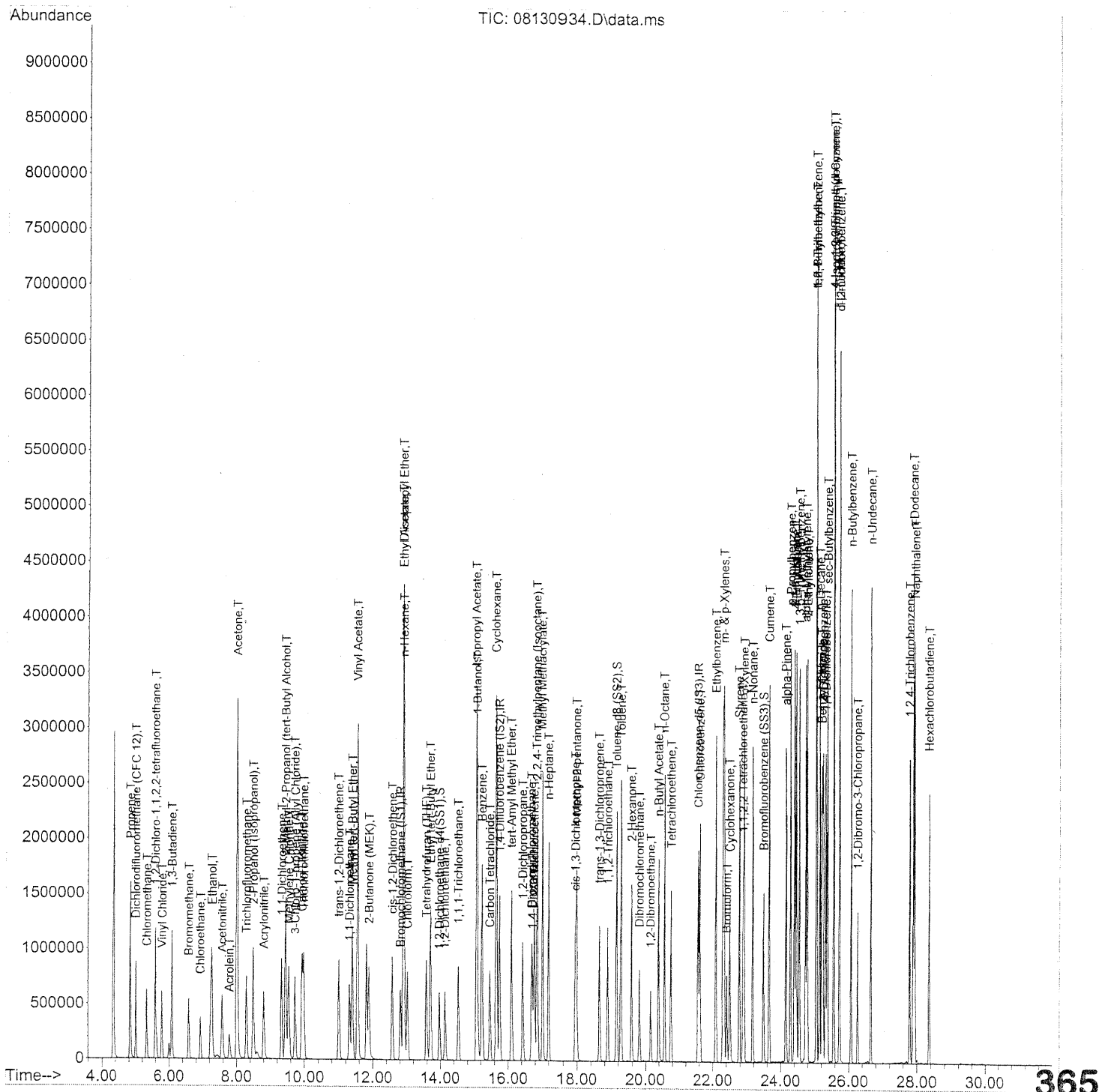
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	5862974	111.426	ng	98
81) 2-Ethyltoluene	24.80	105	11978631	101.452	ng	98
82) 1,2,4-Trimethylbenzene	25.07	105	11417406	108.524	ng	95
83) n-Decane	25.17	57	5959851	117.266	ng	97
84) Benzyl Chloride	25.24	91	9728914	129.016	ng	99
85) 1,3-Dichlorobenzene	25.27	146	5822861	105.443	ng	100
86) 1,4-Dichlorobenzene	25.34	146	5826479	101.267	ng	100
87) sec-Butylbenzene	25.39	105	13318015	101.255	ng	98
88) 4-Isopropyltoluene (p-...	25.58	119	13504368	101.840	ng	96
89) 1,2,3-Trimethylbenzene	25.59	105	11559732	107.903	ng	95
90) 1,2-Dichlorobenzene	25.76	146	6086420	106.037	ng	99
91) d-Limonene	25.75	68	4660560	111.503	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1916720	118.907	ng	94
93) n-Undecane	26.66	57	6305897	121.179	ng	100
94) 1,2,4-Trichlorobenzene	27.80	180	4306788	116.286	ng	100
95) Naphthalene	27.94	128	14097900	109.204	ng	98
96) n-Dodecane	27.90	57	6564038	118.039	ng	100
97) Hexachlorobutadiene	28.36	225	2440971	115.199	ng	99
98) Cyclohexanone	22.53	55	3544648	117.216	ng	95
99) tert-Butylbenzene	25.07	119	11254211	105.845	ng	98
100) n-Butylbenzene	26.08	91	11144477	106.402	ng	96

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

*em 8/14/09*

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	347390	25.000	ng	-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1780684	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	815195	25.000	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	
33) 1,2-Dichloroethane-d4(...)	13.97	65	604640	24.616	ng	-0.02	
Spiked Amount	25.000		Recovery	=	98.48%		✓
57) Toluene-d8 (SS2)	19.15	98	2007417	25.903	ng	-0.01	
Spiked Amount	25.000		Recovery	=	103.60%		✓
73) Bromofluorobenzene (SS3)	23.49	174	549810	25.051	ng	0.00	
Spiked Amount	25.000		Recovery	=	100.20%		✓

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.83	42	755258	24.784	ng	97
3) Dichlorodifluoromethan...	5.00	85	1005106	23.107	ng	99
4) Chloromethane	5.33	50	889752	21.947	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	564338	24.551	ng	100
6) Vinyl Chloride	5.79	62	876778	21.924	ng	99
7) 1,3-Butadiene	6.08	54	701163	24.684	ng	99
8) Bromomethane	6.58	94	517466	24.745	ng	100
9) Chloroethane	6.93	64	453736	22.870	ng	100
10) Ethanol	7.27	45	2232593m	116.796	ng	
11) Acetonitrile	7.57	41	1091608	23.400	ng	98
12) Acrolein	7.79	56	337125	27.044	ng	99
13) Acetone	8.01	58	2192988	112.739	ng	90
14) Trichlorofluoromethane	8.29	101	901533	24.237	ng	98
15) 2-Propanol (Isopropanol)	8.49	45	2159425m	40.537	ng	
16) Acrylonitrile	8.81	53	785326	27.795	ng	99
17) 1,1-Dichloroethene	9.33	96	557081	25.520	ng	100
18) 2-Methyl-2-Propanol (t...	9.45	59	2821970	52.180	ng	97
19) Methylene Chloride	9.54	84	567231	23.372	ng	92
20) 3-Chloro-1-propene (Al...	9.73	41	863616	26.536	ng	90
21) Trichlorotrifluoroethane	9.98	151	460905	27.684	ng	100
22) Carbon Disulfide	9.93	76	2066628	24.130	ng	98
23) trans-1,2-Dichloroethene	11.00	61	828040	24.719	ng	94
24) 1,1-Dichloroethane	11.31	63	1028210	25.062	ng	99
25) Methyl tert-Butyl Ether	11.40	73	1722756	25.914	ng	97
26) Vinyl Acetate	11.56	86	625023	148.358	ng	# 78
27) 2-Butanone (MEK)	11.89	72	401170	29.583	ng	# 87
28) cis-1,2-Dichloroethene	12.58	61	818774	26.193	ng	94
29) Diisopropyl Ether	12.91	87	504111	26.184	ng	# 78
30) Ethyl Acetate	12.90	61	457829	52.062	ng	99
31) n-Hexane	12.93	57	1031014	24.051	ng	

em 8/14/09

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.03	83	925757	25.803	ng	100
34) Tetrahydrofuran (THF)	13.58	72	383882	27.228	ng	# 90
35) Ethyl tert-Butyl Ether	13.71	87	697007	25.375	ng	90
36) 1,2-Dichloroethane	14.13	62	726093	26.447	ng	100
38) 1,1,1-Trichloroethane	14.54	97	832543	25.706	ng	100
39) Isopropyl Acetate	15.07	61	799888	55.041	ng	# 83
40) 1-Butanol	15.09	56	1373581	59.526	ng	88
41) Benzene	15.23	78	2340548	24.441	ng	98
42) Carbon Tetrachloride	15.46	117	716257	26.758	ng	99
43) Cyclohexane	15.66	84	1852146	49.942	ng	90
44) tert-Amyl Methyl Ether	16.10	73	1708871	25.389	ng	99
45) 1,2-Dichloropropane	16.43	63	596499	25.392	ng	98
46) Bromodichloromethane	16.70	83	745141	26.598	ng	99
47) Trichloroethene	16.77	130	608704	25.035	ng	100
48) 1,4-Dioxane	16.72	88	489317	28.729	ng	89
49) 2,2,4-Trimethylpentane...	16.86	57	2653373	24.075	ng	94
50) Methyl Methacrylate	17.02	100	520131	54.356	ng	94
51) n-Heptane	17.21	71	631643	24.777	ng	96
52) cis-1,3-Dichloropropene	17.95	75	924165	26.108	ng	100
53) 4-Methyl-2-pentanone	17.98	58	595650	28.784	ng	96
54) trans-1,3-Dichloropropene	18.64	75	942904	30.449	ng	100
55) 1,1,2-Trichloroethane	18.89	97	547475	26.759	ng	99
58) Toluene	19.28	91	2532381	26.956	ng	99
59) 2-Hexanone	19.58	43	1400765	28.689	ng	100
60) Dibromochloromethane	19.82	129	613012	30.559	ng	100
61) 1,2-Dibromoethane	20.15	107	619801	29.314	ng	99
62) n-Butyl Acetate	20.39	43	1666866	31.288	ng	99
63) n-Octane	20.56	57	565014	26.981	ng	94
64) Tetrachloroethene	20.76	166	616353	26.439	ng	100
65) Chlorobenzene	21.62	112	1574474	27.291	ng	99
66) Ethylbenzene	22.09	91	2787656	27.484	ng	99
67) m- & p-Xylenes	22.33	91	4338755	53.958	ng	100
68) Bromoform	22.42	173	508656	29.212	ng	100
69) Styrene	22.77	104	1750906	29.458	ng	99
70) o-Xylene	22.92	91	2234503	27.623	ng	99
71) n-Nonane	23.17	43	1287447	26.429	ng	94
72) 1,1,2,2-Tetrachloroethane	22.89	83	1004176	28.898	ng	99
74) Cumene	23.66	105	2788818	26.590	ng	99
75) alpha-Pinene	24.15	93	1368269	26.441	ng	99
76) n-Propylbenzene	24.28	91	3462821	26.713	ng	100
77) 3-Ethyltoluene	24.41	105	2770931	28.200	ng	99
78) 4-Ethyltoluene	24.46	105	2777194	28.115	ng	98
79) 1,3,5-Trimethylbenzene	24.55	105	2322017	28.429	ng	1367

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1304171	29.427	ng	99
81) 2-Ethyltoluene	24.79	105	2766681	27.266	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2490909	28.723	ng	99
83) n-Decane	25.15	57	1378346	27.307	ng	96
84) Benzyl Chloride	25.22	91	2140806	31.908	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1296940	28.888	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1331268	27.947	ng	100
87) sec-Butylbenzene	25.38	105	3145430	27.525	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3016689	27.552	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2500322	28.525	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1277785	28.345	ng	100
91) d-Limonene	25.74	68	1049611	29.583	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.26	157	440710	32.373	ng	95
93) n-Undecane	26.65	57	1469089	28.166	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	966603	30.692	ng	99
95) Naphthalene	27.94	128	3356047	28.842	ng	100
96) n-Dodecane	27.89	57	1529739	26.201	ng	97
97) Hexachlorobutadiene	28.36	225	537772	29.903	ng	99
98) Cyclohexanone	22.51	55	852691	28.820	ng	95
99) tert-Butylbenzene	25.05	119	2409546	28.016	ng	100
100) n-Butylbenzene	26.07	91	2612795	28.727	ng	99

