Columbia Analytical Services™ 2655 Park Center Drive, Suite A | Simi Valley, CA 93065 | 805.526.7161 | 805.526.7270 fax | www.caslab.com

LABORATORY REPORT

September 16, 2009

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

RE: 16512

Dear Brian:

Enclosed are the results of the samples submitted to our laboratory on August 20, 2009. For your reference, these analyses have been assigned our service request number P0902876.

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. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 652 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

Kate Aguilera
Project Manager

Client: Environmental Health & Engineering, Incorporated CAS Project No: P0902876
Project: 16512

CASE NARRATIVE

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

Volatile Organic Compound Analysis

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

The upper control criterion was exceeded for Vinyl Acetate in the Continuing Calibration Verification (CCV) analyzed on August 26, 2009. A potential for a high bias exists for this analyte which was detected in sample 102472. The sample was reanalyzed on a passing CCV on September 3, 2009 and the results are comparable. The data has been qualified accordingly. Since the apparent problem equates to a potential high bias, the data quality is not affected for field samples that did not contain this analyte.

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

Folder: P0902876

Project: 16512

Detailed Sample Information

CAS Sample ID	Client Sample ID	Container Type	Pi1 (Hg)	Pi1 (psig)	Pf1	Pi2 (Hg)	Pi2 (psig)	Pf2	Cont ID	Order #	FC ID	Bottle Order #
P0902876-001.01	102349	6.0 L-Summa Canister Ambient	-4.0	-2.0	3.5				AC01172	**14275**		
P0902876-002.01	102350	6.0 L-Summa Canister Ambient	-11.8	-5.8	3.5				AC01185	**14275**		
P0902876-003.01	102351	6.0 L-Summa Canister Ambient	-5.0	-2.5	3.5				AC00976	**14275**		
P0902876-004.01	102352	6.0 L-Summa Canister Ambient	-5.4	-2.7	3.7				AC01257	**14275**		
P0902876-005.01	102353	6.0 L-Summa Canister Ambient	-2.2	-1.1	3.5				AC00672	**14275**		
P0902876-006.01	102470	6.0 L-Summa Canister Ambient	-5.8	-2.8	3.5				AC01374	**14275**		
P0902876-007.01	102471	6.0 L-Summa Canister Ambient	-6.4	-3.1	3.5				AC01047	**14275**		
P0902876-008.01	102472	6.0 L-Summa Canister Ambient	-4.8	-2.4	3.5				AC01667	**14275**		
P0902876-009.01	102473	6.0 L-Summa Canister Ambient	-5.9	-2.9	3.5				AC00958	**14275**		
P0902876-010.01	102474	6.0 L-Summa Canister Ambient	-7.1	-3.5	3.5				AC00782	**14275**		
P0902876-011.01	102475	6.0 L-Summa Canister Ambient	-29.2	-14.3	3.5				AC01659	**14275**		

Detailed Sample Information

CAS Sample ID	Client Sample ID	Container Type	Pi1 (Hg)	Pi1 (psig)	Pf1	Pi2 (Hg)	Pi2 (psig)	Pf2	Cont ID	Order #	FC ID	Bottle Order #

Miscellaneous Items - received

FC00690
FC00220
AVG01116
AVG00577
FC00256
AVG01132
FC00780
AVG00806
FC00580
AVG00906
FC00678
FC00515
AVG01072
AVG01124
FC00190
AVG00464
FC00783
FC00409
FC00335
AVG01172
AVG00900
AVG00986

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 8/19/09

FROM: Environmental Health and Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725 PO902876

TO: COLUMBIA ANALYTICAL

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.
4.0	102349	Summa	EPA TO-15	2HR FLOW 8/18/09
11.8	102350			
5.0	102351			
5.4	102352			
2.2	102353			
5.8	102470			2HR FLOW 8/19/09
6.4	102471			
4.8	102472			
5.9	102473			
7.1	102474			
29.2	102475			

Special instructions:

☒ Standard turn around time ☐ Rush by _____ (date/time) ☐ Other _____

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES** ☒ Electronic transfer - datacoordinator@eheinc.com

☒ Additional report recipient MFRAGALA@EHEINC.COM

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 8/19/09

Received by: FEDEX of (company name) _____ Date: _____

Relinquished by: FEDEX of (company name) _____ Date: _____

Received by: _____ of (company name) CAL Date: 08/20/09 0950

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Lab Data
Received by: _____ of Environmental Health & Engineering, Inc. Date: _____

Page 1 of 1

5

WHITE-EH&E FILE COPY YELLOW-LAB COPY PINK-PROJECT MANAGER COPY GOLD-DATA COORDINATOR COPY

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Environmental Health & Engineering, Incorporated Work order: P0902876

Project: Project # 16512 / 16512

Sample(s) received on: 8/20/2009 Date opened: 8/20/2009 by: ADAVID

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

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

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0902876-001.01	6.0 L Ambient Can					
P0902876-002.01	6.0 L Ambient Can					
P0902876-003.01	6.0 L Ambient Can					
P0902876-004.01	6.0 L Ambient Can					
P0902876-005.01	6.0 L Ambient Can					
P0902876-006.01	6.0 L Ambient Can					

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

Chain of Custody is missing time collected

6

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

Columbia Analytical Services, Inc.

Sample Acceptance Check Form

Client: Environmental Health & Engineering, Incorporated Work order: P0902876

Project: Project # 16512 / 16512

Sample(s) received on: 8/20/2009 Date opened: 8/20/2009 by: ADAVID

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0902876-007.01	6.0 L Ambient Can					
P0902876-008.01	6.0 L Ambient Can					
P0902876-009.01	6.0 L Ambient Can					
P0902876-010.01	6.0 L Ambient Can					
P0902876-011.01	6.0 L Ambient Can					

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

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

RESULTS OF VOLATILE ORGANIC ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102349**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01172

Date Collected: 8/18/09
Date Received: 8/20/09
Date Analyzed: 8/25 - 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)
0.20 Liter(s)

Initial Pressure (psig): -2.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**14**	0.72	**8.2**	0.42	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.8**	0.72	**0.56**	0.14	
74-87-3	**Chloromethane**	**0.89**	0.14	**0.43**	0.069	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.72	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.14	ND	0.056	
106-99-0	1,3-Butadiene	ND	0.14	ND	0.065	
74-83-9	Bromomethane	ND	0.14	ND	0.037	
75-00-3	Chloroethane	ND	0.14	ND	0.054	
64-17-5	**Ethanol**	**1,100**	7.2	**590**	3.8	**D**
75-05-8	**Acetonitrile**	**110**	0.72	**64**	0.43	
107-02-8	**Acrolein**	**4.7**	0.72	**2.1**	0.31	
67-64-1	**Acetone**	**210**	7.2	**88**	3.0	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.14	**0.26**	0.025	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**74**	0.72	**30**	0.29	
107-13-1	Acrylonitrile	ND	0.72	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.14	ND	0.036	
75-09-2	Methylene Chloride	ND	0.72	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.14	ND	0.046	
76-13-1	**Trichlorotrifluoroethane**	**0.61**	0.14	**0.079**	0.019	
75-15-0	**Carbon Disulfide**	**2.7**	0.72	**0.87**	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	0.14	ND	0.036	
75-34-3	1,1-Dichloroethane	ND	0.14	ND	0.035	
1634-04-4	Methyl tert-Butyl Ether	ND	0.14	ND	0.040	
108-05-4	Vinyl Acetate	ND	7.2	ND	2.0	
78-93-3	**2-Butanone (MEK)**	**6.1**	0.72	**2.1**	0.24	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102349** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-001

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25 - 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AC01172

Initial Pressure (psig): -2.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.14	ND	0.036	
141-78-6	**Ethyl Acetate**	**9.6**	0.72	**2.7**	0.20	
110-54-3	**n-Hexane**	**0.87**	0.72	**0.25**	0.20	
67-66-3	**Chloroform**	**2.0**	0.14	**0.42**	0.029	
109-99-9	Tetrahydrofuran (THF)	ND	0.72	ND	0.24	
107-06-2	**1,2-Dichloroethane**	**2.2**	0.14	**0.53**	0.035	
71-55-6	1,1,1-Trichloroethane	ND	0.14	ND	0.026	
71-43-2	**Benzene**	**0.96**	0.14	**0.30**	0.045	
56-23-5	**Carbon Tetrachloride**	**0.56**	0.14	**0.089**	0.023	
110-82-7	Cyclohexane	ND	0.72	ND	0.21	
78-87-5	1,2-Dichloropropane	ND	0.14	ND	0.031	
75-27-4	**Bromodichloromethane**	**0.36**	0.14	**0.054**	0.021	
79-01-6	Trichloroethene	ND	0.14	ND	0.027	
123-91-1	1,4-Dioxane	ND	0.72	ND	0.20	
80-62-6	Methyl Methacrylate	ND	0.72	ND	0.17	
142-82-5	**n-Heptane**	**1.6**	0.72	**0.40**	0.17	
10061-01-5	**cis-1,3-Dichloropropene**	**6.9**	0.72	**1.5**	0.16	
108-10-1	**4-Methyl-2-pentanone**	**2.2**	0.72	**0.54**	0.17	
10061-02-6	**trans-1,3-Dichloropropene**	**4.8**	0.72	**1.1**	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.14	ND	0.026	
108-88-3	**Toluene**	**21**	0.72	**5.6**	0.19	
591-78-6	**2-Hexanone**	**0.93**	0.72	**0.23**	0.17	
124-48-1	**Dibromochloromethane**	**0.20**	0.14	**0.023**	0.017	
106-93-4	1,2-Dibromoethane	ND	0.14	ND	0.019	
123-86-4	**n-Butyl Acetate**	**4.6**	0.72	**0.98**	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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102349** CAS Sample ID: P0902876-001
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25 - 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AC01172

Initial Pressure (psig): -2.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.9**	0.72	**0.62**	0.15	
127-18-4	**Tetrachloroethene**	**0.30**	0.14	**0.044**	0.021	
108-90-7	Chlorobenzene	ND	0.14	ND	0.031	
100-41-4	**Ethylbenzene**	**1.2**	0.72	**0.27**	0.16	
179601-23-1	**m,p-Xylenes**	**3.2**	0.72	**0.73**	0.16	
75-25-2	Bromoform	ND	0.72	ND	0.069	
100-42-5	**Styrene**	**2.8**	0.72	**0.67**	0.17	
95-47-6	**o-Xylene**	**1.3**	0.72	**0.31**	0.16	
111-84-2	**n-Nonane**	**3.7**	0.72	**0.71**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.14	ND	0.021	
98-82-8	Cumene	ND	0.72	ND	0.15	
80-56-8	**alpha-Pinene**	**110**	0.72	**19**	0.13	
103-65-1	n-Propylbenzene	ND	0.72	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.72	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.72	ND	0.15	
95-63-6	**1,2,4-Trimethylbenzene**	**2.2**	0.72	**0.44**	0.15	
100-44-7	Benzyl Chloride	ND	0.14	ND	0.028	
541-73-1	1,3-Dichlorobenzene	ND	0.14	ND	0.024	
106-46-7	**1,4-Dichlorobenzene**	**0.29**	0.14	**0.048**	0.024	
95-50-1	1,2-Dichlorobenzene	ND	0.14	ND	0.024	
5989-27-5	**d-Limonene**	**48**	0.72	**8.6**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.72	ND	0.074	
120-82-1	1,2,4-Trichlorobenzene	ND	0.72	ND	0.096	
91-20-3	Naphthalene	ND	0.72	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.72	ND	0.067	

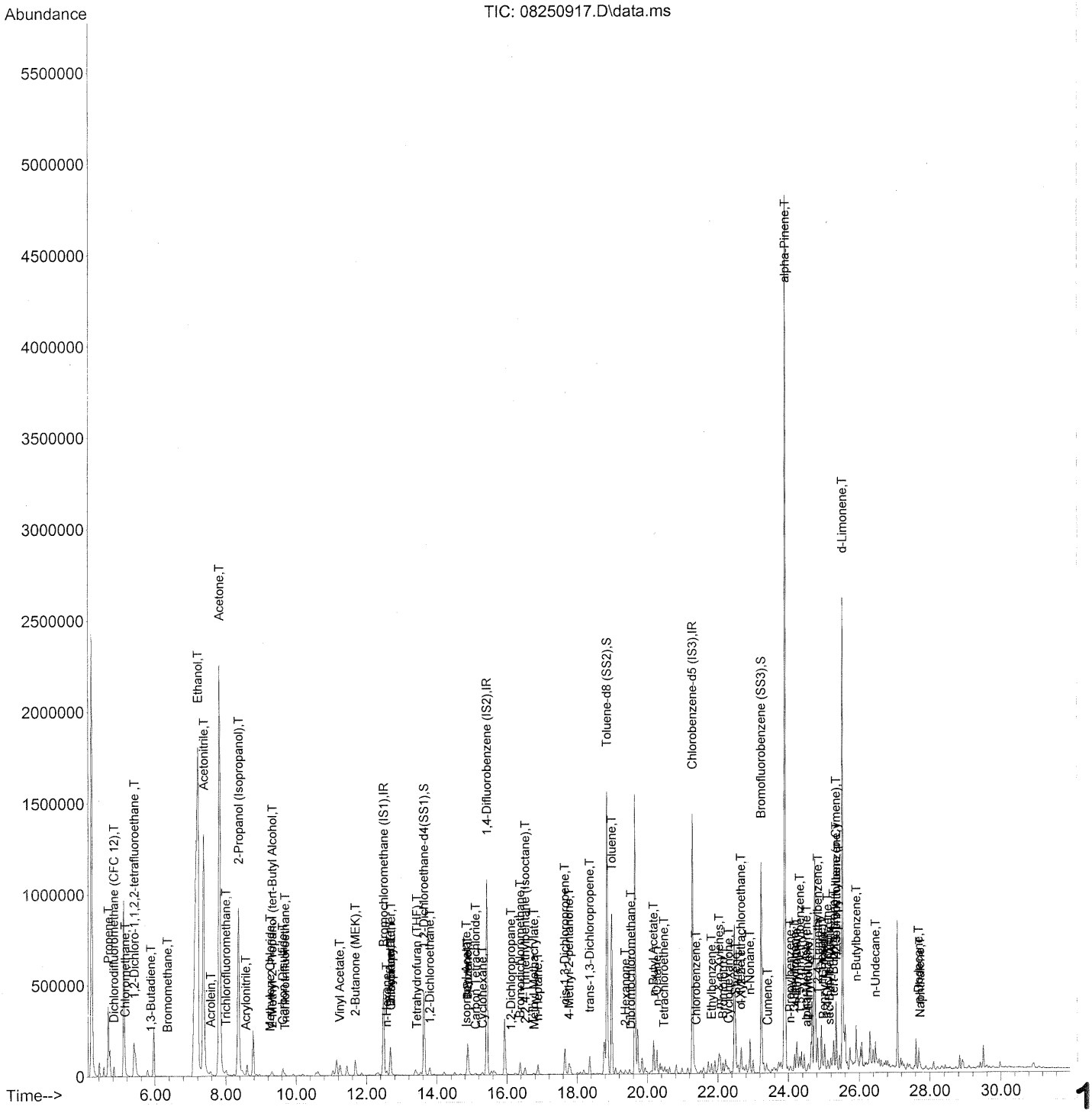
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

VM 8/31/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	246027	25.000 ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.42	114	1234077	25.000 ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	592143	25.000 ng		-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.63	65	463040	21.654 ng		-0.03
Spiked Amount 25.000			Recovery =	86.60%		
57) Toluene-d8 (SS2)	18.85	98	1351961	26.130 ng		-0.02
Spiked Amount 25.000			Recovery =	104.52%		
73) Bromofluorobenzene (SS3)	23.23	174	386292	28.311 ng		-0.01
Spiked Amount 25.000			Recovery =	113.24%		
Target Compounds						Qvalue
2) Propene	4.66	42	167389m	9.915 ng		
3) Dichlorodifluoromethan...	4.83	85	53715	1.947 ng		99
4) Chloromethane	5.15	50	11522	0.621 ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	2828	0.252 ng		85
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.87	54	1199	0.094 ng	#	55
8) Bromomethane	6.35	94	605	0.056 ng		86
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.21	45	6472582	604.825 ng		100
11) Acetonitrile	7.38	41	2336830	74.562 ng		100
12) Acrolein	7.57	56	26927	3.306 ng		100
13) Acetone	7.82	58	1473833	145.962 ng		92
14) Trichlorofluoromethane	8.01	101	25268	1.013 ng		99
15) 2-Propanol (Isopropanol)	8.37	45	2065987	52.066 ng		99
16) Acrylonitrile	8.57	53	1058	0.058 ng		92
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.32	59	11630	0.330 ng	#	59
19) Methylene Chloride	9.26	84	2323	0.171 ng		83
20) 3-Chloro-1-propene (Al...	9.41	41	285	N.D.		
21) Trichlorotrifluoroethane	9.68	151	3856	0.425 ng		94
22) Carbon Disulfide	9.62	76	90386	1.891 ng		99
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.20	73	578	N.D.		
26) Vinyl Acetate	11.23	86	7870	3.830 ng	#	76
27) 2-Butanone (MEK)	11.68	72	39111	4.290 ng	#	88
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.68	87	3340	0.274 ng	#	1
30) Ethyl Acetate	12.67	61	31942	6.725 ng		98
31) n-Hexane	12.57	57	14845	0.611 ng		97

See Attached

13

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.69	83	30315	1.417 ng		99
34) Tetrahydrofuran (THF)	13.42	72	4385	0.451 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	29500	1.509 ng		99
38) 1,1,1-Trichloroethane	14.17	97	98	N.D.		
39) Isopropyl Acetate	14.84	61	2799	0.306 ng	#	1
40) 1-Butanol	14.88	56	123826	7.731 ng		81
41) Benzene	14.87	78	36348	0.670 ng		96
42) Carbon Tetrachloride	15.10	117	6780	0.392 ng		95
43) Cyclohexane	15.29	84	7371	0.371 ng		99
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.11	63	938	0.069 ng	#	49
46) Bromodichloromethane	16.37	83	4536	0.254 ng		89
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.53	88	176	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	37387	0.585 ng		87
50) Methyl Methacrylate	16.77	100	263	0.053 ng	#	1
51) n-Heptane	16.88	71	16780	1.152 ng		98
52) cis-1,3-Dichloropropene	17.65	75	109251	4.838 ng		100
53) 4-Methyl-2-pentanone	17.76	58	20010	1.535 ng		99
54) trans-1,3-Dichloropropene	18.36	75	72337	3.369 ng		100
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	747246	14.695 ng		100
59) 2-Hexanone	19.37	43	22023	0.651 ng		95
60) Dibromochloromethane	19.53	129	1670	0.139 ng		92
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	129113	3.239 ng		92
63) n-Octane	20.27	57	25082	2.040 ng		99
64) Tetrachloroethene	20.47	166	2463	0.209 ng		91
65) Chlorobenzene	21.38	112	2923	0.093 ng	#	43
66) Ethylbenzene	21.82	91	47044	0.809 ng		96
67) m- & p-Xylenes	22.04	91	104051	2.213 ng		98
68) Bromoform	22.15	173	686	0.069 ng	#	55
69) Styrene	22.51	104	67700	1.992 ng	#	65
70) o-Xylene	22.65	91	44298	0.940 ng		95
71) n-Nonane	22.91	43	81376	2.598 ng		97
72) 1,1,2,2-Tetrachloroethane	22.65	83	1147	0.055 ng	#	1
74) Cumene	23.41	105	6232	0.105 ng		93
75) alpha-Pinene	23.90	93	2295807	75.207 ng		90
76) n-Propylbenzene	24.05	91	17999	0.240 ng		85
77) 3-Ethyltoluene	24.17	105	42661	0.750 ng		100
78) 4-Ethyltoluene	24.22	105	24050	0.436 ng		92
79) 1,3,5-Trimethylbenzene	24.32	105	21292	0.458 ng		100

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	1499	0.060 ng		88
81) 2-Ethyltoluene	24.56	105	19632	0.342 ng		100
82) 1,2,4-Trimethylbenzene	24.83	105	71754	1.513 ng		87
83) n-Decane	24.93	57	98197	3.184 ng		88
84) Benzyl Chloride	24.99	91	2957	0.067 ng		80
85) 1,3-Dichlorobenzene	25.02	146	108	N.D.		
86) 1,4-Dichlorobenzene	25.10	146	5202	0.203 ng		95
87) sec-Butylbenzene	25.16	105	3479	0.054 ng	#	72
88) 4-Isopropyltoluene (p-...	25.35	119	177958	3.115 ng		93
89) 1,2,3-Trimethylbenzene	25.35	105	28734	0.595 ng	#	39
90) 1,2-Dichlorobenzene	25.52	146	215	N.D.		
91) d-Limonene	25.53	68	674672	33.449 ng		77
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	46049	1.404 ng	#	67
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.73	128	25002	0.388 ng		93
96) n-Dodecane	27.69	57	38026	0.998 ng		96
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	17373	0.825 ng		92
99) tert-Butylbenzene	25.27	119	6171	0.134 ng		99
100) n-Butylbenzene	25.91	91	18233	0.345 ng	#	76

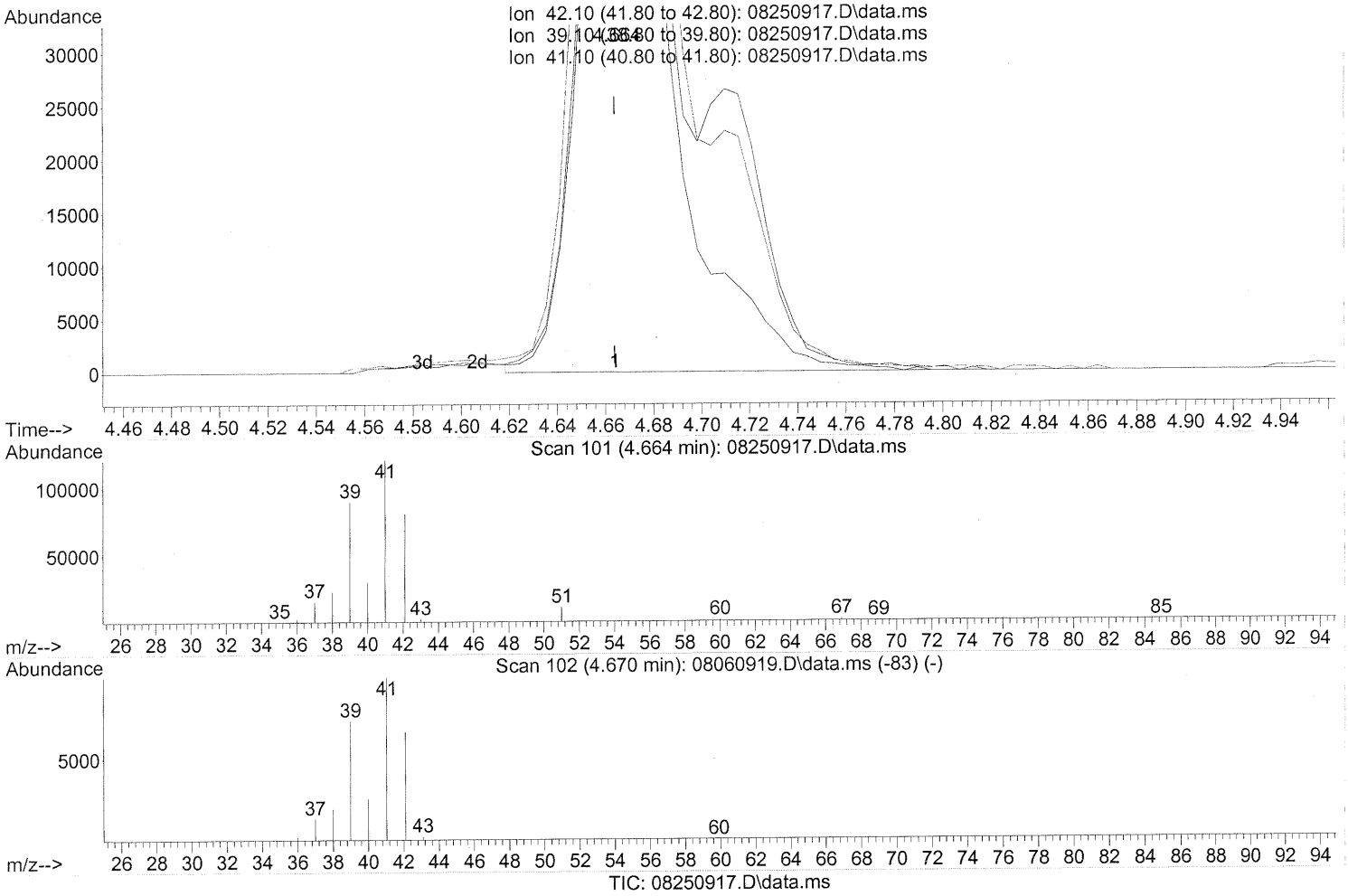
NOT NEEDED

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(2) Propene (T)

4.664min (+0.000) 10.86ng

response 183374

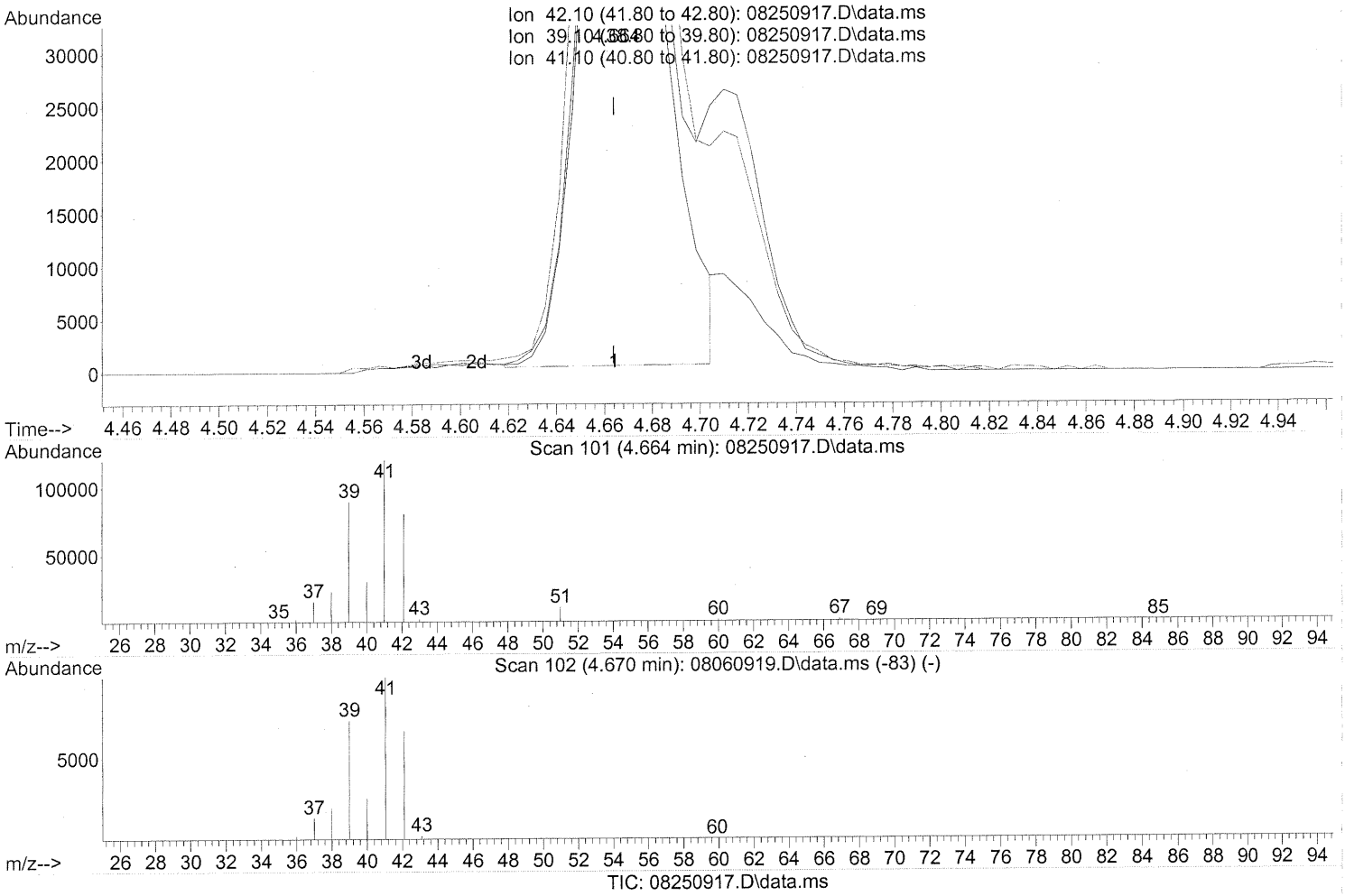
Ion	Exp%	Act%
42.10	100	100
39.10	111.90	128.66
41.10	150.20	163.39
0.00	0.00	0.00

SH

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(2) Propene (T)

4.664min (+0.000) 9.91ng m

response 167389

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	140.95#
41.10	150.20	178.99#
0.00	0.00	0.00

SH->IC
m 8/31/09

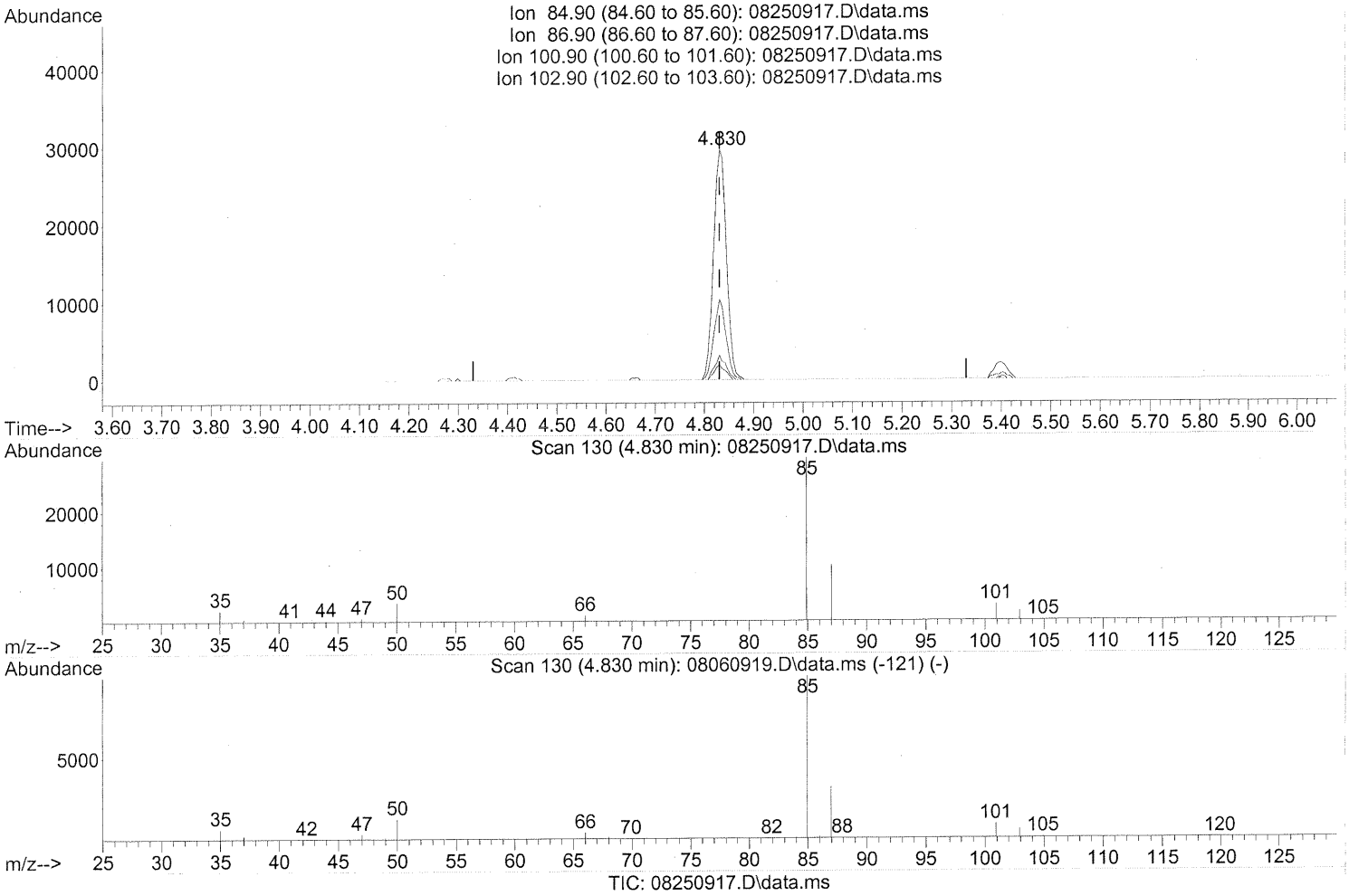
e 9/2/09

17

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (CFC 12) (T)

4.830min (+0.000) 1.95ng

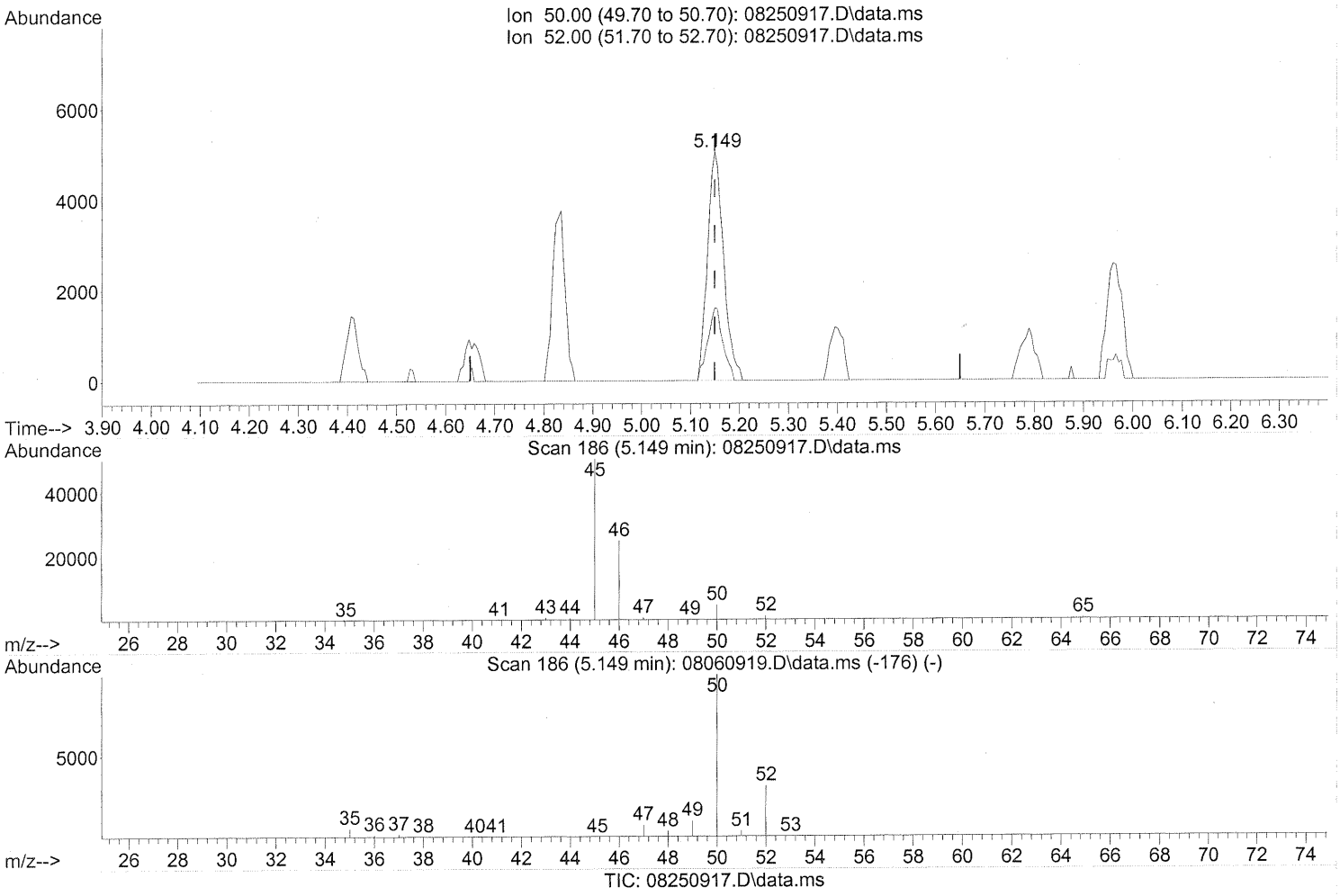
response 53715

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	33.25
100.90	8.80	9.35
102.90	5.20	5.55

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.149min (+0.000) 0.62ng

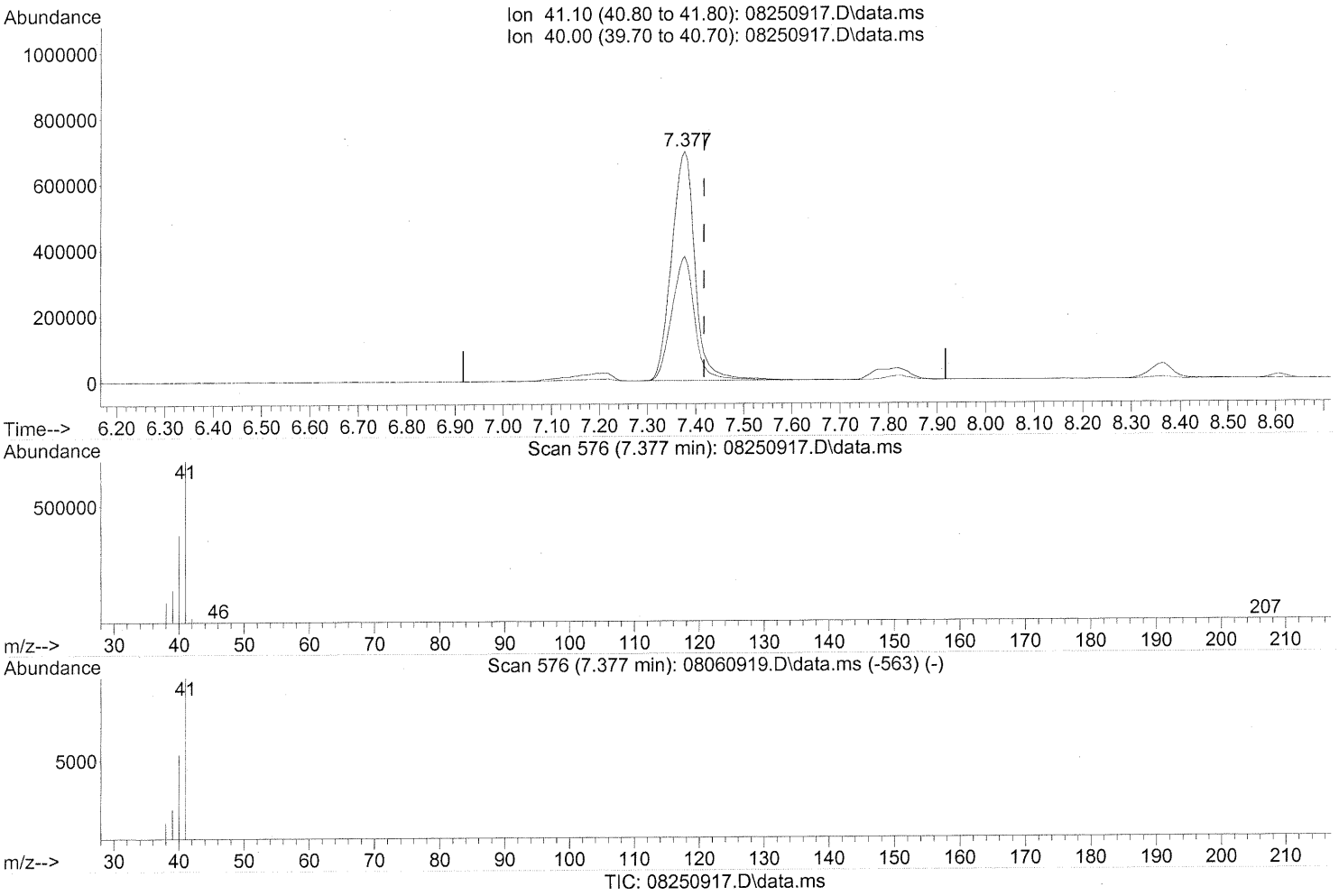
response 11522

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(11) Acetonitrile (T)

7.377min (-0.040) 74.56ng

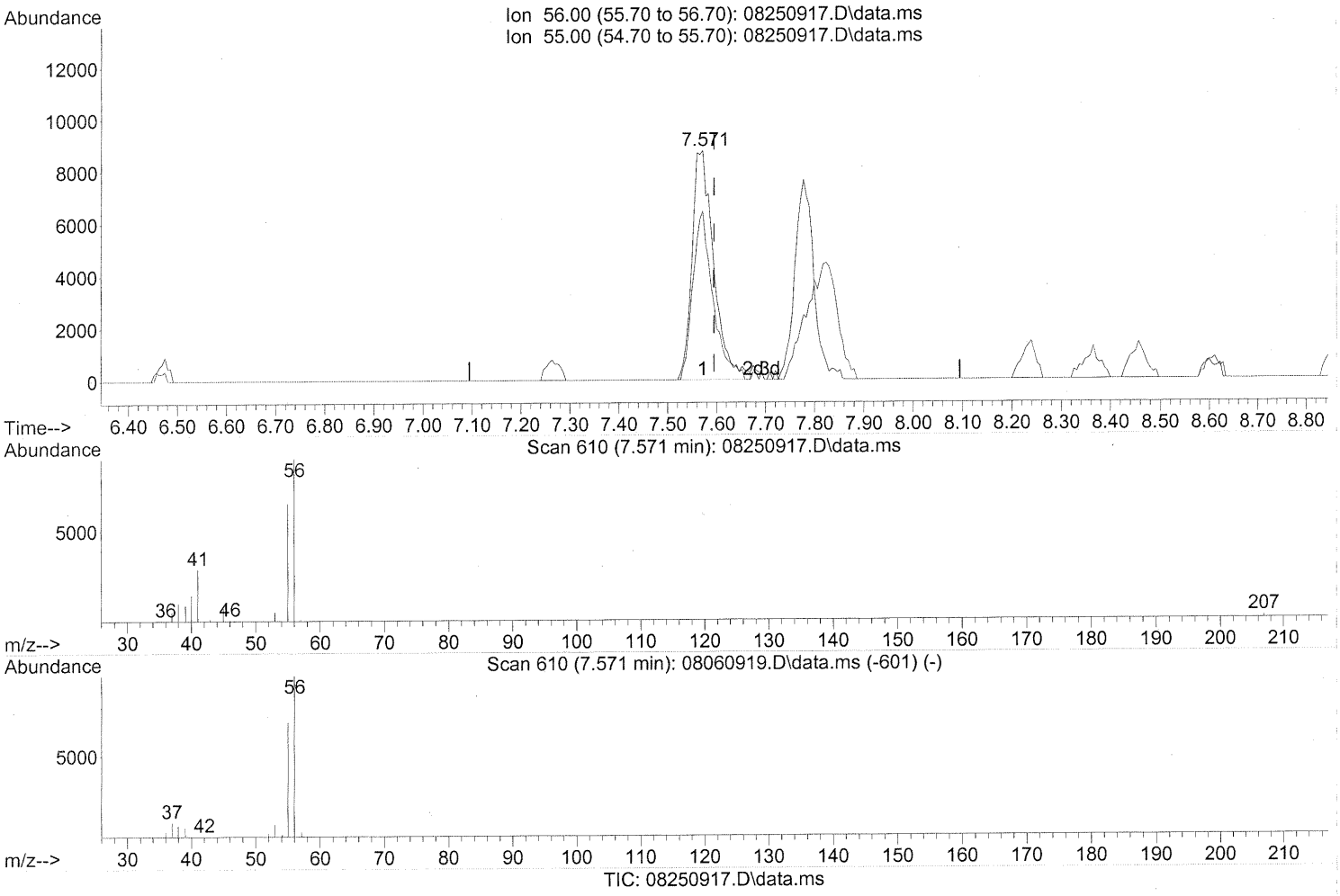
response 2336830

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(12) Acrolein (T)

7.571min (-0.023) 3.31ng

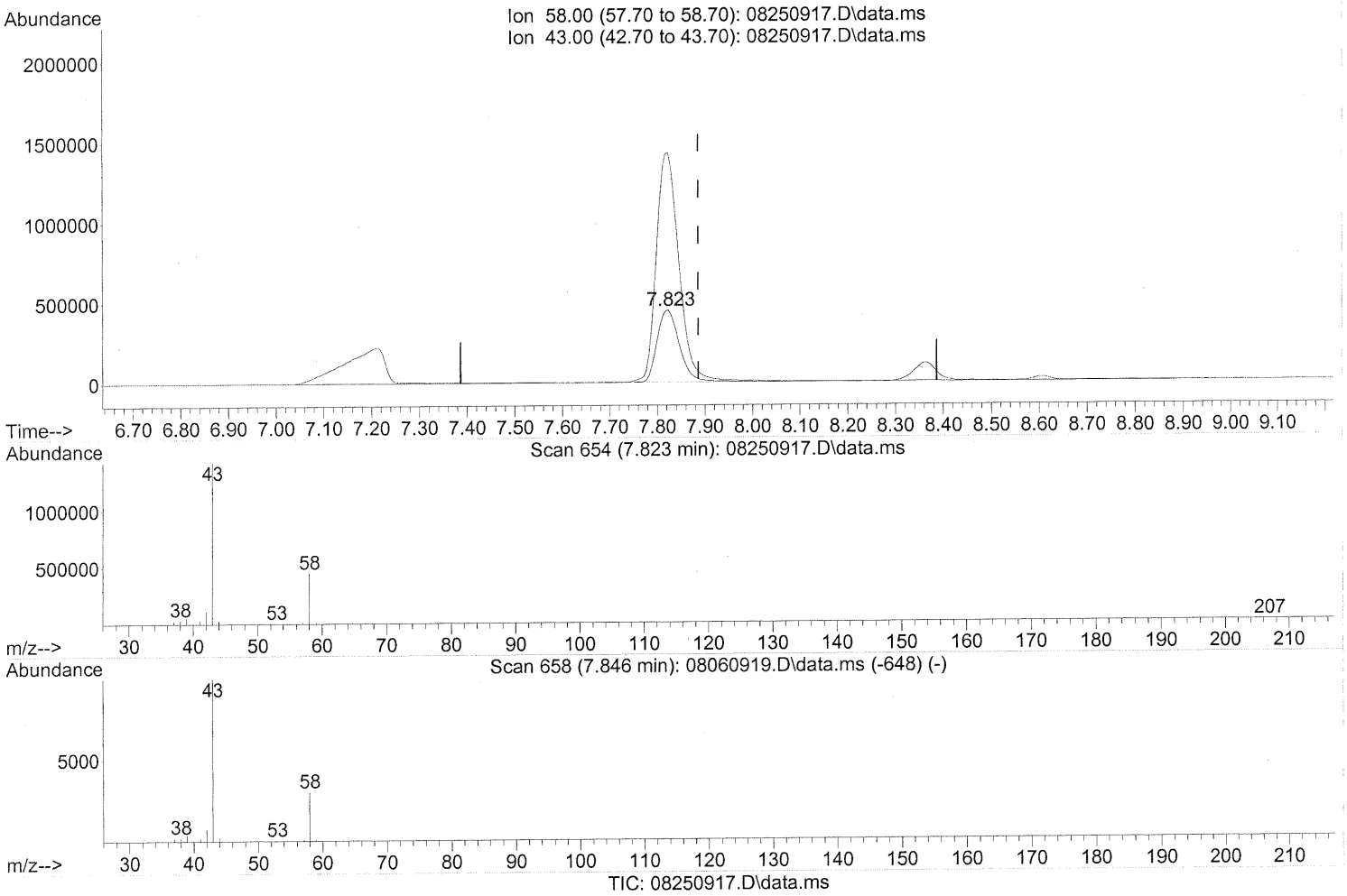
response 26927

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	68.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(13) Acetone (T)

7.823min (-0.063) 145.96ng

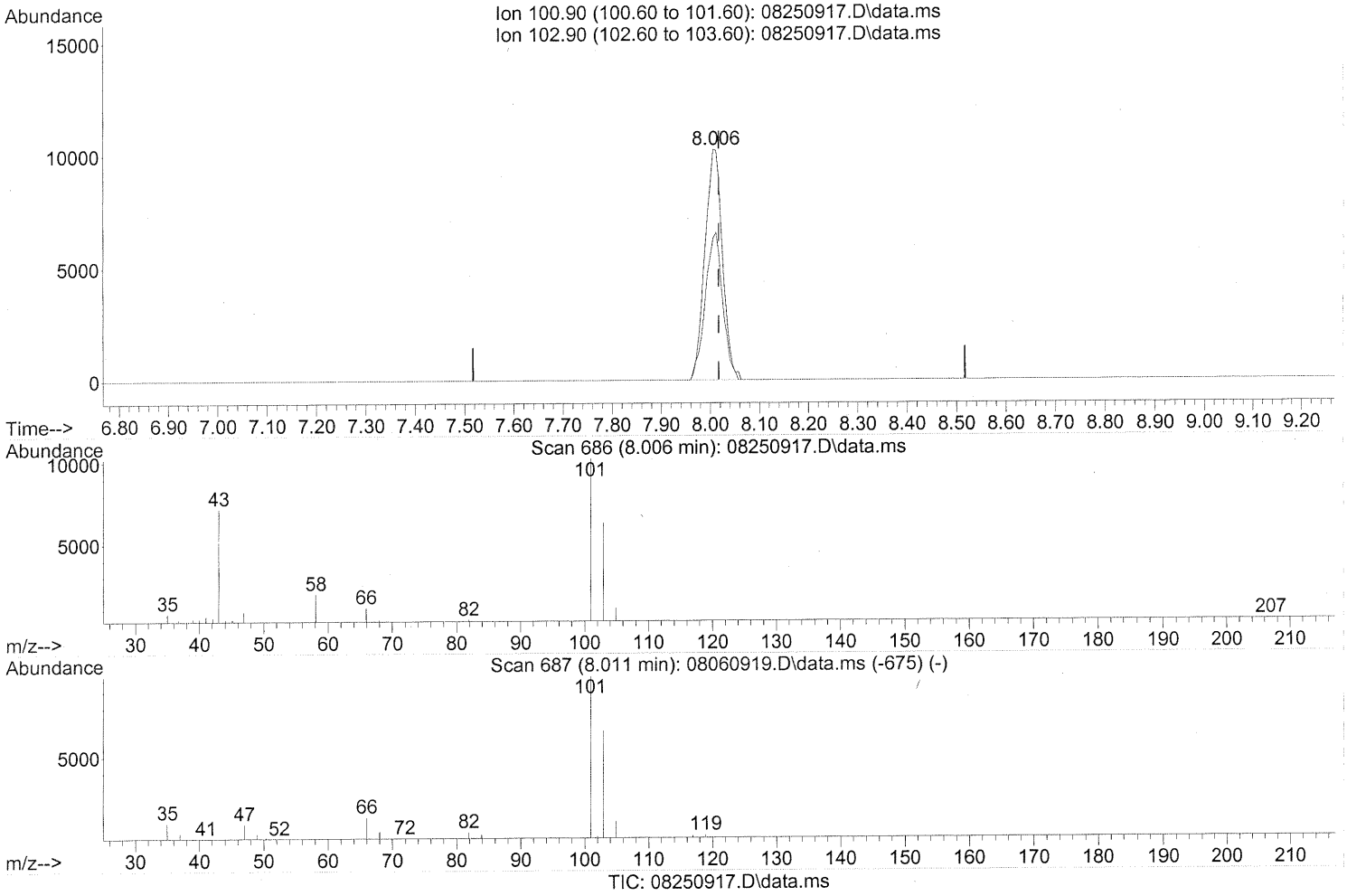
response 1473833

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	323.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(14) Trichlorofluoromethane (T)

8.006min (-0.011) 1.01ng

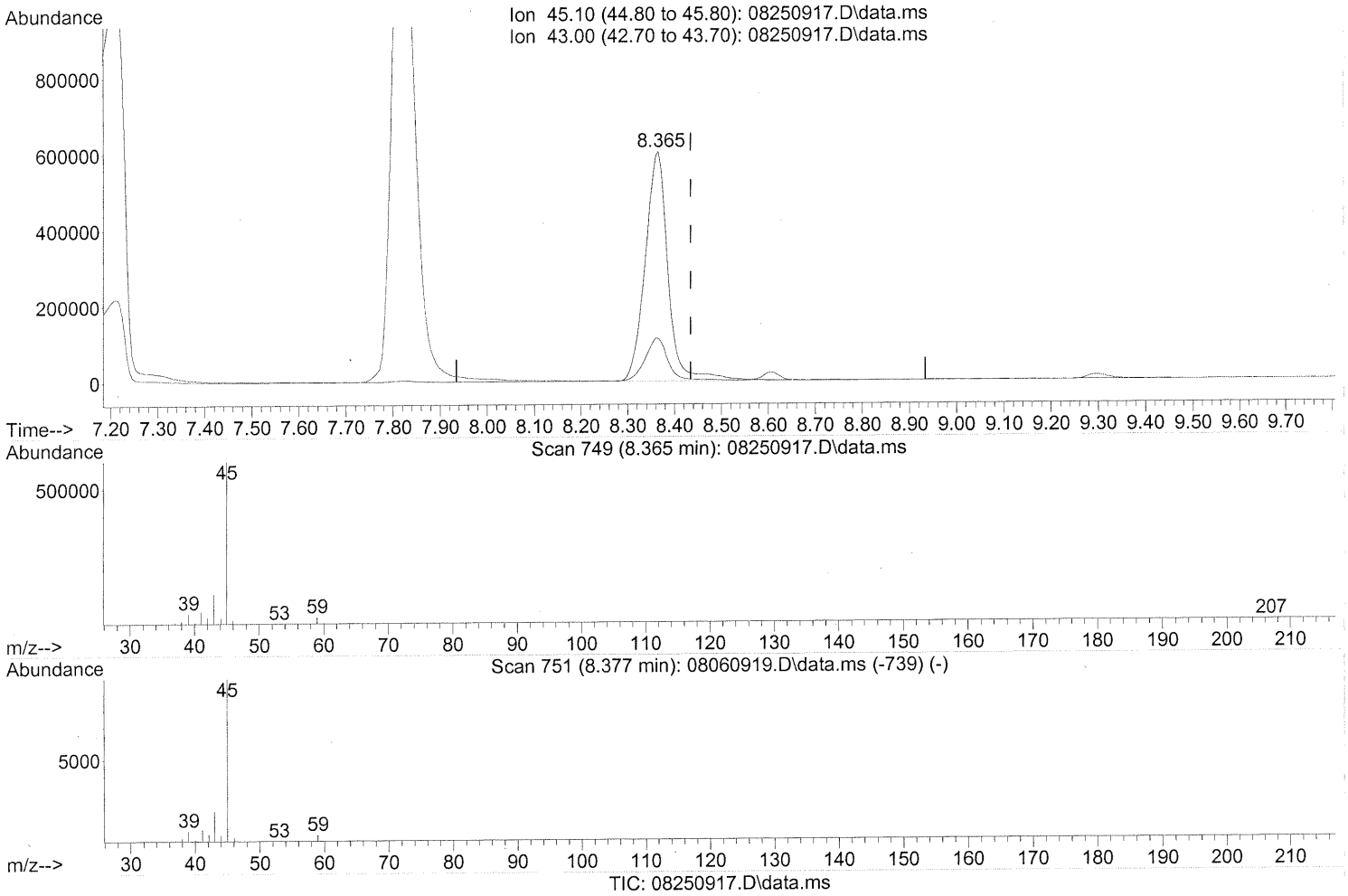
response 25268

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	63.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

8.365min (-0.068) 52.07ng

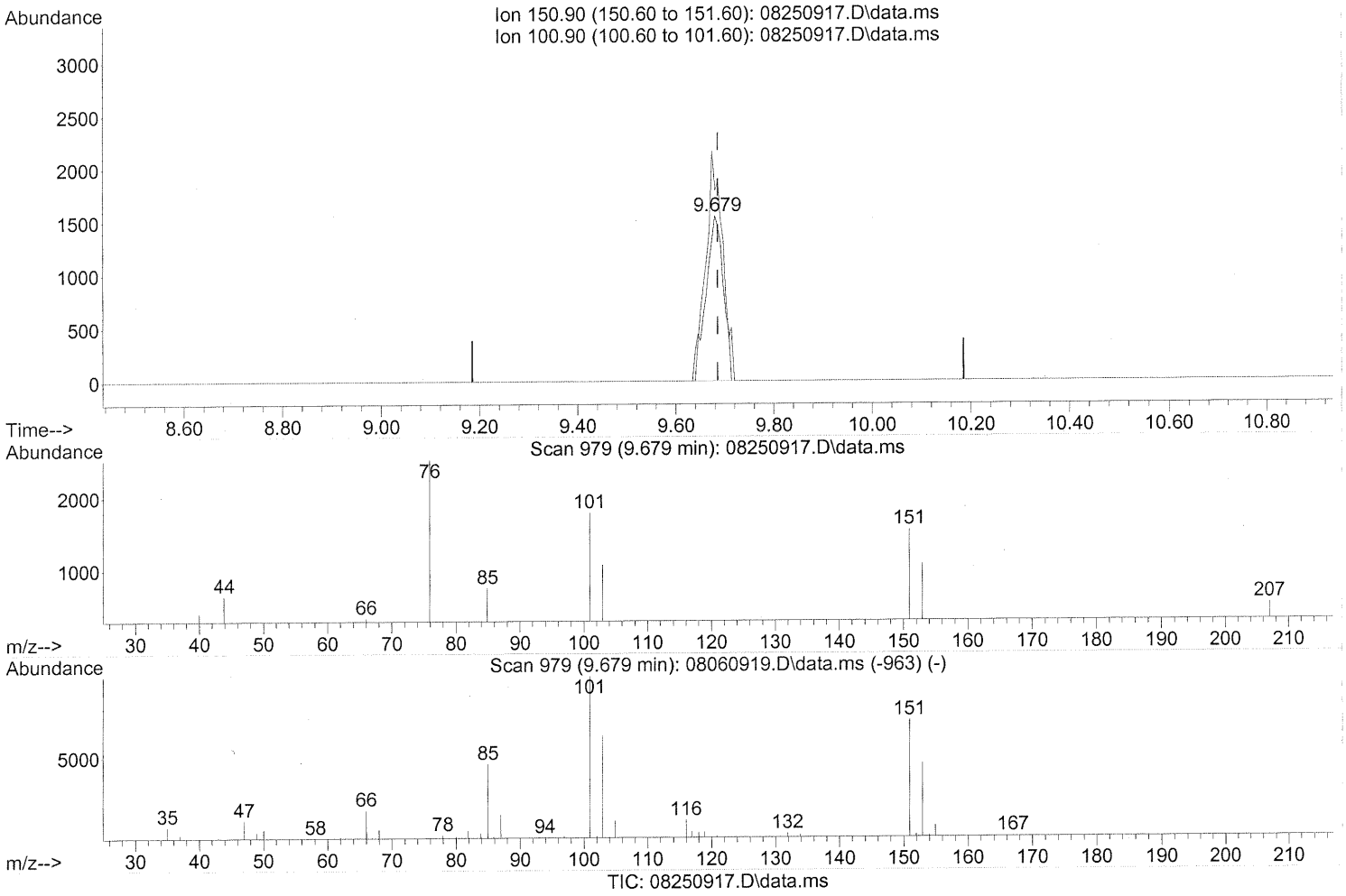
response 2065987

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.43ng

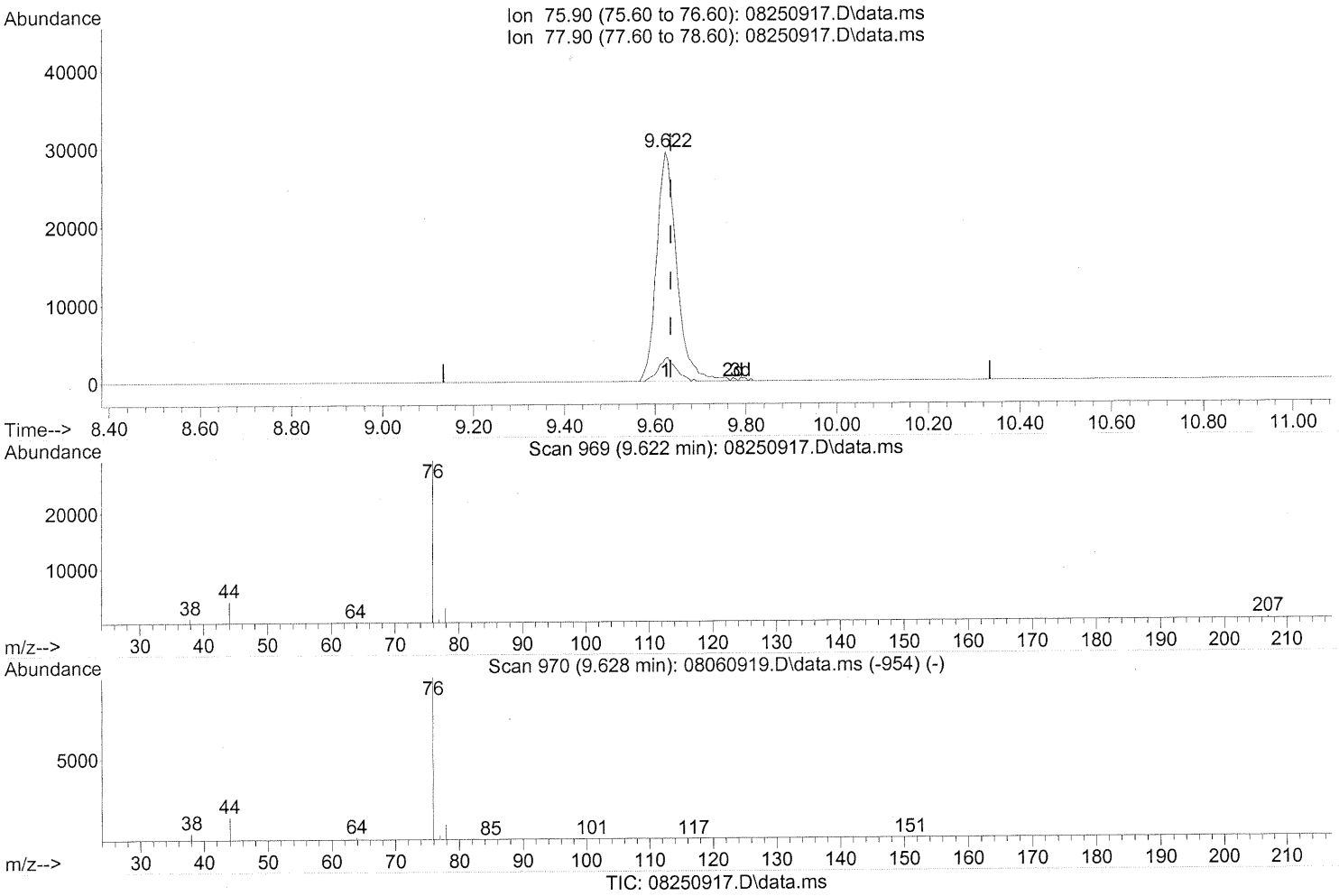
response 3856

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	131.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(22) Carbon Disulfide (T)

9.622min (-0.011) 1.89ng

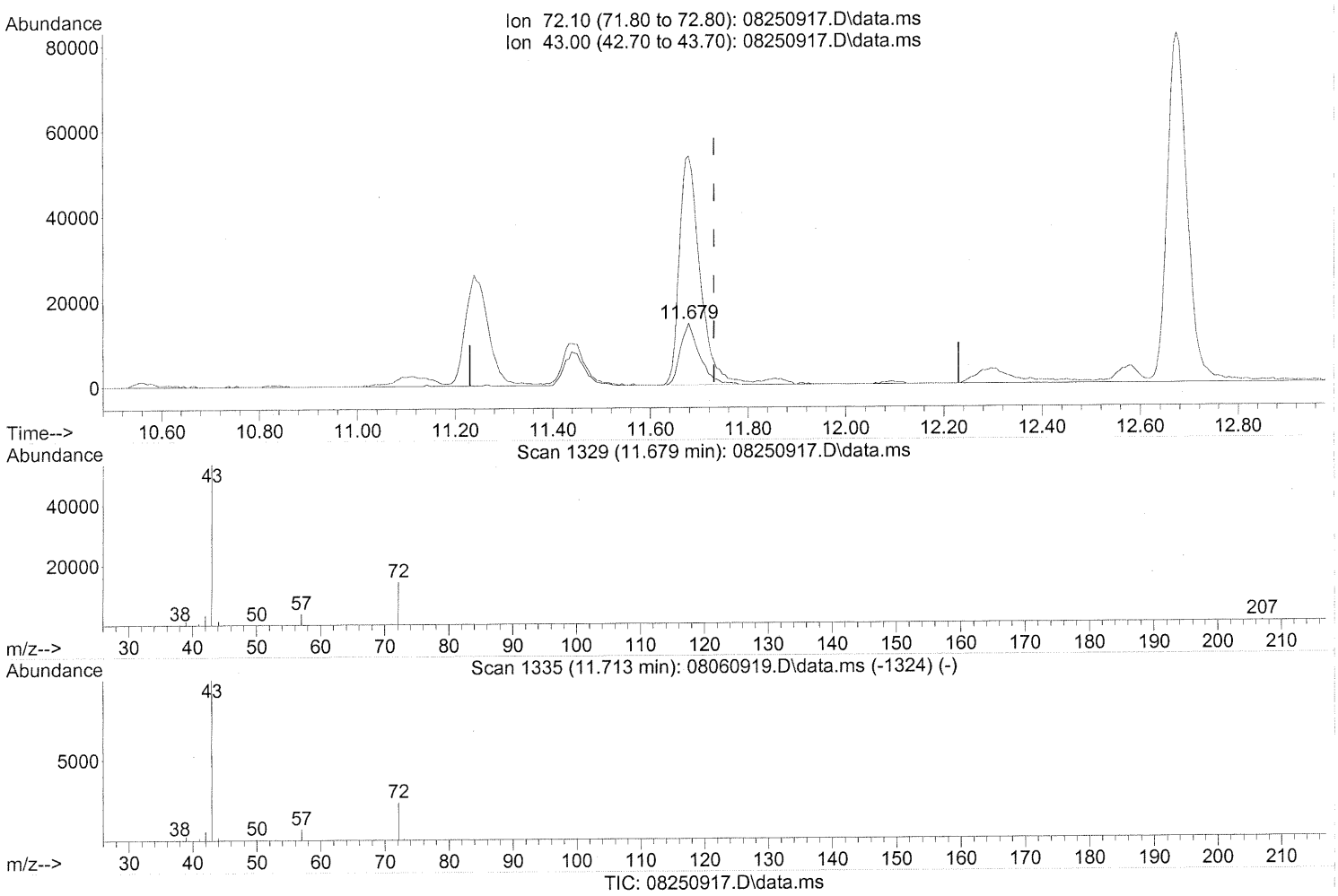
response 90386

Ion	Exp%	Act%
75.90	100	100
77.90	9.40	9.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

11.679min (-0.051) 4.29ng

response 39111

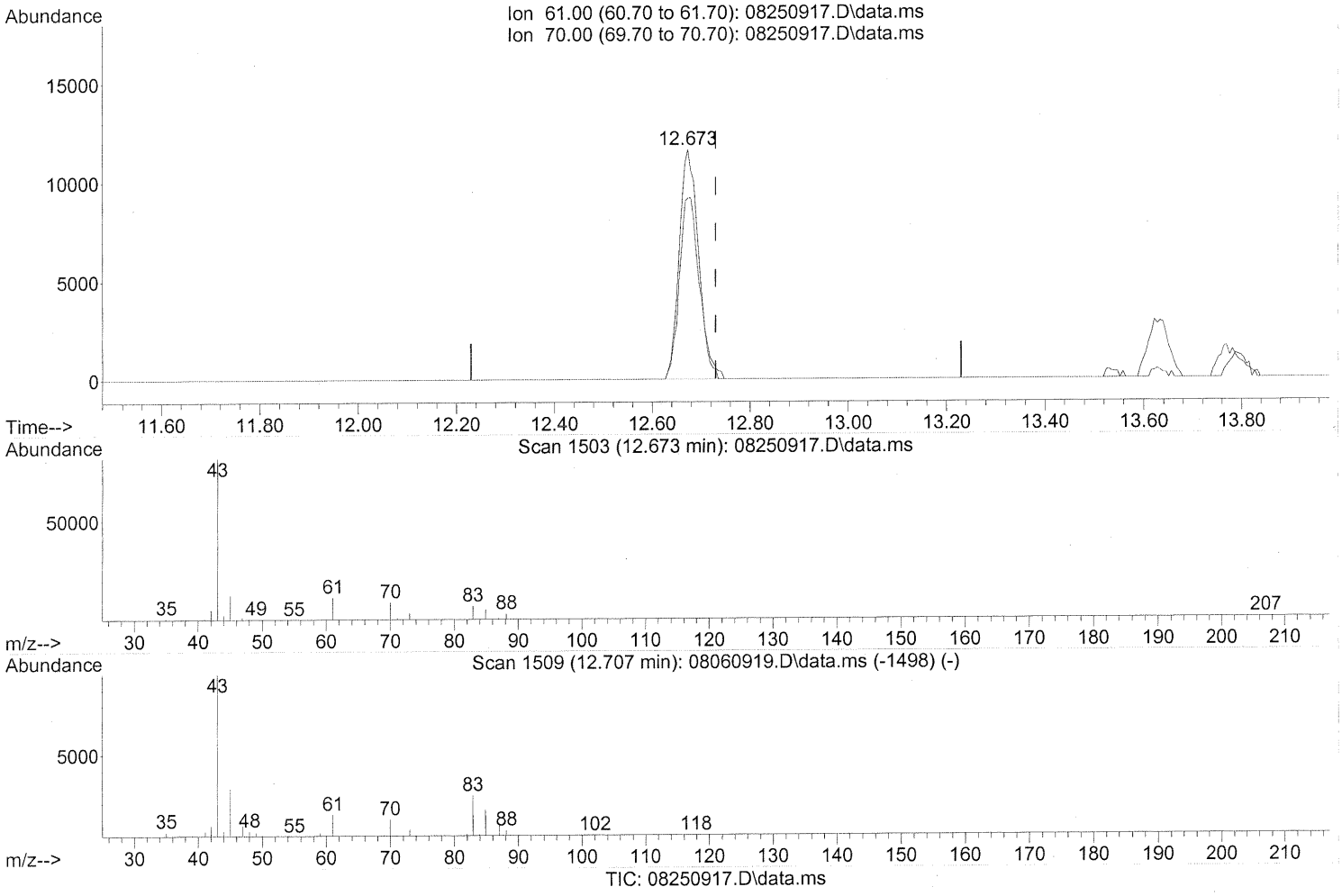
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	405.95#
0.00	0.00	0.00
0.00	0.00	0.00

27

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(30) Ethyl Acetate (T)

12.673min (-0.057) 6.73ng

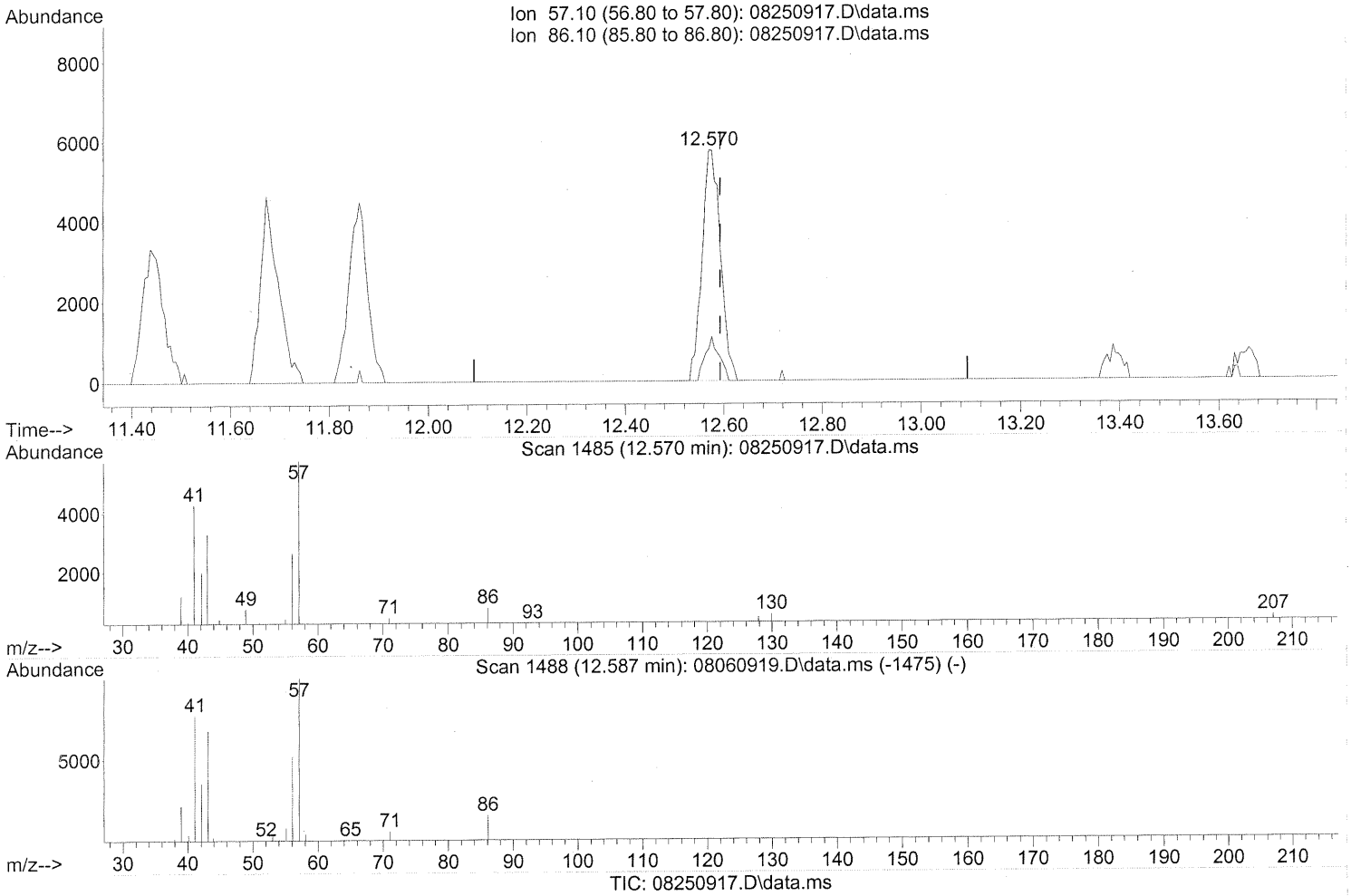
response 31942

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	80.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(31) n-Hexane (T)

12.570min (-0.023) 0.61ng

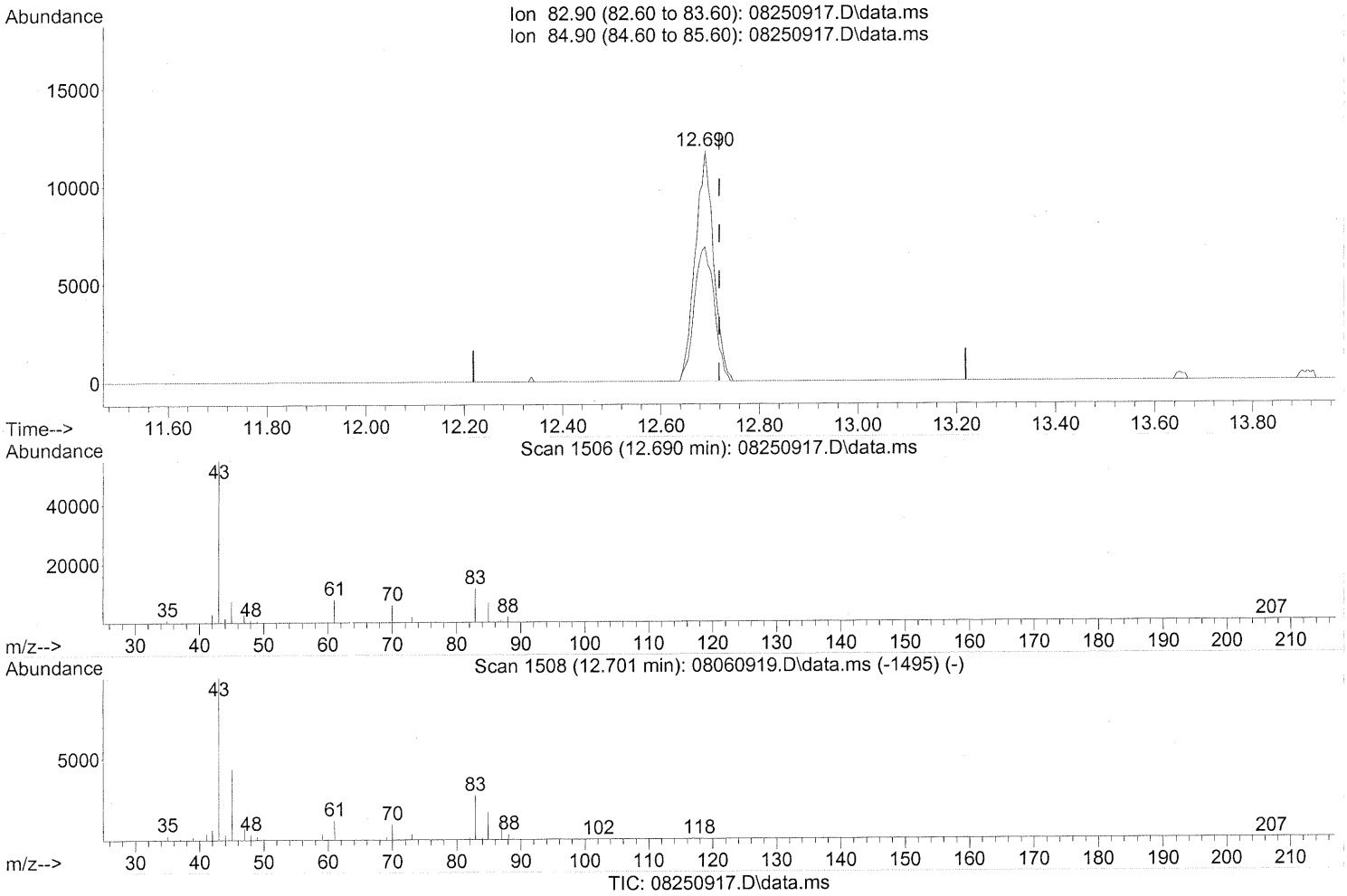
response 14845

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	14.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(32) Chloroform (T)

12.690min (-0.028) 1.42ng

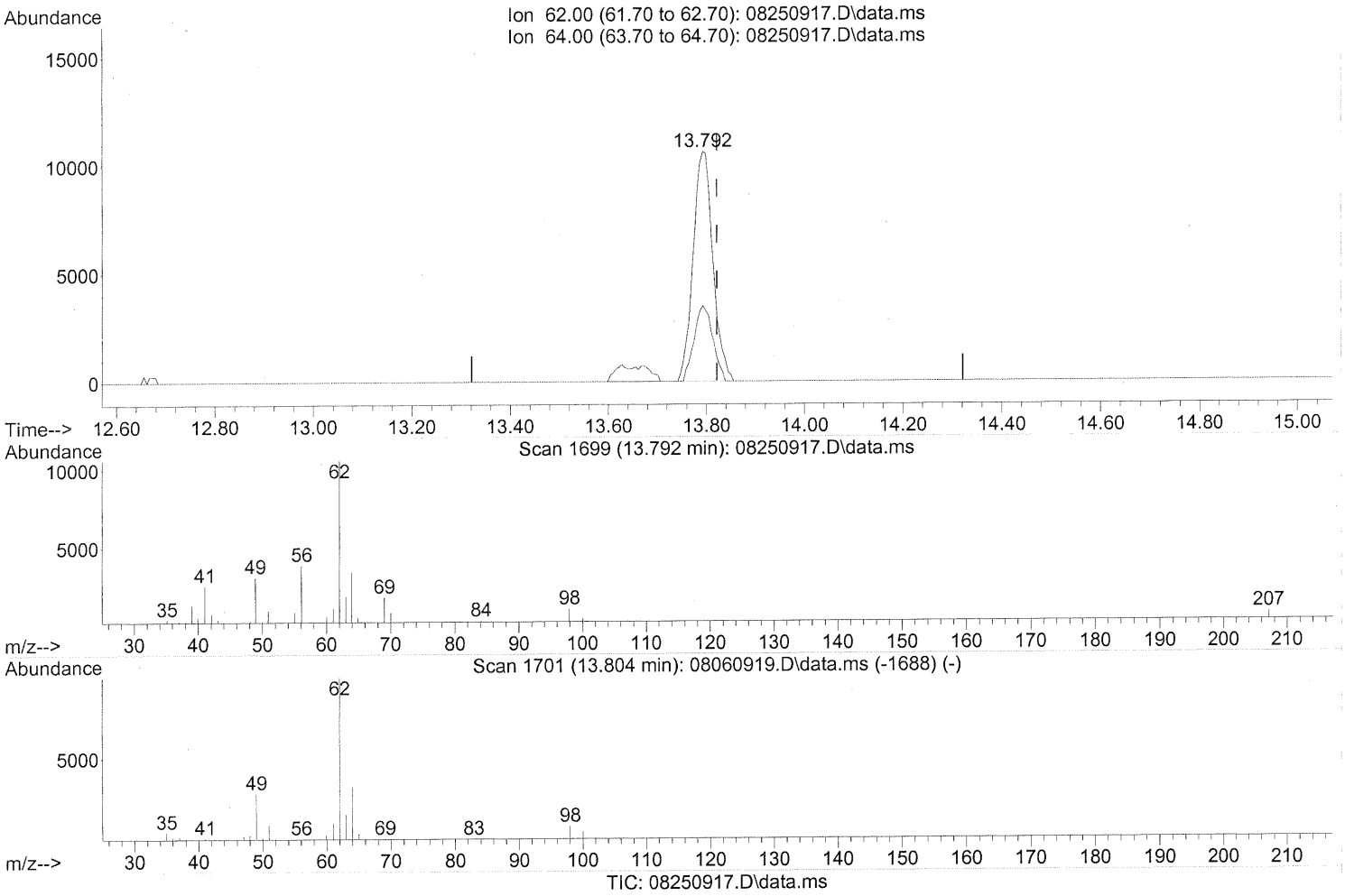
response 30315

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	63.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(36) 1,2-Dichloroethane (T)

13.792min (-0.028) 1.51ng

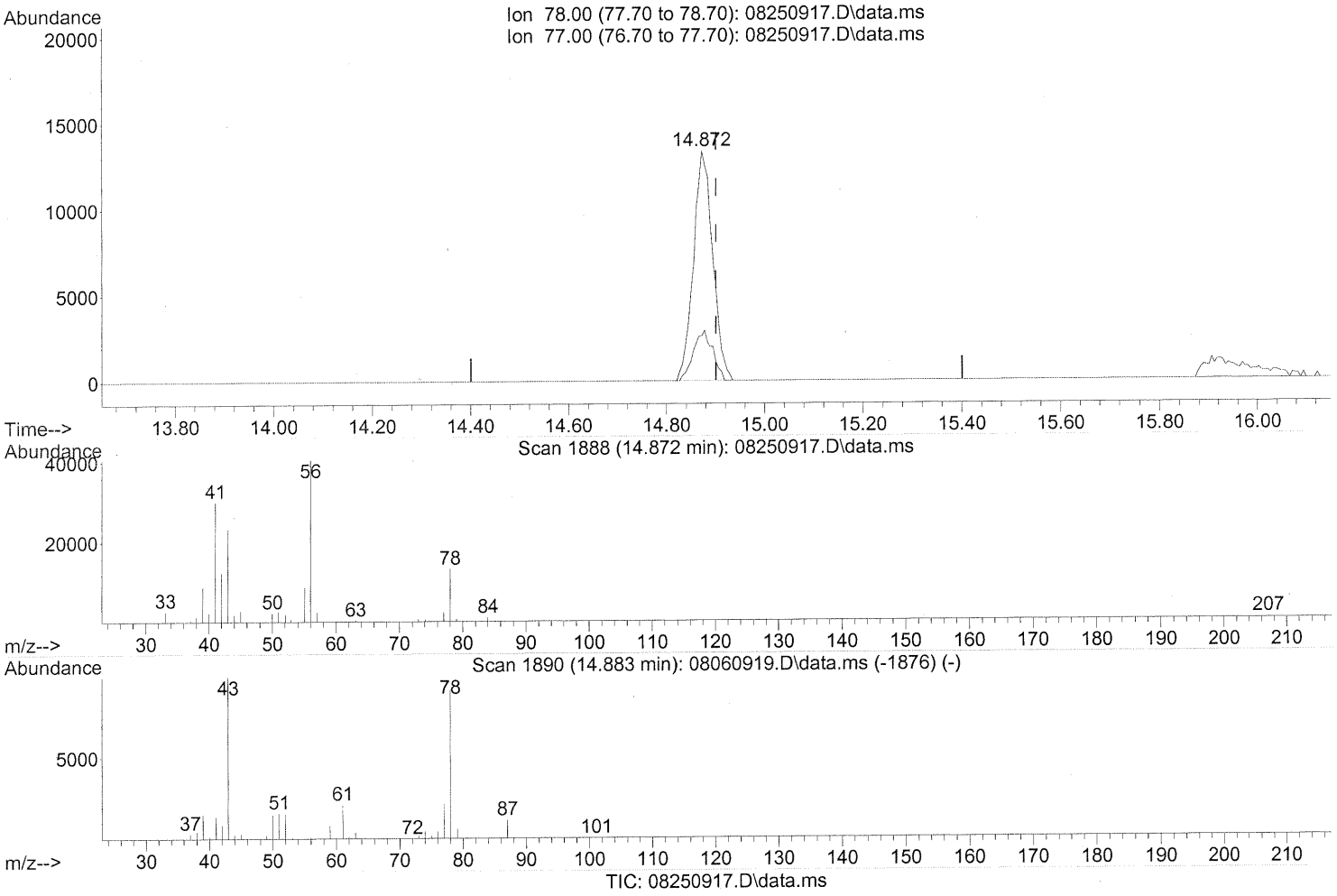
response 29500

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(41) Benzene (T)

14.872min (-0.028) 0.67ng

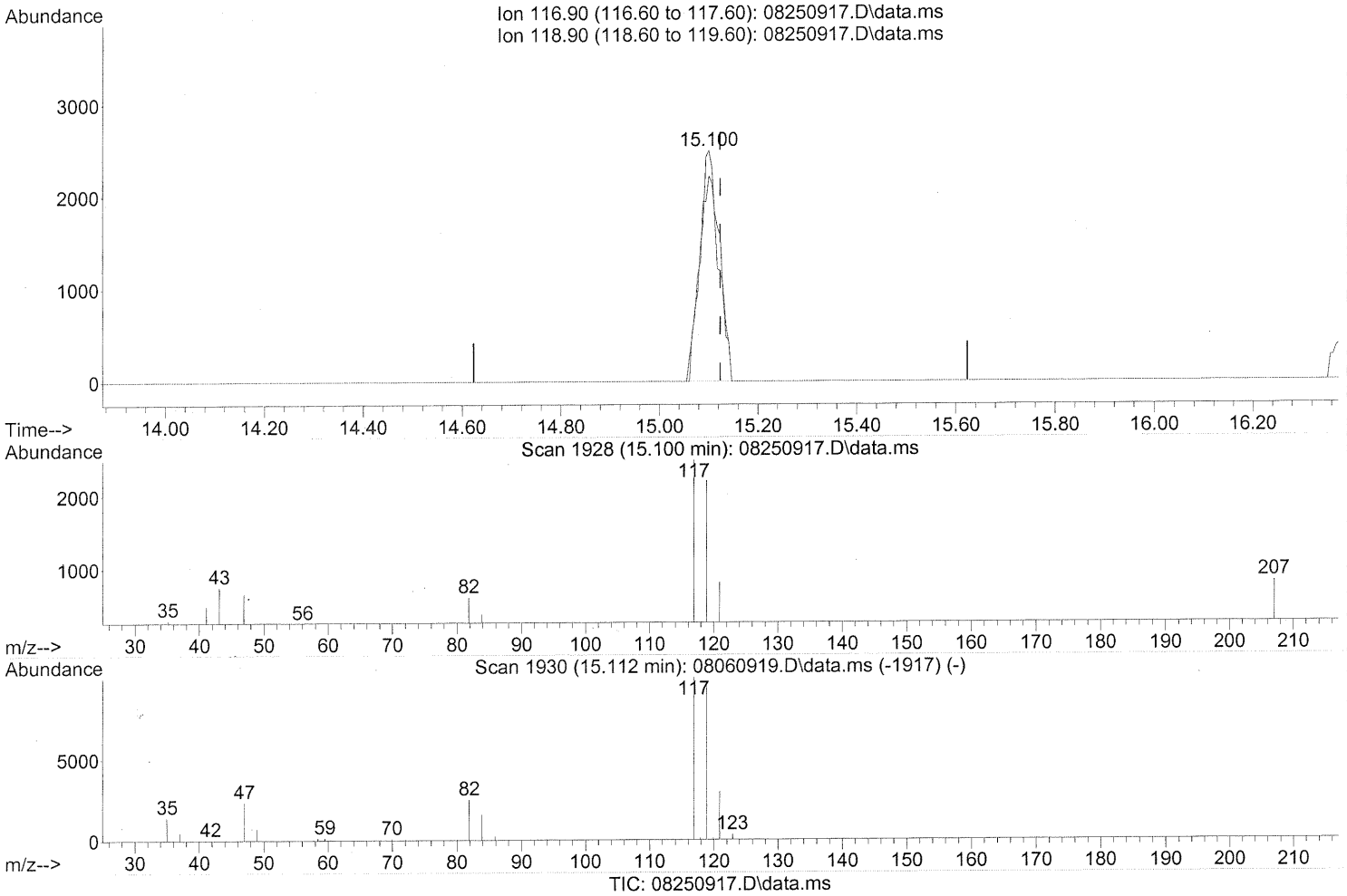
response 36348

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	21.70
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 0.39ng

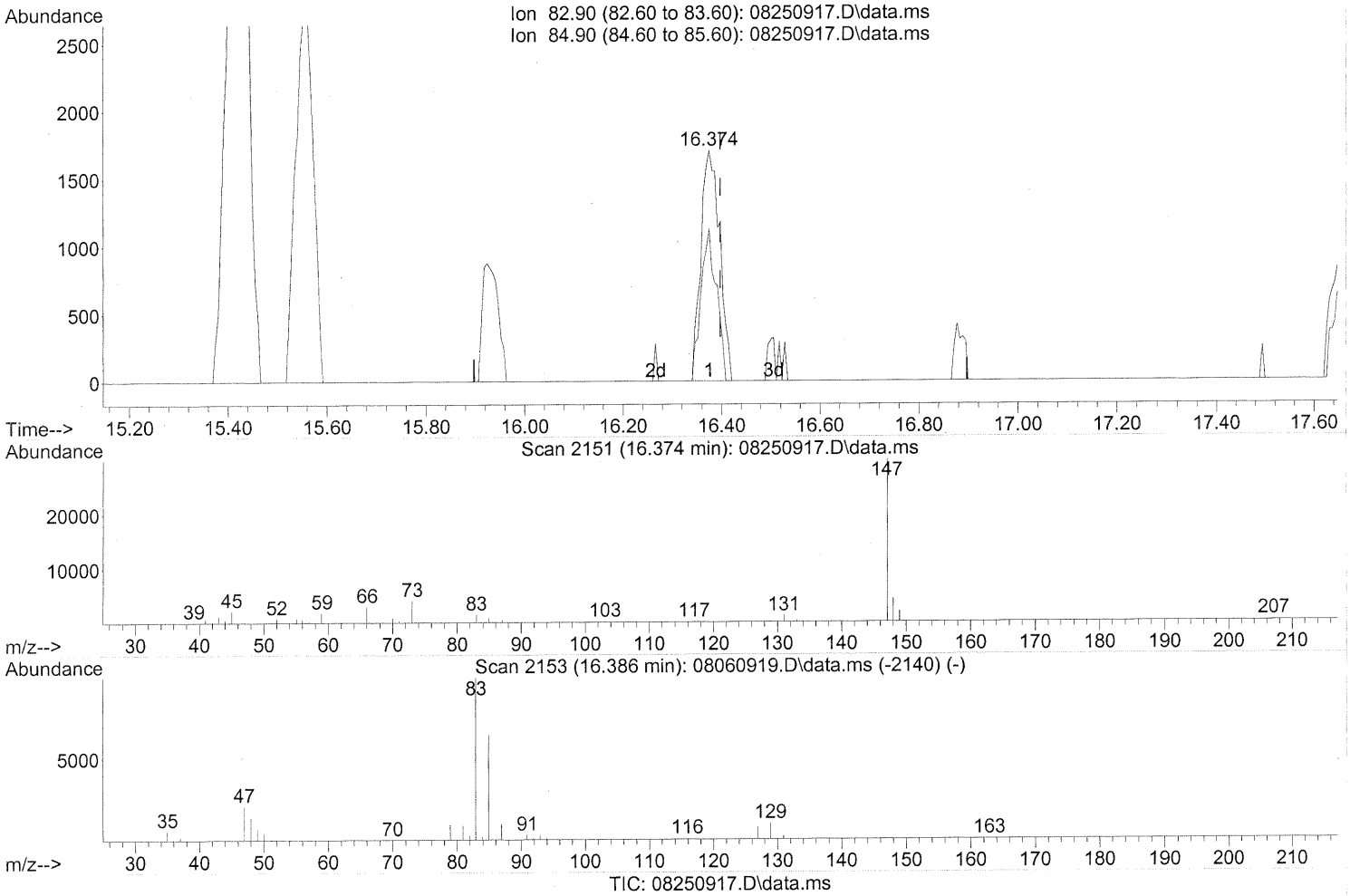
response 6780

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	91.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

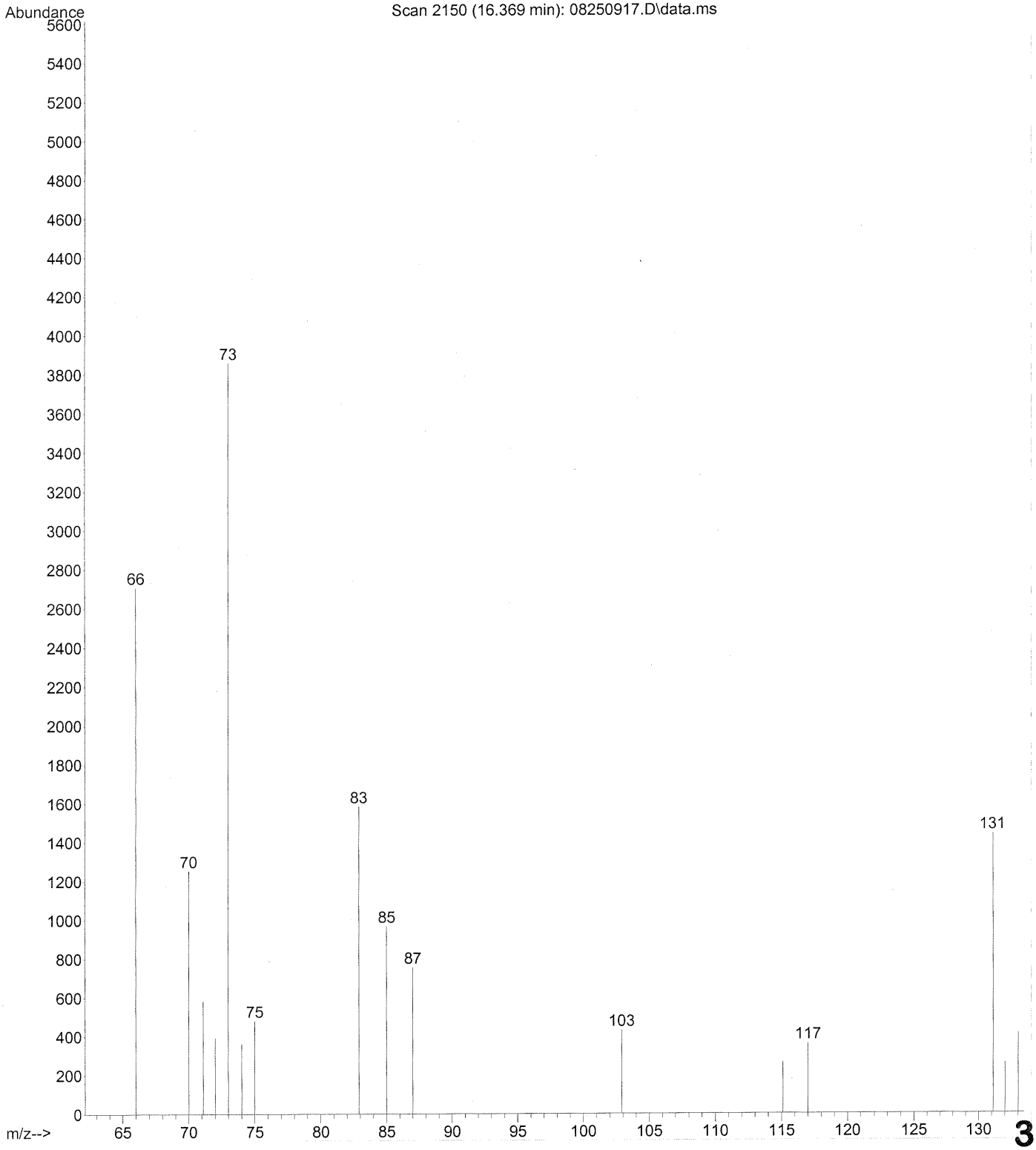
(46) Bromodichloromethane (T)

16.374min (-0.023) 0.25ng

response 4536

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	54.19
0.00	0.00	0.00
0.00	0.00	0.00

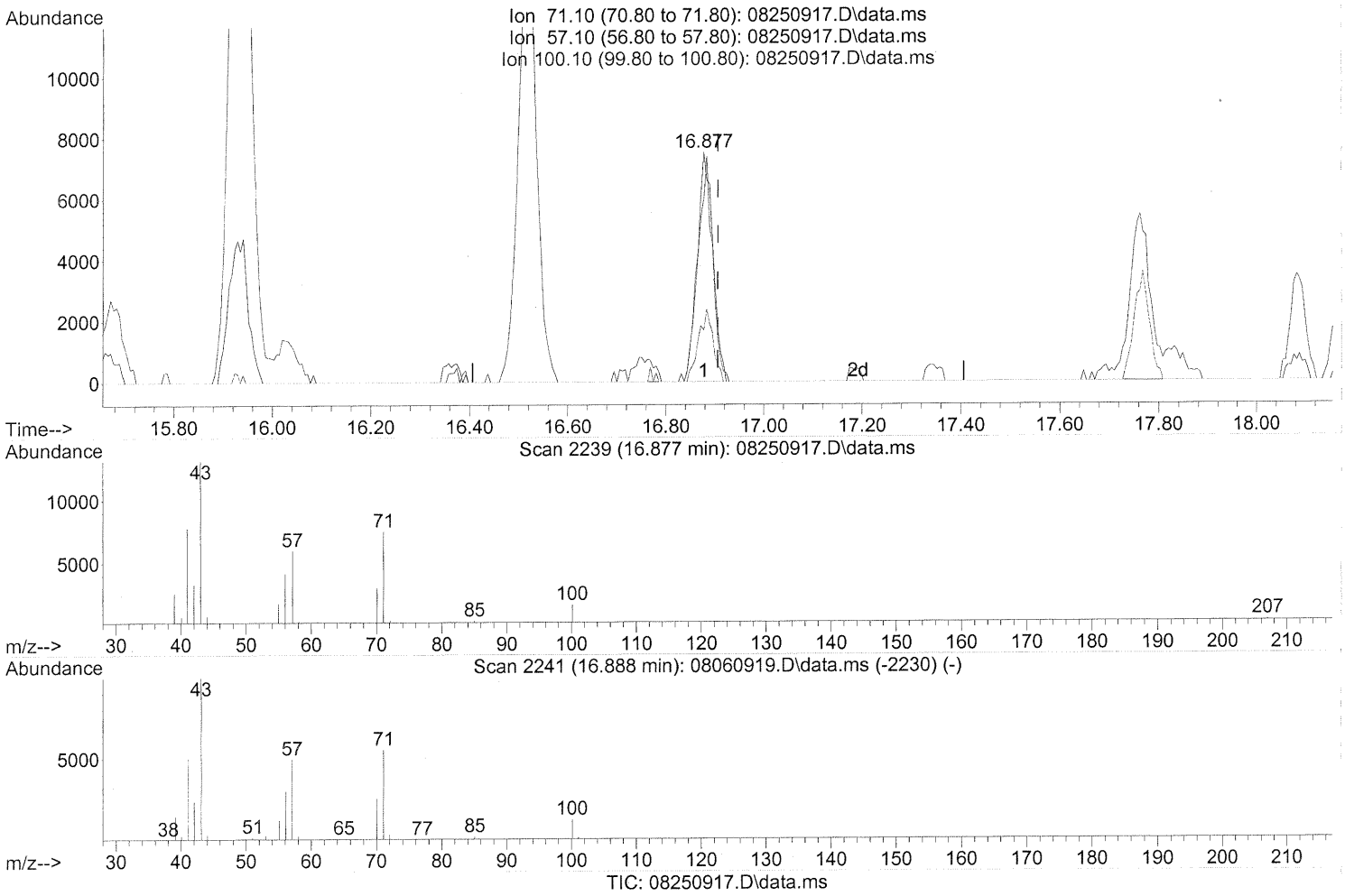
File :J:\MS13\DATA\2009_08\25\08250917.D
Operator : WA/CC
Acquired : 25 Aug 2009 10:17 pm using AcqMethod TO15.M
Instrument : GCMS13
Sample Name: P0902876-001 (1000mL)
Misc Info : Environmental Health 102349
Vial Number: 8



Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(51) n-Heptane (T)

16.877min (-0.028) 1.15ng

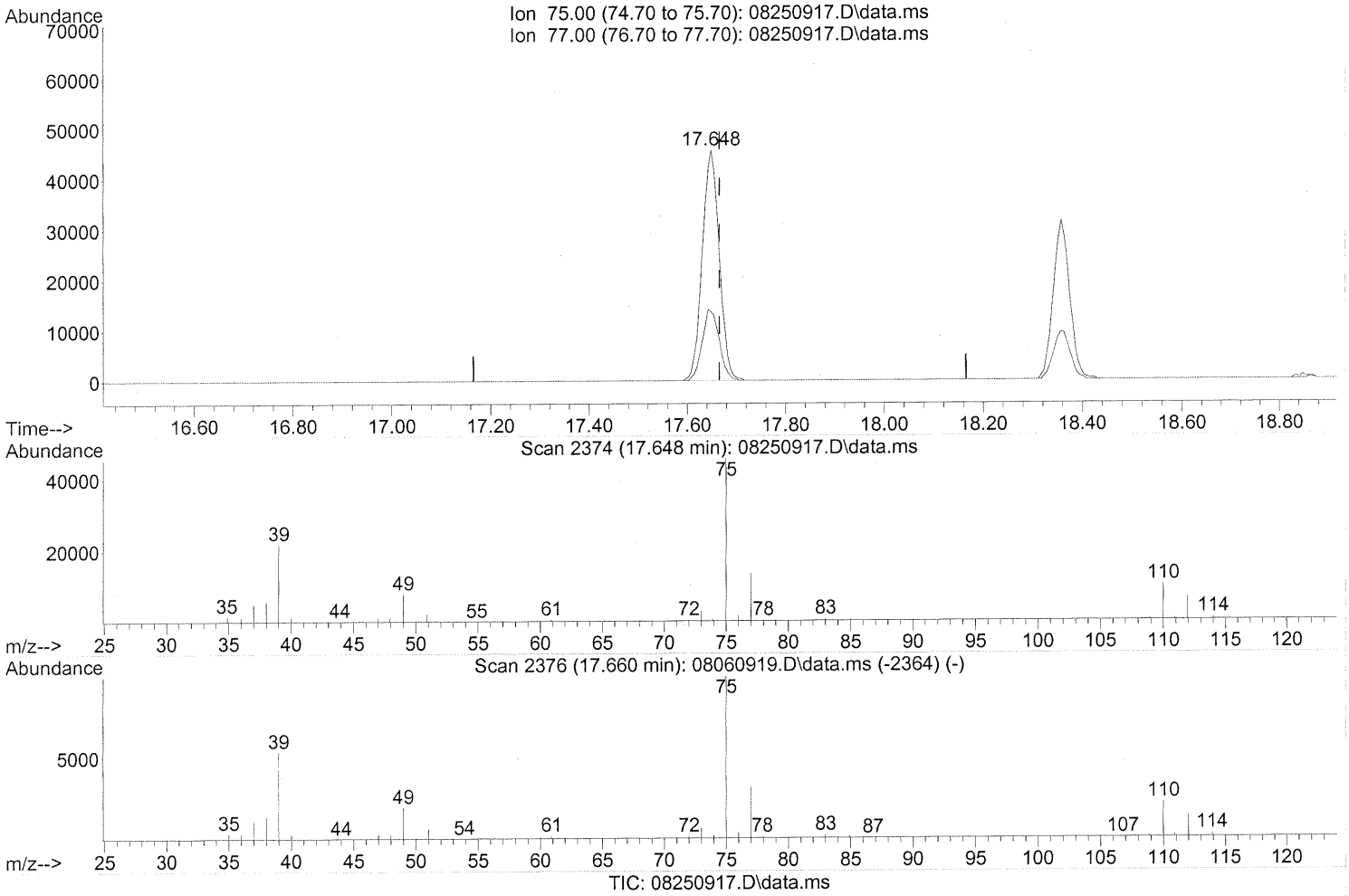
response 16780

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	90.78
100.10	26.40	28.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 4.84ng

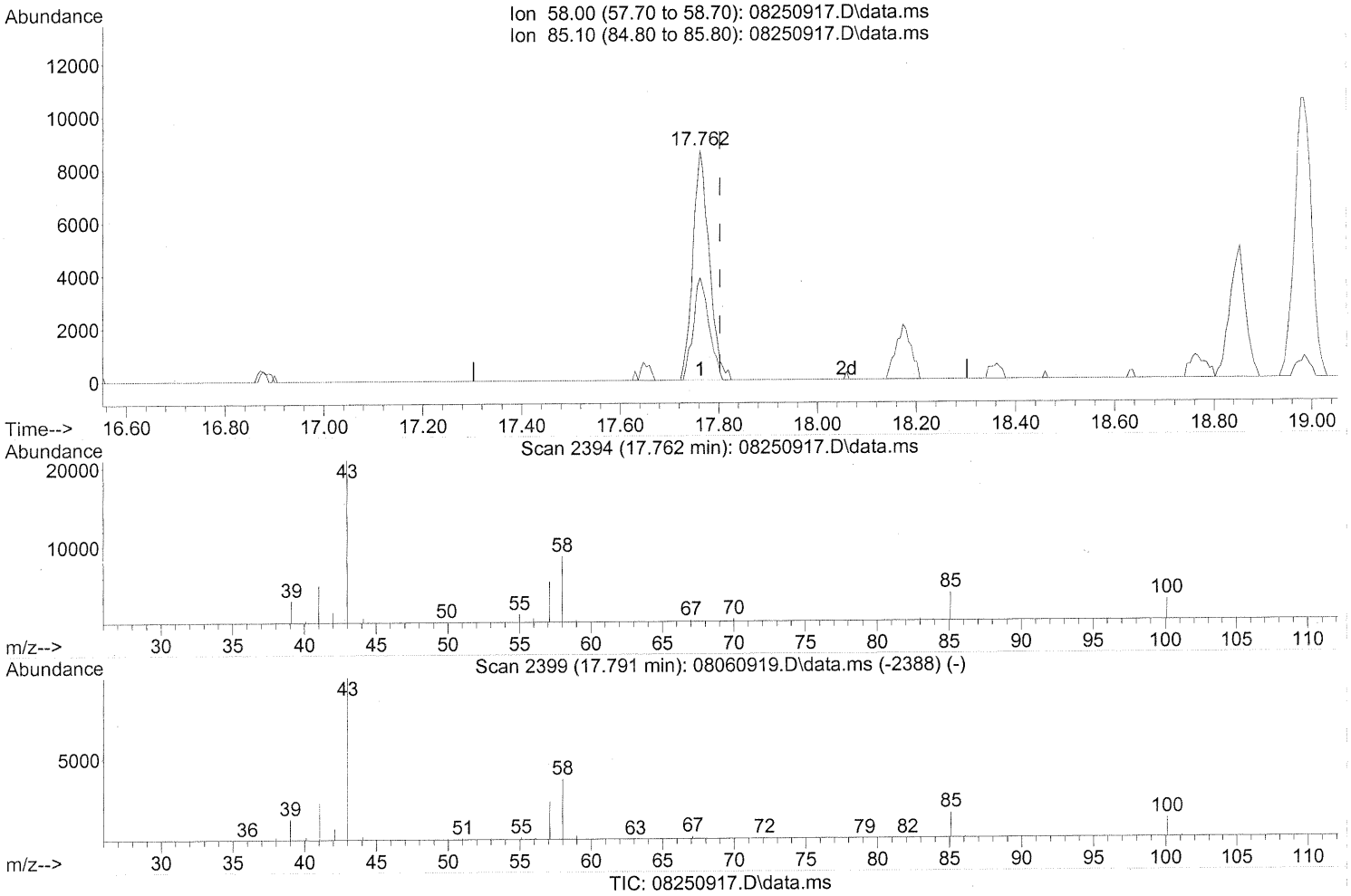
response 109251

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	30.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

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

17.762min (-0.040) 1.53ng

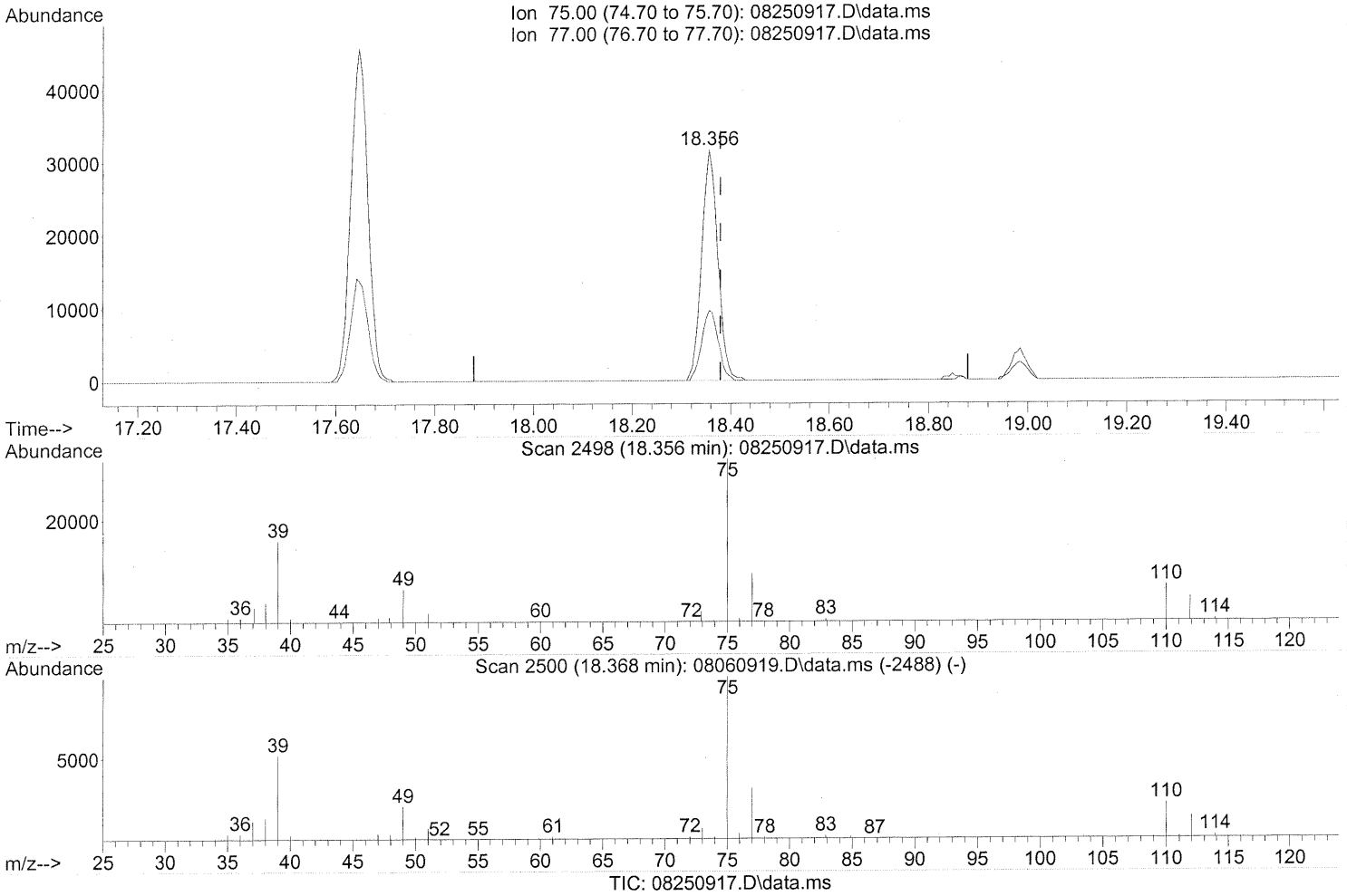
response 20010

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	43.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 3.37ng

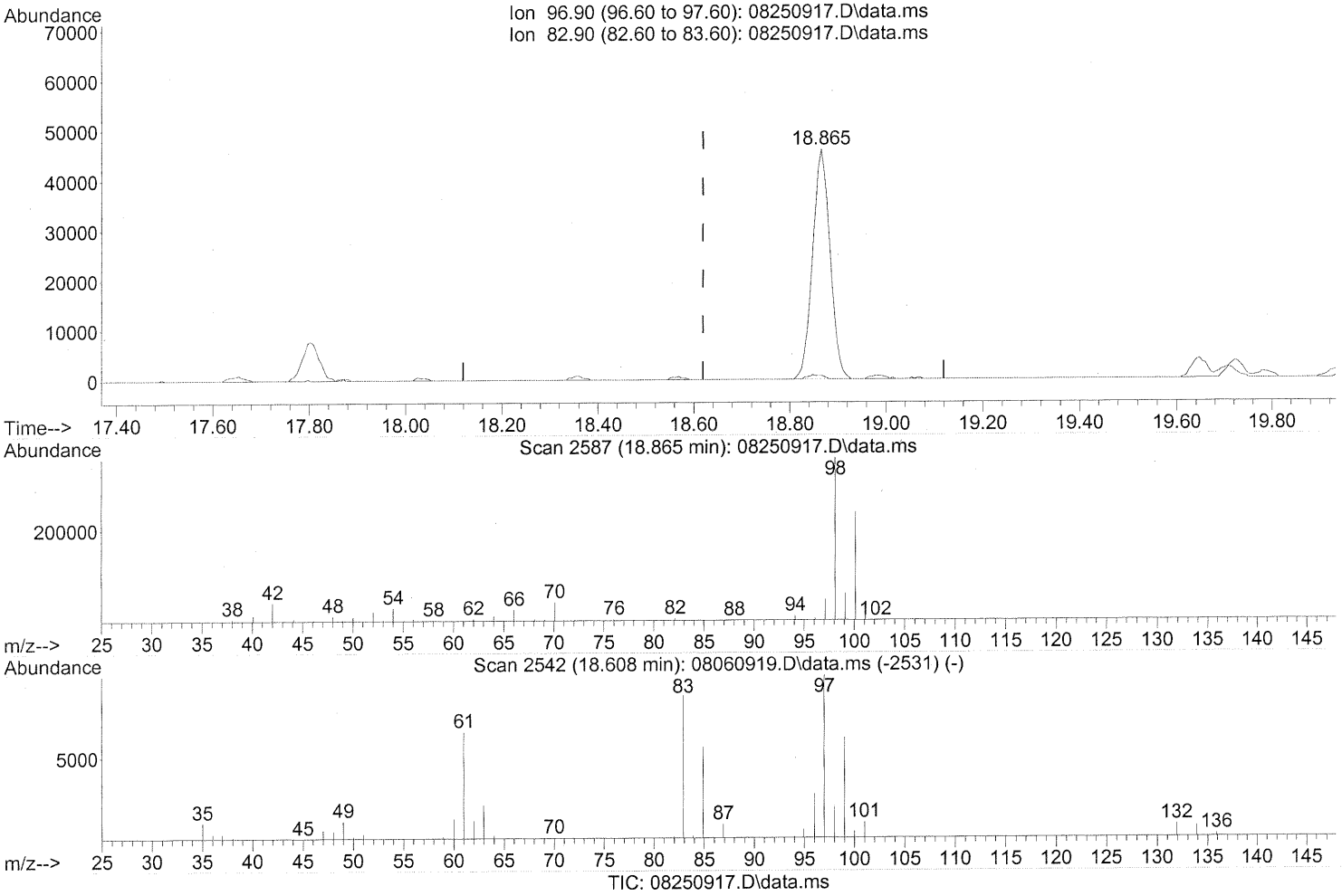
response 72337

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	31.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

18.865min (+0.246) 9.77ng

response 116414

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.45#
0.00	0.00	0.00
0.00	0.00	0.00

FP
MB 8/31/09

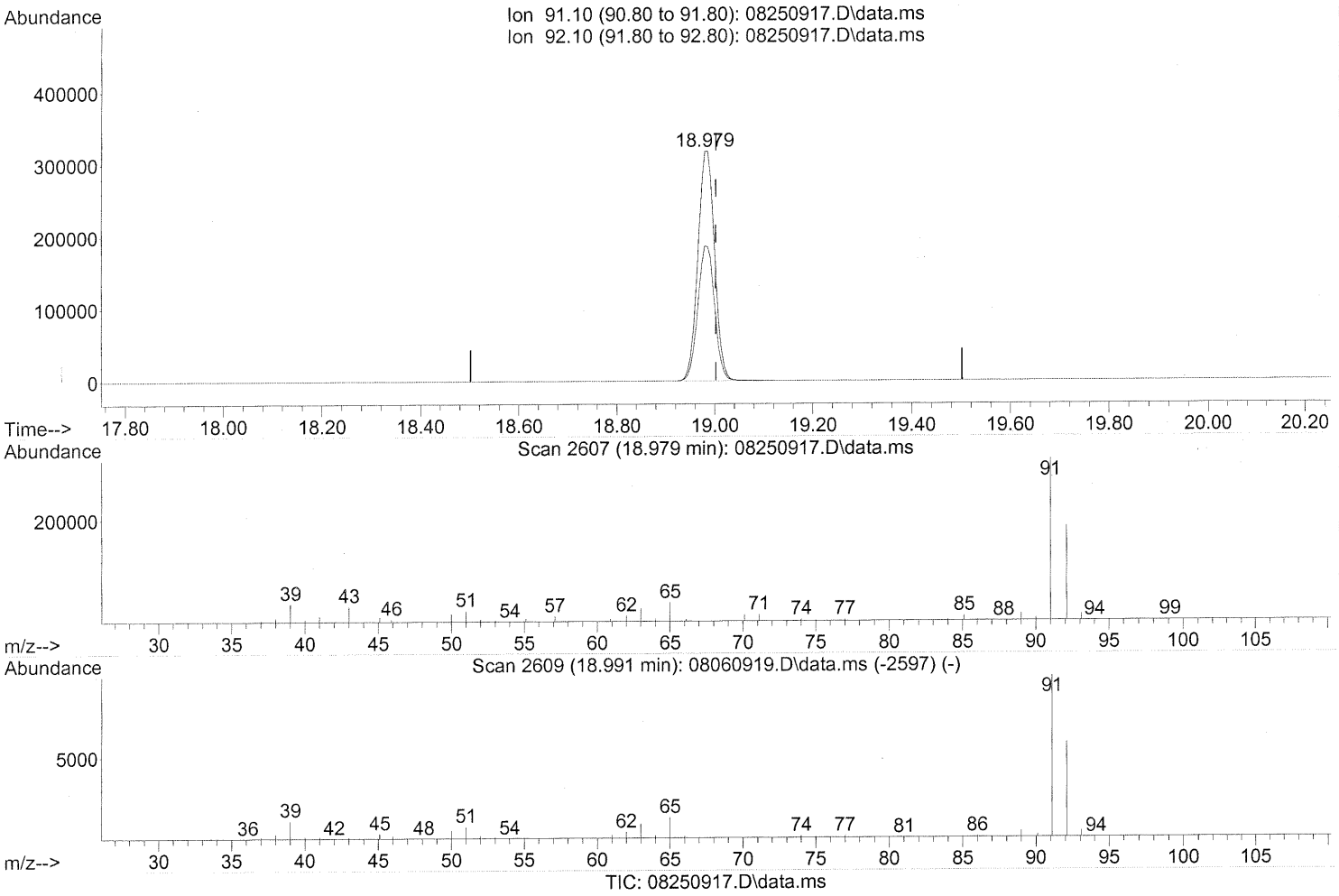
9/2/09

40

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 14.70ng

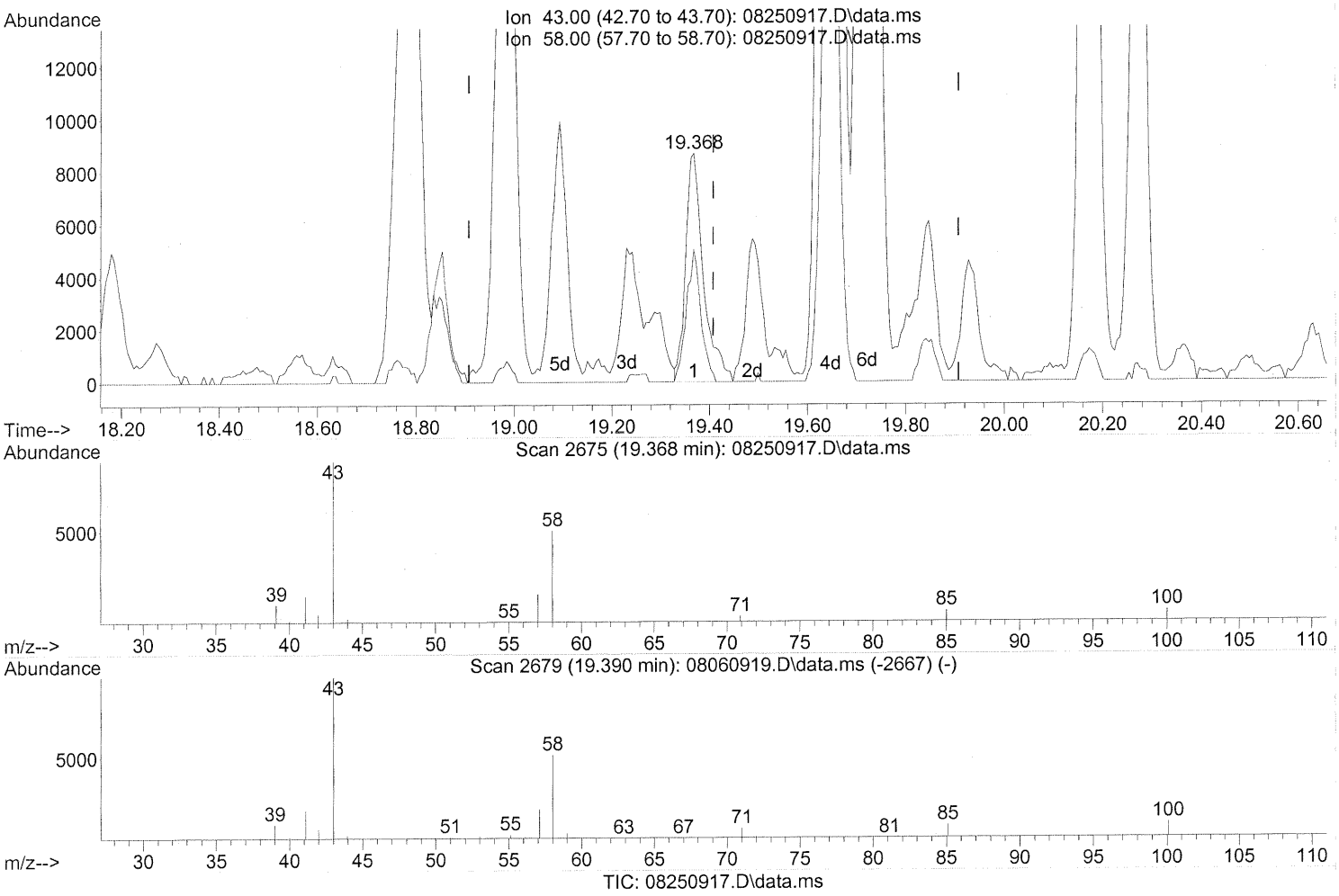
response 747246

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	58.66
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(59) 2-Hexanone (T)

19.368min (-0.040) 0.65ng

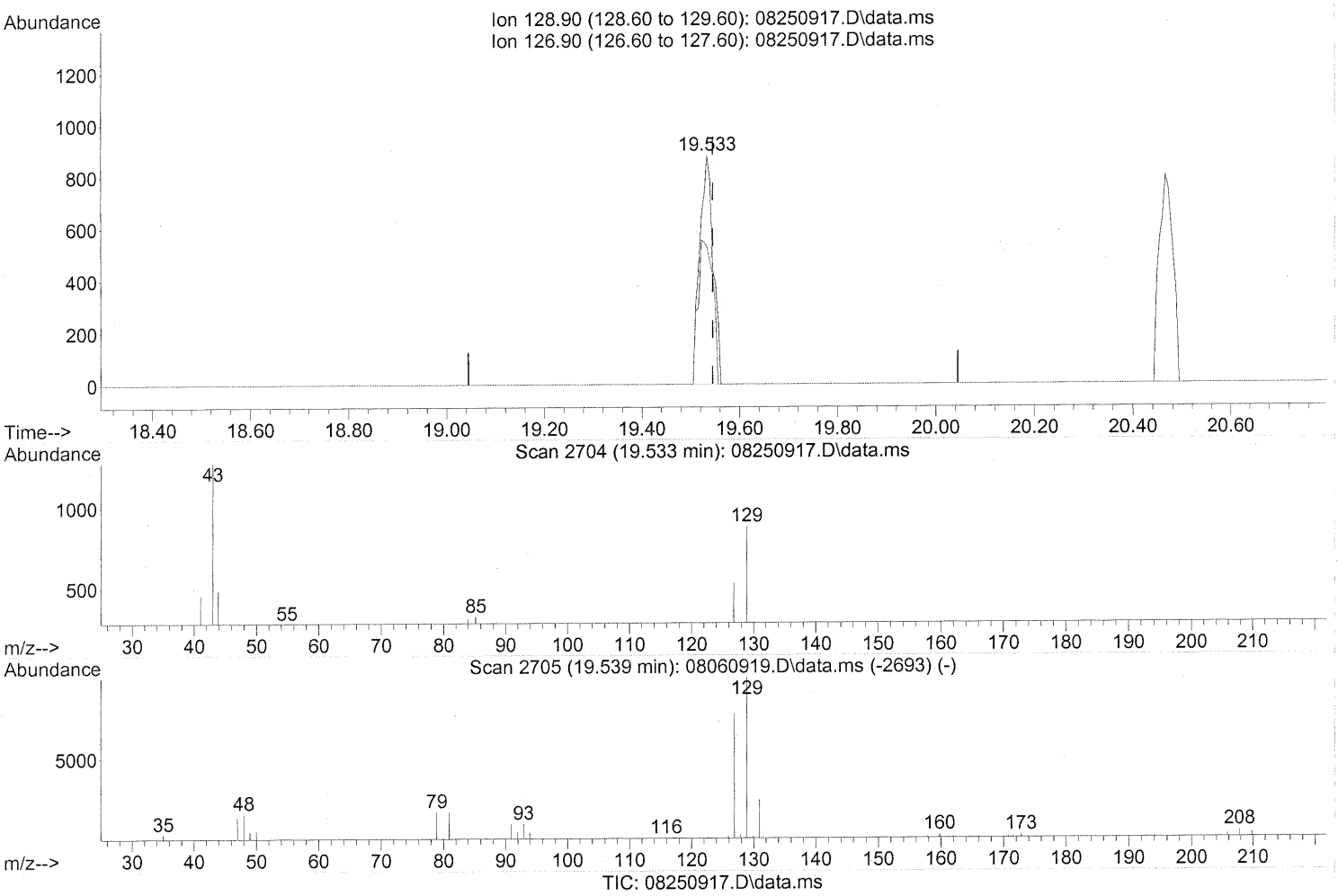
response 22023

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	47.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(60) Dibromochloromethane (T)

19.533min (-0.011) 0.14ng

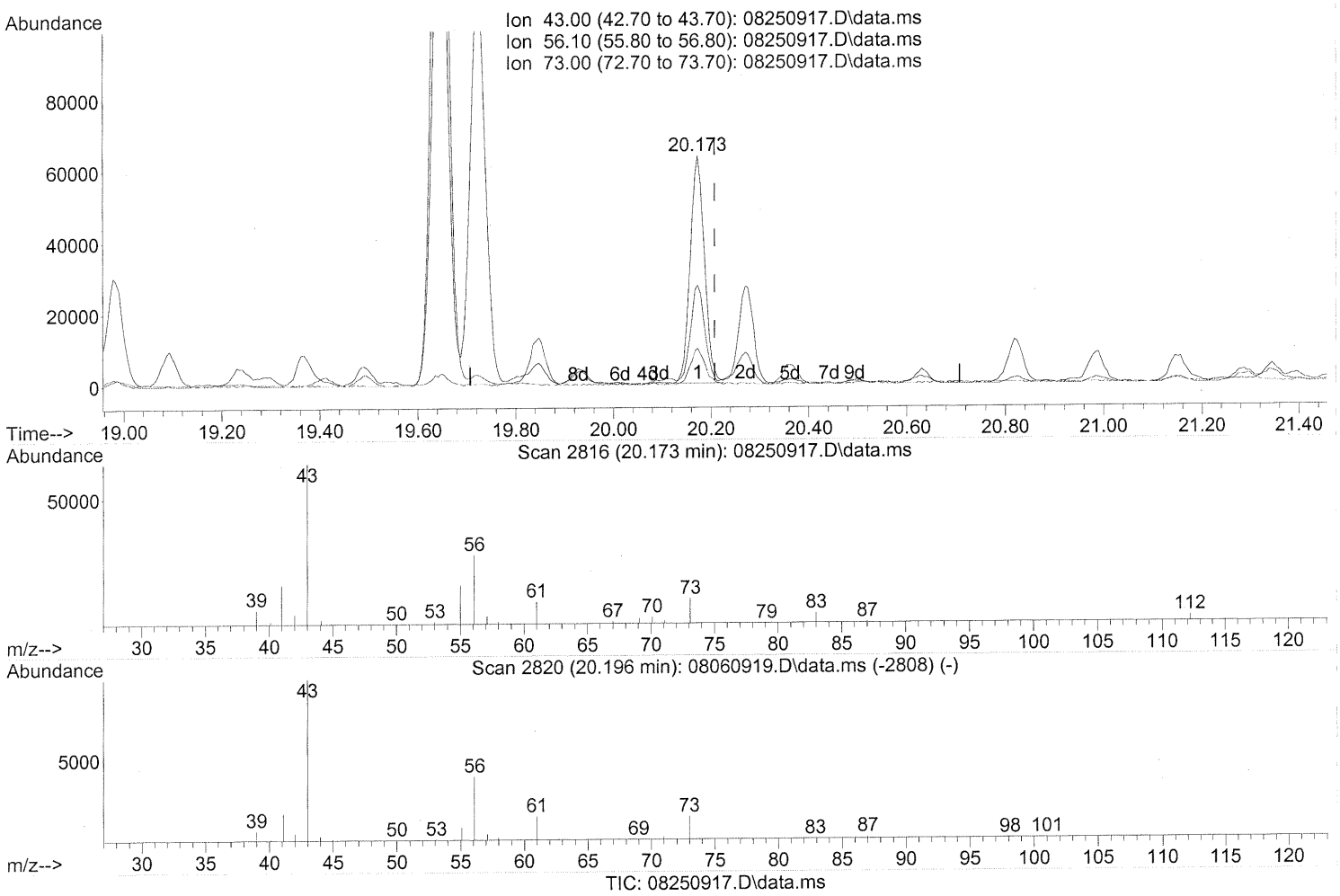
response 1670

Ion	Exp%	Act%
128.90	100	100
126.90	76.40	69.70
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(62) n-Butyl Acetate (T)

20.173min (-0.034) 3.24ng

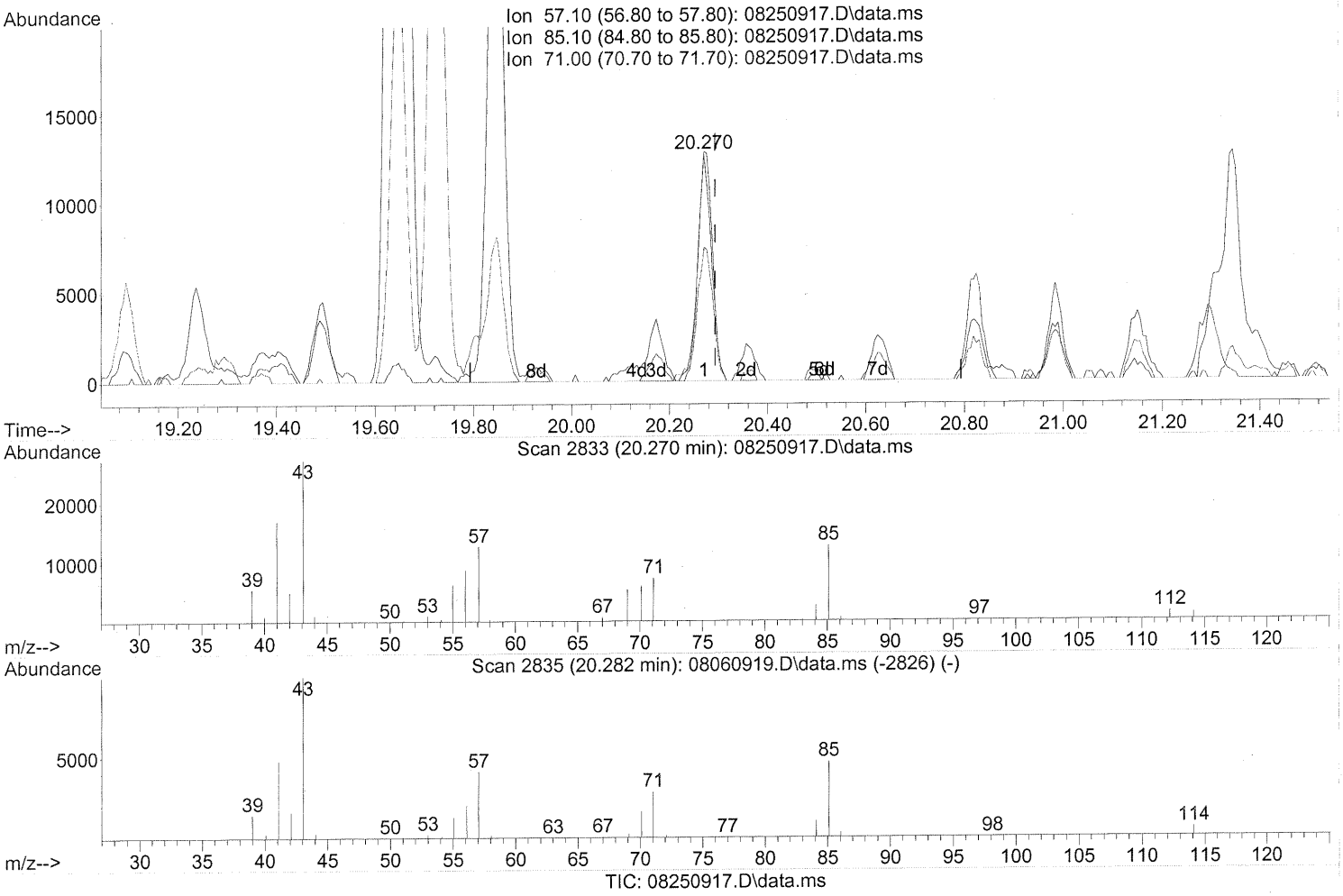
response 129113

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	44.45
73.00	14.80	16.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 2.04ng

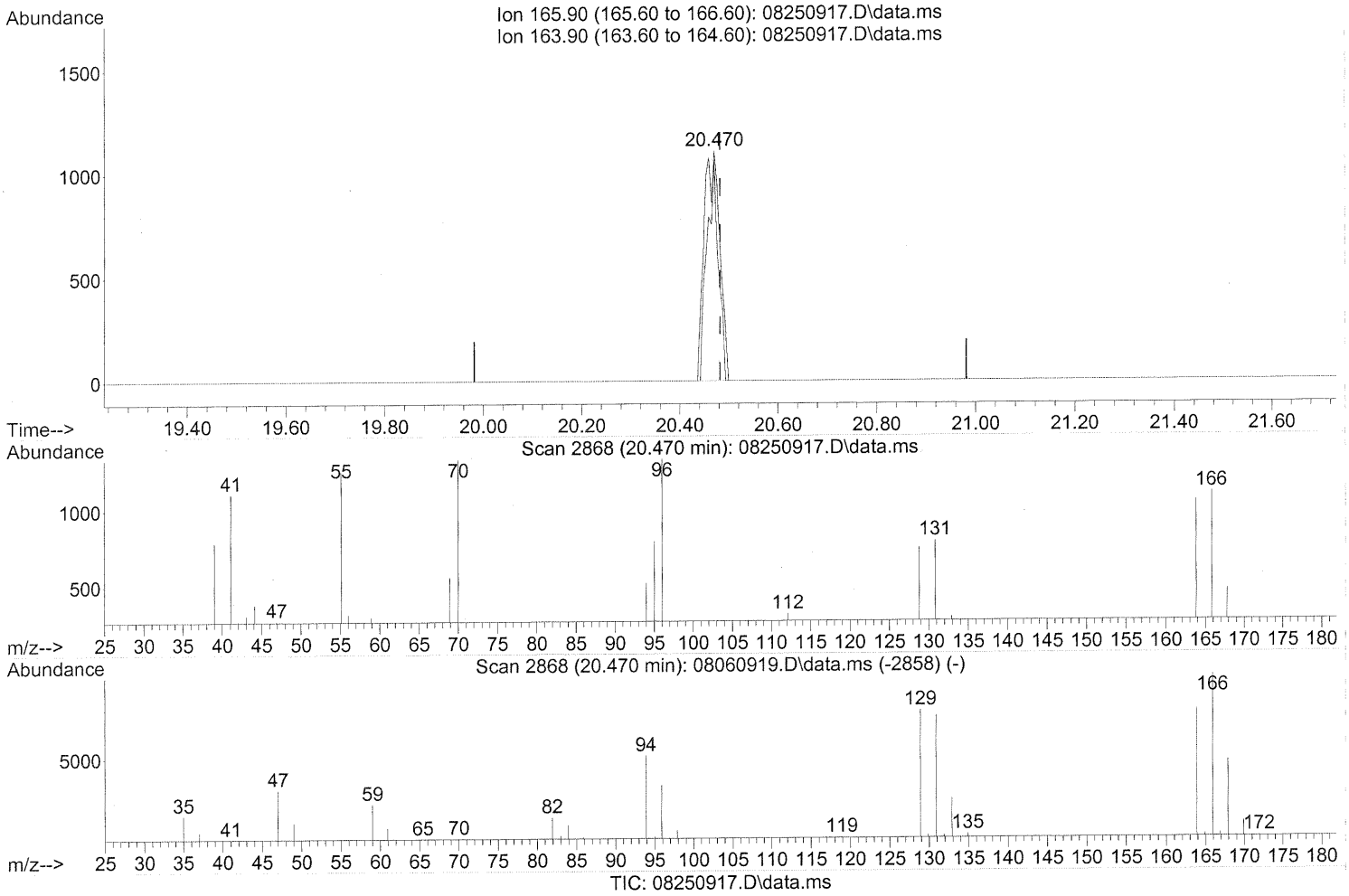
response 25082

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	104.76
71.00	68.10	68.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(64) Tetrachloroethene (T)

20.470min (-0.011) 0.21ng

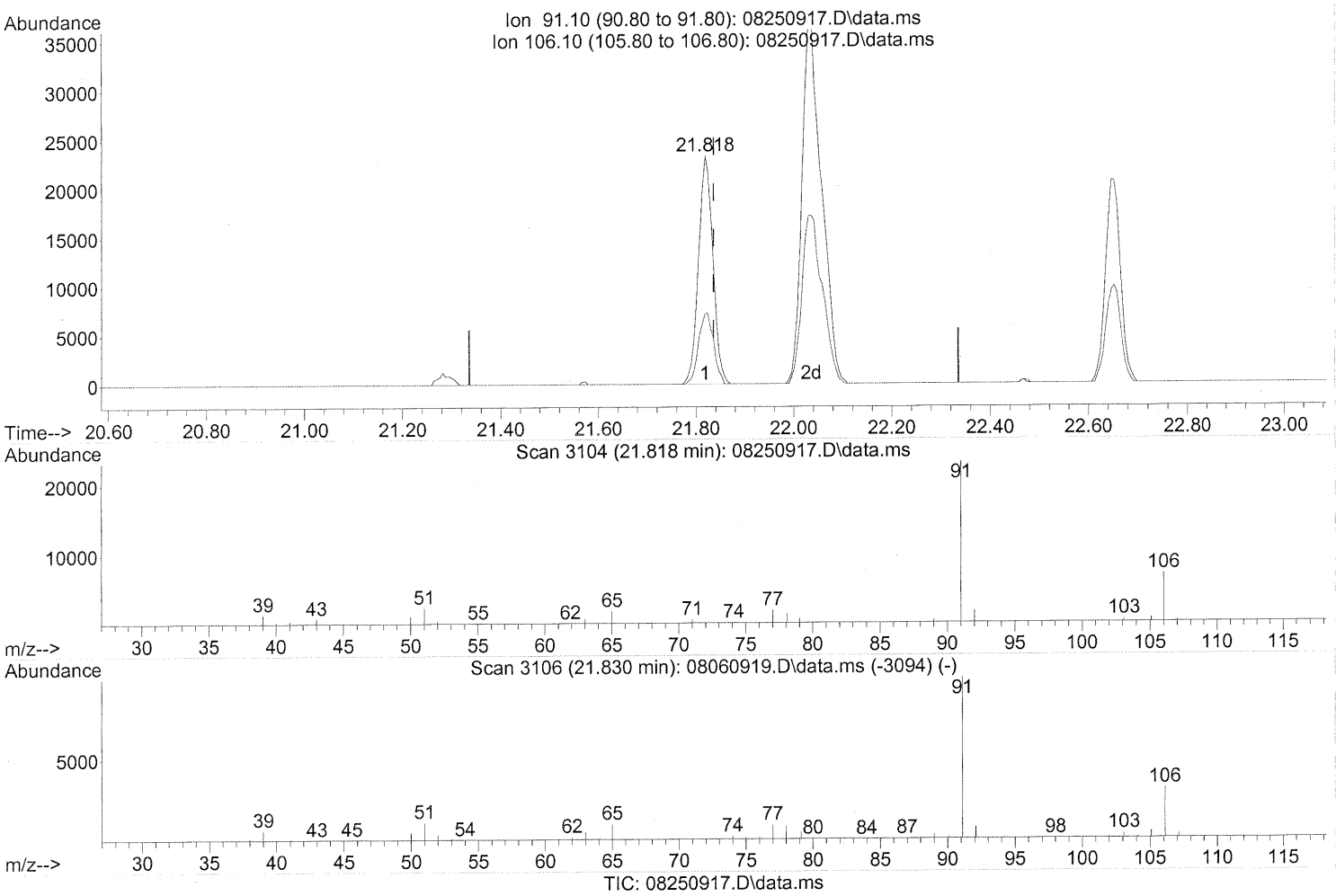
response 2463

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	69.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(66) Ethylbenzene (T)

21.818min (-0.017) 0.81ng

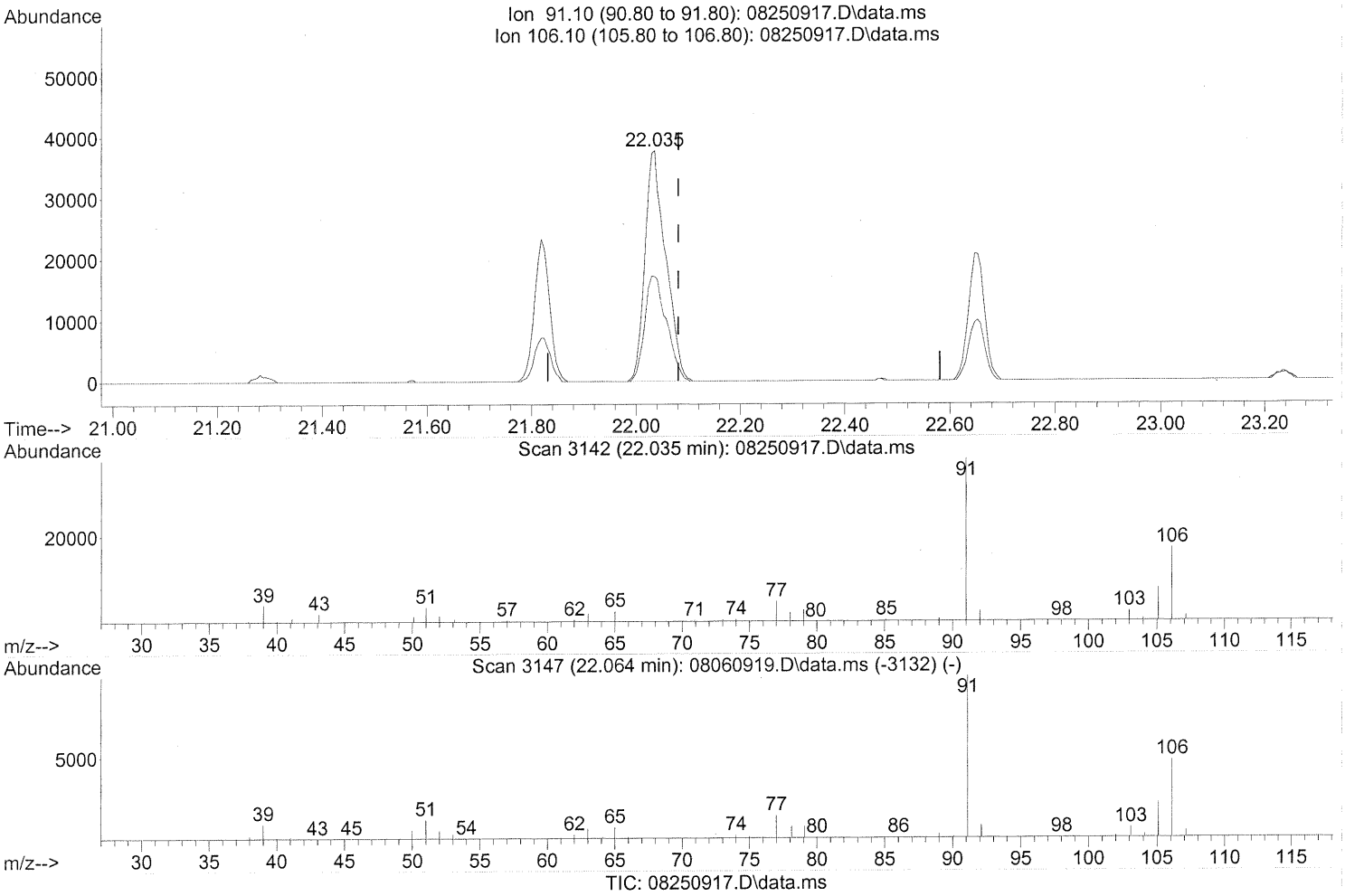
response 47044

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	32.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.035min (-0.046) 2.21ng

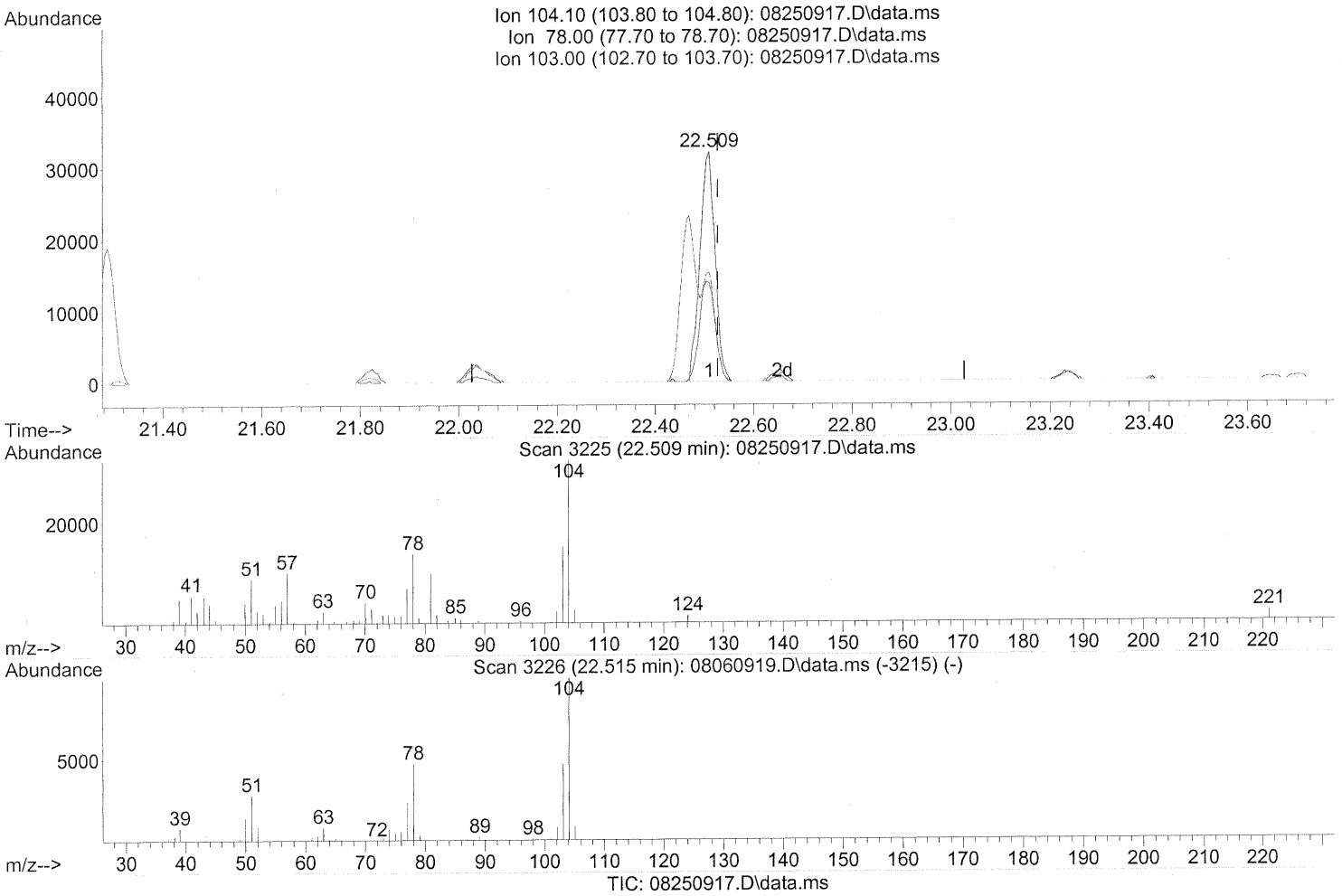
response 104051

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(69) Styrene (T)

22.509min (-0.017) 1.99ng

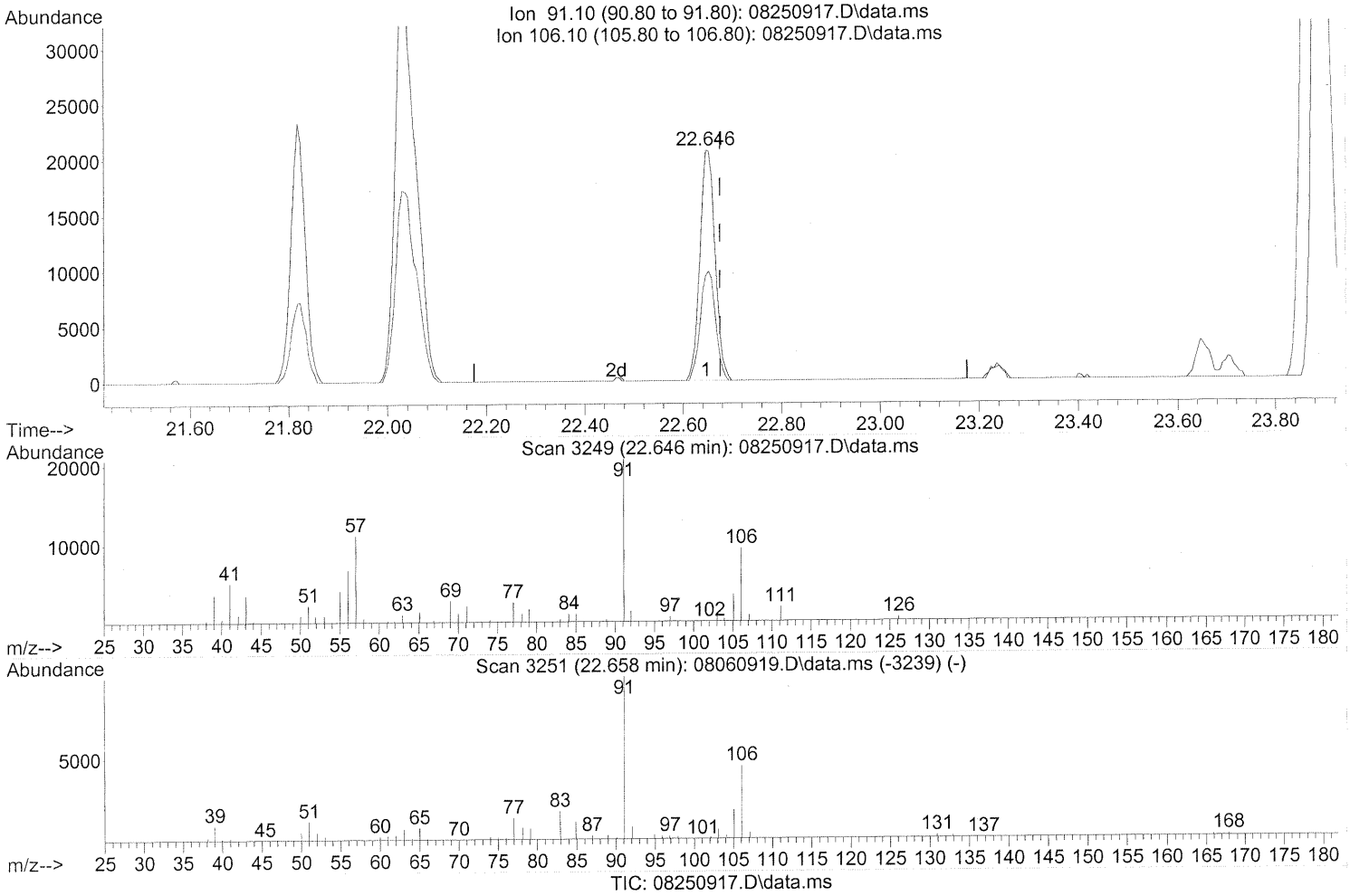
response 67700

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	46.00
103.00	46.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(70) o-Xylene (T)

22.646min (-0.028) 0.94ng

response 44298

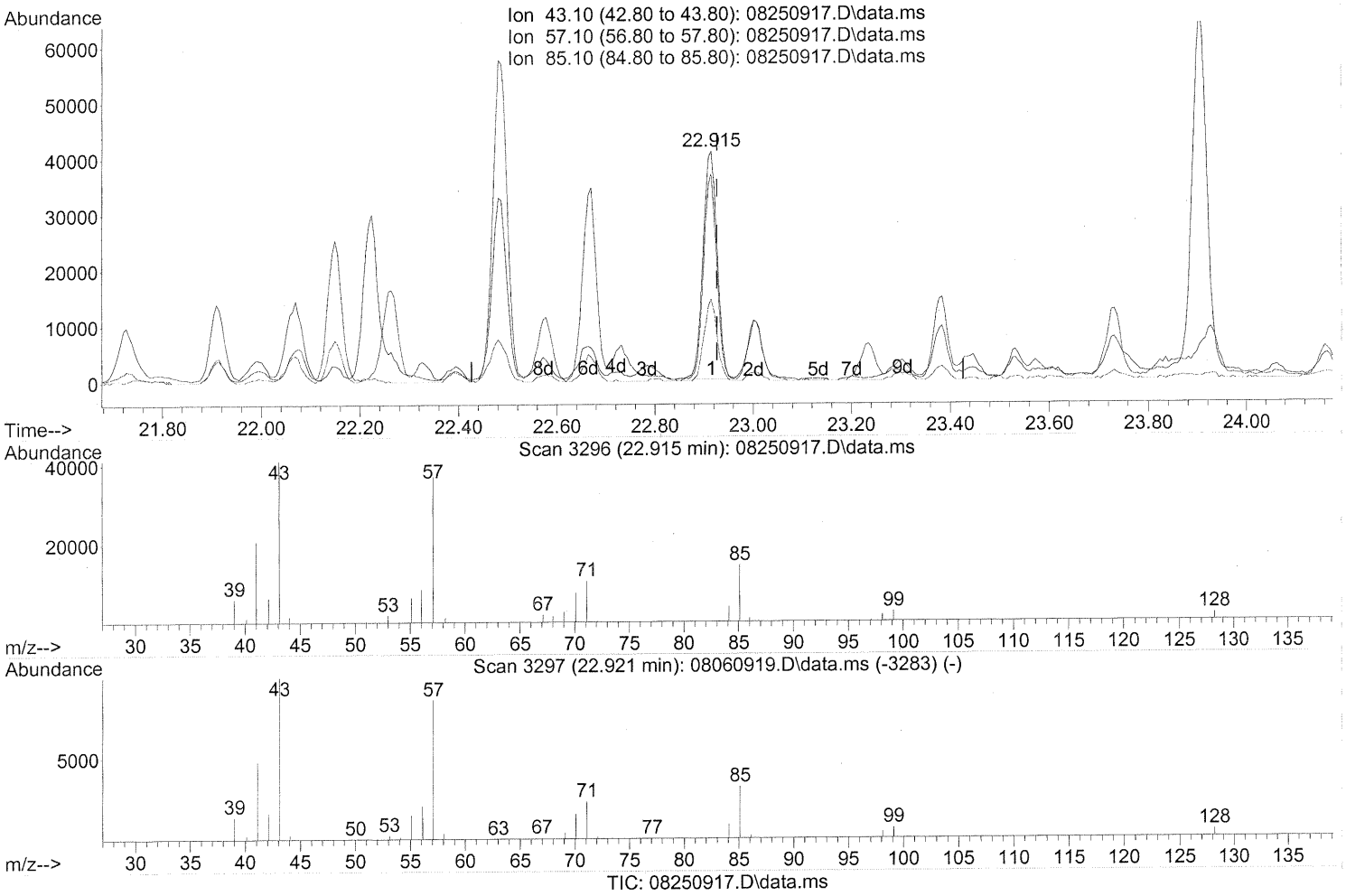
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	47.60
0.00	0.00	0.00
0.00	0.00	0.00

50

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(71) n-Nonane (T)

22.915min (-0.011) 2.60ng

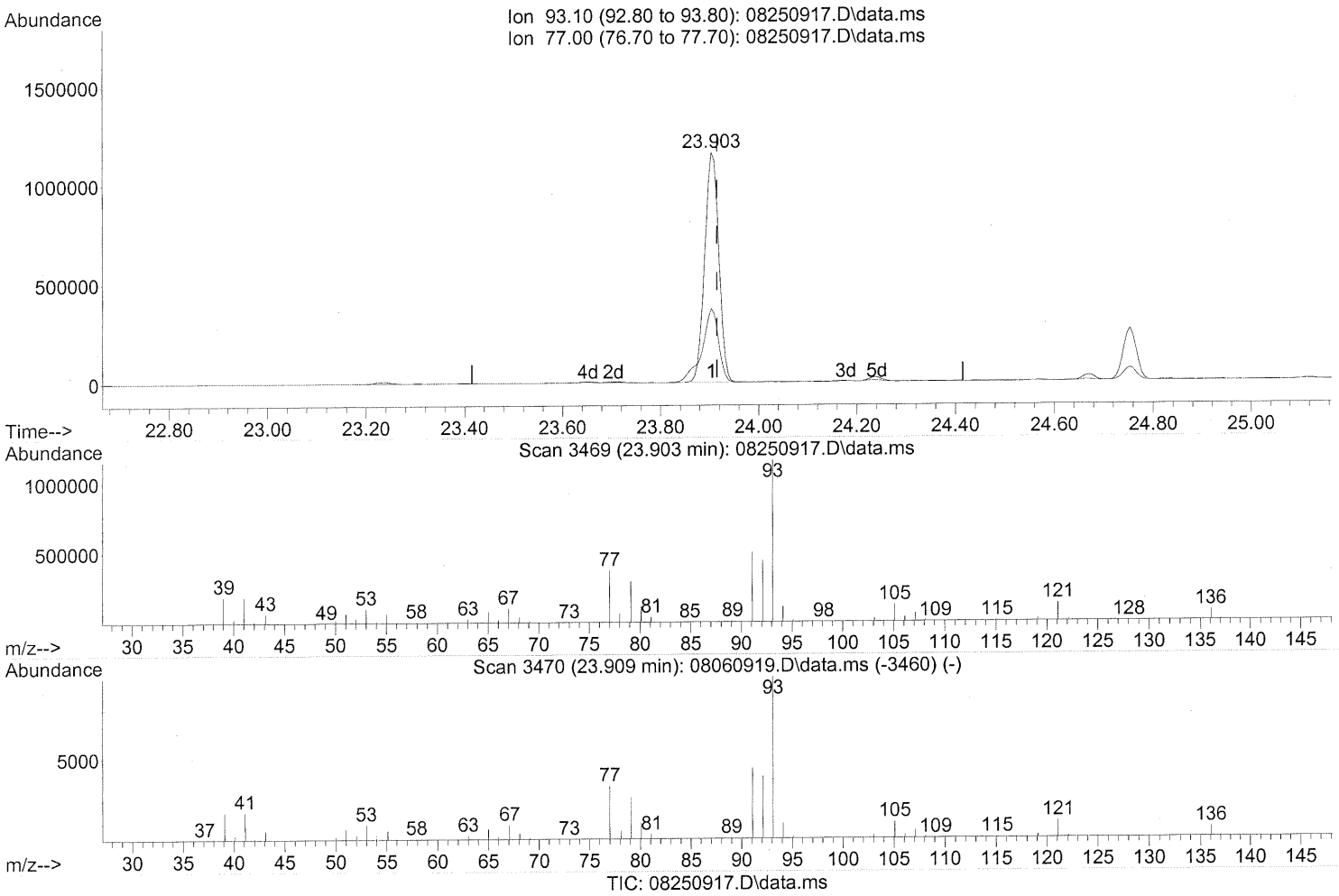
response 81376

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	86.67
85.10	30.40	32.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 75.21ng

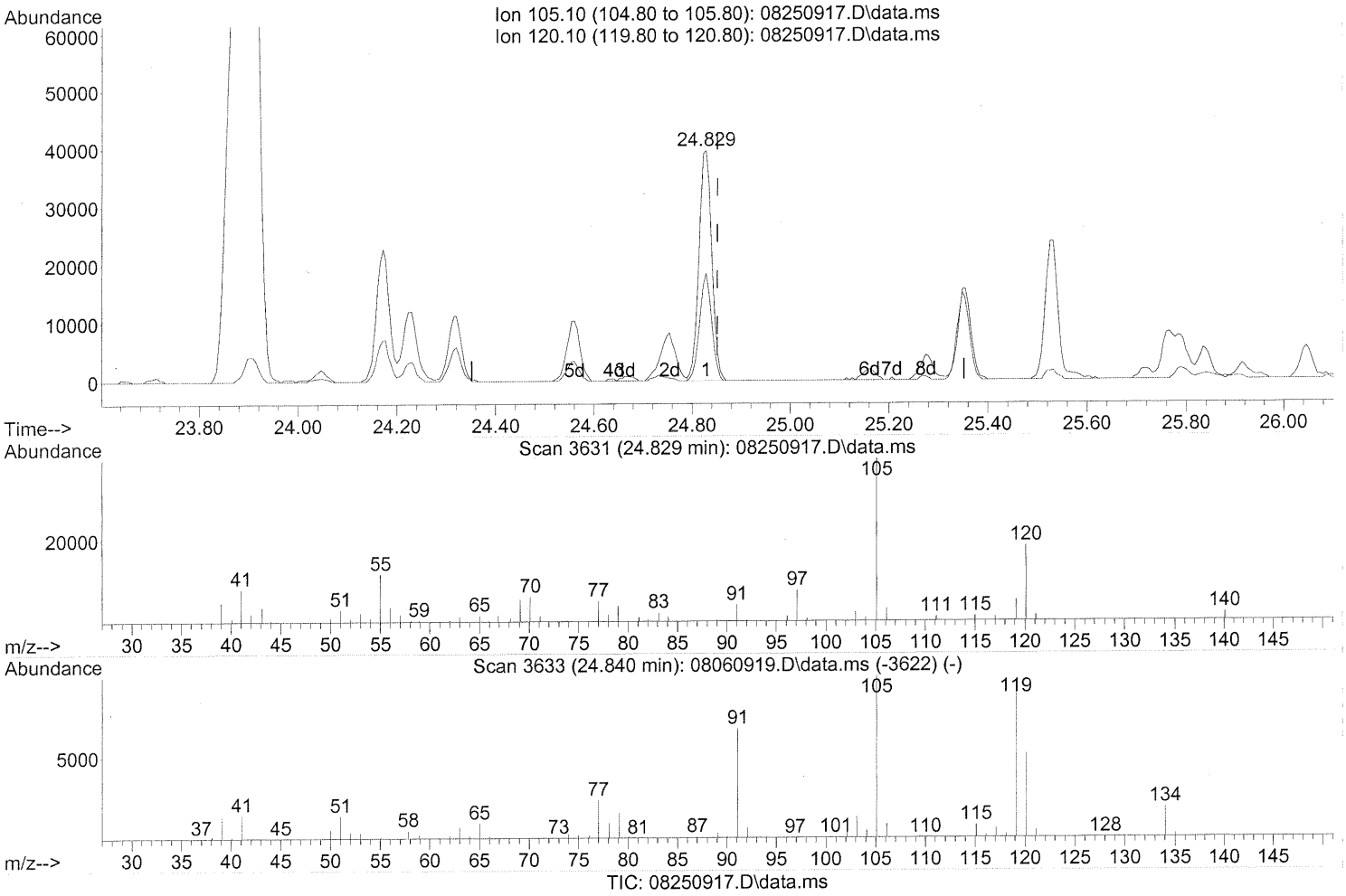
response 2295807

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	37.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250917.D\data.ms

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

24.829min (-0.023) 1.51ng

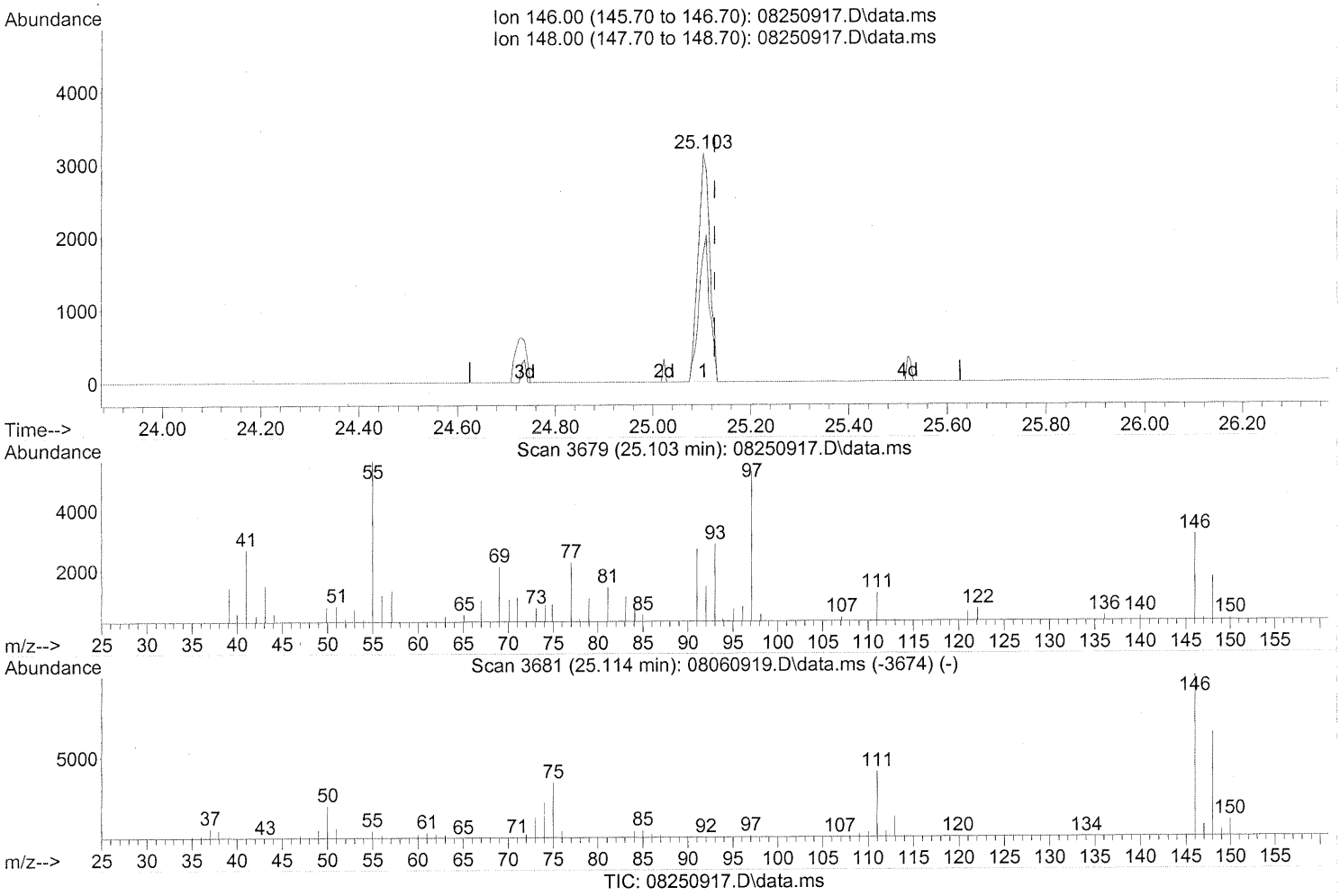
response 71754

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	43.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 16:22:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(86) 1,4-Dichlorobenzene (T)

25.103min (-0.023) 0.20ng

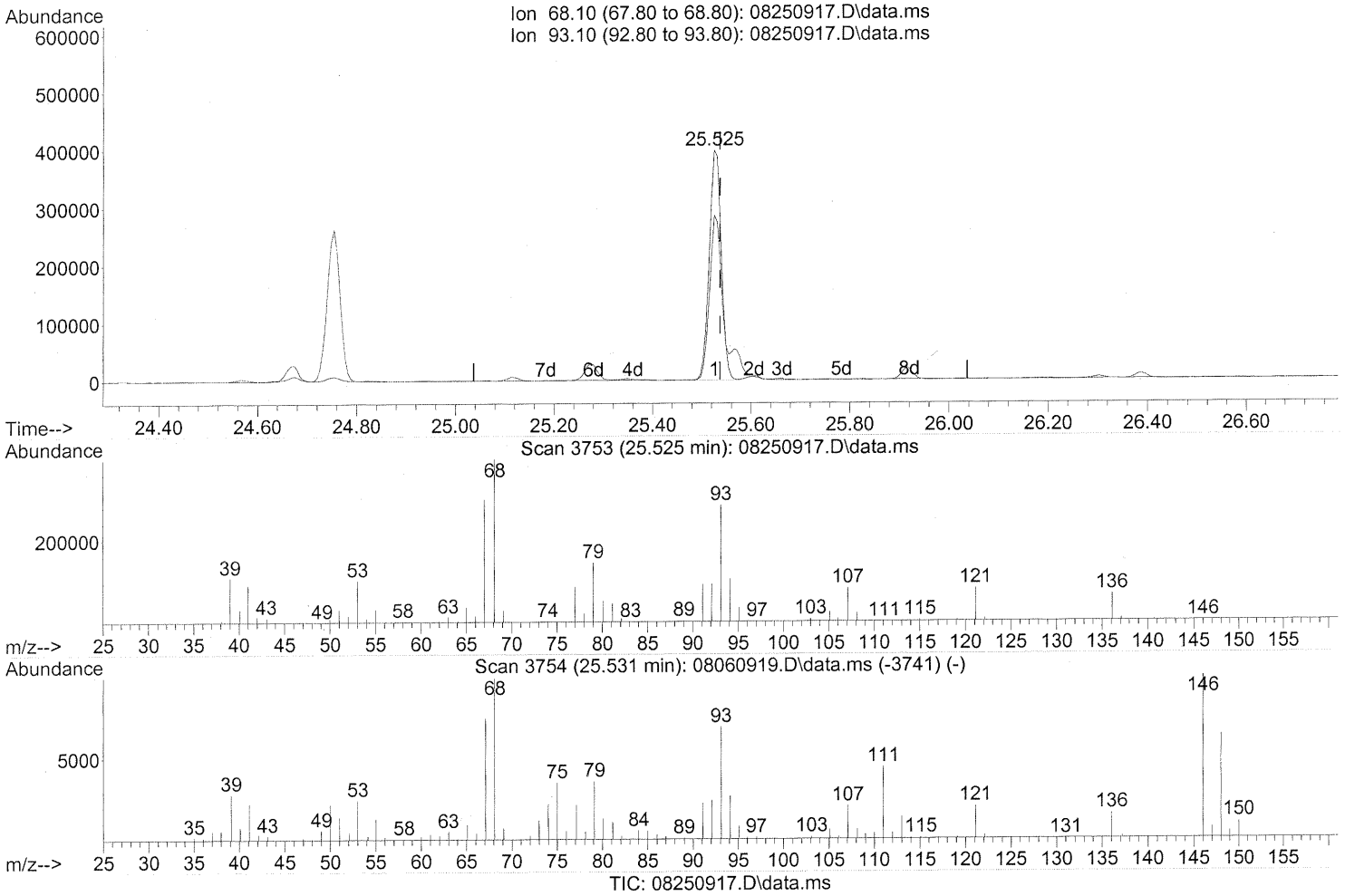
response 5202

Ion	Exp%	Act%
146.00	100	100
148.00	62.20	58.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250917.D
Acq On : 25 Aug 2009 10:17 pm
Operator : WA/CC
Sample : P0902876-001 (1000mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 06:39:32 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(91) d-Limonene (T)

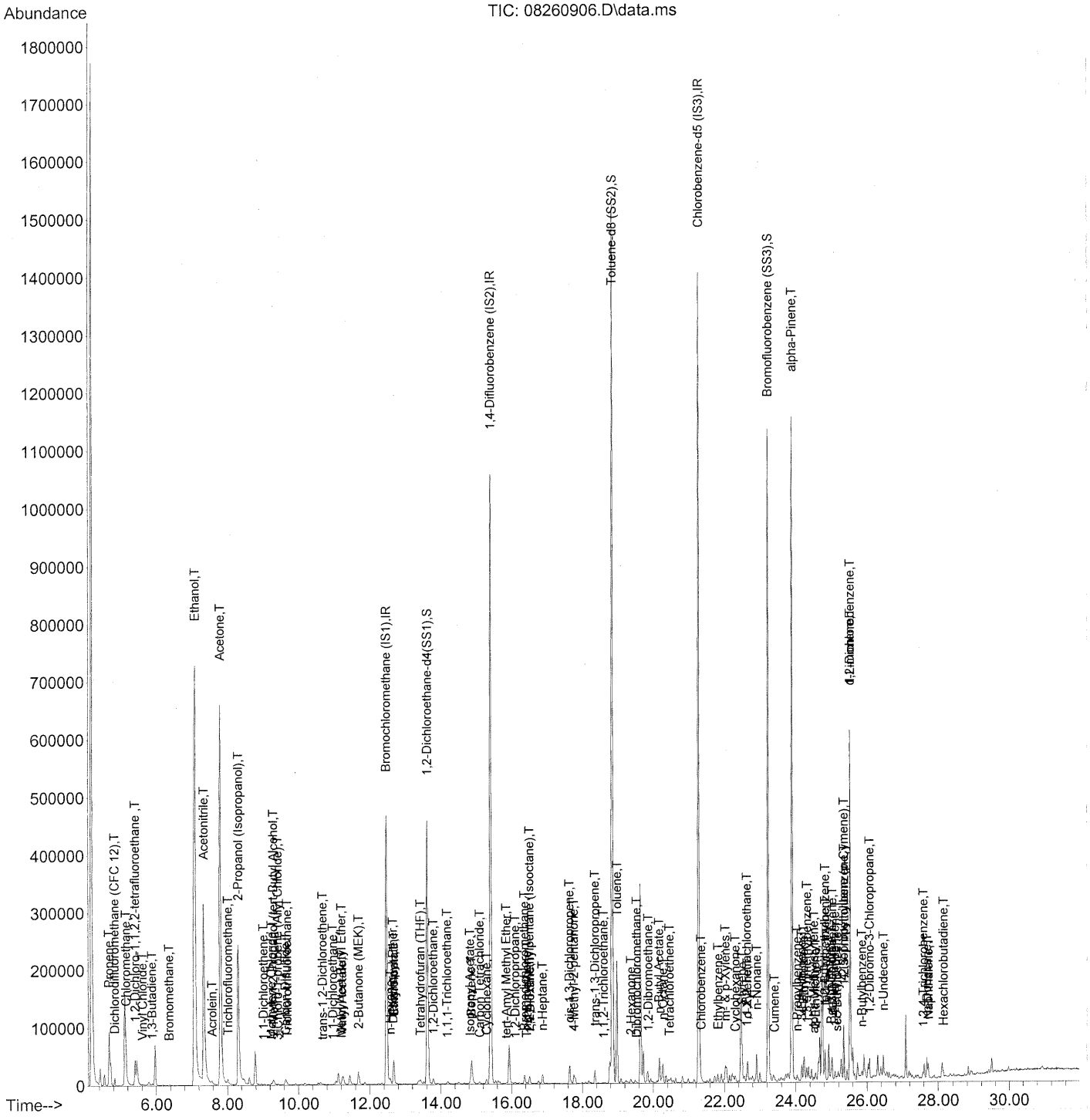
25.525min (-0.011) 33.45ng

response 674672

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	86.69
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260906.D
Acq On : 26 Aug 2009 1:43 pm
Operator : WA/CC
Sample : P0902876-001 dil (200mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 06:21:31 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260906.D
Acq On : 26 Aug 2009 1:43 pm
Operator : WA/CC
Sample : P0902876-001 dil (200mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 06:21:31 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

LM 9/2/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	240798	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.41	114	1214646	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	581524	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	468633	22.391	ng		-0.04
Spiked Amount 25.000			Recovery =	89.56%			
57) Toluene-d8 (SS2)	18.85	98	1320016	25.978	ng		-0.02
Spiked Amount 25.000			Recovery =	103.92%			
73) Bromofluorobenzene (SS3)	23.23	174	371418	27.718	ng		-0.01
Spiked Amount 25.000			Recovery =	110.88%			
Target Compounds							Qvalue
2) Propene	4.68	42	43022	2.604	ng		89
3) Dichlorodifluoromethan...	4.84	85	13987	0.518	ng		99
4) Chloromethane	5.16	50	6515	0.359	ng		95
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	1411	0.129	ng		81
6) Vinyl Chloride	5.61	62	1010	0.058	ng	#	44
7) 1,3-Butadiene	5.88	54	1367	0.109	ng	#	76
8) Bromomethane	6.37	94	920	0.087	ng	#	72
9) Chloroethane	6.70	64	241	N.D.			
10) Ethanol	7.10	45	1622257	154.882	ng		100
11) Acetonitrile	7.34	41	559059	18.226	ng		99
12) Acrolein	7.57	56	6733	0.844	ng		95
13) Acetone	7.80	58	361977	36.627	ng		93
14) Trichlorofluoromethane	8.02	101	7292	0.299	ng		99
15) 2-Propanol (Isopropanol)	8.31	45	525544	13.532	ng		100
16) Acrylonitrile	8.57	53	890	N.D.			
17) 1,1-Dichloroethene	9.02	96	836	0.074	ng	#	81
18) 2-Methyl-2-Propanol (t...	9.29	59	12522	0.363	ng	#	25
19) Methylene Chloride	9.25	84	1742	0.131	ng		83
20) 3-Chloro-1-propene (Al...	9.42	41	1292	0.050	ng	#	43
21) Trichlorotrifluoroethane	9.68	151	1652	0.186	ng		87
22) Carbon Disulfide	9.63	76	23735	0.507	ng		95
23) trans-1,2-Dichloroethene	10.68	61	1109	0.055	ng		80
24) 1,1-Dichloroethane	10.96	63	1335	0.055	ng	#	43
25) Methyl tert-Butyl Ether	11.20	73	2633	0.070	ng		62
26) Vinyl Acetate	11.23	86	2454	1.220	ng	#	92
27) 2-Butanone (MEK)	11.68	72	9453	1.059	ng	#	89
28) cis-1,2-Dichloroethene	12.23	61	850	N.D.			
29) Diisopropyl Ether	12.66	87	1403	0.117	ng	#	1
30) Ethyl Acetate	12.67	61	8256	1.776	ng		92
31) n-Hexane	12.58	57	4692	0.197	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260906.D
Acq On : 26 Aug 2009 1:43 pm
Operator : WA/CC
Sample : P0902876-001 dil (200mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 06:21:31 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	8491	0.406	ng		96
34) Tetrahydrofuran (THF)	13.43	72	2372	0.249	ng	#	37
35) Ethyl tert-Butyl Ether	13.45	87	660	N.D.			
36) 1,2-Dichloroethane	13.79	62	8314	0.435	ng		99
38) 1,1,1-Trichloroethane	14.17	97	1433	0.070	ng	#	49
39) Isopropyl Acetate	14.83	61	1519	0.169	ng	#	1
40) 1-Butanol	15.00	56	87	N.D.			
41) Benzene	14.87	78	12226	0.229	ng		99
42) Carbon Tetrachloride	15.10	117	2842	0.167	ng		99
43) Cyclohexane	15.29	84	4477	0.229	ng		85
44) tert-Amyl Methyl Ether	15.85	73	2326	0.058	ng		75
45) 1,2-Dichloropropane	16.10	63	925	0.069	ng	#	59
46) Bromodichloromethane	16.37	83	2177	0.124	ng		92
47) Trichloroethene	16.43	130	664	0.055	ng		92
48) 1,4-Dioxane	16.53	88	601	0.059	ng	#	22
49) 2,2,4-Trimethylpentane...	16.51	57	12834	0.204	ng		94
50) Methyl Methacrylate	16.77	100	199	N.D.			
51) n-Heptane	16.87	71	4656	0.325	ng		96
52) cis-1,3-Dichloropropene	17.64	75	25115	1.130	ng		97
53) 4-Methyl-2-pentanone	17.76	58	5101	0.397	ng		99
54) trans-1,3-Dichloropropene	18.36	75	17871	0.846	ng		96
55) 1,1,2-Trichloroethane	18.60	97	719	0.061	ng	#	75
58) Toluene	18.98	91	175860	3.522	ng		100
59) 2-Hexanone	19.37	43	8121	0.245	ng		86
60) Dibromochloromethane	19.53	129	942	0.080	ng		85
61) 1,2-Dibromoethane	19.86	107	909	0.073	ng		82
62) n-Butyl Acetate	20.17	43	32510	0.831	ng		92
63) n-Octane	20.27	57	6577	0.545	ng		97
64) Tetrachloroethene	20.46	166	1137	0.098	ng		98
65) Chlorobenzene	21.34	112	2966	0.096	ng		86
66) Ethylbenzene	21.82	91	15231	0.267	ng		98
67) m- & p-Xylenes	22.03	91	30746	0.666	ng		99
68) Bromoform	22.14	173	356	N.D.			
69) Styrene	22.50	104	17724	0.531	ng	#	63
70) o-Xylene	22.65	91	14524	0.314	ng		99
71) n-Nonane	22.91	43	20468	0.665	ng		94
72) 1,1,2,2-Tetrachloroethane	22.63	83	1726	0.084	ng	#	18
74) Cumene	23.41	105	5751	0.098	ng		85
75) alpha-Pinene	23.90	93	542414	18.093	ng		91
76) n-Propylbenzene	24.04	91	10180	0.138	ng		98
77) 3-Ethyltoluene	24.17	105	15577	0.279	ng		99
78) 4-Ethyltoluene	24.22	105	10749	0.198	ng		95
79) 1,3,5-Trimethylbenzene	24.31	105	10143	0.222	ng		89

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260906.D
Acq On : 26 Aug 2009 1:43 pm
Operator : WA/CC
Sample : P0902876-001 dil (200mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 06:21:31 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

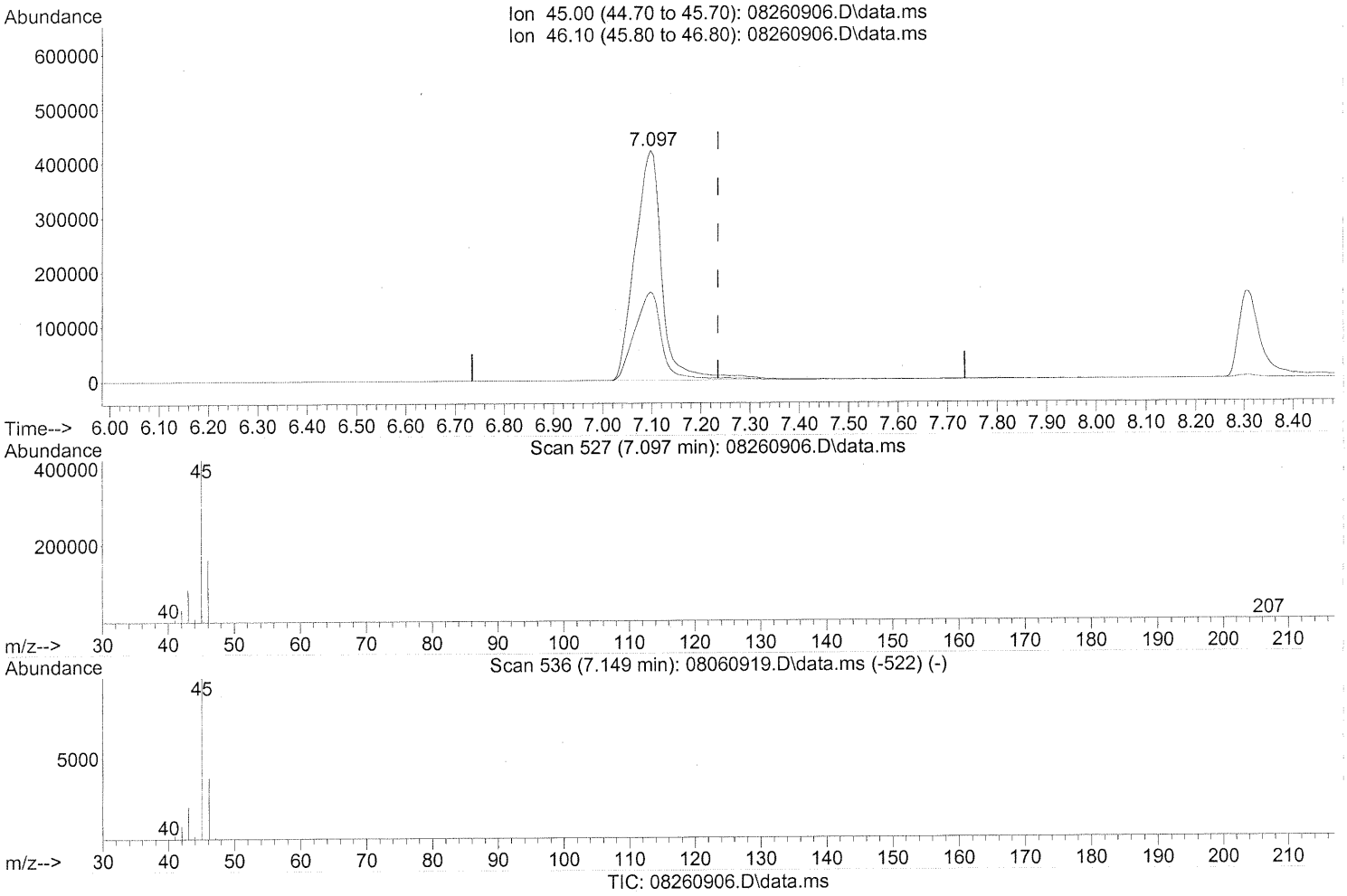
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	2040	0.083	ng		84
81) 2-Ethyltoluene	24.55	105	10068	0.179	ng		91
82) 1,2,4-Trimethylbenzene	24.82	105	20644	0.443	ng		88
83) n-Decane	24.93	57	26133	0.863	ng		94
84) Benzyl Chloride	25.00	91	7658	0.175	ng		92
85) 1,3-Dichlorobenzene	25.02	146	2552	0.108	ng		91
86) 1,4-Dichlorobenzene	25.10	146	4245	0.169	ng		98
87) sec-Butylbenzene	25.16	105	5693	0.090	ng		85
88) 4-Isopropyltoluene (p-...	25.35	119	44360	0.791	ng		97
89) 1,2,3-Trimethylbenzene	25.35	105	9769	0.206	ng	#	59
90) 1,2-Dichlorobenzene	25.53	146	2657	0.119	ng		96
91) d-Limonene	25.53	68	154211	7.785	ng		81
92) 1,2-Dibromo-3-Chloropr...	26.07	157	1063	0.138	ng	#	1
93) n-Undecane	26.46	57	14759	0.458	ng		80
94) 1,2,4-Trichlorobenzene	27.58	180	2839	0.185	ng		91
95) Naphthalene	27.73	128	22901	0.362	ng		98
96) n-Dodecane	27.69	57	11865	0.317	ng		95
97) Hexachlorobutadiene	28.14	225	1605	0.164	ng	#	74
98) Cyclohexanone	22.30	55	6682	0.323	ng		90
99) tert-Butylbenzene	24.82	119	5952	0.132	ng	#	87
100) n-Butylbenzene	25.86	91	8141	0.157	ng	#	76

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260906.D
Acq On : 26 Aug 2009 1:43 pm
Operator : WA/CC
Sample : P0902876-001 dil (200mL)
Misc : Environmental Health 102349
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 27 06:21:31 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.097min (-0.137) 154.88ng

response 1622257

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.64
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102350** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-002

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**16**	1.0	**9.2**	0.59	**M1**
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.7**	1.0	**0.56**	0.21	
74-87-3	**Chloromethane**	**0.80**	0.20	**0.39**	0.099	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.0	ND	0.15	
75-01-4	Vinyl Chloride	ND	0.20	ND	0.080	
106-99-0	1,3-Butadiene	ND	0.20	ND	0.092	
74-83-9	Bromomethane	ND	0.20	ND	0.053	
75-00-3	Chloroethane	ND	0.20	ND	0.077	
64-17-5	**Ethanol**	**870**	10	**460**	5.4	
75-05-8	**Acetonitrile**	**100**	1.0	**62**	0.61	
107-02-8	**Acrolein**	**5.7**	1.0	**2.5**	0.45	
67-64-1	**Acetone**	**220**	10	**93**	4.3	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.20	**0.24**	0.036	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**73**	1.0	**30**	0.42	
107-13-1	Acrylonitrile	ND	1.0	ND	0.47	
75-35-4	1,1-Dichloroethene	ND	0.20	ND	0.051	
75-09-2	Methylene Chloride	ND	1.0	ND	0.29	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.20	ND	0.065	
76-13-1	**Trichlorotrifluoroethane**	**0.58**	0.20	**0.076**	0.027	
75-15-0	**Carbon Disulfide**	**2.6**	1.0	**0.85**	0.33	
156-60-5	trans-1,2-Dichloroethene	ND	0.20	ND	0.051	
75-34-3	1,1-Dichloroethane	ND	0.20	ND	0.050	
1634-04-4	Methyl tert-Butyl Ether	ND	0.20	ND	0.057	
108-05-4	Vinyl Acetate	ND	10	ND	2.9	
78-93-3	**2-Butanone (MEK)**	**6.3**	1.0	**2.1**	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.
M1 = Matrix interference due to coelution with a non-target compound; results may be biased high.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102350** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-002

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.20	ND	0.051	
141-78-6	**Ethyl Acetate**	**9.7**	1.0	**2.7**	0.28	
110-54-3	n-Hexane	ND	1.0	ND	0.29	
67-66-3	**Chloroform**	**2.0**	0.20	**0.42**	0.042	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.35	
107-06-2	**1,2-Dichloroethane**	**2.1**	0.20	**0.52**	0.050	
71-55-6	1,1,1-Trichloroethane	ND	0.20	ND	0.037	
71-43-2	**Benzene**	**0.93**	0.20	**0.29**	0.064	
56-23-5	**Carbon Tetrachloride**	**0.53**	0.20	**0.085**	0.032	
110-82-7	Cyclohexane	ND	1.0	ND	0.30	
78-87-5	1,2-Dichloropropane	ND	0.20	ND	0.044	
75-27-4	**Bromodichloromethane**	**0.38**	0.20	**0.056**	0.030	
79-01-6	Trichloroethene	ND	0.20	ND	0.038	
123-91-1	1,4-Dioxane	ND	1.0	ND	0.28	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.25	
142-82-5	**n-Heptane**	**1.7**	1.0	**0.41**	0.25	
10061-01-5	**cis-1,3-Dichloropropene**	**6.8**	1.0	**1.5**	0.22	
108-10-1	**4-Methyl-2-pentanone**	**2.2**	1.0	**0.53**	0.25	
10061-02-6	**trans-1,3-Dichloropropene**	**4.8**	1.0	**1.1**	0.22	
79-00-5	1,1,2-Trichloroethane	ND	0.20	ND	0.037	
108-88-3	**Toluene**	**21**	1.0	**5.5**	0.27	
591-78-6	2-Hexanone	ND	1.0	ND	0.25	
124-48-1	Dibromochloromethane	ND	0.20	ND	0.024	
106-93-4	1,2-Dibromoethane	ND	0.20	ND	0.027	
123-86-4	**n-Butyl Acetate**	**4.8**	1.0	**1.0**	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
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Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102350** CAS Sample ID: P0902876-002
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.7**	1.0	**0.36**	0.22	
127-18-4	**Tetrachloroethene**	**0.22**	0.20	**0.033**	0.030	
108-90-7	Chlorobenzene	ND	0.20	ND	0.044	
100-41-4	**Ethylbenzene**	**1.2**	1.0	**0.27**	0.23	
179601-23-1	**m,p-Xylenes**	**3.1**	1.0	**0.72**	0.23	
75-25-2	Bromoform	ND	1.0	ND	0.099	
100-42-5	**Styrene**	**2.7**	1.0	**0.64**	0.24	
95-47-6	**o-Xylene**	**1.3**	1.0	**0.30**	0.23	
111-84-2	**n-Nonane**	**3.8**	1.0	**0.73**	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ND	0.030	
98-82-8	Cumene	ND	1.0	ND	0.21	
80-56-8	**alpha-Pinene**	**100**	1.0	**19**	0.18	
103-65-1	n-Propylbenzene	ND	1.0	ND	0.21	
622-96-8	4-Ethyltoluene	ND	1.0	ND	0.21	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ND	0.21	
95-63-6	**1,2,4-Trimethylbenzene**	**2.2**	1.0	**0.44**	0.21	
100-44-7	Benzyl Chloride	ND	0.20	ND	0.039	
541-73-1	1,3-Dichlorobenzene	ND	0.20	ND	0.034	
106-46-7	**1,4-Dichlorobenzene**	**0.29**	0.20	**0.048**	0.034	
95-50-1	1,2-Dichlorobenzene	ND	0.20	ND	0.034	
5989-27-5	**d-Limonene**	**39**	1.0	**7.1**	0.18	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.11	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.14	
91-20-3	Naphthalene	ND	1.0	ND	0.19	
87-68-3	Hexachlorobutadiene	ND	1.0	ND	0.096	

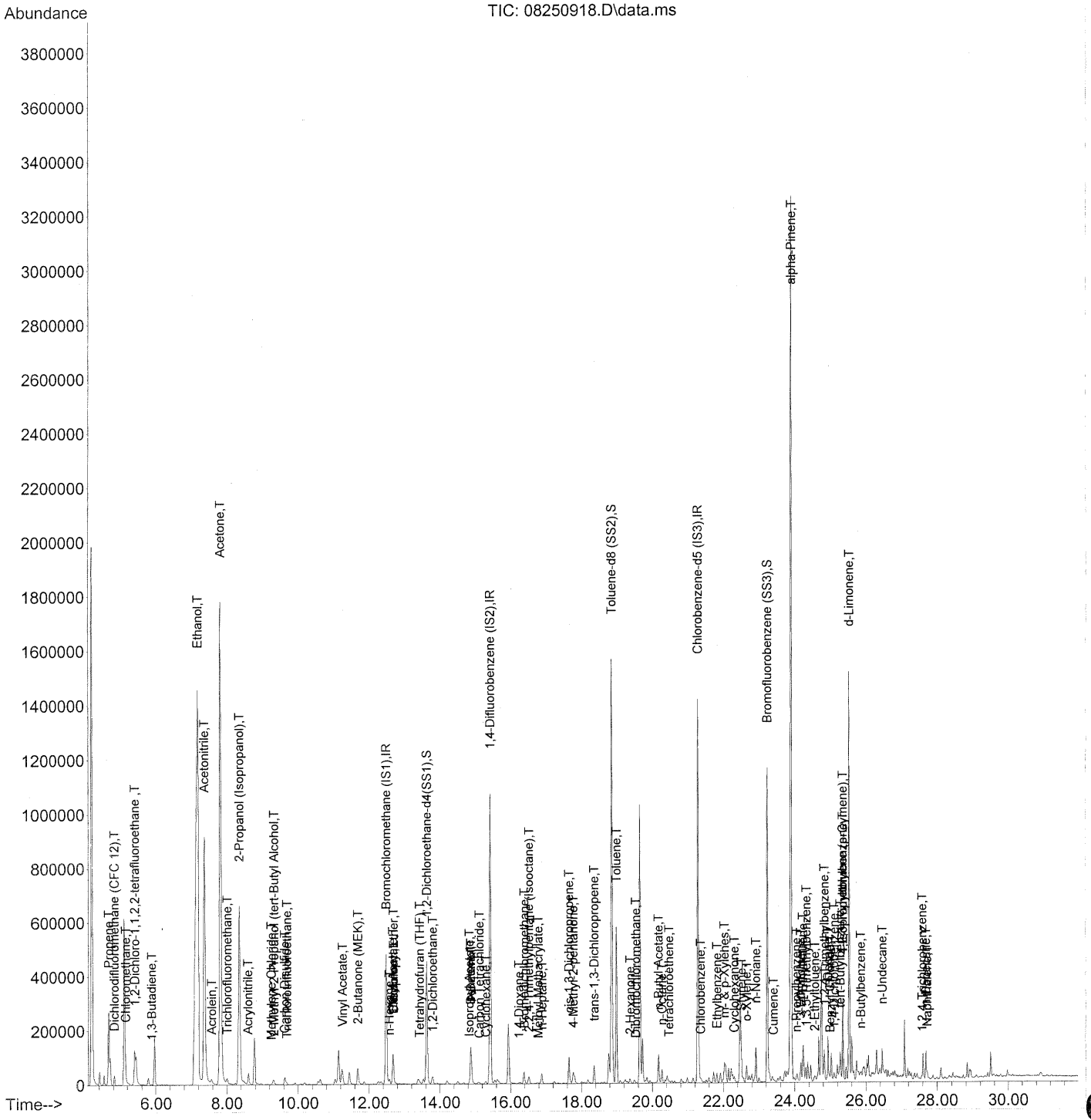
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 16:53:11 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

VM 8/31/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	245612	25.000 ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1229353	25.000 ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	589503	25.000 ng	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 1,2-Dichloroethane-d4(...	13.63	65	464581	21.763 ng	-0.03
Spiked Amount 25.000				Recovery = 87.04%	
57) Toluene-d8 (SS2)	18.85	98	1342955	26.072 ng	-0.02
Spiked Amount 25.000				Recovery = 104.28%	
73) Bromofluorobenzene (SS3)	23.23	174	381850	28.111 ng	-0.01
Spiked Amount 25.000				Recovery = 112.44%	

Target Compounds	R.T.	QIon	Response	Conc Units		Qvalue
2) Propene	4.67	42	130144	7.722 ng	M	89
3) Dichlorodifluoromethan...	4.83	85	37079	1.346 ng		99
4) Chloromethane	5.15	50	7298	0.394 ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	1652	0.148 ng		77
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.87	54	968	0.076 ng	#	70
8) Bromomethane	6.35	94	190	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.18	45	4533113	424.309 ng	See dil. OK via dil	100
11) Acetonitrile	7.36	41	1604742	51.290 ng	VM 9/2/09	99
12) Acrolein	7.57	56	22866	2.812 ng		99
13) Acetone	7.81	58	1091004	108.231 ng		92
14) Trichlorofluoromethane	8.01	101	16490	0.662 ng		100
15) 2-Propanol (Isopropanol)	8.35	45	1425553	35.987 ng		99
16) Acrylonitrile	8.59	53	1433	0.079 ng	#	9
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.32	59	9047	0.257 ng	#	59
19) Methylene Chloride	9.25	84	1554	0.115 ng		92
20) 3-Chloro-1-propene (Al...	9.43	41	94	N.D.		
21) Trichlorotrifluoroethane	9.68	151	2577	0.285 ng		99
22) Carbon Disulfide	9.62	76	61684	1.292 ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.20	73	538	N.D.		
26) Vinyl Acetate	11.24	86	8263	4.028 ng	CMEC #	69
27) 2-Butanone (MEK)	11.68	72	28030	3.080 ng		94
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.68	87	2317	0.190 ng	#	1
30) Ethyl Acetate	12.67	61	22434	4.731 ng		99
31) n-Hexane	12.57	57	9882	0.407 ng		92

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 16:53:11 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.68	83	21296	0.997 ng		97
34) Tetrahydrofuran (THF)	13.43	72	3084	0.318 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	20211	1.036 ng		97
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	14.83	61	1723	0.189 ng	#	1
40) 1-Butanol	14.87	56	102915	6.450 ng		80
41) Benzene	14.87	78	24629	0.456 ng		100
42) Carbon Tetrachloride	15.11	117	4502	0.261 ng		97
43) Cyclohexane	15.29	84	5019	0.254 ng		95
44) tert-Amyl Methyl Ether	16.08	73	104	N.D.		
45) 1,2-Dichloropropane	16.10	63	532	N.D.		
46) Bromodichloromethane	16.38	83	3279	0.184 ng		88
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.23	88	1297	0.126 ng	#	12
49) 2,2,4-Trimethylpentane...	16.51	57	26085	0.410 ng		90
50) Methyl Methacrylate	16.77	100	323	0.065 ng	#	1
51) n-Heptane	16.88	71	11919	0.822 ng		98
52) cis-1,3-Dichloropropene	17.65	75	74832	3.326 ng		100
53) 4-Methyl-2-pentanone	17.76	58	13752	1.059 ng		99
54) trans-1,3-Dichloropropene	18.36	75	50168	2.345 ng		99
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	515769	10.189 ng		99
59) 2-Hexanone	19.37	43	15723	0.467 ng		93
60) Dibromochloromethane	19.53	129	959	0.080 ng		84
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	93908	2.367 ng		96
63) n-Octane	20.27	57	10020	0.819 ng		94
64) Tetrachloroethene	20.47	166	1291	0.110 ng		88
65) Chlorobenzene	21.36	112	1652	0.053 ng	#	43
66) Ethylbenzene	21.82	91	33746	0.583 ng		98
67) m- & p-Xylenes	22.03	91	71621	1.530 ng		98
68) Bromoform	22.15	173	198	N.D.		
69) Styrene	22.51	104	45312	1.339 ng		94
70) o-Xylene	22.65	91	30247	0.644 ng		99
71) n-Nonane	22.91	43	58267	1.868 ng		96
72) 1,1,2,2-Tetrachloroethane	22.65	83	544	N.D.		
74) Cumene	23.41	105	4102	0.069 ng		92
75) alpha-Pinene	23.90	93	1537313	50.586 ng		83
76) n-Propylbenzene	24.05	91	11830	0.159 ng	#	88
77) 3-Ethyltoluene	24.17	105	30687	0.542 ng		97
78) 4-Ethyltoluene	24.23	105	17988	0.328 ng		88
79) 1,3,5-Trimethylbenzene	24.32	105	15026	0.325 ng		96

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 16:53:11 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

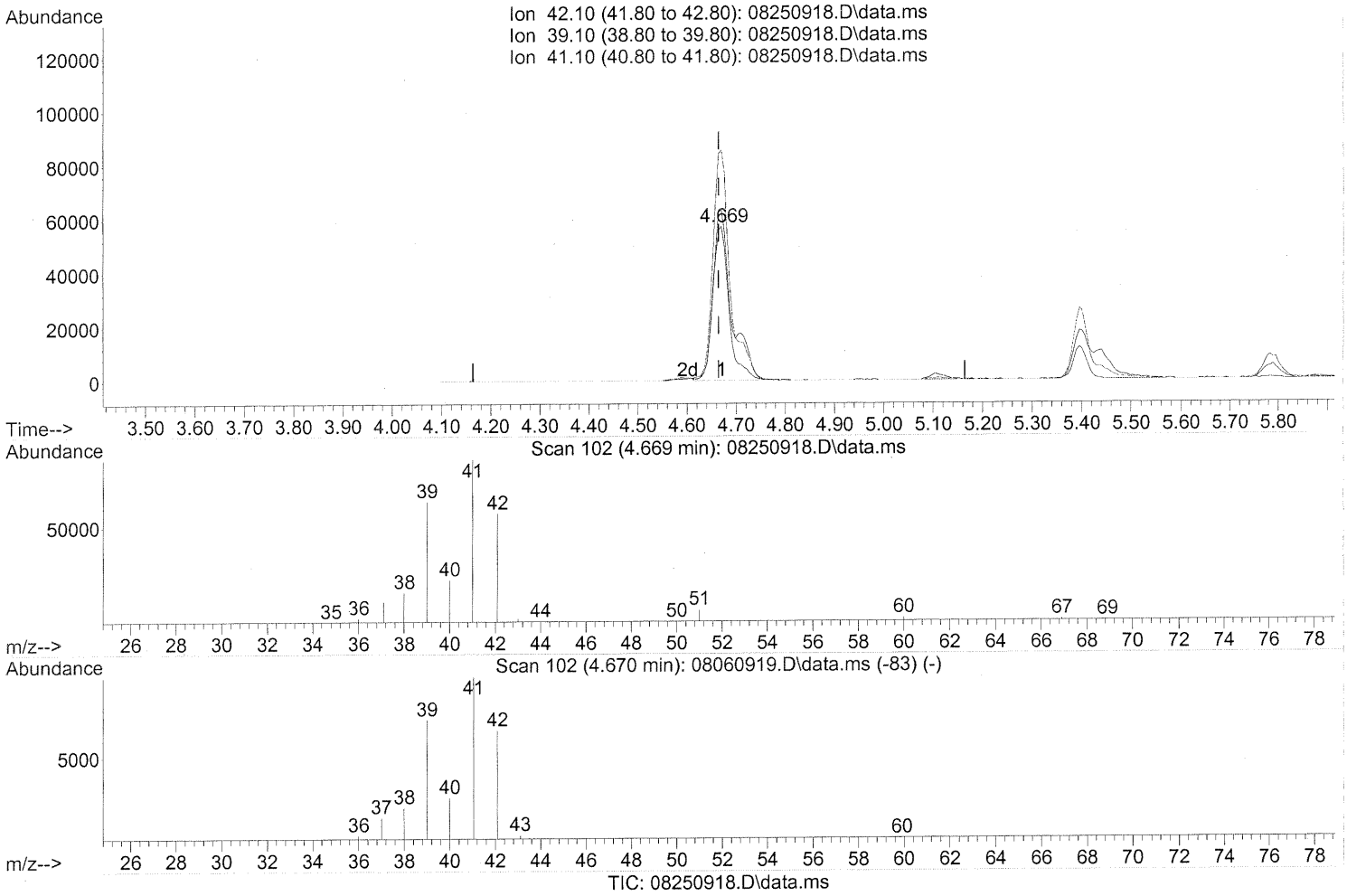
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	754	N.D.			
81) 2-Ethyltoluene	24.56	105	12786	0.224	ng		100
82) 1,2,4-Trimethylbenzene	24.83	105	49864	1.056	ng		88
83) n-Decane	24.93	57	64835	2.112	ng		91
84) Benzyl Chloride	24.99	91	2441	0.055	ng		66
85) 1,3-Dichlorobenzene	25.02	146	103	N.D.			
86) 1,4-Dichlorobenzene	25.10	146	3616	0.142	ng		98
87) sec-Butylbenzene	25.16	105	2277	N.D.			
88) 4-Isopropyltoluene (p-...	25.35	119	147349	2.590	ng		91
89) 1,2,3-Trimethylbenzene	25.35	105	20319	0.422	ng	#	22
90) 1,2-Dichlorobenzene	25.53	146	179	N.D.			
91) d-Limonene	25.53	68	387143	19.280	ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.46	57	34658	1.061	ng		76
94) 1,2,4-Trichlorobenzene	27.58	180	1002	0.064	ng	#	79
95) Naphthalene	27.72	128	18496	0.288	ng		100
96) n-Dodecane	27.69	57	32756	0.863	ng		91
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.30	55	10583	0.505	ng		99
99) tert-Butylbenzene	25.27	119	4161	0.091	ng		94
100) n-Butylbenzene	25.85	91	8634	0.164	ng	#	52

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(2) Propene (T)

4.669min (+0.006) 7.72ng

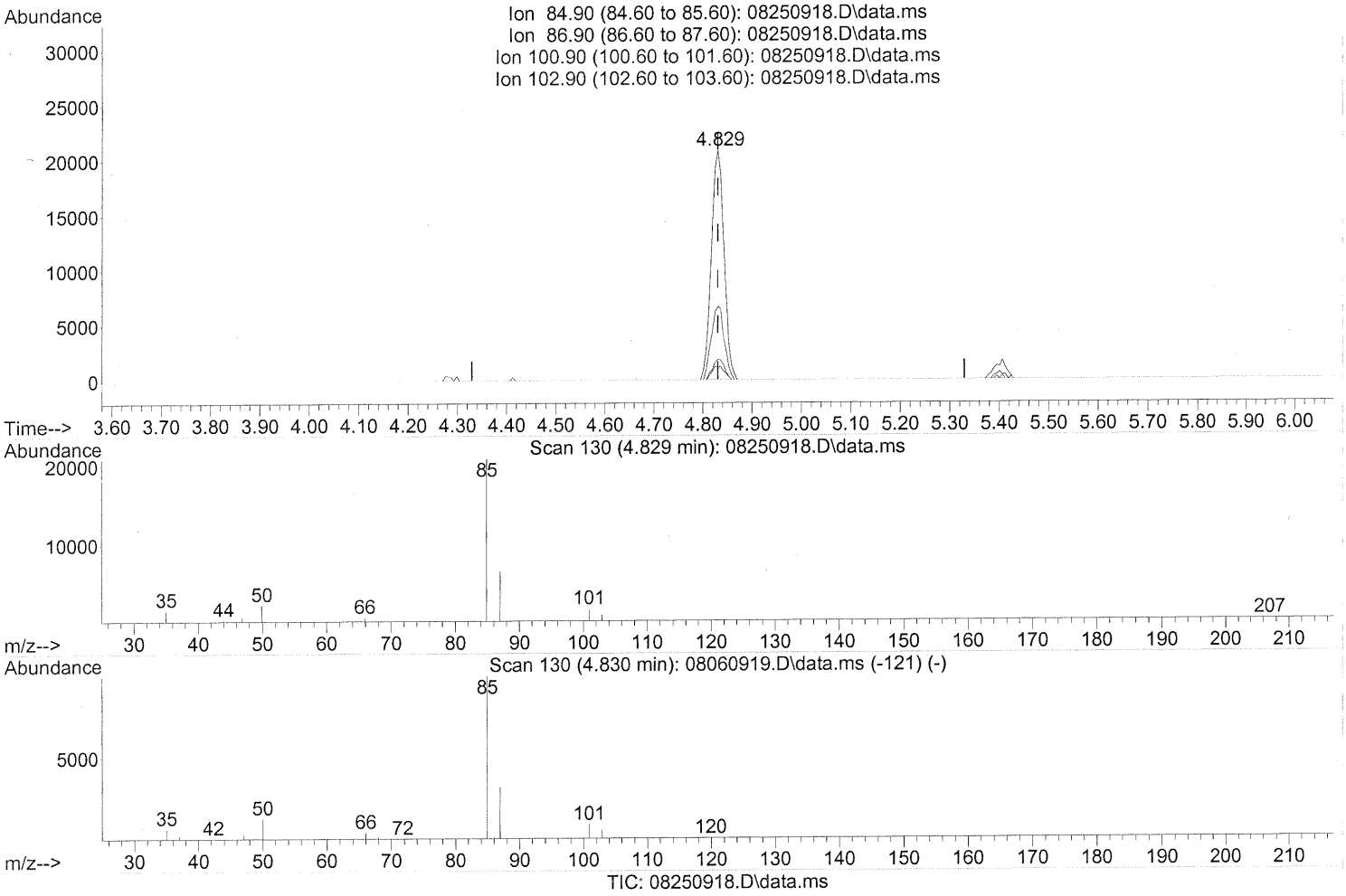
response 130144

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	128.07
41.10	150.20	160.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (CFC 12) (T)

4.829min (0.000) 1.35ng

response 37079

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.52
100.90	8.80	8.37
102.90	5.20	5.69

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
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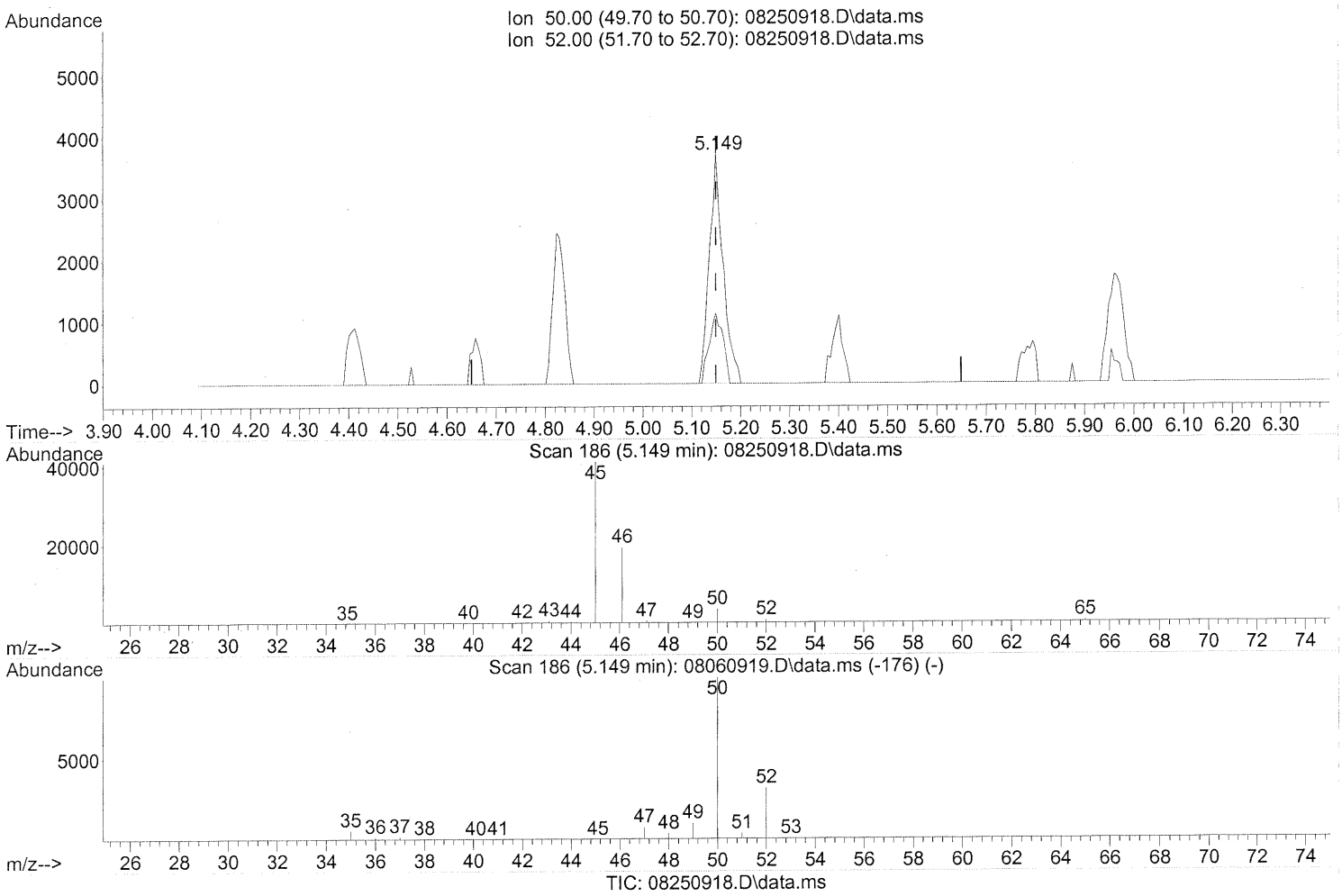
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.149min (-0.000) 0.39ng

response 7298

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	30.42
0.00	0.00	0.00
0.00	0.00	0.00

Before subtr.