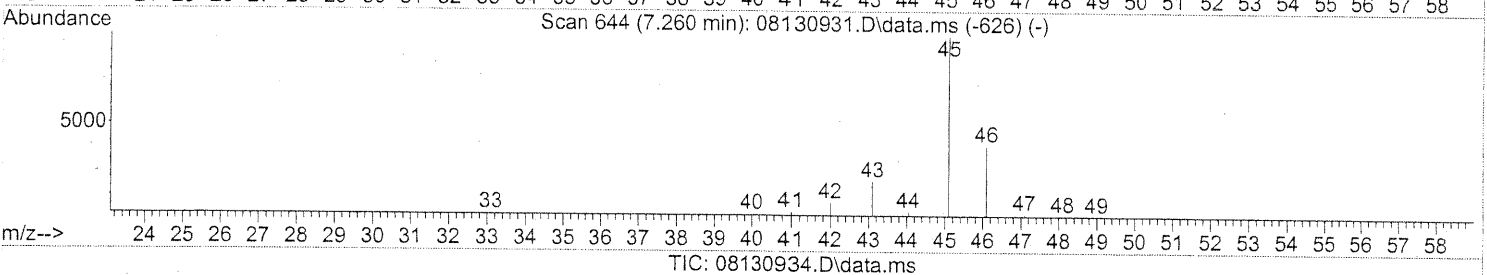
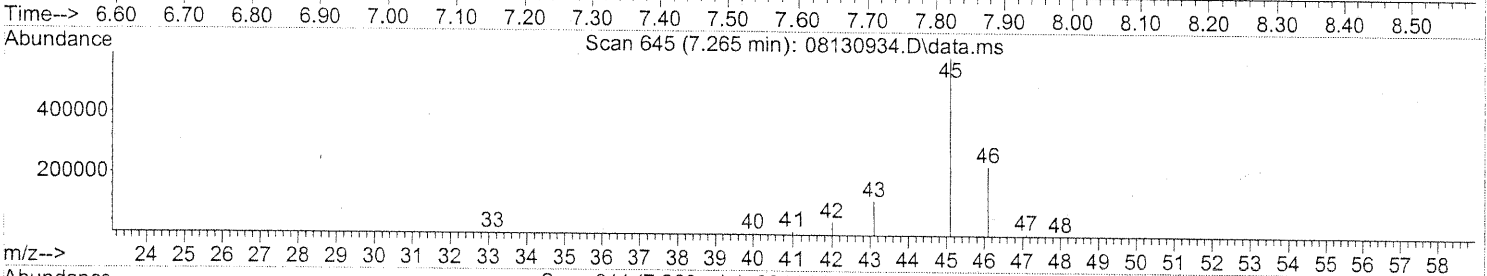
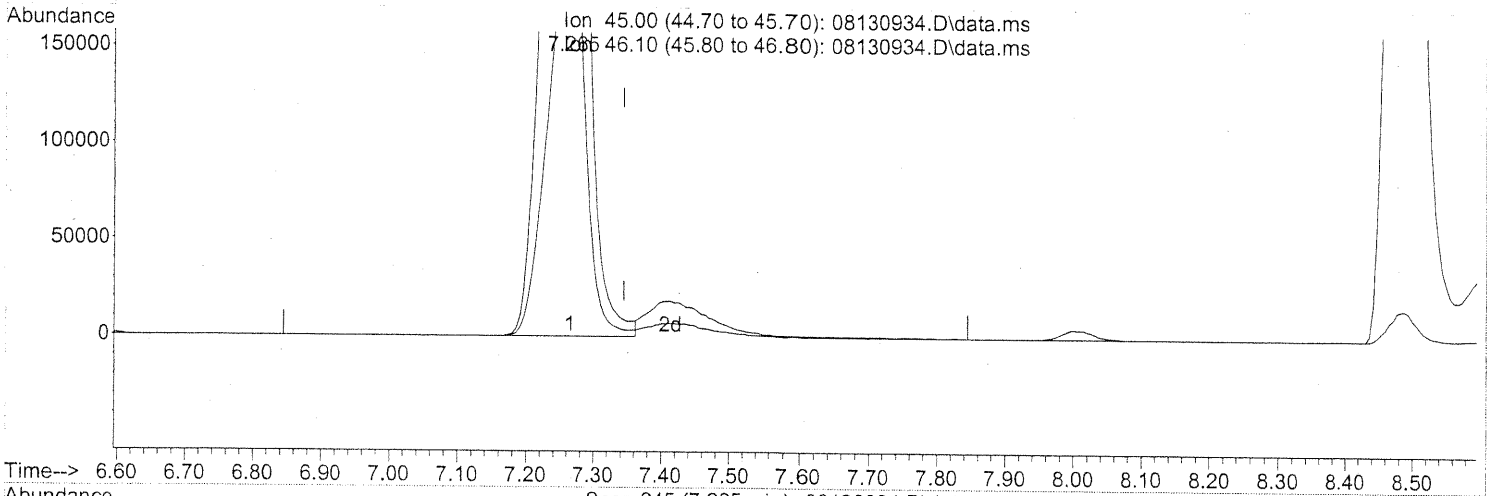
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)  
 7.265min (-0.080) 110.49ng  
 response 2112003

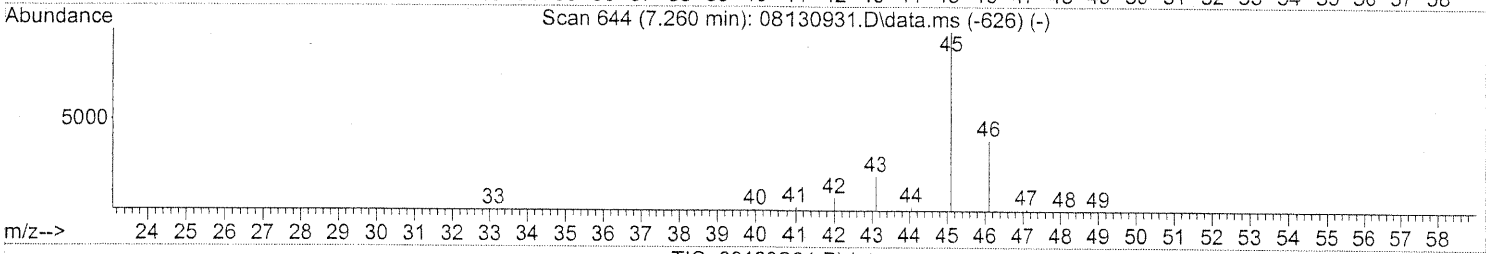
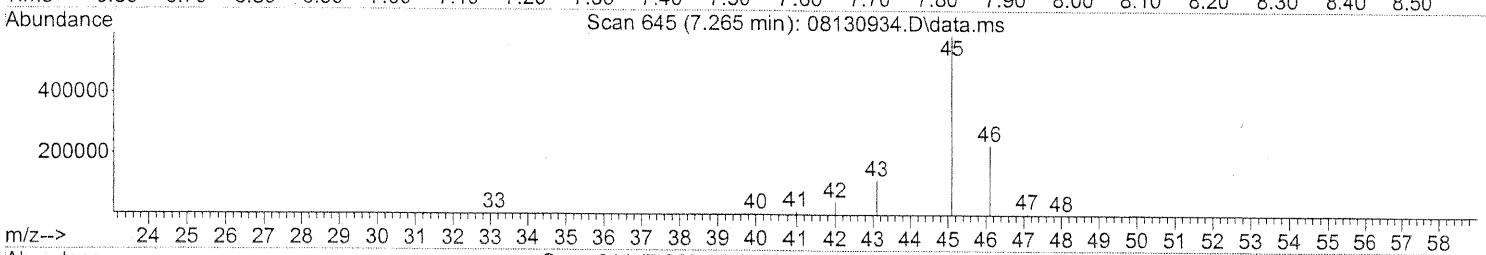
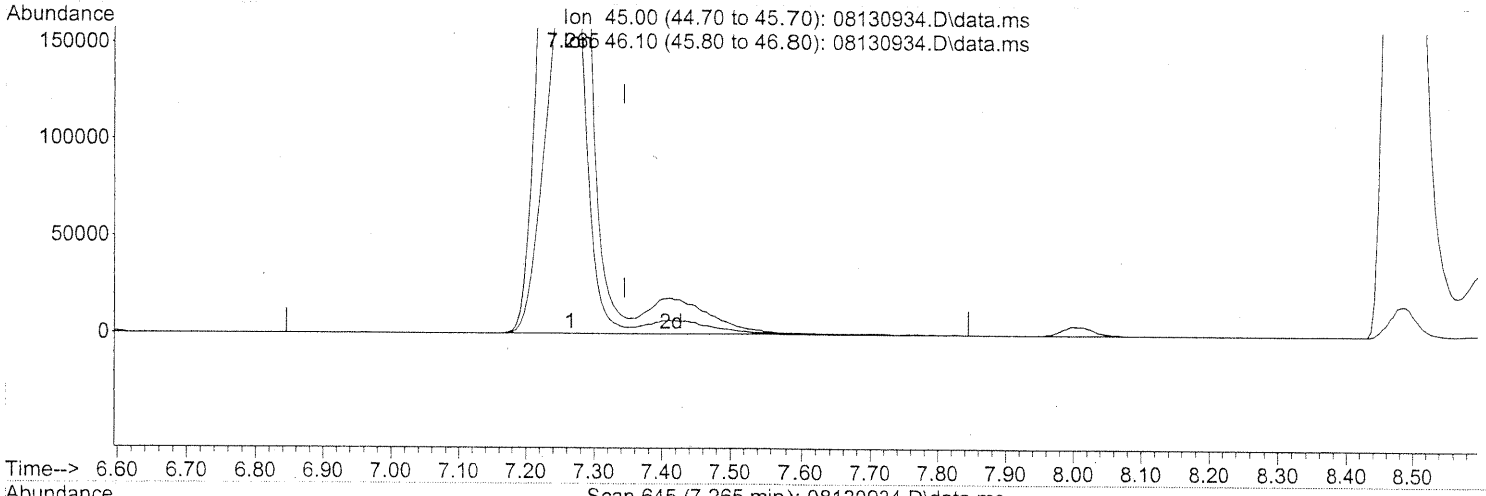
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.87
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130934.D  
Acq On : 14 Aug 2009 7:29  
Operator : EM  
Sample : 25ng TO-15 ICV STD  
Misc : S20-08130905/S20-08070903  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



(10) Ethanol (T)  
7.265min (-0.080) 116.80ng m  
response 2232593

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.77
0.00	0.00	0.00
0.00	0.00	0.00

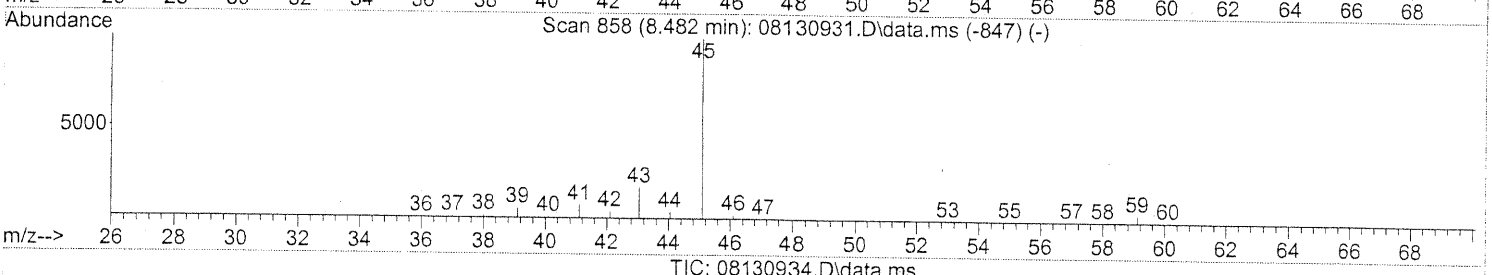
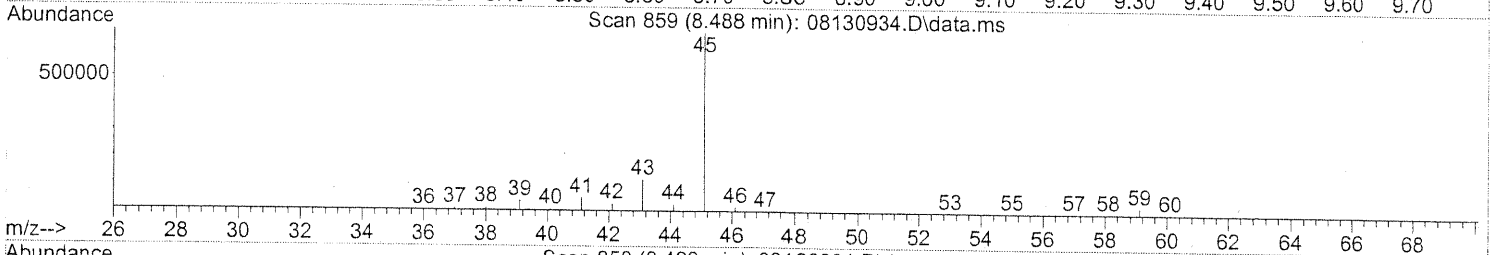
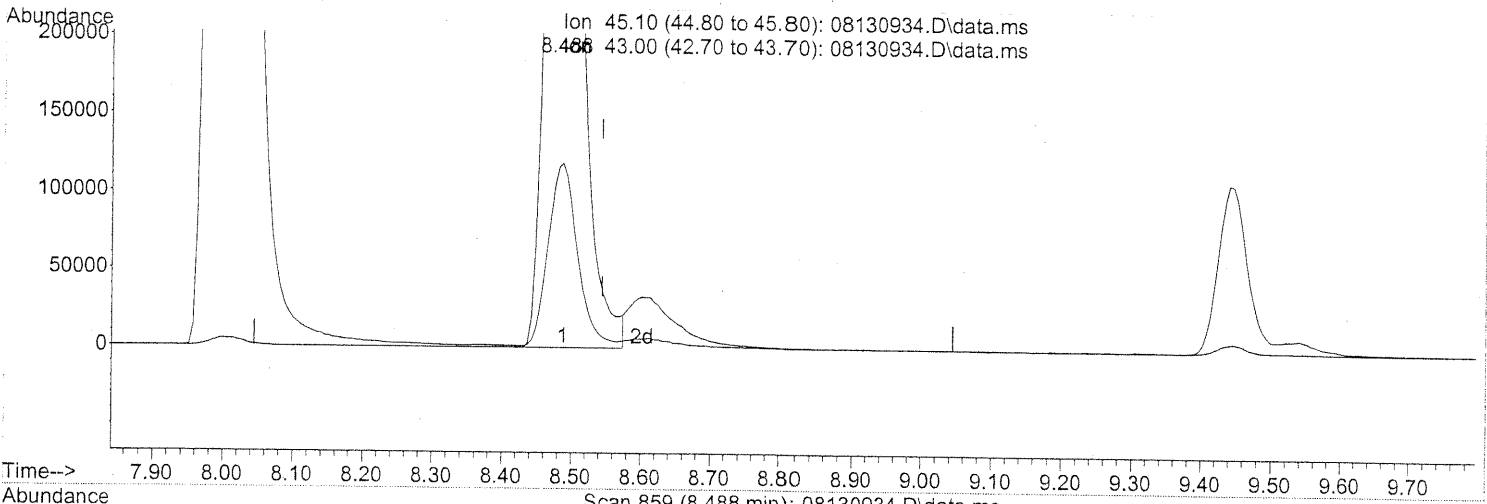
PT → IC  
Em 8/13/09  
14

DA 8/11/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
Data File : 08130934.D  
Acq On : 14 Aug 2009 7:29  
Operator : EM  
Sample : 25ng TO-15 ICV STD  
Misc : S20-08130905/S20-08070903  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



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

8.488min (-0.057) 37.42ng

response 1993602

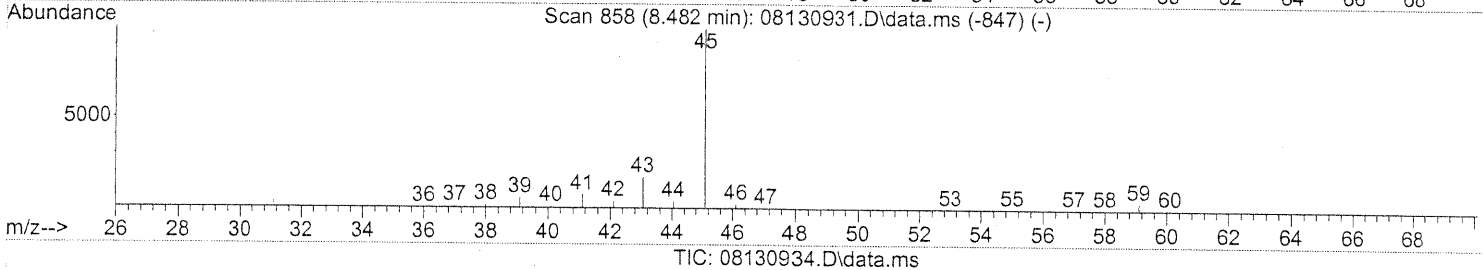
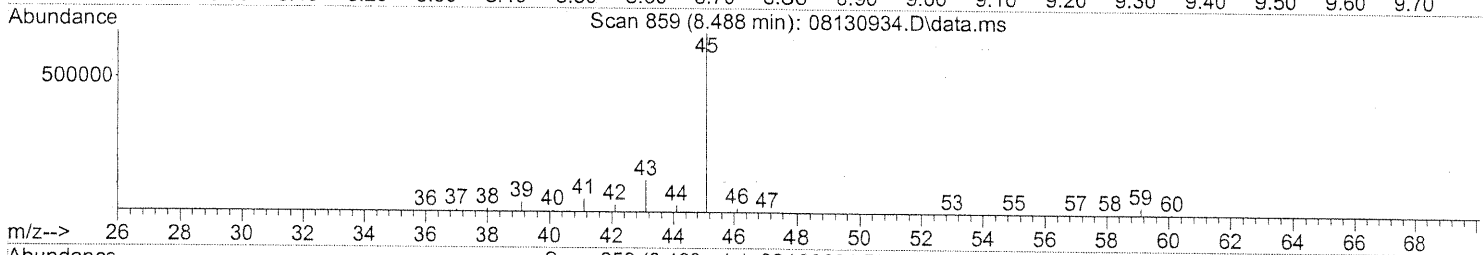
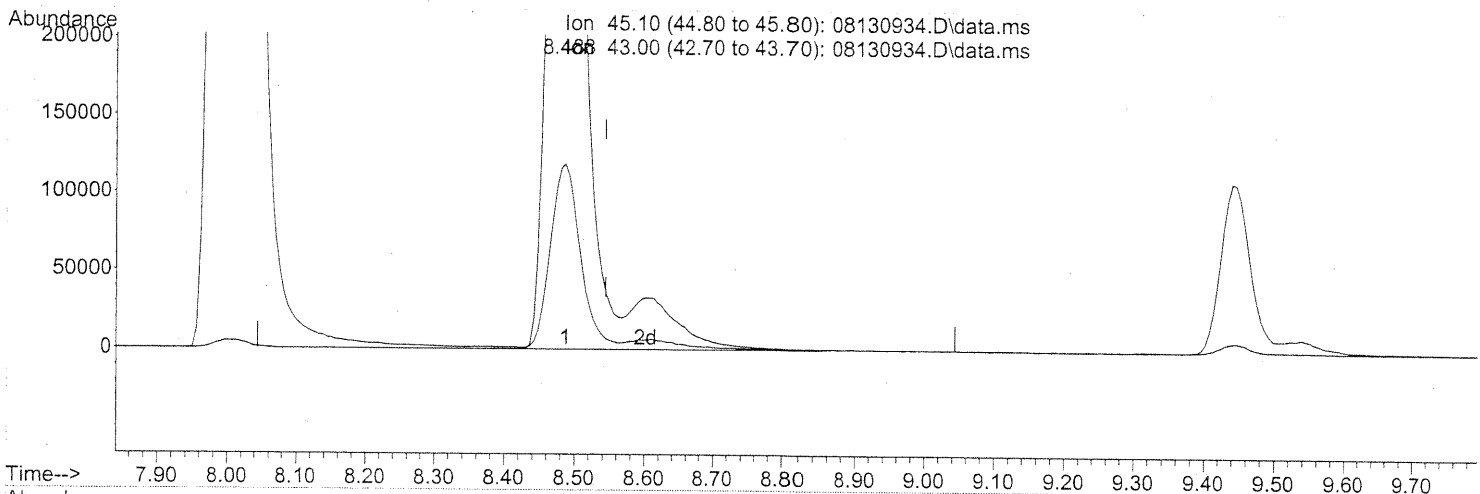
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.46
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130934.D  
 Acq On : 14 Aug 2009 7:29  
 Operator : EM  
 Sample : 25ng TO-15 ICV STD  
 Misc : S20-08130905/S20-08070903  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



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

8.488min (-0.057) 40.54ng m

response 2159425

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.12
0.00	0.00	0.00
0.00	0.00	0.00

*PT → IC*  
*em 8/13/09*  
*14*

*BA 8/15/09 372*

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08130934.D

Acq. Method File: TO15LOW.M

Data File Path: J:\MS09\Data\2009\_08\13\

Name: 25ng TO-15 ICV STD

Operator: EM

Misc Info: S20-08130905/S20-08070903

Date Acquired: 8/14/09 7:29

Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt. (ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.83	24.8	26.3	94.3	70	130	*
3)	Dichlorodifluoromethane (CFC	5.00	23.1	26.0	88.8	70	130	*
4)	Chloromethane	5.33	21.9	25.0	87.6	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro	5.59	24.6	26.0	94.6	70	130	*
6)	Vinyl Chloride	5.79	21.9	25.3	86.6	70	130	*
7)	1,3-Butadiene	6.08	24.7	26.8	92.2	70	130	*
8)	Bromomethane	6.58	24.7	25.8	95.7	70	130	*
9)	Chloroethane	6.93	22.9	25.5	89.8	70	130	*
10)	Ethanol	7.27	116.8	130.0	89.8	70	130	*
11)	Acetonitrile	7.57	23.4	26.0	90.0	70	130	*
12)	Acrolein	7.79	27.0	26.3	102.7	70	130	*
13)	Acetone	8.01	112.7	132.0	85.4	70	130	*
14)	Trichlorofluoromethane	8.29	24.2	26.3	92.0	70	130	*
15)	2-Propanol (Isopropanol)	8.49	40.5	48.0	84.4	70	130	*
16)	Acrylonitrile	8.81	27.8	25.8	107.8	70	130	*
17)	1,1-Dichloroethene	9.33	25.5	27.5	92.7	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	9.45	52.2	50.0	104.4	70	130	*
19)	Methylene Chloride	9.54	23.4	26.8	87.3	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.73	26.5	27.0	98.1	70	130	*
21)	Trichlorotrifluoroethane	9.98	27.7	27.5	100.7	70	130	*
22)	Carbon Disulfide	9.93	24.1	26.0	92.7	70	130	*
23)	trans-1,2-Dichloroethene	11.00	24.7	25.5	96.9	70	130	*
24)	1,1-Dichloroethane	11.31	25.1	26.5	94.7	70	130	*
25)	Methyl tert-Butyl Ether	11.40	25.9	26.3	98.5	70	130	*
26)	Vinyl Acetate	11.56	148.4	126.0	117.8	70	130	*
27)	2-Butanone (MEK)	11.89	29.6	26.8	110.4	70	130	*
28)	cis-1,2-Dichloroethene	12.58	26.2	27.0	97.0	70	130	*
29)	Diisopropyl Ether	12.91	26.2	26.5	98.9	70	130	*
30)	Ethyl Acetate	12.90	52.1	52.0	100.2	70	130	*
31)	n-Hexane	12.93	24.1	26.0	92.7	70	130	*
32)	Chloroform	13.03	25.8	27.5	93.8	70	130	*
34)	Tetrahydrofuran (THF)	13.58	27.2	26.5	102.6	70	130	*
35)	Ethyl tert-Butyl Ether	13.71	25.4	25.5	99.6	70	130	*
36)	1,2-Dichloroethane	14.13	26.4	26.3	100.4	70	130	*
38)	1,1,1-Trichloroethane	14.54	25.7	26.0	98.8	70	130	*
39)	Isopropyl Acetate	15.07	55.0	52.3	105.2	70	130	*
40)	1-Butanol	15.09	59.5	52.8	112.7	70	130	*
41)	Benzene	15.23	24.4	25.8	94.6	70	130	*
42)	Carbon Tetrachloride	15.46	26.8	26.3	101.9	70	130	*
43)	Cyclohexane	15.66	49.9	51.8	96.3	70	130	*
44)	tert-Amyl Methyl Ether	16.10	25.4	25.5	99.6	70	130	*
45)	1,2-Dichloropropane	16.43	25.4	26.0	97.7	70	130	*
46)	Bromodichloromethane	16.70	26.6	26.3	101.1	70	130	*
47)	Trichloroethene	16.77	25.0	25.8	96.9	70	130	*
48)	1,4-Dioxane	16.72	28.7	26.0	110.4	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.86	24.1	25.8	93.4	70	130	*
50)	Methyl Methacrylate	17.02	54.4	52.8	103.0	70	130	*