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
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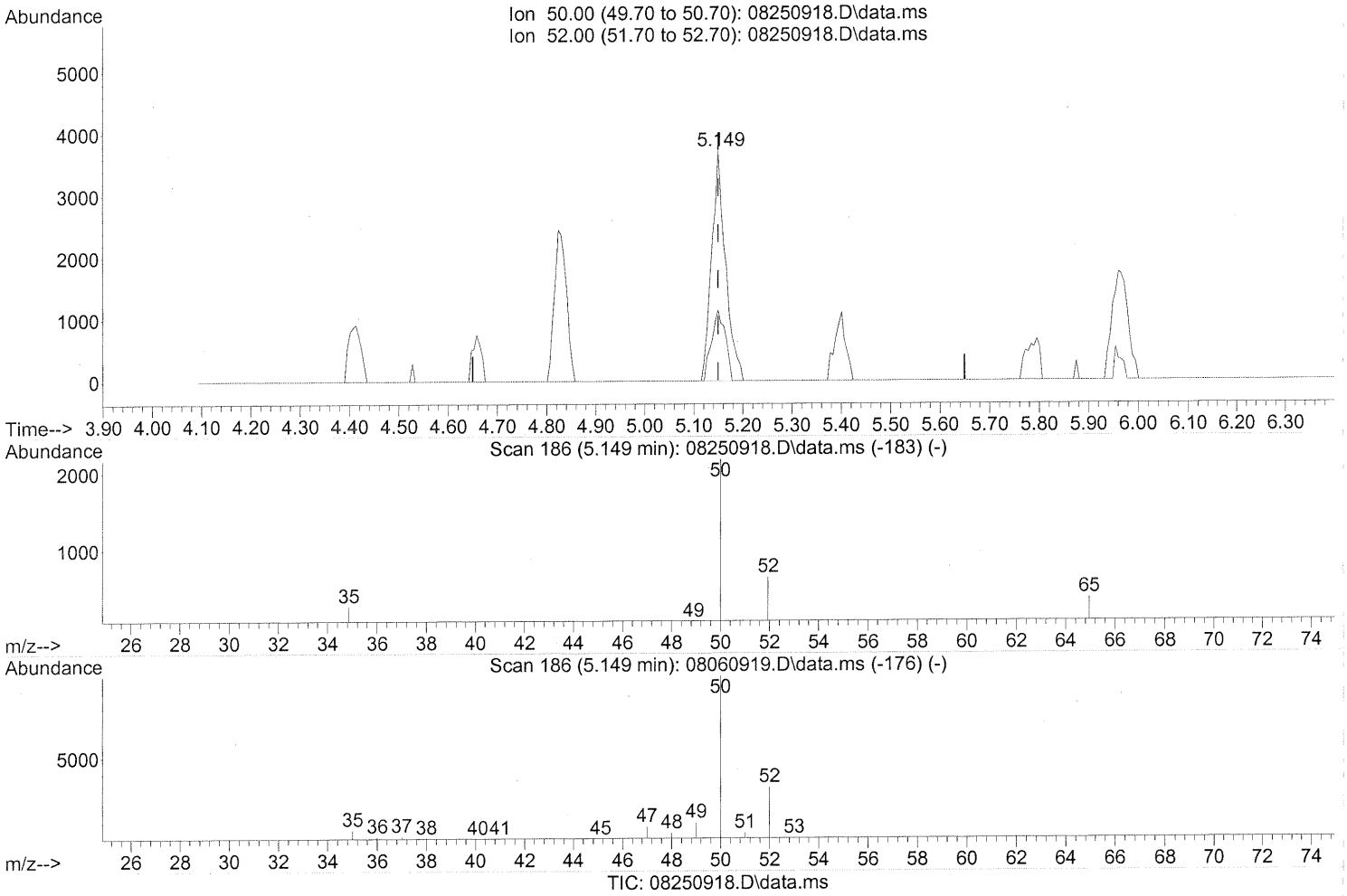
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.149min (-0.000) 0.39ng

response 7298

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	30.42
0.00	0.00	0.00
0.00	0.00	0.00

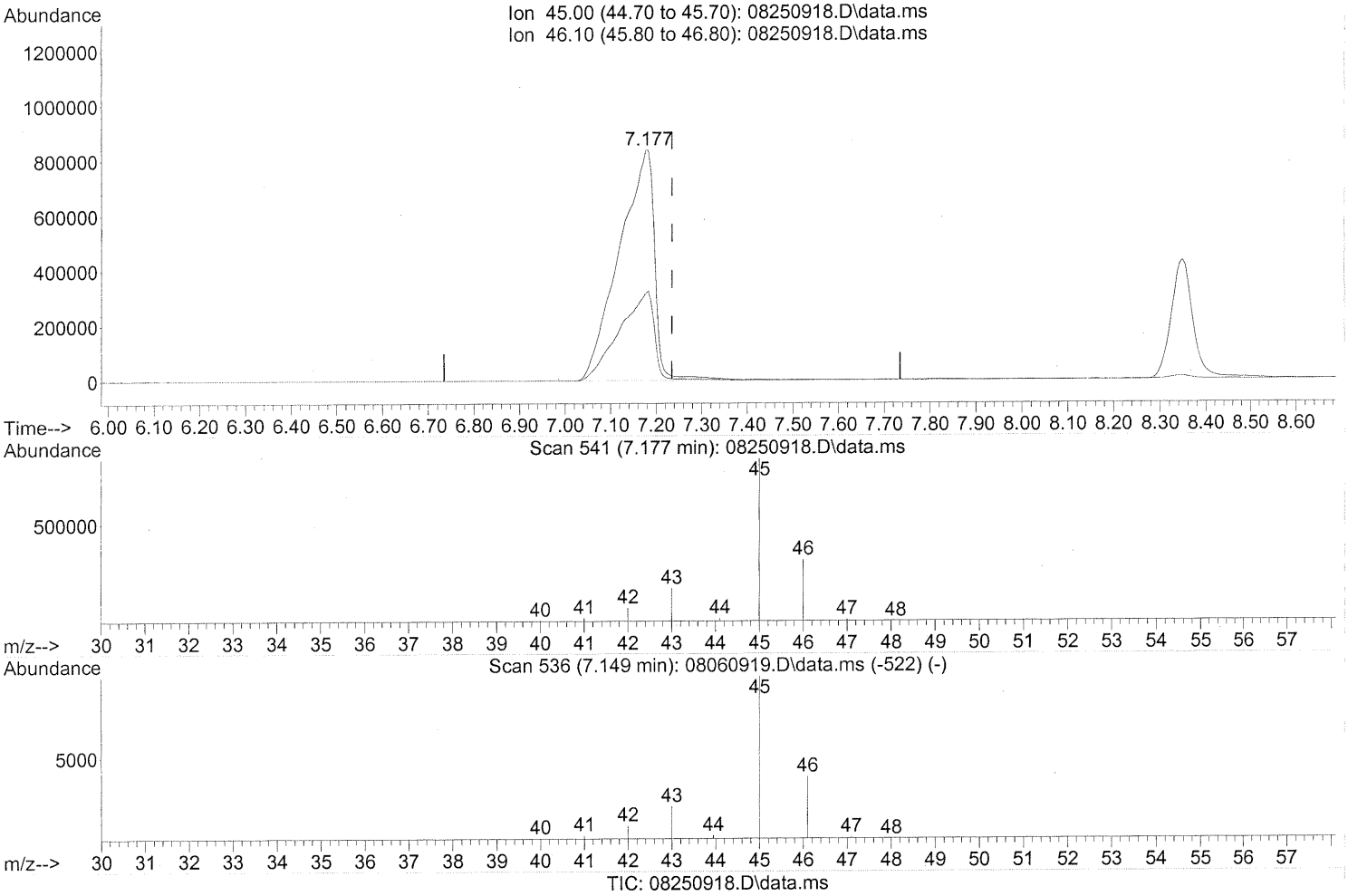
After subdr.

71

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 16:53:11 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.177min (-0.057) 424.31ng

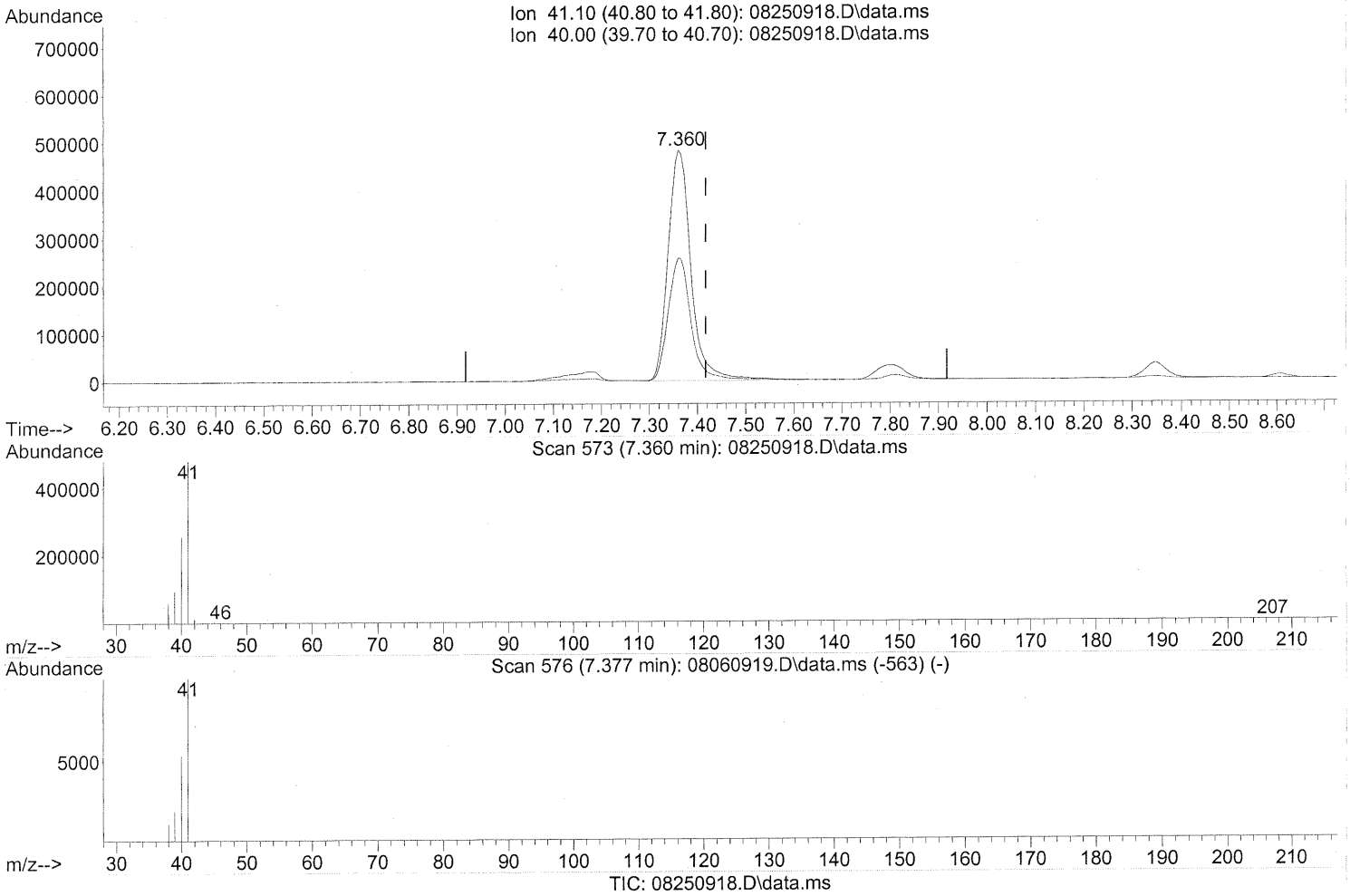
response 4533113

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(11) Acetonitrile (T)

7.360min (-0.057) 51.29ng

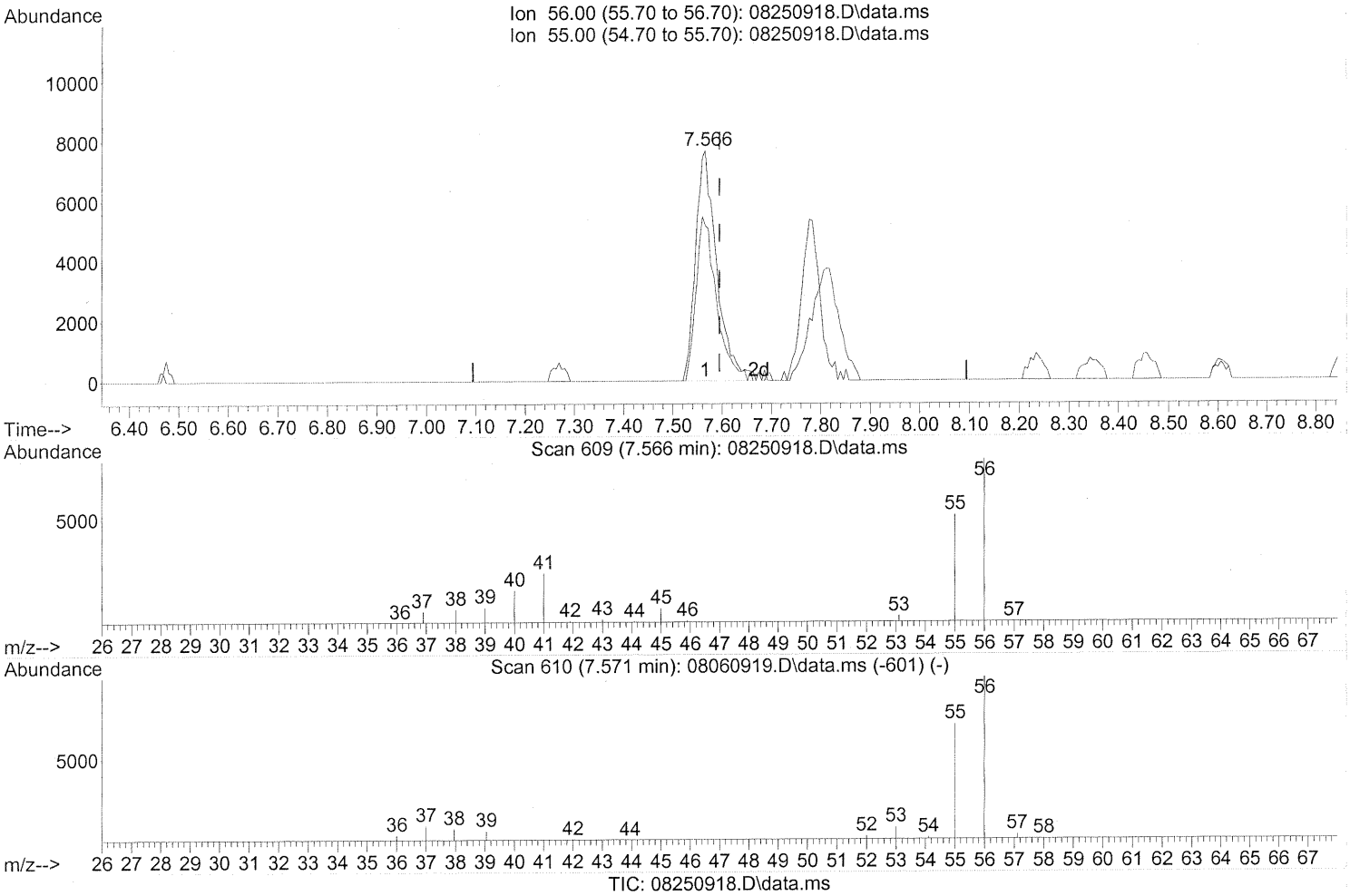
response 1604742

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	52.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(12) Acrolein (T)

7.566min (-0.029) 2.81ng

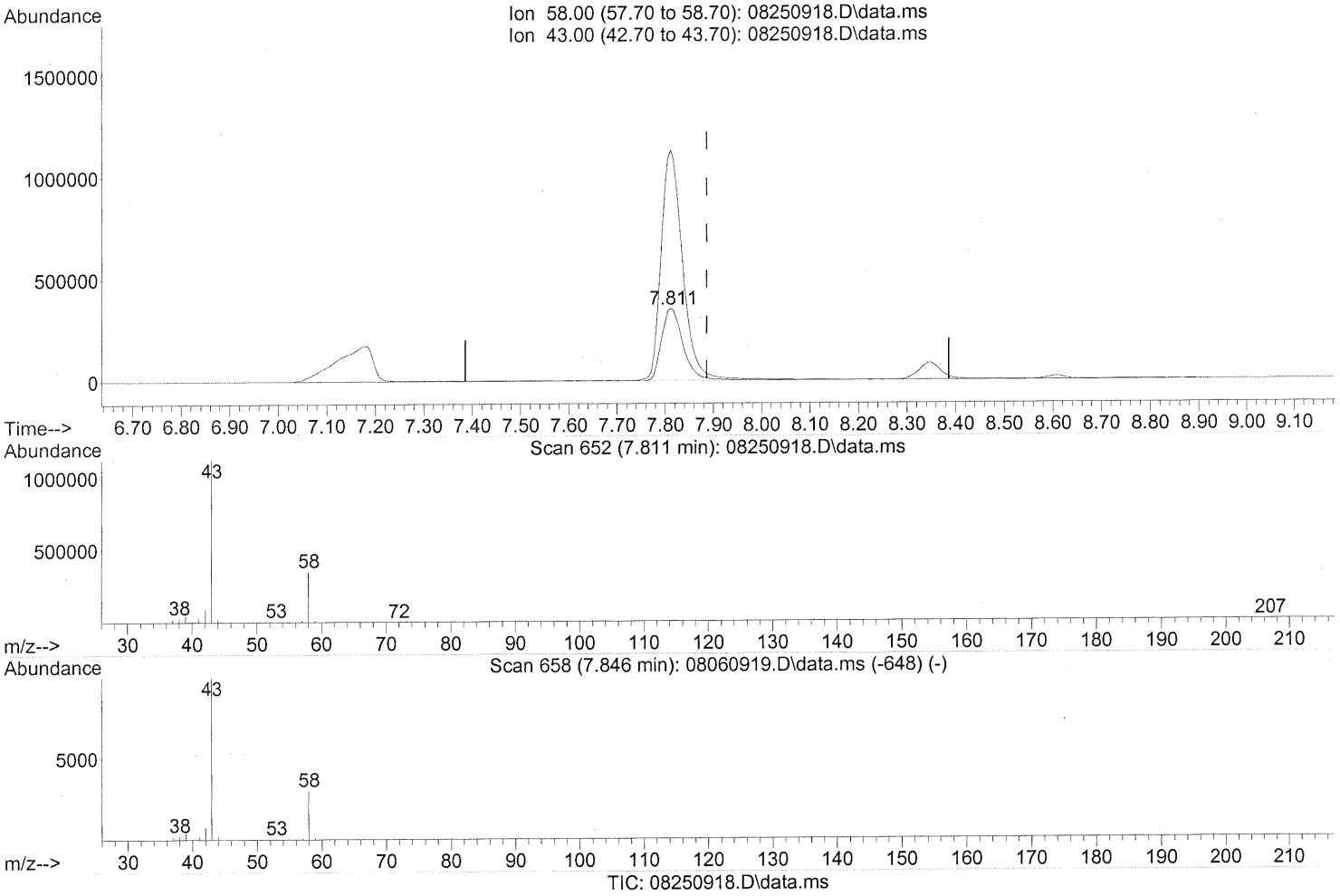
response 22866

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	68.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(13) Acetone (T)

7.811min (-0.075) 108.23ng

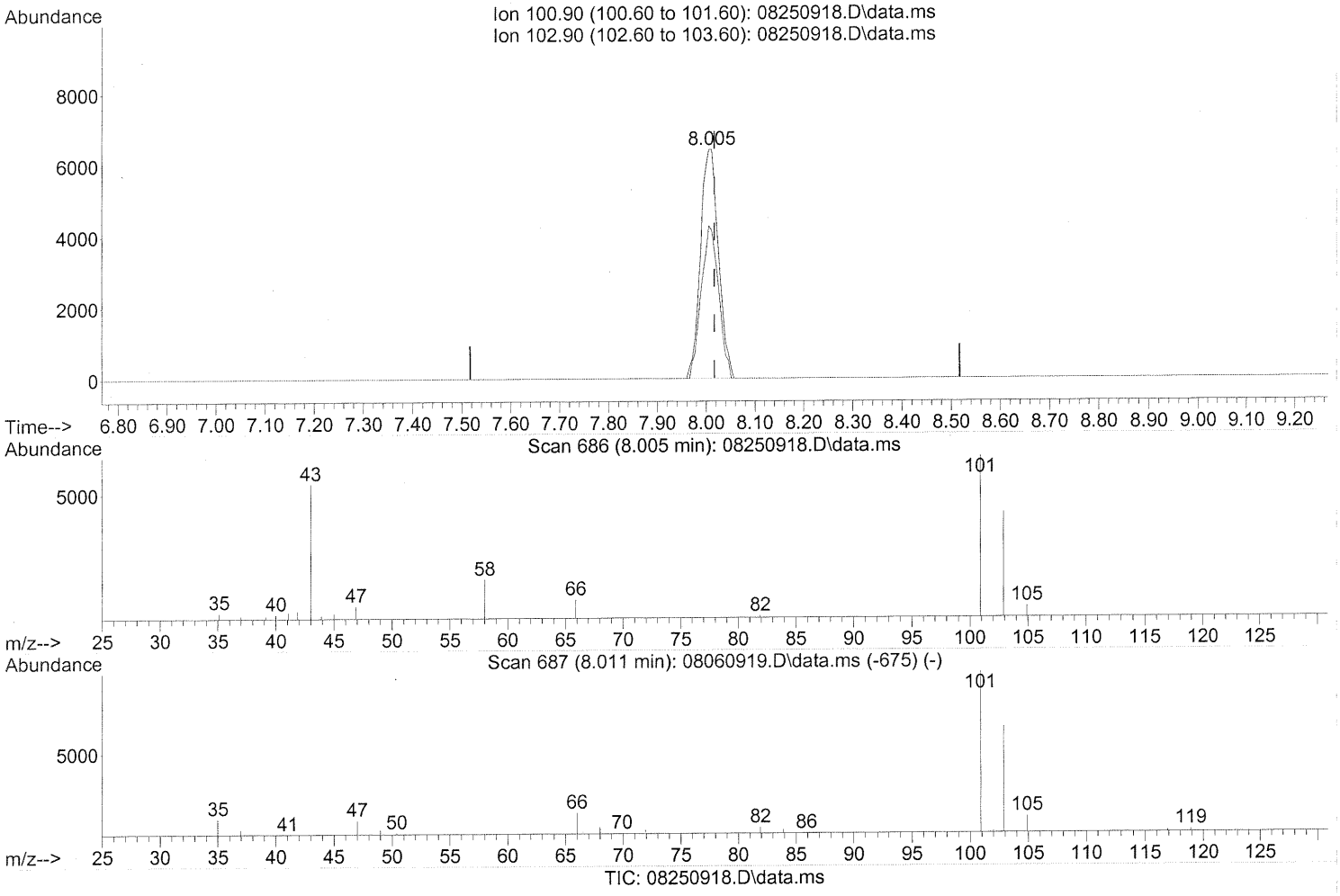
response 1091004

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	322.67
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(14) Trichlorofluoromethane (T)

8.005min (-0.011) 0.66ng

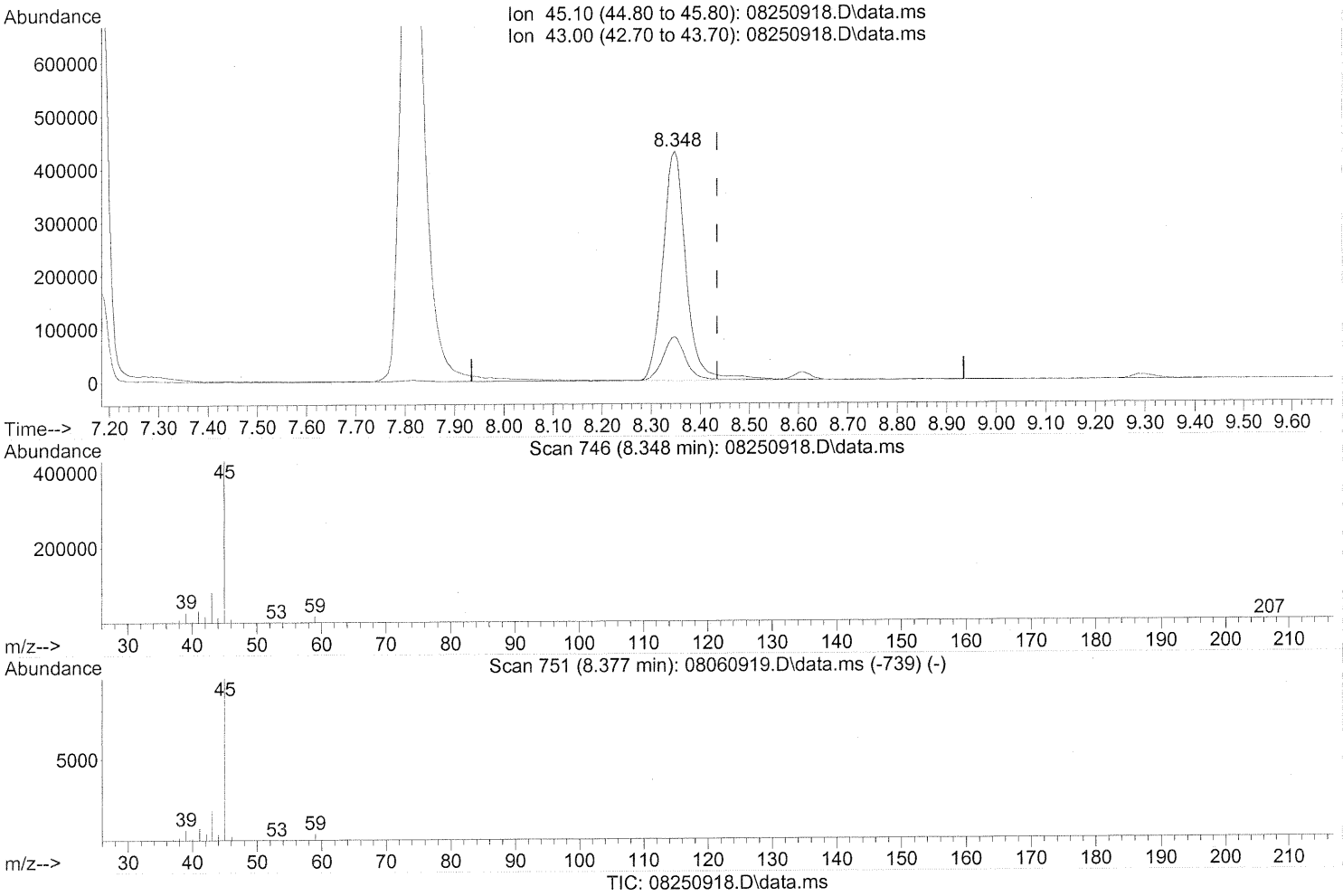
response 16490

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

8.348min (-0.086) 35.99ng

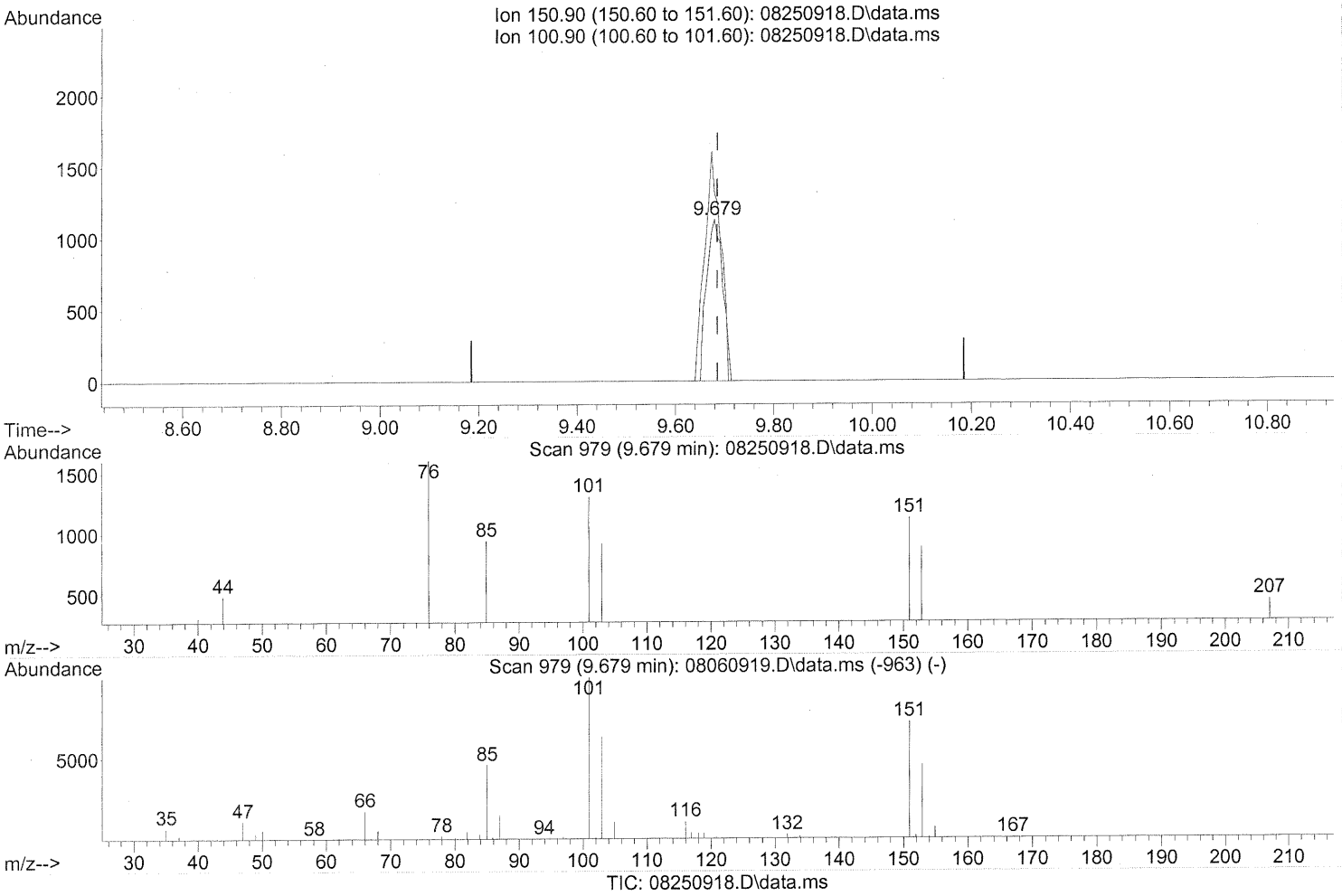
response 1425553

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.39
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.28ng

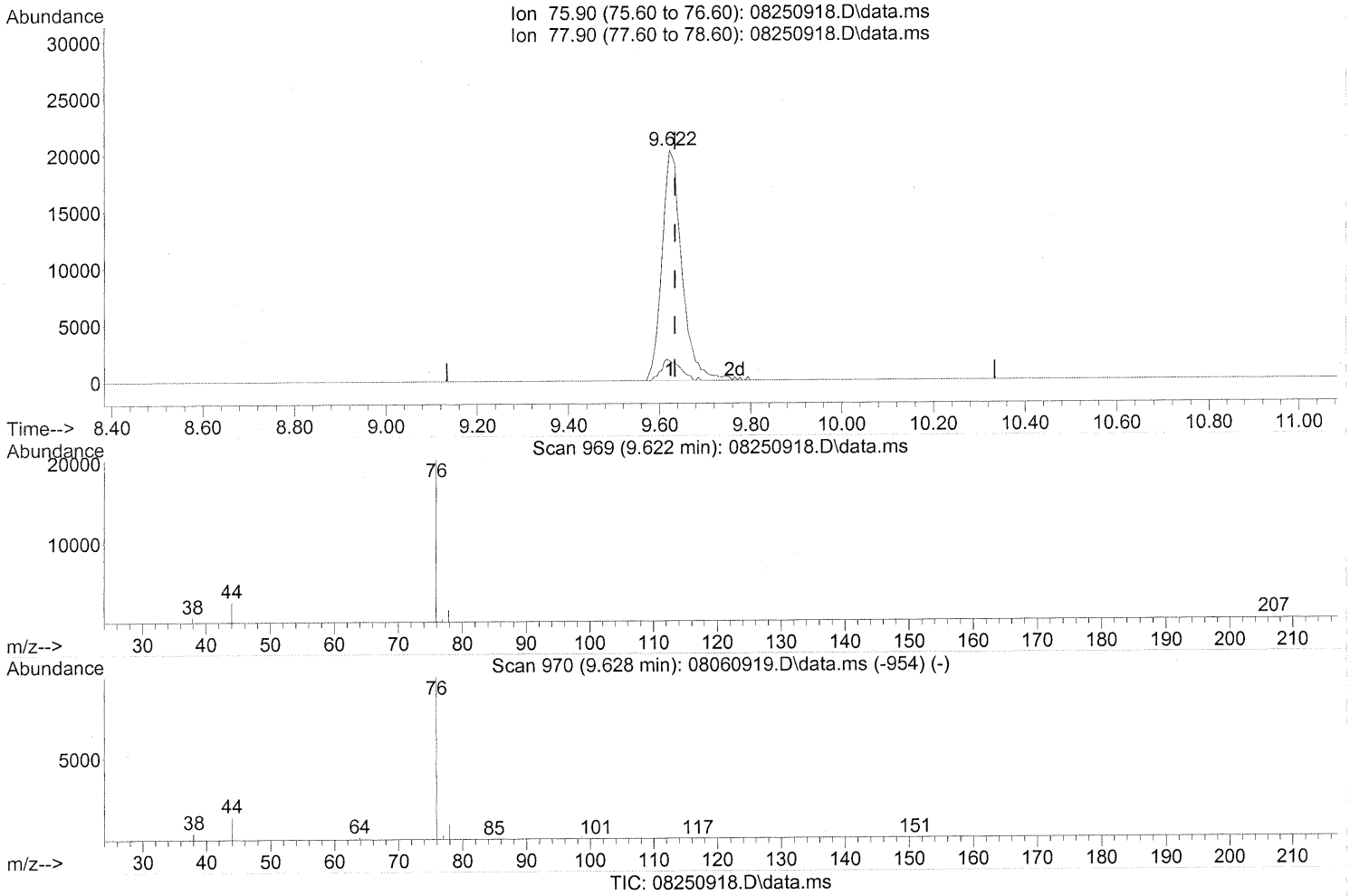
response 2577

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	139.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(22) Carbon Disulfide (T)

9.622min (-0.011) 1.29ng

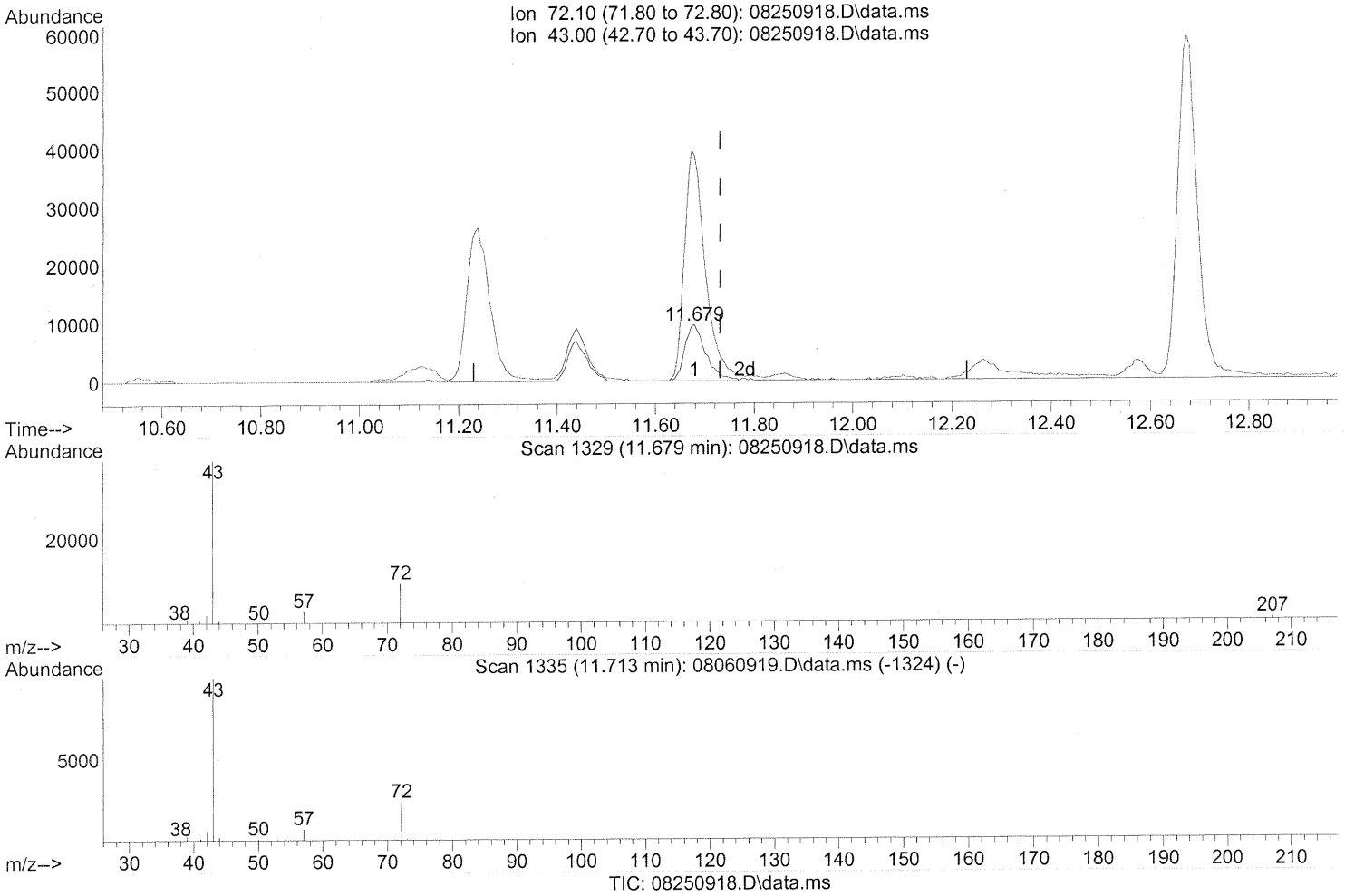
response 61684

Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

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

11.679min (-0.051) 3.08ng

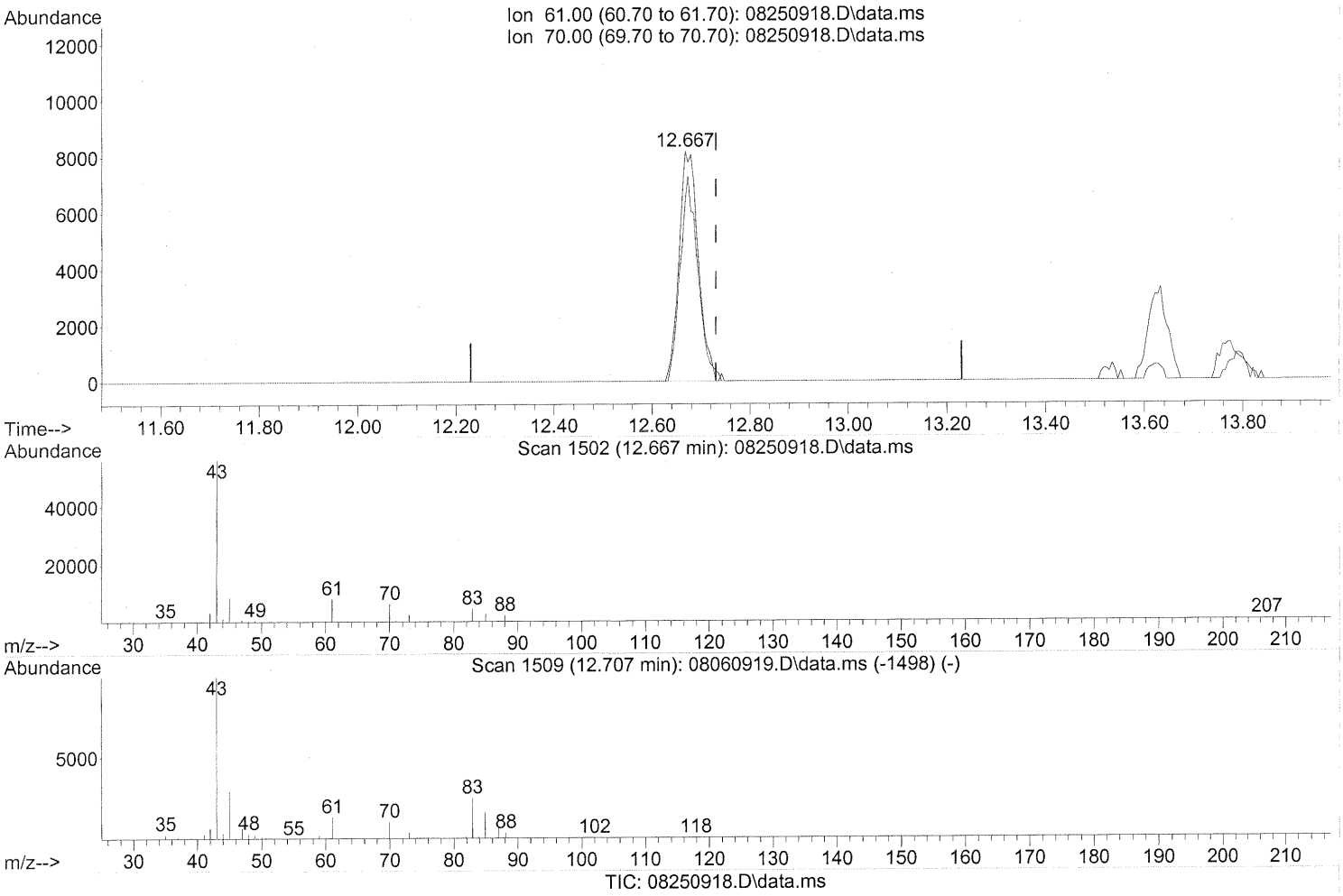
response 28030

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	421.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(30) Ethyl Acetate (T)

12.667min (-0.063) 4.73ng

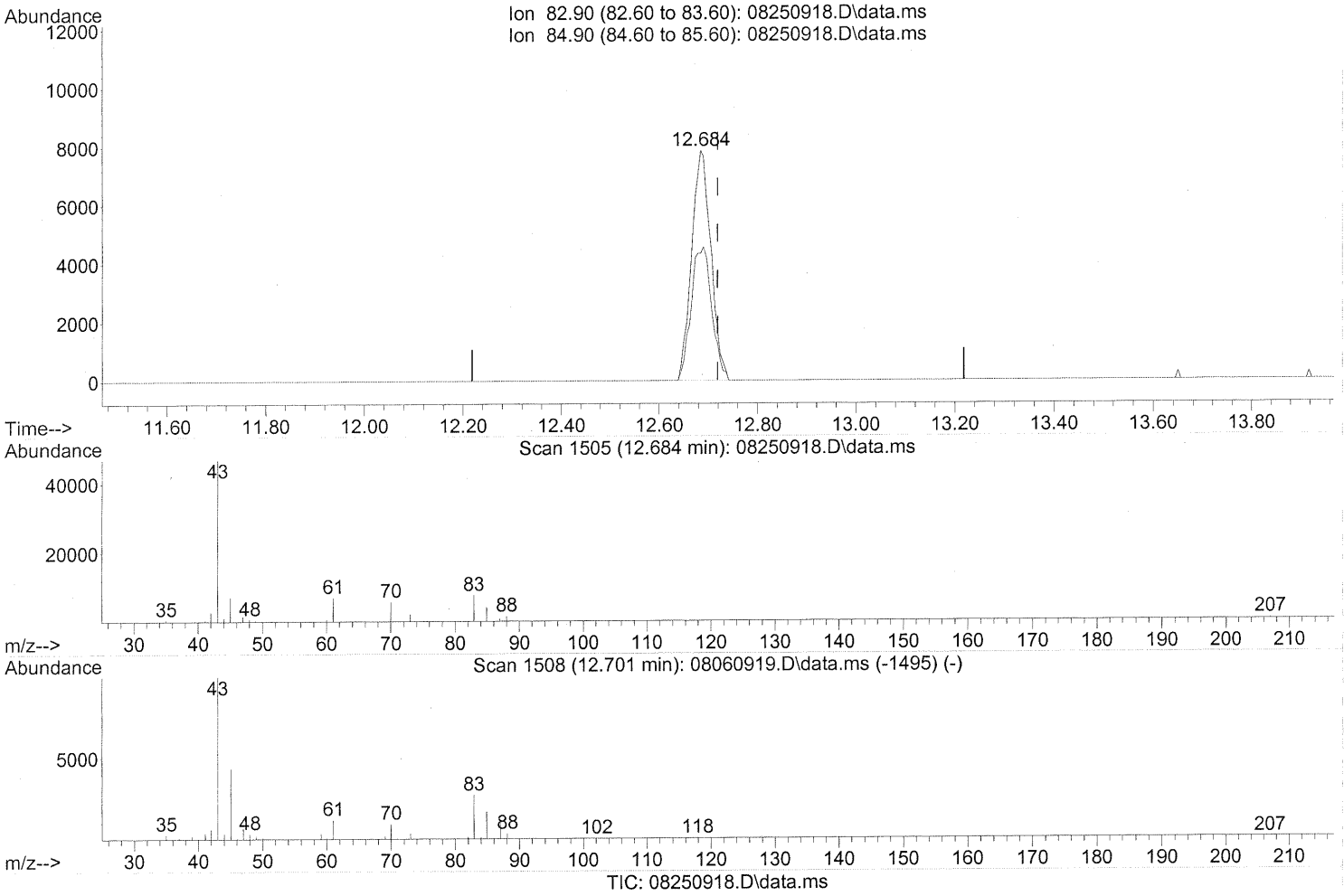
response 22434

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	80.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(32) Chloroform (T)

12.684min (-0.034) 1.00ng

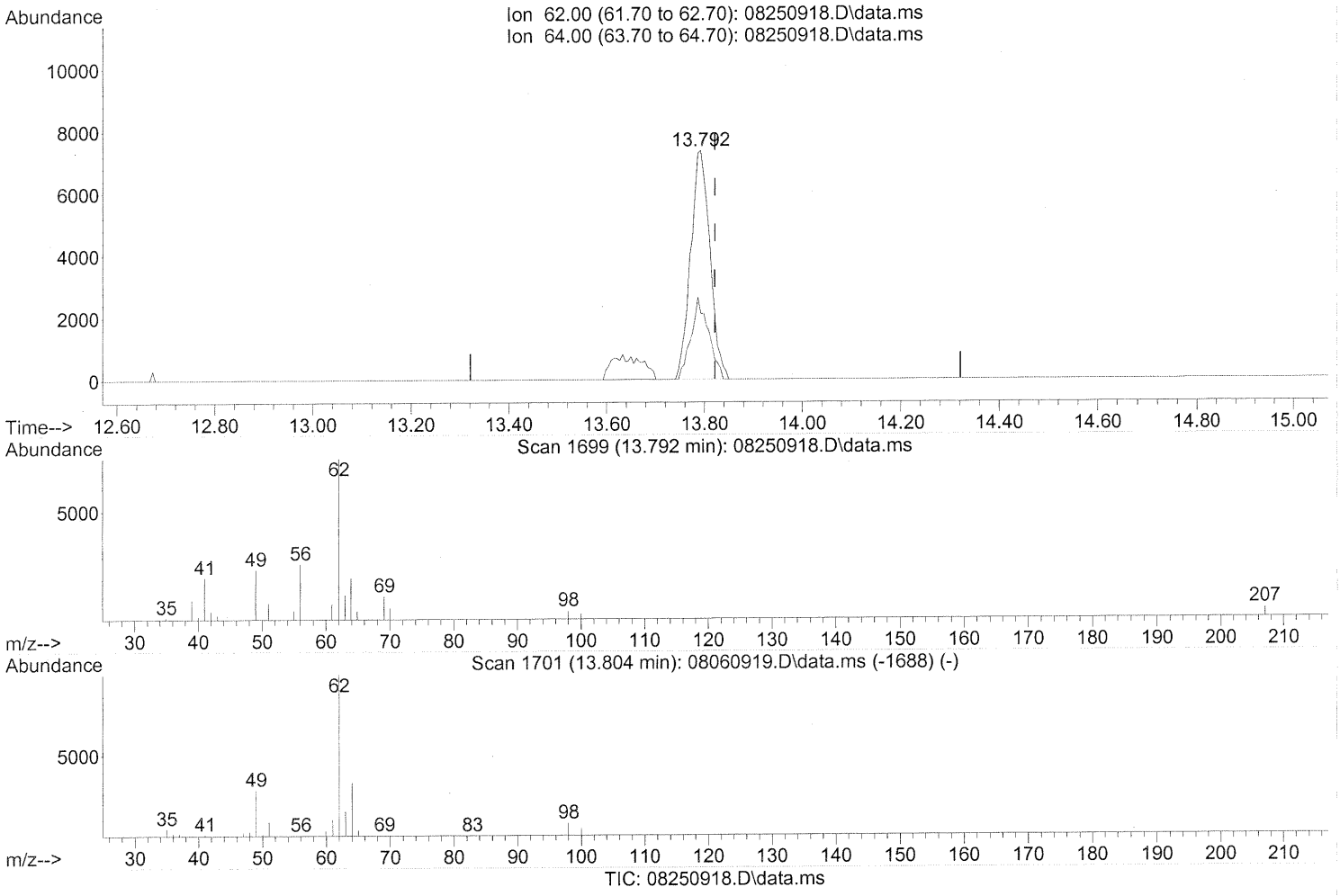
response 21296

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	62.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.04ng

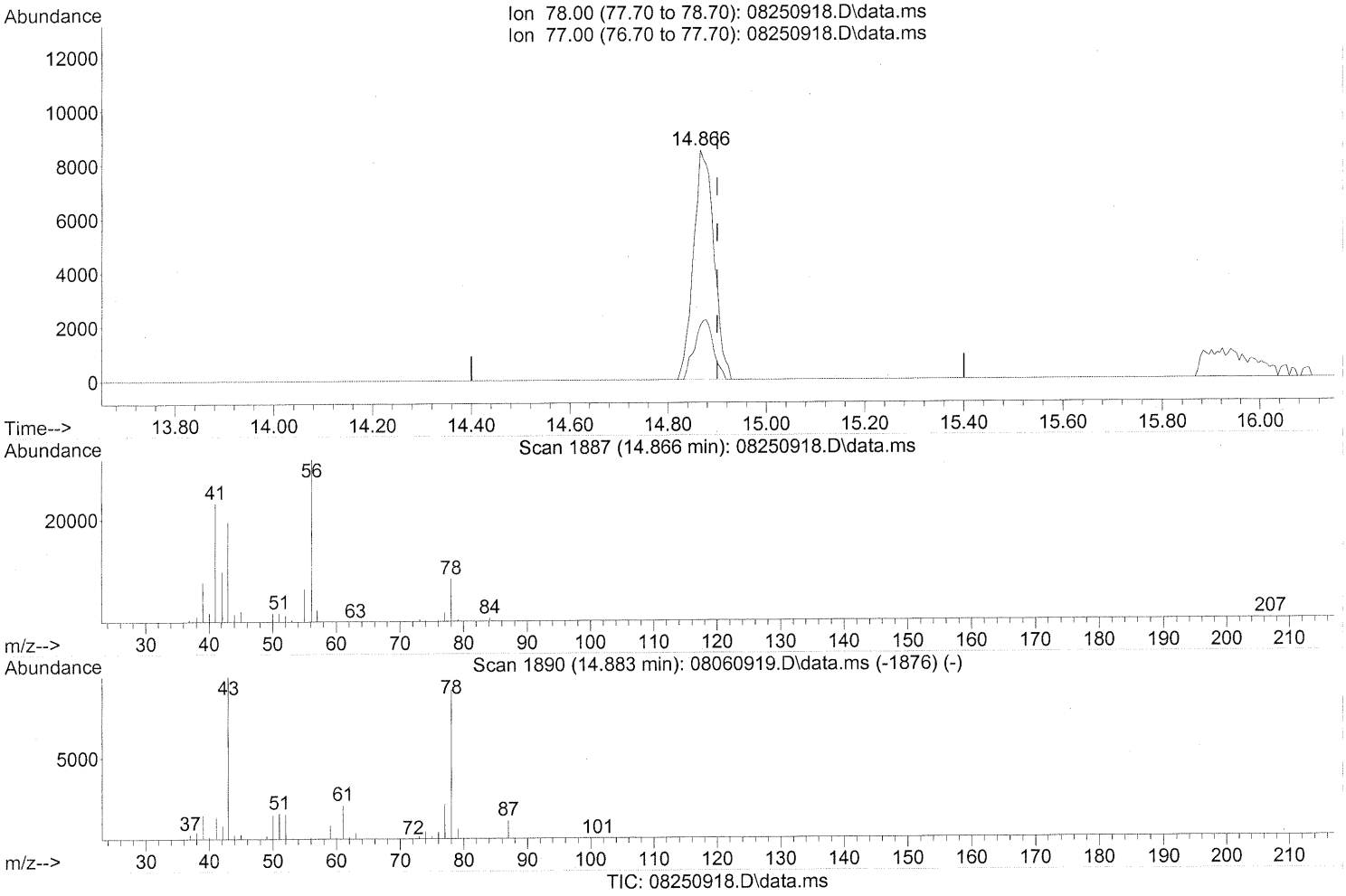
response 20211

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(41) Benzene (T)

14.866min (-0.034) 0.46ng

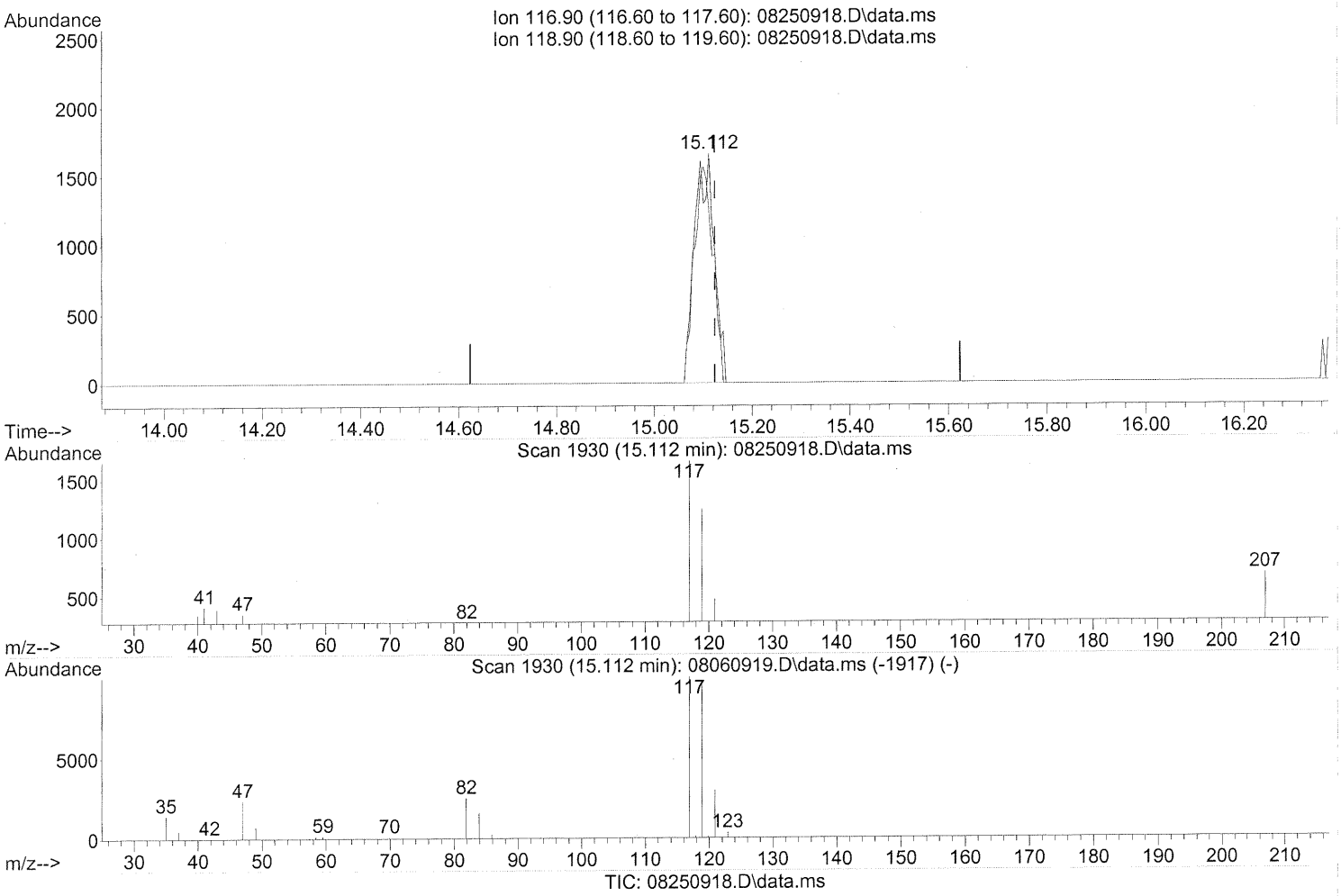
response 24629

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.80
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(42) Carbon Tetrachloride (T)

15.112min (-0.011) 0.26ng

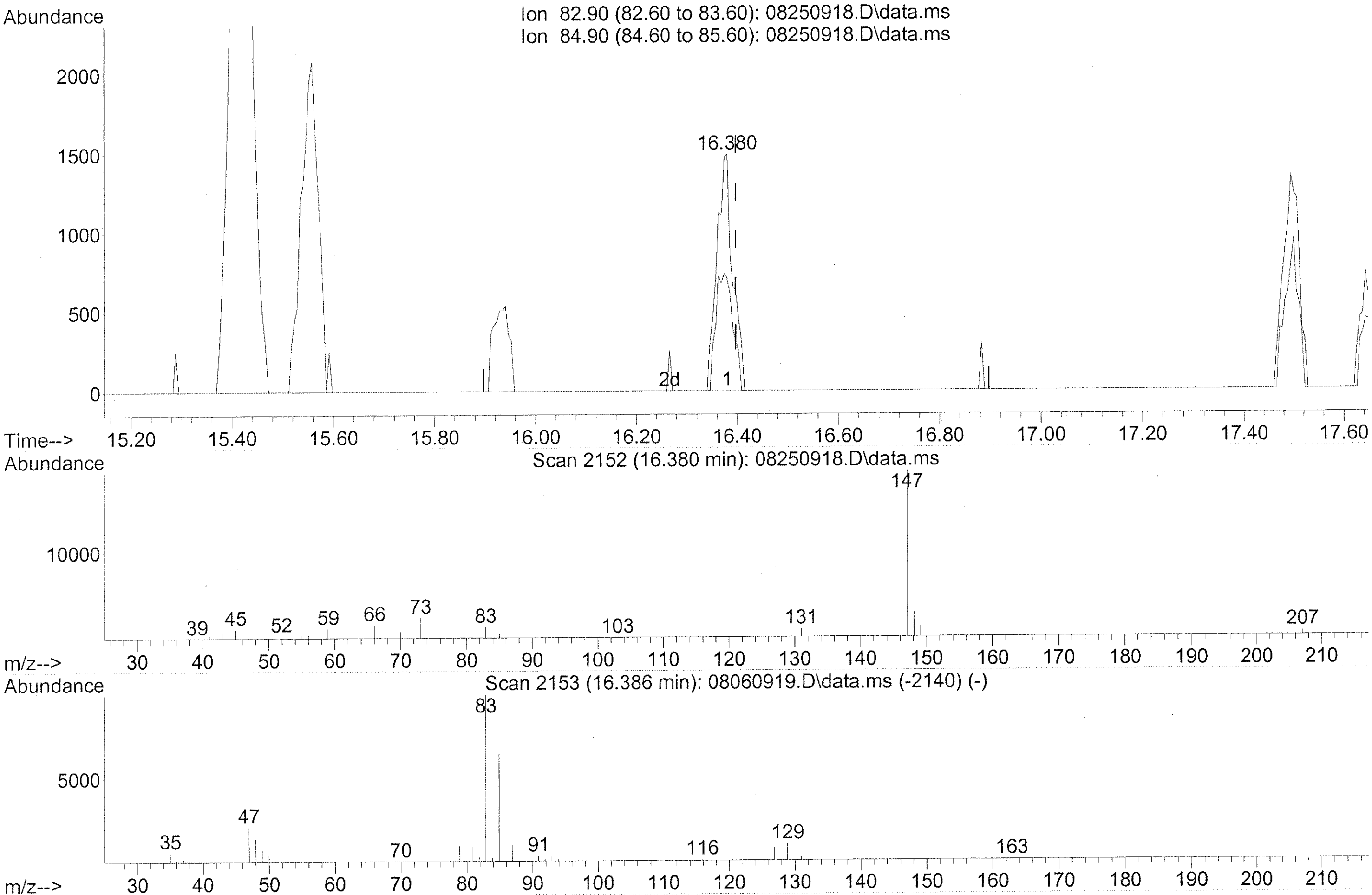
response 4502

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	94.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(46) Bromodichloromethane (T)

16.380min (-0.017) 0.18ng

response 3279

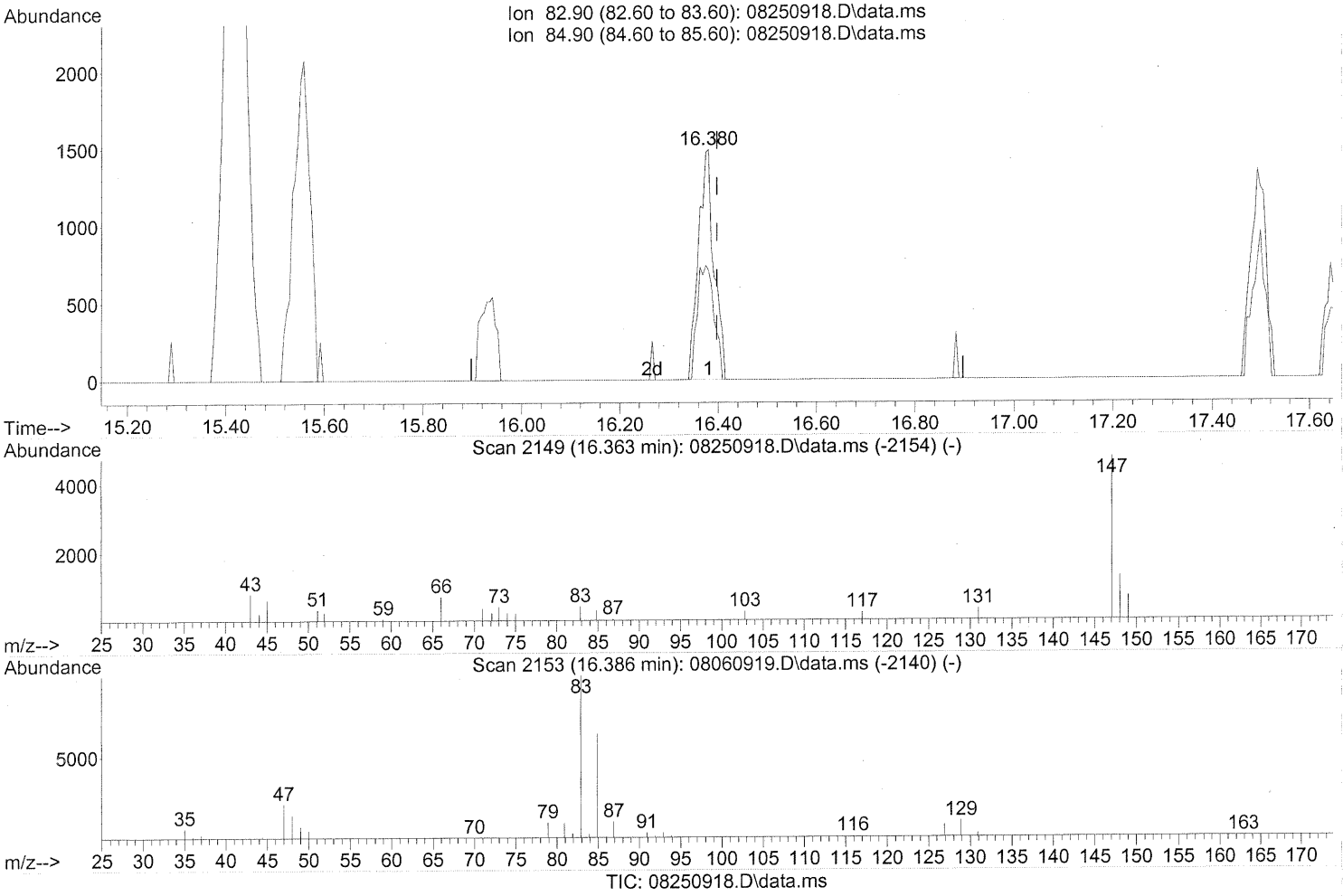
Ion	Exp%	Act%
82.90	100	100
84.90	62.80	53.40
0.00	0.00	0.00
0.00	0.00	0.00

Before subtr.

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(46) Bromodichloromethane (T)

16.380min (-0.017) 0.18ng

response 3279

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	53.40
0.00	0.00	0.00
0.00	0.00	0.00

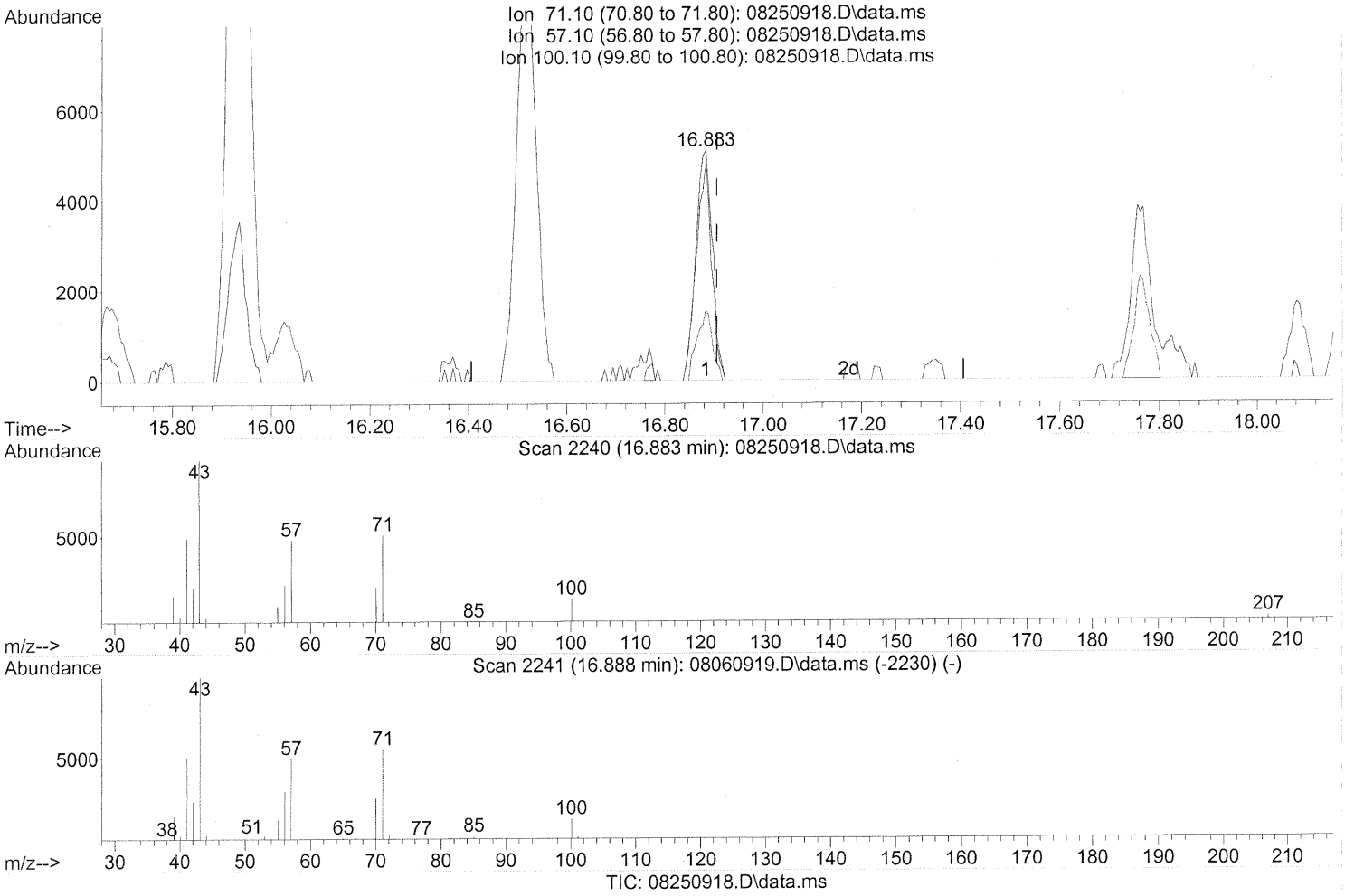
After subtr.

87

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(51) n-Heptane (T)

16.883min (-0.023) 0.82ng

response 11919

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	89.79
100.10	26.40	28.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
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Sample : P0902876-002 (1000mL)
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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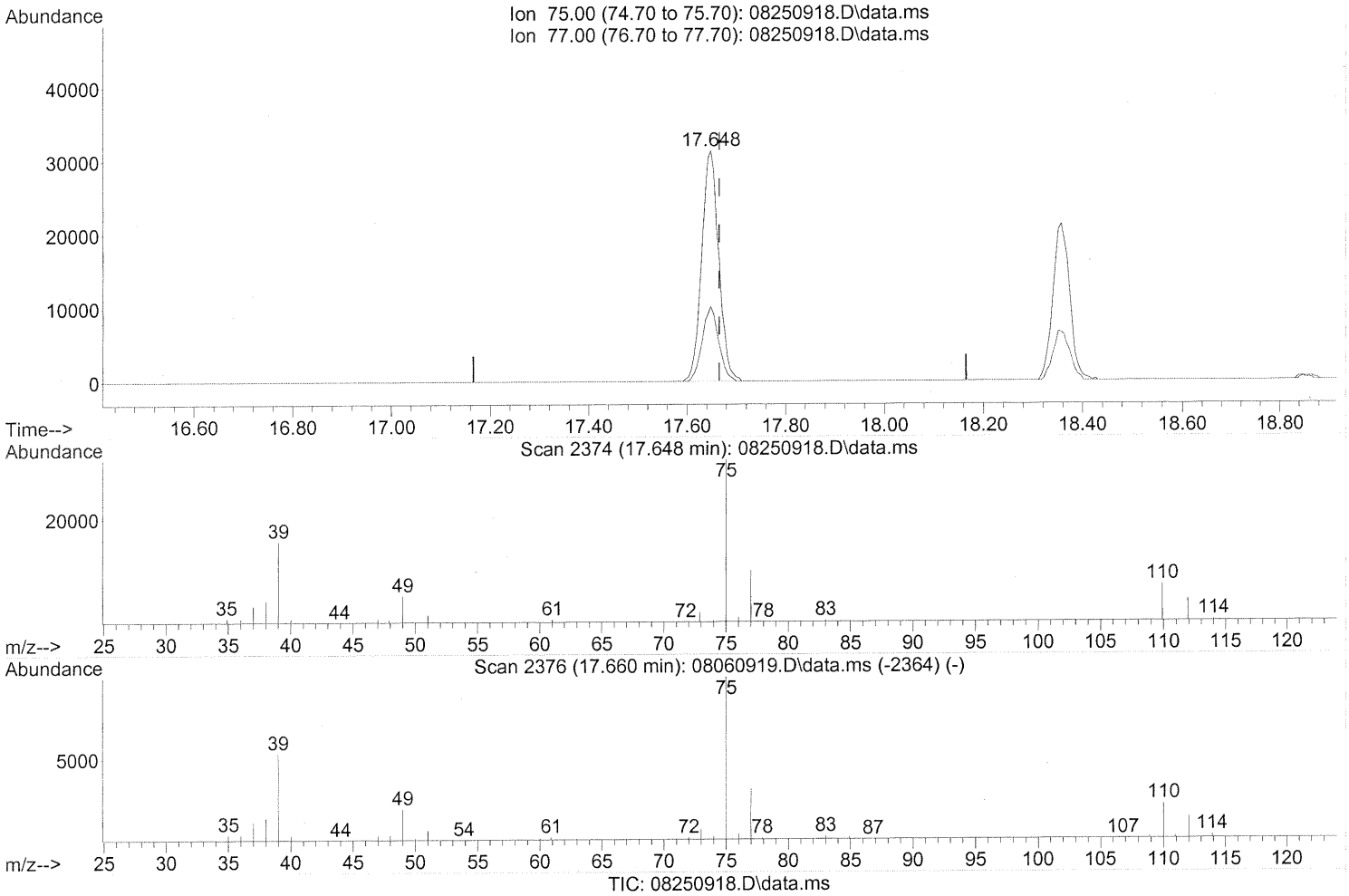
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 3.33ng

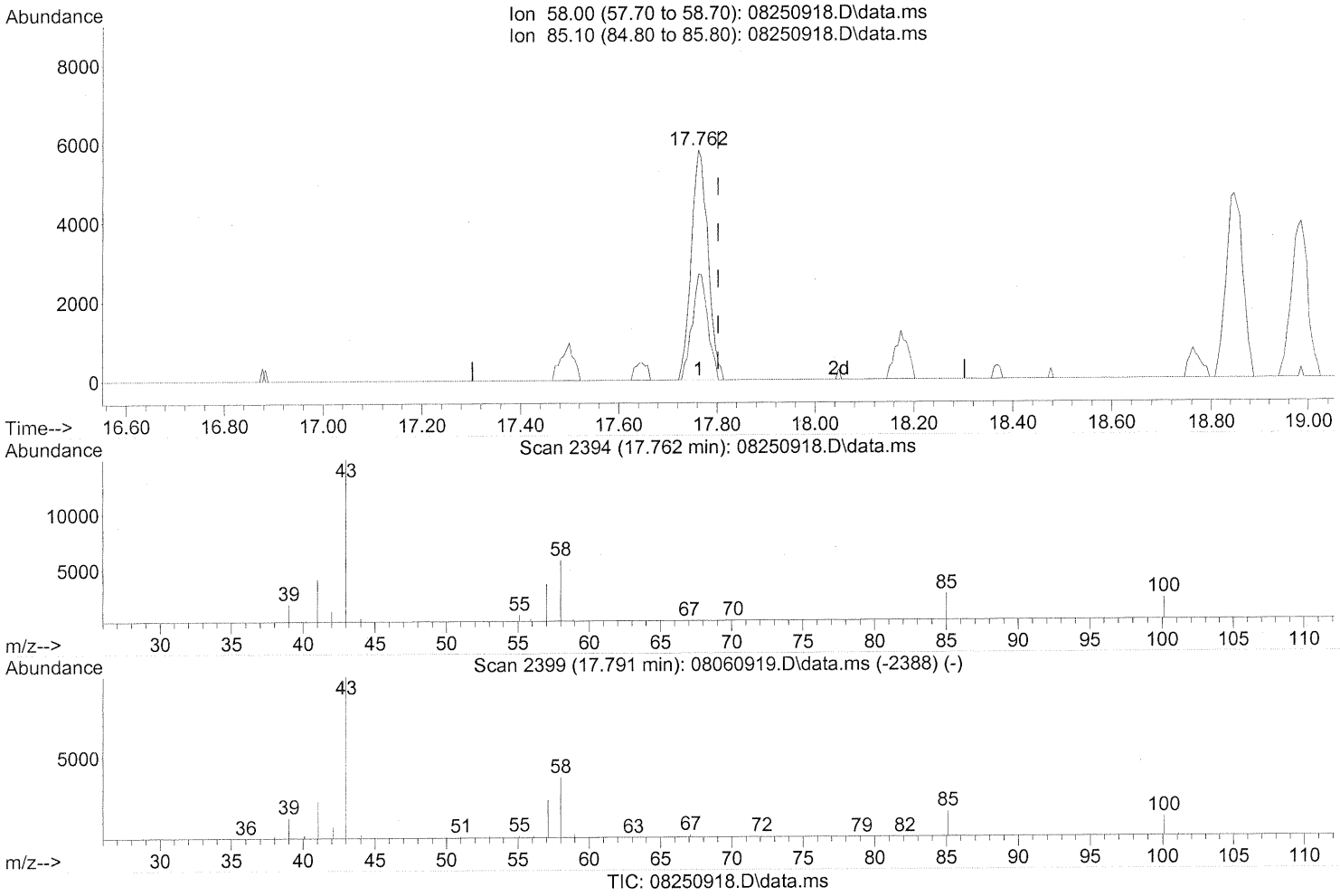
response 74832

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

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

17.762min (-0.040) 1.06ng

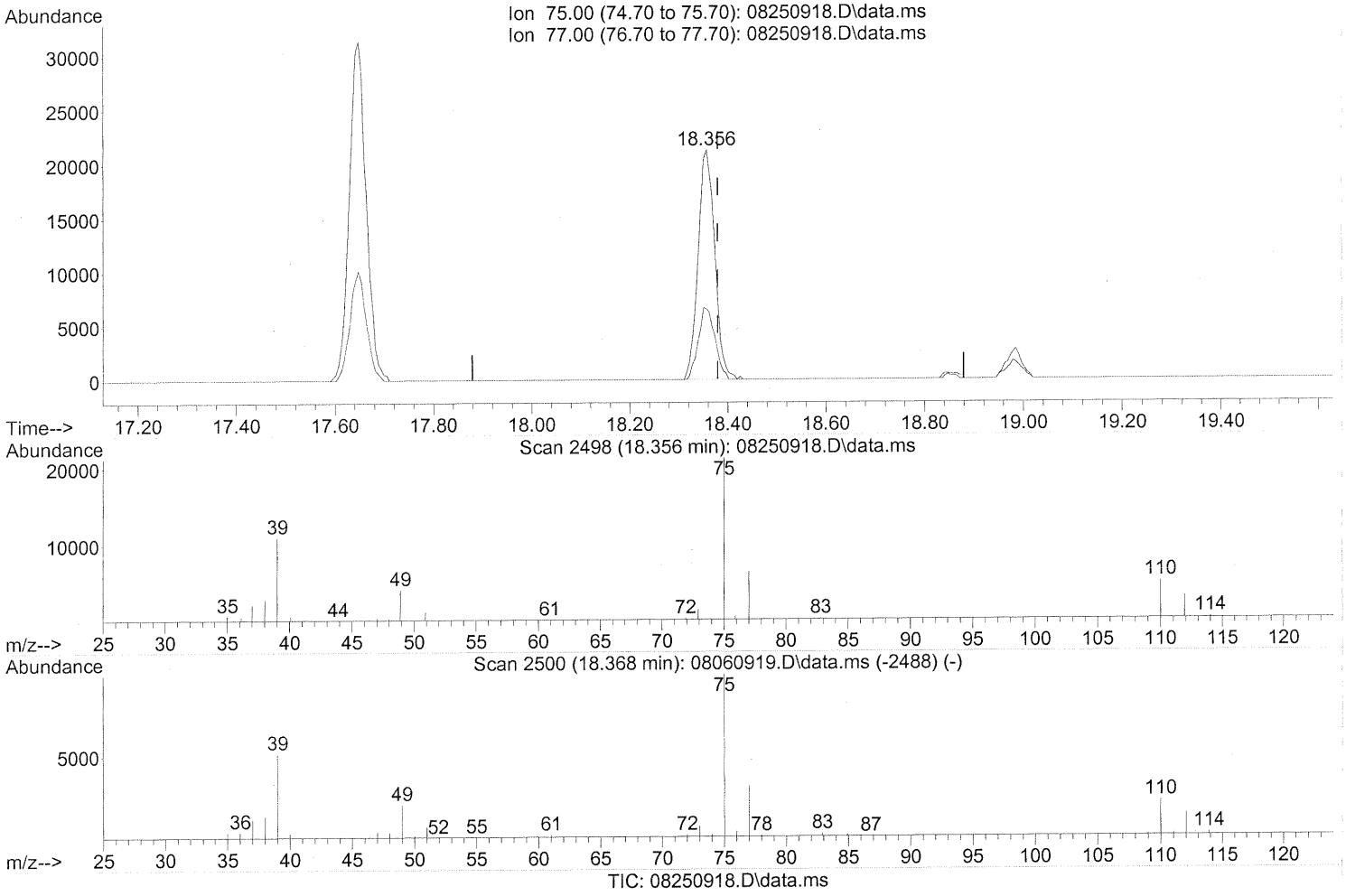
response 13752

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	43.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 2.35ng

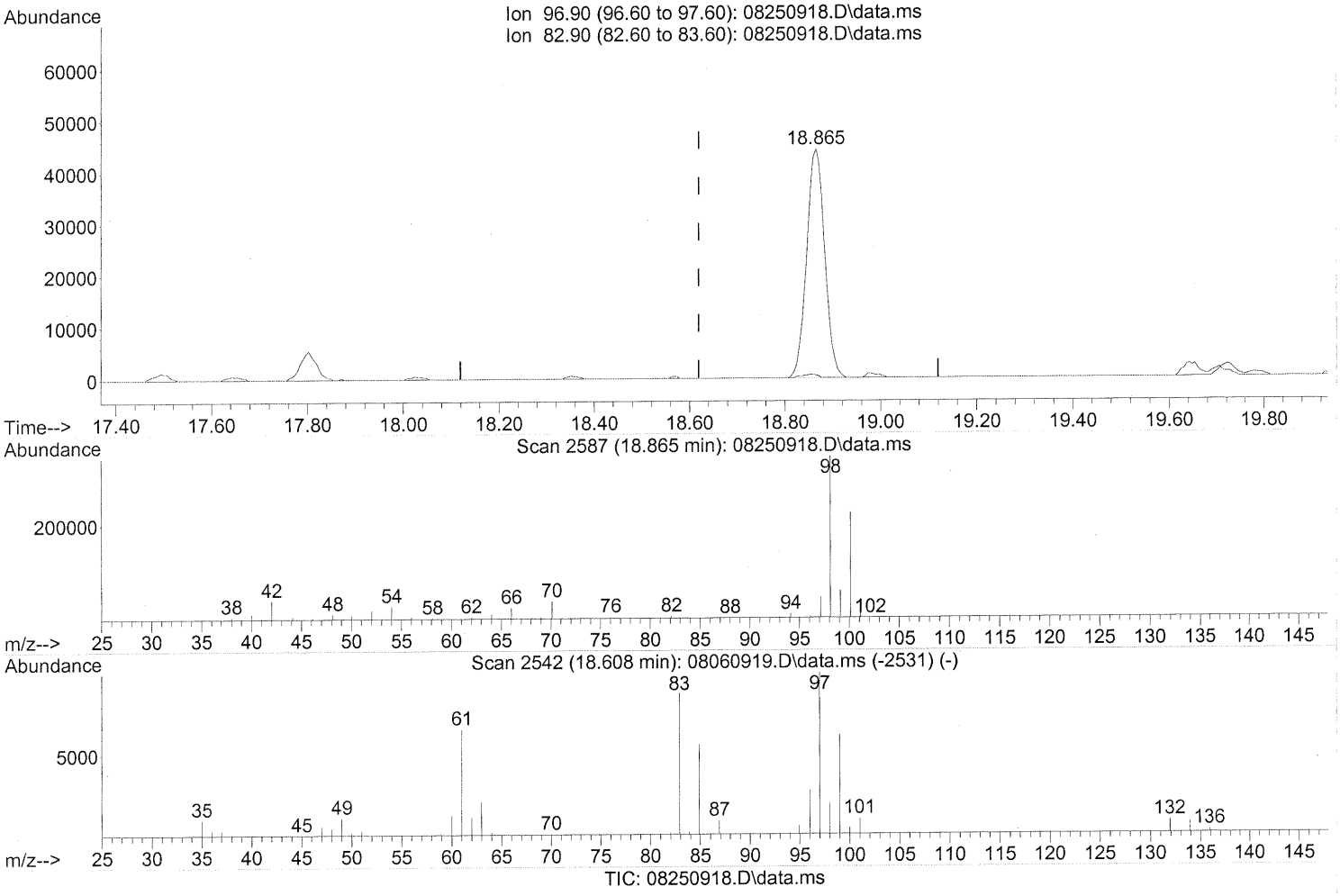
response 50168

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	31.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

18.865min (+0.246) 9.72ng

response 115375

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.13#
0.00	0.00	0.00
0.00	0.00	0.00

FP
VM 8/31/09

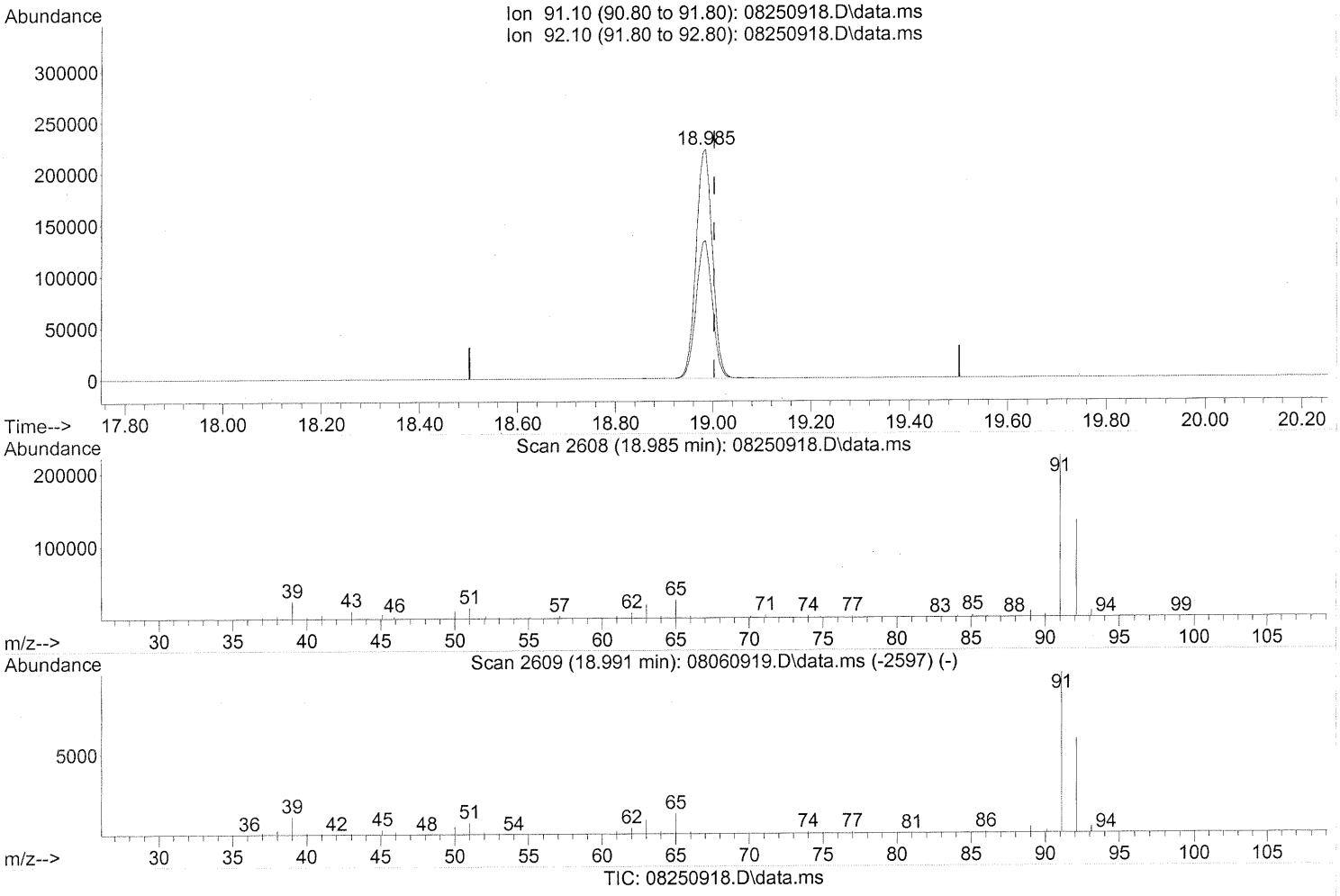
9/2/09

92

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(58) Toluene (T)

18.985min (-0.017) 10.19ng

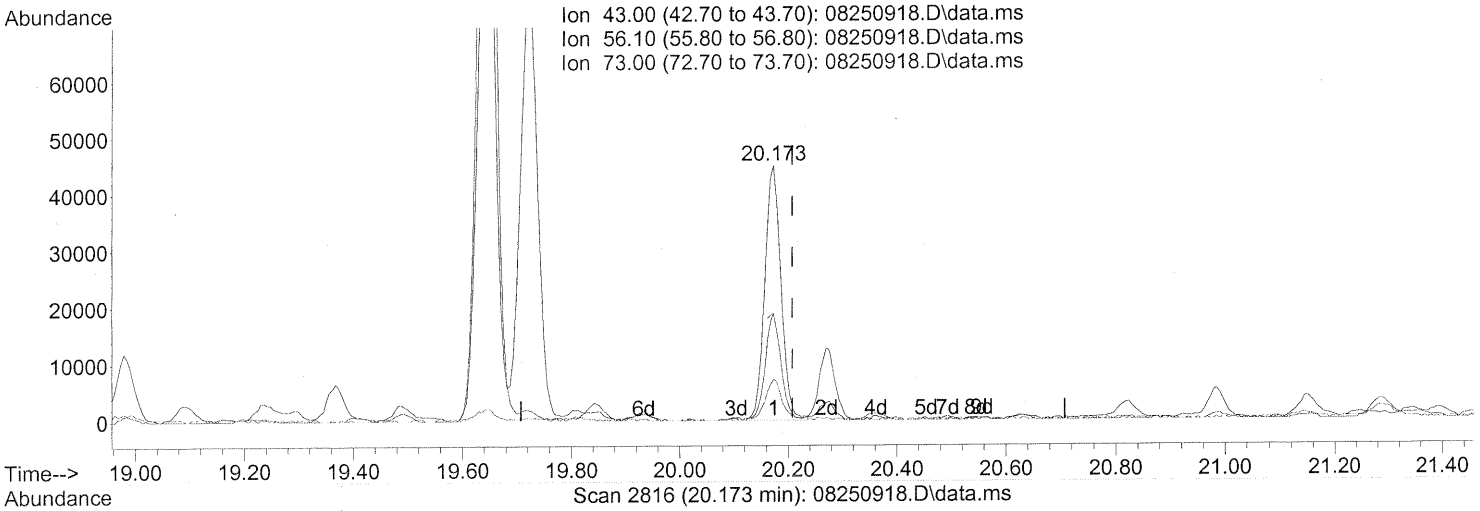
response 515769

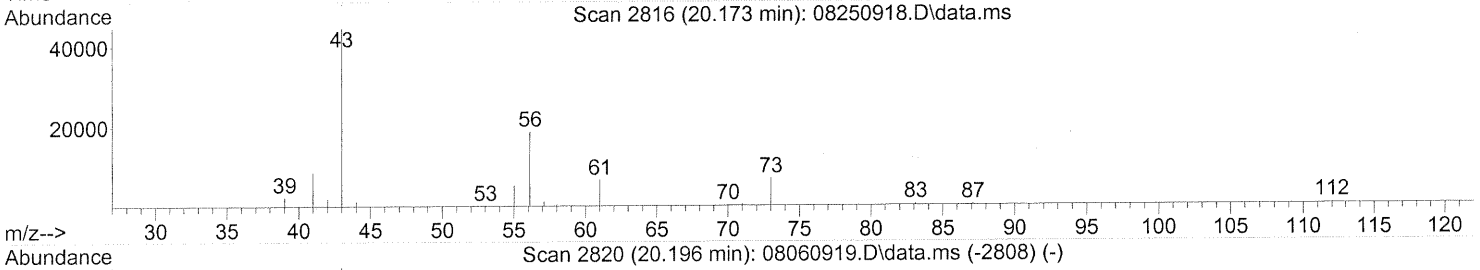
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.54
0.00	0.00	0.00
0.00	0.00	0.00

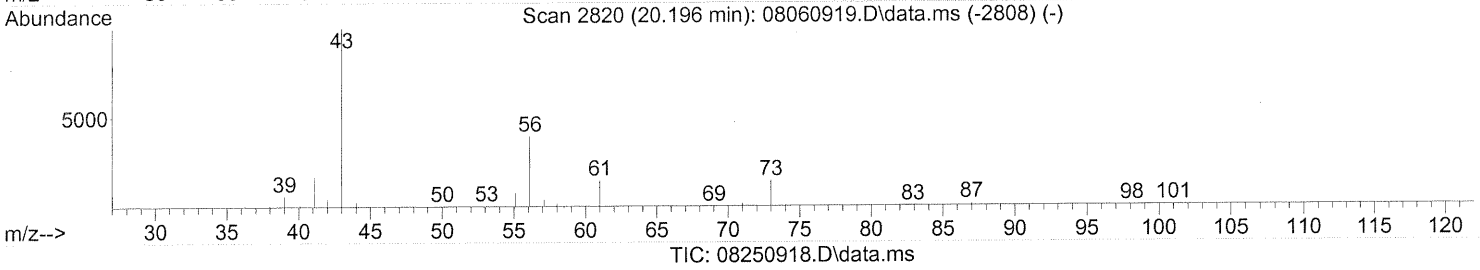
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250918.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 2.37ng

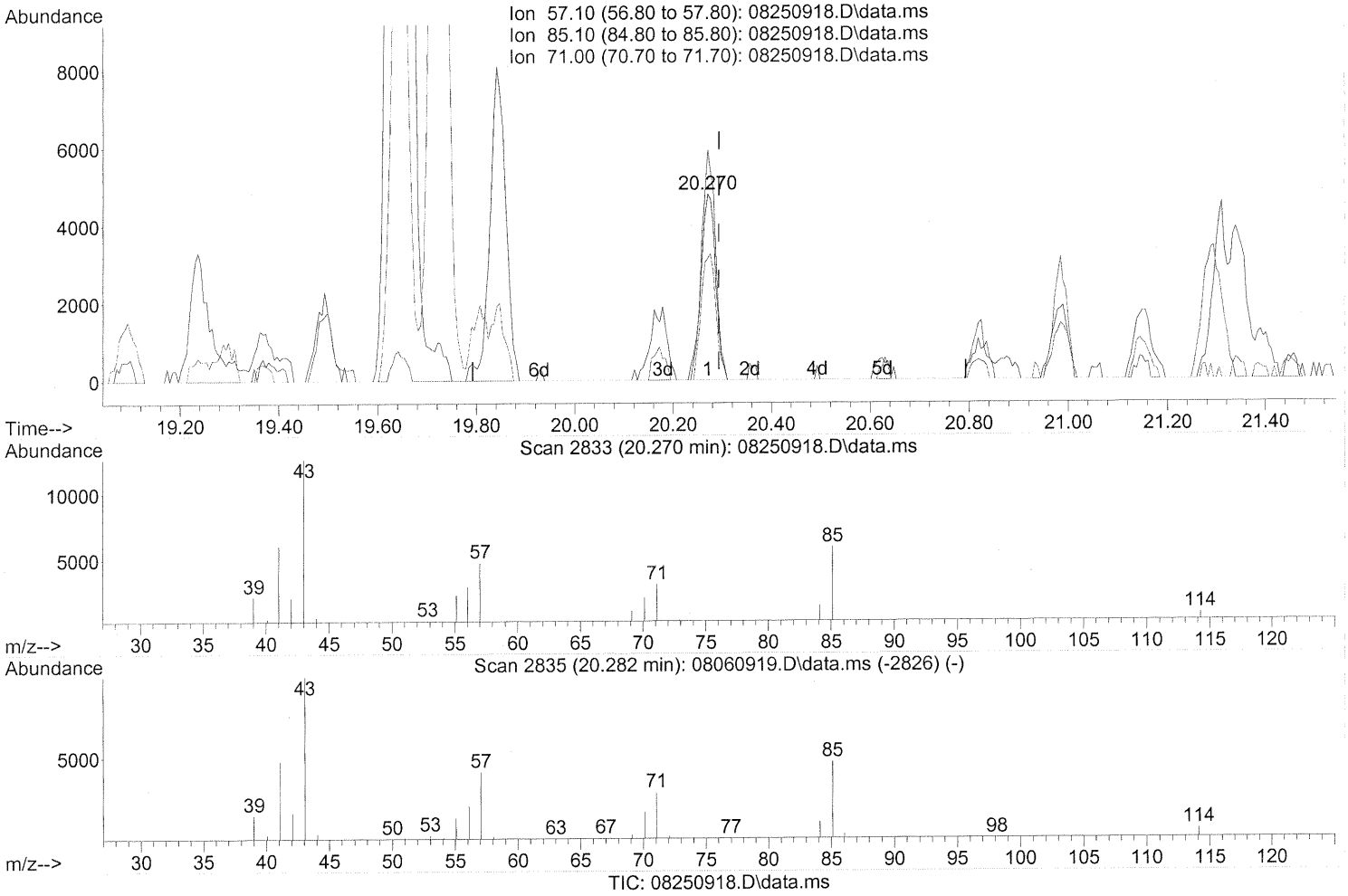
response 93908

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	40.72
73.00	14.80	16.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 0.82ng

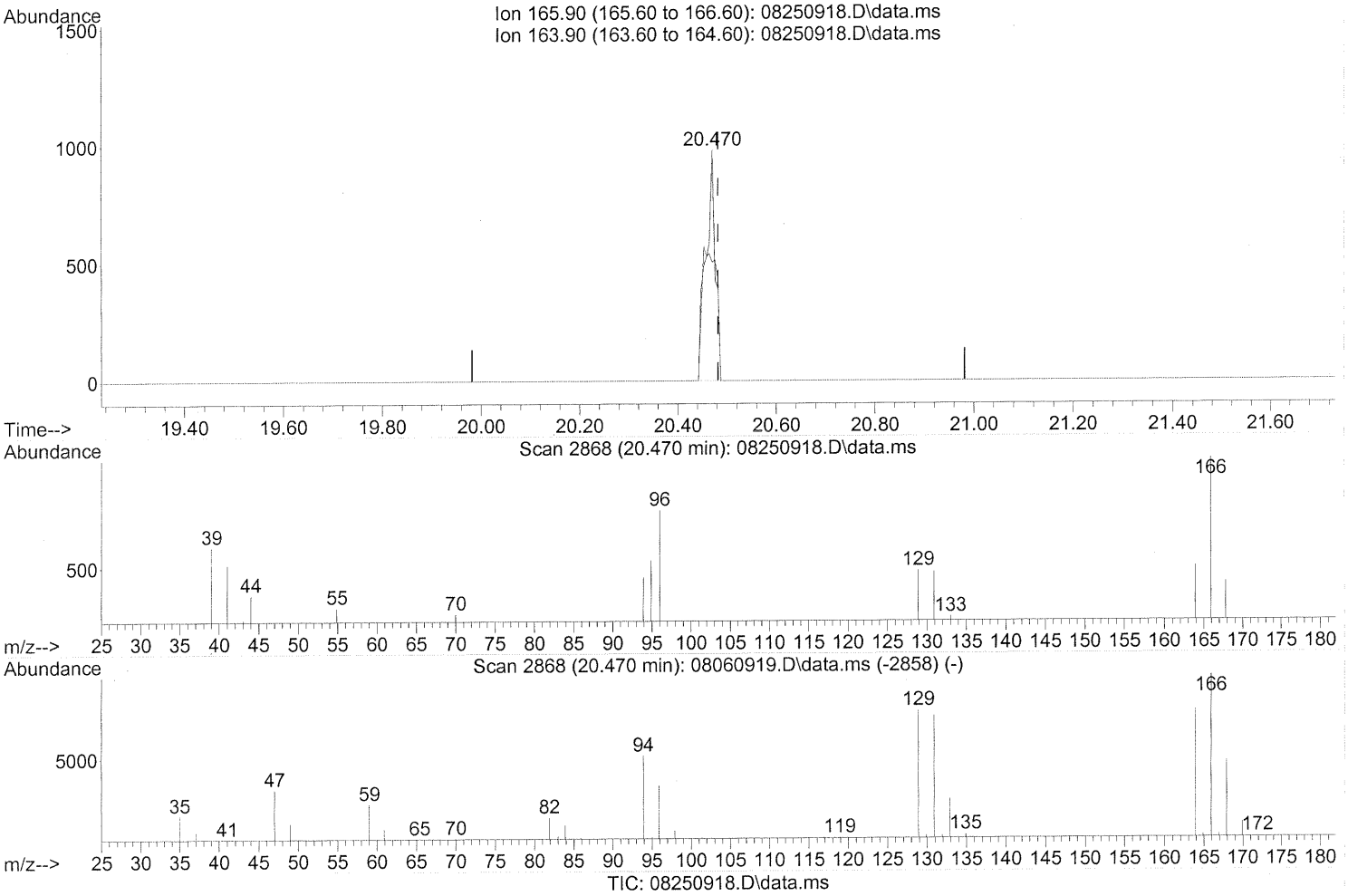
response 10020

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	116.18
71.00	68.10	67.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(64) Tetrachloroethene (T)

20.470min (-0.011) 0.11ng

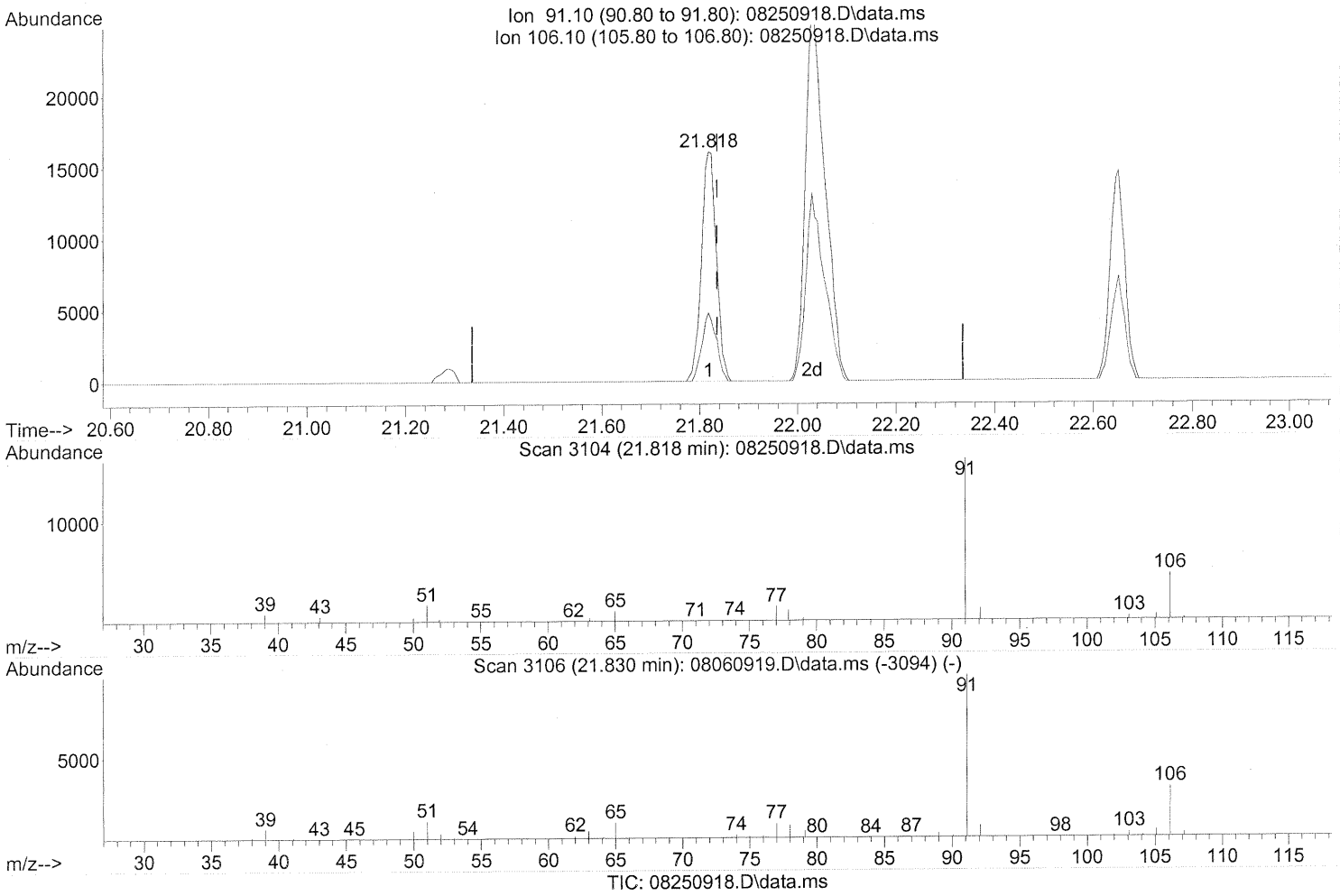
response 1291

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	88.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 0.58ng

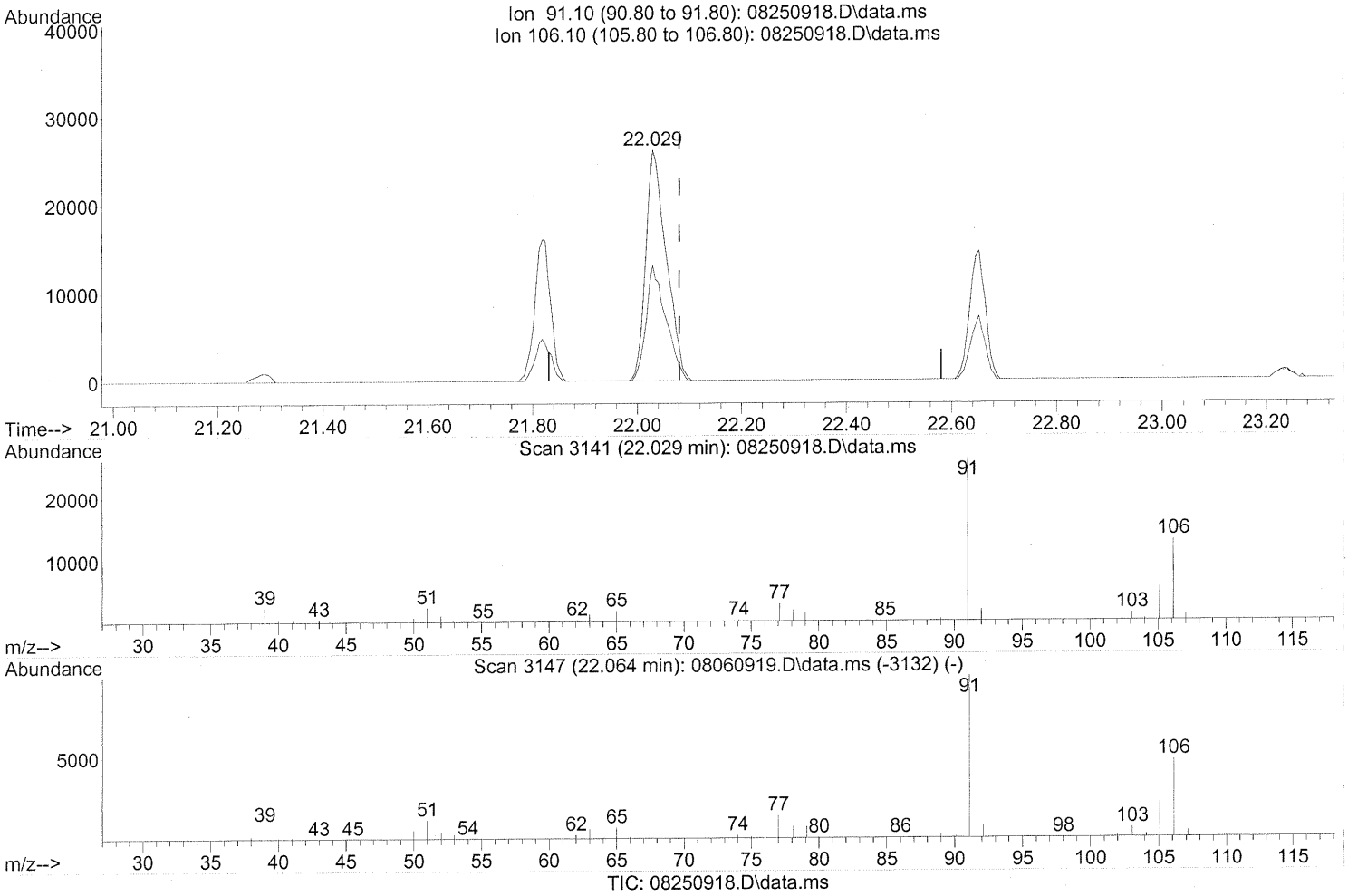
response 33746

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	28.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.029min (-0.051) 1.53ng

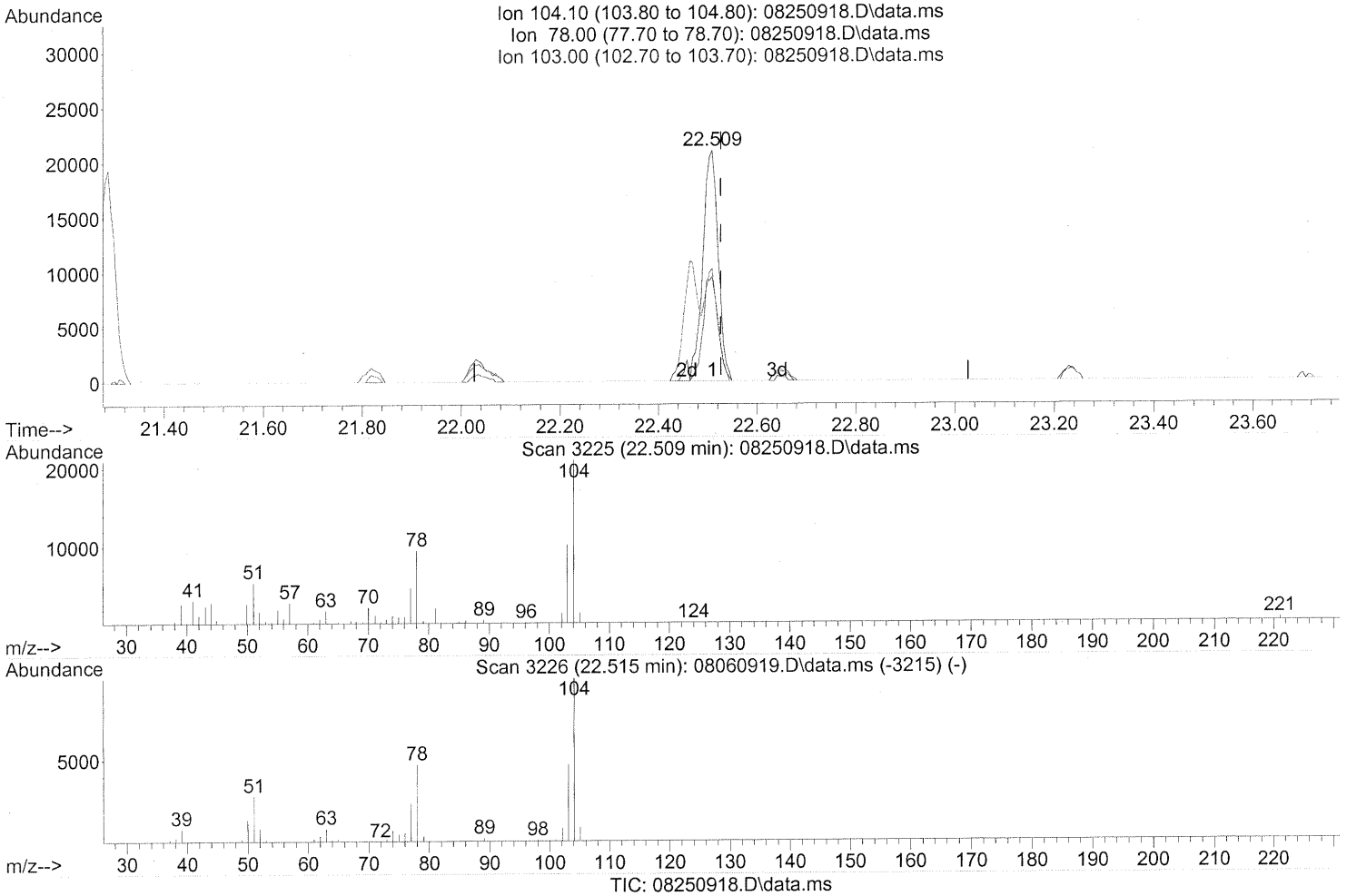
response 71621

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(69) Styrene (T)

22.509min (-0.017) 1.34ng

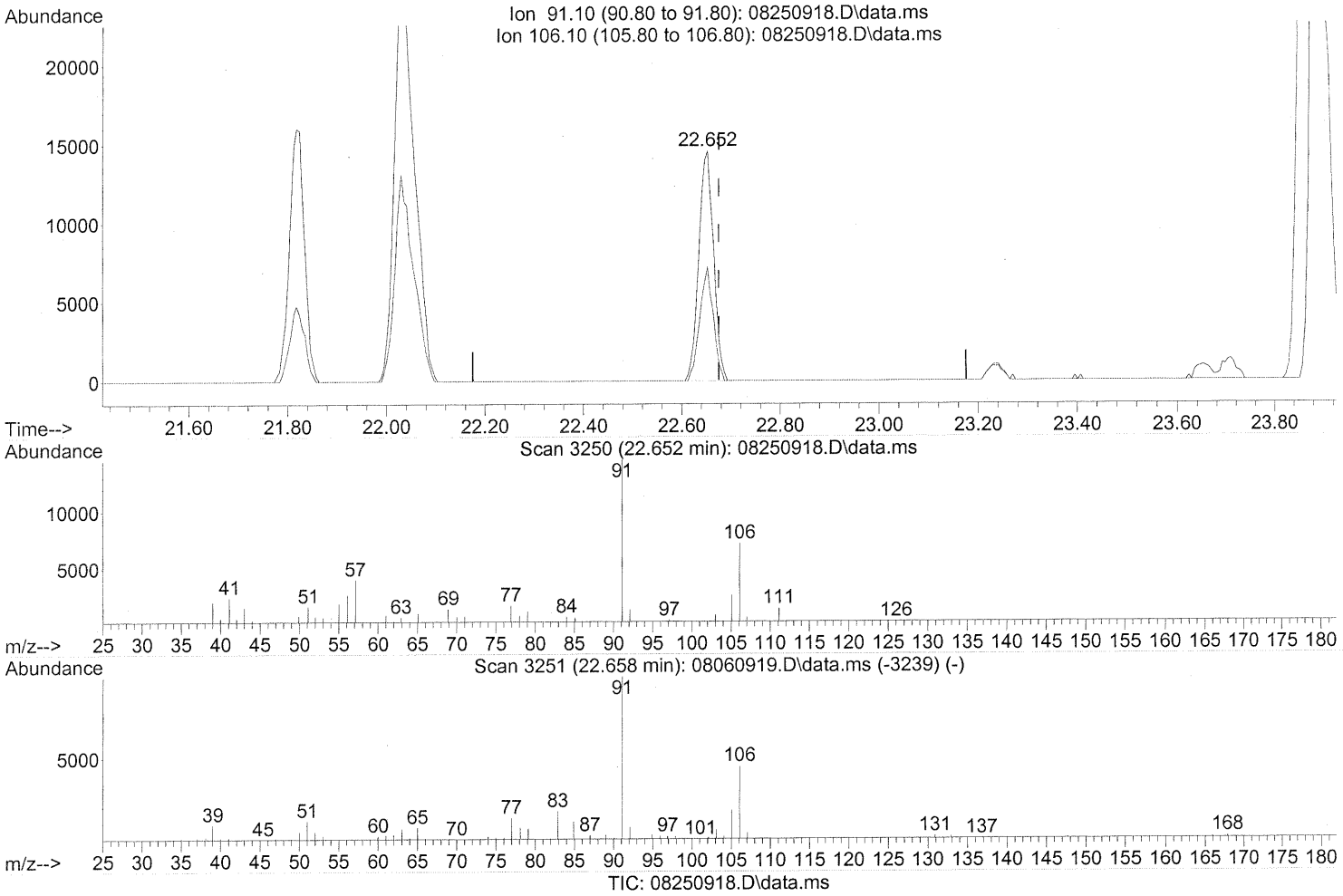
response 45312

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	43.81
103.00	46.20	41.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 0.64ng

response 30247

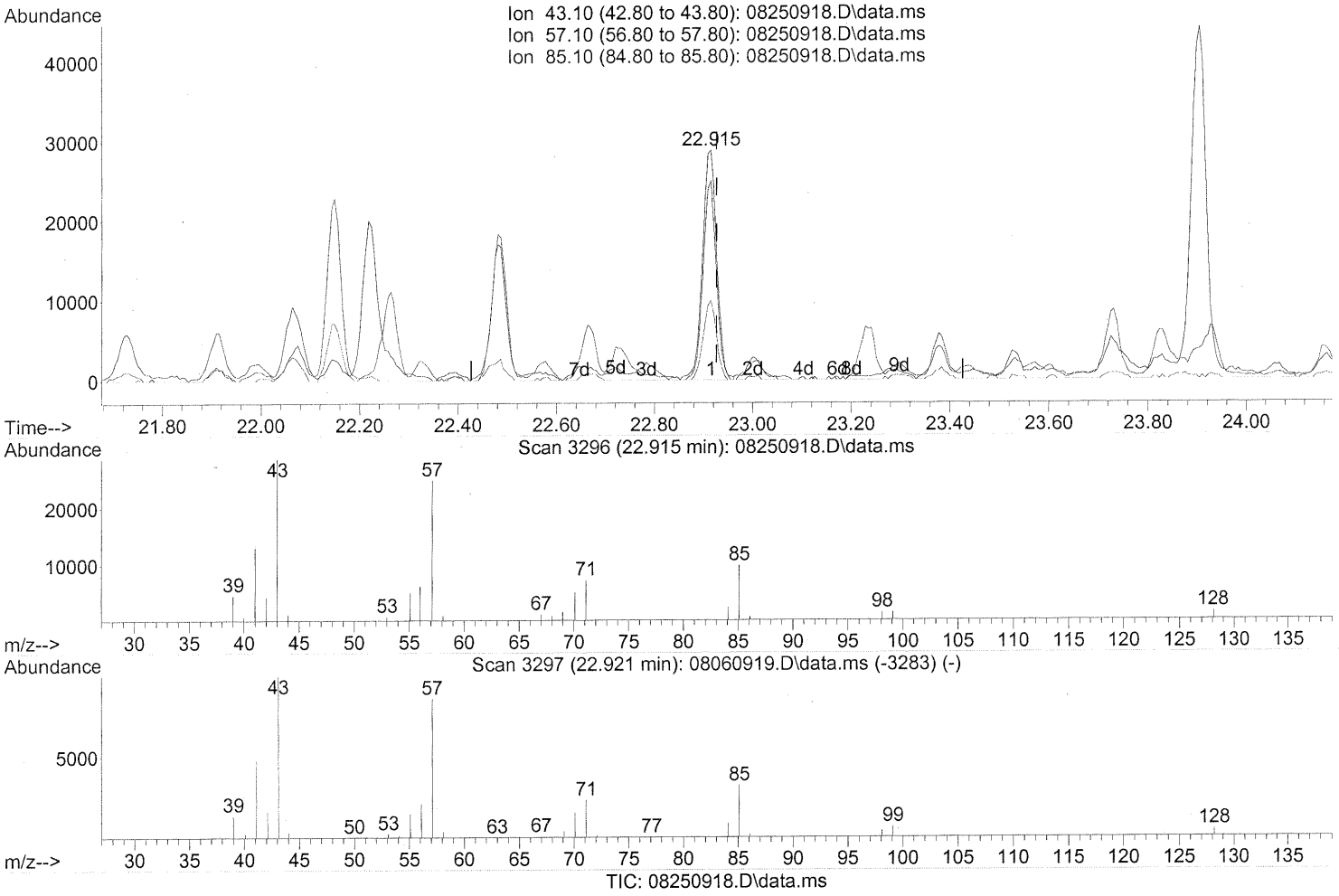
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.03
0.00	0.00	0.00
0.00	0.00	0.00

100

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(71) n-Nonane (T)

22.915min (-0.011) 1.87ng

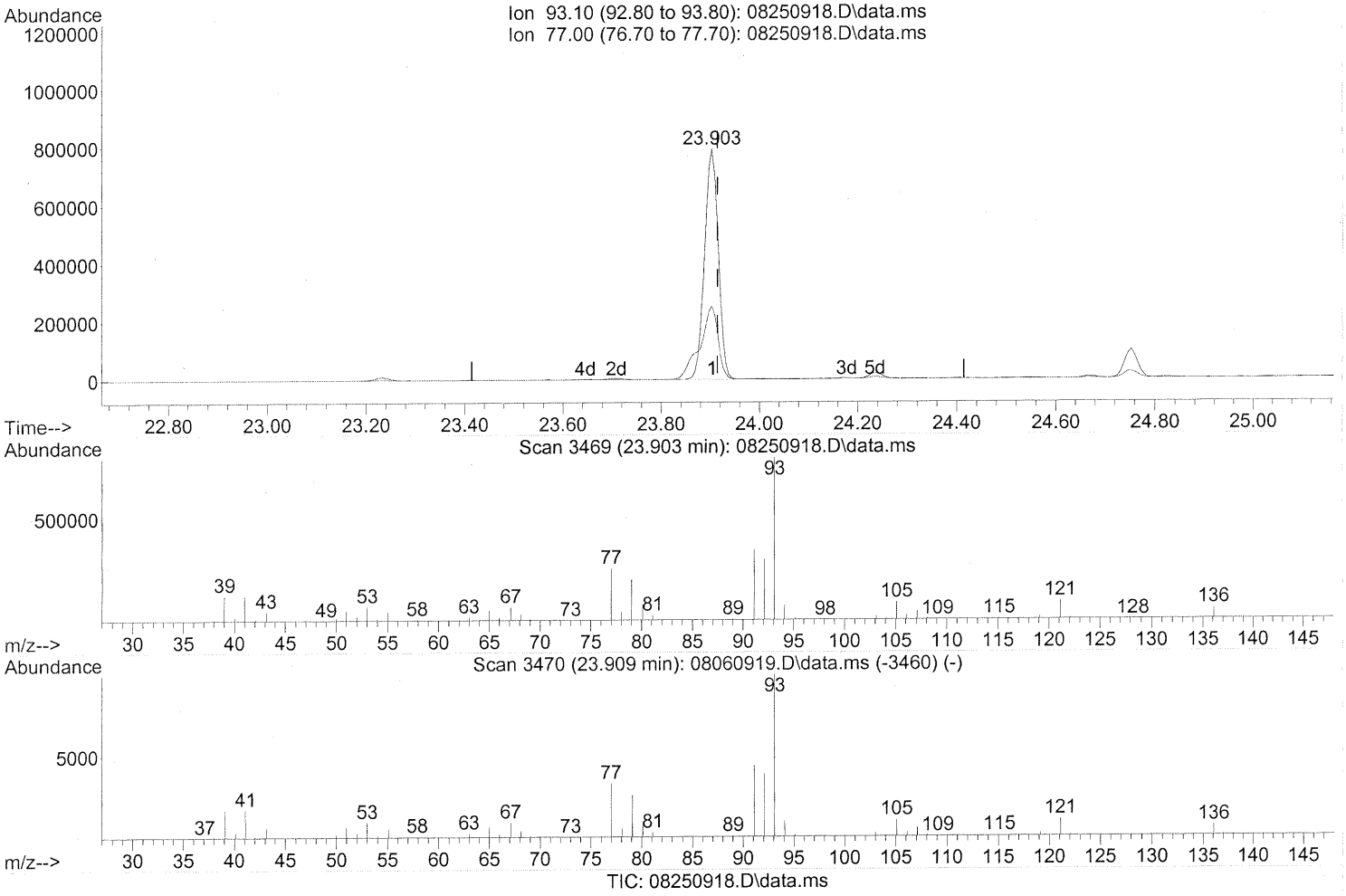
response 58267

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	81.21
85.10	30.40	32.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 50.59ng

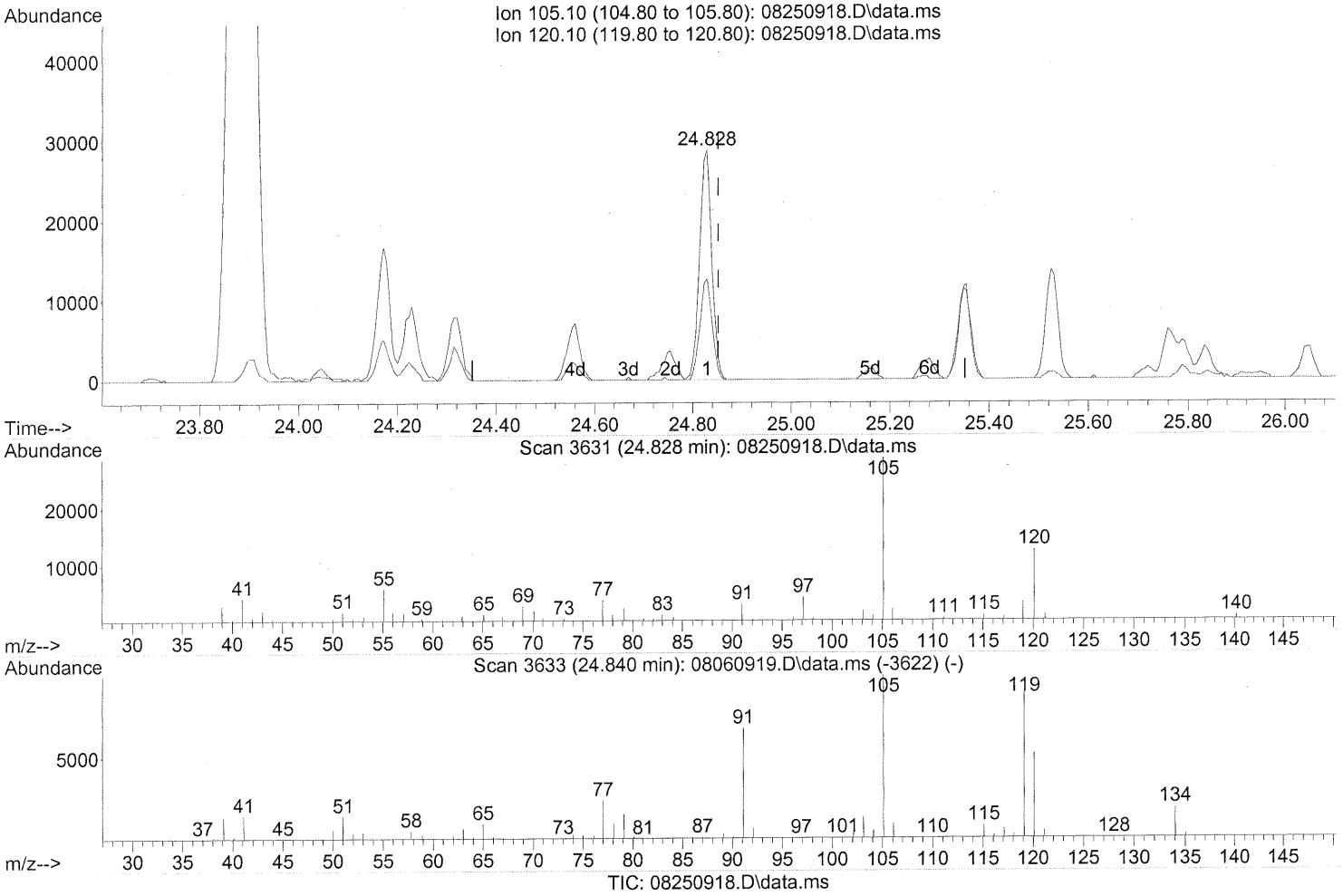
response 1537313

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	42.11
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

24.828min (-0.023) 1.06ng

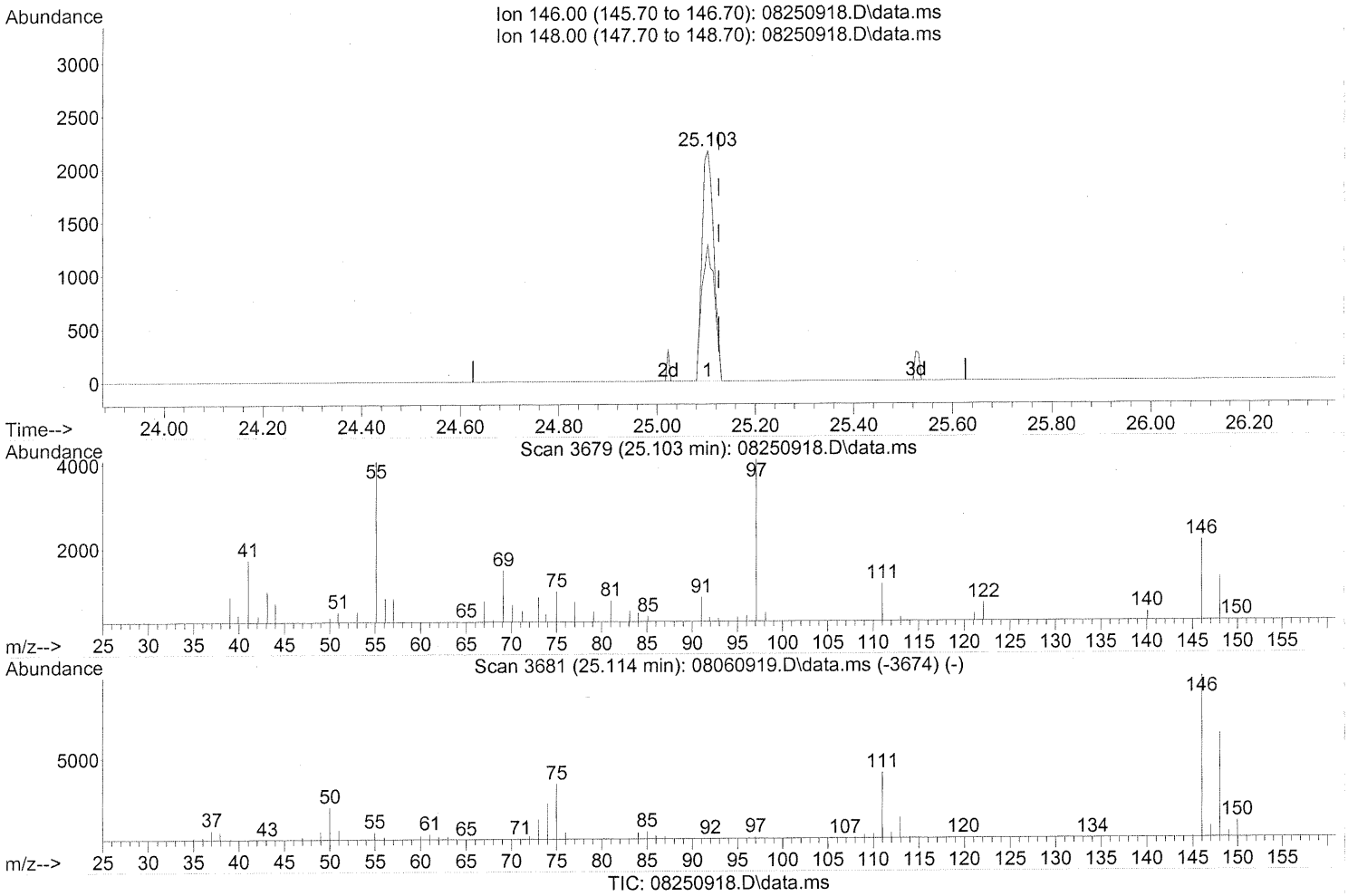
response 49864

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	43.81
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.103min (-0.023) 0.14ng

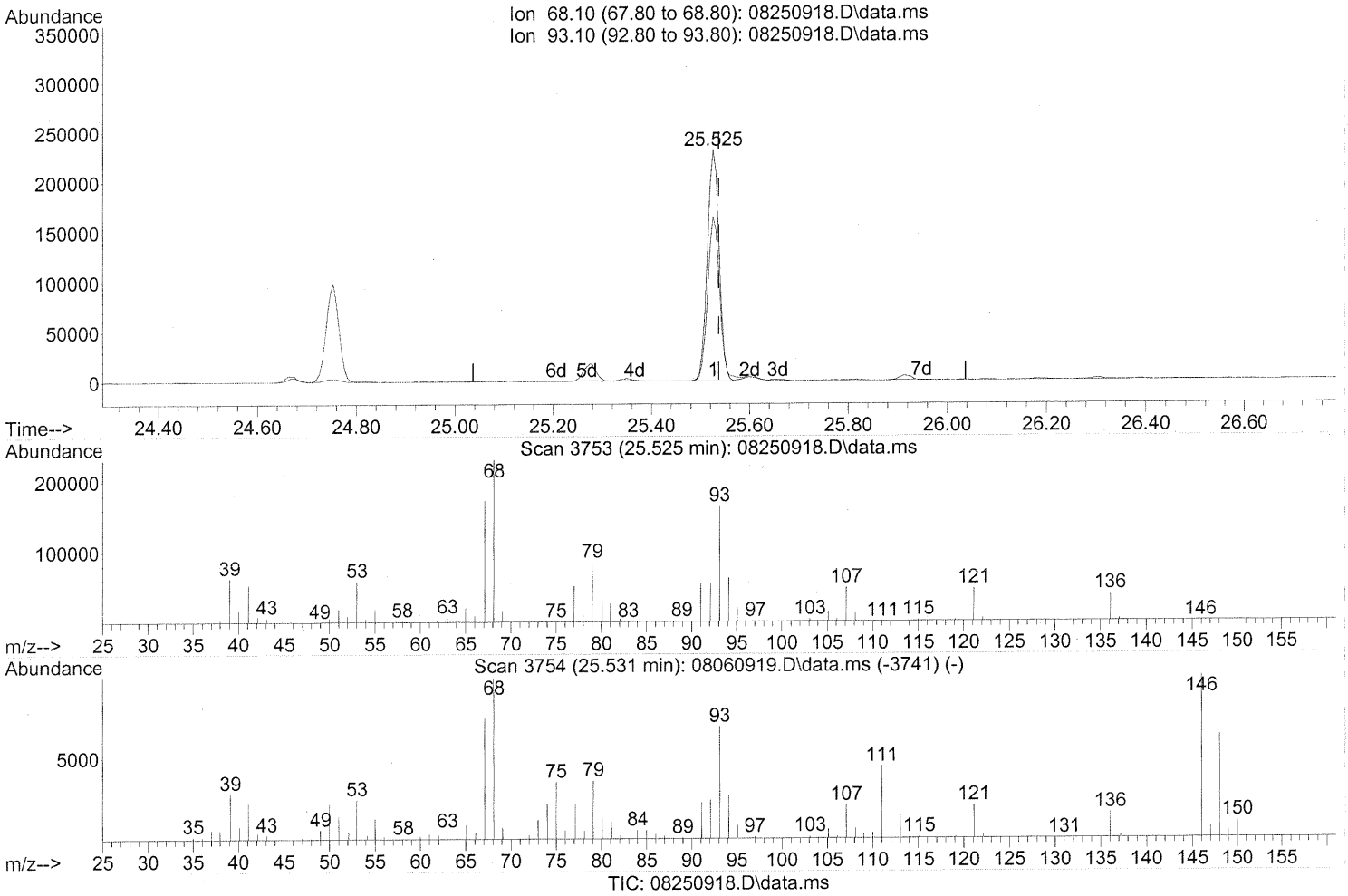
response 3616

Ion	Exp%	Act%
146.00	100	100
148.00	62.20	63.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250918.D
Acq On : 25 Aug 2009 10:59 pm
Operator : WA/CC
Sample : P0902876-002 (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250918.D\data.ms

(91) d-Limonene (T)

25.525min (-0.011) 19.28ng

response 387143

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	72.92
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102351** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-003

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00976

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.75	ND	0.43	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.5**	0.75	**0.51**	0.15	
74-87-3	**Chloromethane**	**0.38**	0.15	**0.19**	0.072	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.75	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.15	ND	0.058	
106-99-0	1,3-Butadiene	ND	0.15	ND	0.067	
74-83-9	Bromomethane	ND	0.15	ND	0.038	
75-00-3	Chloroethane	ND	0.15	ND	0.056	
64-17-5	**Ethanol**	**10**	7.5	**5.4**	4.0	
75-05-8	**Acetonitrile**	**1.0**	0.75	**0.59**	0.44	
107-02-8	Acrolein	ND	0.75	ND	0.33	
67-64-1	**Acetone**	**13**	7.5	**5.5**	3.1	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.15	**0.21**	0.027	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**1.0**	0.75	**0.42**	0.30	
107-13-1	Acrylonitrile	ND	0.75	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.038	
75-09-2	Methylene Chloride	ND	0.75	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.15	ND	0.048	
76-13-1	**Trichlorotrifluoroethane**	**0.60**	0.15	**0.078**	0.019	
75-15-0	Carbon Disulfide	ND	0.75	ND	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.038	
75-34-3	1,1-Dichloroethane	ND	0.15	ND	0.037	
1634-04-4	Methyl tert-Butyl Ether	ND	0.15	ND	0.041	
108-05-4	Vinyl Acetate	ND	7.5	ND	2.1	
78-93-3	**2-Butanone (MEK)**	**0.88**	0.75	**0.30**	0.25	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102351**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00976

Date Collected: 8/18/09
Date Received: 8/20/09
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.038	
141-78-6	**Ethyl Acetate**	**1.3**	0.75	**0.35**	0.21	
110-54-3	n-Hexane	ND	0.75	ND	0.21	
67-66-3	Chloroform	ND	0.15	ND	0.031	
109-99-9	Tetrahydrofuran (THF)	ND	0.75	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.15	ND	0.037	
71-55-6	1,1,1-Trichloroethane	ND	0.15	ND	0.027	
71-43-2	Benzene	ND	0.15	ND	0.047	
56-23-5	**Carbon Tetrachloride**	**0.49**	0.15	**0.078**	0.024	
110-82-7	Cyclohexane	ND	0.75	ND	0.22	
78-87-5	1,2-Dichloropropane	ND	0.15	ND	0.032	
75-27-4	Bromodichloromethane	ND	0.15	ND	0.022	
79-01-6	Trichloroethene	ND	0.15	ND	0.028	
123-91-1	1,4-Dioxane	ND	0.75	ND	0.21	
80-62-6	Methyl Methacrylate	ND	0.75	ND	0.18	
142-82-5	n-Heptane	ND	0.75	ND	0.18	
10061-01-5	**cis-1,3-Dichloropropene**	**3.8**	0.75	**0.83**	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.75	ND	0.18	
10061-02-6	**trans-1,3-Dichloropropene**	**3.6**	0.75	**0.80**	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.15	ND	0.027	
108-88-3	Toluene	ND	0.75	ND	0.20	
591-78-6	2-Hexanone	ND	0.75	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.15	ND	0.017	
106-93-4	1,2-Dibromoethane	ND	0.15	ND	0.019	
123-86-4	n-Butyl Acetate	ND	0.75	ND	0.16	

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: 9/6/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102351** CAS Sample ID: P0902876-003
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00976

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.3**	0.75	**0.27**	0.16	
127-18-4	Tetrachloroethene	ND	0.15	ND	0.022	
108-90-7	Chlorobenzene	ND	0.15	ND	0.032	
100-41-4	Ethylbenzene	ND	0.75	ND	0.17	
179601-23-1	m,p-Xylenes	ND	0.75	ND	0.17	
75-25-2	Bromoform	ND	0.75	ND	0.072	
100-42-5	Styrene	ND	0.75	ND	0.18	
95-47-6	o-Xylene	ND	0.75	ND	0.17	
111-84-2	n-Nonane	ND	0.75	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.15	ND	0.022	
98-82-8	Cumene	ND	0.75	ND	0.15	
80-56-8	**alpha-Pinene**	**1.1**	0.75	**0.19**	0.13	
103-65-1	n-Propylbenzene	ND	0.75	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.75	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.75	ND	0.15	
95-63-6	1,2,4-Trimethylbenzene	ND	0.75	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.15	ND	0.029	
541-73-1	1,3-Dichlorobenzene	ND	0.15	ND	0.025	
106-46-7	1,4-Dichlorobenzene	ND	0.15	ND	0.025	
95-50-1	1,2-Dichlorobenzene	ND	0.15	ND	0.025	
5989-27-5	d-Limonene	ND	0.75	ND	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.75	ND	0.077	
120-82-1	1,2,4-Trichlorobenzene	ND	0.75	ND	0.10	
91-20-3	**Naphthalene**	**0.83**	0.75	**0.16**	0.14	
87-68-3	Hexachlorobutadiene	ND	0.75	ND	0.070	

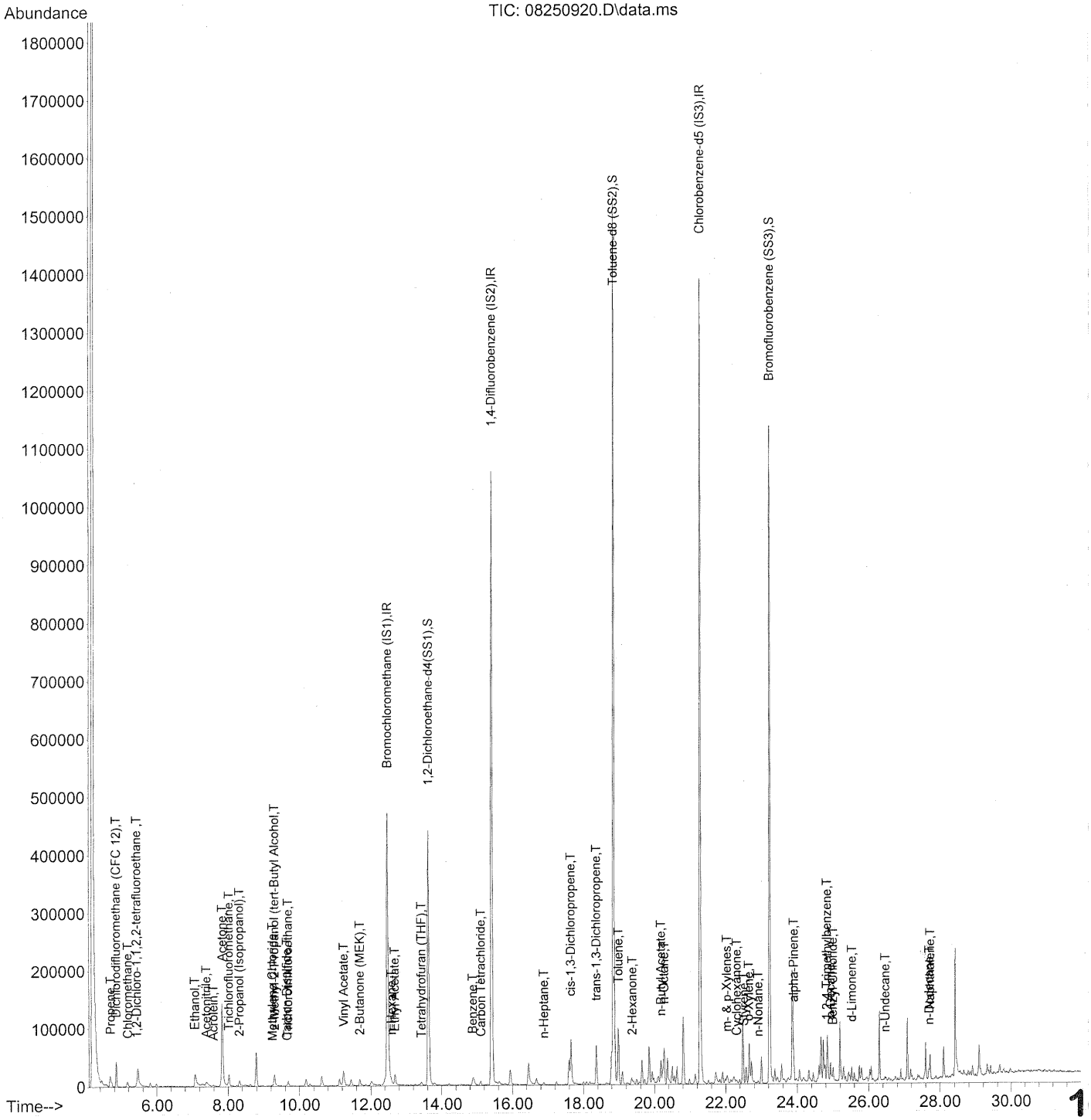
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 12:23 am
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 31 17:28:38 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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VM 8/31/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	240471	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1211351	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	584410	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	458081	21.917	ng		-0.04
Spiked Amount 25.000			Recovery =	87.68%			
57) Toluene-d8 (SS2)	18.85	98	1316249	25.776	ng		-0.02
Spiked Amount 25.000			Recovery =	103.12%			
73) Bromofluorobenzene (SS3)	23.23	174	377133	28.006	ng		-0.01
Spiked Amount 25.000			Recovery =	112.04%			
Target Compounds							Qvalue
2) Propene	4.70	42	5371	0.325 ng			92
3) Dichlorodifluoromethan...	4.86	85	45979	1.705 ng			99
4) Chloromethane	5.18	50	4671	0.258 ng			91
5) 1,2-Dichloro-1,1,2,2-t...	5.43	135	817	0.075 ng		#	44
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.07	45	71406	6.827 ng			86
11) Acetonitrile	7.39	41	20508	0.669 ng			82
12) Acrolein	7.58	56	3880	0.487 ng			99
13) Acetone	7.83	58	86970	8.812 ng		#	83
14) Trichlorofluoromethane	8.02	101	19566	0.802 ng			99
15) 2-Propanol (Isopropanol)	8.32	45	27086m	0.698 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...	9.30	59	3243	0.094 ng		#	1
19) Methylene Chloride	9.24	84	1276	0.096 ng			95
20) 3-Chloro-1-propene (Al...	9.30	41	399	N.D.			
21) Trichlorotrifluoroethane	9.68	151	3555	0.401 ng			98
22) Carbon Disulfide	9.64	76	4000	0.086 ng		#	74
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.24	86	5408	2.693 ng		#	30
27) 2-Butanone (MEK)	11.69	72	5249	0.589 ng			98
28) cis-1,2-Dichloroethene	12.47	61	91	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.67	61	3955	0.852 ng			92
31) n-Hexane	12.58	57	1313	0.055 ng		#	68

<MRL

<MRL

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Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	648	N.D.			
34) Tetrahydrofuran (THF)	13.42	72	1546	~~0.163~~	ng	#	64
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.80	62	107	N.D.			
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	14.98	56	86	N.D.			
41) Benzene	14.87	78	4640	~~0.087~~	ng		87
42) Carbon Tetrachloride	15.11	117	5560	~~0.328~~	ng	Yes	96
43) Cyclohexane	15.29	84	126	N.D.			
44) tert-Amyl Methyl Ether	16.12	73	442	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.			
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) 2,2,4-Trimethylpentane...	16.52	57	2966	N.D.			
50) Methyl Methacrylate	0.00	100	0	N.D.			
51) n-Heptane	16.88	71	981	~~0.069~~	ng	#	81
52) cis-1,3-Dichloropropene	17.64	75	56058	2.529	ng		98
53) 4-Methyl-2-pentanone	17.77	58	617	N.D.			
54) trans-1,3-Dichloropropene	18.36	75	51614	2.449	ng		100
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	18.98	91	21469	~~0.428~~	ng		99
59) 2-Hexanone	19.37	43	7200	~~0.216~~	ng	#	64
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.18	43	6350	~~0.161~~	ng	#	27
63) n-Octane	20.27	57	10340	0.852	ng		96
64) Tetrachloroethene	0.00	166	0	N.D.			
65) Chlorobenzene	0.00	112	0	N.D.			
66) Ethylbenzene	21.81	91	2474	N.D.			
67) m- & p-Xylenes	22.03	91	6029	~~0.130~~	ng		96
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.51	104	1857	~~0.055~~	ng		95
70) o-Xylene	22.65	91	2645	~~0.057~~	ng		75
71) n-Nonane	22.91	43	3231	~~0.105~~	ng	#	73
72) 1,1,2,2-Tetrachloroethane	22.64	83	243	N.D.			
74) Cumene	23.23	105	435	N.D.			
75) alpha-Pinene	23.90	93	21365	0.709	ng	#	42
76) n-Propylbenzene	24.04	91	1458	N.D.			
77) 3-Ethyltoluene	24.17	105	2748	N.D.			
78) 4-Ethyltoluene	24.22	105	1292	N.D.			
79) 1,3,5-Trimethylbenzene	24.33	105	1267	N.D.			

111

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Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	738	N.D.			
81) 2-Ethyltoluene	24.55	105	1168	N.D.			
82) 1,2,4-Trimethylbenzene	24.82	105	3563	0.076	ng		83
83) n-Decane	24.93	57	12154	0.399	ng		97
84) Benzyl Chloride	24.99	91	2257	0.051	ng		81
85) 1,3-Dichlorobenzene	25.10	146	327	N.D.			
86) 1,4-Dichlorobenzene	25.10	146	327	N.D.			
87) sec-Butylbenzene	25.19	105	89	N.D.			
88) 4-Isopropyltoluene (p-...	25.35	119	2498	N.D.			
89) 1,2,3-Trimethylbenzene	25.35	105	1359	N.D.			
90) 1,2-Dichlorobenzene	25.10	146	327	N.D.			
91) d-Limonene	25.53	68	7034	0.353	ng	#	63
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.46	57	3721	0.115	ng		89
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.72	128	35243	0.554	ng		99
96) n-Dodecane	27.70	57	8490	0.226	ng		88
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.31	55	3227	0.155	ng		93
99) tert-Butylbenzene	24.82	119	311	N.D.			
100) n-Butylbenzene	25.82	91	2458	N.D.			

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

Quantitation Report (Qedit)

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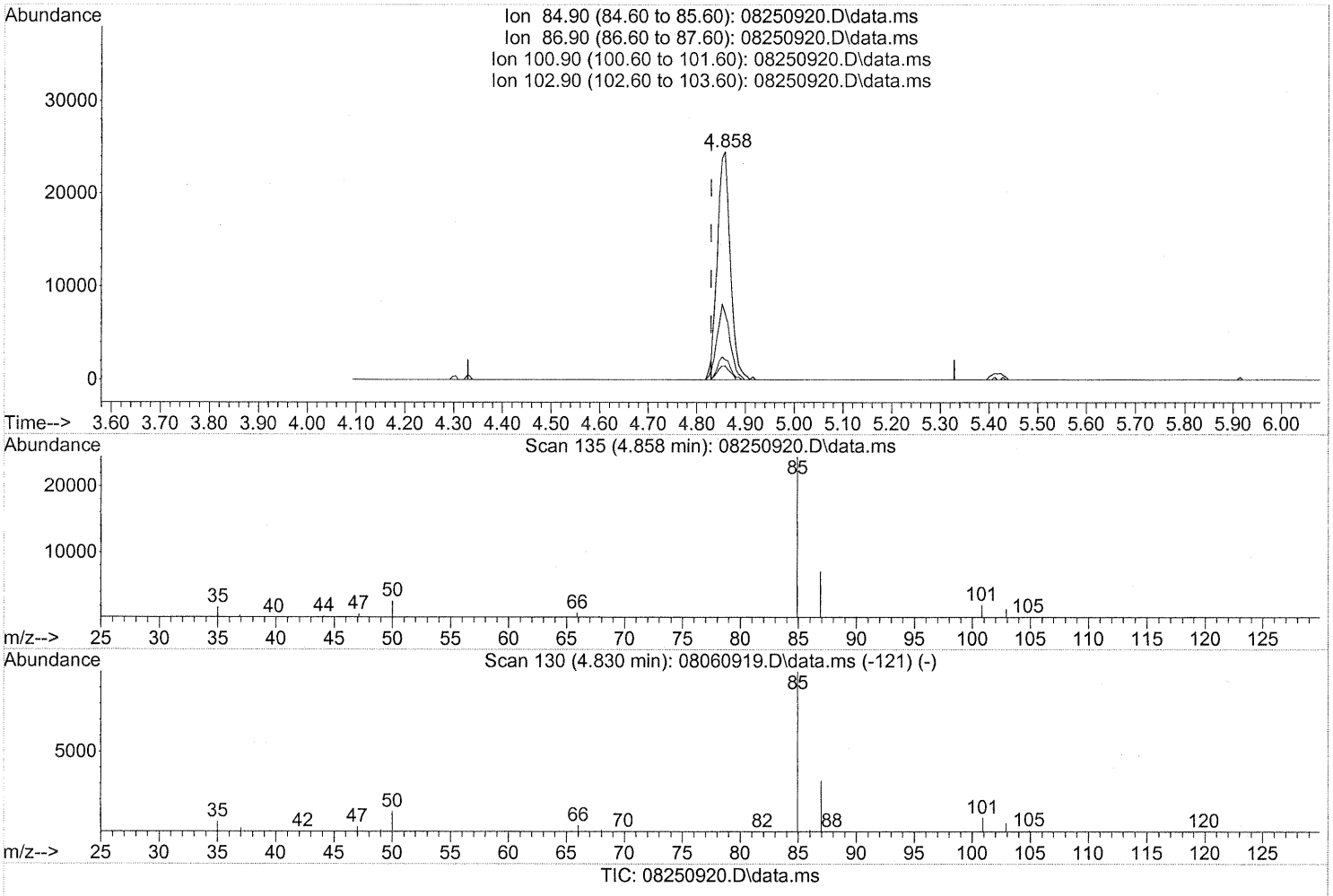

TIC: 08250920.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.858min (+0.028) 1.70ng

response 45979

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.23
100.90	8.80	9.28
102.90	5.20	5.60

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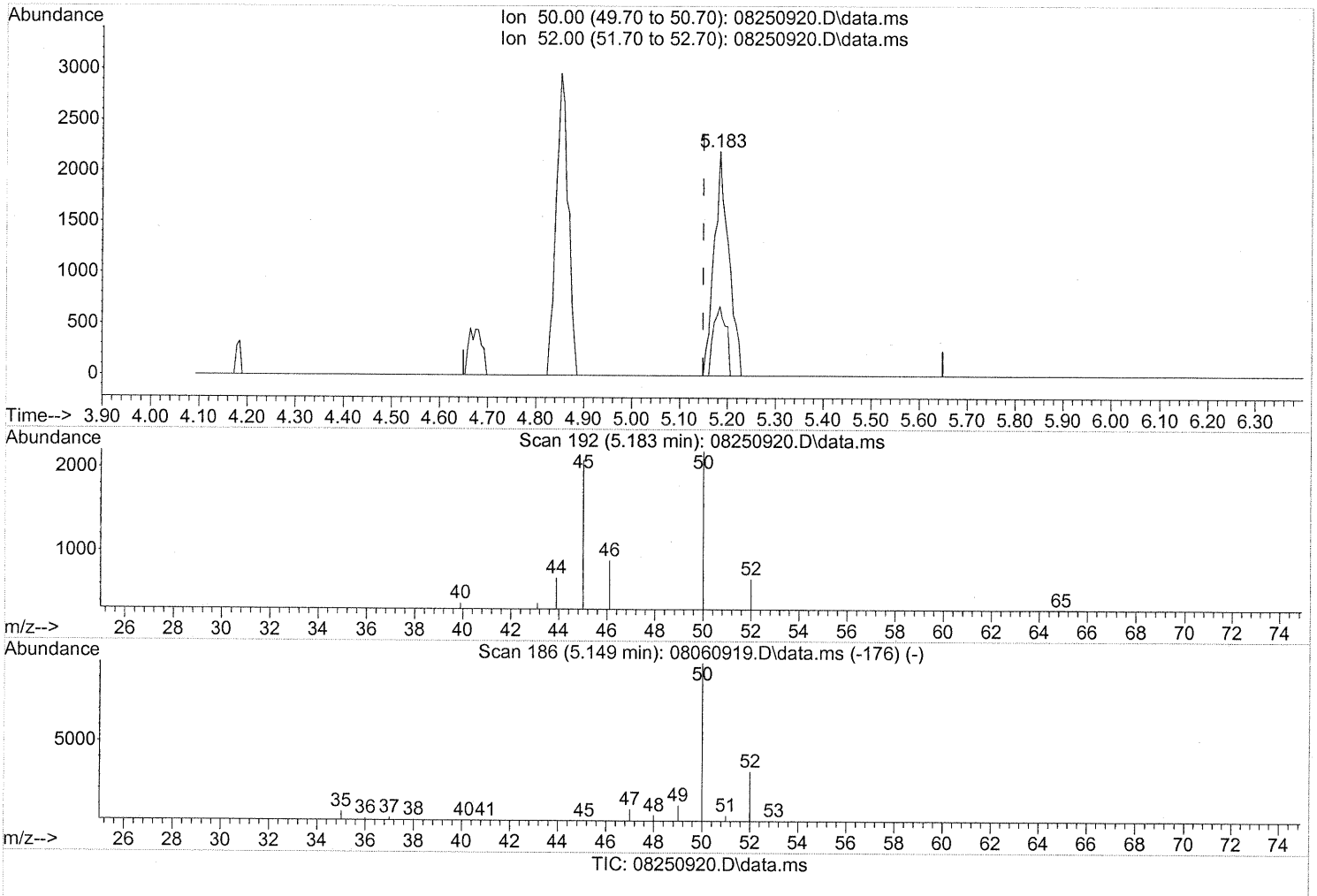

TIC: 08250920.D\data.ms

(4) Chloromethane (T)

5.183min (+0.034) 0.26ng

response 4671

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	26.40
0.00	0.00	0.00
0.00	0.00	0.00

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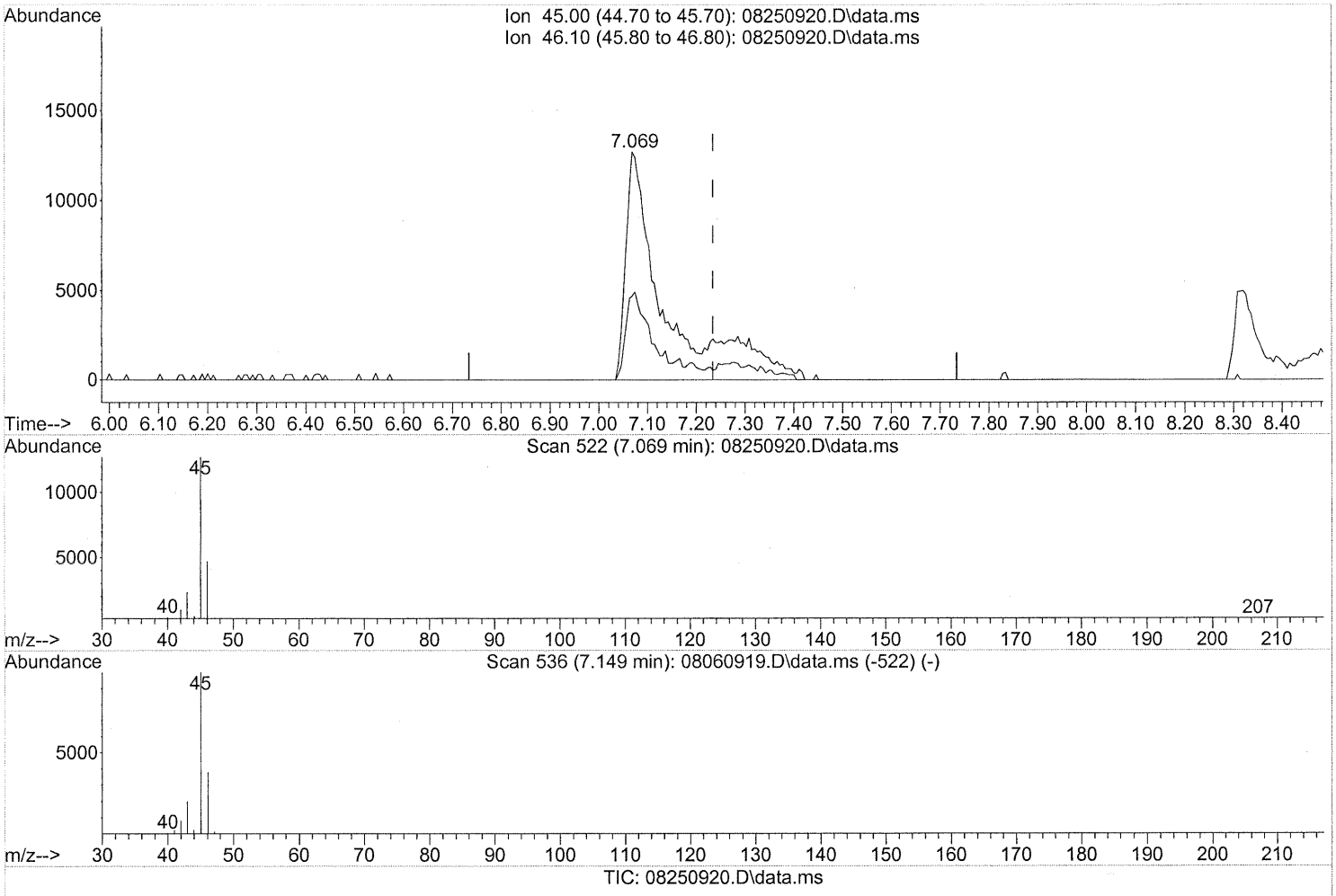

(10) Ethanol (T)

7.069min (-0.166) 6.83ng

response 71406

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	29.81
0.00	0.00	0.00
0.00	0.00	0.00

115

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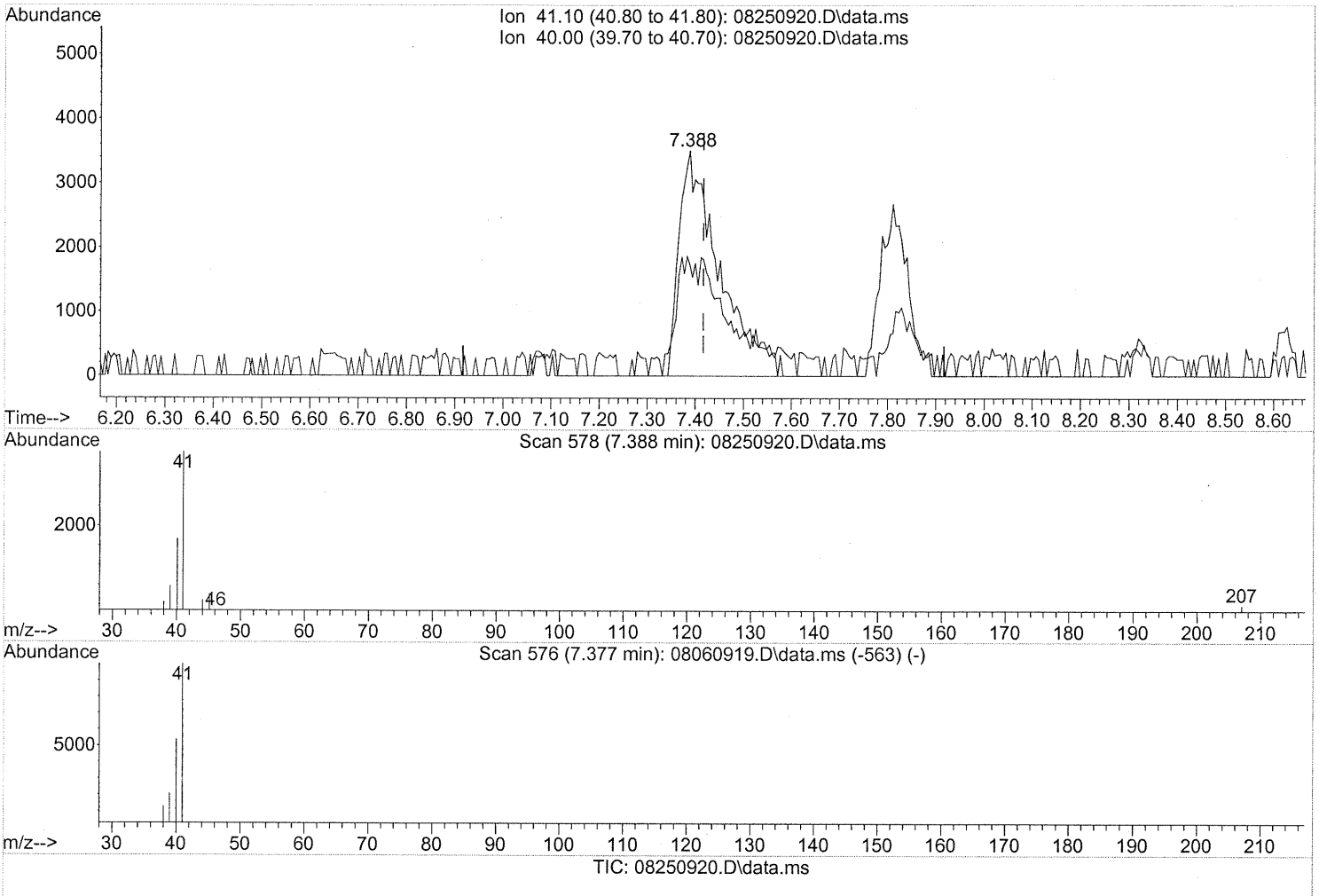

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(11) Acetonitrile (T)

7.388min (-0.029) 0.67ng

response 20508

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	66.22
0.00	0.00	0.00
0.00	0.00	0.00

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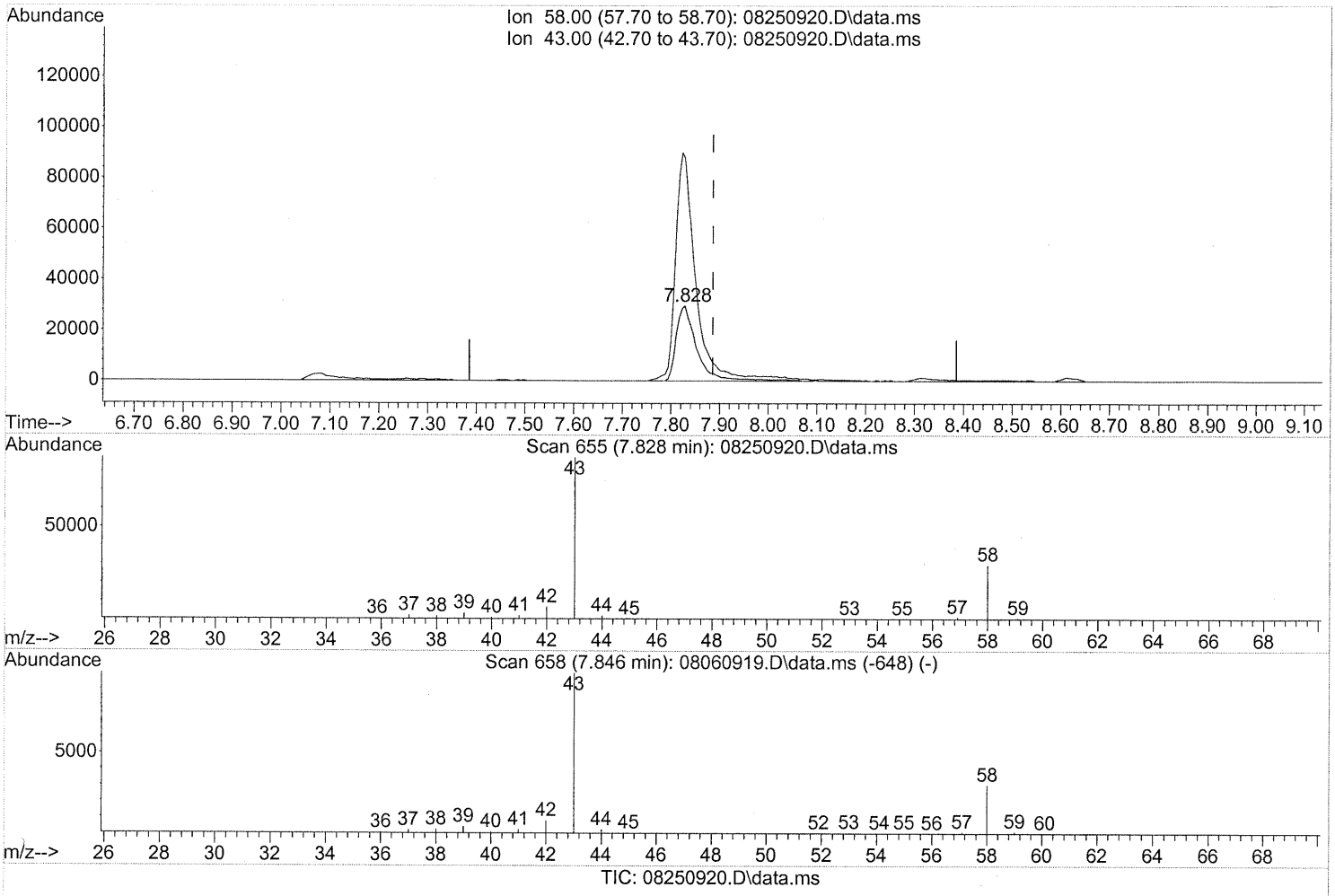

TIC: 08250920.D\data.ms

(13) Acetone (T)

7.828min (-0.058) 8.81ng

response 86970

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	304.72#
0.00	0.00	0.00
0.00	0.00	0.00

117

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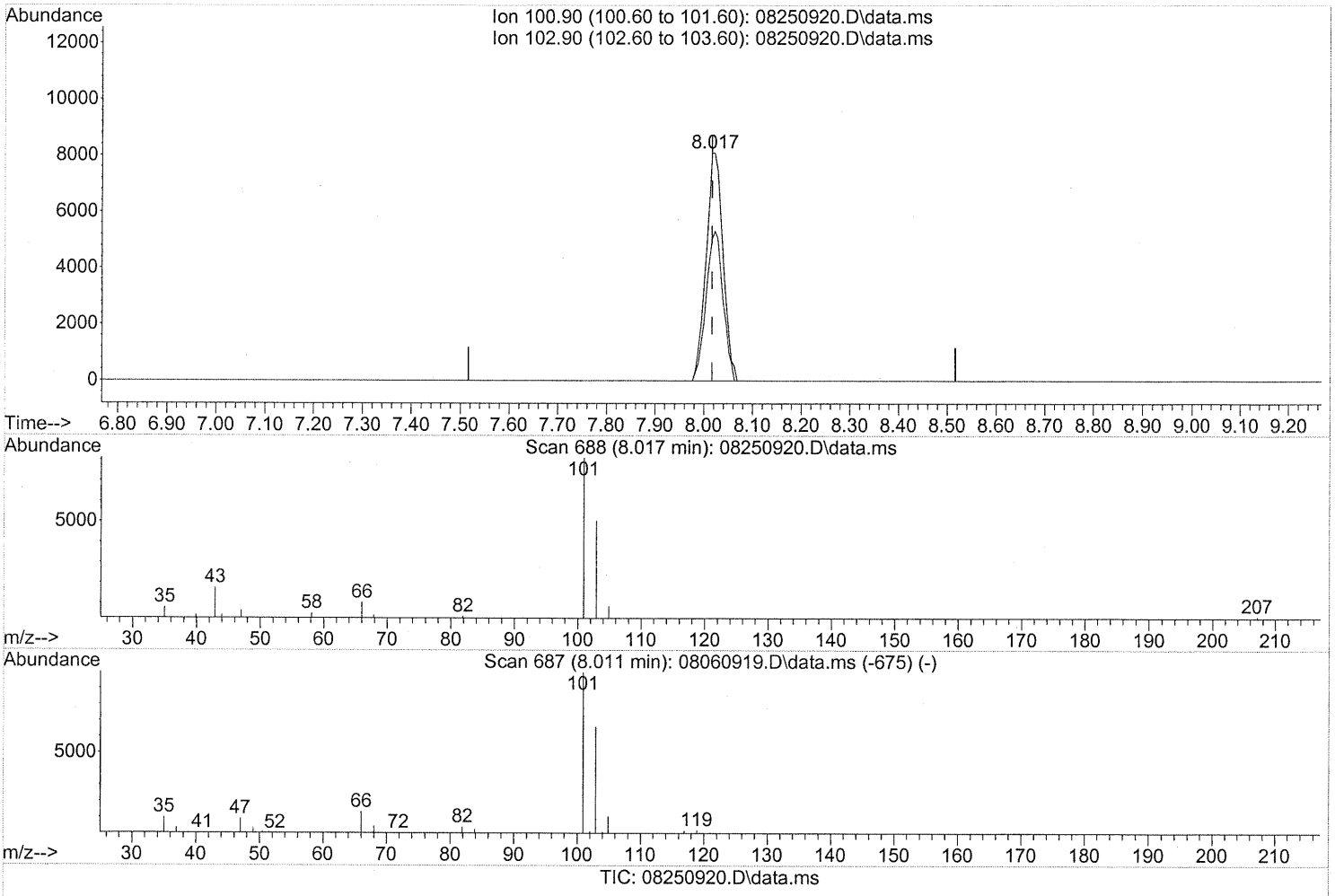

TIC: 08250920.D\data.ms

(14) Trichlorofluoromethane (T)

8.017min (-0.000) 0.80ng

response 19566

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.46
0.00	0.00	0.00
0.00	0.00	0.00

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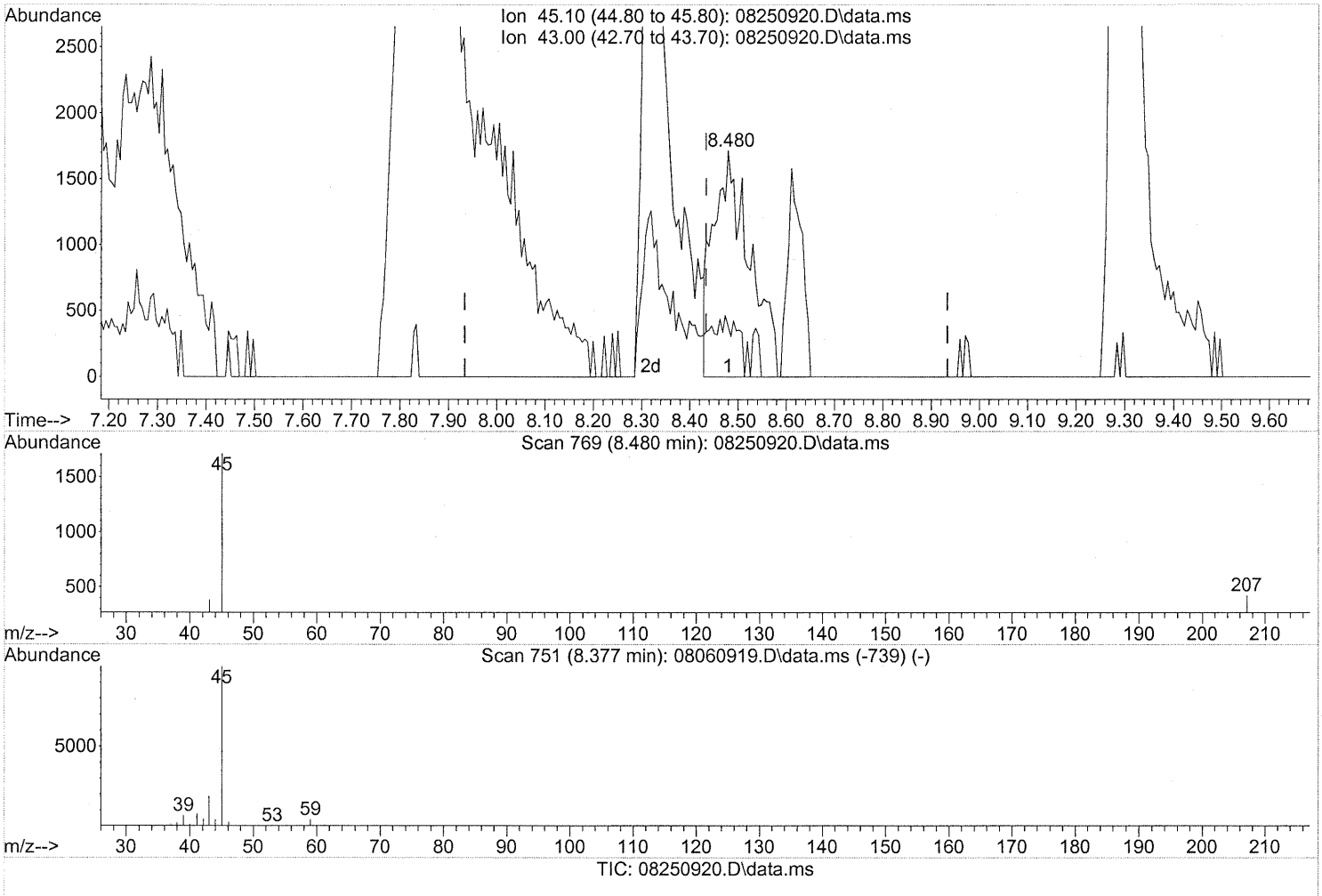

TIC: 08250920.D\data.ms

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

8.480min (+0.046) 0.23ng

response 8883

SP

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	27.86
0.00	0.00	0.00
0.00	0.00	0.00

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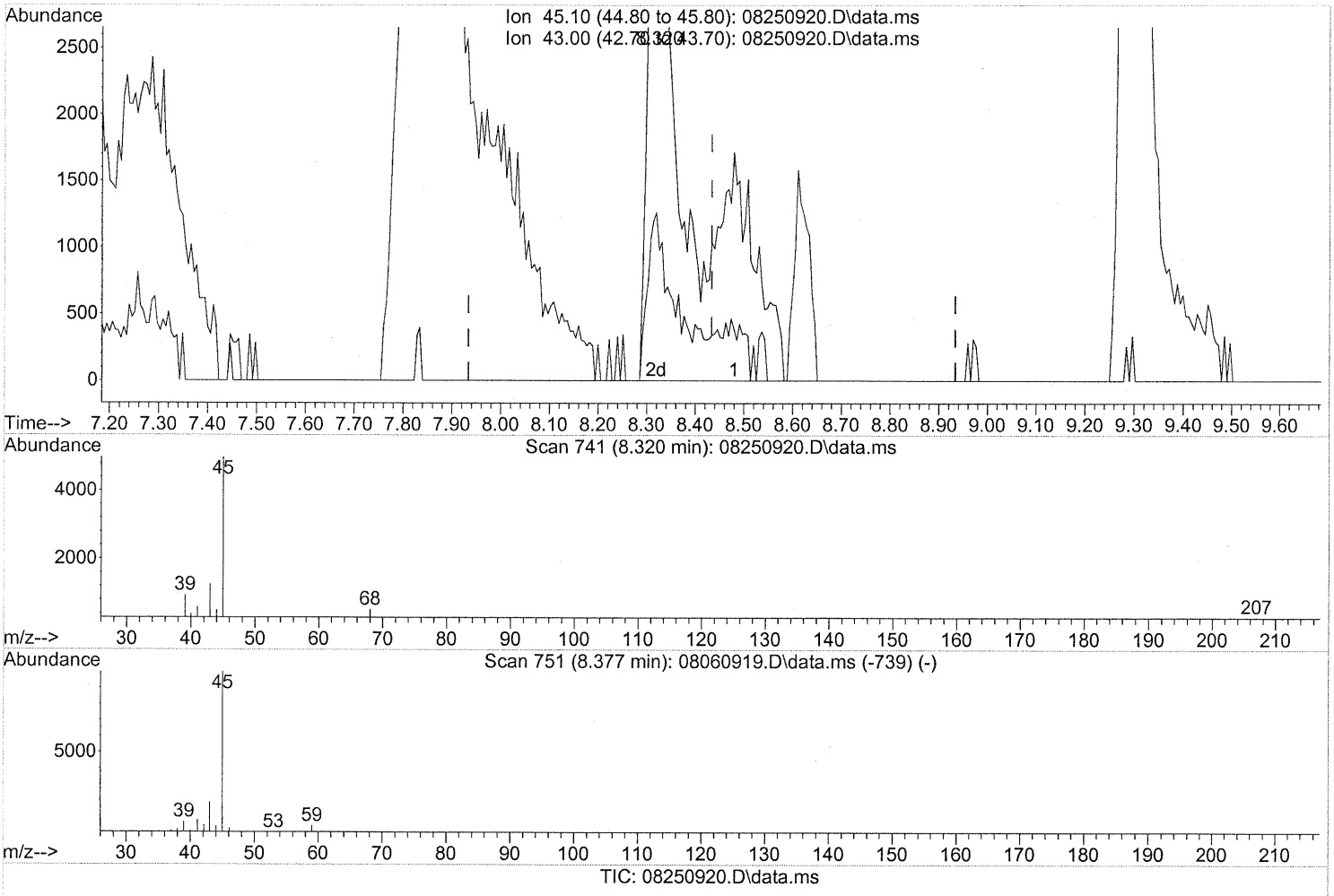

TIC: 08250920.D\data.ms

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

8.320min (-0.114) 0.70ng m

response 27086

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	9.14
0.00	0.00	0.00
0.00	0.00	0.00

CMRL
9/2/09

SP->IC
LM 8/31/09

9/2/09

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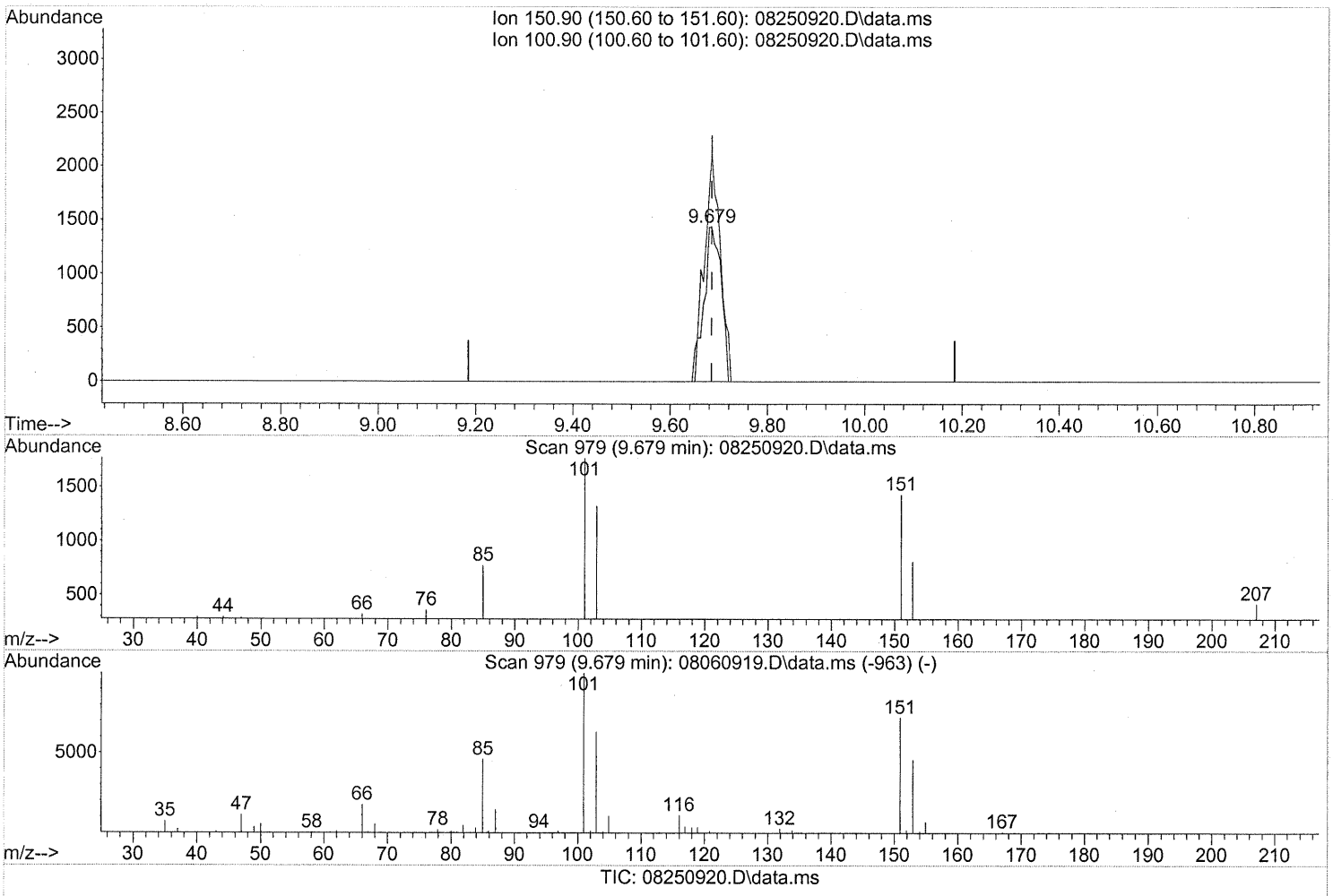
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.40ng

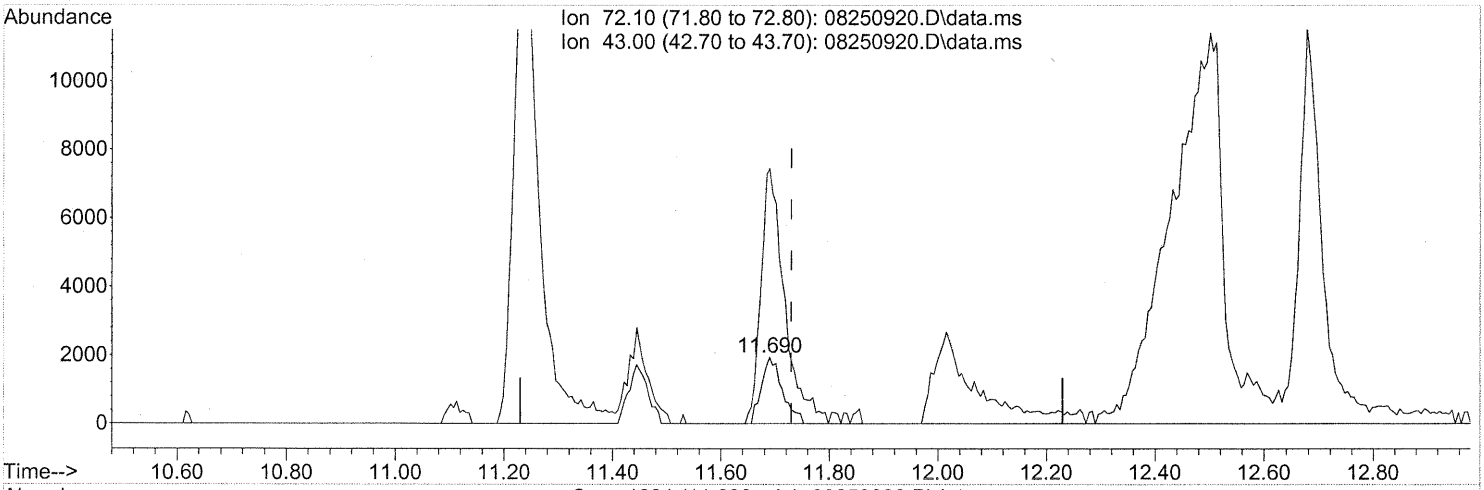
response 3555

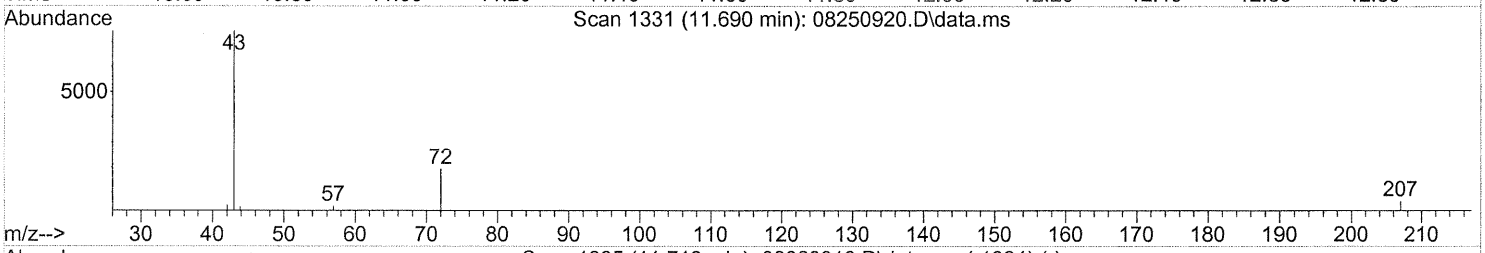
Ion	Exp%	Act%
150.90	100	100
100.90	138.40	135.41
0.00	0.00	0.00
0.00	0.00	0.00

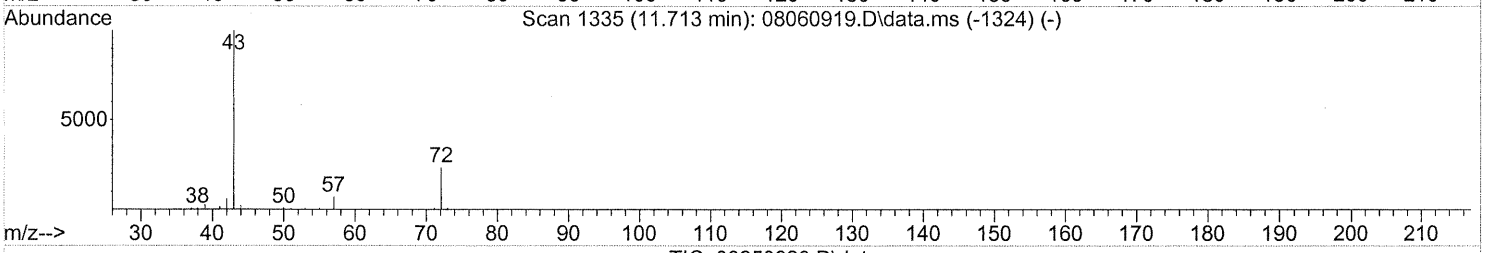
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250920.D\data.ms

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

11.690min (-0.040) 0.59ng

response 5249

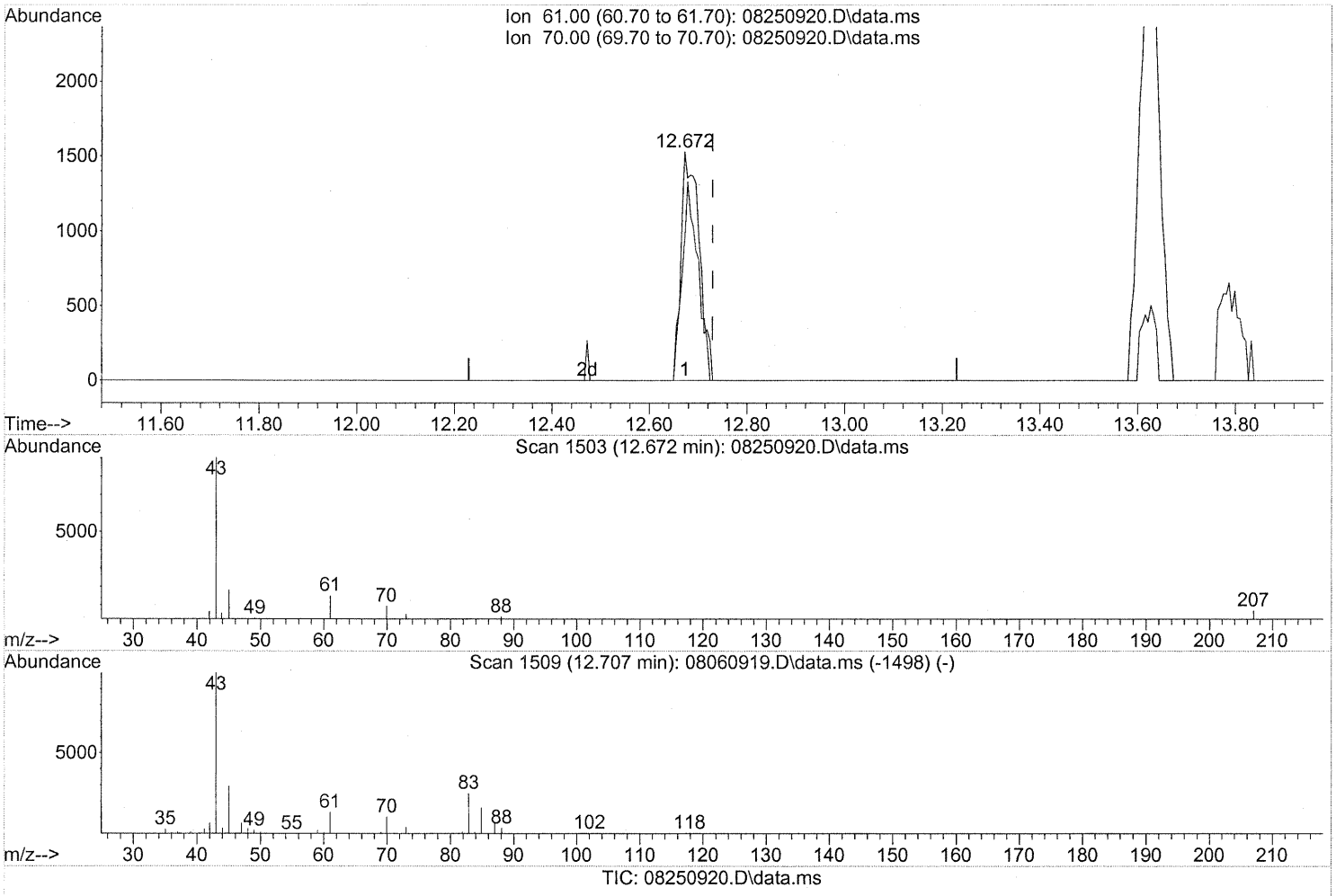
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	432.52
0.00	0.00	0.00
0.00	0.00	0.00

122

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(30) Ethyl Acetate (T)

12.672min (-0.057) 0.85ng

response 3955

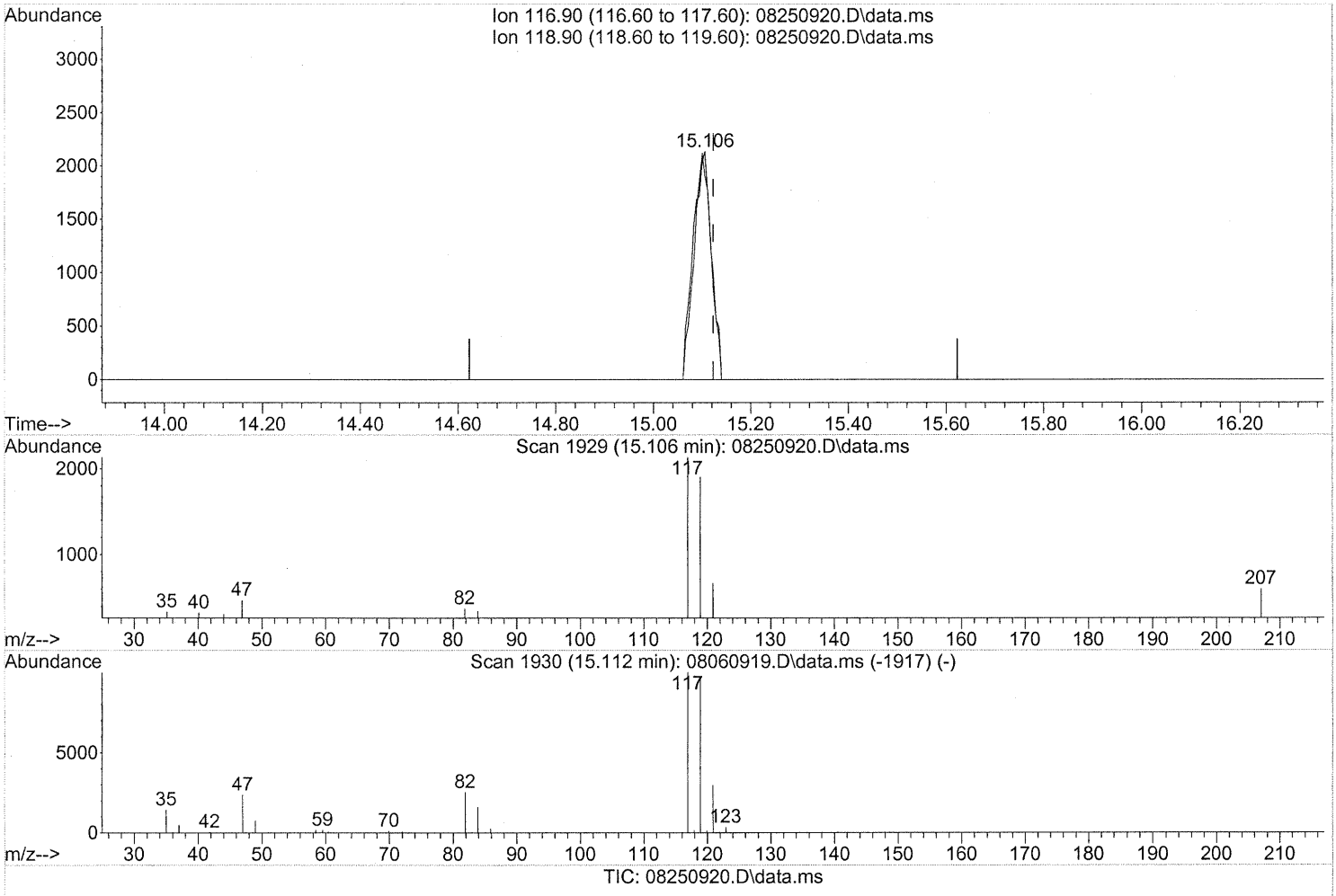
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	74.99
0.00	0.00	0.00
0.00	0.00	0.00