em 8/14/09

**INITIAL CALIBRATION VERIFICATION CHECK SHEET**

Data File Name: 08130934.D

Acq. Method File: TO15LOW.M

Data File Path: J:\MS09\Data\2009\_08\13\

Name: 25ng TO-15 ICV STD

Operator: EM

Misc Info: S20-08130905/S20-08070903

Date Acquired: 8/14/09 7:29

Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt. (ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	17.21	24.8	25.8	96.1	70	130	*
52)	cis-1,3-Dichloropropene	17.95	26.1	24.5	106.5	70	130	*
53)	4-Methyl-2-pentanone	17.98	28.8	26.8	107.5	70	130	*
54)	trans-1,3-Dichloropropene	18.64	30.4	27.0	112.6	70	130	*
55)	1,1,2-Trichloroethane	18.89	26.8	26.0	103.1	70	130	*
58)	Toluene	19.28	27.0	26.8	100.7	70	130	*
59)	2-Hexanone	19.58	28.7	27.0	106.3	70	130	*
60)	Dibromochloromethane	19.82	30.6	28.3	108.1	70	130	*
61)	1,2-Dibromoethane	20.15	29.3	26.3	111.4	70	130	*
62)	n-Butyl Acetate	20.39	31.3	27.5	113.8	70	130	*
63)	n-Octane	20.56	27.0	26.3	102.7	70	130	*
64)	Tetrachloroethene	20.76	26.4	25.3	104.3	70	130	*
65)	Chlorobenzene	21.62	27.3	26.5	103.0	70	130	*
66)	Ethylbenzene	22.09	27.5	26.3	104.6	70	130	*
67)	m- & p-Xylenes	22.33	54.0	51.5	104.9	70	130	*
68)	Bromoform	22.42	29.2	26.5	110.2	70	130	*
69)	Styrene	22.77	29.5	26.3	112.2	70	130	*
70)	o-Xylene	22.92	27.6	26.0	106.2	70	130	*
71)	n-Nonane	23.17	26.4	25.8	102.3	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.89	28.9	27.0	107.0	70	130	*
74)	Cumene	23.66	26.6	25.3	105.1	70	130	*
75)	alpha-Pinene	24.15	26.4	24.8	106.5	70	130	*
76)	n-Propylbenzene	24.28	26.7	25.3	105.5	70	130	*
77)	3-Ethyltoluene	24.41	28.2	26.3	107.2	70	130	*
78)	4-Ethyltoluene	24.46	28.1	26.3	106.8	70	130	*
79)	1,3,5-Trimethylbenzene	24.55	28.4	26.5	107.2	70	130	*
80)	alpha-Methylstyrene	24.74	29.4	26.0	113.1	70	130	*
81)	2-Ethyltoluene	24.79	27.3	26.0	105.0	70	130	*
82)	1,2,4-Trimethylbenzene	25.05	28.7	25.5	112.5	70	130	*
83)	n-Decane	25.15	27.3	26.3	103.8	70	130	*
84)	Benzyl Chloride	25.22	31.9	26.8	119.0	70	130	*
85)	1,3-Dichlorobenzene	25.25	28.9	26.0	111.2	70	130	*
86)	1,4-Dichlorobenzene	25.33	27.9	26.3	106.1	70	130	*
87)	sec-Butylbenzene	25.38	27.5	25.8	106.6	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.57	27.6	25.0	110.4	70	130	*
89)	1,2,3-Trimethylbenzene	25.57	28.5	26.0	109.6	70	130	*
90)	1,2-Dichlorobenzene	25.74	28.3	25.8	109.7	70	130	*
91)	d-Limonene	25.74	29.6	26.5	111.7	70	130	*
92)	1,2-Dibromo-3-Chloropropane	26.26	32.4	27.0	120.0	70	130	*
93)	n-Undecane	26.65	28.2	26.3	107.2	70	130	*
94)	1,2,4-Trichlorobenzene	27.79	30.7	27.3	112.5	70	130	*
95)	Naphthalene	27.94	28.8	25.0	115.2	70	130	*
96)	n-Dodecane	27.89	26.2	24.3	107.8	70	130	*
97)	Hexachlorobutadiene	28.36	29.9	26.8	111.6	70	130	*
98)	Cyclohexanone	22.51	28.8	24.8	116.1	70	130	*
99)	tert-Butylbenzene	25.05	28.0	26.5	105.7	70	130	*
100)	n-Butylbenzene	26.07	28.7	26.5	108.3	70	130	*

\* Denotes Passing Criterion

EM 8/14/09

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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	92	-0.01
2	T Propene	2.193	2.413	-10.0	97	0.00
3	T Dichlorodifluoromethane (CF	3.130	2.905	7.2	91	0.00
4	T Chloromethane	2.918	2.811	3.7	88	0.00
5	T 1,2-Dichloro-1,1,2,2-tetra	1.654	1.577	4.7	91	0.00
6	T Vinyl Chloride	2.878	2.706	6.0	90	-0.01
7	T 1,3-Butadiene	2.044	2.133	-4.4	94	0.00
8	T Bromomethane	1.505	1.481	1.6	91	-0.01
9	T Chloroethane	1.428	1.387	2.9	92	0.00
10	T Ethanol	1.376	1.343	2.4	88	-0.07
11	T Acetonitrile	3.357	3.366	-0.3	93	-0.04
12	T Acrolein	0.897	0.980	-9.3	93	-0.02
13	T Acetone	1.400	1.292	7.7	94	-0.04
14	T Trichlorofluoromethane	2.677	2.605	2.7	91	-0.01
15	T 2-Propanol (Isopropanol)	3.834	3.238	15.5	83	-0.05
16	T Acrylonitrile	2.033	2.311	-13.7	91	-0.03
17	T 1,1-Dichloroethene	1.571	1.495	4.8	91	-0.02
18	T 2-Methyl-2-Propanol (tert-B	3.892	4.171	-7.2	90	-0.03
19	T Methylene Chloride	1.747	1.589	9.0	91	-0.02
20	T 3-Chloro-1-propene (Allyl C	2.342	2.553	-9.0	94	-0.02
21	T Trichlorotrifluoroethane	1.198	1.217	-1.6	91	-0.01
22	T Carbon Disulfide	6.163	5.961	3.3	92	-0.01
23	T trans-1,2-Dichloroethene	2.411	2.447	-1.5	92	-0.01
24	T 1,1-Dichloroethane	2.952	2.941	0.4	92	-0.02
25	T Methyl tert-Butyl Ether	4.784	4.830	-1.0	92	0.00
26	T Vinyl Acetate	0.303	0.358	-18.2	92	-0.03
27	T 2-Butanone (MEK)	0.976	1.110	-13.7	91	-0.03
28	T cis-1,2-Dichloroethene	2.250	2.245	0.2	91	-0.02
29	T Diisopropyl Ether	1.386	1.409	-1.7	92	-0.01
30	T Ethyl Acetate	0.633	0.673	-6.3	92	-0.03
31	T n-Hexane	3.085	3.035	1.6	94	-0.01
32	T Chloroform	2.582	2.538	1.7	91	-0.03
33	S 1,2-Dichloroethane-d4 (SS1)	1.768	1.767	0.1	92	-0.02
34	T Tetrahydrofuran (THF)	1.015	1.070	-5.4	92	-0.01
35	T Ethyl tert-Butyl Ether	1.977	2.012	-1.8	91	-0.01
36	T 1,2-Dichloroethane	1.976	2.014	-1.9	91	-0.02
37	IR 1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	92	-0.01
38	T 1,1,1-Trichloroethane	0.455	0.447	1.8	91	-0.01

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*Em* 8/25/09



Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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	0.204	0.227	-11.3	91	-0.02
40 T	1-Butanol	0.324	0.384	-18.5	91	-0.06
41 T	Benzene	1.344	1.279	4.8	92	-0.01
42 T	Carbon Tetrachloride	0.376	0.372	1.1	90	0.00
43 T	Cyclohexane	0.521	0.516	1.0	92	-0.01
44 T	tert-Amyl Methyl Ether	0.945	0.954	-1.0	91	-0.01
45 T	1,2-Dichloropropane	0.330	0.335	-1.5	92	-0.01
46 T	Bromodichloromethane	0.393	0.409	-4.1	91	-0.02
47 T	Trichloroethene	0.341	0.323	5.3	90	-0.02
48 T	1,4-Dioxane	0.239	0.269	-12.6	91	-0.02
49 T	2,2,4-Trimethylpentane (Iso	1.547	1.529	1.2	92	-0.02
50 T	Methyl Methacrylate	0.134	0.138	-3.0	90	-0.02
51 T	n-Heptane	0.358	0.357	0.3	92	-0.01
52 T	cis-1,3-Dichloropropene	0.497	0.540	-8.7	91	0.00
53 T	4-Methyl-2-pentanone	0.291	0.326	-12.0	91	-0.02
54 T	trans-1,3-Dichloropropene	0.435	0.491	-12.9	91	-0.02
55 T	1,1,2-Trichloroethane	0.287	0.300	-4.5	91	-0.01
56 IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	89	0.00
57 S	Toluene-d8 (SS2)	2.377	2.436	-2.5	91	-0.01
58 T	Toluene	2.881	2.890	-0.3	91	0.00
59 T	2-Hexanone	1.497	1.655	-10.6	92	-0.02
60 T	Dibromochloromethane	0.615	0.664	-8.0	90	0.00
61 T	1,2-Dibromoethane	0.648	0.714	-10.2	91	-0.01
62 T	n-Butyl Acetate	1.634	1.930	-18.1	91	-0.02
63 T	n-Octane	0.642	0.674	-5.0	92	-0.01
64 T	Tetrachloroethene	0.715	0.726	-1.5	90	0.00
65 T	Chlorobenzene	1.769	1.761	0.5	90	-0.01
66 T	Ethylbenzene	3.111	3.211	-3.2	91	0.00
67 T	m- & p-Xylenes	2.466	2.533	-2.7	91	-0.02
68 T	Bromoform	0.534	0.600	-12.4	90	-0.01
69 T	Styrene	1.823	1.951	-7.0	90	-0.01
70 T	o-Xylene	2.481	2.557	-3.1	91	-0.02
71 T	n-Nonane	1.494	1.567	-4.9	92	-0.01
72 T	1,1,2,2-Tetrachloroethane	1.066	1.141	-7.0	91	-0.02
73 S	Bromofluorobenzene (SS3)	0.673	0.658	2.2	86	0.00
74 T	Cumene	3.217	3.291	-2.3	90	0.00
75 T	alpha-Pinene	1.587	1.632	-2.8	89	0.00
76 T	n-Propylbenzene	3.975	4.104	-3.2	90	-0.01