123

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(42) Carbon Tetrachloride (T)

15.106min (-0.017) 0.33ng

response 5560

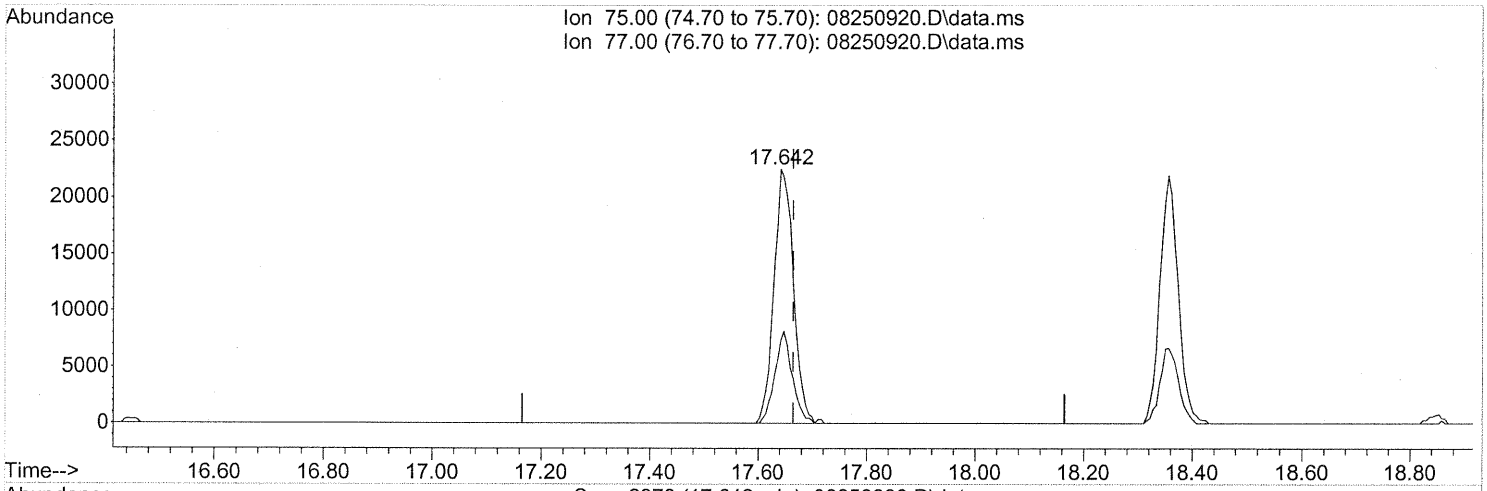
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	93.04
0.00	0.00	0.00
0.00	0.00	0.00

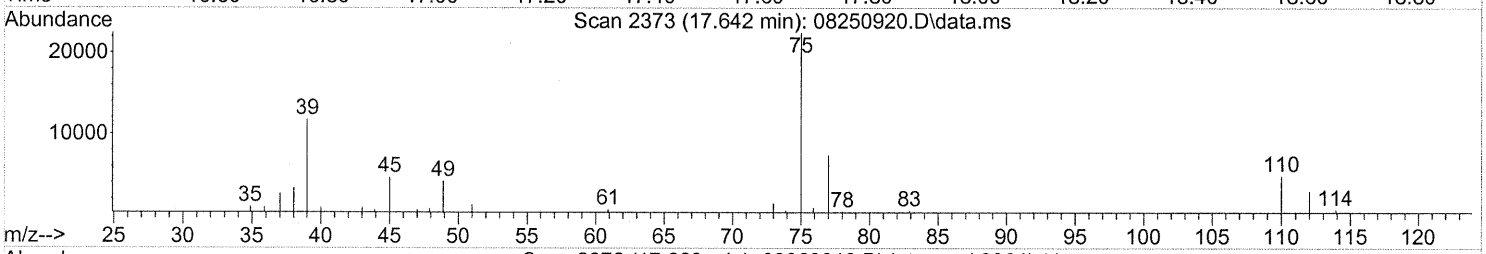
124

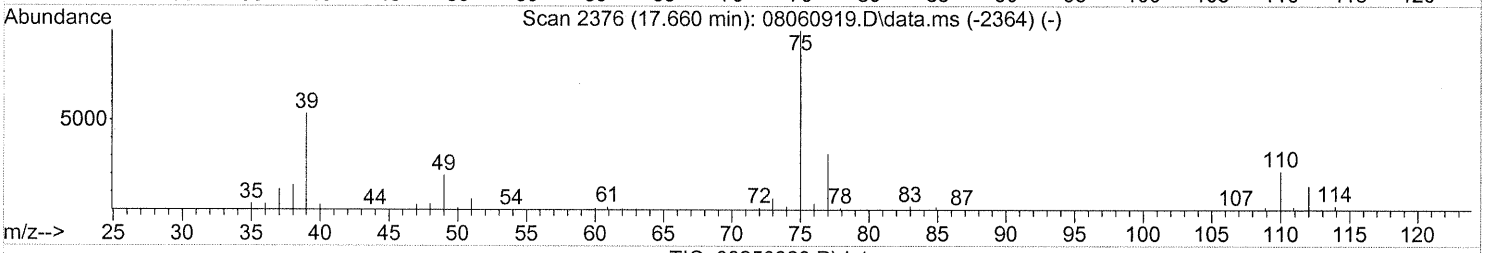
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250920.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.642min (-0.023) 2.53ng

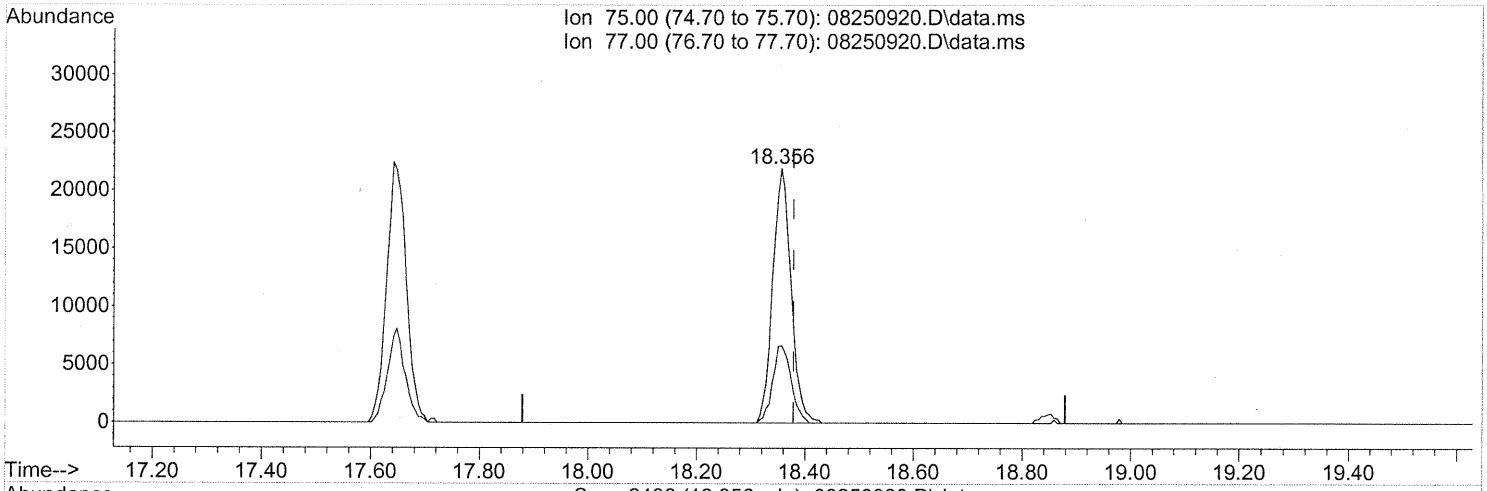
response 56058

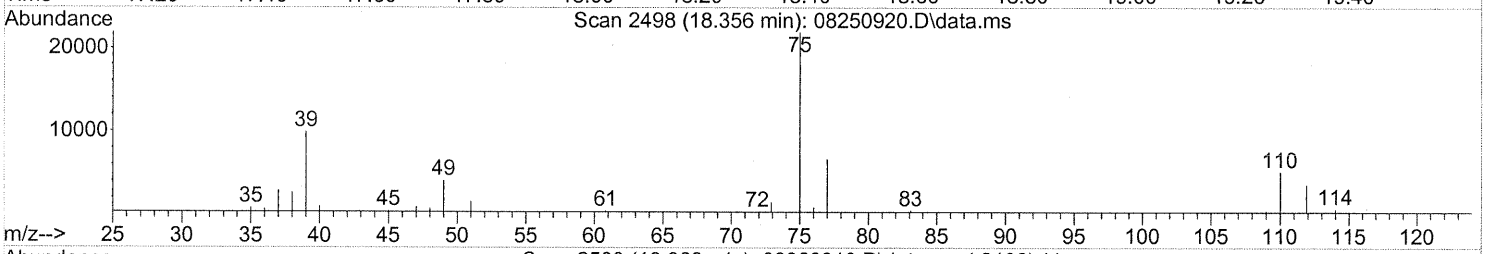
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	32.29
0.00	0.00	0.00
0.00	0.00	0.00

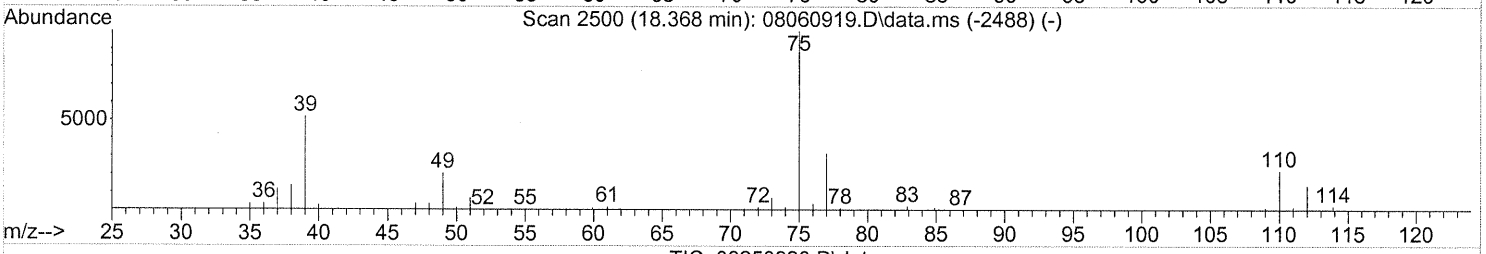
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250920.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 2.45ng

response 51614

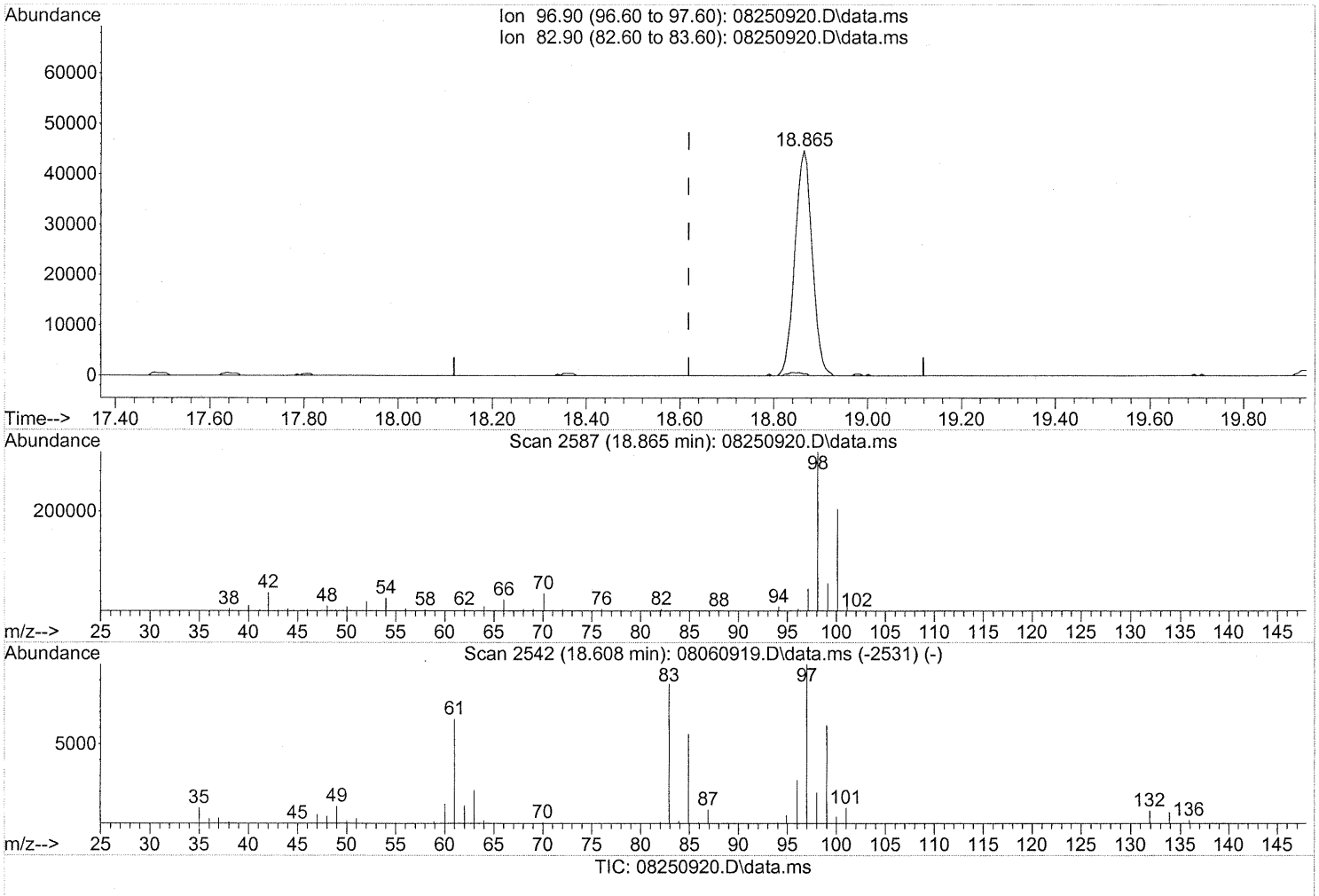
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	30.72
0.00	0.00	0.00
0.00	0.00	0.00

126

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

18.865min (+0.246) 9.80ng

response 114614

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.20#
0.00	0.00	0.00
0.00	0.00	0.00

FP
VM 8/31/09

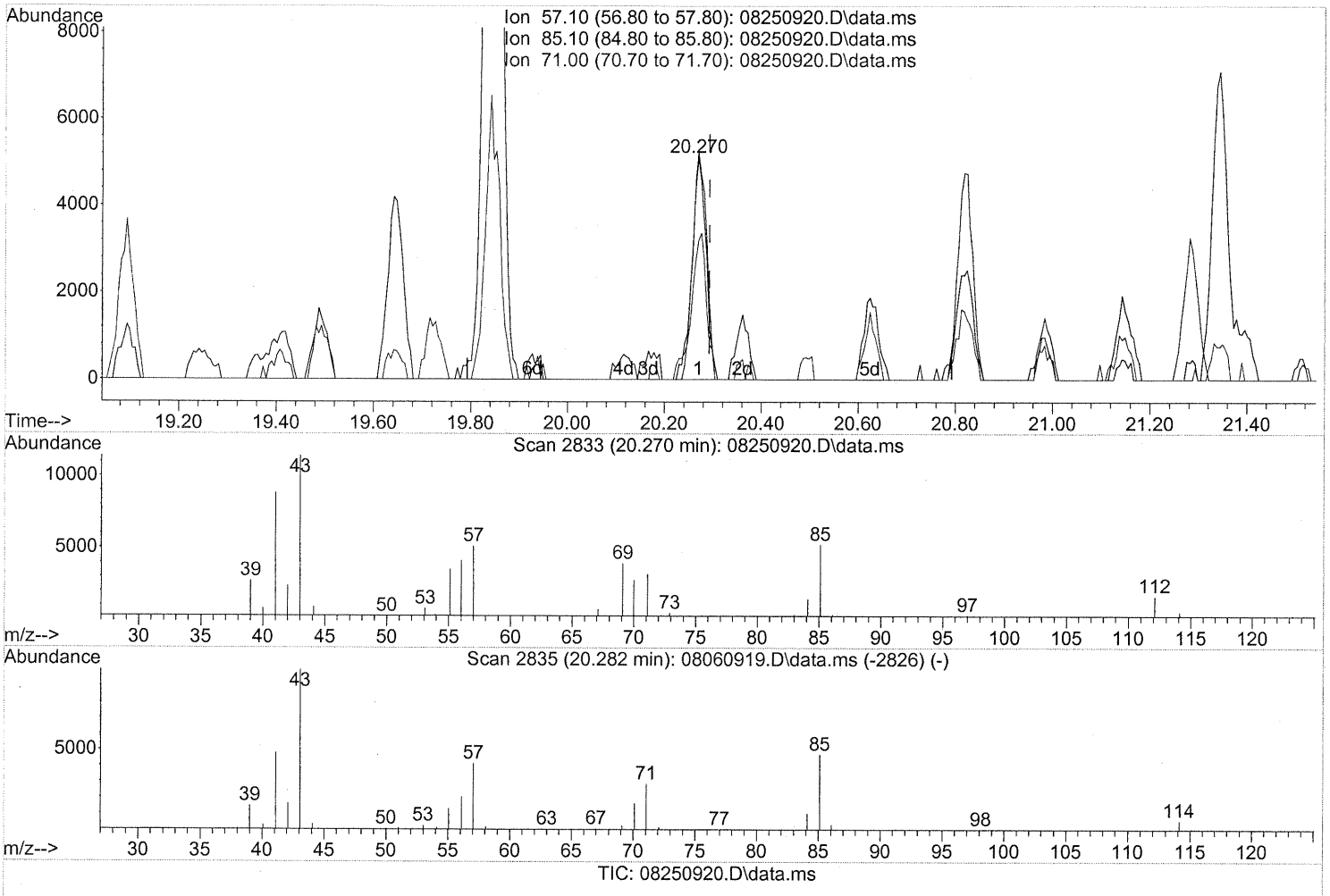
9/2/09

127

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 0.85ng

response 10340

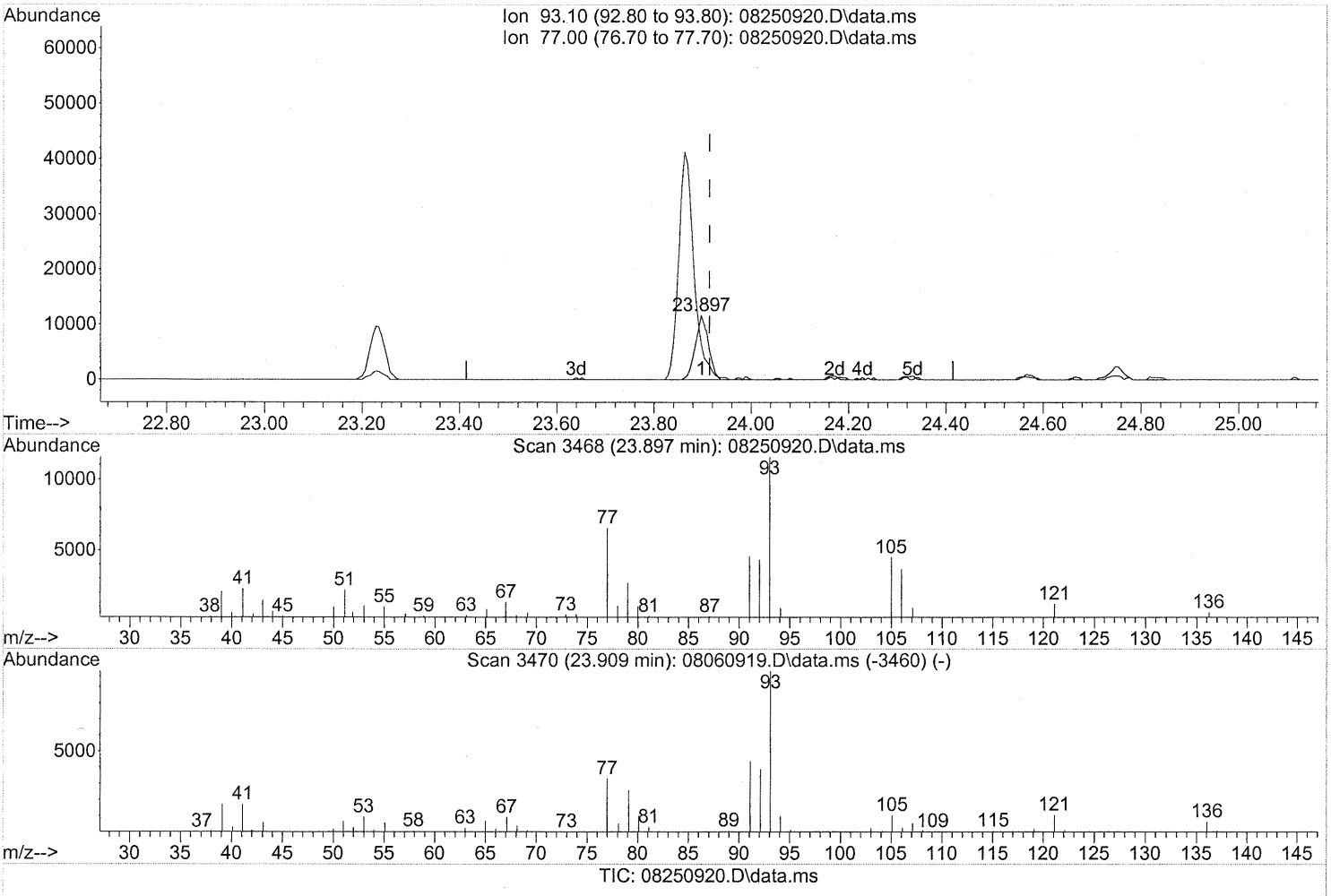
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	100.80
71.00	68.10	69.85
0.00	0.00	0.00

128

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 06:39:44 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(75) alpha-Pinene (T)

23.897min (-0.017) 0.71ng

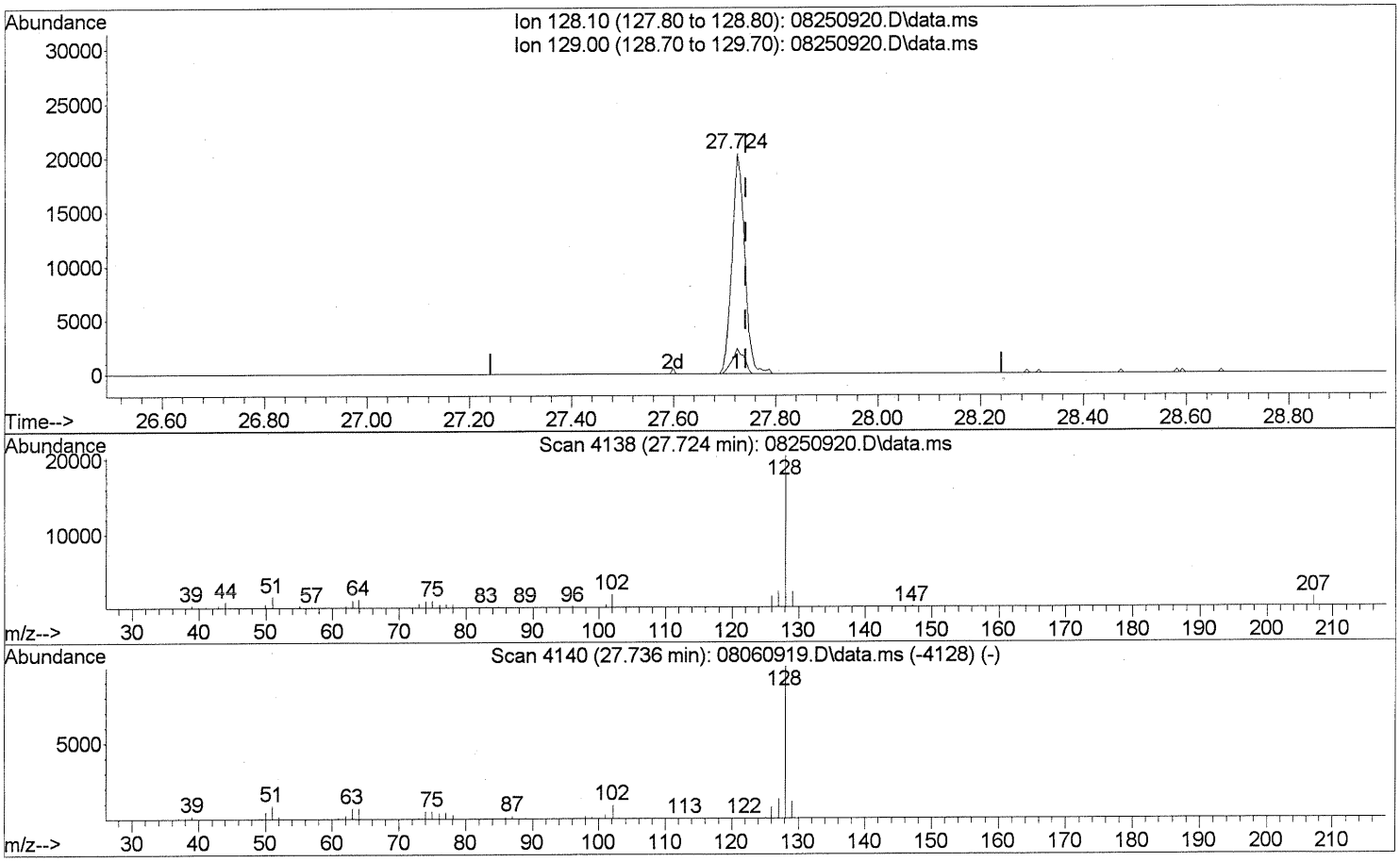
response 21365

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250920.D
Acq On : 26 Aug 2009 00:23
Operator : WA/CC
Sample : P0902876-003 (1000mL)
Misc : Environmental Health 102351
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 31 17:28:38 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250920.D\data.ms

(95) Naphthalene (T)

27.724min (-0.017) 0.55ng

response 35243

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	10.59
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102352**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01257

Date Collected: 8/18/09
Date Received: 8/20/09
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)
0.20 Liter(s)

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**15**	0.77	**9.0**	0.44	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**3.2**	0.77	**0.65**	0.15	
74-87-3	**Chloromethane**	**0.95**	0.15	**0.46**	0.074	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.77	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.15	ND	0.060	
106-99-0	**1,3-Butadiene**	**0.17**	0.15	**0.077**	0.069	
74-83-9	Bromomethane	ND	0.15	ND	0.039	
75-00-3	Chloroethane	ND	0.15	ND	0.058	
64-17-5	**Ethanol**	**1,100**	7.7	**610**	4.1	**D**
75-05-8	**Acetonitrile**	**120**	0.77	**71**	0.46	
107-02-8	**Acrolein**	**6.2**	0.77	**2.7**	0.33	
67-64-1	**Acetone**	**240**	7.7	**100**	3.2	
75-69-4	**Trichlorofluoromethane**	**1.6**	0.15	**0.29**	0.027	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**83**	0.77	**34**	0.31	
107-13-1	Acrylonitrile	ND	0.77	ND	0.35	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.039	
75-09-2	Methylene Chloride	ND	0.77	ND	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.15	ND	0.049	
76-13-1	**Trichlorotrifluoroethane**	**0.70**	0.15	**0.092**	0.020	
75-15-0	**Carbon Disulfide**	**3.1**	0.77	**0.99**	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.039	
75-34-3	1,1-Dichloroethane	ND	0.15	ND	0.038	
1634-04-4	Methyl tert-Butyl Ether	ND	0.15	ND	0.042	
108-05-4	**Vinyl Acetate**	**9.8**	7.7	**2.8**	2.2	
78-93-3	**2-Butanone (MEK)**	**7.0**	0.77	**2.4**	0.26	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102352**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01257

Date Collected: 8/18/09
Date Received: 8/20/09
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)
0.20 Liter(s)

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.039	
141-78-6	**Ethyl Acetate**	**10**	0.77	**2.8**	0.21	
110-54-3	**n-Hexane**	**0.96**	0.77	**0.27**	0.22	
67-66-3	**Chloroform**	**2.2**	0.15	**0.45**	0.031	
109-99-9	**Tetrahydrofuran (THF)**	**0.78**	0.77	**0.26**	0.26	
107-06-2	**1,2-Dichloroethane**	**2.3**	0.15	**0.58**	0.038	
71-55-6	1,1,1-Trichloroethane	ND	0.15	ND	0.028	
71-43-2	**Benzene**	**1.0**	0.15	**0.32**	0.048	
56-23-5	**Carbon Tetrachloride**	**0.63**	0.15	**0.10**	0.024	
110-82-7	Cyclohexane	ND	0.77	ND	0.22	
78-87-5	1,2-Dichloropropane	ND	0.15	ND	0.033	
75-27-4	**Bromodichloromethane**	**0.41**	0.15	**0.061**	0.023	
79-01-6	Trichloroethene	ND	0.15	ND	0.028	
123-91-1	1,4-Dioxane	ND	0.77	ND	0.21	
80-62-6	Methyl Methacrylate	ND	0.77	ND	0.19	
142-82-5	**n-Heptane**	**1.8**	0.77	**0.44**	0.19	
10061-01-5	**cis-1,3-Dichloropropene**	**8.1**	0.77	**1.8**	0.17	
108-10-1	**4-Methyl-2-pentanone**	**2.5**	0.77	**0.60**	0.19	
10061-02-6	**trans-1,3-Dichloropropene**	**5.8**	0.77	**1.3**	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.15	ND	0.028	
108-88-3	**Toluene**	**23**	0.77	**6.1**	0.20	
591-78-6	**2-Hexanone**	**0.93**	0.77	**0.23**	0.19	
124-48-1	**Dibromochloromethane**	**0.23**	0.15	**0.027**	0.018	
106-93-4	1,2-Dibromoethane	ND	0.15	ND	0.020	
123-86-4	**n-Butyl Acetate**	**5.7**	0.77	**1.2**	0.16	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102352** CAS Sample ID: P0902876-004
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AC01257

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.0**	0.77	**0.43**	0.16	
127-18-4	**Tetrachloroethene**	**0.29**	0.15	**0.042**	0.023	
108-90-7	Chlorobenzene	ND	0.15	ND	0.033	
100-41-4	**Ethylbenzene**	**1.5**	0.77	**0.35**	0.18	
179601-23-1	**m,p-Xylenes**	**3.5**	0.77	**0.80**	0.18	
75-25-2	Bromoform	ND	0.77	ND	0.074	
100-42-5	**Styrene**	**3.2**	0.77	**0.76**	0.18	
95-47-6	**o-Xylene**	**1.5**	0.77	**0.34**	0.18	
111-84-2	**n-Nonane**	**4.1**	0.77	**0.78**	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.15	ND	0.022	
98-82-8	Cumene	ND	0.77	ND	0.16	
80-56-8	**alpha-Pinene**	**120**	0.77	**21**	0.14	
103-65-1	n-Propylbenzene	ND	0.77	ND	0.16	
622-96-8	4-Ethyltoluene	ND	0.77	ND	0.16	
108-67-8	1,3,5-Trimethylbenzene	ND	0.77	ND	0.16	
95-63-6	**1,2,4-Trimethylbenzene**	**2.4**	0.77	**0.48**	0.16	
100-44-7	Benzyl Chloride	ND	0.15	ND	0.030	
541-73-1	1,3-Dichlorobenzene	ND	0.15	ND	0.025	
106-46-7	**1,4-Dichlorobenzene**	**0.33**	0.15	**0.055**	0.025	
95-50-1	1,2-Dichlorobenzene	ND	0.15	ND	0.025	
5989-27-5	**d-Limonene**	**49**	0.77	**8.8**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.77	ND	0.079	
120-82-1	1,2,4-Trichlorobenzene	ND	0.77	ND	0.10	
91-20-3	Naphthalene	ND	0.77	ND	0.15	
87-68-3	Hexachlorobutadiene	ND	0.77	ND	0.072	

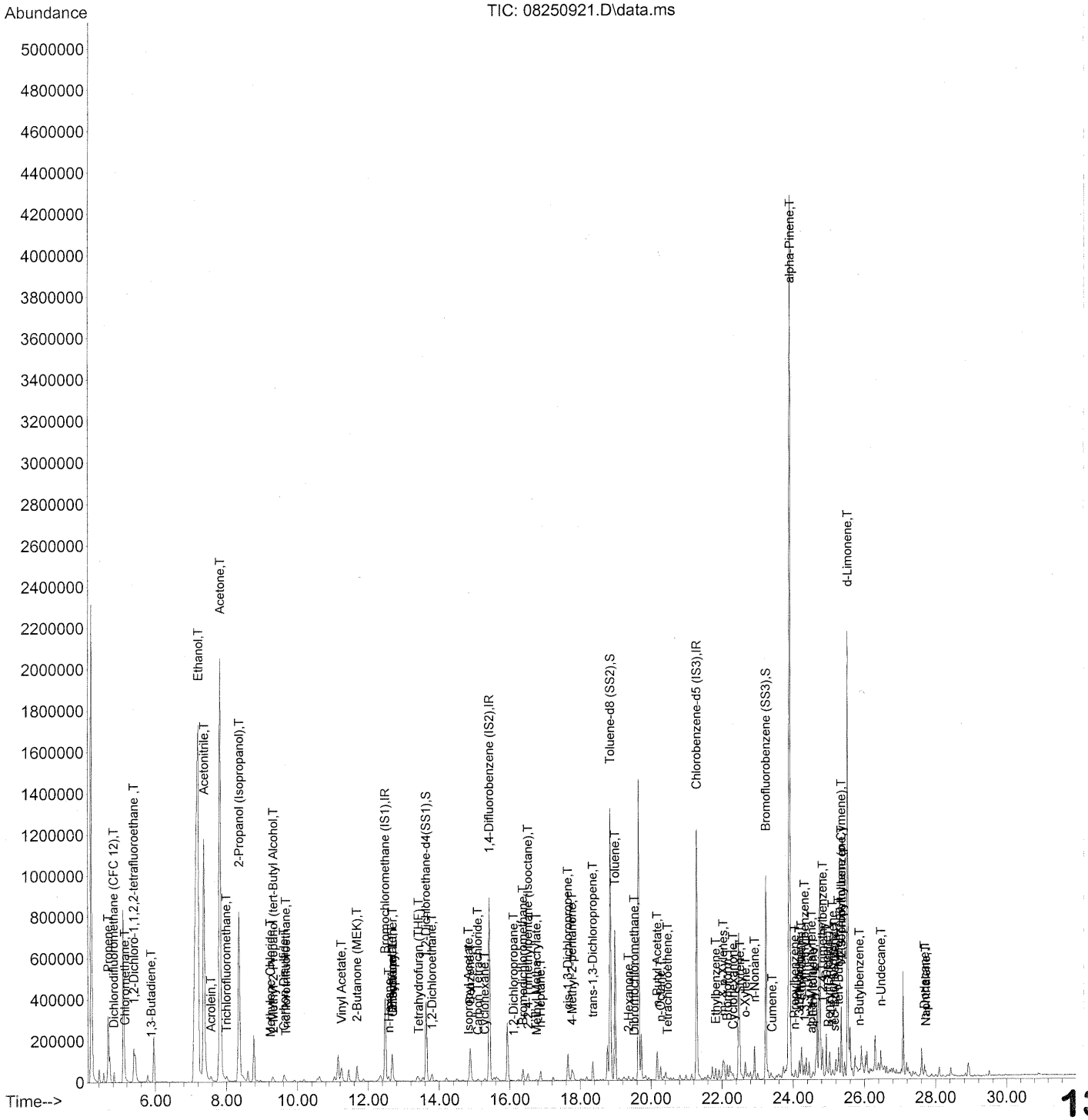
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05 am
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 31 17:34:22 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05 am
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Quant Time: Aug 31 17:34:22 2009
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

MM 9/11/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	207019	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1035350	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.28	82	505764	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	390238	21.688	ng		-0.03
Spiked Amount 25.000			Recovery = 86.76%				
57) Toluene-d8 (SS2)	18.85	98	1135593	25.697	ng		-0.02
Spiked Amount 25.000			Recovery = 102.80%				
73) Bromofluorobenzene (SS3)	23.23	174	324981	27.886	ng		-0.01
Spiked Amount 25.000			Recovery = 111.56%				
Target Compounds							Qvalue
2) Propene	4.66	42	143817m	10.124	ng		
3) Dichlorodifluoromethan...	4.83	85	49122	2.116	ng		99
4) Chloromethane	5.15	50	9731	0.624	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	2170	0.230	ng		96
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.88	54	1193	0.111	ng	#	67
8) Bromomethane	6.35	94	107	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.21	45	6035377	670.238	ng		100
11) Acetonitrile	7.37	41	2042030	77.433	ng		99
12) Acrolein	7.56	56	27674	4.037	ng		94
13) Acetone	7.82	58	1325097	155.960	ng		91
14) Trichlorofluoromethane	8.00	101	22225	1.059	ng		100
15) 2-Propanol (Isopropanol)	8.36	45	1818496	54.464	ng		99
16) Acrylonitrile	8.58	53	413	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.32	59	13316	0.449	ng	#	67
19) Methylene Chloride	9.24	84	2195	0.192	ng	#	76
20) 3-Chloro-1-propene (Al...	9.42	41	109	N.D.			
21) Trichlorotrifluoroethane	9.67	151	3510	0.460	ng		96
22) Carbon Disulfide	9.62	76	81172	2.018	ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.23	73	97	N.D.			
26) Vinyl Acetate	11.24	86	11059	6.396	ng	#	43
27) 2-Butanone (MEK)	11.68	72	35070	4.571	ng	#	89
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.68	87	3076	0.300	ng	#	1
30) Ethyl Acetate	12.67	61	26705	6.682	ng		99
31) n-Hexane	12.58	57	12856	0.629	ng		98

Cal Std

Data Path : J:\MS13\DATA\2009_08\25\
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Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 31 17:34:22 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	25847	1.436	ng		99
34) Tetrahydrofuran (THF)	13.42	72	4167	0.510	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.79	62	25178	1.531	ng		99
38) 1,1,1-Trichloroethane	14.17	97	94	N.D.			
39) Isopropyl Acetate	14.83	61	2183	0.284	ng	#	1
40) 1-Butanol	15.03	56	584	N.D.			
41) Benzene	14.87	78	30866	0.678	ng		99
42) Carbon Tetrachloride	15.09	117	6015	0.415	ng		99
43) Cyclohexane	15.28	84	6851	0.411	ng		94
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	16.11	63	1018	0.089	ng	#	66
46) Bromodichloromethane	16.37	83	4009	0.267	ng		86
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.52	88	115	N.D.			
49) 2,2,4-Trimethylpentane...	16.52	57	34564	0.645	ng		89
50) Methyl Methacrylate	16.76	100	328	0.078	ng	#	1
51) n-Heptane	16.87	71	14422	1.181	ng		99
52) cis-1,3-Dichloropropene	17.65	75	100090	5.283	ng		100
53) 4-Methyl-2-pentanone	17.76	58	17567	1.606	ng		97
54) trans-1,3-Dichloropropene	18.36	75	68317	3.792	ng		99
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	18.98	91	651732	15.006	ng		99
59) 2-Hexanone	19.36	43	17576	0.609	ng		99
60) Dibromochloromethane	19.52	129	1524	0.148	ng		93
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	127552	3.747	ng		97
63) n-Octane	20.27	57	13881	1.322	ng		99
64) Tetrachloroethene	20.46	166	1885	0.188	ng		89
65) Chlorobenzene	0.00	112	0	N.D.	d		
66) Ethylbenzene	21.82	91	48985	0.987	ng		98
67) m- & p-Xylenes	22.03	91	91355	2.275	ng		98
68) Bromoform	22.15	173	469	0.055	ng	#	29
69) Styrene	22.50	104	61458	2.117	ng	#	63
70) o-Xylene	22.65	91	38947	0.967	ng		98
71) n-Nonane	22.91	43	71485	2.672	ng		99
72) 1,1,2,2-Tetrachloroethane	22.64	83	794	N.D.			
74) Cumene	23.41	105	5208	0.102	ng		97
75) alpha-Pinene	23.90	93	2027191	77.749	ng		77
76) n-Propylbenzene	24.04	91	15087	0.236	ng	#	89
77) 3-Ethyltoluene	24.17	105	39477	0.812	ng		99
78) 4-Ethyltoluene	24.22	105	21149	0.449	ng		92
79) 1,3,5-Trimethylbenzene	24.31	105	19467	0.490	ng		90

Quantitation Report (QT Reviewed)

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Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 31 17:34:22 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	1111	0.052 ng	#	85
81) 2-Ethyltoluene	24.55	105	18313	0.374 ng		96
82) 1,2,4-Trimethylbenzene	24.82	105	62511	1.543 ng		89
83) n-Decane	24.93	57	84226	3.198 ng		90
84) Benzyl Chloride	24.99	91	2550	0.067 ng		84
85) 1,3-Dichlorobenzene	25.02	146	189	N.D.		
86) 1,4-Dichlorobenzene	25.10	146	4718	0.216 ng		99
87) sec-Butylbenzene	25.16	105	3232	0.059 ng		84
88) 4-Isopropyltoluene (p-...	25.35	119	164816	3.377 ng		92
89) 1,2,3-Trimethylbenzene	25.35	105	25214	0.611 ng	#	32
90) 1,2-Dichlorobenzene	25.53	146	256	N.D.		
91) d-Limonene	25.53	68	551593	32.017 ng		81
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	37459	1.337 ng	#	66
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.72	128	17577	0.319 ng		98
96) n-Dodecane	27.69	57	19510	0.599 ng		94
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	17171	0.954 ng		89
99) tert-Butylbenzene	25.27	119	5645	0.144 ng		97
100) n-Butylbenzene	25.86	91	10899	0.242 ng	#	53

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

Quantitation Report (Qedit)

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Sample : P0902876-004 (1000mL)
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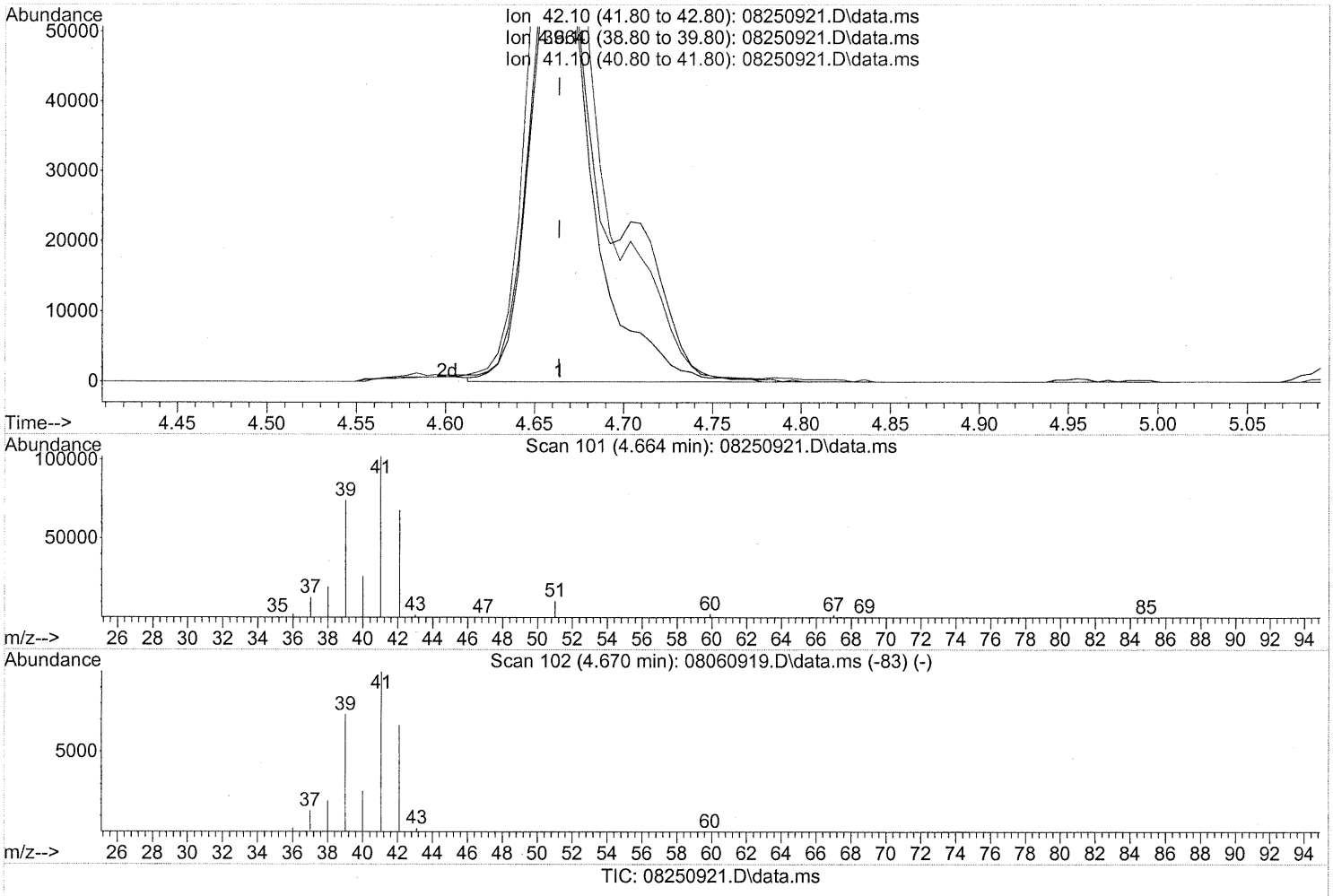
Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(2) Propene (T)

4.664min (-0.000) 10.79ng

response 153332

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	129.51
41.10	150.20	161.44
0.00	0.00	0.00

SH

Quantitation Report (Qedit)

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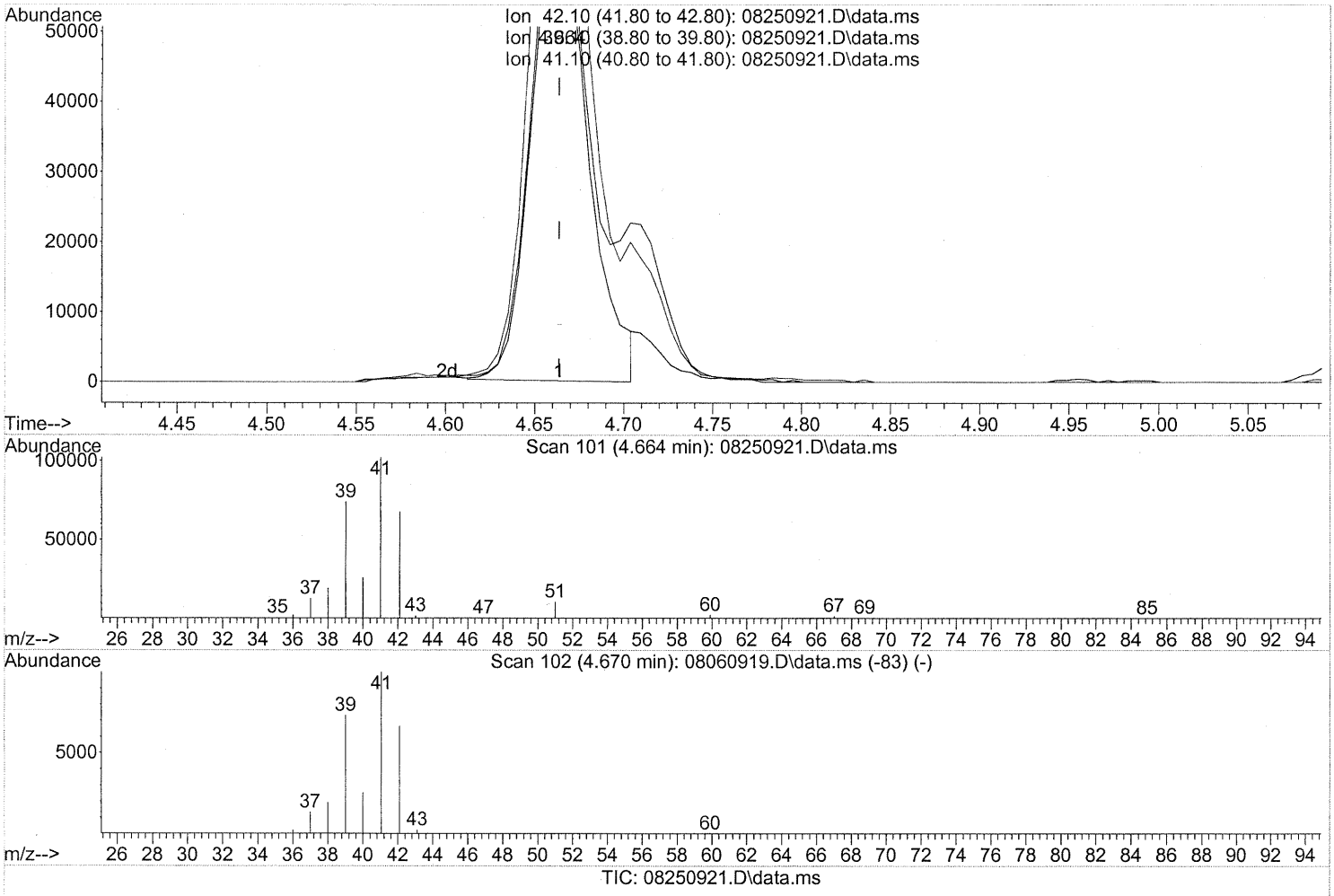

TIC: 08250921.D\data.ms

(2) Propene (T)

4.664min (-0.000) 10.12ng m

response 143817

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	138.07#
41.10	150.20	172.12#
0.00	0.00	0.00

SH → IC
VM 8/31/09
9/2/09

139

Quantitation Report (Qedit)

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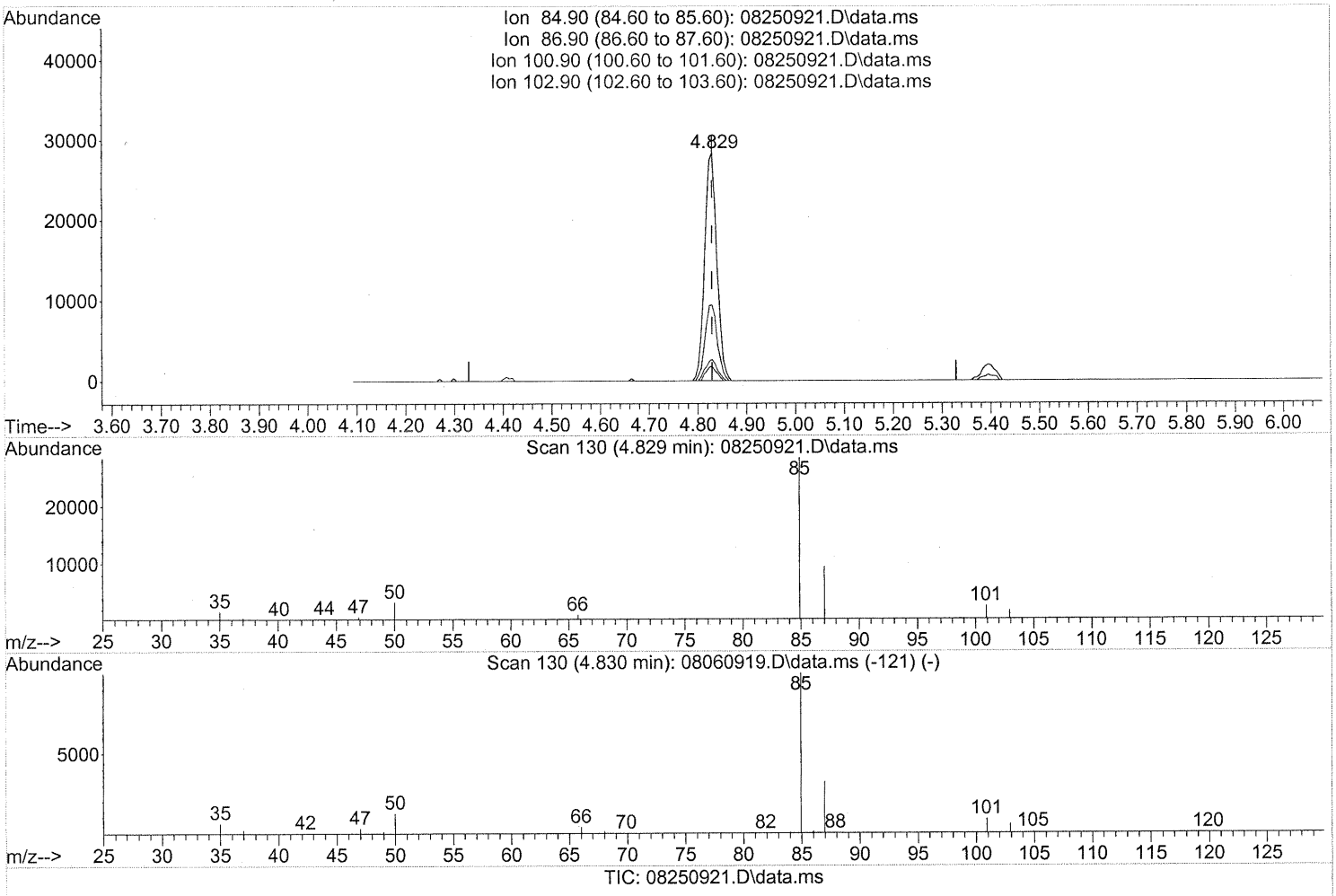

TIC: 08250921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.829min (-0.000) 2.12ng

response 49122

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	33.66
100.90	8.80	9.00
102.90	5.20	5.42

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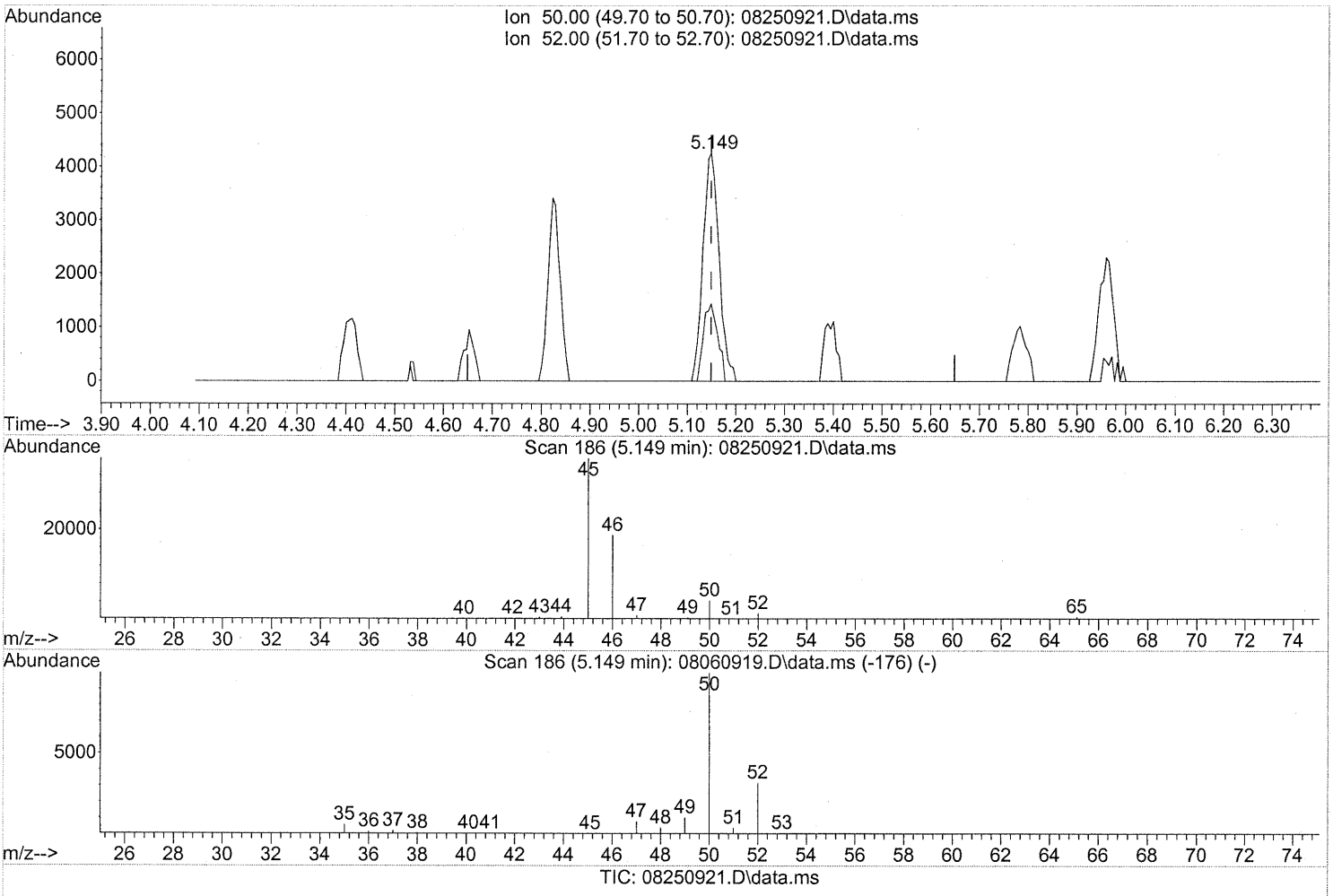

TIC: 08250921.D\data.ms

(4) Chloromethane (T)

5.149min (-0.000) 0.62ng

response 9731

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.76
0.00	0.00	0.00
0.00	0.00	0.00

Before subtr.

141

Quantitation Report (Qedit)

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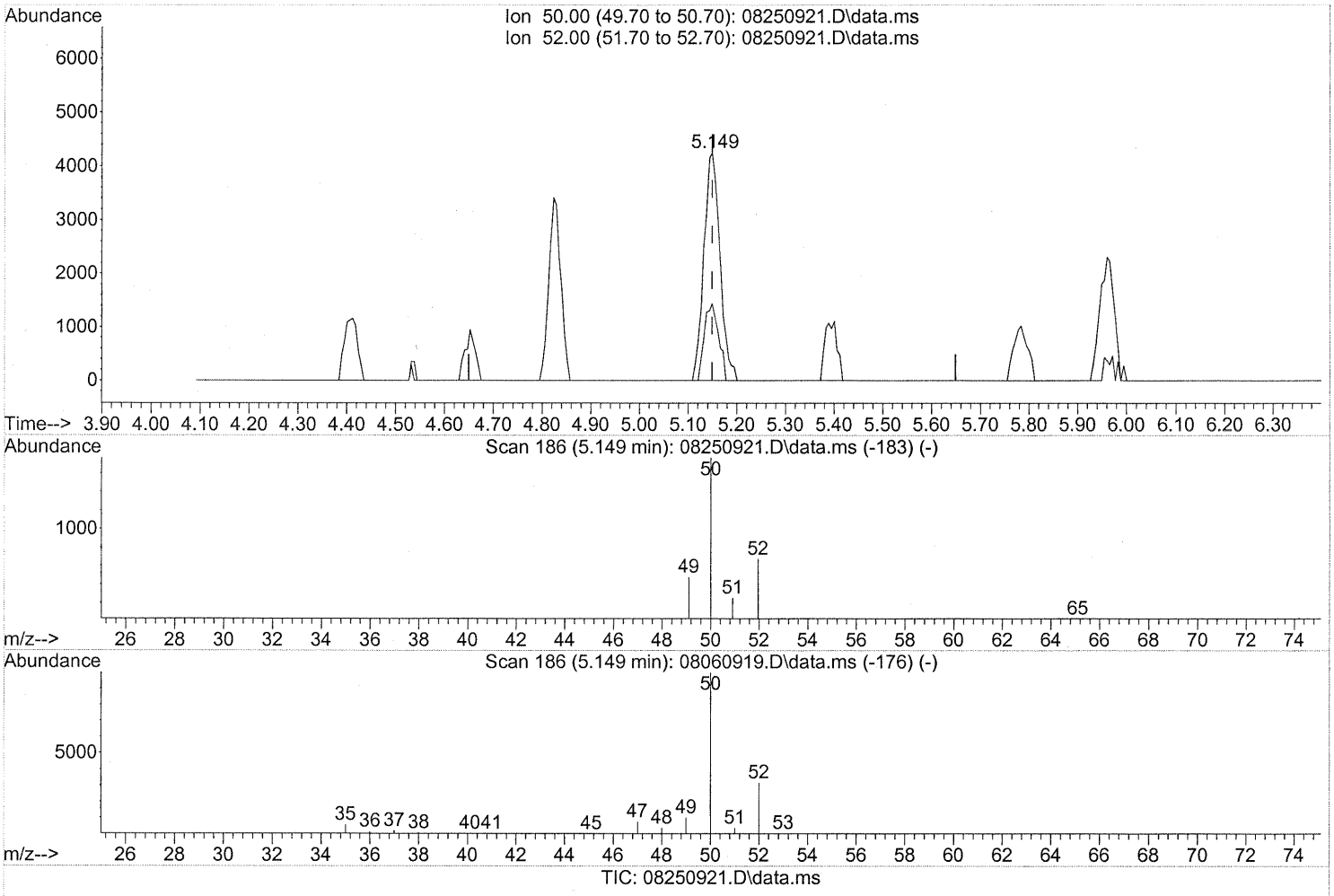

(4) Chloromethane (T)

5.149min (-0.000) 0.62ng

response 9731

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	29.76
0.00	0.00	0.00
0.00	0.00	0.00

After subtr.

142

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
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Acq On : 26 Aug 2009 1:05
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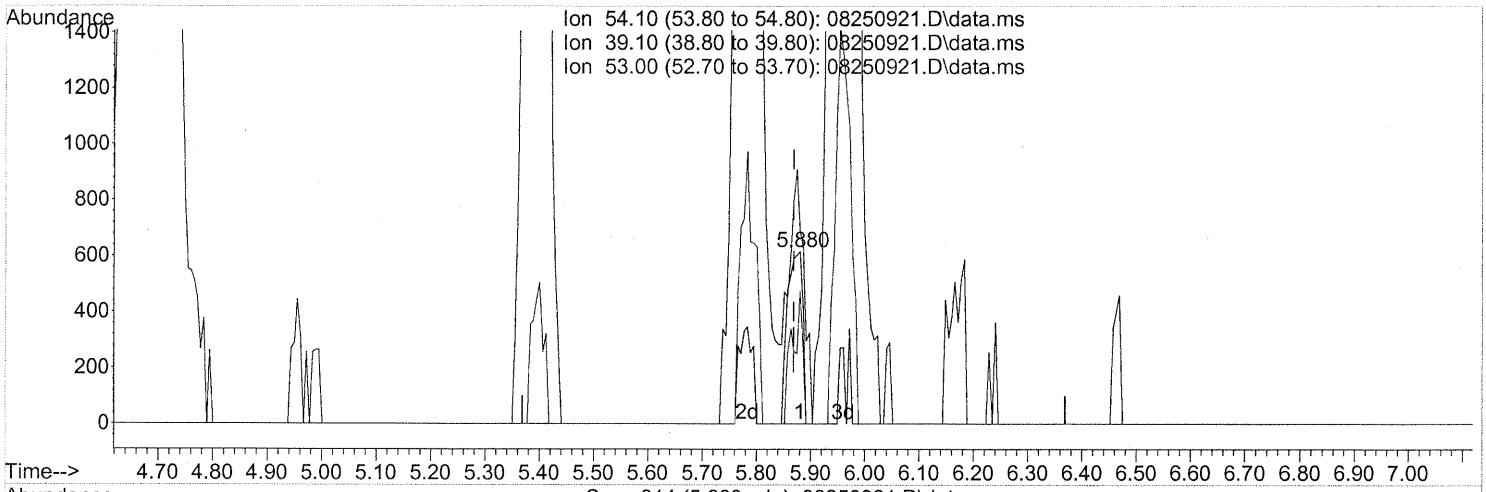

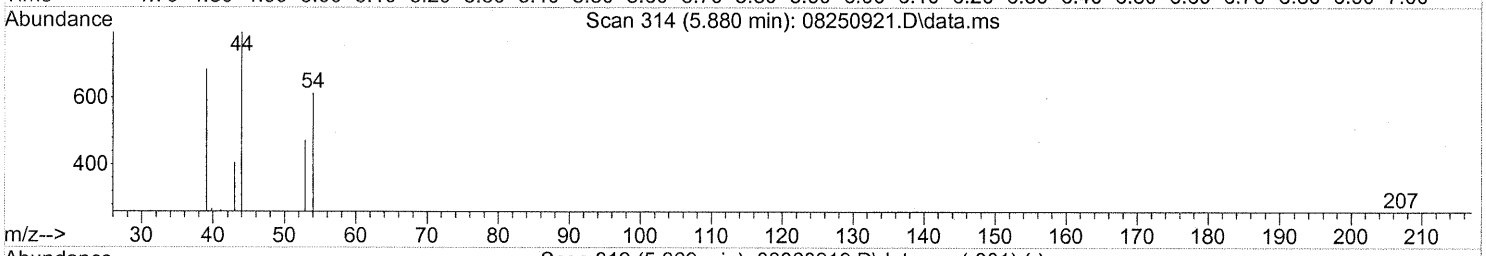

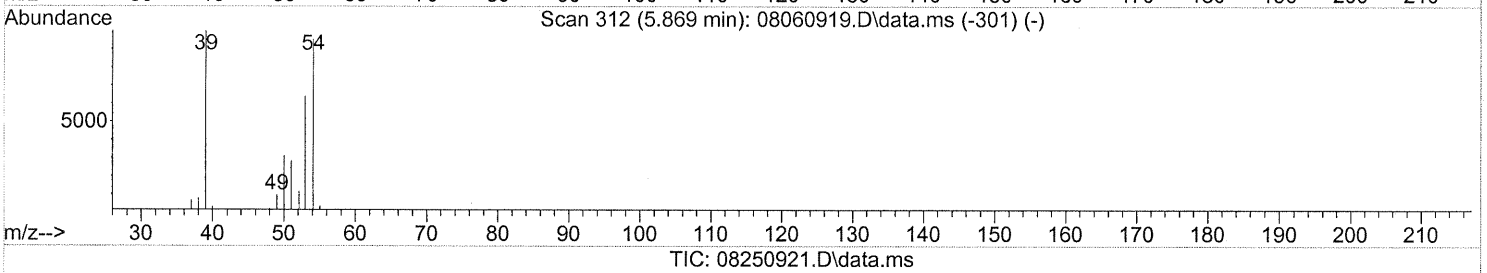

TIC: 08250921.D\data.ms

(7) 1,3-Butadiene (T)

5.880min (+0.011) 0.11ng

response 1193

Ion	Exp%	Act%
54.10	100	100
39.10	106.70	148.45#
53.00	69.50	52.56
0.00	0.00	0.00

143

Quantitation Report (Qedit)

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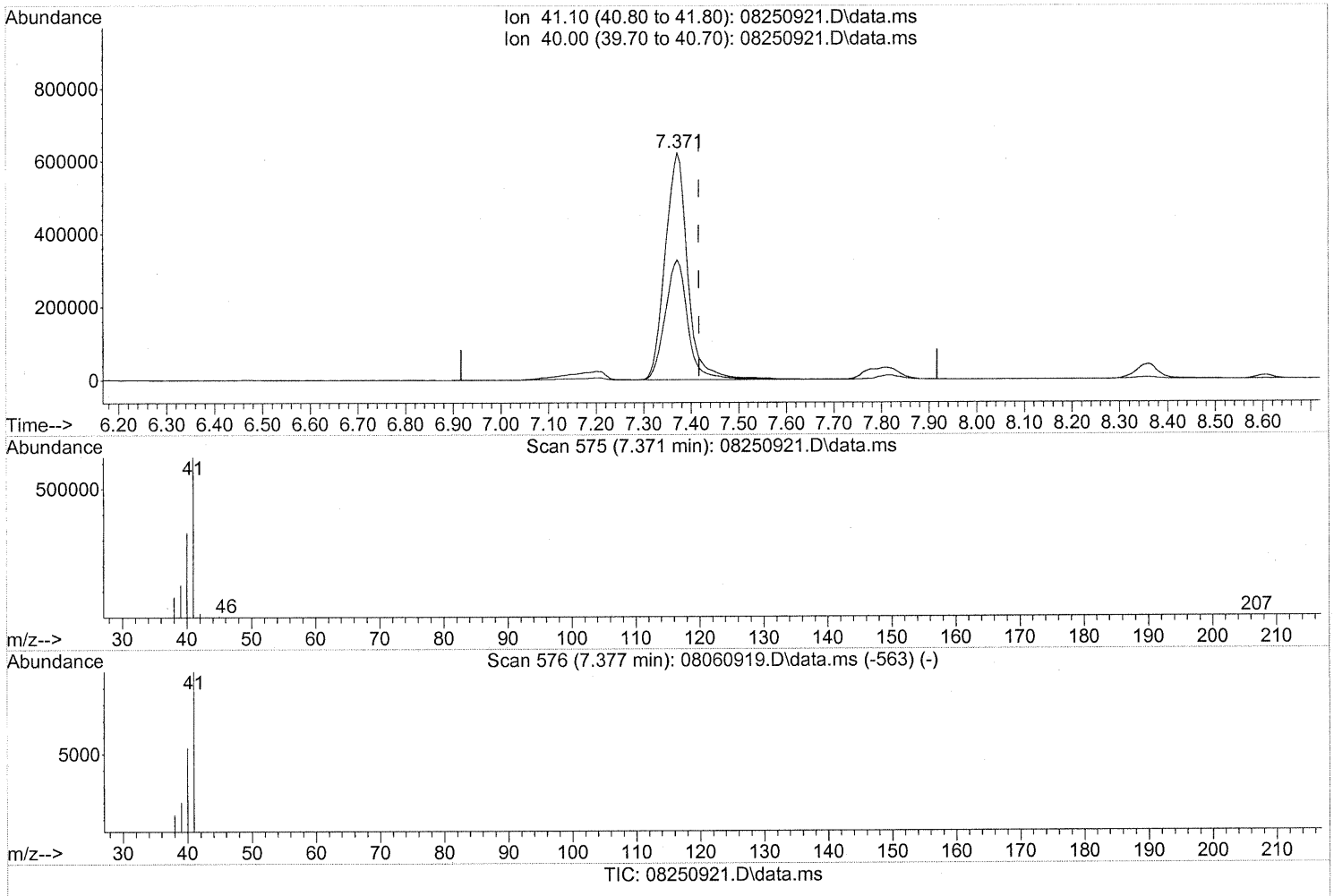
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(11) Acetonitrile (T)

7.371min (-0.046) 77.43ng

response 2042030

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.33
0.00	0.00	0.00
0.00	0.00	0.00

144

Quantitation Report (Qedit)

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Acq On : 26 Aug 2009 1:05
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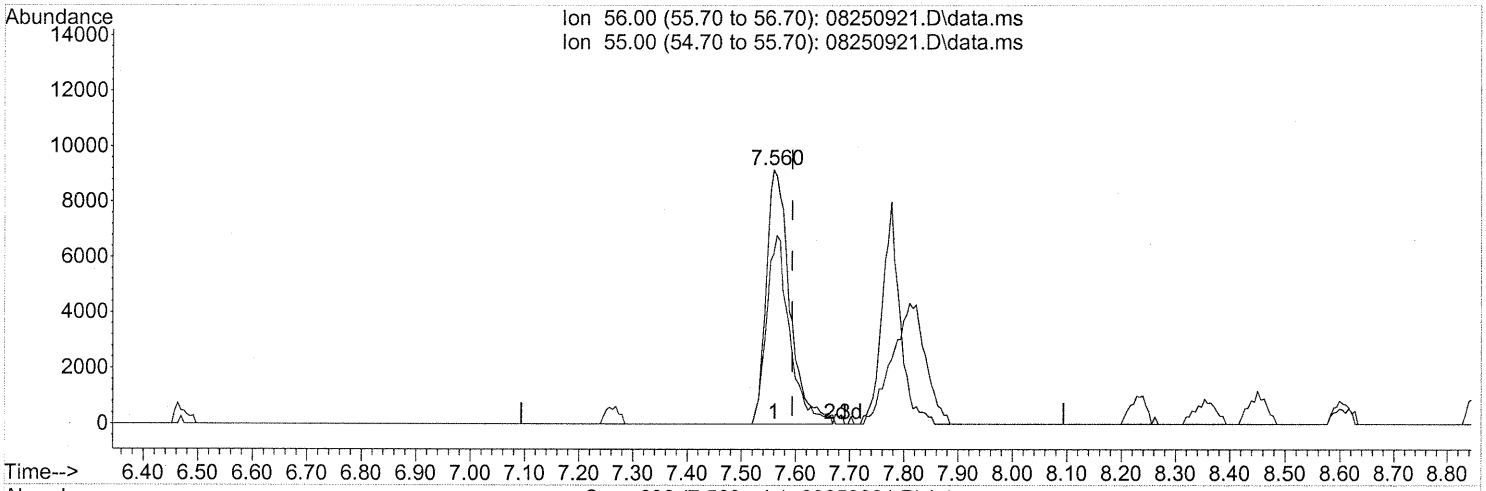
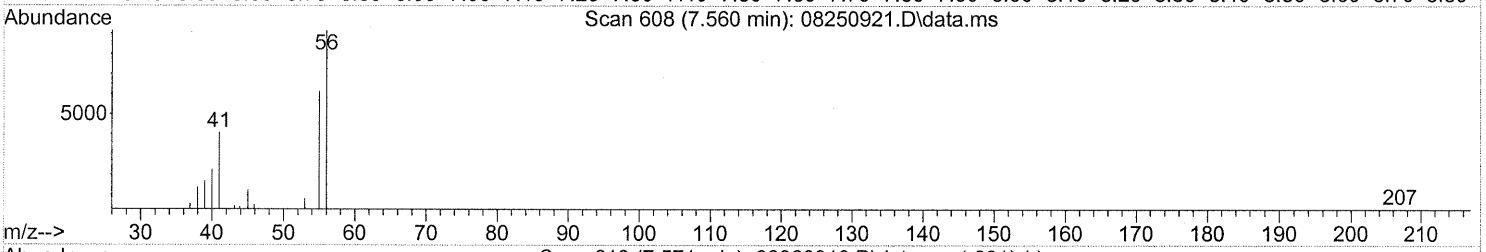
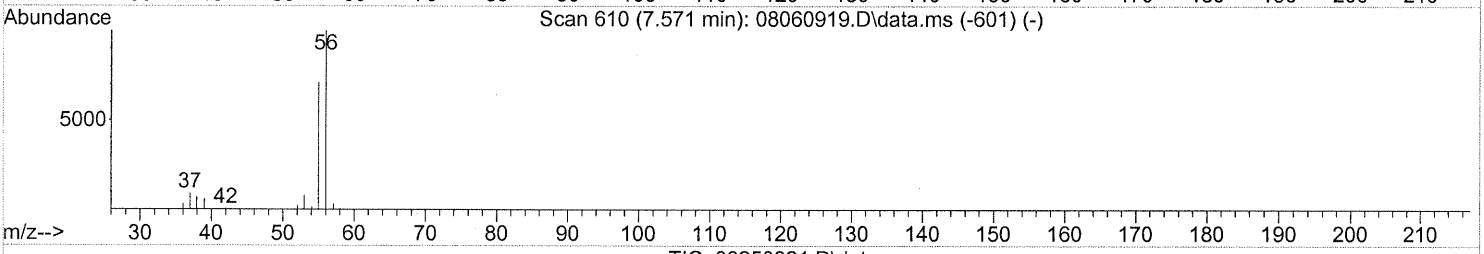
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(12) Acrolein (T)

7.560min (-0.034) 4.04ng

response 27674

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	72.92
0.00	0.00	0.00
0.00	0.00	0.00

145

Quantitation Report (Qedit)

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Misc : Environmental Health 102352
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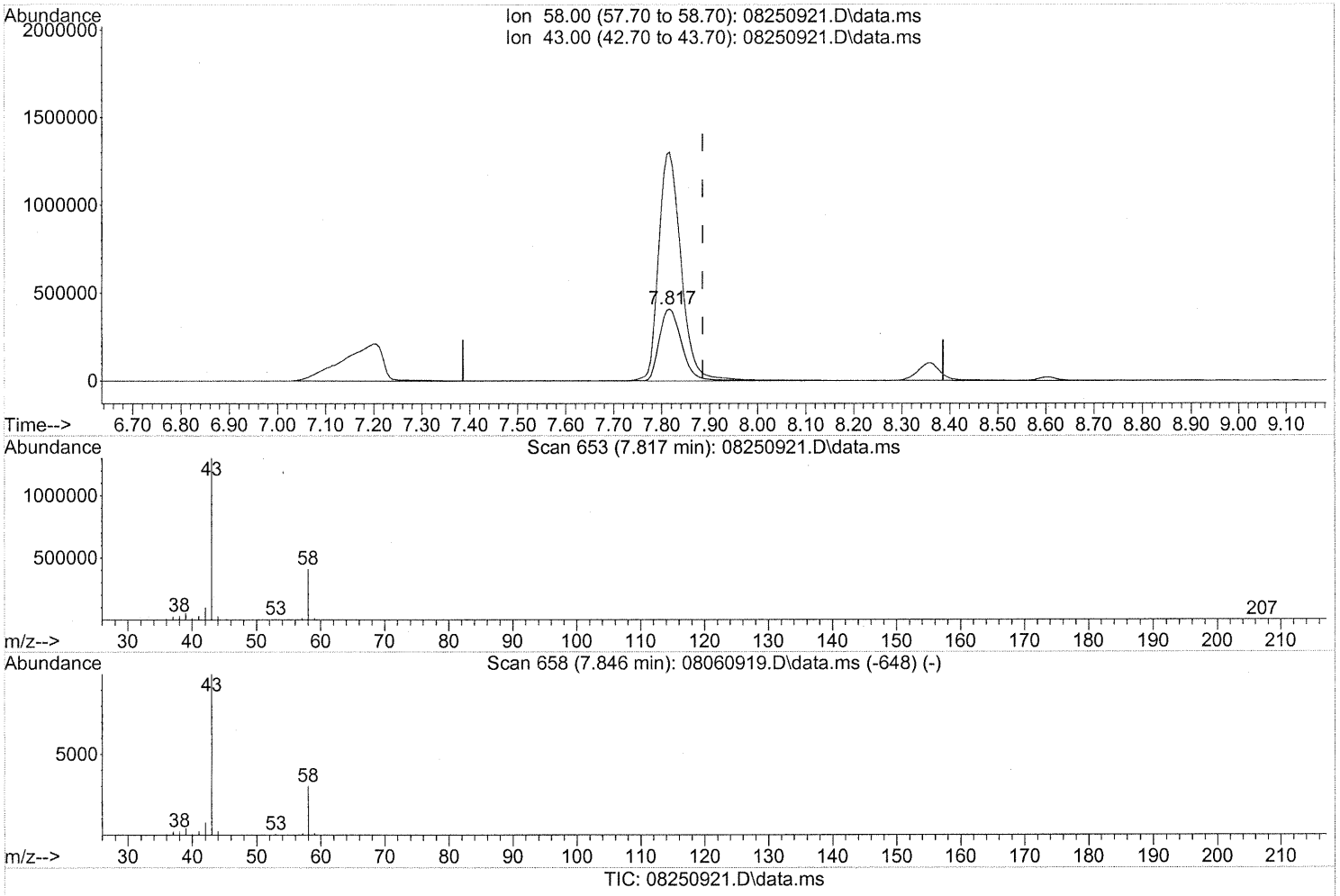
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(13) Acetone (T)

7.817min (-0.069) 155.96ng

response 1325097

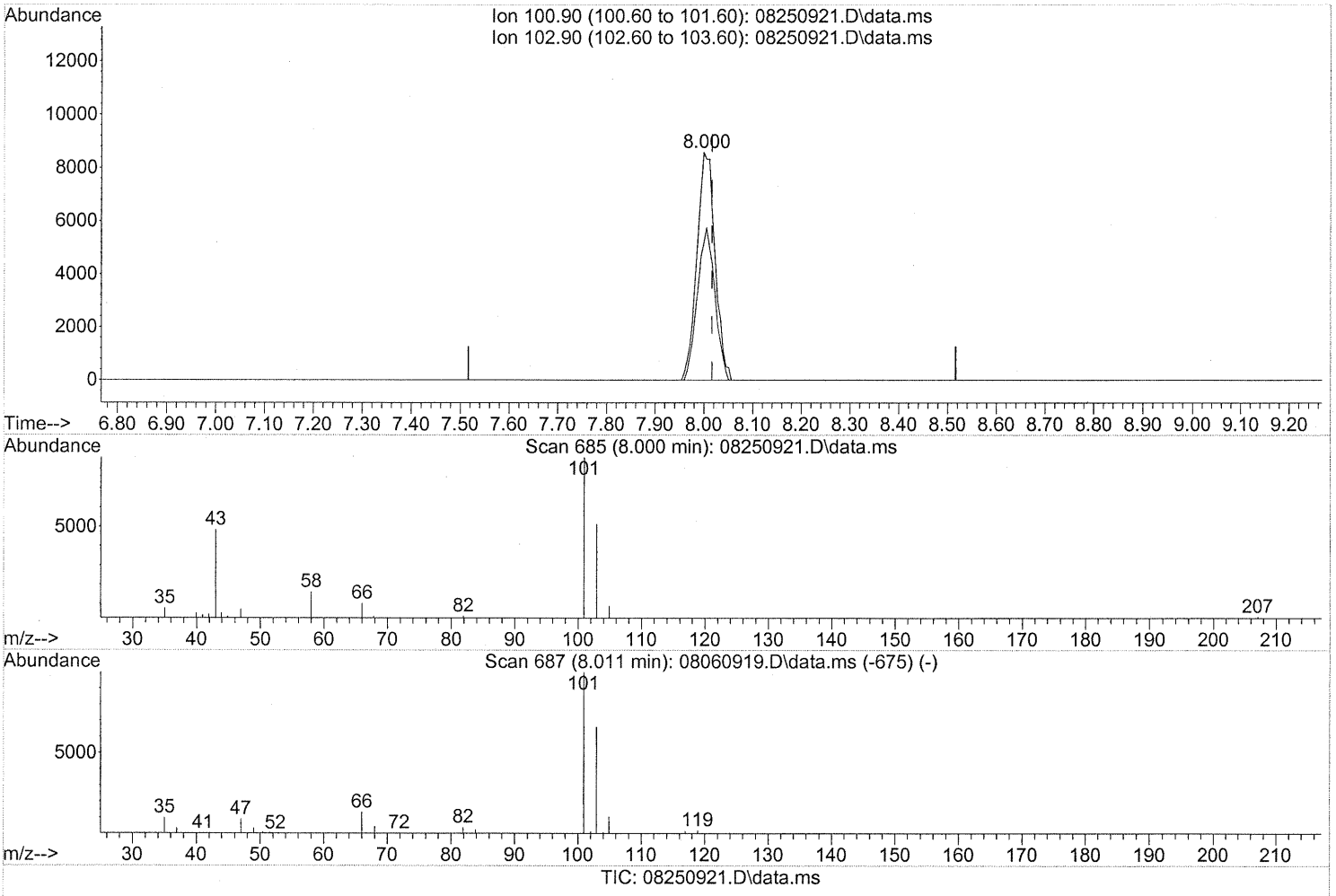
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	320.59
0.00	0.00	0.00
0.00	0.00	0.00

146

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(14) Trichlorofluoromethane (T)

8.000min (-0.017) 1.06ng

response 22225

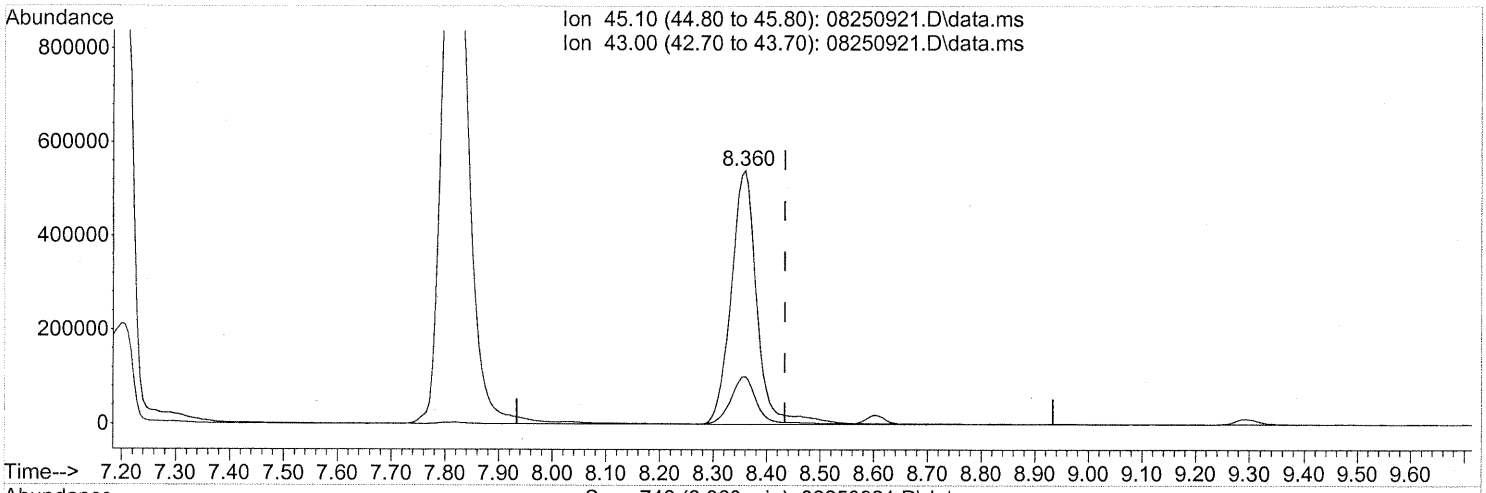
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.15
0.00	0.00	0.00
0.00	0.00	0.00

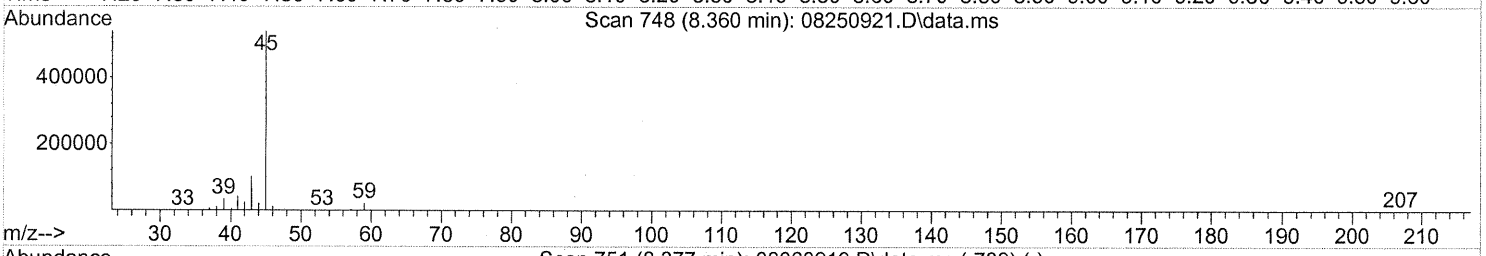
147

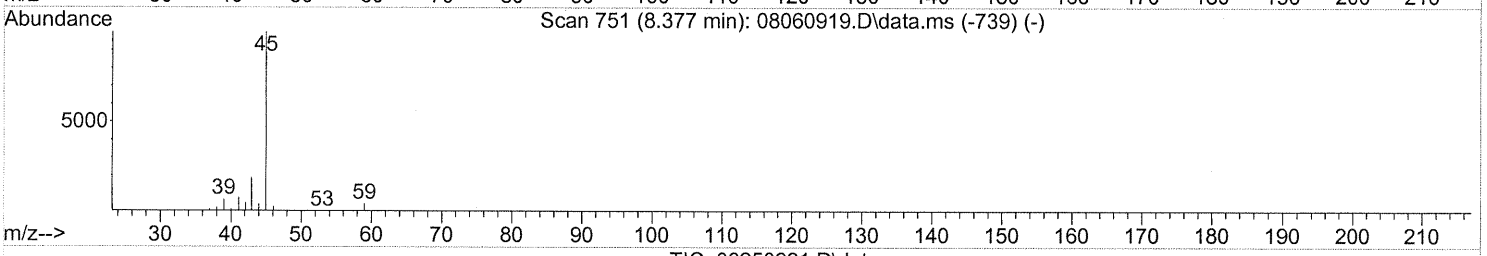
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

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

8.360min (-0.074) 54.46ng

response 1818496

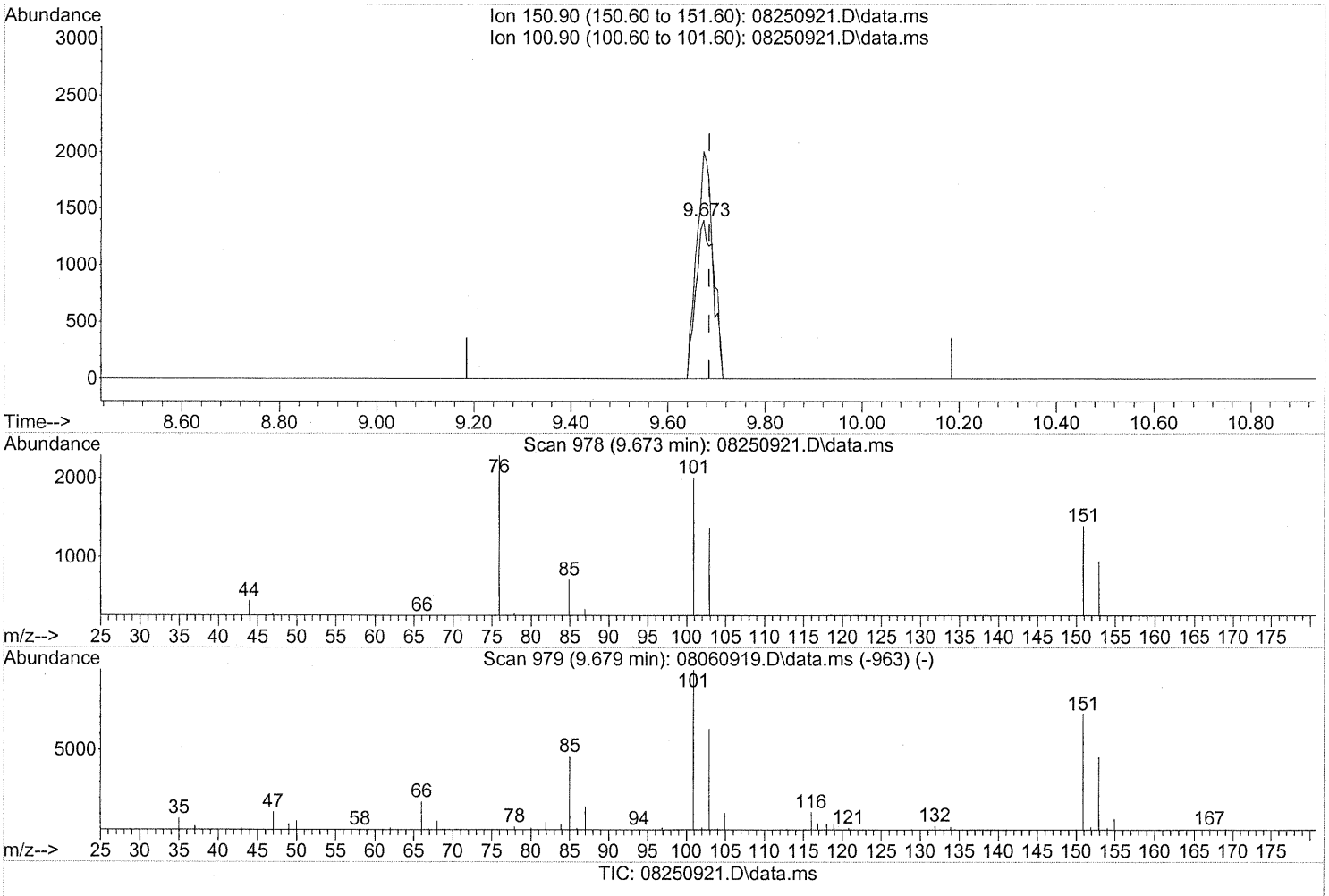
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.53
0.00	0.00	0.00
0.00	0.00	0.00

148

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.673min (-0.011) 0.46ng

response 3510

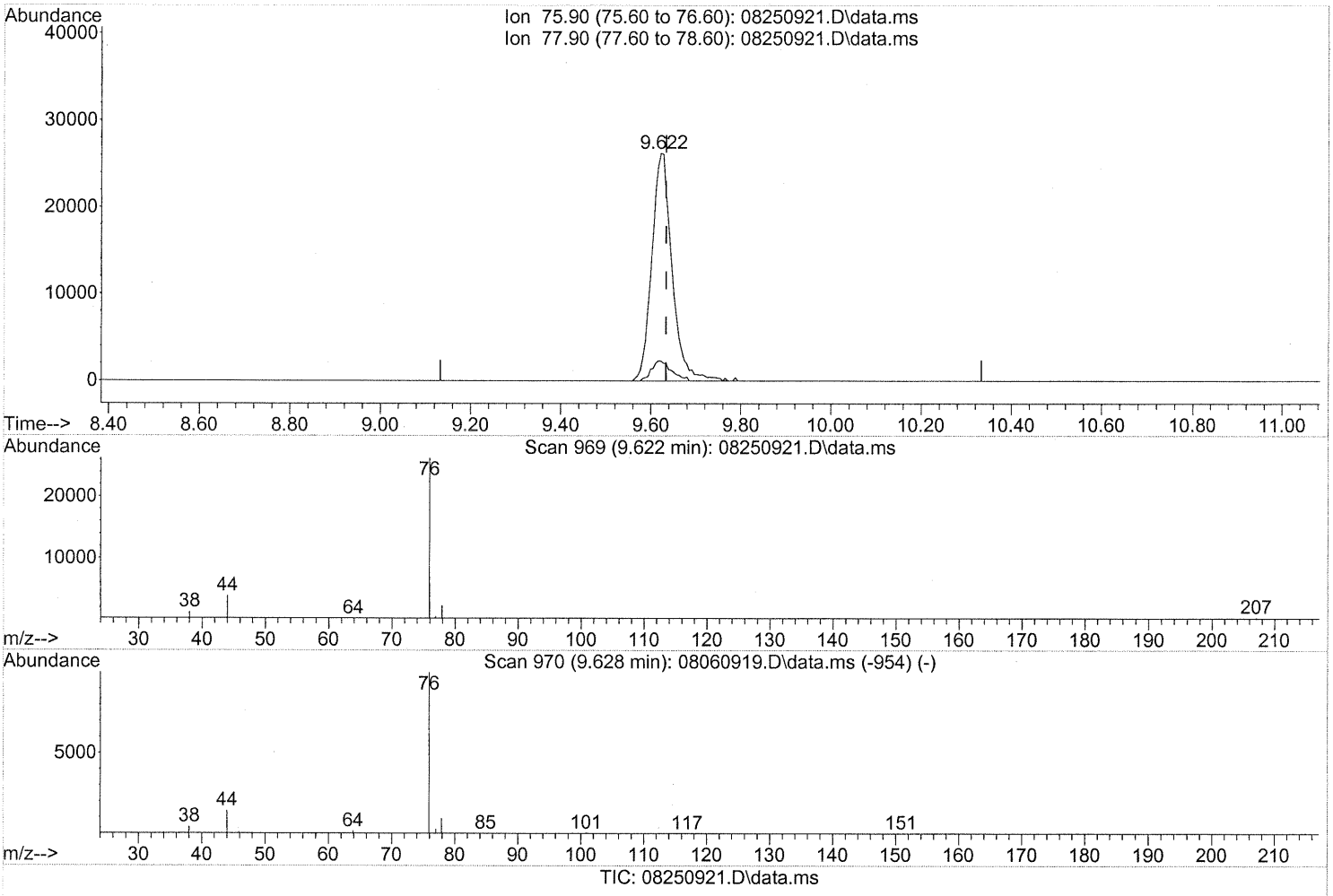
Ion	Exp%	Act%
150.90	100	100
100.90	138.40	133.50
0.00	0.00	0.00
0.00	0.00	0.00

149

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(22) Carbon Disulfide (T)

9.622min (-0.011) 2.02ng

response 81172

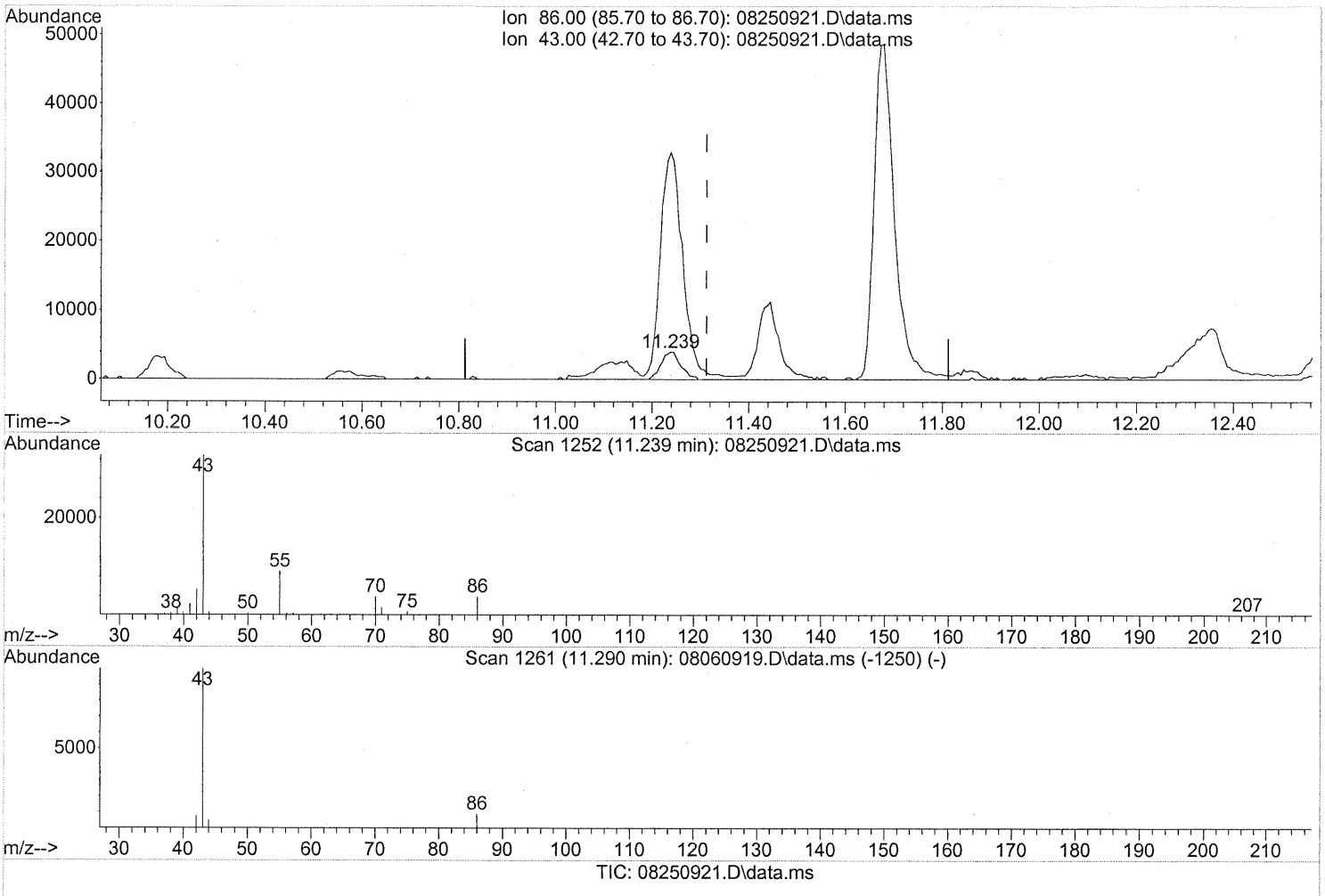
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.50
0.00	0.00	0.00
0.00	0.00	0.00

150

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(26) Vinyl Acetate (T)

11.239min (-0.074) 6.40ng

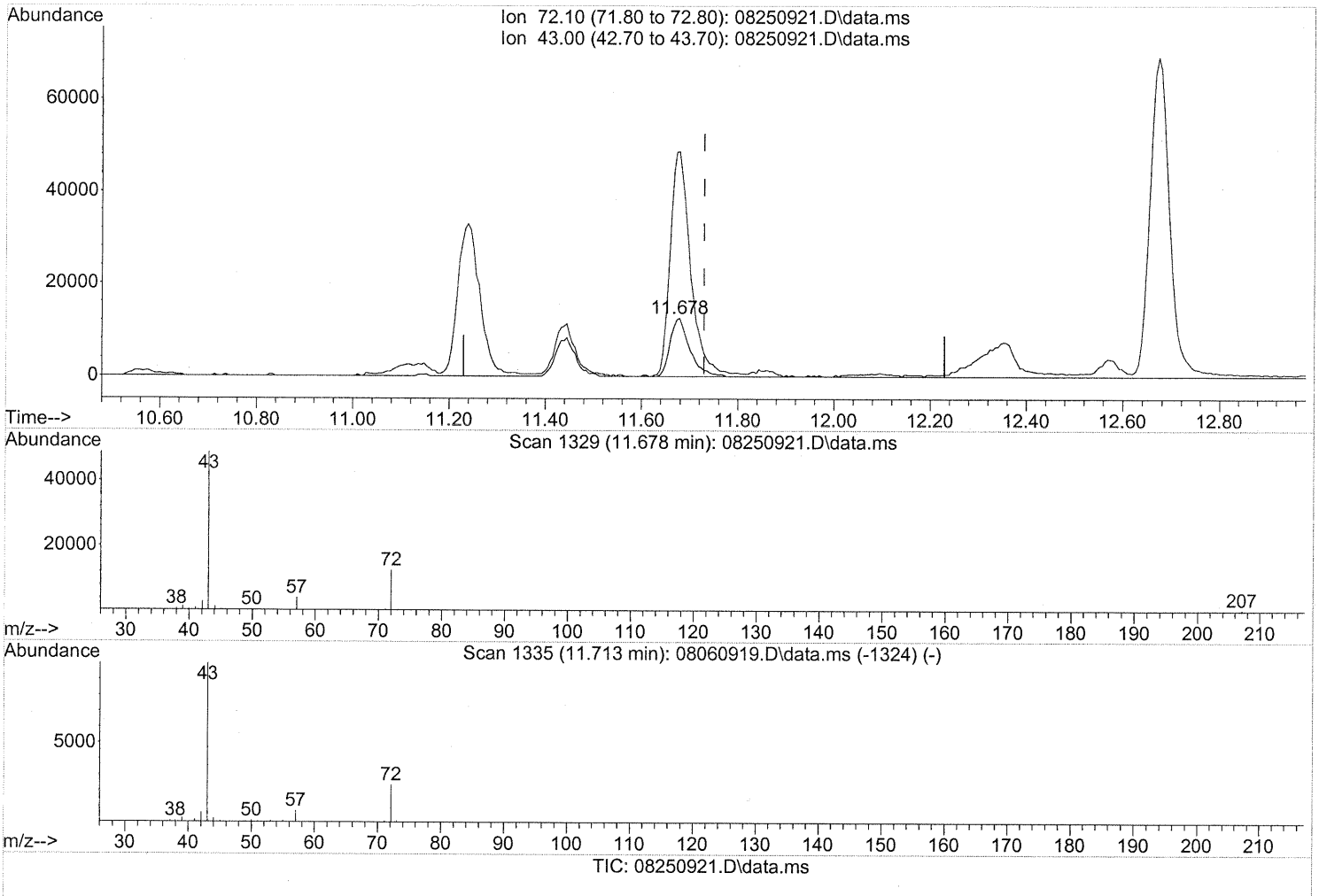
response 11059

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	921.32#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

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

11.678min (-0.051) 4.57ng

response 35070

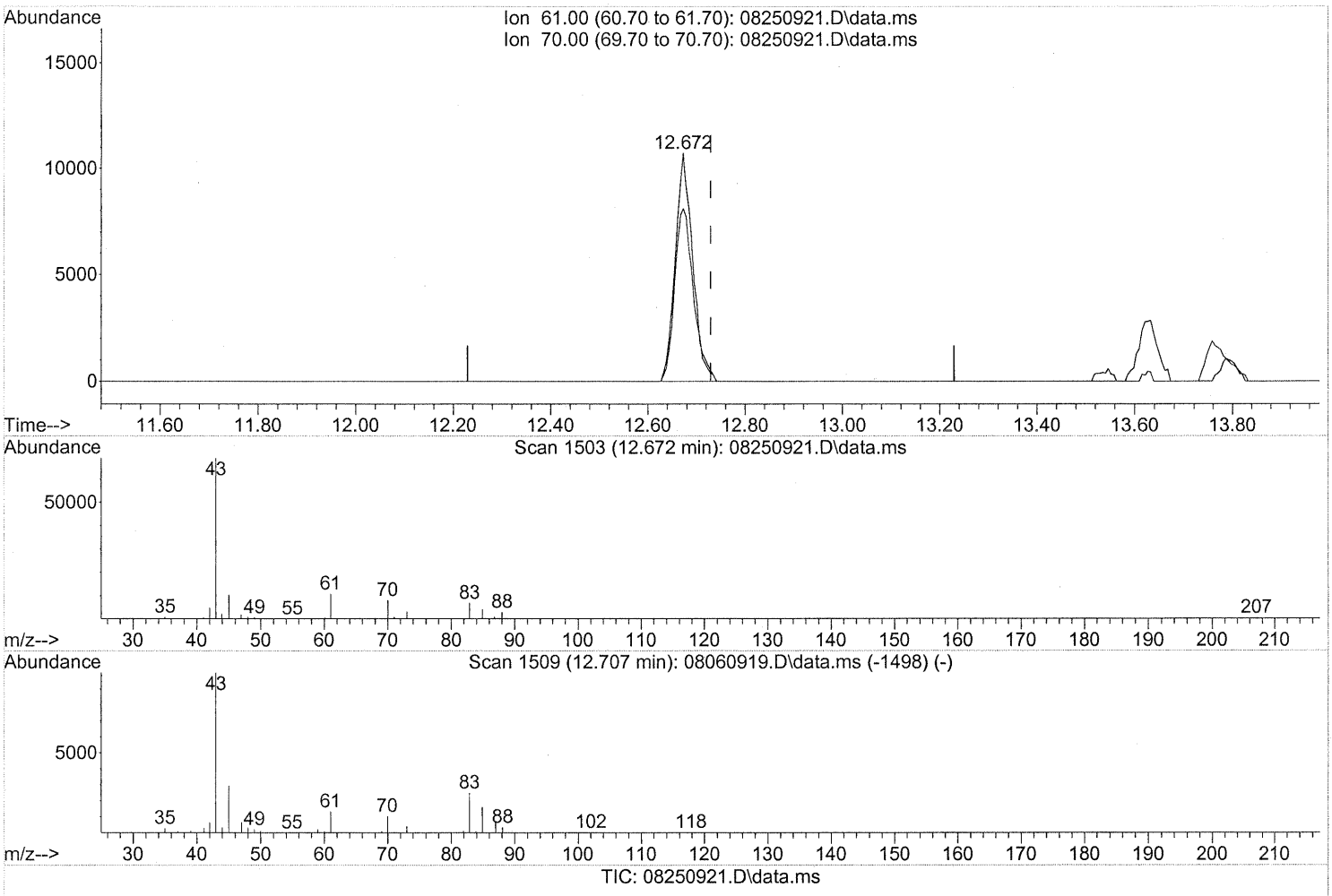
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	409.36#
0.00	0.00	0.00
0.00	0.00	0.00

152

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(30) Ethyl Acetate (T)

12.672min (-0.057) 6.68ng

response 26705

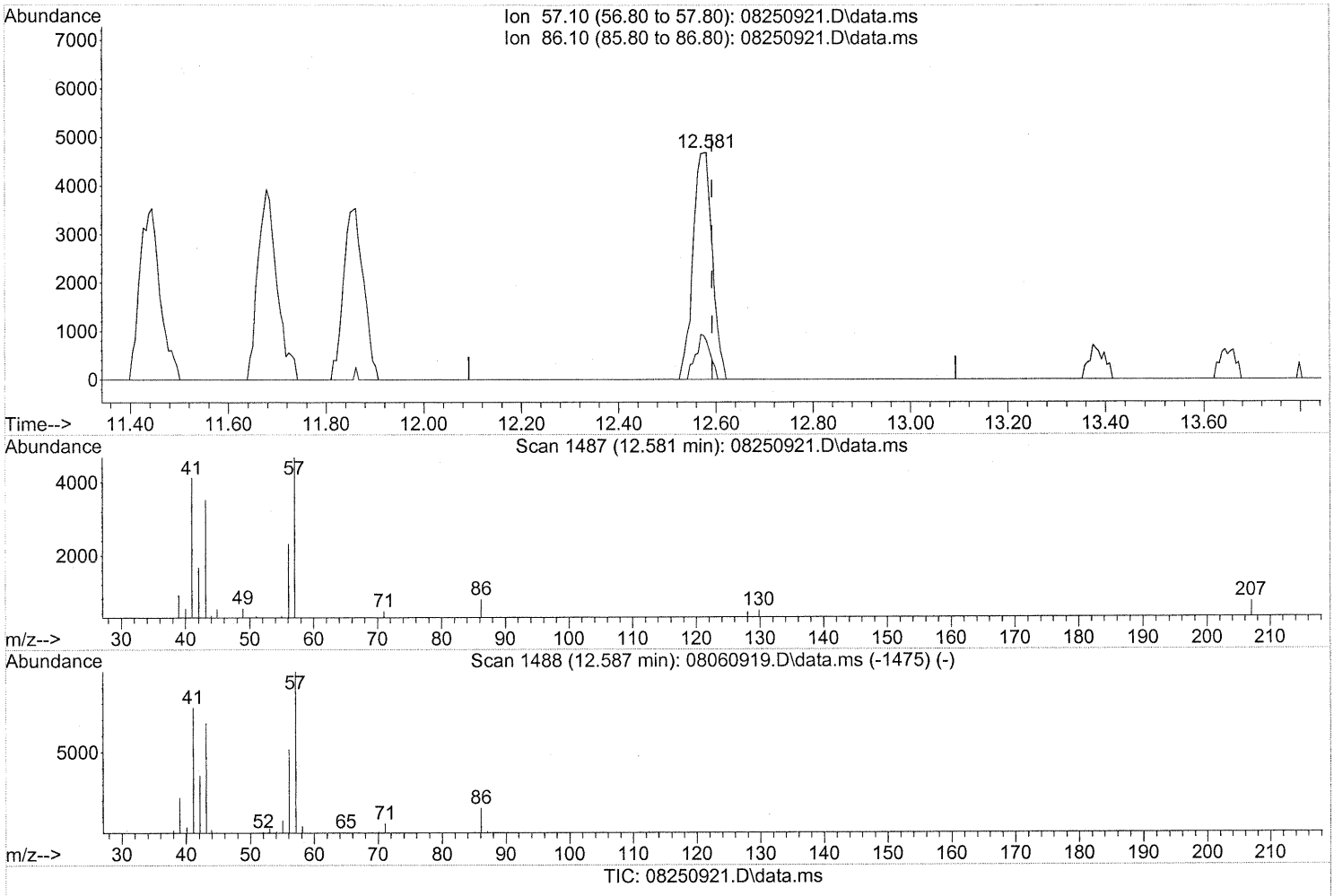
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	80.73
0.00	0.00	0.00
0.00	0.00	0.00

153

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(31) n-Hexane (T)

12.581min (-0.011) 0.63ng

response 12856

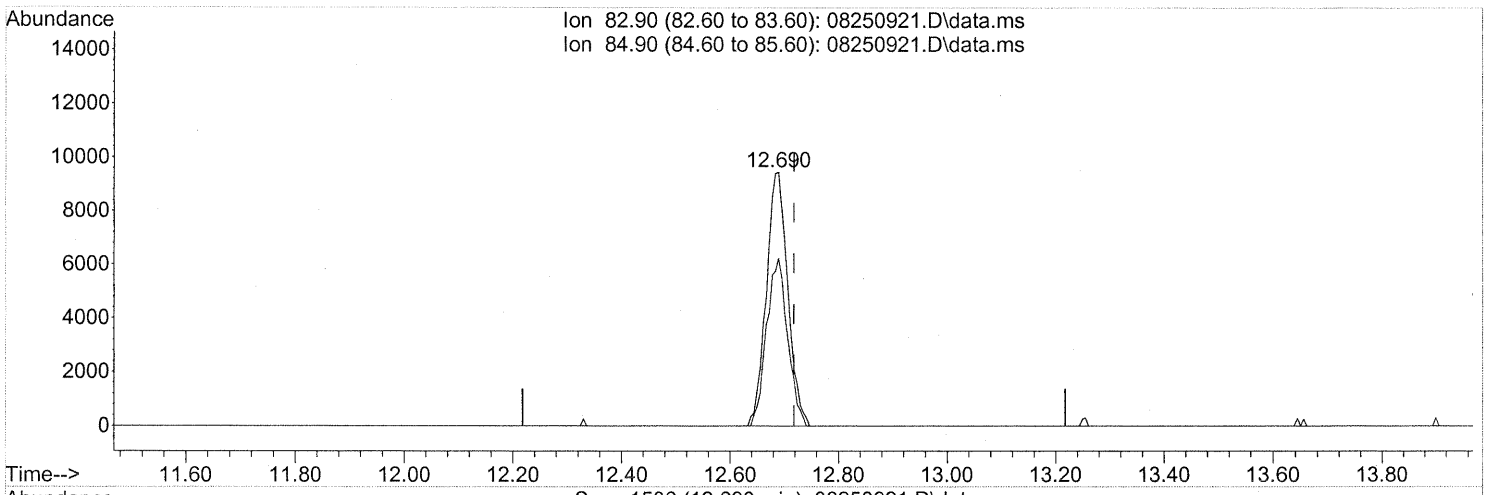
Ion	Exp%	Act%
57.10	100	100
86.10	15.70	14.69
0.00	0.00	0.00
0.00	0.00	0.00

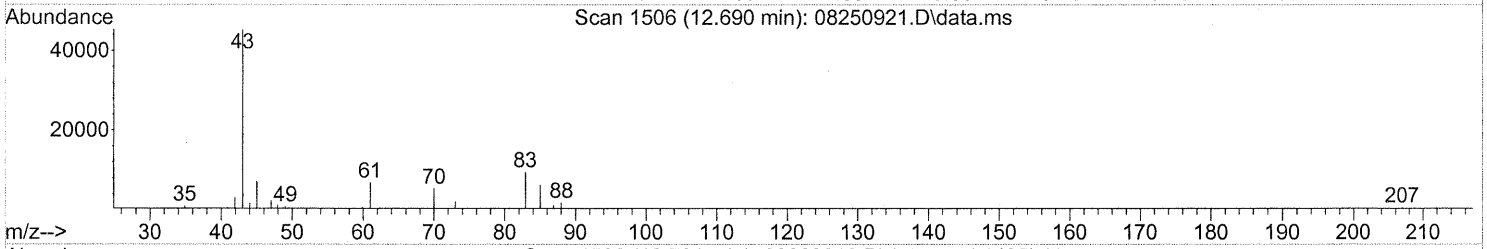
154

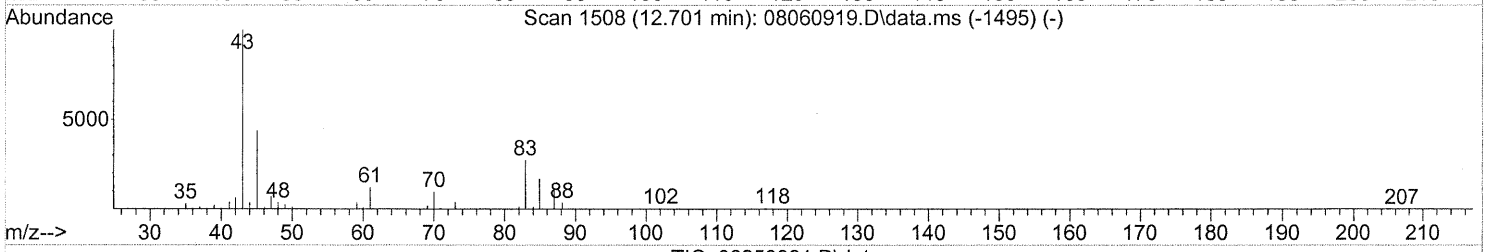
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(32) Chloroform (T)

12.690min (-0.029) 1.44ng

response 25847

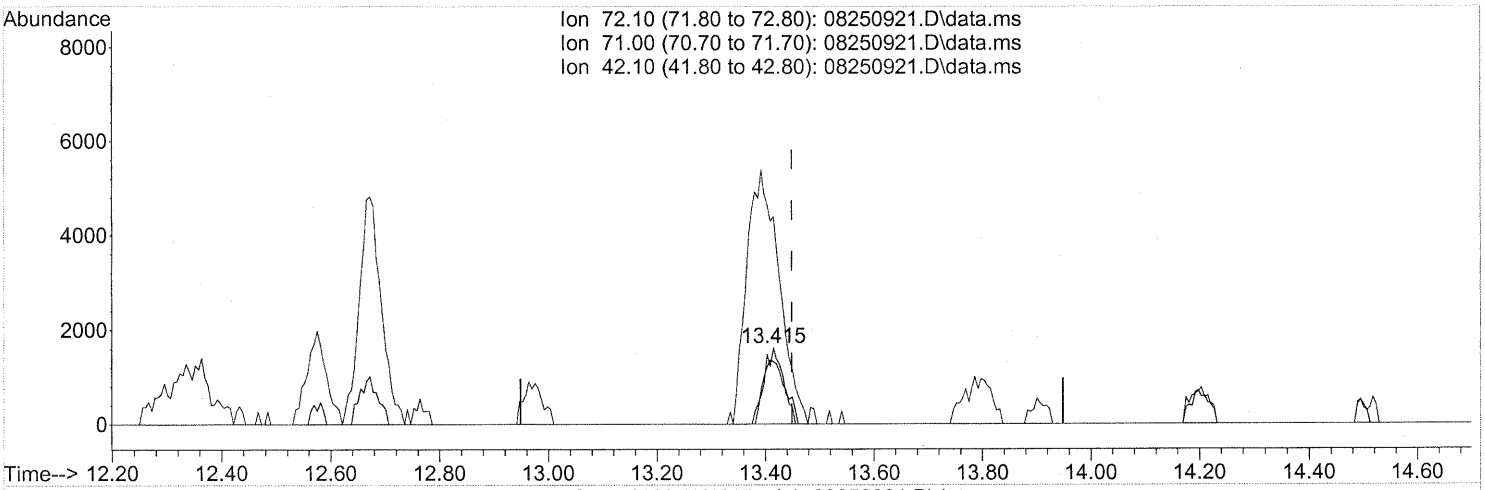
Ion	Exp%	Act%
82.90	100	100
84.90	64.30	64.91
0.00	0.00	0.00
0.00	0.00	0.00

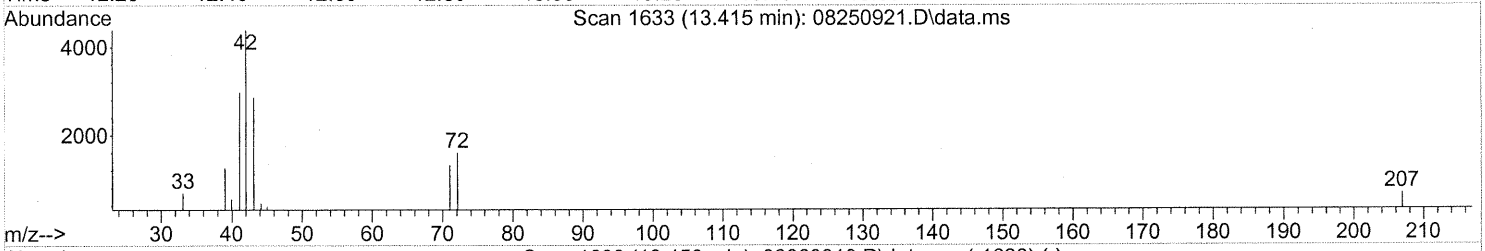
155

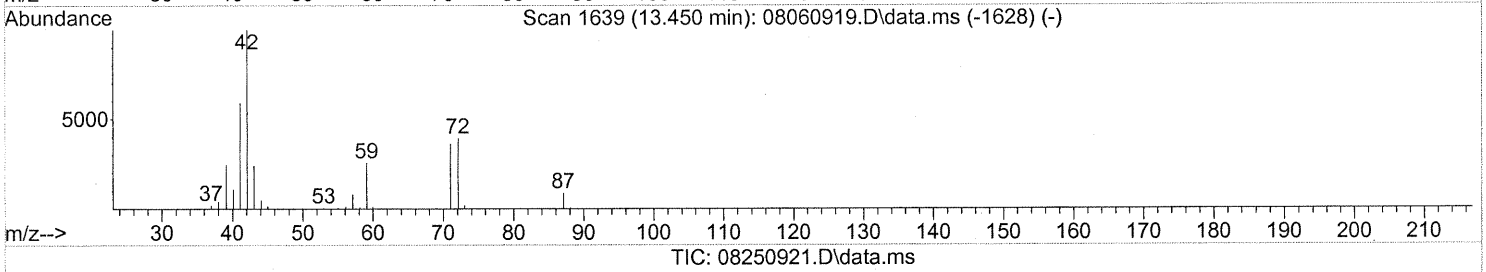
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.415min (-0.034) 0.51ng

response 4167

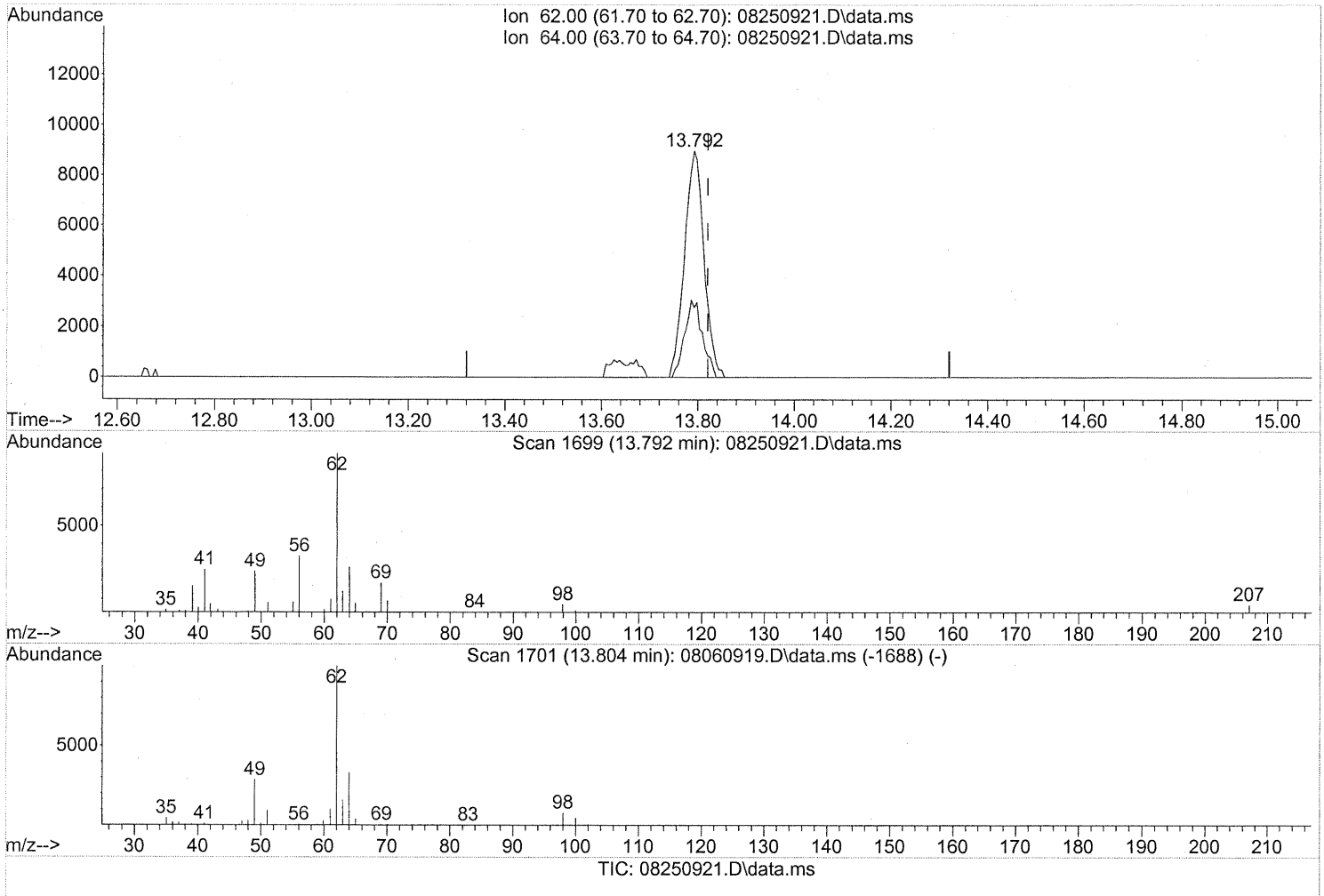
Ion	Exp%	Act%
72.10	100	100
71.00	95.70	87.98
42.10	253.40	0.00#
0.00	0.00	0.00

156

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.53ng

response 25178

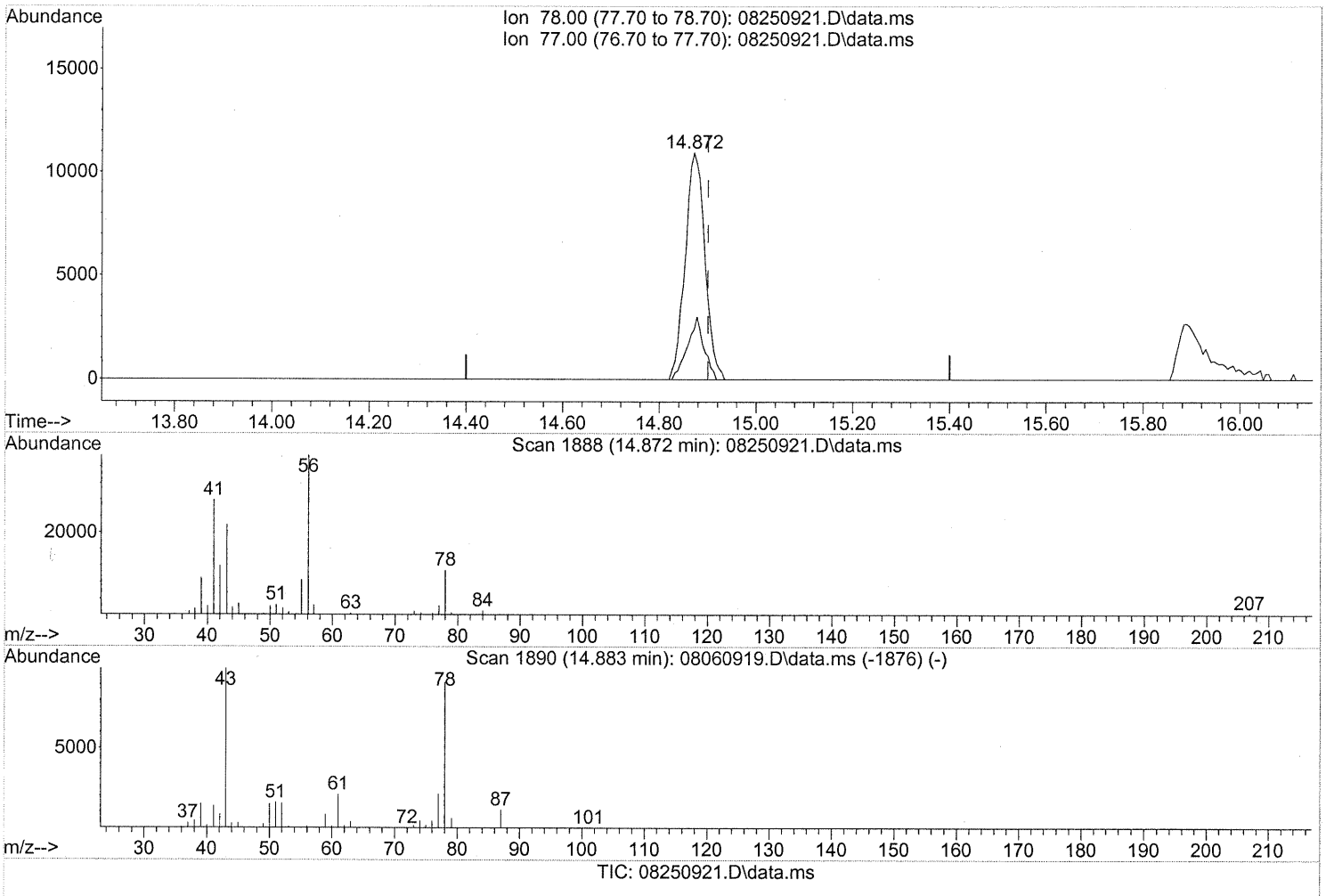
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.10
0.00	0.00	0.00
0.00	0.00	0.00

157

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(41) Benzene (T)

14.872min (-0.029) 0.68ng

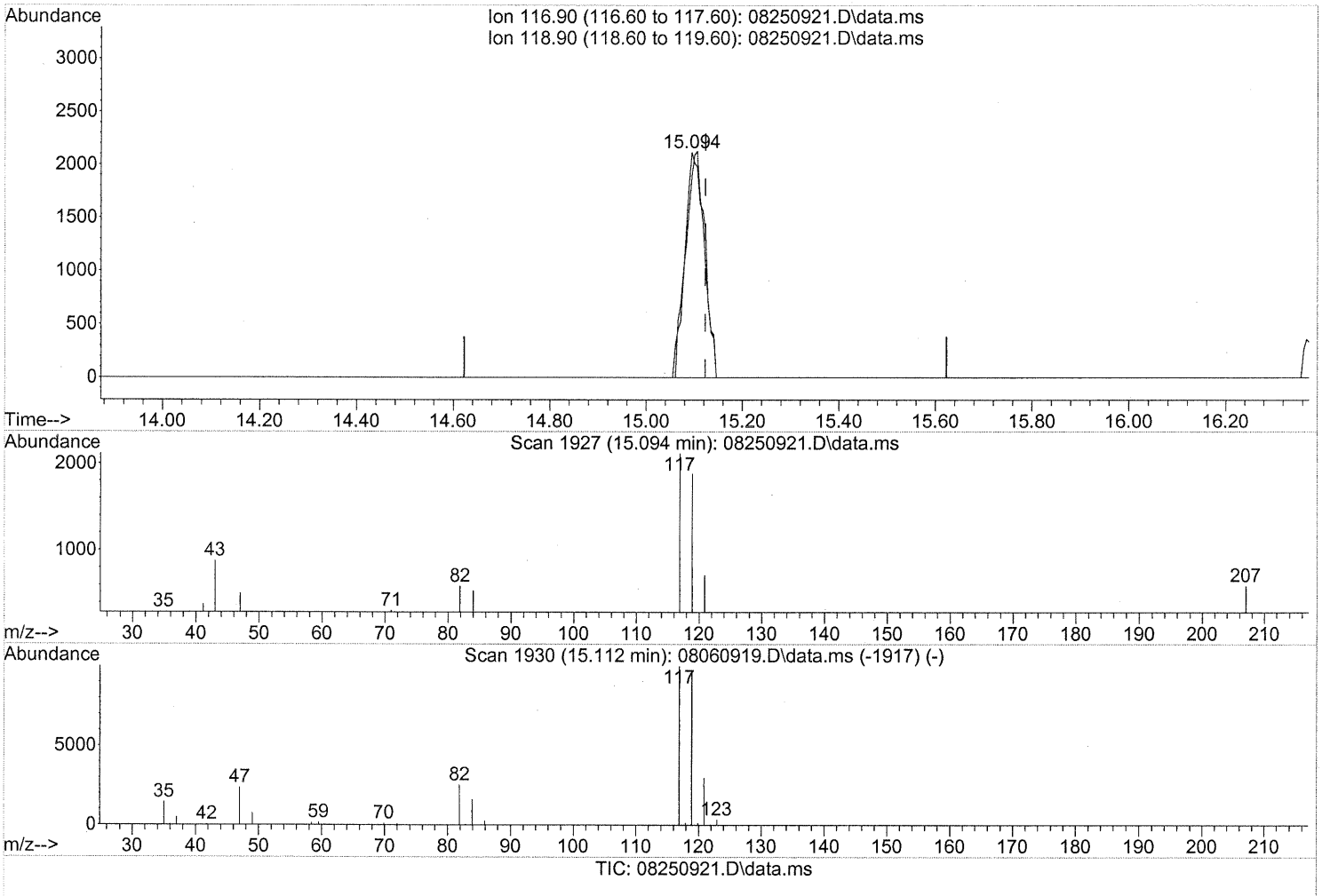
response 30866

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(42) Carbon Tetrachloride (T)

15.094min (-0.029) 0.41ng

response 6015

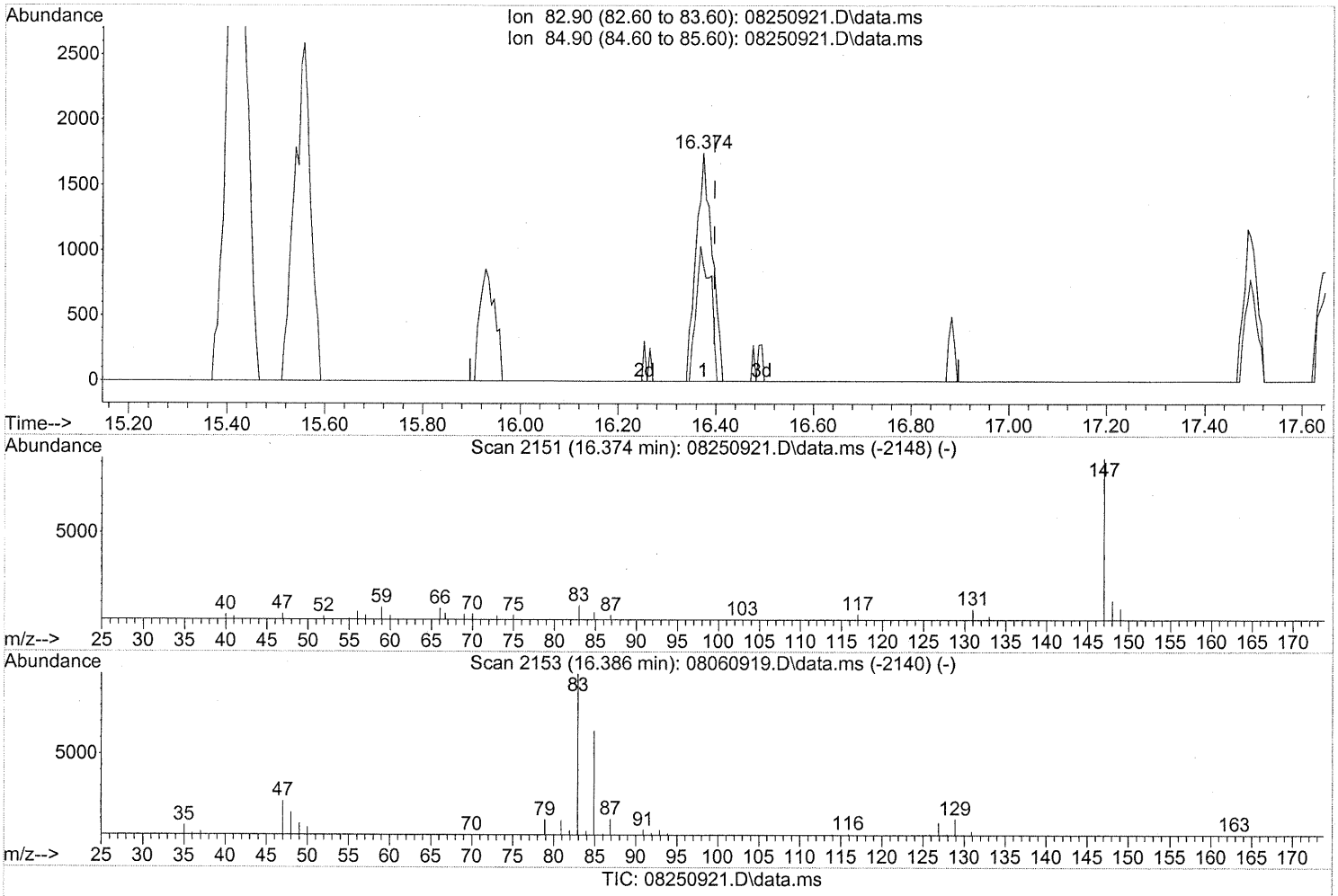
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	95.93
0.00	0.00	0.00
0.00	0.00	0.00

159

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(46) Bromodichloromethane (T)

16.374min (-0.023) 0.27ng

response 4009

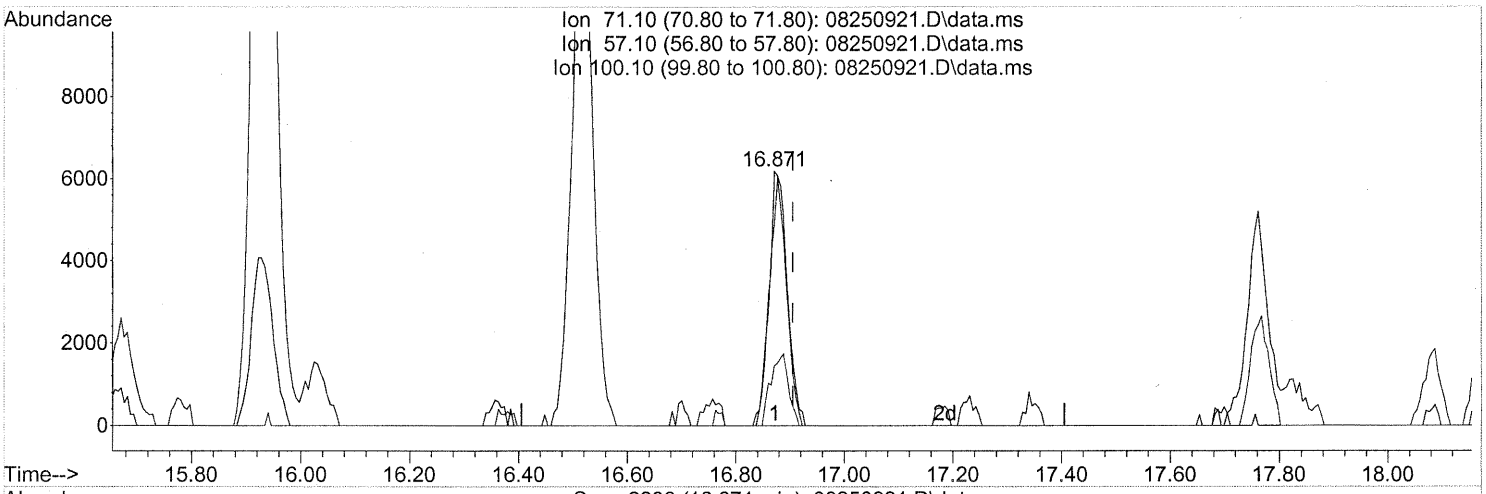
Ion	Exp%	Act%
82.90	100	100
84.90	62.80	52.16
0.00	0.00	0.00
0.00	0.00	0.00

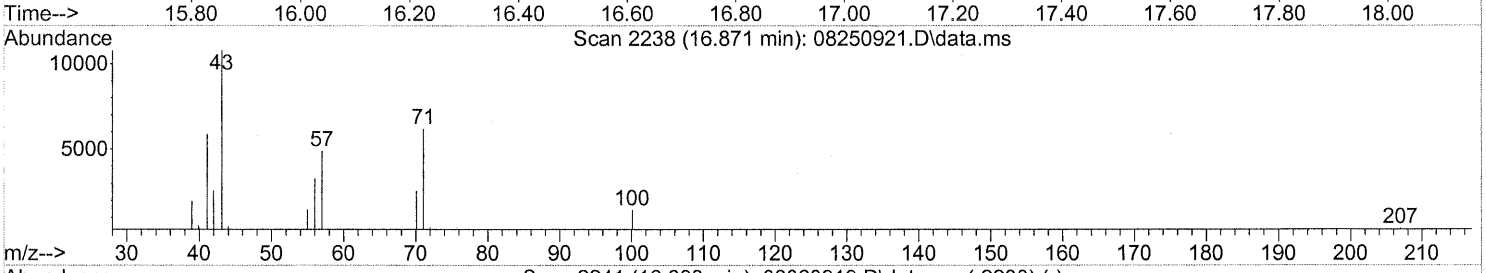
160

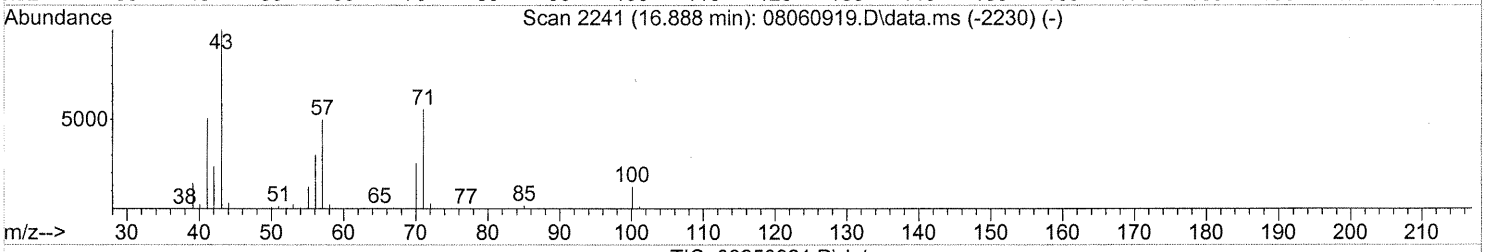
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(51) n-Heptane (T)

16.871min (-0.034) 1.18ng

response 14422

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	92.32
100.10	26.40	27.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
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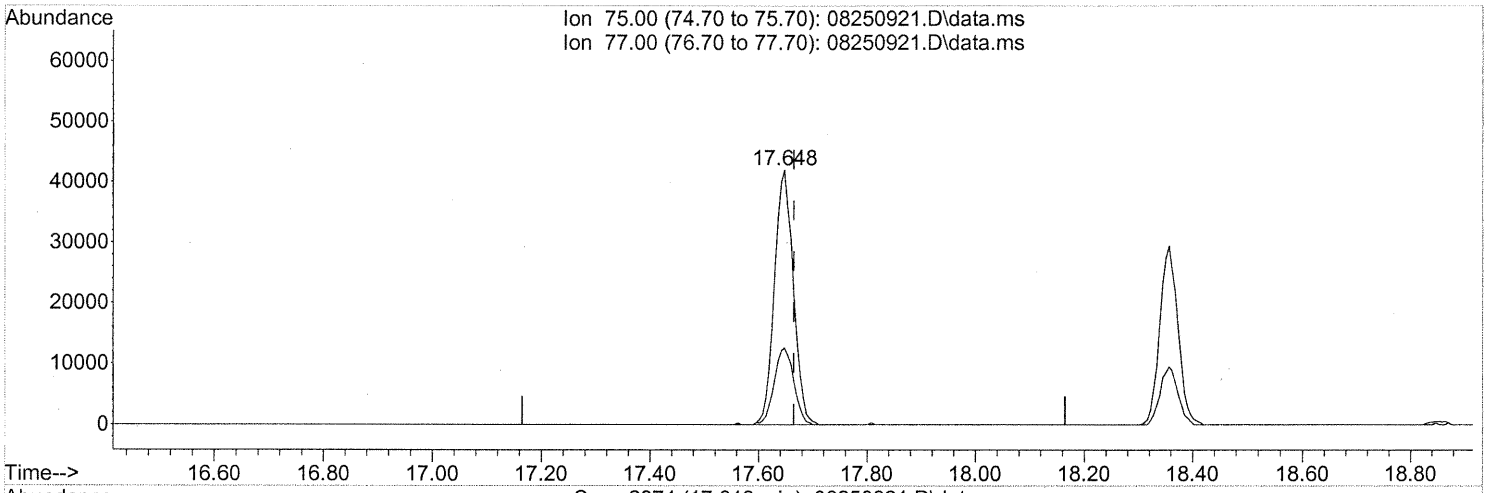
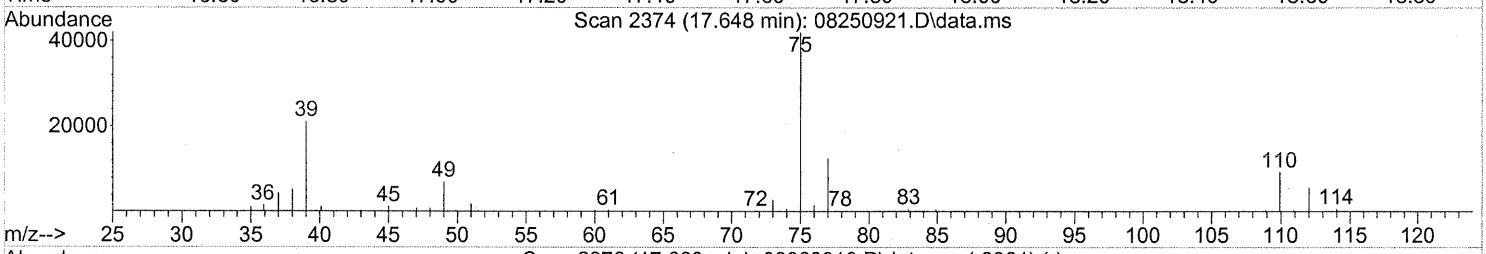
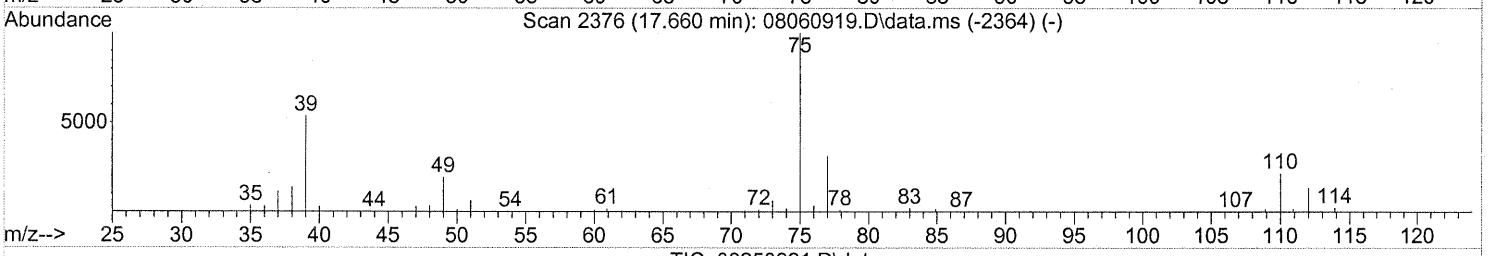
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 5.28ng

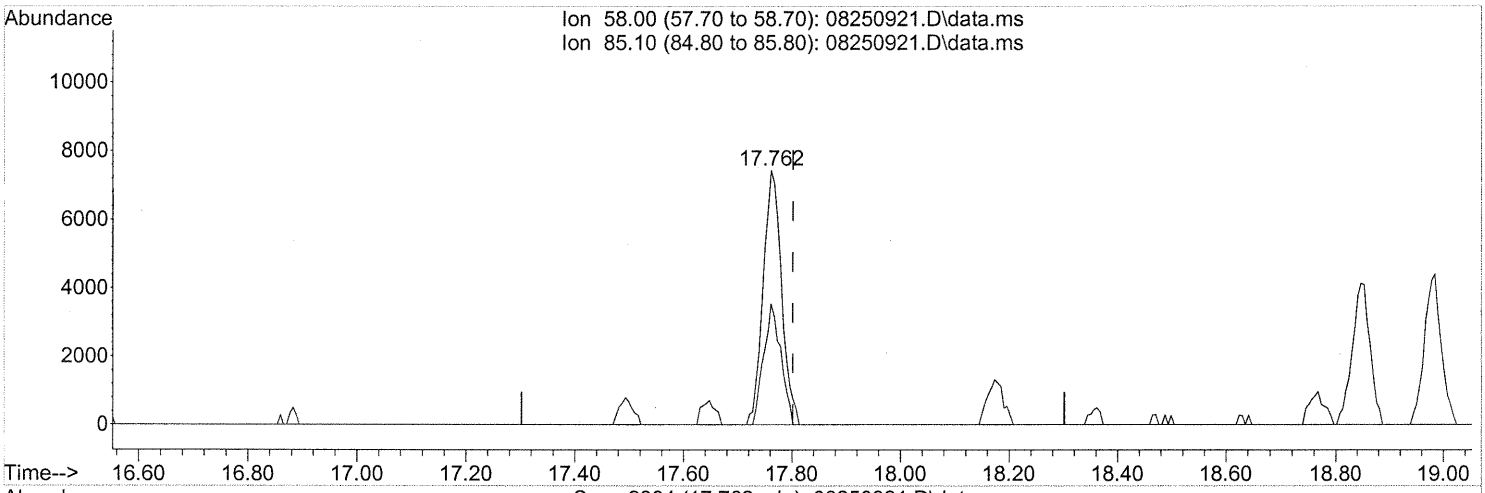
response 100090

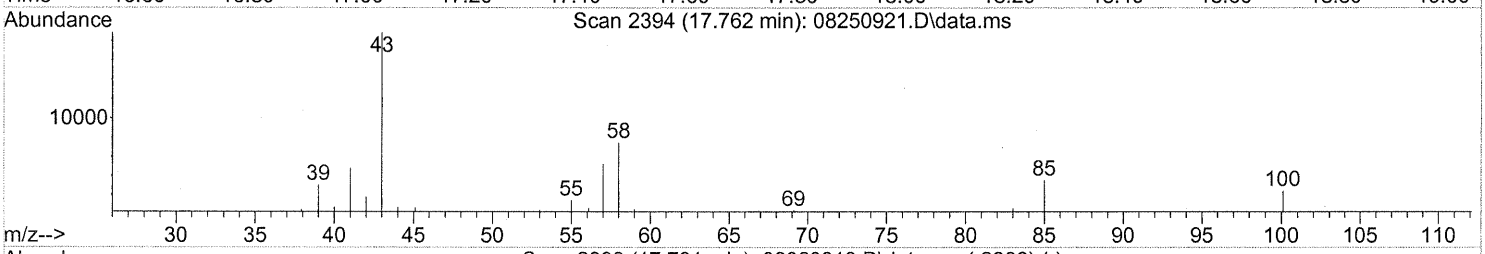
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.11
0.00	0.00	0.00
0.00	0.00	0.00

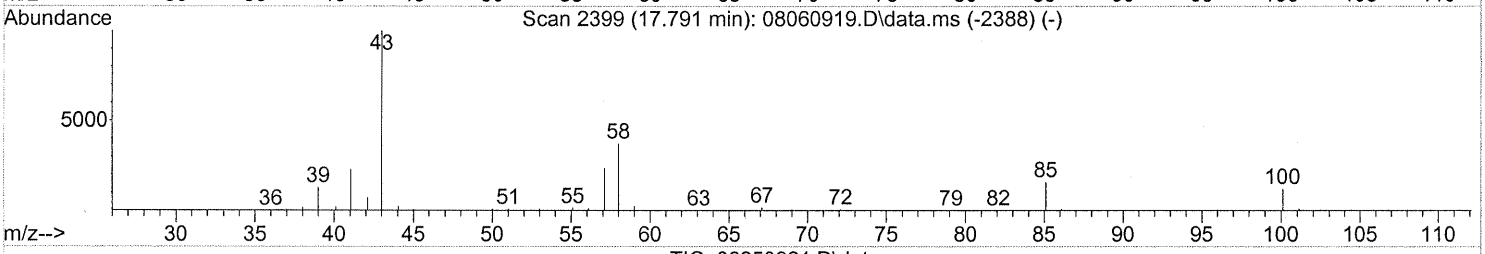
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

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

17.762min (-0.040) 1.61ng

response 17567

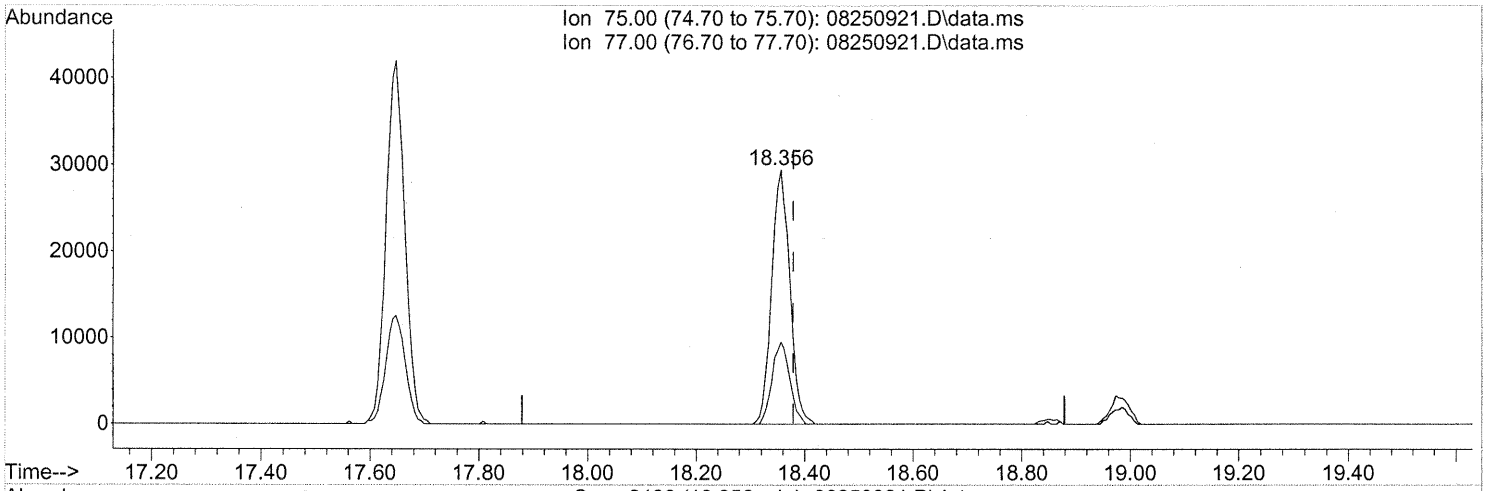
Ion	Exp%	Act%
58.00	100	100
85.10	42.60	44.35
0.00	0.00	0.00
0.00	0.00	0.00

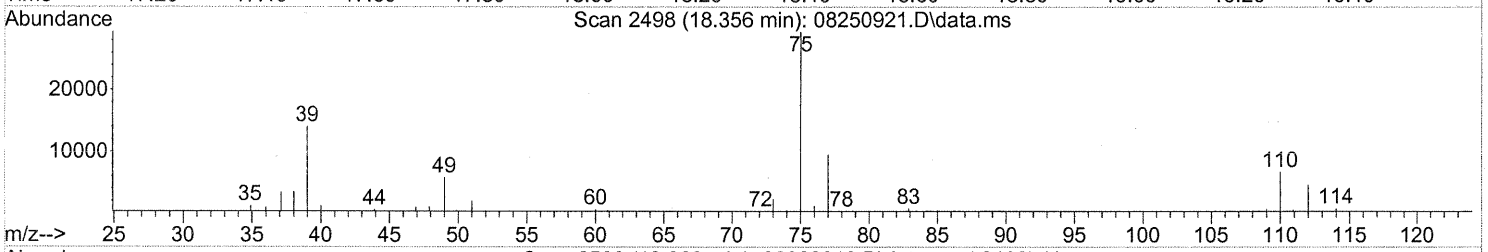
163

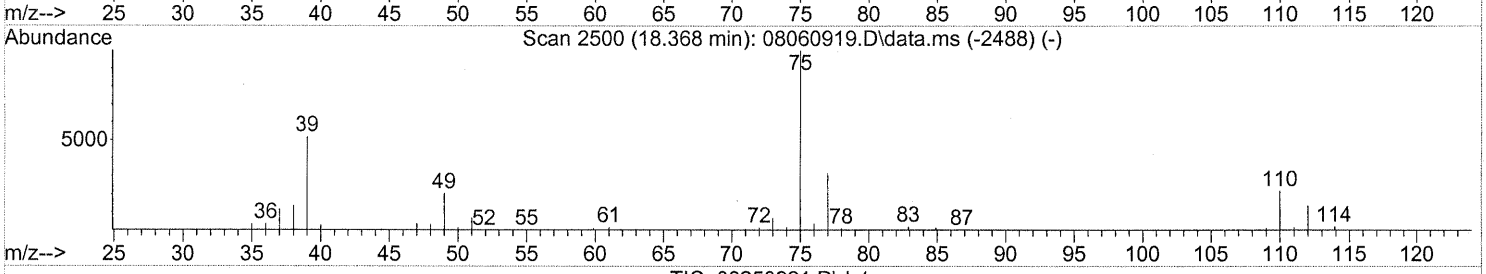
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 3.79ng

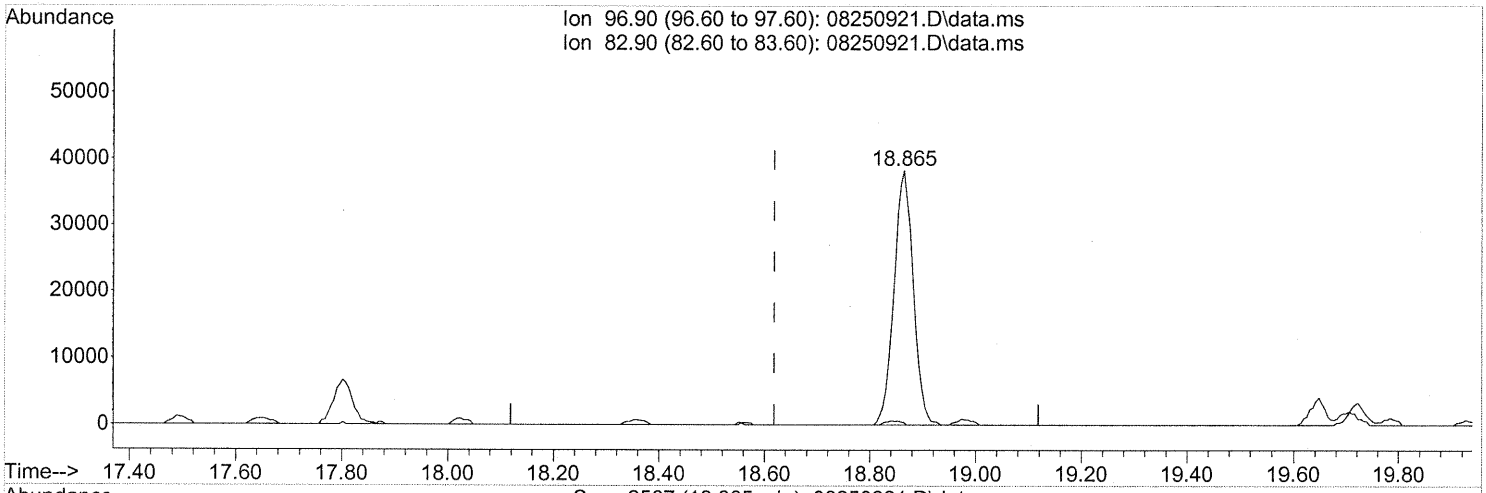
response 68317

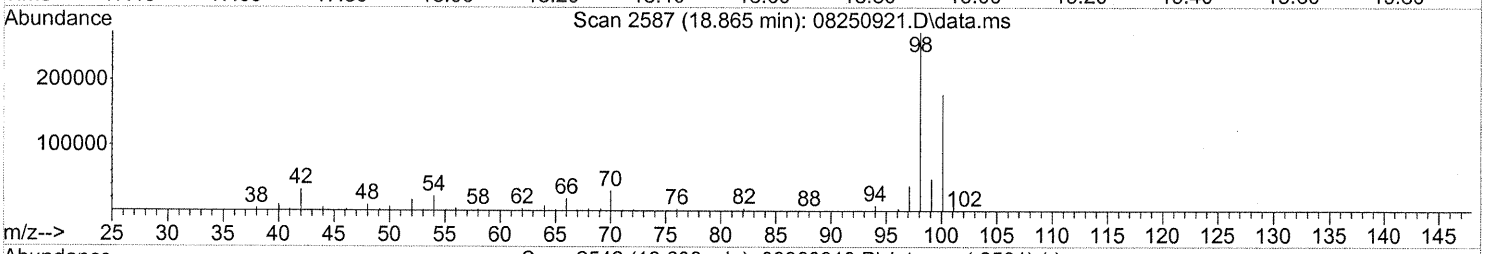
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	31.33
0.00	0.00	0.00
0.00	0.00	0.00

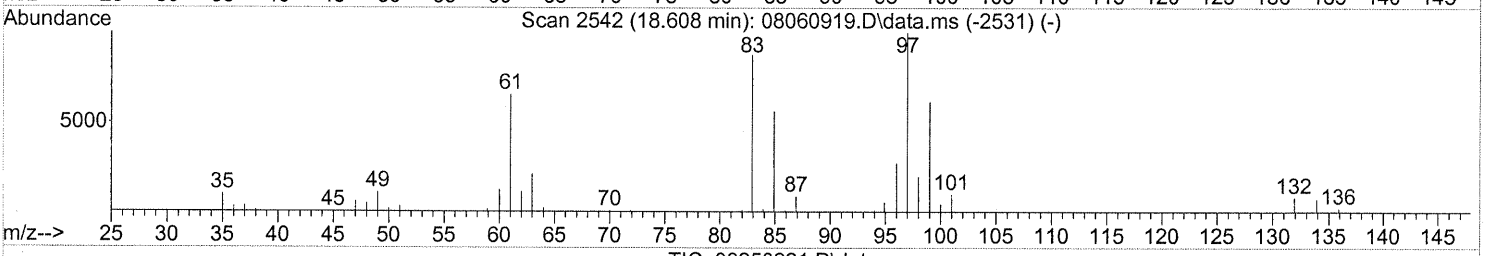
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

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

18.865min (+0.246) 9.75ng

response 97446

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

FP
JM 8/31/09

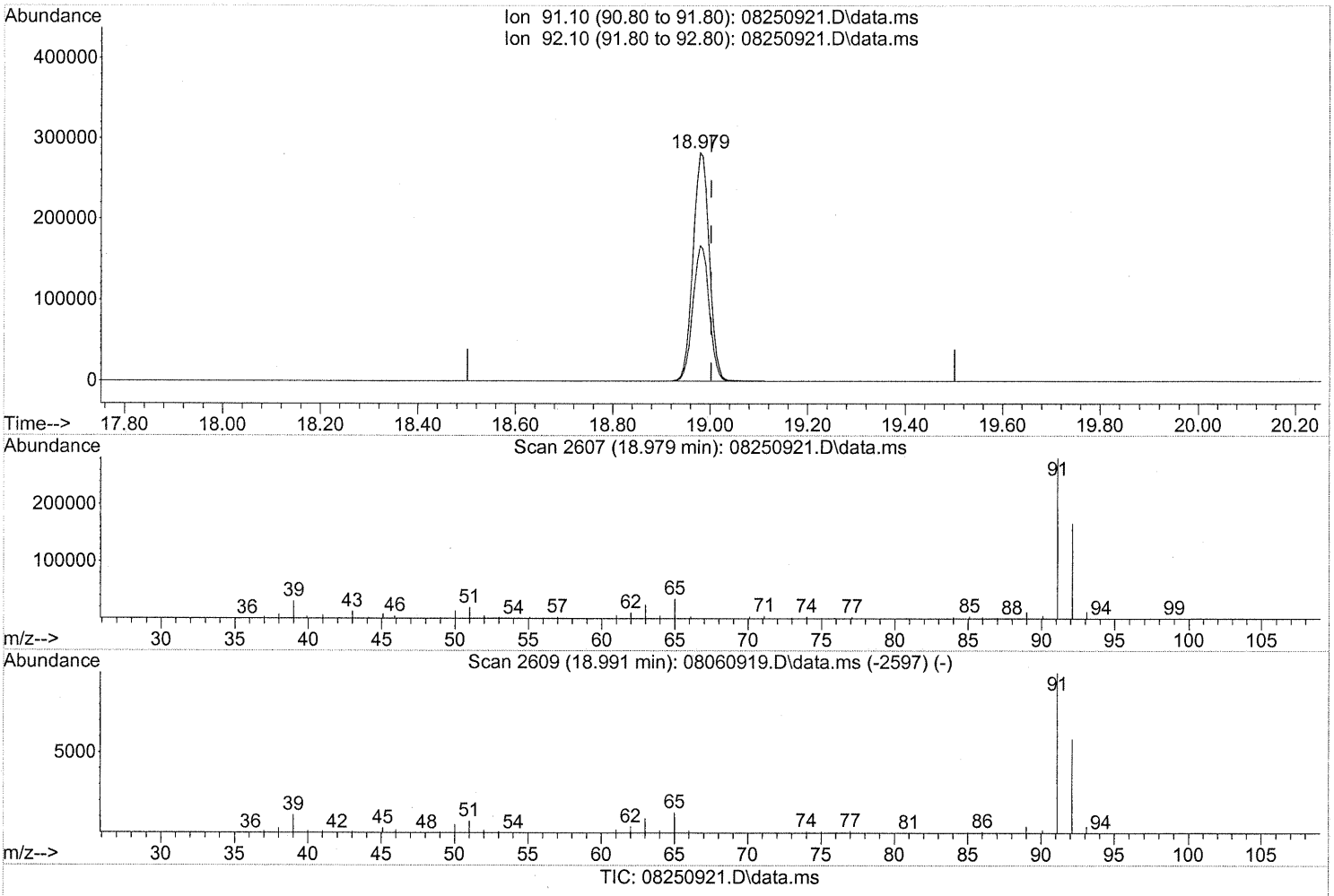
9/2/09

165

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 15.01ng

response 651732

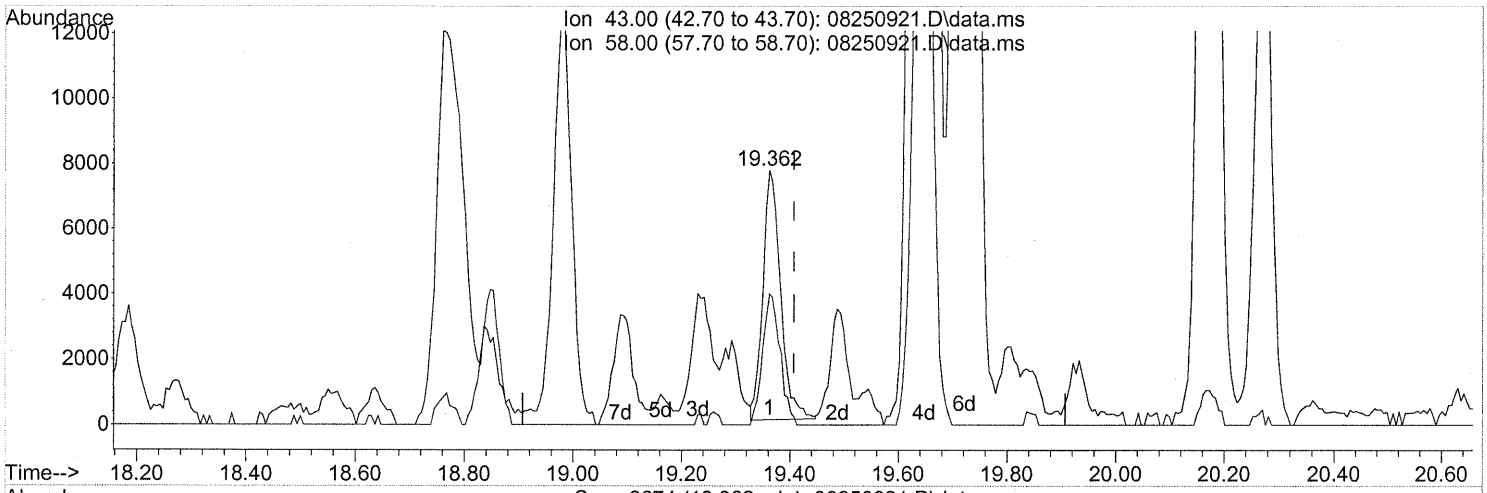
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.29
0.00	0.00	0.00
0.00	0.00	0.00

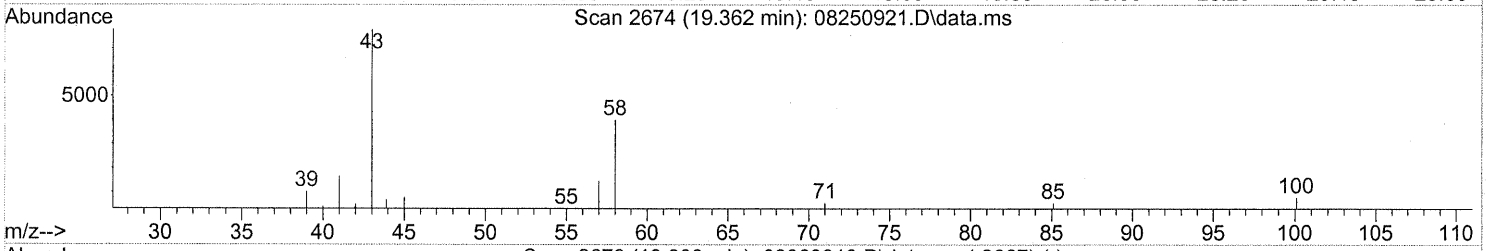
166

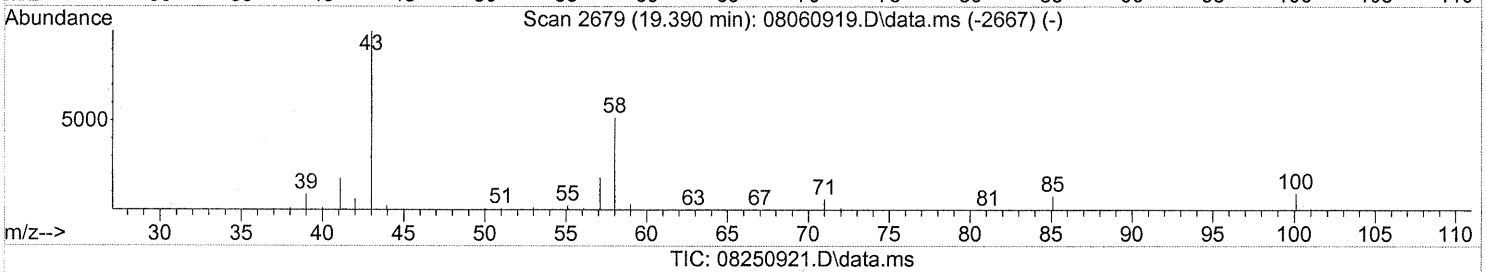
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250921.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 0.61ng

response 17576

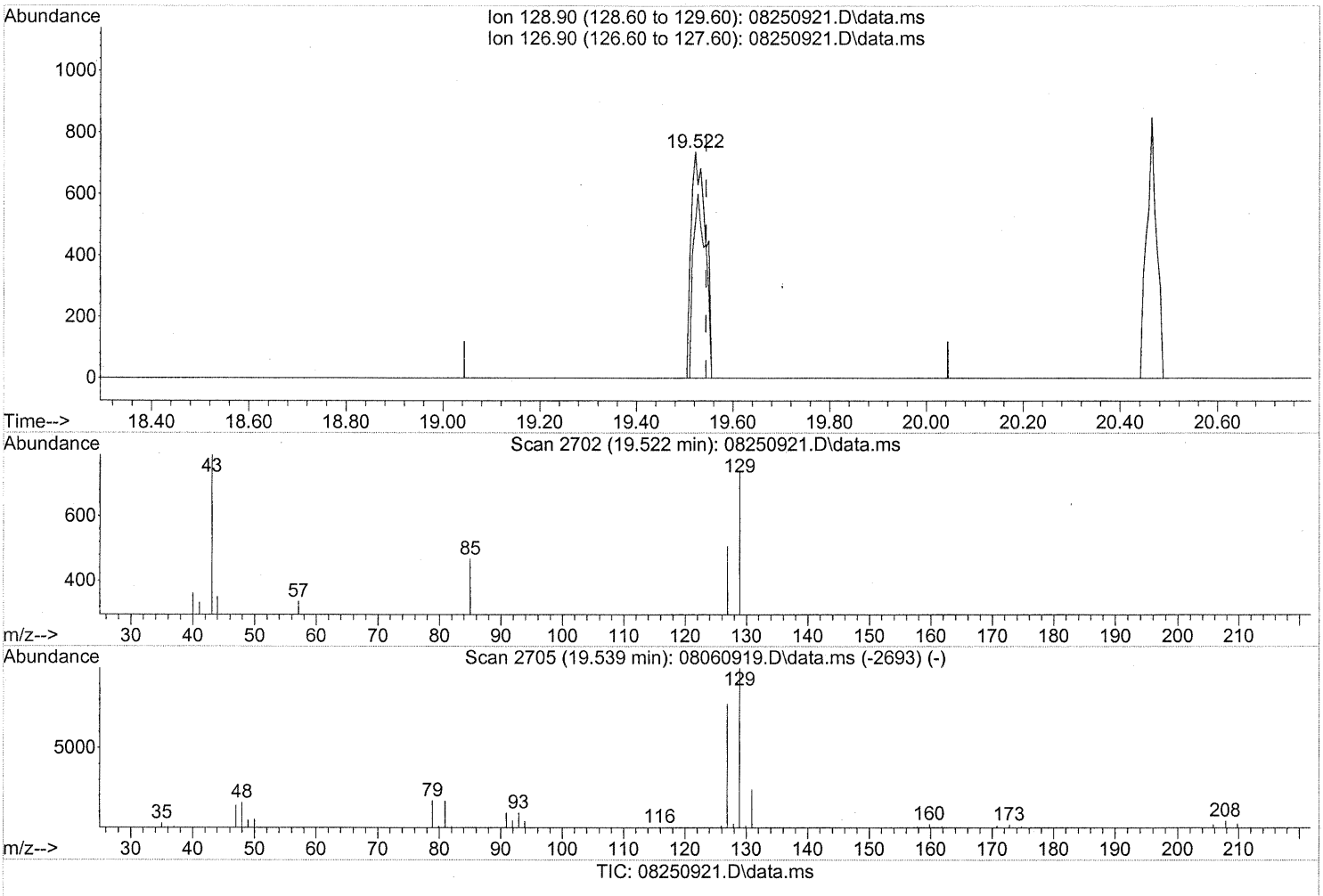
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	51.52
0.00	0.00	0.00
0.00	0.00	0.00

167

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(60) Dibromochloromethane (T)

19.522min (-0.023) 0.15ng

response 1524

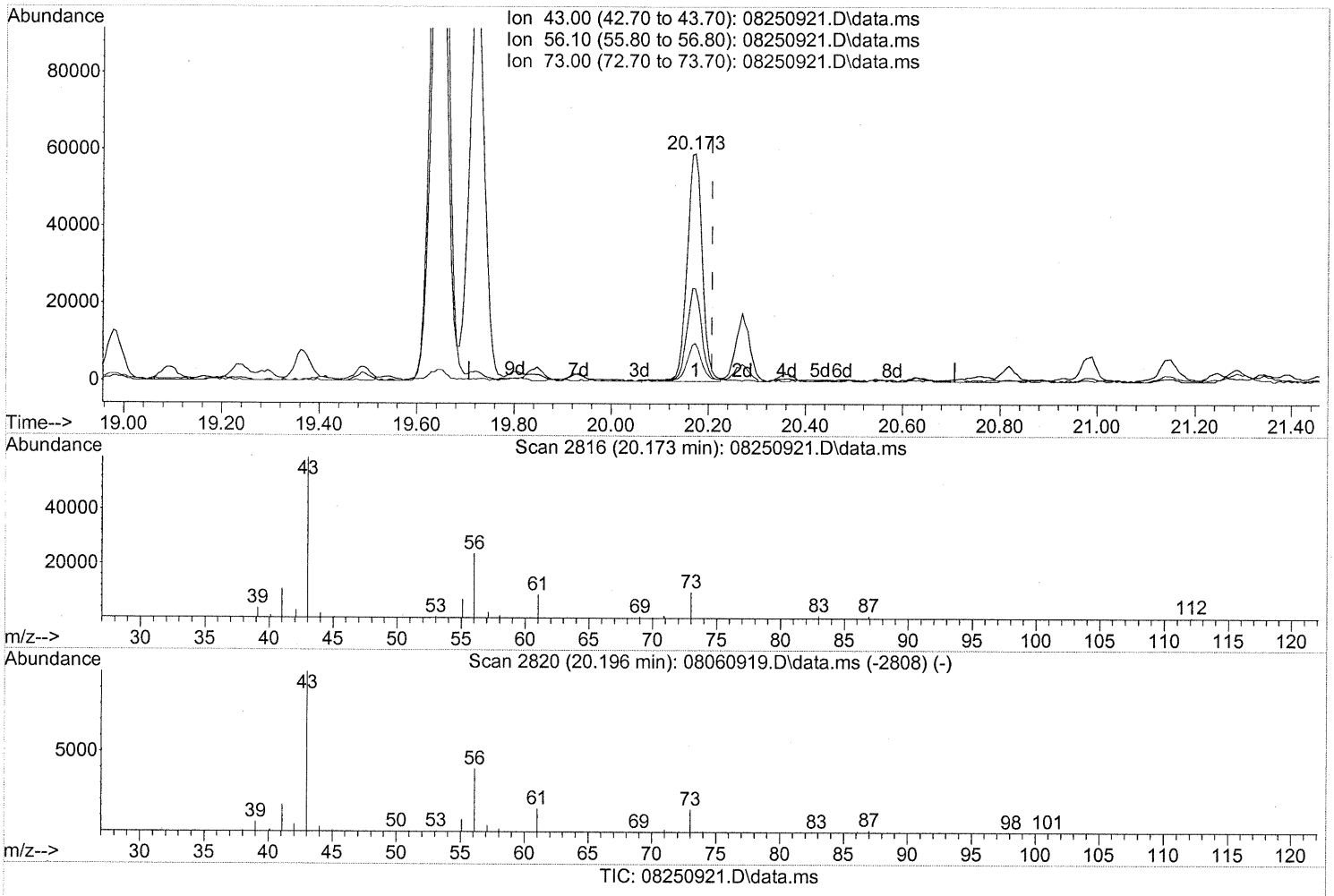
Ion	Exp%	Act%
128.90	100	100
126.90	76.40	70.47
0.00	0.00	0.00
0.00	0.00	0.00

168

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 3.75ng

response 127552

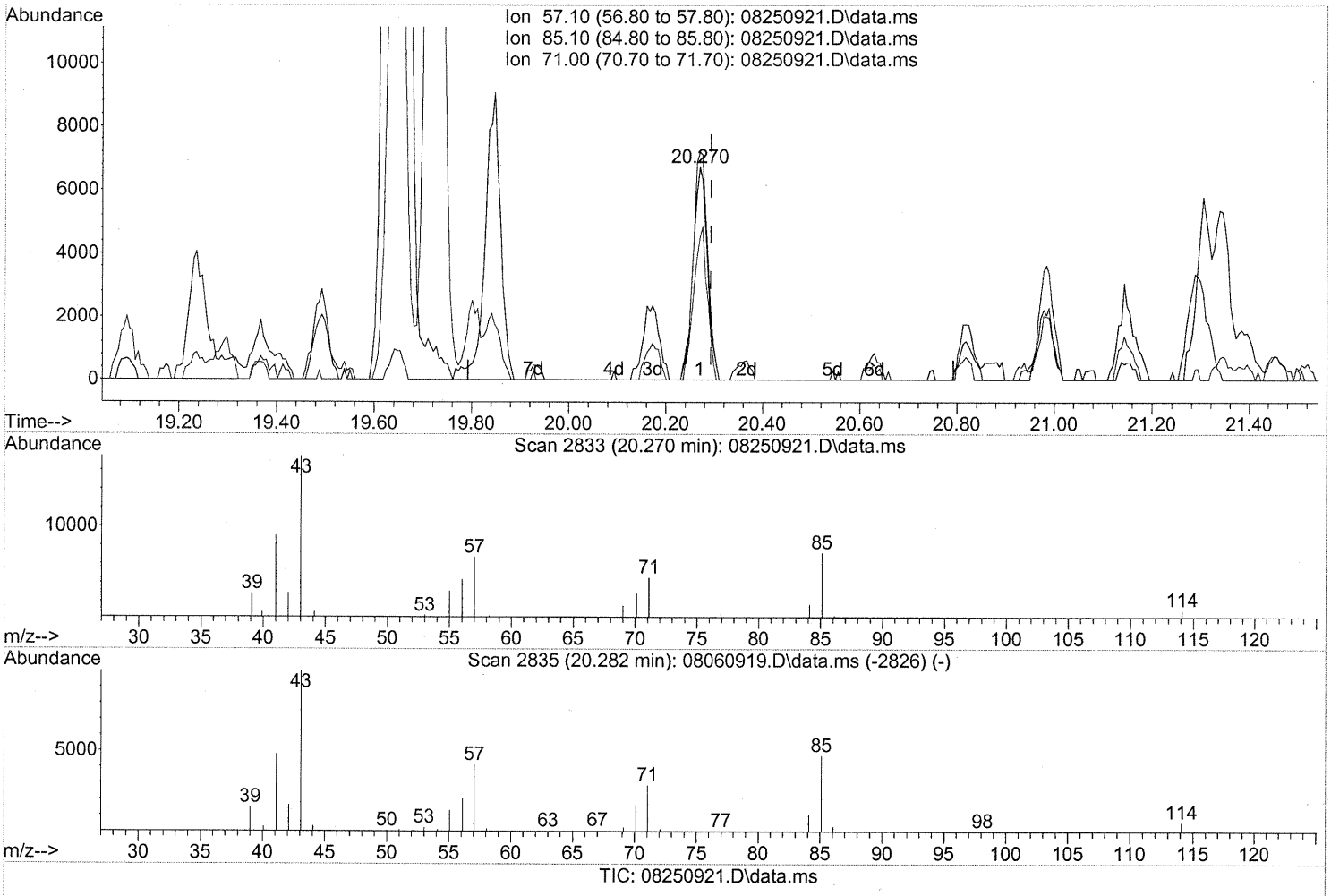
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	39.67
73.00	14.80	16.87
0.00	0.00	0.00

169

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 1.32ng

response 13881

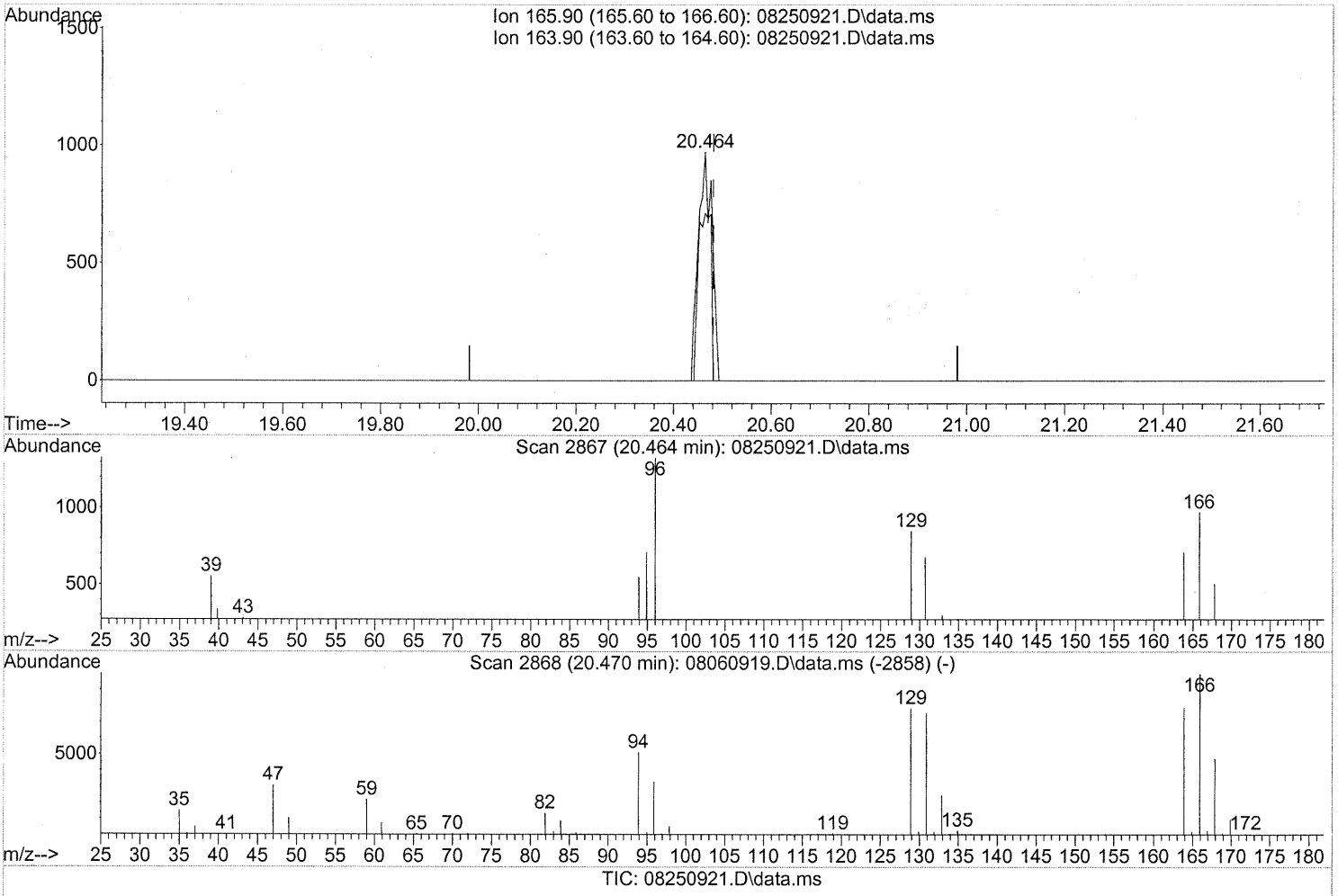
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	107.46
71.00	68.10	69.14
0.00	0.00	0.00

170

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(64) Tetrachloroethene (T)

20.464min (-0.017) 0.19ng

response 1885

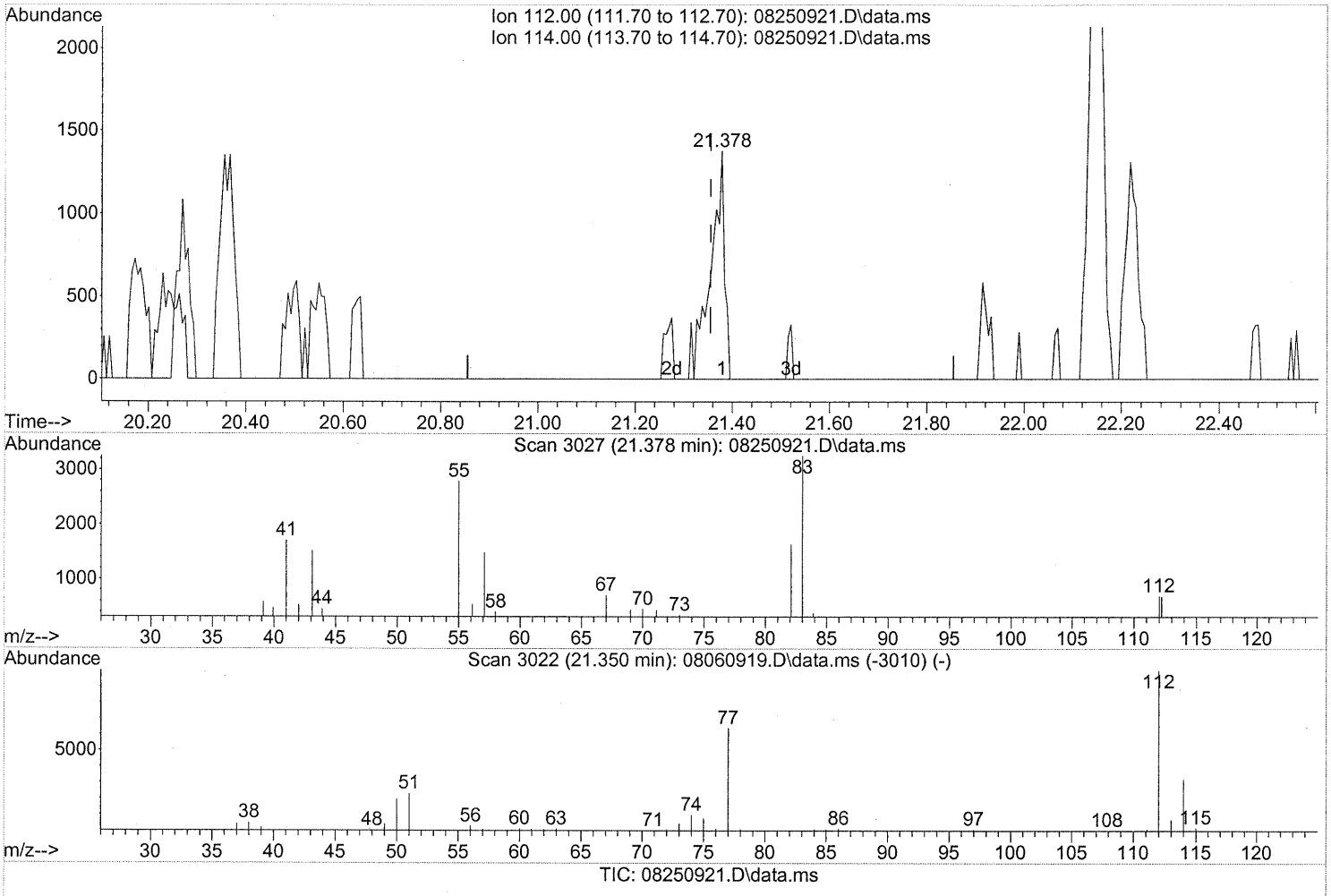
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	68.38
0.00	0.00	0.00
0.00	0.00	0.00

171

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(65) Chlorobenzene (T)

21.378min (+0.023) 0.10ng

response 2787

Ion	Exp%	Act%
112.00	100	100
114.00	32.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FP
m 8/31/09

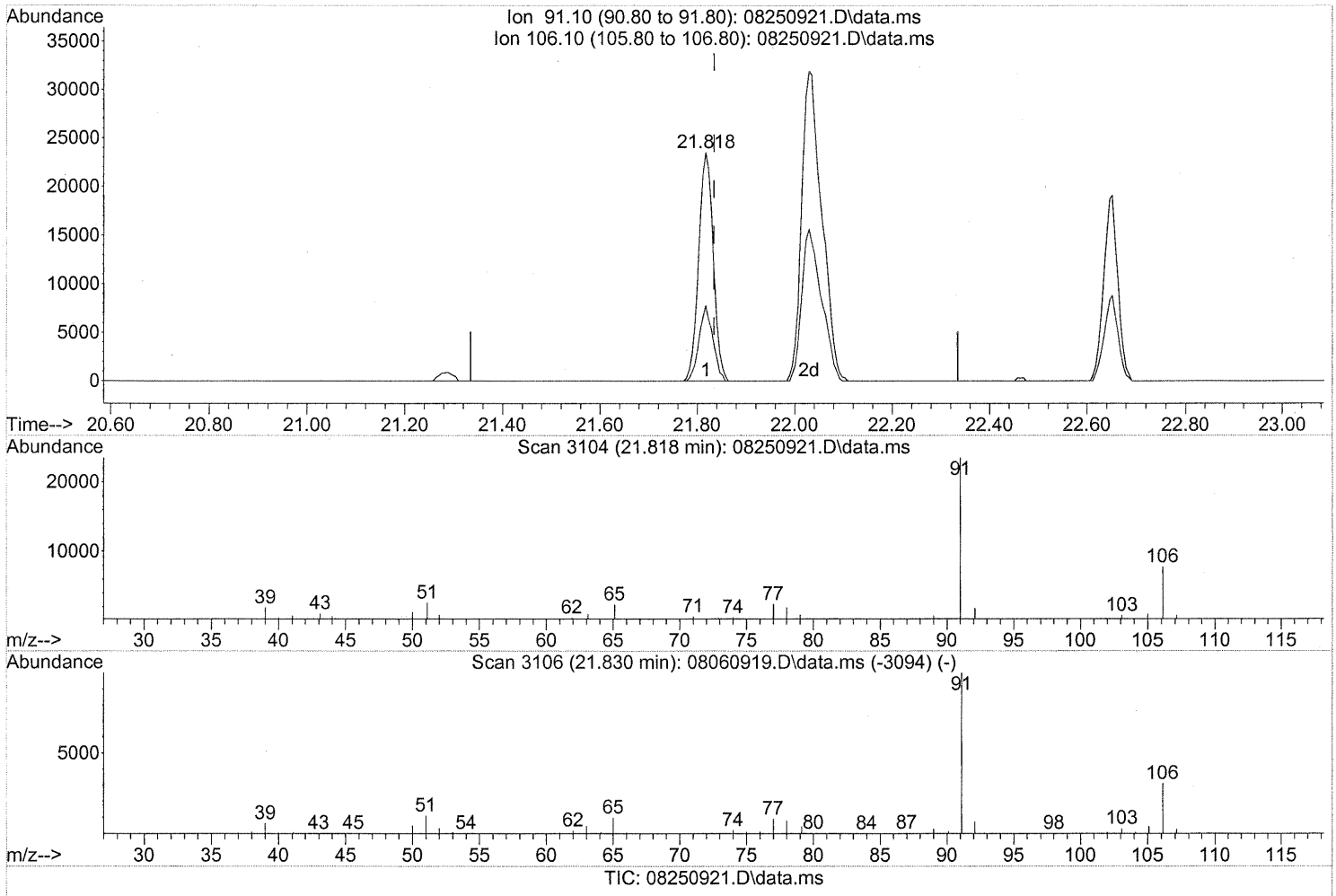
9/2/09

172

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 0.99ng

response 48985

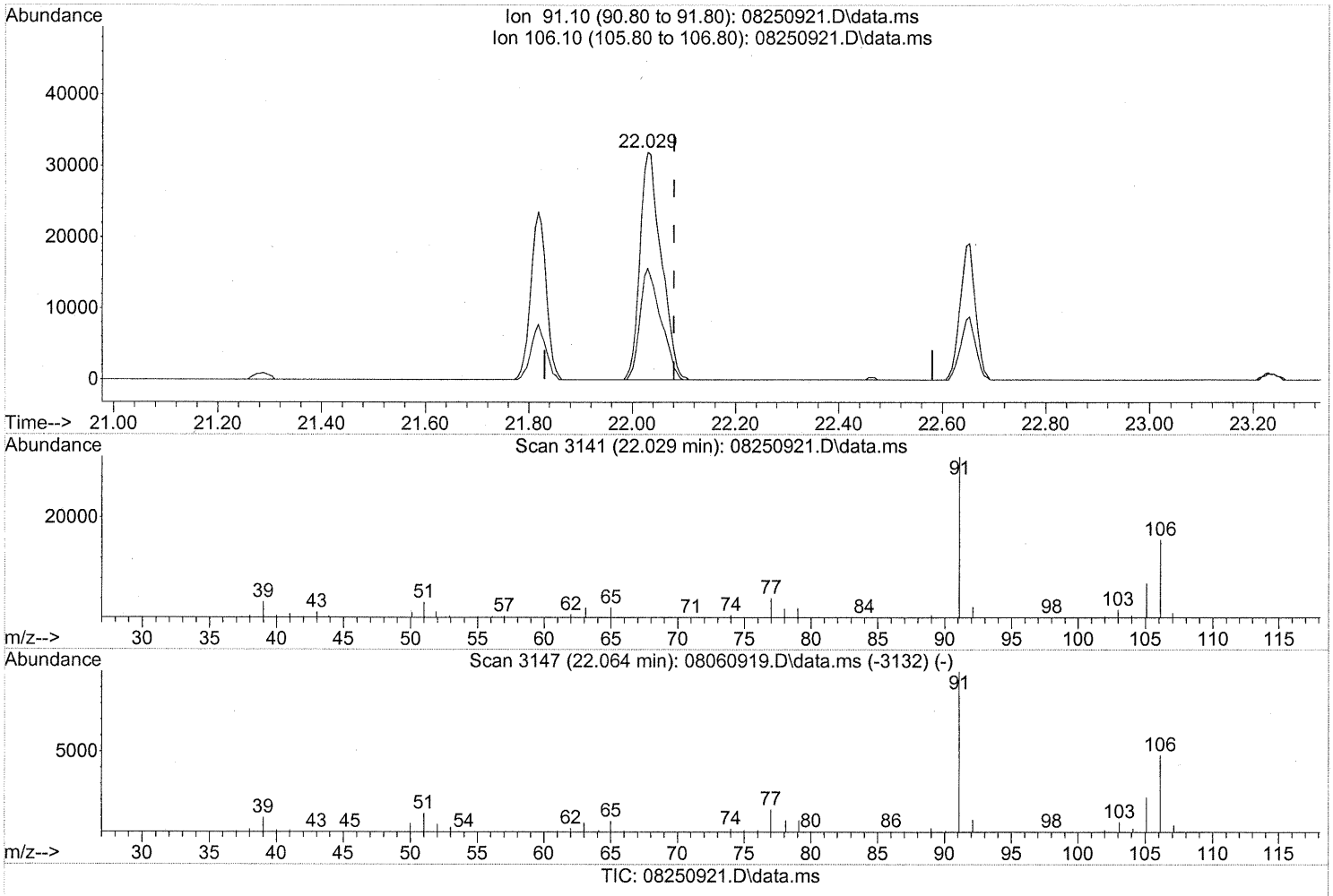
Ion	Exp%	Act%
91.10	100	100
106.10	30.10	31.32
0.00	0.00	0.00
0.00	0.00	0.00

173

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

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

22.029min (-0.051) 2.27ng

response 91355

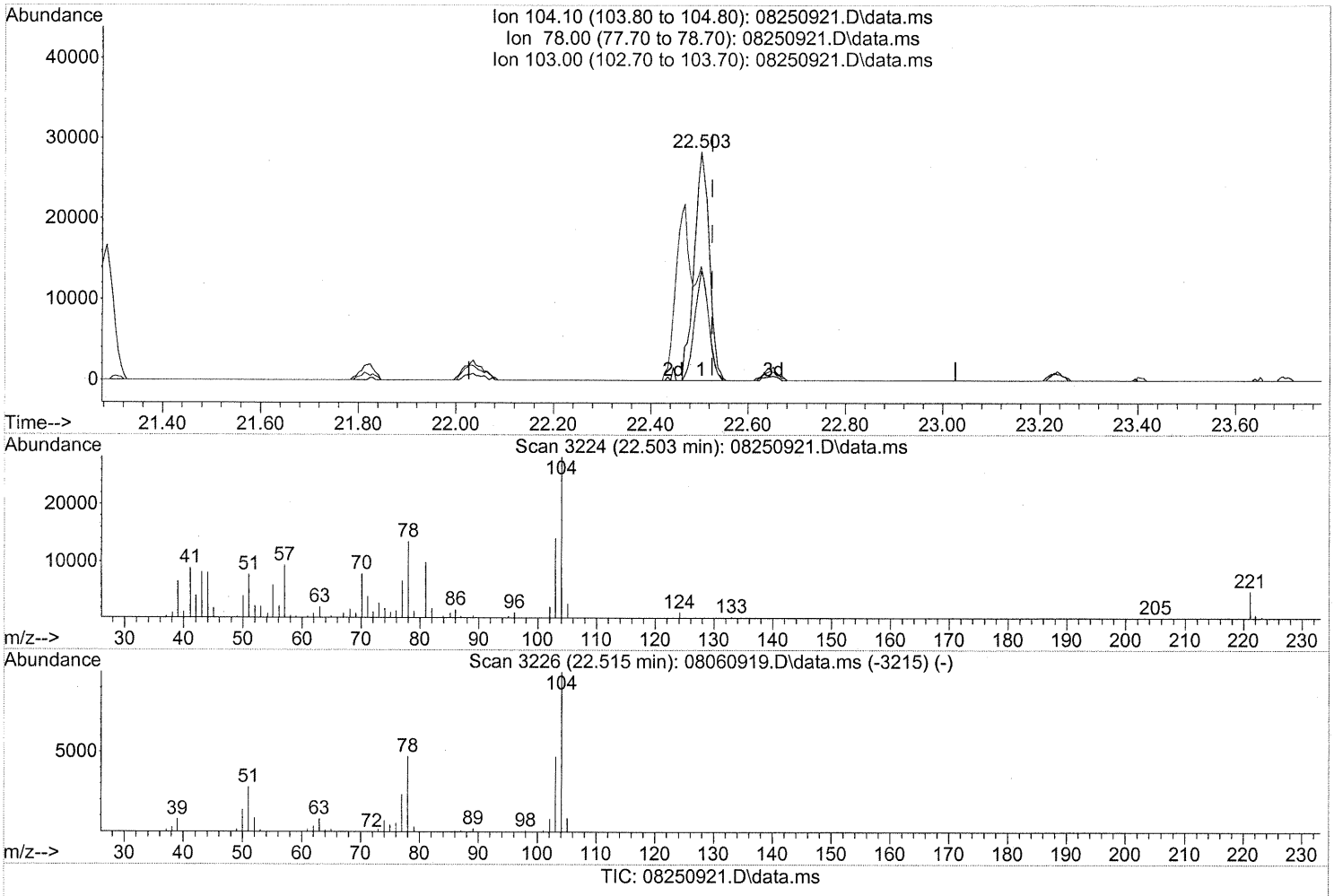
Ion	Exp%	Act%
91.10	100	100
106.10	46.90	47.98
0.00	0.00	0.00
0.00	0.00	0.00

174

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(69) Styrene (T)

22.503min (-0.023) 2.12ng

response 61458

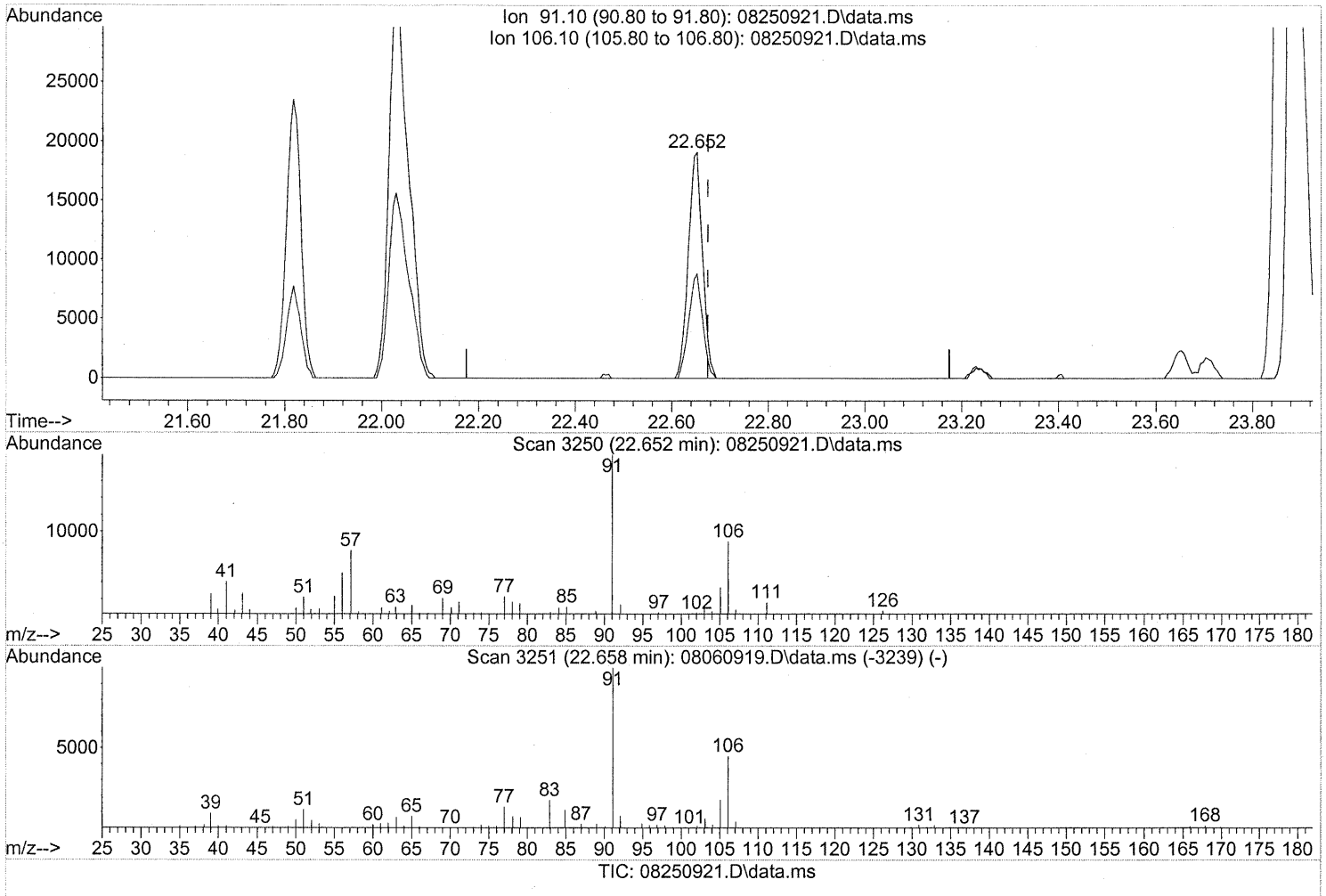
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	44.38
103.00	46.20	0.00#
0.00	0.00	0.00

175

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 0.97ng

response 38947

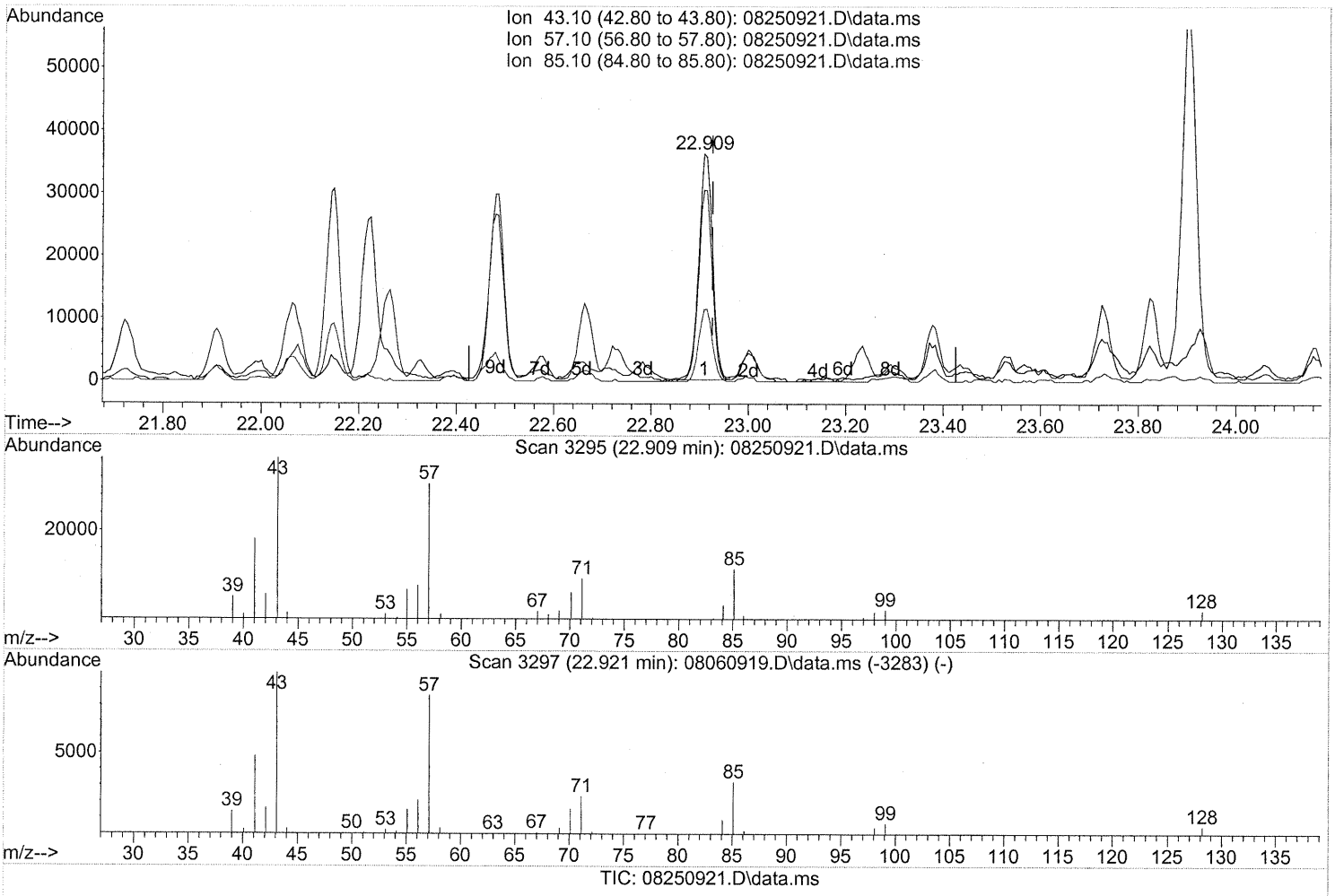
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.14
0.00	0.00	0.00
0.00	0.00	0.00

176

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(71) n-Nonane (T)

22.909min (-0.017) 2.67ng

response 71485

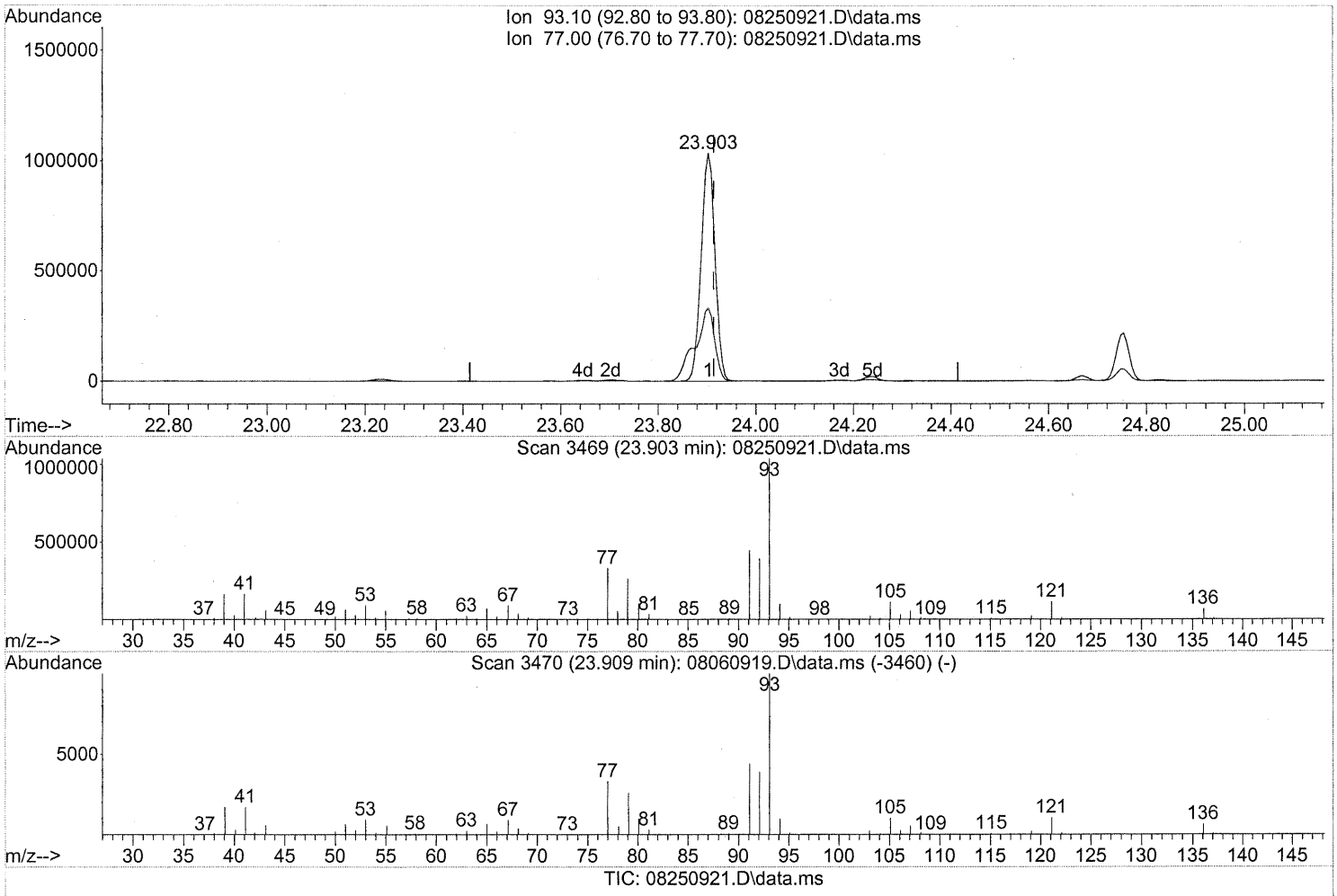
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	85.68
85.10	30.40	31.48
0.00	0.00	0.00

177

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 77.75ng

response 2027191

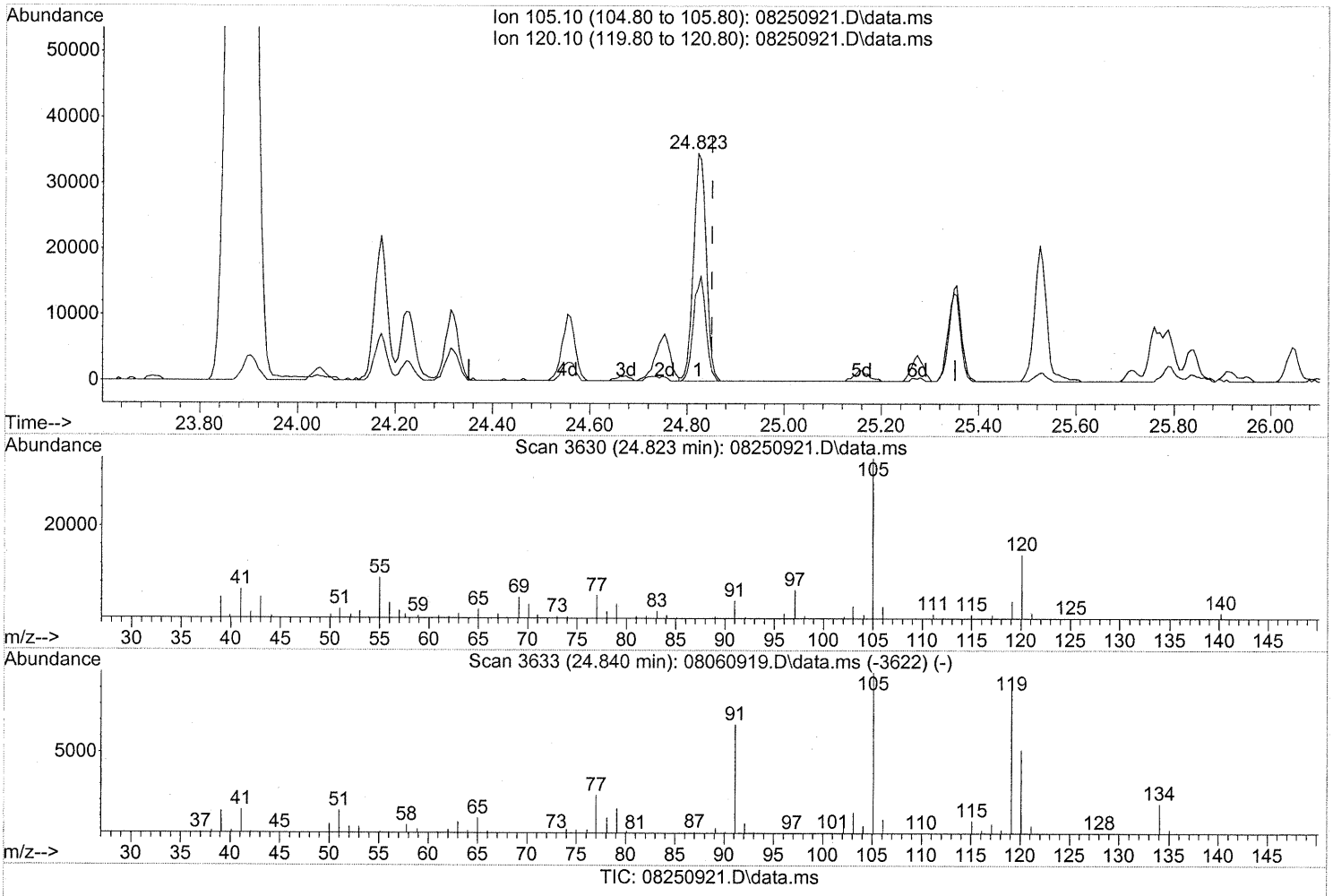
Ion	Exp%	Act%
93.10	100	100
77.00	32.40	45.47
0.00	0.00	0.00
0.00	0.00	0.00

178

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

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

24.823min (-0.029) 1.54ng

response 62511

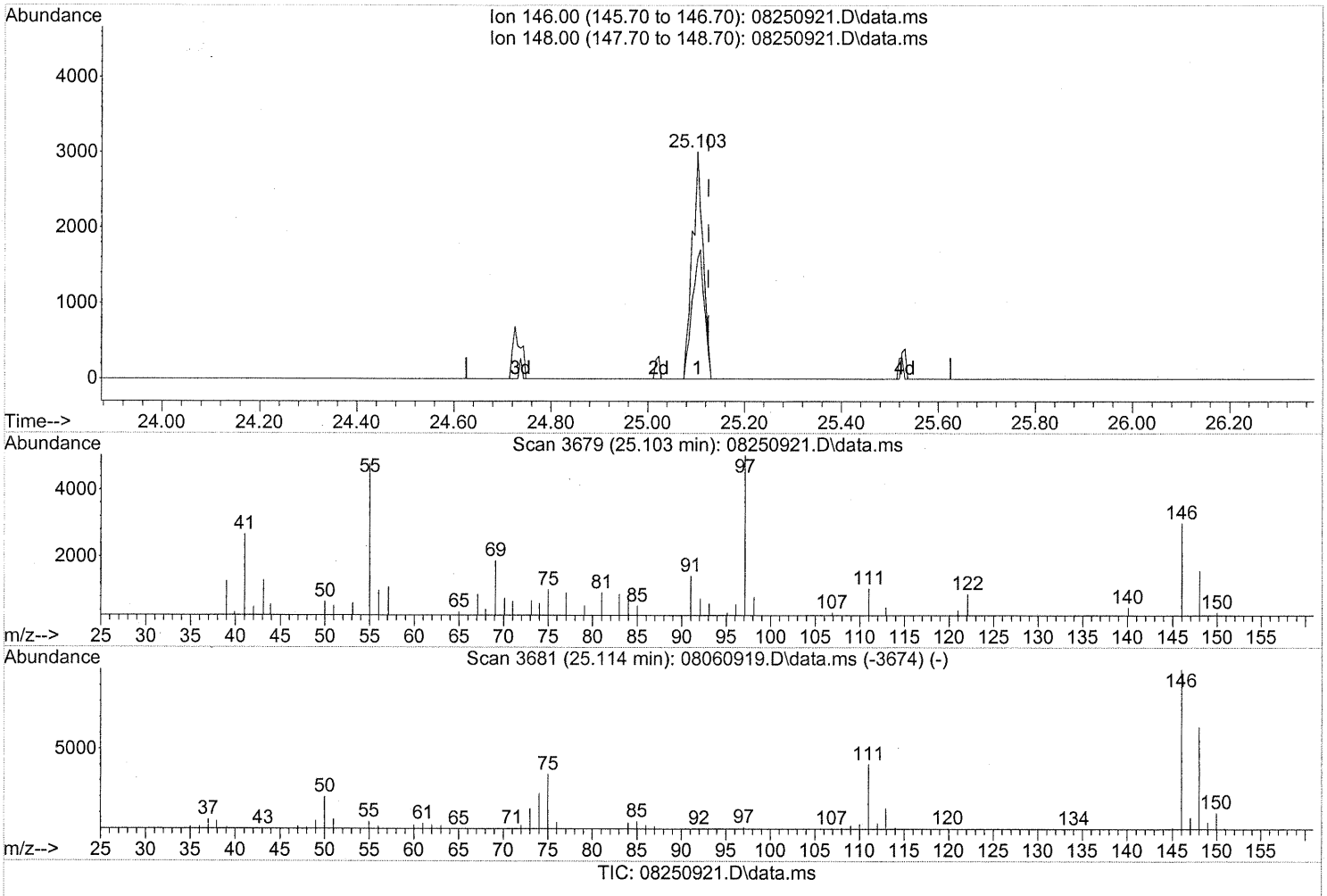
Ion	Exp%	Act%
105.10	100	100
120.10	52.60	44.75
0.00	0.00	0.00
0.00	0.00	0.00

179

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.103min (-0.023) 0.22ng

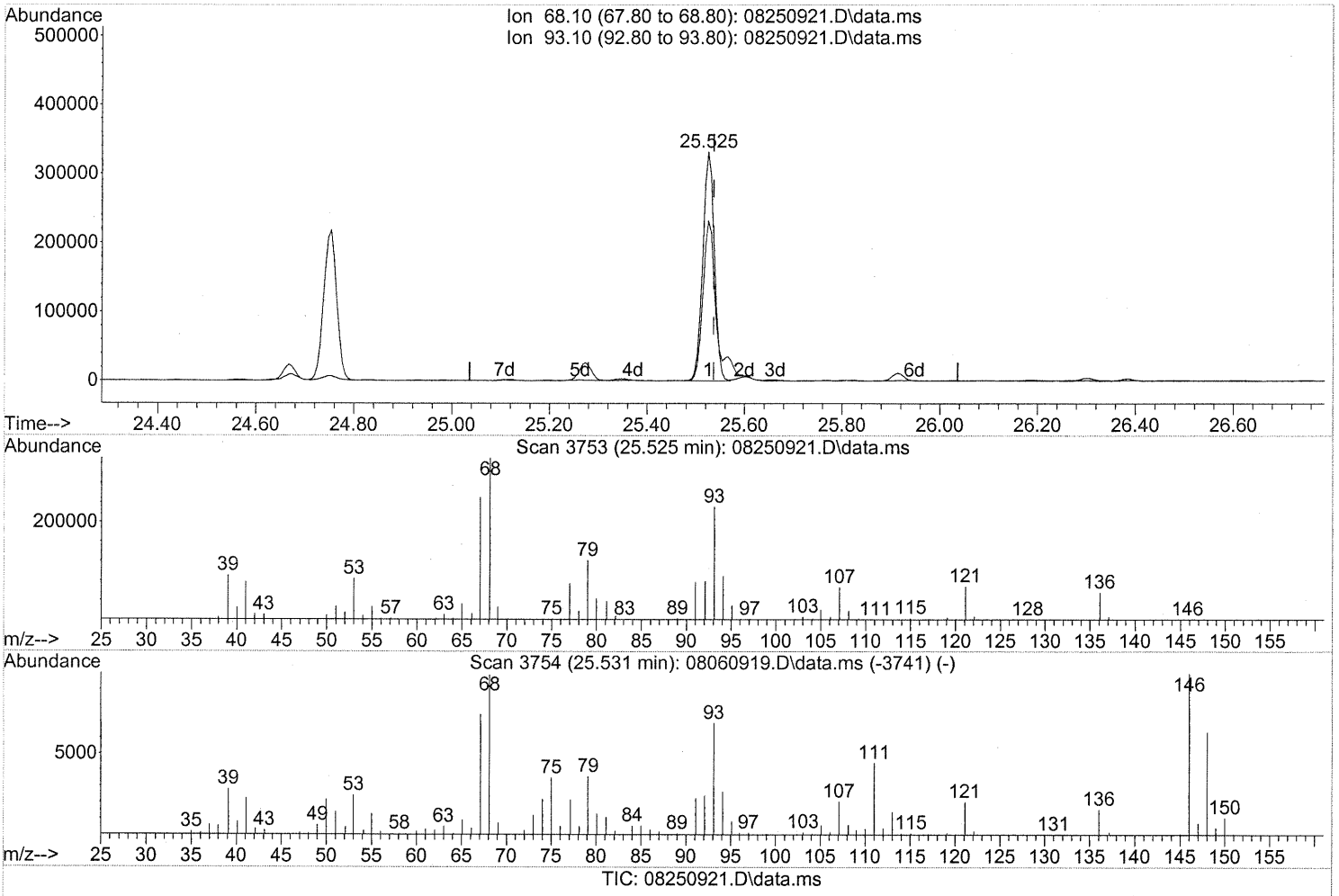
response 4718

Ion	Exp%	Act%
146.00	100	100
148.00	62.20	62.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250921.D
Acq On : 26 Aug 2009 1:05
Operator : WA/CC
Sample : P0902876-004 (1000mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 06:39:48 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250921.D\data.ms

(91) d-Limonene (T)

25.525min (-0.011) 32.02ng

response 551593

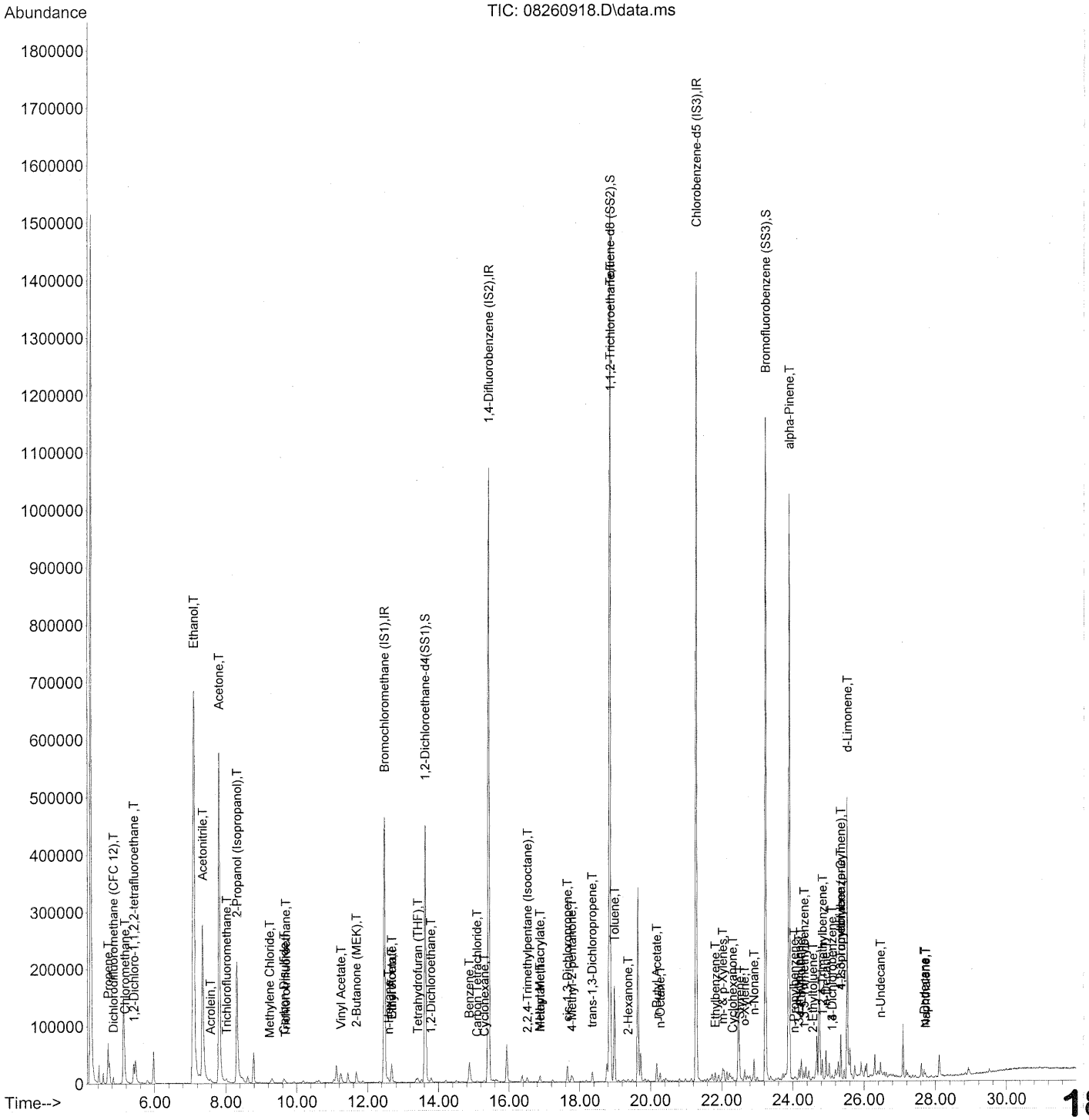
Ion	Exp%	Act%
68.10	100	100
93.10	67.90	82.89
0.00	0.00	0.00
0.00	0.00	0.00

181

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260918.D
Acq On : 26 Aug 2009 10:13 pm
Operator : WA/CC
Sample : P0902876-004 dil (200mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 27 06:22:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260918.D
Acq On : 26 Aug 2009 10:13 pm
Operator : WA/CC
Sample : P0902876-004 dil (200mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 27 06:22:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

vm 9/2/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	237547	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1198423	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	586178	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	466563	22.597	ng		-0.04 ✓
Spiked Amount 25.000			Recovery =	90.40%			
57) Toluene-d8 (SS2)	18.85	98	1317675	25.726	ng		-0.02 ✓
Spiked Amount 25.000			Recovery =	102.92%			
73) Bromofluorobenzene (SS3)	23.23	174	381942	28.277	ng		-0.01 ✓
Spiked Amount 25.000			Recovery =	113.12%			
Target Compounds							Qvalue
2) Propene	4.68	42	31799	1.951	ng		87
3) Dichlorodifluoromethan...	4.84	85	11426	0.429	ng		98
4) Chloromethane	5.16	50	4812	0.269	ng		91
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	670	0.062	ng	#	44
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	7.09	45	1545395	149.563	ng		100
11) Acetonitrile	7.34	41	494402	16.338	ng		99
12) Acrolein	7.57	56	6244	0.794	ng		99
13) Acetone	7.81	58	324080	33.241	ng		91
14) Trichlorofluoromethane	8.02	101	5097	0.212	ng		96
15) 2-Propanol (Isopropanol)	8.31	45	466725	12.182	ng		99
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.36	59	1203	N.D.			
19) Methylene Chloride	9.23	84	888	0.068	ng		96
20) 3-Chloro-1-propene (Al...	9.43	41	136	N.D.			
21) Trichlorotrifluoroethane	9.68	151	707	0.081	ng		99
22) Carbon Disulfide	9.63	76	19083	0.413	ng		95
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.21	73	94	N.D.			
26) Vinyl Acetate	11.24	86	2869	1.446	ng	#	77
27) 2-Butanone (MEK)	11.68	72	9086	1.032	ng		94
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.68	87	532	N.D.			
30) Ethyl Acetate	12.67	61	5994	1.307	ng		99
31) n-Hexane	12.59	57	2889	0.123	ng		78

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260918.D
Acq On : 26 Aug 2009 10:13 pm
Operator : WA/CC
Sample : P0902876-004 dil (200mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 27 06:22:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.67	83	6475	0.314	ng		94
34) Tetrahydrofuran (THF)	13.41	72	2203	0.235	ng	#	30
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.78	62	5988	0.317	ng		93
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	14.84	61	188	N.D.			
40) 1-Butanol	15.01	56	94	N.D.			
41) Benzene	14.87	78	8241	0.156	ng		98
42) Carbon Tetrachloride	15.09	117	1572	0.094	ng		87
43) Cyclohexane	15.29	84	1915	0.099	ng	#	78
44) tert-Amyl Methyl Ether	15.85	73	200	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	16.37	83	791	N.D.			
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) 2,2,4-Trimethylpentane...	16.52	57	8123	0.131	ng		91
50) Methyl Methacrylate	16.88	100	536	0.111	ng	#	1
51) n-Heptane	16.88	71	3173	0.224	ng		90
52) cis-1,3-Dichloropropene	17.65	75	22530	1.027	ng		99
53) 4-Methyl-2-pentanone	17.77	58	3834	0.303	ng		99
54) trans-1,3-Dichloropropene	18.35	75	15493	0.743	ng		99
55) 1,1,2-Trichloroethane	18.86	97	111407	9.630	ng	#	5
58) Toluene	18.98	91	149344	2.967	ng		99
59) 2-Hexanone	19.36	43	5137	0.153	ng		88
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	28599	0.725	ng		95
63) n-Octane	20.27	57	3093	0.254	ng		95
64) Tetrachloroethene	20.47	166	178	N.D.			
65) Chlorobenzene	21.34	112	371	N.D.			
66) Ethylbenzene	21.82	91	14664	0.255	ng		97
67) m- & p-Xylenes	22.03	91	21913	0.471	ng		96
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.51	104	13682	0.407	ng	#	64
70) o-Xylene	22.65	91	9648	0.207	ng		96
71) n-Nonane	22.91	43	18060	0.582	ng		96
72) 1,1,2,2-Tetrachloroethane	22.72	83	606	N.D.			
74) Cumene	23.40	105	1606	N.D.			
75) alpha-Pinene	23.90	93	471068	15.589	ng		78
76) n-Propylbenzene	24.04	91	4567	0.062	ng		87
77) 3-Ethyltoluene	24.17	105	9678	0.172	ng		97
78) 4-Ethyltoluene	24.23	105	4986	0.091	ng		88
79) 1,3,5-Trimethylbenzene	24.31	105	4621	0.100	ng		98

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260918.D
Acq On : 26 Aug 2009 10:13 pm
Operator : WA/CC
Sample : P0902876-004 dil (200mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 27 06:22:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

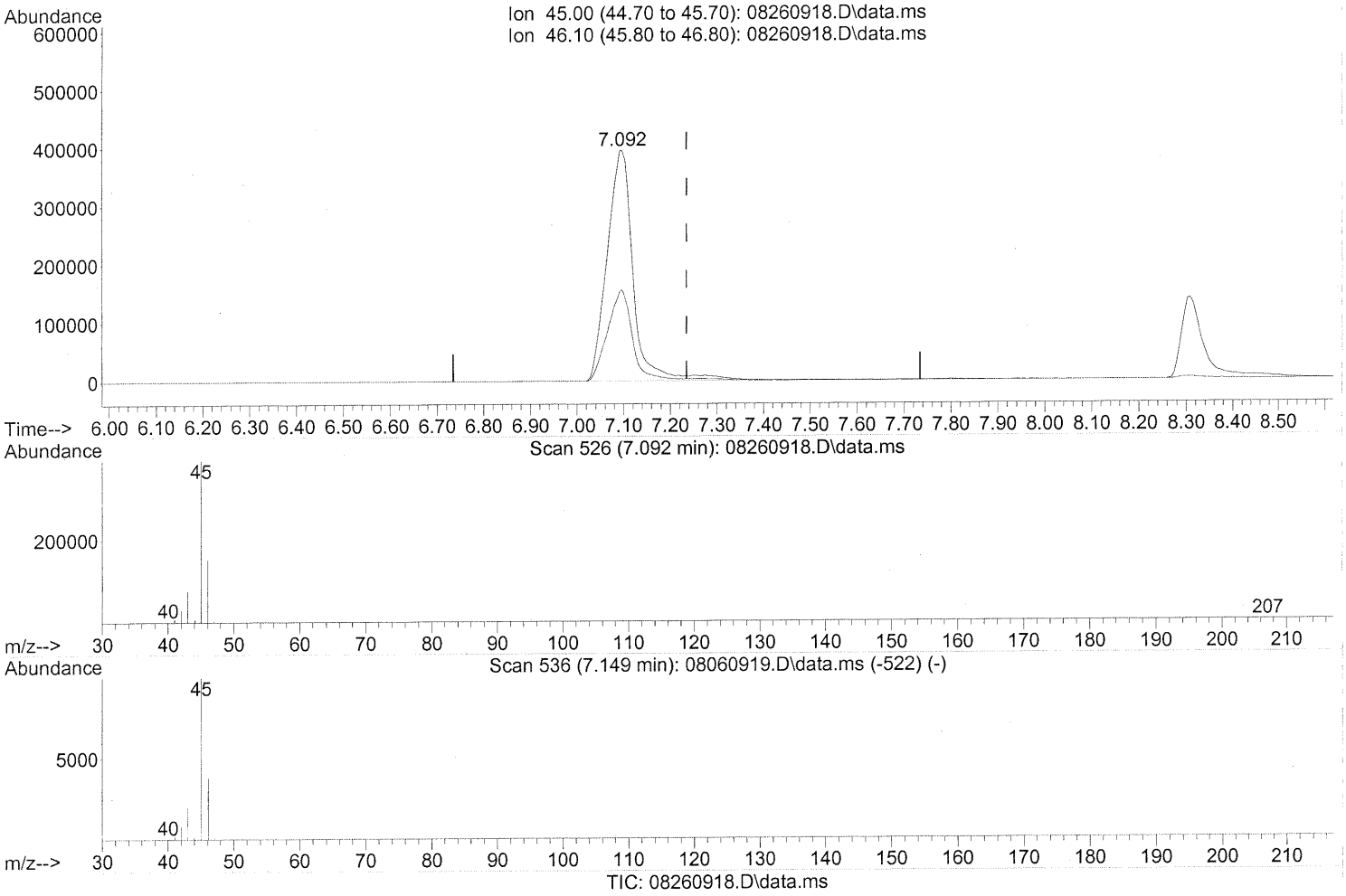
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	152	N.D.			
81) 2-Ethyltoluene	24.56	105	4639	0.082	ng		93
82) 1,2,4-Trimethylbenzene	24.83	105	14688	0.313	ng		89
83) n-Decane	24.93	57	21127	0.692	ng		95
84) Benzyl Chloride	24.99	91	2029	N.D.			
85) 1,3-Dichlorobenzene	25.10	146	1366	0.057	ng		82
86) 1,4-Dichlorobenzene	25.10	146	1366	0.054	ng		82
87) sec-Butylbenzene	25.15	105	1346	N.D.			
88) 4-Isopropyltoluene (p-...	25.35	119	37729	0.667	ng		92
89) 1,2,3-Trimethylbenzene	25.35	105	6139	0.128	ng	#	40
90) 1,2-Dichlorobenzene	25.52	146	199	N.D.			
91) d-Limonene	25.53	68	124638	6.242	ng		84
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.46	57	9528	0.293	ng		81
94) 1,2,4-Trichlorobenzene	27.58	180	273	N.D.			
95) Naphthalene	27.73	128	5977	0.094	ng		91
96) n-Dodecane	27.70	57	6259	0.166	ng		91
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.31	55	4104	0.197	ng		92
99) tert-Butylbenzene	24.82	119	2100	N.D.			
100) n-Butylbenzene	25.86	91	1389	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260918.D
Acq On : 26 Aug 2009 10:13 pm
Operator : WA/CC
Sample : P0902876-004 dil (200mL)
Misc : Environmental Health 102352
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 27 06:22:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.092min (-0.143) 149.56ng

response 1545395

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.28
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102353**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00672

Date Collected: 8/18/09
Date Received: 8/20/09
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)
0.20 Liter(s)

Initial Pressure (psig): -1.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.34

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**14**	0.67	**8.2**	0.39	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.8**	0.67	**0.57**	0.14	
74-87-3	**Chloromethane**	**0.82**	0.13	**0.40**	0.065	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.67	ND	0.096	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.052	
106-99-0	**1,3-Butadiene**	**0.15**	0.13	**0.067**	0.061	
74-83-9	Bromomethane	ND	0.13	ND	0.035	
75-00-3	Chloroethane	ND	0.13	ND	0.051	
64-17-5	**Ethanol**	**1,100**	6.7	**610**	3.6	**D**
75-05-8	**Acetonitrile**	**100**	0.67	**61**	0.40	
107-02-8	**Acrolein**	**4.9**	0.67	**2.1**	0.29	
67-64-1	**Acetone**	**200**	6.7	**83**	2.8	
75-69-4	**Trichlorofluoromethane**	**1.5**	0.13	**0.26**	0.024	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**69**	0.67	**28**	0.27	
107-13-1	Acrylonitrile	ND	0.67	ND	0.31	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.034	
75-09-2	Methylene Chloride	ND	0.67	ND	0.19	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.043	
76-13-1	**Trichlorotrifluoroethane**	**0.62**	0.13	**0.081**	0.017	
75-15-0	**Carbon Disulfide**	**2.6**	0.67	**0.85**	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	ND	0.034	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.033	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.037	
108-05-4	**Vinyl Acetate**	**7.7**	6.7	**2.2**	1.9	
78-93-3	**2-Butanone (MEK)**	**6.0**	0.67	**2.0**	0.23	

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: 9/9/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102353** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-005

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AC00672

Initial Pressure (psig): -1.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.34

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.13	ND	0.034	
141-78-6	**Ethyl Acetate**	**9.8**	0.67	**2.7**	0.19	
110-54-3	**n-Hexane**	**0.82**	0.67	**0.23**	0.19	
67-66-3	**Chloroform**	**1.8**	0.13	**0.37**	0.027	
109-99-9	Tetrahydrofuran (THF)	ND	0.67	ND	0.23	
107-06-2	**1,2-Dichloroethane**	**2.1**	0.13	**0.52**	0.033	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.025	
71-43-2	**Benzene**	**0.89**	0.13	**0.28**	0.042	
56-23-5	**Carbon Tetrachloride**	**0.53**	0.13	**0.084**	0.021	
110-82-7	Cyclohexane	ND	0.67	ND	0.19	
78-87-5	**1,2-Dichloropropane**	**0.16**	0.13	**0.034**	0.029	
75-27-4	**Bromodichloromethane**	**0.37**	0.13	**0.055**	0.020	
79-01-6	Trichloroethene	ND	0.13	ND	0.025	
123-91-1	1,4-Dioxane	ND	0.67	ND	0.19	
80-62-6	Methyl Methacrylate	ND	0.67	ND	0.16	
142-82-5	**n-Heptane**	**1.6**	0.67	**0.38**	0.16	
10061-01-5	**cis-1,3-Dichloropropene**	**7.0**	0.67	**1.5**	0.15	
108-10-1	**4-Methyl-2-pentanone**	**2.2**	0.67	**0.54**	0.16	
10061-02-6	**trans-1,3-Dichloropropene**	**4.9**	0.67	**1.1**	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.025	
108-88-3	**Toluene**	**21**	0.67	**5.5**	0.18	
591-78-6	**2-Hexanone**	**0.87**	0.67	**0.21**	0.16	
124-48-1	**Dibromochloromethane**	**0.20**	0.13	**0.023**	0.016	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.017	
123-86-4	**n-Butyl Acetate**	**5.5**	0.67	**1.2**	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: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102353** CAS Sample ID: P0902876-005
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AC00672

Initial Pressure (psig): -1.1 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.34

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.7**	0.67	**0.37**	0.14	
127-18-4	**Tetrachloroethene**	**0.23**	0.13	**0.034**	0.020	
108-90-7	Chlorobenzene	ND	0.13	ND	0.029	
100-41-4	**Ethylbenzene**	**1.1**	0.67	**0.26**	0.15	
179601-23-1	**m,p-Xylenes**	**3.0**	0.67	**0.69**	0.15	
75-25-2	Bromoform	ND	0.67	ND	0.065	
100-42-5	**Styrene**	**2.9**	0.67	**0.67**	0.16	
95-47-6	**o-Xylene**	**1.3**	0.67	**0.30**	0.15	
111-84-2	**n-Nonane**	**3.5**	0.67	**0.68**	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.020	
98-82-8	Cumene	ND	0.67	ND	0.14	
80-56-8	**alpha-Pinene**	**100**	0.67	**18**	0.12	
103-65-1	n-Propylbenzene	ND	0.67	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.67	ND	0.14	
108-67-8	**1,3,5-Trimethylbenzene**	**0.69**	0.67	**0.14**	0.14	
95-63-6	**1,2,4-Trimethylbenzene**	**2.2**	0.67	**0.44**	0.14	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.026	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.022	
106-46-7	**1,4-Dichlorobenzene**	**0.27**	0.13	**0.045**	0.022	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.022	
5989-27-5	**d-Limonene**	**46**	0.67	**8.2**	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.67	ND	0.069	
120-82-1	1,2,4-Trichlorobenzene	ND	0.67	ND	0.090	
91-20-3	Naphthalene	ND	0.67	ND	0.13	
87-68-3	Hexachlorobutadiene	ND	0.67	ND	0.063	

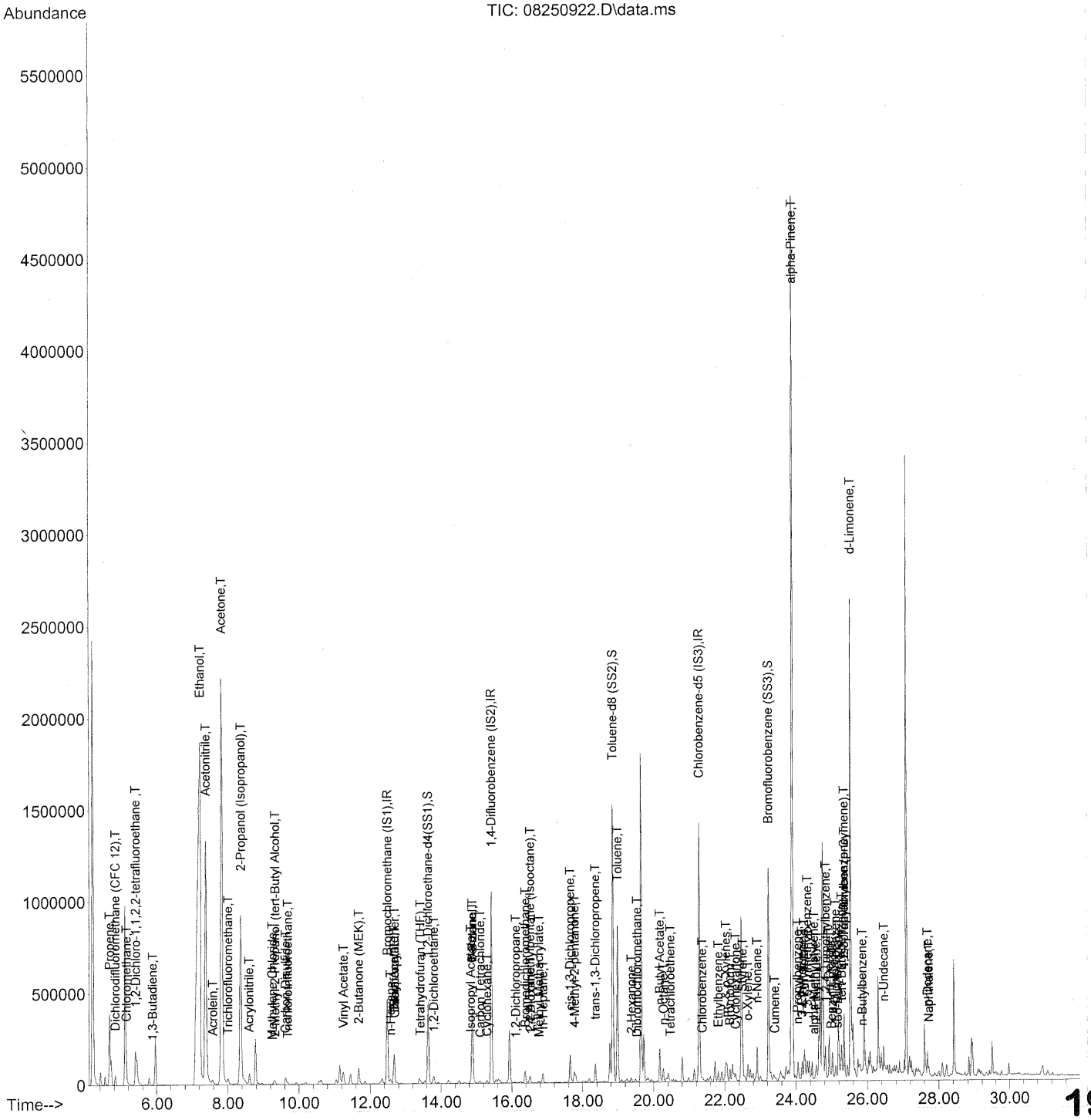
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 01 09:22:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

um 9/1/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	240632	25.000 ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.42	114	1207487	25.000 ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	584510	25.000 ng		-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.63	65	453905	21.702 ng		-0.03
Spiked Amount 25.000			Recovery =	86.80%		
57) Toluene-d8 (SS2)	18.85	98	1315542	25.758 ng		-0.02
Spiked Amount 25.000			Recovery =	103.04%		
73) Bromofluorobenzene (SS3)	23.23	174	383298	28.459 ng		-0.01
Spiked Amount 25.000			Recovery =	113.84%		
Target Compounds						Qvalue
2) Propene	4.67	42	174758m	10.583 ng		
3) Dichlorodifluoromethan...	4.84	85	56597	2.097 ng		99
4) Chloromethane	5.15	50	11093	0.612 ng		100
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	2534	0.231 ng		95
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.88	54	1375	0.110 ng	#	74
8) Bromomethane	6.36	94	209	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.22	45	6863885	655.770 ng		100
11) Acetonitrile	7.38	41	2345822	76.527 ng		100
12) Acrolein	7.57	56	28884	3.625 ng		100
13) Acetone	7.82	58	1447812	146.600 ng		91
14) Trichlorofluoromethane	8.01	101	26482	1.085 ng		100
15) 2-Propanol (Isopropanol)	8.37	45	2011752	51.836 ng		99
16) Acrylonitrile	8.59	53	2102	0.118 ng	#	72
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.33	59	11981	0.348 ng	#	58
19) Methylene Chloride	9.25	84	2392	0.180 ng		89
20) 3-Chloro-1-propene (Al...	9.41	41	425	N.D.		
21) Trichlorotrifluoroethane	9.68	151	4109	0.463 ng		95
22) Carbon Disulfide	9.62	76	92418	1.976 ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.19	73	1245	N.D.		
26) Vinyl Acetate	11.24	86	11563	5.753 ng	#	41
27) 2-Butanone (MEK)	11.68	72	39706	4.453 ng	#	91
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.68	87	3690	0.309 ng	#	1
30) Ethyl Acetate	12.67	61	33944	7.307 ng		97
31) n-Hexane	12.58	57	14517	0.611 ng		96

Sat'd

Quantitation Report (QT Reviewed)

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Quant Time: Sep 01 09:22:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	28564	1.365	ng		94
34) Tetrahydrofuran (THF)	13.41	72	4622	0.486	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.79	62	30051	1.572	ng		96
38) 1,1,1-Trichloroethane	14.18	97	246	N.D.			
39) Isopropyl Acetate	14.84	61	2639	0.295	ng	#	1
40) 1-Butanol	14.88	56	329248	21.010	ng	#	79
41) Benzene	14.88	78	35387	0.667	ng		97
42) Carbon Tetrachloride	15.11	117	6682	0.395	ng		93
43) Cyclohexane	15.29	84	8277	0.426	ng		93
44) tert-Amyl Methyl Ether	16.06	73	298	N.D.			
45) 1,2-Dichloropropane	16.11	63	1578	0.118	ng		84
46) Bromodichloromethane	16.38	83	4849	0.277	ng		93
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.53	88	634	0.062	ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	38230	0.611	ng		88
50) Methyl Methacrylate	16.77	100	932	0.191	ng	#	85
51) n-Heptane	16.88	71	16519	1.159	ng		96
52) cis-1,3-Dichloropropene	17.65	75	115070	5.207	ng		99
53) 4-Methyl-2-pentanone	17.77	58	20936	1.641	ng		97
54) trans-1,3-Dichloropropene	18.36	75	76812	3.656	ng		97
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	18.98	91	774691	15.434	ng		99
59) 2-Hexanone	19.37	43	21551	0.646	ng		98
60) Dibromochloromethane	19.53	129	1740	0.147	ng		90
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	161631	4.108	ng		97
63) n-Octane	20.28	57	15483	1.276	ng		97
64) Tetrachloroethene	20.47	166	1991	0.171	ng		98
65) Chlorobenzene	21.37	112	2143	0.069	ng	#	43
66) Ethylbenzene	21.82	91	48241	0.841	ng		98
67) m- & p-Xylenes	22.04	91	103394	2.228	ng		97
68) Bromoform	22.14	173	962	0.098	ng	#	44
69) Styrene	22.50	104	71733	2.138	ng	#	63
70) o-Xylene	22.65	91	45376	0.975	ng		97
71) n-Nonane	22.91	43	81739	2.643	ng		98
72) 1,1,2,2-Tetrachloroethane	22.65	83	814	N.D.			
74) Cumene	23.41	105	6801	0.116	ng		94
75) alpha-Pinene	23.90	93	2281771	75.723	ng		79
76) n-Propylbenzene	24.05	91	18729	0.253	ng	#	66
77) 3-Ethyltoluene	24.17	105	46618	0.830	ng		98
78) 4-Ethyltoluene	24.23	105	24689	0.454	ng		95
79) 1,3,5-Trimethylbenzene	24.31	105	23721	0.517	ng		90

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ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 01 09:22:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	1848	0.075	ng		83
81) 2-Ethyltoluene	24.56	105	21765	0.384	ng		99
82) 1,2,4-Trimethylbenzene	24.83	105	75549	1.614	ng		89
83) n-Decane	24.93	57	94052	3.090	ng		91
84) Benzyl Chloride	24.99	91	2800	0.064	ng		82
85) 1,3-Dichlorobenzene	25.02	146	351	N.D.			
86) 1,4-Dichlorobenzene	25.10	146	5165	0.204	ng		96
87) sec-Butylbenzene	25.17	105	5498	0.087	ng	#	73
88) 4-Isopropyltoluene (p-...	25.35	119	158967	2.819	ng		95
89) 1,2,3-Trimethylbenzene	25.35	105	30182	0.633	ng	#	49
90) 1,2-Dichlorobenzene	25.53	146	632	N.D.			
91) d-Limonene	25.53	68	679724	34.139	ng	#	72
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.46	57	49717	1.535	ng		74
94) 1,2,4-Trichlorobenzene	27.58	180	501	N.D.			
95) Naphthalene	27.72	128	29642	0.466	ng		96
96) n-Dodecane	27.69	57	42721	1.135	ng		98
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.30	55	22232	1.069	ng		94
99) tert-Butylbenzene	25.27	119	6903	0.152	ng		98
100) n-Butylbenzene	25.86	91	13580	0.260	ng	#	56

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

Quantitation Report (Qedit)

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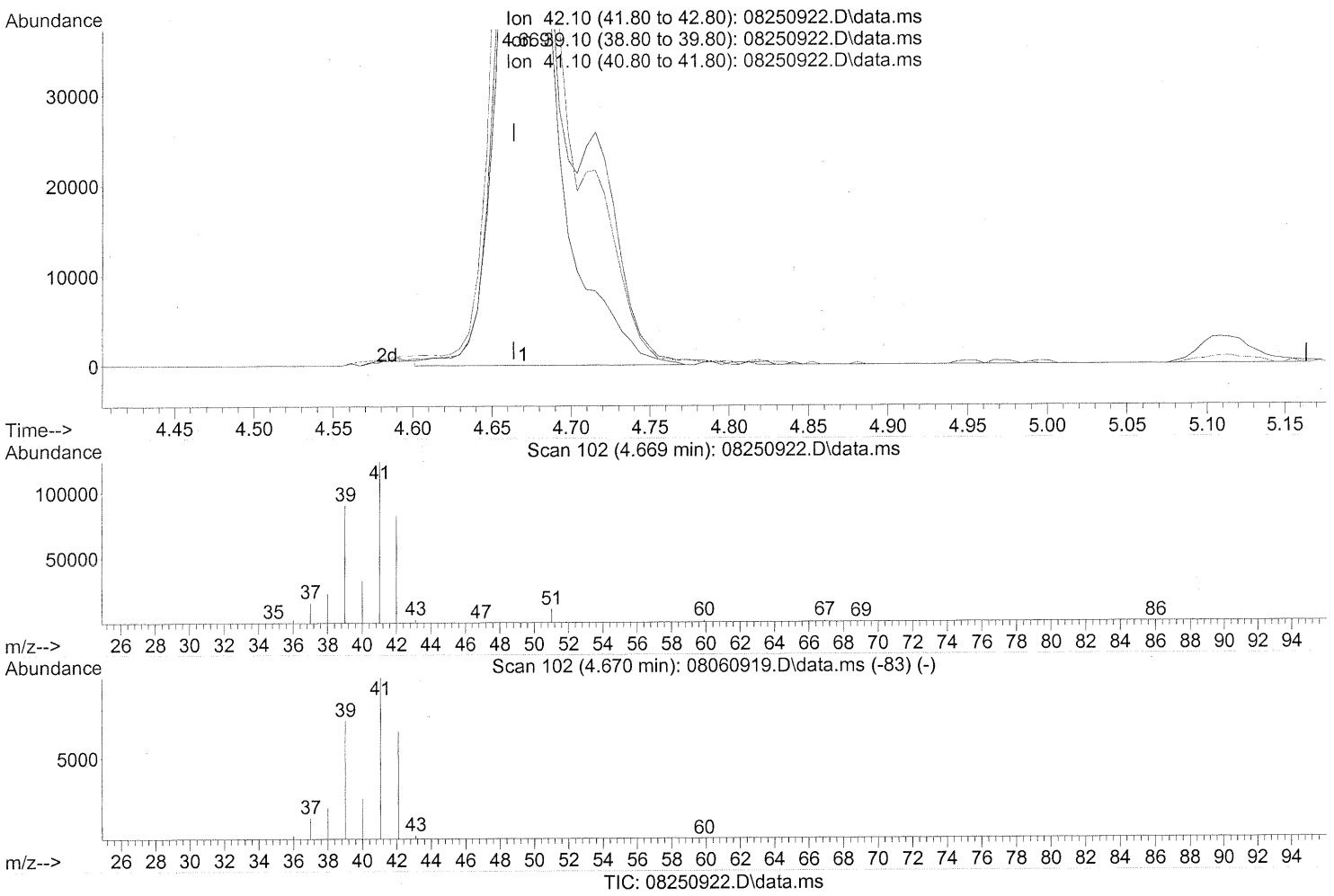
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(2) Propene (T)

4.669min (+0.006) 11.20ng

response 185023

SH

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	127.85
41.10	150.20	160.52
0.00	0.00	0.00

Quantitation Report (Qedit)

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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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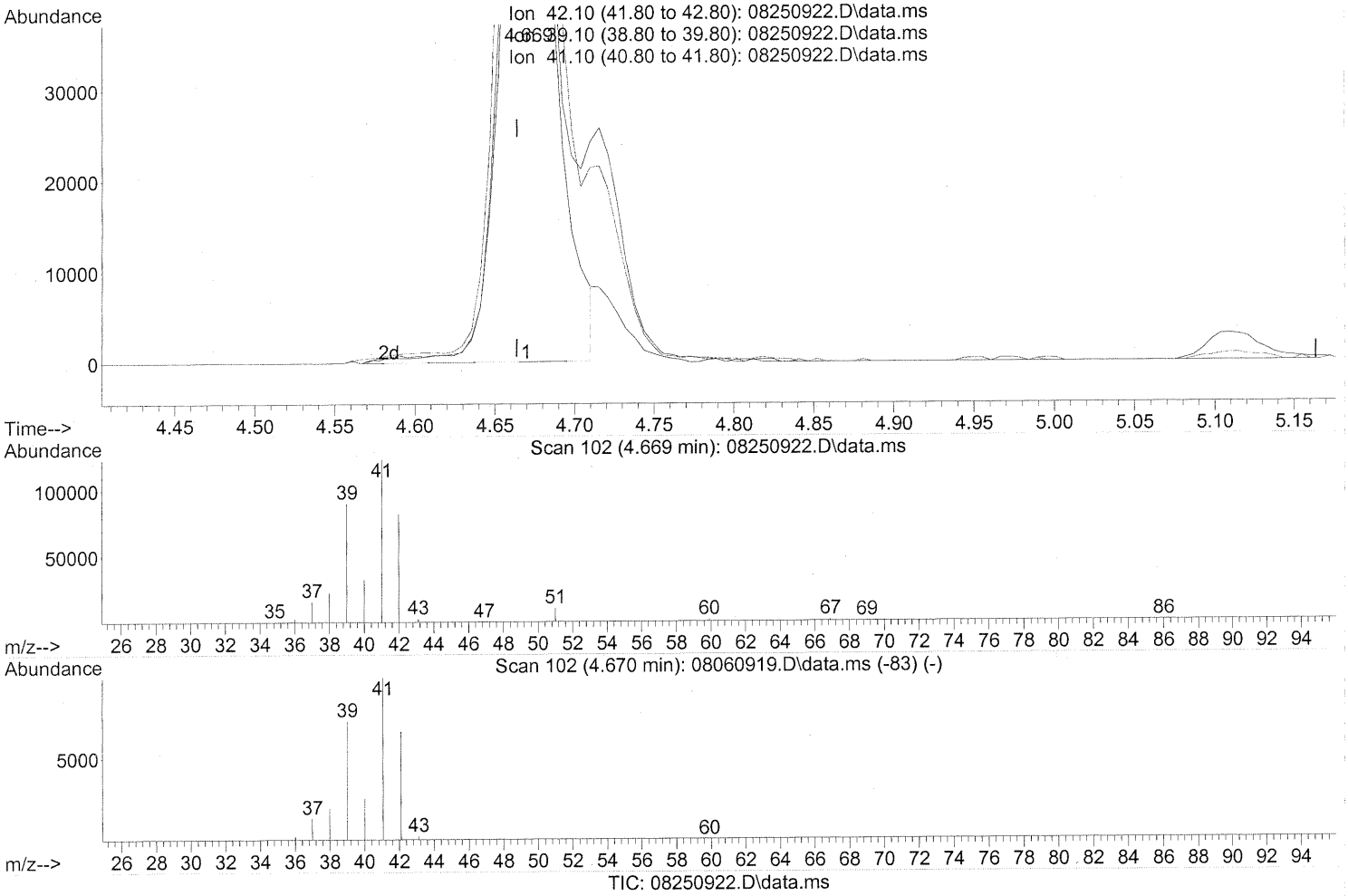

(2) Propene (T)

4.669min (+0.006) 10.58ng m

response 174758

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	135.36#
41.10	150.20	169.95
0.00	0.00	0.00

SH->IC
VM911109

9/2/09

195

Quantitation Report (Qedit)

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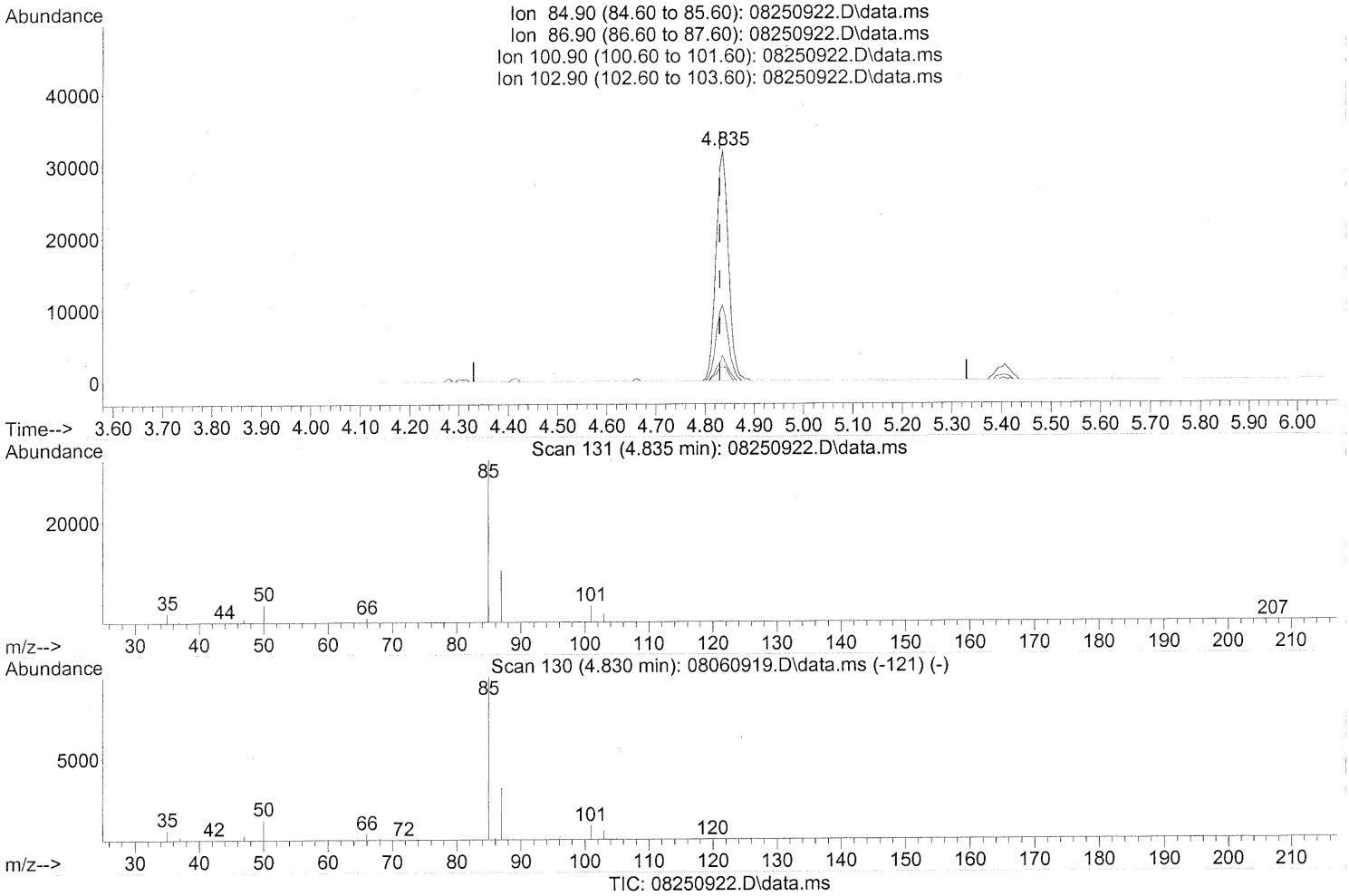

(3) Dichlorodifluoromethane (CFC 12) (T)

4.835min (+0.006) 2.10ng

response 56597

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.56
100.90	8.80	9.05
102.90	5.20	5.64

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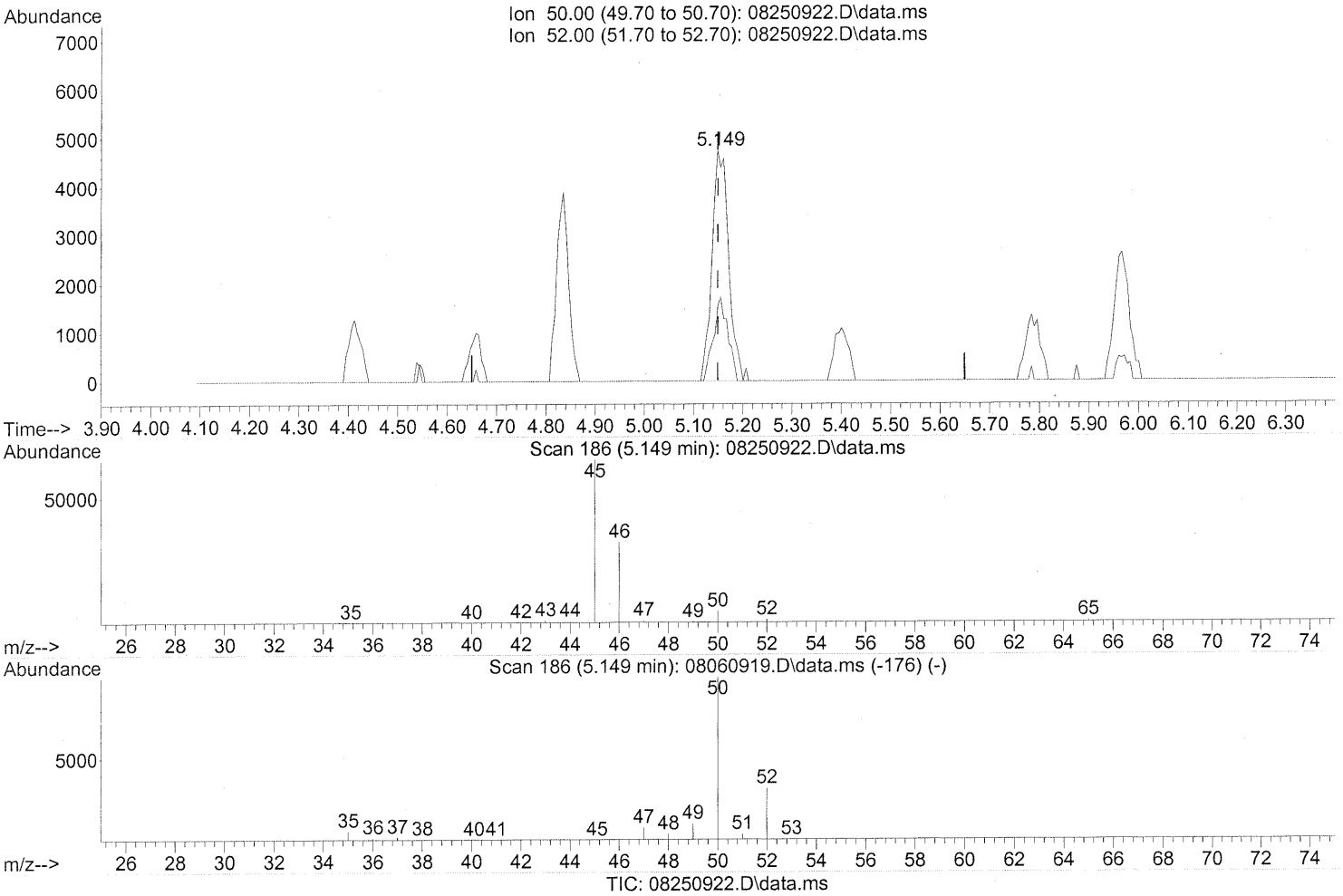

(4) Chloromethane (T)

5.149min (-0.000) 0.61ng

response 11093

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	31.52
0.00	0.00	0.00
0.00	0.00	0.00

Before subtr.

197

Quantitation Report (Qedit)

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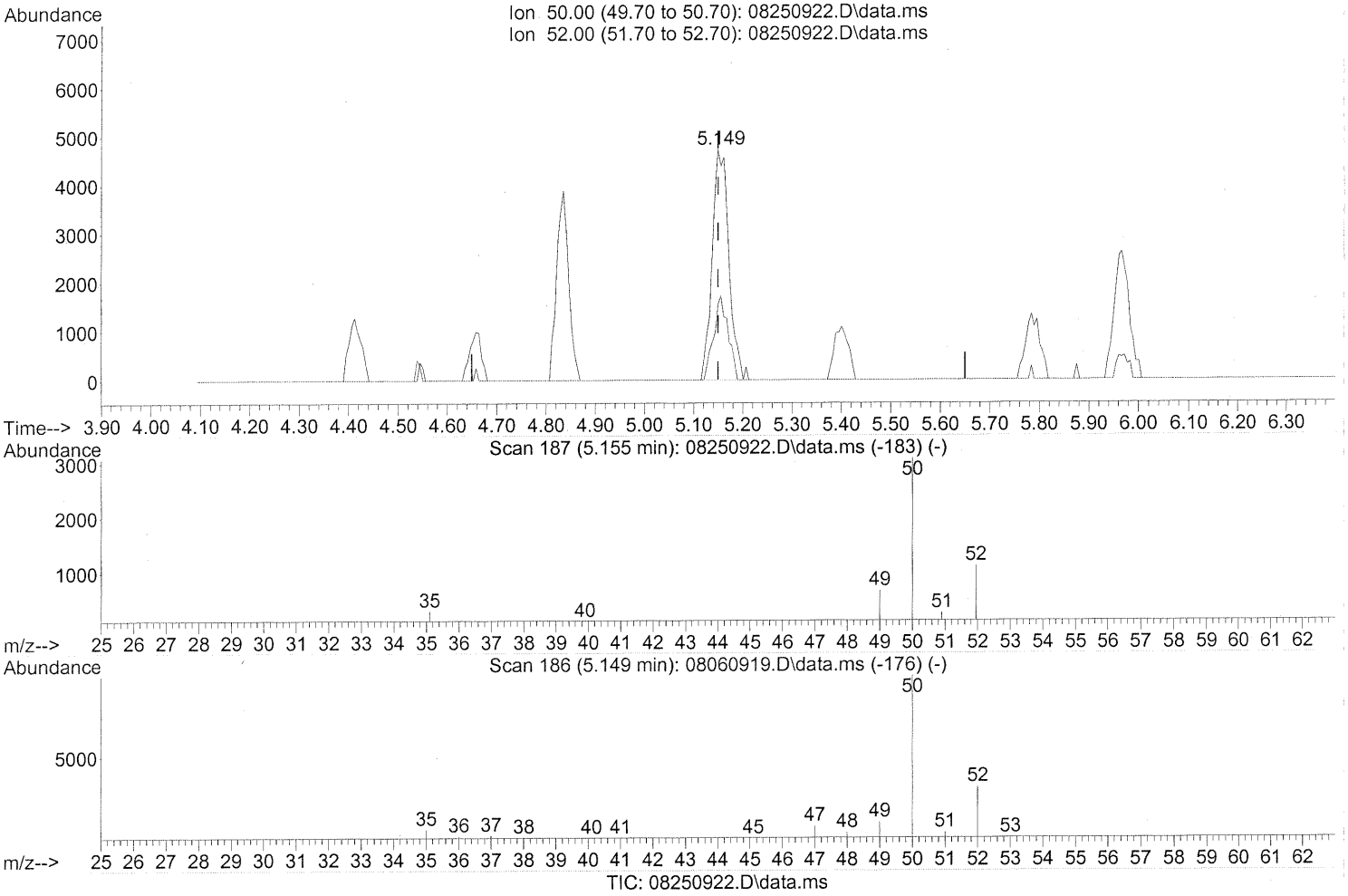

(4) Chloromethane (T)

5.149min (-0.000) 0.61ng

response 11093

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	31.52
0.00	0.00	0.00
0.00	0.00	0.00

after scrubber.

198

Quantitation Report (Qedit)

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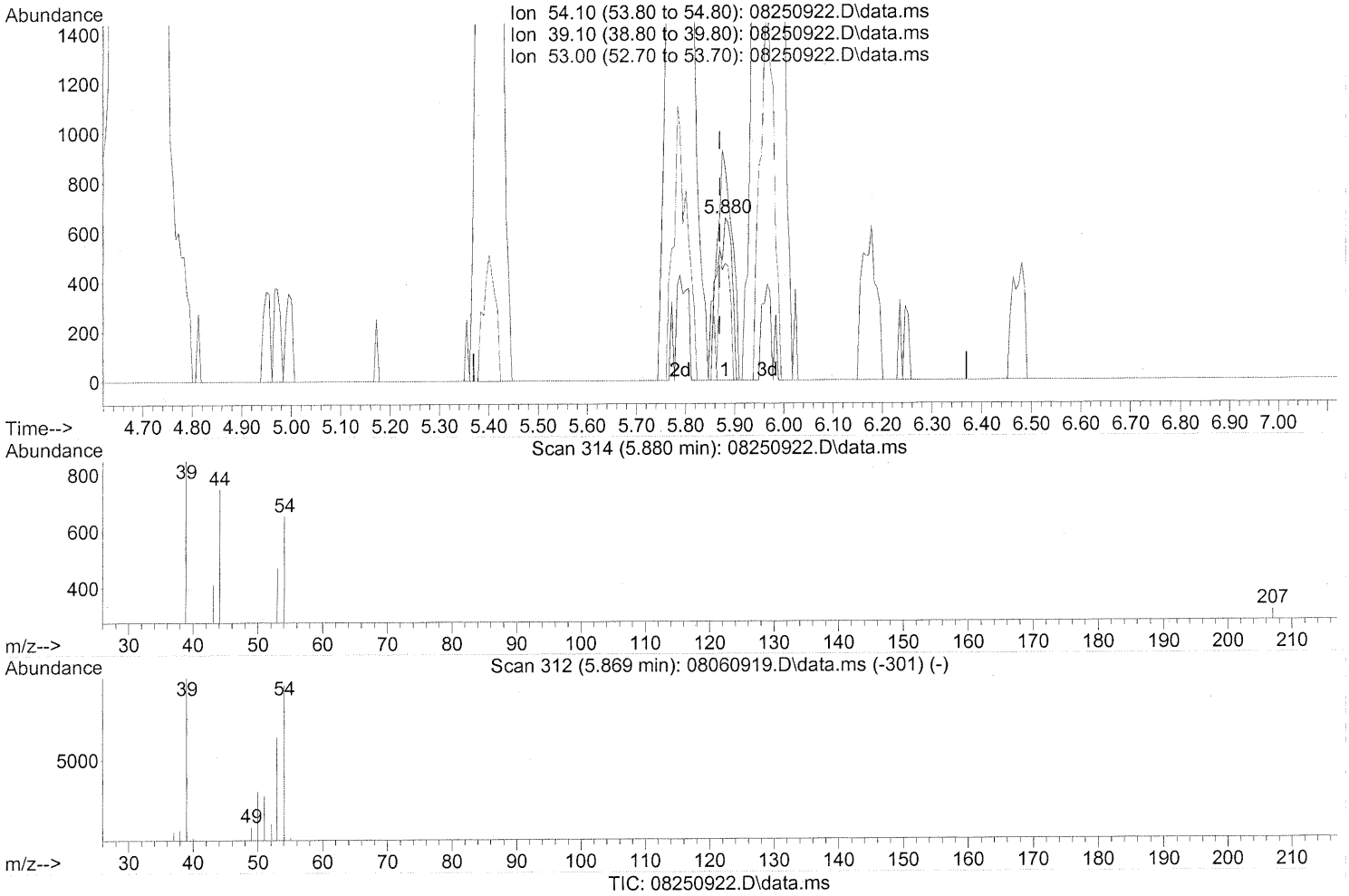

(7) 1,3-Butadiene (T)

5.880min (+0.011) 0.11ng

response 1375

Ion	Exp%	Act%
54.10	100	100
39.10	106.70	147.05#
53.00	69.50	63.64
0.00	0.00	0.00

199

Quantitation Report (Qedit)

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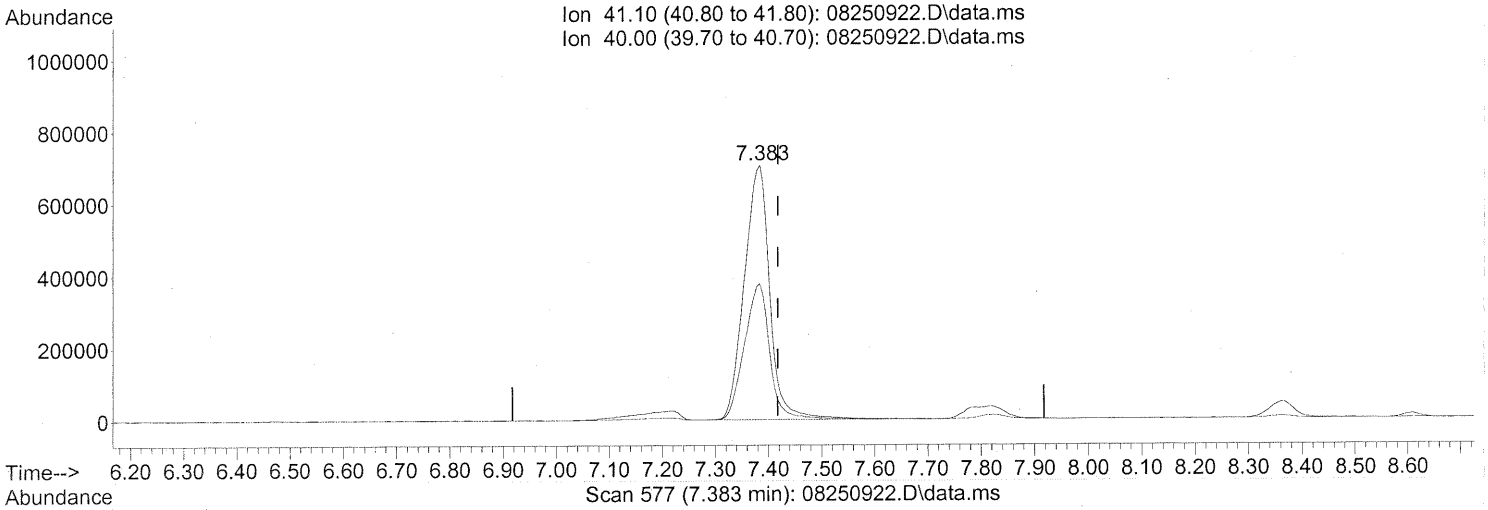

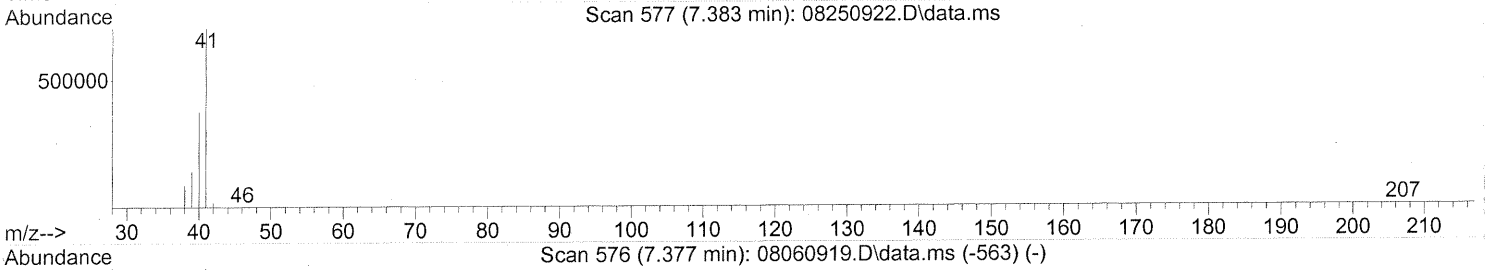

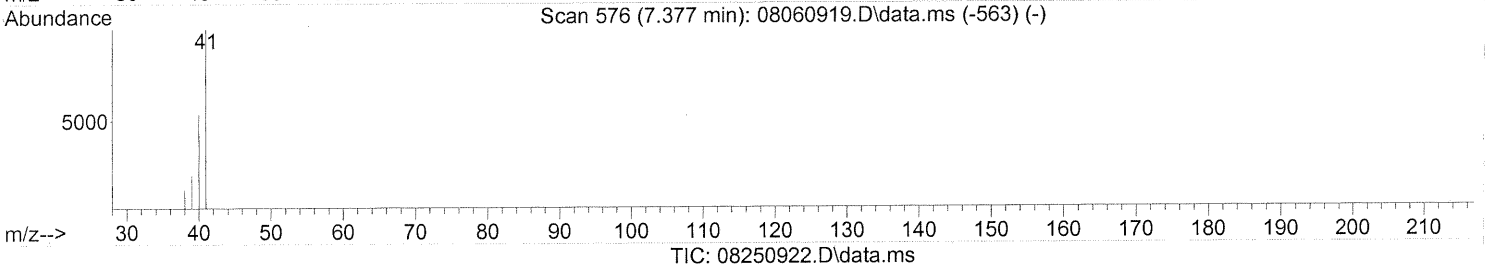

(11) Acetonitrile (T)

7.383min (-0.034) 76.53ng

response 2345822

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.47
0.00	0.00	0.00
0.00	0.00	0.00

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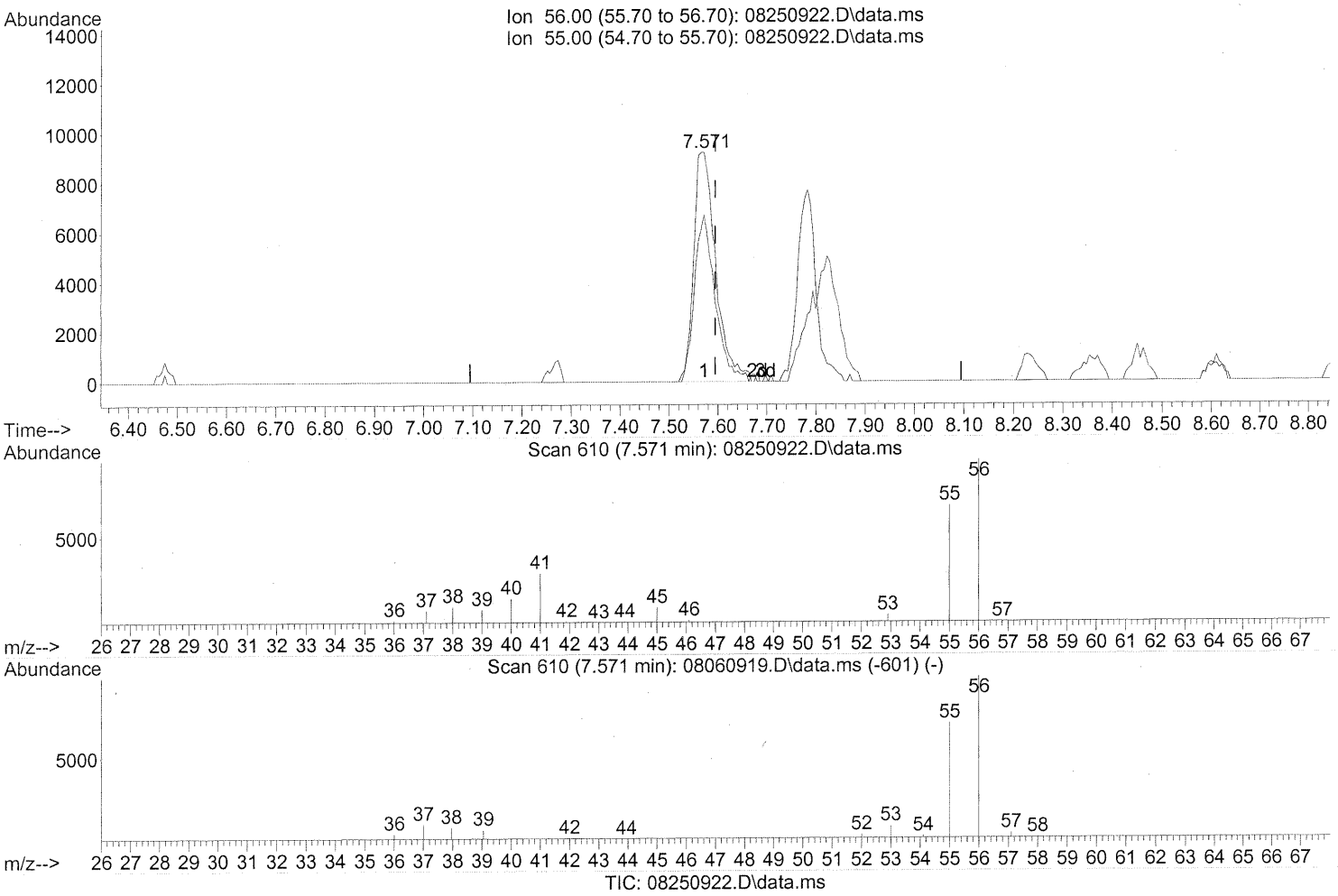

TIC: 08250922.D\data.ms

(12) Acrolein (T)

7.571min (-0.023) 3.63ng

response 28884

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	68.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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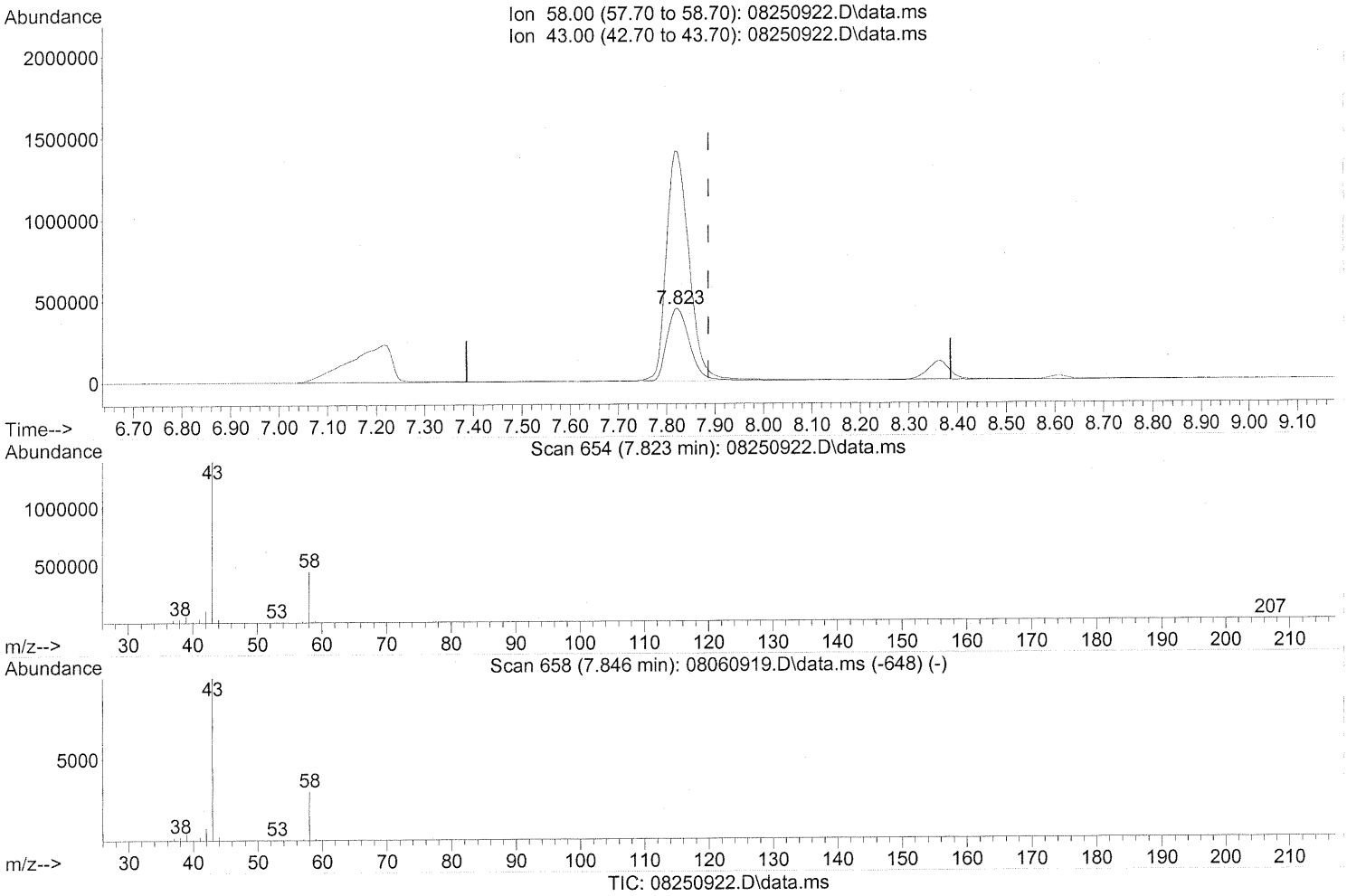
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(13) Acetone (T)

7.823min (-0.063) 146.60ng

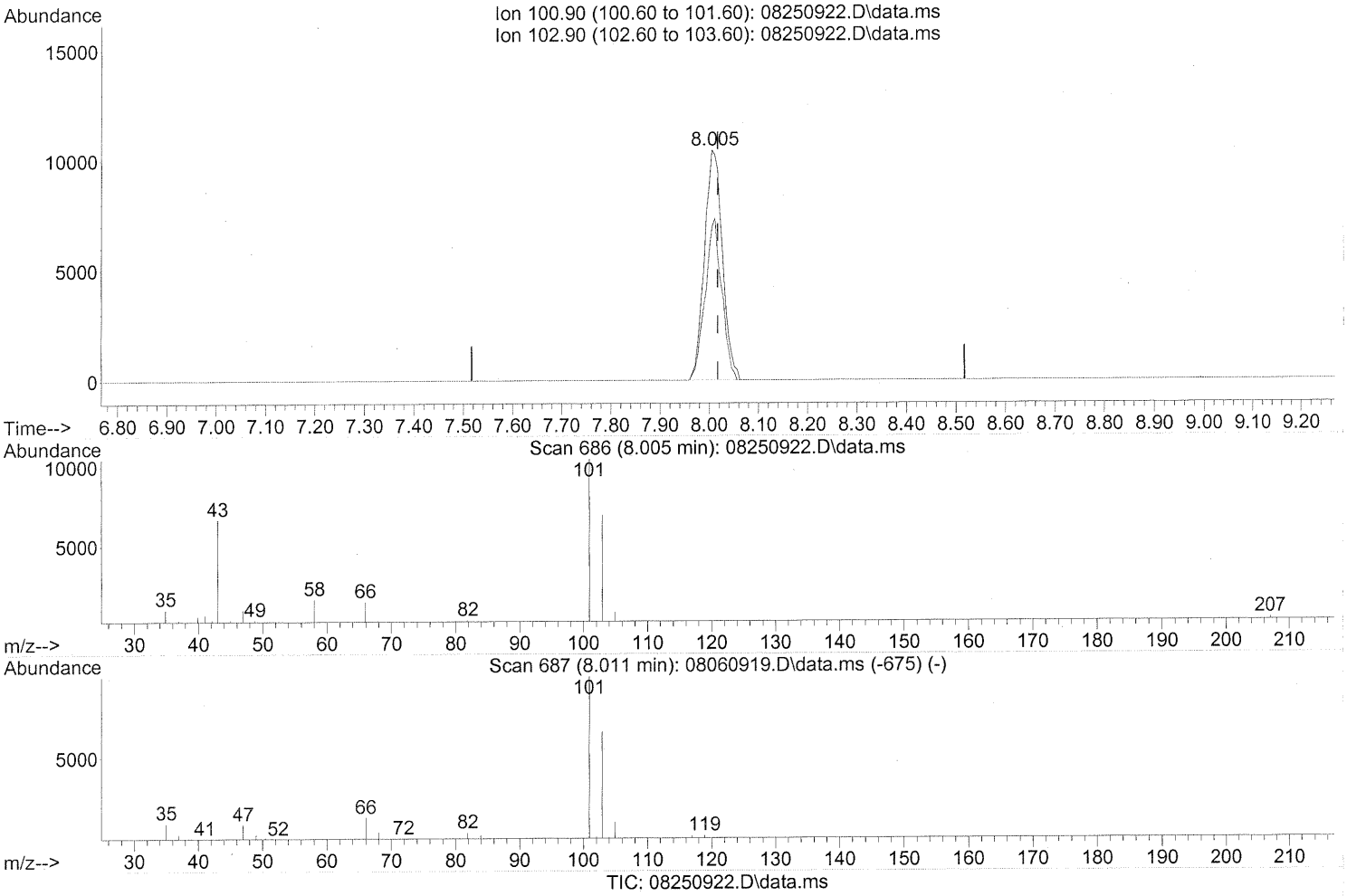
response 1447812

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	322.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(14) Trichlorofluoromethane (T)

8.005min (-0.011) 1.09ng

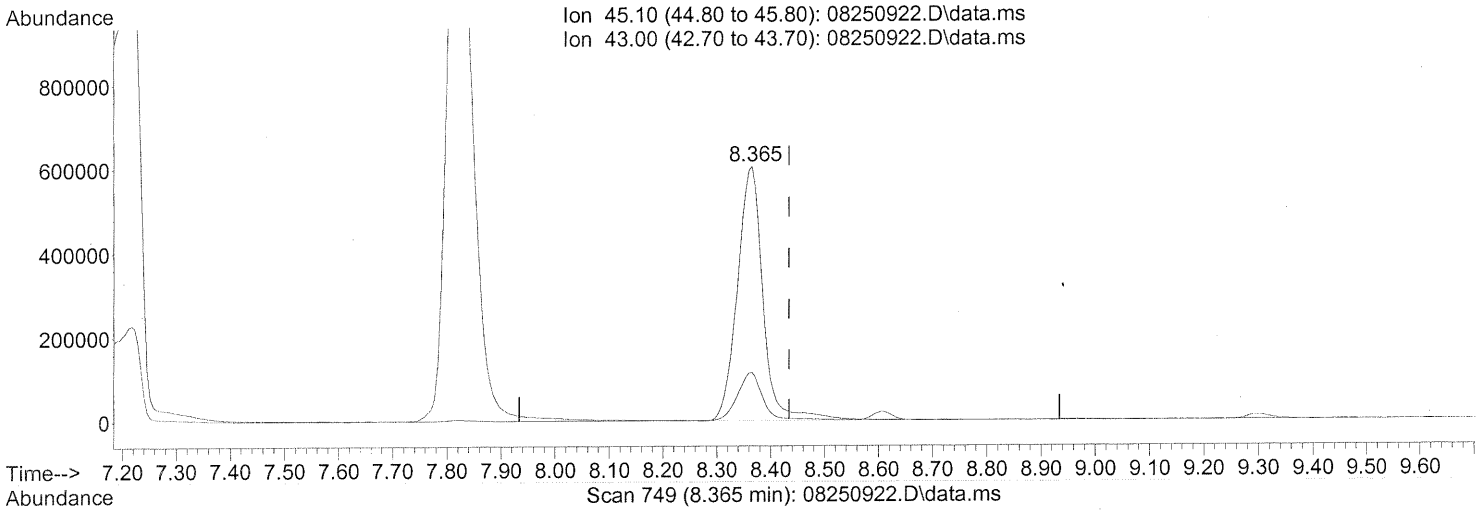
response 26482

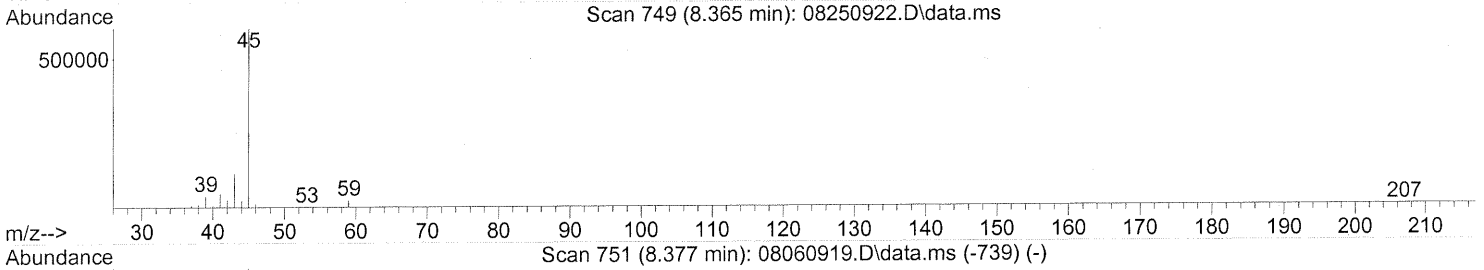
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.59
0.00	0.00	0.00
0.00	0.00	0.00

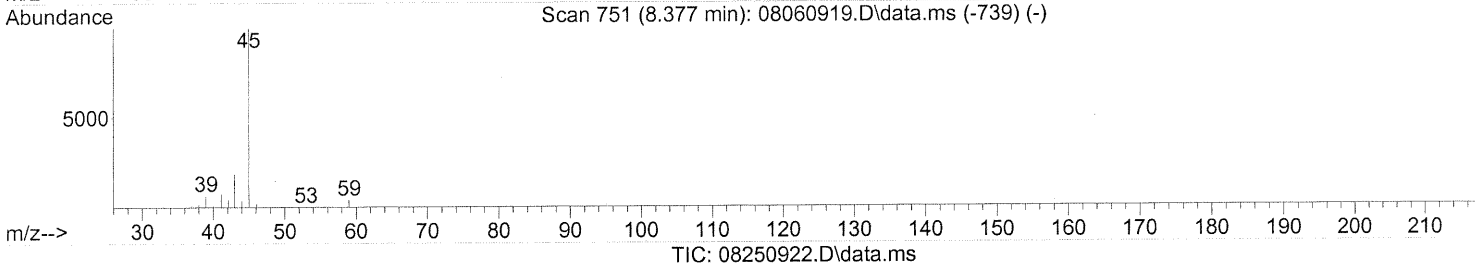
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







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

8.365min (-0.069) 51.84ng

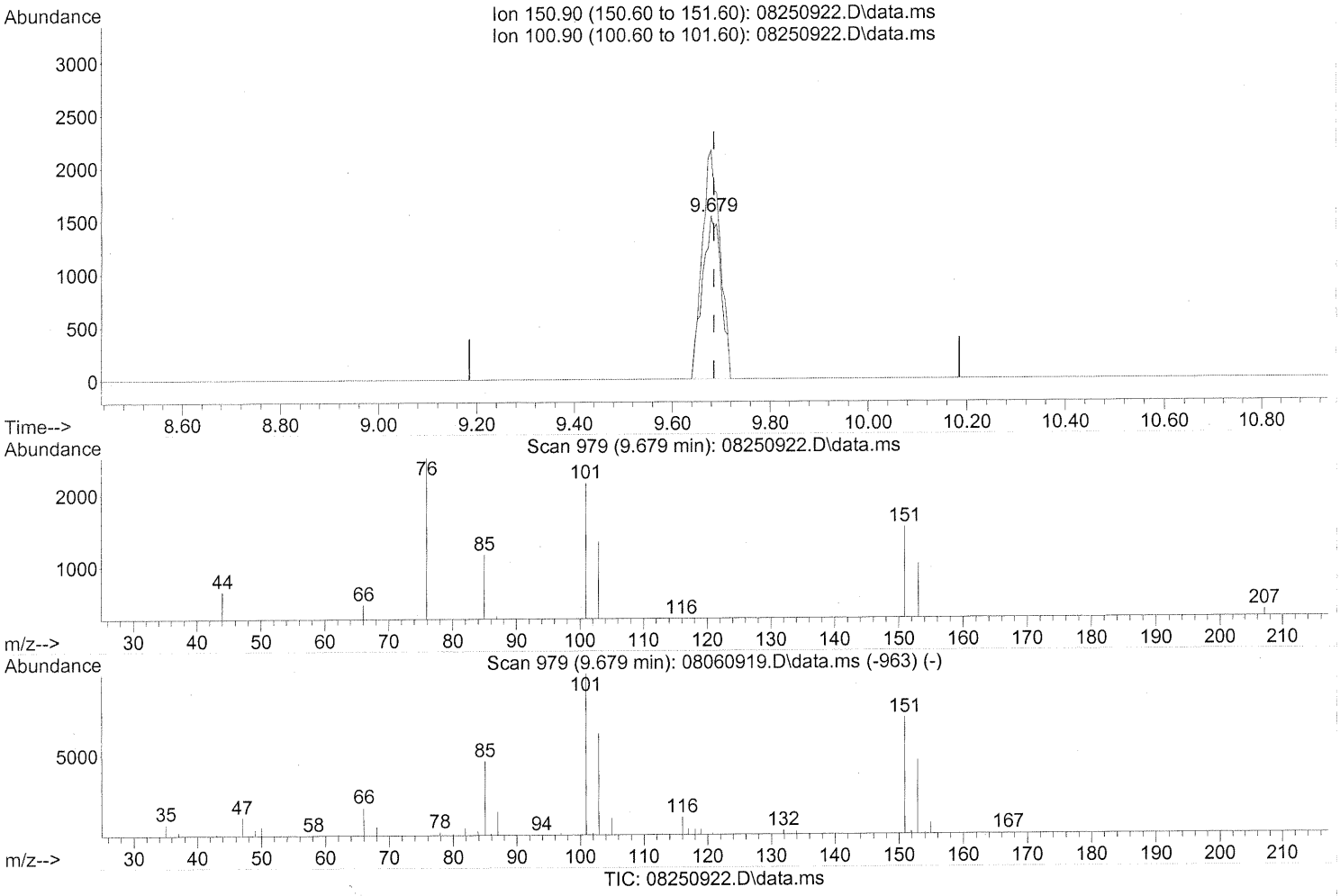
response 2011752

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.46ng

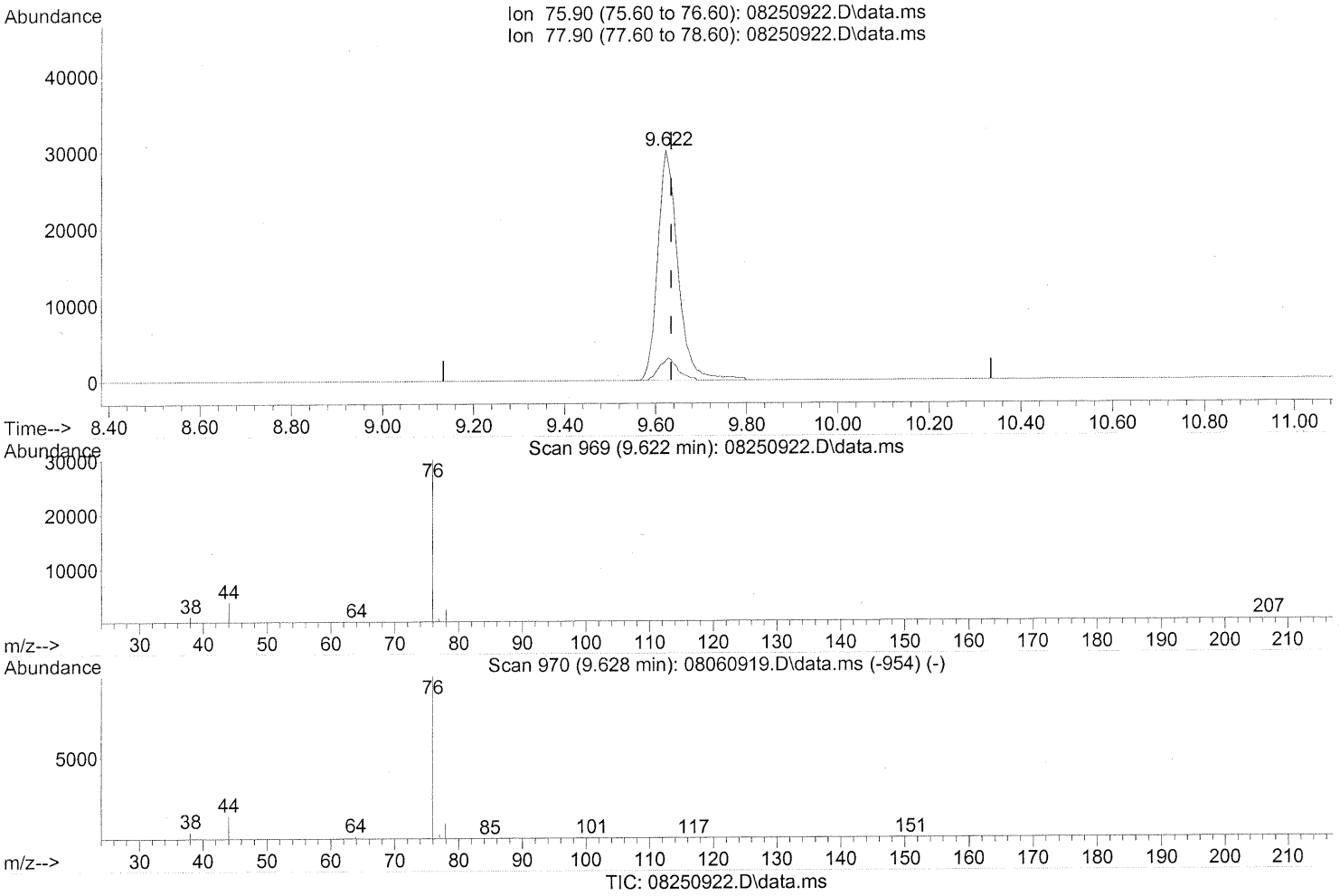
response 4109

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	132.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(22) Carbon Disulfide (T)

9.622min (-0.011) 1.98ng

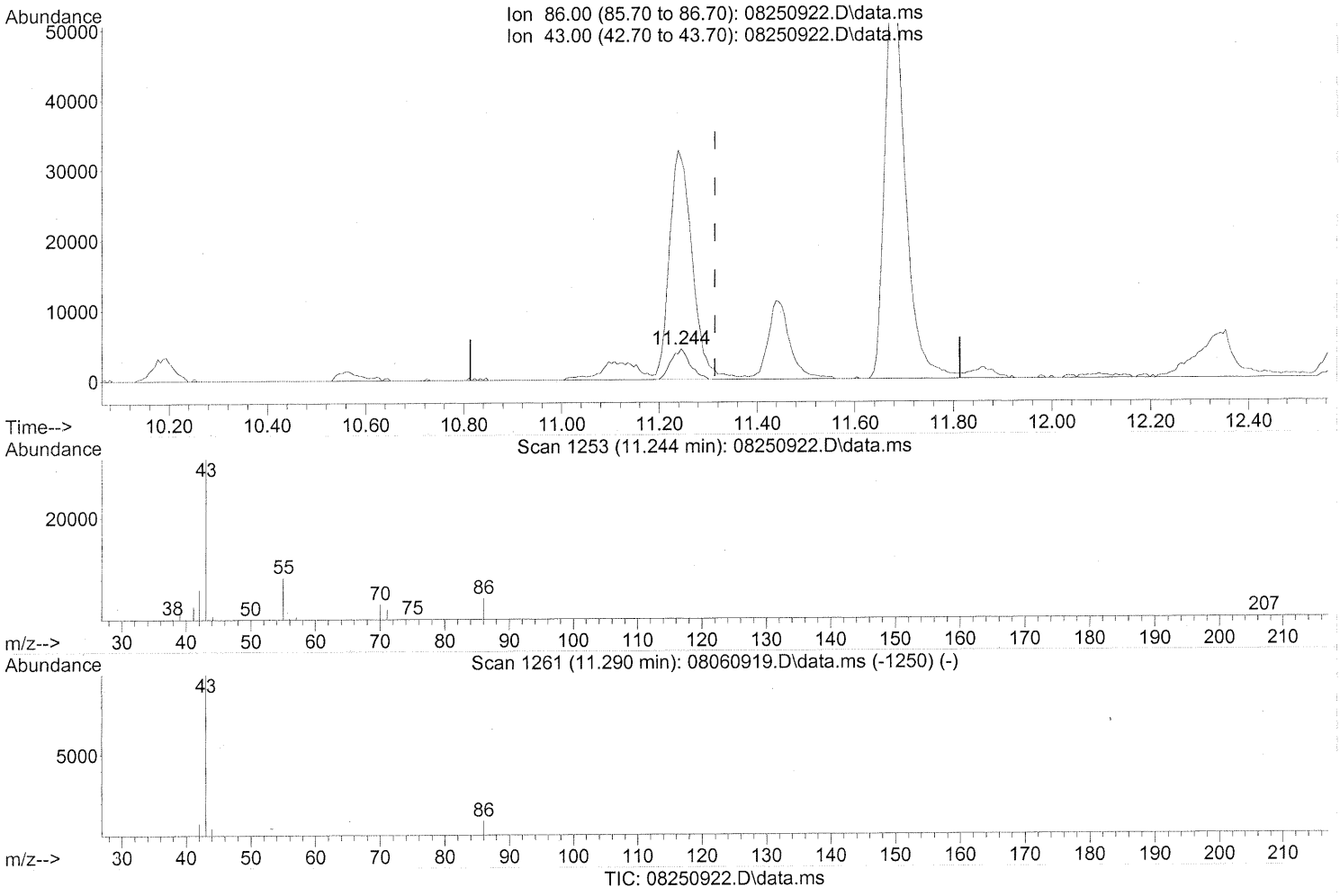
response 92418

Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(26) Vinyl Acetate (T)

11.244min (-0.069) 5.75ng

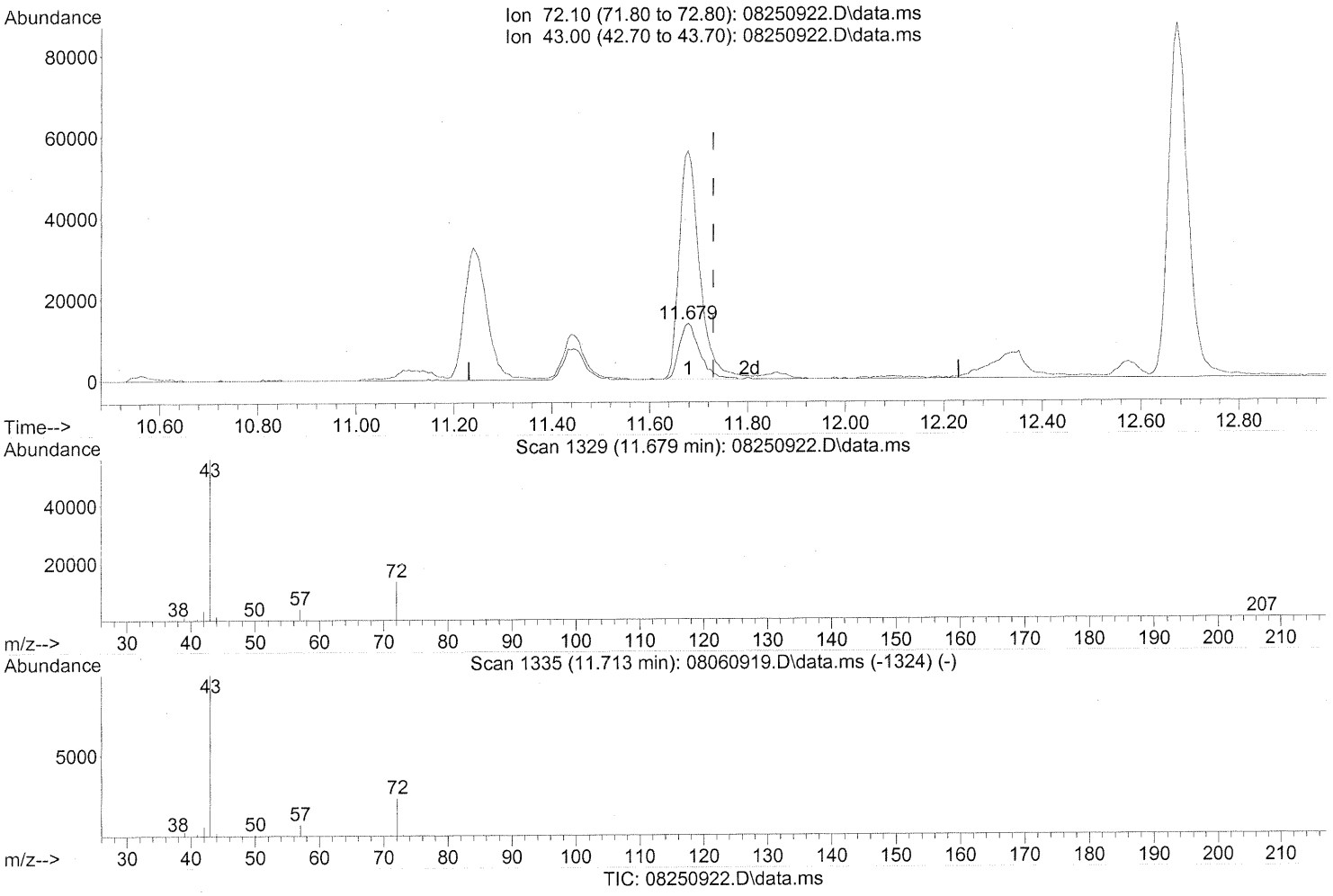
response 11563

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	910.03#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

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

11.679min (-0.051) 4.45ng

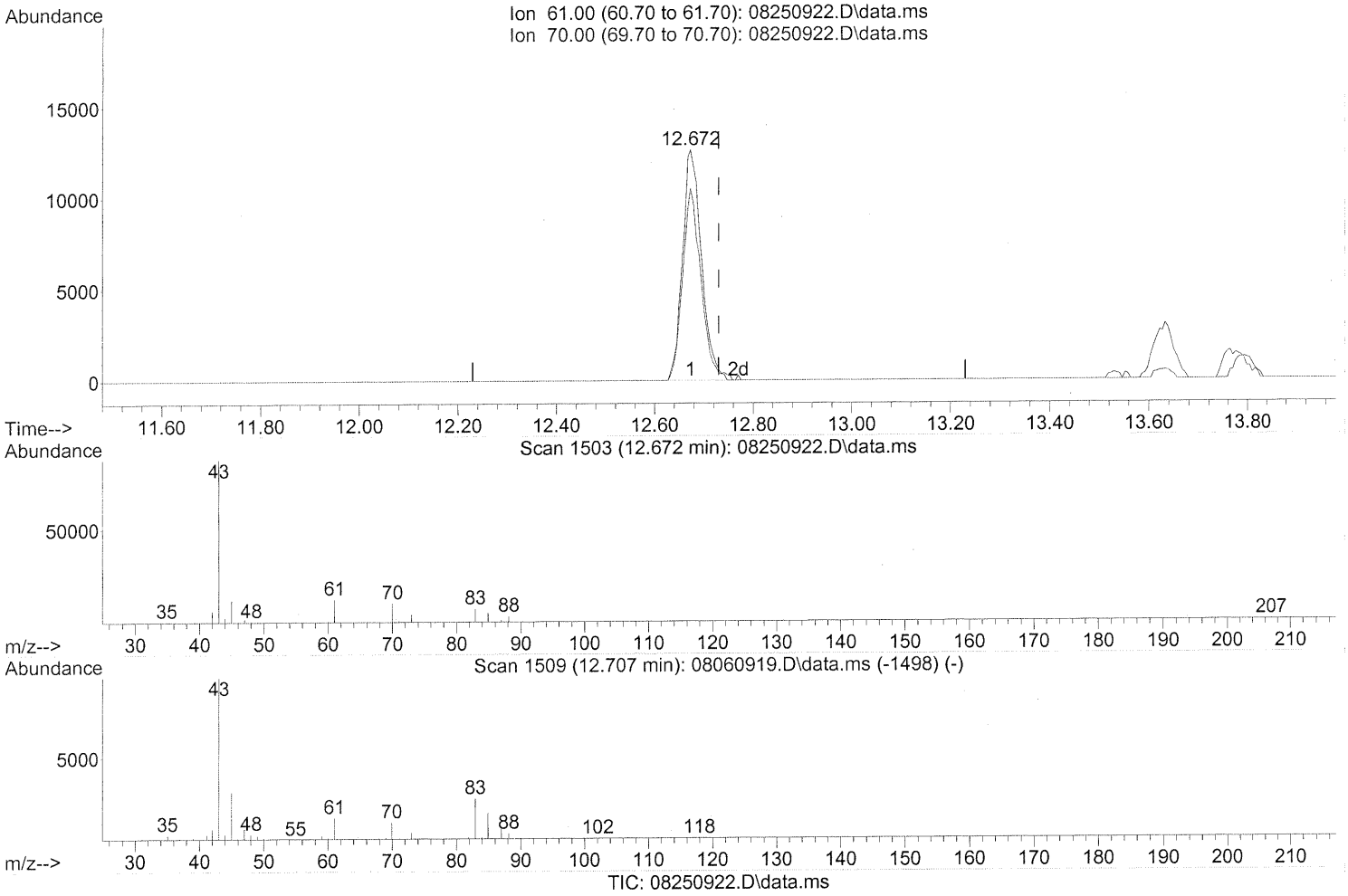
response 39706

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	414.57#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(30) Ethyl Acetate (T)

12.672min (-0.057) 7.31ng

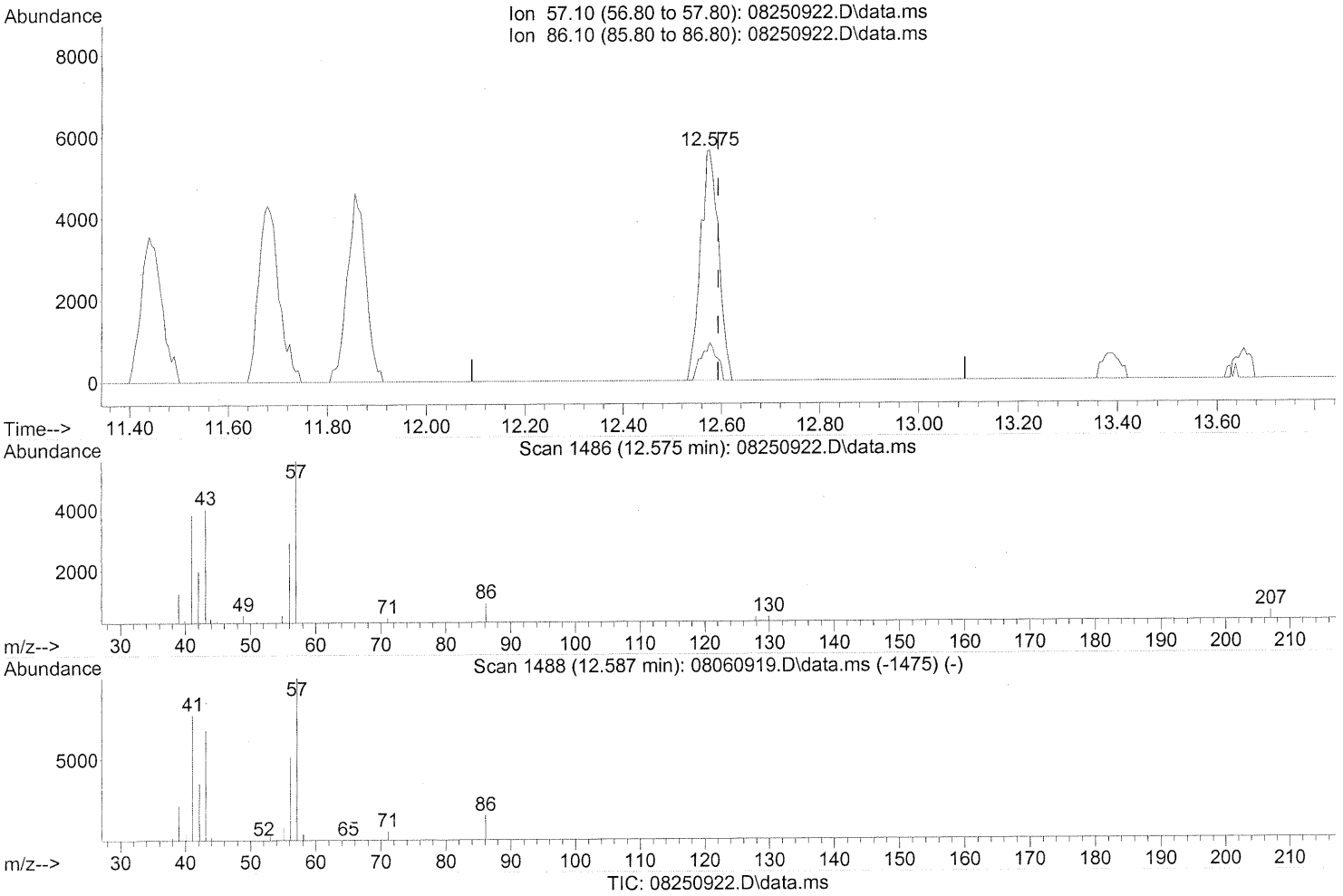
response 33944

Ion	Exp%	Act%
61.00	100	100
70.00	82.00	79.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(31) n-Hexane (T)

12.575min (-0.017) 0.61ng

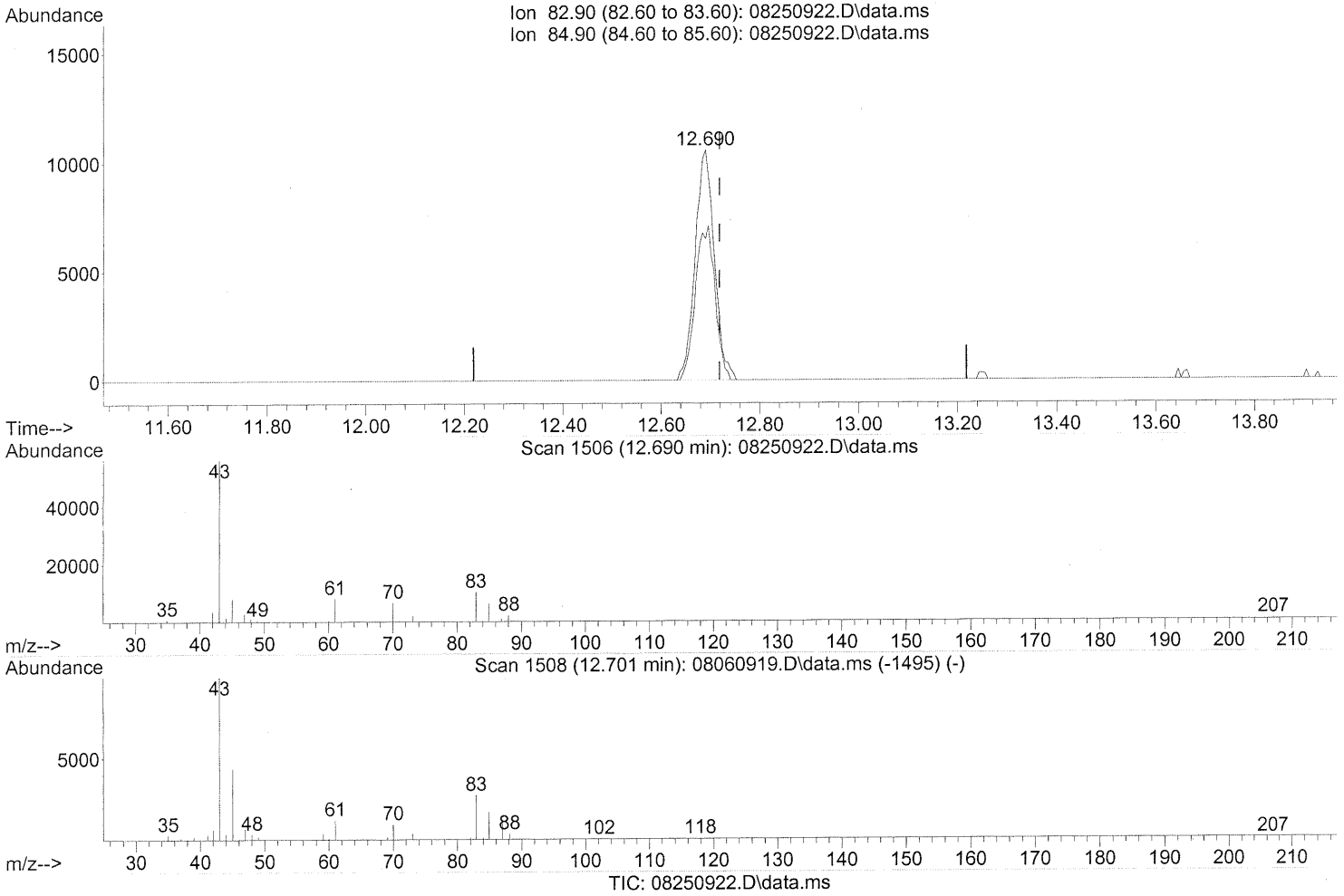
response 14517

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	14.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(32) Chloroform (T)

12.690min (-0.029) 1.37ng

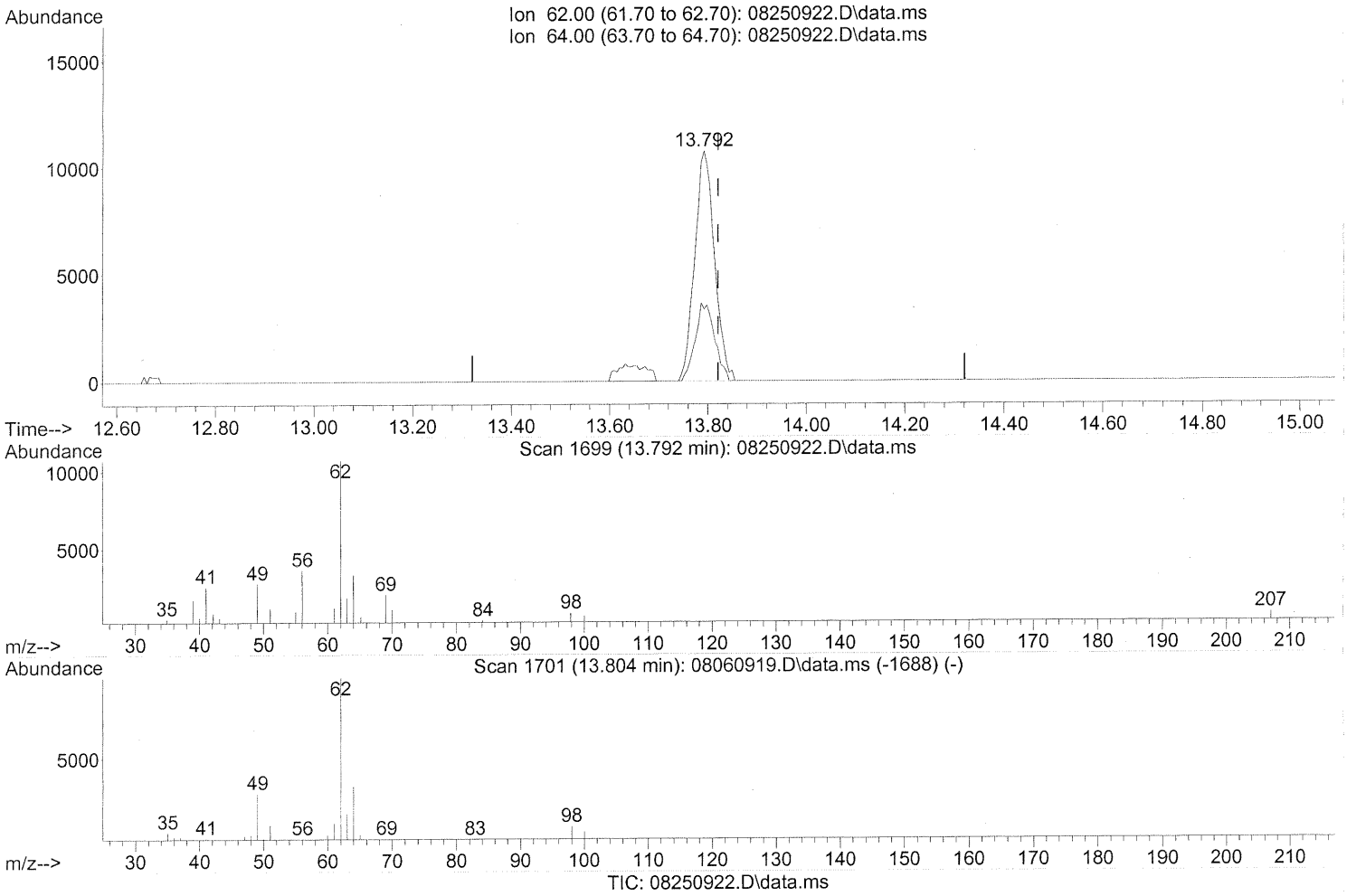
response 28564

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	68.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.57ng

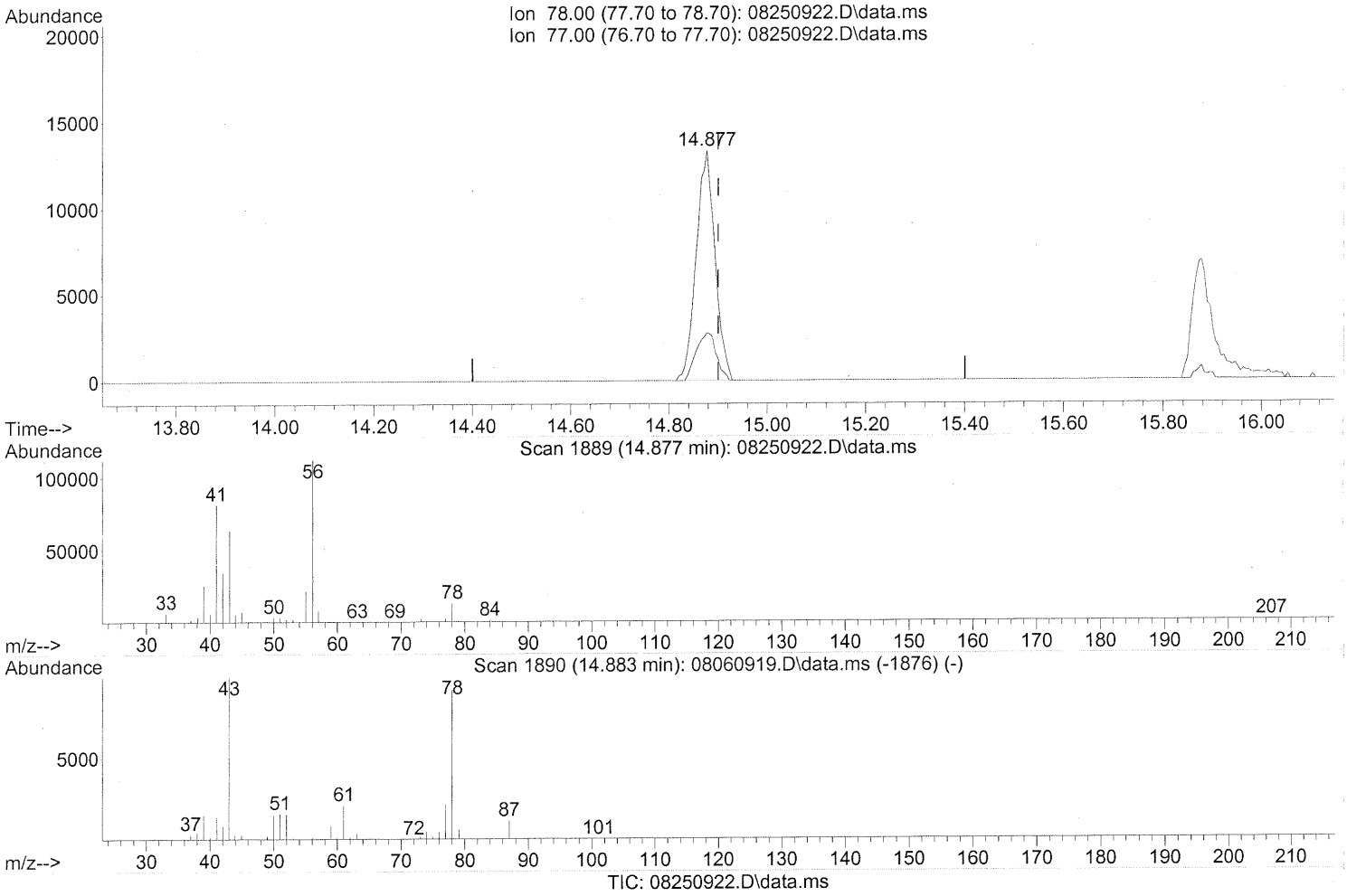
response 30051

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	33.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(41) Benzene (T)

14.877min (-0.023) 0.67ng

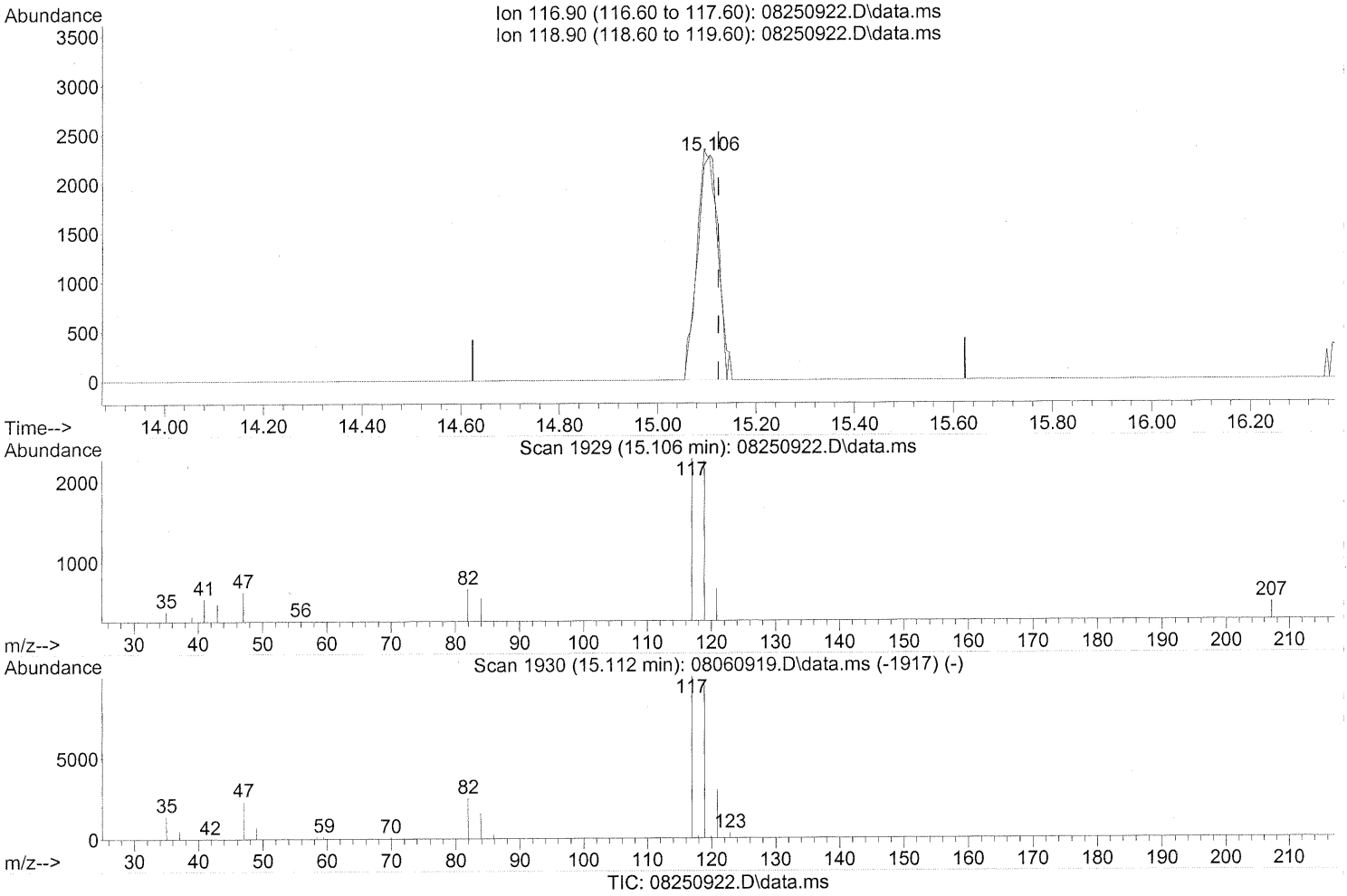
response 35387

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	22.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(42) Carbon Tetrachloride (T)

15.106min (-0.017) 0.39ng

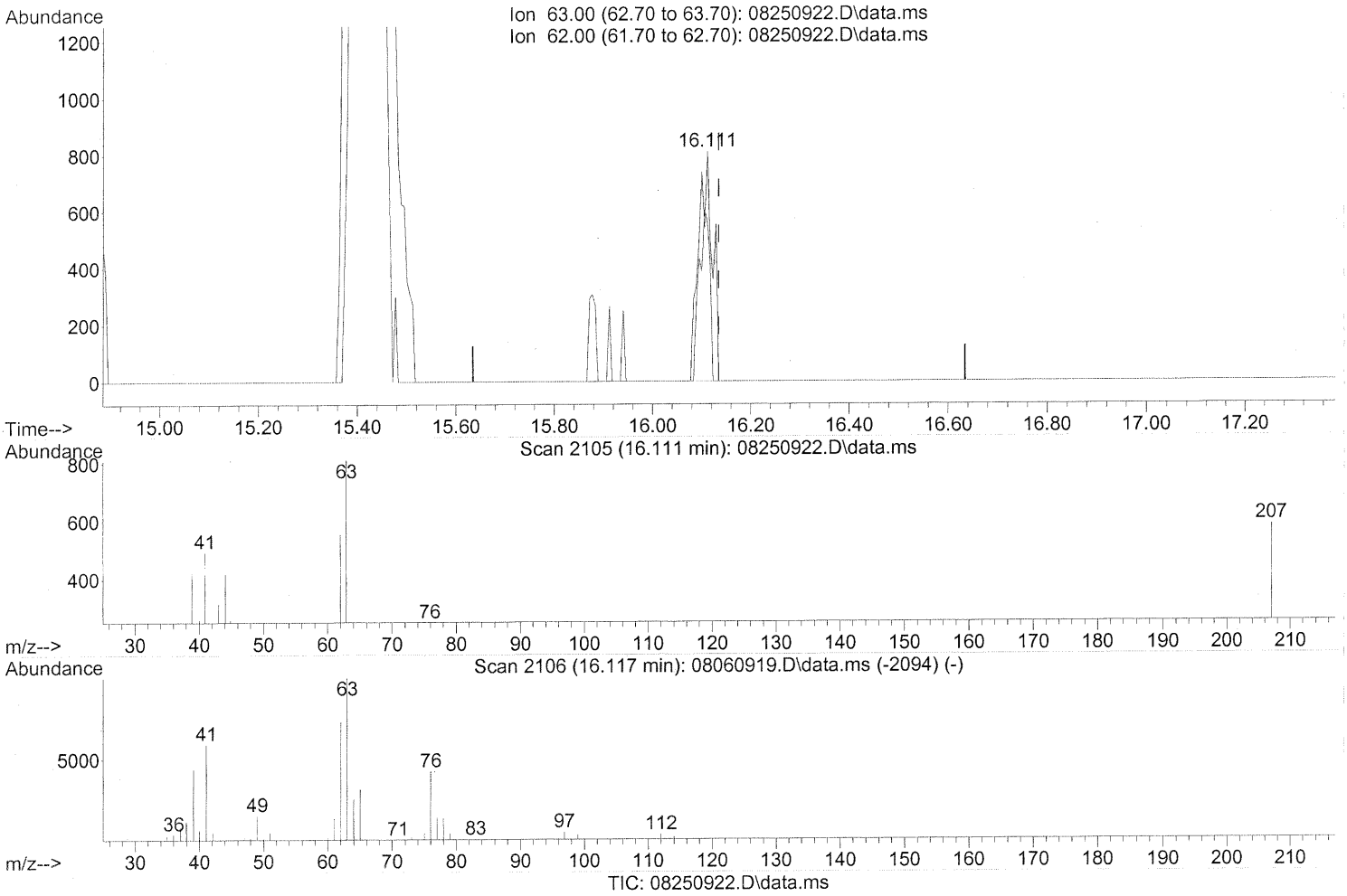
response 6682

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	104.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(45) 1,2-Dichloropropane (T)

16.111min (-0.023) 0.12ng

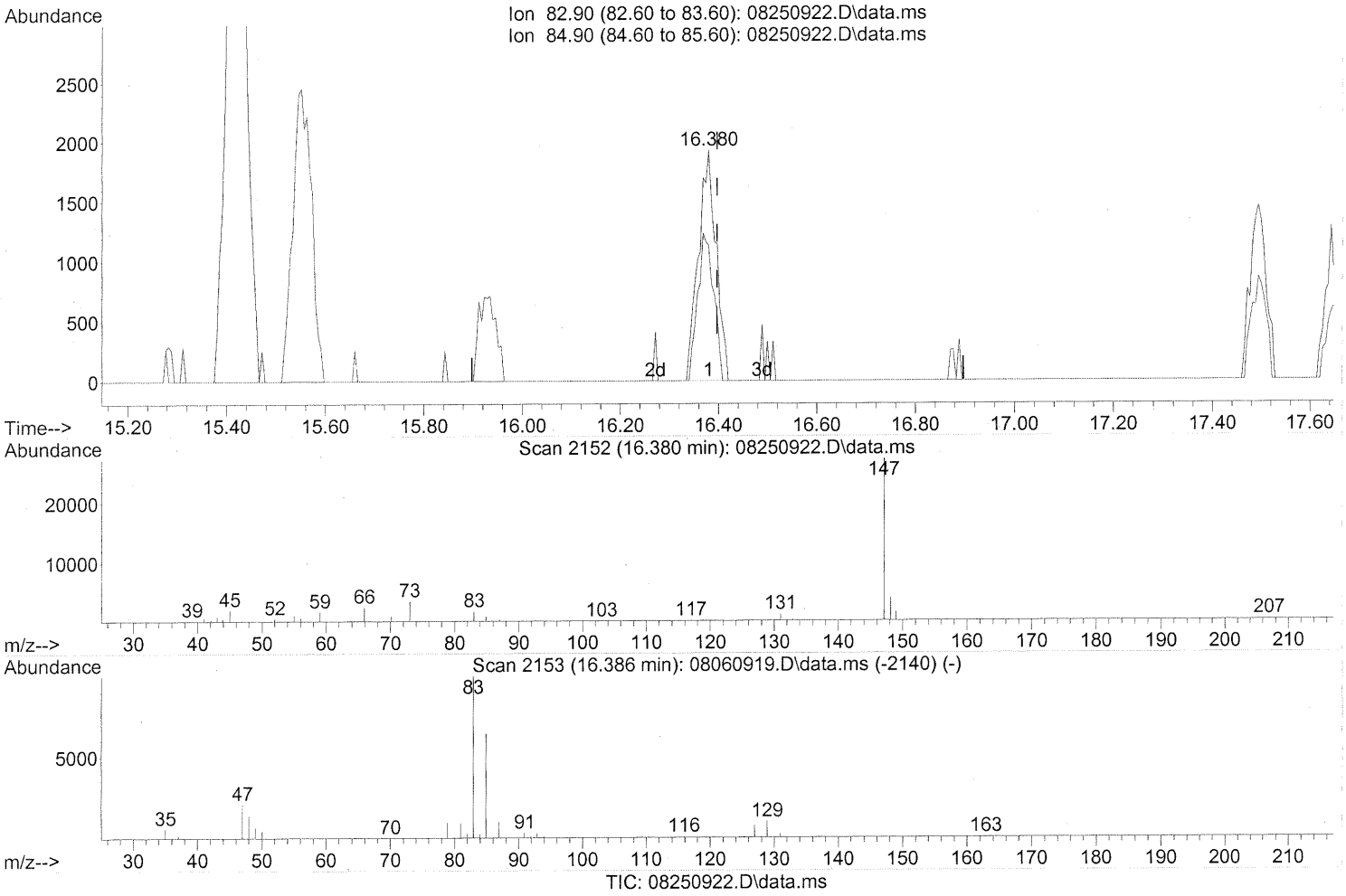
response 1578

Ion	Exp%	Act%
63.00	100	100
62.00	71.20	57.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(46) Bromodichloromethane (T)

16.380min (-0.017) 0.28ng

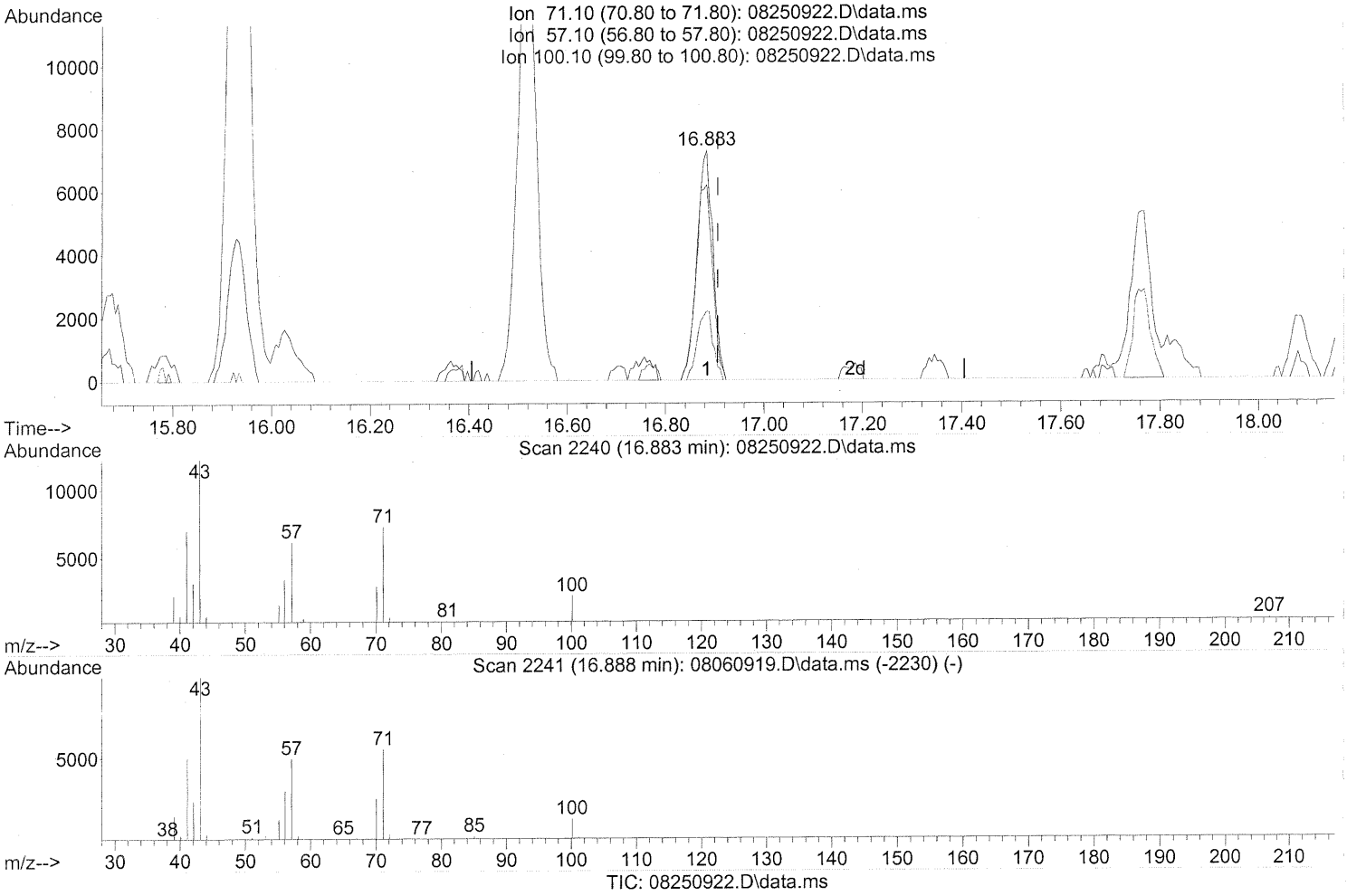
response 4849

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	57.72
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(51) n-Heptane (T)

16.883min (-0.023) 1.16ng

response 16519

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	88.16
100.10	26.40	29.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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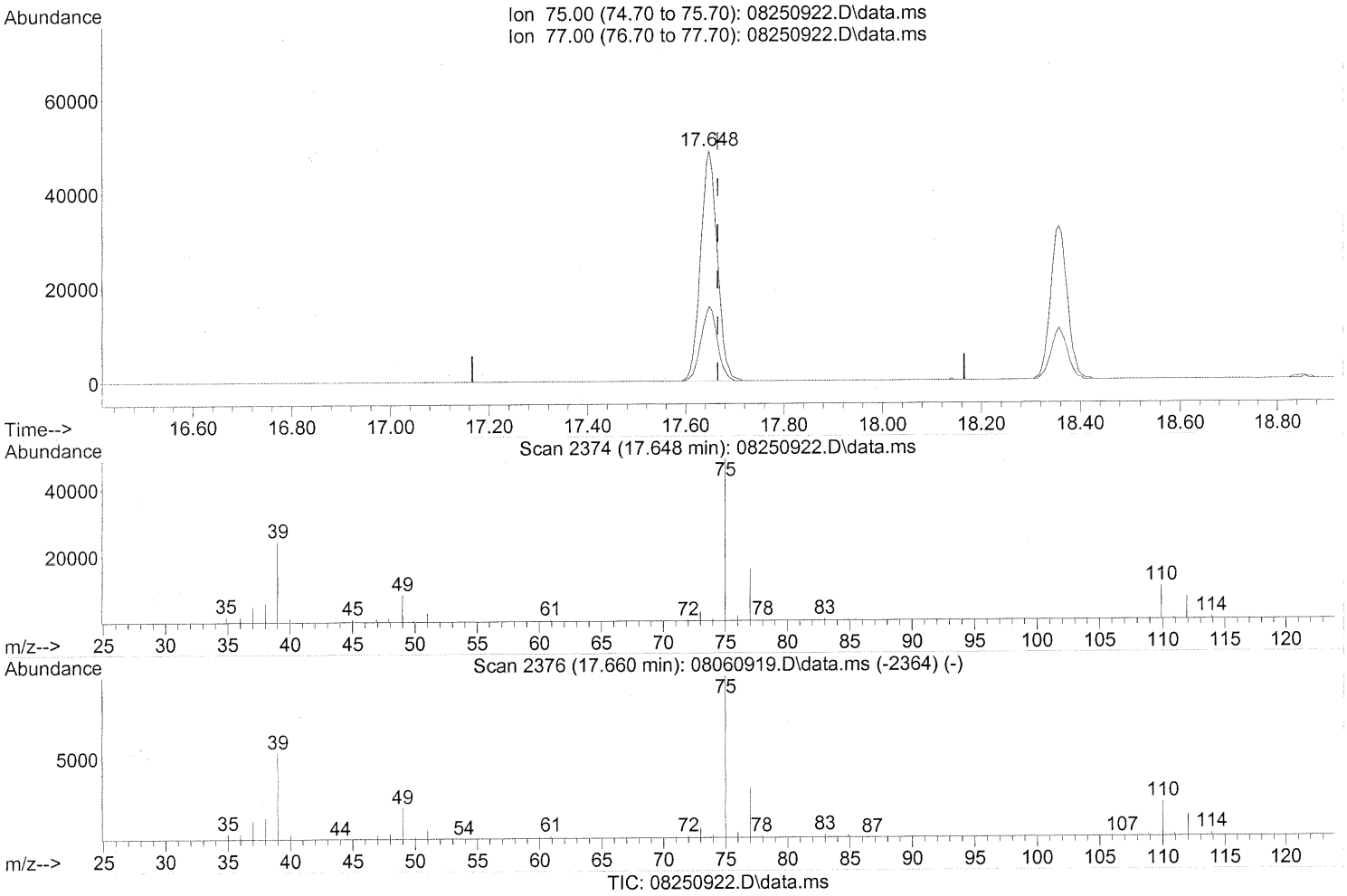

TIC: 08250922.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 5.21ng

response 115070

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
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Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
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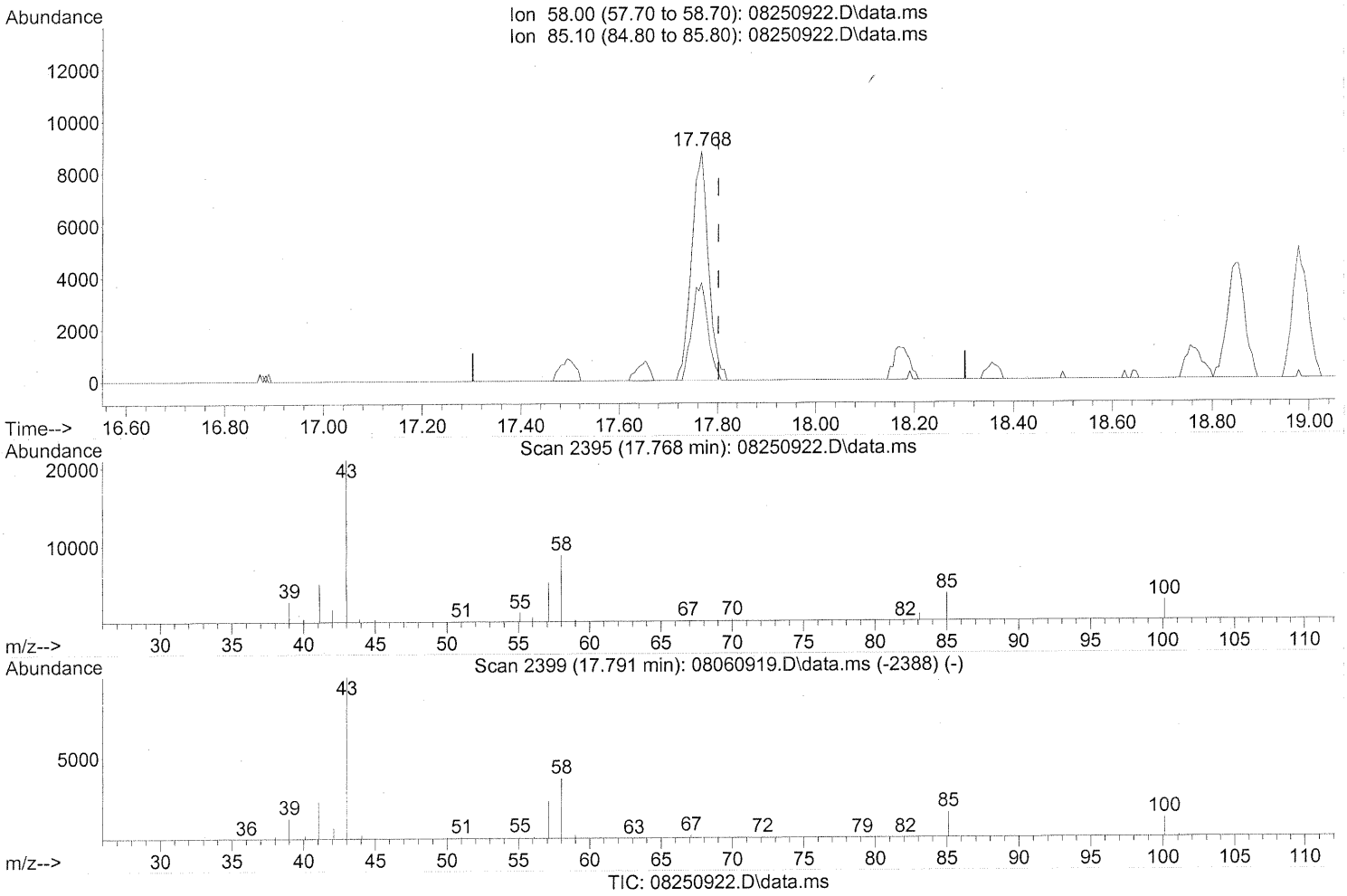


TIC: 08250922.D\data.ms

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

17.768min (-0.034) 1.64ng

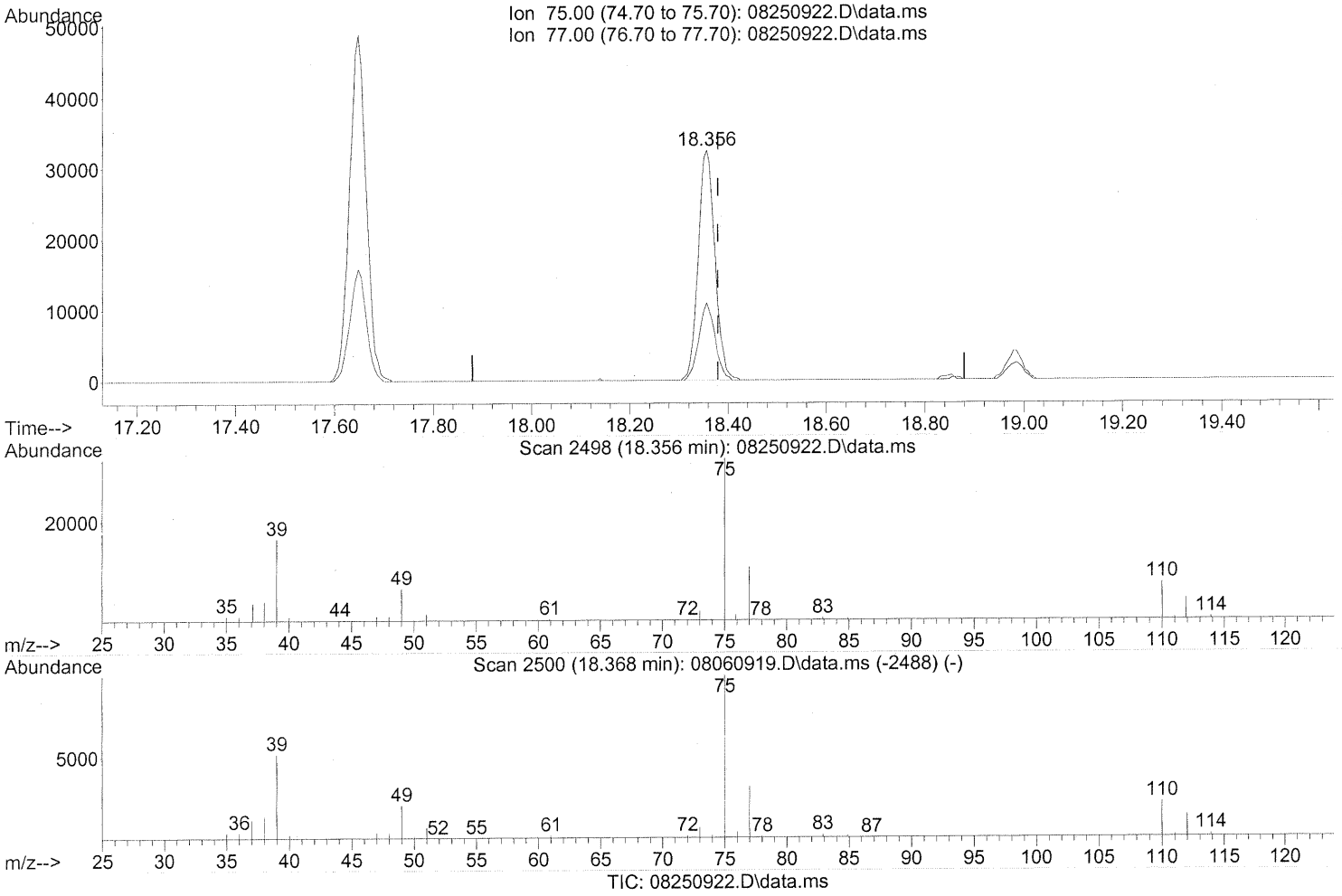
response 20936

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	40.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 3.66ng

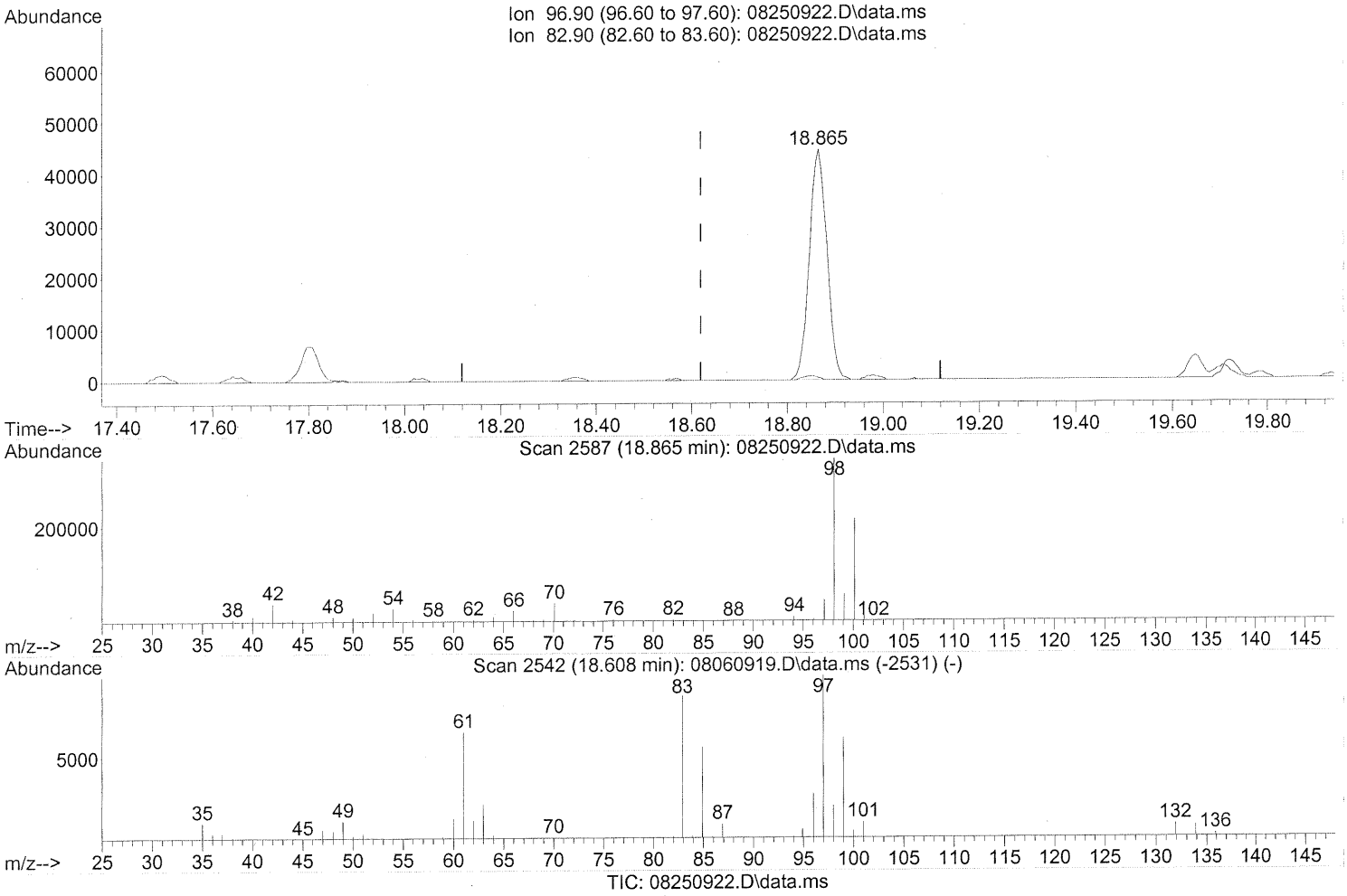
response 76812

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	32.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

18.865min (+0.246) 9.73ng

response 113421

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.40#
0.00	0.00	0.00
0.00	0.00	0.00

FP
VM 9/1/09

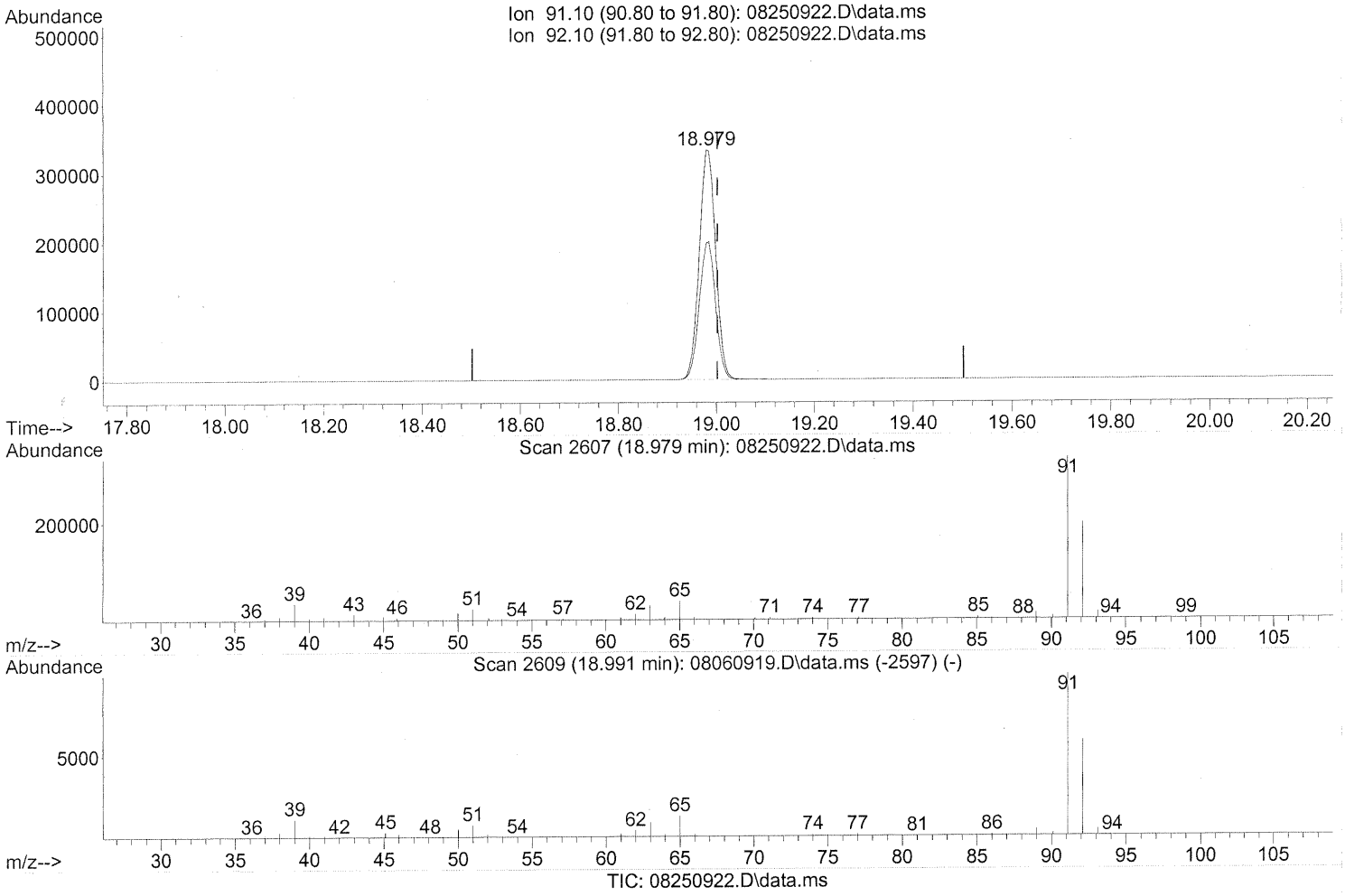
9/2/09

221

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 15.43ng

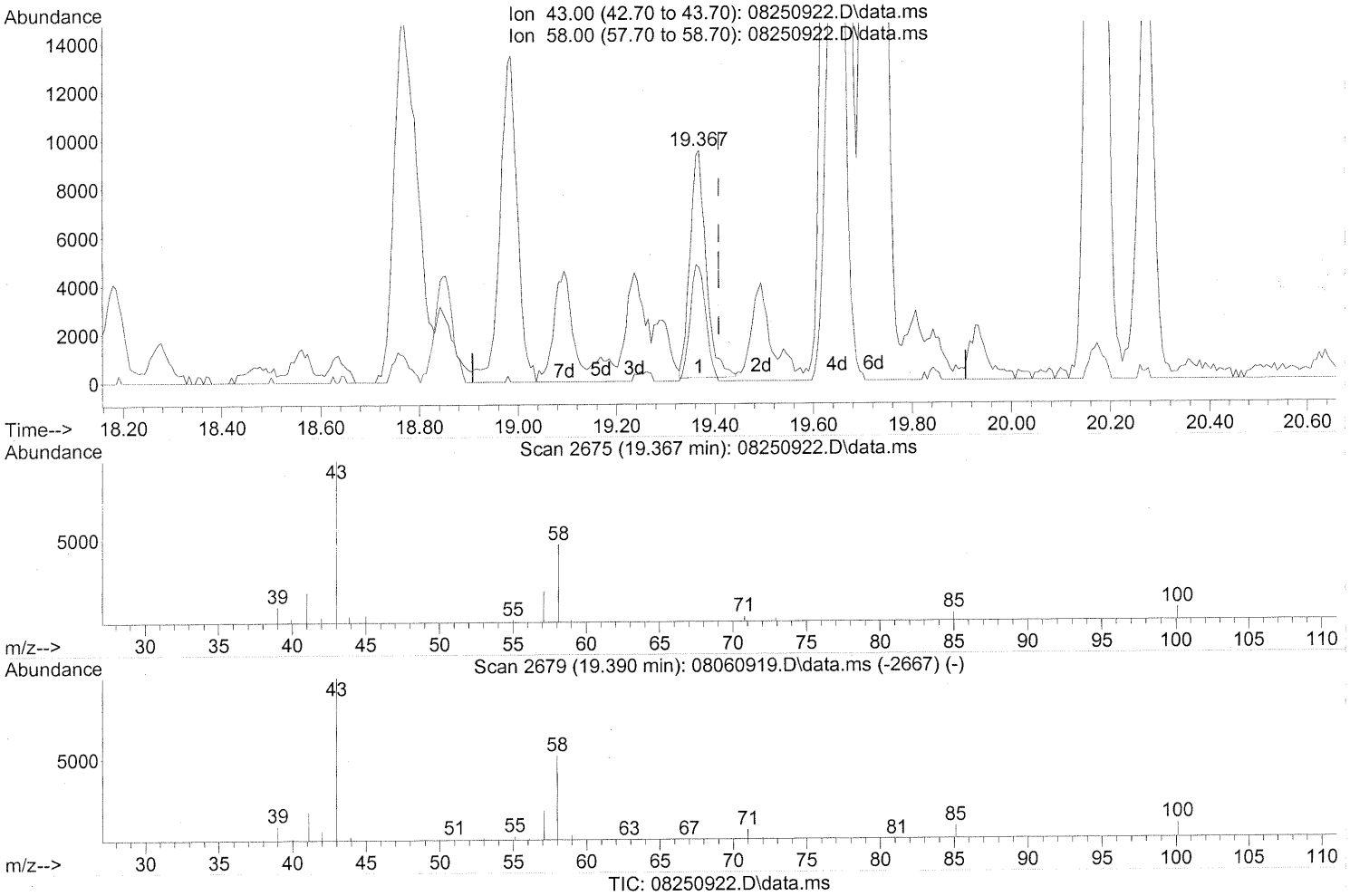
response 774691

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(59) 2-Hexanone (T)

19.367min (-0.040) 0.65ng

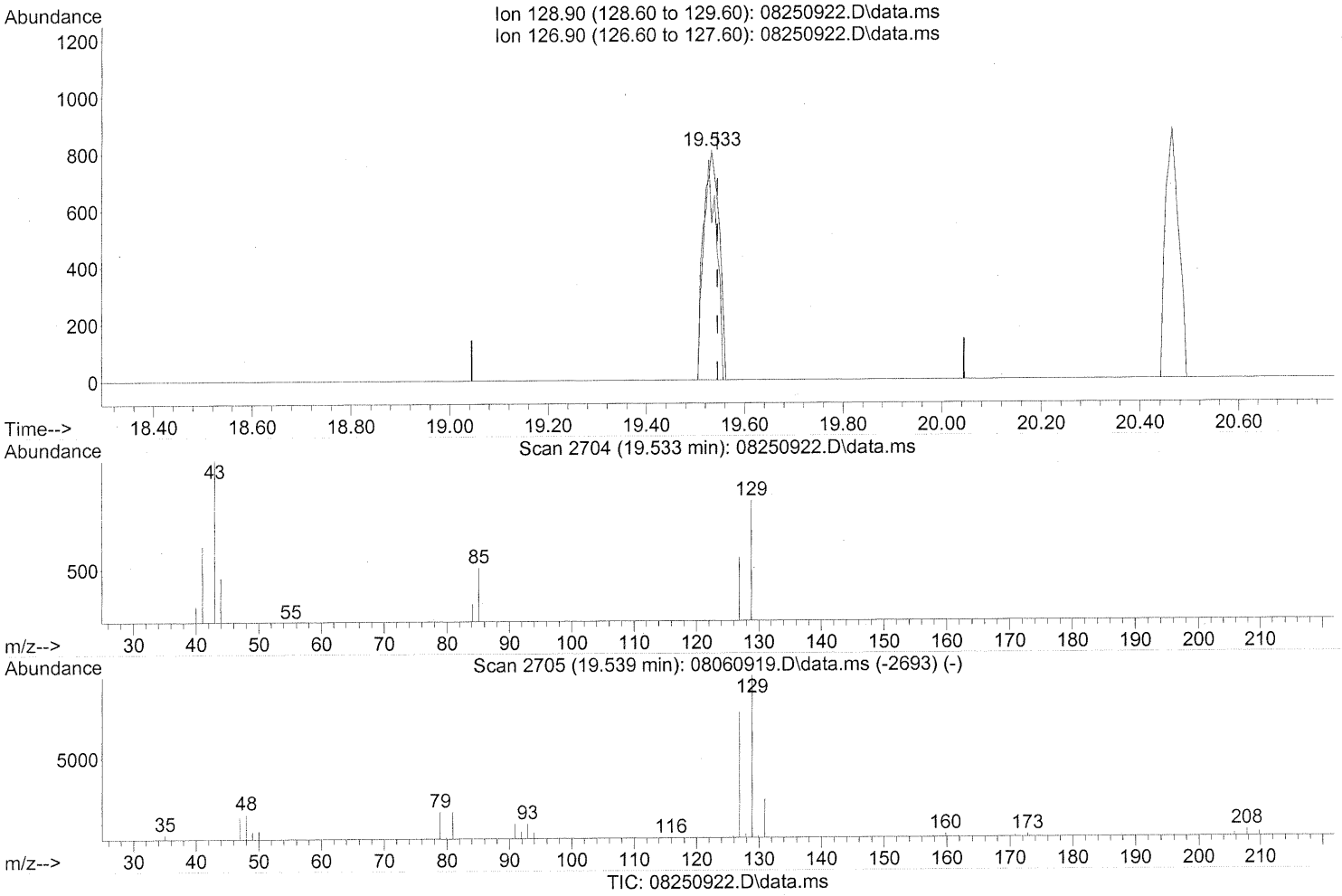
response 21551

Ion	Exp%	Act%
43.00	100	100
58.00	50.90	49.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(60) Dibromochloromethane (T)

19.533min (-0.011) 0.15ng

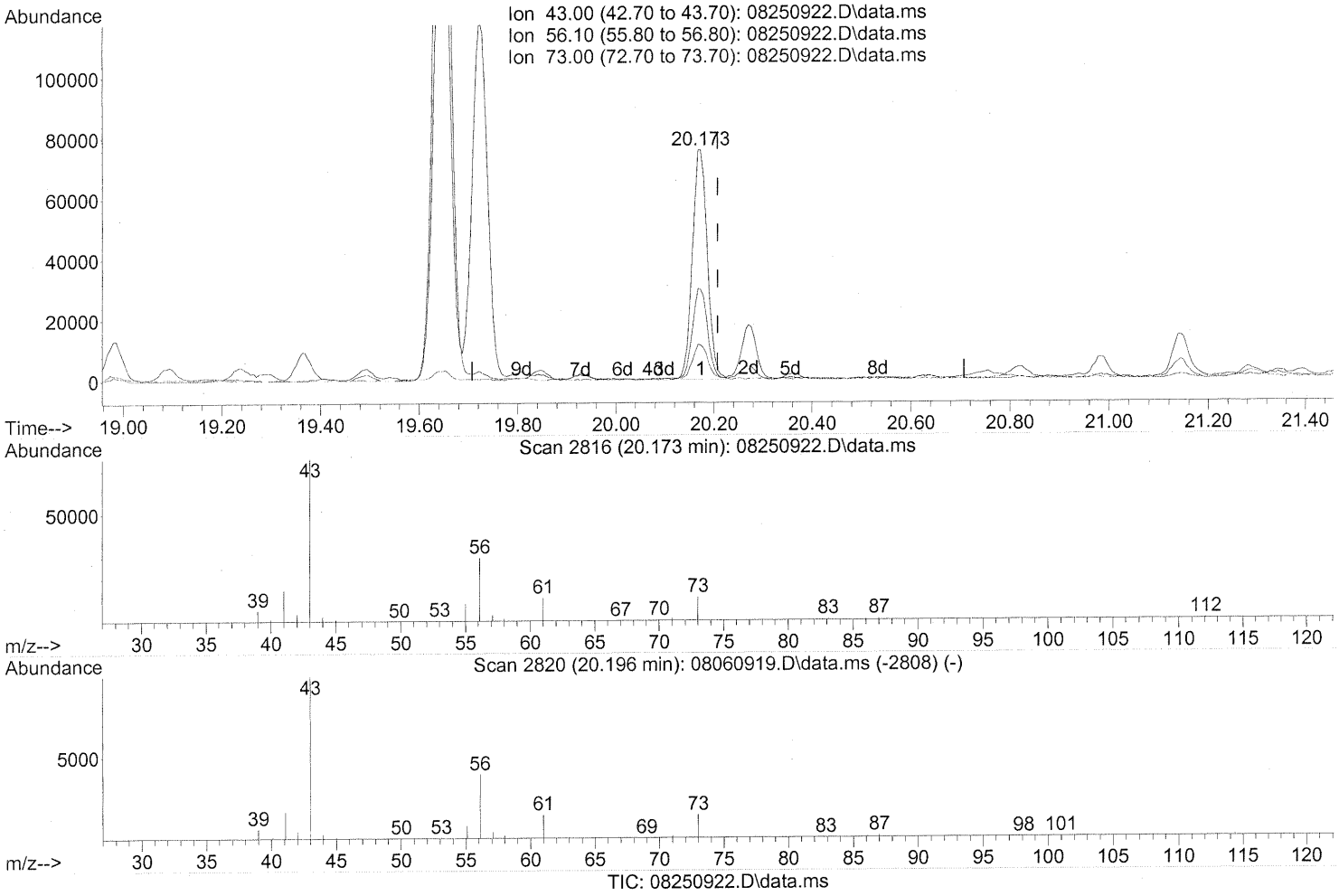
response 1740

Ion	Exp%	Act%
128.90	100	100
126.90	76.40	84.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(62) n-Butyl Acetate (T)

20.173min (-0.034) 4.11ng

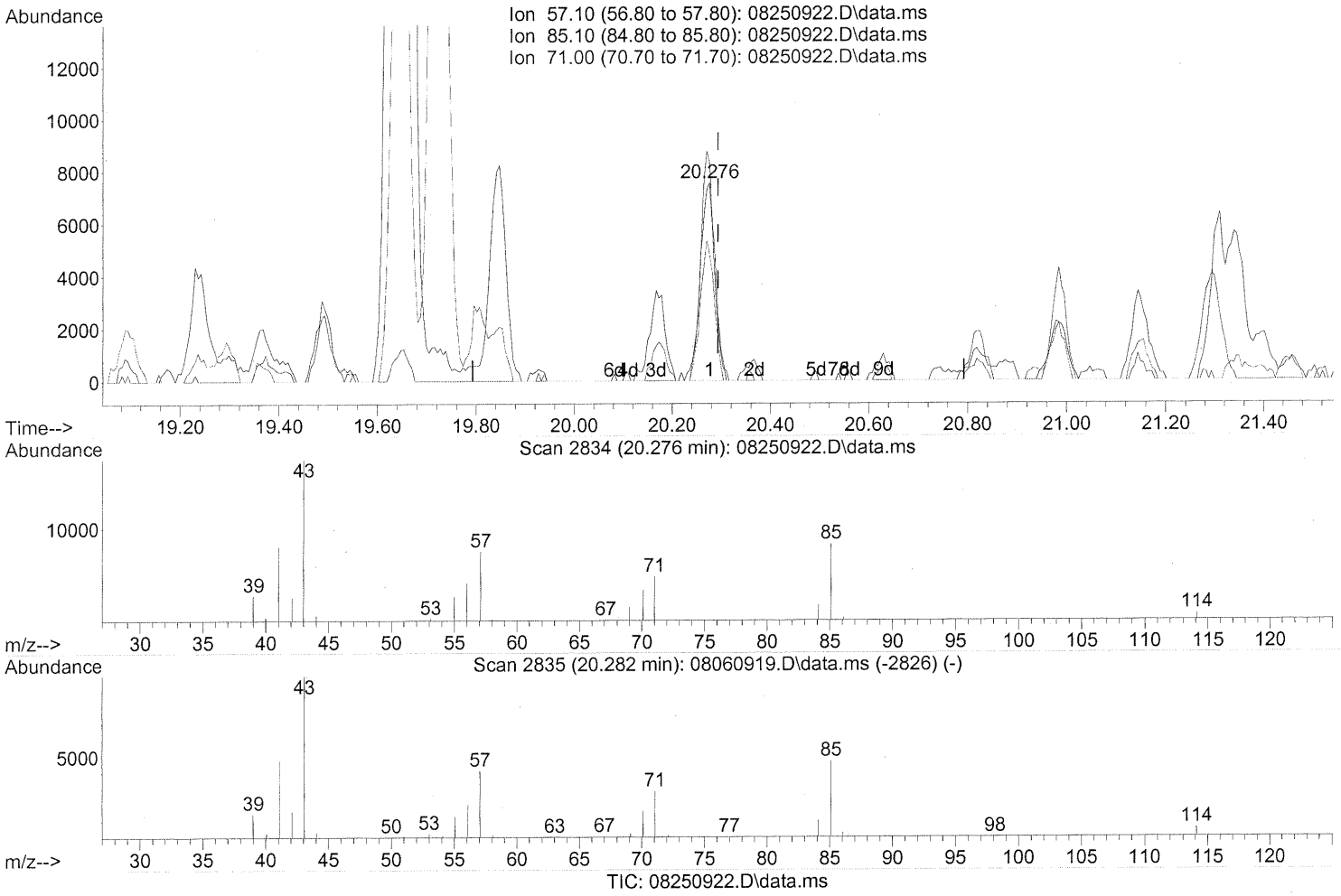
response 161631

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	39.96
73.00	14.80	16.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(63) n-Octane (T)

20.276min (-0.017) 1.28ng

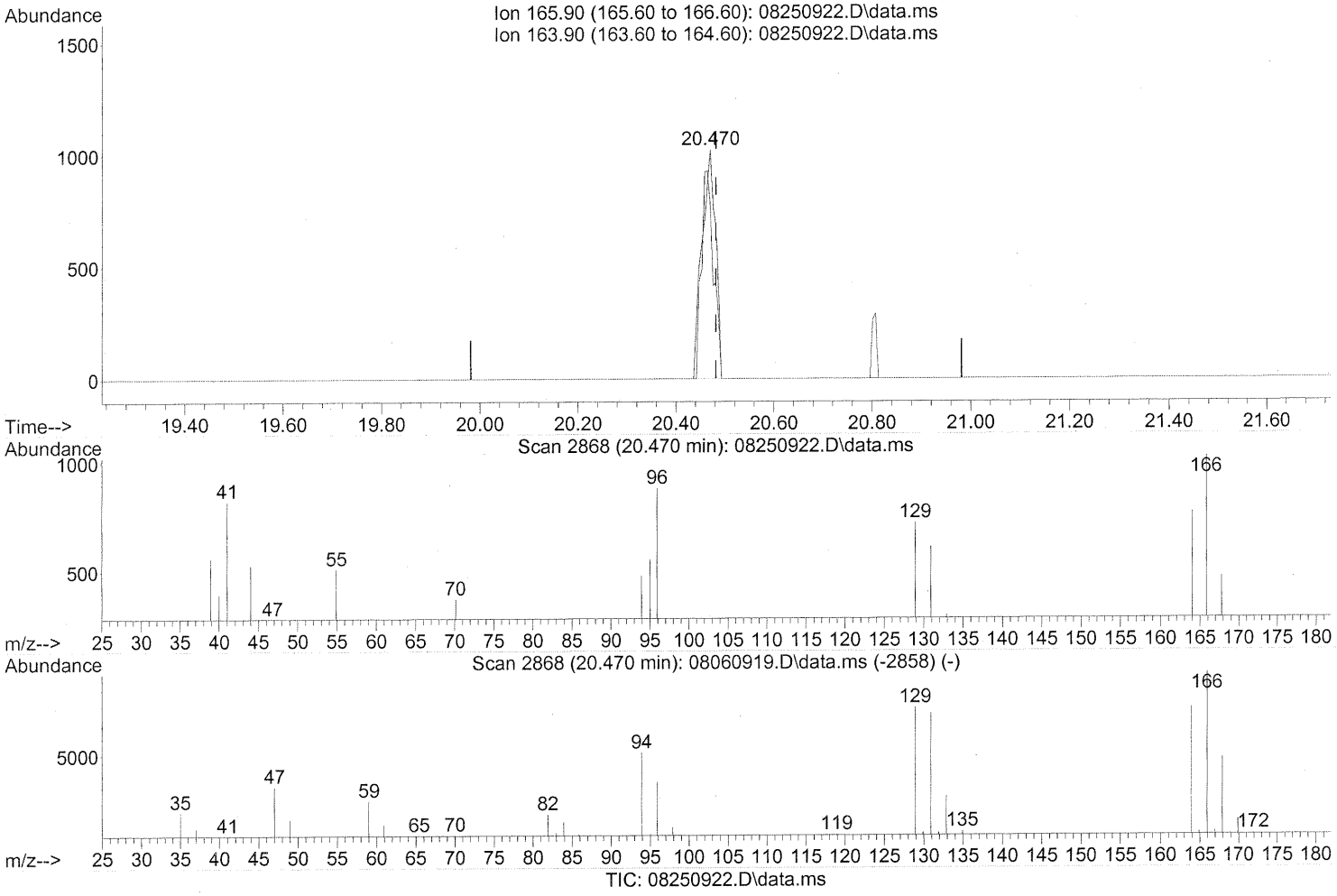
response 15483

Ion	Exp%	Act%
57.10	100	100
85.10	107.00	110.66
71.00	68.10	67.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(64) Tetrachloroethene (T)

20.470min (-0.011) 0.17ng

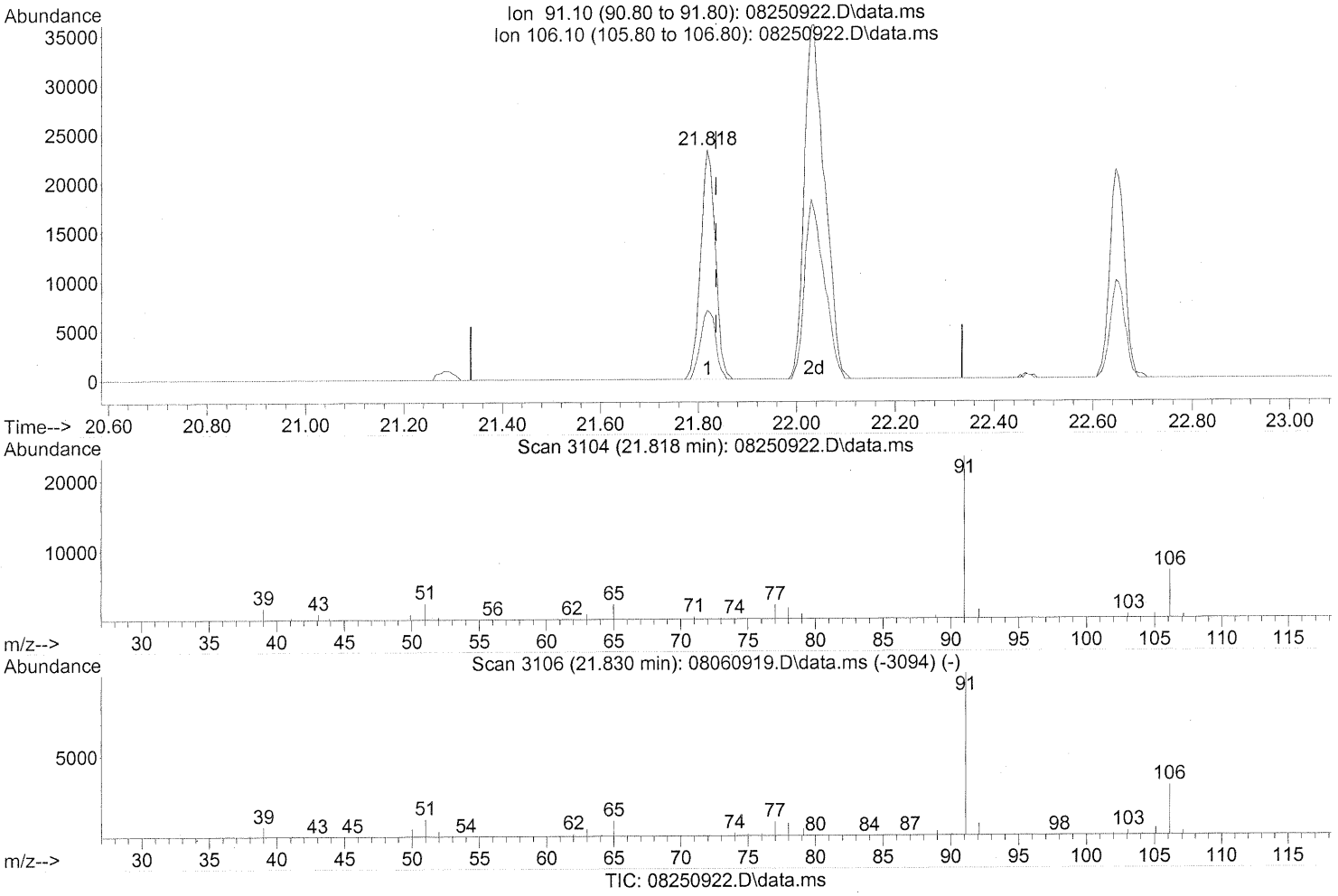
response 1991

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	79.91
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(66) Ethylbenzene (T)

21.818min (-0.017) 0.84ng

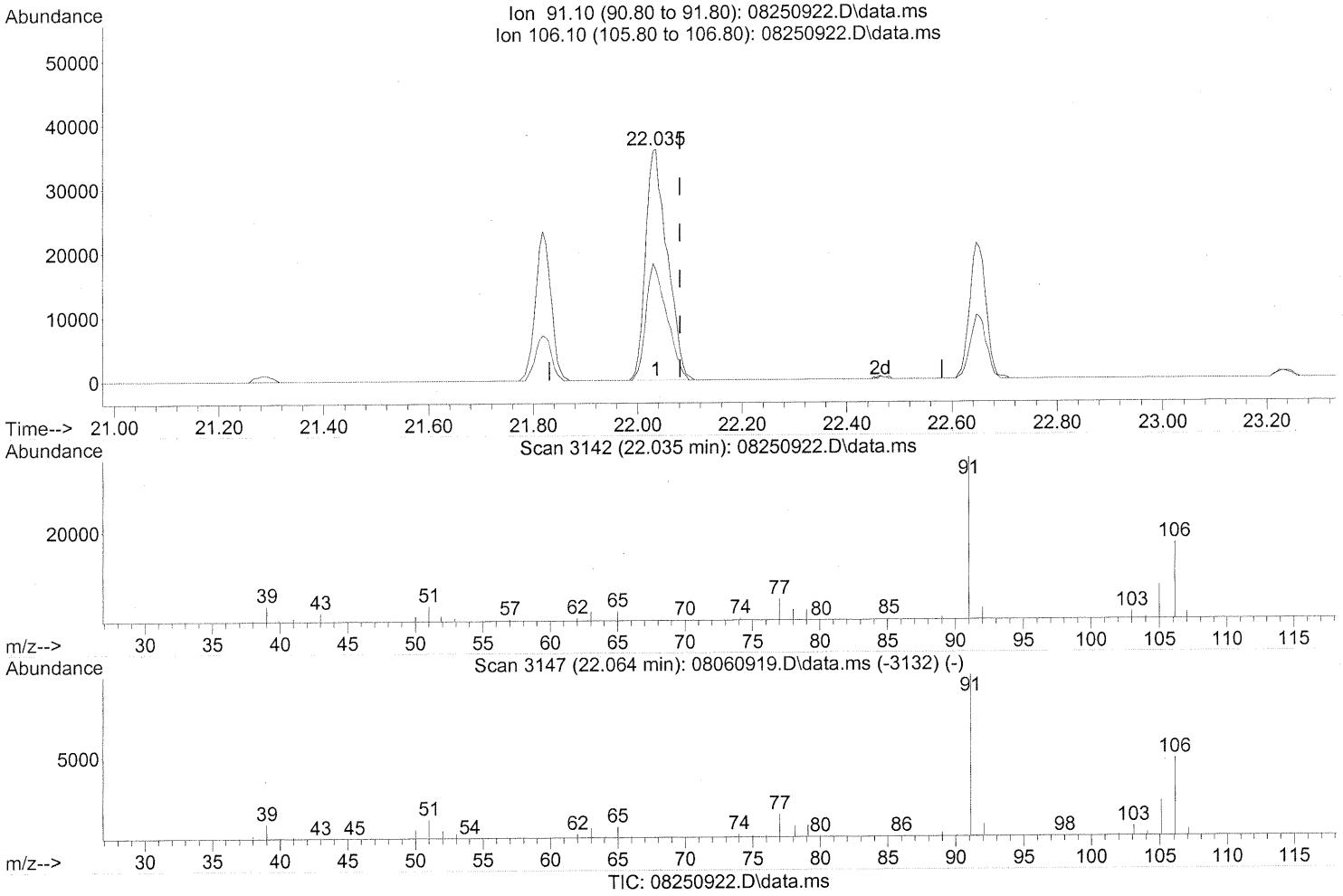
response 48241

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.035min (-0.046) 2.23ng

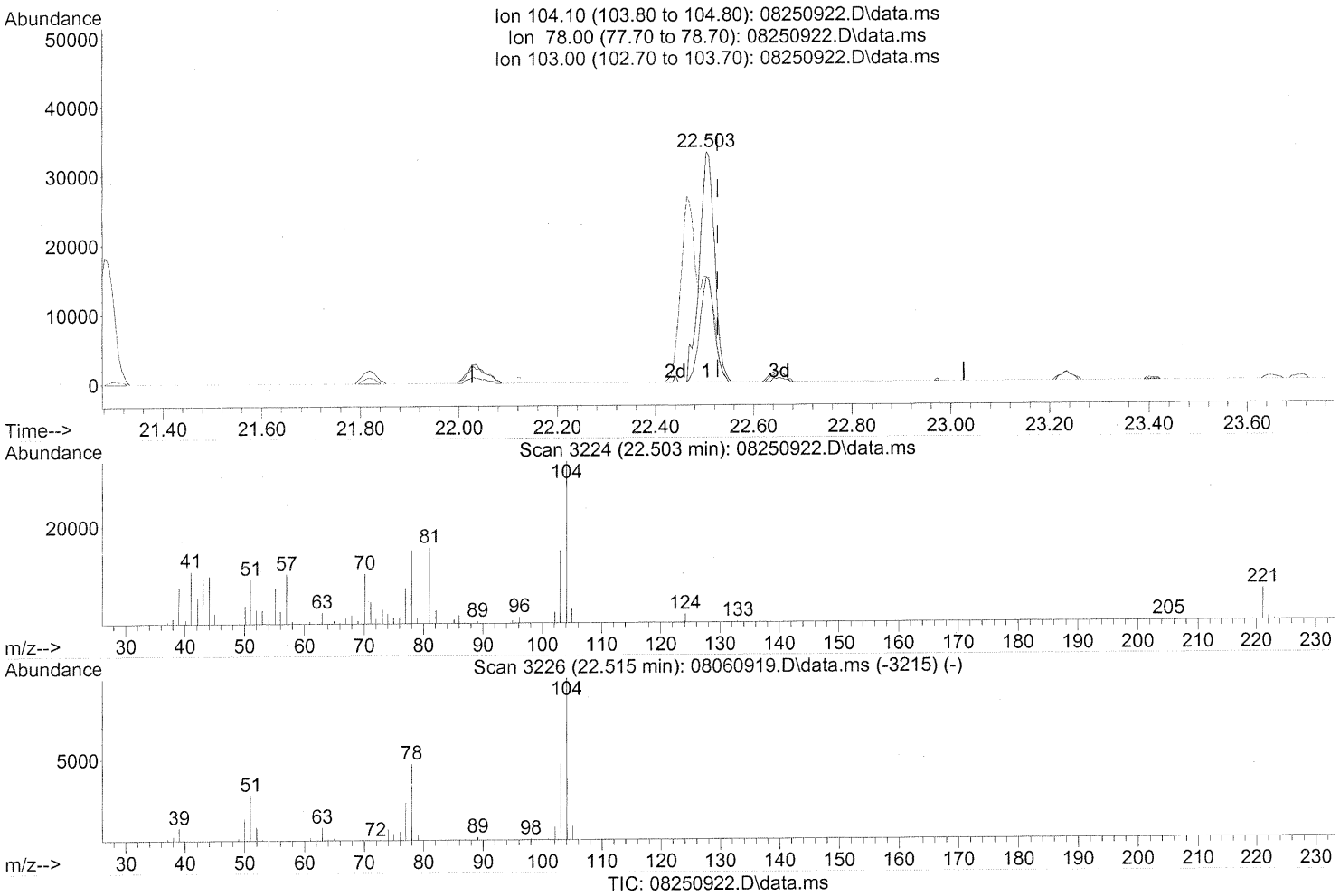
response 103394

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.85
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(69) Styrene (T)

22.503min (-0.023) 2.14ng

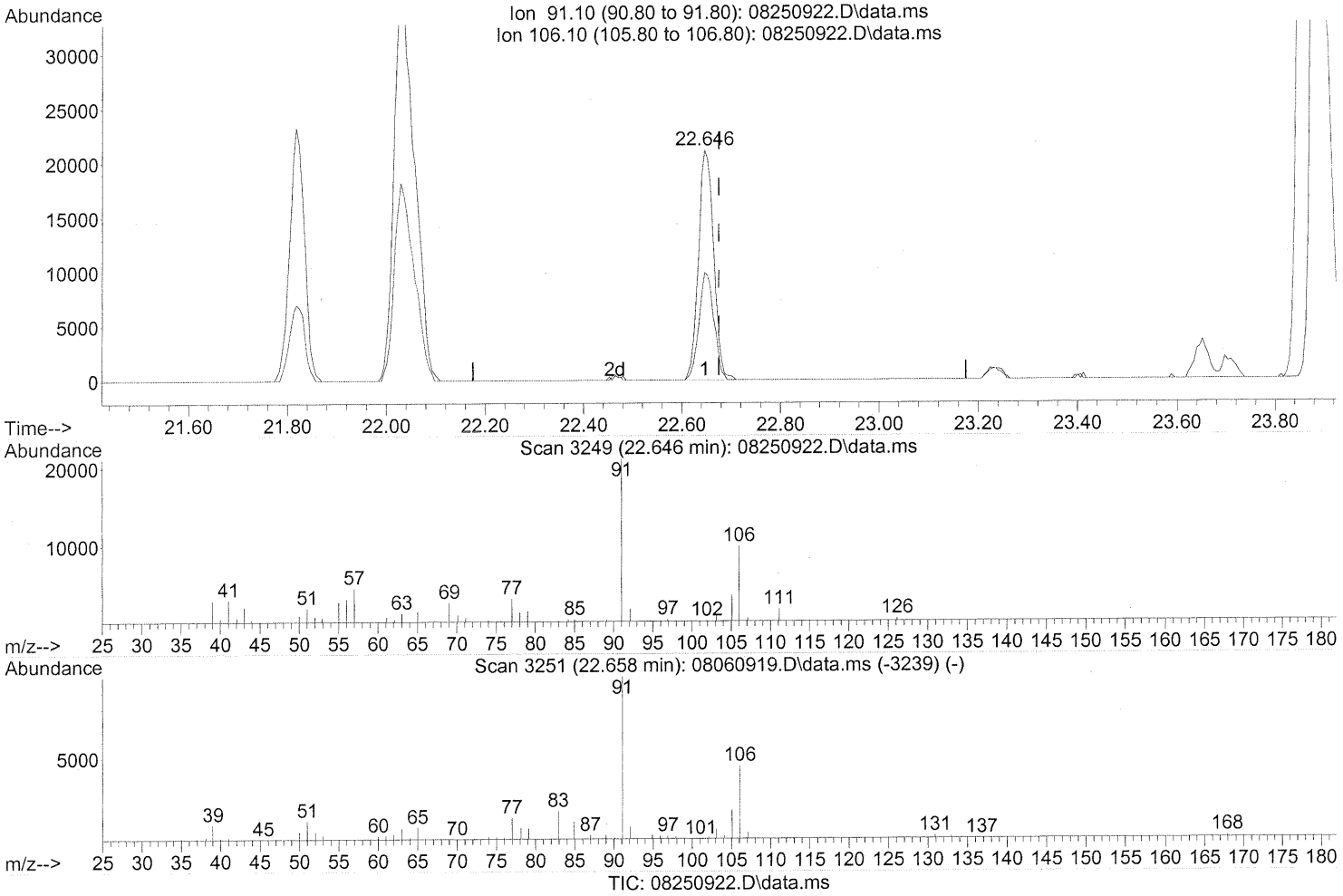
response 71733

Ion	Exp%	Act%
104.10	100	100
78.00	47.10	43.24
103.00	46.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(70) o-Xylene (T)

22.646min (-0.029) 0.98ng

response 45376

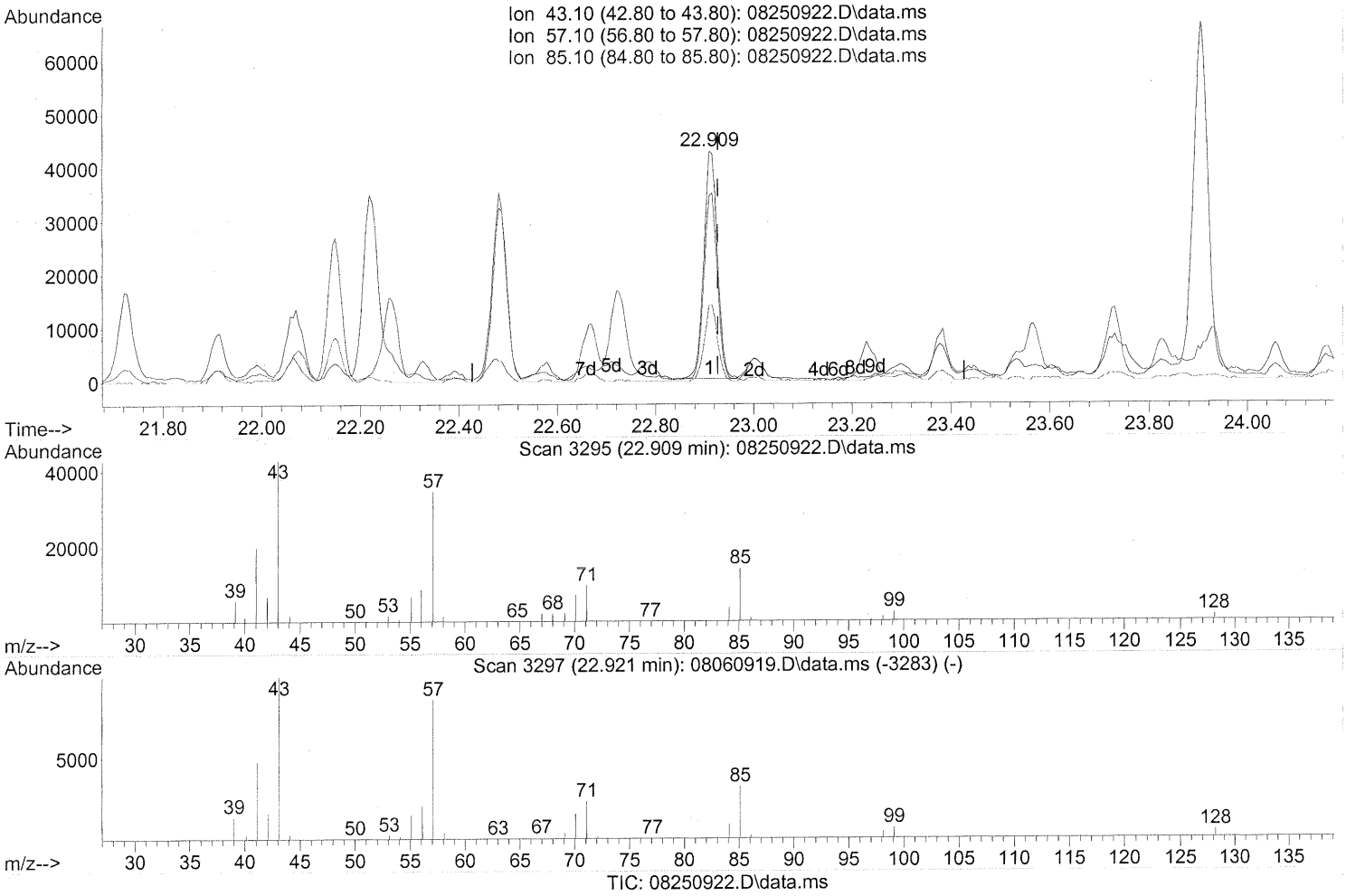
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.87
0.00	0.00	0.00
0.00	0.00	0.00

231

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

(71) n-Nonane (T)

22.909min (-0.017) 2.64ng

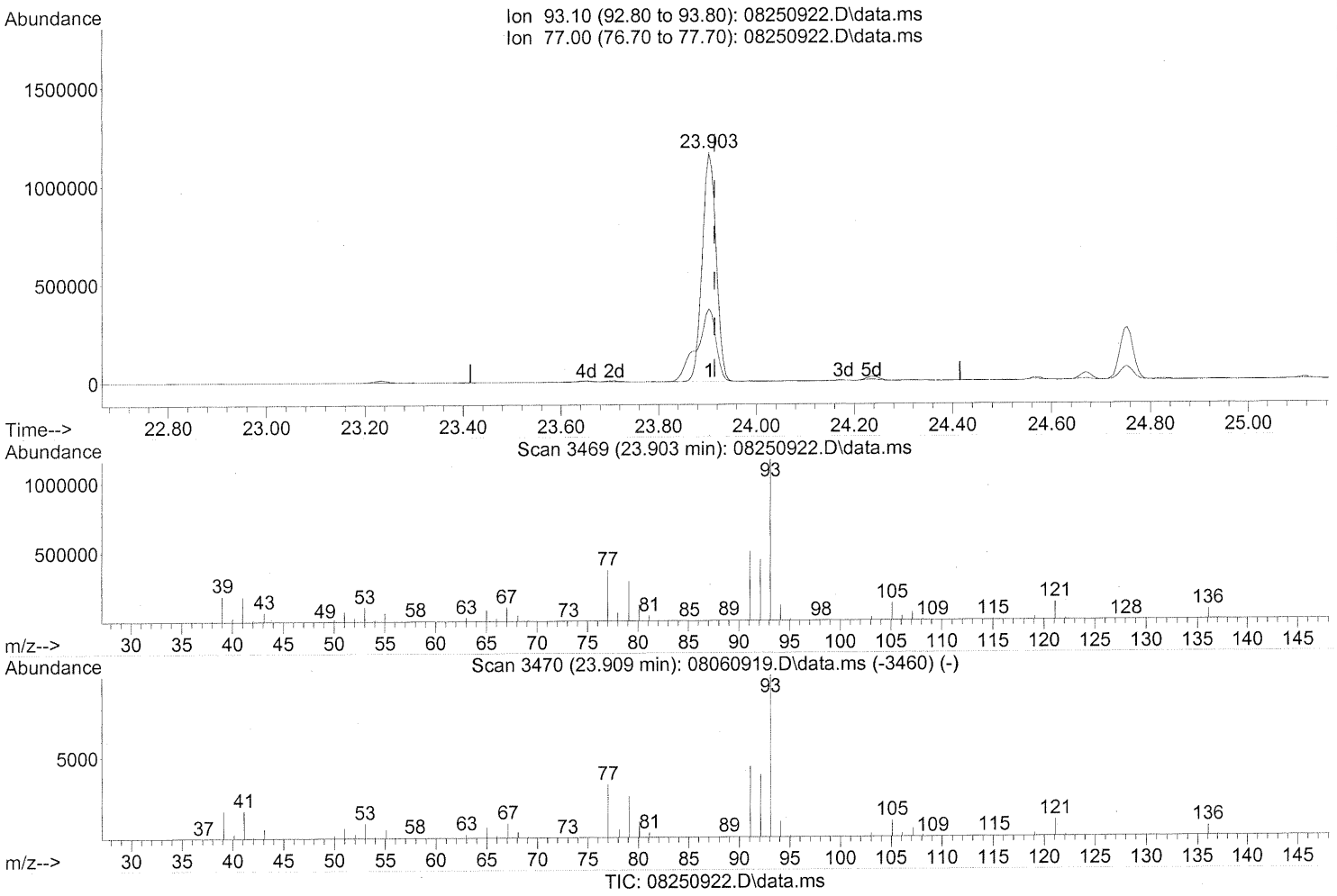
response 81739

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	83.52
85.10	30.40	32.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(75) alpha-Pinene (T)

23.903min (-0.011) 75.72ng

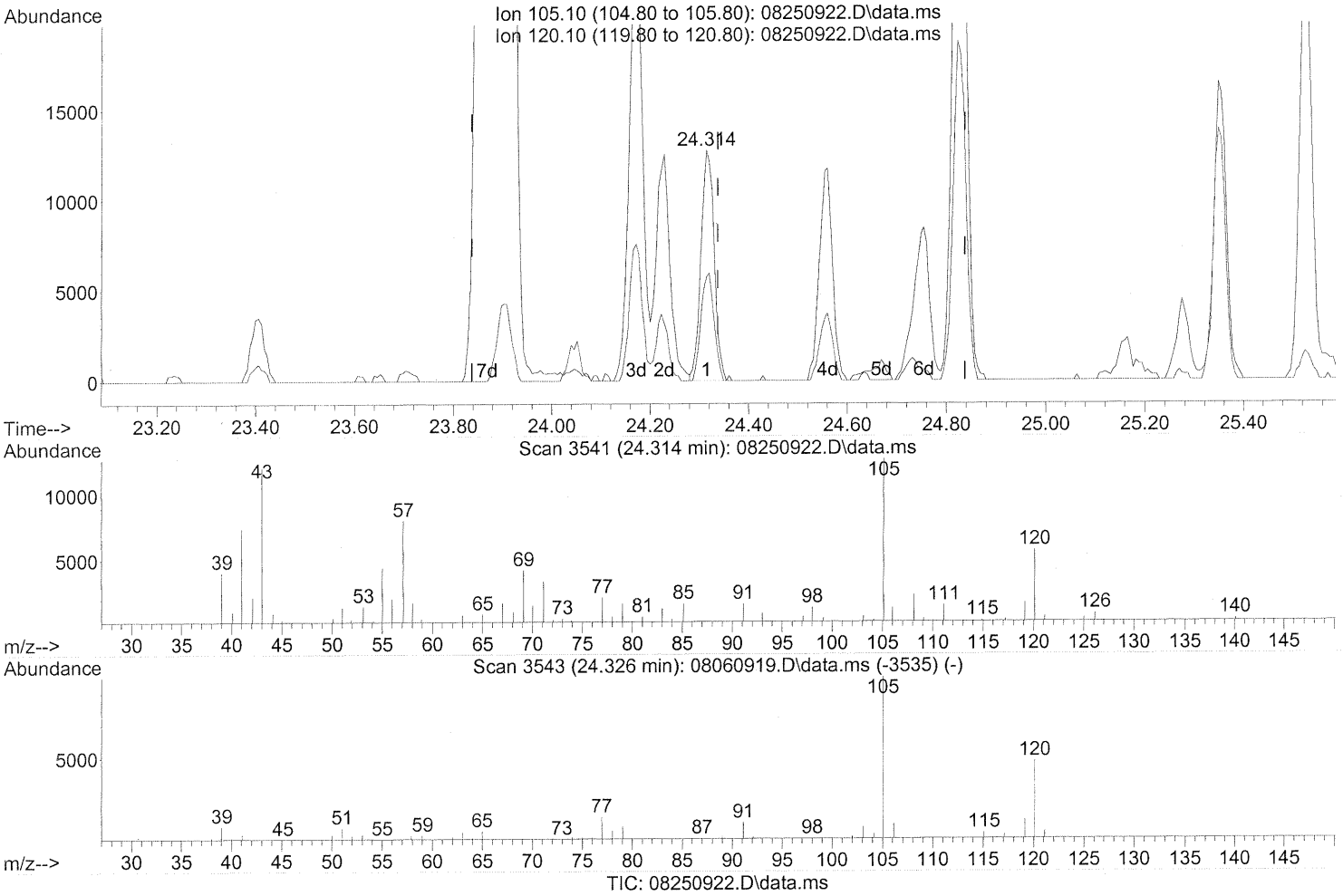
response 2281771

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	44.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