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*Em* 8/25/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 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	3.013	3.064	-1.7	87	0.00
78 T	4-Ethyltoluene	3.029	3.129	-3.3	93	-0.01
79 T	1,3,5-Trimethylbenzene	2.505	2.518	-0.5	90	0.00
80 T	alpha-Methylstyrene	1.359	1.453	-6.9	89	-0.01
81 T	2-Ethyltoluene	3.112	3.149	-1.2	90	-0.01
82 T	1,2,4-Trimethylbenzene	2.660	2.764	-3.9	89	-0.01
83 T	n-Decane	1.548	1.589	-2.6	91	-0.02
84 T	Benzyl Chloride	2.058	2.345	-13.9	89	-0.02
85 T	1,3-Dichlorobenzene	1.377	1.400	-1.7	90	-0.02
86 T	1,4-Dichlorobenzene	1.461	1.464	-0.2	90	-0.01
87 T	sec-Butylbenzene	3.505	3.560	-1.6	90	-0.01
88 T	4-Isopropyltoluene (p-Cymen)	3.358	3.497	-4.1	90	-0.01
89 T	1,2,3-Trimethylbenzene	2.688	2.777	-3.3	89	-0.01
90 T	1,2-Dichlorobenzene	1.382	1.399	-1.2	89	-0.01
91 T	d-Limonene	1.088	1.162	-6.8	89	-0.01
92 T	1,2-Dibromo-3-Chloropropane	0.417	0.469	-12.5	89	-0.01
93 T	n-Undecane	1.600	1.665	-4.1	91	0.00
94 T	1,2,4-Trichlorobenzene	0.966	1.013	-4.9	93	-0.01
95 T	Naphthalene	3.568	3.785	-6.1	93	0.00
96 T	n-Dodecane	1.790	1.917	-7.1	93	0.00
97 T	Hexachlorobutadiene	0.552	0.575	-4.2	92	0.00
98 T	Cyclohexanone	0.907	1.046	-15.3	89	-0.02
99 T	tert-Butylbenzene	2.638	2.724	-3.3	90	-0.01
100 T	n-Butylbenzene	2.789	2.860	-2.5	89	0.00

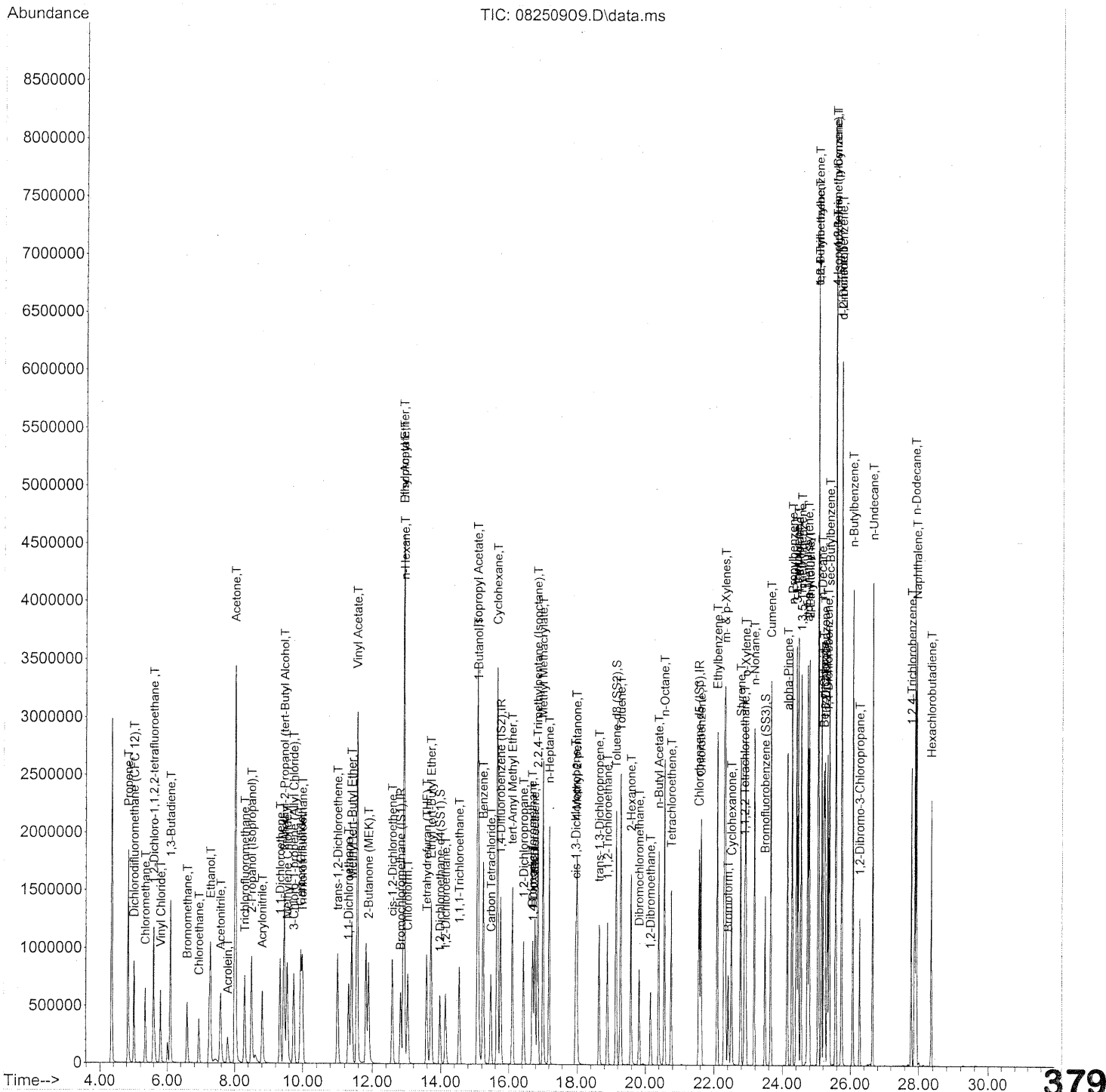
(#) = Out of Range

SPCC's out = 0 CCC's out = 0

*Em* 8/25/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	333521	25.000	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1712202	25.000	ng	-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	798758	25.000	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4 (...)	13.97	65	589291	24.988	ng	-0.02
Spiked Amount	25.000		Recovery	=	99.96%	✓
57) Toluene-d8 (SS2)	19.15	98	1945782	25.624	ng	-0.01
Spiked Amount	25.000		Recovery	=	102.48%	✓
73) Bromofluorobenzene (SS3)	23.49	174	525922	24.456	ng	0.00
Spiked Amount	25.000		Recovery	=	97.84%	✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propene	4.84	42	862693	29.487	ng	96
3) Dichlorodifluoromethan...	5.01	85	1019251	24.406	ng	99
4) Chloromethane	5.34	50	937592	24.089	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	557611	25.267	ng	100
6) Vinyl Chloride	5.80	62	913223	23.785	ng	98
7) 1,3-Butadiene	6.09	54	853870	31.309	ng	98
8) Bromomethane	6.59	94	503781	25.093	ng	99
9) Chloroethane	6.93	64	468289	24.585	ng	100
10) Ethanol	7.27	45	2328395m	126.874	ng	
11) Acetonitrile	7.58	41	1181041	26.370	ng	98
12) Acrolein	7.79	56	353053	29.499	ng	98
13) Acetone	8.01	58	2378027	127.336	ng	91
14) Trichlorofluoromethane	8.29	101	914061	25.595	ng	98
15) 2-Propanol (Isopropanol)	8.49	45	2043270m	39.951	ng	
16) Acrylonitrile	8.81	53	817065	30.121	ng	99
17) 1,1-Dichloroethene	9.33	96	548441	26.169	ng	97
18) 2-Methyl-2-Propanol (t...	9.45	59	2810125	54.122	ng	97
19) Methylene Chloride	9.54	84	568137	24.383	ng	87
20) 3-Chloro-1-propene (Al...	9.73	41	919522	29.428	ng	88
21) Trichlorotrifluoroethane	9.99	151	446659	27.944	ng	98
22) Carbon Disulfide	9.94	76	2131262	25.920	ng	98
23) trans-1,2-Dichloroethene	11.01	61	864978	26.895	ng	92
24) 1,1-Dichloroethane	11.32	63	1039579	26.393	ng	99
25) Methyl tert-Butyl Ether	11.40	73	1759038	27.560	ng	96
26) Vinyl Acetate	11.56	86	602569	148.976	ng	# 65
27) 2-Butanone (MEK)	11.89	72	407173	31.274	ng	# 81
28) cis-1,2-Dichloroethene	12.58	61	817694	27.246	ng	93
29) Diisopropyl Ether	12.91	87	503816	27.257	ng	# 64
30) Ethyl Acetate	12.91	61	478769	56.707	ng	96
31) n-Hexane	12.93	57	1105523	26.862	ng	92

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*Em 8/25/09*

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
32) Chloroform	13.03	83	907573	26.348	ng	100
34) Tetrahydrofuran (THF)	13.58	72	392523	28.999	ng #	86
35) Ethyl tert-Butyl Ether	13.71	87	692371	26.254	ng #	87
36) 1,2-Dichloroethane	14.14	62	712067	27.015	ng	100
38) 1,1,1-Trichloroethane	14.54	97	804746	25.842	ng	99
39) Isopropyl Acetate	15.07	61	811331	58.061	ng #	80
40) 1-Butanol	15.09	56	1360797	61.331	ng	86
41) Benzene	15.23	78	2320755	25.204	ng	99
42) Carbon Tetrachloride	15.47	117	688209	26.739	ng	99
43) Cyclohexane	15.66	84	1901789	53.331	ng	87
44) tert-Amyl Methyl Ether	16.10	73	1698869	26.250	ng	98
45) 1,2-Dichloropropane	16.44	63	603868	26.733	ng	98
46) Bromodichloromethane	16.70	83	756277	28.075	ng	99
47) Trichloroethene	16.77	130	586041	25.067	ng	99
48) 1,4-Dioxane	16.72	88	492835	30.092	ng	87
49) 2,2,4-Trimethylpentane...	16.86	57	2722735	25.692	ng	94
50) Methyl Methacrylate	17.02	100	504378	54.818	ng	91
51) n-Heptane	17.21	71	648485	26.455	ng	94
52) cis-1,3-Dichloropropene	17.95	75	917425	26.954	ng	100
53) 4-Methyl-2-pentanone	17.99	58	613799	30.848	ng	94
54) trans-1,3-Dichloropropene	18.64	75	924506	31.049	ng	100
55) 1,1,2-Trichloroethane	18.89	97	540151	27.457	ng	99
58) Toluene	19.28	91	2493385	27.087	ng	100
59) 2-Hexanone	19.58	43	1454202	30.396	ng	98
60) Dibromochloromethane	19.82	129	611305	31.101	ng	100
61) 1,2-Dibromoethane	20.15	107	604539	29.181	ng	100
62) n-Butyl Acetate	20.39	43	1695471	32.480	ng	98
63) n-Octane	20.56	57	577356	28.138	ng	91
64) Tetrachloroethene	20.76	166	591540	25.897	ng	100
65) Chlorobenzene	21.62	112	1519168	26.874	ng	100
66) Ethylbenzene	22.09	91	2718451	27.353	ng	99
67) m- & p-Xylenes	22.33	91	4208093	53.410	ng	100
68) Bromoform	22.41	173	494693	28.995	ng	100
69) Styrene	22.77	104	1670376	28.682	ng	100
70) o-Xylene	22.92	91	2165254	27.318	ng	99
71) n-Nonane	23.17	43	1326725	27.795	ng	93
72) 1,1,2,2-Tetrachloroethane	22.89	83	977036	28.696	ng	100
74) Cumene	23.66	105	2712565	26.395	ng	99
75) alpha-Pinene	24.15	93	1319461	26.023	ng	100
76) n-Propylbenzene	24.28	91	3382831	26.633	ng	99
77) 3-Ethyltoluene	24.41	105	2672729	27.761	ng	100
78) 4-Ethyltoluene	24.46	105	2729630	28.202	ng	98
79) 1,3,5-Trimethylbenzene	24.55	105	2196332	27.444	ng	100

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Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:11:42 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration

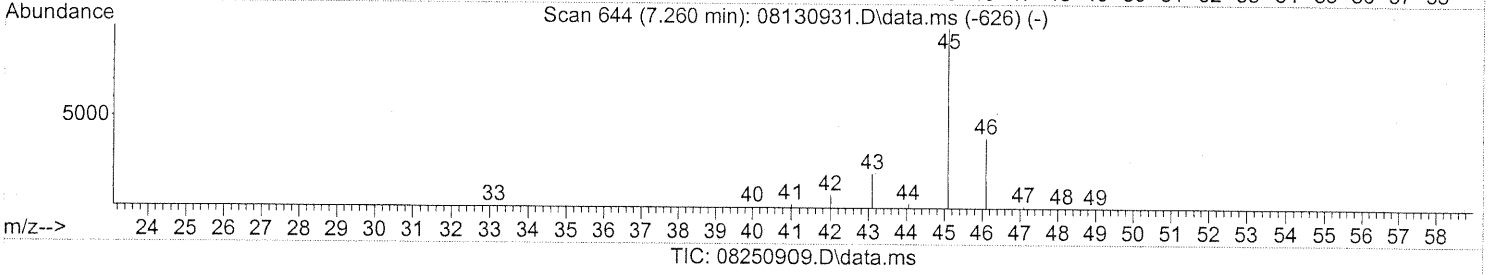
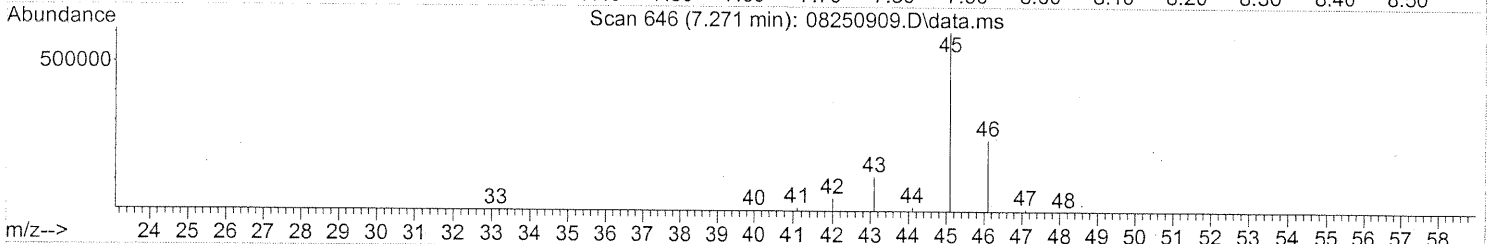
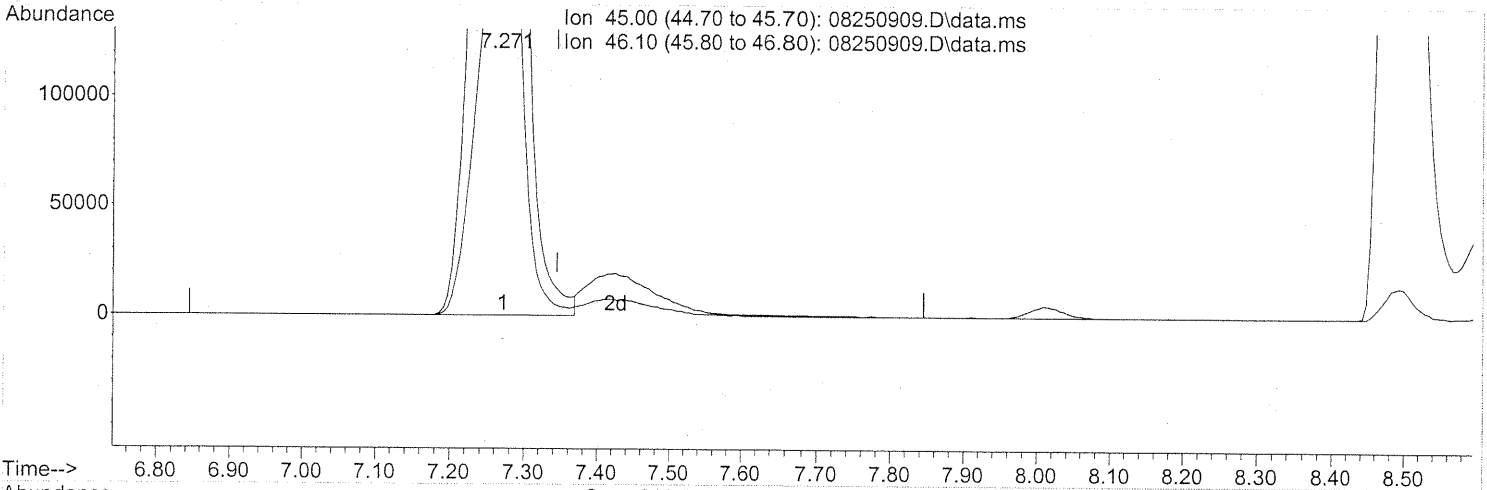
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1244040	28.648	ng	99
81) 2-Ethyltoluene	24.79	105	2645698	26.610	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2340100	27.539	ng	99
83) n-Decane	25.15	57	1370469	27.709	ng	95
84) Benzyl Chloride	25.22	91	2060644	31.345	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1221005	27.756	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1239664	26.559	ng	100
87) sec-Butylbenzene	25.38	105	3014541	26.922	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2882889	26.872	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2377641	27.683	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1184405	26.814	ng	100
91) d-Limonene	25.74	68	1013404	29.150	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	411818	30.873	ng	96
93) n-Undecane	26.65	57	1452031	28.412	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	905981	29.359	ng	99
95) Naphthalene	27.94	128	3204375	28.105	ng	100
96) n-Dodecane	27.89	57	1519358	26.559	ng	96
97) Hexachlorobutadiene	28.36	225	504894	28.652	ng	100
98) Cyclohexanone	22.51	55	819096	28.254	ng	95
99) tert-Butylbenzene	25.05	119	2306224	27.367	ng	99
100) n-Butylbenzene	26.07	91	2494400	27.989	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:10:36 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)  
 7.271min (-0.074) 119.74ng  
 response 2197469

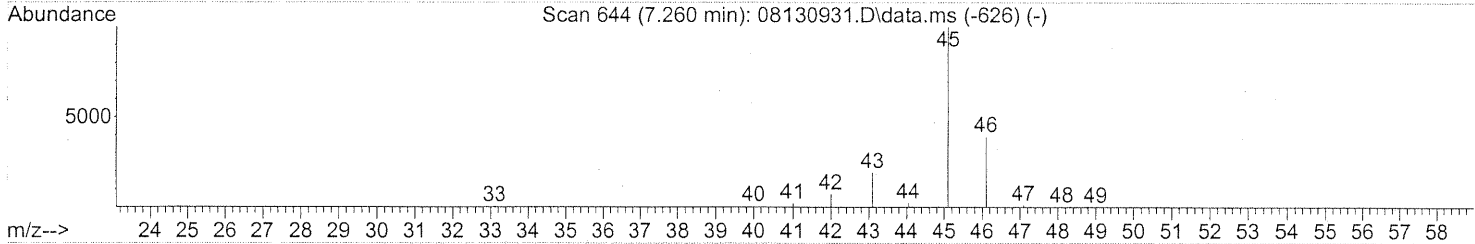
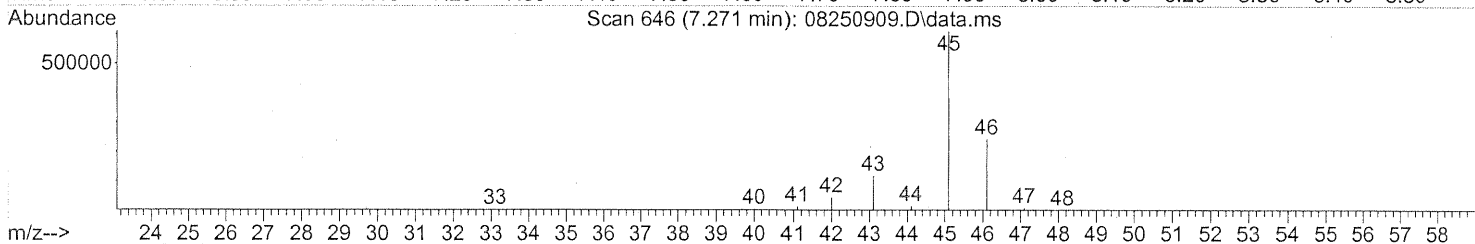
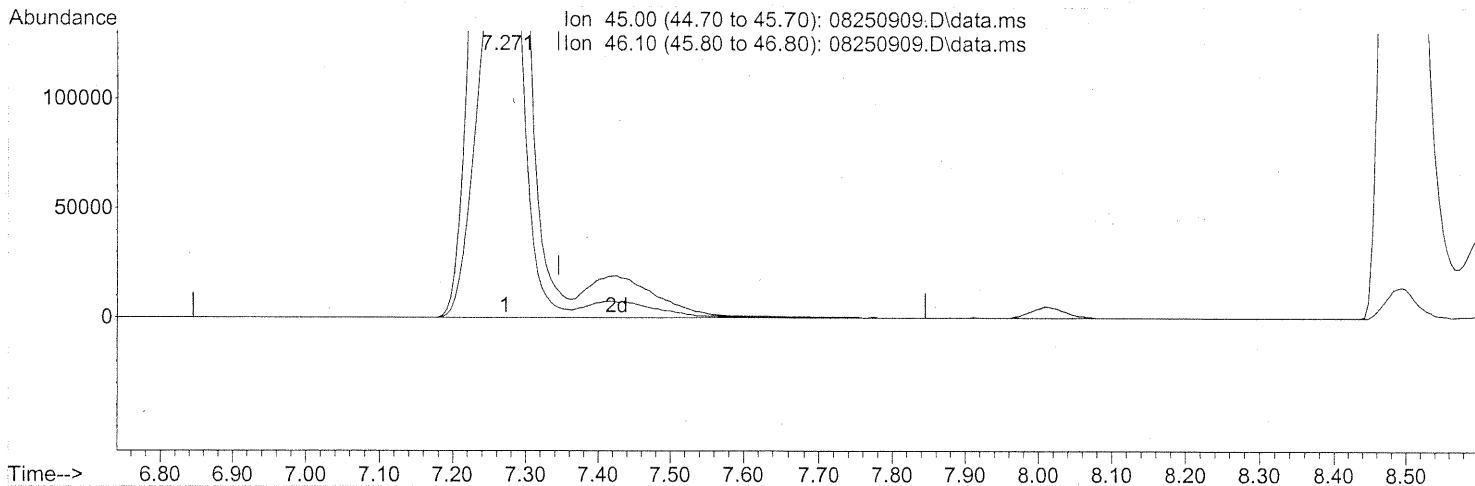
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.35
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:10:36 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(10) Ethanol (T)

7.271min (-0.074) 126.87ng m

response 2328395

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.13
0.00	0.00	0.00
0.00	0.00	0.00

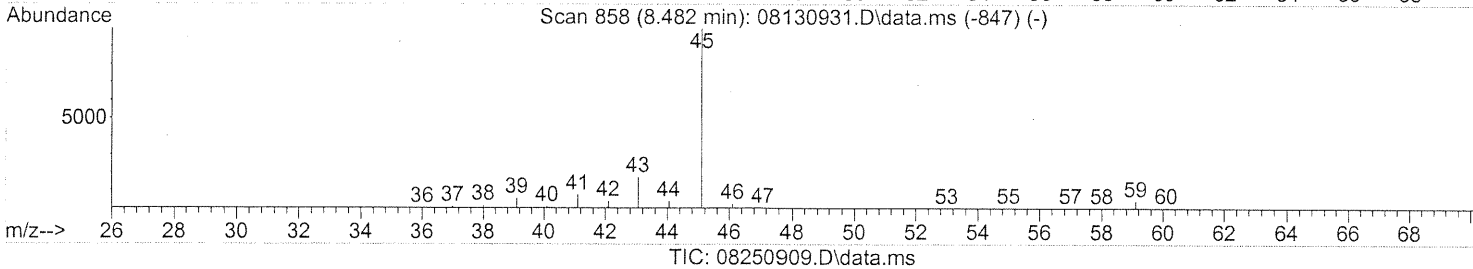
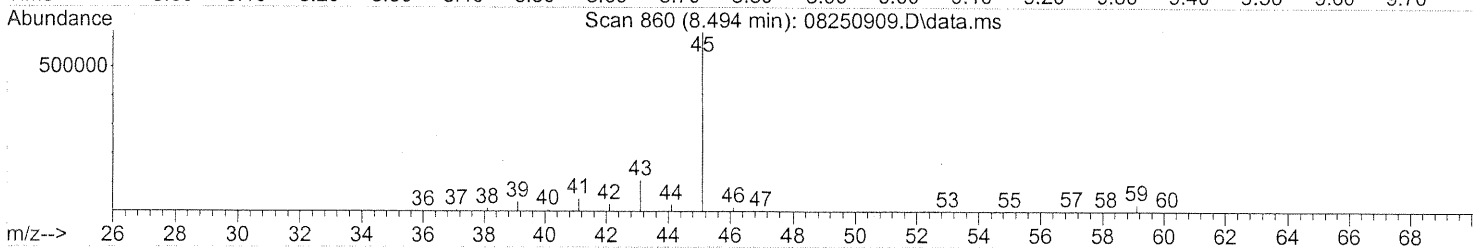
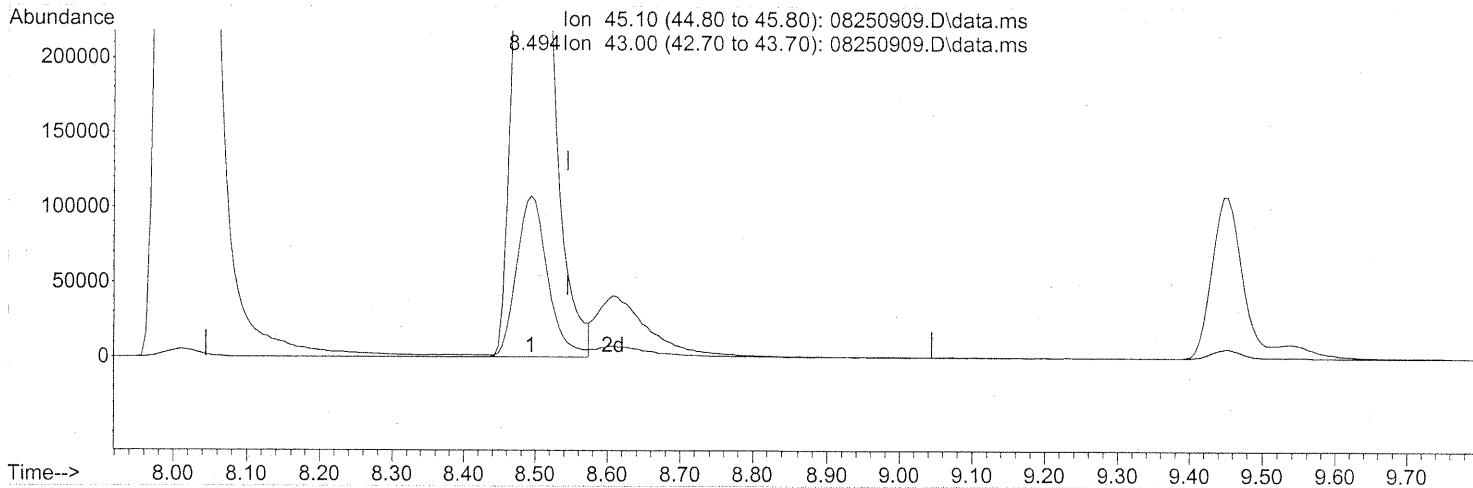
PT → LC  
 em 8/25/09  
 — 8/26/09



Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
Data File : 08250909.D  
Acq On : 25 Aug 2009 7:36  
Operator : EM  
Sample : 25ng TO-15 CCV STD  
Misc : S20-08130905/S20-08100902  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:10:36 2009  
Quant Method : J:\MS09\Methods\R9081309.M  
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
QLast Update : Fri Aug 14 07:39:36 2009  
Response via : Initial Calibration



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

8.494min (-0.051) 35.92ng

response 1837240

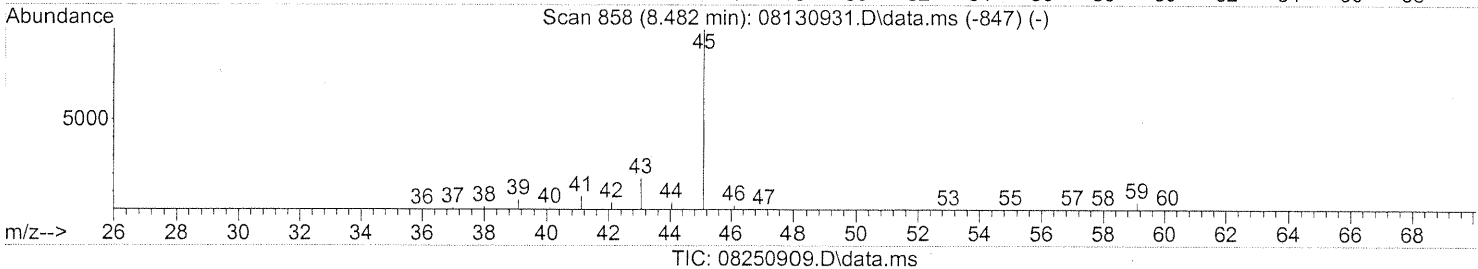
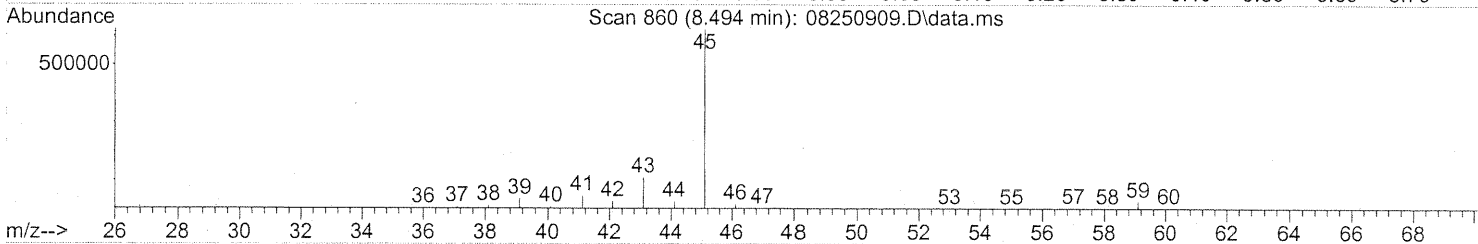
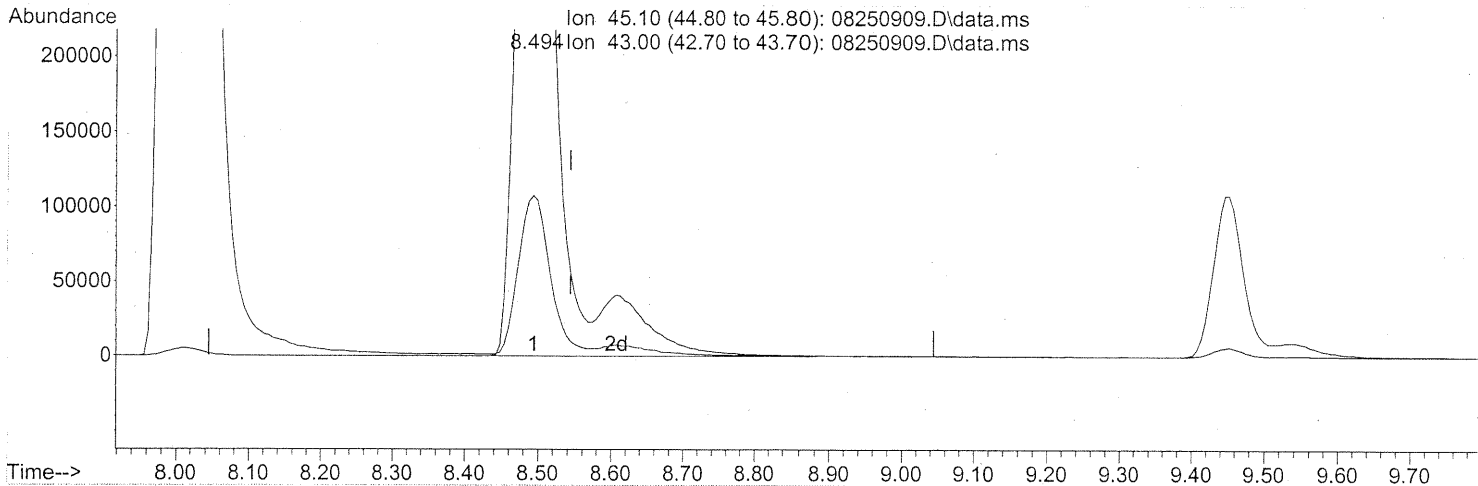
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.41
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 25 08:10:36 2009  
 Quant Method : J:\MS09\Methods\R9081309.M  
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 QLast Update : Fri Aug 14 07:39:36 2009  
 Response via : Initial Calibration



(15) 2-Propanol (isopropanol) (T)

8.494min (-0.051) 39.95ng m

response 2043270

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.66
0.00	0.00	0.00
0.00	0.00	0.00

*PT → LC*

*EM 8/25/09*

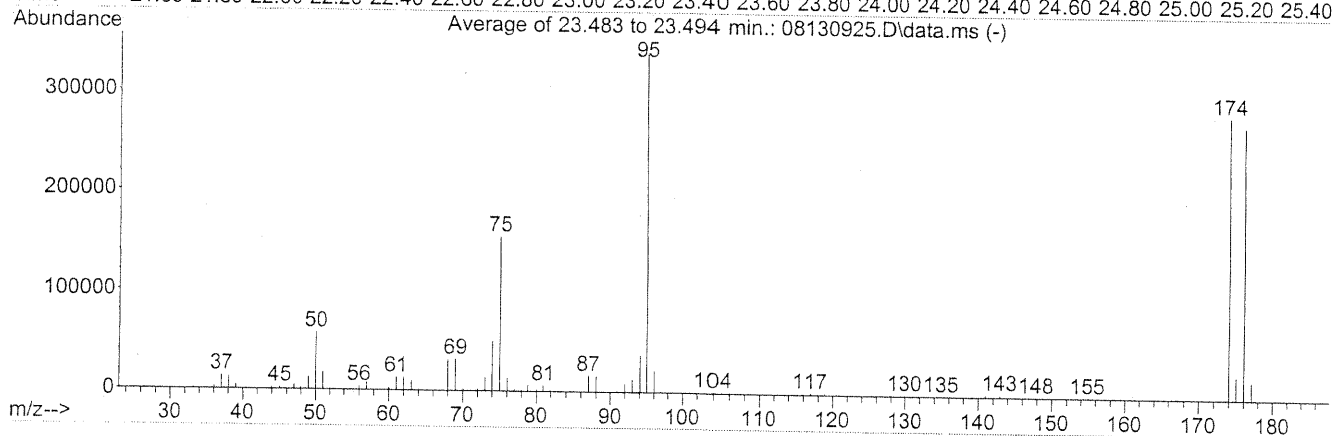
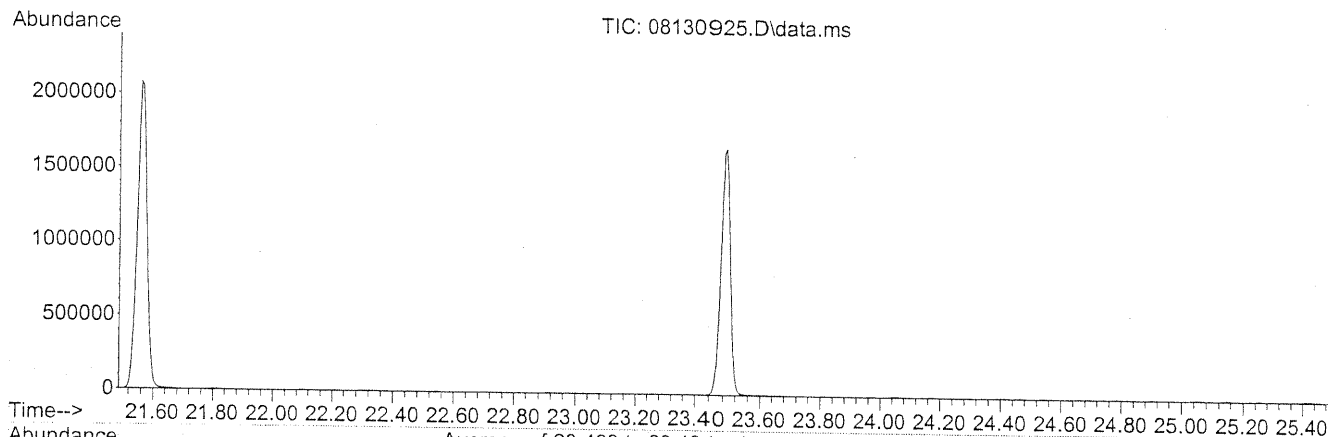
*— R 8/26/09*

## BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS09\Data\2009\_08\13\  
 Data File : 08130925.D  
 Acq On : 14 Aug 2009 1:14  
 Operator : EM  
 Sample : TO-15 BFB Standard (200ml)  
 Misc : S20-08130905  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Mon Jul 27 09:38:25 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