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

24.314min (-0.023) 0.52ng

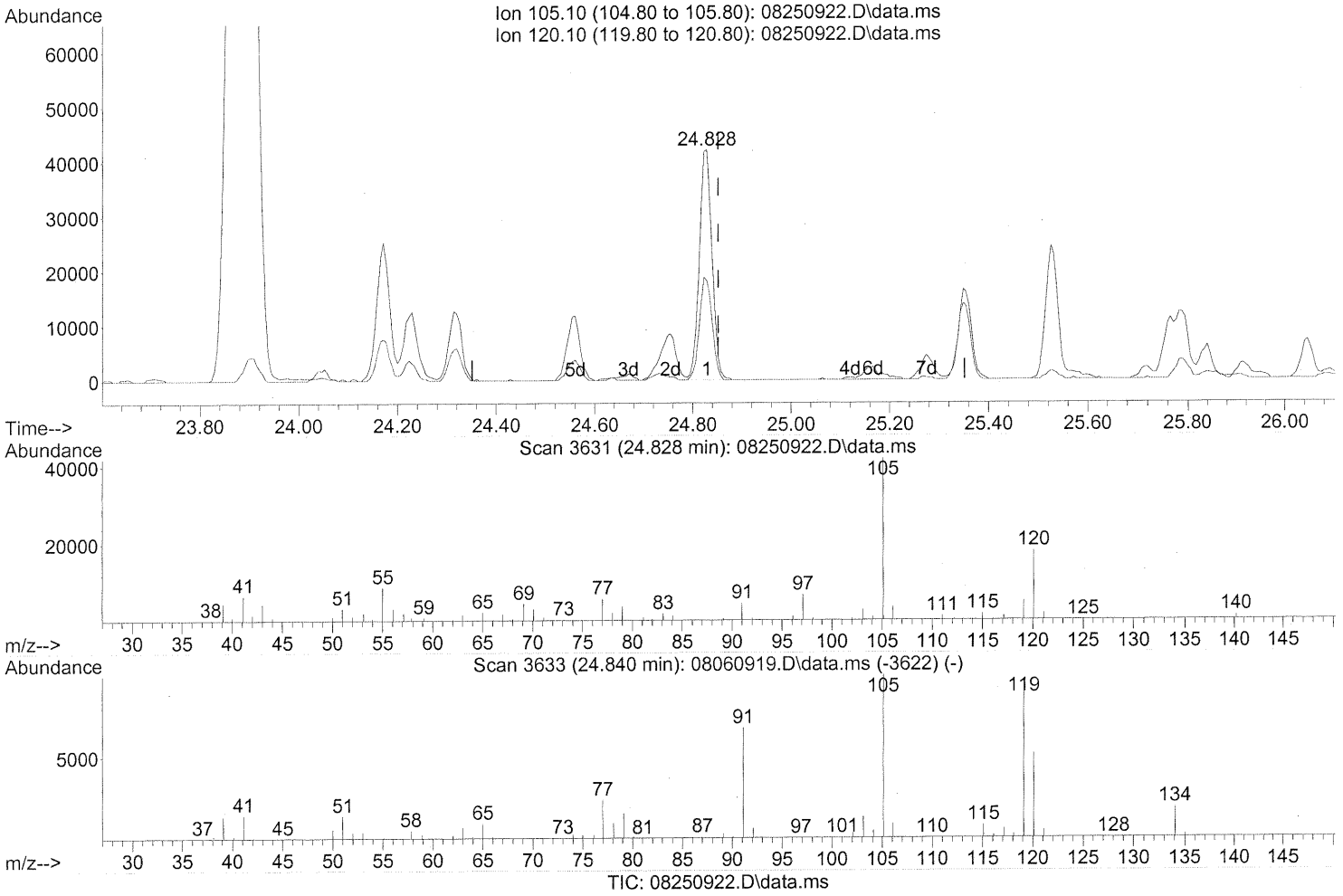
response 23721

Ion	Exp%	Act%
105.10	100	100
120.10	46.80	45.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250922.D\data.ms

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

24.828min (-0.023) 1.61ng

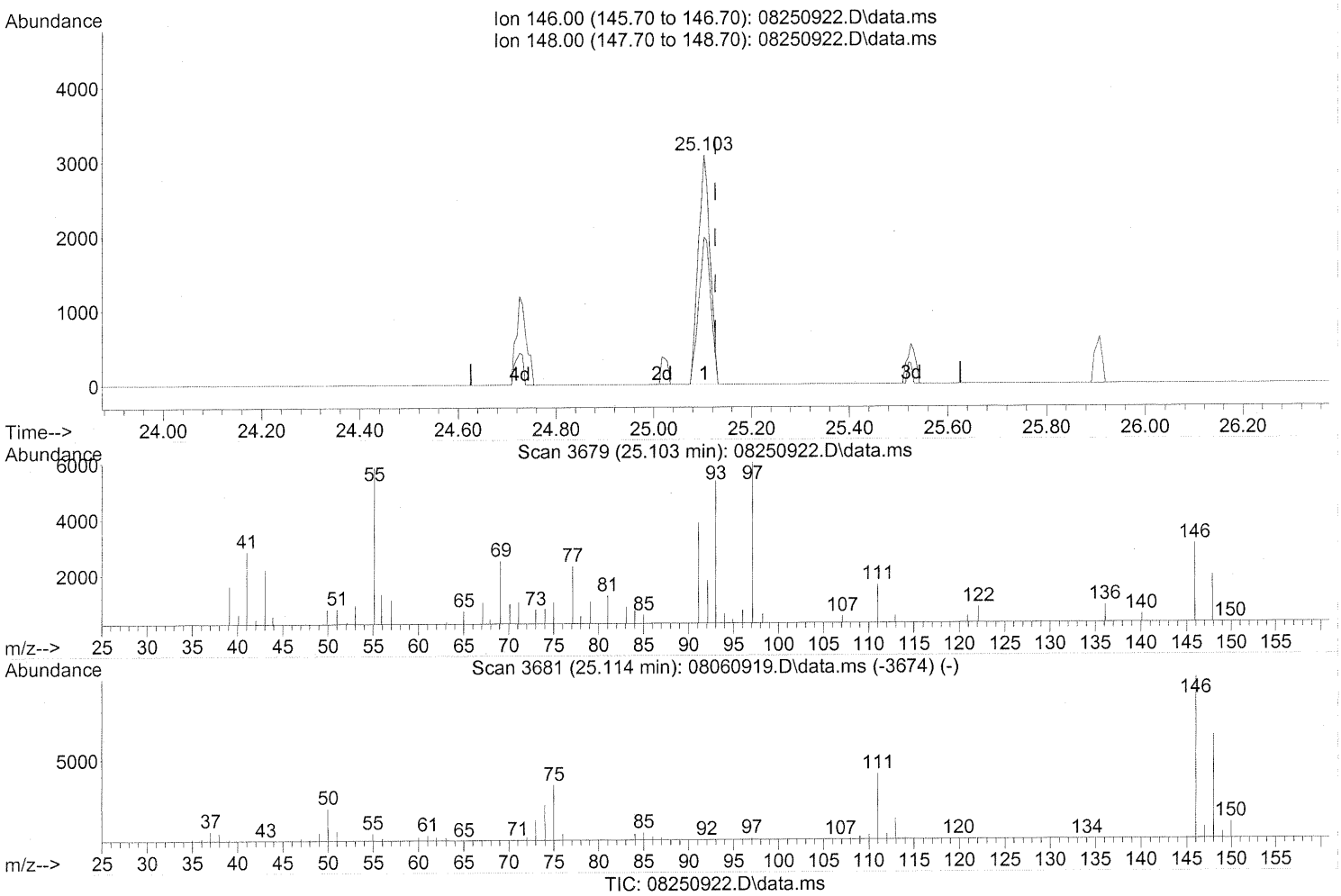
response 75549

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	44.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(86) 1,4-Dichlorobenzene (T)

25.103min (-0.023) 0.20ng

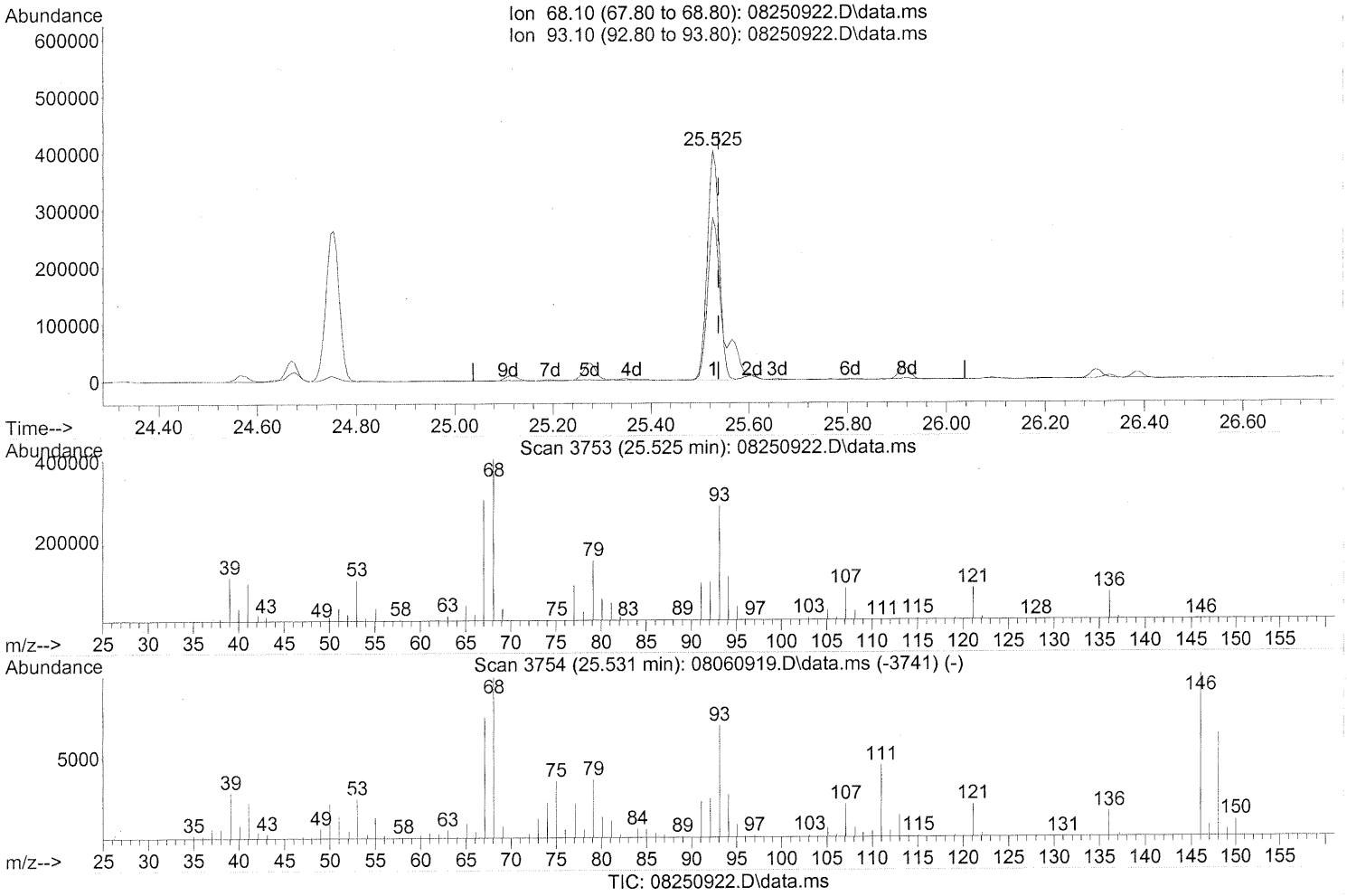
response 5165

Ion	Exp%	Act%
146.00	100	100
148.00	62.20	65.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250922.D
Acq On : 26 Aug 2009 1:47 am
Operator : WA/CC
Sample : P0902876-005 (1000mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 06:39:52 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(91) d-Limonene (T)

25.525min (-0.011) 34.14ng

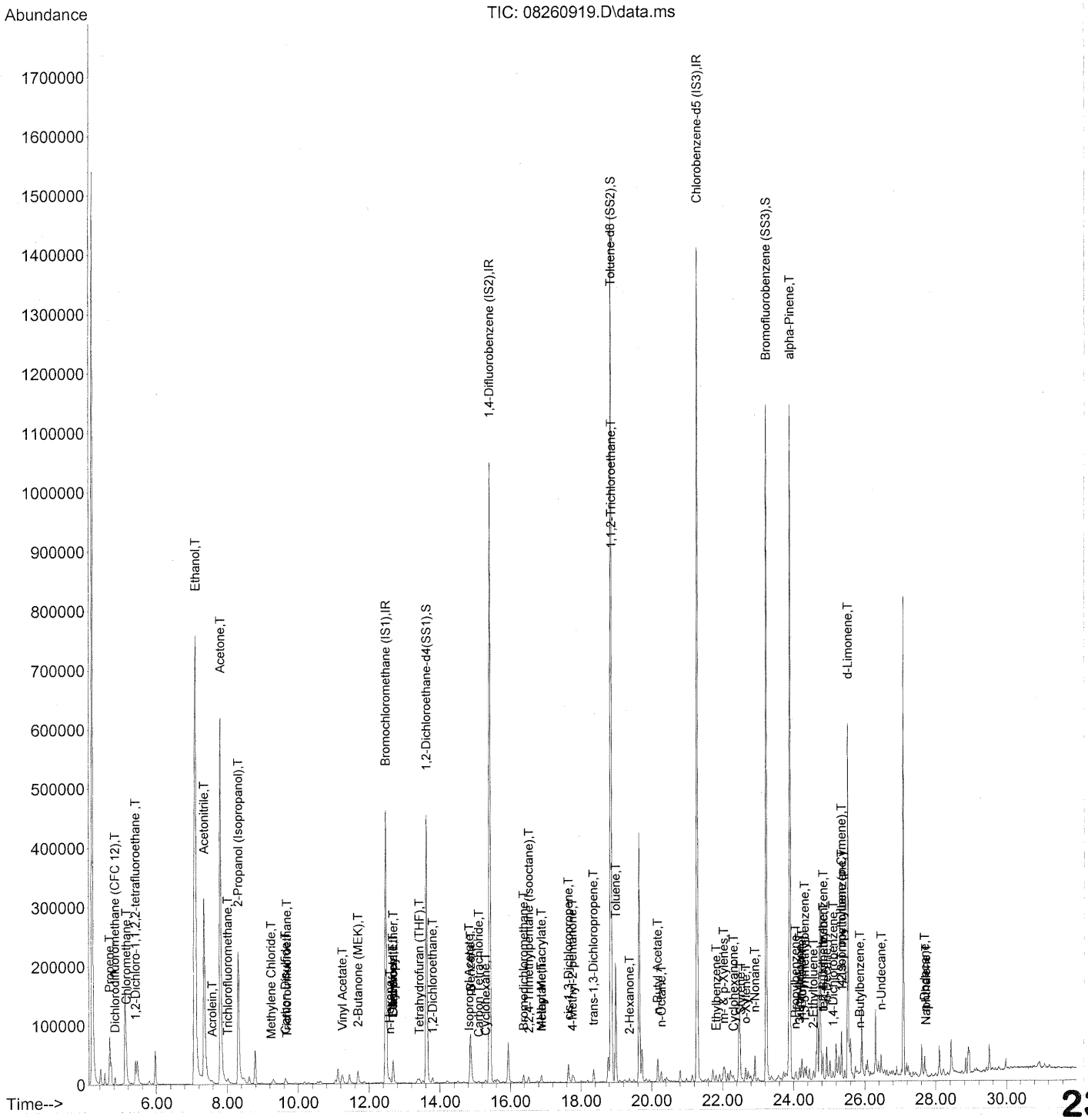
response 679724

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	90.58#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260919.D
Acq On : 26 Aug 2009 10:53 pm
Operator : WA/CC
Sample : P0902876-005 dil (200mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 27 06:22:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260919.D
Acq On : 26 Aug 2009 10:53 pm
Operator : WA/CC
Sample : P0902876-005 dil (200mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 27 06:22:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

MM 9/11/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	234801	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1185836	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	585743	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	457949	22.440	ng		-0.04
Spiked Amount 25.000			Recovery =	89.76%			
57) Toluene-d8 (SS2)	18.85	98	1290964	25.224	ng		-0.02
Spiked Amount 25.000			Recovery =	100.88%			
73) Bromofluorobenzene (SS3)	23.23	174	379527	28.119	ng		-0.01
Spiked Amount 25.000			Recovery =	112.48%			
Target Compounds							Qvalue
2) Propene	4.68	42	37638	2.336	ng		86
3) Dichlorodifluoromethan...	4.84	85	12775	0.485	ng		98
4) Chloromethane	5.16	50	5270	0.298	ng		87
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	634	0.059	ng	#	44
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.89	54	231	N.D.			
8) Bromomethane	6.39	94	86	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.10	45	1739897	170.356	ng		100
11) Acetonitrile	7.34	41	552759	18.480	ng		98
12) Acrolein	7.57	56	6167	0.793	ng		97
13) Acetone	7.81	58	344836	35.784	ng		91
14) Trichlorofluoromethane	8.01	101	6285	0.264	ng		96
15) 2-Propanol (Isopropanol)	8.31	45	492684	13.010	ng		100
16) Acrylonitrile	8.56	53	90	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.38	59	243	N.D.			
19) Methylene Chloride	9.24	84	727	0.056	ng	#	64
20) 3-Chloro-1-propene (Al...	9.43	41	423	N.D.			
21) Trichlorotrifluoroethane	9.68	151	962	0.111	ng	#	83
22) Carbon Disulfide	9.64	76	21639	0.474	ng		96
23) trans-1,2-Dichloroethene	10.68	61	99	N.D.			
24) 1,1-Dichloroethane	10.99	63	183	N.D.			
25) Methyl tert-Butyl Ether	11.20	73	553	N.D.			
26) Vinyl Acetate	11.24	86	2766	1.410	ng	#	72
27) 2-Butanone (MEK)	11.68	72	10325	1.187	ng		92
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.68	87	756	0.065	ng	#	1
30) Ethyl Acetate	12.67	61	7700	1.699	ng		92
31) n-Hexane	12.58	57	3818	0.165	ng		68

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260919.D
Acq On : 26 Aug 2009 10:53 pm
Operator : WA/CC
Sample : P0902876-005 dil (200mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 27 06:22:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.67	83	6750	0.331 ng		99
34) Tetrahydrofuran (THF)	13.42	72	2155	0.232 ng	#	78
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	7093	0.380 ng		97
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	14.83	61	568	0.065 ng	#	1
40) 1-Butanol	15.00	56	459	N.D.		
41) Benzene	14.87	78	10079	0.193 ng		94
42) Carbon Tetrachloride	15.10	117	1937	0.117 ng		99
43) Cyclohexane	15.29	84	2147	0.112 ng		91
44) tert-Amyl Methyl Ether	15.88	73	387	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.37	83	1126	0.066 ng		99
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.23	88	88	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	9163	0.149 ng		92
50) Methyl Methacrylate	16.88	100	844	0.176 ng	#	1
51) n-Heptane	16.88	71	3583	0.256 ng		99
52) cis-1,3-Dichloropropene	17.65	75	24864	1.146 ng		98
53) 4-Methyl-2-pentanone	17.76	58	4366	0.348 ng		99
54) trans-1,3-Dichloropropene	18.35	75	18021	0.873 ng		99
55) 1,1,2-Trichloroethane	18.86	97	112393	9.818 ng	#	5
58) Toluene	18.98	91	175942	3.498 ng		98
59) 2-Hexanone	19.37	43	6231	0.186 ng		85
60) Dibromochloromethane	19.53	129	89	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	35936	0.911 ng		96
63) n-Octane	20.27	57	3677	0.302 ng		97
64) Tetrachloroethene	20.46	166	451	N.D.		
65) Chlorobenzene	21.35	112	1150	N.D.		
66) Ethylbenzene	21.82	91	11840	0.206 ng		99
67) m- & p-Xylenes	22.03	91	24751	0.532 ng		97
68) Bromoform	22.15	173	199	N.D.		
69) Styrene	22.51	104	15538	0.462 ng	#	63
70) o-Xylene	22.65	91	11158	0.239 ng		95
71) n-Nonane	22.91	43	18901	0.610 ng		98
72) 1,1,2,2-Tetrachloroethane	22.65	83	222	N.D.		
74) Cumene	23.40	105	2608	N.D.		
75) alpha-Pinene	23.90	93	534332	17.695 ng		81
76) n-Propylbenzene	24.05	91	5235	0.071 ng		92
77) 3-Ethyltoluene	24.17	105	11722	0.208 ng		96
78) 4-Ethyltoluene	24.22	105	6625	0.121 ng		91
79) 1,3,5-Trimethylbenzene	24.31	105	6290	0.137 ng		96

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260919.D
Acq On : 26 Aug 2009 10:53 pm
Operator : WA/CC
Sample : P0902876-005 dil (200mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 27 06:22:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

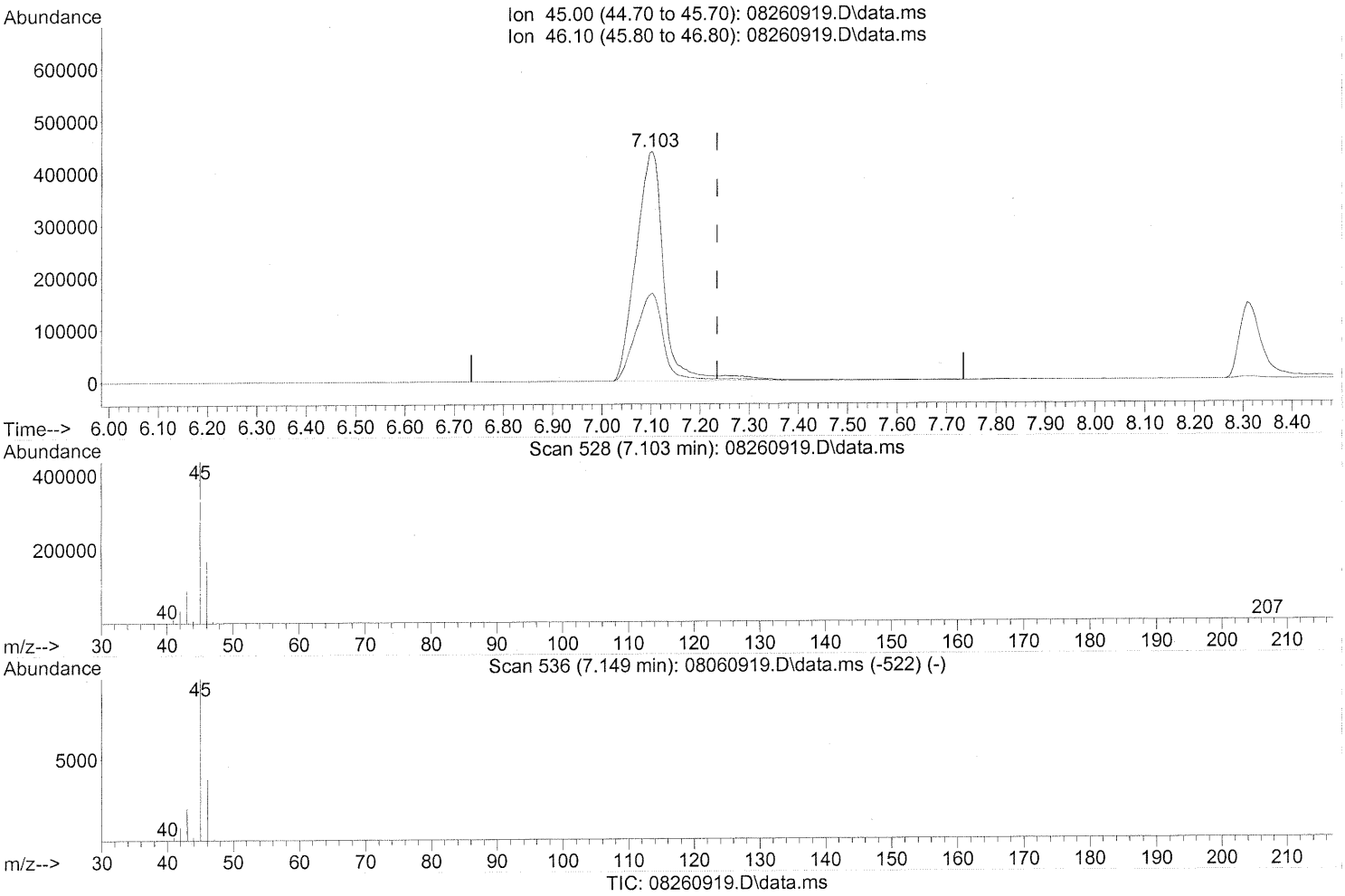
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	739	N.D.		
81) 2-Ethyltoluene	24.55	105	6067	0.107 ng		89
82) 1,2,4-Trimethylbenzene	24.83	105	18057	0.385 ng		88
83) n-Decane	24.93	57	22922	0.751 ng		95
84) Benzyl Chloride	25.00	91	2186	N.D.		
85) 1,3-Dichlorobenzene	25.02	146	108	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	1586	0.063 ng		93
87) sec-Butylbenzene	25.16	105	2311	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	37063	0.656 ng		96
89) 1,2,3-Trimethylbenzene	25.35	105	8148	0.170 ng	#	63
90) 1,2-Dichlorobenzene	25.53	146	436	N.D.		
91) d-Limonene	25.53	68	155564	7.797 ng		76
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	12858	0.396 ng	#	67
94) 1,2,4-Trichlorobenzene	27.58	180	726	N.D.		
95) Naphthalene	27.72	128	9059	0.142 ng		97
96) n-Dodecane	27.69	57	13417	0.356 ng		91
97) Hexachlorobutadiene	28.14	225	236	N.D.		
98) Cyclohexanone	22.31	55	5576	0.268 ng	#	85
99) tert-Butylbenzene	24.83	119	3113	0.069 ng	#	56
100) n-Butylbenzene	25.86	91	4677	0.089 ng	#	61

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260919.D
Acq On : 26 Aug 2009 10:53 pm
Operator : WA/CC
Sample : P0902876-005 dil (200mL)
Misc : Environmental Health 102353
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 27 06:22:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.103min (-0.131) 170.36ng

response 1739897

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.28
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102470** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-006

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01374

Initial Pressure (psig): -2.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.77	ND	0.44	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**3.1**	0.77	**0.62**	0.15	
74-87-3	**Chloromethane**	**1.1**	0.15	**0.55**	0.074	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.77	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.15	ND	0.060	
106-99-0	1,3-Butadiene	ND	0.15	ND	0.069	
74-83-9	Bromomethane	ND	0.15	ND	0.039	
75-00-3	Chloroethane	ND	0.15	ND	0.058	
64-17-5	**Ethanol**	**130**	7.7	**67**	4.1	
75-05-8	**Acetonitrile**	**190**	0.77	**110**	0.46	E
107-02-8	**Acrolein**	**6.9**	0.77	**3.0**	0.33	
67-64-1	**Acetone**	**150**	7.7	**65**	3.2	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.15	**0.25**	0.027	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**10**	0.77	**4.2**	0.31	
107-13-1	Acrylonitrile	ND	0.77	ND	0.35	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.039	
75-09-2	Methylene Chloride	ND	0.77	ND	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.15	ND	0.049	
76-13-1	**Trichlorotrifluoroethane**	**0.73**	0.15	**0.095**	0.020	
75-15-0	**Carbon Disulfide**	**9.4**	0.77	**3.0**	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.039	
75-34-3	1,1-Dichloroethane	ND	0.15	ND	0.038	
1634-04-4	**Methyl tert-Butyl Ether**	**0.57**	0.15	**0.16**	0.042	
108-05-4	Vinyl Acetate	ND	7.7	ND	2.2	
78-93-3	**2-Butanone (MEK)**	**6.6**	0.77	**2.2**	0.26	

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.
E = Estimated; concentration exceeded calibration range.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102470**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01374

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

Initial Pressure (psig): -2.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.039	
141-78-6	**Ethyl Acetate**	**1.4**	0.77	**0.39**	0.21	
110-54-3	**n-Hexane**	**11**	0.77	**3.1**	0.22	
67-66-3	**Chloroform**	**0.20**	0.15	**0.040**	0.031	
109-99-9	**Tetrahydrofuran (THF)**	**1.1**	0.77	**0.36**	0.26	
107-06-2	**1,2-Dichloroethane**	**3.2**	0.15	**0.79**	0.038	
71-55-6	1,1,1-Trichloroethane	ND	0.15	ND	0.028	
71-43-2	**Benzene**	**2.4**	0.15	**0.74**	0.048	
56-23-5	**Carbon Tetrachloride**	**0.62**	0.15	**0.098**	0.024	
110-82-7	**Cyclohexane**	**1.9**	0.77	**0.54**	0.22	
78-87-5	1,2-Dichloropropane	ND	0.15	ND	0.033	
75-27-4	Bromodichloromethane	ND	0.15	ND	0.023	
79-01-6	Trichloroethene	ND	0.15	ND	0.028	
123-91-1	1,4-Dioxane	ND	0.77	ND	0.21	
80-62-6	Methyl Methacrylate	ND	0.77	ND	0.19	
142-82-5	**n-Heptane**	**3.2**	0.77	**0.79**	0.19	
10061-01-5	**cis-1,3-Dichloropropene**	**2.2**	0.77	**0.48**	0.17	
108-10-1	**4-Methyl-2-pentanone**	**0.92**	0.77	**0.23**	0.19	
10061-02-6	**trans-1,3-Dichloropropene**	**1.8**	0.77	**0.40**	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.15	ND	0.028	
108-88-3	**Toluene**	**20**	0.77	**5.4**	0.20	
591-78-6	**2-Hexanone**	**1.5**	0.77	**0.36**	0.19	
124-48-1	Dibromochloromethane	ND	0.15	ND	0.018	
106-93-4	1,2-Dibromoethane	ND	0.15	ND	0.020	
123-86-4	**n-Butyl Acetate**	**3.0**	0.77	**0.64**	0.16	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102470**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01374

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

Initial Pressure (psig): -2.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.0**	0.77	**0.42**	0.16	
127-18-4	**Tetrachloroethene**	**0.27**	0.15	**0.040**	0.023	
108-90-7	Chlorobenzene	ND	0.15	ND	0.033	
100-41-4	**Ethylbenzene**	**4.1**	0.77	**0.96**	0.18	
179601-23-1	**m,p-Xylenes**	**7.7**	0.77	**1.8**	0.18	
75-25-2	Bromoform	ND	0.77	ND	0.074	
100-42-5	**Styrene**	**5.7**	0.77	**1.3**	0.18	
95-47-6	**o-Xylene**	**3.9**	0.77	**0.89**	0.18	
111-84-2	**n-Nonane**	**1.4**	0.77	**0.26**	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.15	ND	0.022	
98-82-8	Cumene	ND	0.77	ND	0.16	
80-56-8	**alpha-Pinene**	**92**	0.77	**16**	0.14	
103-65-1	**n-Propylbenzene**	**1.1**	0.77	**0.23**	0.16	
622-96-8	**4-Ethyltoluene**	**1.4**	0.77	**0.29**	0.16	
108-67-8	**1,3,5-Trimethylbenzene**	**1.7**	0.77	**0.34**	0.16	
95-63-6	**1,2,4-Trimethylbenzene**	**5.5**	0.77	**1.1**	0.16	
100-44-7	Benzyl Chloride	ND	0.15	ND	0.030	
541-73-1	1,3-Dichlorobenzene	ND	0.15	ND	0.025	
106-46-7	1,4-Dichlorobenzene	ND	0.15	ND	0.025	
95-50-1	**1,2-Dichlorobenzene**	**0.28**	0.15	**0.046**	0.025	
5989-27-5	**d-Limonene**	**20**	0.77	**3.6**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.77	ND	0.079	
120-82-1	1,2,4-Trichlorobenzene	ND	0.77	ND	0.10	
91-20-3	**Naphthalene**	**2.3**	0.77	**0.44**	0.15	
87-68-3	Hexachlorobutadiene	ND	0.77	ND	0.072	

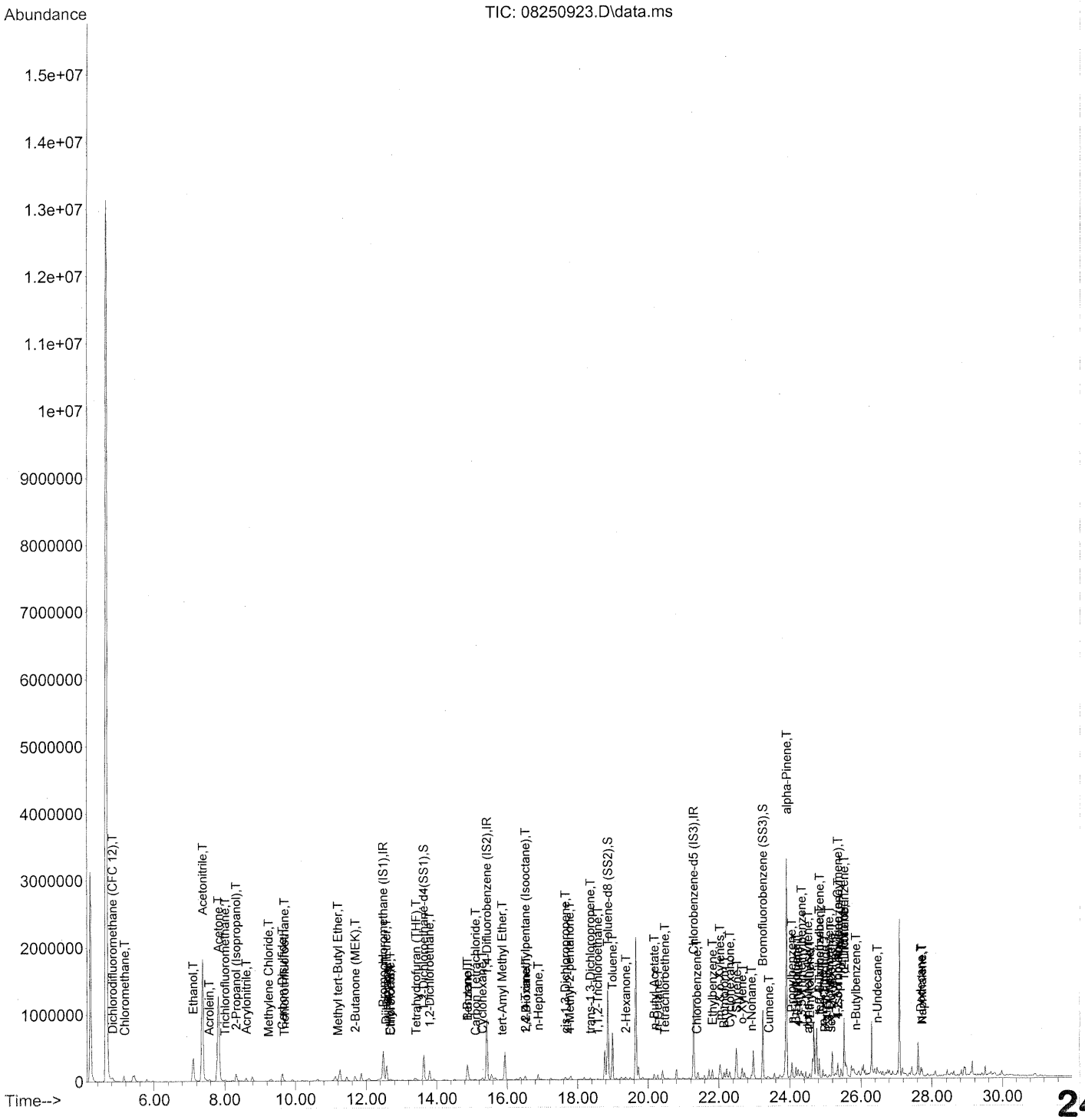
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 02 08:53:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 02 08:53:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

VM 9/1/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	208543	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1043895	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	506937	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	391774	21.614	ng		-0.03
Spiked Amount 25.000			Recovery =	86.44%			
57) Toluene-d8 (SS2)	18.85	98	1149597	25.953	ng		-0.02
Spiked Amount 25.000			Recovery =	103.80%			
73) Bromofluorobenzene (SS3)	23.23	174	331334	28.365	ng		-0.01
Spiked Amount 25.000			Recovery =	113.44%			
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D.	d		
3) Dichlorodifluoromethan...	4.82	85	46858	2.003	ng		99
4) Chloromethane	5.17	50	11627	0.740	ng		90
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	470	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.87	54	177	N.D.			
8) Bromomethane	6.35	94	192	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.10	45	747354	82.388	ng	E	100
11) Acetonitrile	7.38	41	3284053	123.620	ng		99
12) Acrolein	7.56	56	31019	4.492	ng		96
13) Acetone	7.82	58	860140	100.496	ng		95
14) Trichlorofluoromethane	8.01	101	19698	0.932	ng		99
15) 2-Propanol (Isopropanol)	8.33	45	226596	6.737	ng		99
16) Acrylonitrile	8.61	53	1586	0.103	ng	#	9
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.40	59	89	N.D.			
19) Methylene Chloride	9.24	84	1576	0.137	ng		98
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.	d		
21) Trichlorotrifluoroethane	9.68	151	3668	0.477	ng		92
22) Carbon Disulfide	9.63	76	249871	6.166	ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.19	73	11966	0.370	ng		70
26) Vinyl Acetate	0.00	86	0	N.D.	d		
27) 2-Butanone (MEK)	11.68	72	33175	4.293	ng	#	92
28) cis-1,2-Dichloroethene	12.09	61	92	N.D.			
29) Diisopropyl Ether	12.56	87	1409	0.136	ng	#	1
30) Ethyl Acetate	12.67	61	3690	0.917	ng		87
31) n-Hexane	12.58	57	145422	7.061	ng		9

VM 9/2/09

247

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 02 08:53:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	2345	0.129	ng		86
34) Tetrahydrofuran (THF)	13.41	72	5788	0.703	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.79	62	34462	2.080	ng		99
38) 1,1,1-Trichloroethane	14.16	97	96	N.D.			
39) Isopropyl Acetate	14.85	61	181	N.D.			
40) 1-Butanol	14.87	56	164801	12.164	ng		81
41) Benzene	14.87	78	71270	1.553	ng		99
42) Carbon Tetrachloride	15.10	117	5908	0.404	ng		99
43) Cyclohexane	15.29	84	20350	1.211	ng		96
44) tert-Amyl Methyl Ether	15.85	73	9903	0.287	ng	#	73
45) 1,2-Dichloropropane	15.95	63	94	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D. d			
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.53	88	1478	0.169	ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	51578	0.954	ng		80
50) Methyl Methacrylate	16.77	100	86	N.D.			
51) n-Heptane	16.88	71	25977	2.109	ng		94
52) cis-1,3-Dichloropropene	17.65	75	27260	1.427	ng		97
53) 4-Methyl-2-pentanone	17.76	58	6658	0.604	ng		89
54) trans-1,3-Dichloropropene	18.36	75	21634	1.191	ng		100
55) 1,1,2-Trichloroethane	18.56	97	545	0.054	ng	#	1
58) Toluene	18.98	91	576091	13.234	ng		99
59) 2-Hexanone	19.36	43	28236	0.975	ng		99
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	68015	1.993	ng		95
63) n-Octane	20.27	57	13633	1.295	ng		95
64) Tetrachloroethene	20.47	166	1787	0.177	ng	#	76
65) Chlorobenzene	21.37	112	1730	0.064	ng	#	43
66) Ethylbenzene	21.82	91	134950	2.712	ng		100
67) m- & p-Xylenes	22.03	91	202013	5.018	ng		98
68) Bromoform	22.15	173	480	0.056	ng	#	29
69) Styrene	22.50	104	109196	3.753	ng		99
70) o-Xylene	22.65	91	102230	2.533	ng		98
71) n-Nonane	22.91	43	24230	0.903	ng		92
72) 1,1,2,2-Tetrachloroethane	22.64	83	215	N.D.			
74) Cumene	23.41	105	14767	0.290	ng		99
75) alpha-Pinene	23.90	93	1568871	60.032	ng		86
76) n-Propylbenzene	24.05	91	46799	0.730	ng	#	68
77) 3-Ethyltoluene	24.17	105	103891	2.132	ng		99
78) 4-Ethyltoluene	24.22	105	44140	0.935	ng		98
79) 1,3,5-Trimethylbenzene	24.32	105	43587	1.095	ng		91

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 02 08:53:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

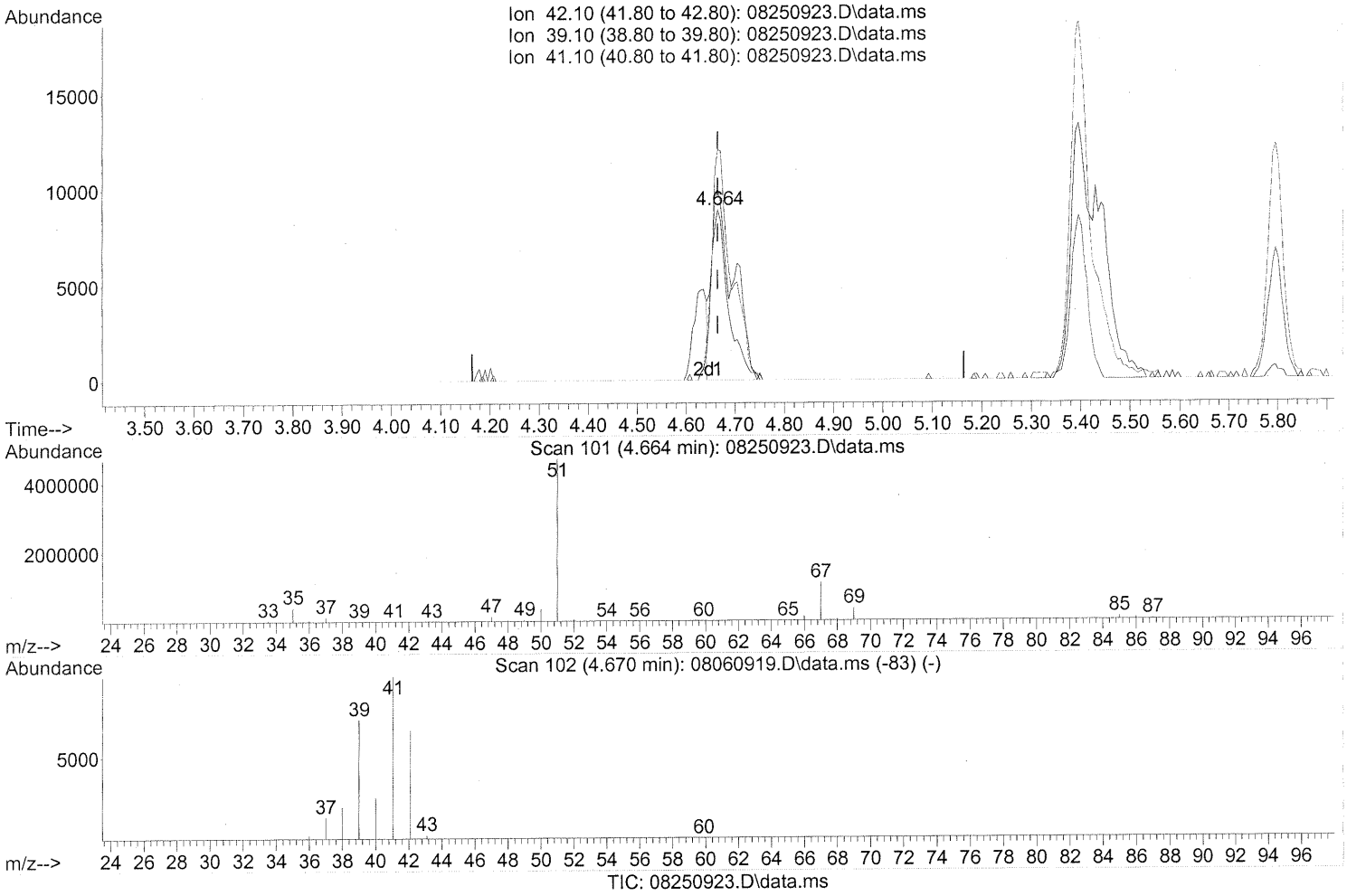
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	2765	0.130 ng		97
81) 2-Ethyltoluene	24.55	105	41365	0.842 ng		99
82) 1,2,4-Trimethylbenzene	24.83	105	145454	3.582 ng		89
83) n-Decane	24.93	57	53327	2.020 ng		86
84) Benzyl Chloride	24.99	91	2825	0.074 ng		75
85) 1,3-Dichlorobenzene	25.10	146	1584	0.077 ng		96
86) 1,4-Dichlorobenzene	25.10	146	1584	0.072 ng		96
87) sec-Butylbenzene	25.16	105	4036	0.074 ng	#	75
88) 4-Isopropyltoluene (p-...	25.35	119	71131	1.454 ng		99
89) 1,2,3-Trimethylbenzene	25.35	105	40789	0.986 ng		91
90) 1,2-Dichlorobenzene	25.52	146	3552	0.182 ng		96
91) d-Limonene	25.53	68	223562	12.947 ng		93
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	41501	1.478 ng	#	69
94) 1,2,4-Trichlorobenzene	27.58	180	599	N.D.		
95) Naphthalene	27.72	128	82555	1.497 ng		97
96) n-Dodecane	27.69	57	40682	1.247 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	62735	3.478 ng		95
99) tert-Butylbenzene	24.82	119	17489	0.445 ng	#	56
100) n-Butylbenzene	25.86	91	17870	0.395 ng	#	45

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 01 14:13:05 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(2) Propene (T)

4.664min (+0.000) 1.52ng

response 21685

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	143.63#
41.10	150.20	156.16
0.00	0.00	0.00

FP
WT 9/11/09

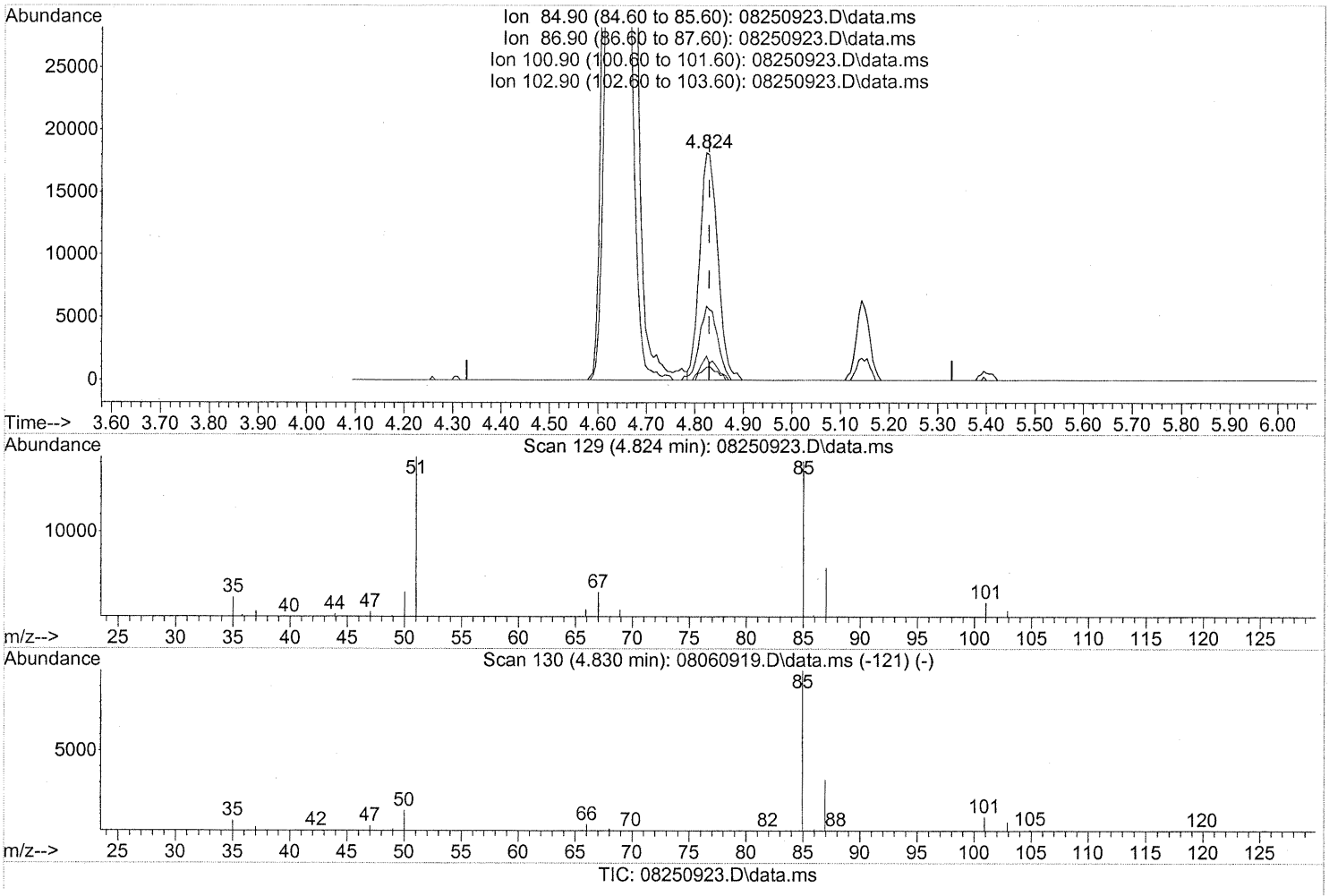
9/2/09

250

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (CFC 12) (T)

4.824min (-0.006) 2.00ng

response 46858

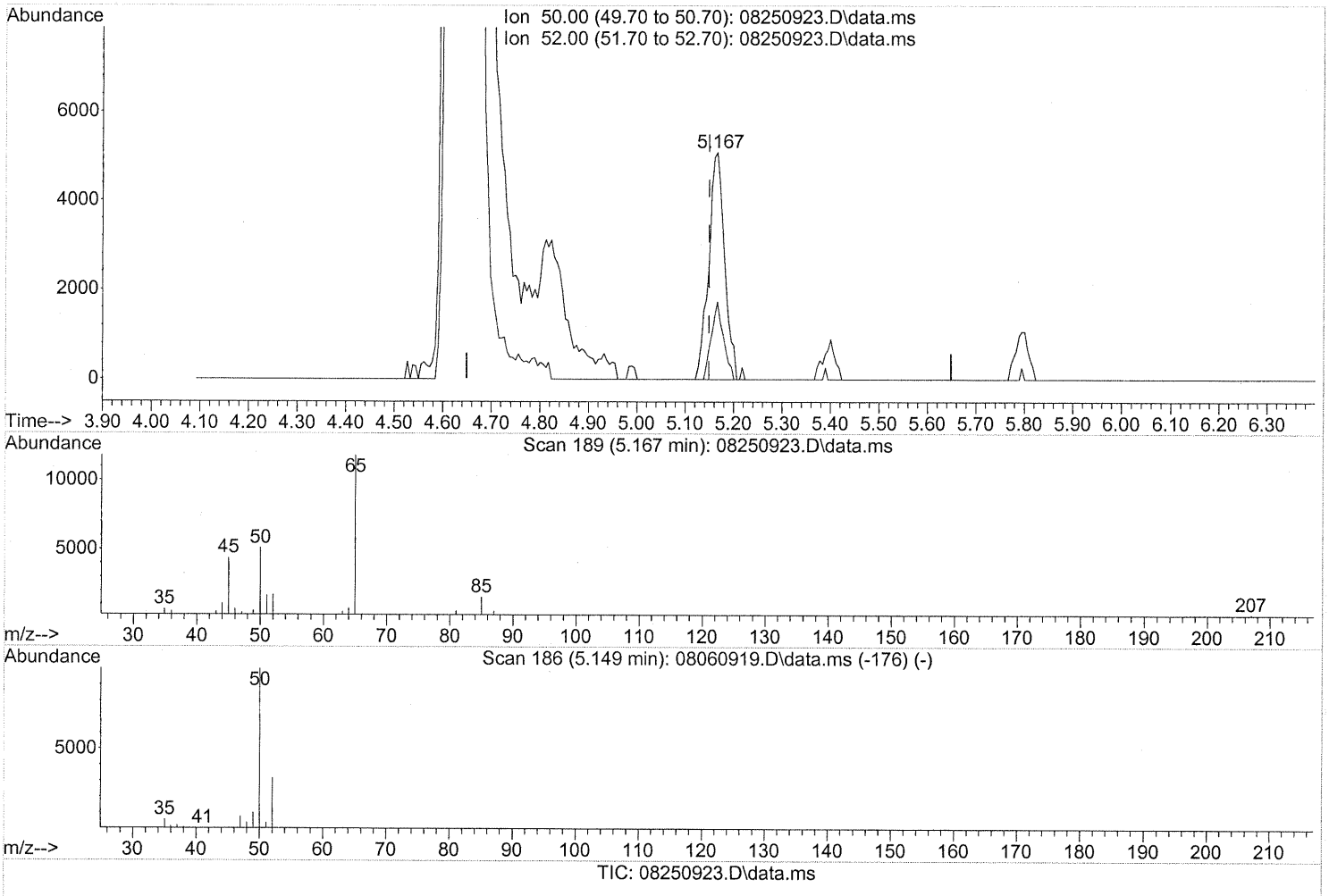
Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.42
100.90	8.80	8.73
102.90	5.20	5.07

251

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.167min (+0.017) 0.74ng

response 11627

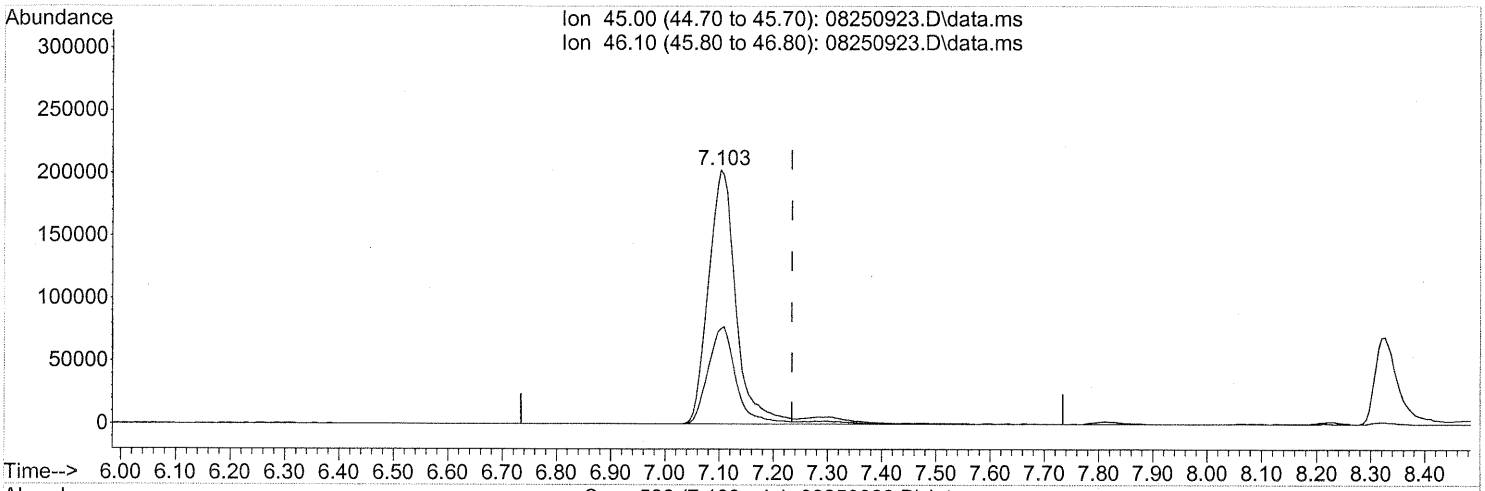
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	25.87
0.00	0.00	0.00
0.00	0.00	0.00

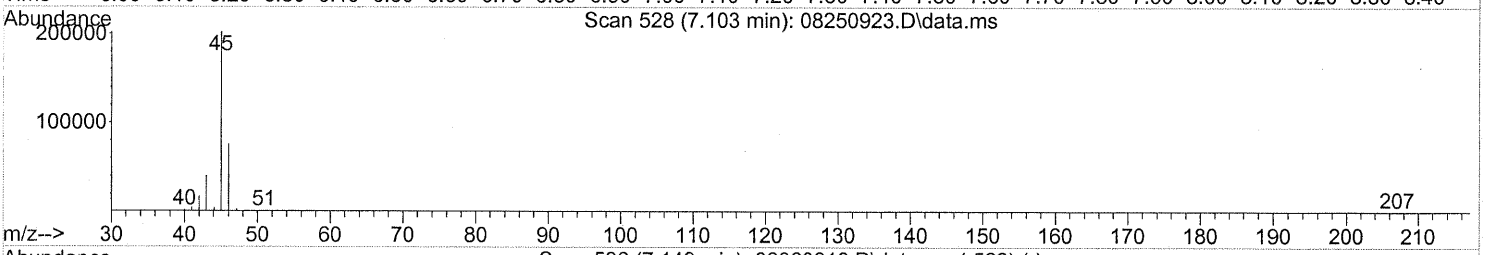
252

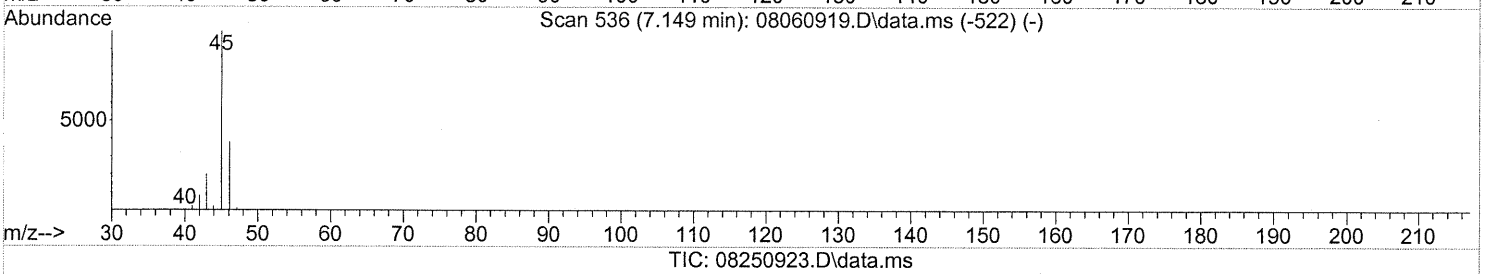
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(10) Ethanol (T)

7.103min (-0.131) 82.39ng

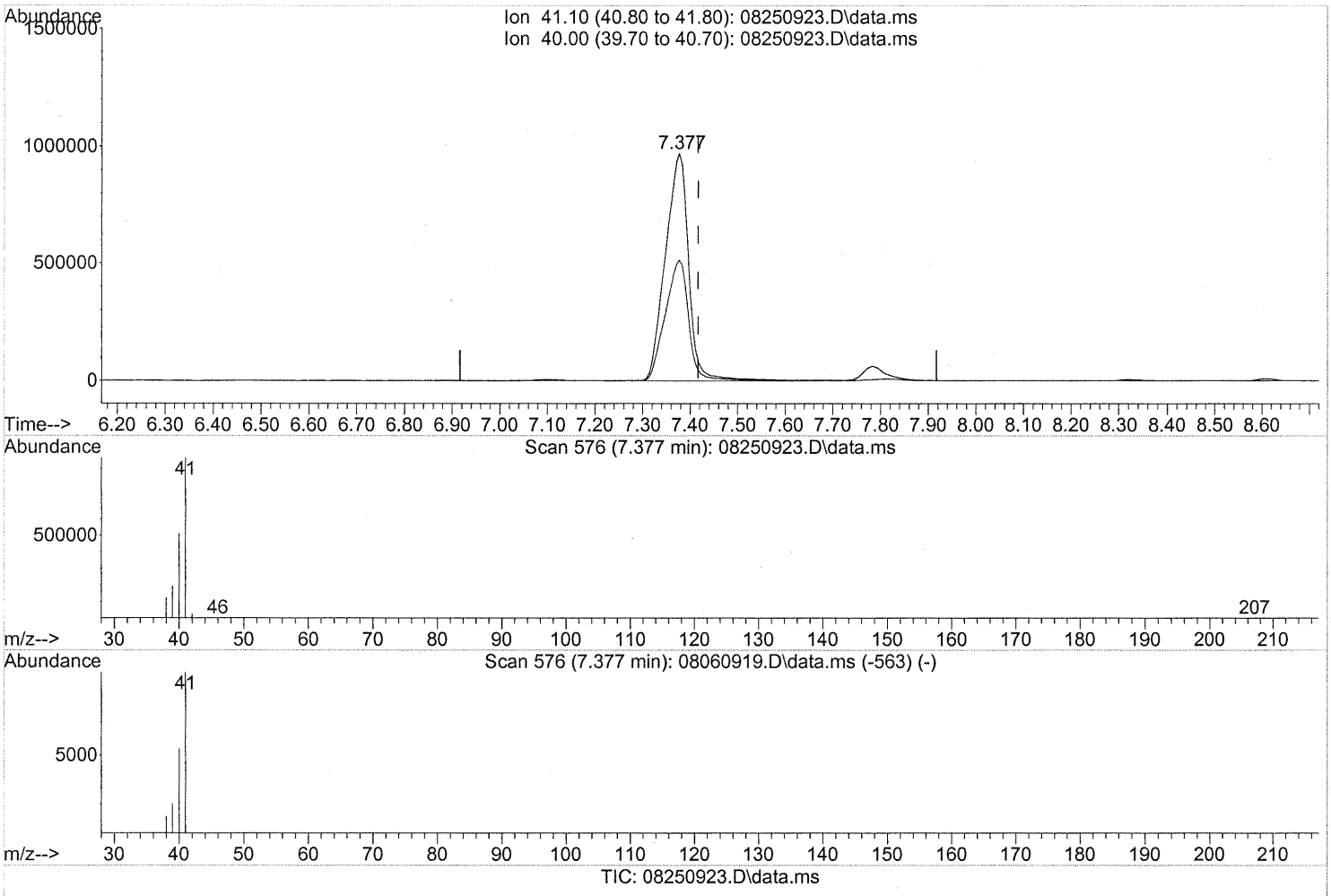
response 747354

Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(11) Acetonitrile (T)

7.377min (-0.040) 123.62ng

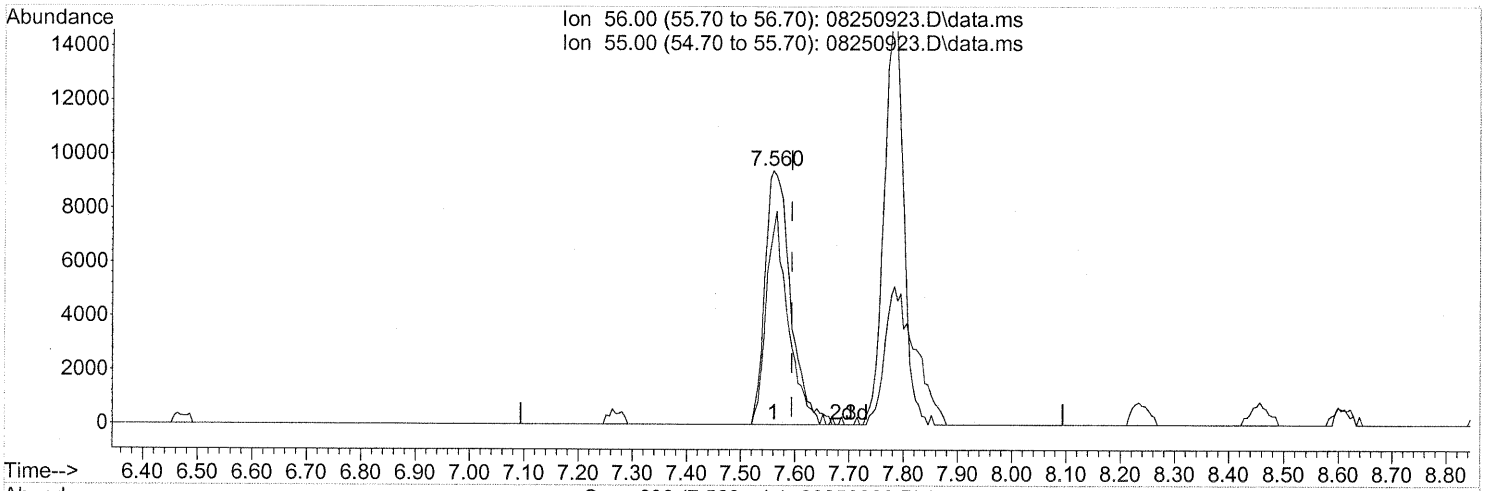
response 3284053

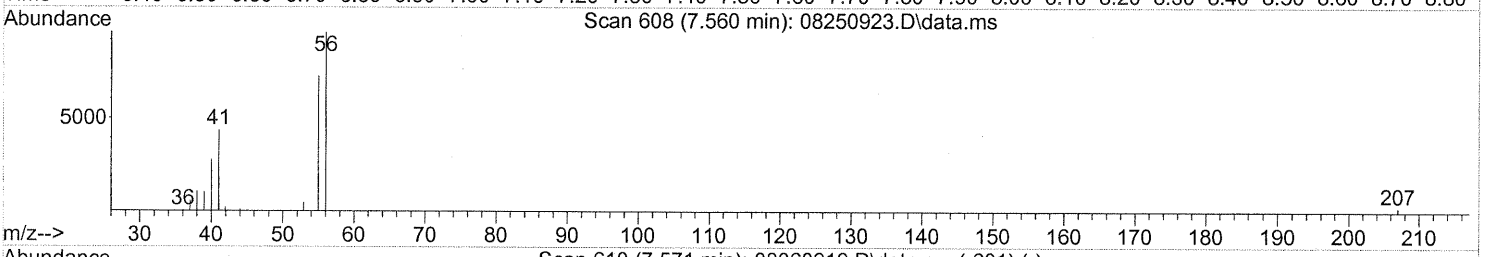
Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.11
0.00	0.00	0.00
0.00	0.00	0.00

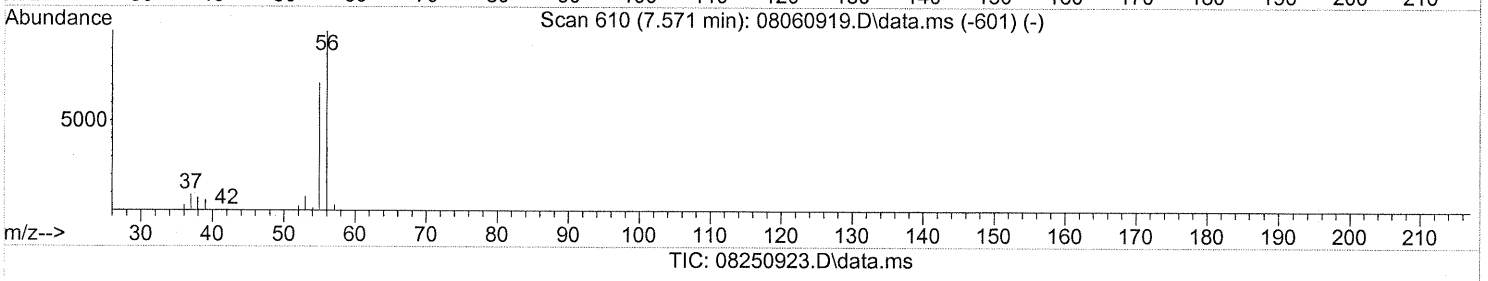
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(12) Acrolein (T)

7.560min (-0.034) 4.49ng

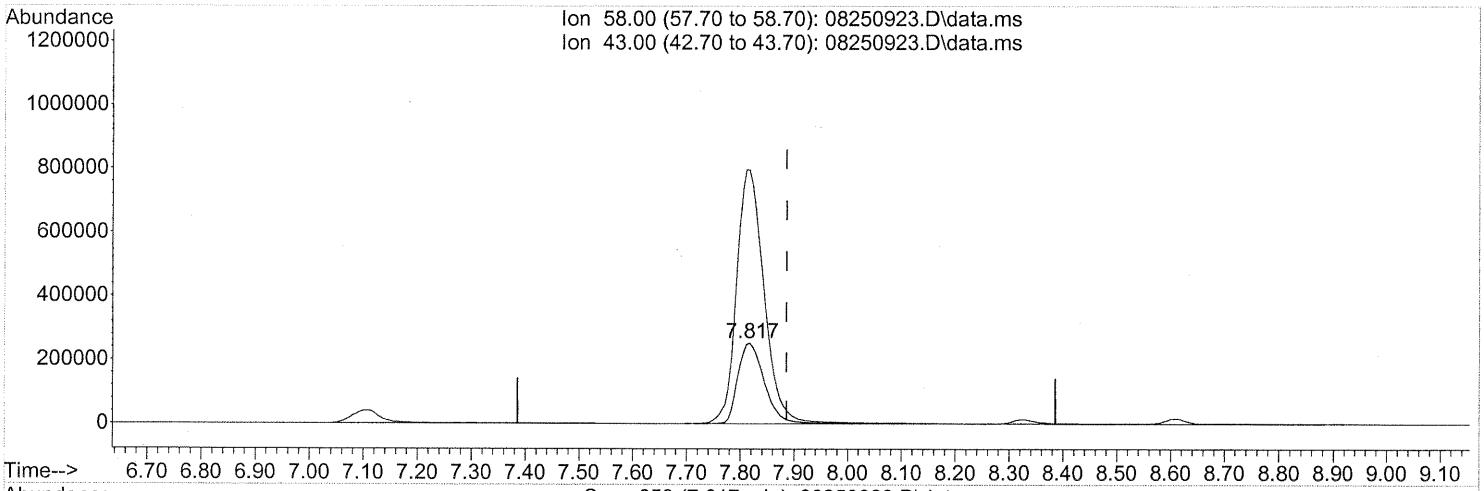
response 31019

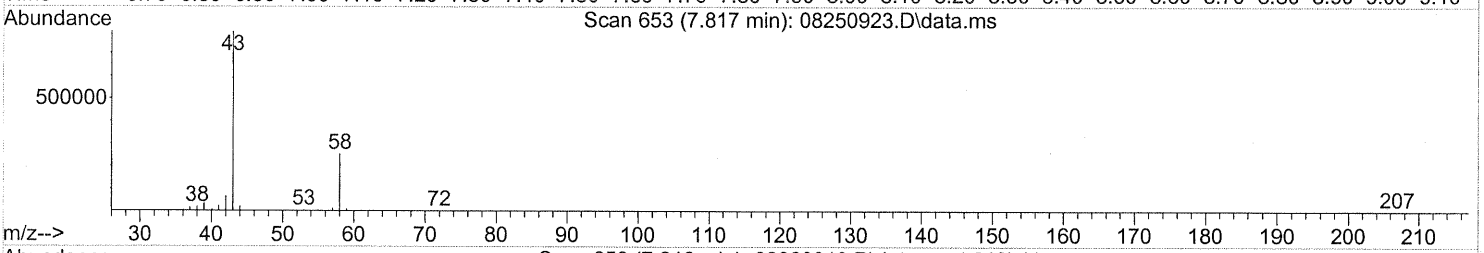
Ion	Exp%	Act%
56.00	100	100
55.00	68.10	71.26
0.00	0.00	0.00
0.00	0.00	0.00

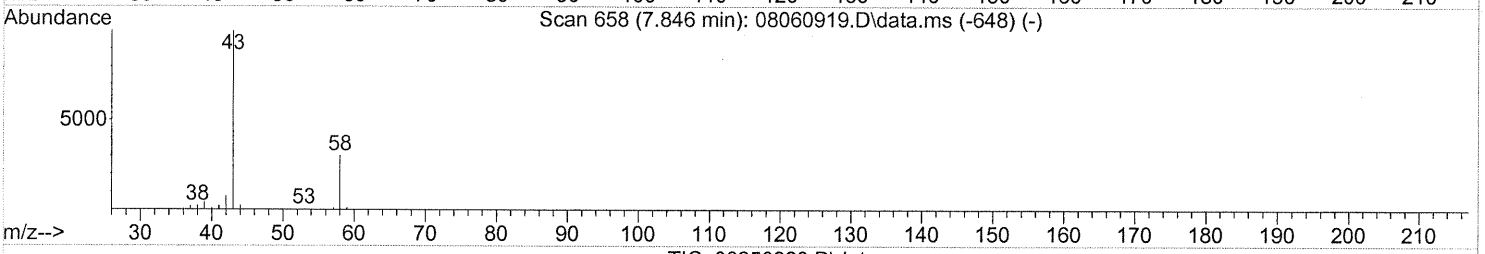
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(13) Acetone (T)

7.817min (-0.069) 100.50ng

response 860140

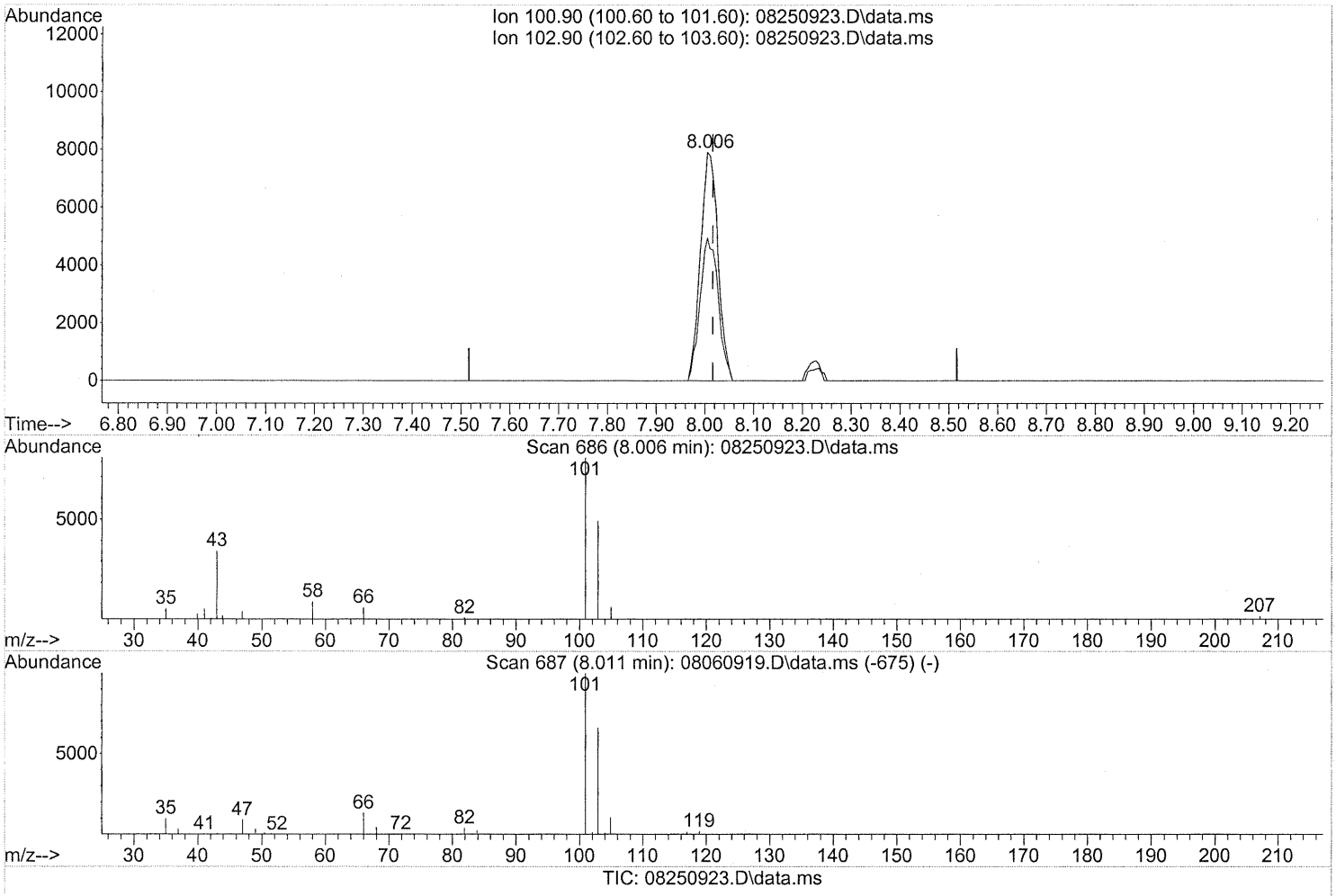
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	330.24
0.00	0.00	0.00
0.00	0.00	0.00

256

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(14) Trichlorofluoromethane (T)

8.006min (-0.011) 0.93ng

response 19698

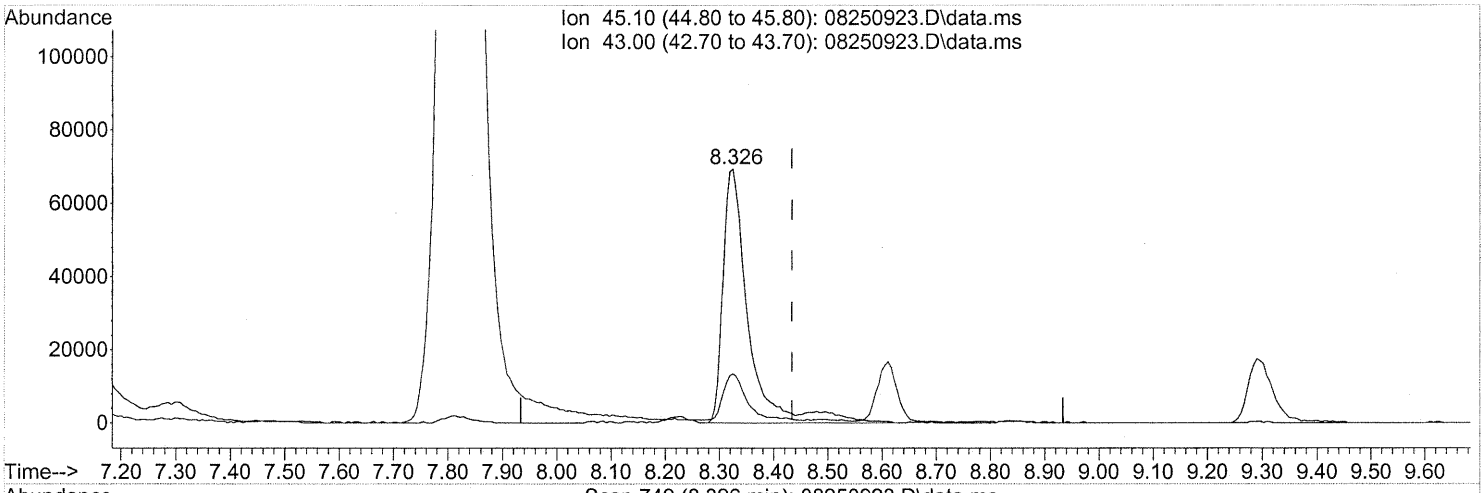
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.00
0.00	0.00	0.00
0.00	0.00	0.00

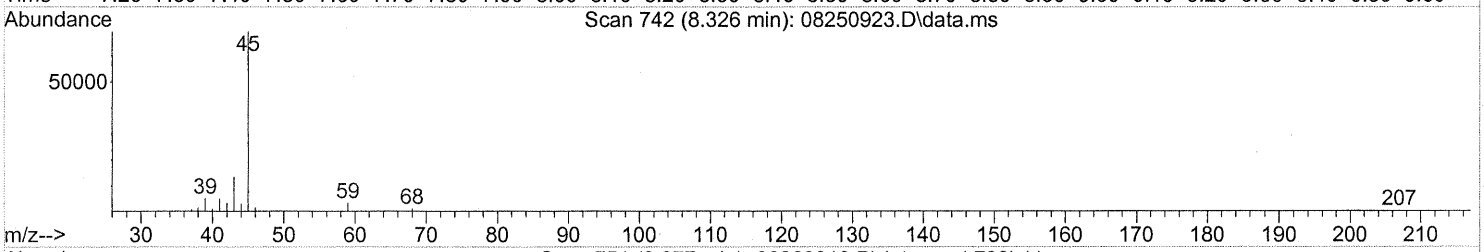
257

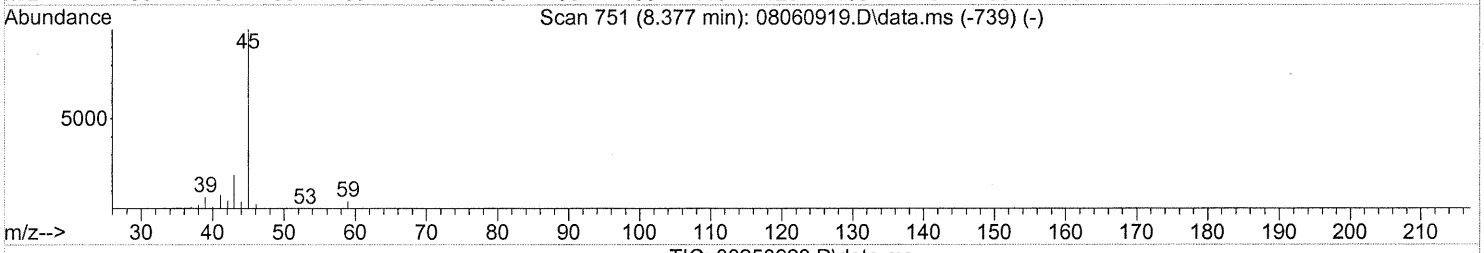
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

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

8.326min (-0.108) 6.74ng

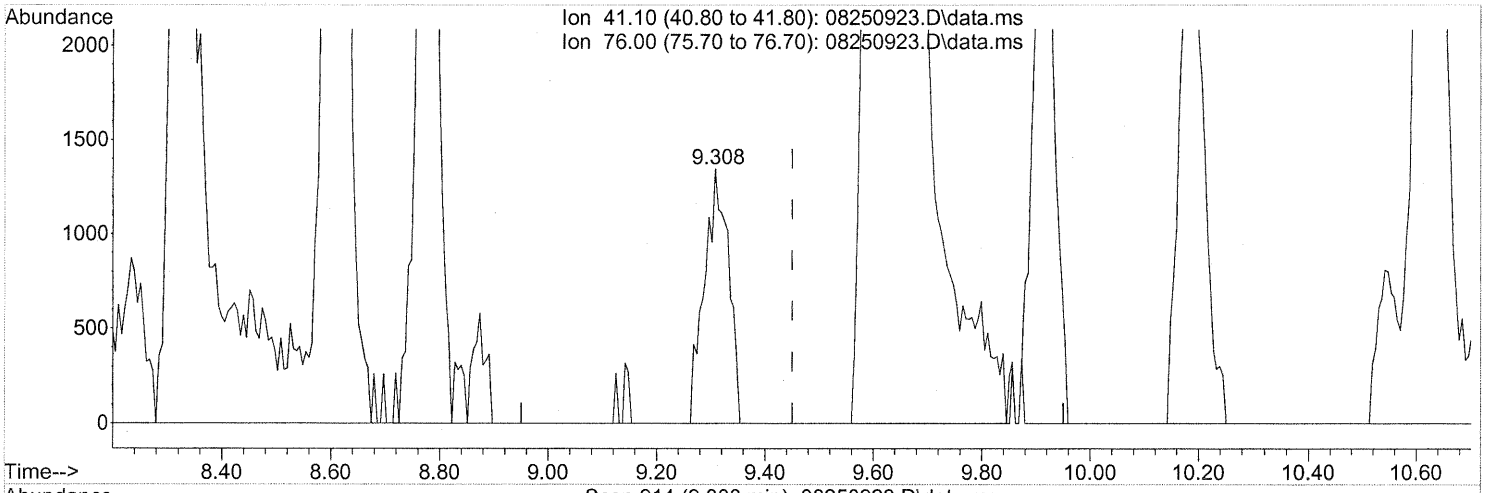
response 226596

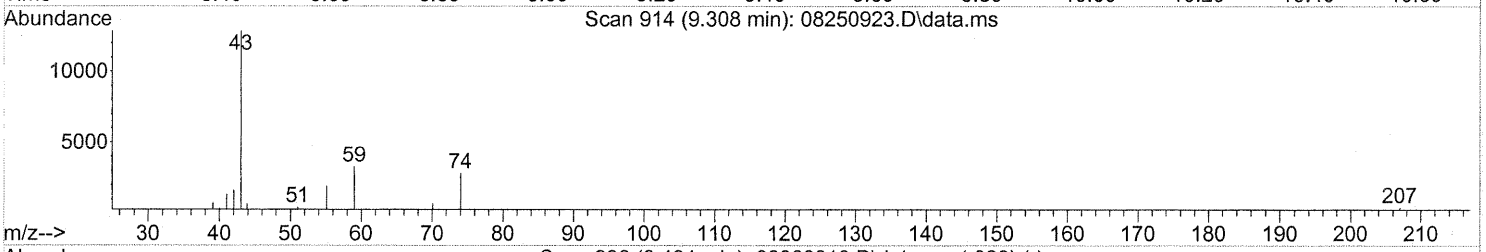
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.74
0.00	0.00	0.00
0.00	0.00	0.00

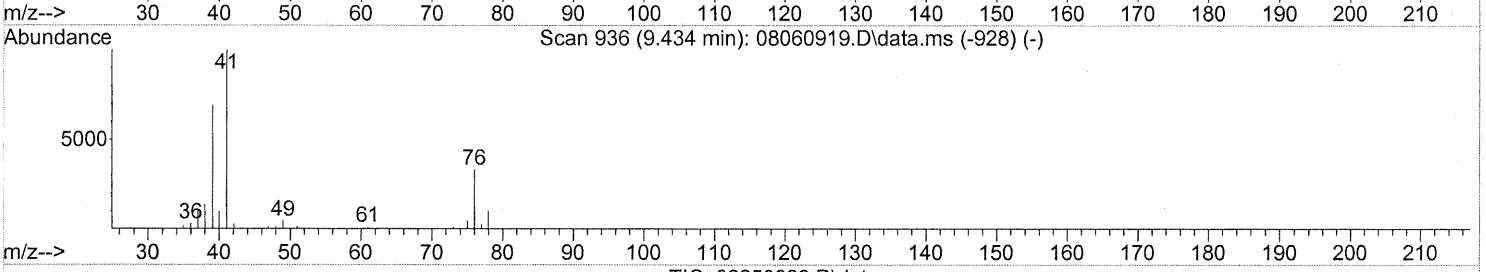
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 01 10:41:26 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

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

9.308min (-0.143) 0.19ng

response 4156

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FD
VM 9/11/09

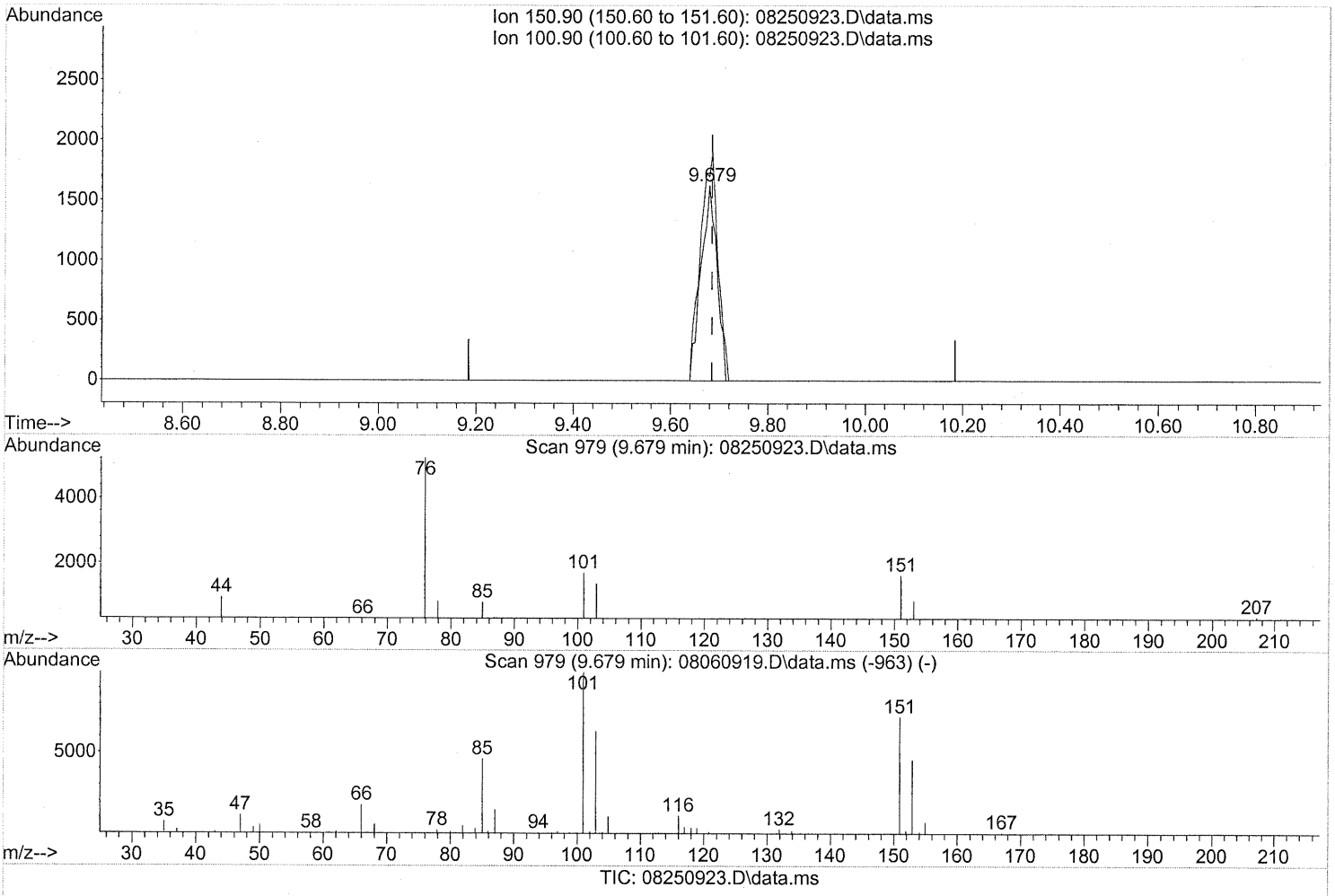
9/2/09

259

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.48ng

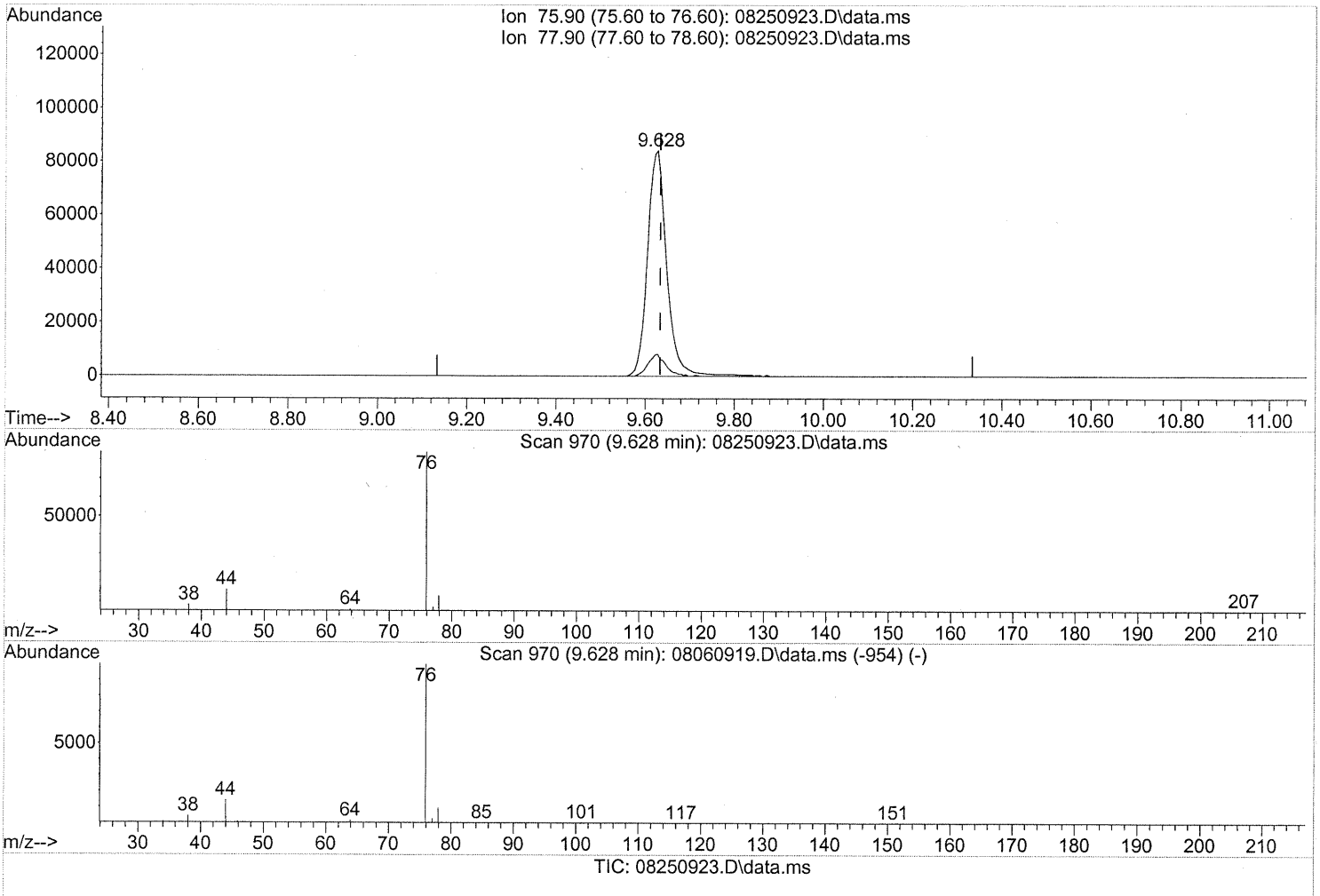
response 3668

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	129.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(22) Carbon Disulfide (T)

9.628min (-0.006) 6.17ng

response 249871

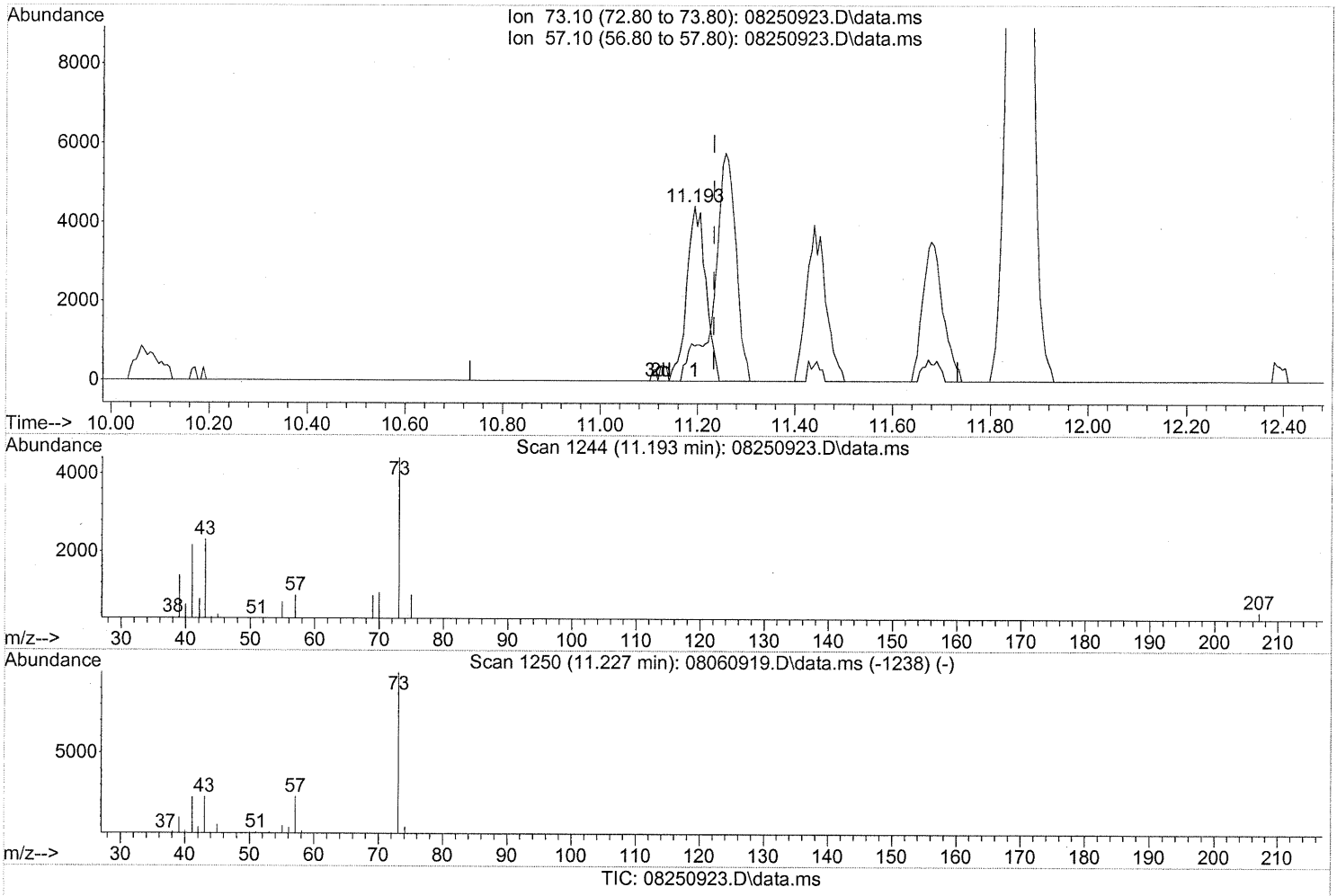
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.81
0.00	0.00	0.00
0.00	0.00	0.00

261

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(25) Methyl tert-Butyl Ether (T)

11.193min (-0.040) 0.37ng

response 11966

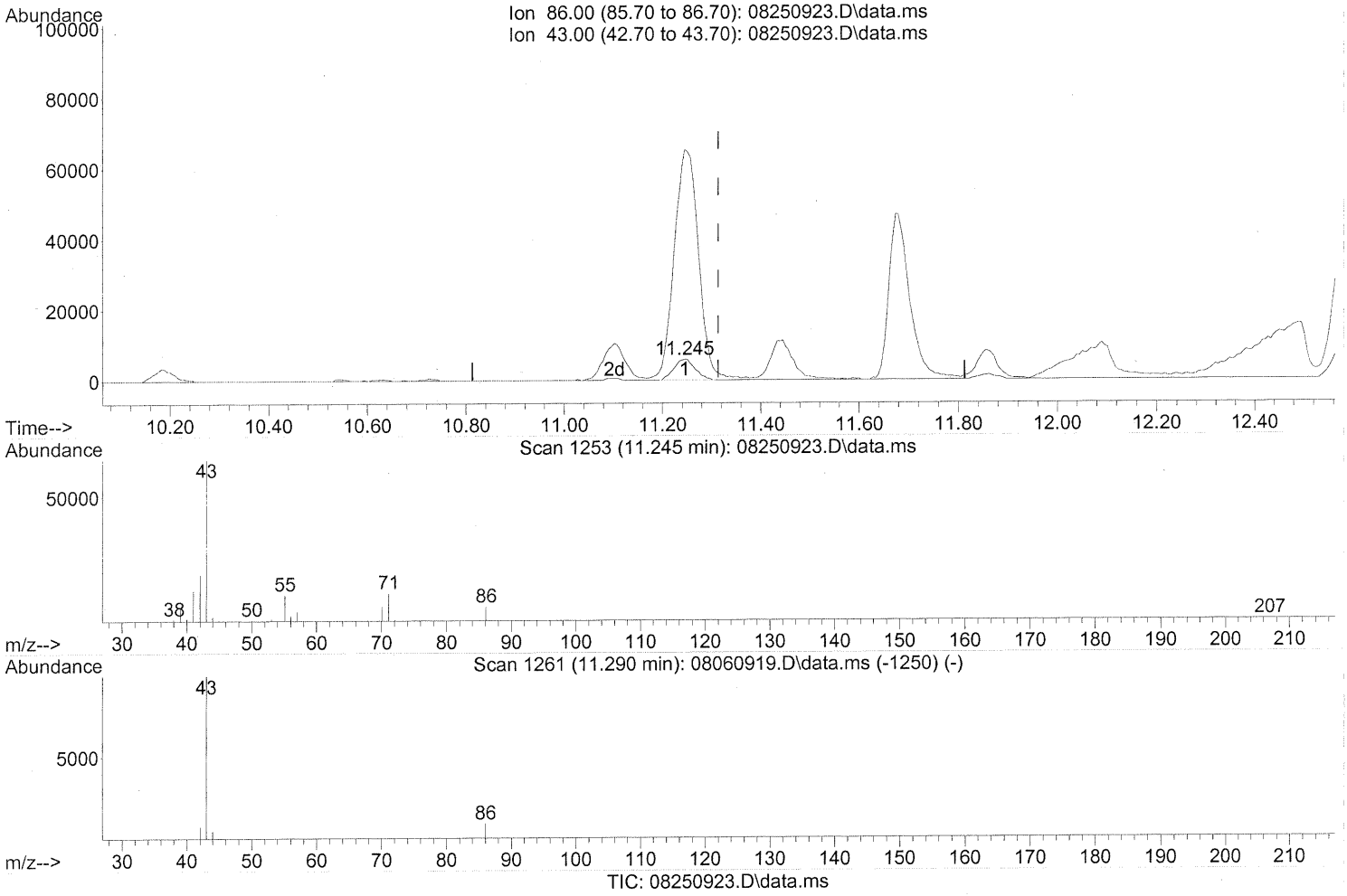
Ion	Exp%	Act%
73.10	100	100
57.10	22.50	8.07
0.00	0.00	0.00
0.00	0.00	0.00

262

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28 am
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 02 08:51:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(26) Vinyl Acetate (T)

11.245min (-0.068) 9.90ng

response 17239

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1274.74#
0.00	0.00	0.00
0.00	0.00	0.00

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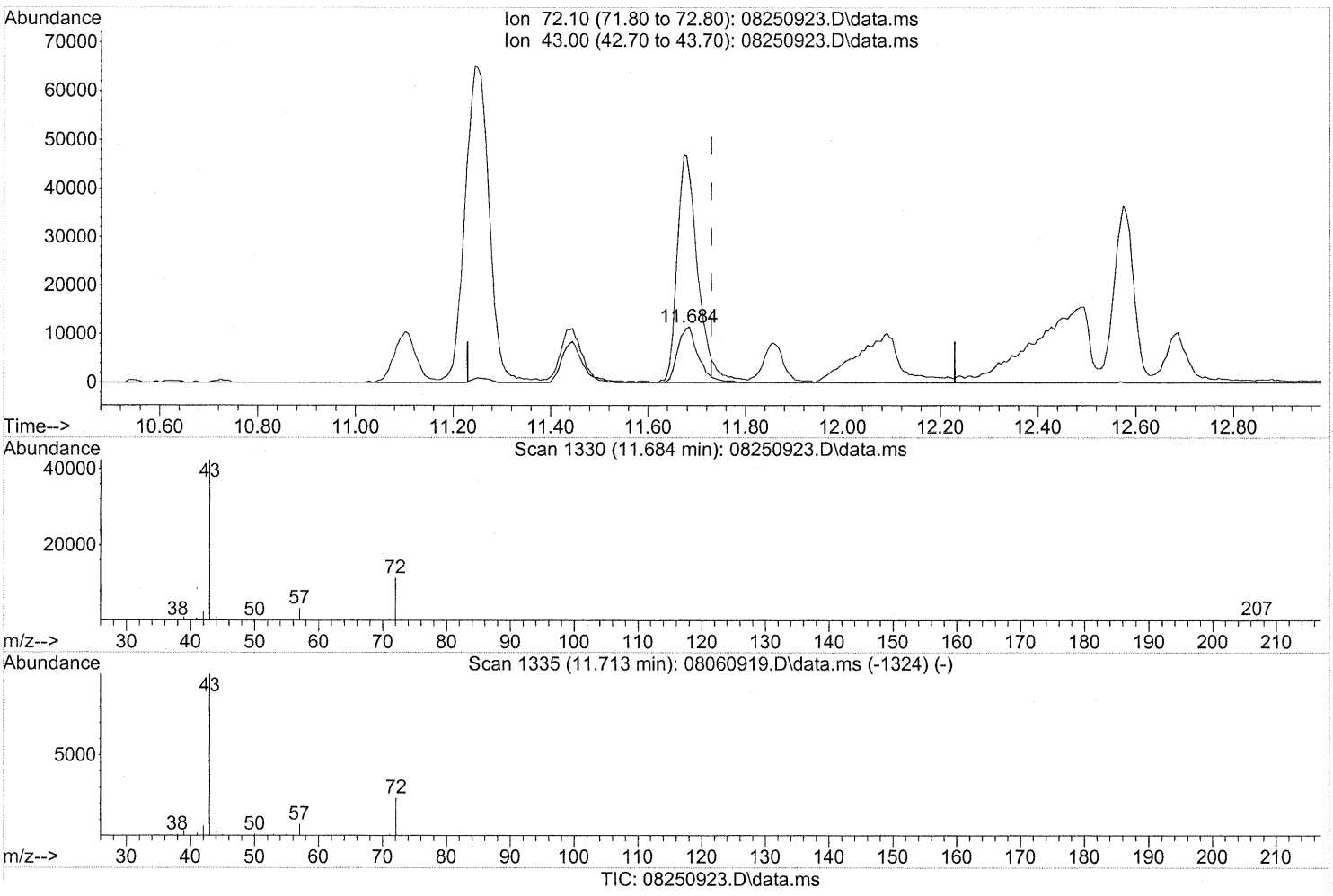
263

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

11.684min (-0.046) 4.29ng

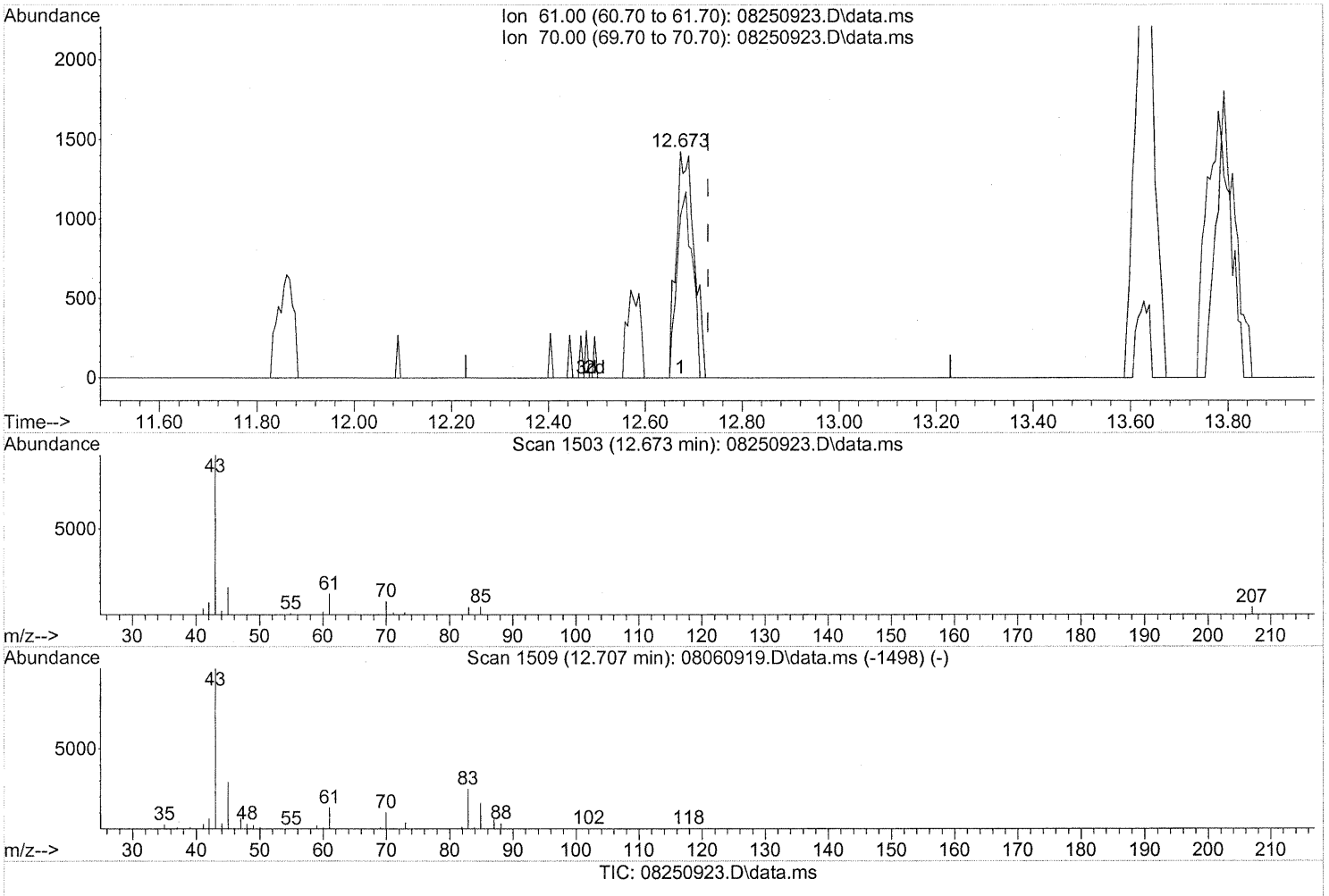
response 33175

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	416.07#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(30) Ethyl Acetate (T)

12.673min (-0.057) 0.92ng

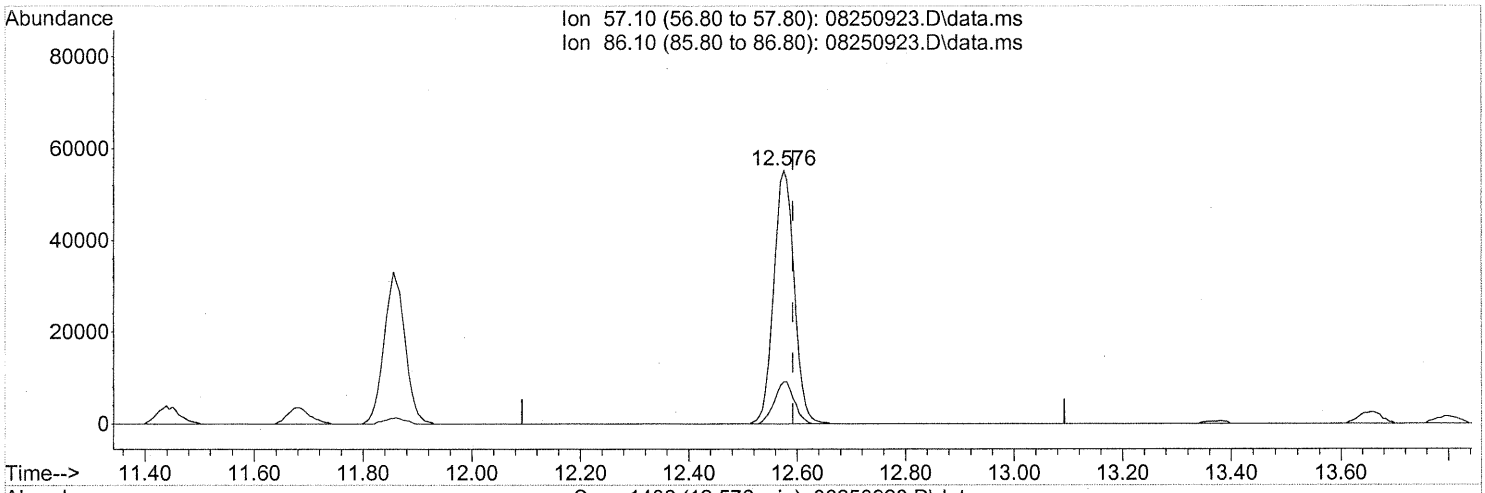
response 3690

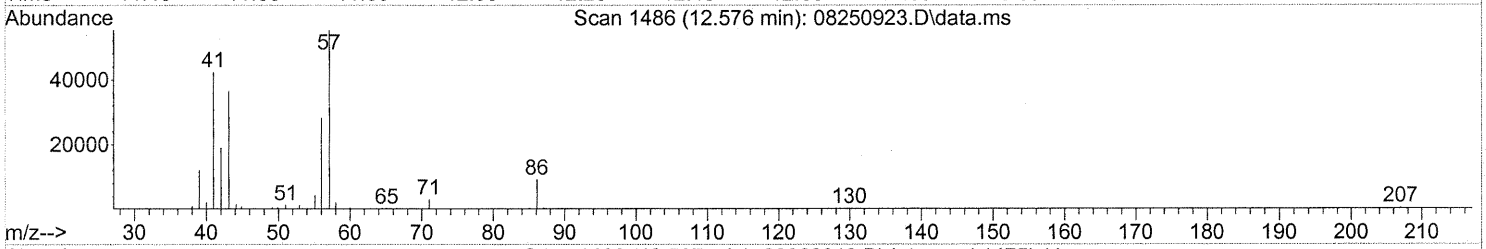
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	70.03
0.00	0.00	0.00
0.00	0.00	0.00

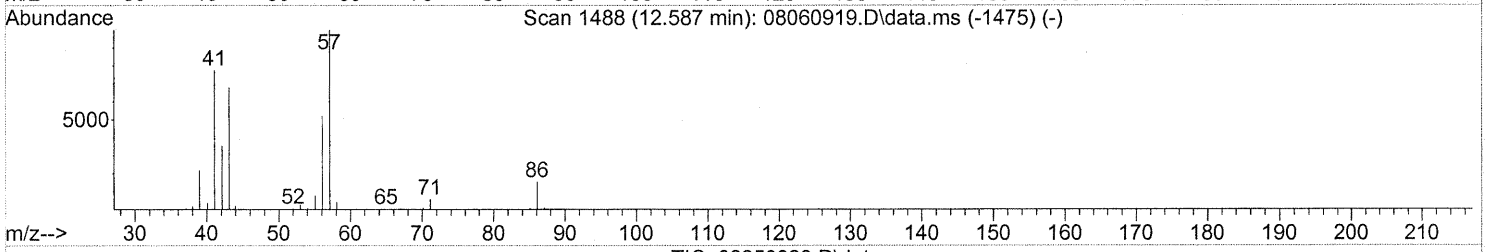
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(31) n-Hexane (T)

12.576min (-0.017) 7.06ng

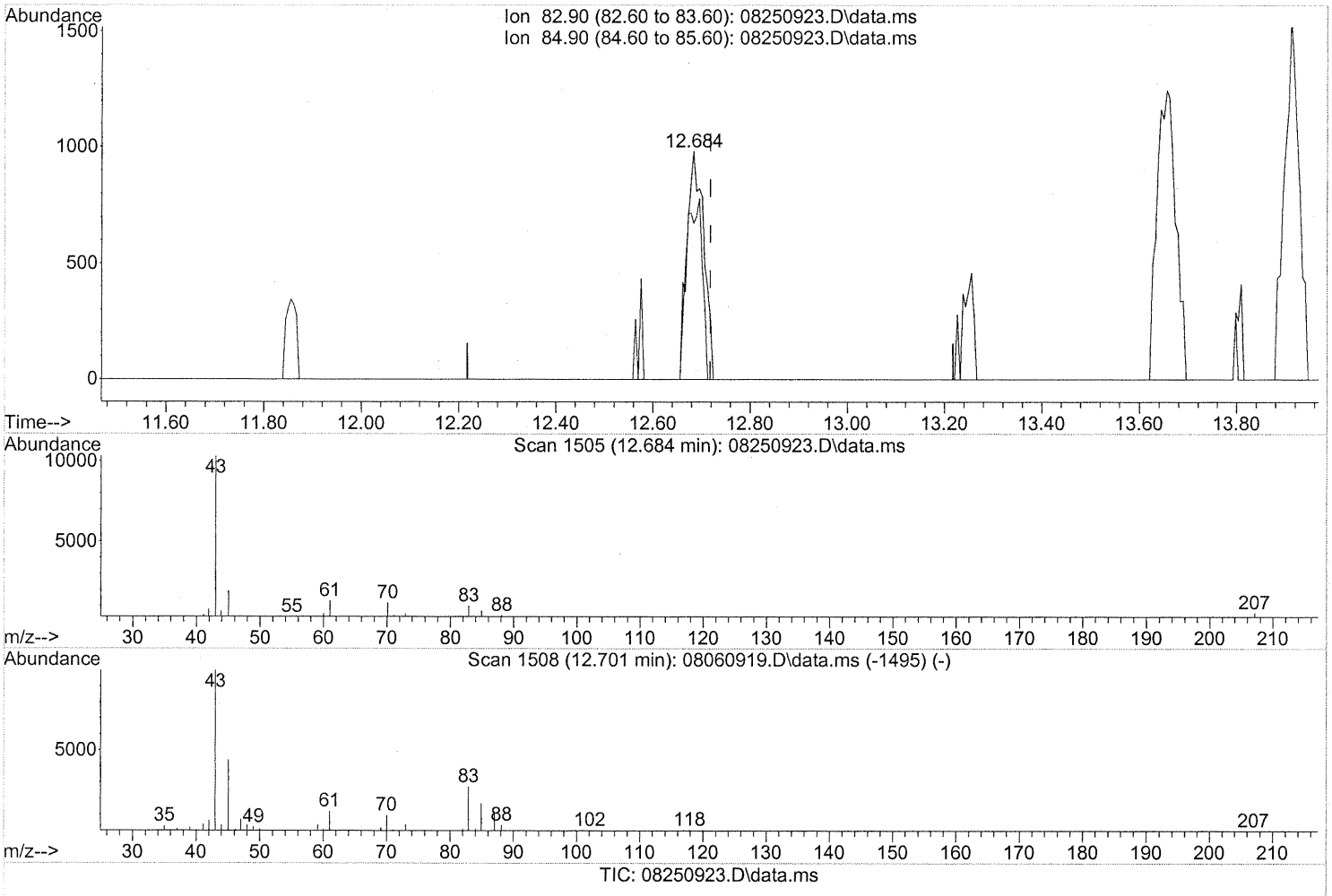
response 145422

Ion	Exp%	Act%
57.10	100	100
86.10	15.70	15.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(32) Chloroform (T)

12.684min (-0.034) 0.13ng

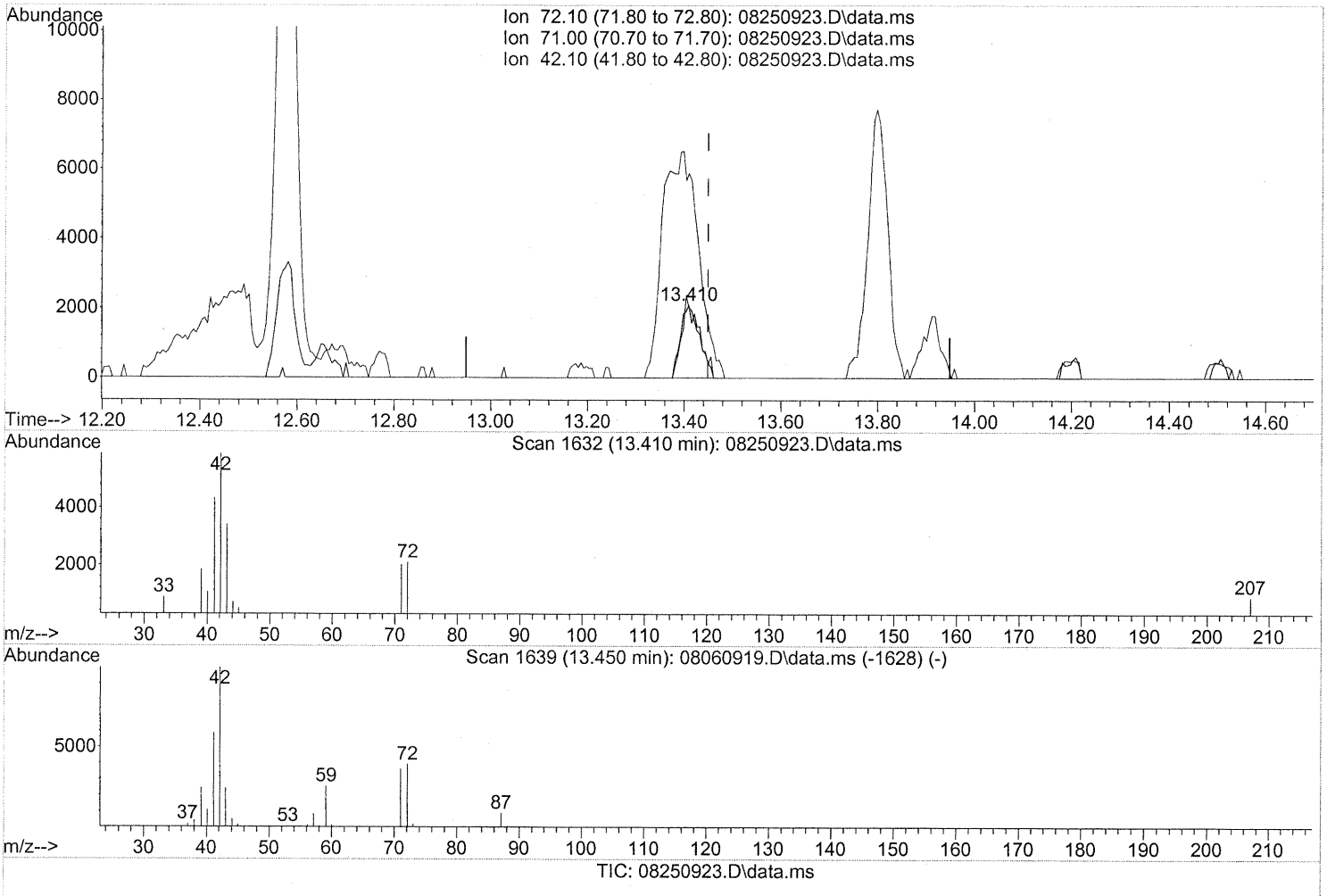
response 2345

Ion	Exp%	Act%
82.90	100	100
84.90	64.30	75.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(34) Tetrahydrofuran (THF) (T)

13.410min (-0.039) 0.70ng

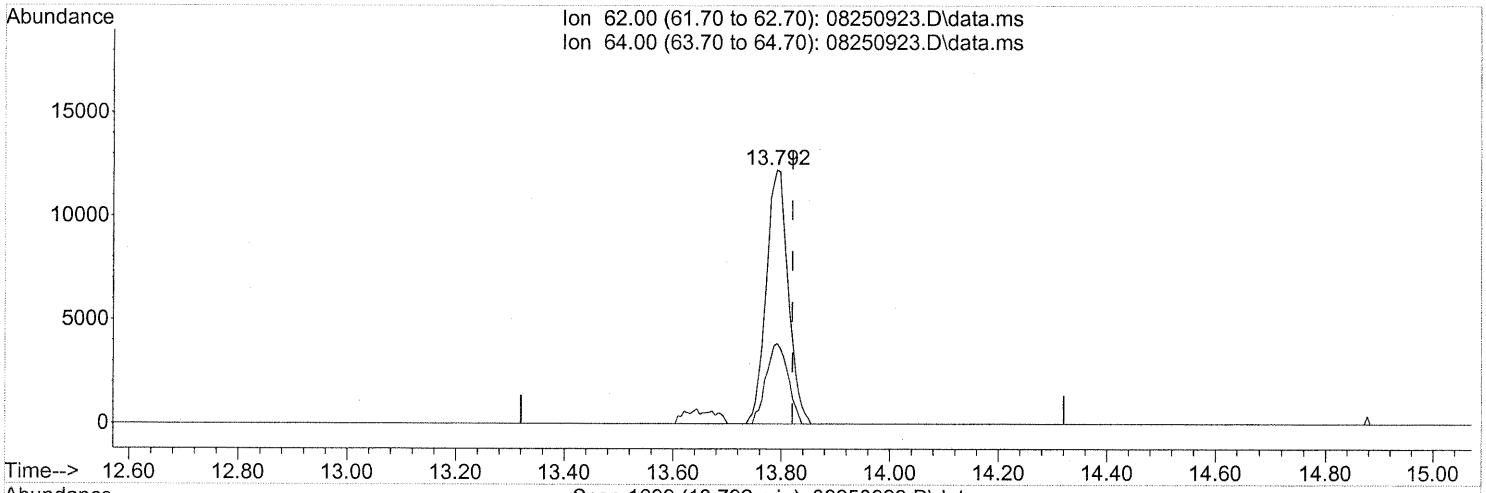
response 5788

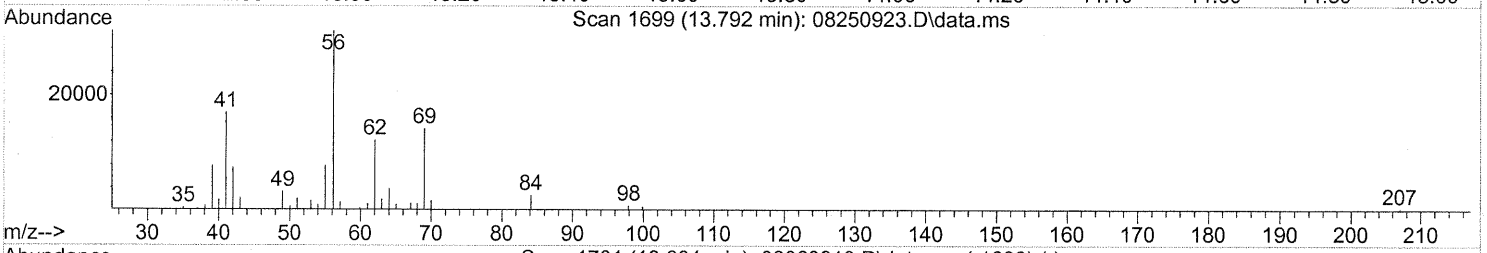
Ion	Exp%	Act%
72.10	100	100
71.00	95.70	98.19
42.10	253.40	578.06#
0.00	0.00	0.00

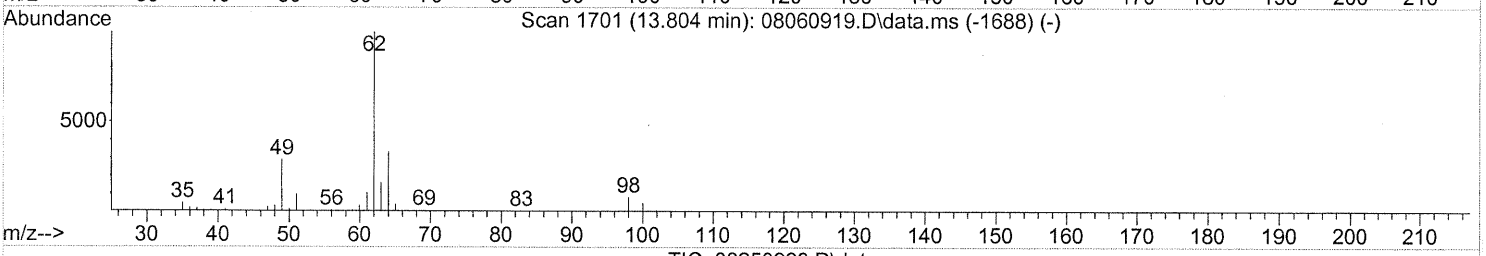
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.028) 2.08ng

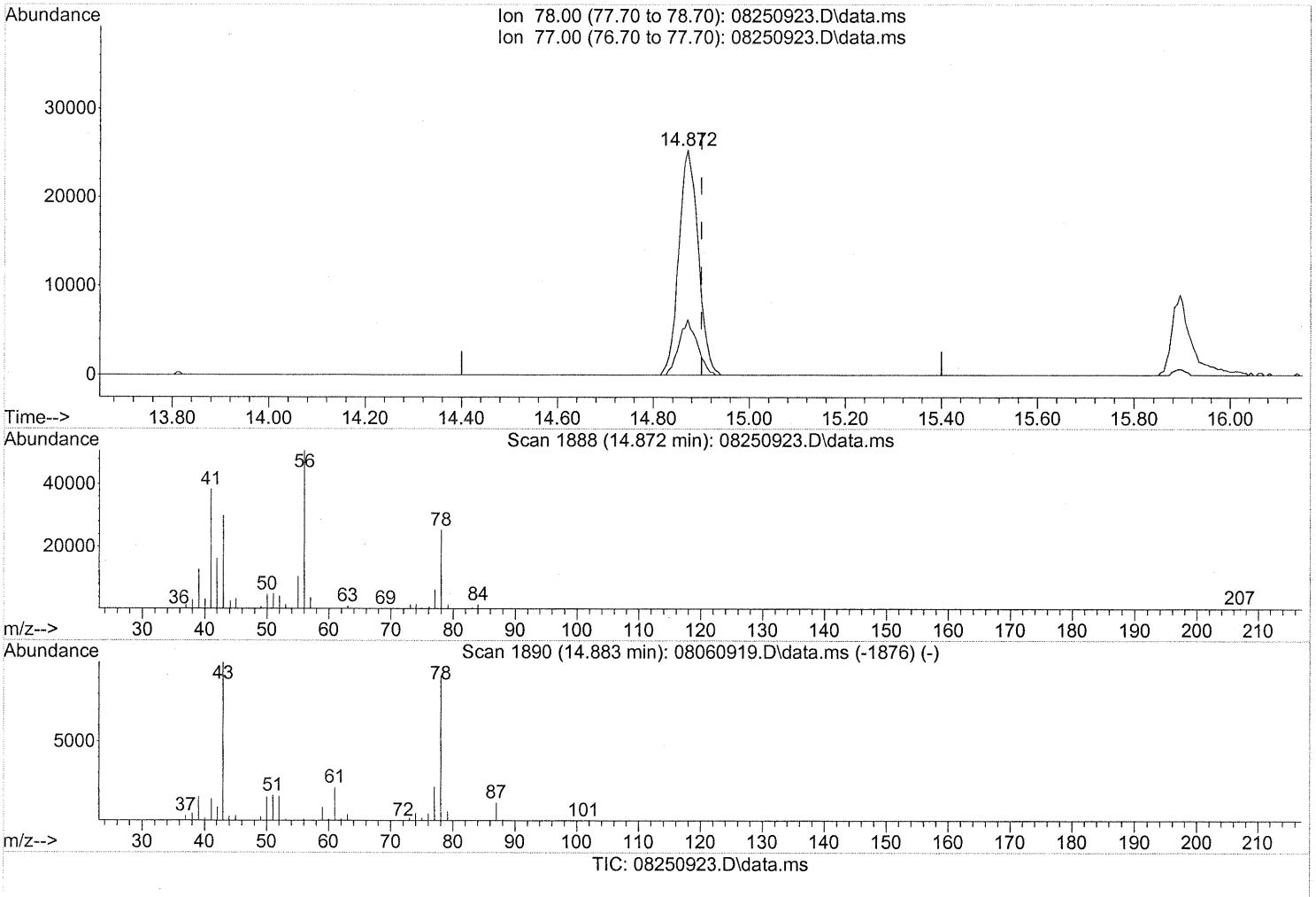
response 34462

Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(41) Benzene (T)

14.872min (-0.028) 1.55ng

response 71270

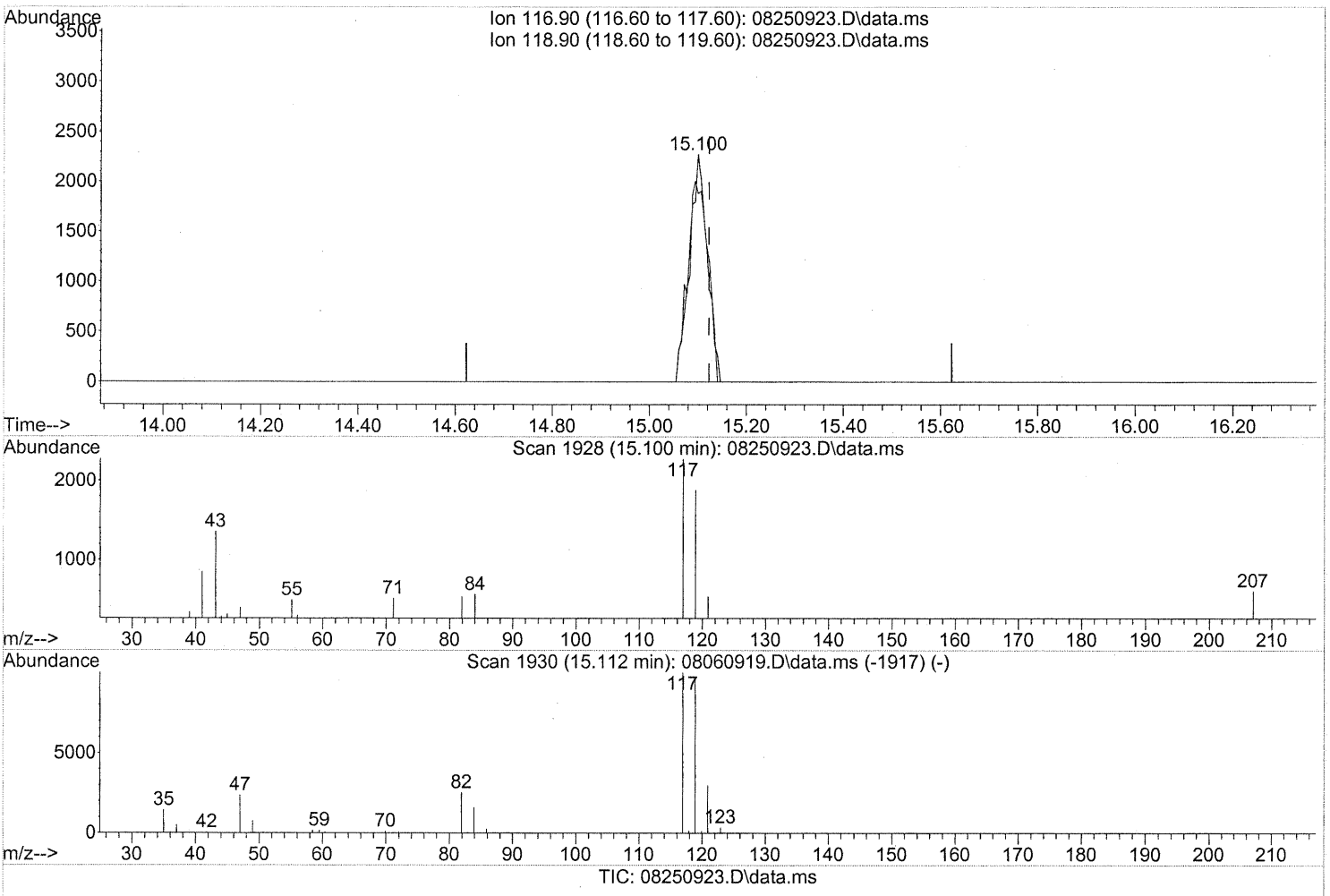
Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.14
0.00	0.00	0.00
0.00	0.00	0.00

270

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 0.40ng

response 5908

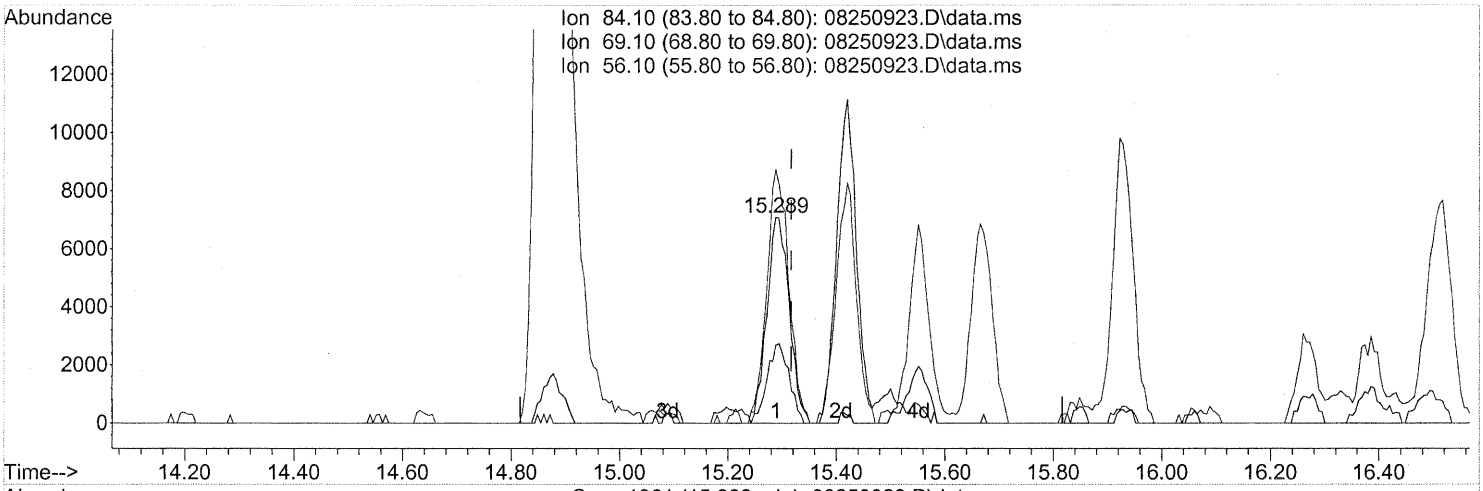
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	96.09
0.00	0.00	0.00
0.00	0.00	0.00

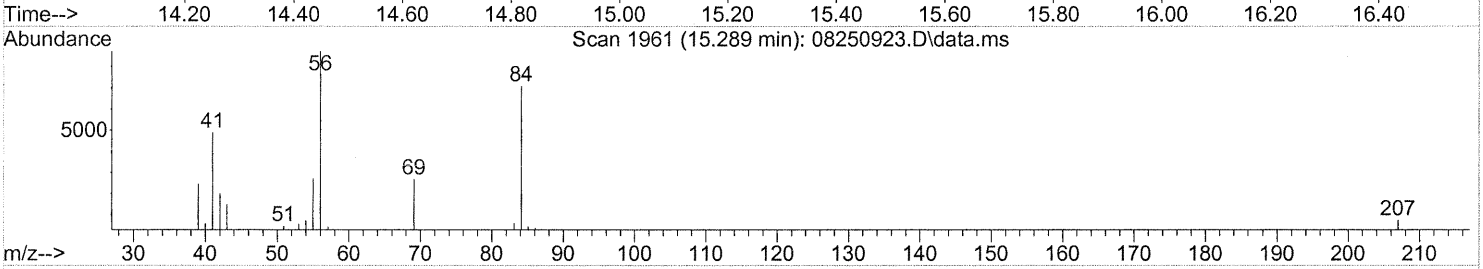
271

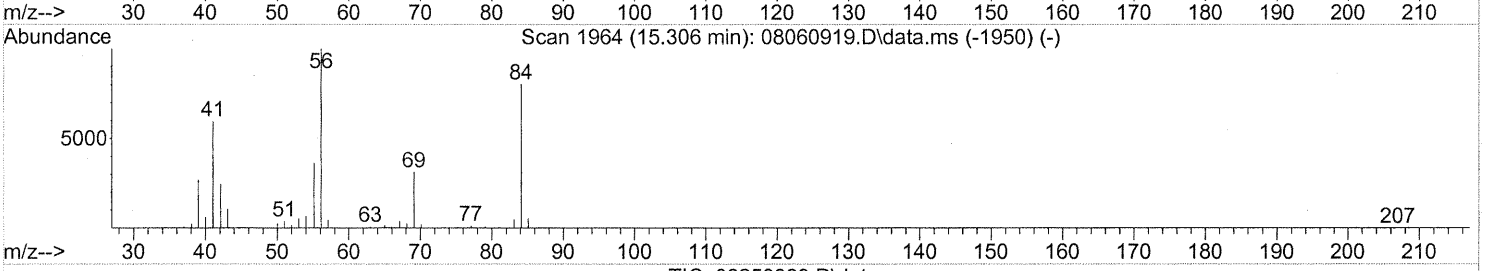
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(43) Cyclohexane (T)

15.289min (-0.028) 1.21ng

response 20350

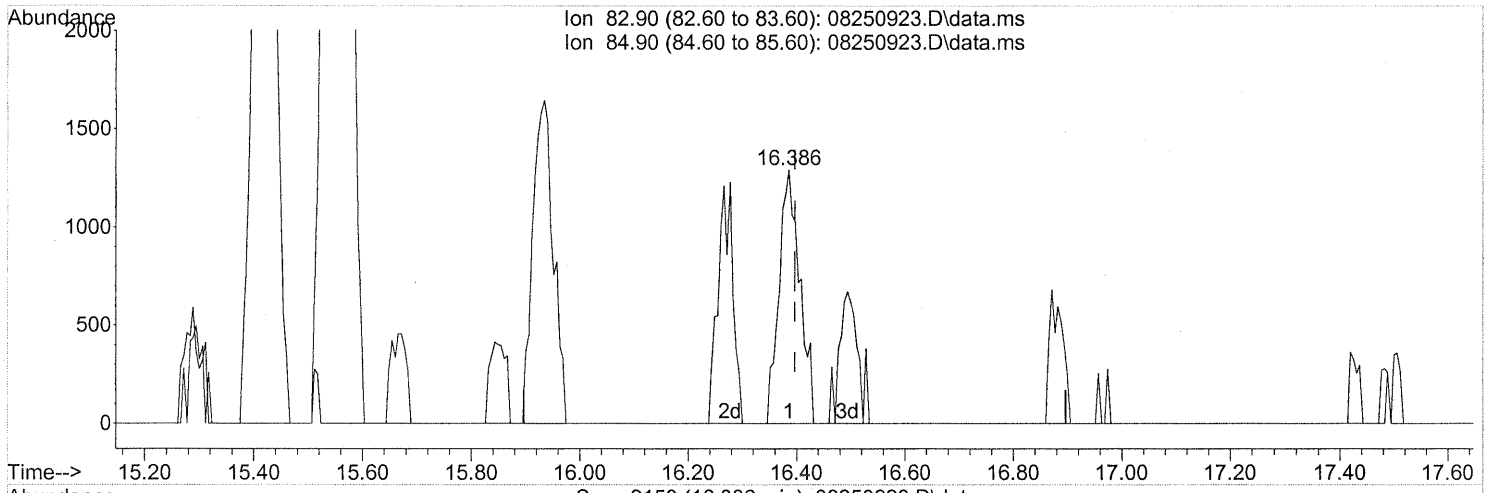
Ion	Exp%	Act%
84.10	100	100
69.10	38.70	37.70
56.10	127.50	122.09
0.00	0.00	0.00

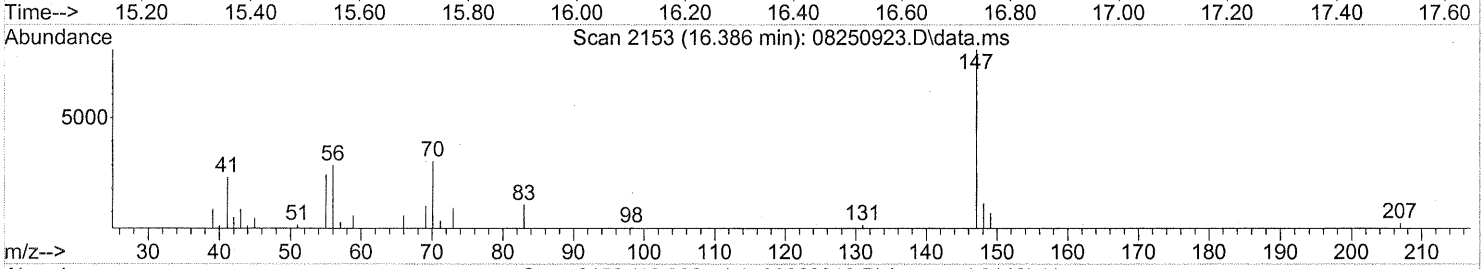
272

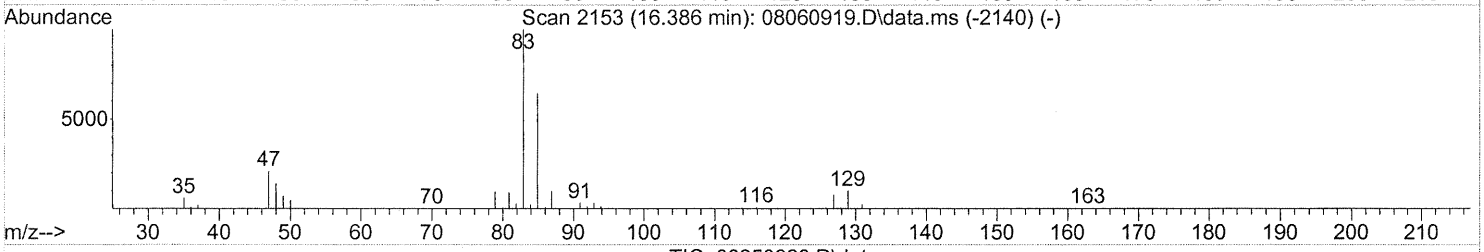
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(46) Bromodichloromethane (T)

16.386min (-0.011) 0.23ng

response 3428

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

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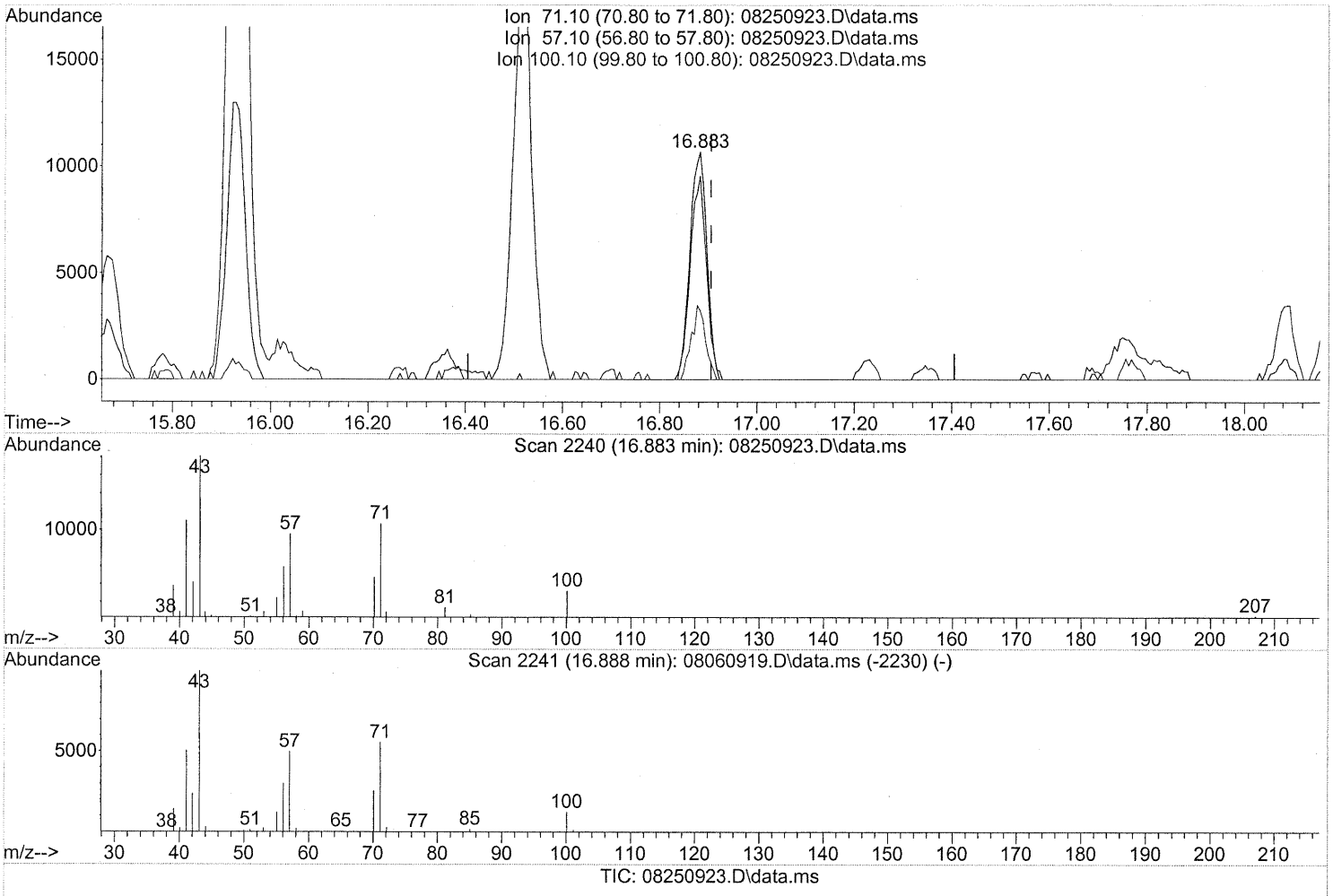
273

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(51) n-Heptane (T)

16.883min (-0.023) 2.11ng

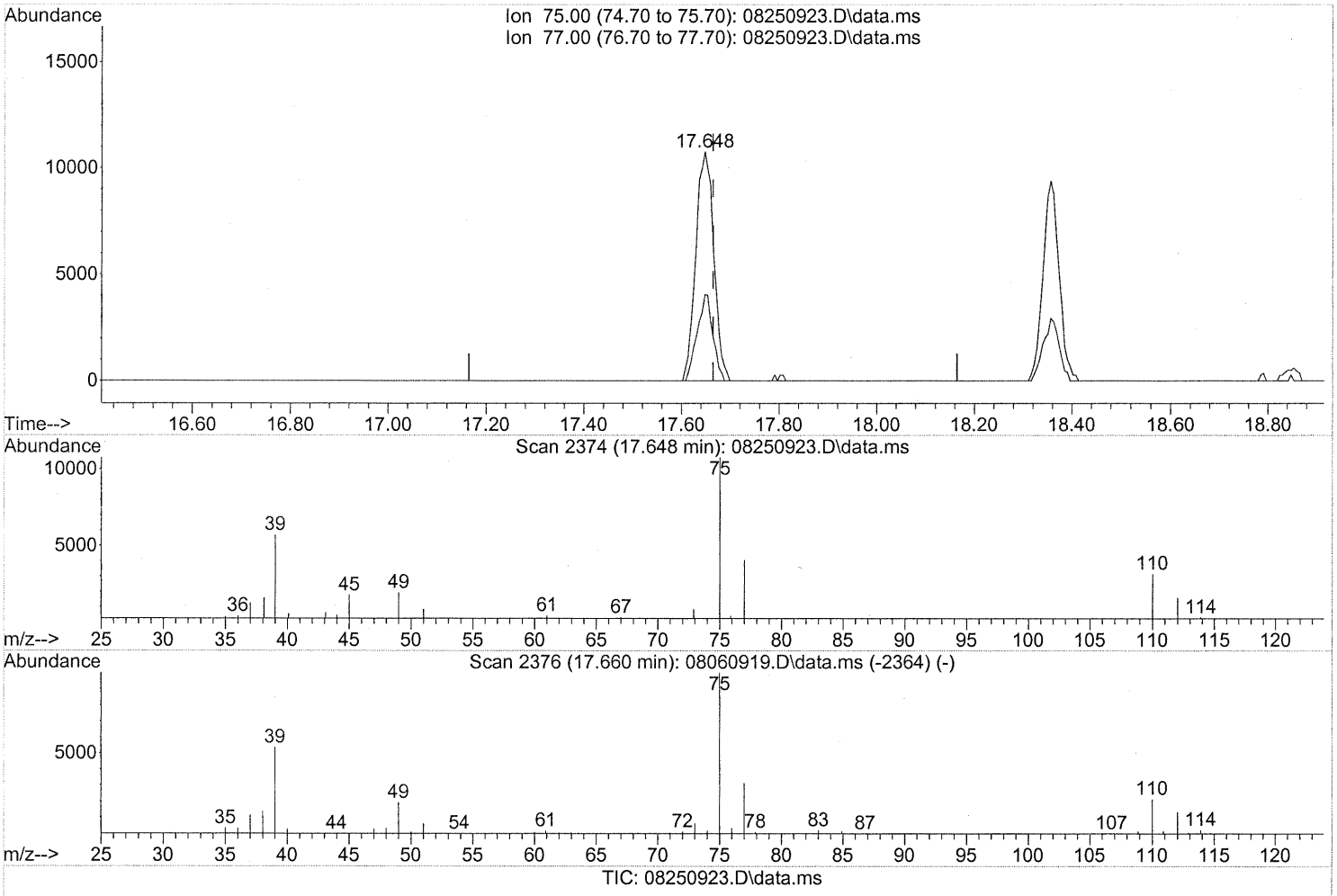
response 25977

Ion	Exp%	Act%
71.10	100	100
57.10	91.90	84.92
100.10	26.40	27.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 1.43ng

response 27260

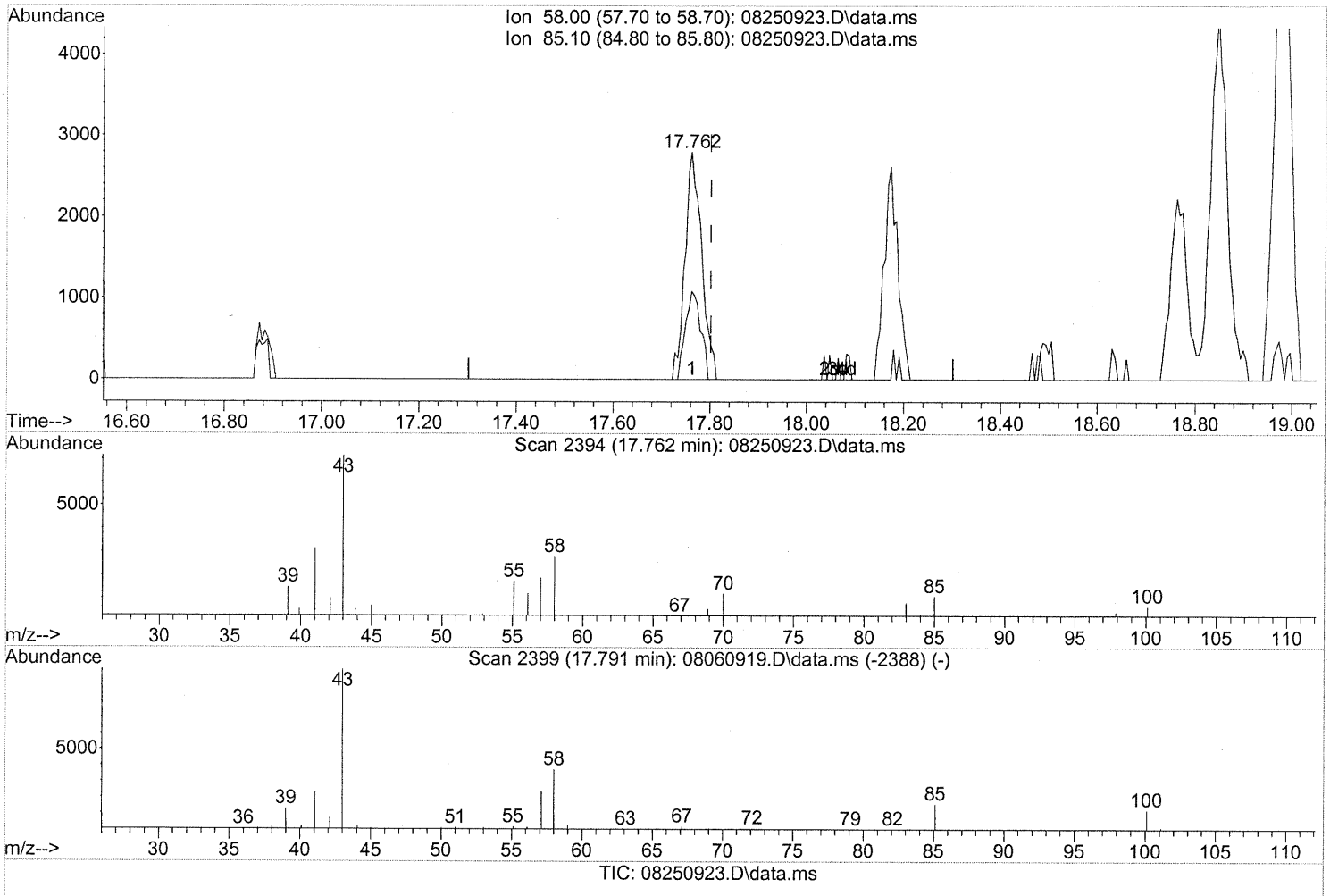
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	32.76
0.00	0.00	0.00
0.00	0.00	0.00

275

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

17.762min (-0.040) 0.60ng

response 6658

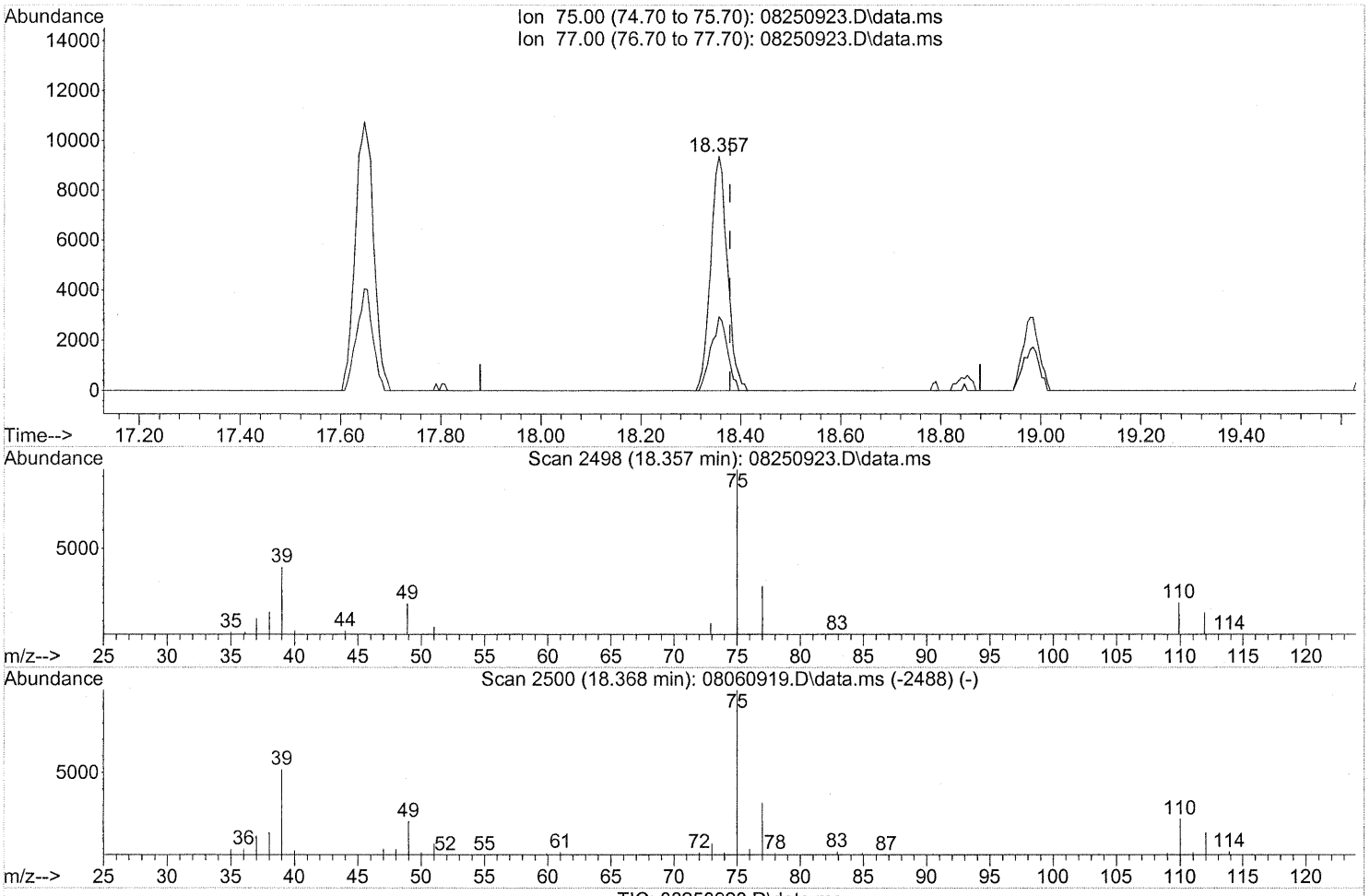
Ion	Exp%	Act%
58.00	100	100
85.10	42.60	35.75
0.00	0.00	0.00
0.00	0.00	0.00

276

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.357min (-0.023) 1.19ng

response 21634

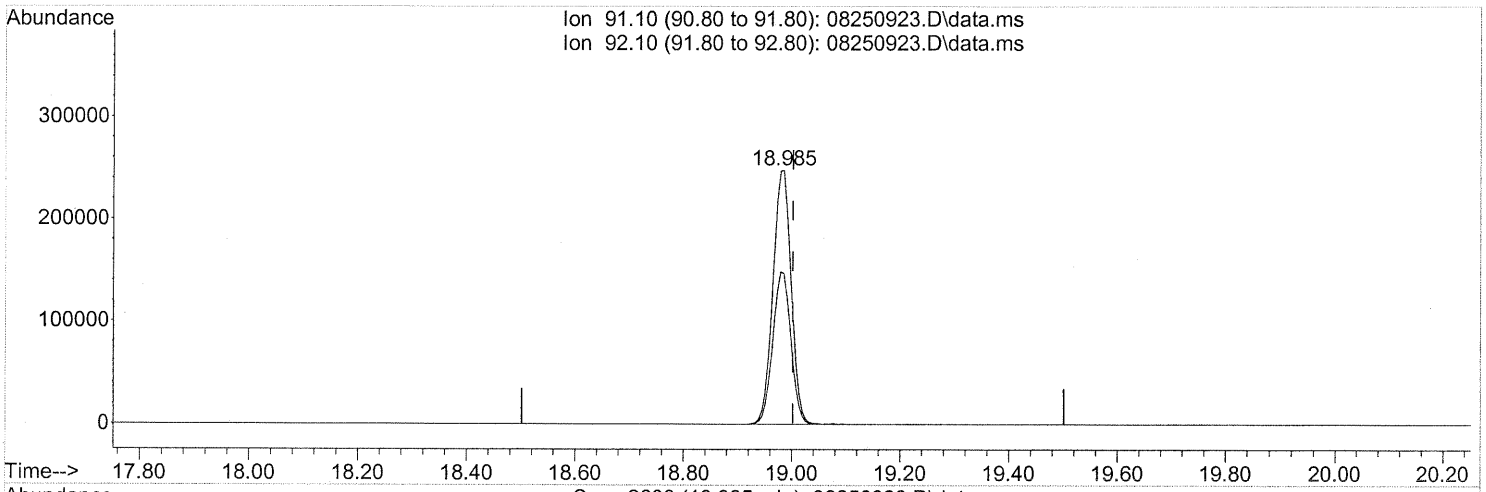
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	30.83
0.00	0.00	0.00
0.00	0.00	0.00

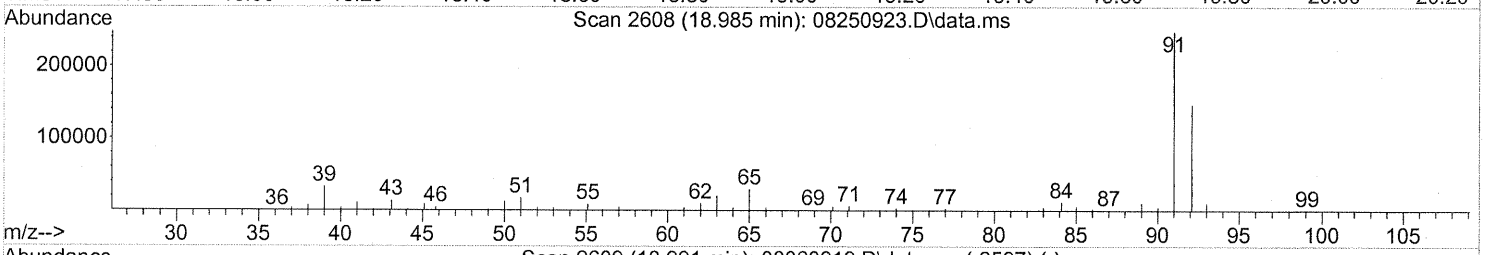
277

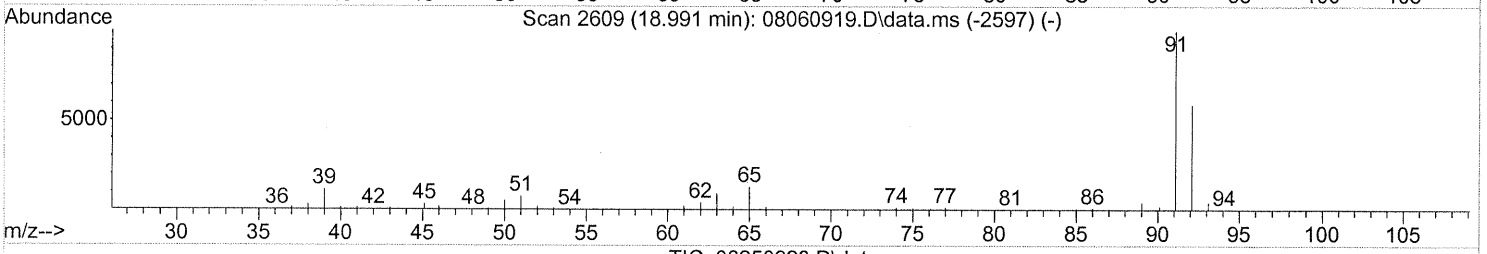
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(58) Toluene (T)

18.985min (-0.017) 13.23ng

response 576091

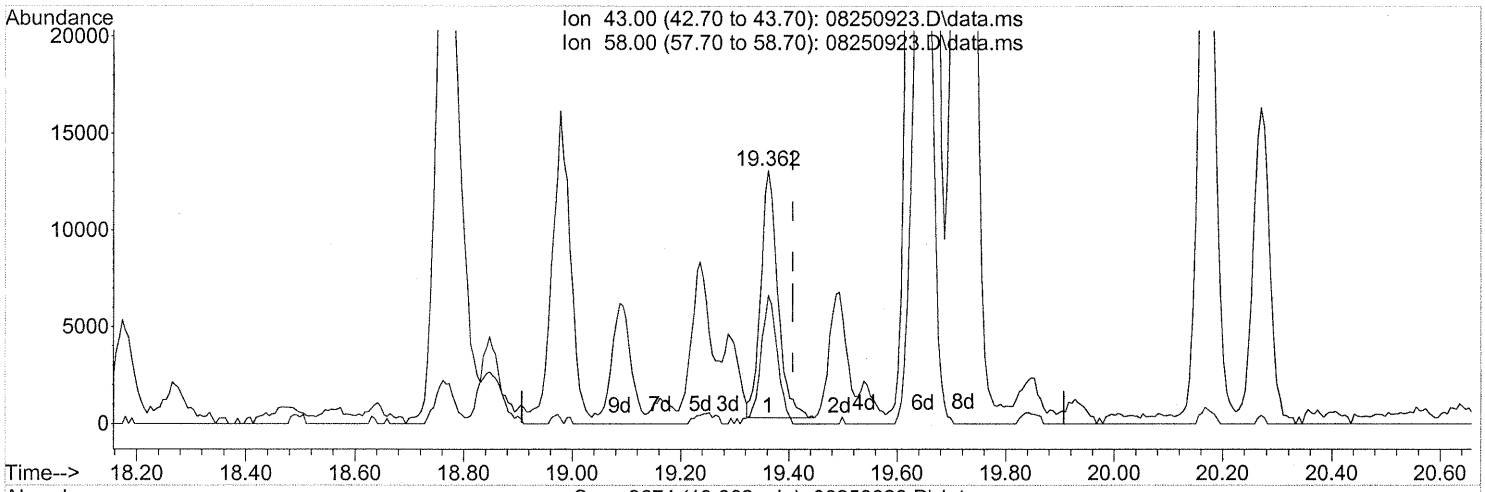
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.56
0.00	0.00	0.00
0.00	0.00	0.00

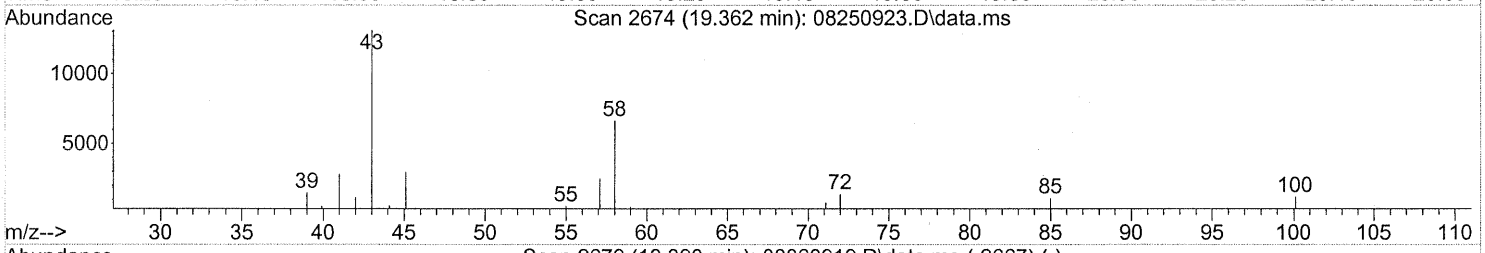
278

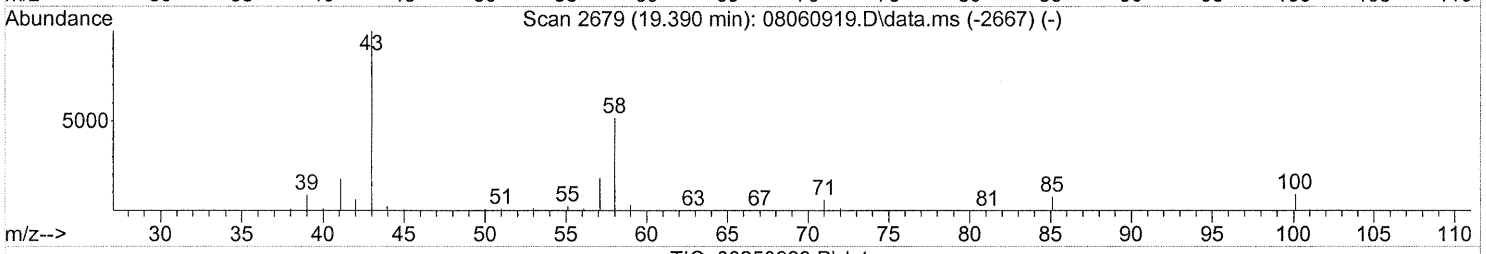
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 0.98ng

response 28236

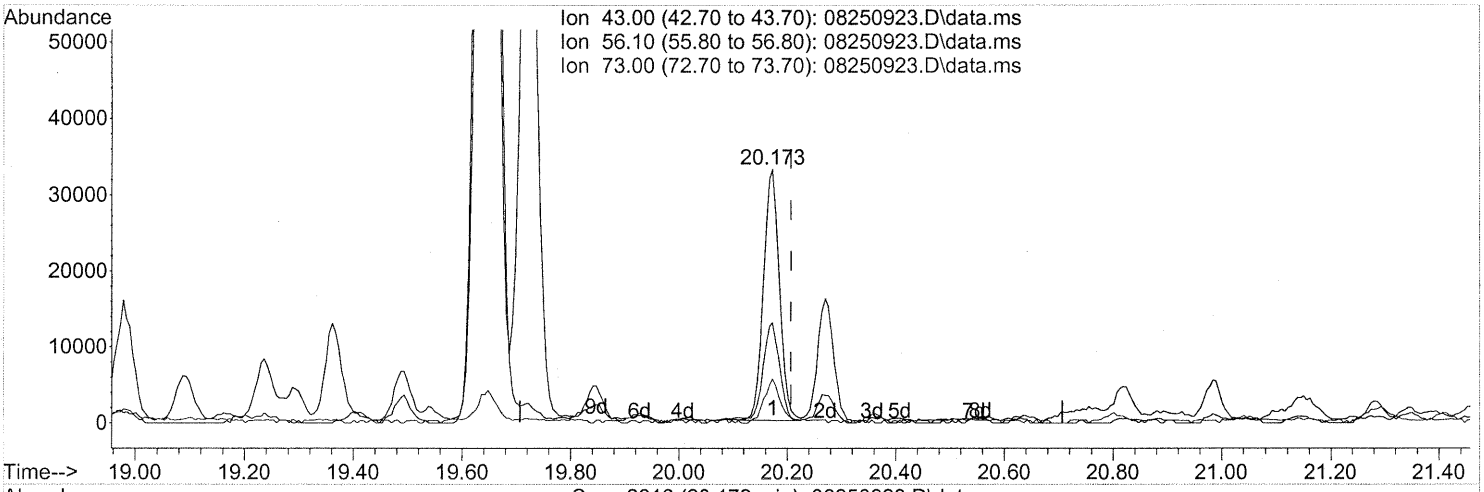
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	50.37
0.00	0.00	0.00
0.00	0.00	0.00

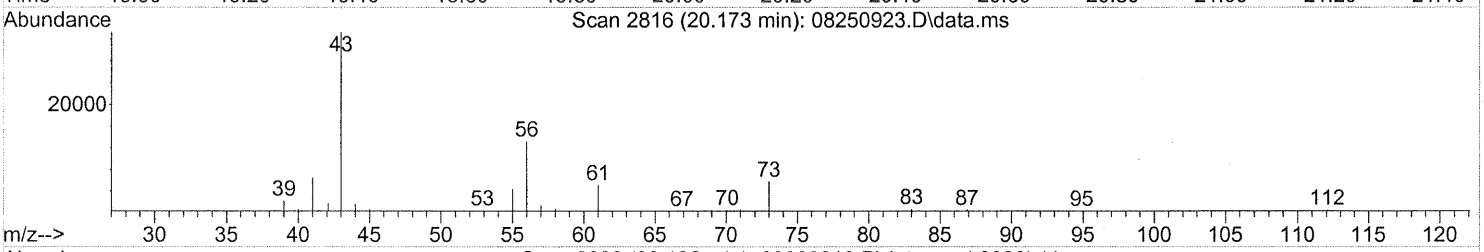
279

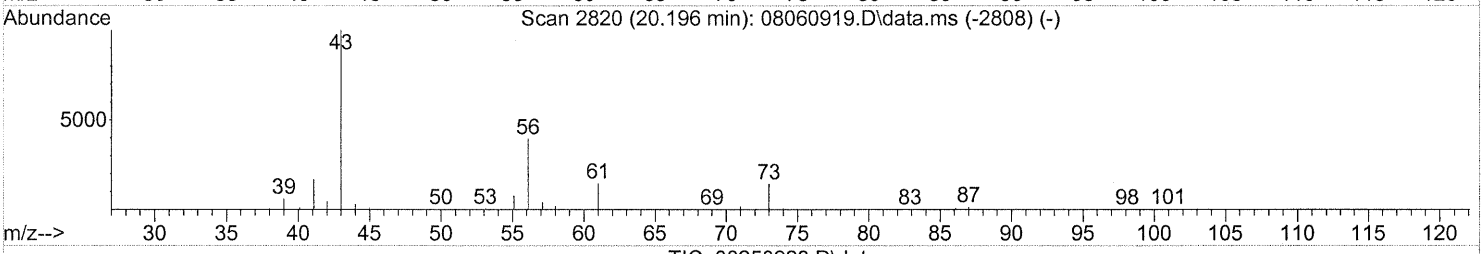
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 1.99ng

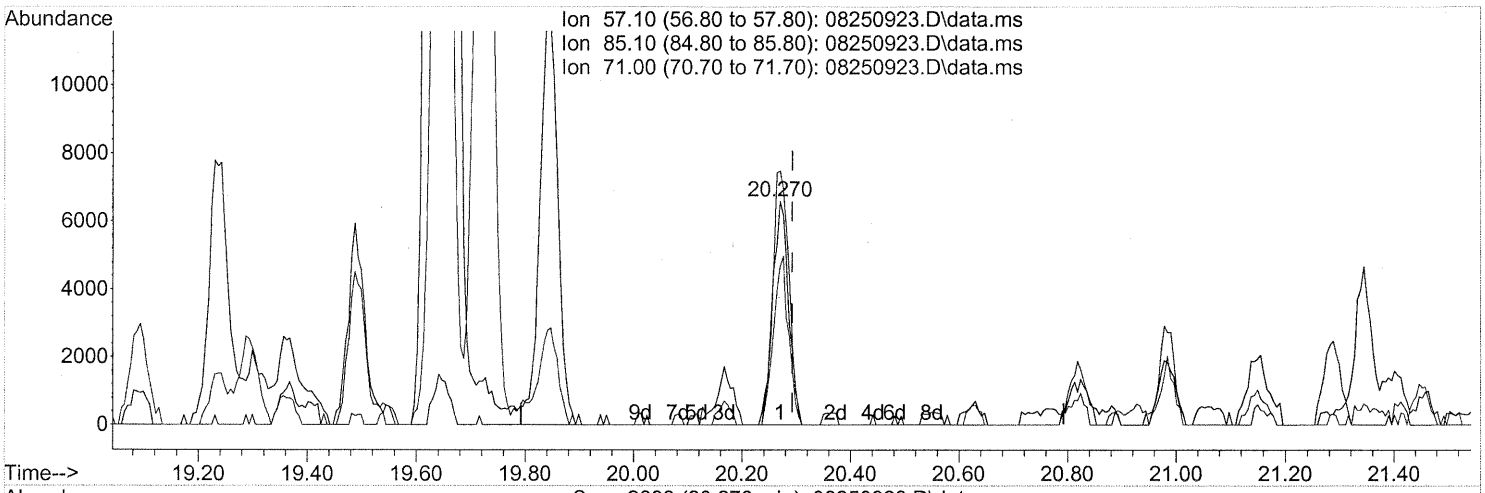
response 68015

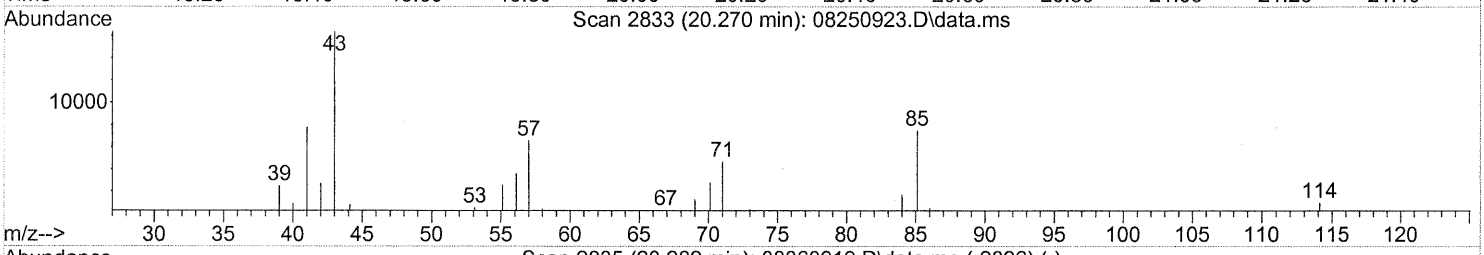
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	40.31
73.00	14.80	19.64
0.00	0.00	0.00

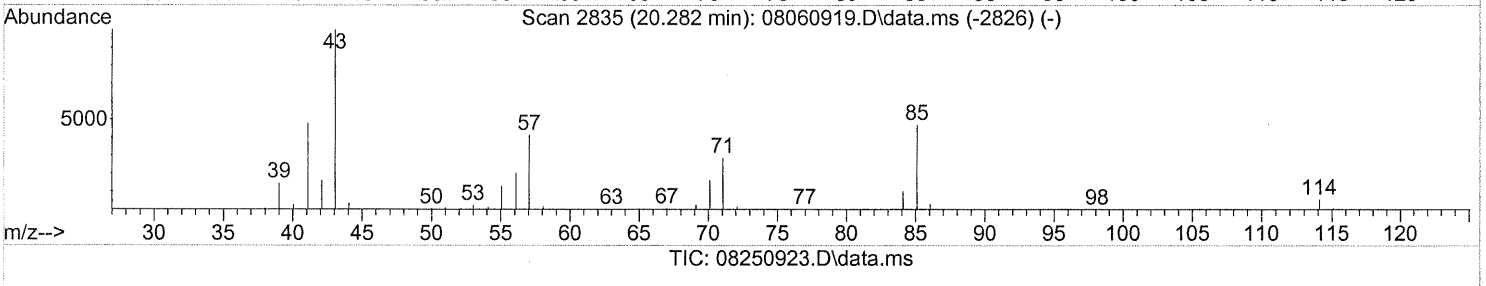
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 1.30ng

response 13633

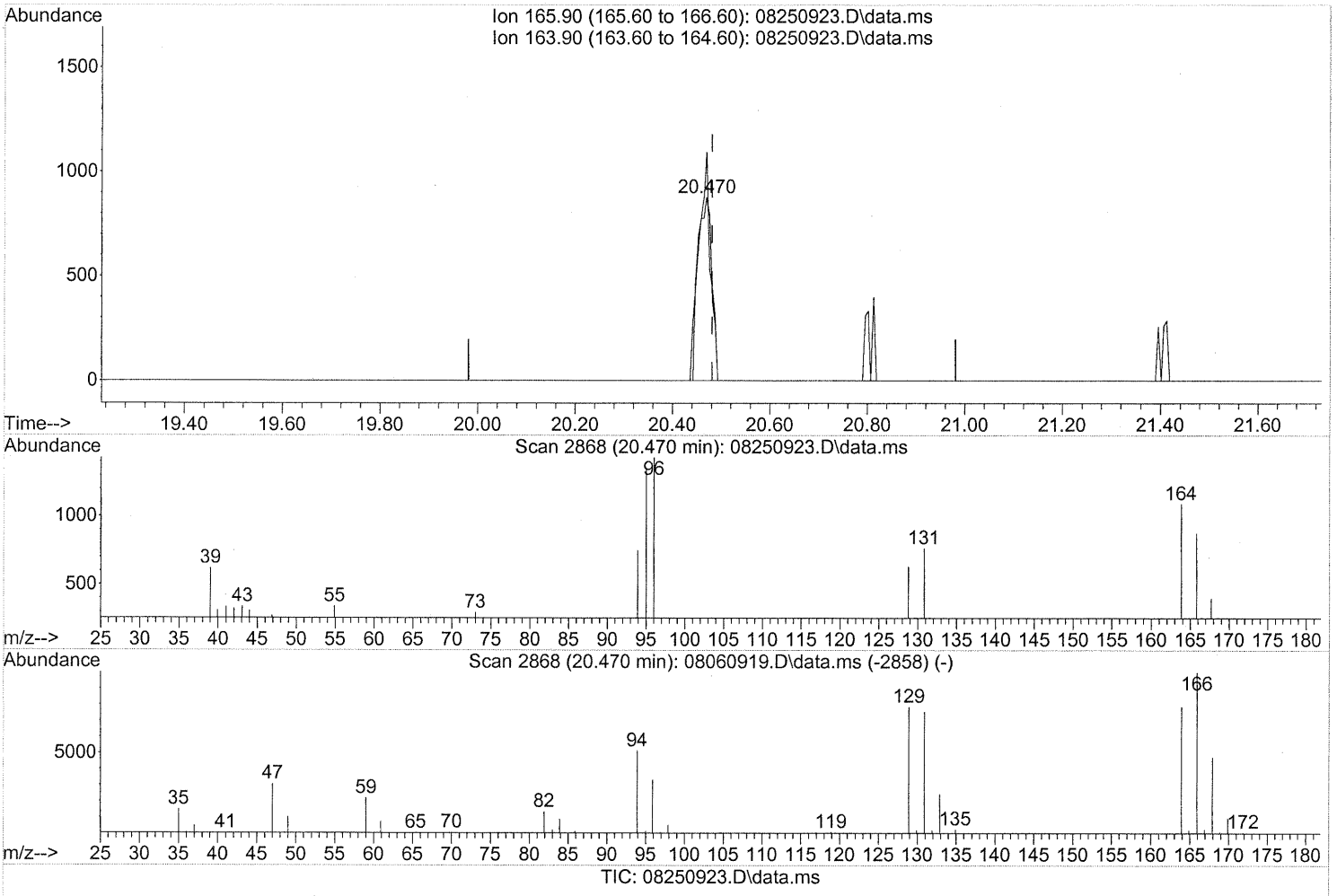
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	114.09
71.00	68.10	70.33
0.00	0.00	0.00

281

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(64) Tetrachloroethene (T)

20.470min (-0.011) 0.18ng

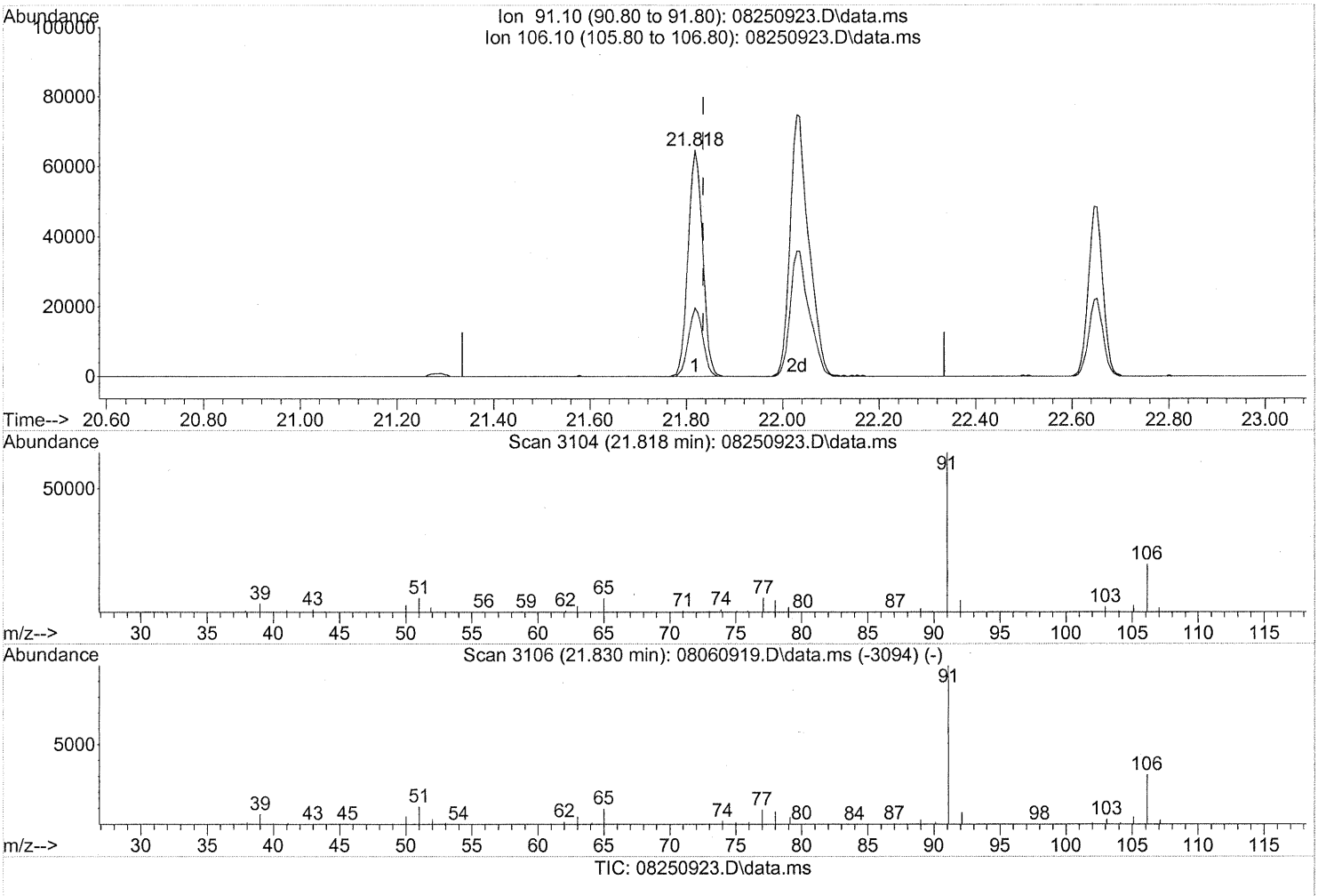
response 1787

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	99.05#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(66) Ethylbenzene (T)

21.818min (-0.017) 2.71ng

response 134950

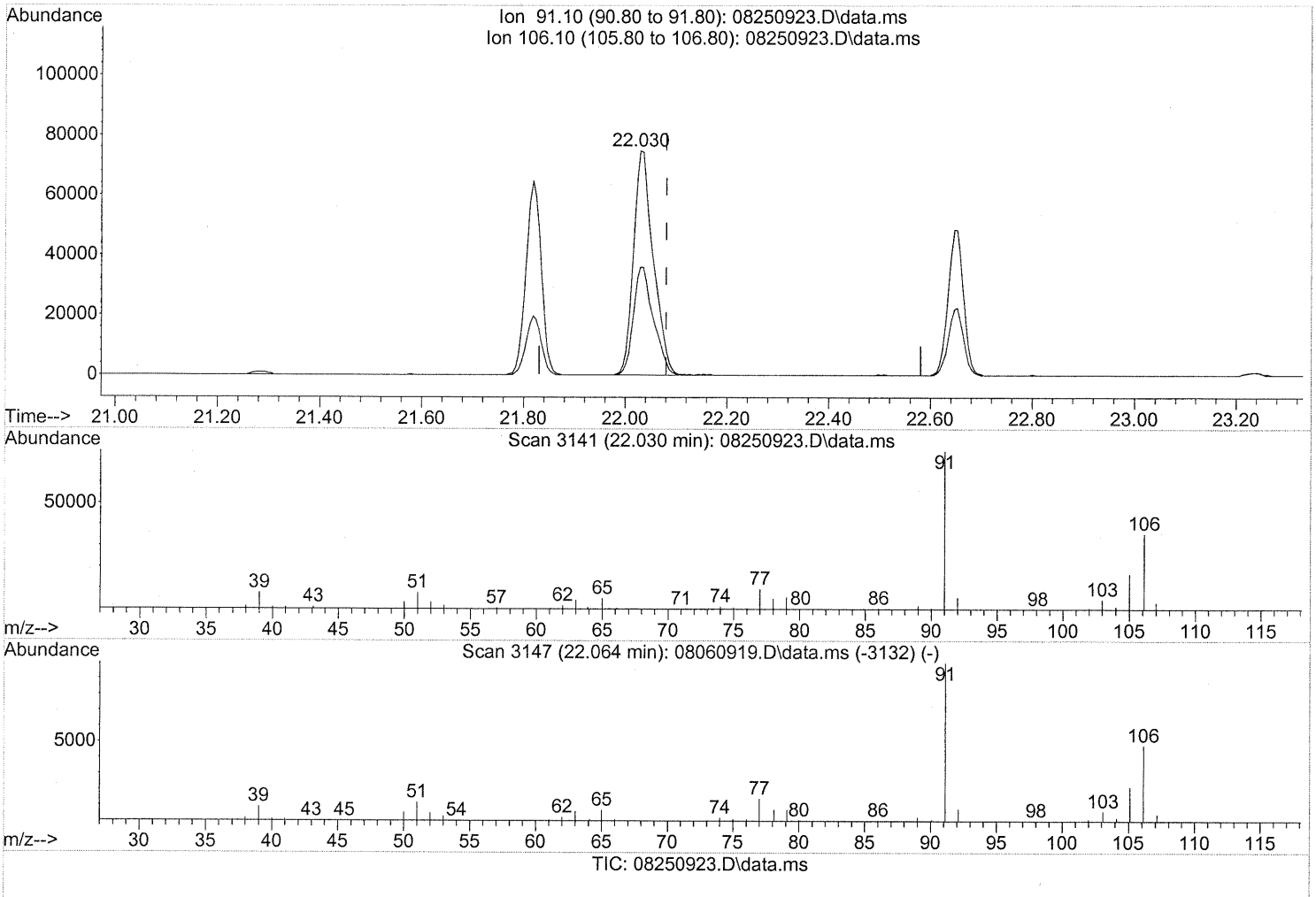
Ion	Exp%	Act%
91.10	100	100
106.10	30.10	29.87
0.00	0.00	0.00
0.00	0.00	0.00

283

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.030min (-0.051) 5.02ng

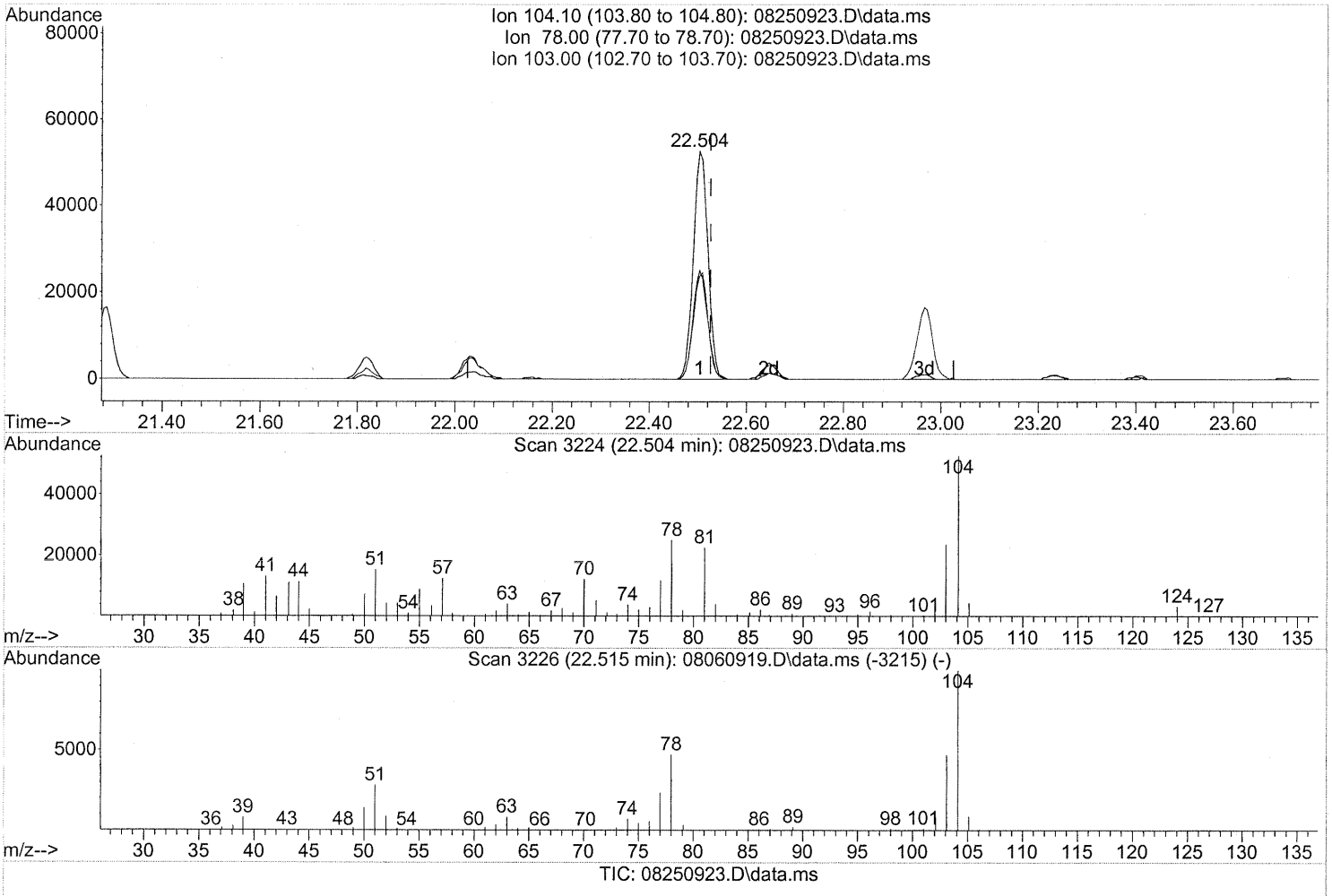
response 202013

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(69) Styrene (T)

22.504min (-0.023) 3.75ng

response 109196

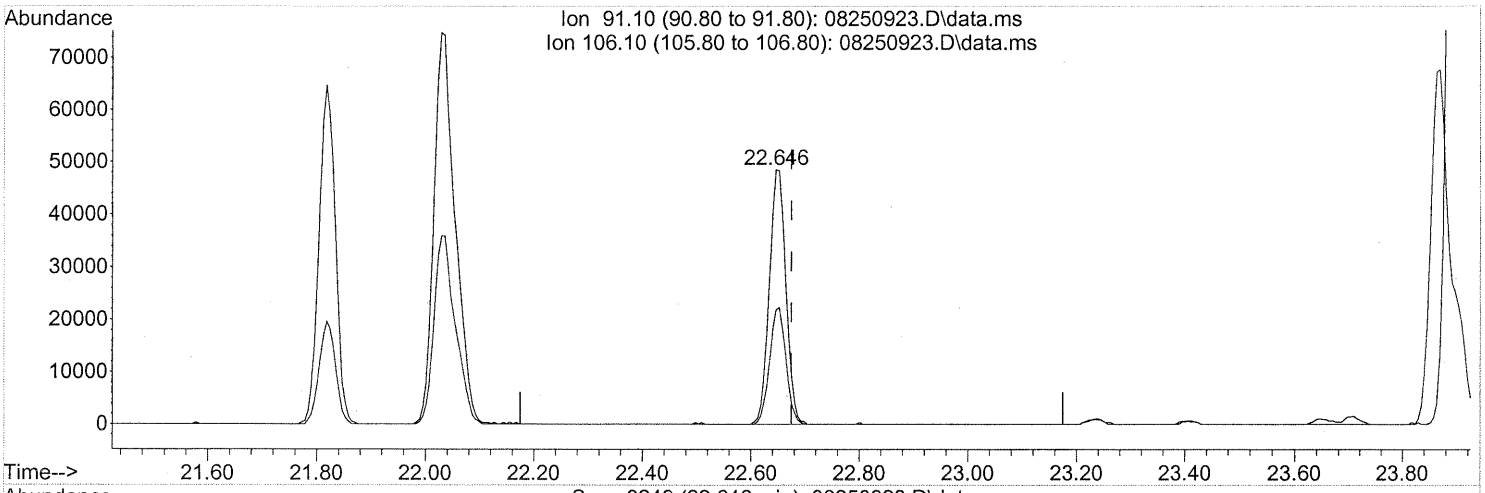
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	47.17
103.00	46.20	46.98
0.00	0.00	0.00

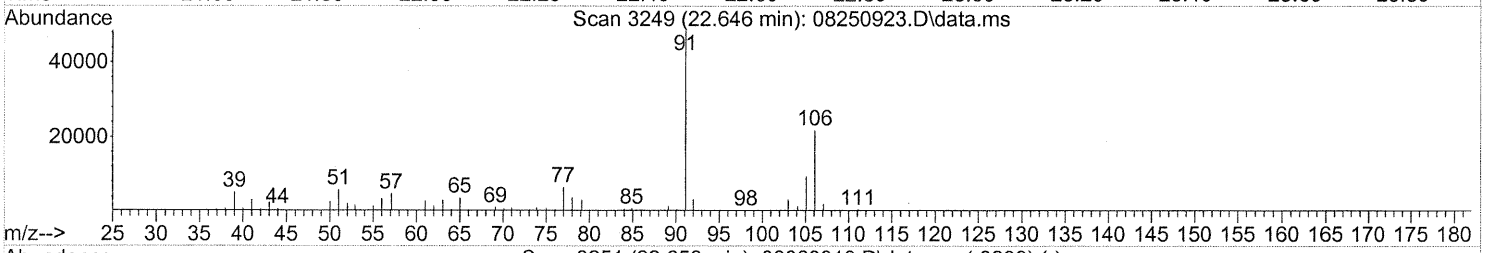
285

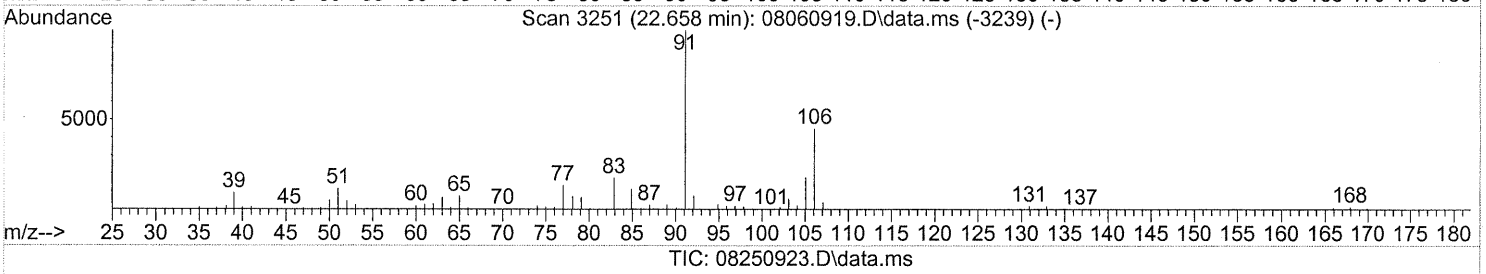
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(70) o-Xylene (T)

22.646min (-0.028) 2.53ng

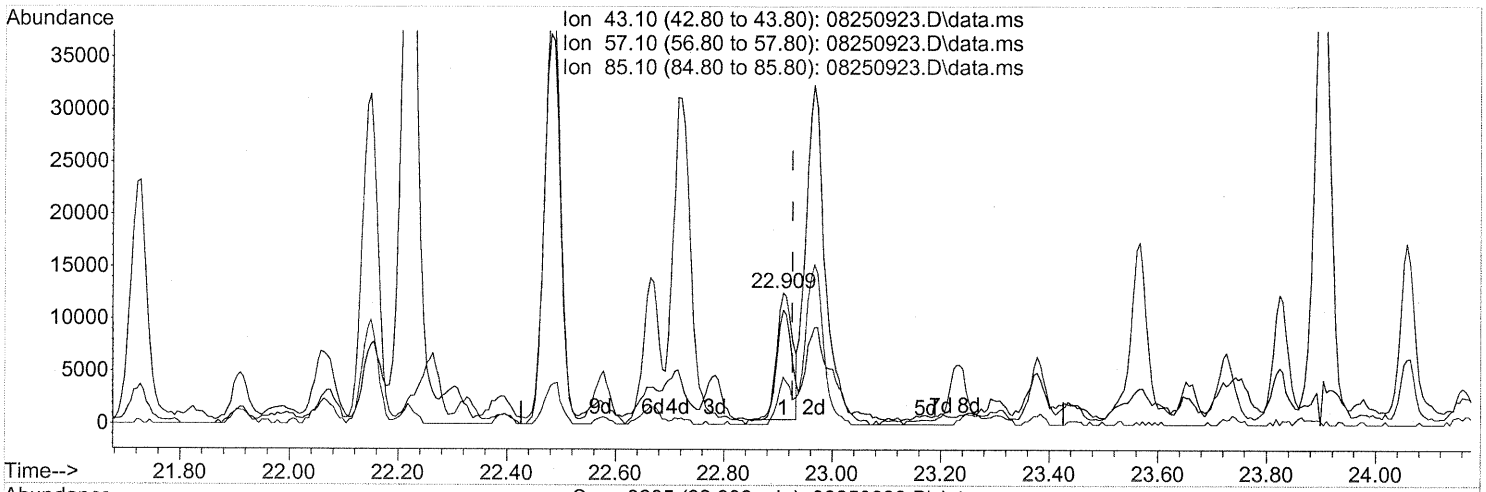
response 102230

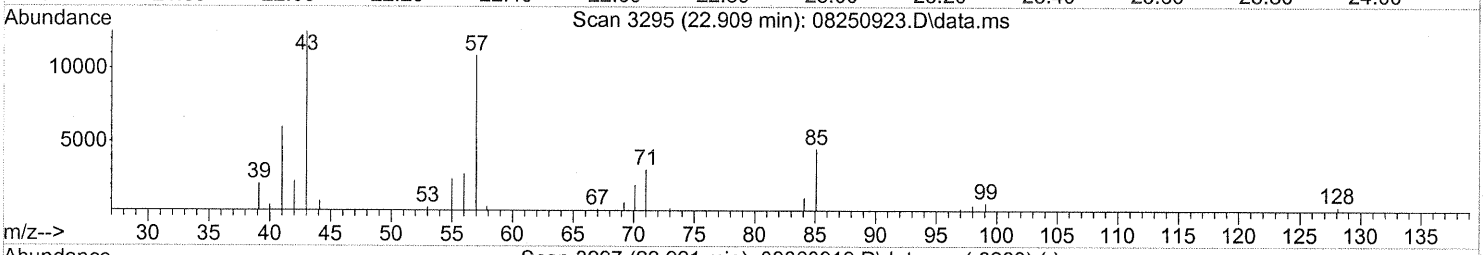
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.09
0.00	0.00	0.00
0.00	0.00	0.00

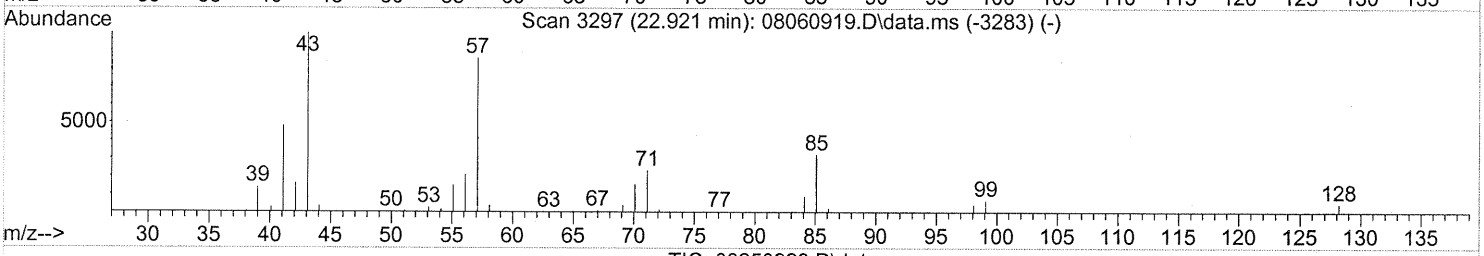
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(71) n-Nonane (T)

22.909min (-0.017) 0.90ng

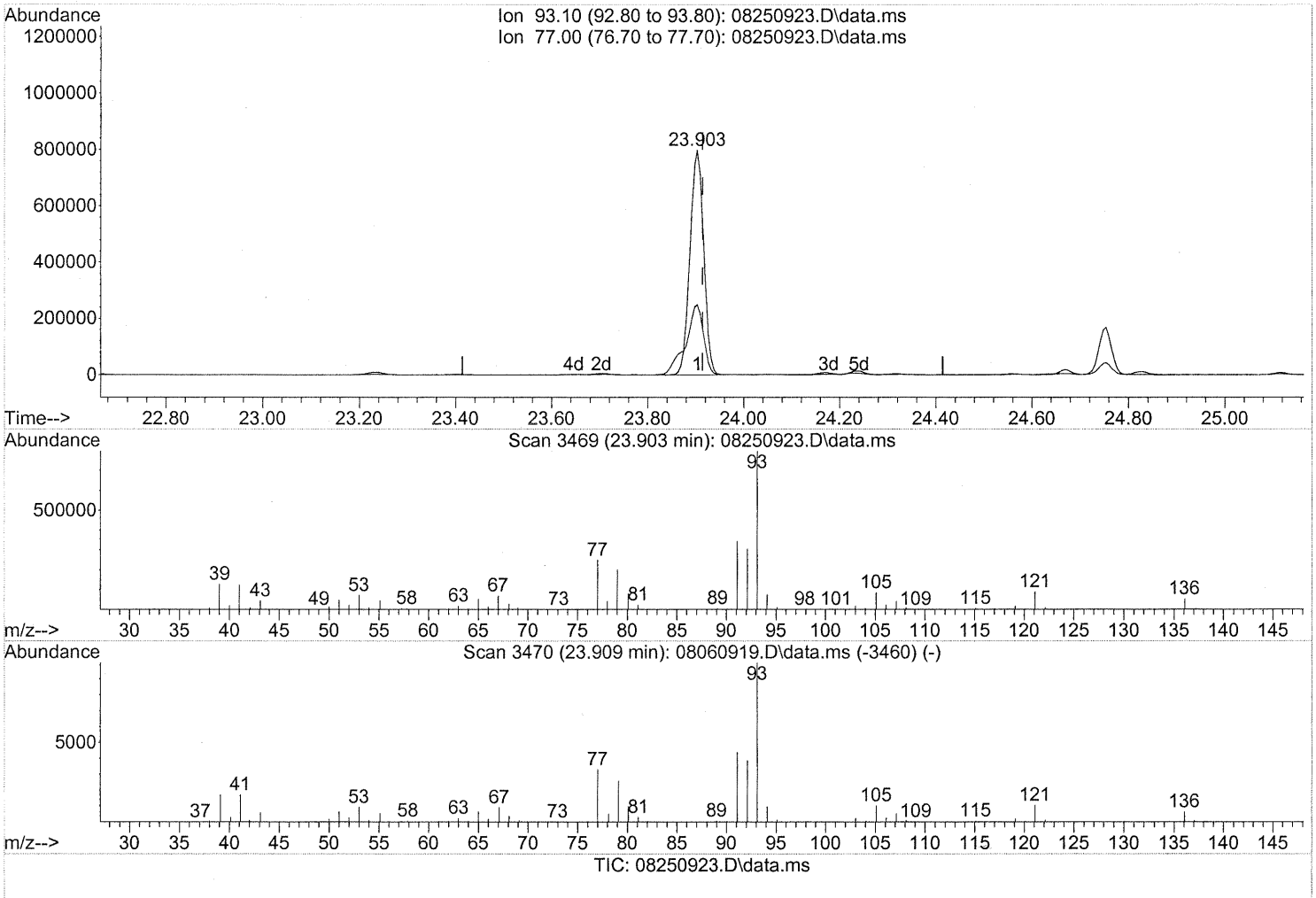
response 24230

Ion	Exp%	Act%
43.10	100	100
57.10	84.90	93.15
85.10	30.40	33.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 60.03ng

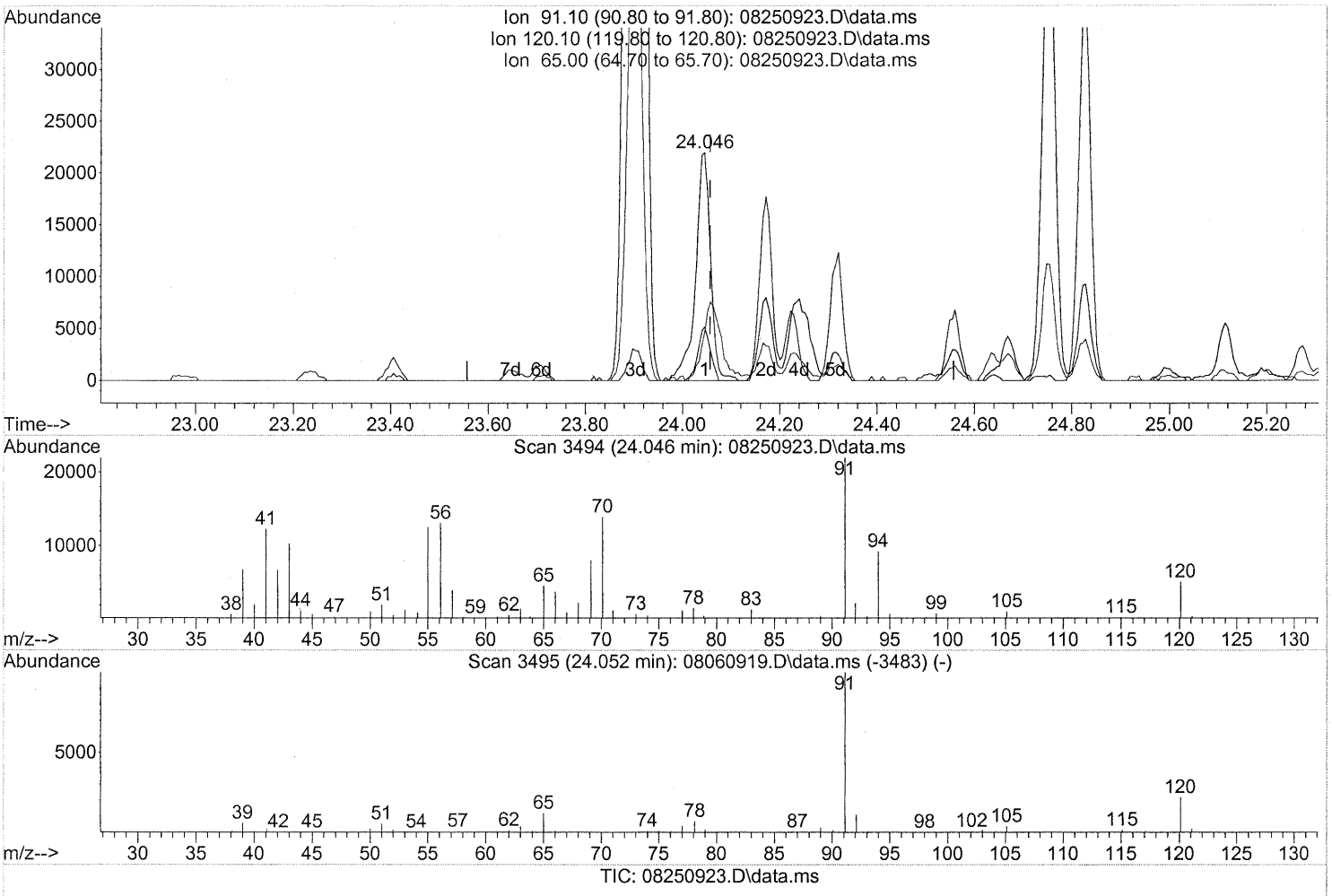
response 1568871

Ion	Exp%	Act%
93.10	100	100
77.00	32.40	40.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.73ng

response 46799

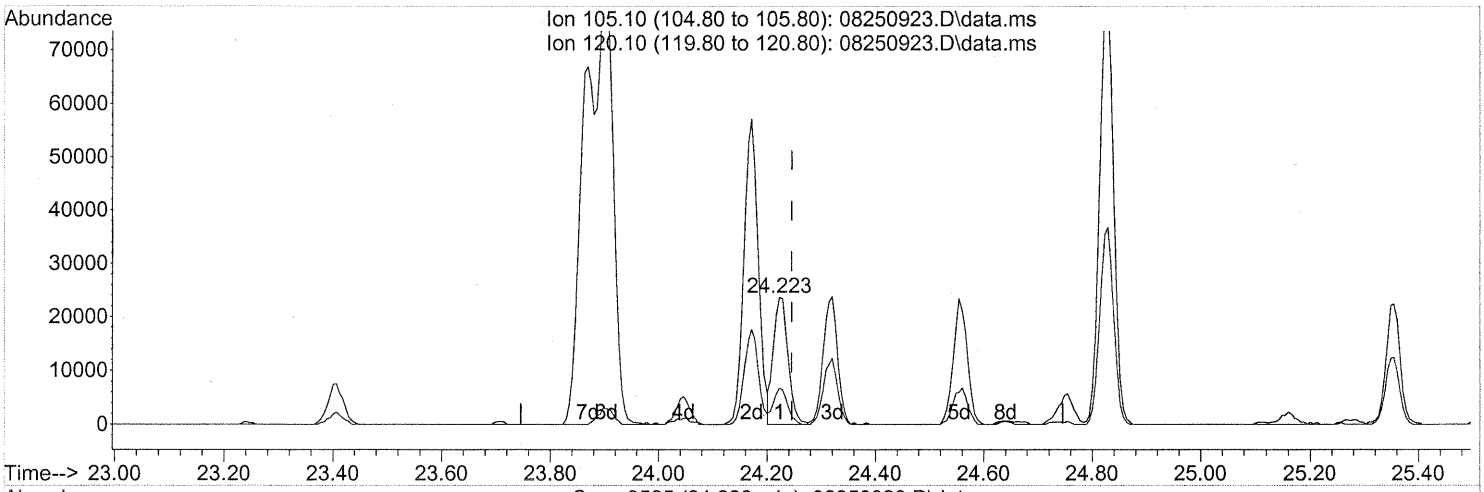
Ion	Exp%	Act%
91.10	100	100
120.10	21.60	19.14
65.00	12.00	42.66#
0.00	0.00	0.00

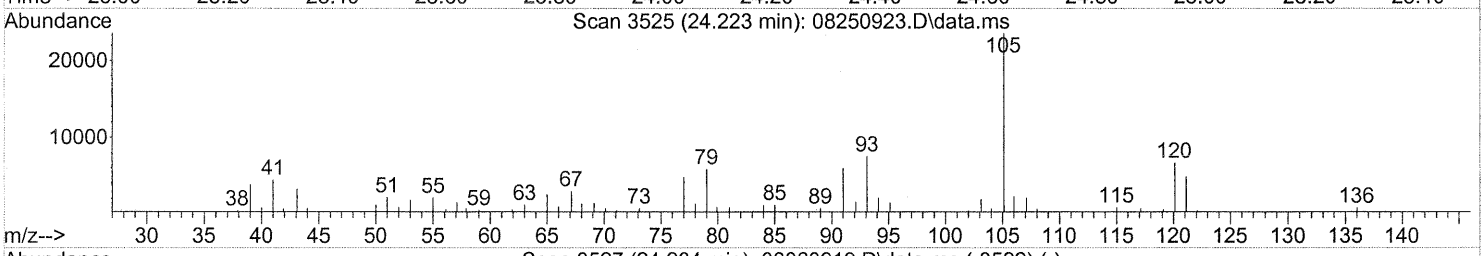
289

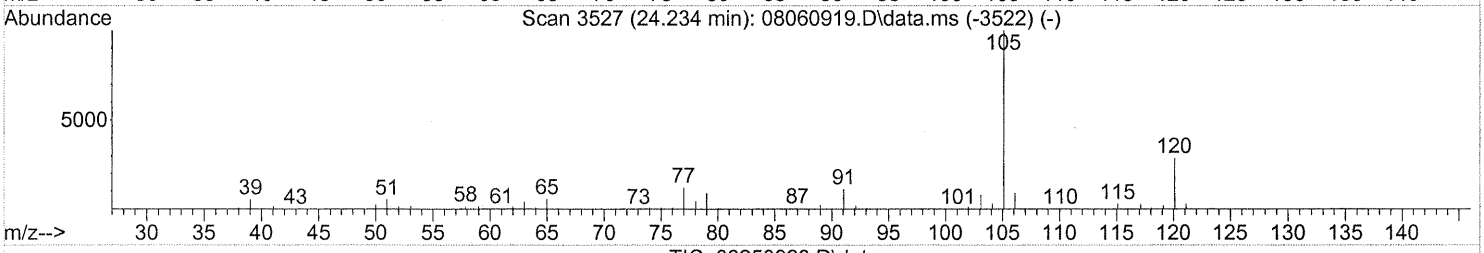
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250923.D\data.ms

(78) 4-Ethyltoluene (T)

24.223min (-0.023) 0.93ng

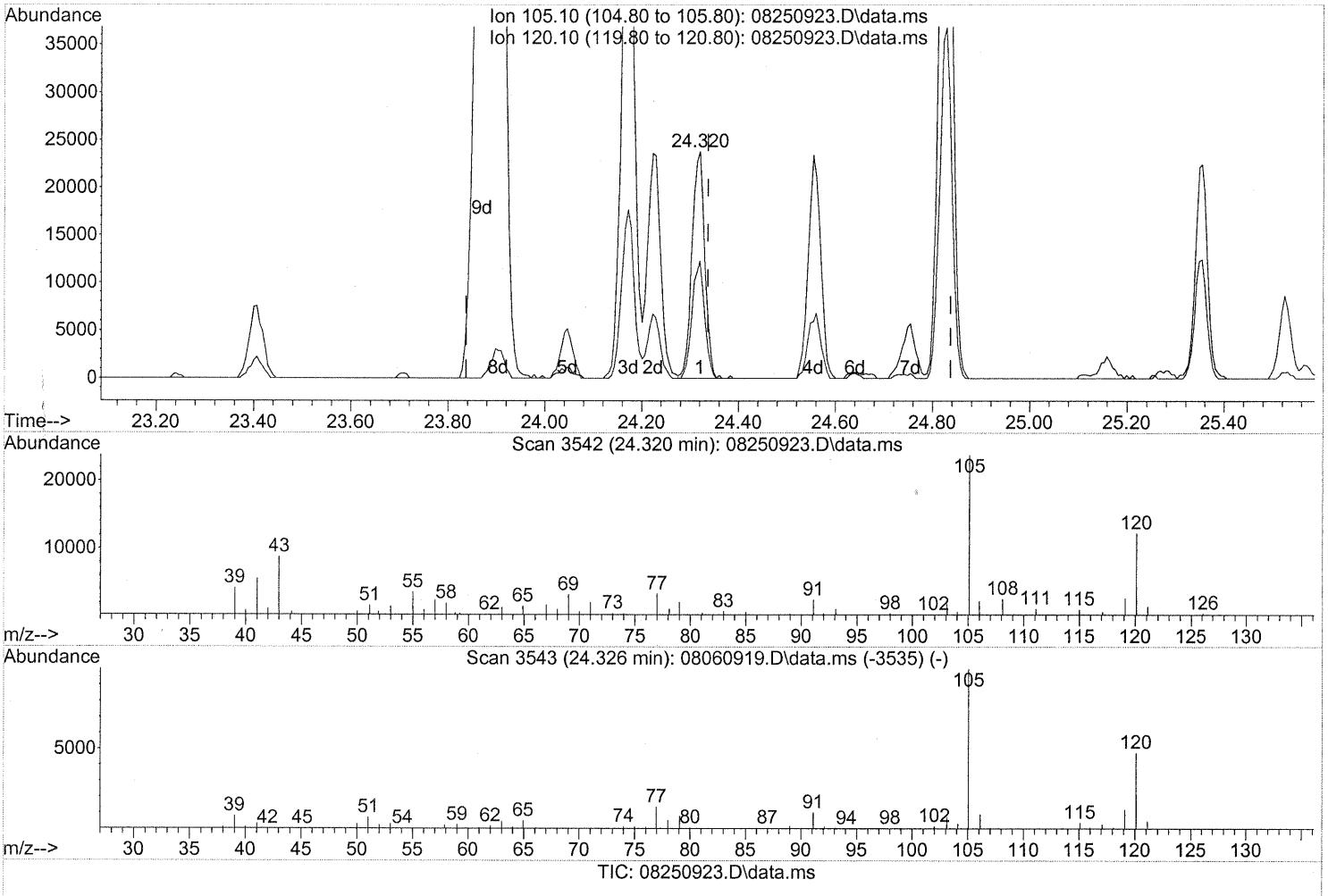
response 44140

Ion	Exp%	Act%
105.10	100	100
120.10	28.40	27.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

24.320min (-0.017) 1.09ng

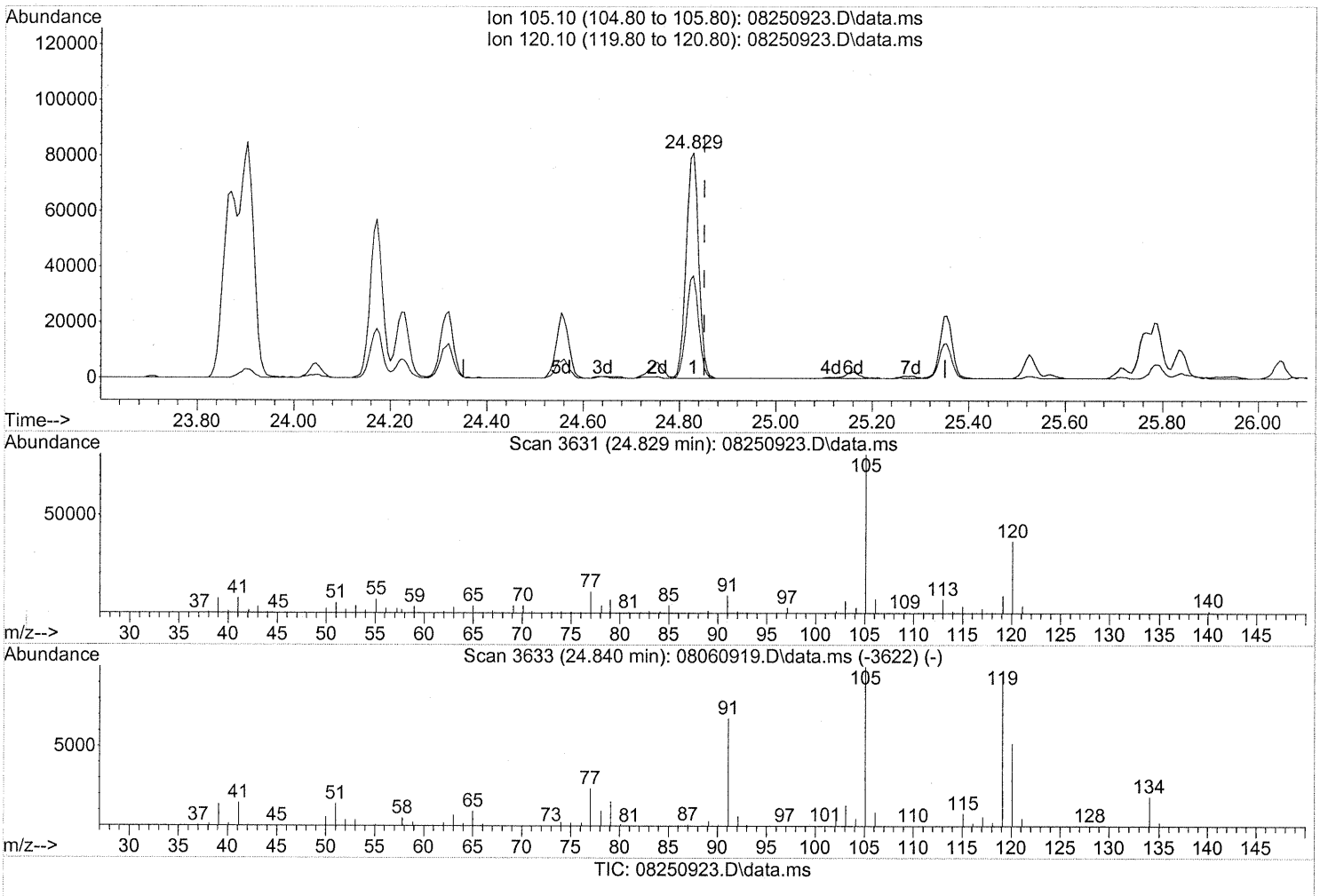
response 43587

Ion	Exp%	Act%
105.10	100	100
120.10	46.80	50.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

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

24.829min (-0.023) 3.58ng

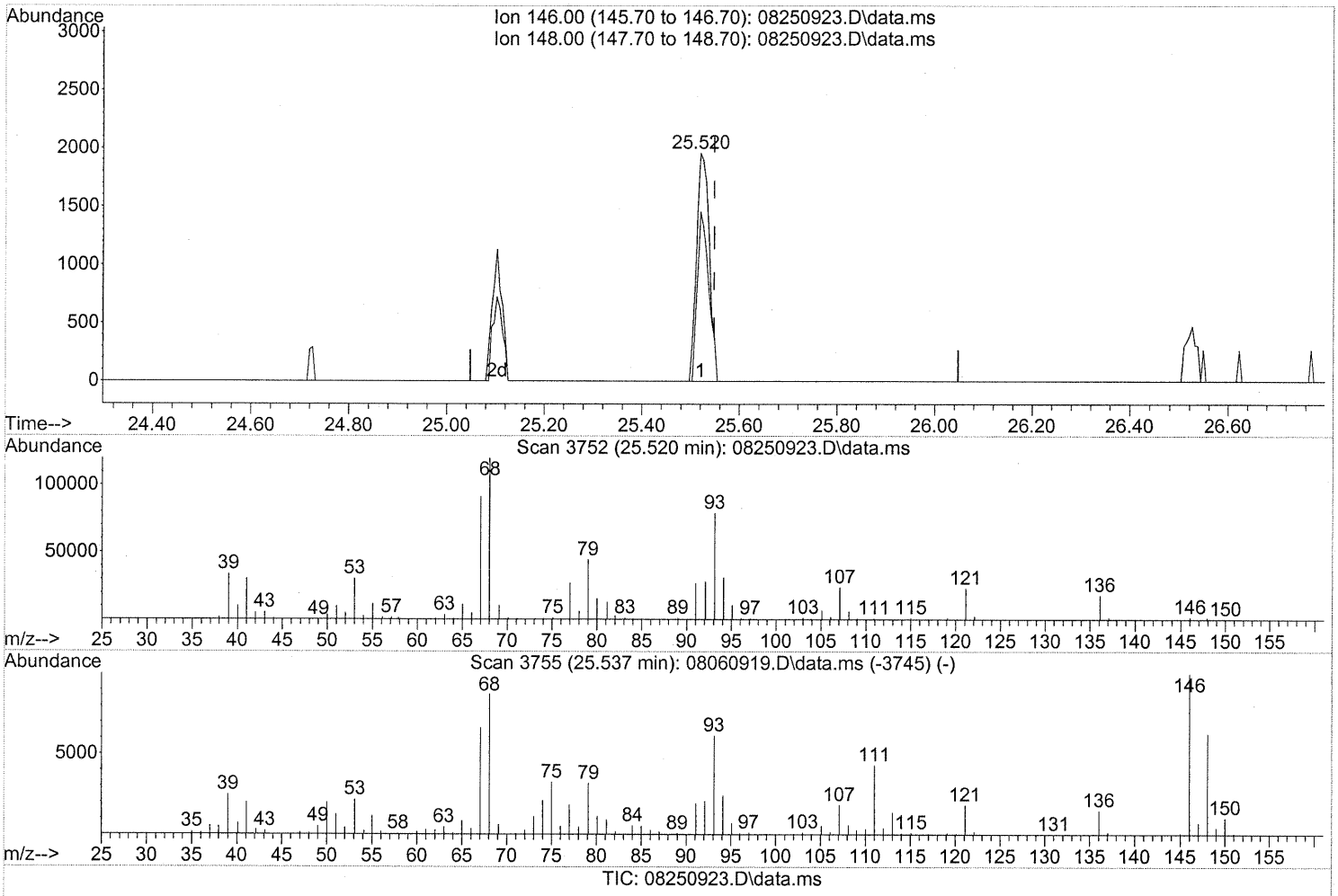
response 145454

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	44.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.520min (-0.028) 0.18ng

response 3552

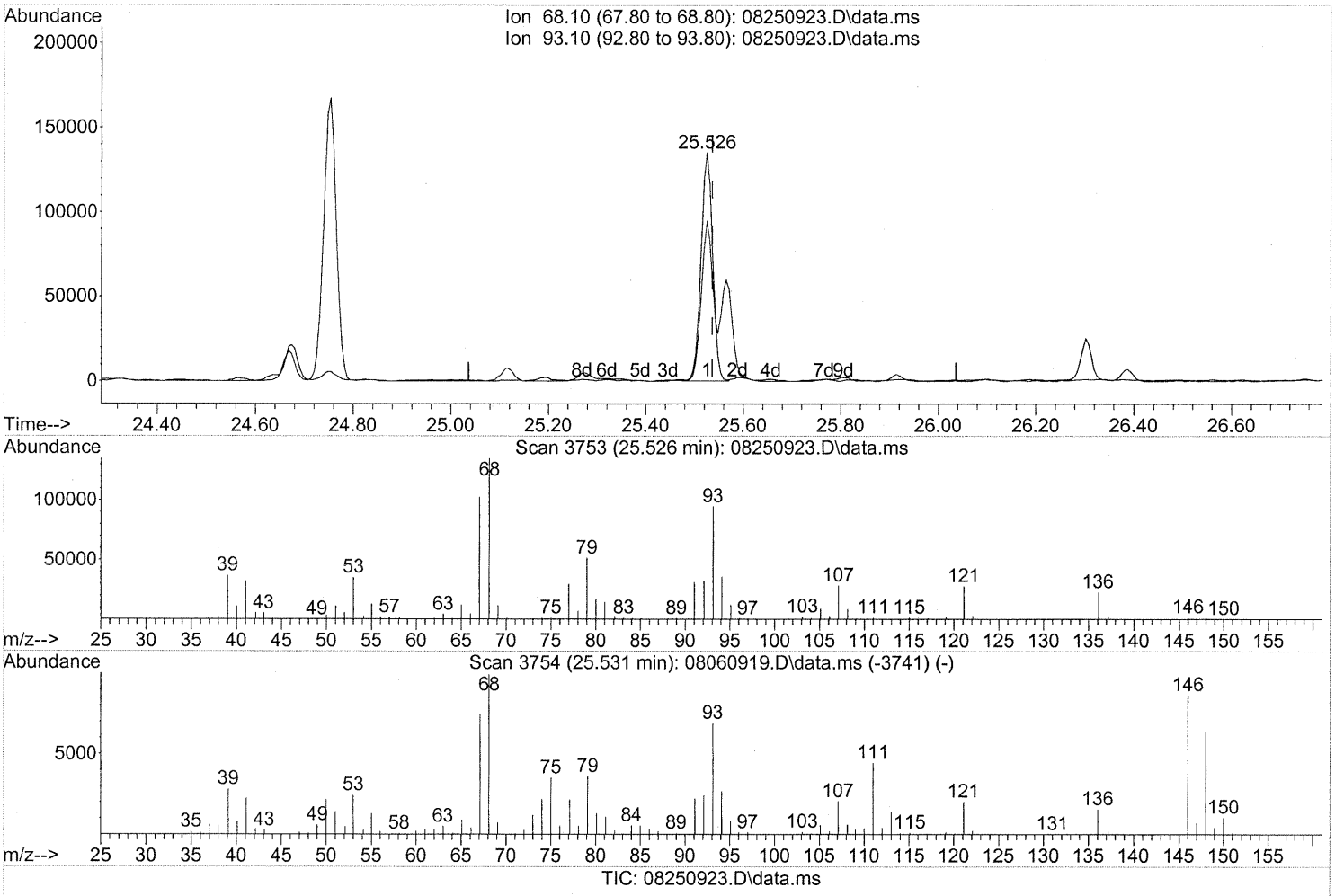
Ion	Exp%	Act%
146.00	100	100
148.00	63.70	66.89
0.00	0.00	0.00
0.00	0.00	0.00

293

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(91) d-Limonene (T)

25.526min (-0.011) 12.95ng

response 223562

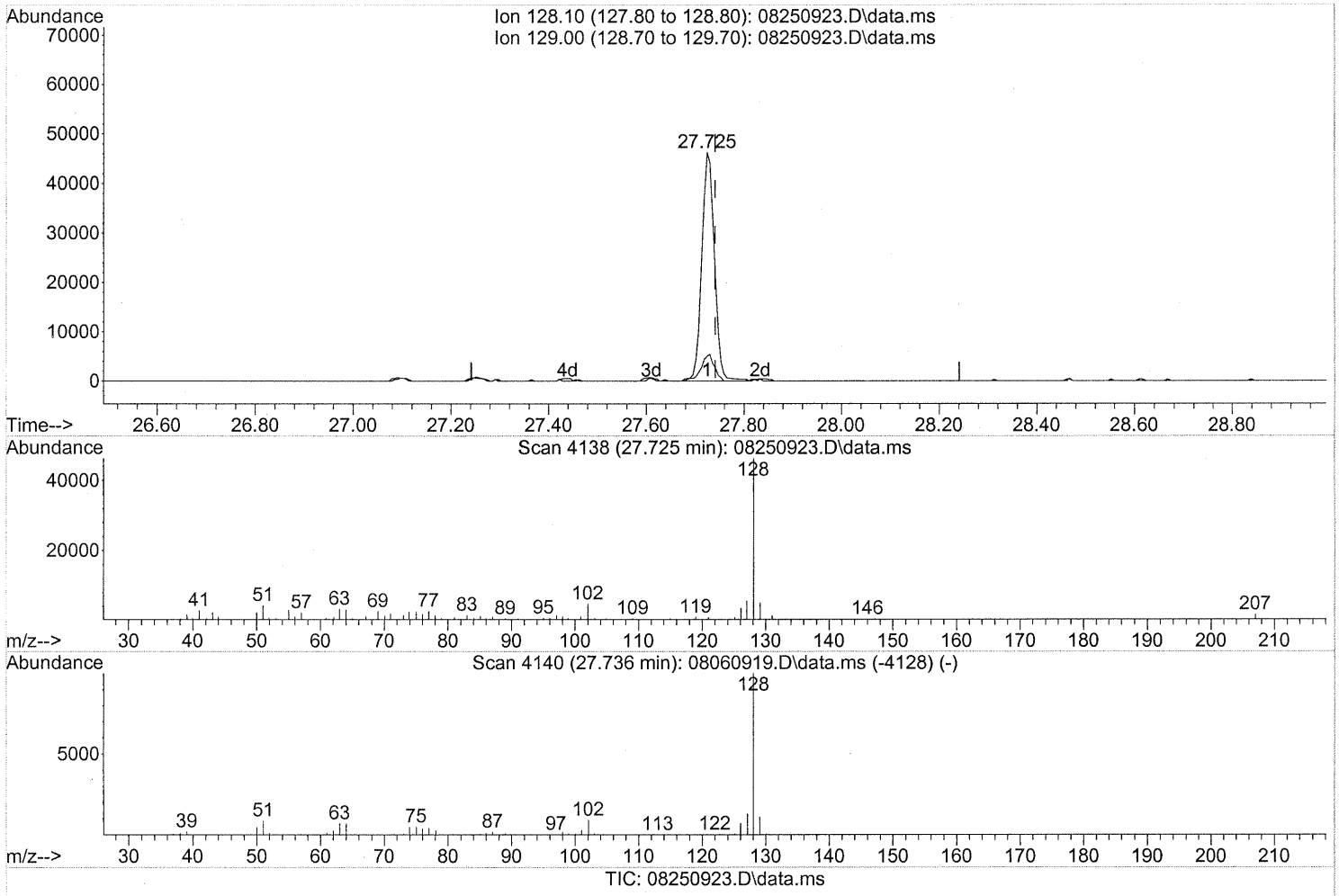
Ion	Exp%	Act%
68.10	100	100
93.10	67.90	73.41
0.00	0.00	0.00
0.00	0.00	0.00

294

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250923.D
Acq On : 26 Aug 2009 2:28
Operator : WA/CC
Sample : P0902876-006 (1000mL)
Misc : Environmental Health 102470
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 26 06:39:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250923.D\data.ms

(95) Naphthalene (T)

27.725min (-0.017) 1.50ng

response 82555

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	12.06
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102471** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-007

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01047

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

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.79	ND	0.46	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**3.1**	0.79	**0.62**	0.16	
74-87-3	**Chloromethane**	**1.1**	0.16	**0.55**	0.076	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.79	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.16	ND	0.061	
106-99-0	1,3-Butadiene	ND	0.16	ND	0.071	
74-83-9	**Bromomethane**	**0.16**	0.16	**0.041**	0.040	
75-00-3	Chloroethane	ND	0.16	ND	0.060	
64-17-5	**Ethanol**	**130**	7.9	**69**	4.2	
75-05-8	**Acetonitrile**	**190**	0.79	**110**	0.47	**E**
107-02-8	**Acrolein**	**6.3**	0.79	**2.7**	0.34	
67-64-1	**Acetone**	**150**	7.9	**62**	3.3	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.16	**0.25**	0.028	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**10**	0.79	**4.3**	0.32	
107-13-1	Acrylonitrile	ND	0.79	ND	0.36	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.040	
75-09-2	Methylene Chloride	ND	0.79	ND	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.16	ND	0.050	
76-13-1	**Trichlorotrifluoroethane**	**0.69**	0.16	**0.090**	0.020	
75-15-0	**Carbon Disulfide**	**9.4**	0.79	**3.0**	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.040	
75-34-3	1,1-Dichloroethane	ND	0.16	ND	0.039	
1634-04-4	**Methyl tert-Butyl Ether**	**0.57**	0.16	**0.16**	0.044	
108-05-4	Vinyl Acetate	ND	7.9	ND	2.2	
78-93-3	**2-Butanone (MEK)**	**5.8**	0.79	**2.0**	0.27	

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.
E = Estimated; concentration exceeded calibration range.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102471** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-007

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01047

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

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.16	ND	0.040	
141-78-6	**Ethyl Acetate**	**1.2**	0.79	**0.34**	0.22	
110-54-3	**n-Hexane**	**11**	0.79	**3.0**	0.22	
67-66-3	**Chloroform**	**0.22**	0.16	**0.045**	0.032	
109-99-9	**Tetrahydrofuran (THF)**	**1.0**	0.79	**0.35**	0.27	
107-06-2	**1,2-Dichloroethane**	**3.2**	0.16	**0.78**	0.039	
71-55-6	1,1,1-Trichloroethane	ND	0.16	ND	0.029	
71-43-2	**Benzene**	**2.4**	0.16	**0.75**	0.049	
56-23-5	**Carbon Tetrachloride**	**0.57**	0.16	**0.090**	0.025	
110-82-7	**Cyclohexane**	**1.8**	0.79	**0.53**	0.23	
78-87-5	1,2-Dichloropropane	ND	0.16	ND	0.034	
75-27-4	Bromodichloromethane	ND	0.16	ND	0.023	
79-01-6	Trichloroethene	ND	0.16	ND	0.029	
123-91-1	1,4-Dioxane	ND	0.79	ND	0.22	
80-62-6	Methyl Methacrylate	ND	0.79	ND	0.19	
142-82-5	**n-Heptane**	**3.1**	0.79	**0.76**	0.19	
10061-01-5	**cis-1,3-Dichloropropene**	**2.2**	0.79	**0.49**	0.17	
108-10-1	**4-Methyl-2-pentanone**	**0.92**	0.79	**0.22**	0.19	
10061-02-6	**trans-1,3-Dichloropropene**	**1.8**	0.79	**0.39**	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.16	ND	0.029	
108-88-3	**Toluene**	**20**	0.79	**5.2**	0.21	
591-78-6	**2-Hexanone**	**1.4**	0.79	**0.35**	0.19	
124-48-1	Dibromochloromethane	ND	0.16	ND	0.018	
106-93-4	1,2-Dibromoethane	ND	0.16	ND	0.020	
123-86-4	**n-Butyl Acetate**	**2.9**	0.79	**0.61**	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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102471** CAS Sample ID: P0902876-007
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01047

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

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.8**	0.79	**0.38**	0.17	
127-18-4	**Tetrachloroethene**	**0.44**	0.16	**0.064**	0.023	
108-90-7	Chlorobenzene	ND	0.16	ND	0.034	
100-41-4	**Ethylbenzene**	**4.1**	0.79	**0.94**	0.18	
179601-23-1	**m,p-Xylenes**	**7.6**	0.79	**1.8**	0.18	
75-25-2	Bromoform	ND	0.79	ND	0.076	
100-42-5	**Styrene**	**5.6**	0.79	**1.3**	0.18	
95-47-6	**o-Xylene**	**3.8**	0.79	**0.88**	0.18	
111-84-2	**n-Nonane**	**1.3**	0.79	**0.26**	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.16	ND	0.023	
98-82-8	Cumene	ND	0.79	ND	0.16	
80-56-8	**alpha-Pinene**	**92**	0.79	**16**	0.14	
103-65-1	**n-Propylbenzene**	**1.1**	0.79	**0.23**	0.16	
622-96-8	**4-Ethyltoluene**	**1.4**	0.79	**0.28**	0.16	
108-67-8	**1,3,5-Trimethylbenzene**	**1.7**	0.79	**0.35**	0.16	
95-63-6	**1,2,4-Trimethylbenzene**	**5.4**	0.79	**1.1**	0.16	
100-44-7	Benzyl Chloride	ND	0.16	ND	0.030	
541-73-1	1,3-Dichlorobenzene	ND	0.16	ND	0.026	
106-46-7	1,4-Dichlorobenzene	ND	0.16	ND	0.026	
95-50-1	**1,2-Dichlorobenzene**	**0.30**	0.16	**0.050**	0.026	
5989-27-5	**d-Limonene**	**17**	0.79	**3.1**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.79	ND	0.081	
120-82-1	1,2,4-Trichlorobenzene	ND	0.79	ND	0.11	
91-20-3	**Naphthalene**	**2.5**	0.79	**0.48**	0.15	
87-68-3	Hexachlorobutadiene	ND	0.79	ND	0.074	

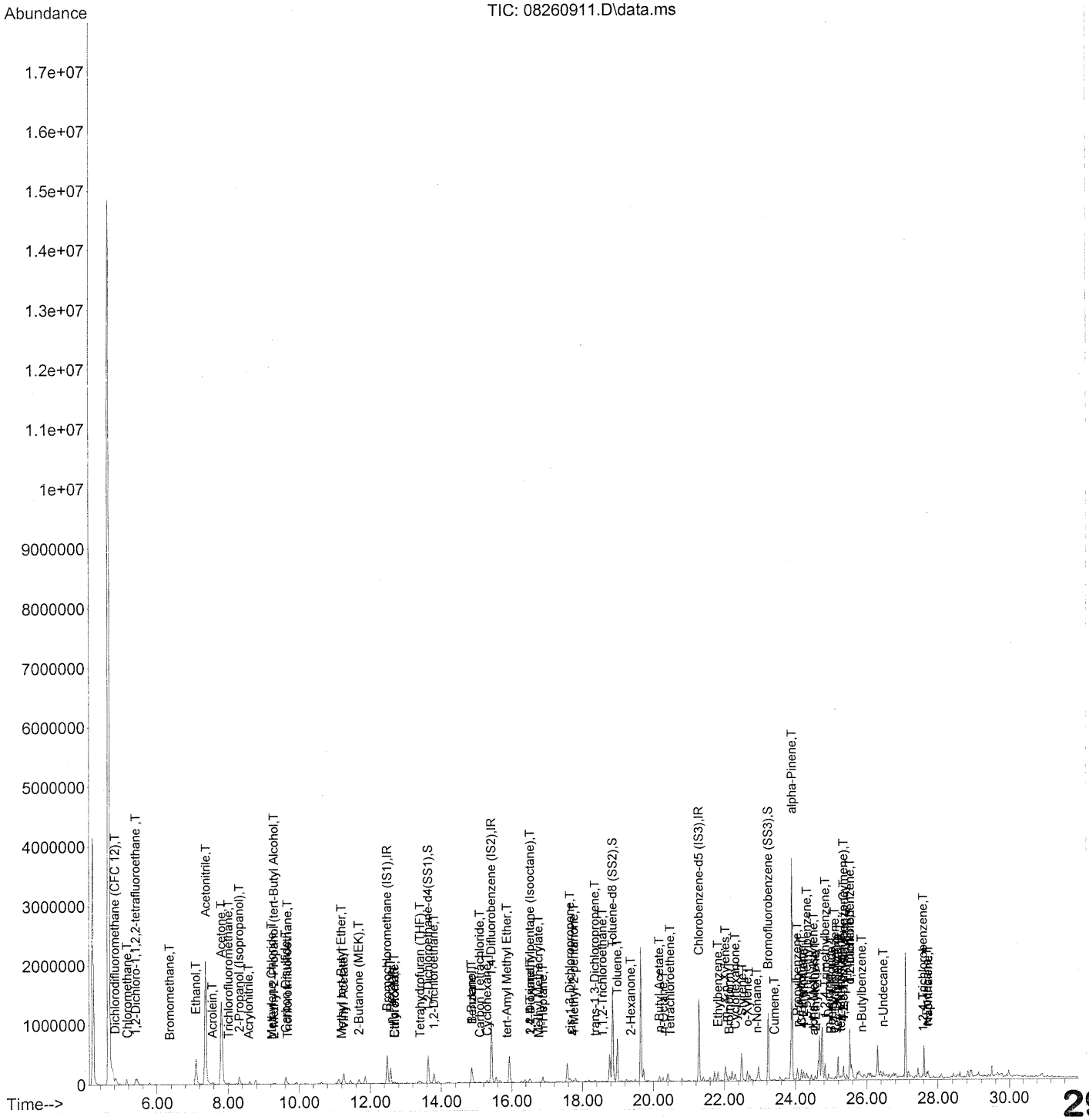
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 5:25 pm
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 01 17:02:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 5:25 pm
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 01 17:02:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

MT 9/1/09

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	238666	25.000 ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1194964	25.000 ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.28	82	580502	25.000 ng		-0.02
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.63	65	460234	22.186 ng		-0.03
Spiked Amount 25.000			Recovery =	88.76%		✓
57) Toluene-d8 (SS2)	18.85	98	1299223	25.614 ng		-0.02
Spiked Amount 25.000			Recovery =	102.44%		✓
73) Bromofluorobenzene (SS3)	23.23	174	373878	27.951 ng		-0.01
Spiked Amount 25.000			Recovery =	111.80%		✓
Target Compounds						Qvalue
2) Propene	0.00	42	0	N.D. d		
3) Dichlorodifluoromethan...	4.83	85	52538	1.963 ng		98
4) Chloromethane	5.17	50	13092	0.728 ng		90
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	684	~~0.063~~ ng	#	44
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.86	54	109	N.D.		
8) Bromomethane	6.36	94	1070	0.102 ng		81
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.10	45	858238	82.671 ng	E	100
11) Acetonitrile	7.38	41	3671632	~~120.766~~ ng	Sec Aff	100
12) Acrolein	7.56	56	31679	4.009 ng		99
13) Acetone	7.81	58	919837	93.906 ng		97
14) Trichlorofluoromethane	8.01	101	21332	0.881 ng		99
15) 2-Propanol (Isopropanol)	8.32	45	257020	6.677 ng		99
16) Acrylonitrile	8.58	53	2169	~~0.123~~ ng	#	50
17) 1,1-Dichloroethene	9.03	96	96	N.D.		
18) 2-Methyl-2-Propanol (t...	9.29	59	9458	0.277 ng	#	1
19) Methylene Chloride	9.23	84	2059	~~0.157 ng~~	#	1
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d		
21) Trichlorotrifluoroethane	9.67	151	3841	0.437 ng		100
22) Carbon Disulfide	9.63	76	277370	5.981 ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.19	73	13324	~~0.360 ng~~	#	94
26) Vinyl Acetate	11.25	86	12618	~~6.330 ng~~	#	31
27) 2-Butanone (MEK)	11.68	72	32481	3.673 ng	# 9/2/09	87
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.68	87	95	~~N.D.~~		
30) Ethyl Acetate	12.68	61	3576	0.776 ng		95
31) n-Hexane	12.58	57	160850	6.825 ng		96

300

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 5:25 pm
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 01 17:02:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	2893	0.139	ng		96
34) Tetrahydrofuran (THF)	13.40	72	6108	0.648	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.79	62	38254	2.017	ng		98
38) 1,1,1-Trichloroethane	14.16	97	218	N.D.			
39) Isopropyl Acetate	14.87	61	215	N.D.			
40) 1-Butanol	14.86	56	182766	11.785	ng	#	78
41) Benzene	14.87	78	79660	1.516	ng		99
42) Carbon Tetrachloride	15.09	117	6047	0.361	ng		95
43) Cyclohexane	15.29	84	22203	1.154	ng		94
44) tert-Amyl Methyl Ether	15.86	73	2396	0.061	ng	#	46
45) 1,2-Dichloropropane	15.93	63	361	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.	d		
47) Trichloroethene	16.45	130	120	N.D.			
48) 1,4-Dioxane	16.53	88	1230	0.123	ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	56583	0.914	ng		84
50) Methyl Methacrylate	16.76	100	291	0.060	ng	#	1
51) n-Heptane	16.88	71	28011	1.987	ng		98
52) cis-1,3-Dichloropropene	17.65	75	31278	1.430	ng		98
53) 4-Methyl-2-pentanone	17.76	58	7418	0.587	ng		91
54) trans-1,3-Dichloropropene	18.35	75	23572	1.134	ng		99
55) 1,1,2-Trichloroethane	18.56	97	663	0.057	ng	#	1
58) Toluene	18.98	91	625678	12.551	ng		99
59) 2-Hexanone	19.36	43	30422	0.918	ng		99
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	72515	1.856	ng		93
63) n-Octane	20.28	57	13700	1.137	ng		95
64) Tetrachloroethene	20.47	166	3210	0.278	ng		92
65) Chlorobenzene	21.35	112	683	N.D.			
66) Ethylbenzene	21.82	91	148524	2.606	ng		99
67) m- & p-Xylenes	22.03	91	223336	4.845	ng		97
68) Bromoform	22.13	173	801	0.082	ng	#	49
69) Styrene	22.50	104	119187	3.577	ng		98
70) o-Xylene	22.65	91	112690	2.438	ng		99
71) n-Nonane	22.91	43	26204	0.853	ng		92
72) 1,1,2,2-Tetrachloroethane	22.64	83	790	N.D.			
74) Cumene	23.41	105	15724	0.269	ng		97
75) alpha-Pinene	23.90	93	1746885	58.373	ng		84
76) n-Propylbenzene	24.05	91	52125	0.710	ng	#	78
77) 3-Ethyltoluene	24.17	105	115468	2.070	ng		100
78) 4-Ethyltoluene	24.22	105	47953	0.887	ng		97
79) 1,3,5-Trimethylbenzene	24.31	105	49616	1.088	ng		10

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 5:25 pm
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 01 17:02:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

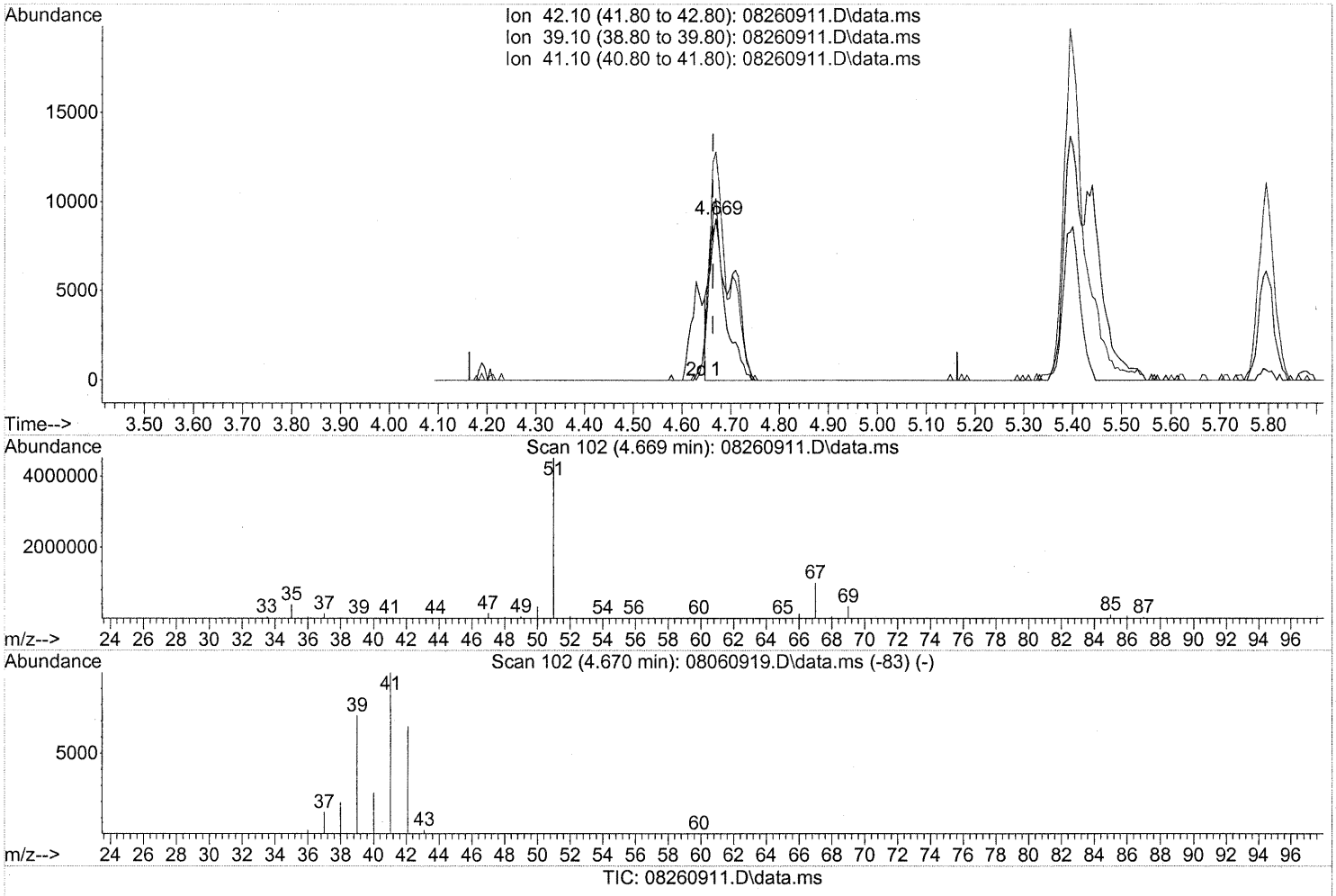
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	2331	0.095 ng		98
81) 2-Ethyltoluene	24.55	105	46375	0.824 ng		98
82) 1,2,4-Trimethylbenzene	24.83	105	159144	3.422 ng		90
83) n-Decane	24.93	57	46763	1.547 ng		93
84) Benzyl Chloride	25.00	91	3272	0.075 ng		78
85) 1,3-Dichlorobenzene	25.02	146	309	N.D.		
86) 1,4-Dichlorobenzene	25.10	146	2038	0.081 ng		97
87) sec-Butylbenzene	25.17	105	4949	0.079 ng	#	72
88) 4-Isopropyltoluene (p-...	25.35	119	79199	1.414 ng		98
89) 1,2,3-Trimethylbenzene	25.35	105	42725	0.902 ng	NOT NEEDED	87
90) 1,2-Dichlorobenzene	25.53	146	4256	0.191 ng		100
91) d-Limonene	25.53	68	216715	10.960 ng		91
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	48711	1.514 ng		98
94) 1,2,4-Trichlorobenzene	27.58	180	1523	0.099 ng	#	86
95) Naphthalene	27.72	128	100173	1.586 ng		99
96) n-Dodecane	27.69	57	35463	0.949 ng		99
97) Hexachlorobutadiene	28.14	225	196	N.D.		
98) Cyclohexanone	22.30	55	68538	3.318 ng		94
99) tert-Butylbenzene	25.27	119	5421	0.120 ng		93
100) n-Butylbenzene	25.85	91	19105	0.369 ng	#	50

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 01 14:31:22 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(2) Propene (T)

4.669min (+0.006) 1.26ng

response 20577

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	150.09#
41.10	150.20	169.73
0.00	0.00	0.00

FP
9/1/09

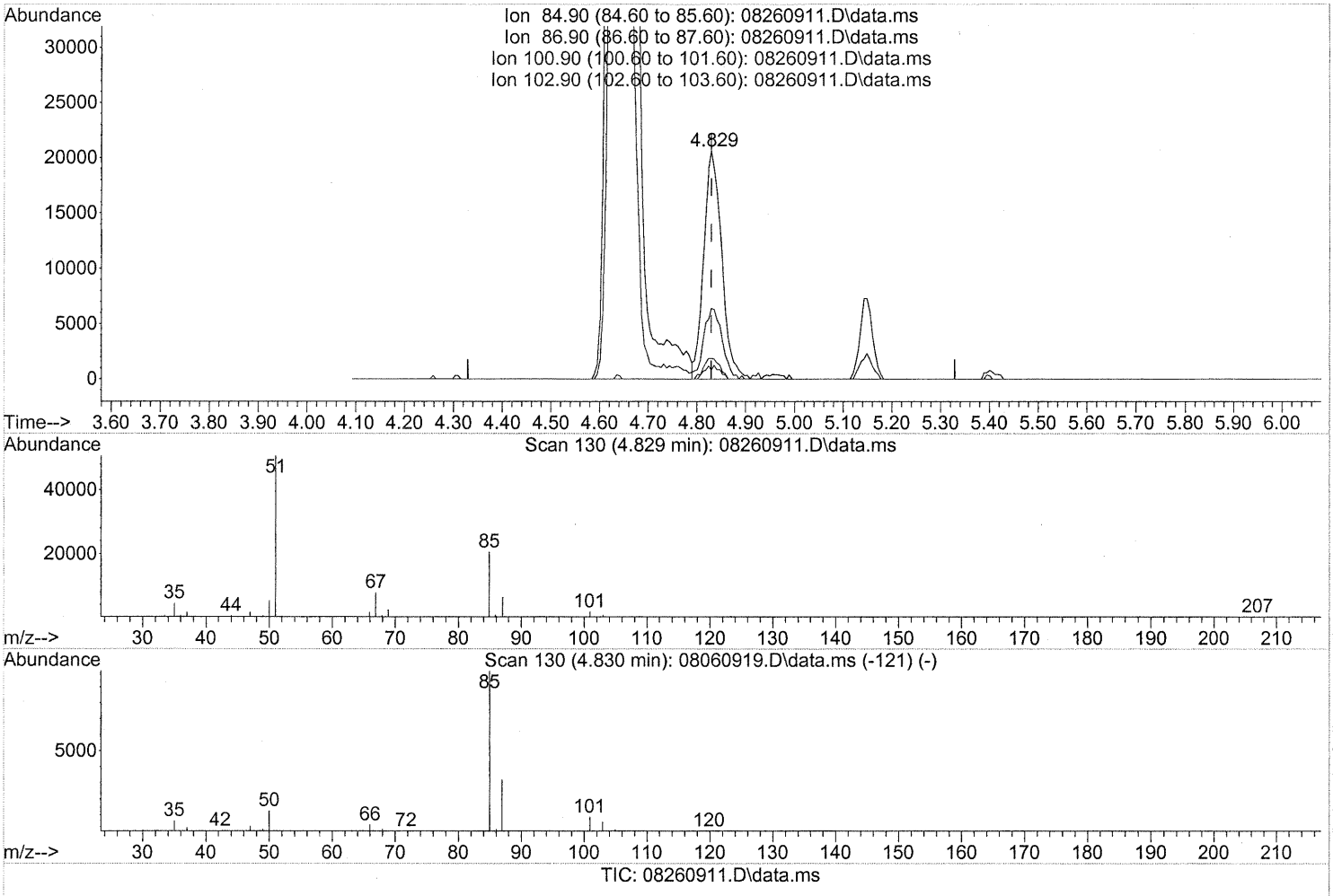
9/2/09

303

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.829min (-0.000) 1.96ng

response 52538

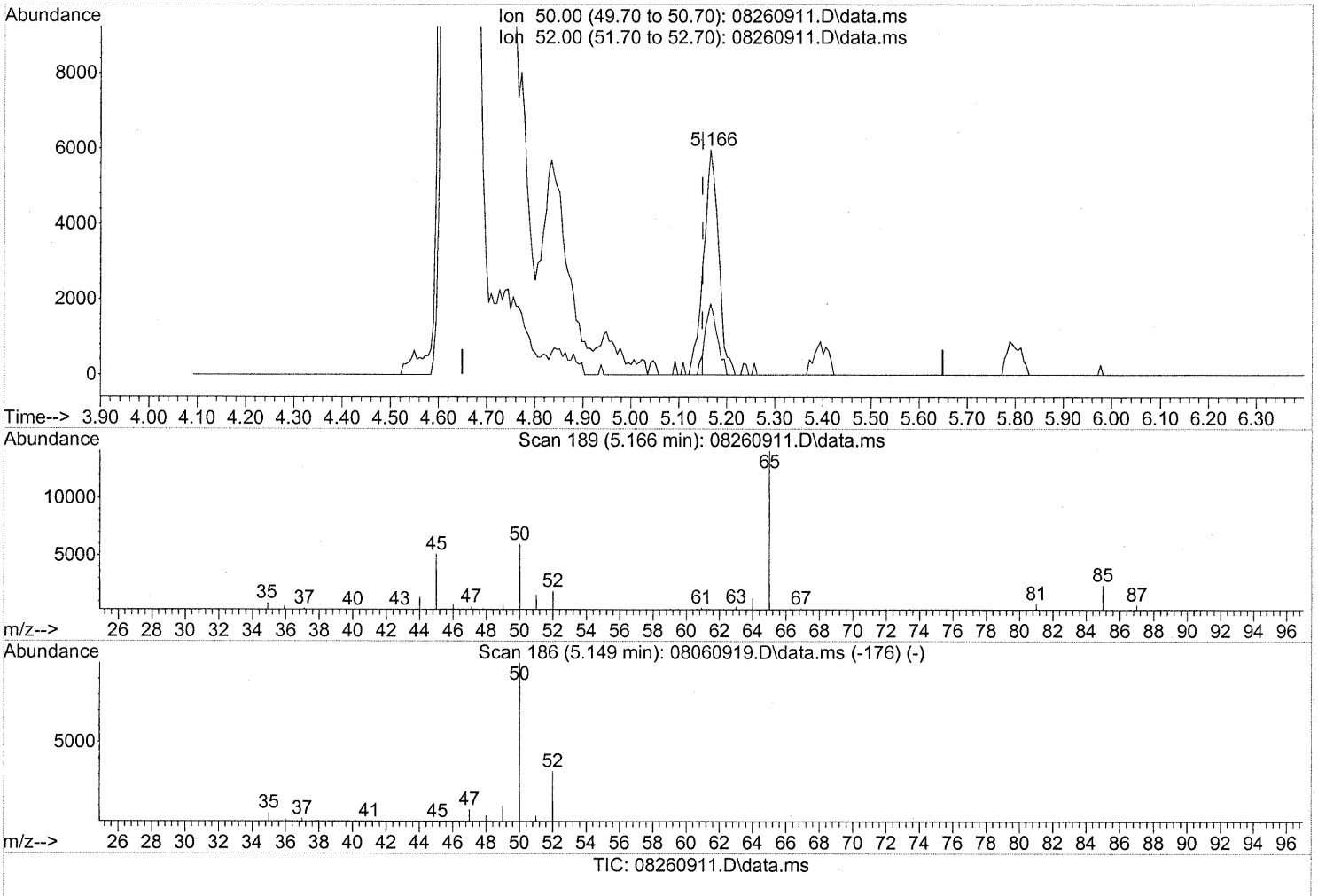
Ion	Exp%	Act%
84.90	100	100
86.90	32.80	31.84
100.90	8.80	8.10
102.90	5.20	4.76

304

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(4) Chloromethane (T)

5.166min (+0.017) 0.73ng

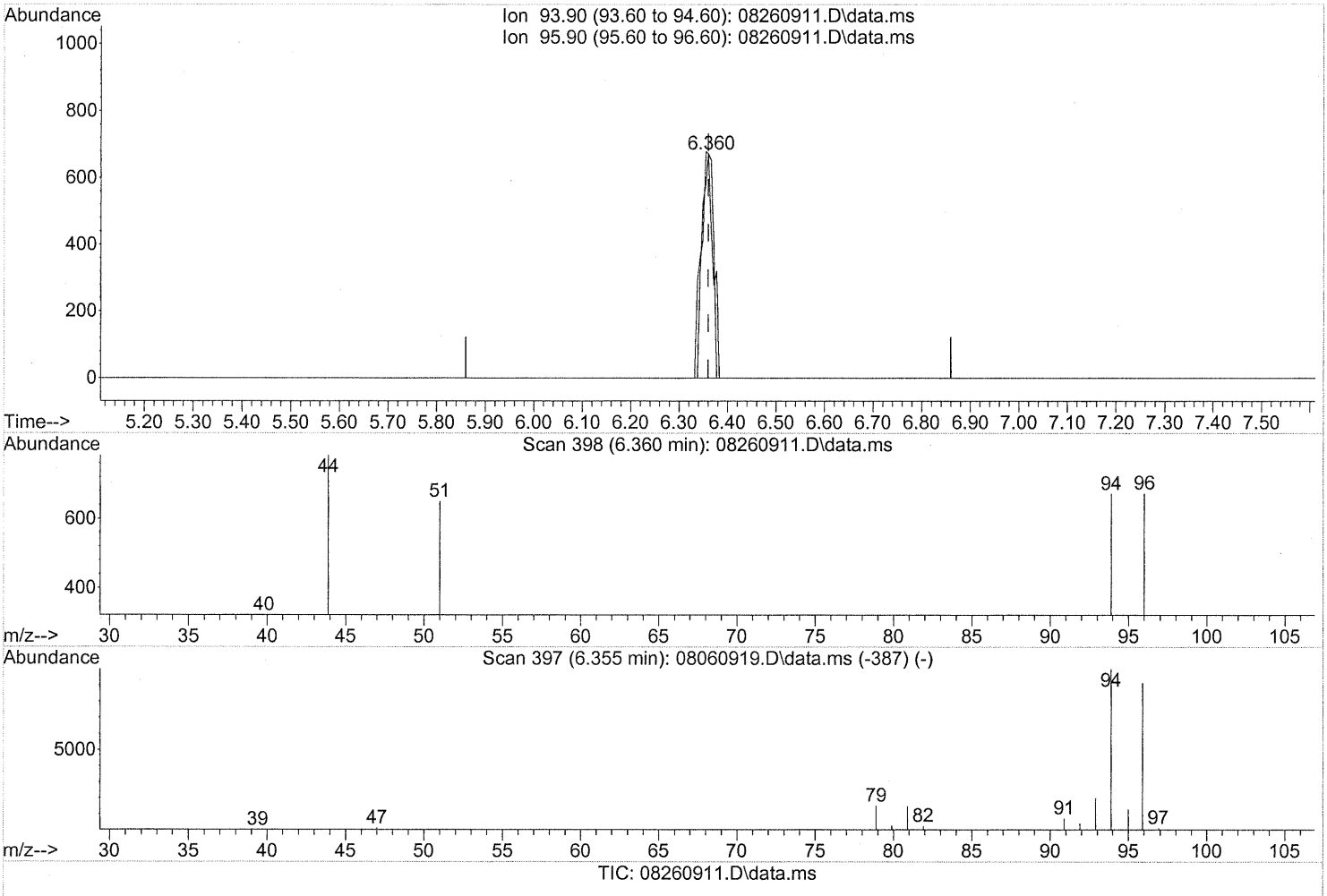
response 13092

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	25.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(8) Bromomethane (T)

6.360min (-0.000) 0.10ng

response 1070

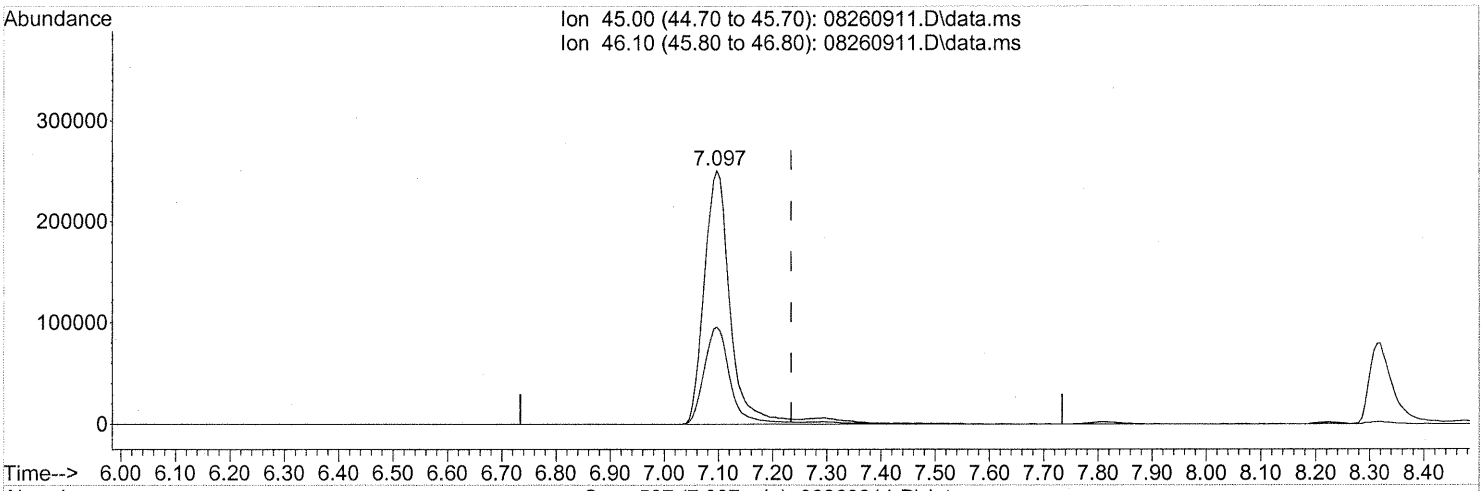
Ion	Exp%	Act%
93.90	100	100
95.90	92.80	110.56
0.00	0.00	0.00
0.00	0.00	0.00

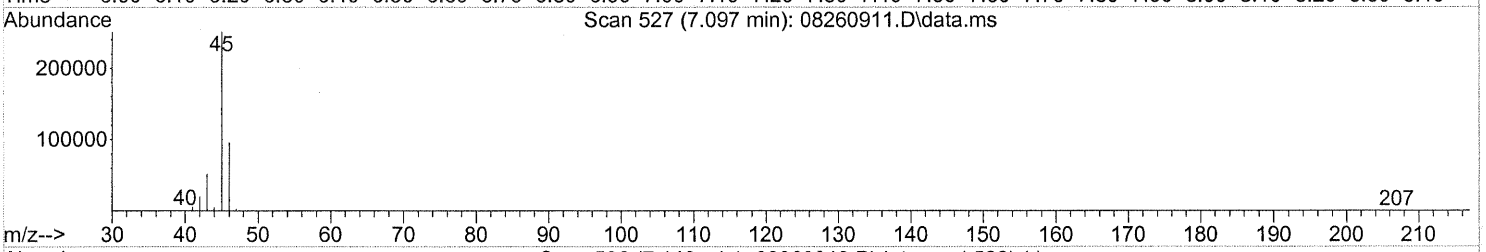
306

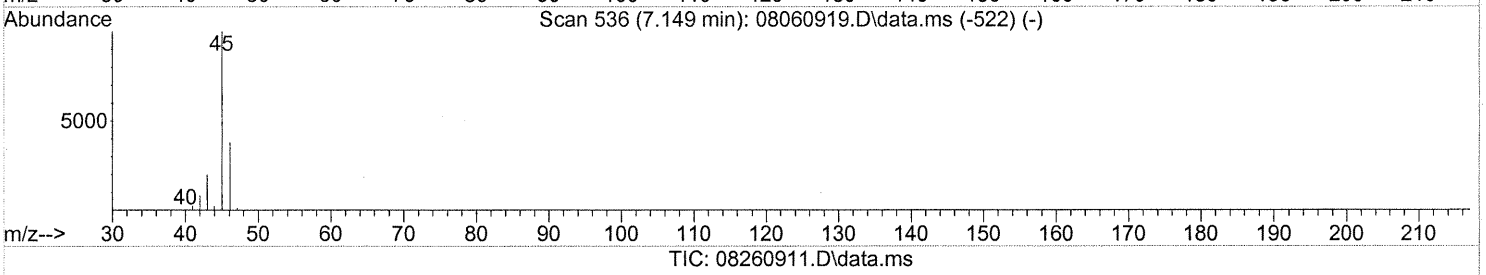
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(10) Ethanol (T)

7.097min (-0.137) 82.67ng

response 858238

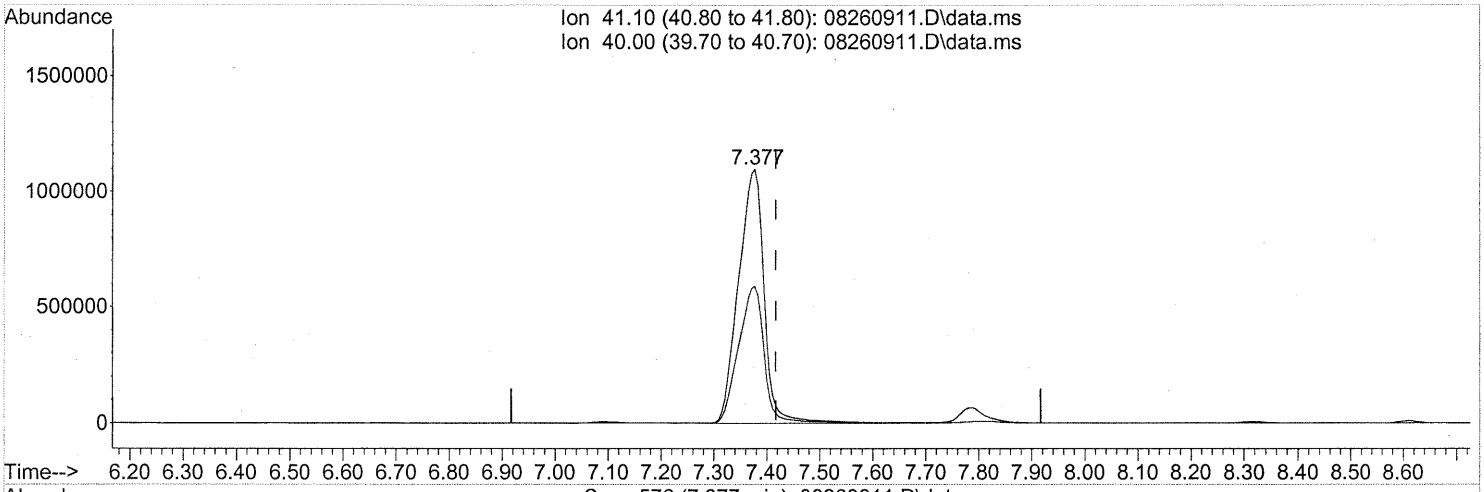
Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.30
0.00	0.00	0.00
0.00	0.00	0.00

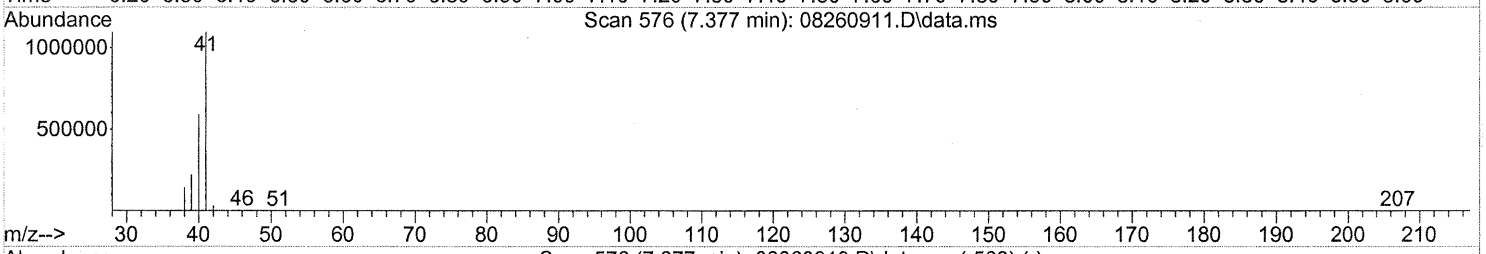
307

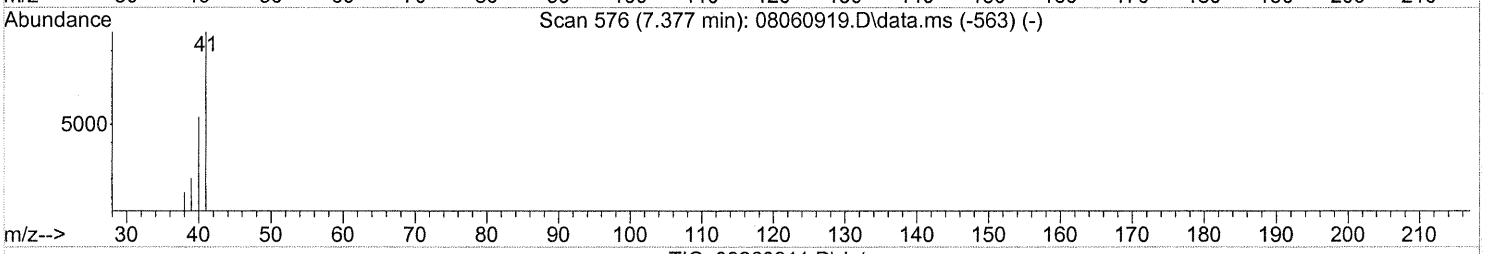
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(11) Acetonitrile (T)

7.377min (-0.040) 120.77ng

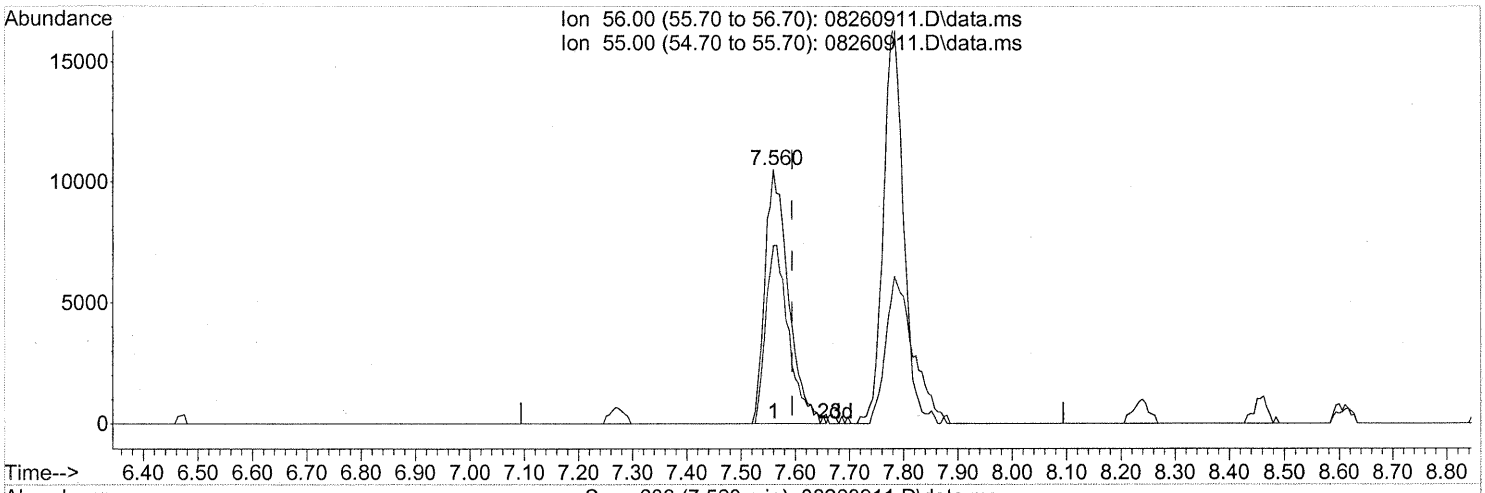
response 3671632

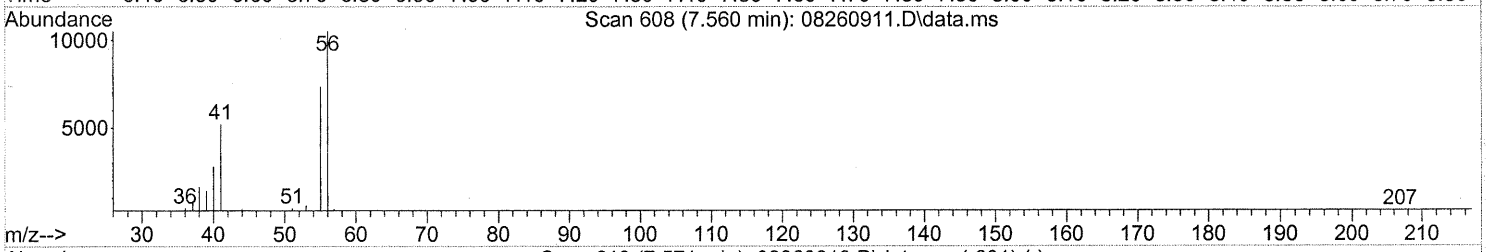
Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.75
0.00	0.00	0.00
0.00	0.00	0.00

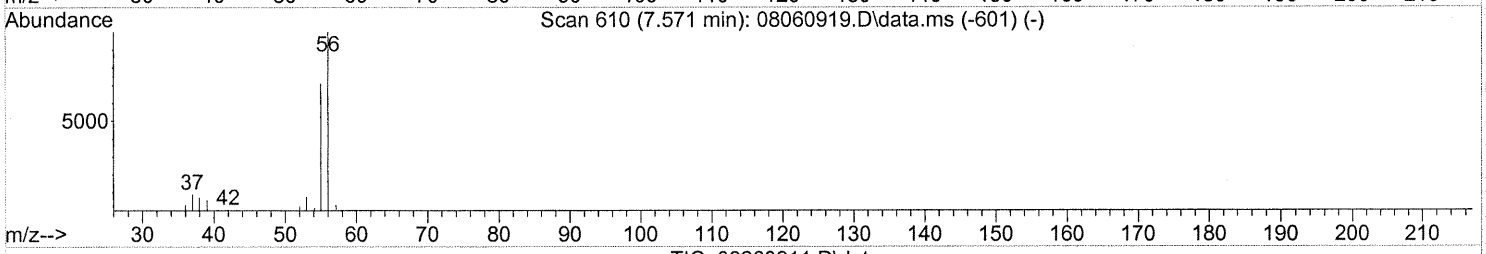
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(12) Acrolein (T)

7.560min (-0.034) 4.01ng

response 31679

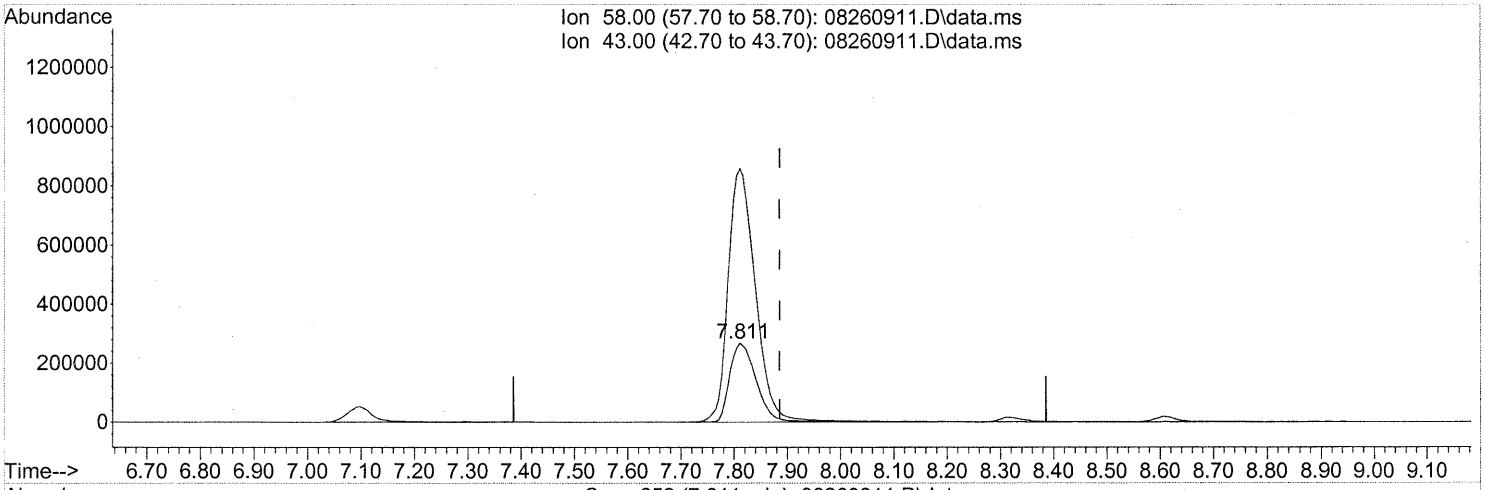
Ion	Exp%	Act%
56.00	100	100
55.00	68.10	68.60
0.00	0.00	0.00
0.00	0.00	0.00

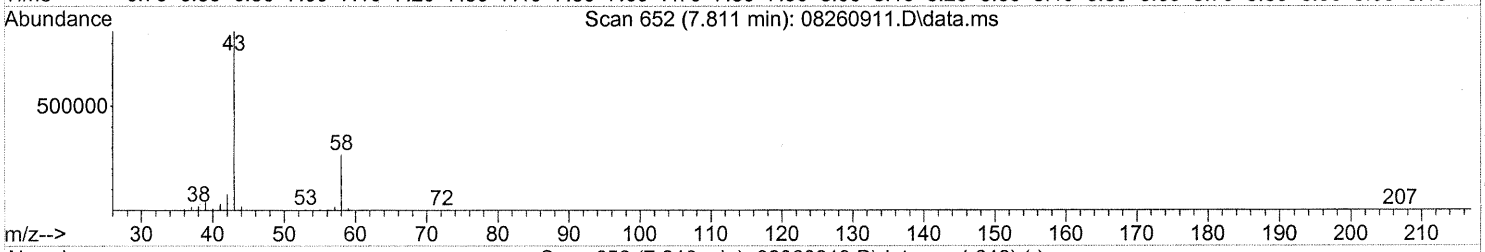
309

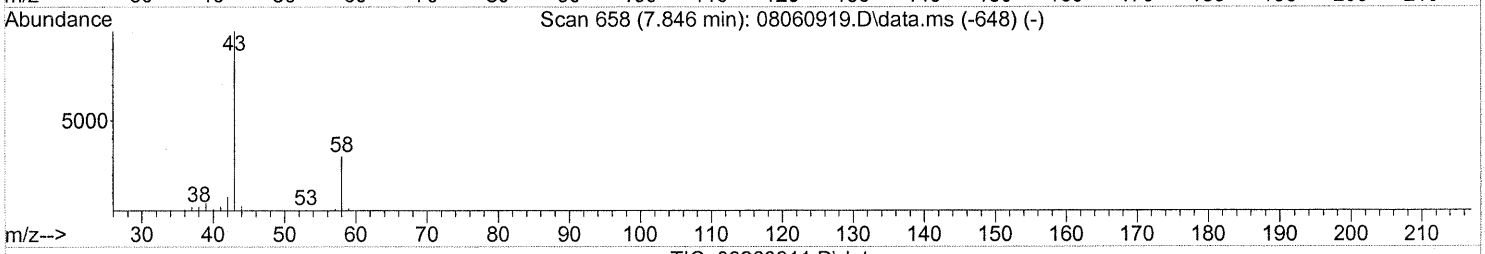
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(13) Acetone (T)

7.811min (-0.075) 93.91ng

response 919837

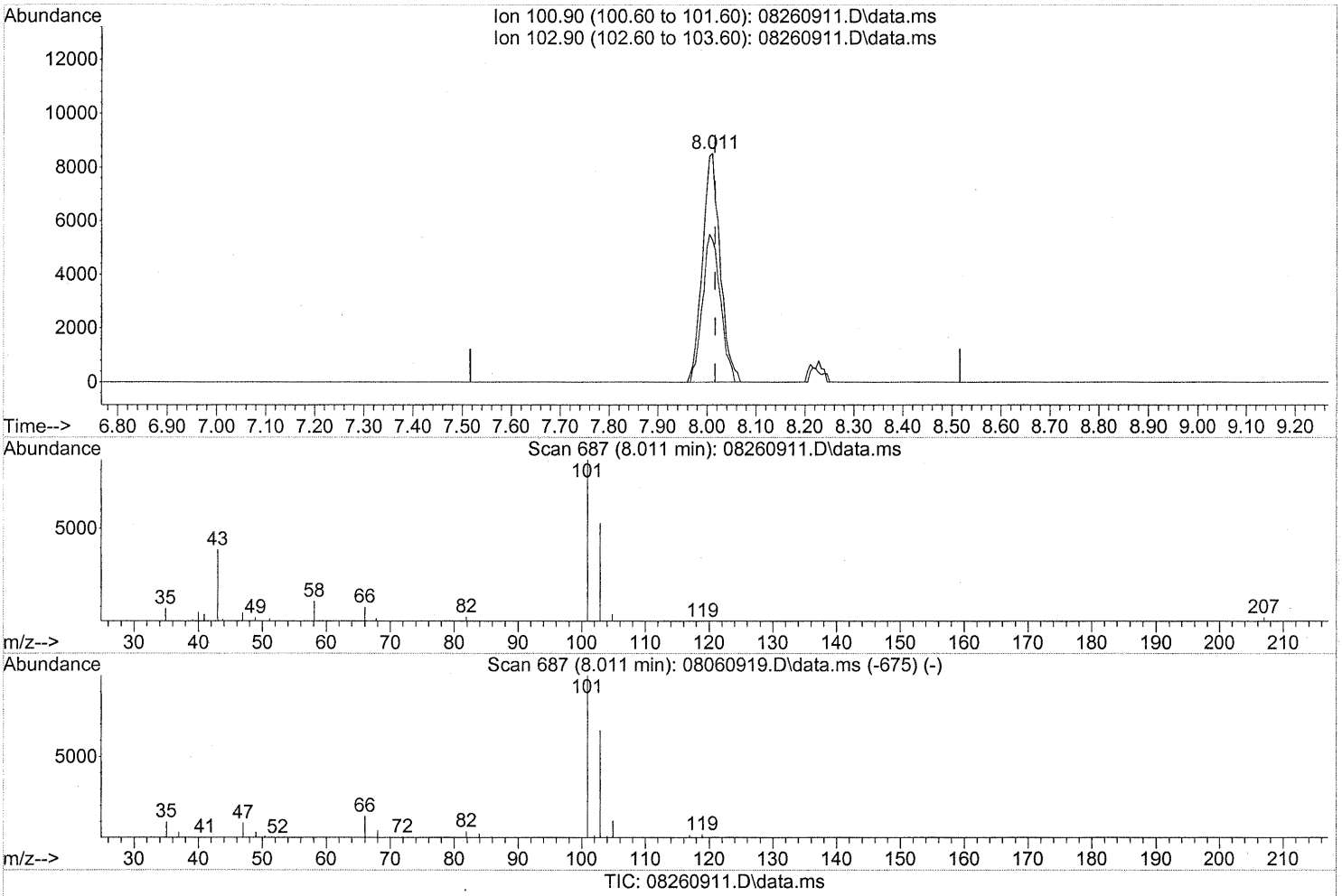
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	333.59
0.00	0.00	0.00
0.00	0.00	0.00

310

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(14) Trichlorofluoromethane (T)

8.011min (-0.006) 0.88ng

response 21332

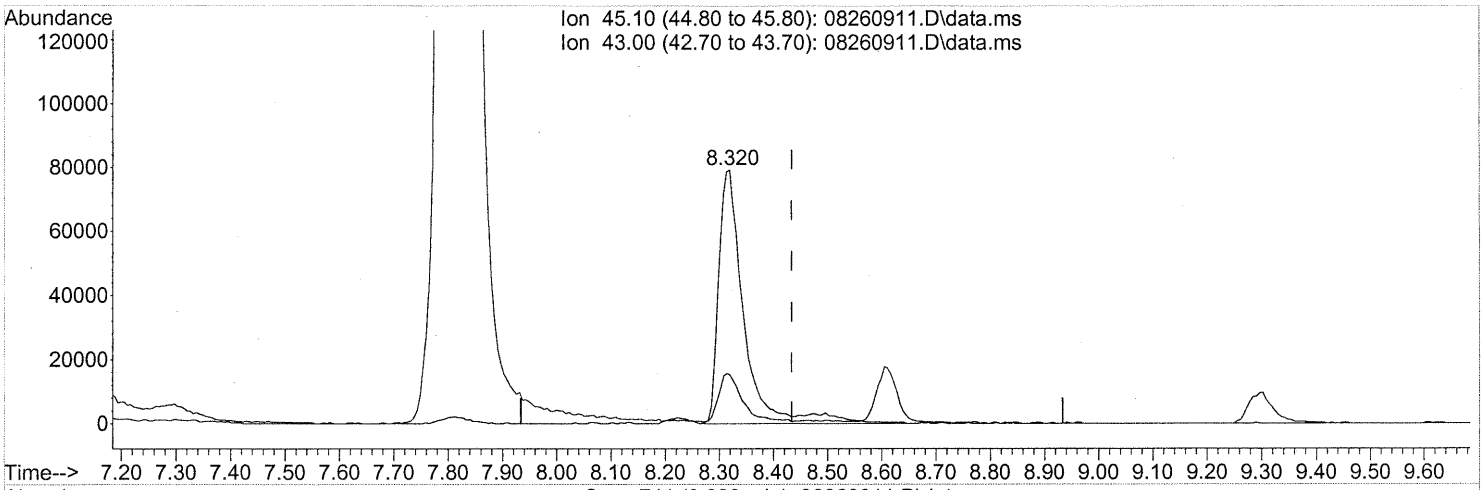
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	65.11
0.00	0.00	0.00
0.00	0.00	0.00

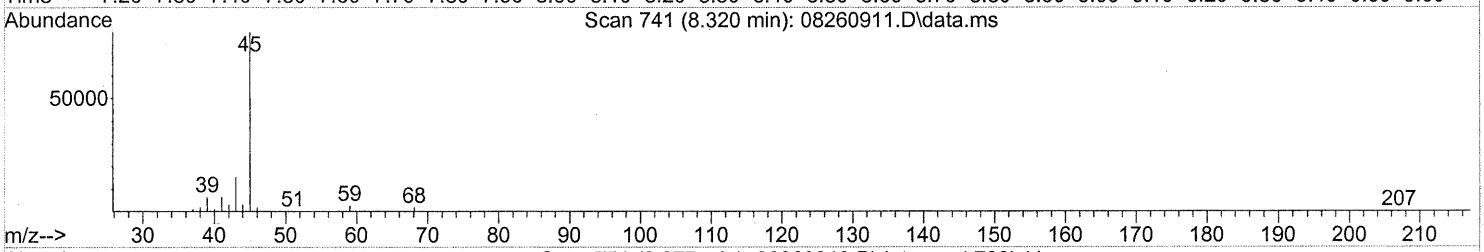
311

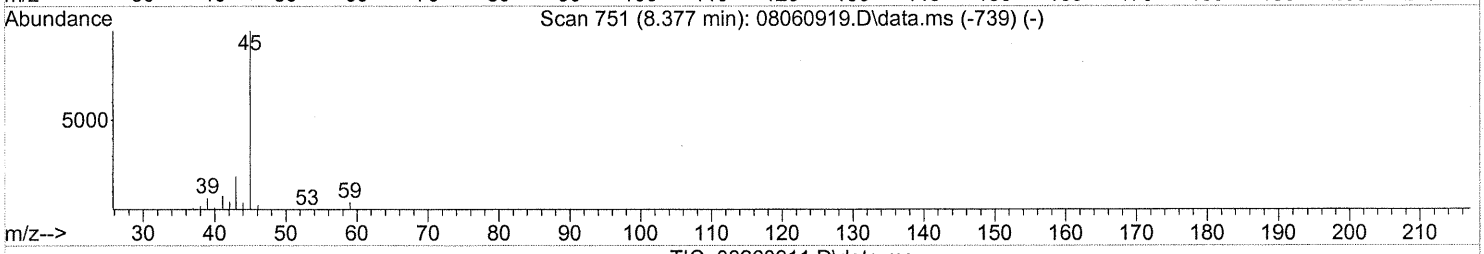
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

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

8.320min (-0.114) 6.68ng

response 257020

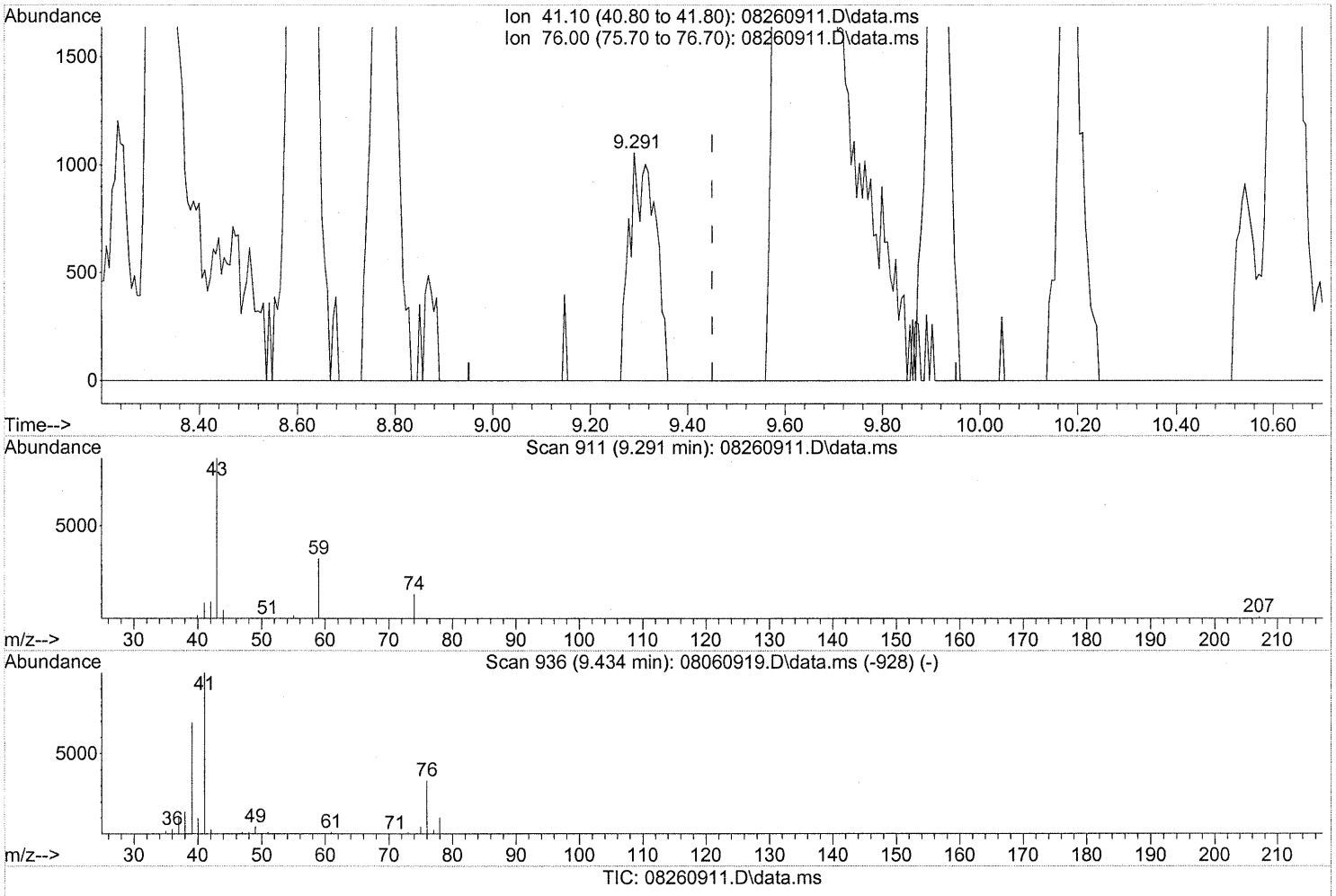
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.58
0.00	0.00	0.00
0.00	0.00	0.00

312

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

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

9.291min (-0.160) 0.15ng

response 3871

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FP
m 9/11/09

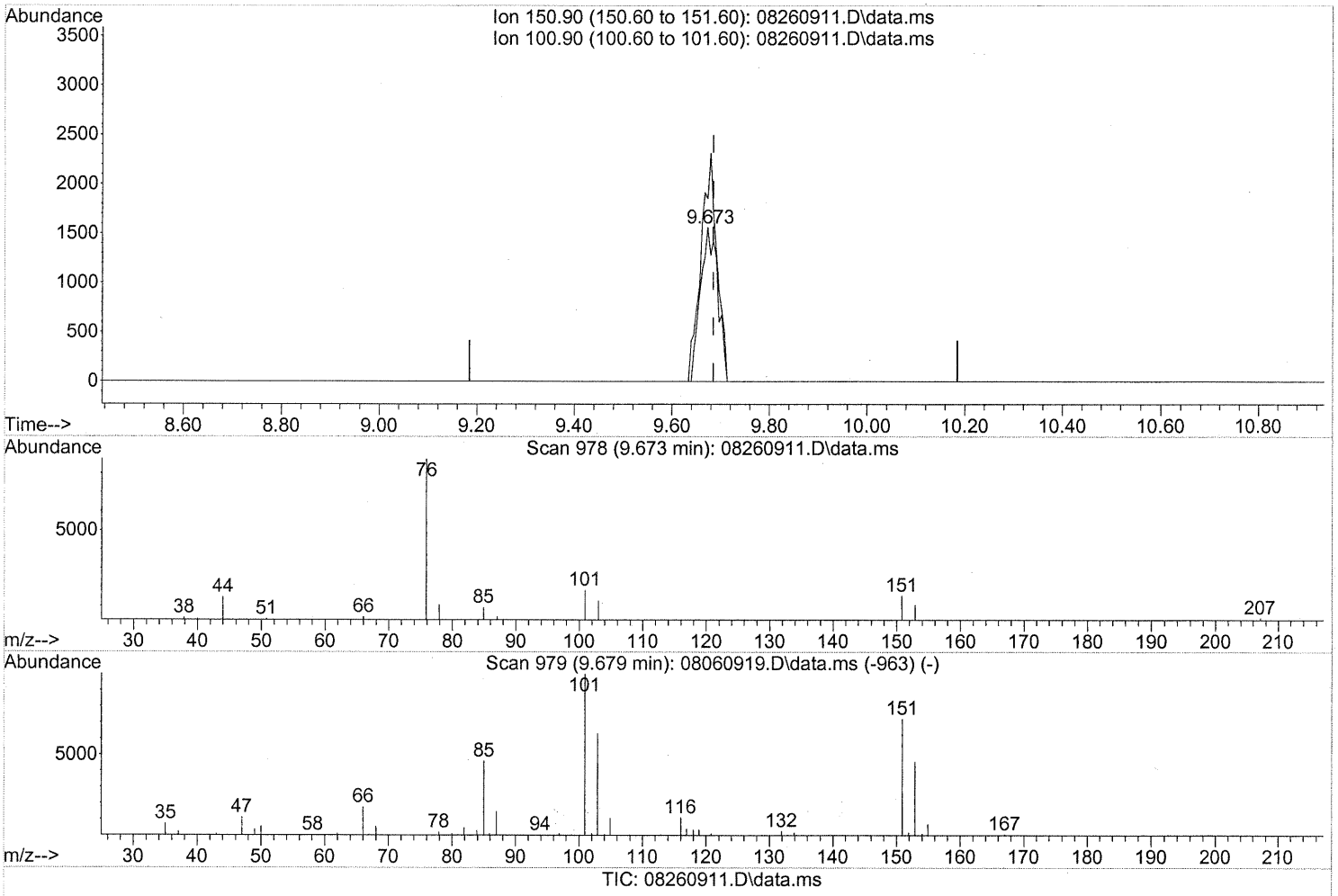
9/2/09

313

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.673min (-0.011) 0.44ng

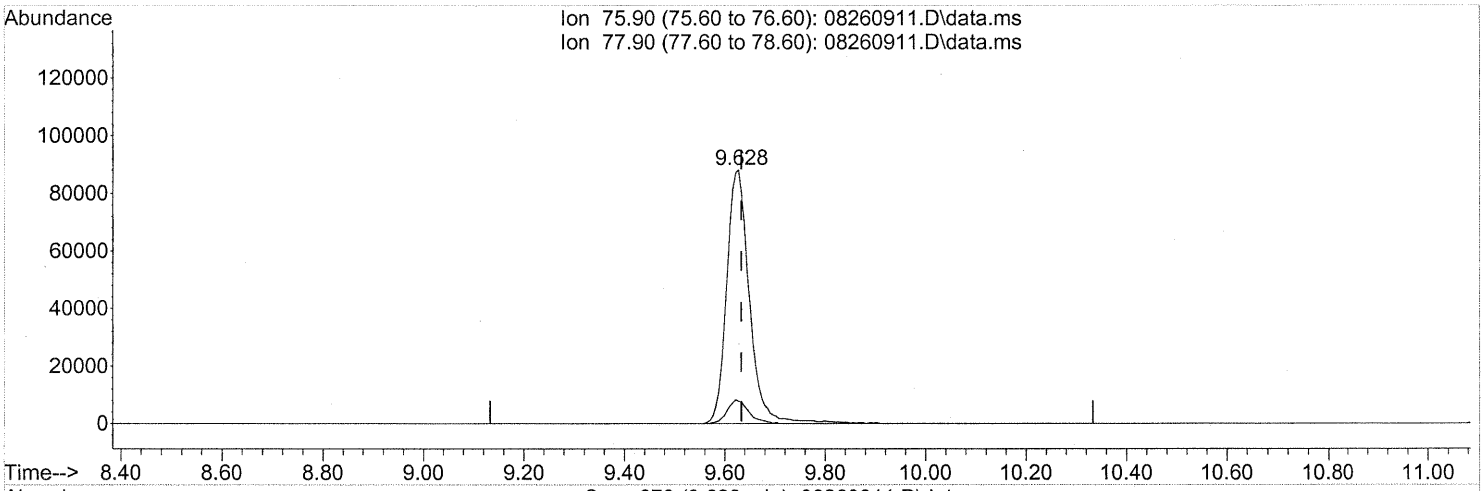
response 3841

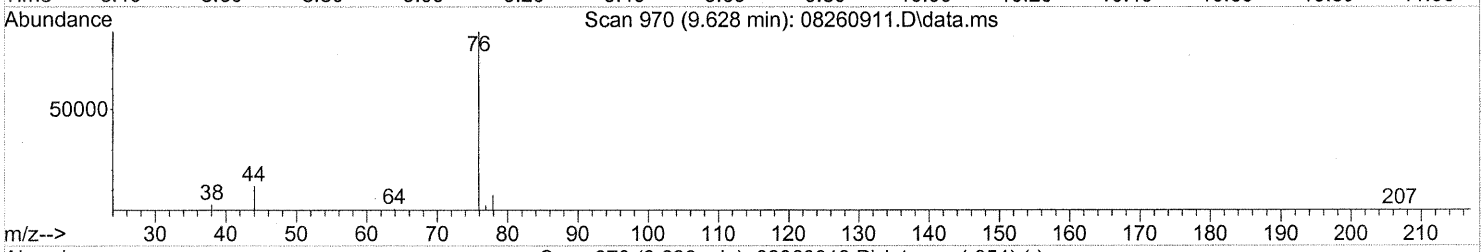
Ion	Exp%	Act%
150.90	100	100
100.90	138.40	137.93
0.00	0.00	0.00
0.00	0.00	0.00

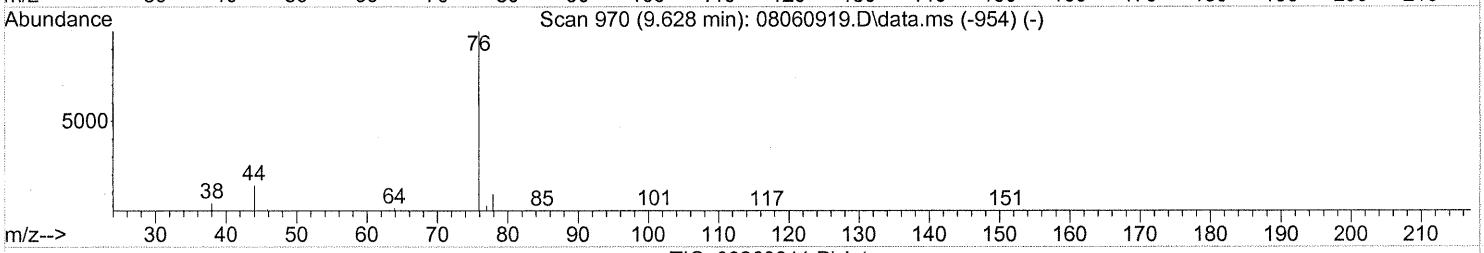
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(22) Carbon Disulfide (T)

9.628min (-0.006) 5.98ng

response 277370

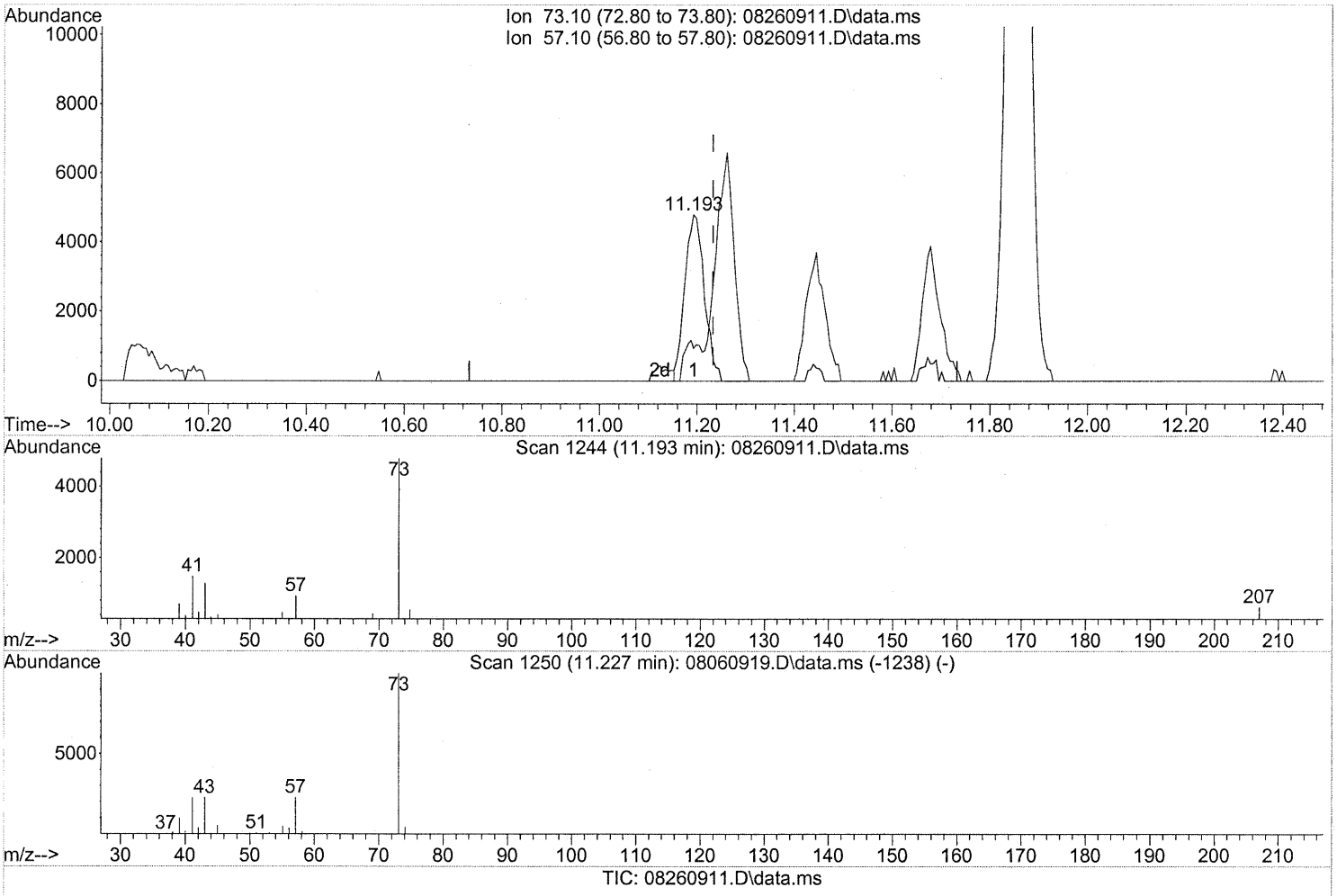
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.63
0.00	0.00	0.00
0.00	0.00	0.00

315

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(25) Methyl tert-Butyl Ether (T)

11.193min (-0.040) 0.36ng

response 13324

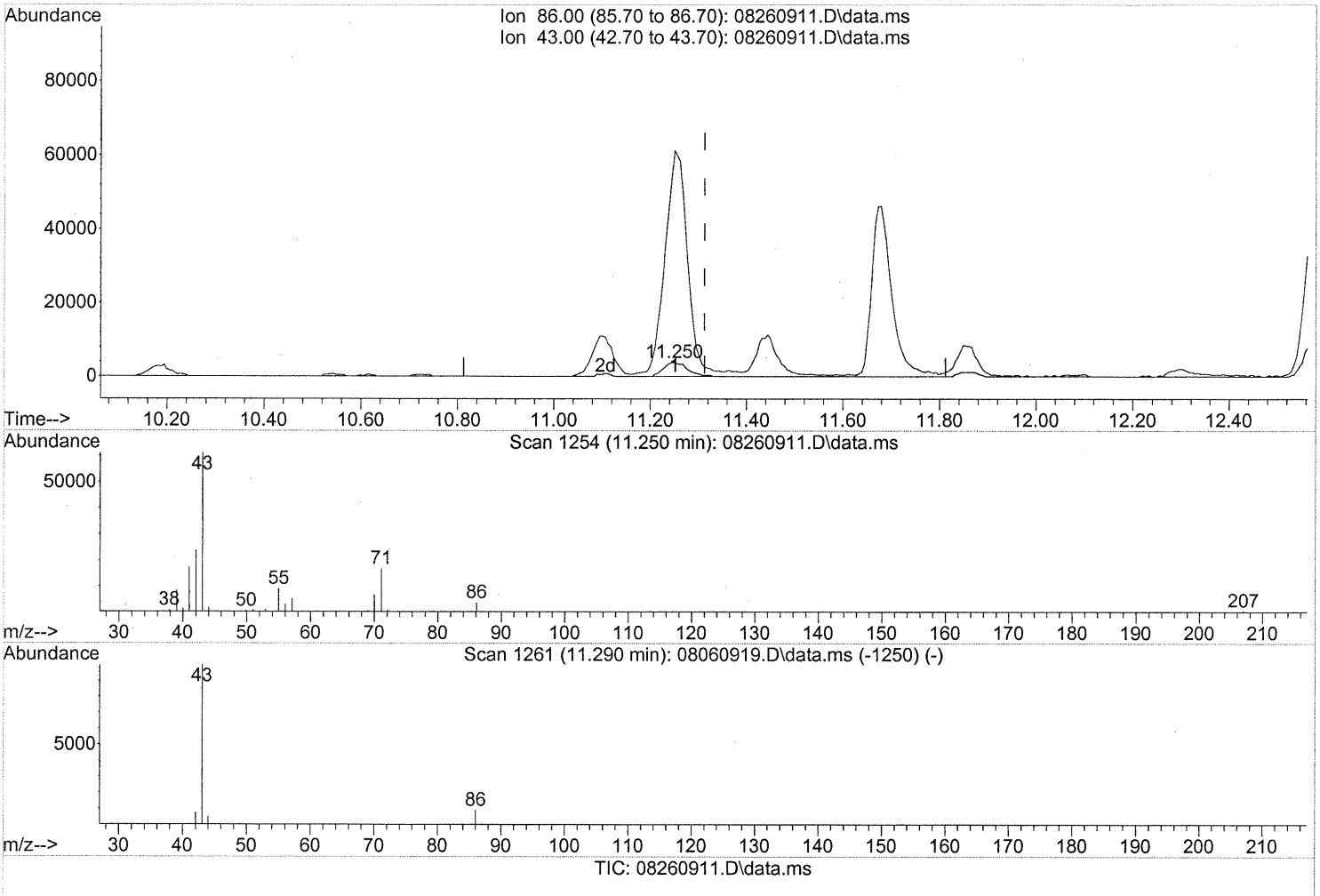
Ion	Exp%	Act%
73.10	100	100
57.10	22.50	19.64
0.00	0.00	0.00
0.00	0.00	0.00

316

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(26) Vinyl Acetate (T)

11.250min (-0.063) 6.33ng

response 12618

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1563.40#
0.00	0.00	0.00
0.00	0.00	0.00

FP
VM 9/2/09

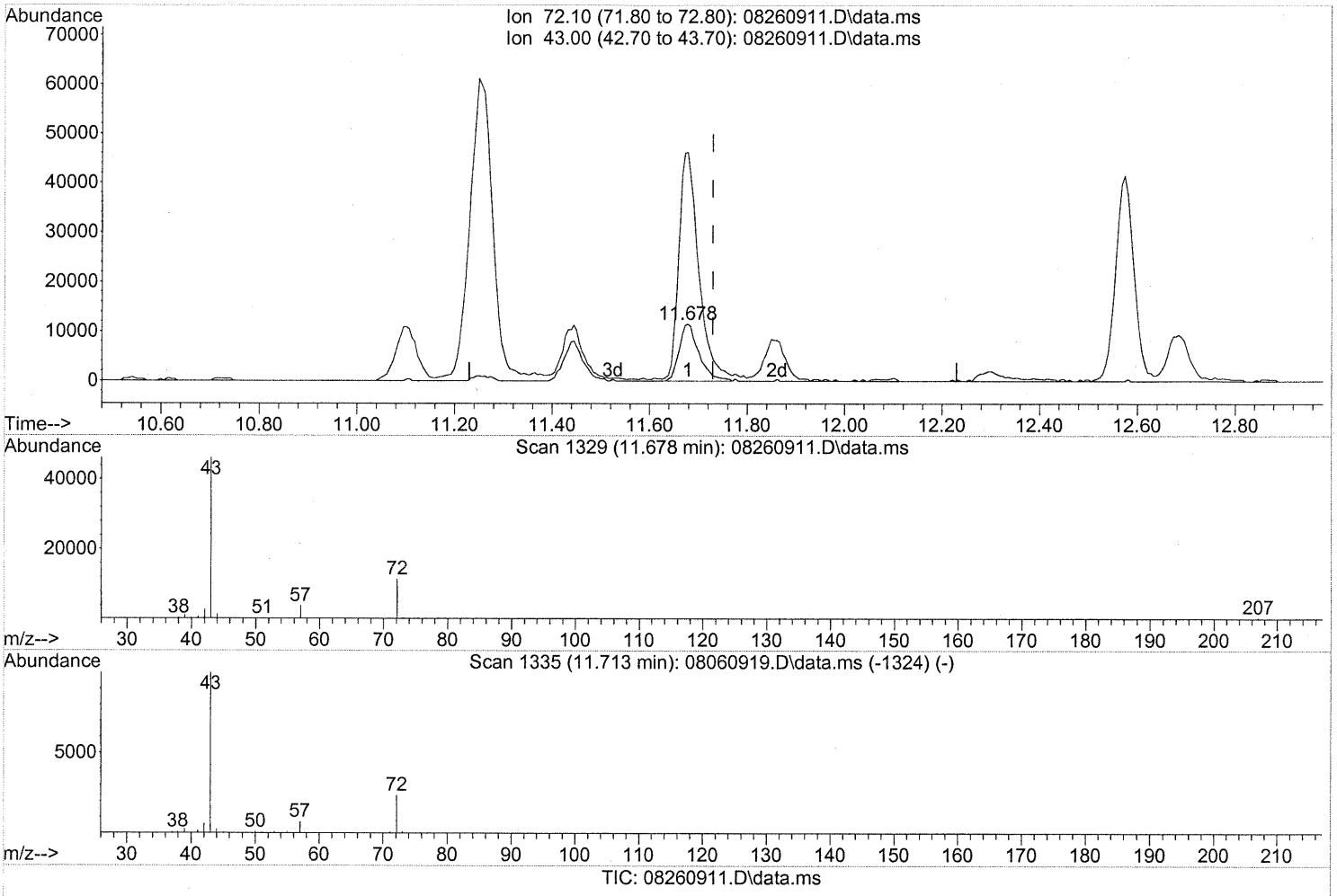
9/2/09

317

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

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

11.678min (-0.052) 3.67ng

response 32481

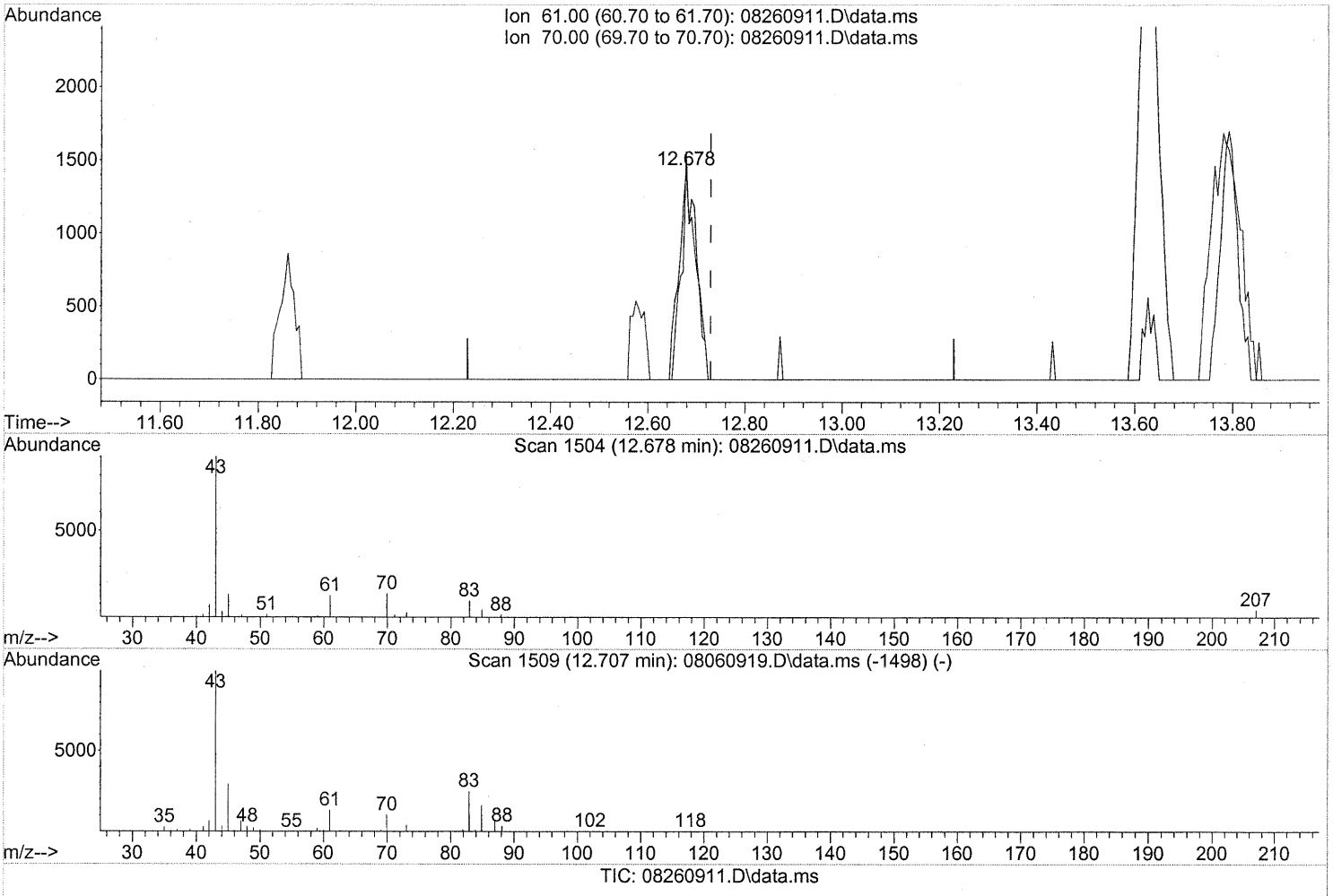
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	403.74#
0.00	0.00	0.00
0.00	0.00	0.00

318

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(30) Ethyl Acetate (T)

12.678min (-0.052) 0.78ng

response 3576

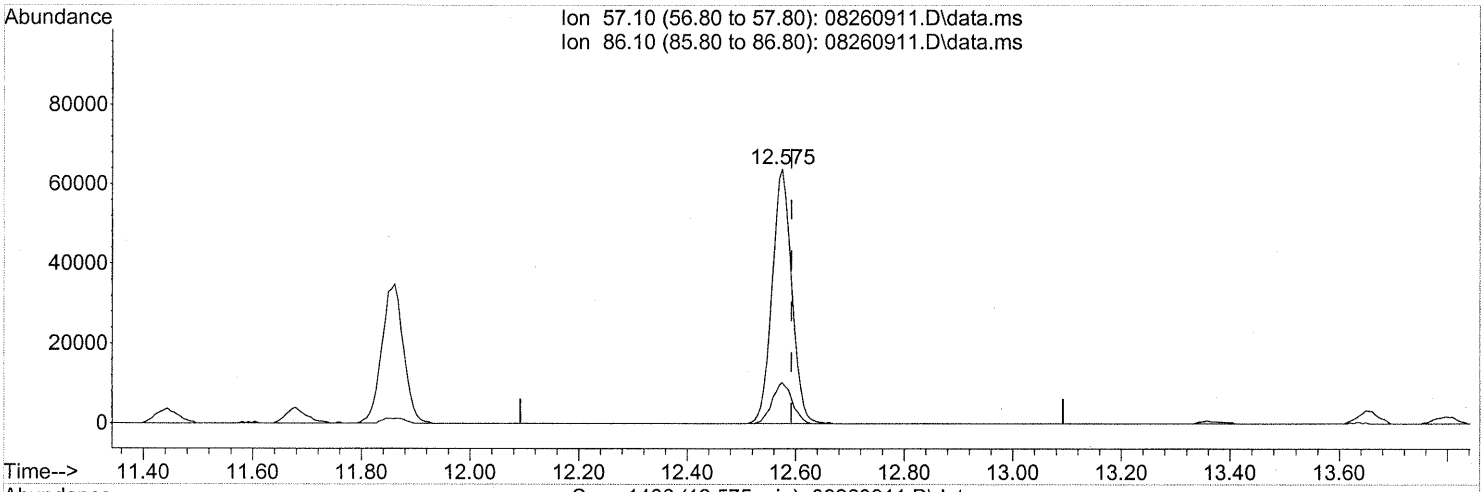
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	86.63
0.00	0.00	0.00
0.00	0.00	0.00

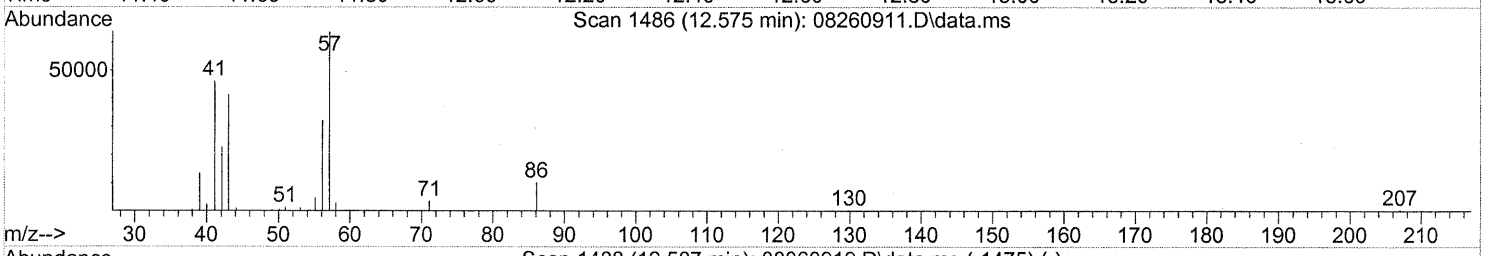
319

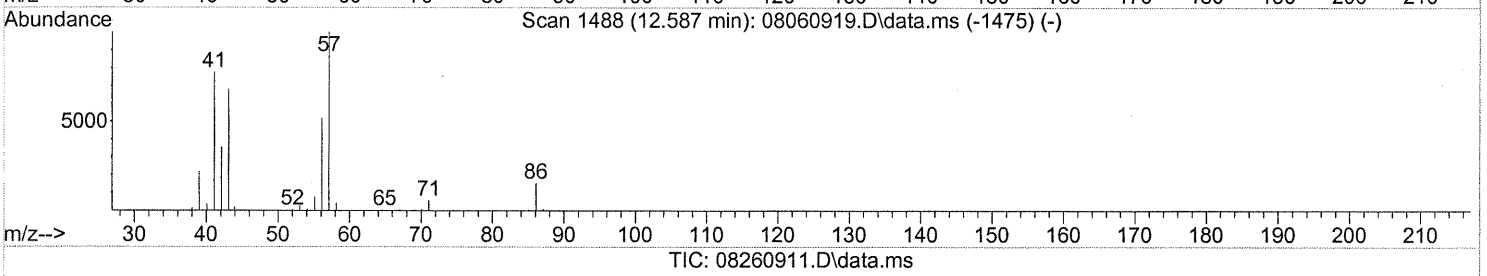
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(31) n-Hexane (T)

12.575min (-0.017) 6.82ng

response 160850

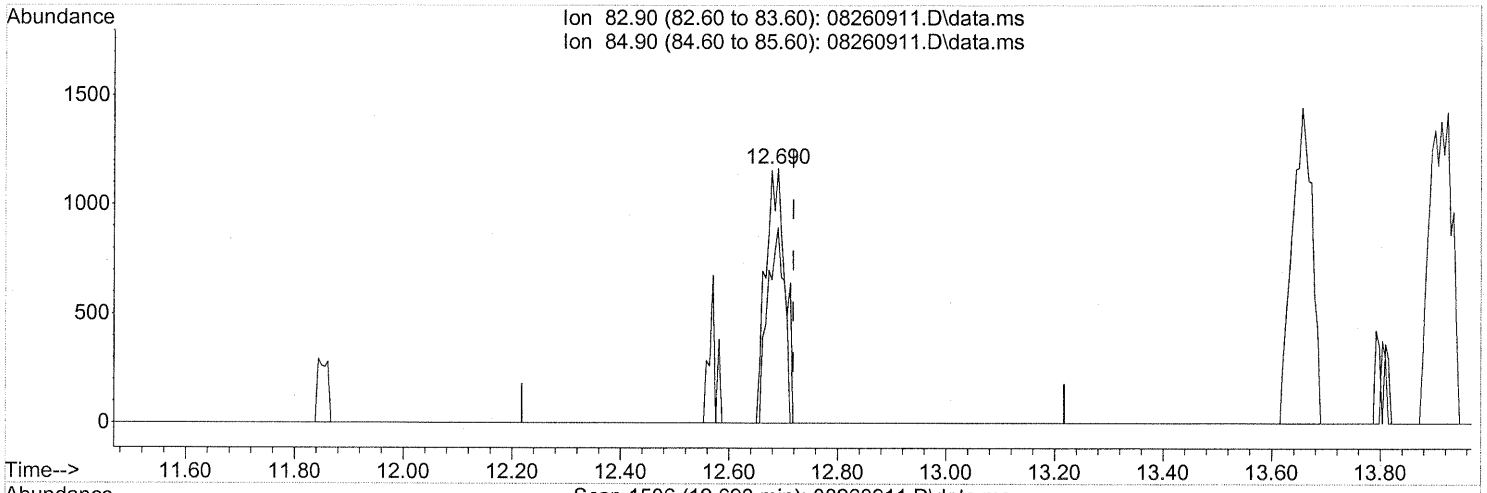
Ion	Exp%	Act%
57.10	100	100
86.10	15.70	16.28
0.00	0.00	0.00
0.00	0.00	0.00

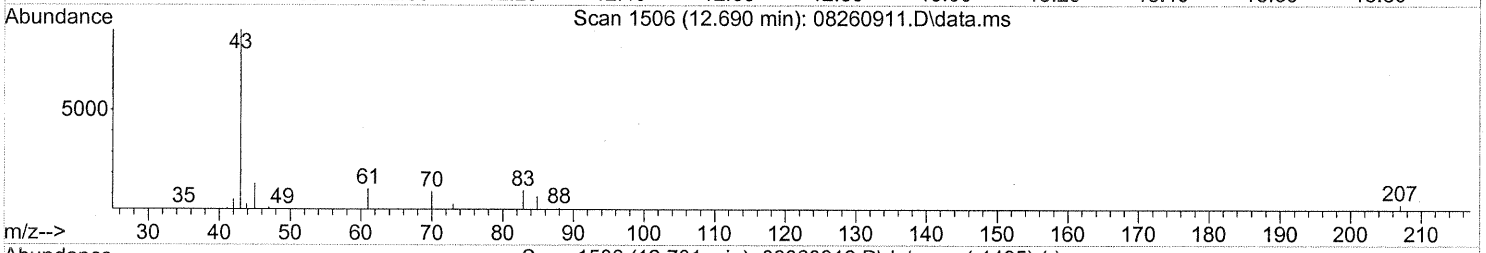
320

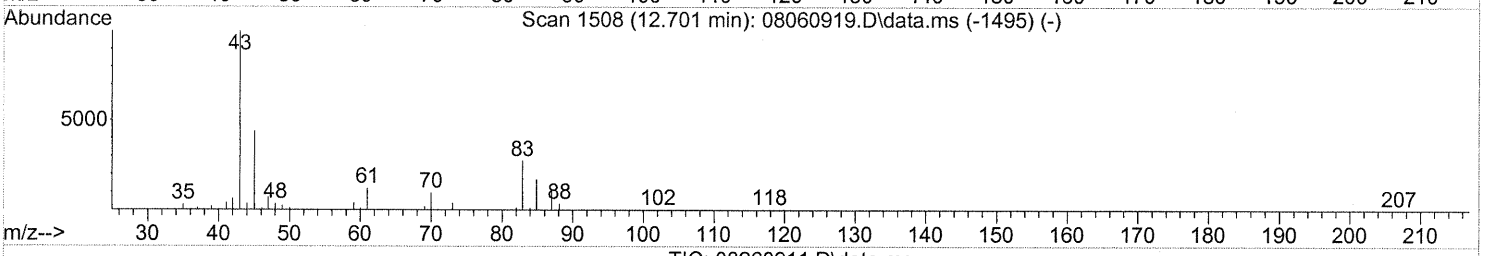
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(32) Chloroform (T)

12.690min (-0.029) 0.14ng

response 2893

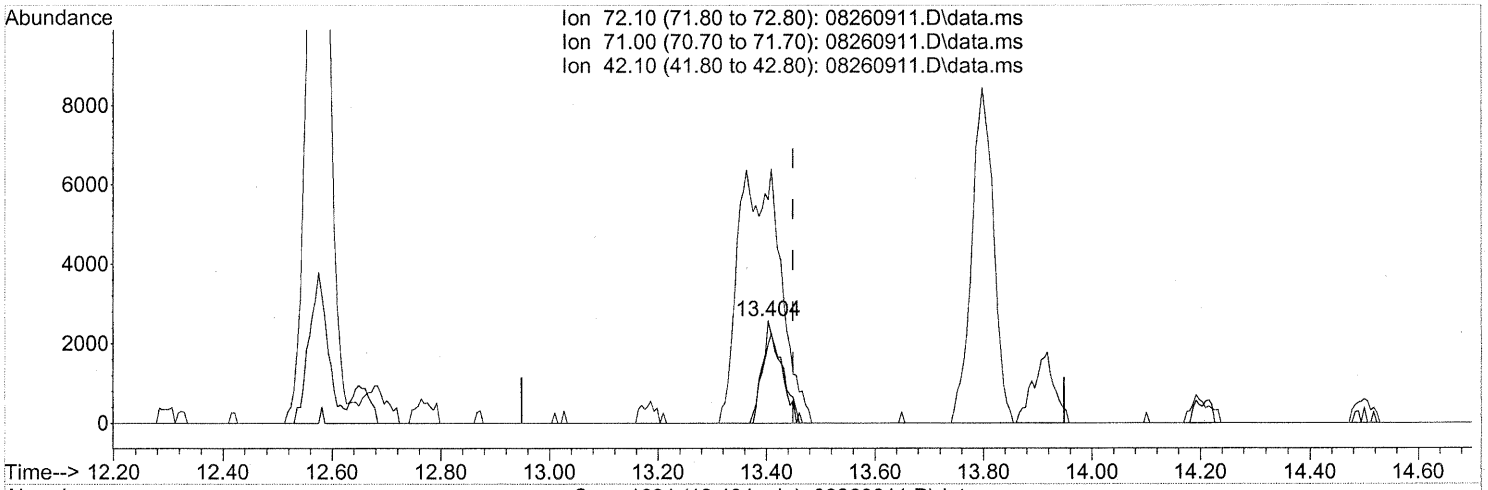
Ion	Exp%	Act%
82.90	100	100
84.90	64.30	67.27
0.00	0.00	0.00
0.00	0.00	0.00

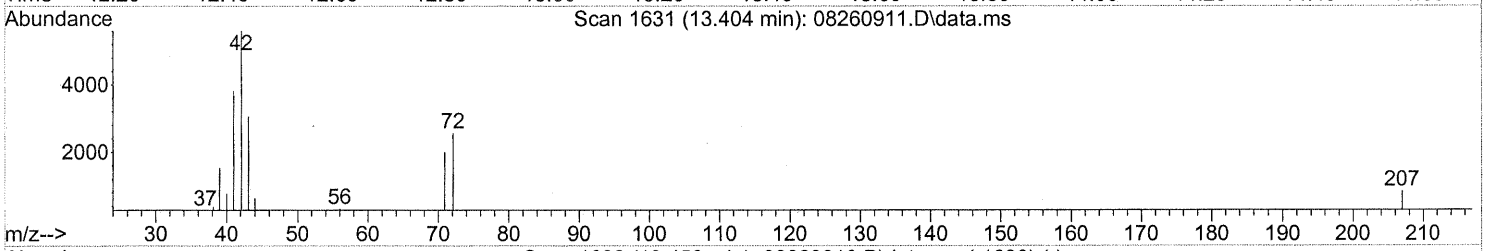
321

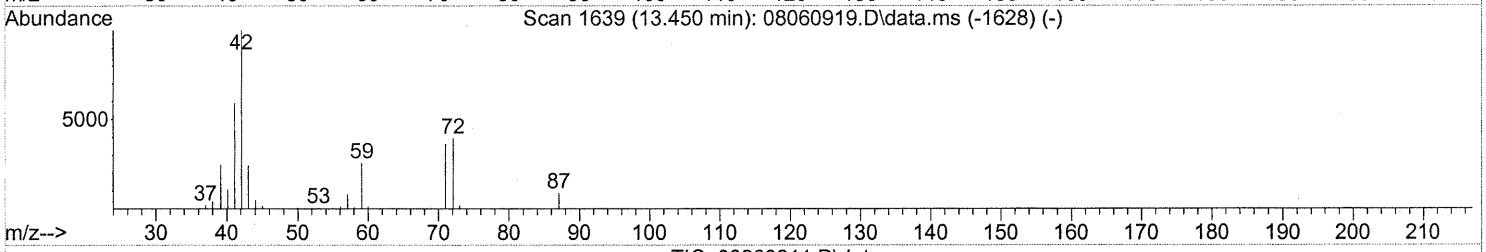
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.404min (-0.045) 0.65ng

response 6108

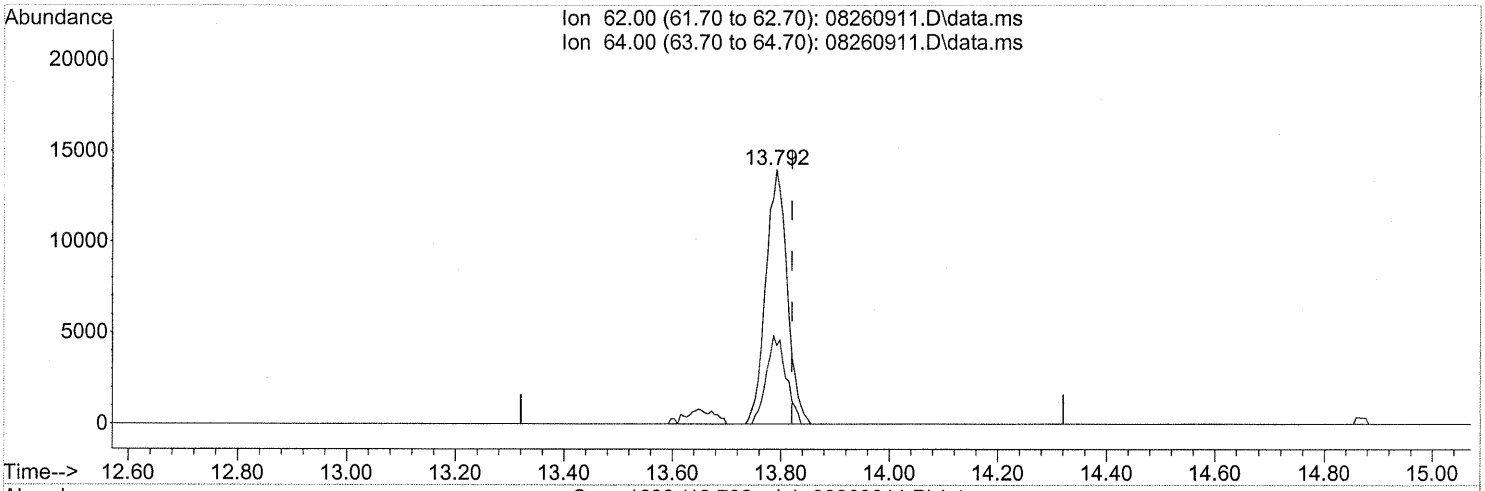
Ion	Exp%	Act%
72.10	100	100
71.00	95.70	99.66
42.10	253.40	560.92#
0.00	0.00	0.00

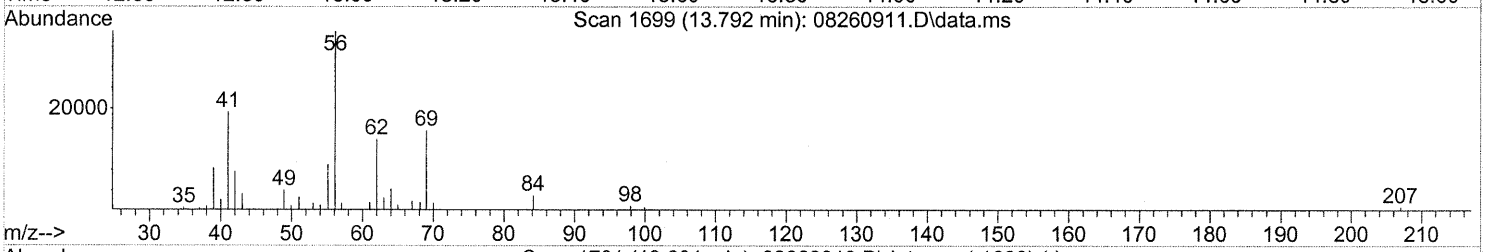
322

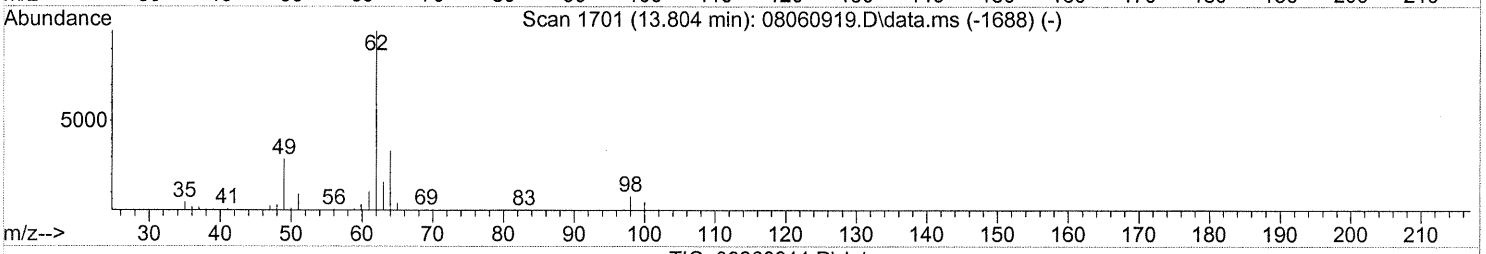
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 2.02ng

response 38254

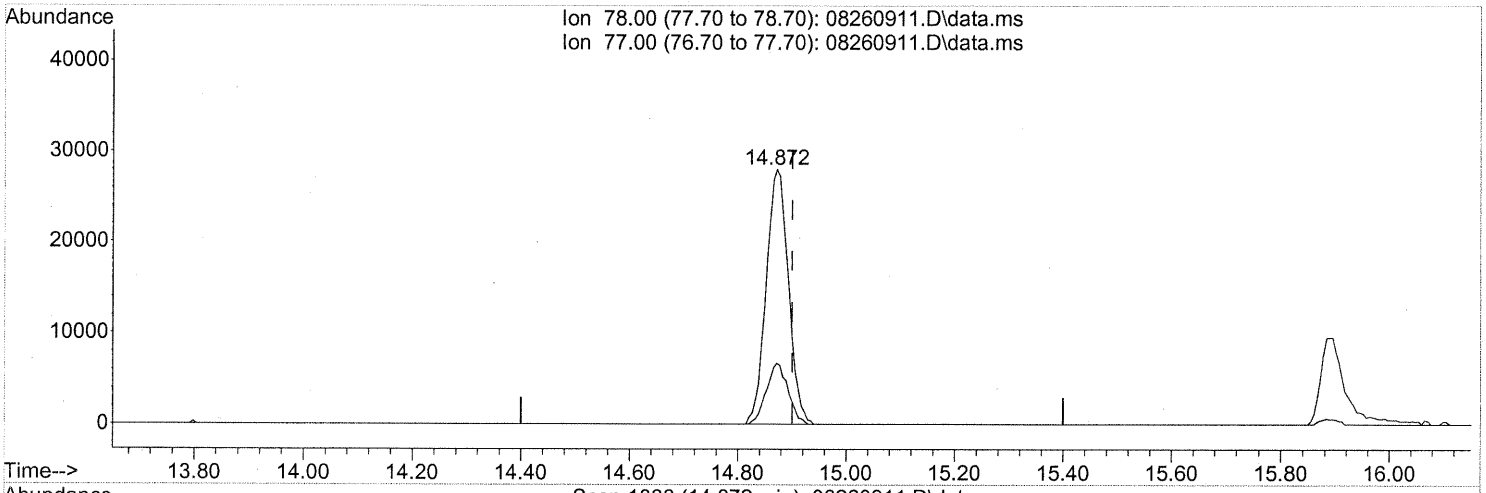
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.85
0.00	0.00	0.00
0.00	0.00	0.00

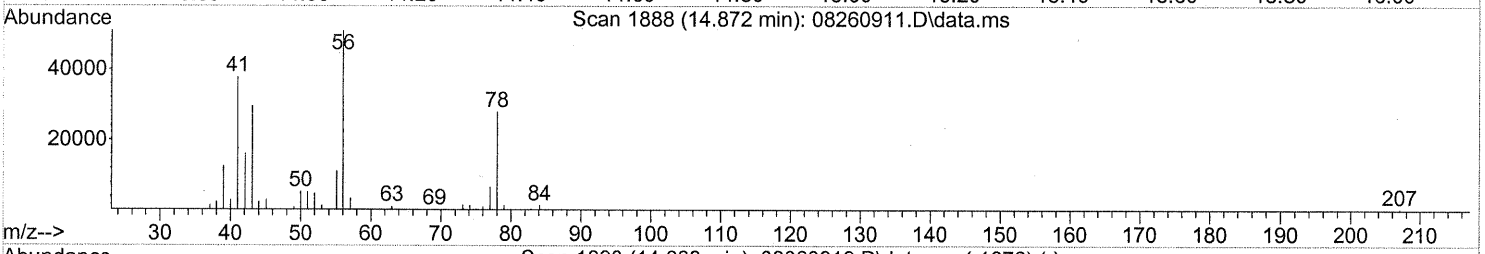
323

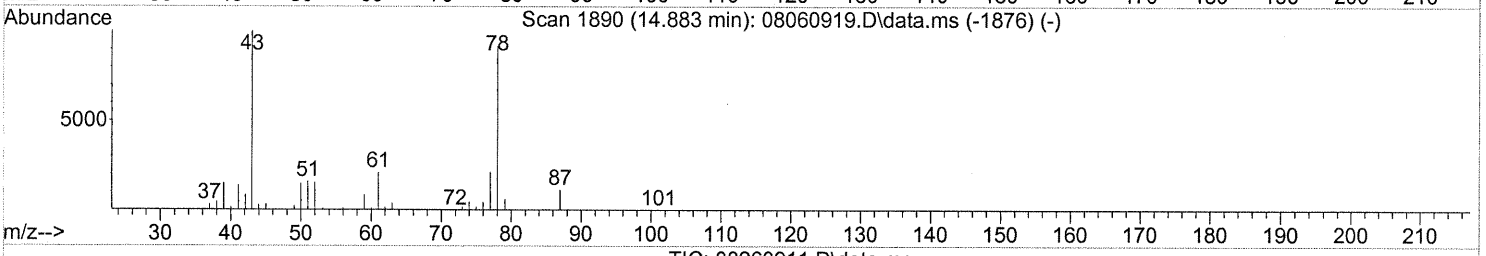
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(41) Benzene (T)

14.872min (-0.029) 1.52ng

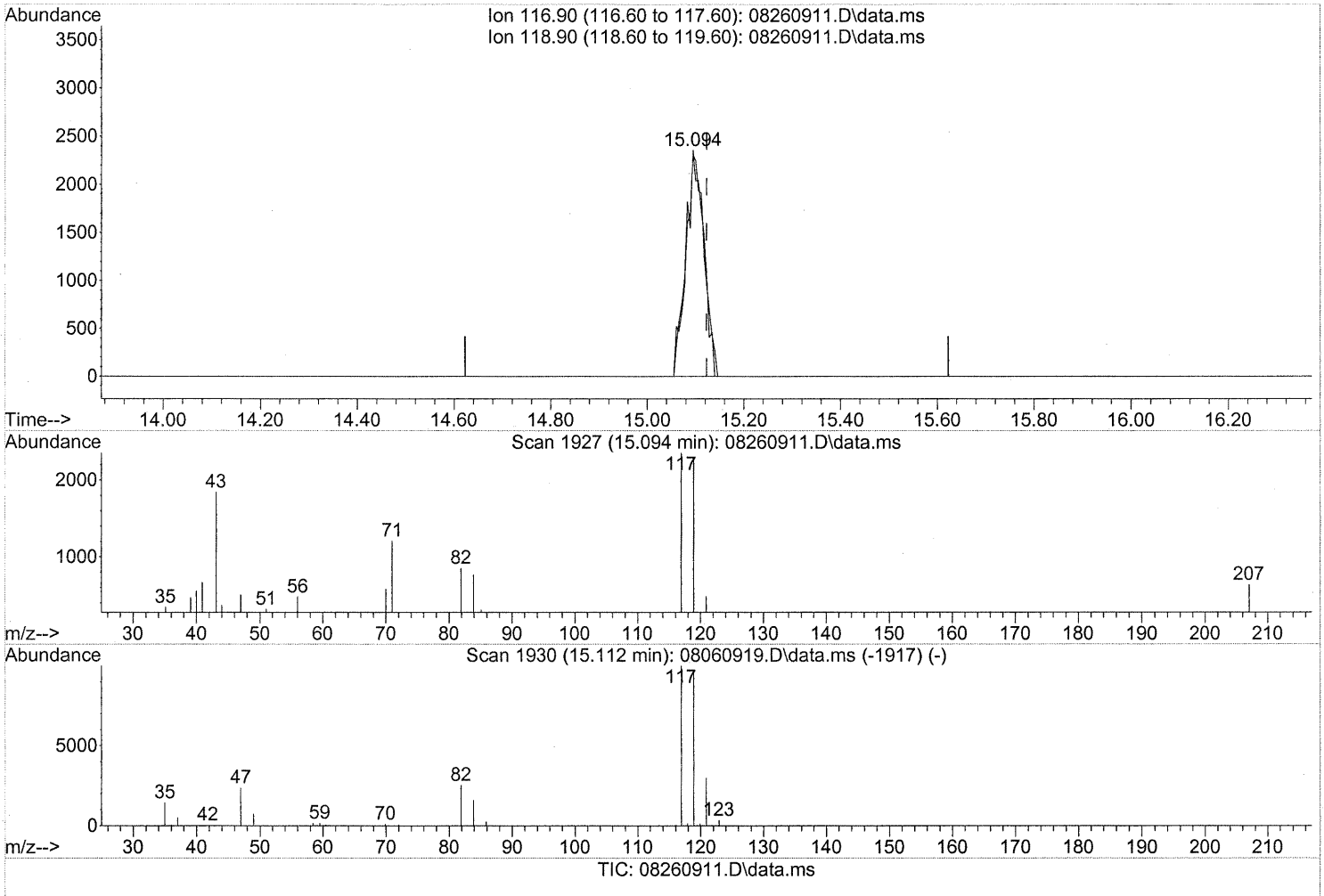
response 79660

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.27
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(42) Carbon Tetrachloride (T)

15.094min (-0.029) 0.36ng

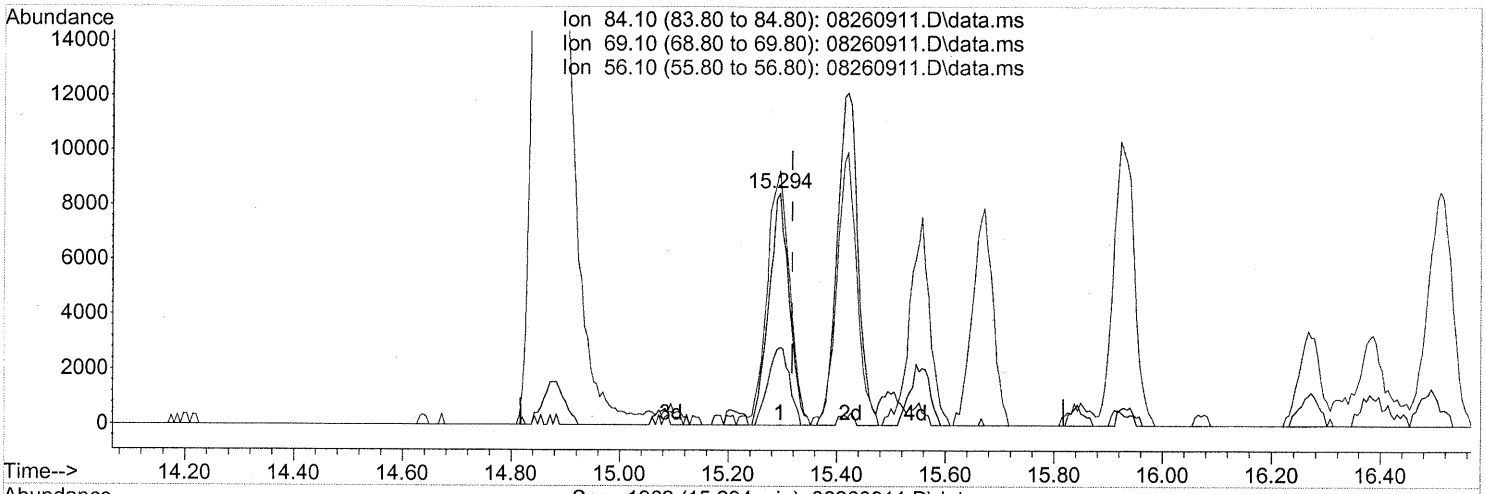
response 6047

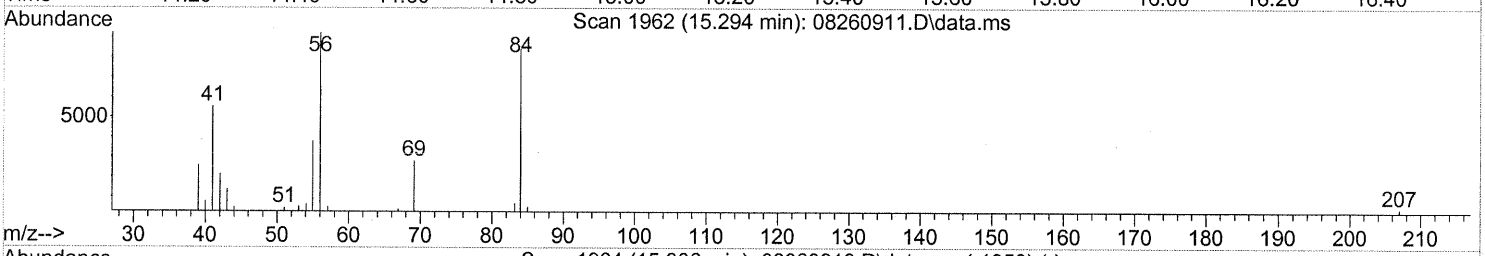
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	101.60
0.00	0.00	0.00
0.00	0.00	0.00

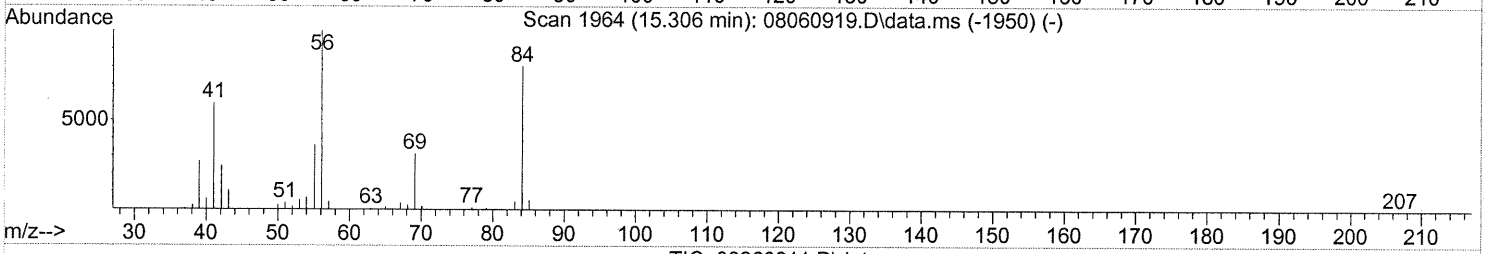
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(43) Cyclohexane (T)

15.294min (-0.023) 1.15ng

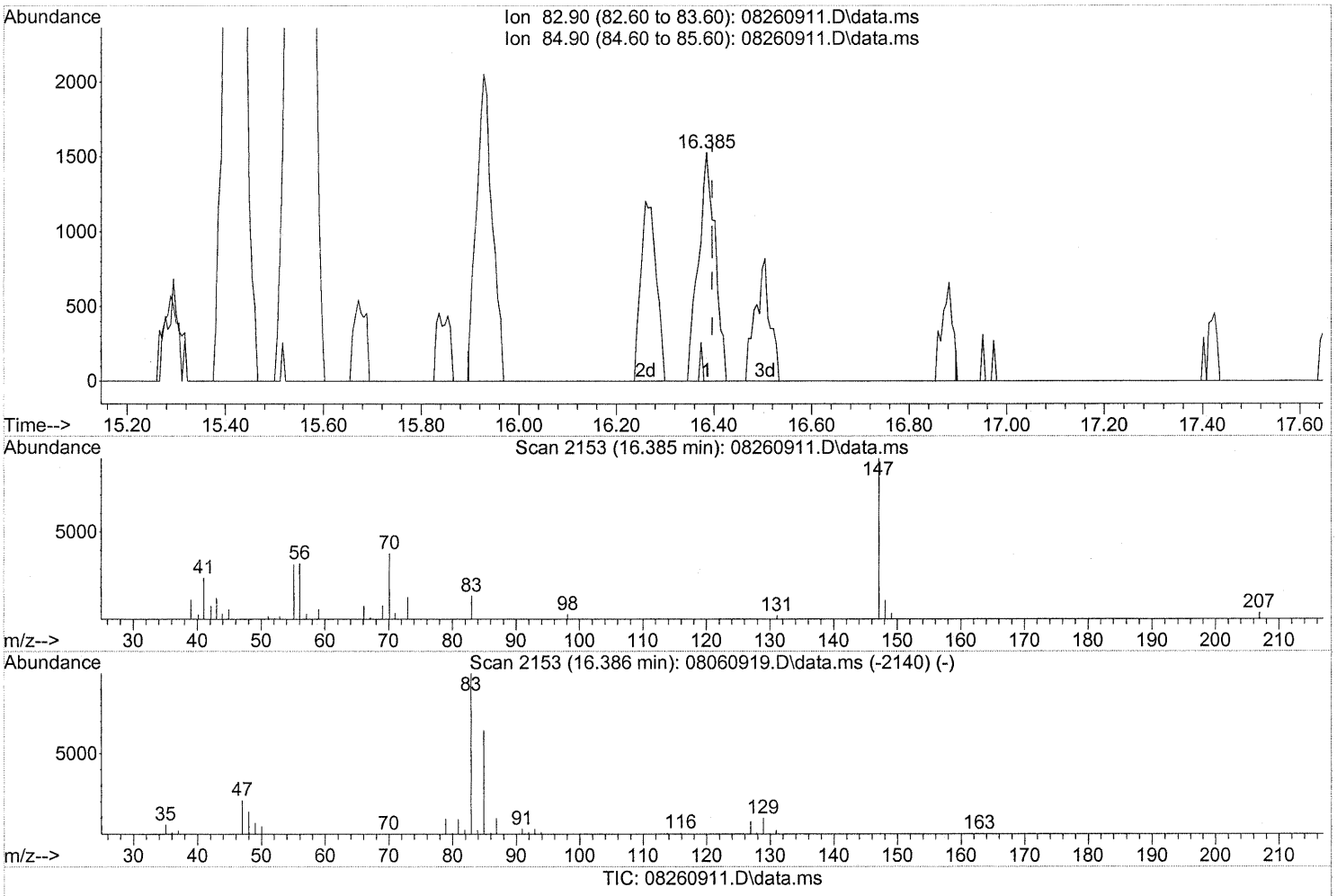
response 22203

Ion	Exp%	Act%
84.10	100	100
69.10	38.70	34.92
56.10	127.50	120.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(46) Bromodichloromethane (T)

16.385min (-0.012) 0.21ng

response 3651

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	2.41#
0.00	0.00	0.00
0.00	0.00	0.00

FP
LM 9/1/09

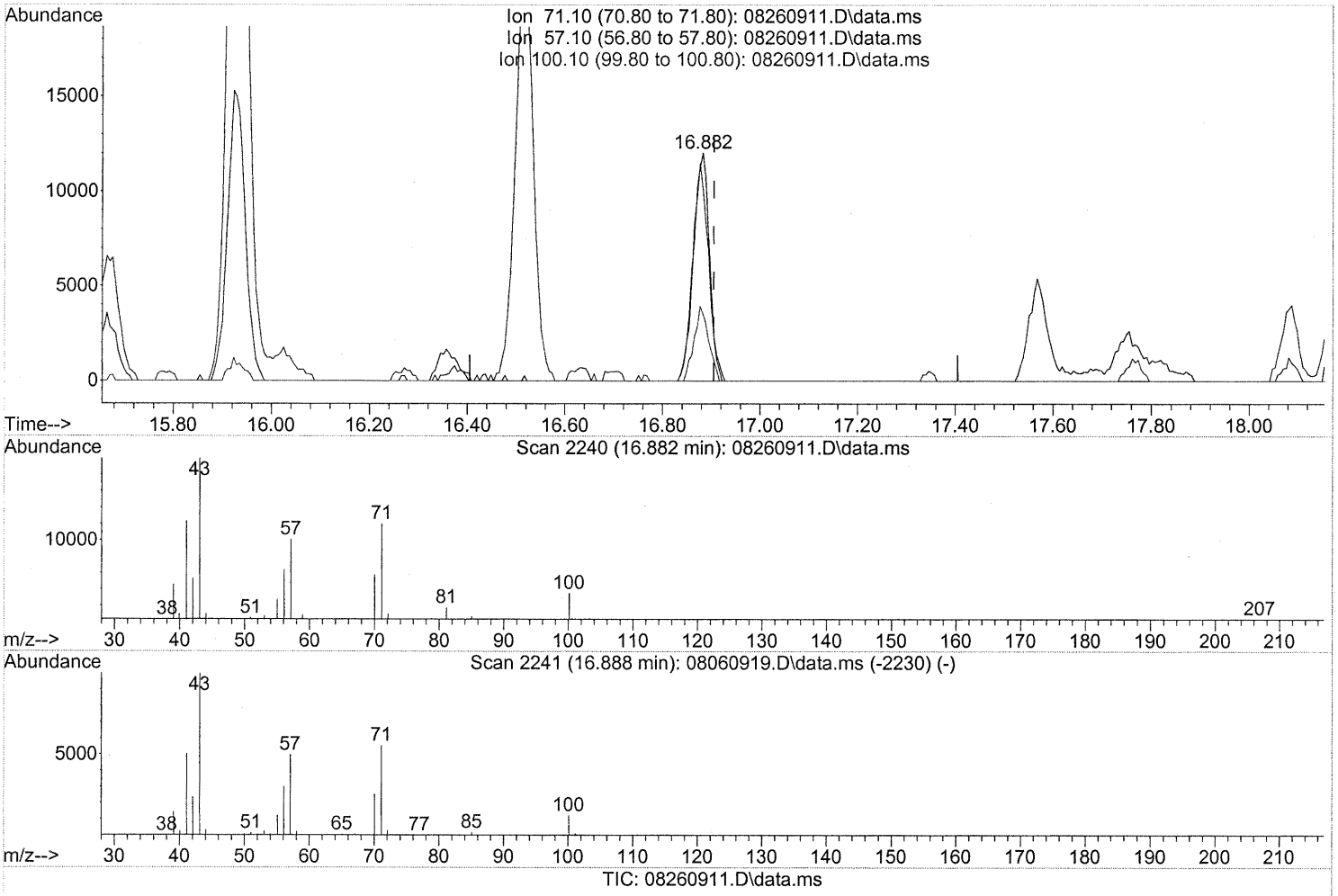
9/2/09

327

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(51) n-Heptane (T)

16.882min (-0.023) 1.99ng

response 28011

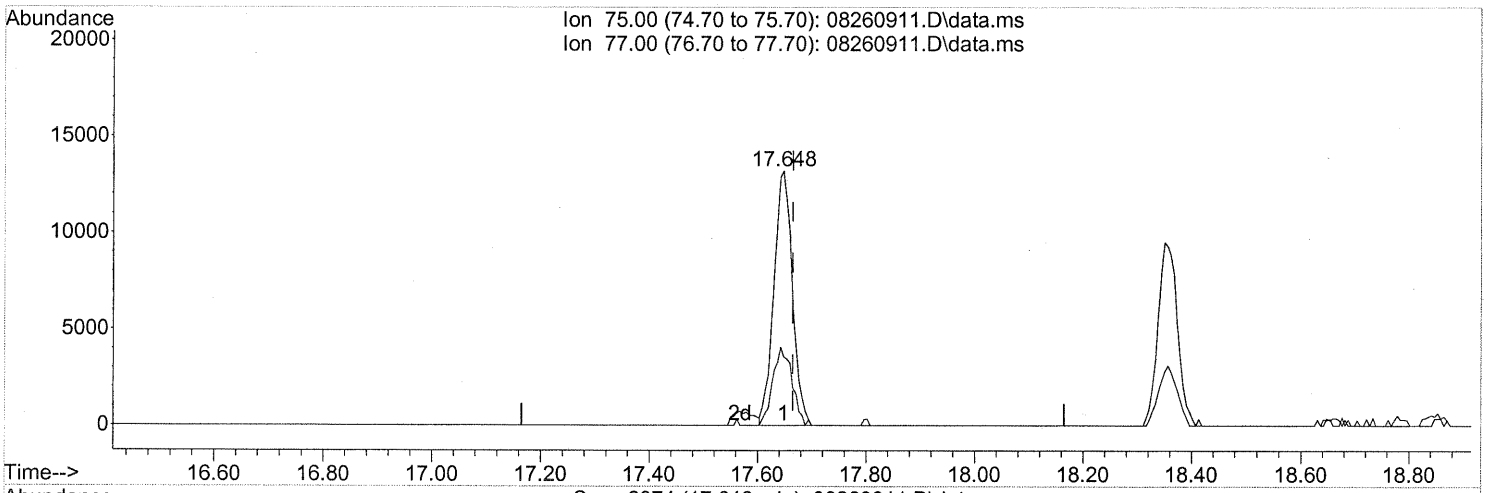
Ion	Exp%	Act%
71.10	100	100
57.10	91.90	90.71
100.10	26.40	29.13
0.00	0.00	0.00

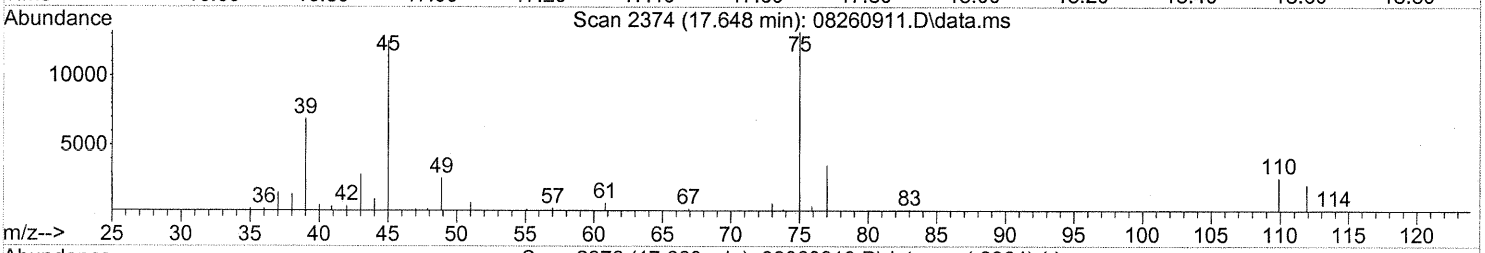
328

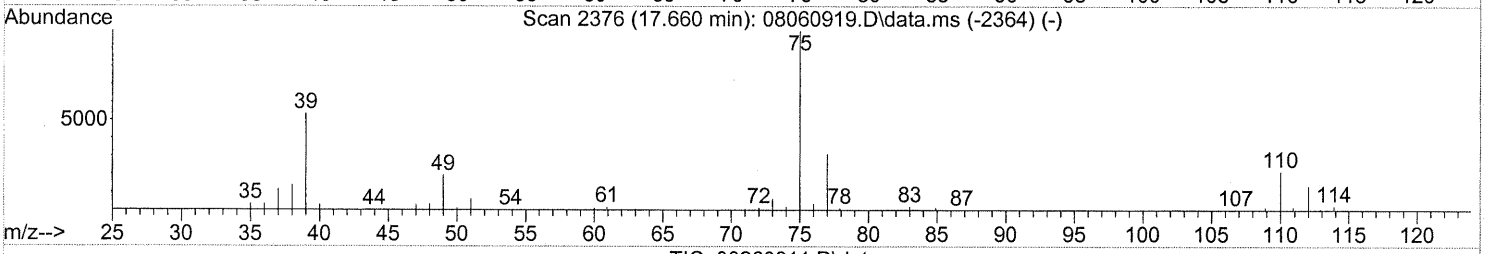
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 1.43ng

response 31278

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
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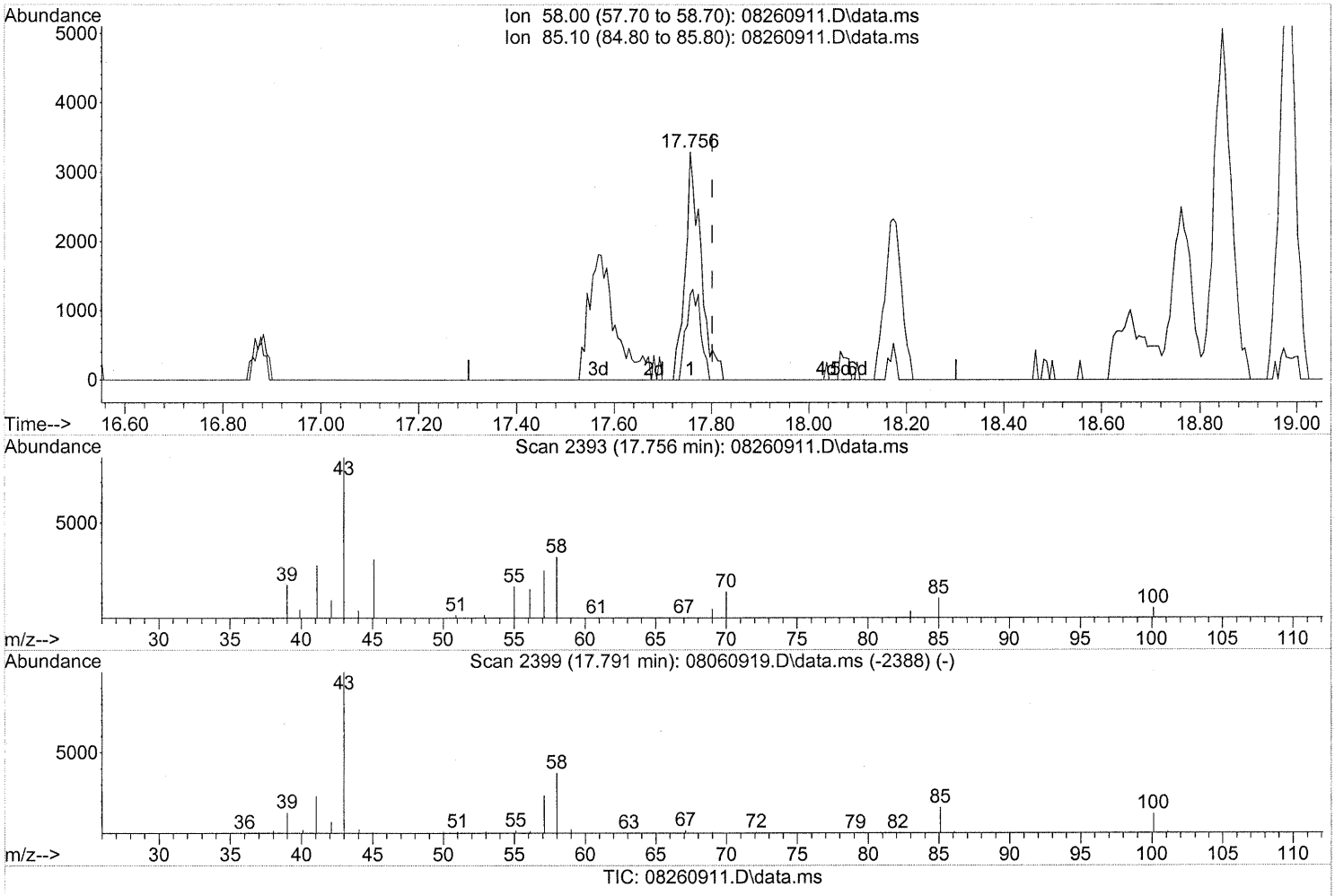
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

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

17.756min (-0.046) 0.59ng

response 7418

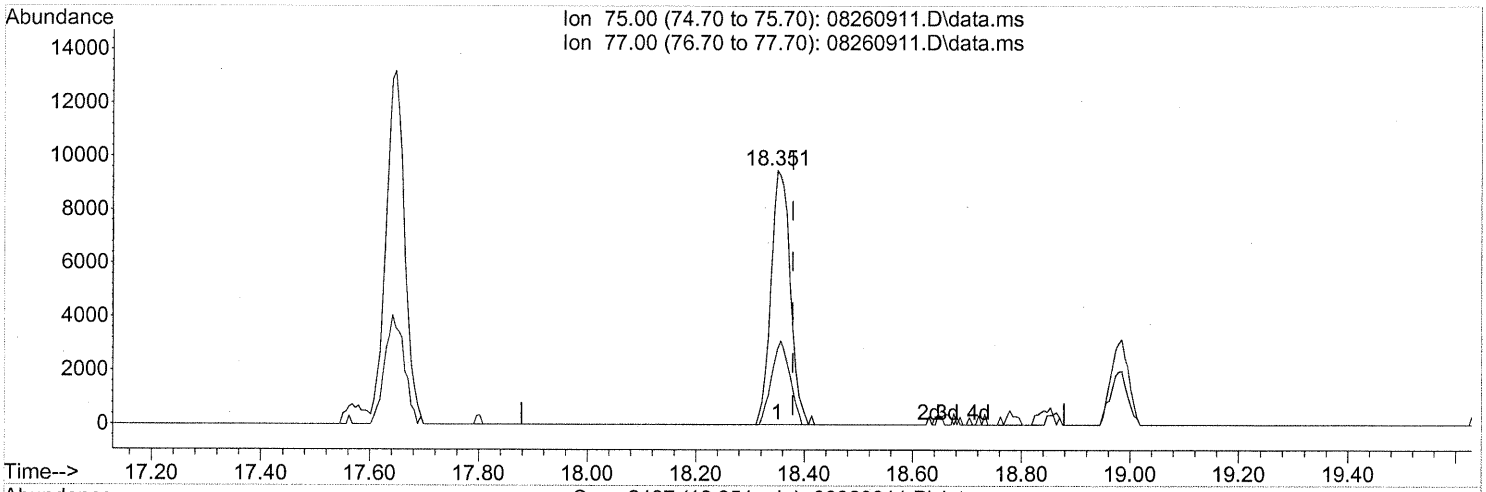
Ion	Exp%	Act%
58.00	100	100
85.10	42.60	36.86
0.00	0.00	0.00
0.00	0.00	0.00

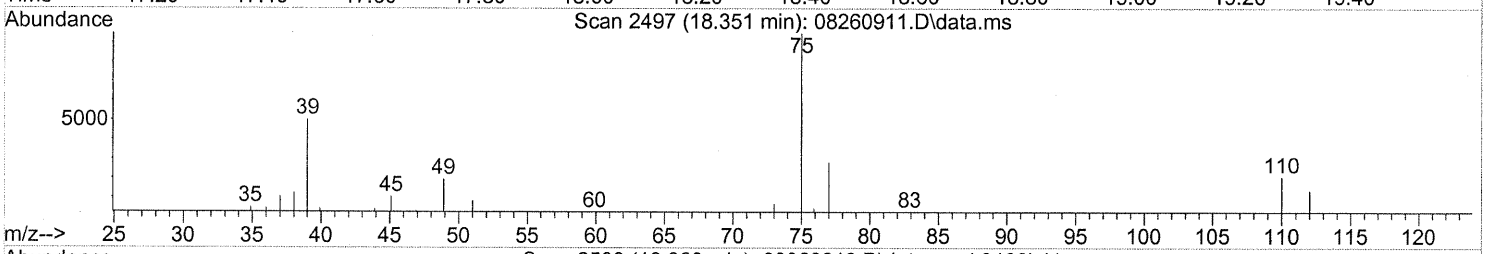
330

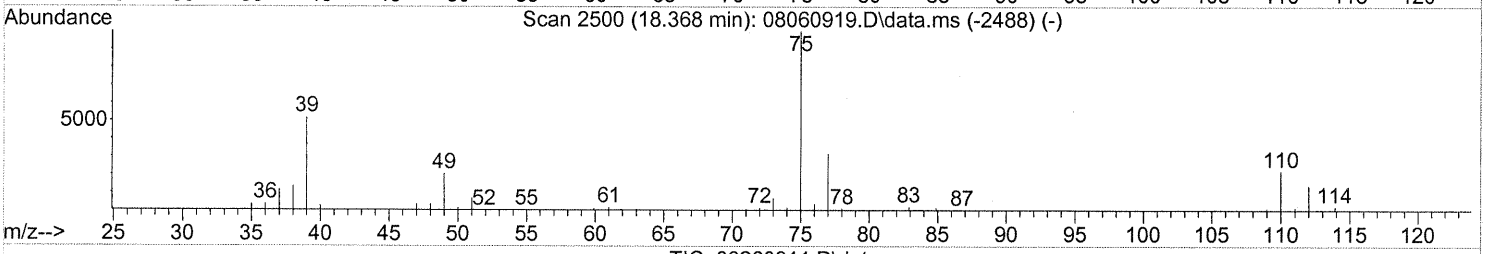
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.351min (-0.029) 1.13ng

response 23572

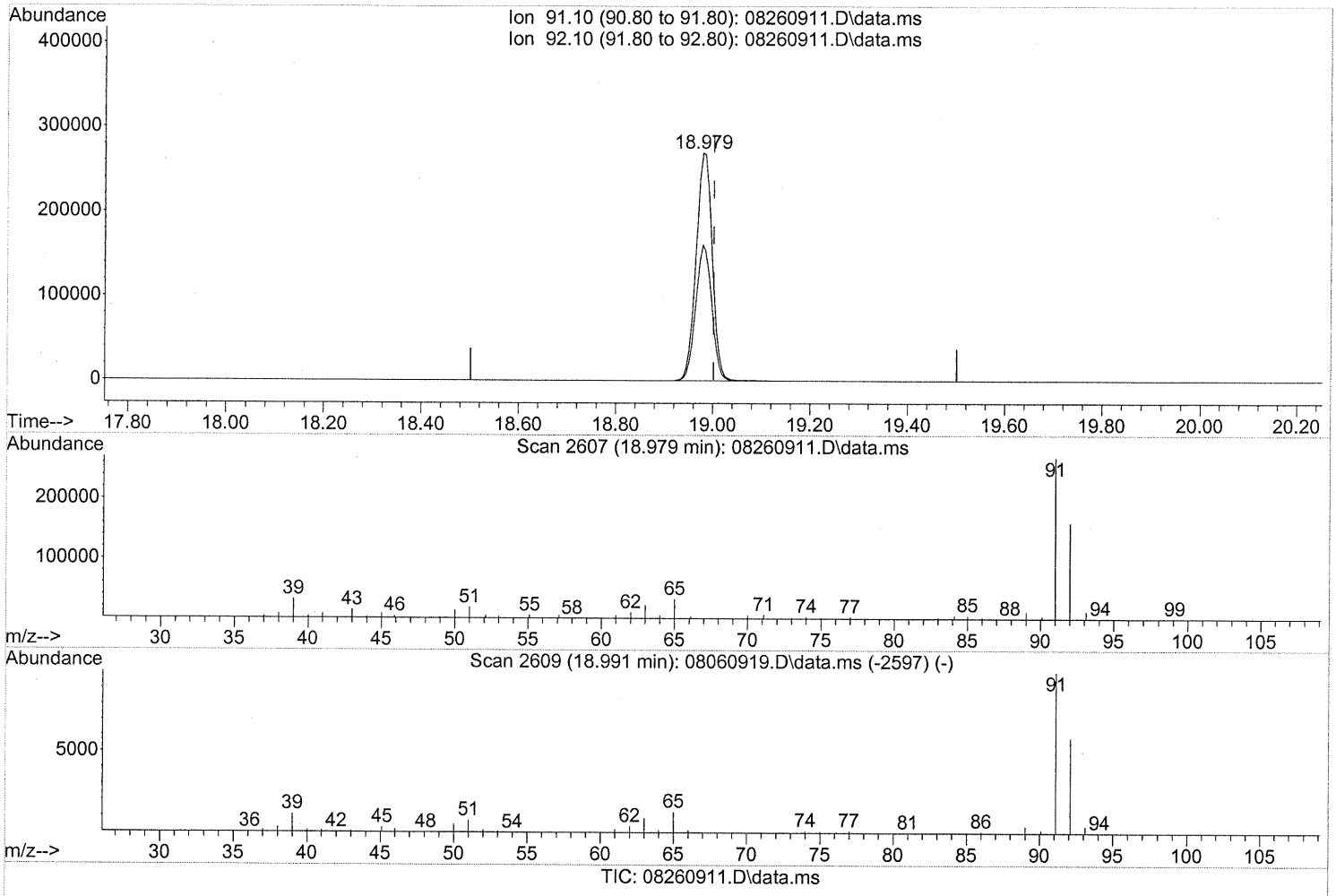
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	31.17
0.00	0.00	0.00
0.00	0.00	0.00

331

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 12.55ng

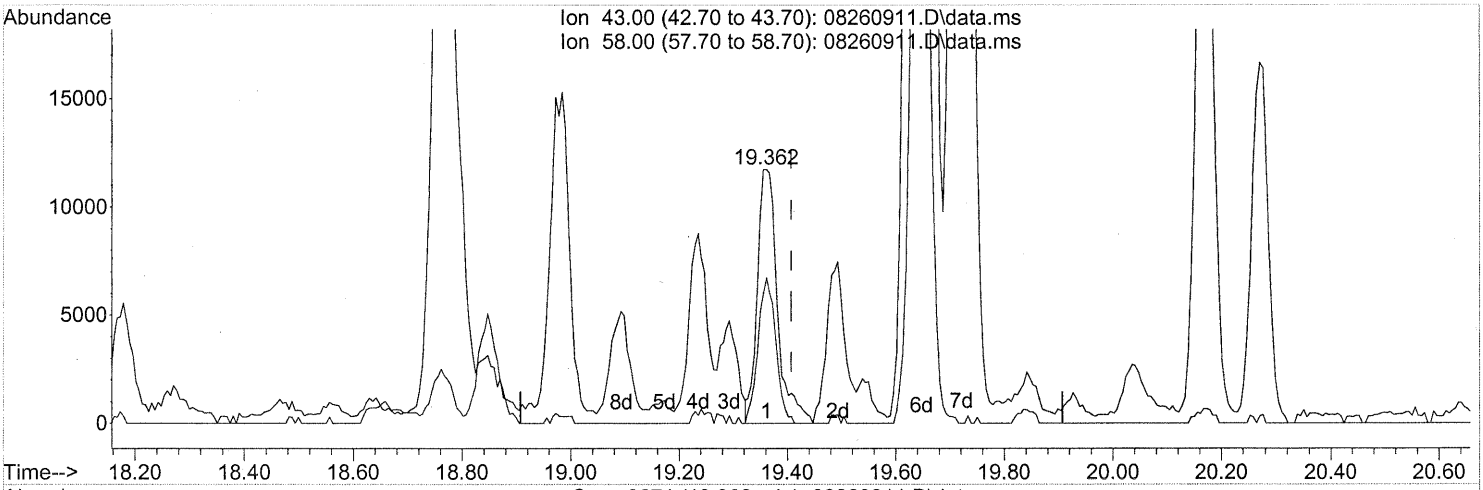
response 625678

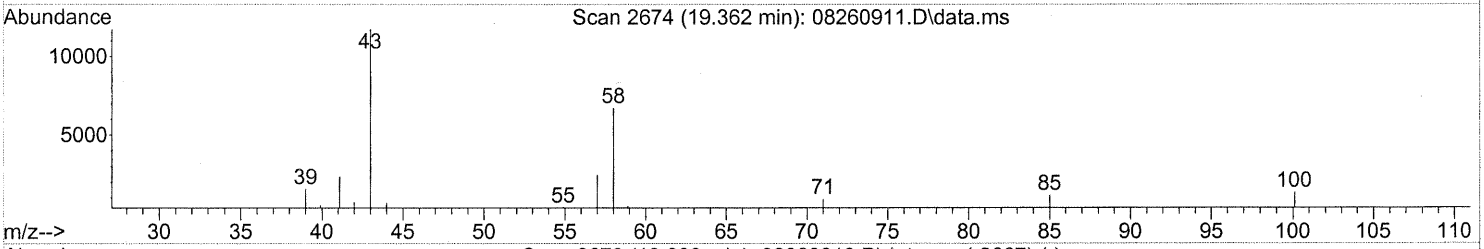
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.14
0.00	0.00	0.00
0.00	0.00	0.00

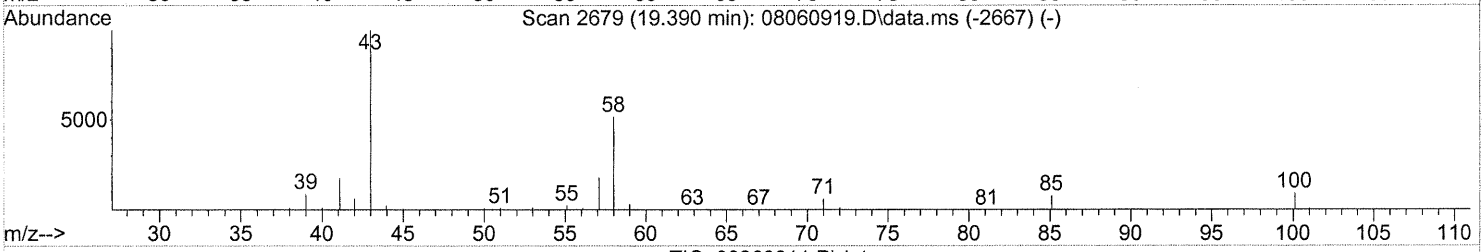
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 0.92ng

response 30422

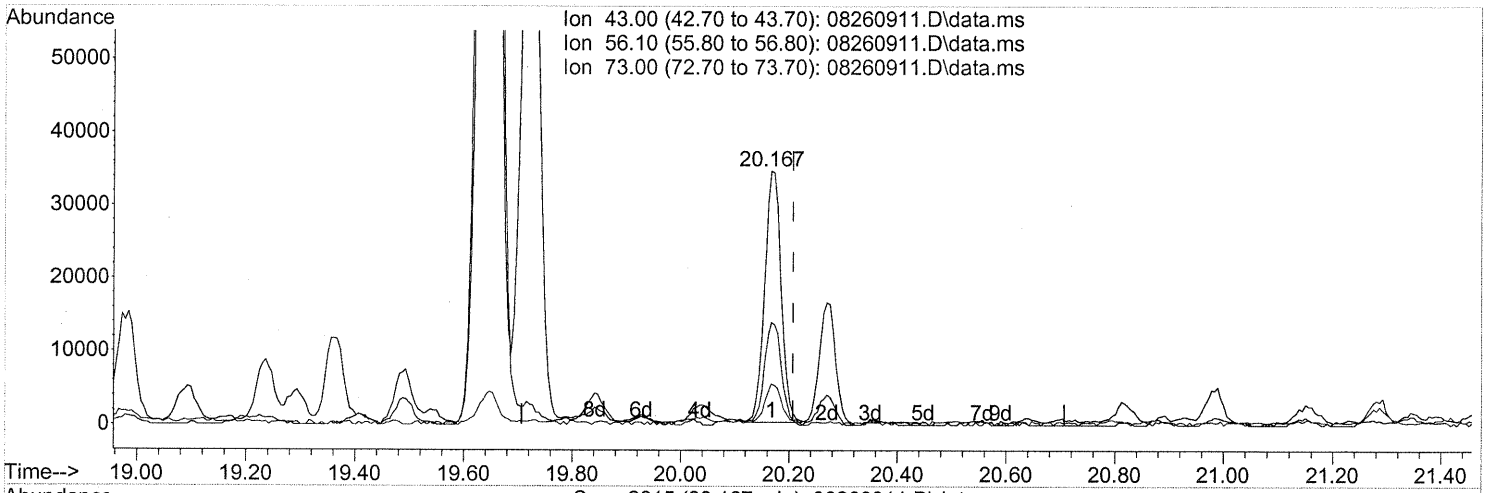
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	50.28
0.00	0.00	0.00
0.00	0.00	0.00

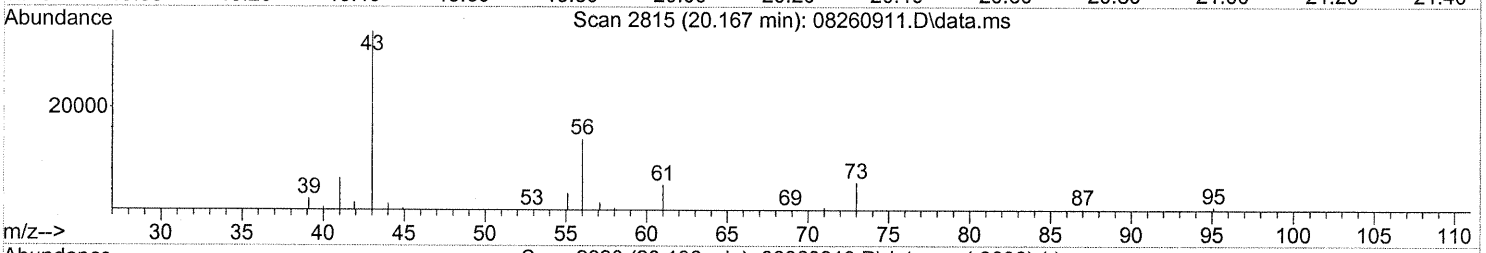
333

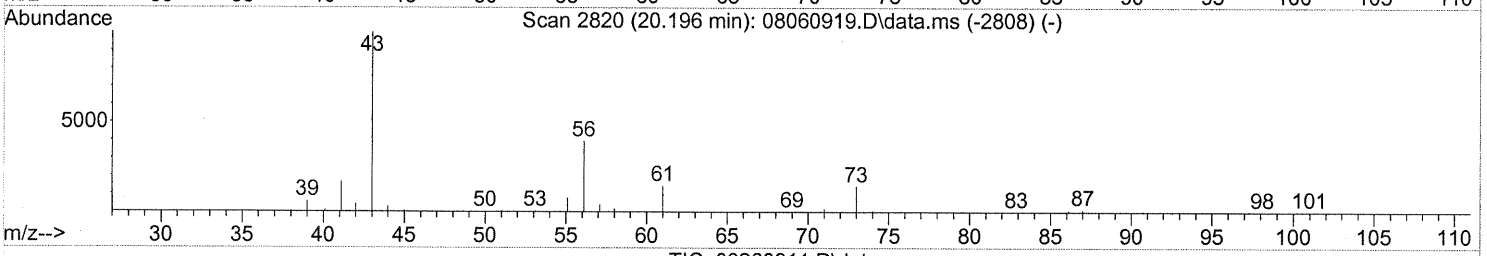
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(62) n-Butyl Acetate (T)

20.167min (-0.040) 1.86ng

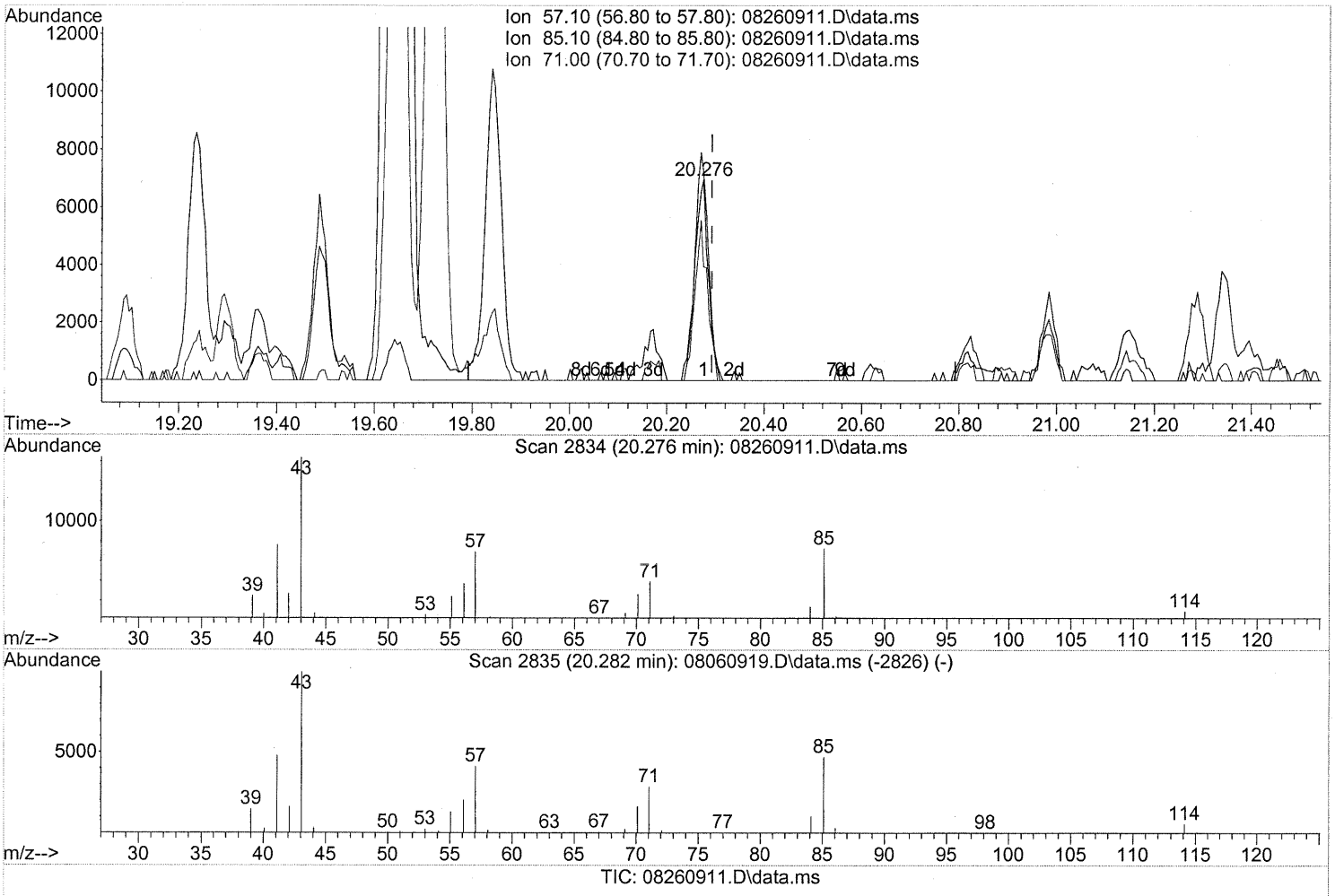
response 72515

Ion	Exp%	Act%
43.00	100	100
56.10	38.50	42.52
73.00	14.80	17.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(63) n-Octane (T)

20.276min (-0.017) 1.14ng

response 13700

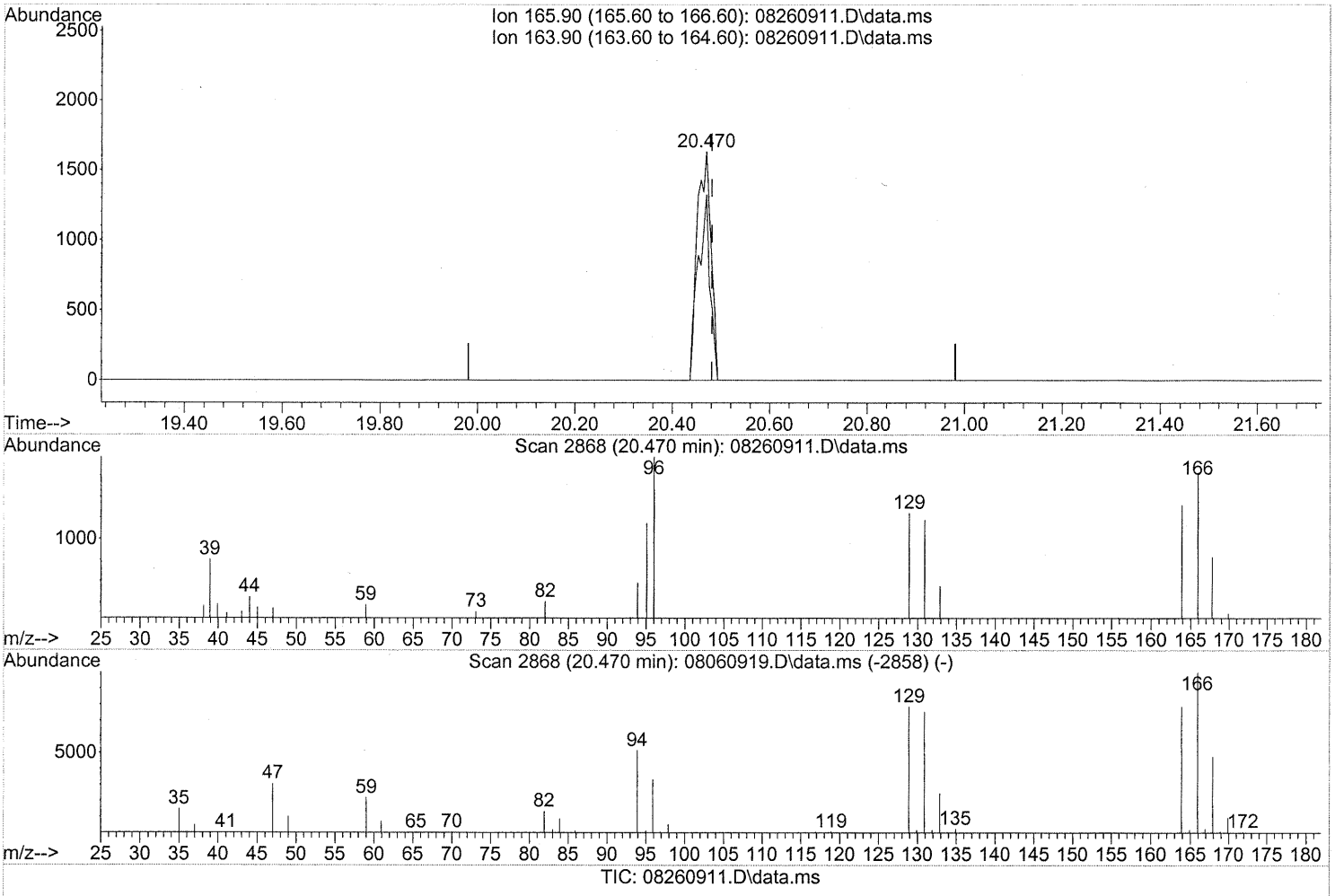
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	111.39
71.00	68.10	72.34
0.00	0.00	0.00

335

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(64) Tetrachloroethene (T)

20.470min (-0.012) 0.28ng

response 3210

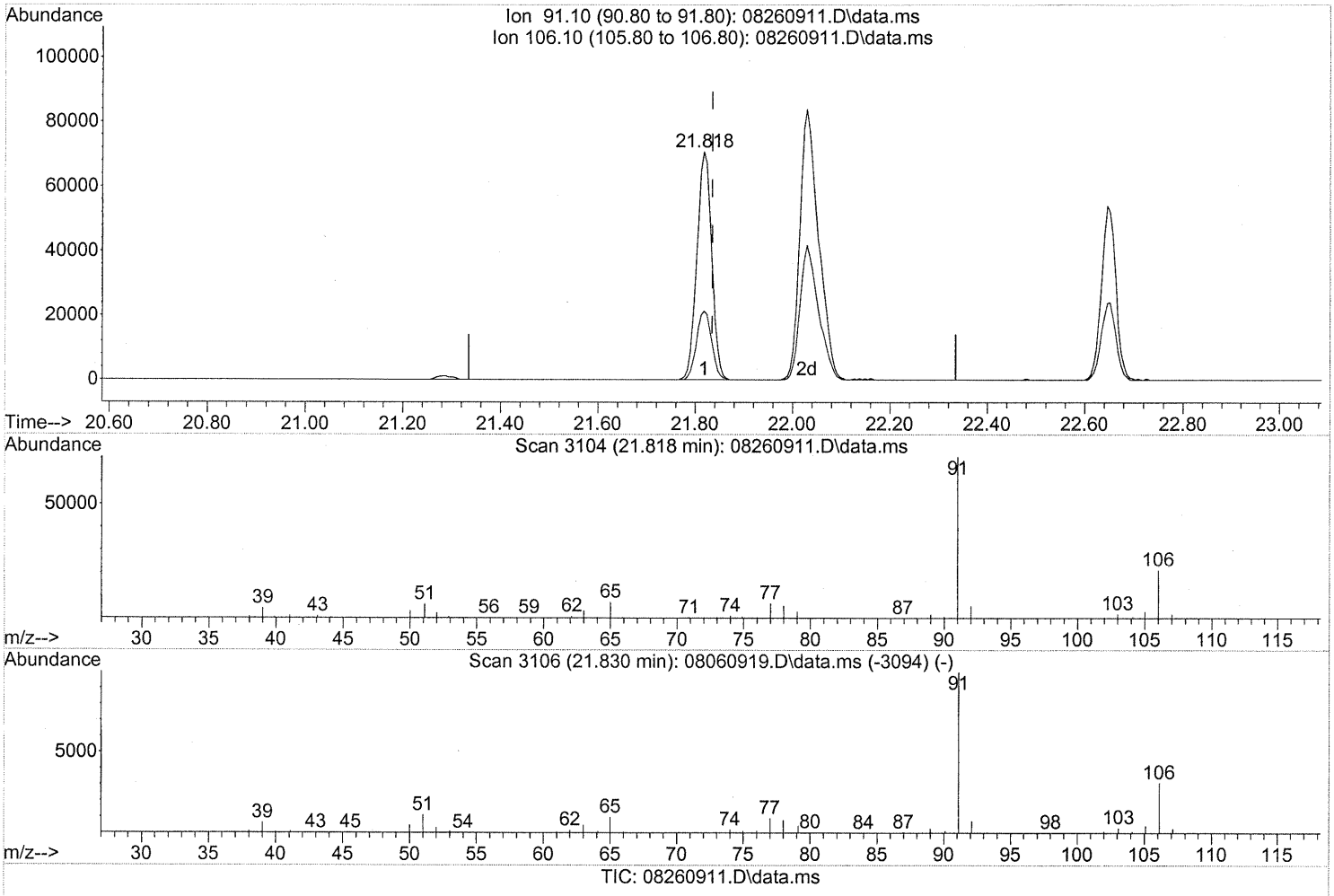
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	71.06
0.00	0.00	0.00
0.00	0.00	0.00

336

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 2.61ng

response 148524

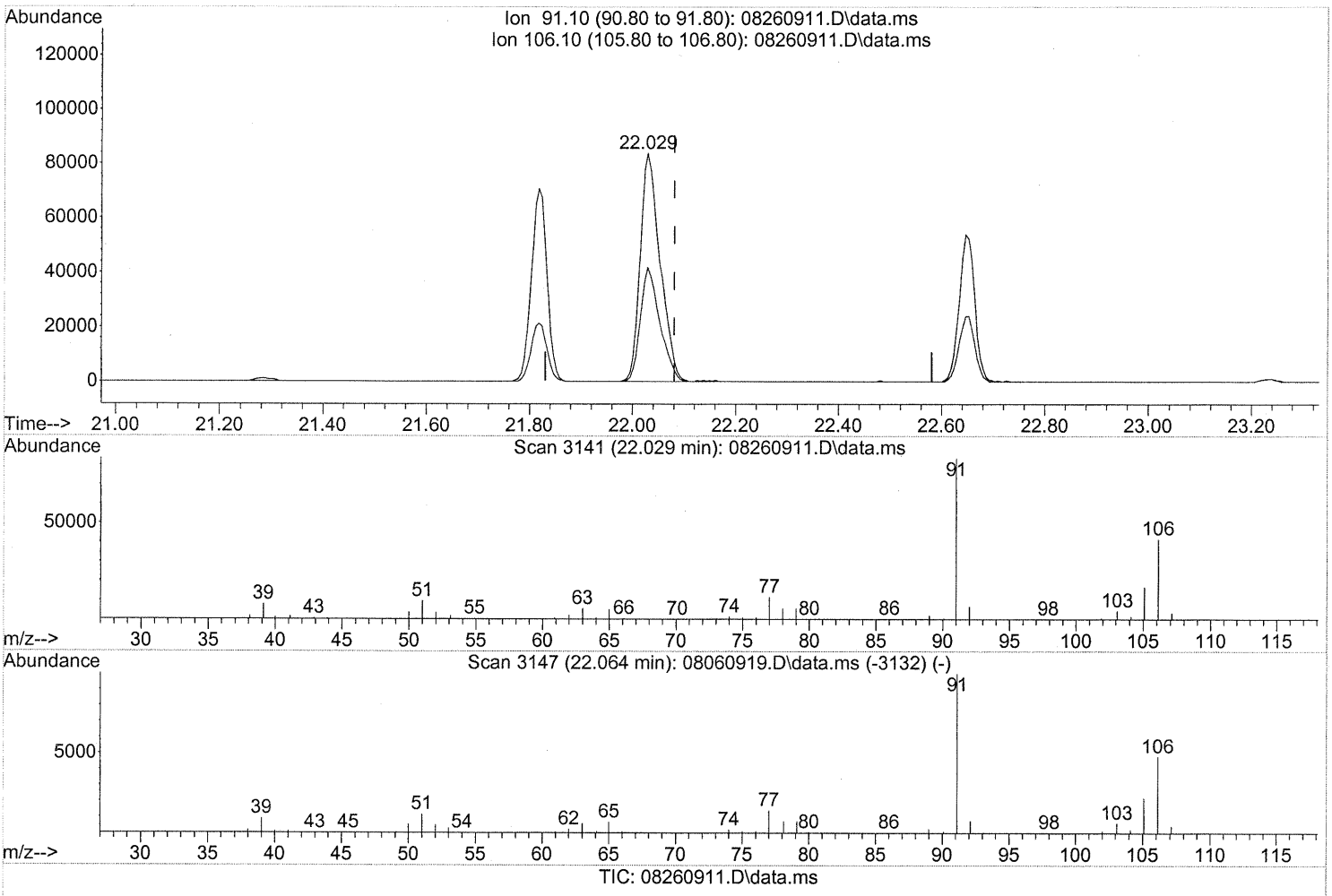
Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.71
0.00	0.00	0.00
0.00	0.00	0.00