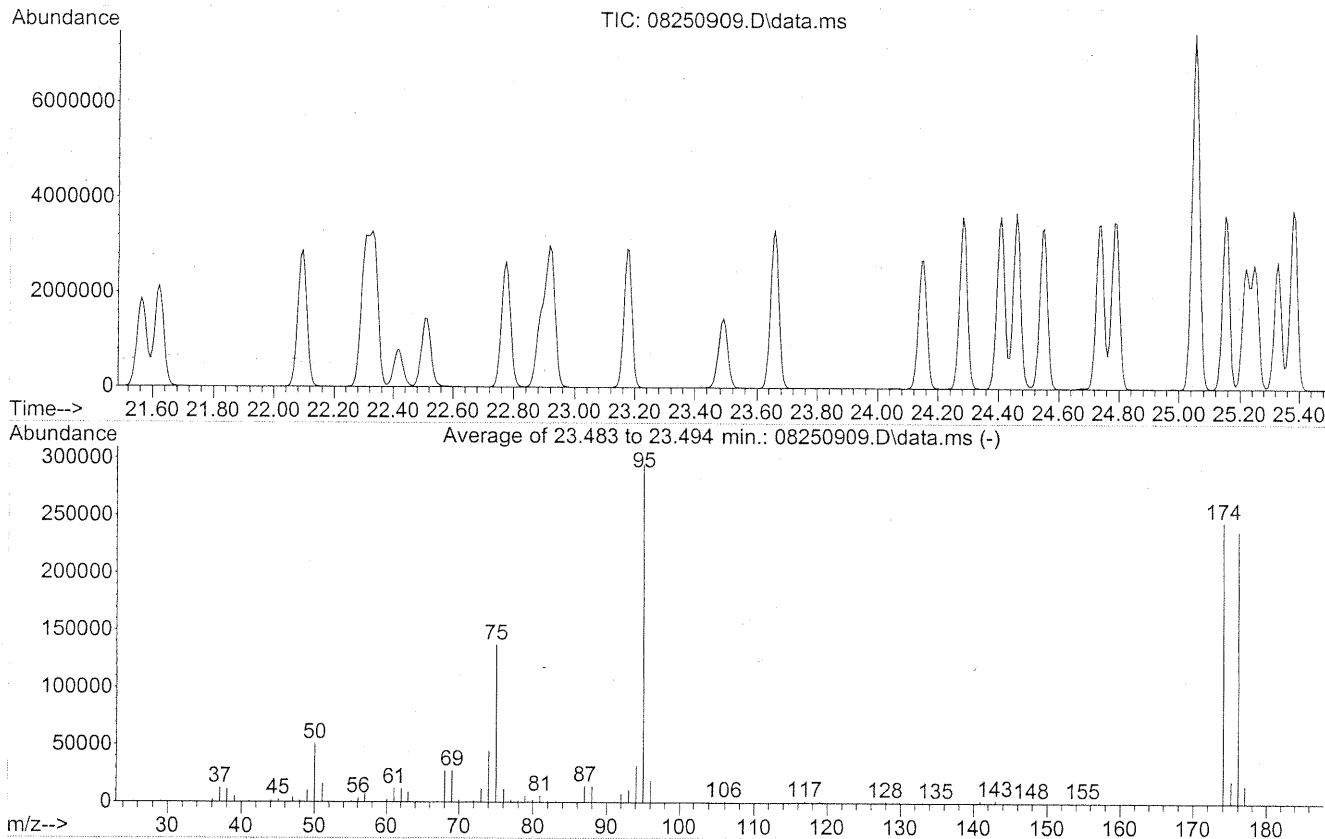
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.9	57432	PASS
75	95	30	66	45.6	154987	PASS
95	95	100	100	100.0	339563	PASS
96	95	5	9	6.4	21896	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.2	282475	PASS
175	174	4	9	8.1	22795	PASS
176	174	93	101	96.4	272171	PASS
177	176	5	9	6.4	17522	PASS

*EM* 8/14/09

Data Path : J:\MS09\Data\2009\_08\25\  
 Data File : 08250909.D  
 Acq On : 25 Aug 2009 7:36  
 Operator : EM  
 Sample : 25ng TO-15 CCV STD  
 Misc : S20-08130905/S20-08100902  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M  
 Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)  
 Last Update : Fri Aug 14 07:39:36 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.3	50859	PASS
75	95	30	66	46.7	137400	PASS
95	95	100	100	100.0	294400	PASS
96	95	5	9	6.3	18677	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.2	244992	PASS
175	174	4	9	8.0	19568	PASS
176	174	93	101	96.9	237419	PASS
177	176	5	9	6.6	15616	PASS

*EM 8/25/09*

## RUN LOGS

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment	
1	08/13/09 6:23	08130901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass	
2	08/13/09 7:04	08130902.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220902	EM	16	Pass	
3	08/13/09 8:54	08130903.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Pass as MB	
4	08/13/09 10:01	08130904.D	P0902767-001 (5ml)	[REDACTED]	EM	1	Case File	
5	08/13/09 10:43	08130905.D	P0902767-002 (0.5ml)	[REDACTED]	EM	1	↓	
6	08/13/09 11:34	08130906.D	P0902780-001 (0.5ml)	[REDACTED]	EM	1	Case File	
7	08/13/09 12:15	08130907.D	P0902678-013 (30ml)	[REDACTED]	EM	5		
8	08/13/09 12:57	08130908.D	25ng TO-15 LCS STD	S20-07200901/S20-08070903	EM	2	Pass, Acrylonitrile	
9	08/13/09 13:52	08130909.D	P0902780-002 (0.5ml)	[REDACTED]	EM	1		
10	08/13/09 14:33	08130910.D	P0902780-001 (1ml)	[REDACTED]	EM	1		
11	08/13/09 15:15	08130911.D	P0902780-001 dup (1ml)	[REDACTED]	EM	1	Pass as Lab Dup.	
12	08/13/09 16:15	08130912.D	P0902780-002 dil (0.1ml)	[REDACTED]	EM	1		
13	08/13/09 16:56	08130913.D	25ng std check	S20-08130905/S20-08070903	EM	2		
14	08/13/09 17:37	08130914.D	P0902678-013 dil (15ml)	[REDACTED]	EM	5		
15	08/13/09 18:19	08130915.D	P0902678-005 dil (100ml)	[REDACTED]	EM	9		
16	08/13/09 19:00	08130916.D	P0902678-011 dil (100ml)	[REDACTED]	EM	14		
17	08/13/09 19:41	08130917.D	P0902678-012 dil (100ml)	[REDACTED]	EM	15		
18	08/13/09 20:23	08130918.D	P0902678-014 (1000ml)	[REDACTED]	EM	6		
19	08/13/09 21:04	08130919.D	P0902678-014 dil (100ml)	[REDACTED]	EM	6		
20	08/13/09 21:46	08130920.D	P0902678-015 (1000ml)	[REDACTED]	EM	7		
21	08/13/09 22:28	08130921.D	P0902678-015 dil (100ml)	[REDACTED]	EM	7		
22	08/13/09 23:09	08130922.D	5ng std check	S20-08130905/S20-08100904	EM	1		
23	08/13/09 23:51	08130923.D	25ng std check	S20-08130905/S20-08100902	EM	1		
24	08/14/09 0:33	08130924.D	System Check		EM	4		
25	08/14/09 1:14	08130925.D	TO-15 BFB Standard (200ml)	S20-08130905	EM	1	Pass	
26	08/14/09 1:56	08130926.D	0.1ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	ICAL R9081309.M	
27	08/14/09 2:38	08130927.D	0.2ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8		
28	08/14/09 3:19	08130928.D	0.5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1		
29	08/14/09 4:01	08130929.D	1.0ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1		
30	08/14/09 4:43	08130930.D	5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1		
31	08/14/09 5:24	08130931.D	25ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1		
32	08/14/09 6:06	08130932.D	50ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1		
33	08/14/09 6:47	08130933.D	100ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1		
34	08/14/09 7:29	08130934.D	25ng TO-15 ICV STD	S20-08130905/S20-08070903	EM	2		Pass
35	08/14/09 8:26	08130935.D	25ng TO-15 ICV STD	S20-08130905/S20-07270906	EM	10		Case File Extra

ICAL R9081309.M: 0.2ng-100ng: 1-Butanol, n-Butyl Acetate, 4-methyl-2-pentanone  
 0.5ng-100ng: Vinyl Acetate, 2-Butanone, Ethyl Acetate  
 Methyl Methacrylate, 2-Hexanone  
 0.1ng-50ng: TBA  
 0.1ng-100ng: Rest of compounds.

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/25/09 2:03	08250901.D	BFB Tune Standard (200ml)	S20-08130905	EM	1	
2	08/25/09 2:45	08250902.D	0.5ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	13	
3	08/25/09 3:26	08250903.D	1ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	13	
4	08/25/09 4:08	08250904.D	5ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	13	
5	08/25/09 4:50	08250905.D	25ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	14	
6	08/25/09 5:32	08250906.D	50ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	14	
7	08/25/09 6:13	08250907.D	100ng MAPH ICAL STD	S20-08130905/S20-08210904	EM	14	
8	08/25/09 6:55	08250908.D	25ng MAPH ICV STD	S20-08130905/S20-08070903	EM	2	
9	08/25/09 7:36	08250909.D	25ng TO-15 CCV STD	S20-08130905/S20-08100902	EM	1	Pass
10	08/25/09 8:18	08250910.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
11	08/25/09 9:19	08250911.D	P0902652-001 (70ml)	[REDACTED]	EM	11	
12	08/25/09 10:00	08250912.D	P0902924-001 (3ml)	[REDACTED]	EM	1	Case File
13	08/25/09 10:48	08250913.D	P0902924-002 (25ml)	[REDACTED]	EM	15	
14	08/25/09 11:30	08250914.D	P0902924-001 (25ml)	[REDACTED]	EM	12	
15	08/25/09 12:11	08250915.D	P0902924-001 dup (25ml)	[REDACTED]	EM	12	Pass as Lab Dup.
16	08/25/09 12:53	08250916.D	P0902924-003 (25ml)	[REDACTED]	EM	16	
17	08/25/09 13:35	08250917.D	25ng TO-15/MAPH LCS STD	S20-08130905/S20-08070903	EM	2	Pass
18	08/25/09 14:16	08250918.D	P0902857-002 dil (50ml)	Env. H & E 100455	EM	5	
19	08/25/09 15:01	08250919.D	P0902856-002 (4ml)	[REDACTED]	EM	1	
20	08/25/09 16:30	08250920.D	Blank (200ml)	S20-08130905	EM	1	
21	08/25/09 17:12	08250921.D	0.5ng TO-15 RL Check	S20-08130905/S20-08240905	EM	1	
22	08/25/09 17:53	08250922.D	P0902857-003 (1000ml)	Env. H & E 100456	EM	7	
23	08/25/09 18:35	08250923.D	P0902857-002 (500ml)	Env. H & E 100455	EM	5	
24	08/25/09 19:16	08250924.D	P0902857-001 (1000ml)	Env. H & E 100452	EM	6	
25	08/25/09 19:58	08250925.D	P0902857-004 (500ml)	Env. H & E 100459	EM	8	
26	08/25/09 20:40	08250926.D	P0902857-004 dil (50ml)	Env. H & E 100459	EM	8	
27	08/25/09 21:22	08250927.D	P0902857-005 (500ml)	Env. H & E 100461	EM	9	
28	08/25/09 22:03	08250928.D	P0902857-005 dil (50ml)	Env. H & E 100461	EM	9	
29	08/25/09 22:45	08250929.D	P0902857-006 (500ml)	Env. H & E 100462	EM	10	
30	08/25/09 23:27	08250930.D	P0902857-006 dil (50ml)	Env. H & E 100462	EM	10	
31	08/26/09 0:09	08250931.D	System Check		EM	4	
32	08/26/09 0:51	08250932.D	CAS QC CAN/FC/AVG (1000ml)	AC01453/FC00269/AVG00437	EM	3	Pass #143 39
33	08/26/09 1:32	08250933.D	CAS QC CAN/FC/AVG (1000ml)	AC01062/FC00361/AVG00768	EM	11	↓
34	08/26/09 2:14	08250934.D	CAS QC CAN/FC/AVG (1000ml)	AC00949/FC00569/AVG01090	EM	12	
35	08/26/09 2:56	08250935.D	CAS QC CAN/FC/AVG (1000ml)	AC01563/FC00660/AVG01087	EM	13	
36	08/26/09 3:38	08250936.D	CAS QC CAN/FC/AVG (1000ml)	AC01318/FC00651/AVG00556	EM	14	
37	08/26/09 4:20	08250937.D	CAS QC CAN/FC/AVG (1000ml)	AC00731/FC00665/AVG01146	EM	15	
38	08/26/09 5:02	08250938.D	CAS QC CAN/FC/AVG (1000ml)	AC01627/FC00204/AVG01123	EM	16	
39	08/26/09 5:44	08250939.D	System Check		EM	4	