337

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

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

22.029min (-0.051) 4.84ng

response 223336

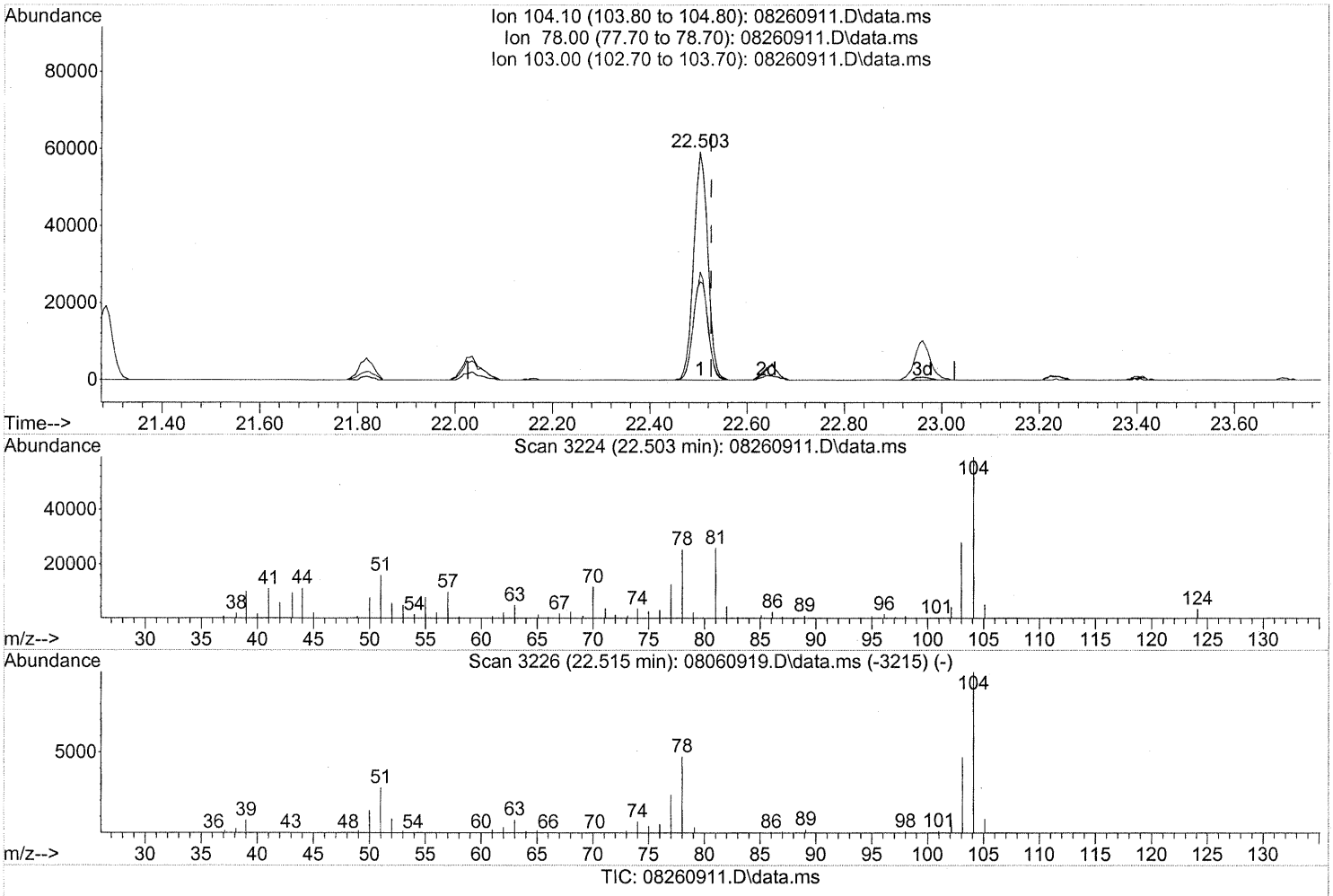
Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.84
0.00	0.00	0.00
0.00	0.00	0.00

338

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(69) Styrene (T)

22.503min (-0.023) 3.58ng

response 119187

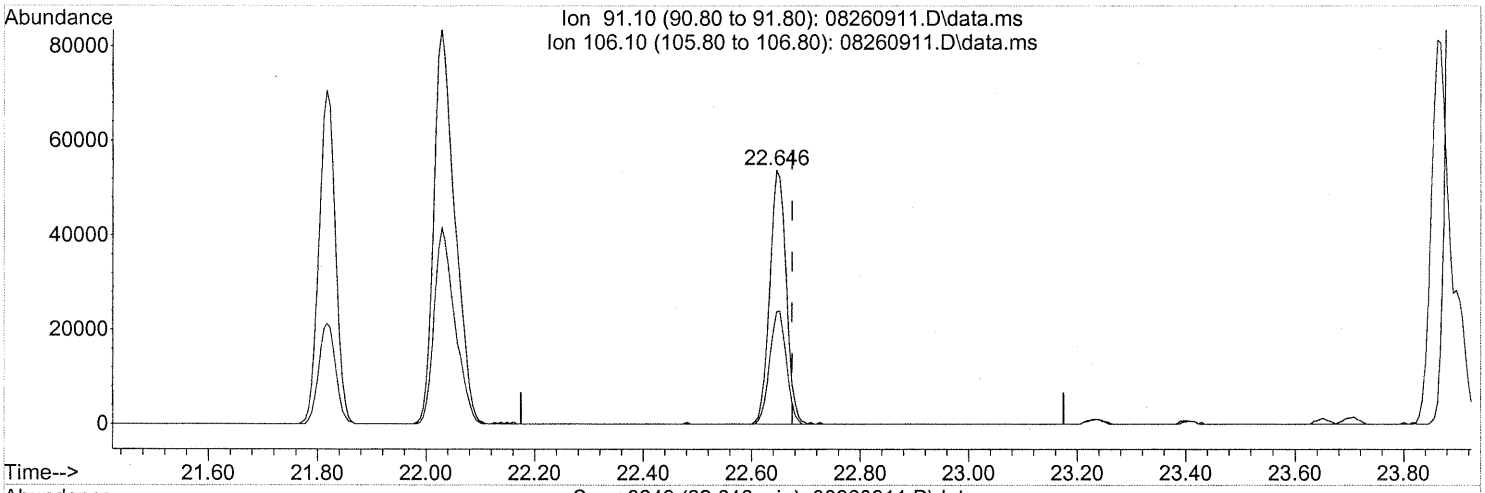
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	45.80
103.00	46.20	47.27
0.00	0.00	0.00

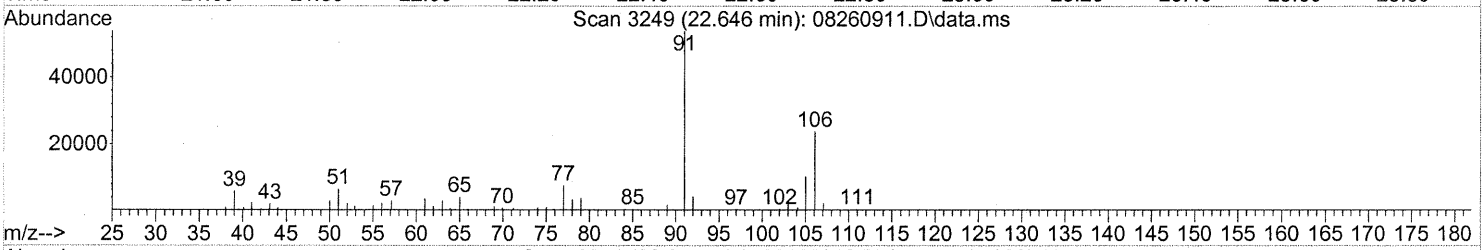
339

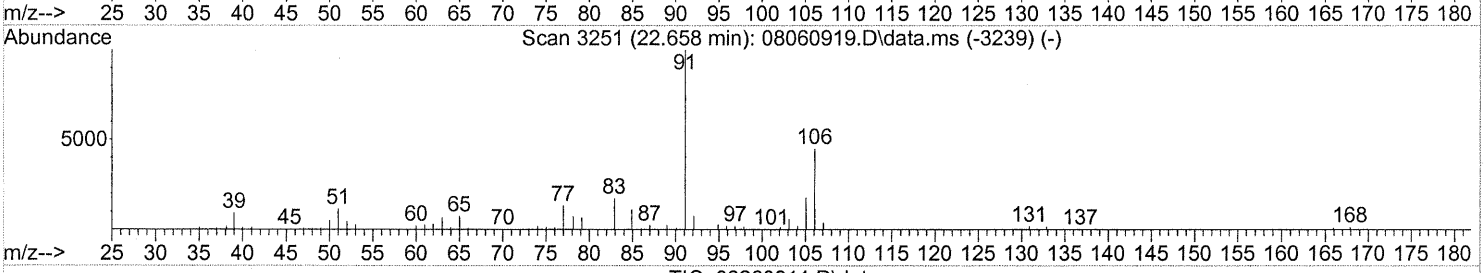
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

(70) o-Xylene (T)

22.646min (-0.029) 2.44ng

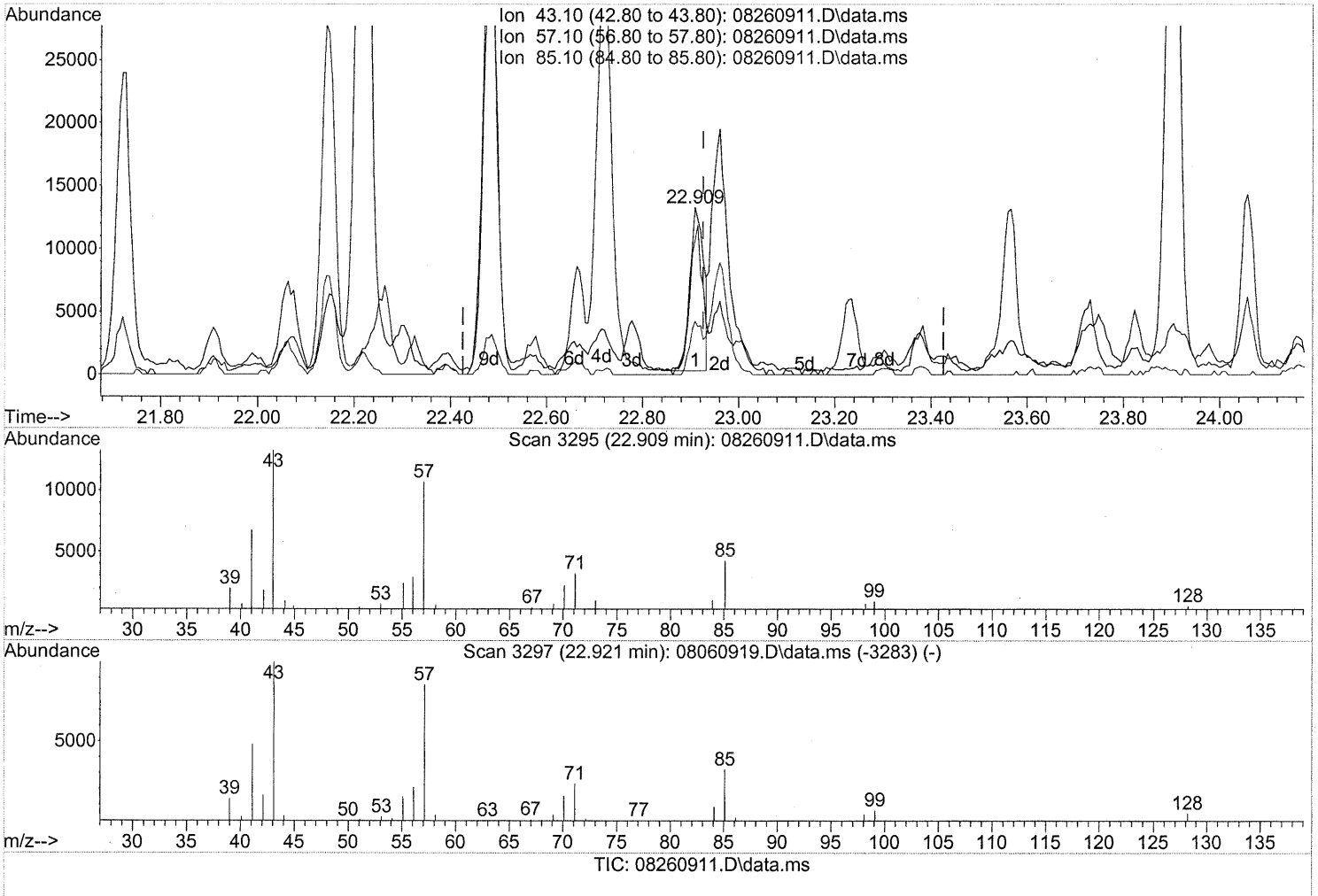
response 112690

Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(71) n-Nonane (T)

22.909min (-0.017) 0.85ng

response 26204

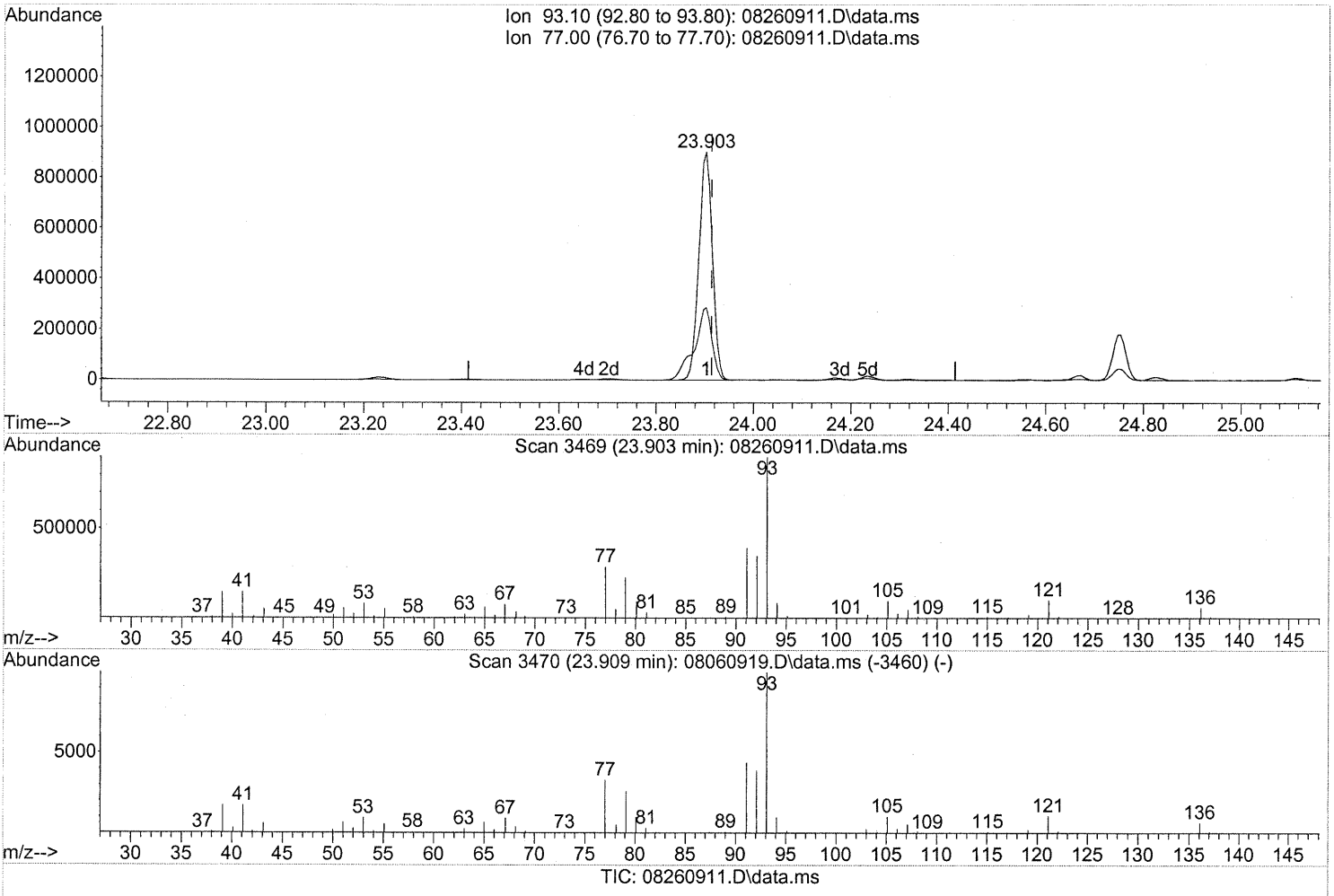
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	92.71
85.10	30.40	33.32
0.00	0.00	0.00

341

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.012) 58.37ng

response 1746885

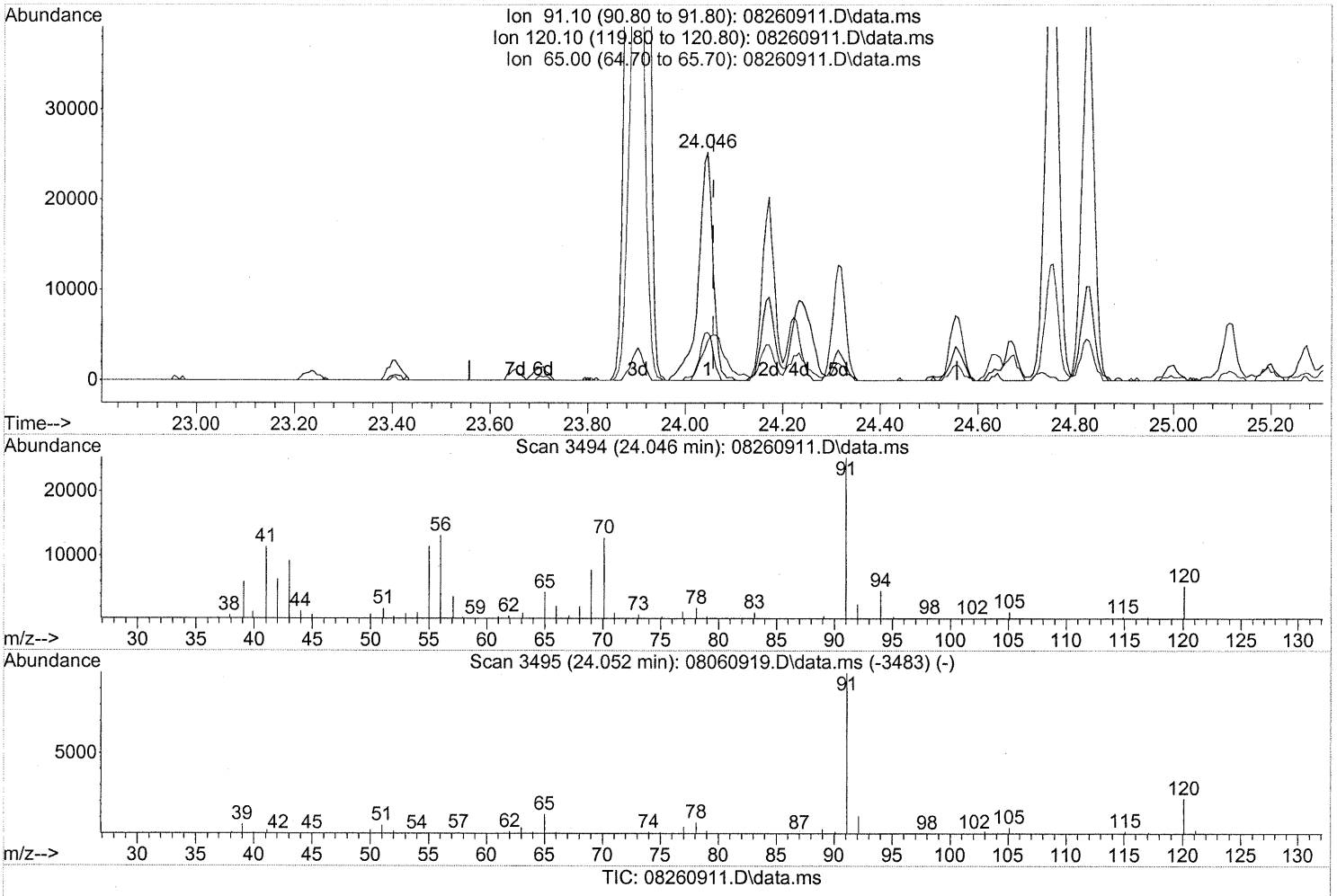
Ion	Exp%	Act%
93.10	100	100
77.00	32.40	41.47
0.00	0.00	0.00
0.00	0.00	0.00

342

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.012) 0.71ng

response 52125

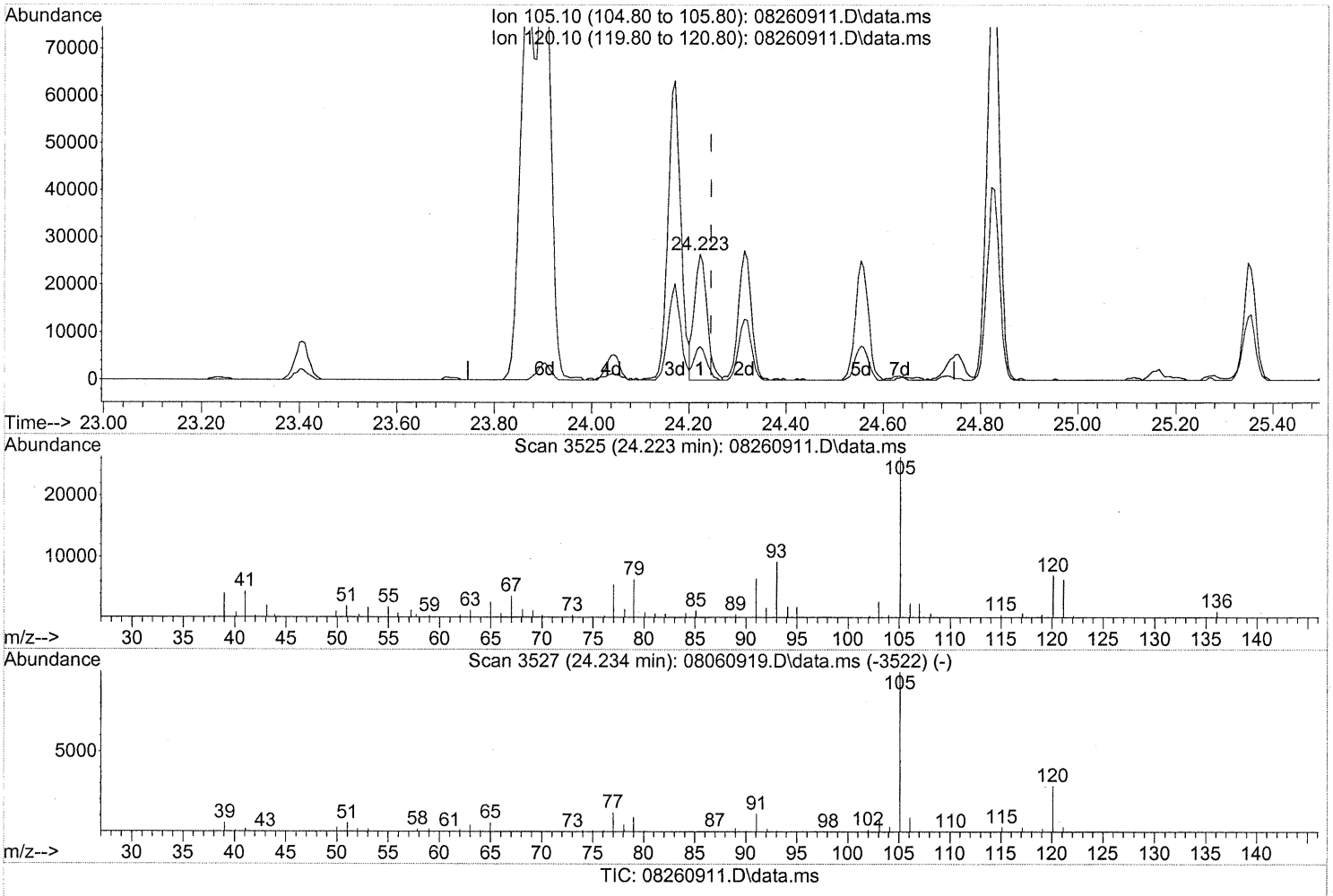
Ion	Exp%	Act%
91.10	100	100
120.10	21.60	19.02
65.00	12.00	32.05#
0.00	0.00	0.00

343

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(78) 4-Ethyltoluene (T)

24.223min (-0.023) 0.89ng

response 47953

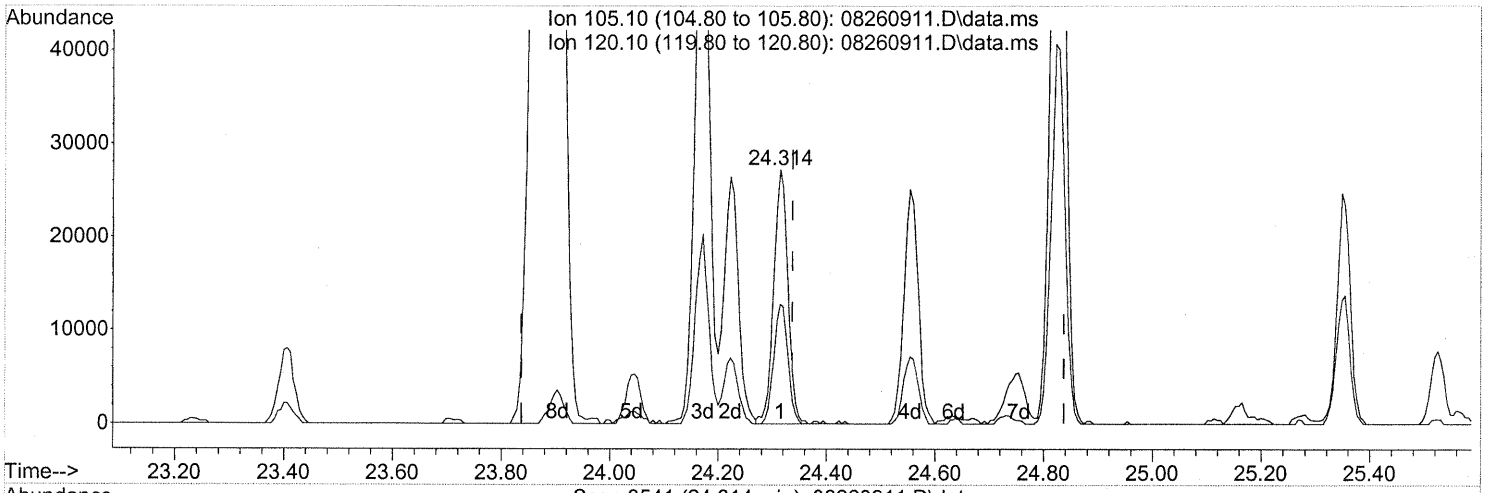
Ion	Exp%	Act%
105.10	100	100
120.10	28.40	26.74
0.00	0.00	0.00
0.00	0.00	0.00

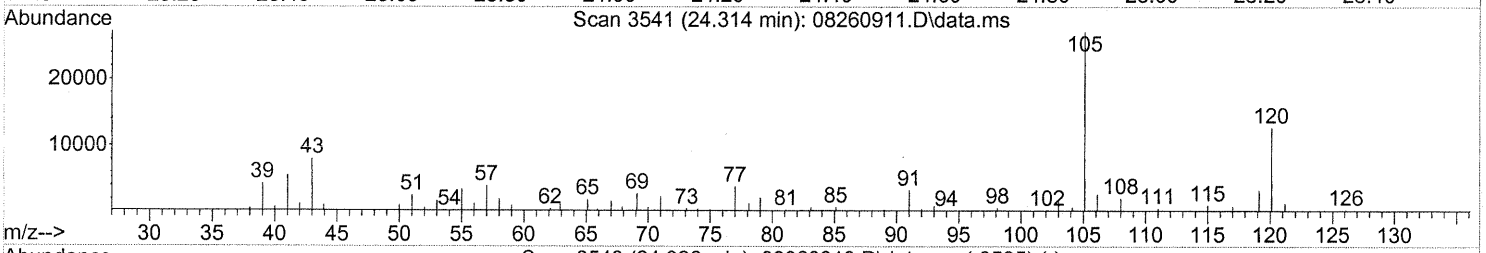
344

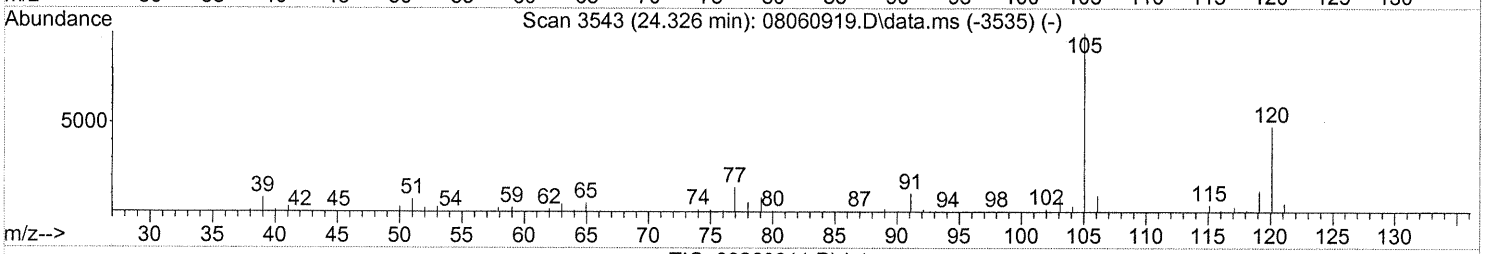
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260911.D\data.ms

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

24.314min (-0.023) 1.09ng

response 49616

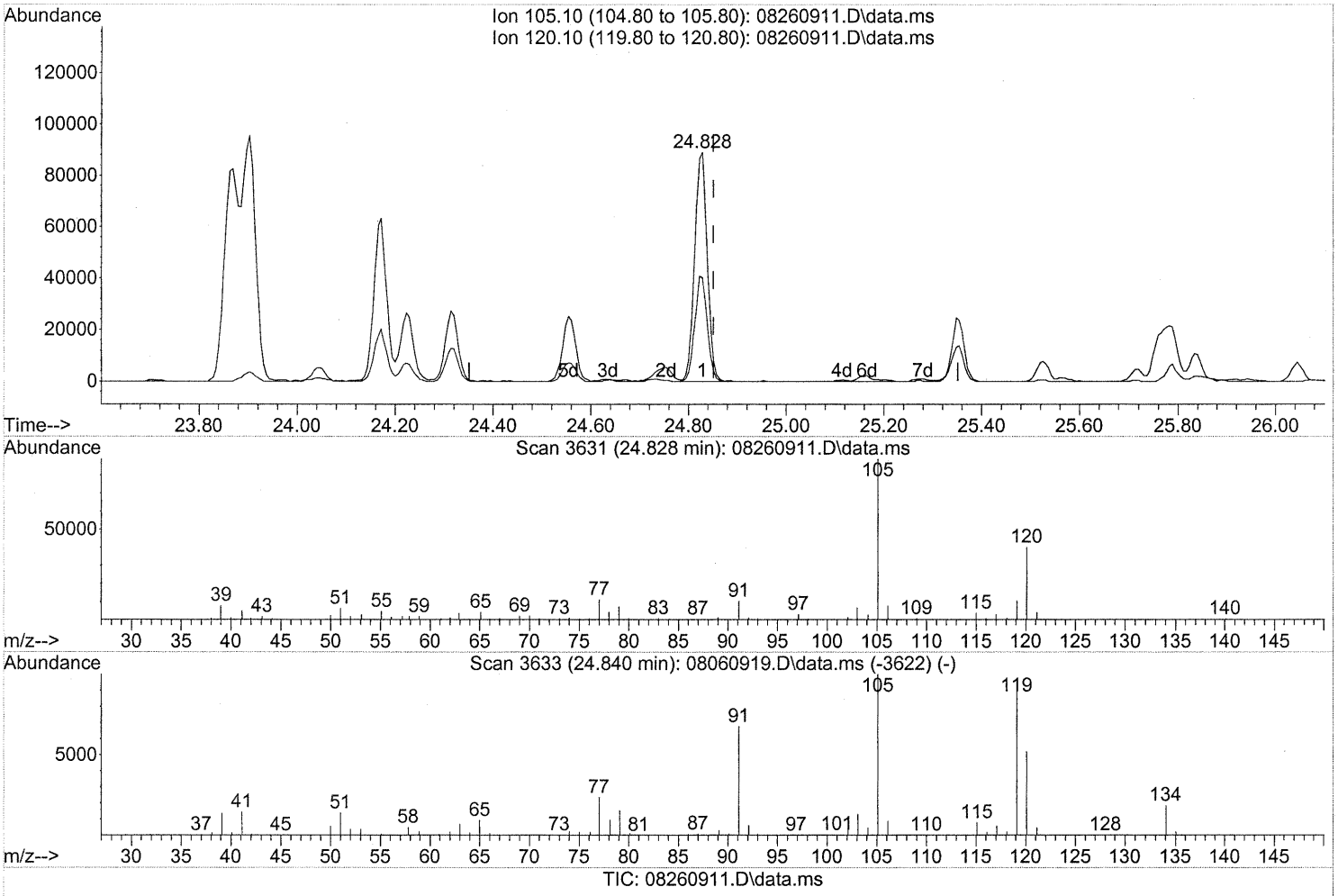
Ion	Exp%	Act%
105.10	100	100
120.10	46.80	46.65
0.00	0.00	0.00
0.00	0.00	0.00

345

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

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

24.828min (-0.023) 3.42ng

response 159144

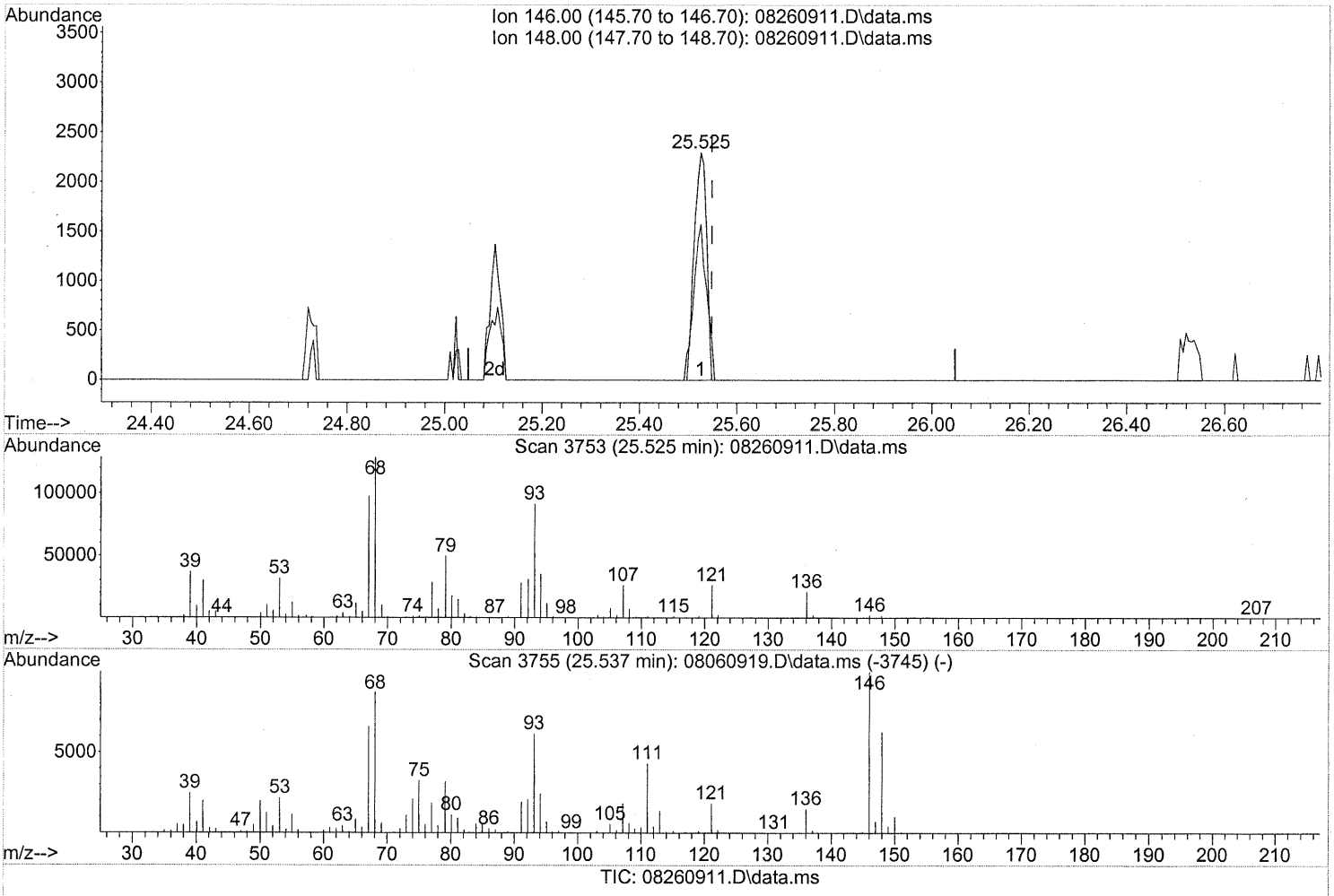
Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.19
0.00	0.00	0.00
0.00	0.00	0.00

346

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.525min (-0.023) 0.19ng

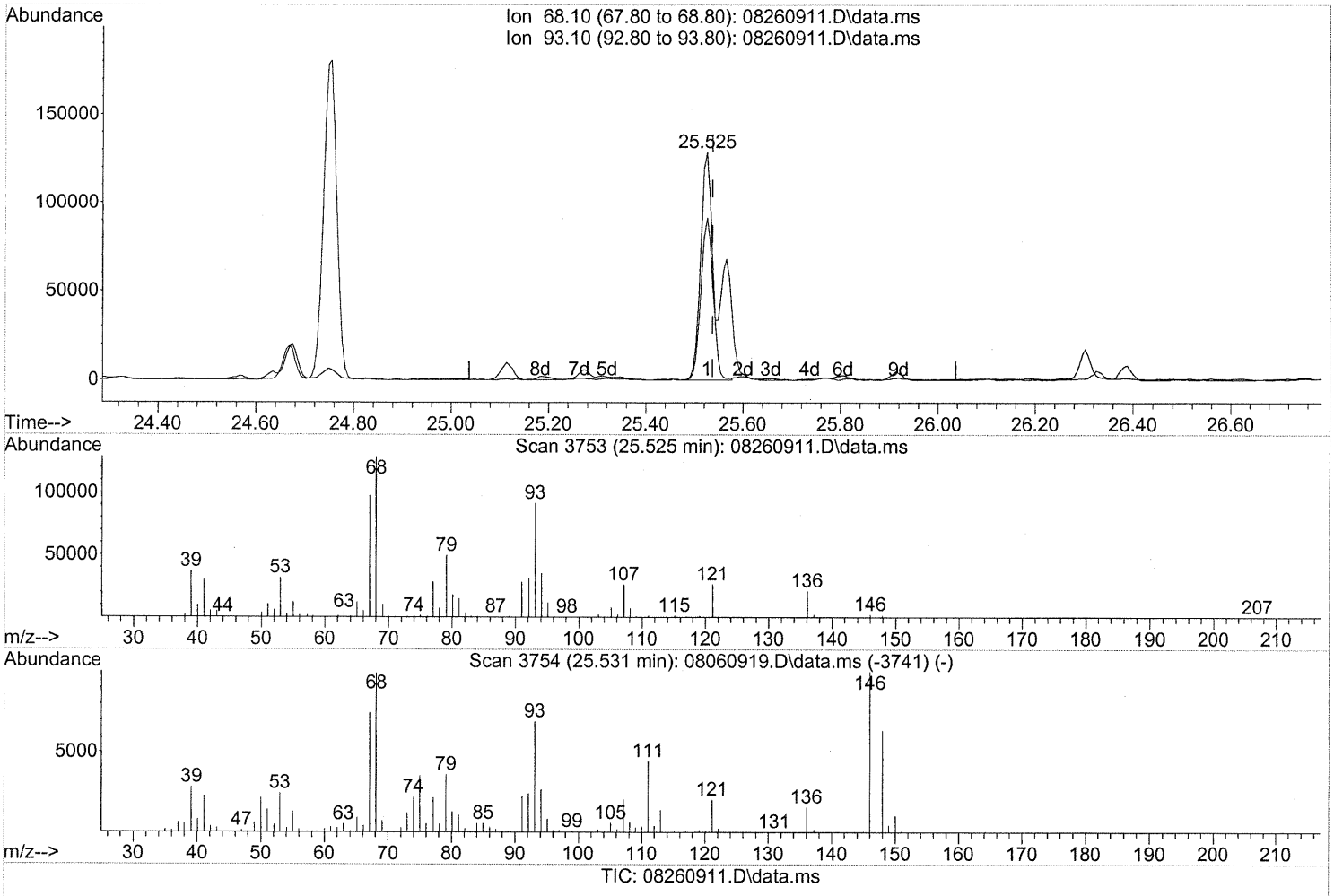
response 4256

Ion	Exp%	Act%
146.00	100	100
148.00	63.70	63.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(91) d-Limonene (T)

25.525min (-0.012) 10.96ng

response 216715

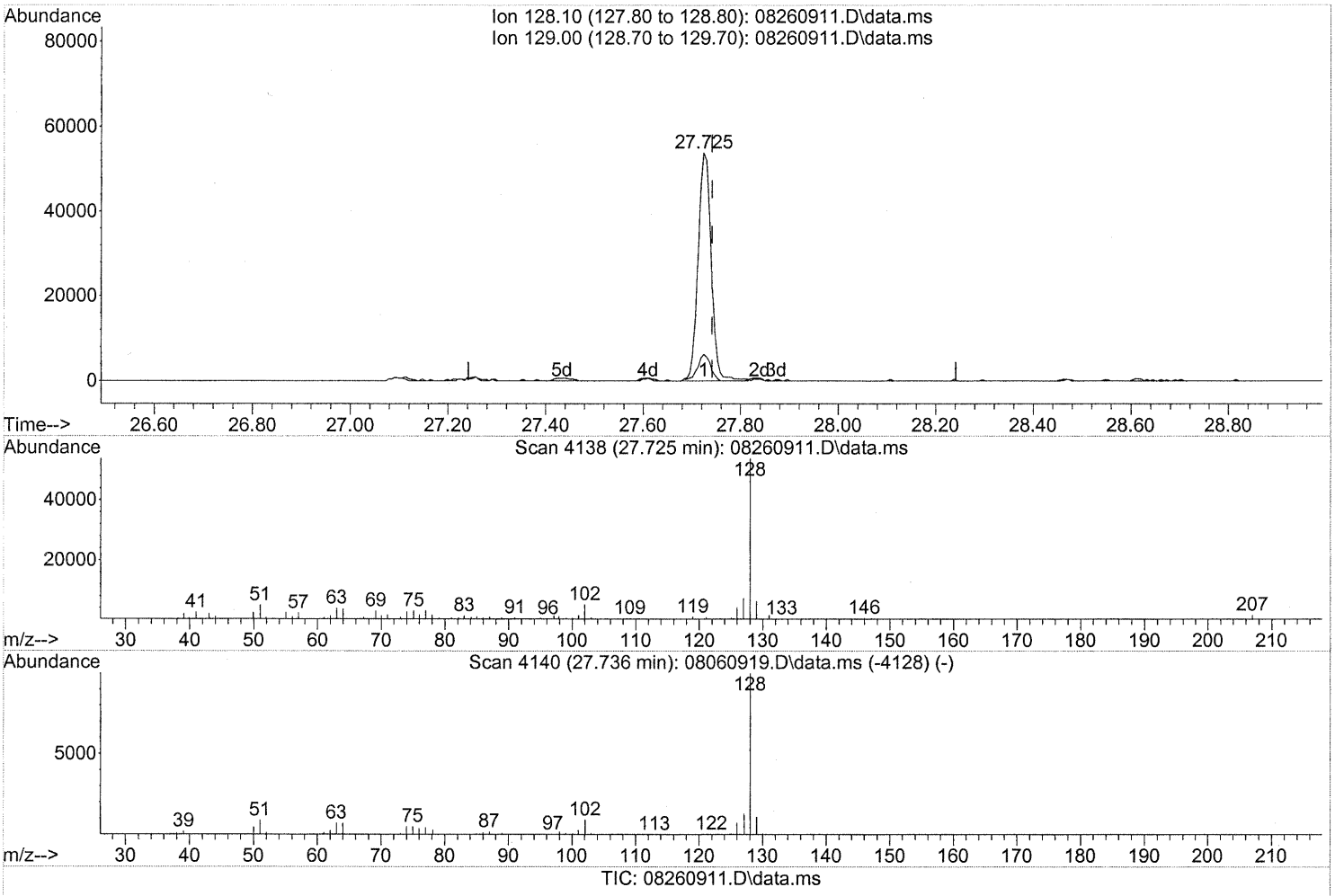
Ion	Exp%	Act%
68.10	100	100
93.10	67.90	75.55
0.00	0.00	0.00
0.00	0.00	0.00

348

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260911.D
Acq On : 26 Aug 2009 17:25
Operator : WA/CC
Sample : P0902876-007 (1000mL)
Misc : Environmental Health 102471
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 27 06:21:42 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260911.D\data.ms

(95) Naphthalene (T)

27.725min (-0.017) 1.59ng

response 100173

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.42
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102472** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-008

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01667

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.74	ND	0.43	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.7**	0.74	**0.55**	0.15	
74-87-3	**Chloromethane**	**0.52**	0.15	**0.25**	0.072	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.74	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.15	ND	0.058	
106-99-0	1,3-Butadiene	ND	0.15	ND	0.067	
74-83-9	Bromomethane	ND	0.15	ND	0.038	
75-00-3	Chloroethane	ND	0.15	ND	0.056	
64-17-5	**Ethanol**	**11**	7.4	**5.8**	3.9	
75-05-8	**Acetonitrile**	**4.2**	0.74	**2.5**	0.44	
107-02-8	**Acrolein**	**1.2**	0.74	**0.51**	0.32	
67-64-1	**Acetone**	**17**	7.4	**7.3**	3.1	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.15	**0.23**	0.026	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**0.88**	0.74	**0.36**	0.30	
107-13-1	Acrylonitrile	ND	0.74	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.037	
75-09-2	Methylene Chloride	ND	0.74	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.15	ND	0.047	
76-13-1	**Trichlorotrifluoroethane**	**0.65**	0.15	**0.085**	0.019	
75-15-0	Carbon Disulfide	ND	0.74	ND	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.037	
75-34-3	1,1-Dichloroethane	ND	0.15	ND	0.037	
1634-04-4	Methyl tert-Butyl Ether	ND	0.15	ND	0.041	
108-05-4	**Vinyl Acetate**	**9.4**	7.4	**2.7**	2.1	V
78-93-3	**2-Butanone (MEK)**	**1.5**	0.74	**0.53**	0.25	

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.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102472**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01667

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

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.037	
141-78-6	Ethyl Acetate	ND	0.74	ND	0.21	
110-54-3	n-Hexane	ND	0.74	ND	0.21	
67-66-3	Chloroform	ND	0.15	ND	0.030	
109-99-9	Tetrahydrofuran (THF)	ND	0.74	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.15	ND	0.037	
71-55-6	1,1,1-Trichloroethane	ND	0.15	ND	0.027	
71-43-2	**Benzene**	**0.39**	0.15	**0.12**	0.046	
56-23-5	**Carbon Tetrachloride**	**0.51**	0.15	**0.081**	0.024	
110-82-7	Cyclohexane	ND	0.74	ND	0.22	
78-87-5	1,2-Dichloropropane	ND	0.15	ND	0.032	
75-27-4	Bromodichloromethane	ND	0.15	ND	0.022	
79-01-6	Trichloroethene	ND	0.15	ND	0.028	
123-91-1	1,4-Dioxane	ND	0.74	ND	0.21	
80-62-6	Methyl Methacrylate	ND	0.74	ND	0.18	
142-82-5	n-Heptane	ND	0.74	ND	0.18	
10061-01-5	**cis-1,3-Dichloropropene**	**4.1**	0.74	**0.89**	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.74	ND	0.18	
10061-02-6	**trans-1,3-Dichloropropene**	**4.0**	0.74	**0.89**	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.15	ND	0.027	
108-88-3	**Toluene**	**1.8**	0.74	**0.49**	0.20	
591-78-6	2-Hexanone	ND	0.74	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.15	ND	0.017	
106-93-4	1,2-Dibromoethane	ND	0.15	ND	0.019	
123-86-4	n-Butyl Acetate	ND	0.74	ND	0.16	

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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102472**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01667

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

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.74	ND	0.16	
127-18-4	**Tetrachloroethene**	**0.21**	0.15	**0.031**	0.022	
108-90-7	Chlorobenzene	ND	0.15	ND	0.032	
100-41-4	Ethylbenzene	ND	0.74	ND	0.17	
179601-23-1	**m,p-Xylenes**	**0.95**	0.74	**0.22**	0.17	
75-25-2	Bromoform	ND	0.74	ND	0.072	
100-42-5	Styrene	ND	0.74	ND	0.17	
95-47-6	o-Xylene	ND	0.74	ND	0.17	
111-84-2	n-Nonane	ND	0.74	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.15	ND	0.022	
98-82-8	Cumene	ND	0.74	ND	0.15	
80-56-8	**alpha-Pinene**	**1.6**	0.74	**0.28**	0.13	
103-65-1	n-Propylbenzene	ND	0.74	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.74	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.74	ND	0.15	
95-63-6	1,2,4-Trimethylbenzene	ND	0.74	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.15	ND	0.029	
541-73-1	1,3-Dichlorobenzene	ND	0.15	ND	0.025	
106-46-7	1,4-Dichlorobenzene	ND	0.15	ND	0.025	
95-50-1	1,2-Dichlorobenzene	ND	0.15	ND	0.025	
5989-27-5	**d-Limonene**	**1.1**	0.74	**0.20**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.74	ND	0.077	
120-82-1	1,2,4-Trichlorobenzene	ND	0.74	ND	0.10	
91-20-3	Naphthalene	ND	0.74	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.74	ND	0.069	

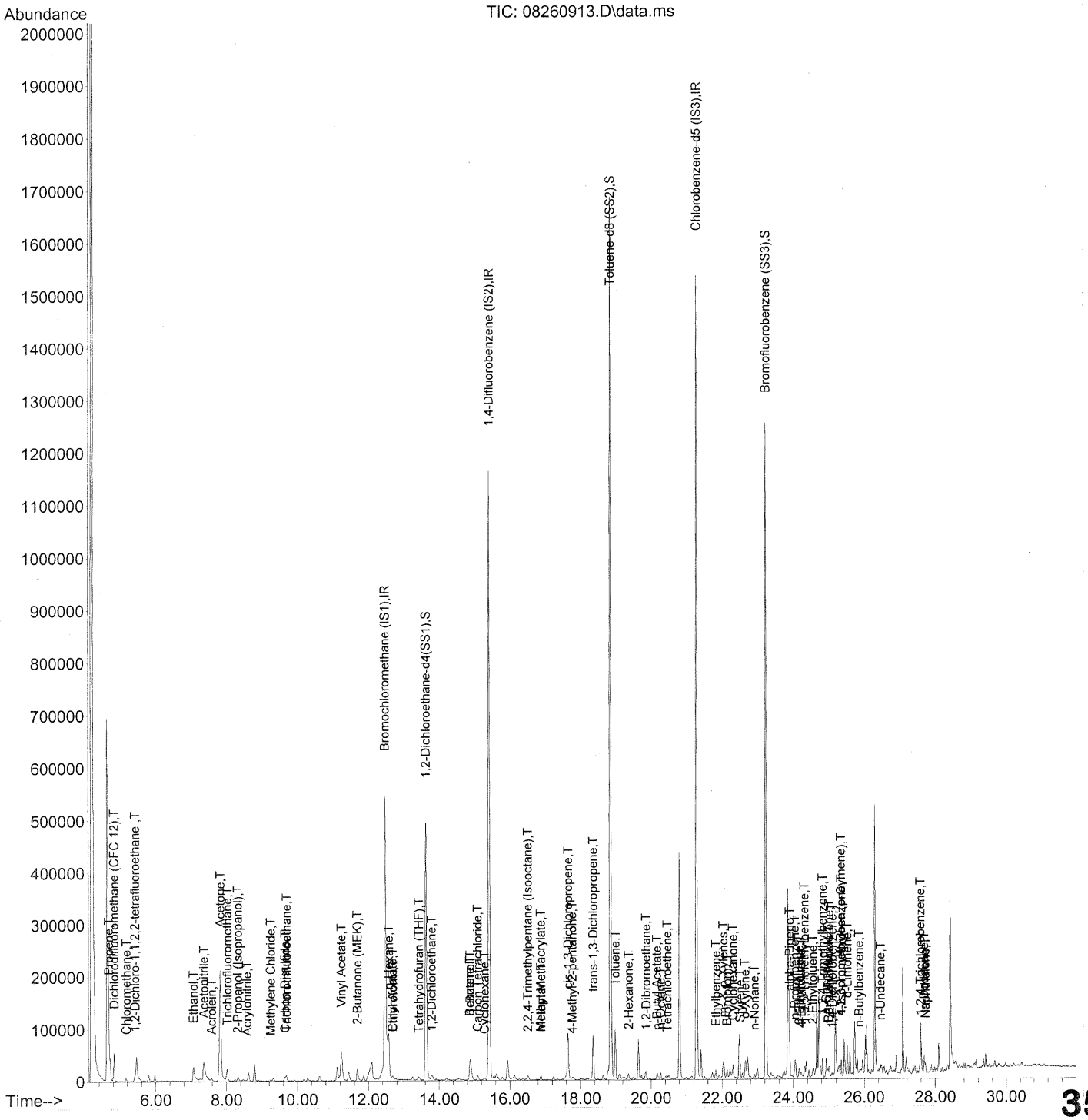
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 11:04:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
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Quant Time: Sep 01 11:04:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

um 9/1/09.

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	263909	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.41	114	1340749	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	641533	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	519502	22.648	ng		-0.04
Spiked Amount 25.000			Recovery =	90.60%			
57) Toluene-d8 (SS2)	18.85	98	1458498	26.019	ng		-0.02
Spiked Amount 25.000			Recovery =	104.08%			
73) Bromofluorobenzene (SS3)	23.23	174	411522	27.838	ng		-0.01
Spiked Amount 25.000			Recovery =	111.36%			
Target Compounds							Qvalue
2) Propene	4.67	42	6938	0.383	ng		94
3) Dichlorodifluoromethan...	4.82	85	54585	1.844	ng		98
4) Chloromethane	5.17	50	6965	0.350	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	1054	0.088	ng	#	60
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.88	54	232	N.D.			
8) Bromomethane	6.38	94	106	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.06	45	84666m	7.375	ng		
11) Acetonitrile	7.36	41	95511	2.841	ng		99
12) Acrolein	7.58	56	6958	0.796	ng		98
13) Acetone	7.82	58	127446	11.766	ng		86
14) Trichlorofluoromethane	8.02	101	23341	0.872	ng		99
15) 2-Propanol (Isopropanol)	8.31	45	25202	0.592	ng		90
16) Acrylonitrile	8.57	53	2769	0.141	ng	#	54
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.34	59	183	N.D.			
19) Methylene Chloride	9.24	84	1692	0.116	ng		95
20) 3-Chloro-1-propene (Al...	9.44	41	90	N.D.			
21) Trichlorotrifluoroethane	9.68	151	4294	0.441	ng		96
22) Carbon Disulfide	9.64	76	18754	0.366	ng		93
23) trans-1,2-Dichloroethene	10.69	61	873	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.23	86	13989m	6.346	ng		
27) 2-Butanone (MEK)	11.68	72	10226	1.046	ng		92
28) cis-1,2-Dichloroethene	12.23	61	265	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.67	61	777	0.153	ng		81
31) n-Hexane	12.57	57	7581	0.291	ng		97

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 11:04:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	1325	0.058	ng	#	43
34) Tetrahydrofuran (THF)	13.42	72	1922	0.184	ng	#	76
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.78	62	1513	0.072	ng	#	44
38) 1,1,1-Trichloroethane	14.17	97	108	N.D.			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	14.87	56	35292	2.028	ng		82
41) Benzene	14.87	78	15374	0.261	ng		98
42) Carbon Tetrachloride	15.09	117	6448	0.343	ng		98
43) Cyclohexane	15.28	84	2258	0.105	ng	#	3
44) tert-Amyl Methyl Ether	15.97	73	2095	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.			
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) 2,2,4-Trimethylpentane...	16.51	57	10393	0.150	ng		89
50) Methyl Methacrylate	16.87	100	314	0.058	ng	#	1
51) n-Heptane	16.88	71	1883	0.119	ng		94
52) cis-1,3-Dichloropropene	17.65	75	67176	2.738	ng		98
53) 4-Methyl-2-pentanone	17.76	58	1229	0.087	ng	#	33
54) trans-1,3-Dichloropropene	18.36	75	63637	2.728	ng		100
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	18.98	91	68425	1.242	ng		99
59) 2-Hexanone	19.36	43	8995	0.246	ng		87
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	19.86	107	1153	0.083	ng		94
62) n-Butyl Acetate	20.17	43	9566	0.222	ng	#	75
63) n-Octane	20.27	57	2337	0.175	ng		96
64) Tetrachloroethene	20.46	166	1794	0.141	ng		95
65) Chlorobenzene	21.34	112	1189	N.D.			
66) Ethylbenzene	21.82	91	15578	0.247	ng		96
67) m- & p-Xylenes	22.04	91	32654	0.641	ng	Yes	99
68) Bromoform	22.14	173	701	0.065	ng	#	29
69) Styrene	22.51	104	8790	0.239	ng		97
70) o-Xylene	22.65	91	13368	0.262	ng		97
71) n-Nonane	22.91	43	5943	0.175	ng	#	77
72) 1,1,2,2-Tetrachloroethane	22.49	83	199	N.D.			
74) Cumene	23.41	105	1894	N.D.			
75) alpha-Pinene	23.90	93	35375	1.070	ng	#	42
76) n-Propylbenzene	24.05	91	5470	0.067	ng	#	86
77) 3-Ethyltoluene	24.17	105	11883	0.193	ng		95
78) 4-Ethyltoluene	24.22	105	5563	0.093	ng		100
79) 1,3,5-Trimethylbenzene	24.31	105	4759	0.094	ng		98

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 11:04:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

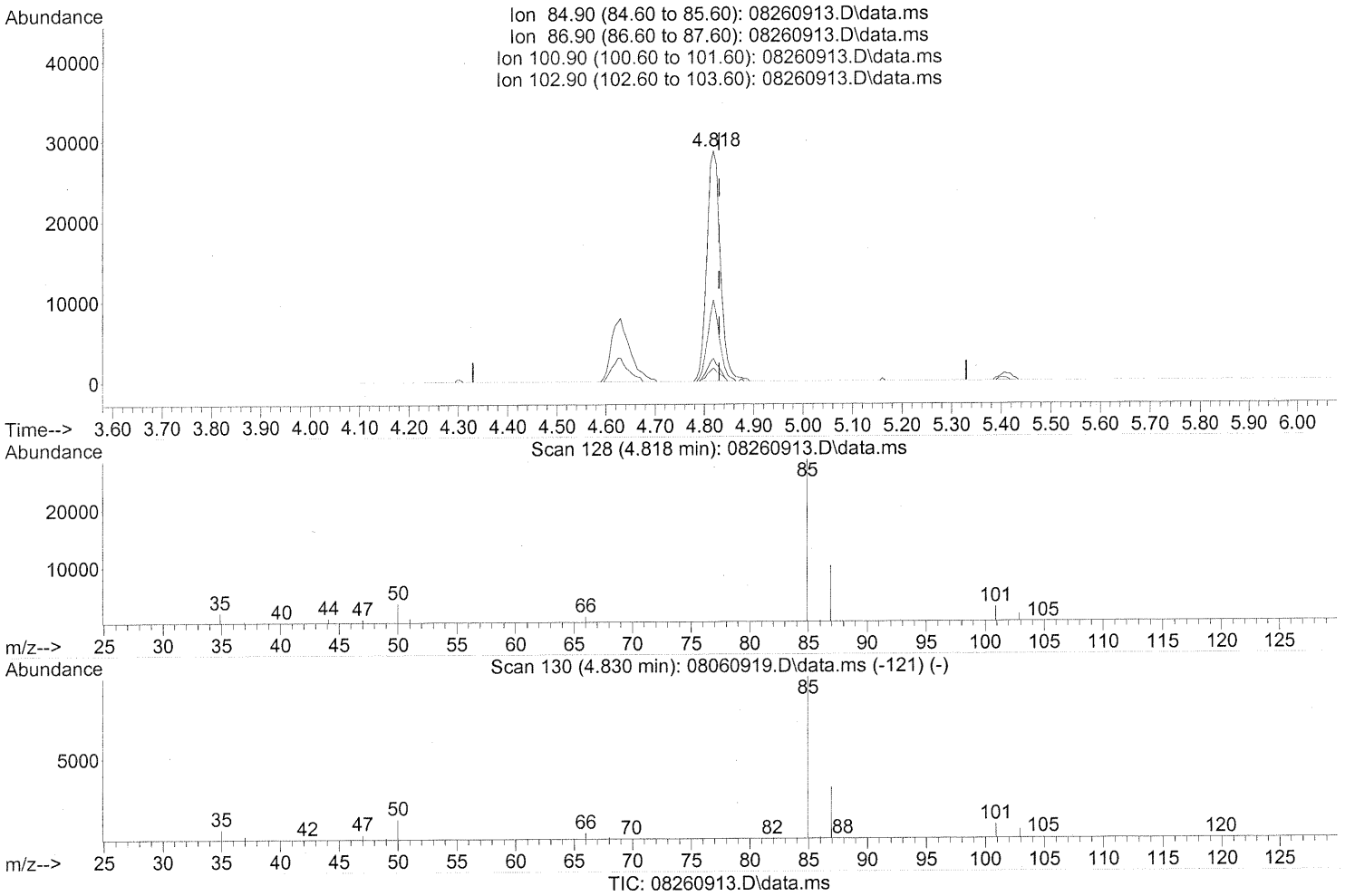
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	1038	N.D.		
81) 2-Ethyltoluene	24.55	105	5048	0.081 ng		87
82) 1,2,4-Trimethylbenzene	24.83	105	15319	0.298 ng		87
83) n-Decane	24.93	57	19665	0.589 ng		81
84) Benzyl Chloride	25.00	91	4738	0.098 ng		94
85) 1,3-Dichlorobenzene	25.02	146	1501	0.058 ng		98
86) 1,4-Dichlorobenzene	25.10	146	2580	0.093 ng		99
87) sec-Butylbenzene	25.18	105	291	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	4361	0.070 ng	#	72
89) 1,2,3-Trimethylbenzene	25.35	105	4815	0.092 ng		97
90) 1,2-Dichlorobenzene	25.51	146	994	N.D.		
91) d-Limonene	25.53	68	16477	0.754 ng		83
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	7767	0.219 ng		86
94) 1,2,4-Trichlorobenzene	27.58	180	1672	0.099 ng	#	81
95) Naphthalene	27.72	128	14779	0.212 ng		96
96) n-Dodecane	27.69	57	12253	0.297 ng		86
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	14547	0.637 ng		99
99) tert-Butylbenzene	24.82	119	1996	N.D.		
100) n-Butylbenzene	25.86	91	4314	0.075 ng	#	48

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 27 06:21:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (CFC 12) (T)

4.818min (-0.011) 1.84ng

response 54585

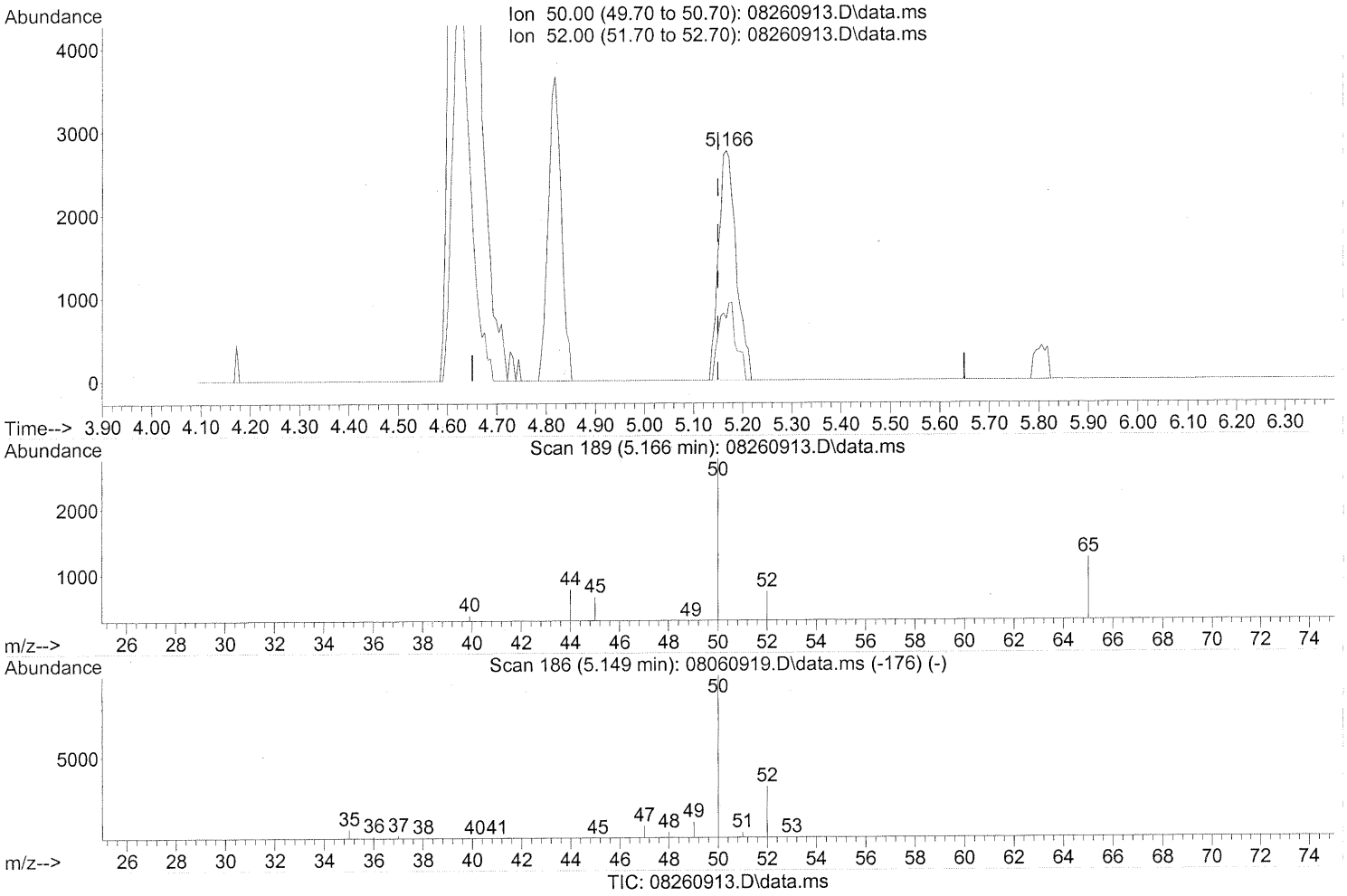
Ion	Exp%	Act%
84.90	100	100
86.90	32.80	30.95
100.90	8.80	8.59
102.90	5.20	4.99

357

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 27 06:21:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.166min (+0.017) 0.35ng

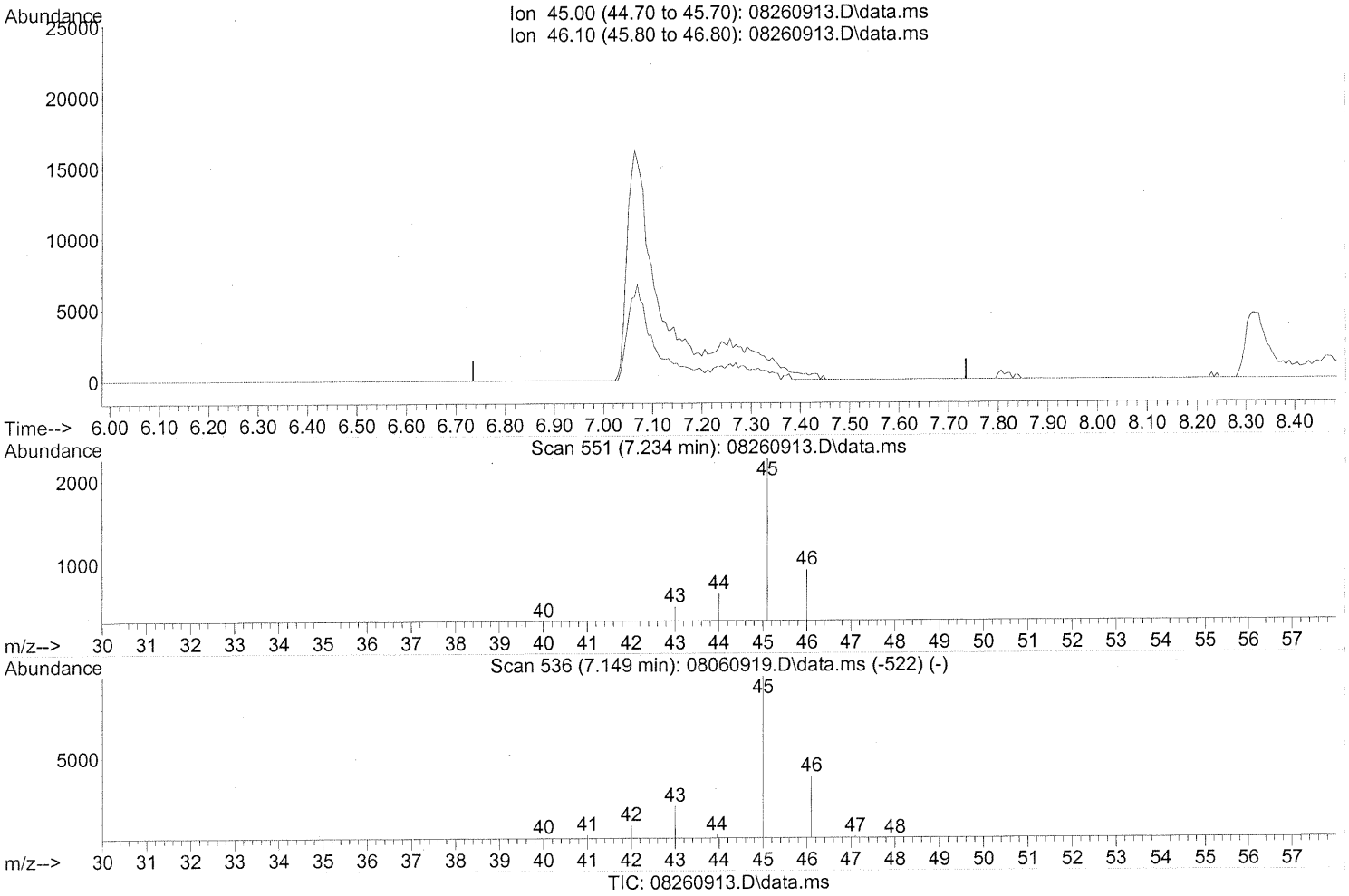
response 6965

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	31.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 27 06:21:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.234min (-7.234) 0.00ng

response 0

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

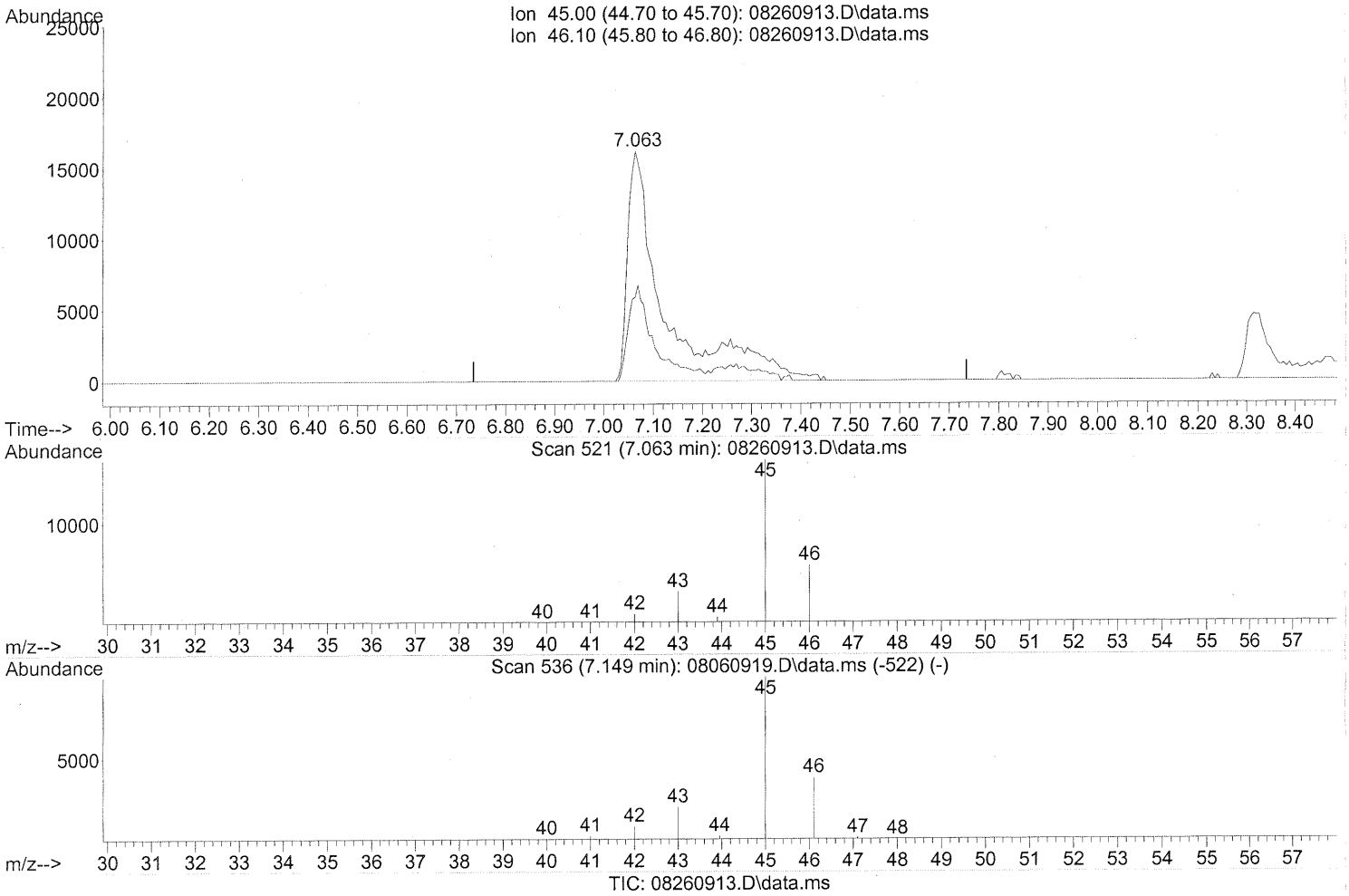
BMI

359

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 27 06:21:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.063min (-0.171) 7.38ng m

response 84666

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

BMI -> IC
MB 9/1/09

E 9/2/09

360

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
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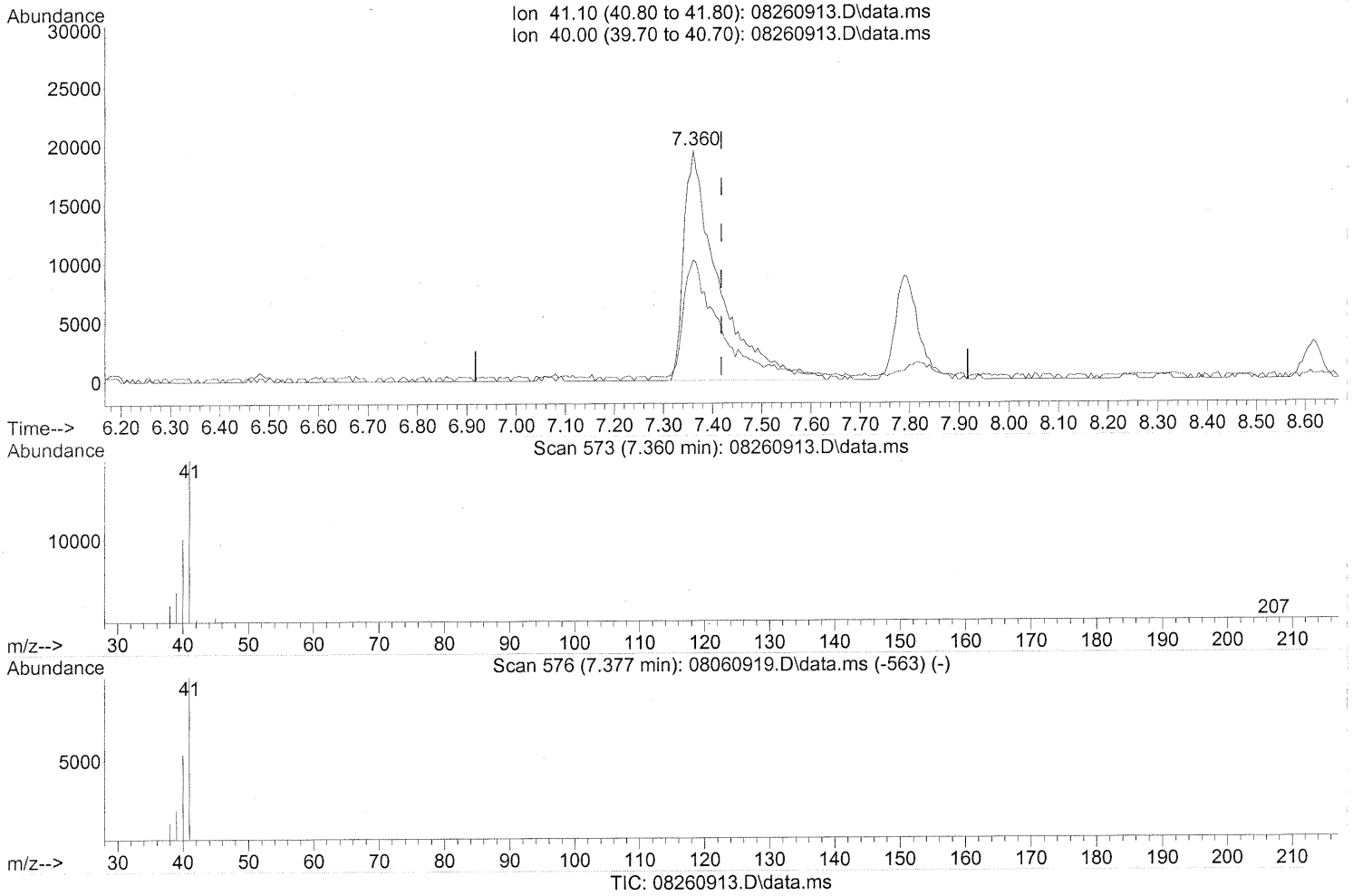
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(11) Acetonitrile (T)

7.360min (-0.057) 2.84ng

response 95511

Ion	Exp%	Act%
41.10	100	100
40.00	53.70	54.67
0.00	0.00	0.00
0.00	0.00	0.00

361

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
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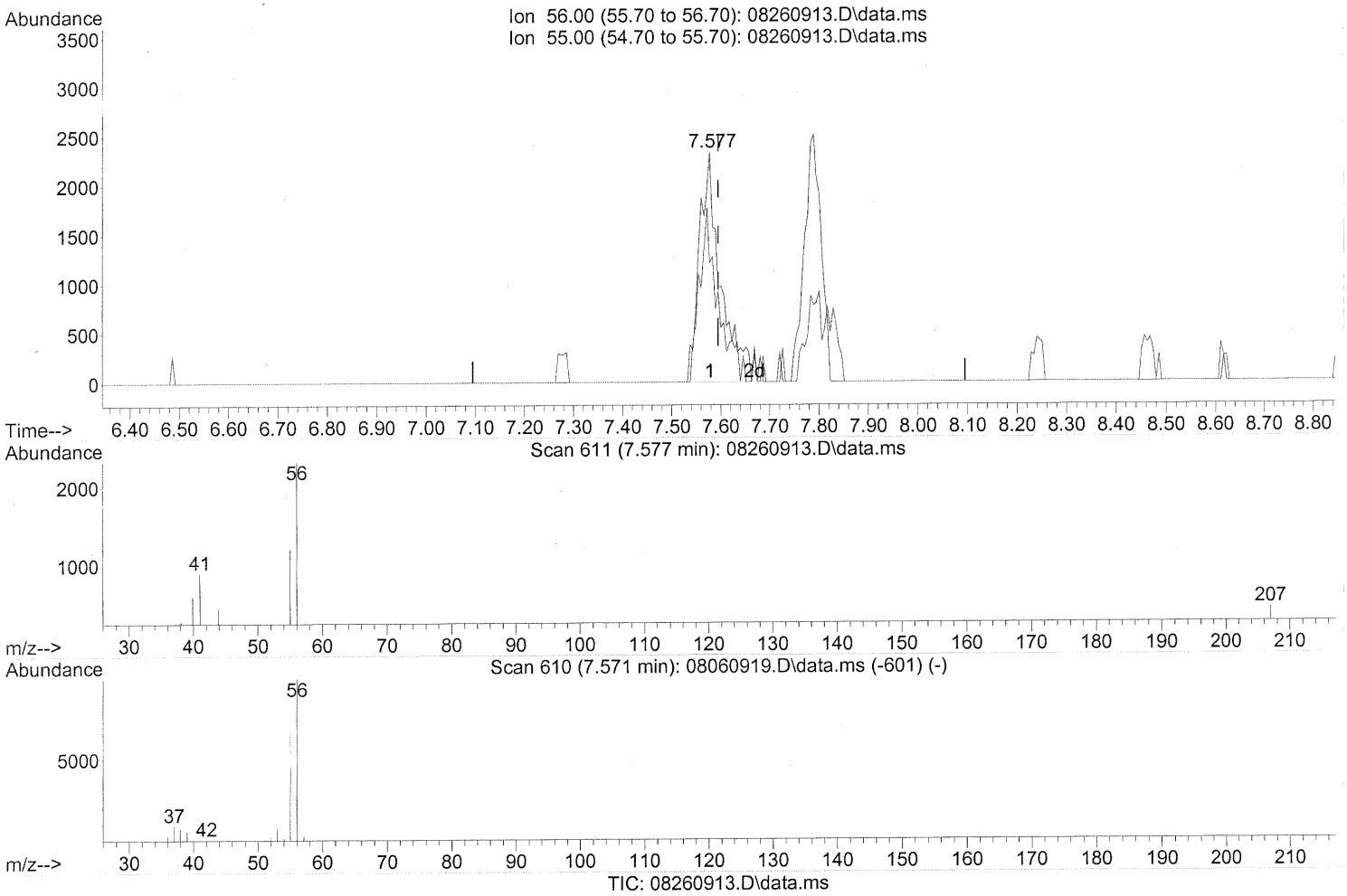
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(12) Acrolein (T)

7.577min (-0.017) 0.80ng

response 6958

Ion	Exp%	Act%
56.00	100	100
55.00	68.10	66.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 27 06:21:49 2009
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
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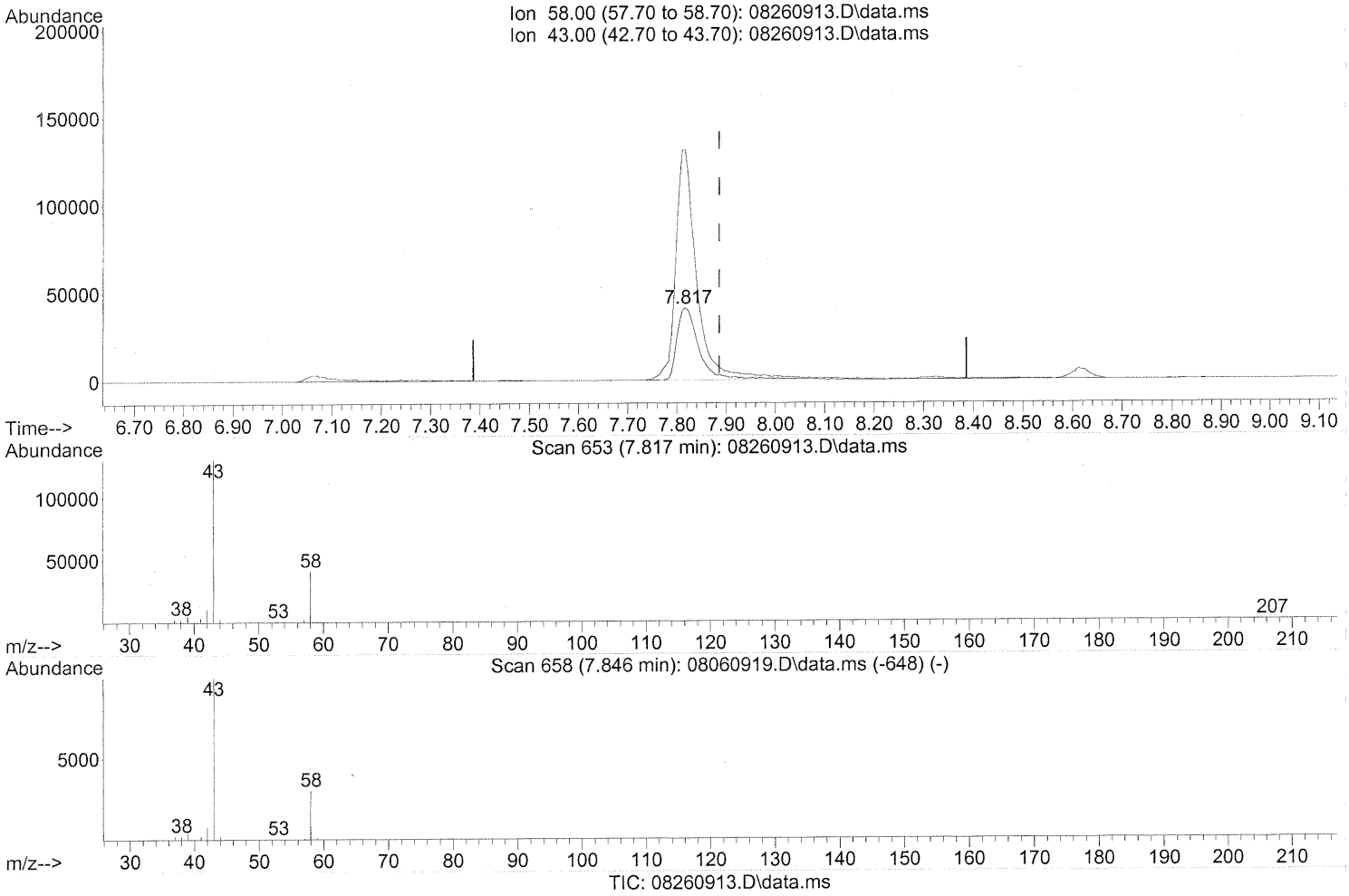

(13) Acetone (T)

7.817min (-0.069) 11.77ng

response 127446

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	311.03
0.00	0.00	0.00
0.00	0.00	0.00

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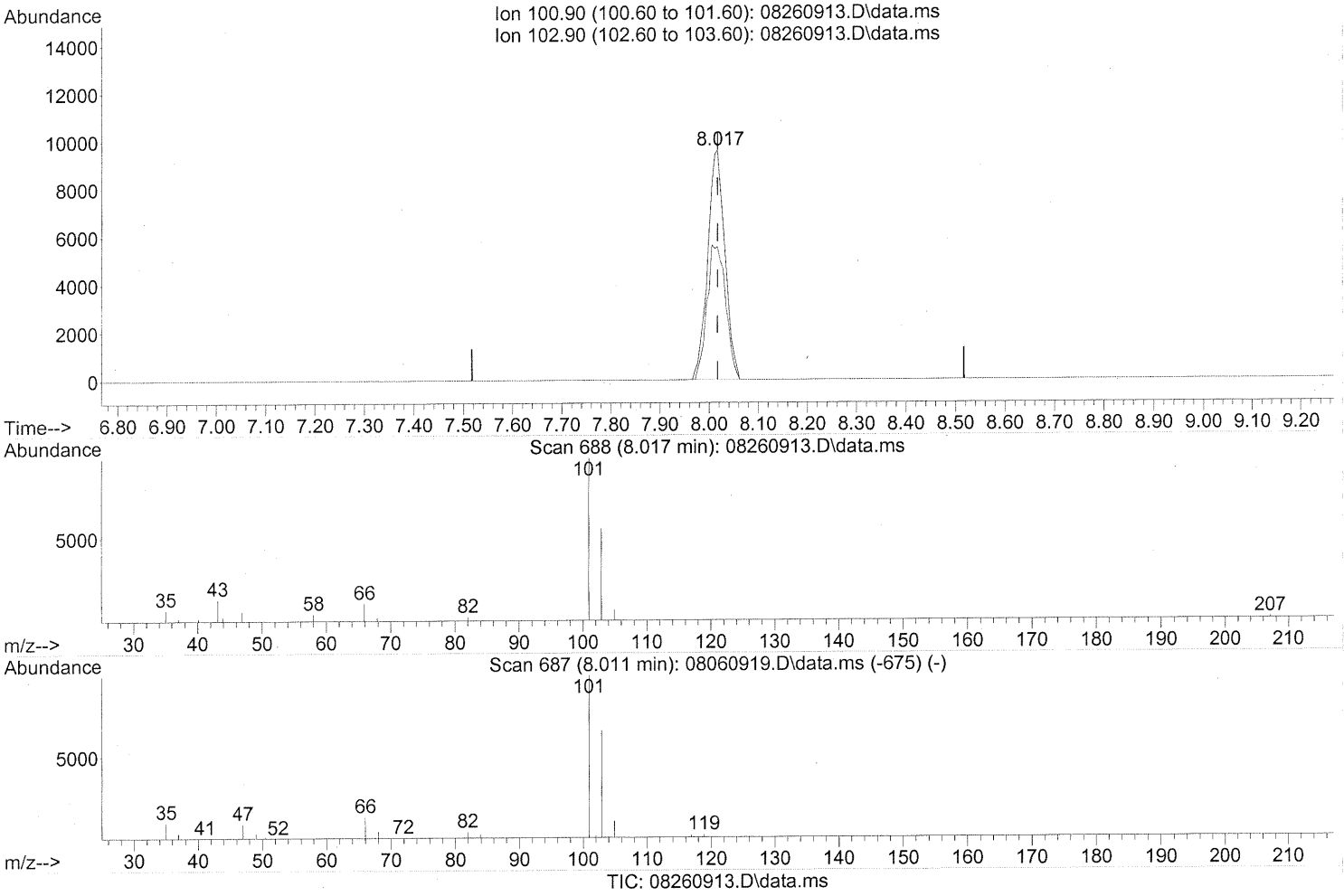
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(14) Trichlorofluoromethane (T)

8.017min (-0.000) 0.87ng

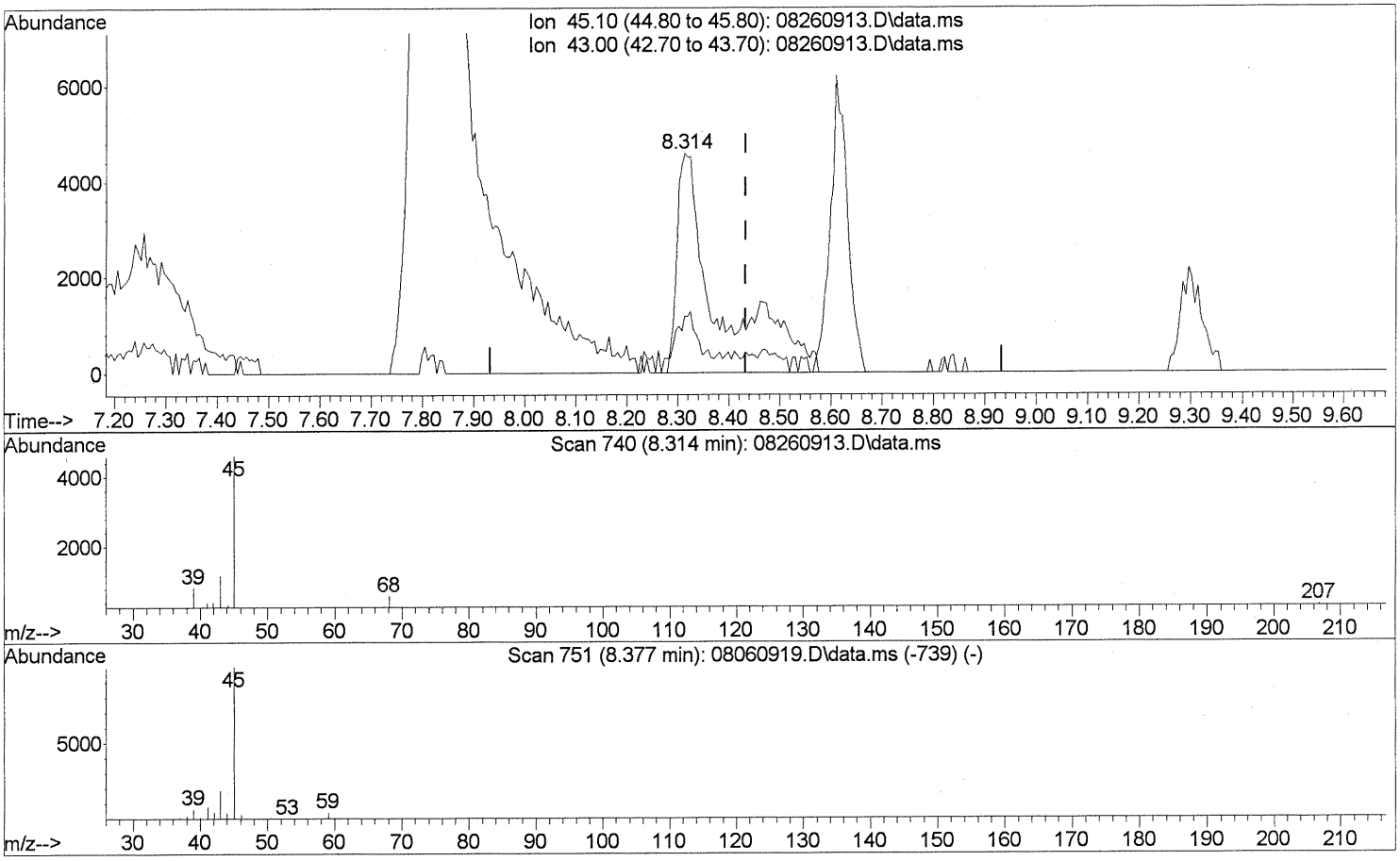
response 23341

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	63.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 18:47
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 11:04:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

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

8.314min (-0.120) 0.59ng

response 25202

Ion	Exp%	Act%
45.10	100	100
43.00	19.00	23.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
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Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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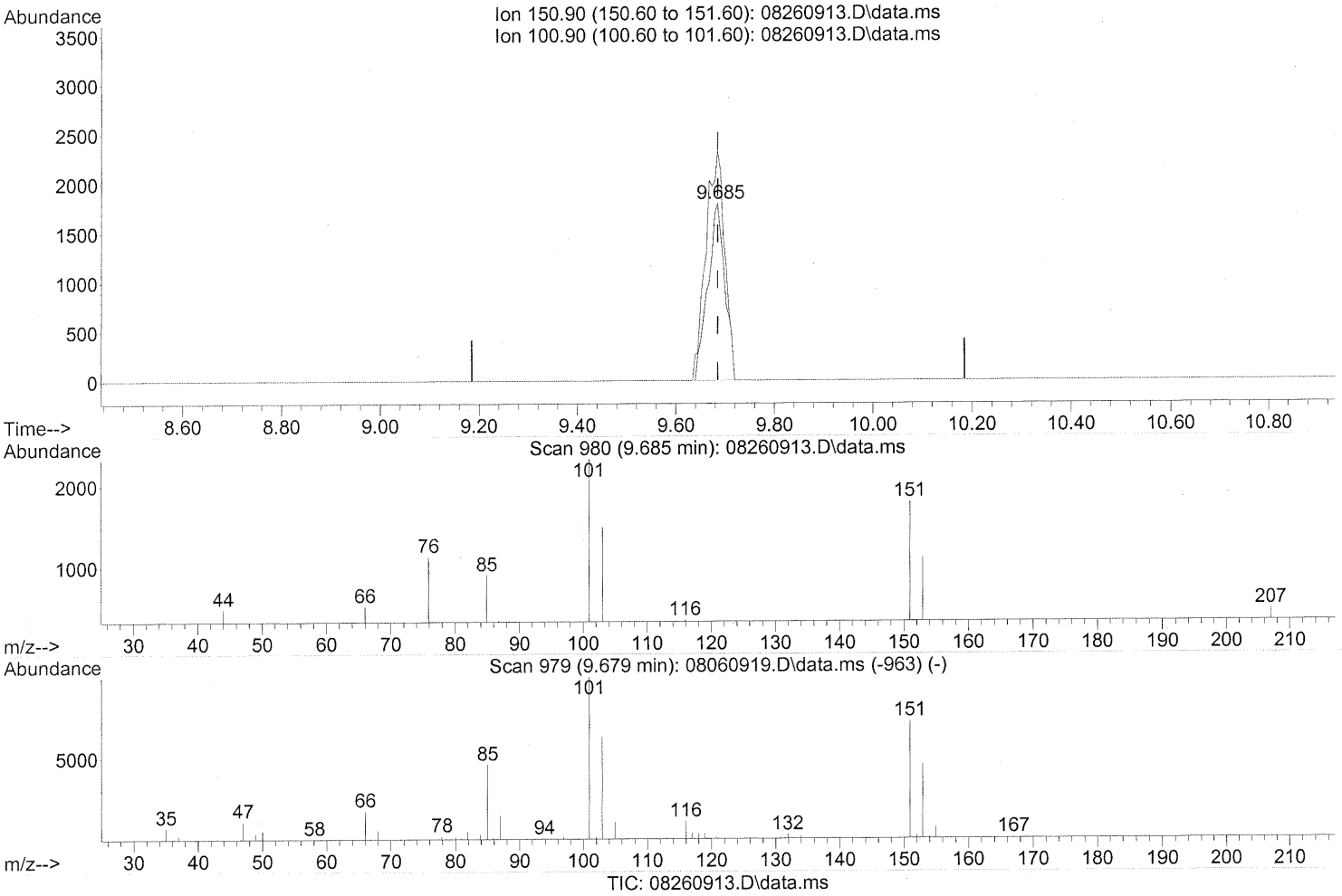


TIC: 08260913.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.685min (-0.000) 0.44ng

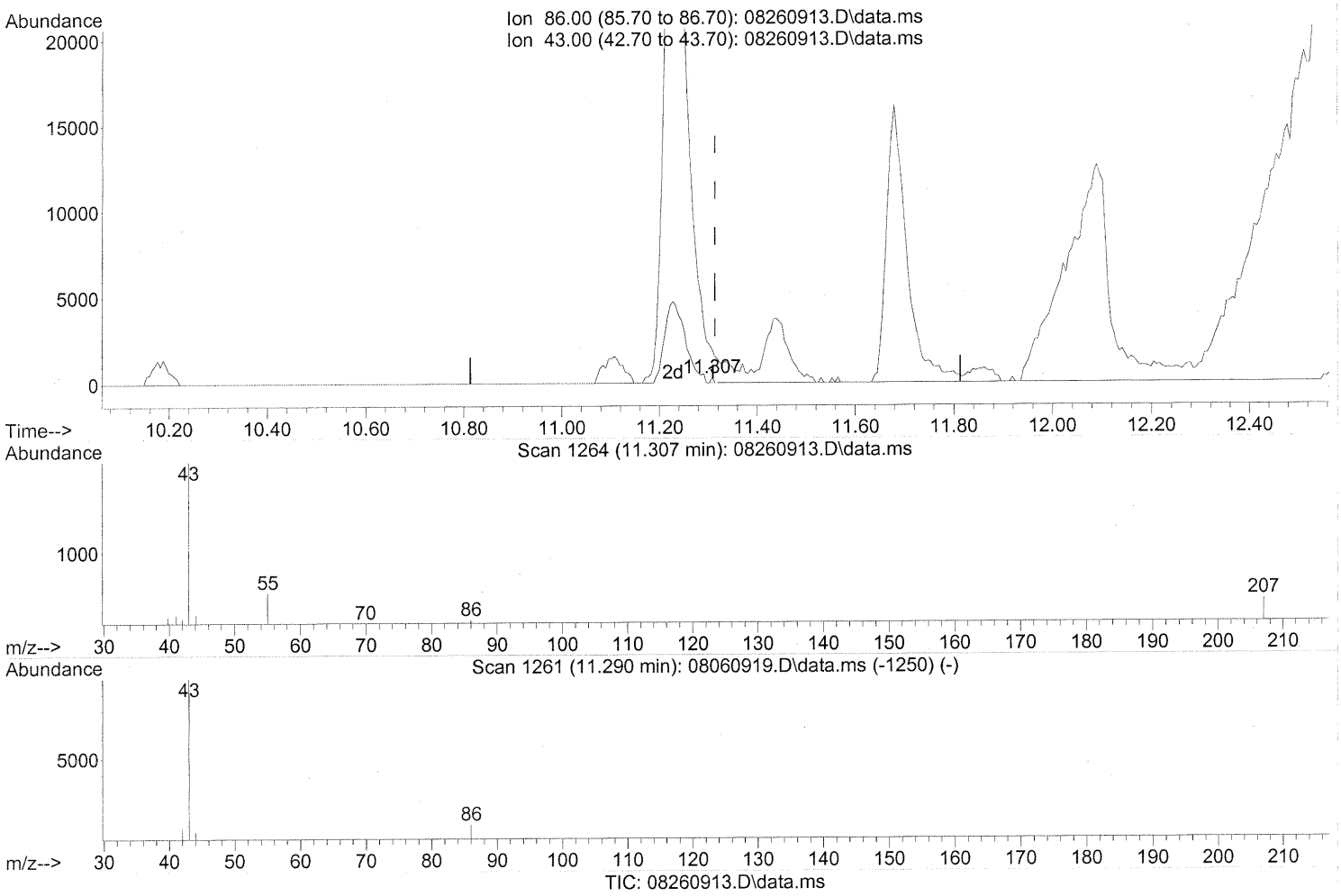
response 4294

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	143.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 10:51:07 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(26) Vinyl Acetate (T)

11.307min (-0.006) 0.05ng

response 102

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

BHI

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
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Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
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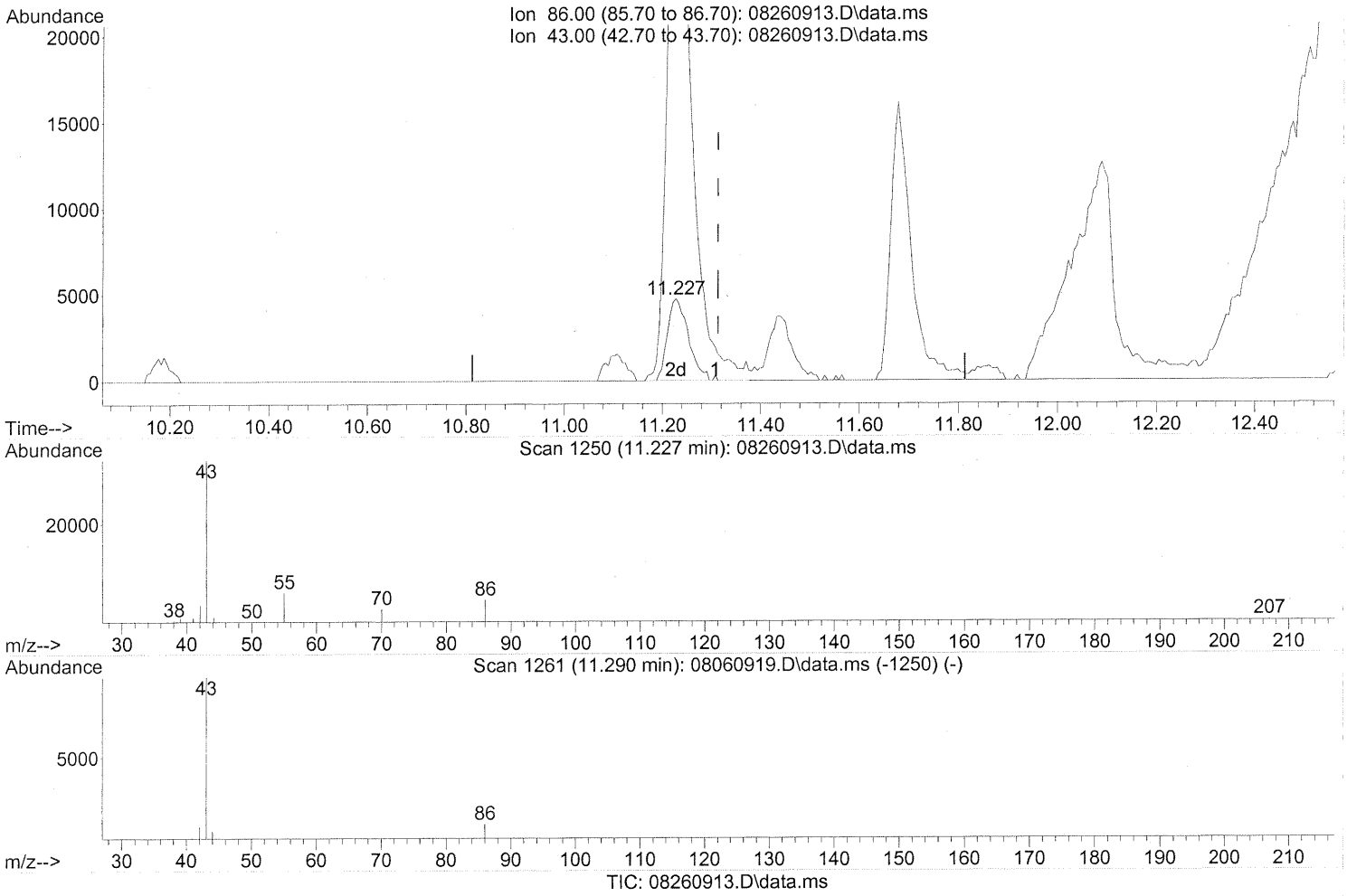
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 10:51:07 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(26) Vinyl Acetate (T)

11.227min (-0.086) 6.35ng m

response 13989

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

BM1->1C
IM9111109

9/2/09

368

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
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Acq On : 26 Aug 2009 18:47
Operator : WA/CC
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Misc : Environmental Health 102472
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Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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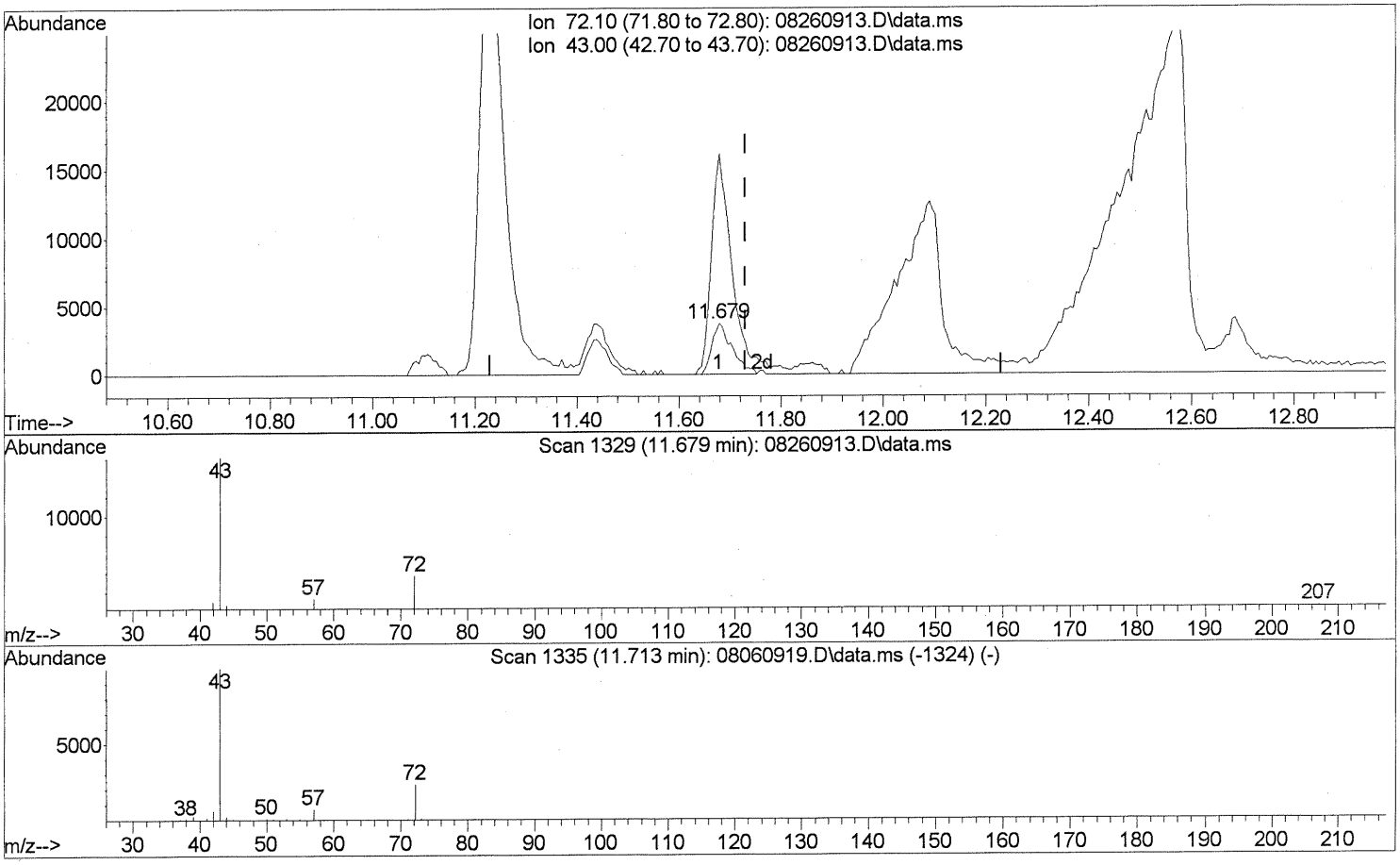

TIC: 08260913.D\data.ms

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

11.679min (-0.051) 1.05ng

response 10226

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	456.40
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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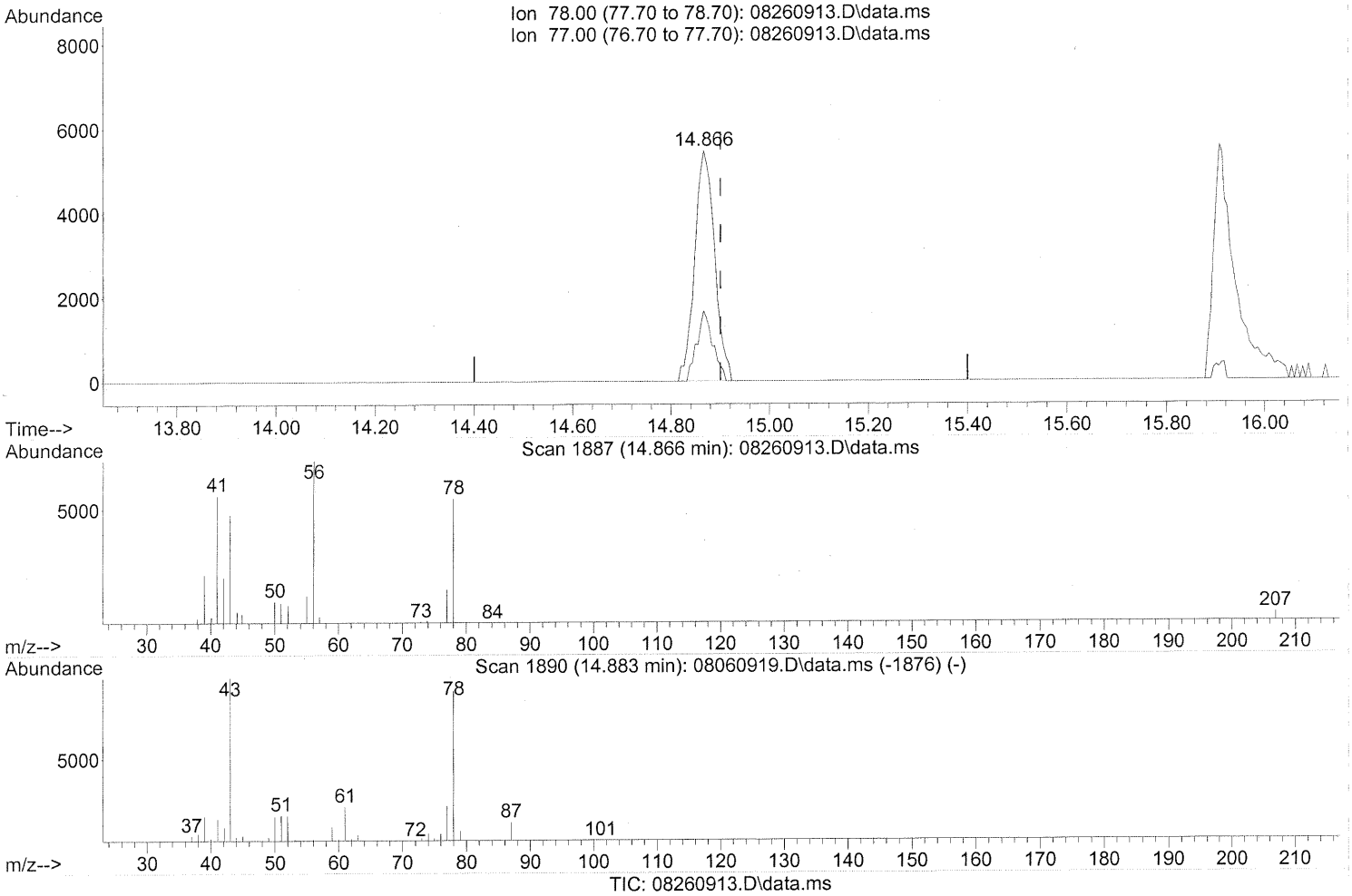
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 10:51:07 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(41) Benzene (T)

14.866min (-0.034) 0.26ng

response 15374

Ion	Exp%	Act%
78.00	100	100
77.00	23.60	24.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
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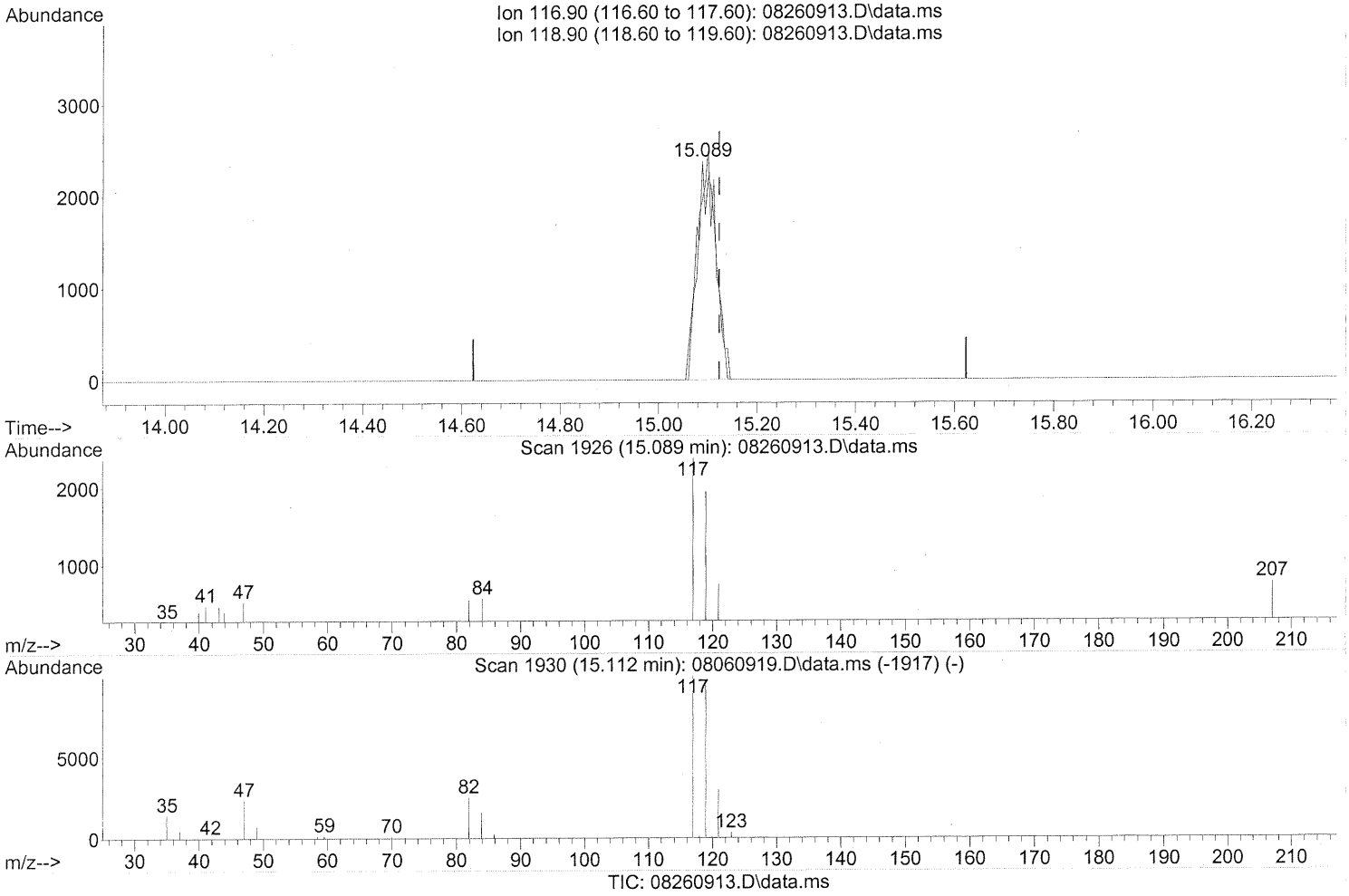

TIC: 08260913.D\data.ms

(42) Carbon Tetrachloride (T)

15.089min (-0.034) 0.34ng

response 6448

Ion	Exp%	Act%
116.90	100	100
118.90	97.10	95.41
0.00	0.00	0.00
0.00	0.00	0.00

371

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
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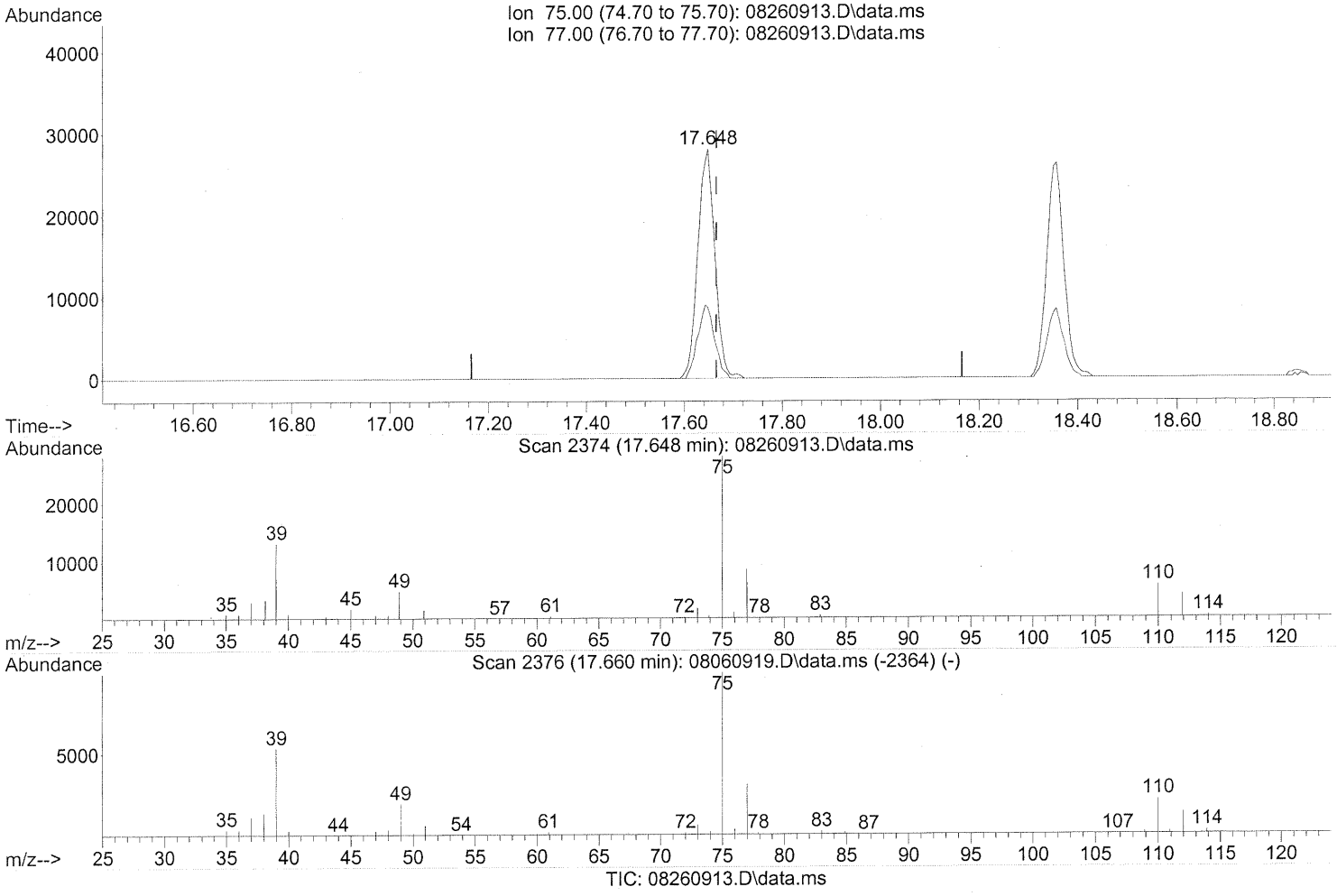

TIC: 08260913.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 2.74ng

response 67176

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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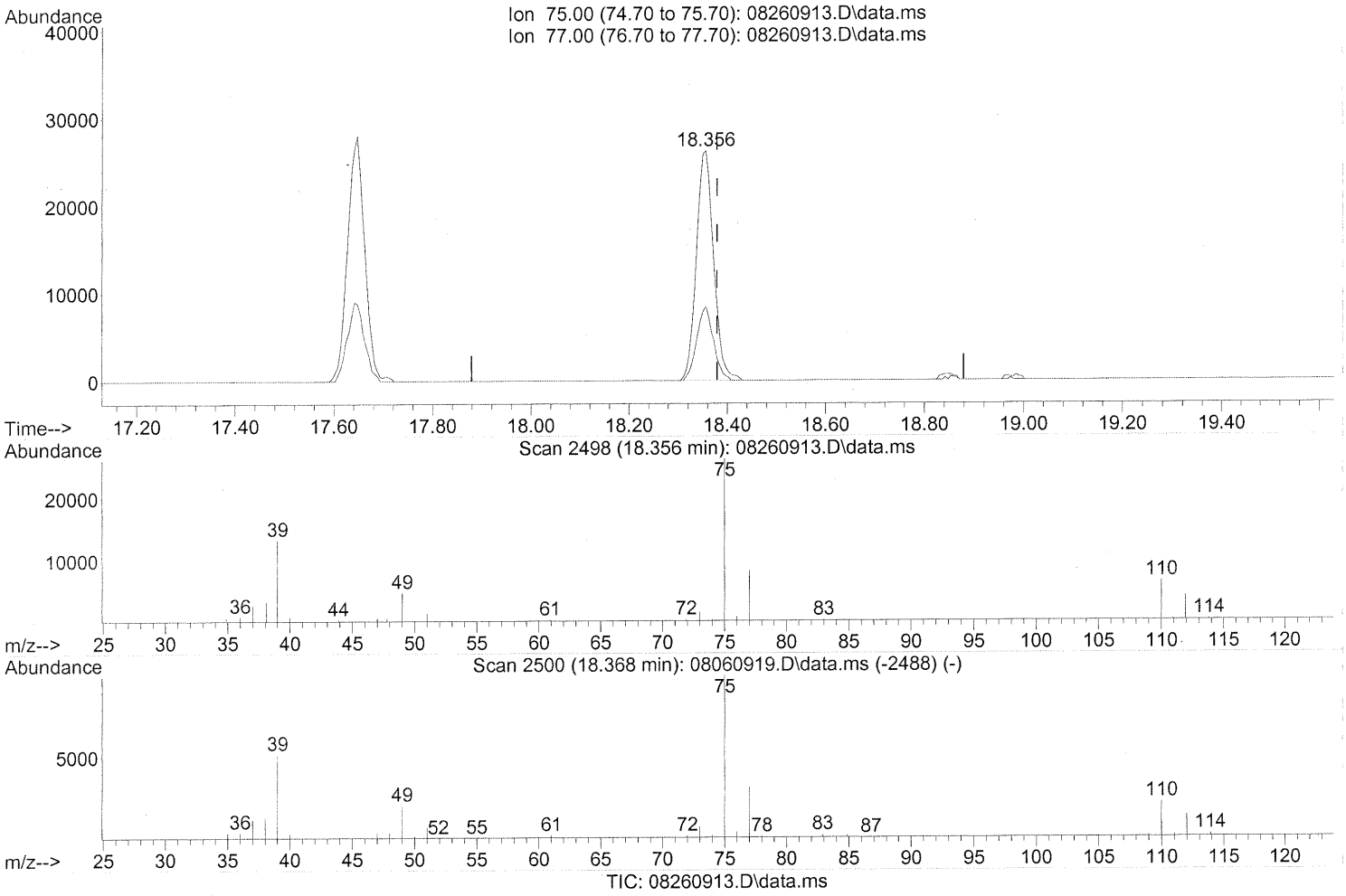

TIC: 08260913.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 2.73ng

response 63637

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	30.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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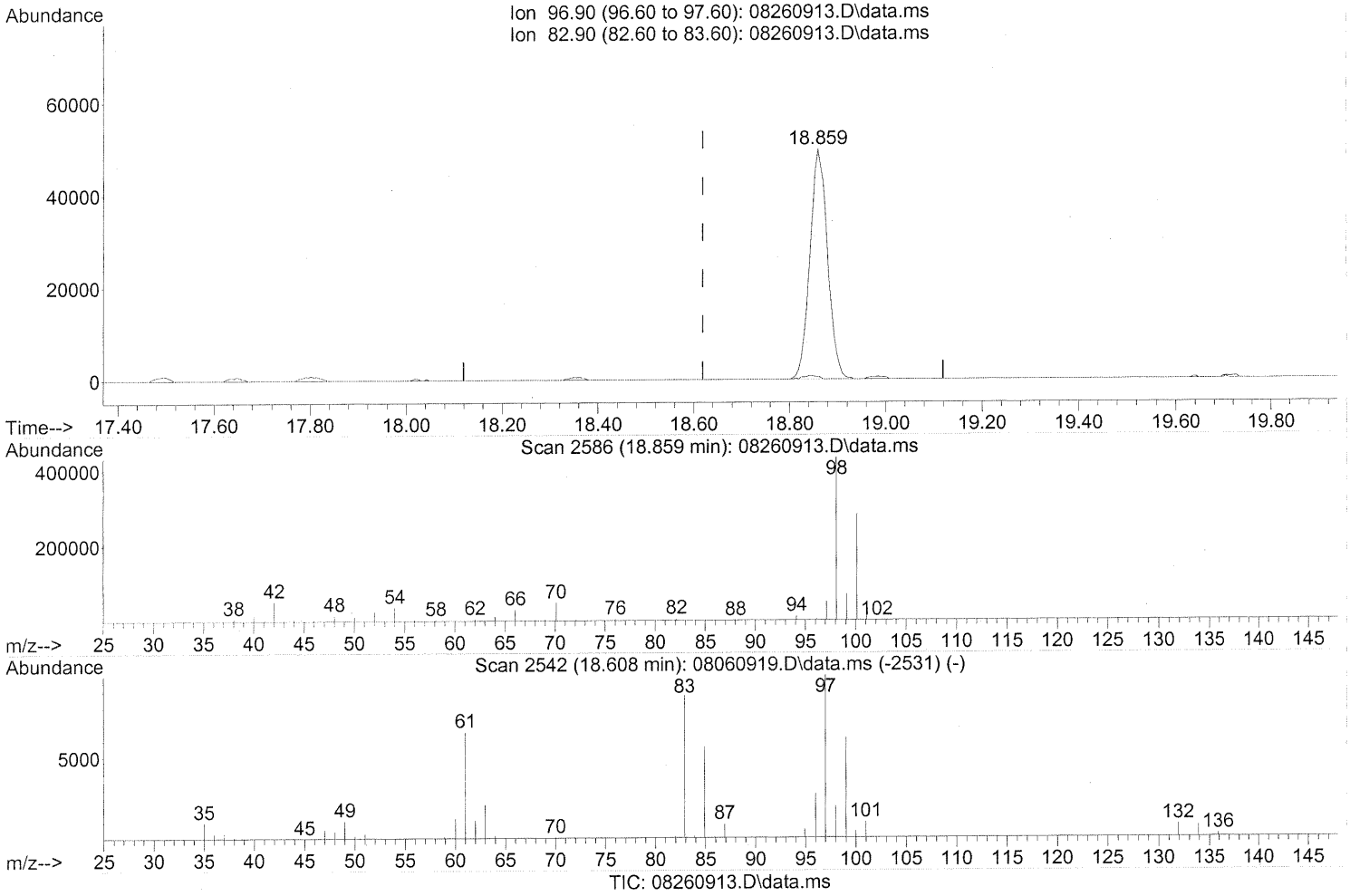

(55) 1,1,2-Trichloroethane (T)

18.859min (+0.240) 9.79ng

response 126681

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.18#
0.00	0.00	0.00
0.00	0.00	0.00

EP
VM 9/11/09

9/2/09

374

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
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Acq On : 26 Aug 2009 6:47 pm
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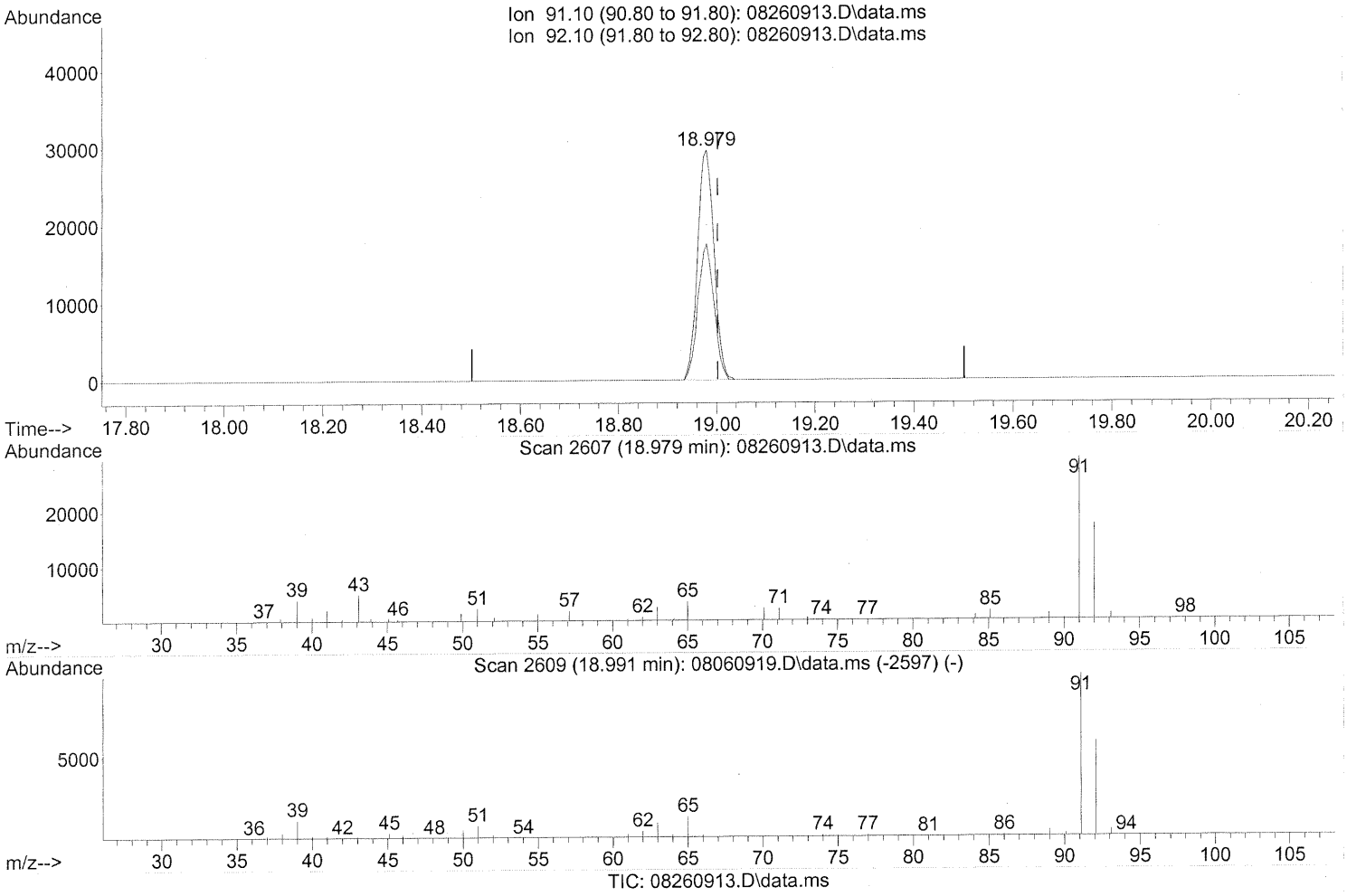

TIC: 08260913.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 1.24ng

response 68425

Ion	Exp%	Act%
91.10	100	100
92.10	58.60	57.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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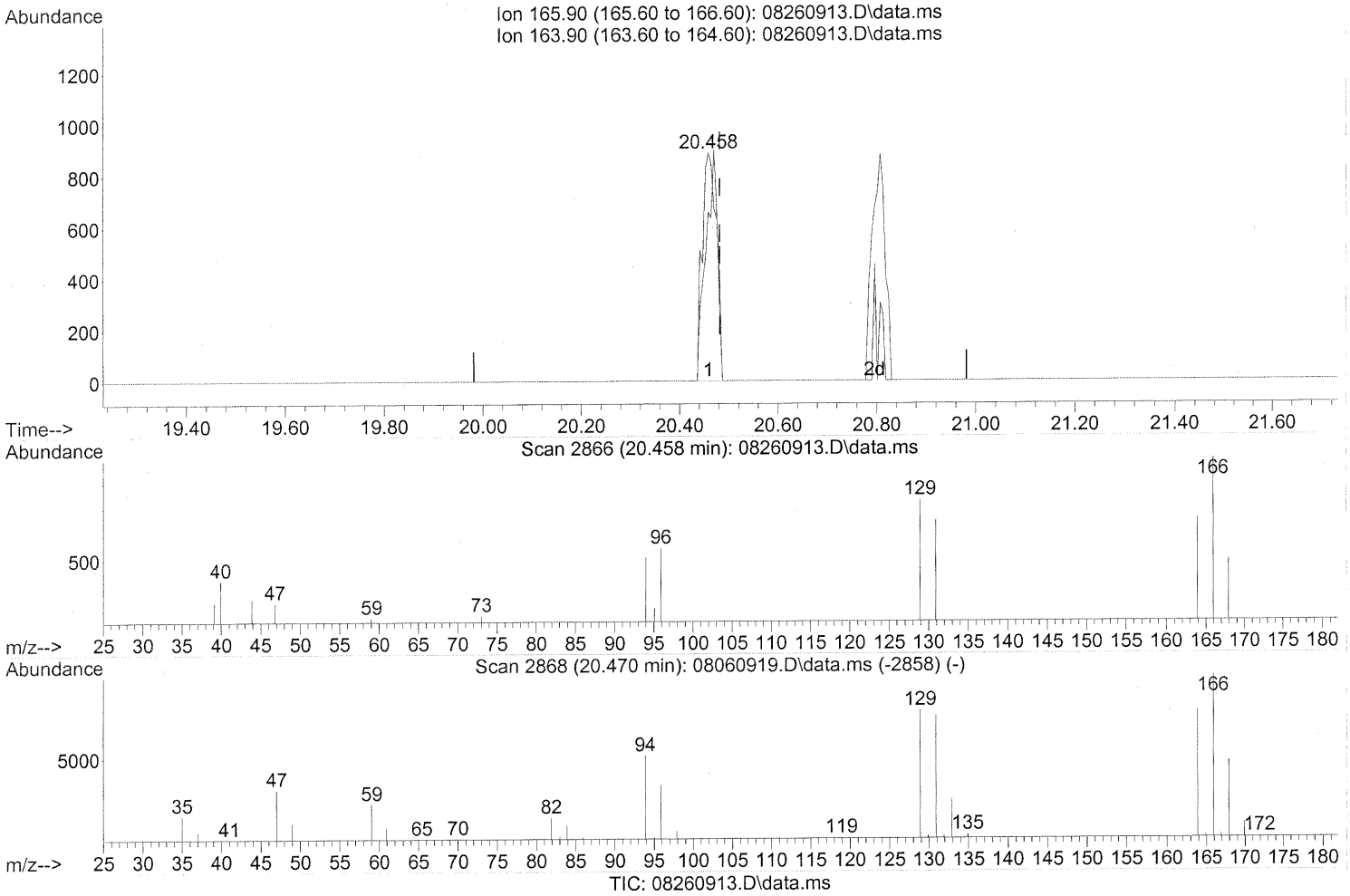

TIC: 08260913.D\data.ms

(64) Tetrachloroethene (T)

20.458min (-0.023) 0.14ng

response 1794

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	81.83
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
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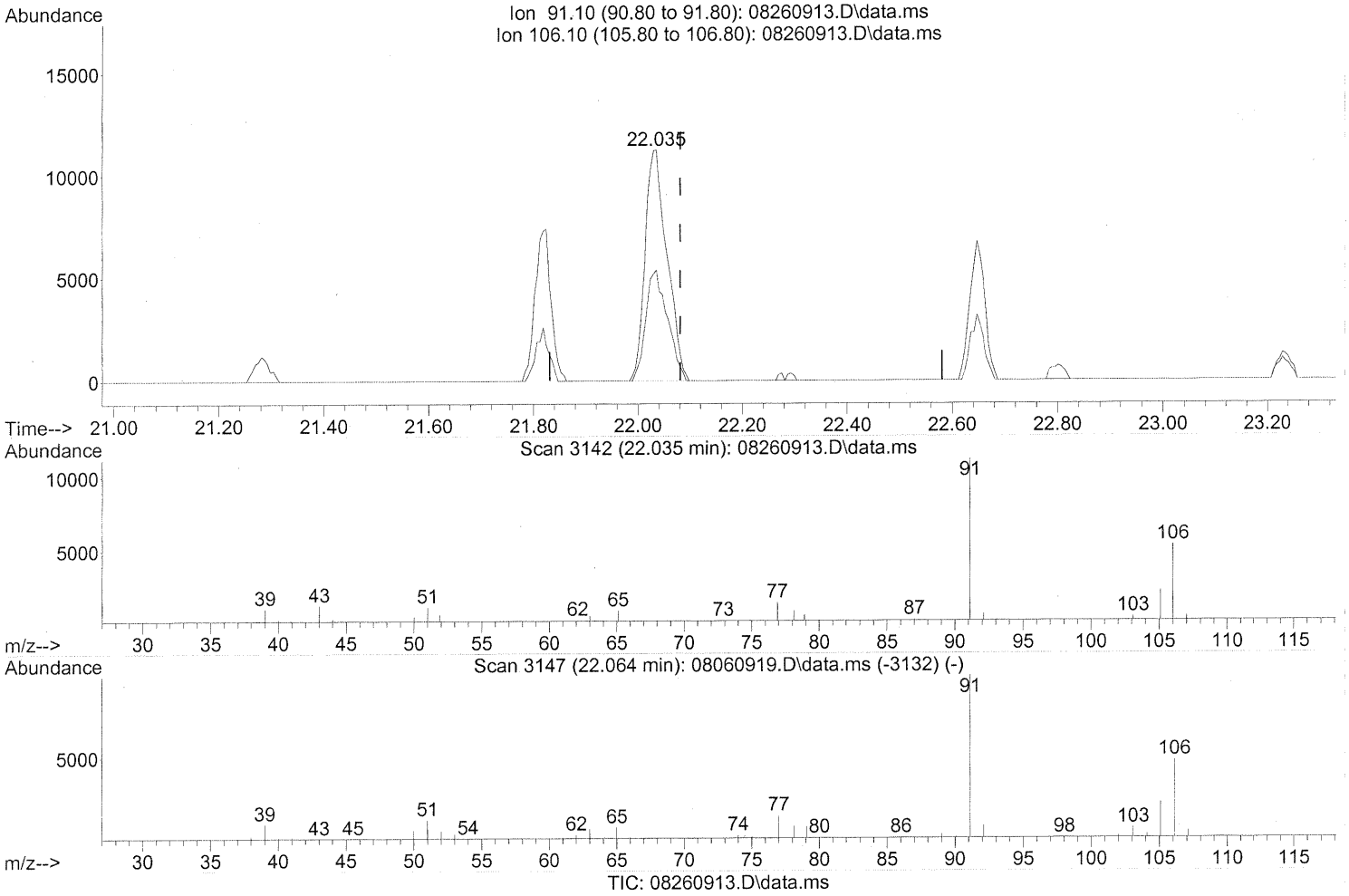


(67) m- & p-Xylenes (T)

22.035min (-0.046) 0.64ng

response 32654

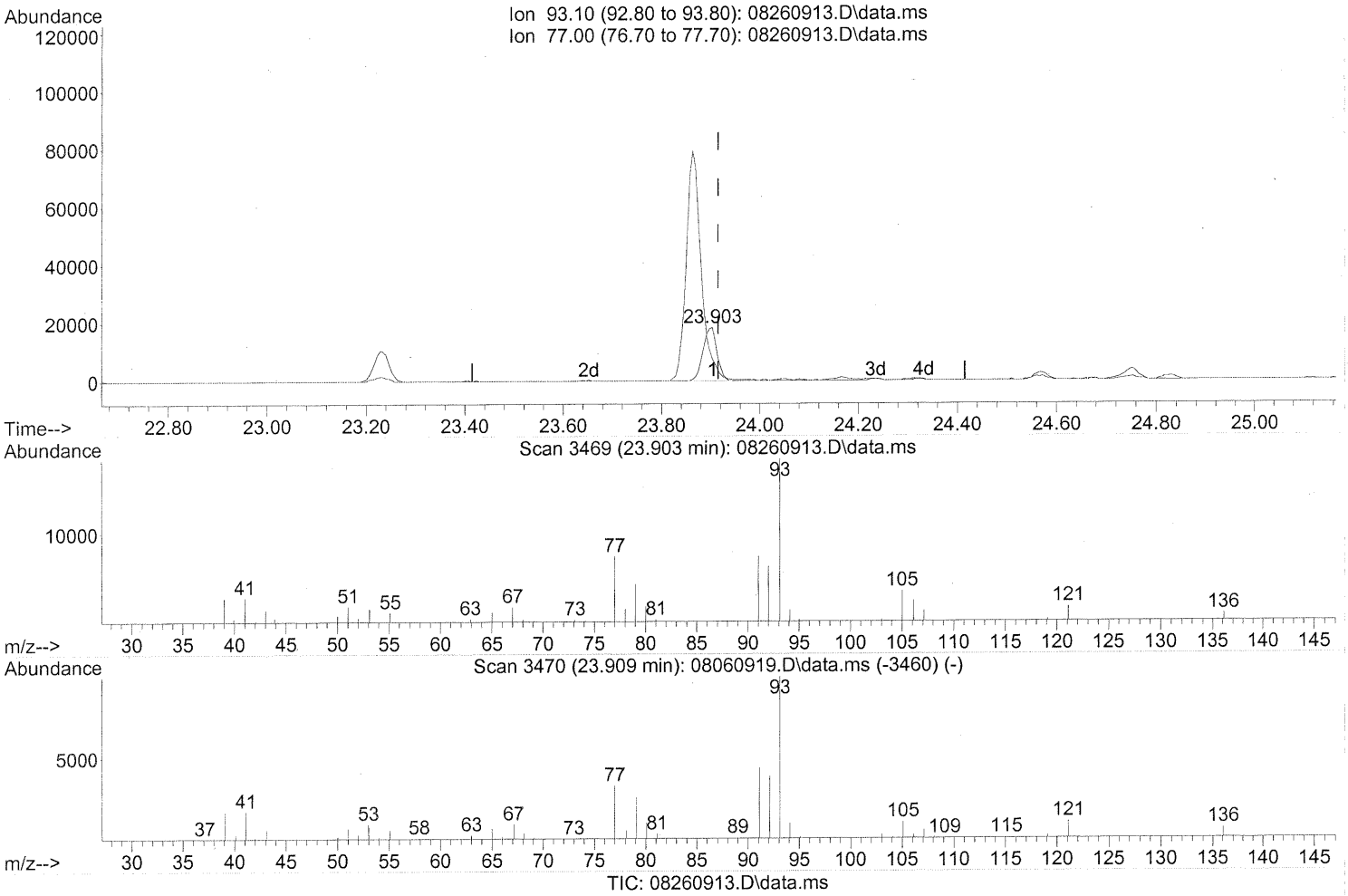
Ion	Exp%	Act%
91.10	100	100
106.10	46.90	47.44
0.00	0.00	0.00
0.00	0.00	0.00

377

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 10:51:07 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(75) alpha-Pinene (T)

23.903min (-0.011) 1.07ng

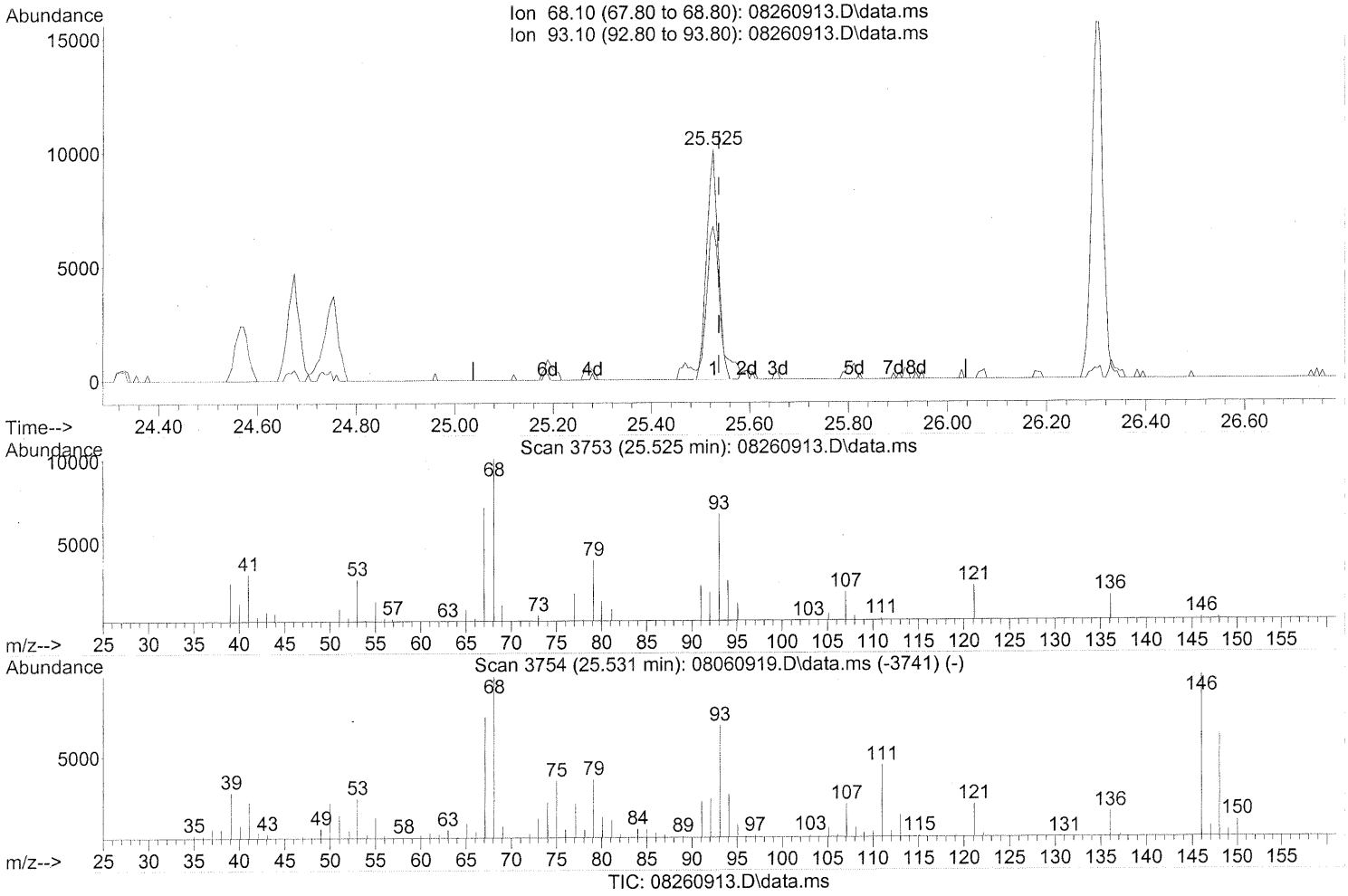
response 35375

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260913.D
Acq On : 26 Aug 2009 6:47 pm
Operator : WA/CC
Sample : P0902876-008 (1000mL)
Misc : Environmental Health 102472
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 01 10:51:07 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260913.D\data.ms

(91) d-Limonene (T)

25.525min (-0.011) 0.75ng

response 16477

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	81.90
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102473**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00958

Date Collected: 8/19/09
Date Received: 8/20/09
Date Analyzed: 8/27/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.77	ND	0.45	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.5**	0.77	**0.50**	0.16	
74-87-3	**Chloromethane**	**1.0**	0.15	**0.49**	0.075	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.77	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.15	ND	0.060	
106-99-0	1,3-Butadiene	ND	0.15	ND	0.070	
74-83-9	**Bromomethane**	**0.15**	0.15	**0.040**	0.040	
75-00-3	Chloroethane	ND	0.15	ND	0.058	
64-17-5	**Ethanol**	**110**	7.7	**56**	4.1	
75-05-8	**Acetonitrile**	**170**	0.77	**100**	0.46	**E**
107-02-8	**Acrolein**	**5.5**	0.77	**2.4**	0.34	
67-64-1	**Acetone**	**130**	7.7	**54**	3.2	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.15	**0.22**	0.027	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**9.0**	0.77	**3.7**	0.31	
107-13-1	Acrylonitrile	ND	0.77	ND	0.35	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.039	
75-09-2	Methylene Chloride	ND	0.77	ND	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.15	ND	0.049	
76-13-1	**Trichlorotrifluoroethane**	**0.58**	0.15	**0.076**	0.020	
75-15-0	**Carbon Disulfide**	**8.0**	0.77	**2.6**	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.039	
75-34-3	1,1-Dichloroethane	ND	0.15	ND	0.038	
1634-04-4	**Methyl tert-Butyl Ether**	**0.49**	0.15	**0.13**	0.043	
108-05-4	Vinyl Acetate	ND	7.7	ND	2.2	
78-93-3	**2-Butanone (MEK)**	**5.3**	0.77	**1.8**	0.26	

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.
E = Estimated; concentration exceeded calibration range.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102473** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-009

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/27/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00958

Initial Pressure (psig): -2.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.039	
141-78-6	**Ethyl Acetate**	**1.1**	0.77	**0.29**	0.21	
110-54-3	**n-Hexane**	**9.4**	0.77	**2.7**	0.22	
67-66-3	**Chloroform**	**0.17**	0.15	**0.036**	0.032	
109-99-9	**Tetrahydrofuran (THF)**	**0.80**	0.77	**0.27**	0.26	
107-06-2	**1,2-Dichloroethane**	**2.7**	0.15	**0.66**	0.038	
71-55-6	1,1,1-Trichloroethane	ND	0.15	ND	0.028	
71-43-2	**Benzene**	**2.0**	0.15	**0.63**	0.048	
56-23-5	**Carbon Tetrachloride**	**0.51**	0.15	**0.081**	0.024	
110-82-7	**Cyclohexane**	**1.6**	0.77	**0.46**	0.22	
78-87-5	1,2-Dichloropropane	ND	0.15	ND	0.033	
75-27-4	Bromodichloromethane	ND	0.15	ND	0.023	
79-01-6	Trichloroethene	ND	0.15	ND	0.029	
123-91-1	1,4-Dioxane	ND	0.77	ND	0.21	
80-62-6	Methyl Methacrylate	ND	0.77	ND	0.19	
142-82-5	**n-Heptane**	**2.7**	0.77	**0.65**	0.19	
10061-01-5	**cis-1,3-Dichloropropene**	**1.9**	0.77	**0.42**	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.77	ND	0.19	
10061-02-6	**trans-1,3-Dichloropropene**	**1.5**	0.77	**0.34**	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.15	ND	0.028	
108-88-3	**Toluene**	**17**	0.77	**4.5**	0.20	
591-78-6	**2-Hexanone**	**1.2**	0.77	**0.28**	0.19	
124-48-1	Dibromochloromethane	ND	0.15	ND	0.018	
106-93-4	1,2-Dibromoethane	ND	0.15	ND	0.020	
123-86-4	**n-Butyl Acetate**	**2.4**	0.77	**0.51**	0.16	

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: 9/4/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102473**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00958

Date Collected: 8/19/09
Date Received: 8/20/09
Date Analyzed: 8/27/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.6**	0.77	**0.34**	0.16	
127-18-4	**Tetrachloroethene**	**0.31**	0.15	**0.046**	0.023	
108-90-7	Chlorobenzene	ND	0.15	ND	0.033	
100-41-4	**Ethylbenzene**	**3.5**	0.77	**0.80**	0.18	
179601-23-1	**m,p-Xylenes**	**6.5**	0.77	**1.5**	0.18	
75-25-2	Bromoform	ND	0.77	ND	0.075	
100-42-5	**Styrene**	**4.7**	0.77	**1.1**	0.18	
95-47-6	**o-Xylene**	**3.3**	0.77	**0.75**	0.18	
111-84-2	**n-Nonane**	**1.0**	0.77	**0.20**	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.15	ND	0.022	
98-82-8	Cumene	ND	0.77	ND	0.16	
80-56-8	**alpha-Pinene**	**77**	0.77	**14**	0.14	
103-65-1	**n-Propylbenzene**	**0.96**	0.77	**0.20**	0.16	
622-96-8	**4-Ethyltoluene**	**1.3**	0.77	**0.26**	0.16	
108-67-8	**1,3,5-Trimethylbenzene**	**1.4**	0.77	**0.29**	0.16	
95-63-6	**1,2,4-Trimethylbenzene**	**4.7**	0.77	**0.97**	0.16	
100-44-7	Benzyl Chloride	ND	0.15	ND	0.030	
541-73-1	1,3-Dichlorobenzene	ND	0.15	ND	0.026	
106-46-7	1,4-Dichlorobenzene	ND	0.15	ND	0.026	
95-50-1	**1,2-Dichlorobenzene**	**0.26**	0.15	**0.043**	0.026	
5989-27-5	**d-Limonene**	**15**	0.77	**2.6**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.77	ND	0.080	
120-82-1	1,2,4-Trichlorobenzene	ND	0.77	ND	0.10	
91-20-3	**Naphthalene**	**2.1**	0.77	**0.40**	0.15	
87-68-3	Hexachlorobutadiene	ND	0.77	ND	0.072	

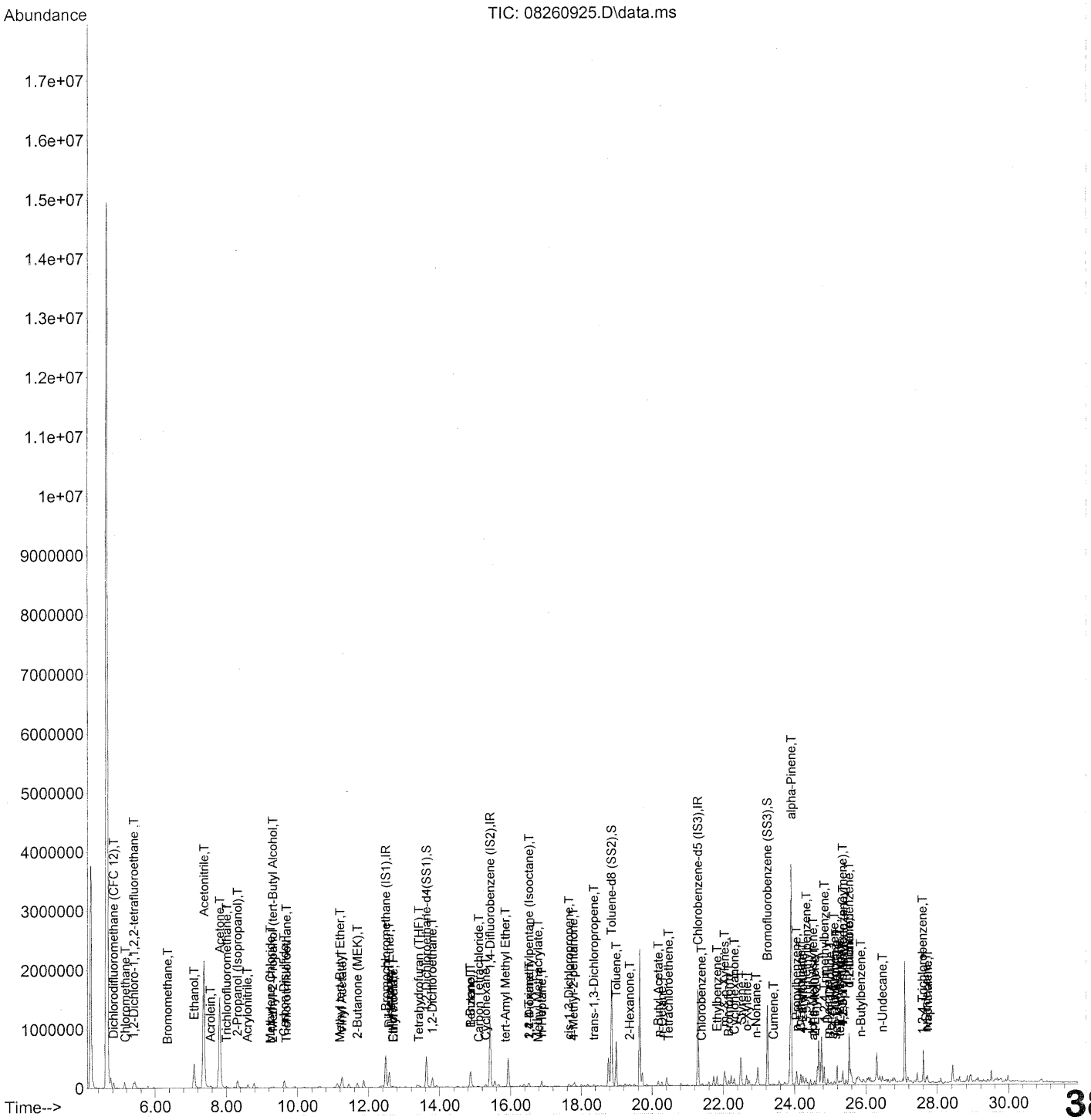
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39 am
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 17:06:46 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



383

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39 am
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 17:06:46 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS) LM 9/1/09
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	282561	25.000 ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1401481	25.000 ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	684112	25.000 ng	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 1,2-Dichloroethane-d4(...	13.63	65	546854	22.267 ng	-0.03
Spiked Amount 25.000				Recovery = 89.08%	✓
57) Toluene-d8 (SS2)	18.85	98	1539481	25.754 ng	-0.02
Spiked Amount 25.000				Recovery = 103.00%	✓
73) Bromofluorobenzene (SS3)	23.23	174	440191	27.924 ng	-0.01
Spiked Amount 25.000				Recovery = 111.68%	✓

Target Compounds	R.T.	QIon	Response	Conc Units		Qvalue
2) Propene	0.00	42	0	N.D. d		
3) Dichlorodifluoromethan...	4.82	85	50686	1.599 ng		99
4) Chloromethane	5.16	50	13873	0.652 ng		91
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	742	0.058 ng	#	44
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.88	54	87	N.D.		
8) Bromomethane	6.35	94	1244	0.100 ng		98
9) Chloroethane	6.70	64	88	N.D.	LM 9/2/09	
10) Ethanol	7.10	45	839943	68.340 ng	E	100
11) Acetonitrile	7.37	41	4088994	113.600 ng	See Adj	99
12) Acrolein	7.55	56	33695	3.602 ng		95
13) Acetone	7.81	58	966519	83.344 ng		98
14) Trichlorofluoromethane	8.01	101	22721	0.793 ng		98
15) 2-Propanol (Isopropanol)	8.31	45	265586	5.828 ng		97
16) Acrylonitrile	8.59	53	2655	0.127 ng	#	34
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.30	59	11602	0.287 ng	#	1
19) Methylene Chloride	9.24	84	1781	0.114 ng		87
20) 3-Chloro-1-propene (Al...	9.40	41	88	N.D.		
21) Trichlorotrifluoroethane	9.68	151	3921	0.376 ng		98
22) Carbon Disulfide	9.62	76	284227	5.176 ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.19	73	13836	0.315 ng	FP	90
26) Vinyl Acetate	11.24	86	16830	7.131 ng	#	78
27) 2-Butanone (MEK)	11.68	72	36209	3.458 ng	9/8/09	84
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	12.58	87	1551	0.111 ng	#	1
30) Ethyl Acetate	12.70	61	3737	0.685 ng		87
31) n-Hexane	12.58	57	170660	6.116 ng		9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39 am
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 17:06:46 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	2784	0.113	ng		92
34) Tetrahydrofuran (THF)	13.41	72	5789	0.519	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	13.79	62	38883	1.732	ng		99
38) 1,1,1-Trichloroethane	14.17	97	119	N.D.			
39) Isopropyl Acetate	14.85	61	111	N.D.			
40) 1-Butanol	14.87	56	197897	10.880	ng	#	78
41) Benzene	14.87	78	80894	1.313	ng		99
42) Carbon Tetrachloride	15.10	117	6461	0.329	ng		96
43) Cyclohexane	15.29	84	23114	1.024	ng		98
44) tert-Amyl Methyl Ether	15.85	73	3282	0.071	ng	#	53
45) 1,2-Dichloropropane	15.93	63	126	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.	d		
47) Trichloroethene	16.45	130	193	N.D.			
48) 1,4-Dioxane	16.53	88	1317	0.112	ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	59155	0.815	ng		83
50) Methyl Methacrylate	16.77	100	411	0.072	ng	#	1
51) n-Heptane	16.88	71	28812	1.742	ng		98
52) cis-1,3-Dichloropropene	17.65	75	31661	1.234	ng		99
53) 4-Methyl-2-pentanone	17.77	58	6798	0.459	ng		99
54) trans-1,3-Dichloropropene	18.36	75	24394	1.000	ng		96
55) 1,1,2-Trichloroethane	18.57	97	554	N.D.			
58) Toluene	18.98	91	648322	11.036	ng		99
59) 2-Hexanone	19.36	43	29430	0.753	ng		100
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.17	43	71743	1.558	ng		93
63) n-Octane	20.27	57	14431	1.016	ng		99
64) Tetrachloroethene	20.46	166	2757	0.203	ng		89
65) Chlorobenzene	21.38	112	1827	0.050	ng	#	43
66) Ethylbenzene	21.82	91	150899	2.247	ng		99
67) m- & p-Xylenes	22.03	91	230239	4.238	ng		98
68) Bromoform	22.14	173	668	0.058	ng	#	52
69) Styrene	22.51	104	118897	3.028	ng		98
70) o-Xylene	22.65	91	115181	2.115	ng		98
71) n-Nonane	22.91	43	24175	0.668	ng		90
72) 1,1,2,2-Tetrachloroethane	22.63	83	487	N.D.			
74) Cumene	23.41	105	15231	0.221	ng		97
75) alpha-Pinene	23.90	93	1756739	49.812	ng		76
76) n-Propylbenzene	24.05	91	53878	0.623	ng	#	76
77) 3-Ethyltoluene	24.17	105	121136	1.842	ng		99
78) 4-Ethyltoluene	24.22	105	51976	0.816	ng		98
79) 1,3,5-Trimethylbenzene	24.32	105	50518	0.940	ng		98

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39 am
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 17:06:46 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

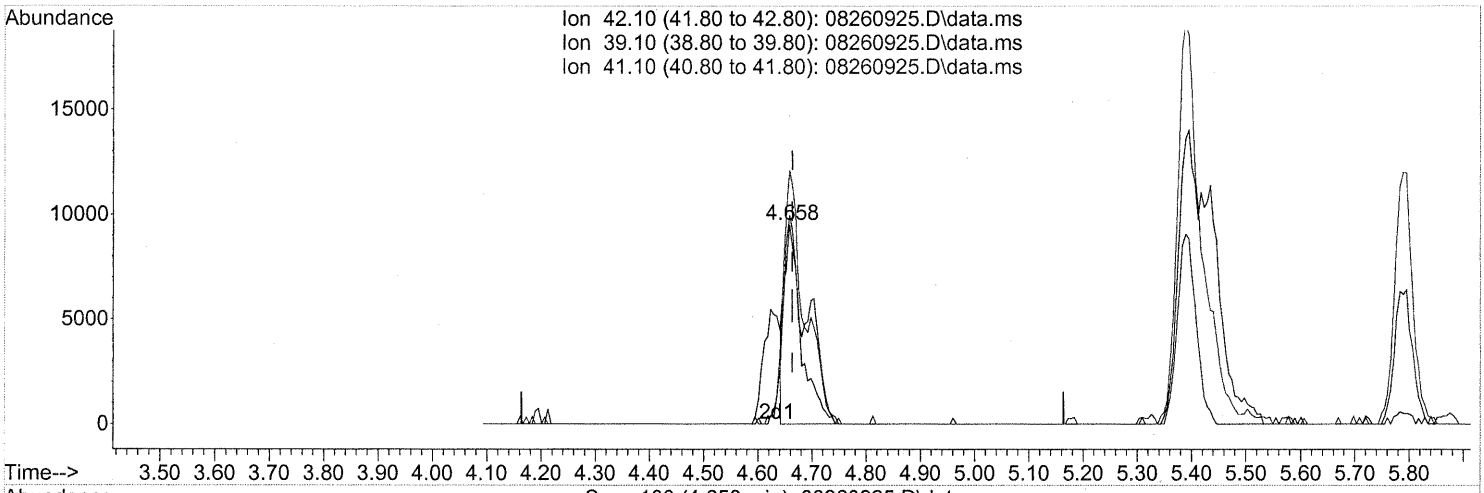
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	1607	0.056 ng		88
81) 2-Ethyltoluene	24.56	105	46752	0.705 ng		98
82) 1,2,4-Trimethylbenzene	24.83	105	168774	3.080 ng		88
83) n-Decane	24.93	57	40708	1.143 ng		89
84) Benzyl Chloride	24.99	91	3515	0.068 ng		86
85) 1,3-Dichlorobenzene	25.02	146	811	N.D.		
86) 1,4-Dichlorobenzene	25.11	146	2482	0.084 ng		99
87) sec-Butylbenzene	25.16	105	5623	0.076 ng	#	75
88) 4-Isopropyltoluene (p-...	25.35	119	81227	1.230 ng	NOT NEEDED	98
89) 1,2,3-Trimethylbenzene	25.35	105	44851	0.803 ng		90
90) 1,2-Dichlorobenzene	25.53	146	4360	0.166 ng		92
91) d-Limonene	25.53	68	222559	9.551 ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	48676	1.284 ng		94
94) 1,2,4-Trichlorobenzene	27.59	180	1927	0.107 ng	#	92
95) Naphthalene	27.73	128	102430	1.376 ng		99
96) n-Dodecane	27.69	57	34816	0.791 ng		98
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	65641	2.697 ng		95
99) tert-Butylbenzene	25.27	119	5747	0.108 ng		93
100) n-Butylbenzene	25.85	91	23751	0.389 ng	#	50

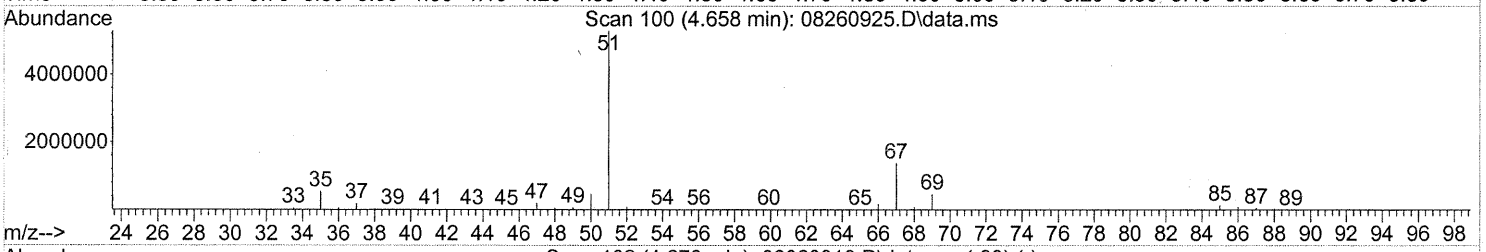
(#) = qualifier out of range (m) = manual integration (+) = signals summed

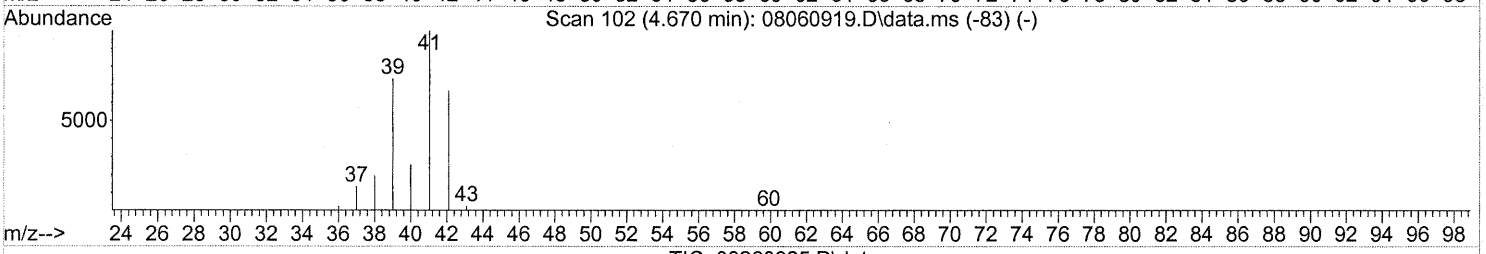
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 01 14:49:14 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(2) Propene (T)

4.658min (-0.006) 1.08ng

response 20944

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	144.85#
41.10	150.20	159.63
0.00	0.00	0.00

FP
9/11/09

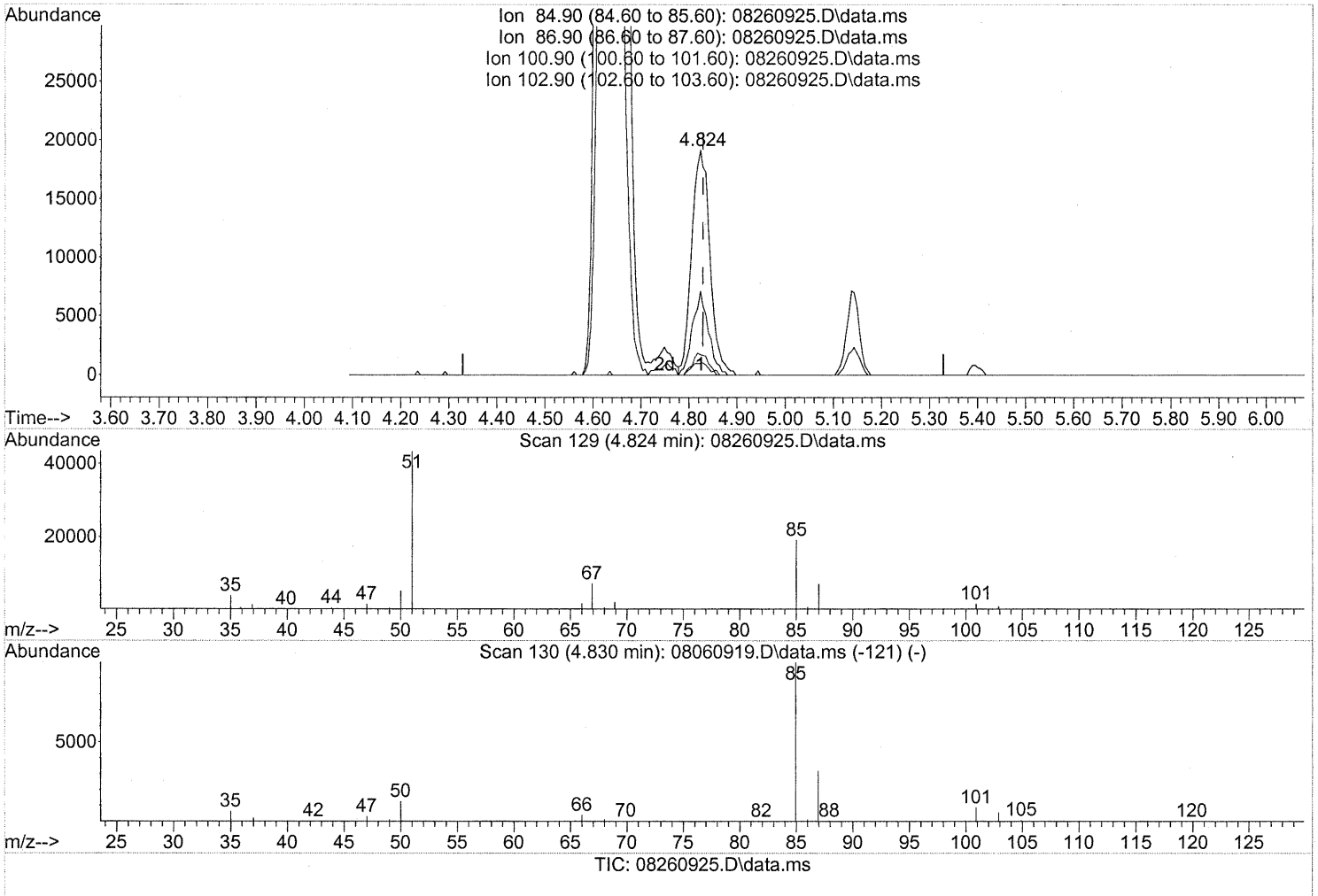
9/2/09

387

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.824min (-0.006) 1.60ng

response 50686

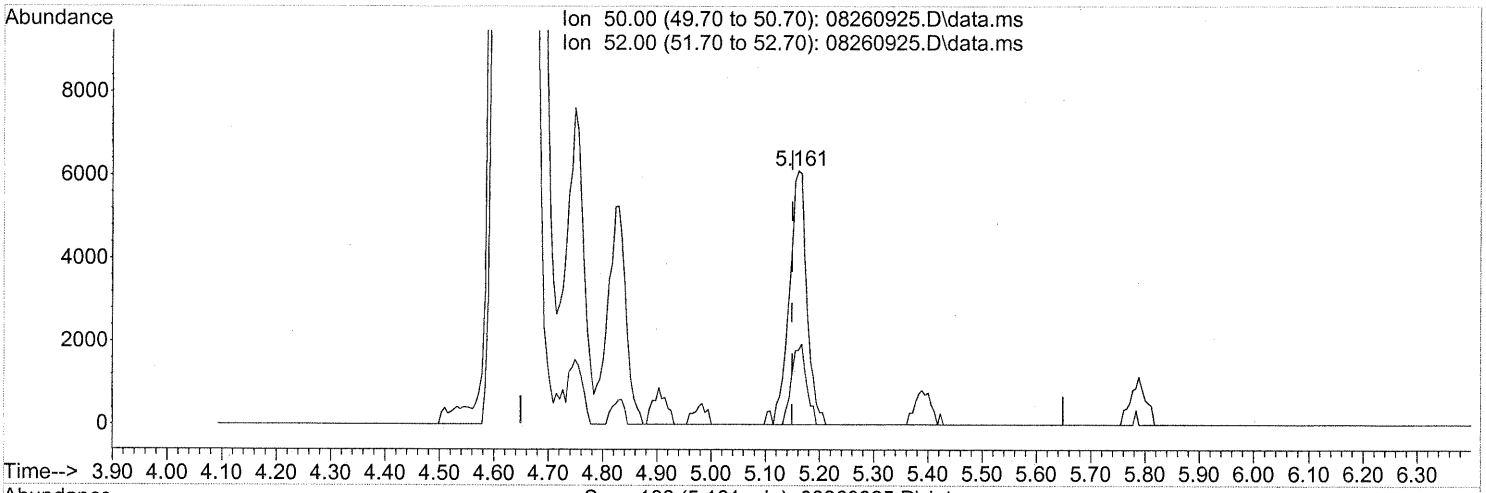
Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.45
100.90	8.80	8.48
102.90	5.20	4.99

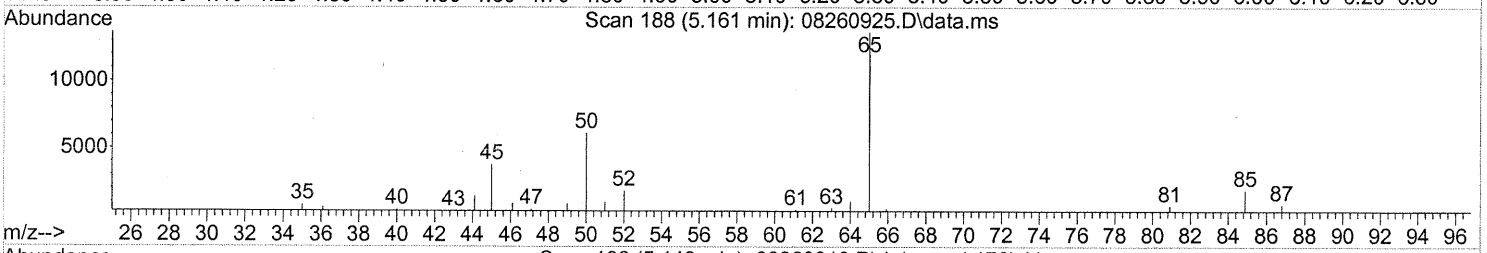
388

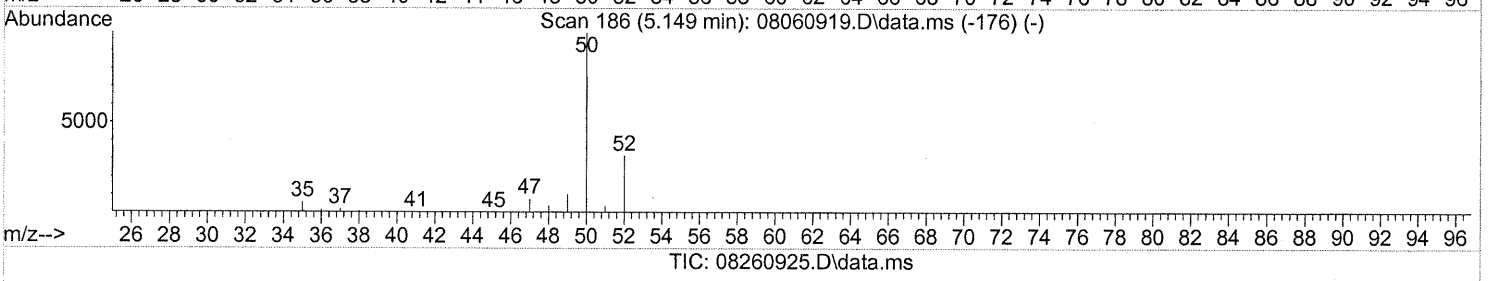
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(4) Chloromethane (T)

5.161min (+0.011) 0.65ng

response 13873

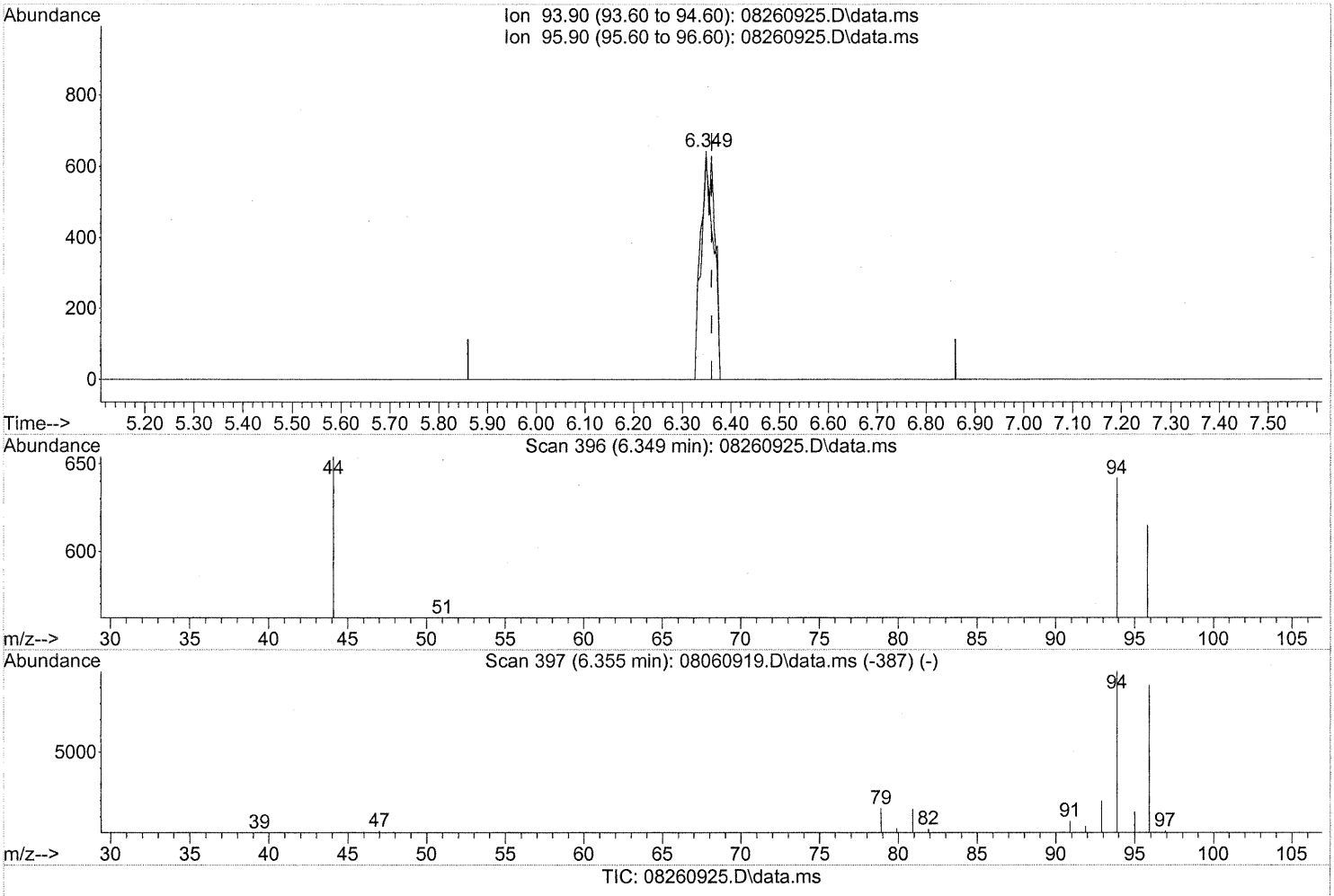
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	26.59
0.00	0.00	0.00
0.00	0.00	0.00

389

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(8) Bromomethane (T)

6.349min (-0.011) 0.10ng

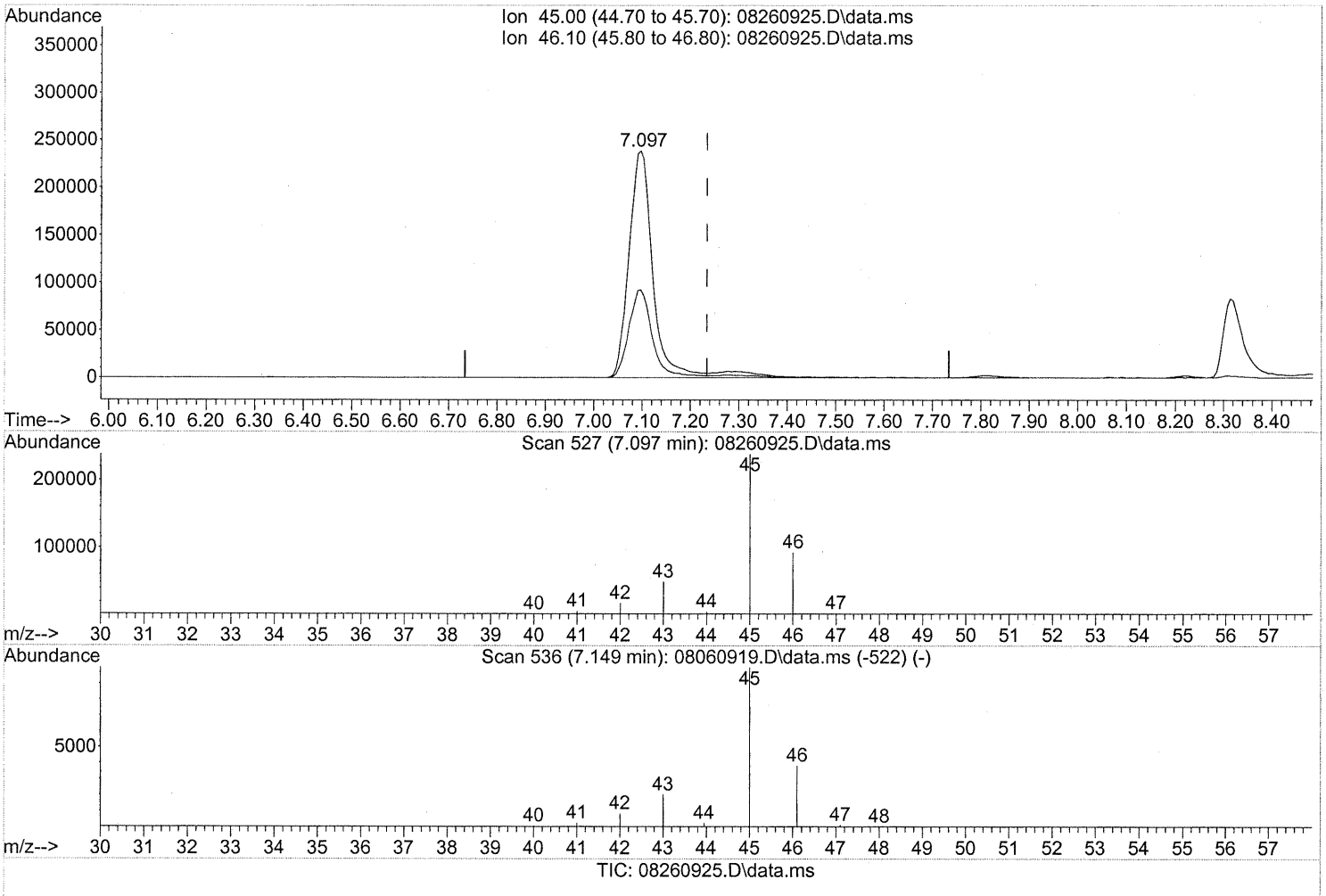
response 1244

Ion	Exp%	Act%
93.90	100	100
95.90	92.80	91.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.097min (-0.137) 68.34ng

response 839943

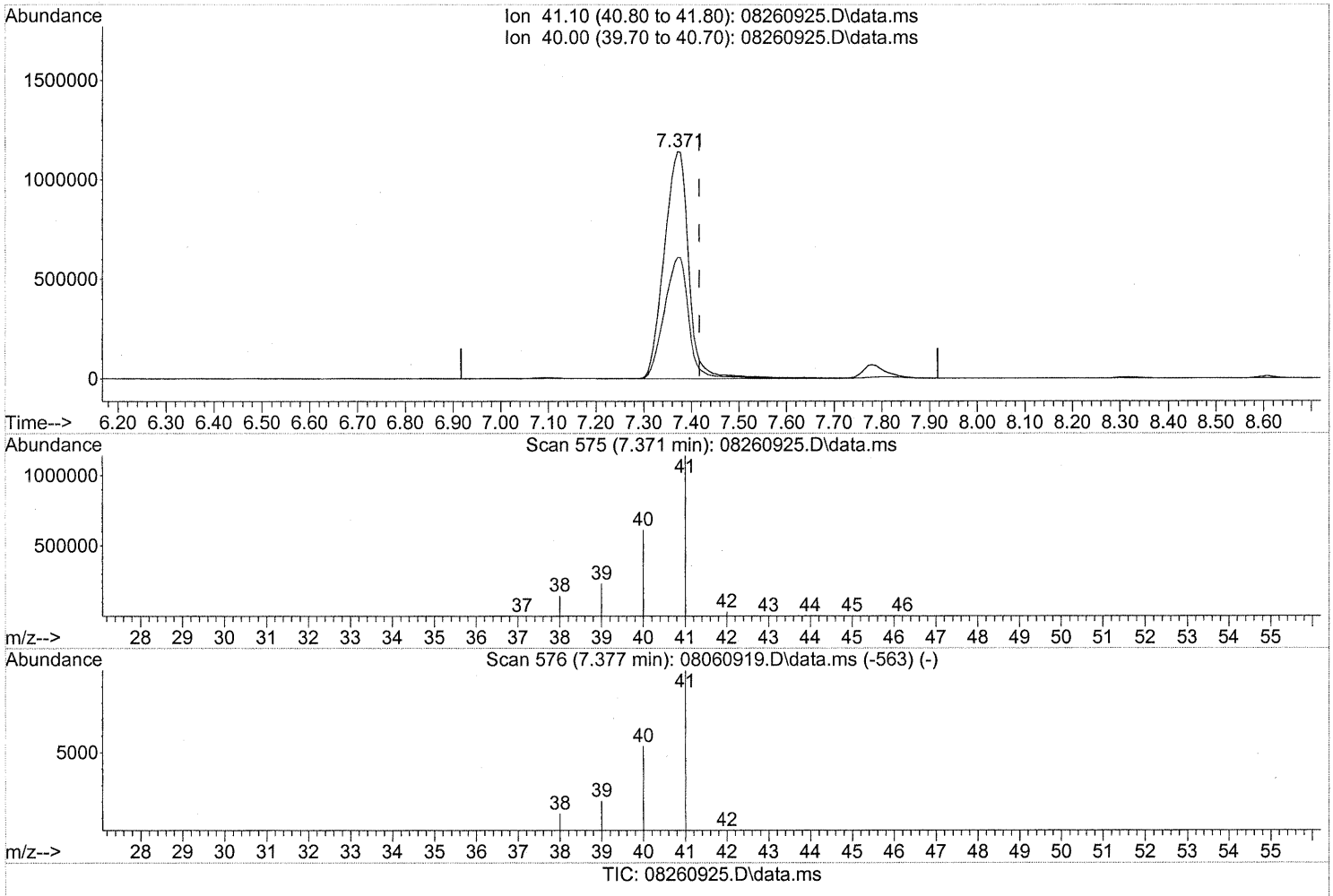
Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.49
0.00	0.00	0.00
0.00	0.00	0.00

391

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(11) Acetonitrile (T)

7.371min (-0.046) 113.60ng

response 4088994

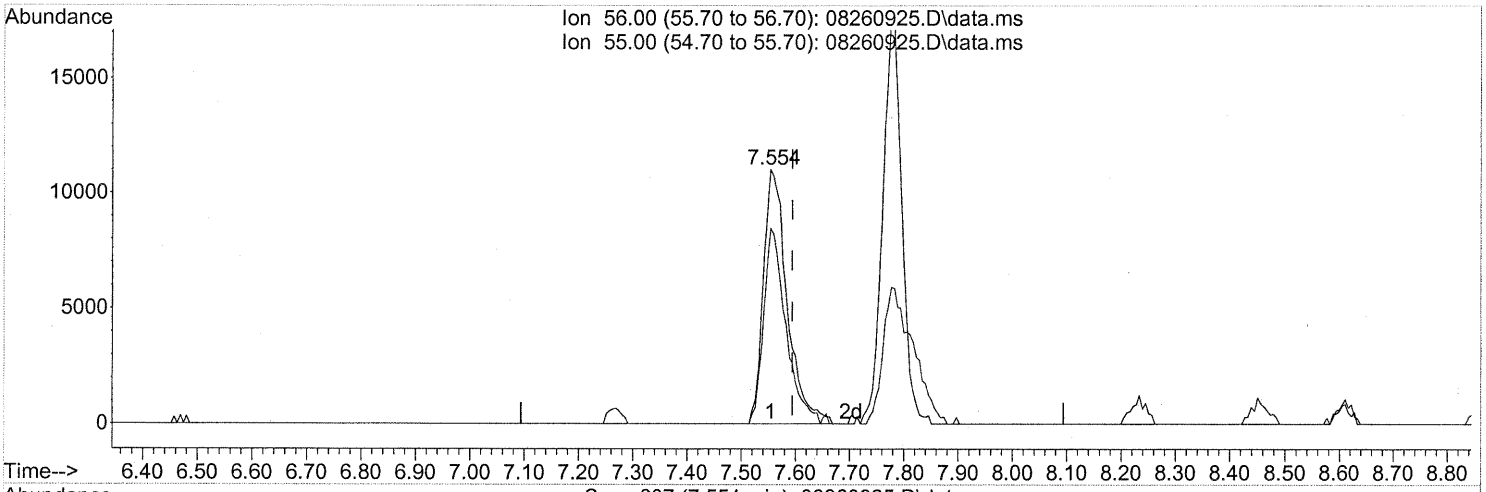
Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.09
0.00	0.00	0.00
0.00	0.00	0.00

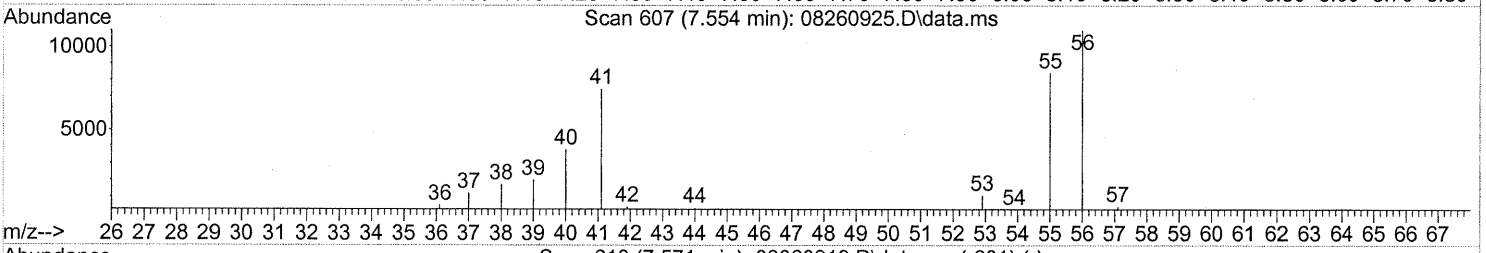
392

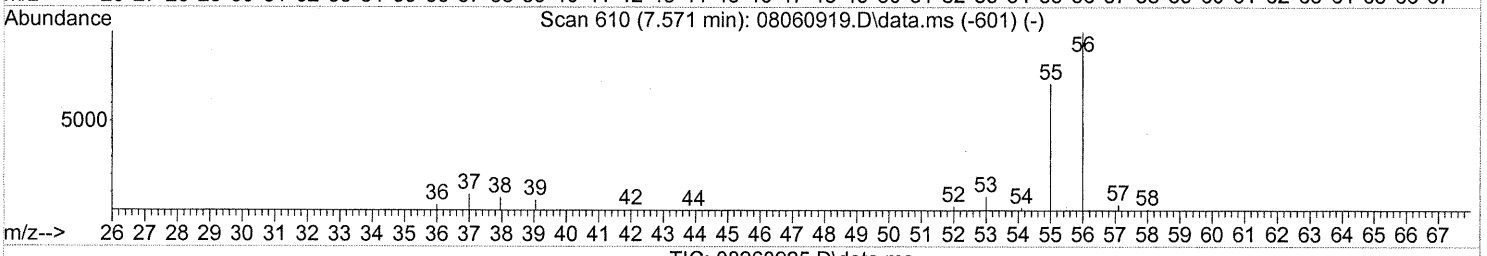
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(12) Acrolein (T)

7.554min (-0.040) 3.60ng

response 33695

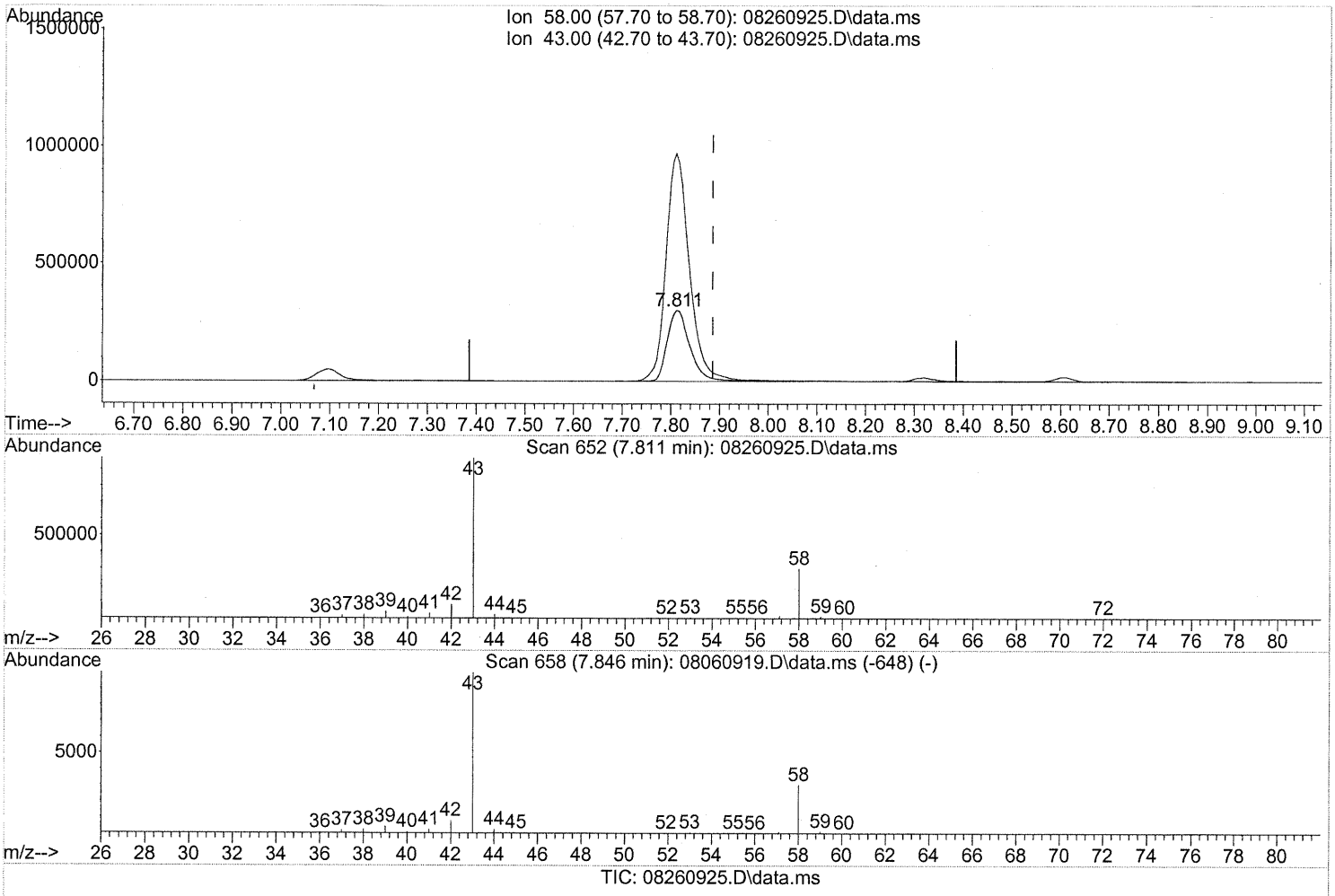
Ion	Exp%	Act%
56.00	100	100
55.00	68.10	72.02
0.00	0.00	0.00
0.00	0.00	0.00

393

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(13) Acetone (T)

7.811min (-0.075) 83.34ng

response 966519

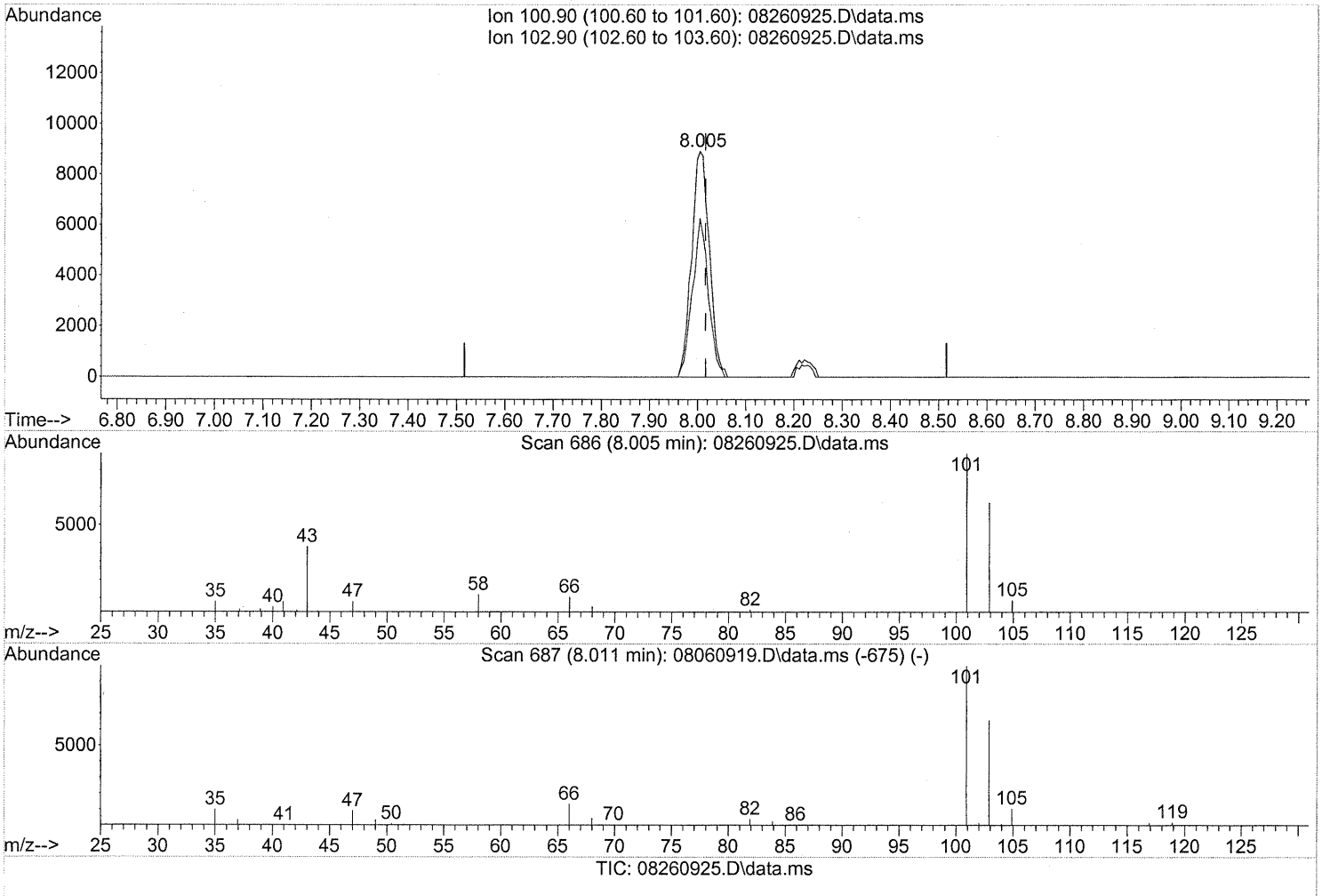
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	335.26
0.00	0.00	0.00
0.00	0.00	0.00

394

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(14) Trichlorofluoromethane (T)

8.005min (-0.011) 0.79ng

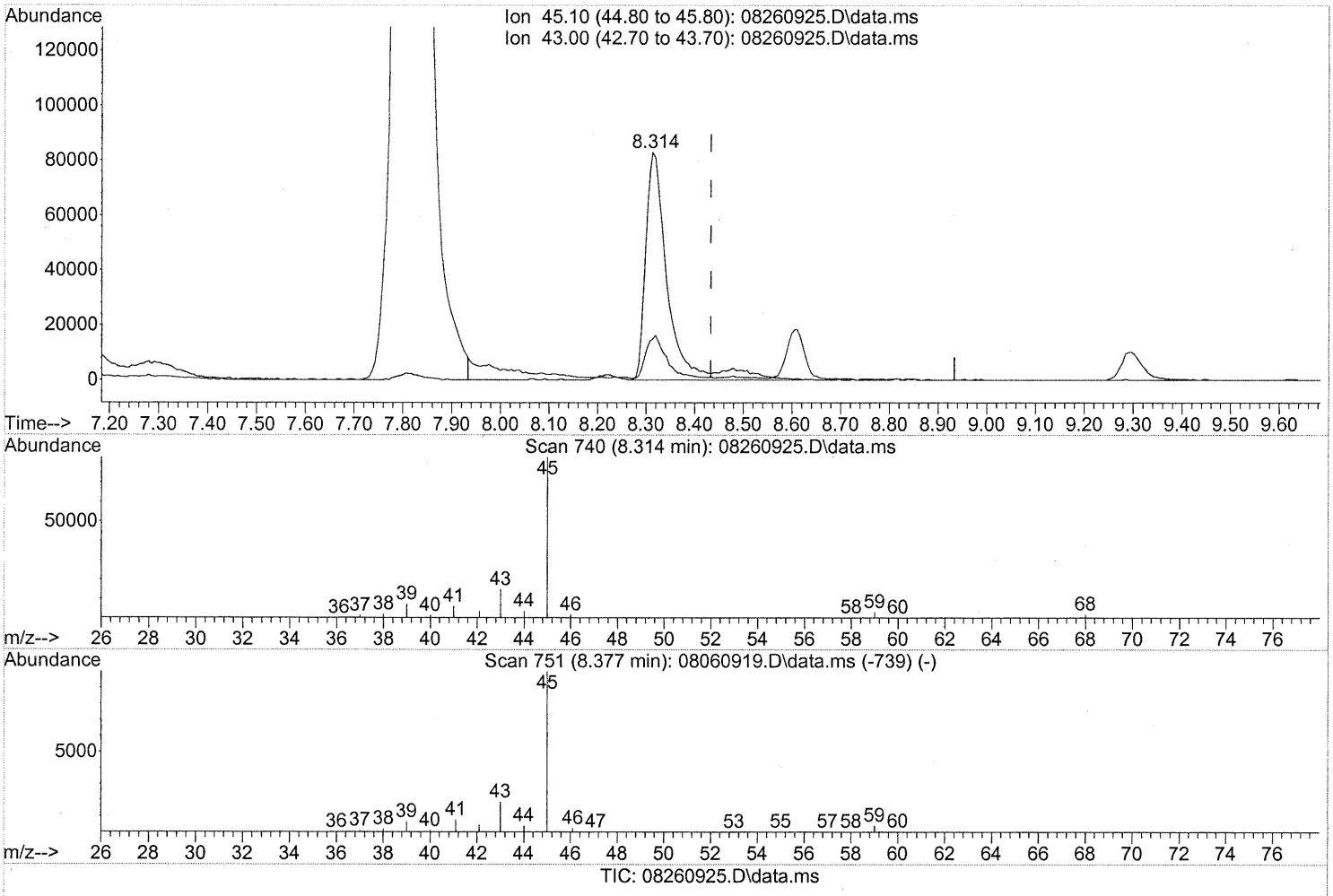
response 22721

Ion	Exp%	Act%
100.90	100	100
102.90	64.40	63.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

8.314min (-0.120) 5.83ng

response 265586

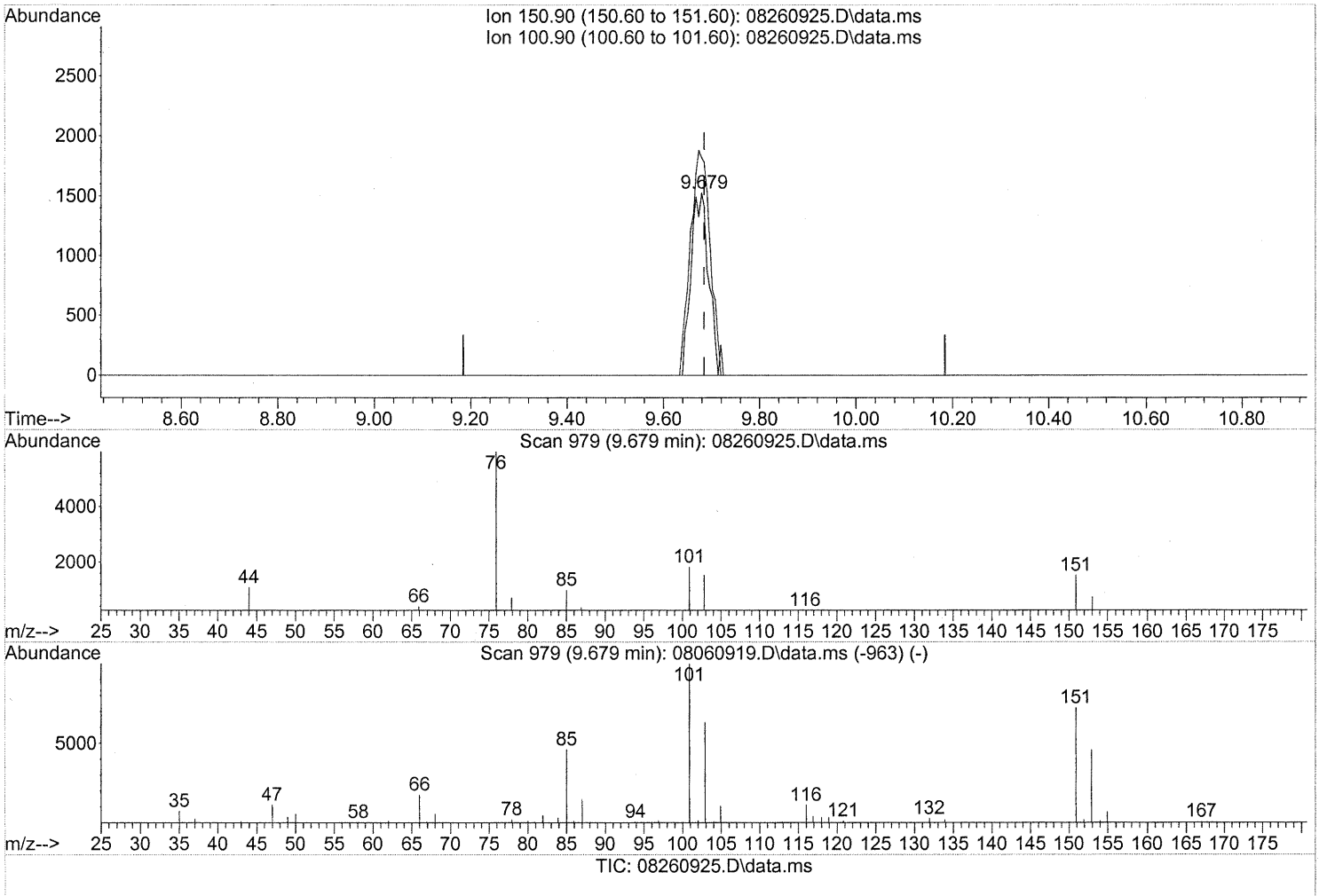
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	17.48
0.00	0.00	0.00
0.00	0.00	0.00

396

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.38ng

response 3921

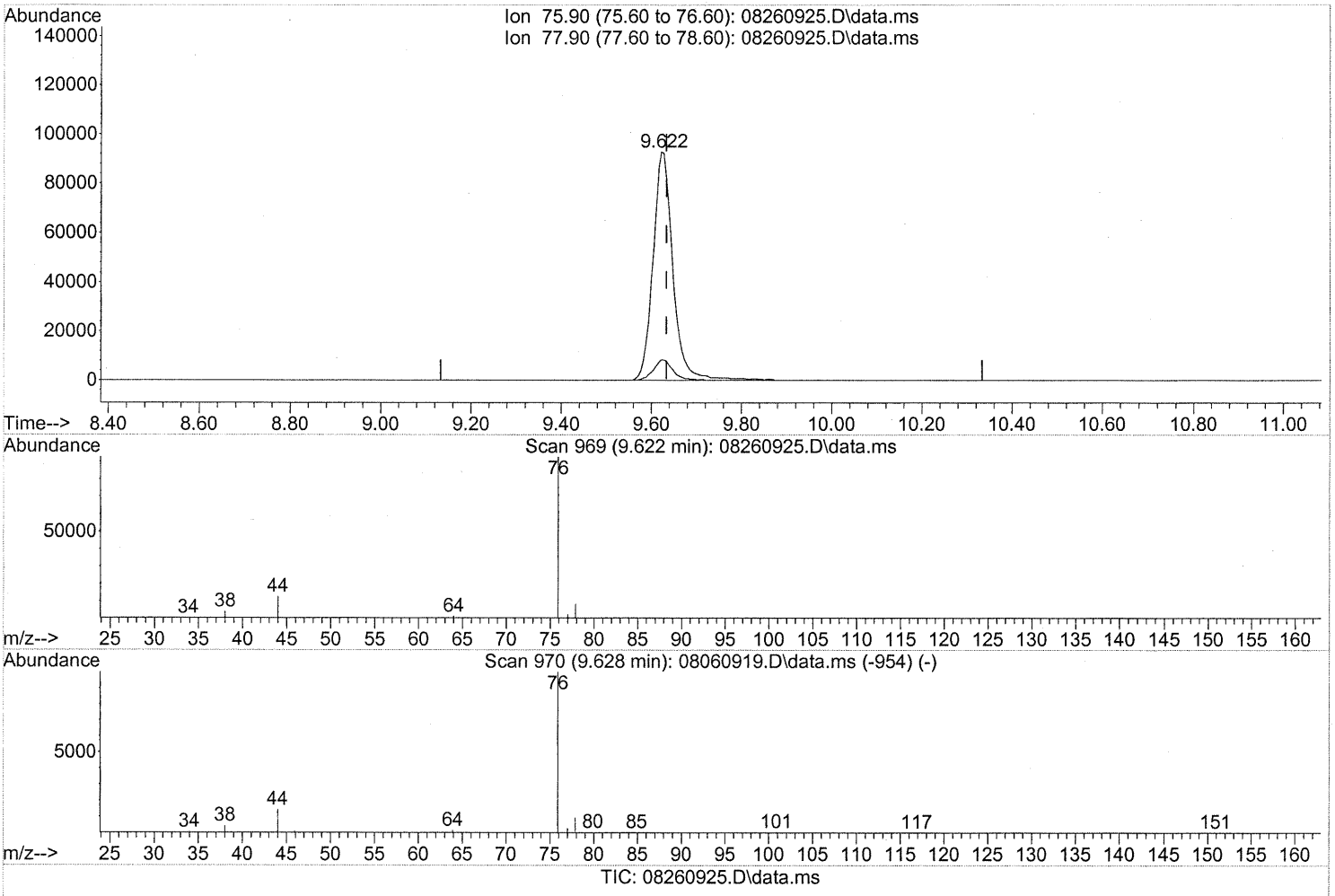
Ion	Exp%	Act%
150.90	100	100
100.90	138.40	135.76
0.00	0.00	0.00
0.00	0.00	0.00

397

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(22) Carbon Disulfide (T)

9.622min (-0.011) 5.18ng

response 284227

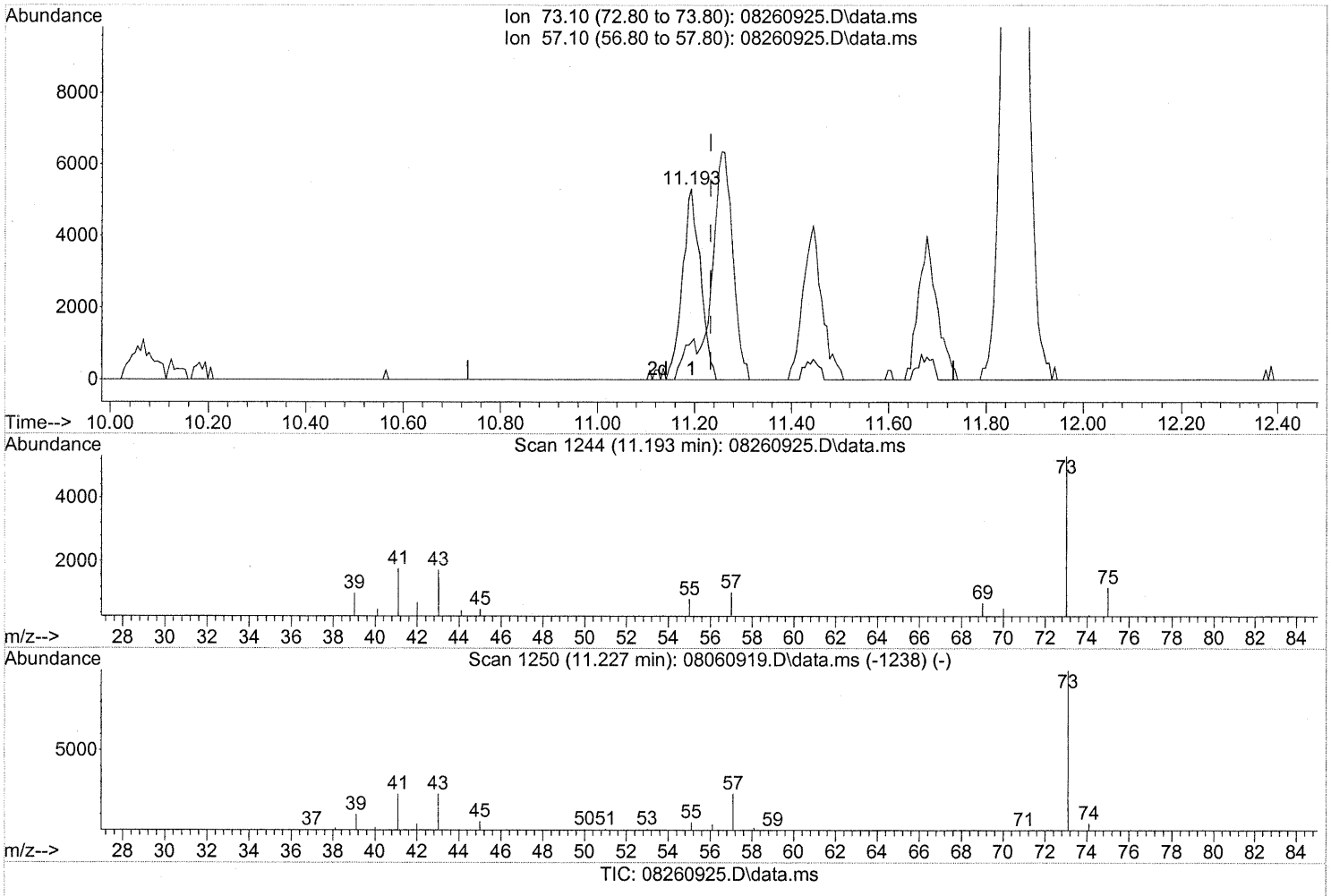
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.50
0.00	0.00	0.00
0.00	0.00	0.00

398

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(25) Methyl tert-Butyl Ether (T)

11.193min (-0.040) 0.32ng

response 13836

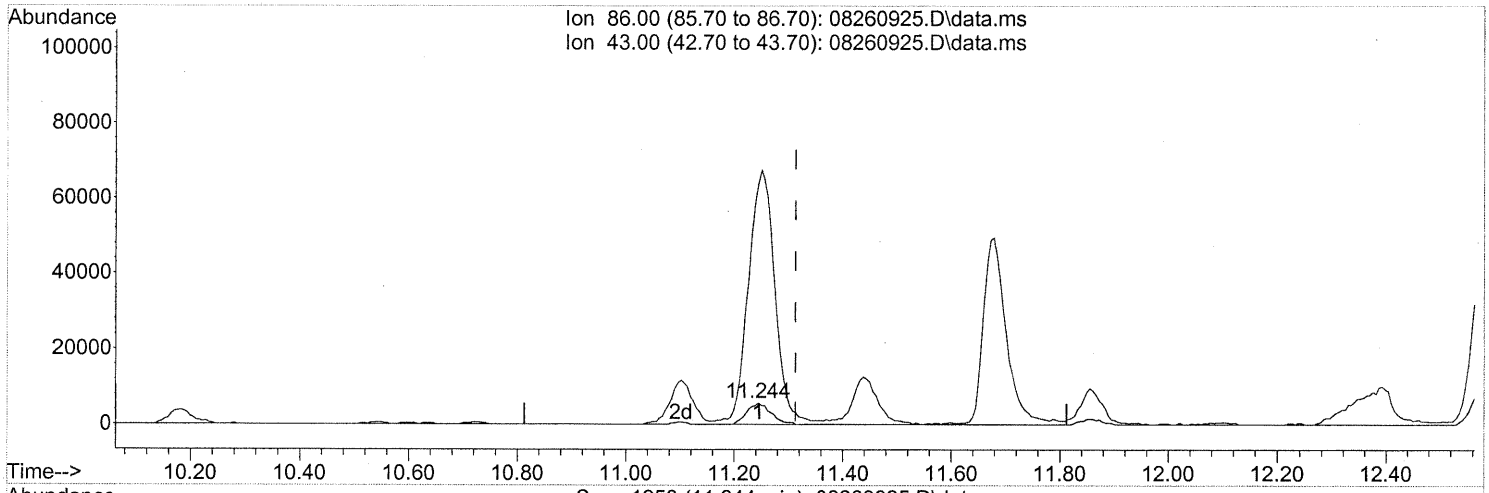
Ion	Exp%	Act%
73.10	100	100
57.10	22.50	17.55
0.00	0.00	0.00
0.00	0.00	0.00

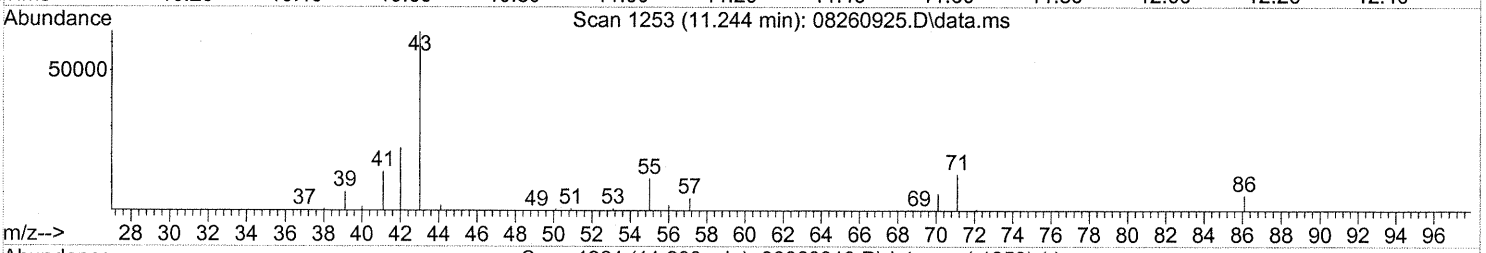
399

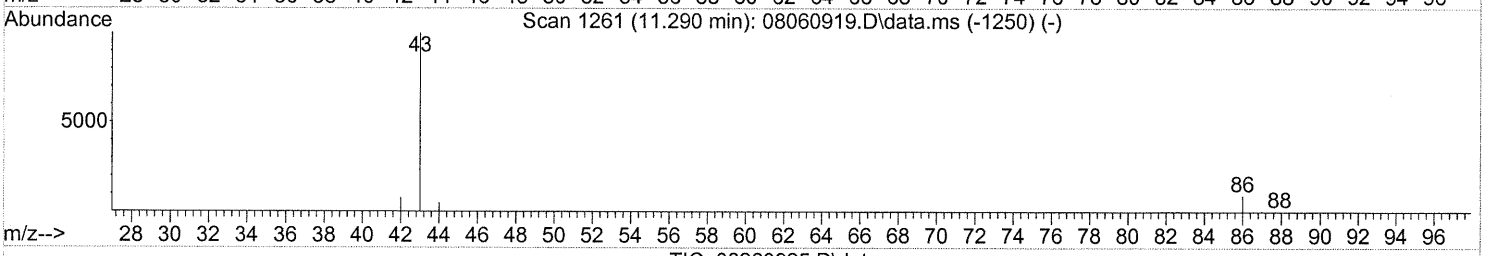
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(26) Vinyl Acetate (T)

11.244min (-0.069) 7.13ng

response 16830

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1323.59#
0.00	0.00	0.00
0.00	0.00	0.00

TP

VM 9/2/09

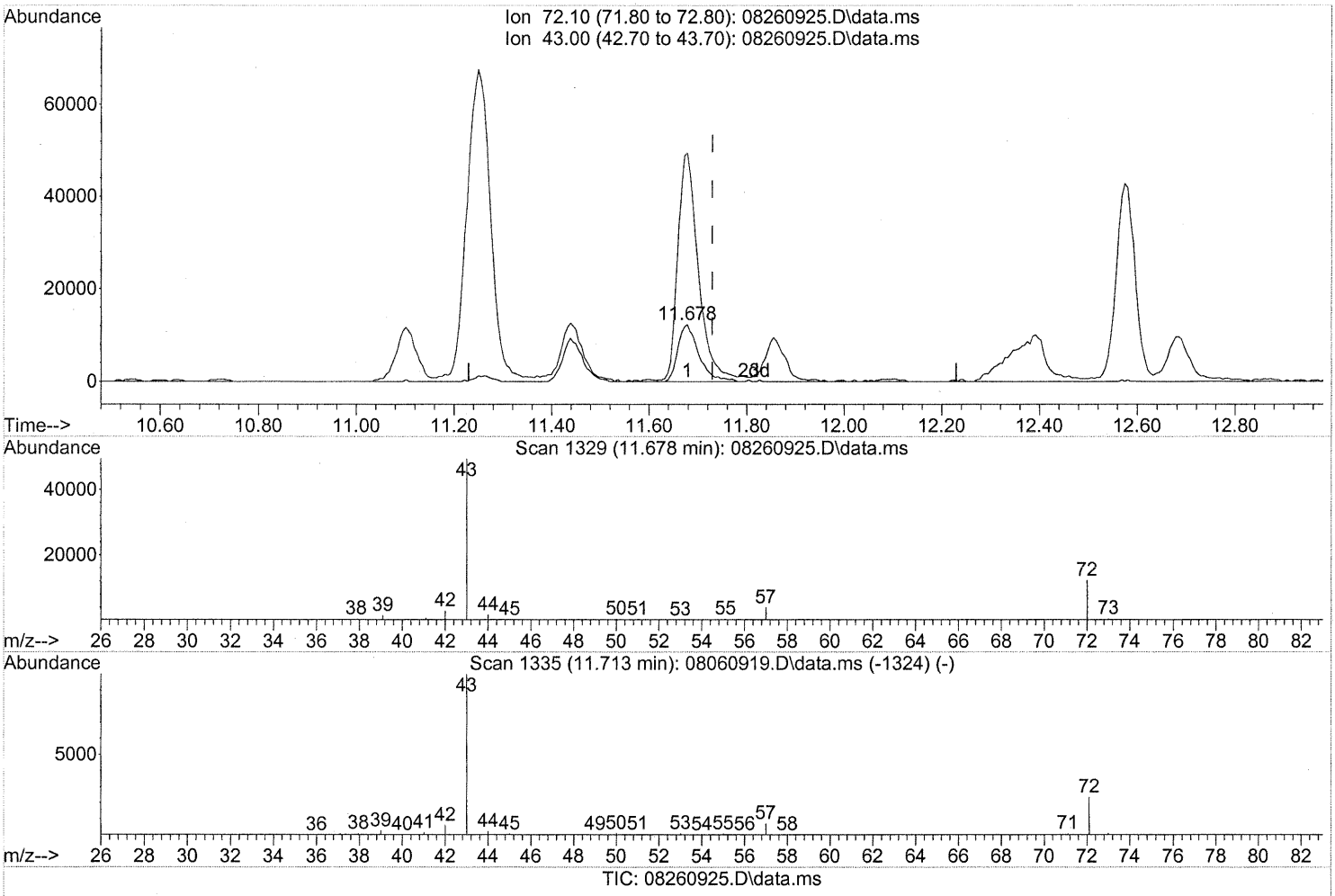
9/2/09

400

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

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

11.678min (-0.051) 3.46ng

response 36209

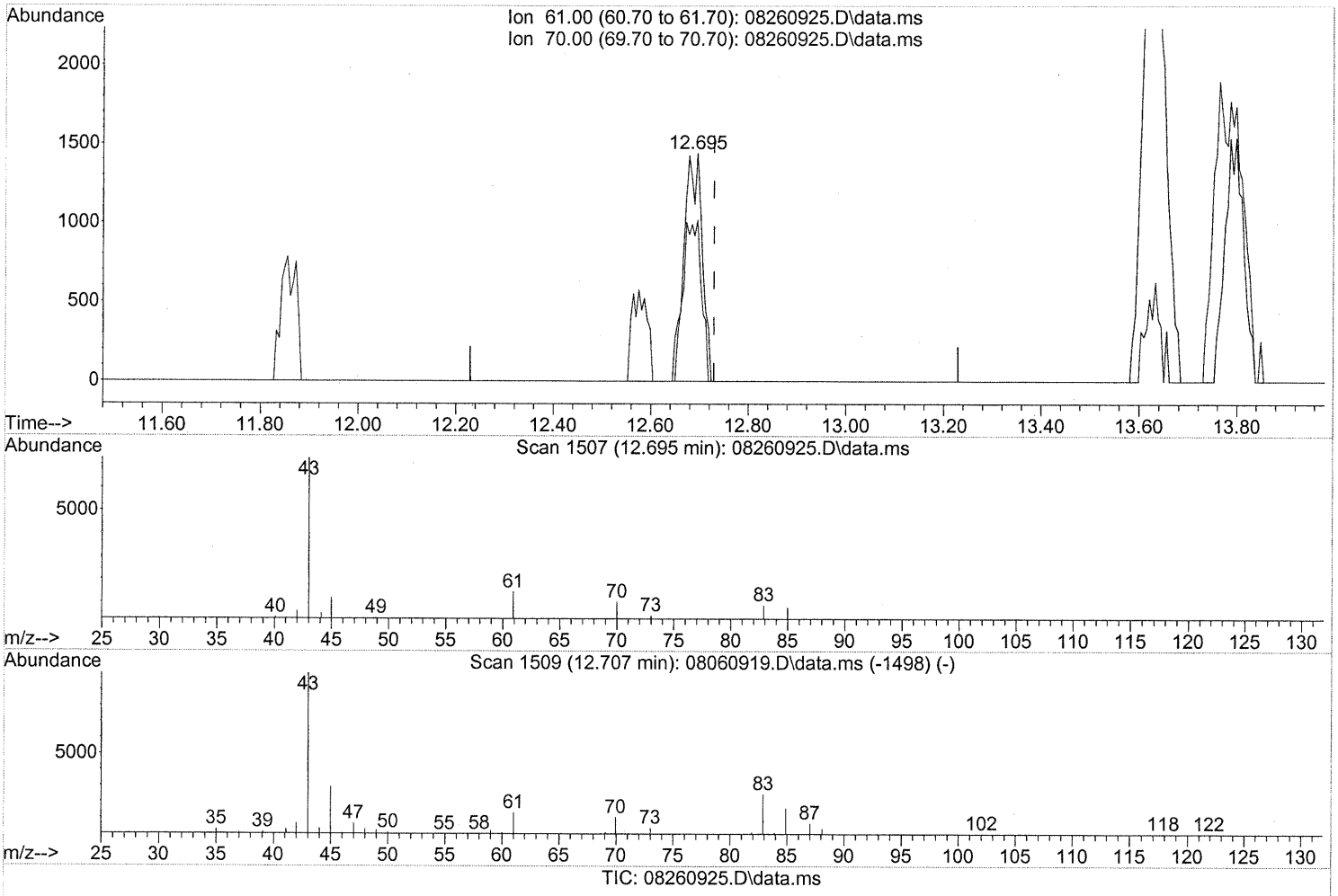
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	397.14#
0.00	0.00	0.00
0.00	0.00	0.00

401

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(30) Ethyl Acetate (T)

12.695min (-0.034) 0.69ng

response 3737

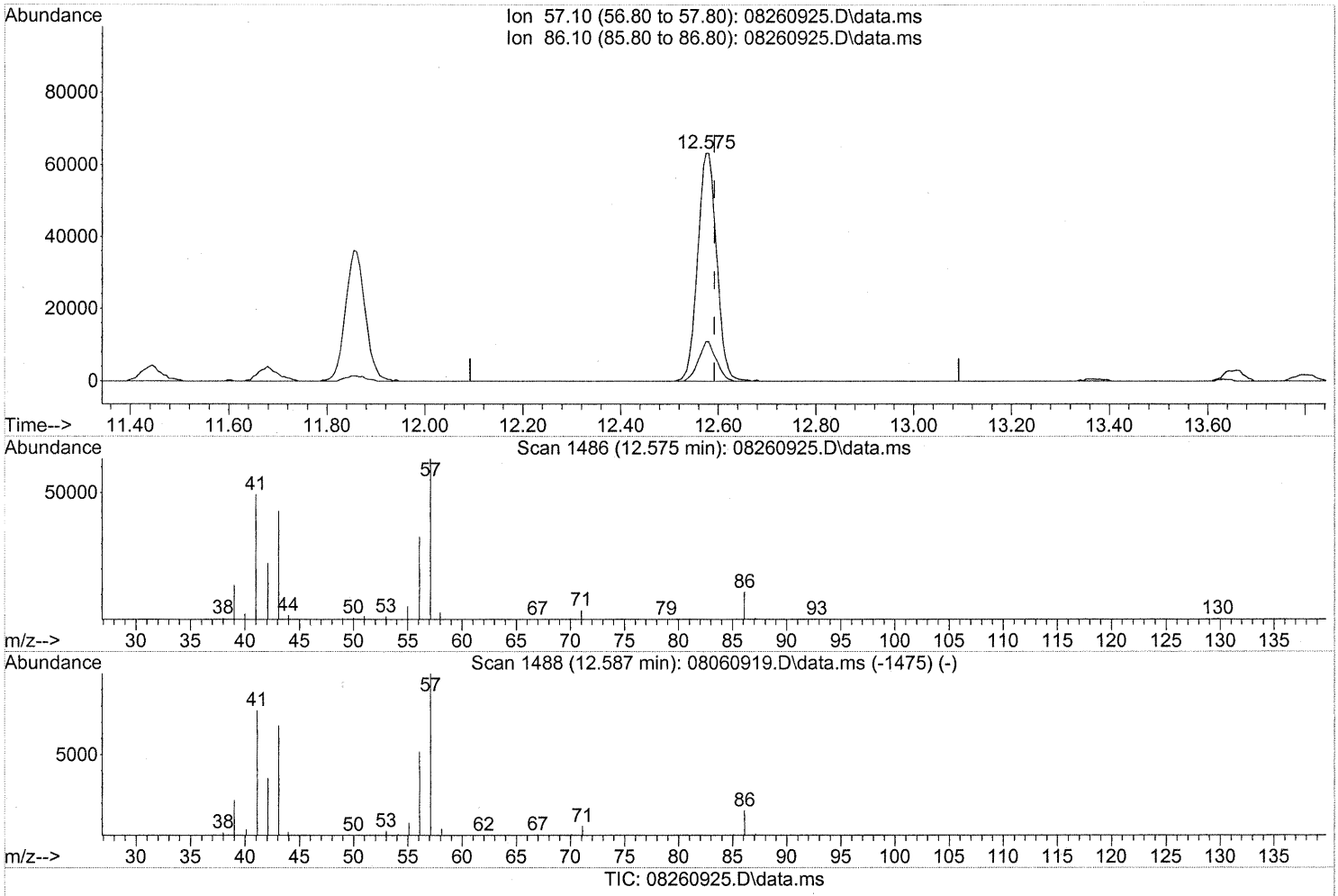
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	70.00
0.00	0.00	0.00
0.00	0.00	0.00

402

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(31) n-Hexane (T)

12.575min (-0.017) 6.12ng

response 170660

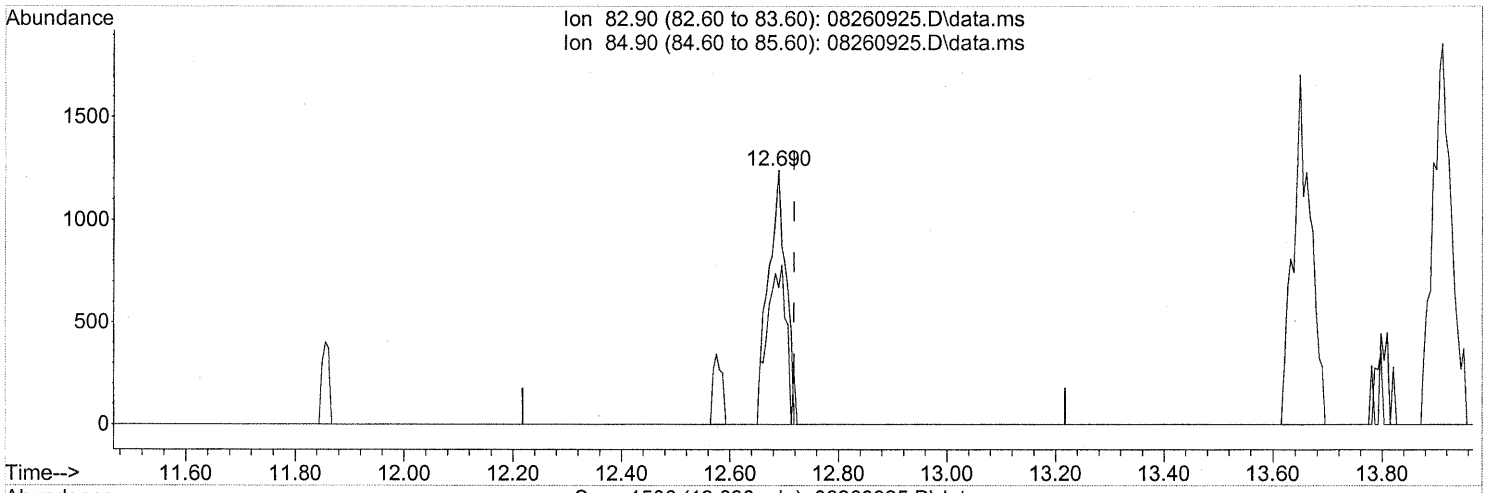
Ion	Exp%	Act%
57.10	100	100
86.10	15.70	15.95
0.00	0.00	0.00
0.00	0.00	0.00

403

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(32) Chloroform (T)

12.690min (-0.029) 0.11ng

response 2784

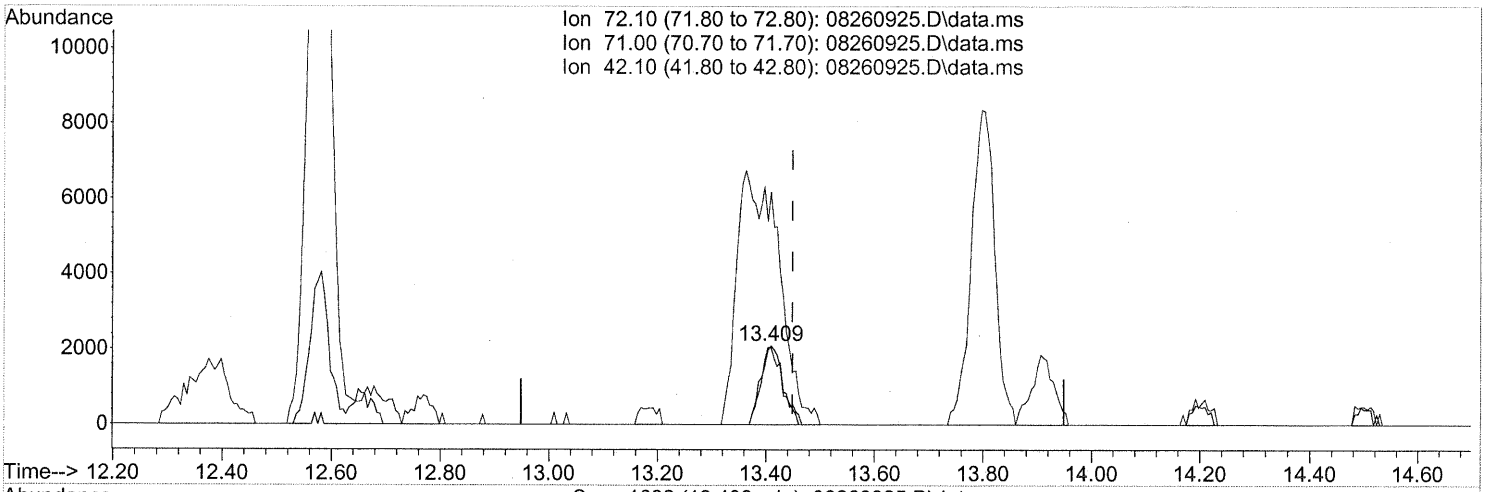
Ion	Exp%	Act%
82.90	100	100
84.90	64.30	70.51
0.00	0.00	0.00
0.00	0.00	0.00

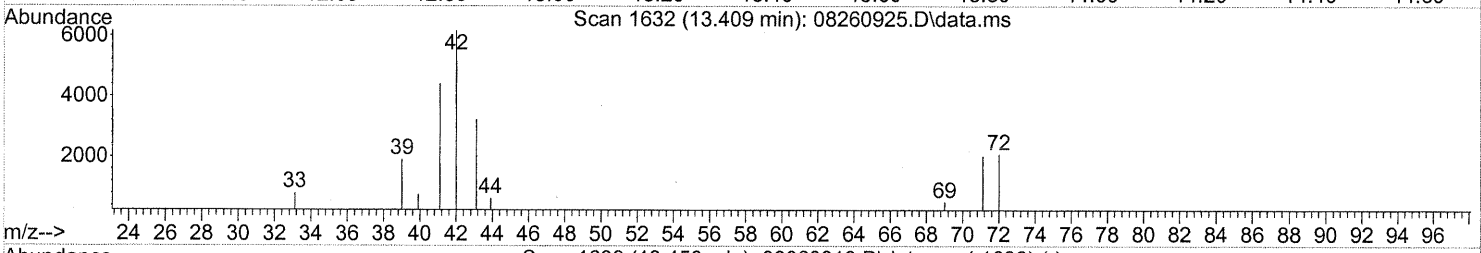
404

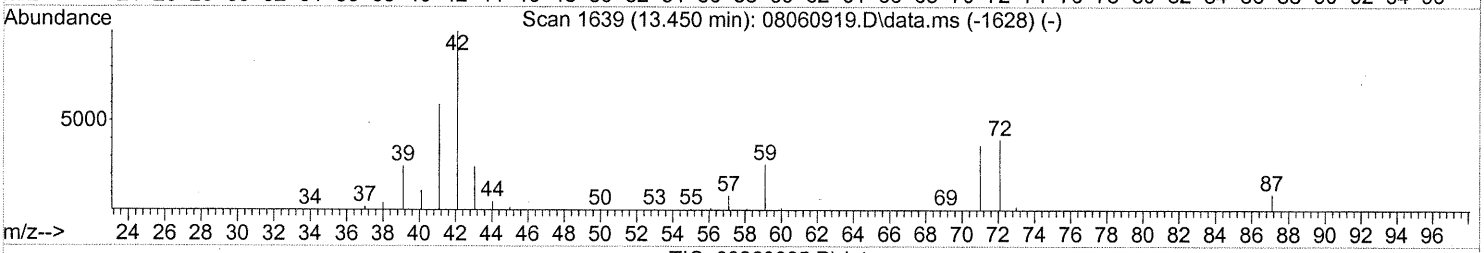
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.409min (-0.040) 0.52ng

response 5789

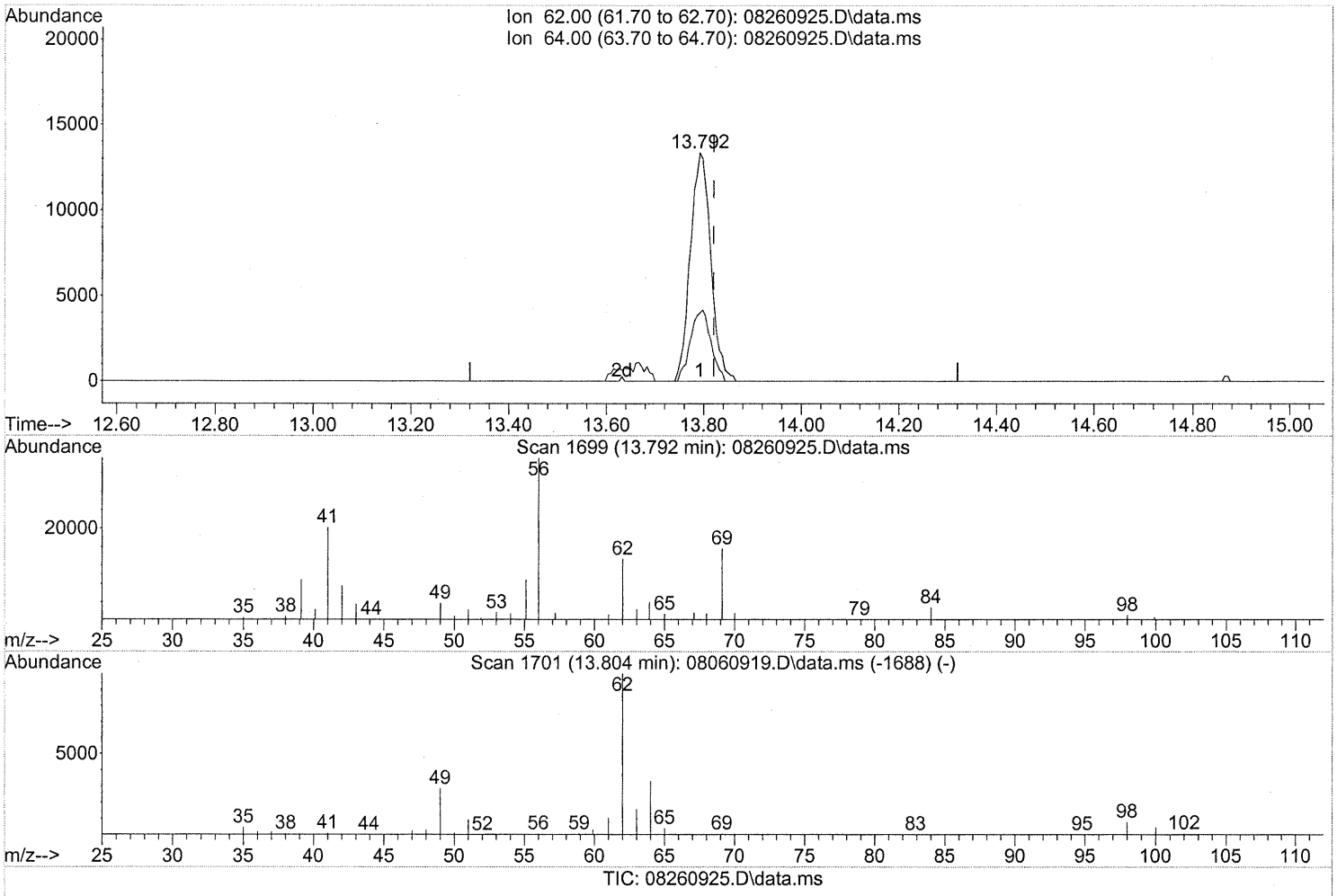
Ion	Exp%	Act%
72.10	100	100
71.00	95.70	99.59
42.10	253.40	0.00#
0.00	0.00	0.00

405

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.73ng

response 38883

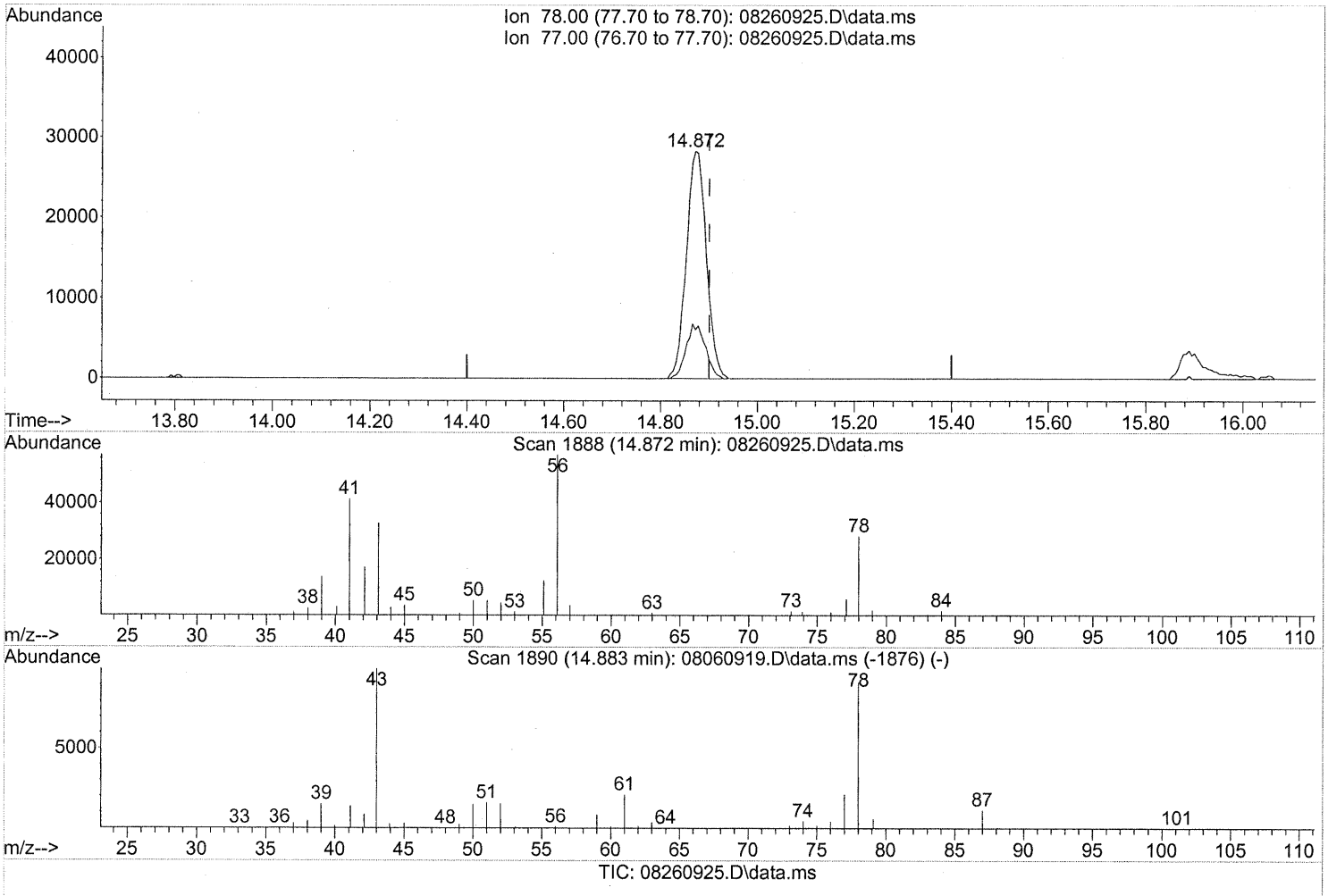
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.22
0.00	0.00	0.00
0.00	0.00	0.00

406

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(41) Benzene (T)

14.872min (-0.029) 1.31ng

response 80894

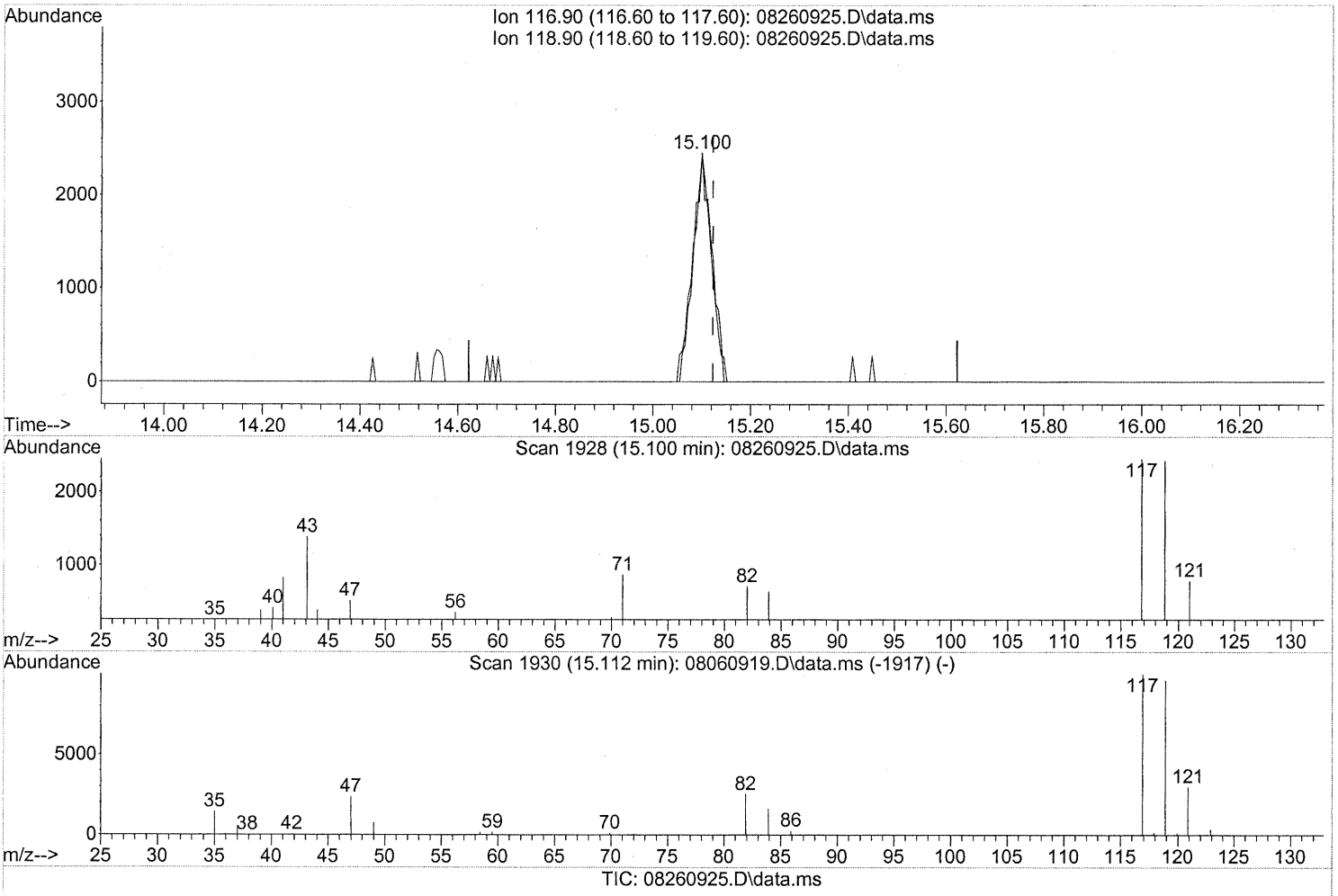
Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.14
0.00	0.00	0.00
0.00	0.00	0.00

407

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 0.33ng

response 6461

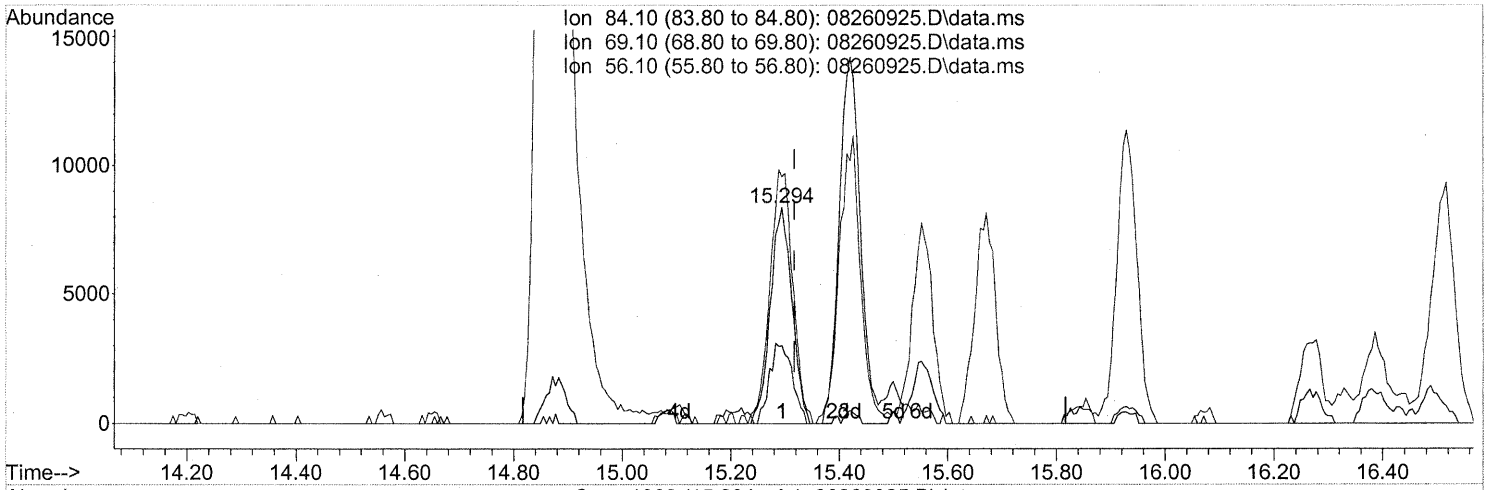
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	101.47
0.00	0.00	0.00
0.00	0.00	0.00

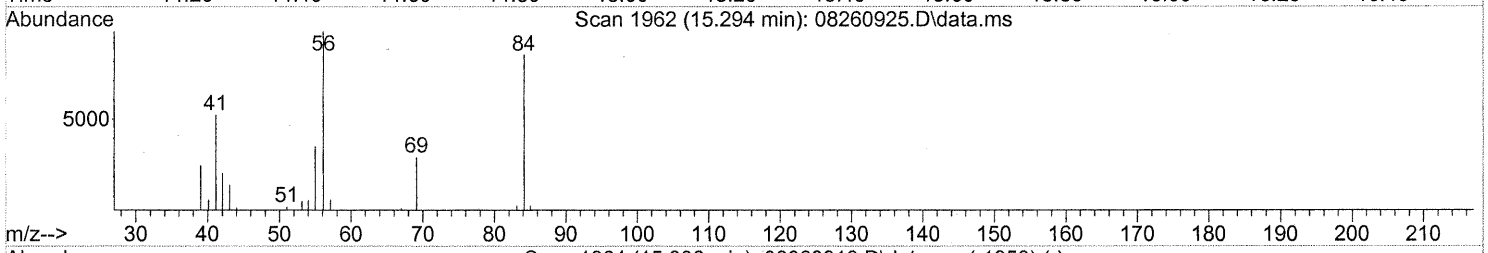
408

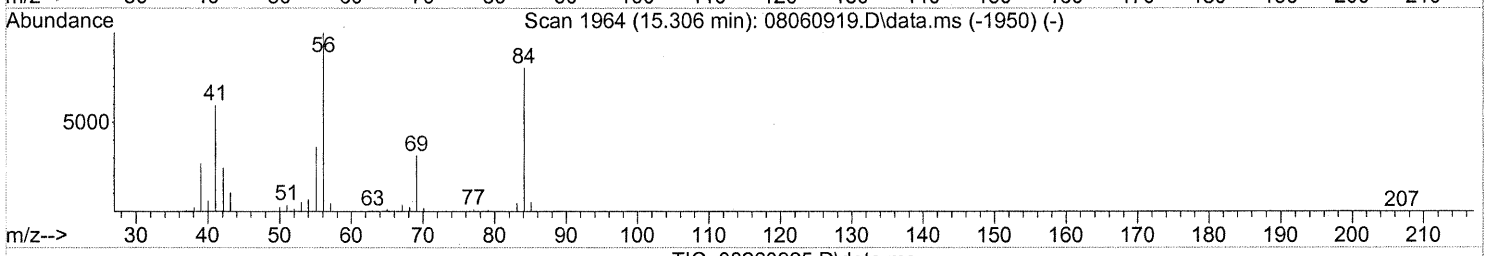
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(43) Cyclohexane (T)

15.294min (-0.023) 1.02ng

response 23114

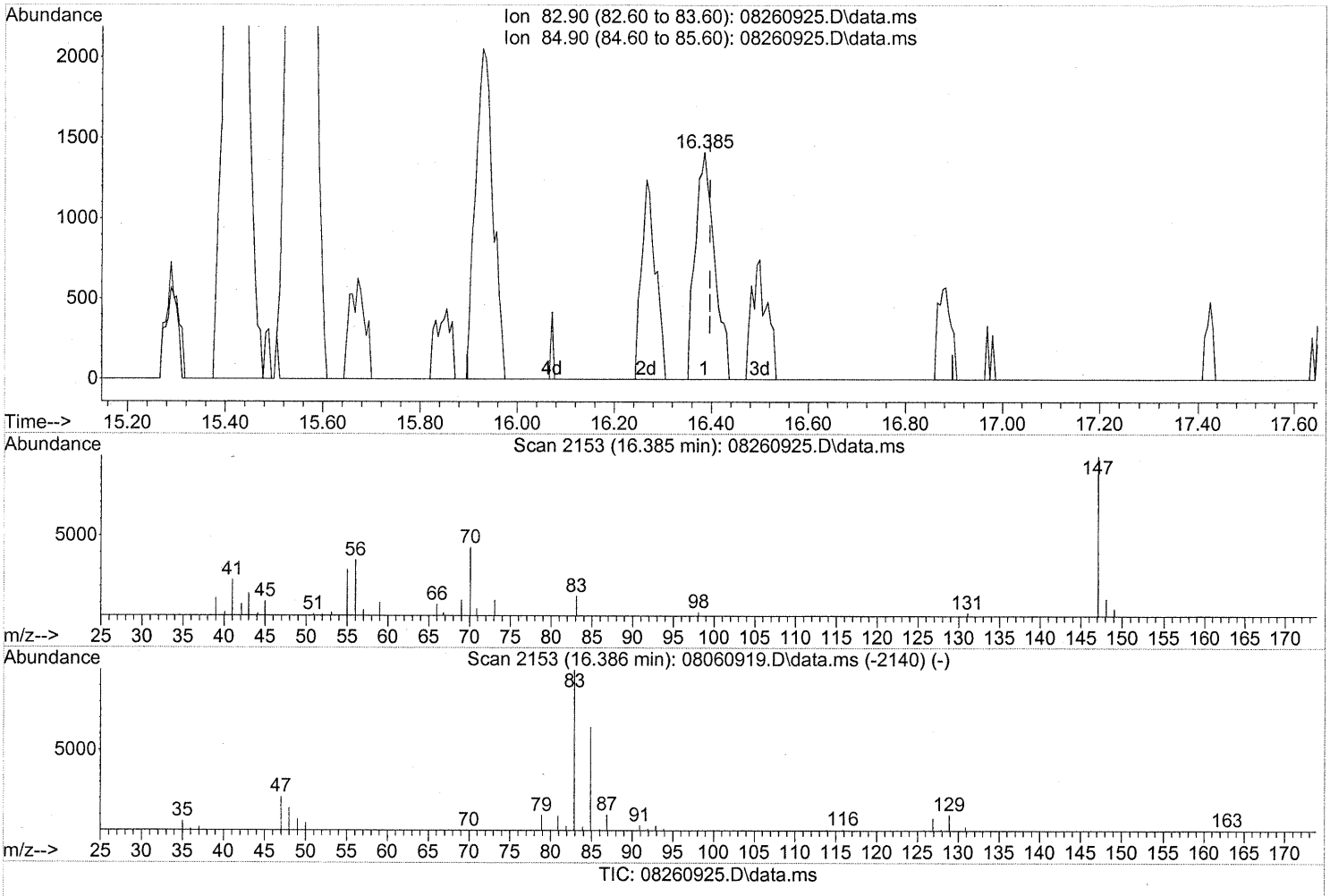
Ion	Exp%	Act%
84.10	100	100
69.10	38.70	39.08
56.10	127.50	124.93
0.00	0.00	0.00

409

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(46) Bromodichloromethane (T)

16.385min (-0.011) 0.19ng

response 3884

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

FP
m 9/1/09

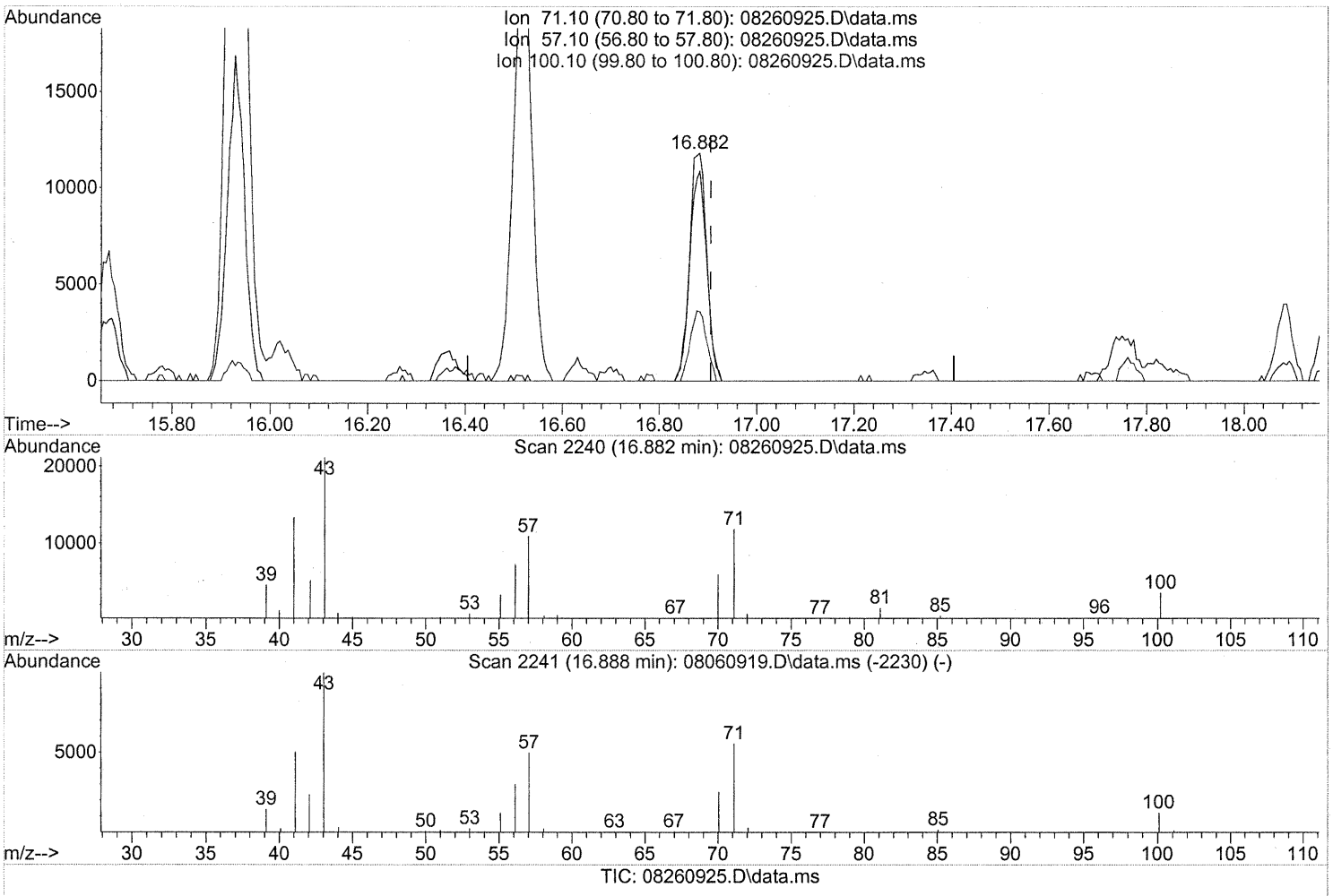
9/2/09

410

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(51) n-Heptane (T)

16.882min (-0.023) 1.74ng

response 28812

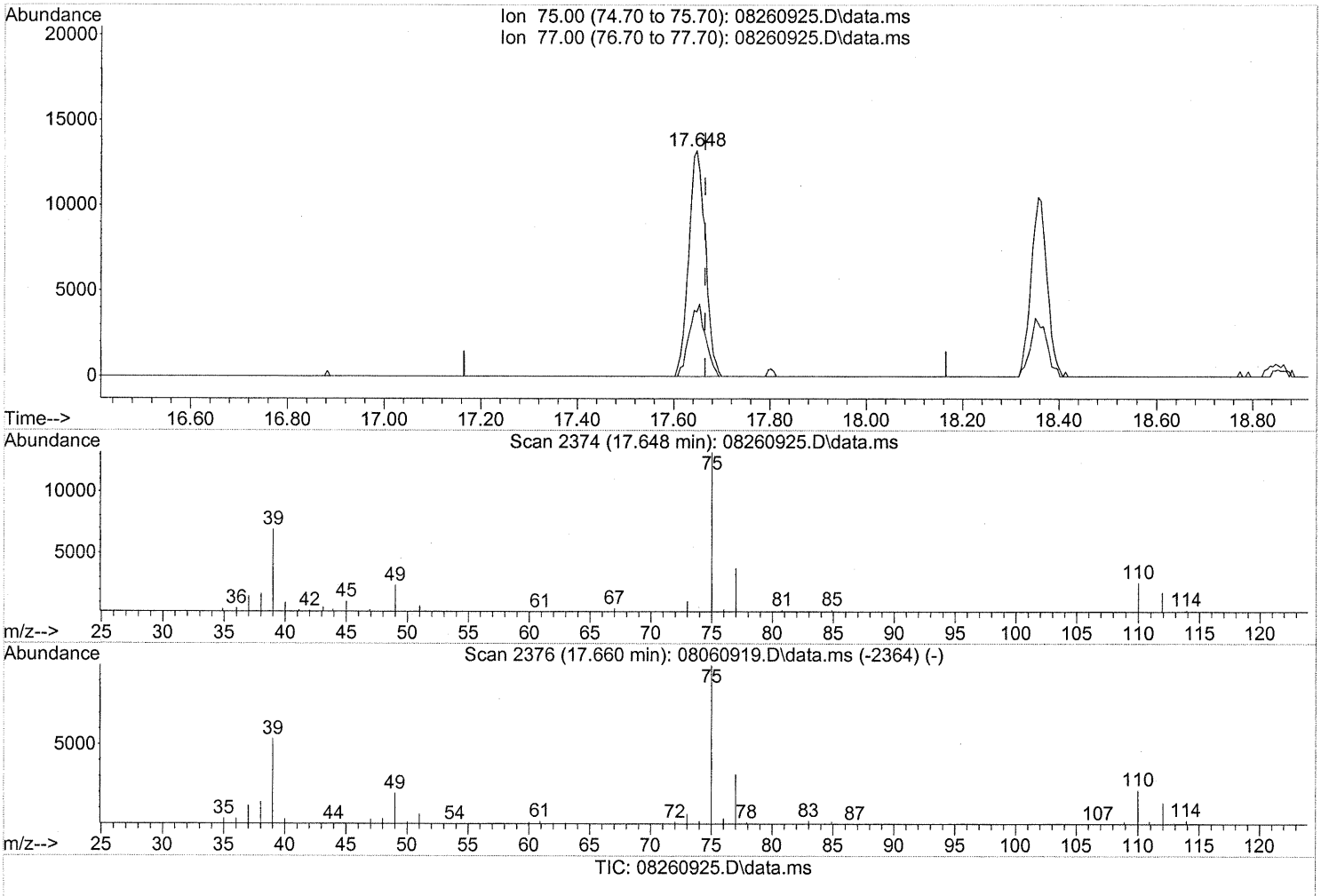
Ion	Exp%	Act%
71.10	100	100
57.10	91.90	90.84
100.10	26.40	29.21
0.00	0.00	0.00

411

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 1.23ng

response 31661

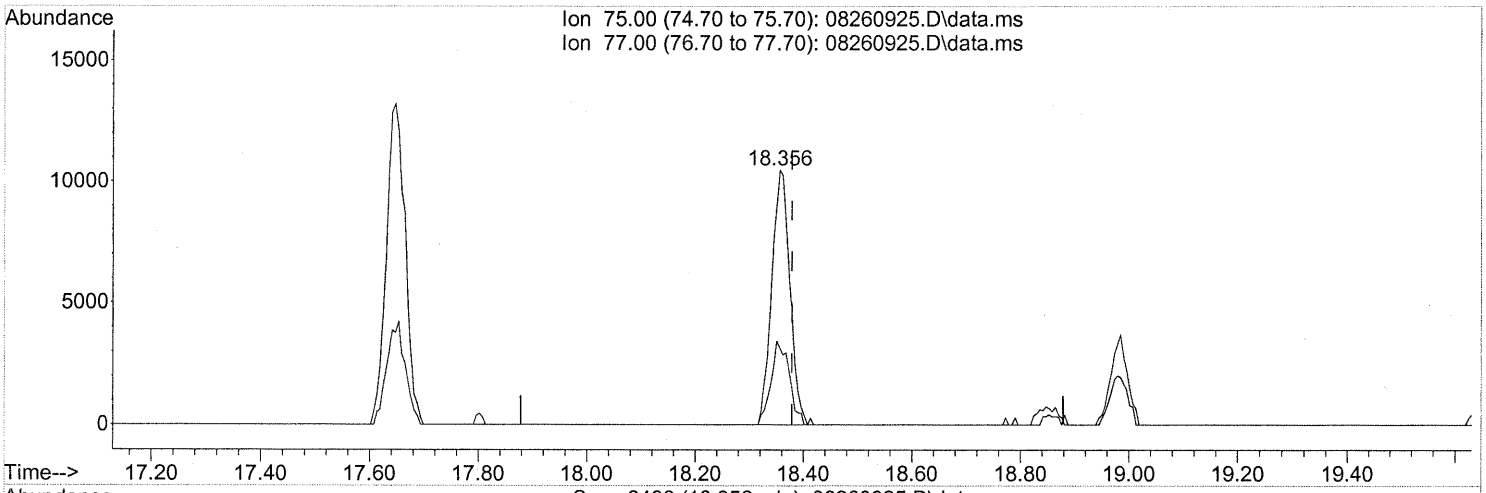
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.29
0.00	0.00	0.00
0.00	0.00	0.00

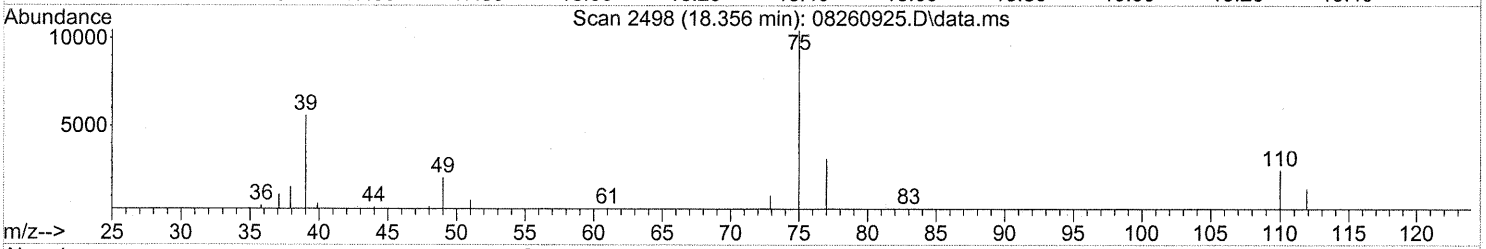
412

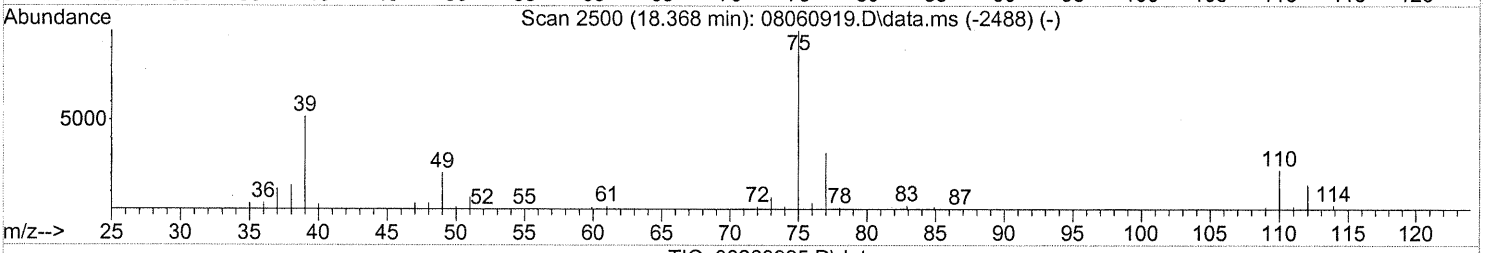
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 1.00ng

response 24394

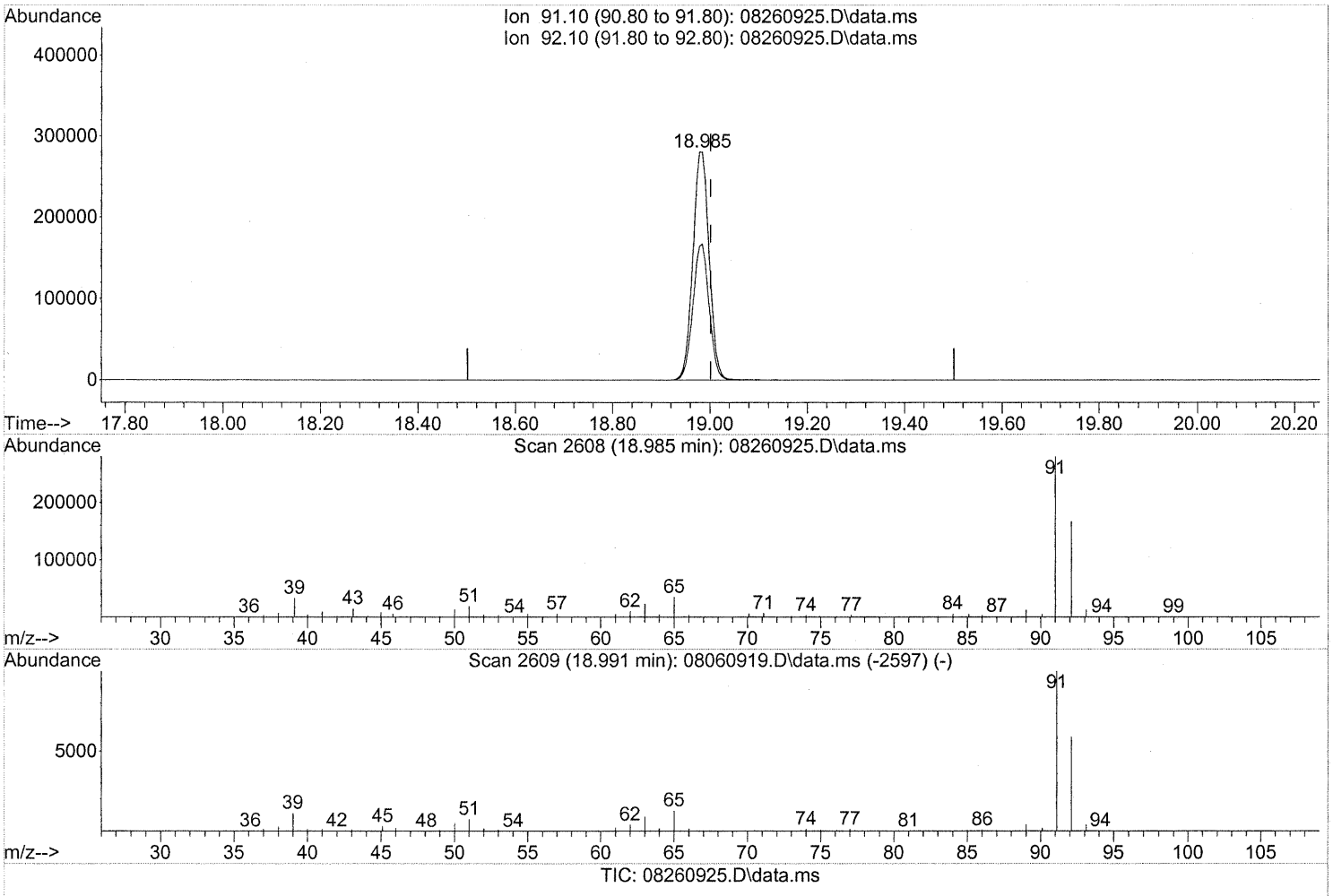
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	32.90
0.00	0.00	0.00
0.00	0.00	0.00

413

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(58) Toluene (T)

18.985min (-0.017) 11.04ng

response 648322

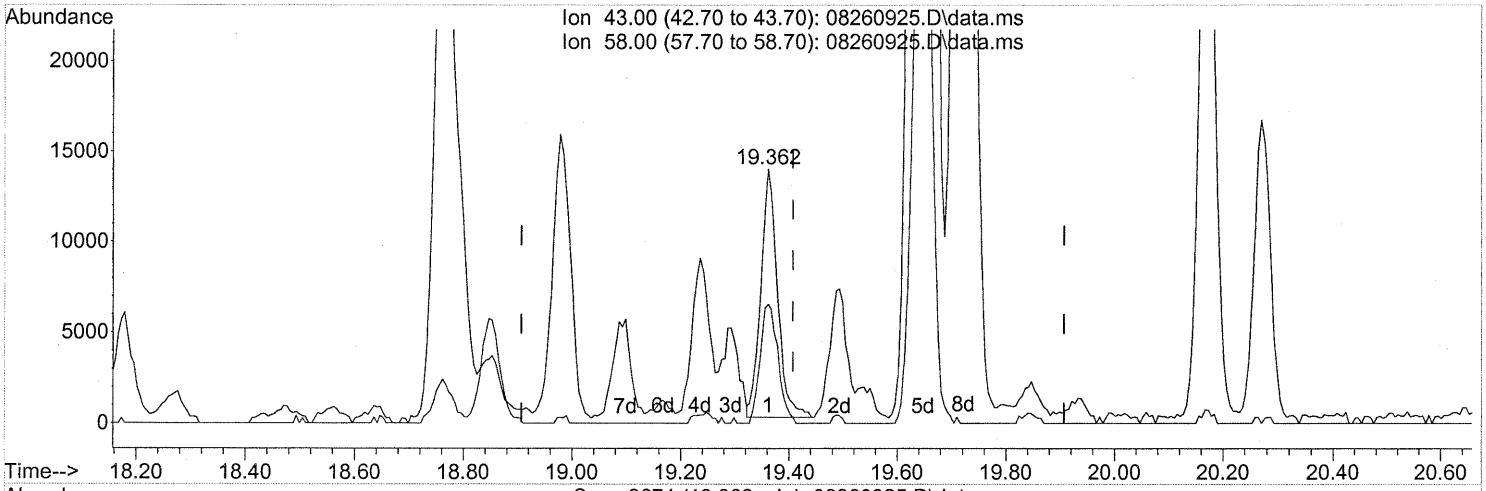
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.42
0.00	0.00	0.00
0.00	0.00	0.00

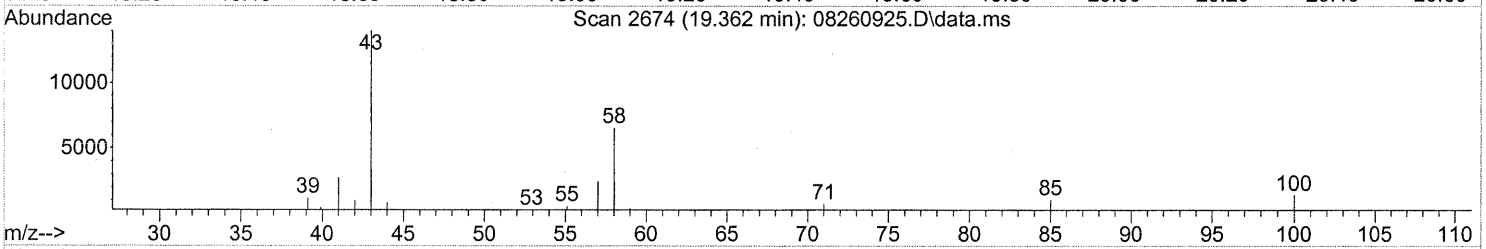
414

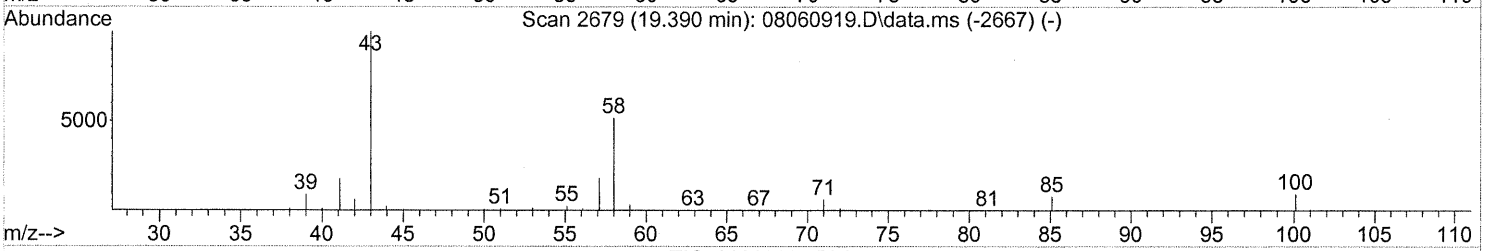
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 0.75ng

response 29430

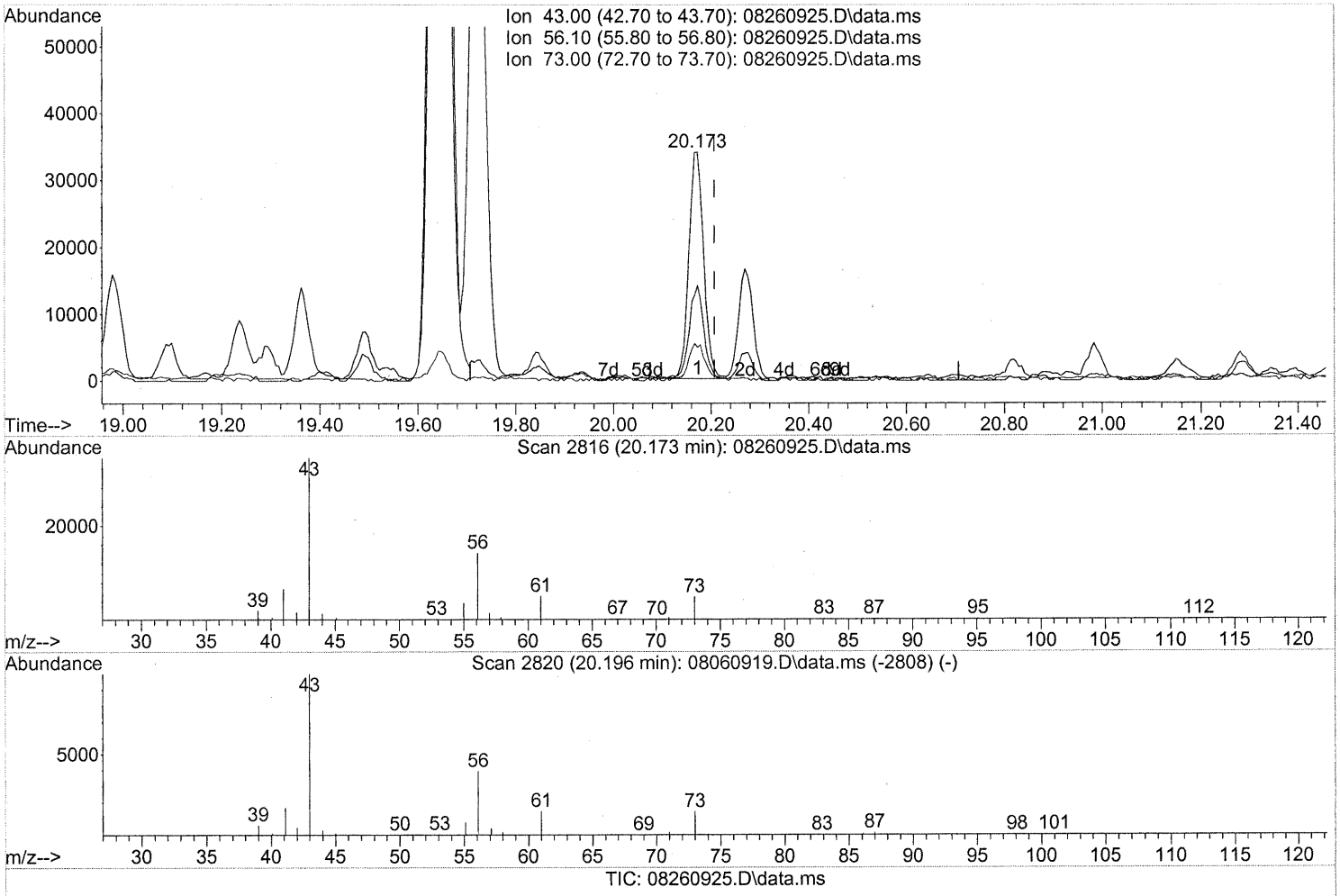
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	51.22
0.00	0.00	0.00
0.00	0.00	0.00

415

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 1.56ng

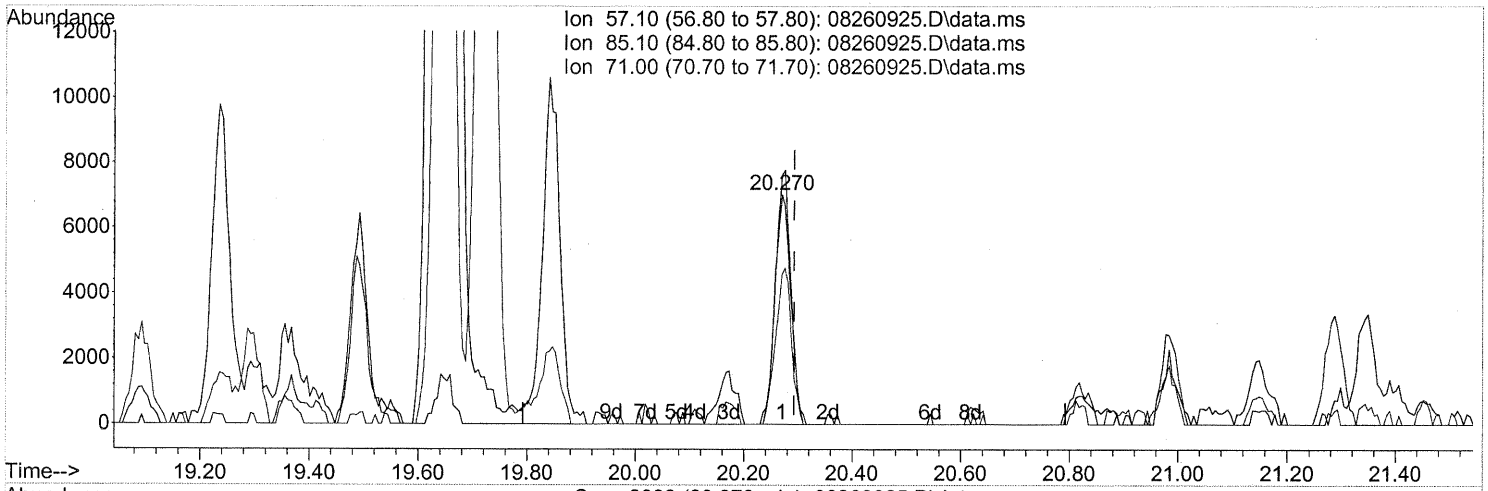
response 71743

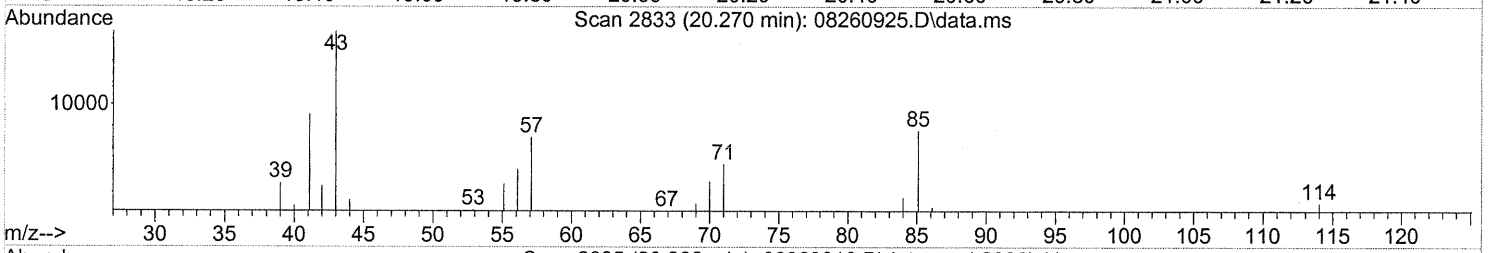
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	41.72
73.00	14.80	19.25
0.00	0.00	0.00

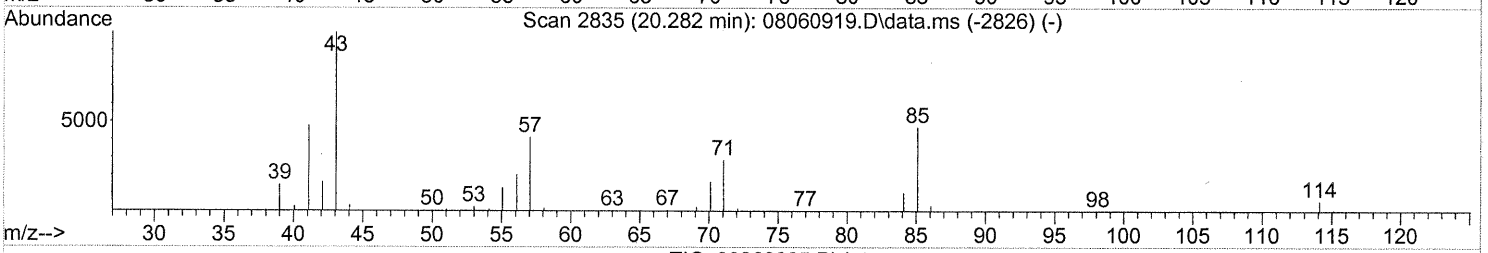
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 1.02ng

response 14431

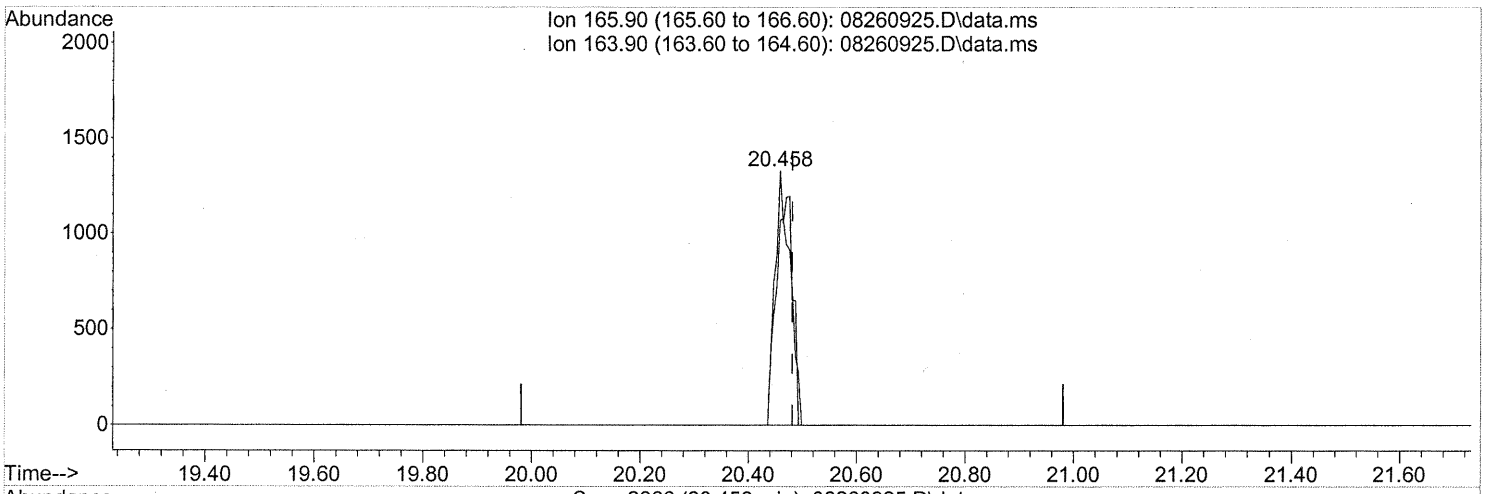
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	106.09
71.00	68.10	66.89
0.00	0.00	0.00

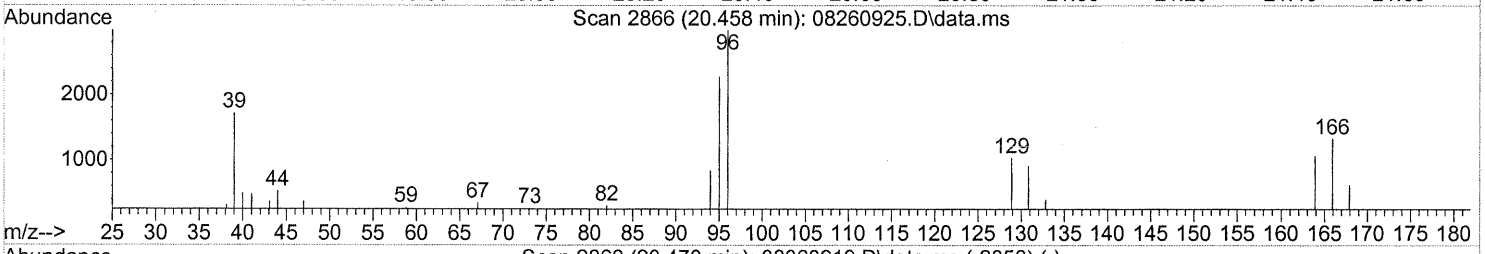
417

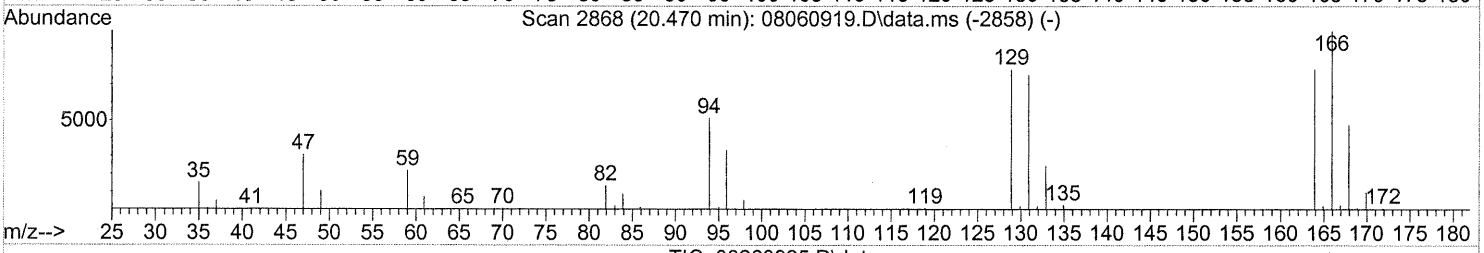
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(64) Tetrachloroethene (T)

20.458min (-0.023) 0.20ng

response 2757

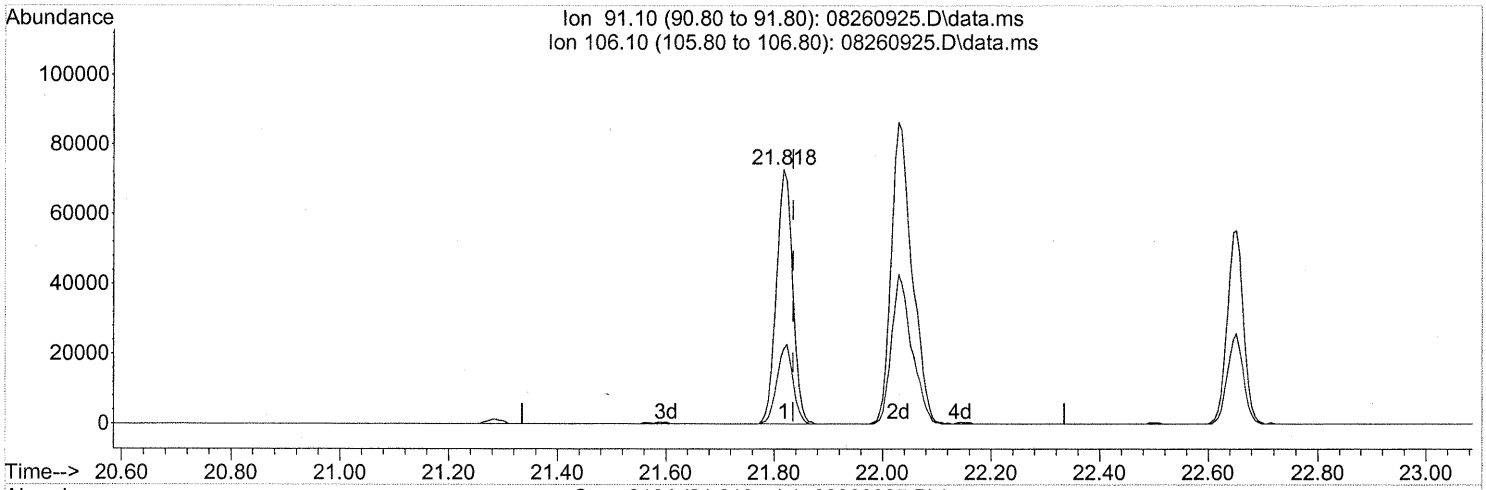
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	87.12
0.00	0.00	0.00
0.00	0.00	0.00

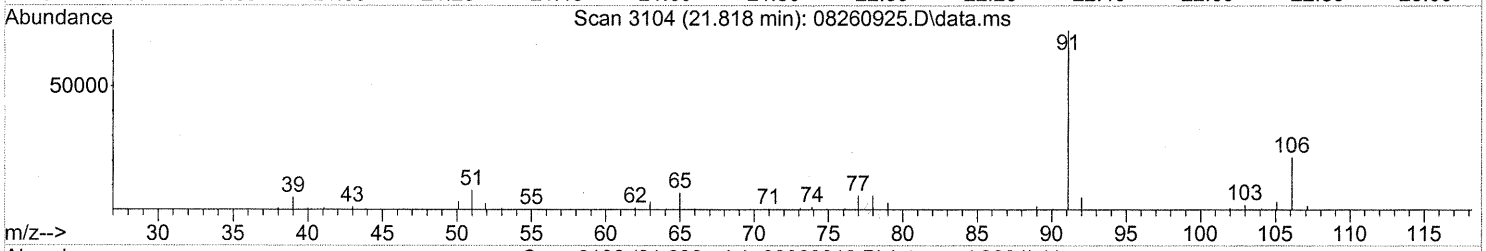
418

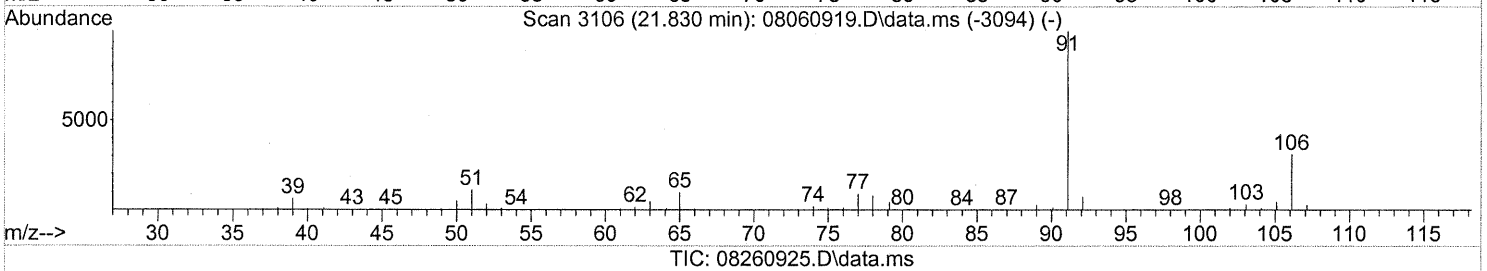
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 2.25ng

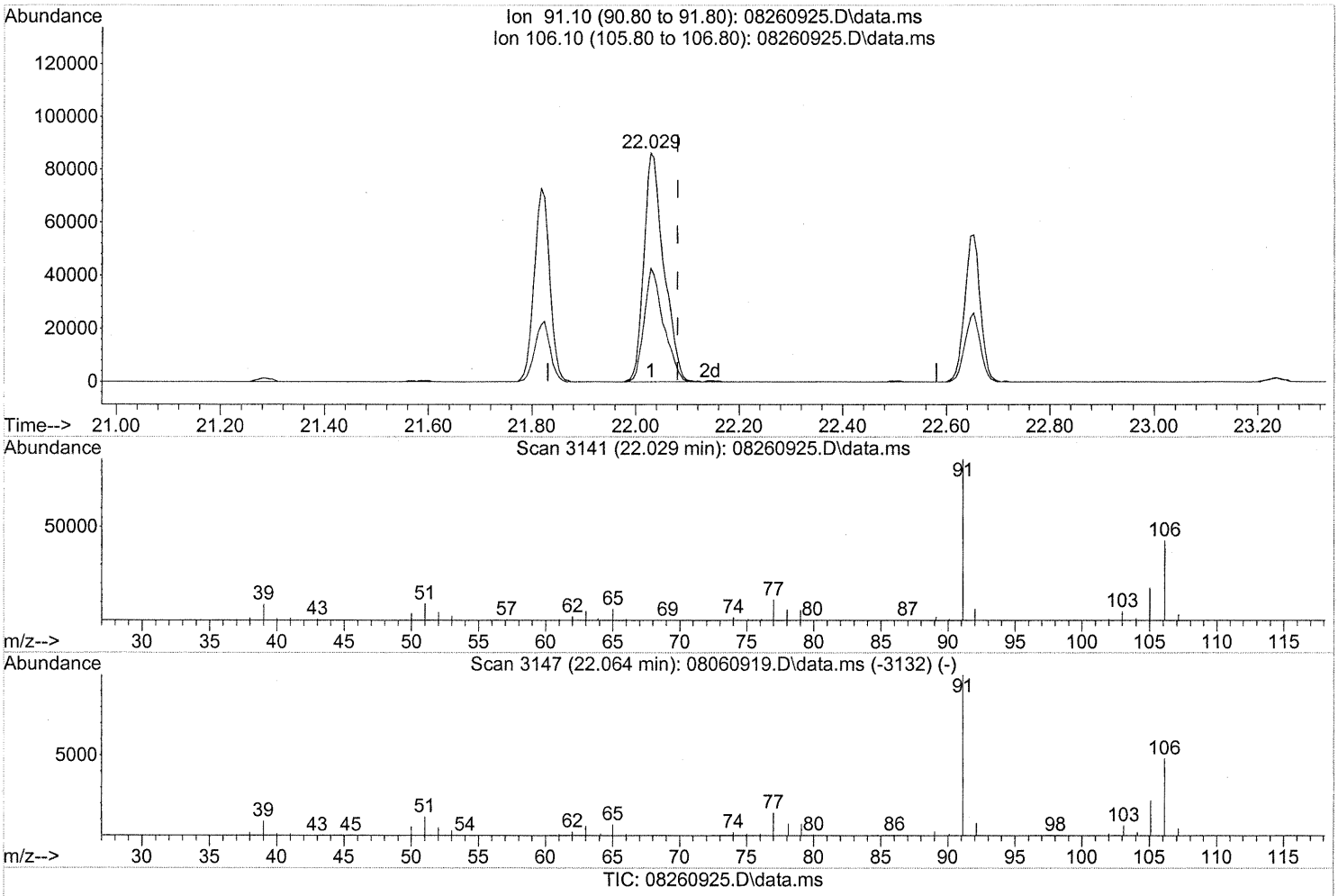
response 150899

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.029min (-0.051) 4.24ng

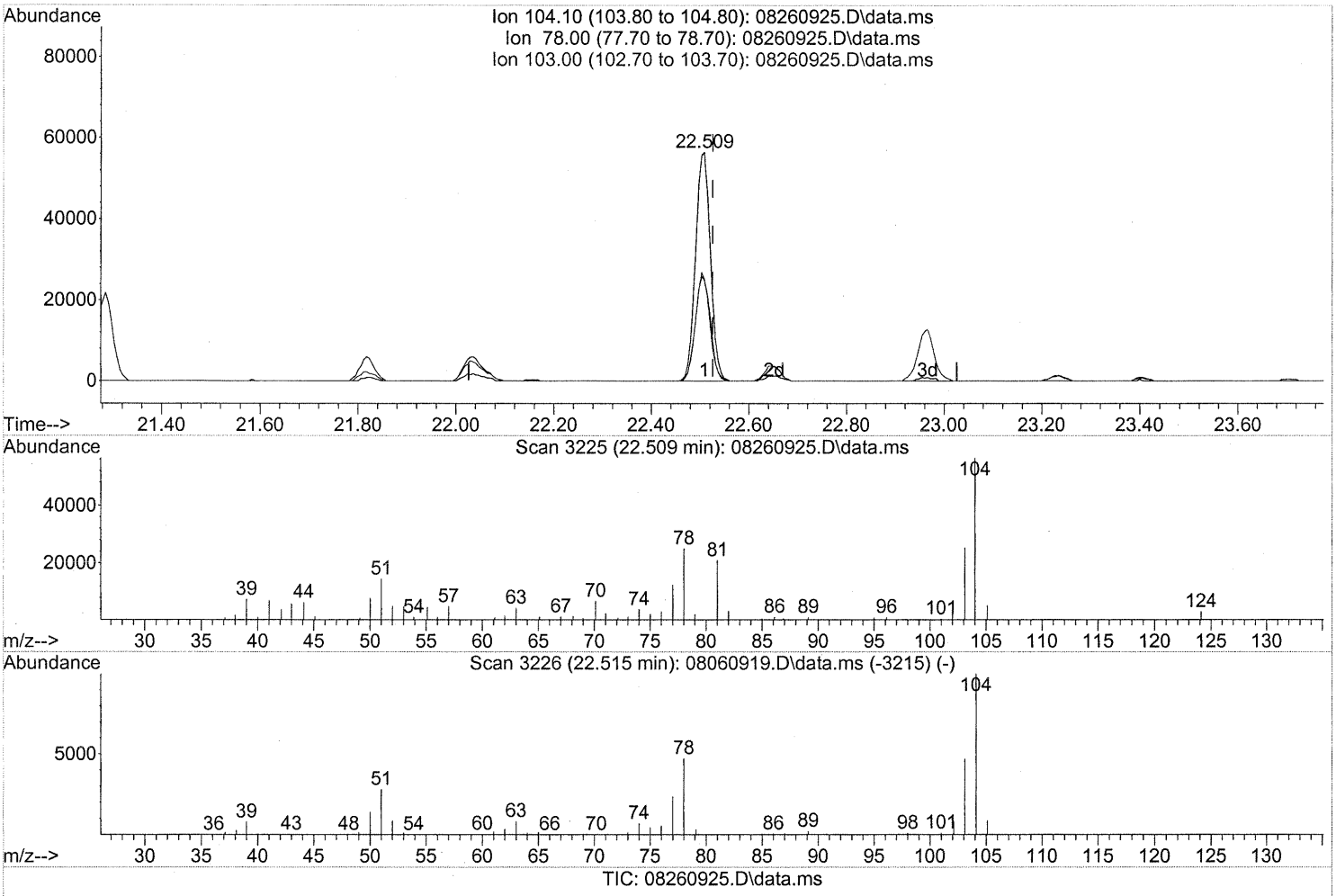
response 230239

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(69) Styrene (T)

22.509min (-0.017) 3.03ng

response 118897

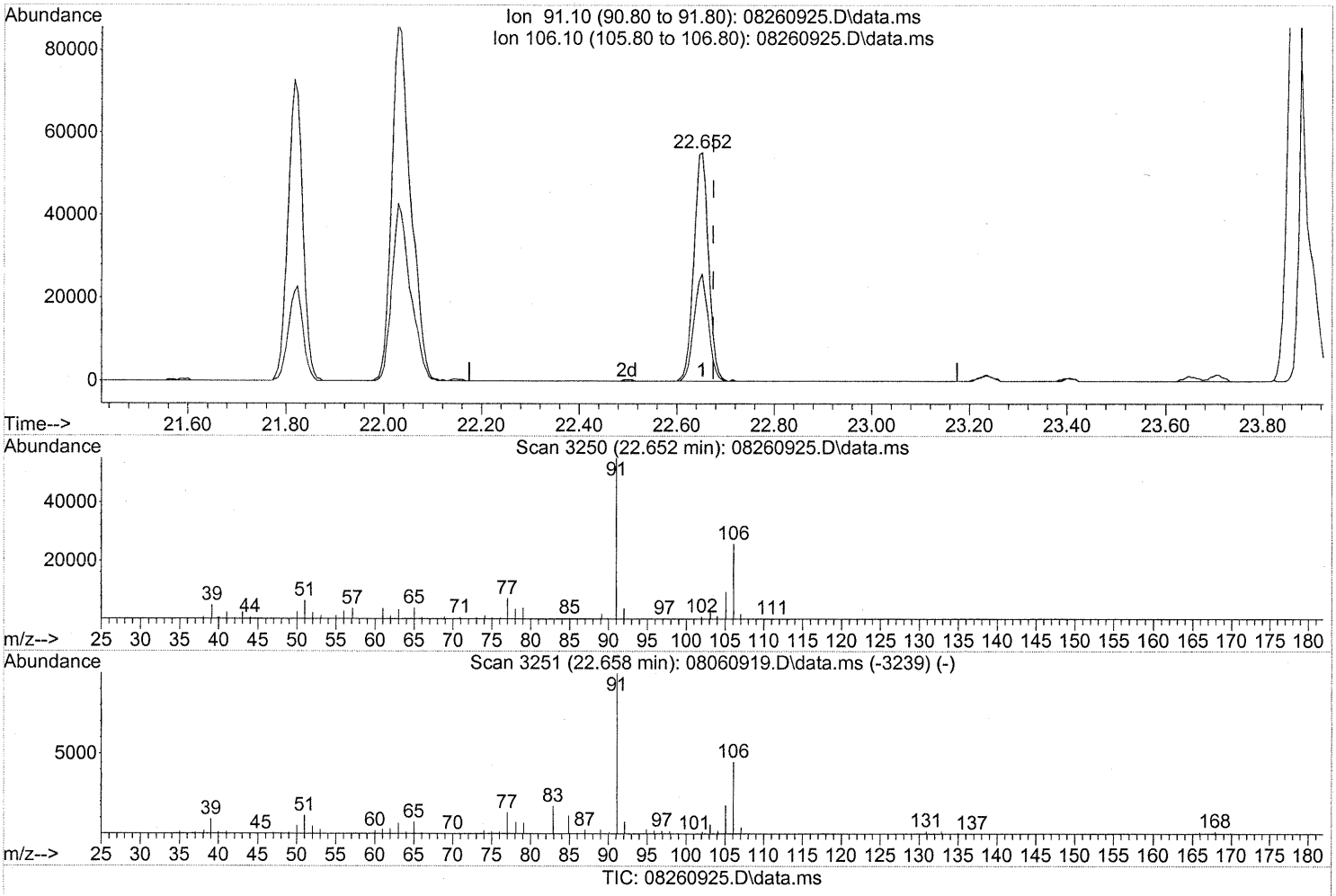
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	45.24
103.00	46.20	46.95
0.00	0.00	0.00

421

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(70) o-Xylene (T)

22.652min (-0.023) 2.11ng

response 115181

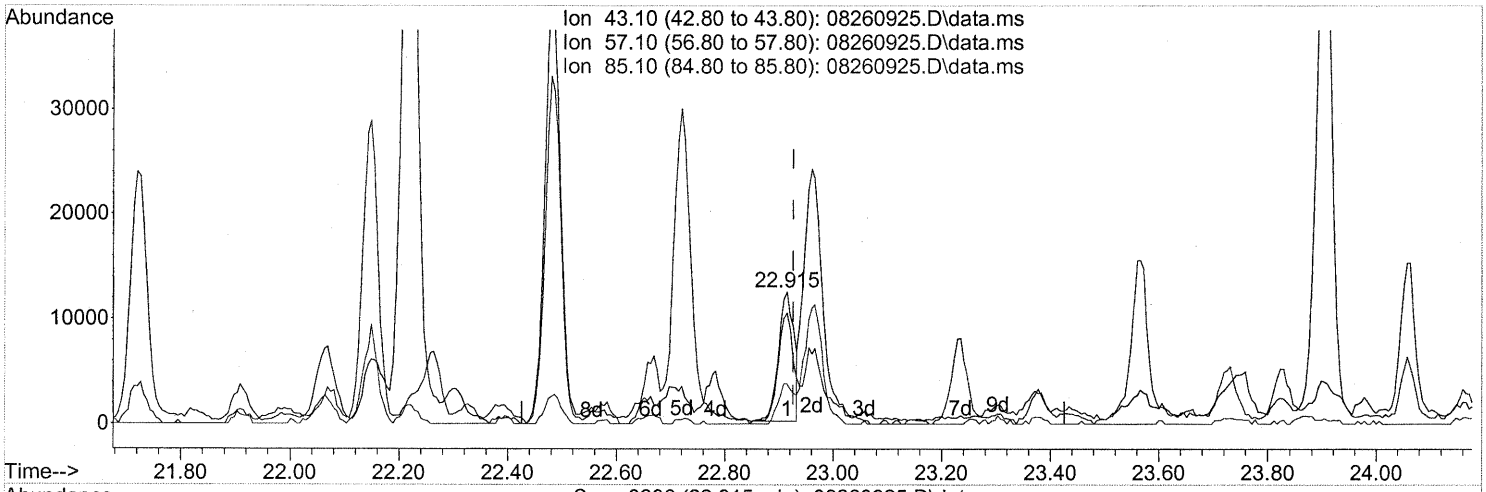
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.67
0.00	0.00	0.00
0.00	0.00	0.00

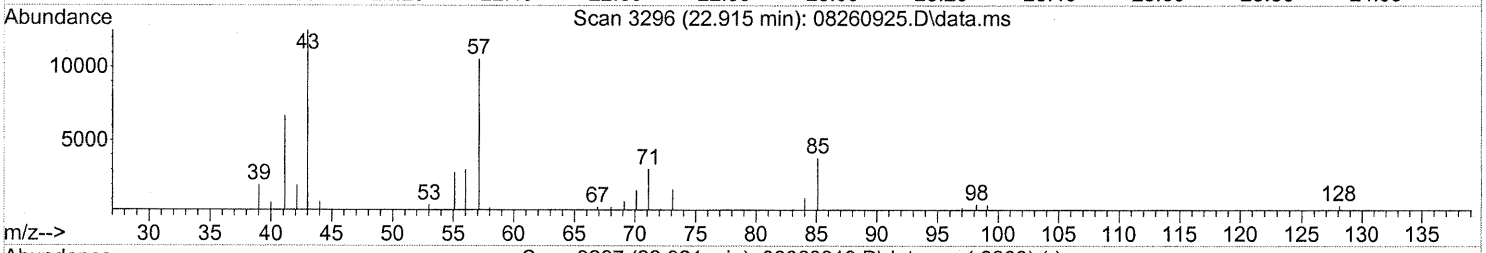
422

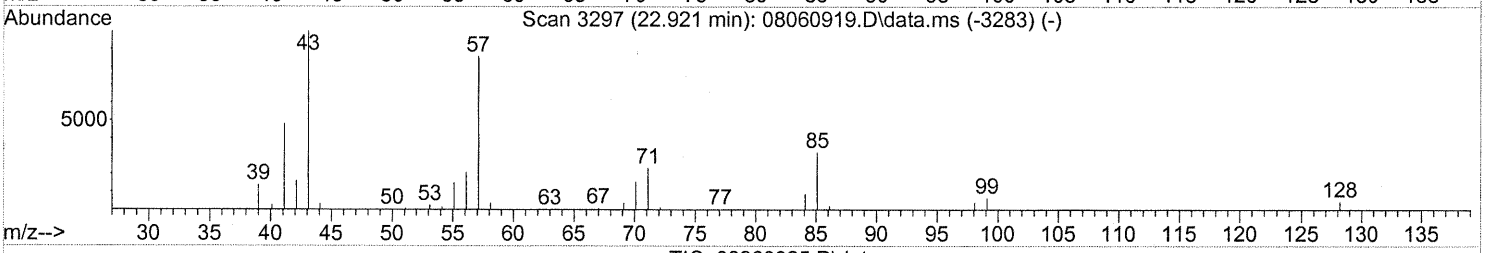
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(71) n-Nonane (T)

22.915min (-0.012) 0.67ng

response 24175

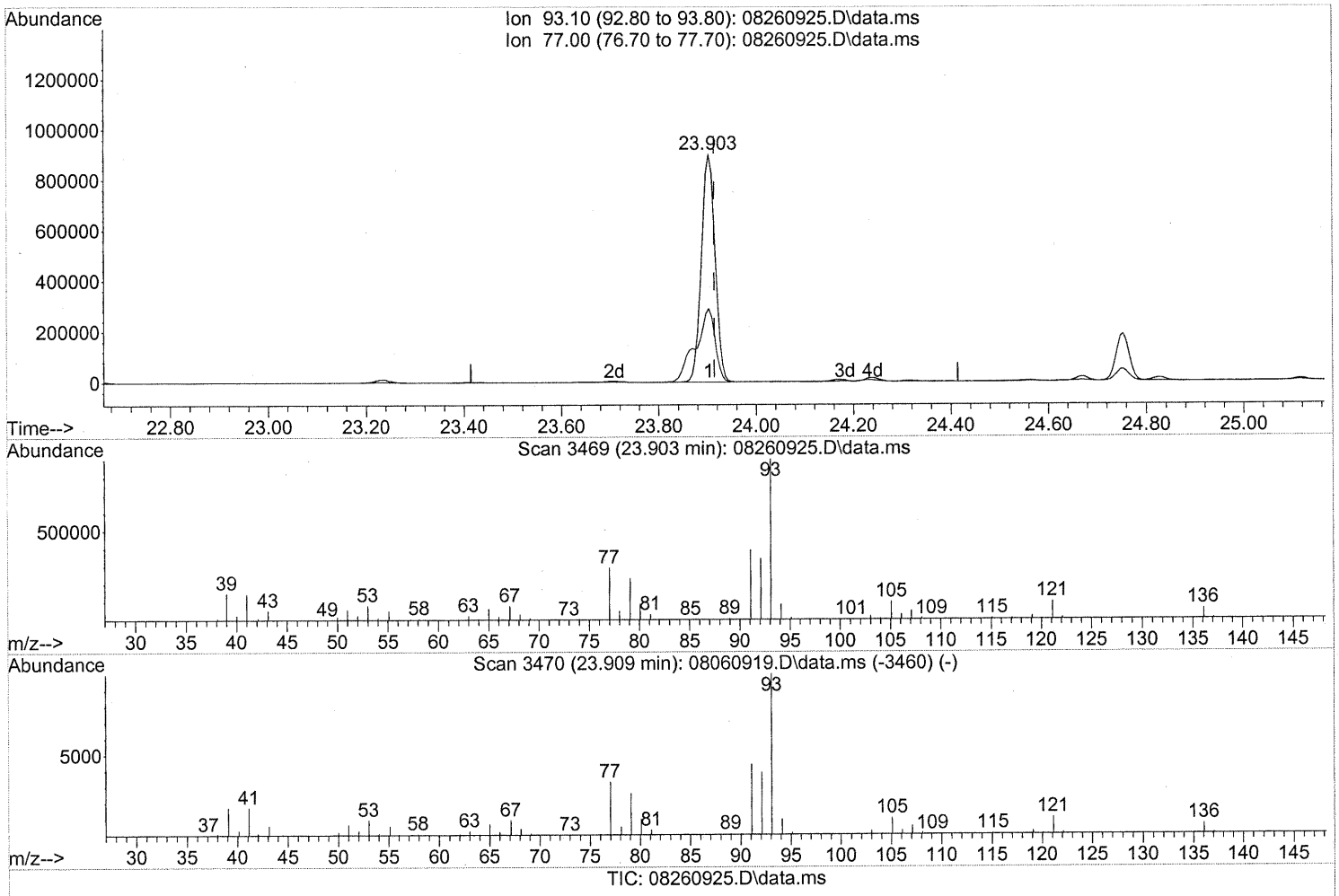
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	96.17
85.10	30.40	32.48
0.00	0.00	0.00

423

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 49.81ng

response 1756739

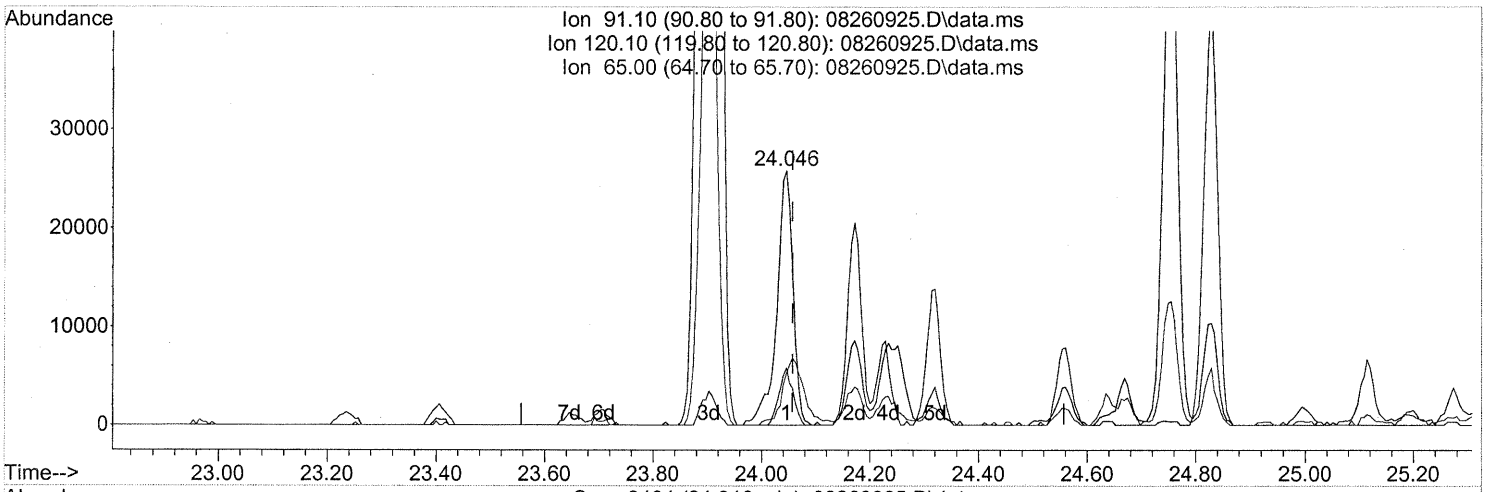
Ion	Exp%	Act%
93.10	100	100
77.00	32.40	45.99
0.00	0.00	0.00
0.00	0.00	0.00

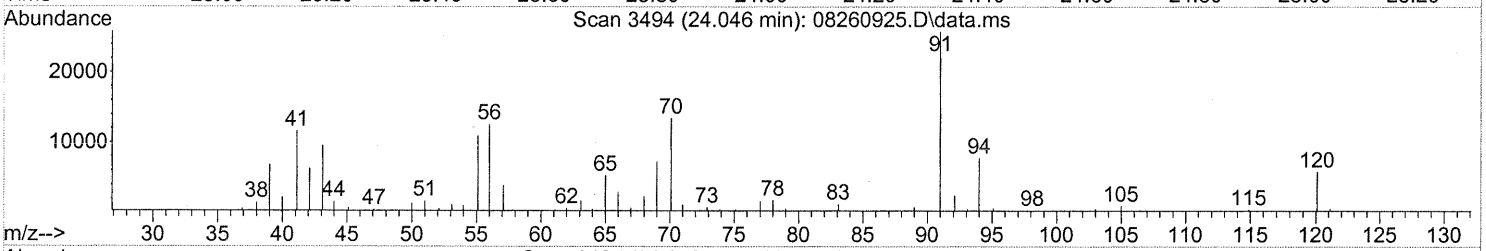
424

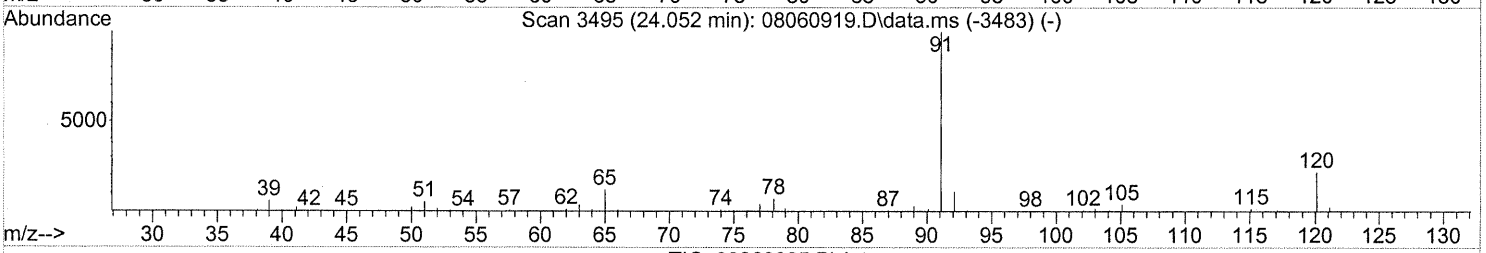
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260925.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.62ng

response 53878

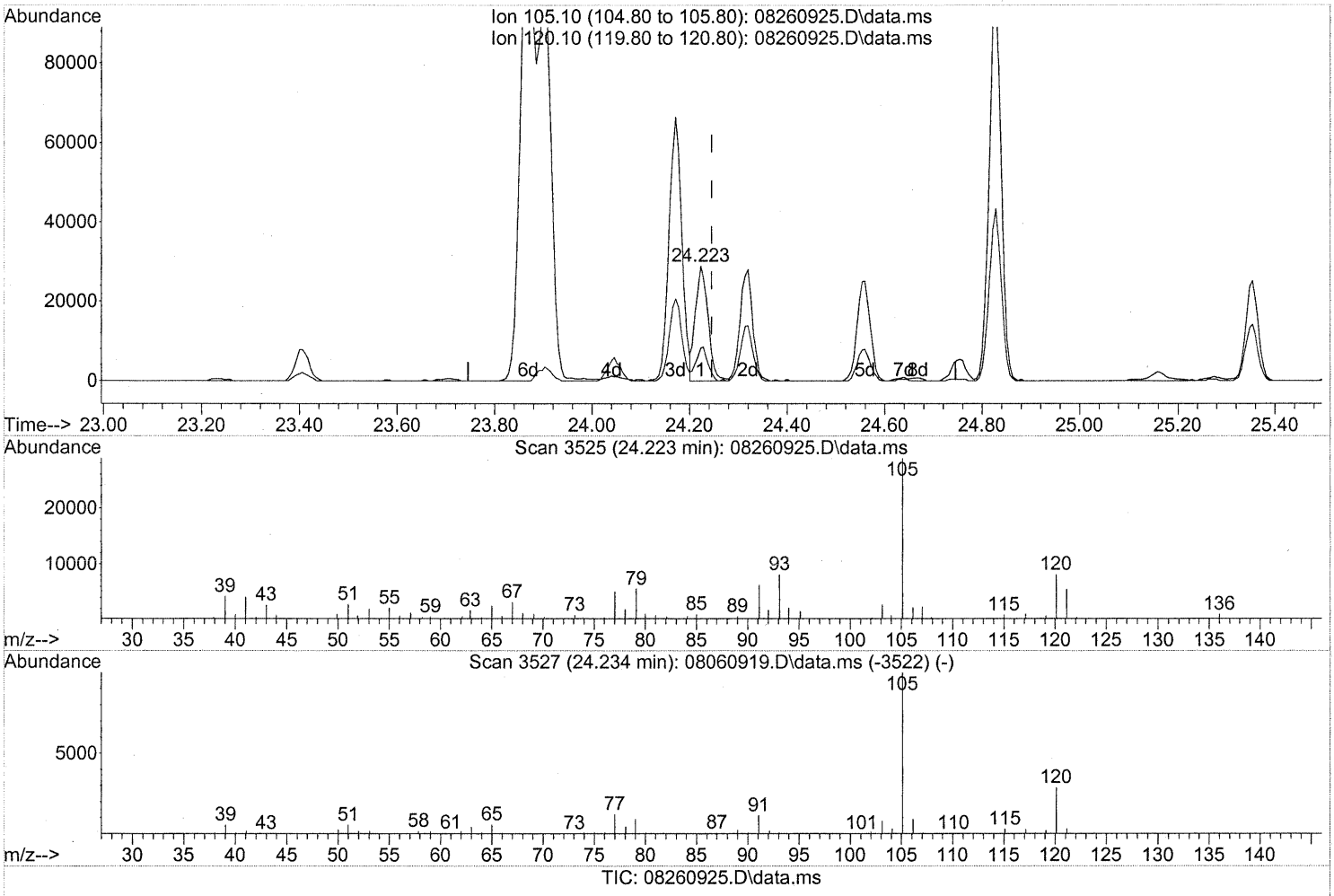
Ion	Exp%	Act%
91.10	100	100
120.10	21.60	19.14
65.00	12.00	34.64#
0.00	0.00	0.00

425

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(78) 4-Ethyltoluene (T)

24.223min (-0.023) 0.82ng

response 51976

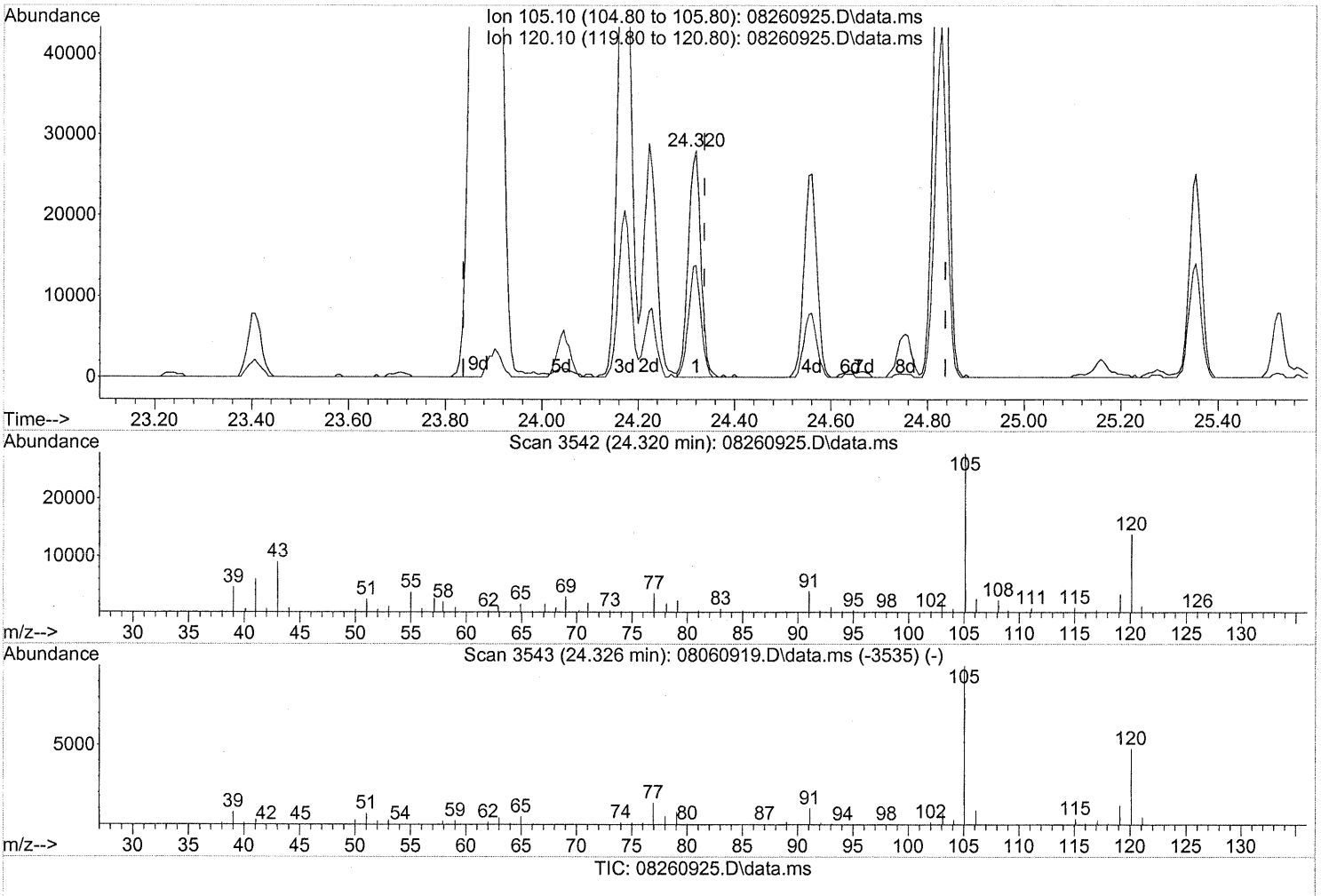
Ion	Exp%	Act%
105.10	100	100
120.10	28.40	27.37
0.00	0.00	0.00
0.00	0.00	0.00

426

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

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

24.320min (-0.017) 0.94ng

response 50518

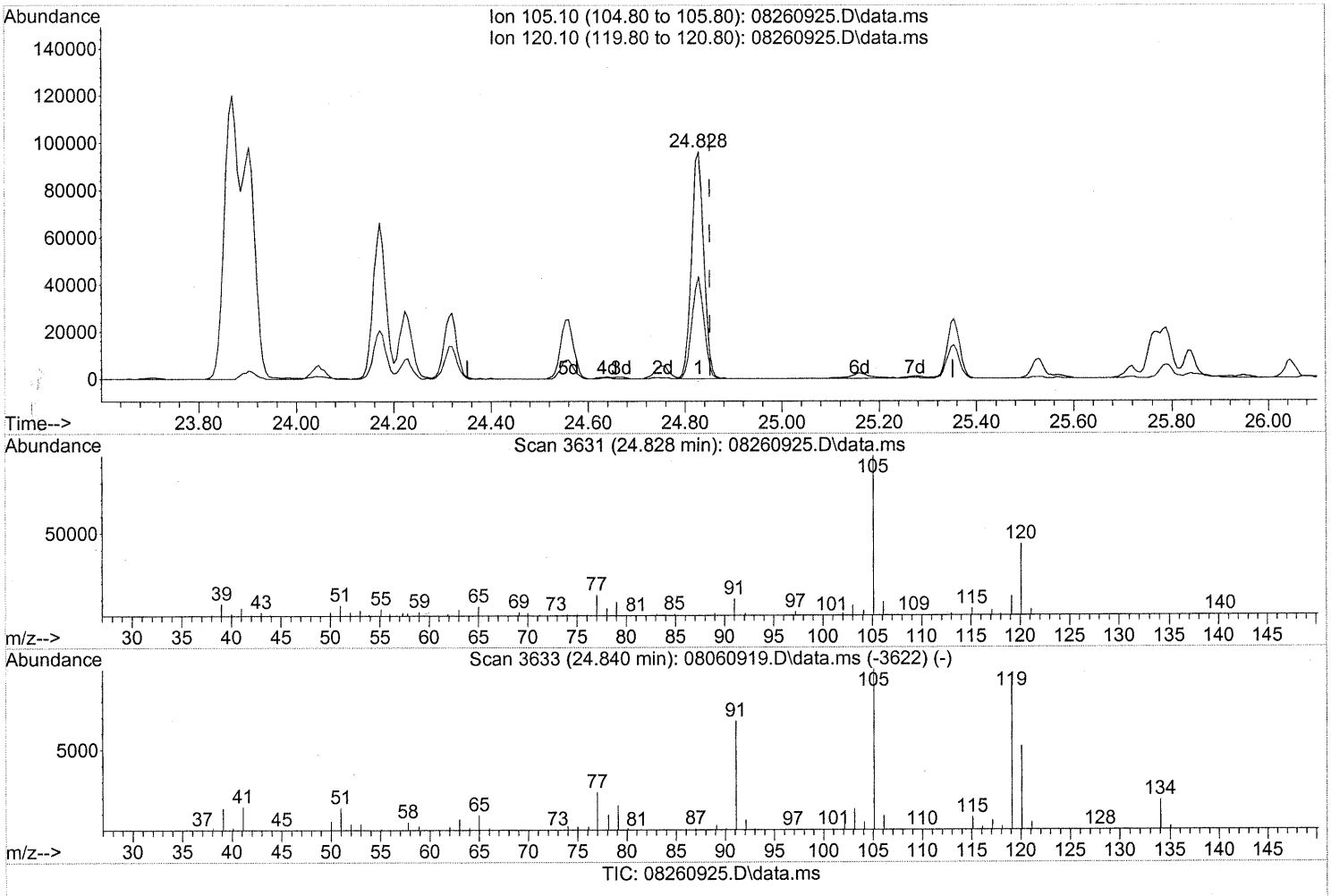
Ion	Exp%	Act%
105.10	100	100
120.10	46.80	48.37
0.00	0.00	0.00
0.00	0.00	0.00

427

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

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

24.828min (-0.023) 3.08ng

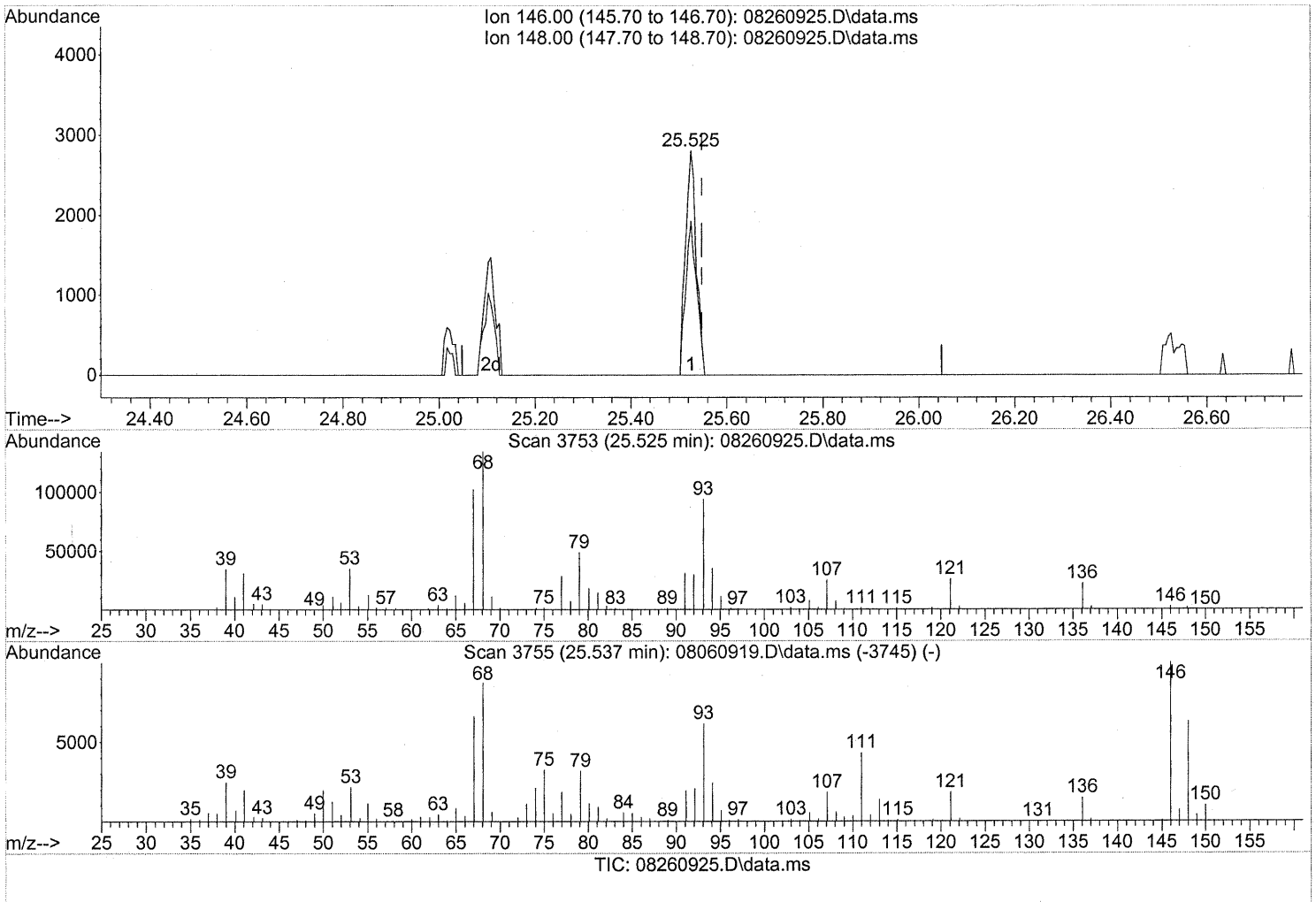
response 168774

Ion	Exp%	Act%
105.10	100	100
120.10	52.60	44.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.525min (-0.023) 0.17ng

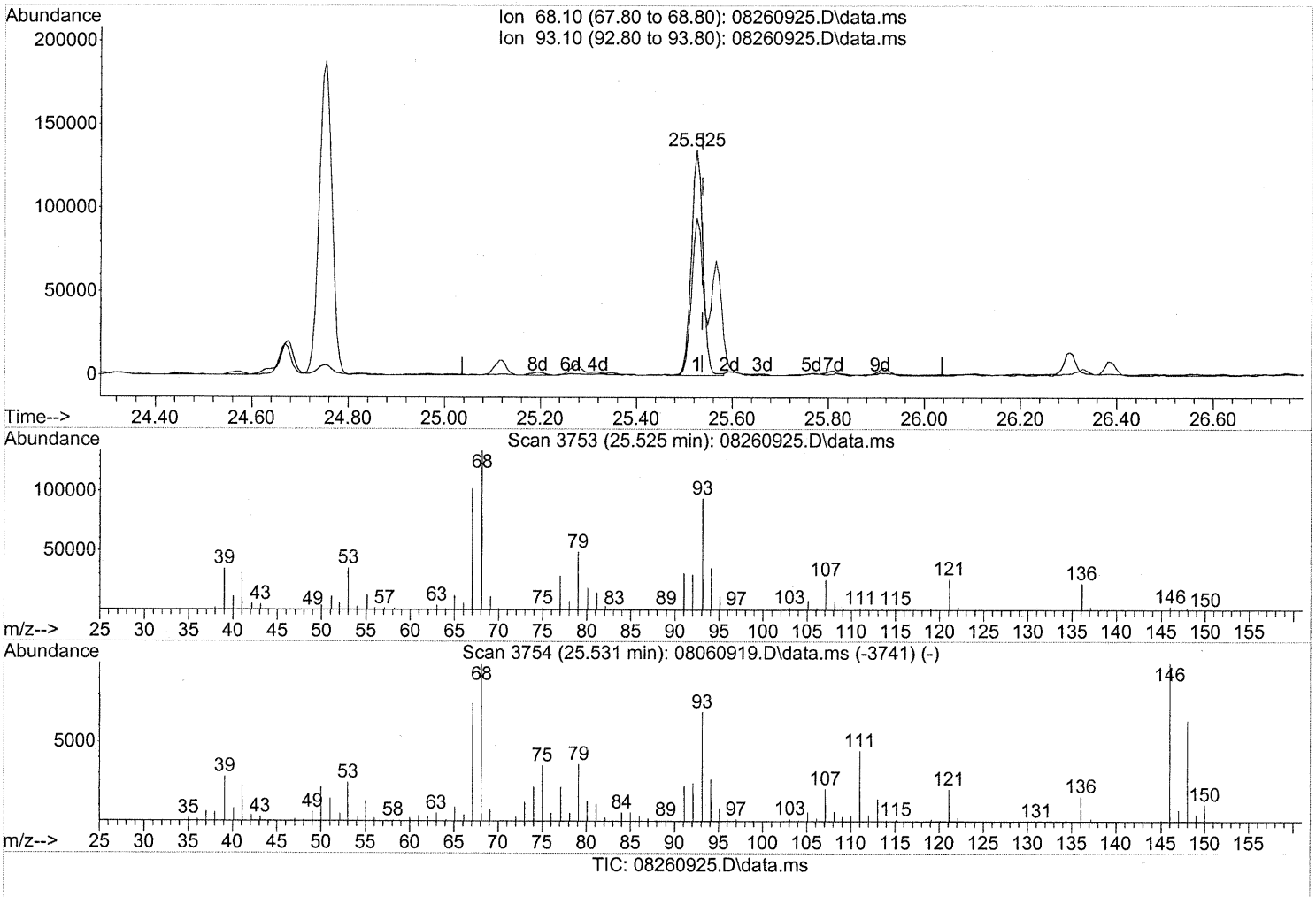
response 4360

Ion	Exp%	Act%
146.00	100	100
148.00	63.70	69.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(91) d-Limonene (T)

25.525min (-0.012) 9.55ng

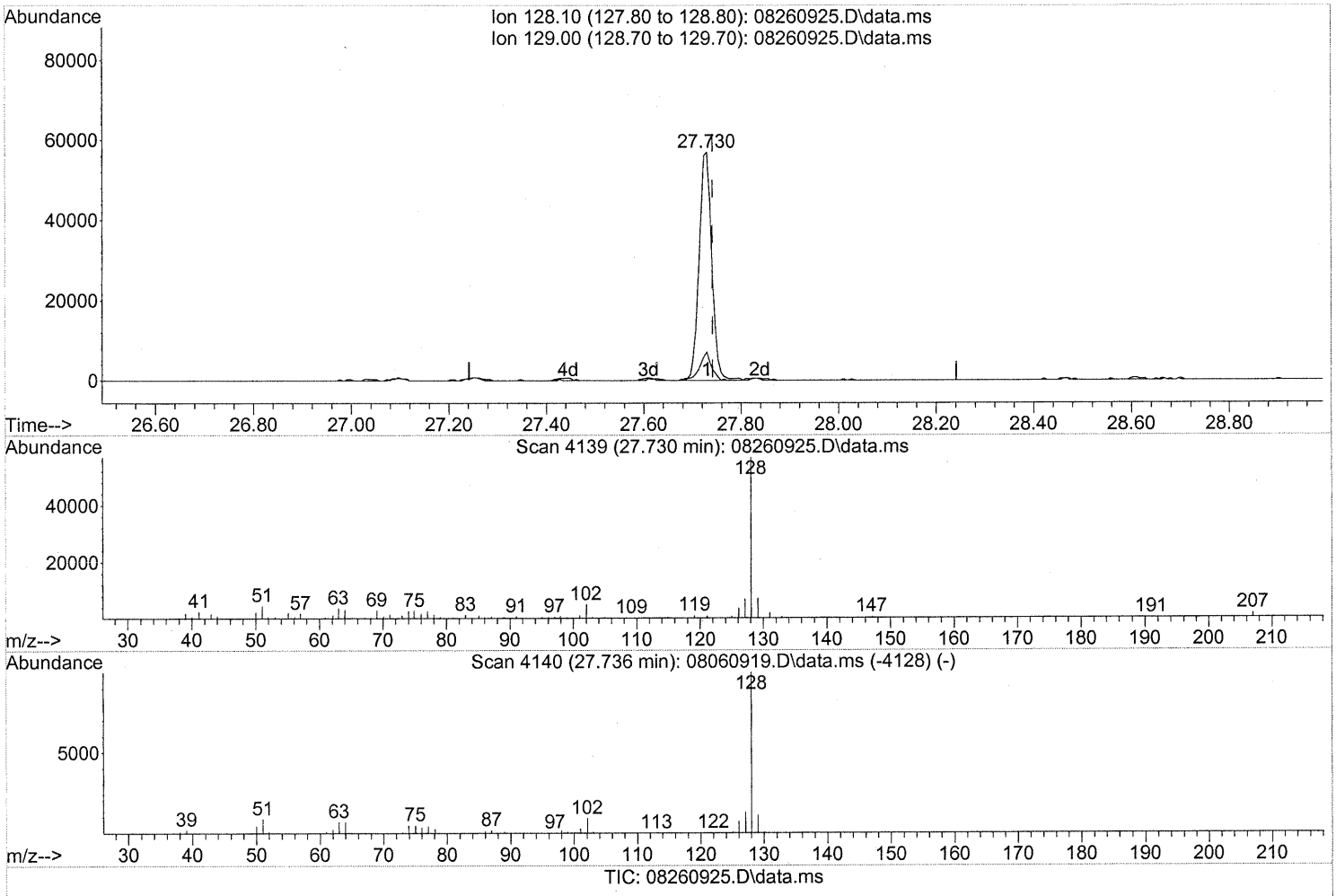
response 222559

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	72.37
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260925.D
Acq On : 27 Aug 2009 6:39
Operator : WA/CC
Sample : P0902876-009 (1000mL)
Misc : Environmental Health 102473
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 27 08:15:39 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260925.D\data.ms

(95) Naphthalene (T)

27.730min (-0.011) 1.38ng

response 102430

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.38
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102474** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-010

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00782

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

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.82	ND	0.47	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**3.0**	0.82	**0.61**	0.16	
74-87-3	**Chloromethane**	**1.2**	0.16	**0.57**	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**	**120**	8.2	**66**	4.3	
75-05-8	**Acetonitrile**	**200**	0.82	**120**	0.49	**E**
107-02-8	**Acrolein**	**6.7**	0.82	**2.9**	0.36	
67-64-1	**Acetone**	**150**	8.2	**64**	3.4	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.16	**0.25**	0.029	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**10**	0.82	**4.1**	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	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.16	ND	0.052	
76-13-1	**Trichlorotrifluoroethane**	**0.64**	0.16	**0.083**	0.021	
75-15-0	**Carbon Disulfide**	**9.9**	0.82	**3.2**	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	0.040	
1634-04-4	**Methyl tert-Butyl Ether**	**0.54**	0.16	**0.15**	0.045	
108-05-4	Vinyl Acetate	ND	8.2	ND	2.3	
78-93-3	**2-Butanone (MEK)**	**6.3**	0.82	**2.2**	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.
E = Estimated; concentration exceeded calibration range.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102474**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00782

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

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

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.16	ND	0.041	
141-78-6	**Ethyl Acetate**	**1.5**	0.82	**0.42**	0.23	
110-54-3	**n-Hexane**	**10**	0.82	**2.9**	0.23	
67-66-3	**Chloroform**	**0.23**	0.16	**0.048**	0.033	
109-99-9	**Tetrahydrofuran (THF)**	**0.96**	0.82	**0.32**	0.28	
107-06-2	**1,2-Dichloroethane**	**3.4**	0.16	**0.84**	0.040	
71-55-6	1,1,1-Trichloroethane	ND	0.16	ND	0.030	
71-43-2	**Benzene**	**2.3**	0.16	**0.72**	0.051	
56-23-5	**Carbon Tetrachloride**	**0.57**	0.16	**0.090**	0.026	
110-82-7	**Cyclohexane**	**1.8**	0.82	**0.52**	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	0.030	
123-91-1	1,4-Dioxane	ND	0.82	ND	0.23	
80-62-6	Methyl Methacrylate	ND	0.82	ND	0.20	
142-82-5	**n-Heptane**	**3.2**	0.82	**0.77**	0.20	
10061-01-5	**cis-1,3-Dichloropropene**	**1.9**	0.82	**0.43**	0.18	
108-10-1	**4-Methyl-2-pentanone**	**0.88**	0.82	**0.21**	0.20	
10061-02-6	**trans-1,3-Dichloropropene**	**1.5**	0.82	**0.33**	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.16	ND	0.030	
108-88-3	**Toluene**	**20**	0.82	**5.4**	0.22	
591-78-6	**2-Hexanone**	**1.7**	0.82	**0.41**	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**	**3.1**	0.82	**0.65**	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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902876
Client Sample ID: **102474** CAS Sample ID: P0902876-010
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00782

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

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.0**	0.82	**0.42**	0.17	
127-18-4	**Tetrachloroethene**	**0.39**	0.16	**0.057**	0.024	
108-90-7	Chlorobenzene	ND	0.16	ND	0.035	
100-41-4	**Ethylbenzene**	**4.3**	0.82	**0.98**	0.19	
179601-23-1	**m,p-Xylenes**	**7.7**	0.82	**1.8**	0.19	
75-25-2	Bromoform	ND	0.82	ND	0.079	
100-42-5	**Styrene**	**5.8**	0.82	**1.4**	0.19	
95-47-6	**o-Xylene**	**3.8**	0.82	**0.89**	0.19	
111-84-2	**n-Nonane**	**1.2**	0.82	**0.24**	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**	**91**	0.82	**16**	0.15	
103-65-1	**n-Propylbenzene**	**1.1**	0.82	**0.22**	0.17	
622-96-8	**4-Ethyltoluene**	**1.4**	0.82	**0.28**	0.17	
108-67-8	**1,3,5-Trimethylbenzene**	**1.7**	0.82	**0.34**	0.17	
95-63-6	**1,2,4-Trimethylbenzene**	**5.3**	0.82	**1.1**	0.17	
100-44-7	Benzyl Chloride	ND	0.16	ND	0.031	
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**	**0.27**	0.16	**0.044**	0.027	
5989-27-5	**d-Limonene**	**17**	0.82	**3.1**	0.15	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.82	ND	0.084	
120-82-1	1,2,4-Trichlorobenzene	ND	0.82	ND	0.11	
91-20-3	**Naphthalene**	**2.2**	0.82	**0.41**	0.16	
87-68-3	Hexachlorobutadiene	ND	0.82	ND	0.076	

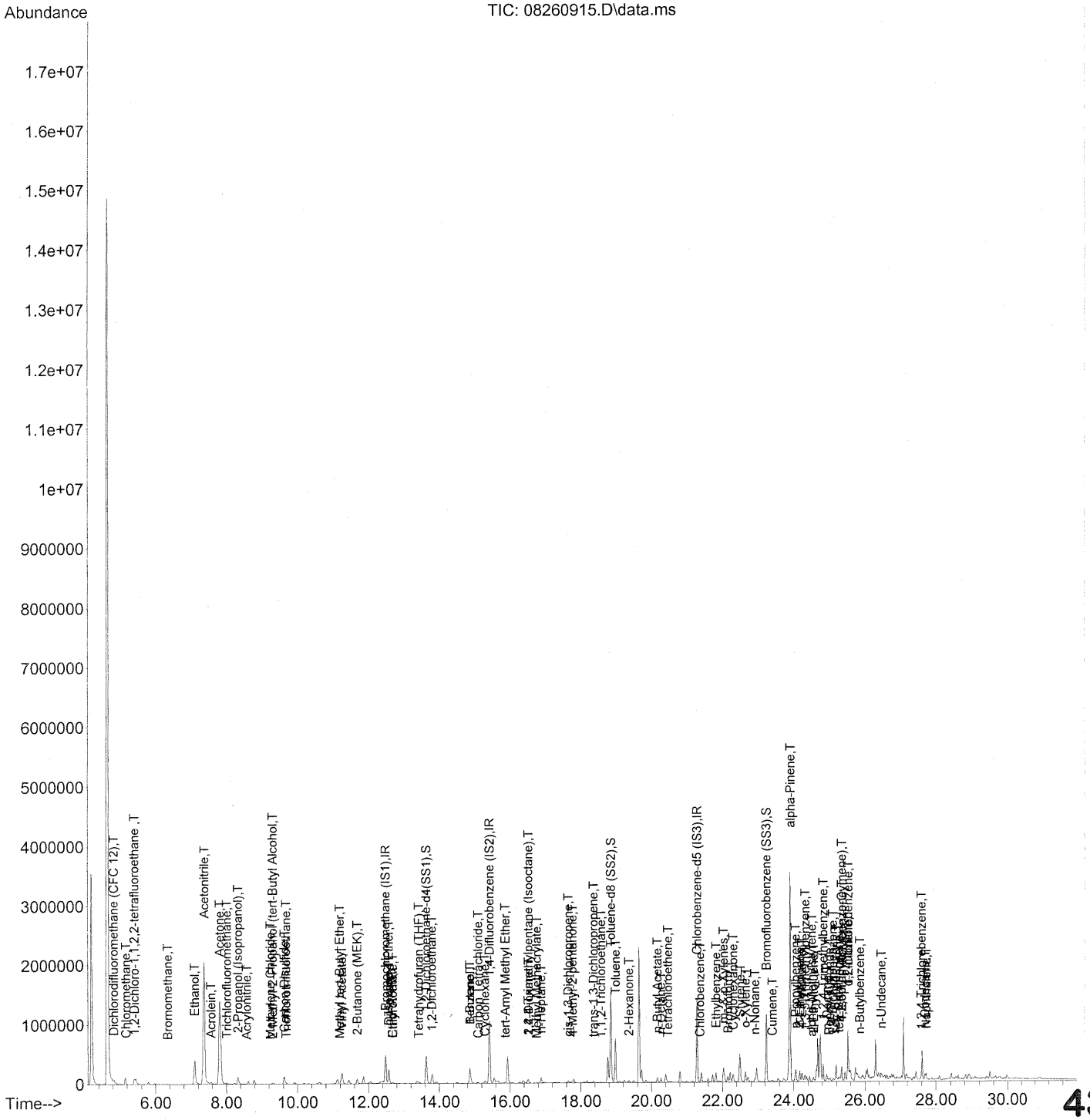
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 8:09 pm
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 17:04:03 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

WM 9/1/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	241879	25.000 ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1208117	25.000 ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	579717	25.000 ng	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 1,2-Dichloroethane-d4(...	13.63	65	470593	22.384 ng	-0.03
Spiked Amount 25.000			Recovery =	89.52%	✓
57) Toluene-d8 (SS2)	18.85	98	1315799	25.976 ng	-0.02
Spiked Amount 25.000			Recovery =	103.92%	✓
73) Bromofluorobenzene (SS3)	23.23	174	364962	27.321 ng	-0.01 ✓
Spiked Amount 25.000			Recovery =	109.28%	

Target Compounds	R.T.	QIon	Response	Conc Units		Qvalue
2) Propene	0.00	42	0	N.D. d		
3) Dichlorodifluoromethan...	4.82	85	50266	1.853 ng		100
4) Chloromethane	5.17	50	13259	0.727 ng		94
5) 1,2-Dichloro-1,1,2,2-t...	5.41	135	711	0.065 ng	#	44
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	5.88	54	216	N.D.		
8) Bromomethane	6.35	94	966	0.091 ng		98
9) Chloroethane	0.00	64	0	N.D.	E WM 9/2/09	
10) Ethanol	7.10	45	806639	76.668 ng		100
11) Acetonitrile	7.38	41	3802444	123.407 ng		100
12) Acrolein	7.57	56	32803	4.096 ng		99
13) Acetone	7.81	58	930770	93.760 ng		96
14) Trichlorofluoromethane	8.01	101	20834	0.849 ng		97
15) 2-Propanol (Isopropanol)	8.33	45	238578m	6.116 ng		
16) Acrylonitrile	8.57	53	1023	0.057 ng	#	9
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.30	59	9654	0.279 ng	#	1
19) Methylene Chloride	9.24	84	1739	0.130 ng		100
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d		
21) Trichlorotrifluoroethane	9.67	151	3488	0.391 ng		92
22) Carbon Disulfide	9.63	76	286388	6.093 ng		98
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	11.19	73	12468	0.332 ng		96
26) Vinyl Acetate	11.24	86	16658	8.246 ng	FP	67
27) 2-Butanone (MEK)	11.68	72	34859	3.889 ng	9/8/09	95
28) cis-1,2-Dichloroethene	12.34	61	99	N.D.		
29) Diisopropyl Ether	12.57	87	1505	0.125 ng	#	1
30) Ethyl Acetate	12.68	61	4350	0.932 ng		89
31) n-Hexane	12.57	57	151091	6.325 ng		10[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 8:09 pm
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 17:04:03 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.68	83	3025	0.144 ng		97
34) Tetrahydrofuran (THF)	13.42	72	5608	0.587 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	40121	2.088 ng		96
38) 1,1,1-Trichloroethane	14.17	97	233	N.D.		
39) Isopropyl Acetate	14.87	61	197	N.D.		
40) 1-Butanol	14.87	56	174219	11.111 ng		79
41) Benzene	14.87	78	74872	1.410 ng		99
42) Carbon Tetrachloride	15.10	117	5901	0.349 ng		94
43) Cyclohexane	15.29	84	21443	1.102 ng		97
44) tert-Amyl Methyl Ether	15.87	73	2606	0.065 ng	#	61
45) 1,2-Dichloropropane	15.94	63	91	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.52	88	1386	0.137 ng	#	1
49) 2,2,4-Trimethylpentane...	16.52	57	54651	0.874 ng		80
50) Methyl Methacrylate	16.76	100	516	0.106 ng	#	1
51) n-Heptane	16.88	71	27600	1.936 ng		98
52) cis-1,3-Dichloropropene	17.65	75	26196	1.185 ng		100
53) 4-Methyl-2-pentanone	17.76	58	6899	0.540 ng		94
54) trans-1,3-Dichloropropene	18.36	75	19187	0.913 ng		100
55) 1,1,2-Trichloroethane	18.57	97	648	0.056 ng	#	1
58) Toluene	18.98	91	621970	12.494 ng		99
59) 2-Hexanone	19.36	43	33715	1.018 ng		97
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	73474	1.883 ng		96
63) n-Octane	20.27	57	14456	1.201 ng		98
64) Tetrachloroethene	20.46	166	2756	0.239 ng		98
65) Chlorobenzene	21.37	112	1915	0.062 ng	#	43
66) Ethylbenzene	21.82	91	149228	2.622 ng		99
67) m- & p-Xylenes	22.03	91	216769	4.709 ng		98
68) Bromoform	22.16	173	522	0.053 ng	#	29
69) Styrene	22.50	104	118539	3.563 ng		99
70) o-Xylene	22.65	91	108822	2.358 ng		98
71) n-Nonane	22.91	43	23467	0.765 ng		97
72) 1,1,2,2-Tetrachloroethane	22.65	83	284	N.D.		
74) Cumene	23.40	105	15882	0.272 ng		98
75) alpha-Pinene	23.90	93	1665055	55.714 ng		81
76) n-Propylbenzene	24.05	91	49654	0.677 ng	#	65
77) 3-Ethyltoluene	24.17	105	108515	1.948 ng		100
78) 4-Ethyltoluene	24.23	105	46382	0.859 ng		97
79) 1,3,5-Trimethylbenzene	24.31	105	46721	1.026 ng		98

NOT NEEDED

437

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 8:09 pm
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 17:04:03 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

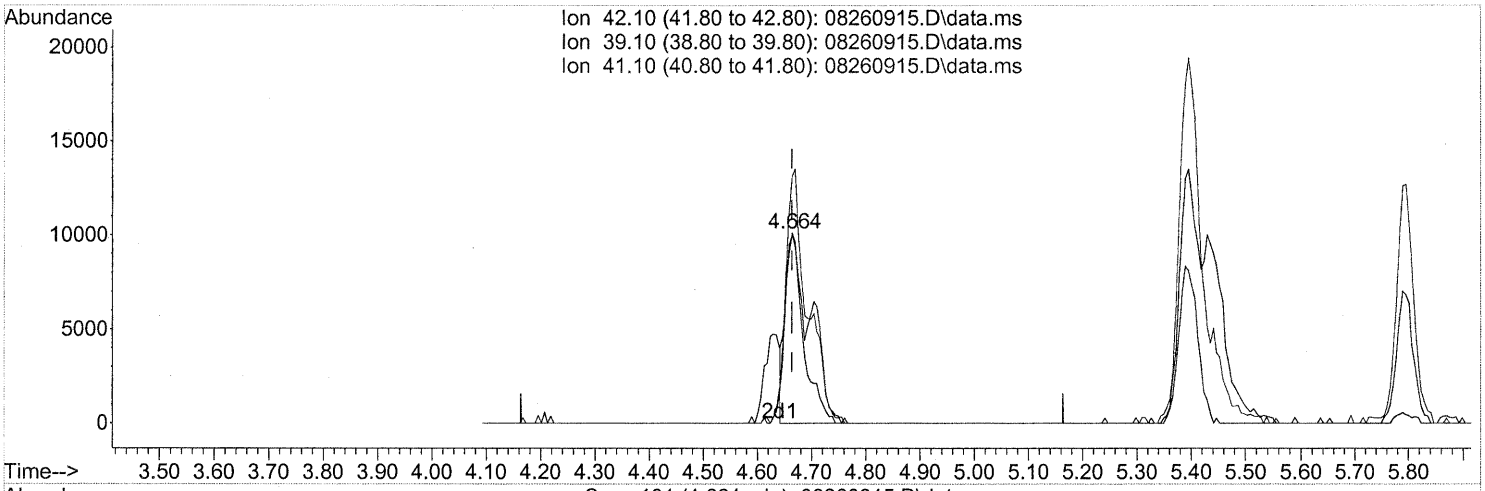
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.50	118	2149	0.088 ng		97
81) 2-Ethyltoluene	24.56	105	43038	0.766 ng		100
82) 1,2,4-Trimethylbenzene	24.82	105	151780	3.269 ng		89
83) n-Decane	24.93	57	52559	1.741 ng		87
84) Benzyl Chloride	24.99	91	2291	0.053 ng		77
85) 1,3-Dichlorobenzene	25.02	146	96	N.D.		
86) 1,4-Dichlorobenzene	25.10	146	1787	0.071 ng		90
87) sec-Butylbenzene	25.17	105	4520	0.072 ng	#	73
88) 4-Isopropyltoluene (p-...	25.35	119	81885	1.464 ng		99
89) 1,2,3-Trimethylbenzene	25.35	105	42140	0.891 ng	NOT NEEDED	86
90) 1,2-Dichlorobenzene	25.53	146	3632	0.163 ng		92
91) d-Limonene	25.53	68	210056	10.637 ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	32373	1.008 ng		99
94) 1,2,4-Trichlorobenzene	27.59	180	901	0.059 ng	#	84
95) Naphthalene	27.72	128	83302	1.321 ng		97
96) n-Dodecane	27.69	57	35719	0.957 ng		97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	72589	3.519 ng		94
99) tert-Butylbenzene	25.27	119	5466	0.122 ng		93
100) n-Butylbenzene	25.86	91	18384	0.355 ng	#	45

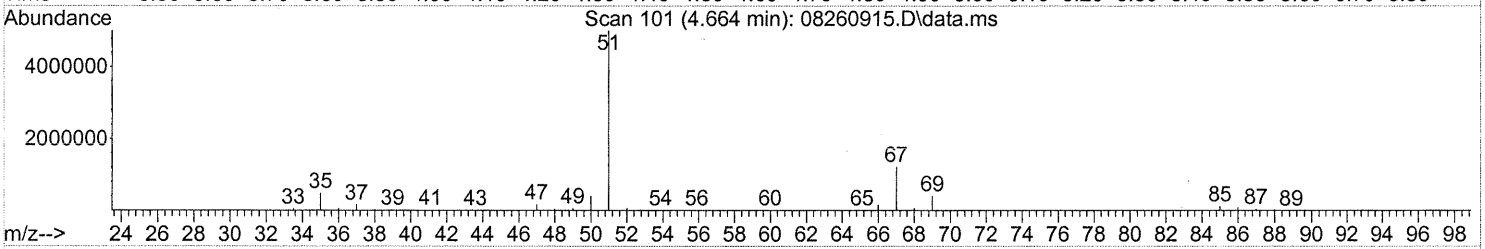
(#) = qualifier out of range (m) = manual integration (+) = signals summed

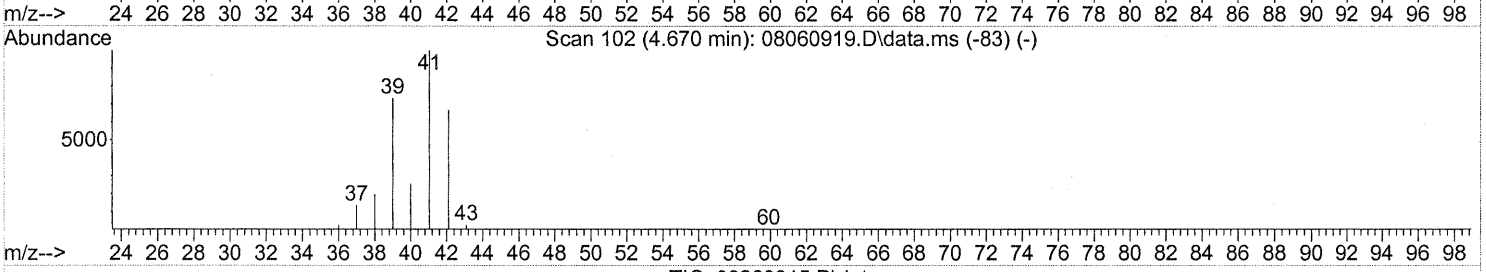
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 01 14:39:23 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(2) Propene (T)

4.664min (+0.000) 1.43ng

response 23667

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	139.33#
41.10	150.20	159.06
0.00	0.00	0.00

FP
VM 9/11/09

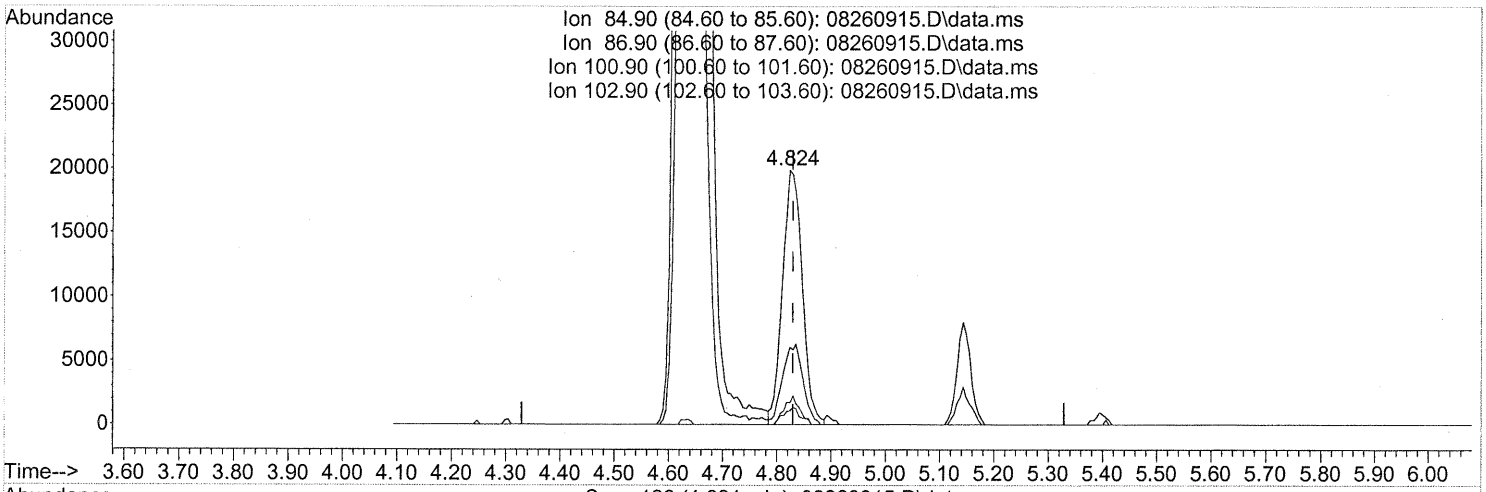
9/2/09

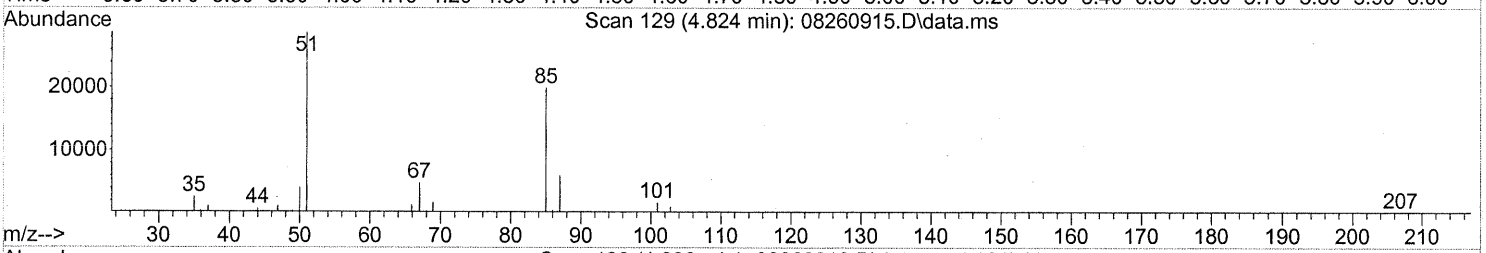
439

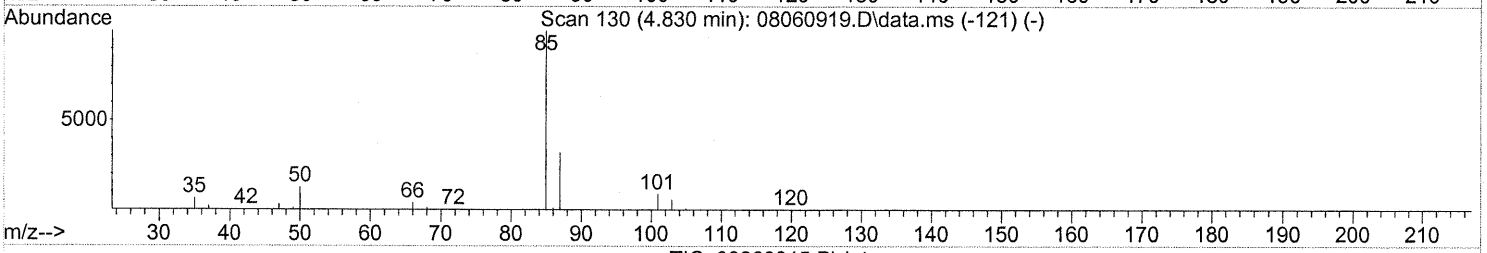
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.824min (-0.006) 1.85ng

response 50266

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	32.78
100.90	8.80	8.59
102.90	5.20	5.60

Quantitation Report (Qedit)

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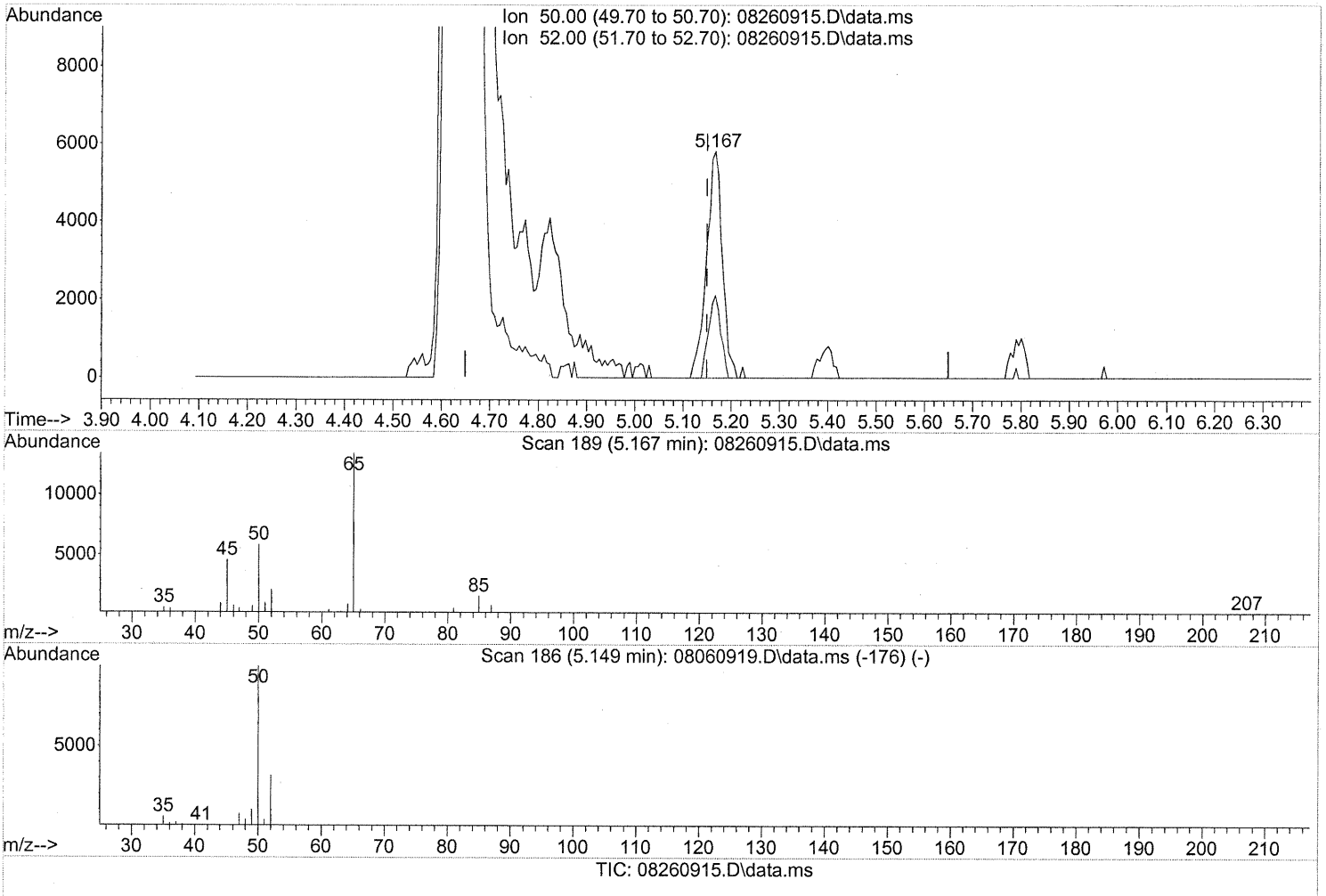

(4) Chloromethane (T)

5.167min (+0.017) 0.73ng

response 13259

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	28.16
0.00	0.00	0.00
0.00	0.00	0.00

441

Quantitation Report (Qedit)

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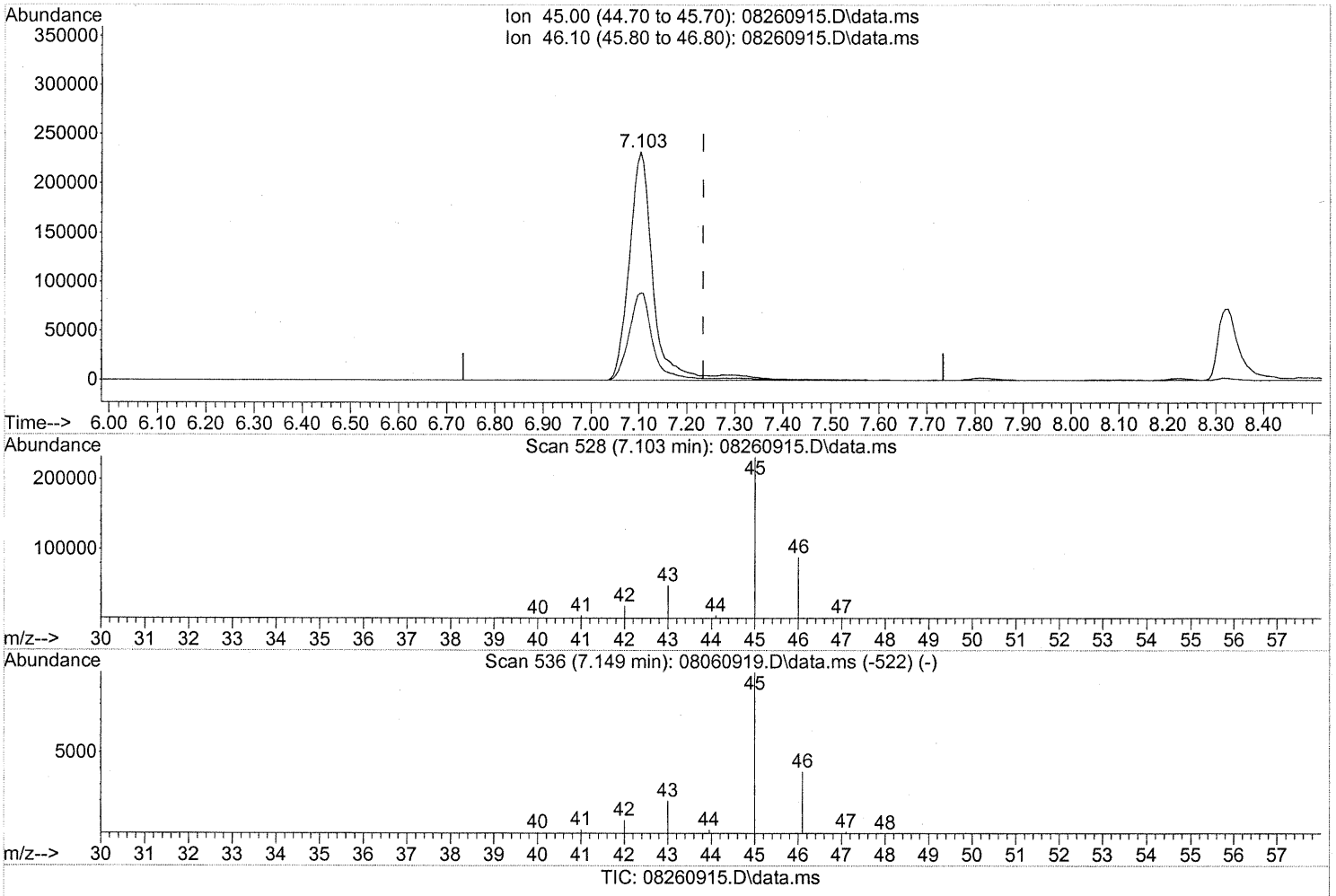
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.103min (-0.131) 76.67ng

response 806639

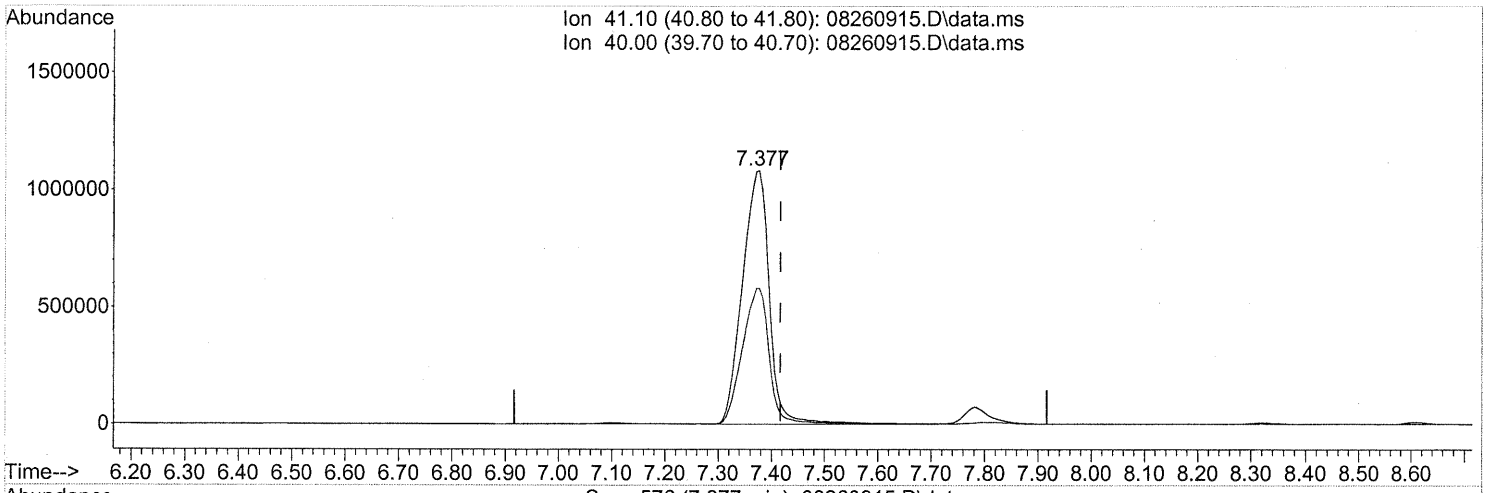
Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.65
0.00	0.00	0.00
0.00	0.00	0.00

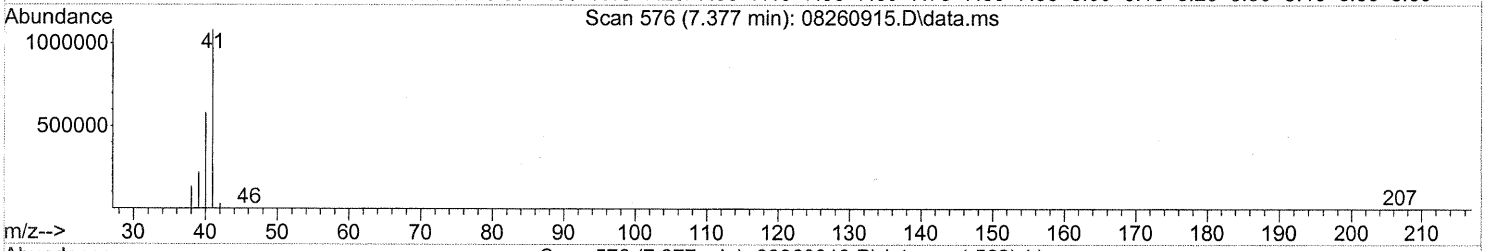
442

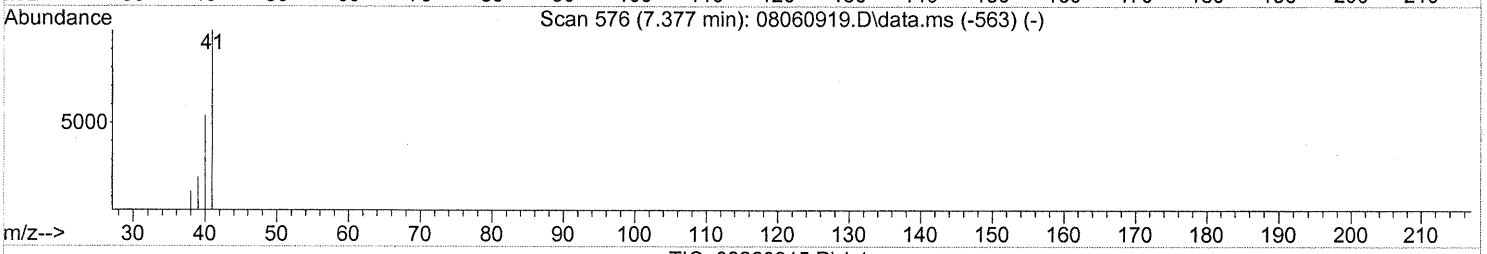
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(11) Acetonitrile (T)

7.377min (-0.040) 123.41ng

response 3802444

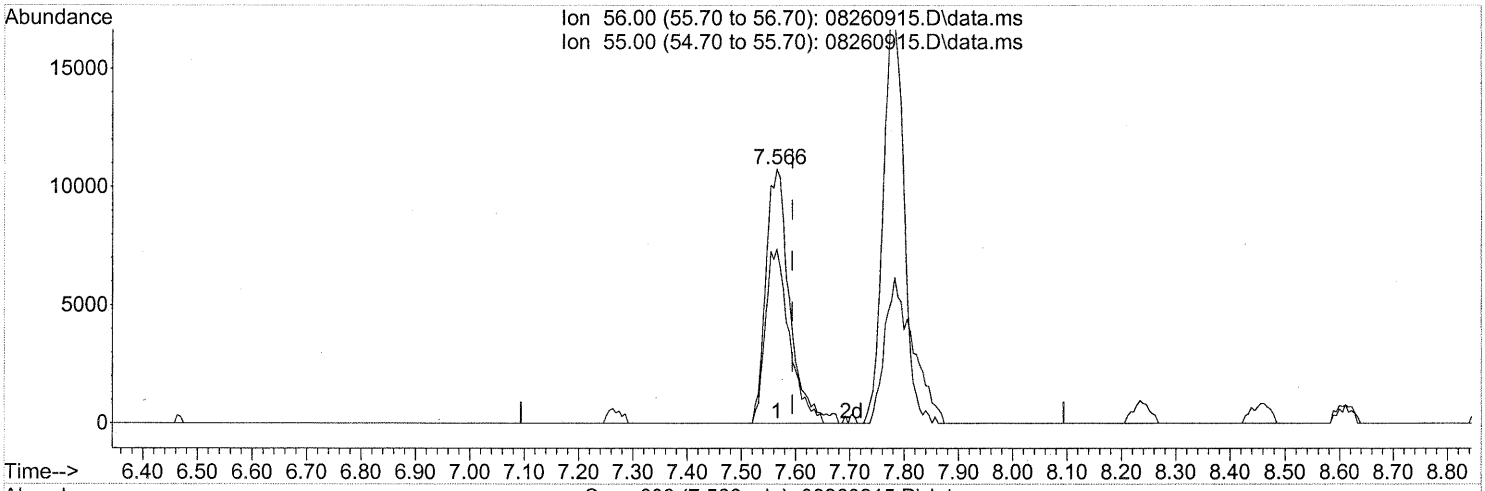
Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.54
0.00	0.00	0.00
0.00	0.00	0.00

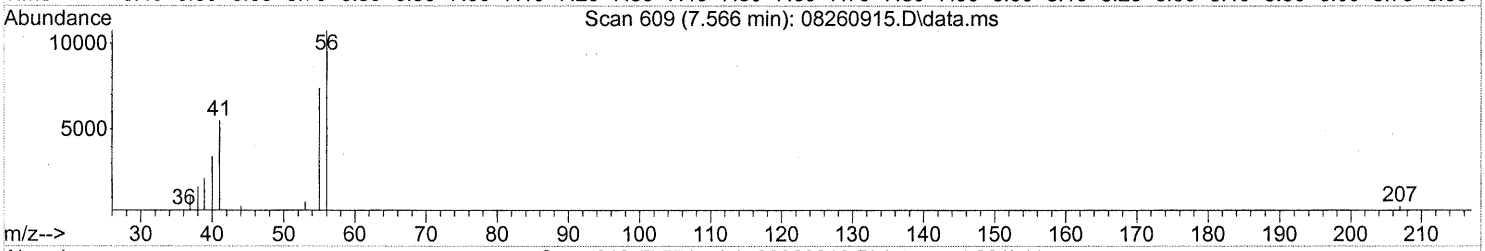
443

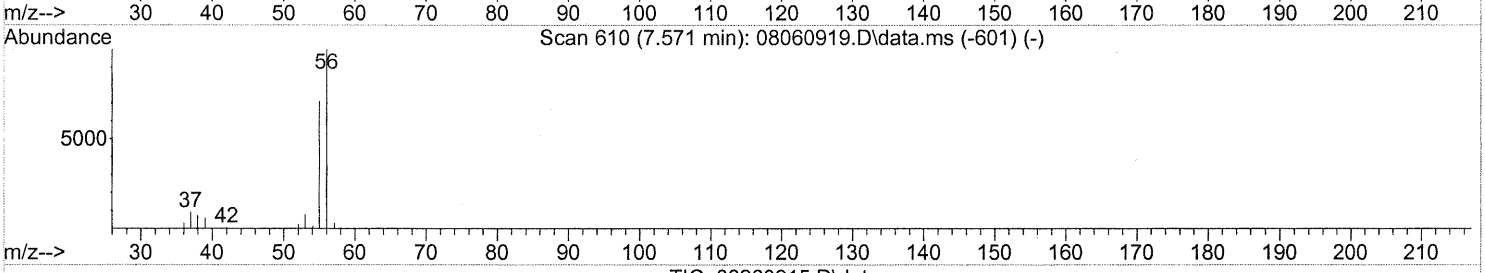
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(12) Acrolein (T)

7.566min (-0.028) 4.10ng

response 32803

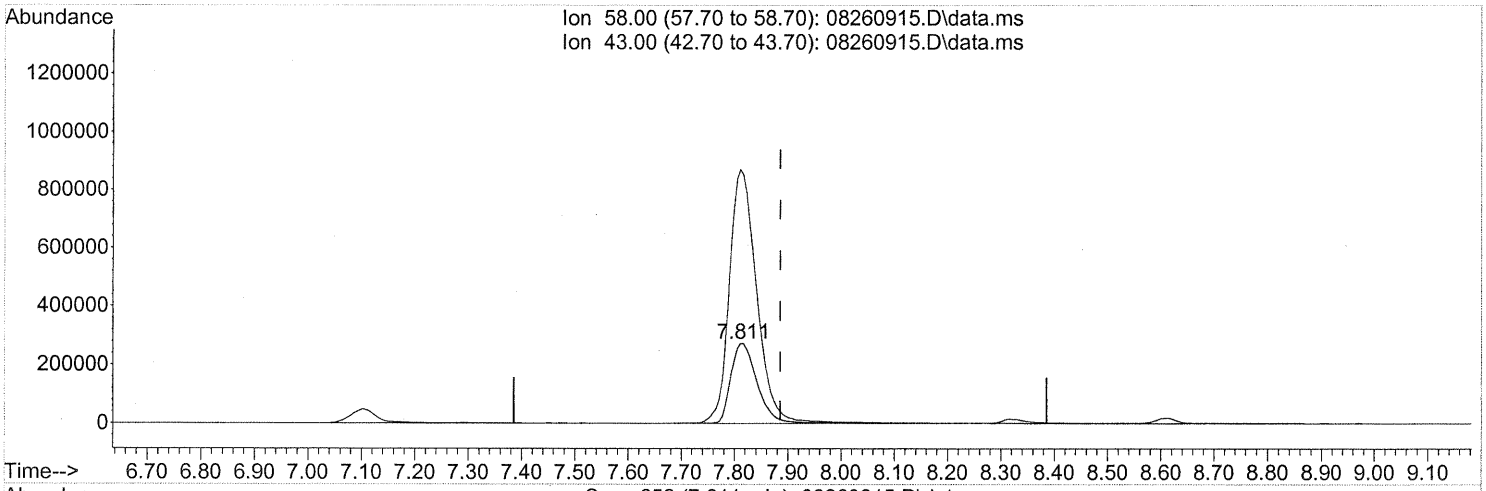
Ion	Exp%	Act%
56.00	100	100
55.00	68.10	69.00
0.00	0.00	0.00
0.00	0.00	0.00

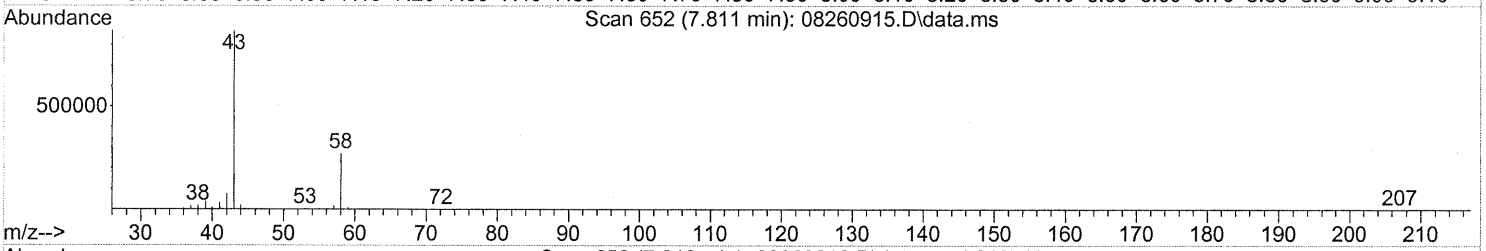
444

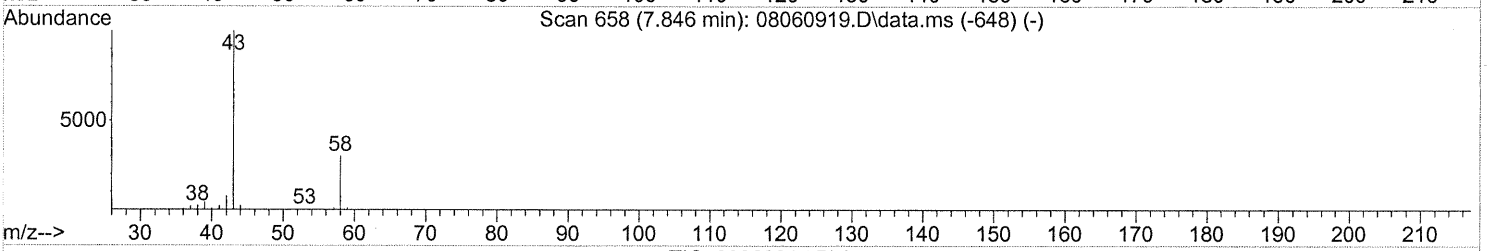
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(13) Acetone (T)

7.811min (-0.075) 93.76ng

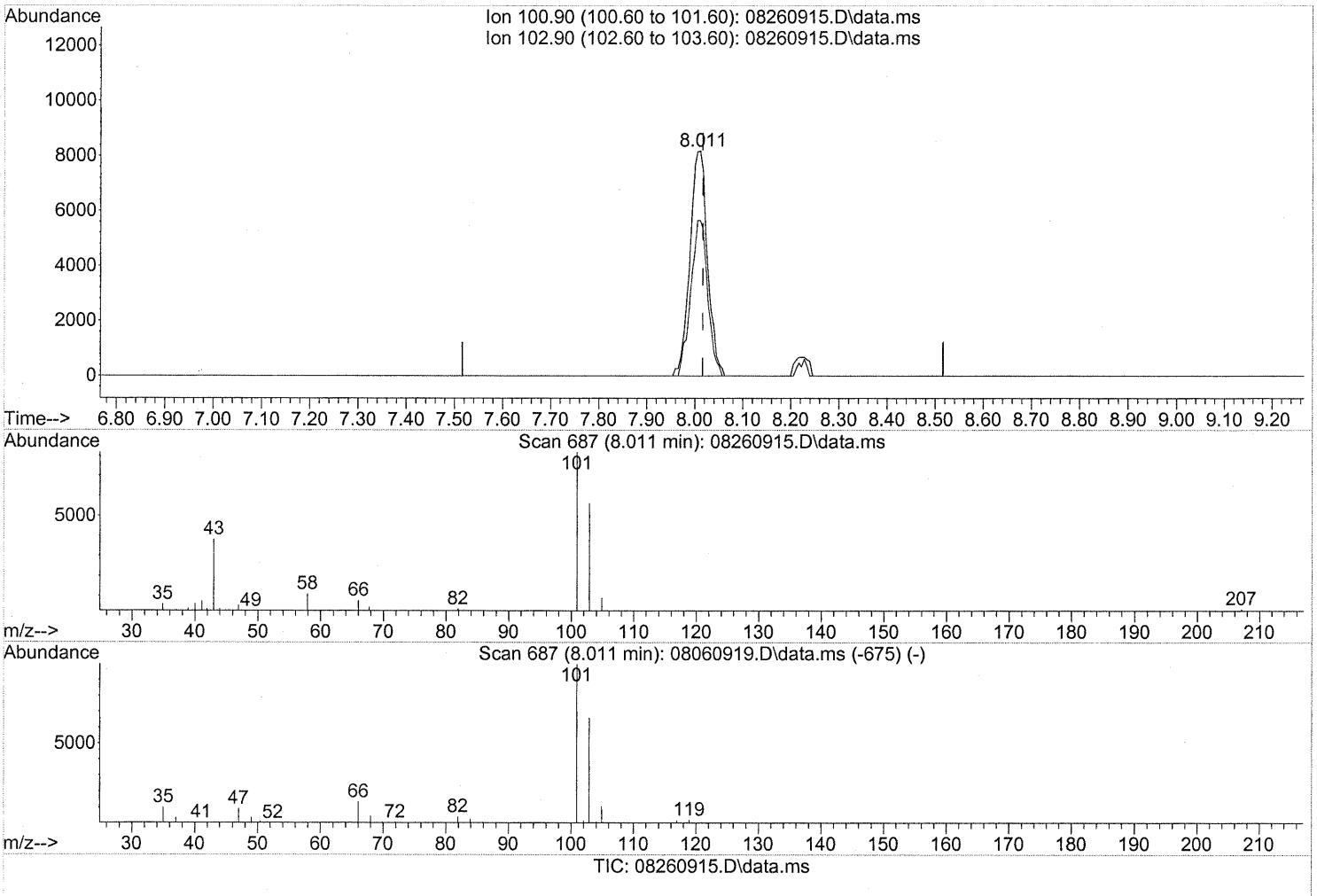
response 930770

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	332.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(14) Trichlorofluoromethane (T)

8.011min (-0.006) 0.85ng

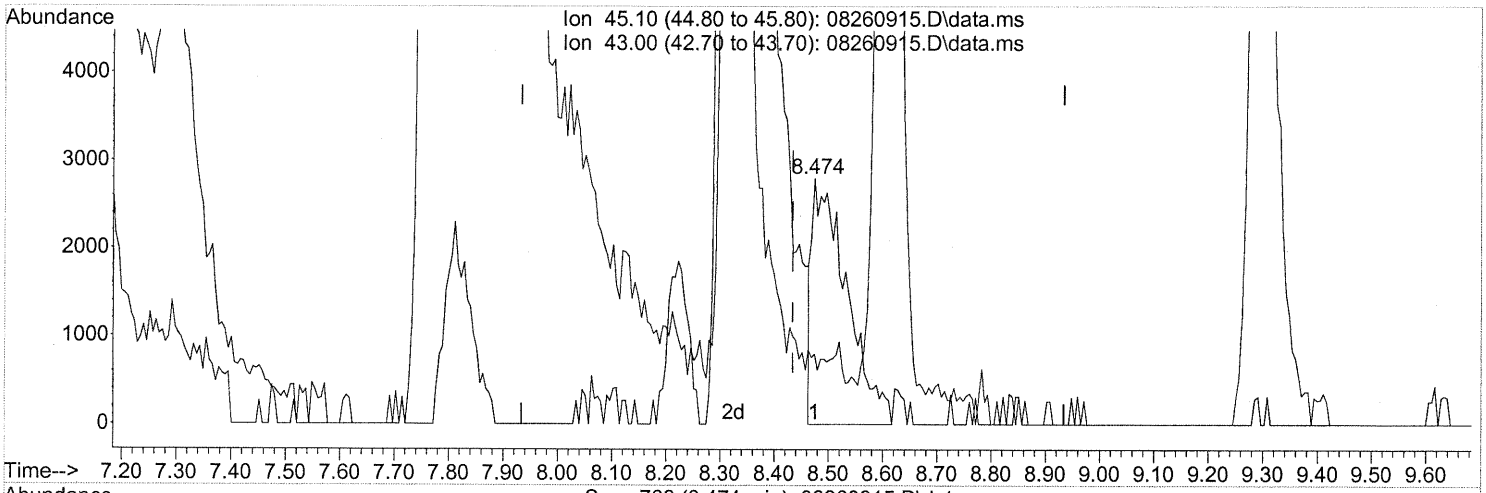
response 20834

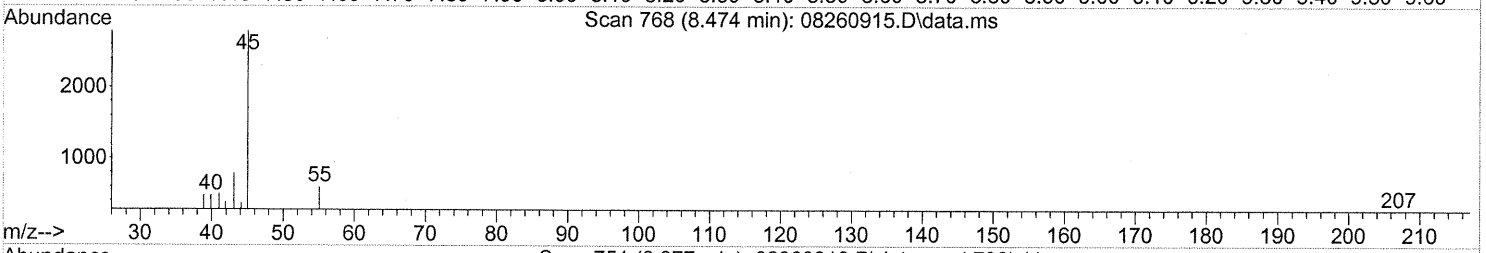
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	66.43
0.00	0.00	0.00
0.00	0.00	0.00

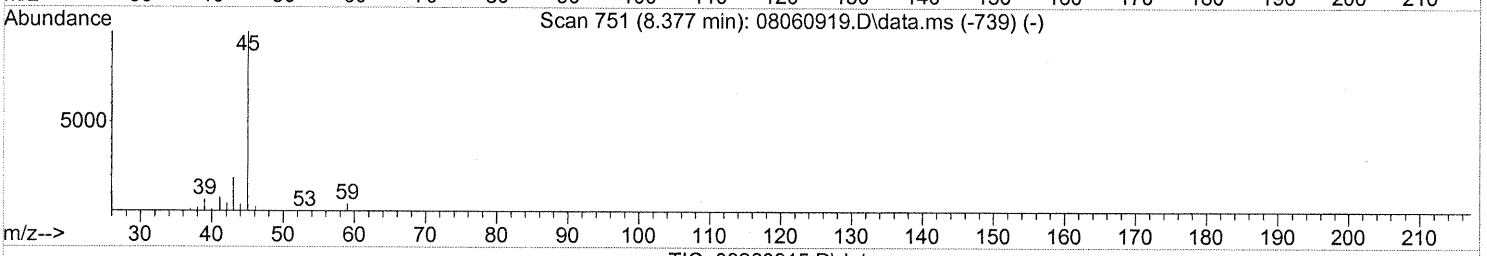
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

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

8.474min (+0.040) 0.32ng

response 12365

SP

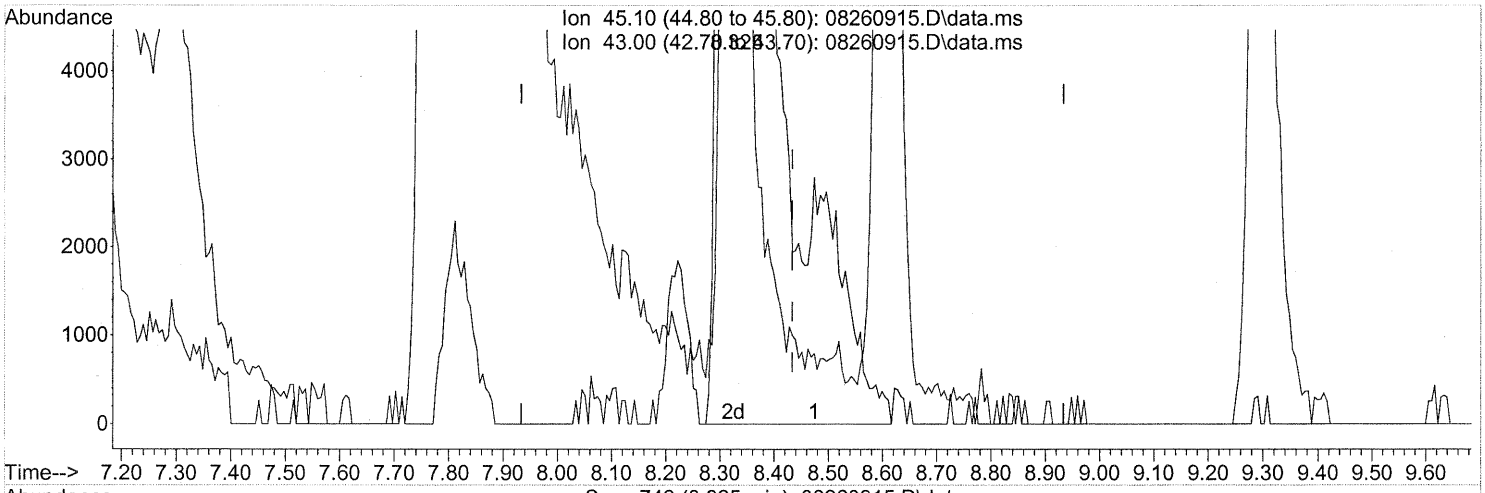
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

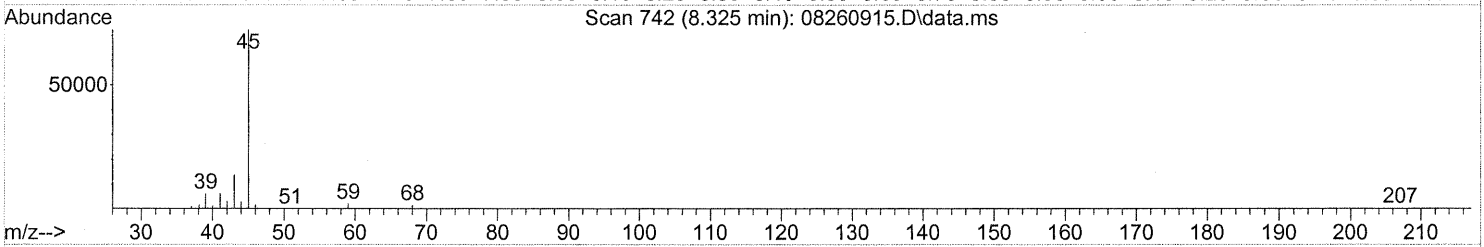
447

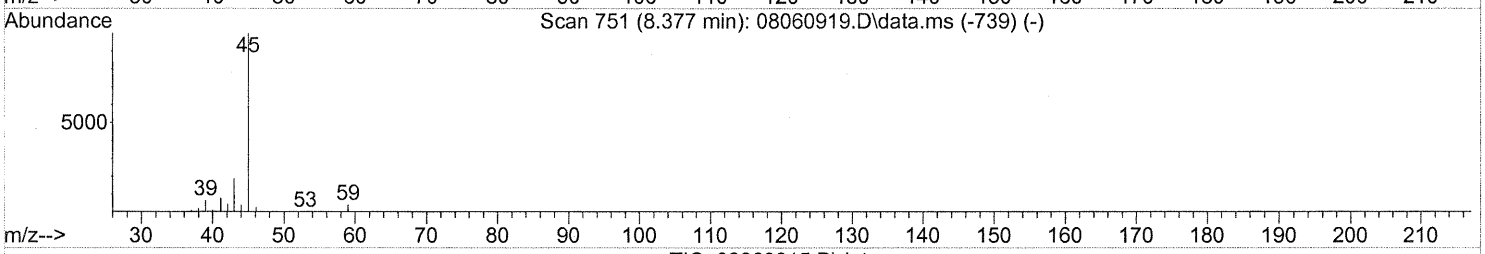
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

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

8.325min (-0.108) 6.12ng m

response 238578

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

SP 5/c
M 9/11/09

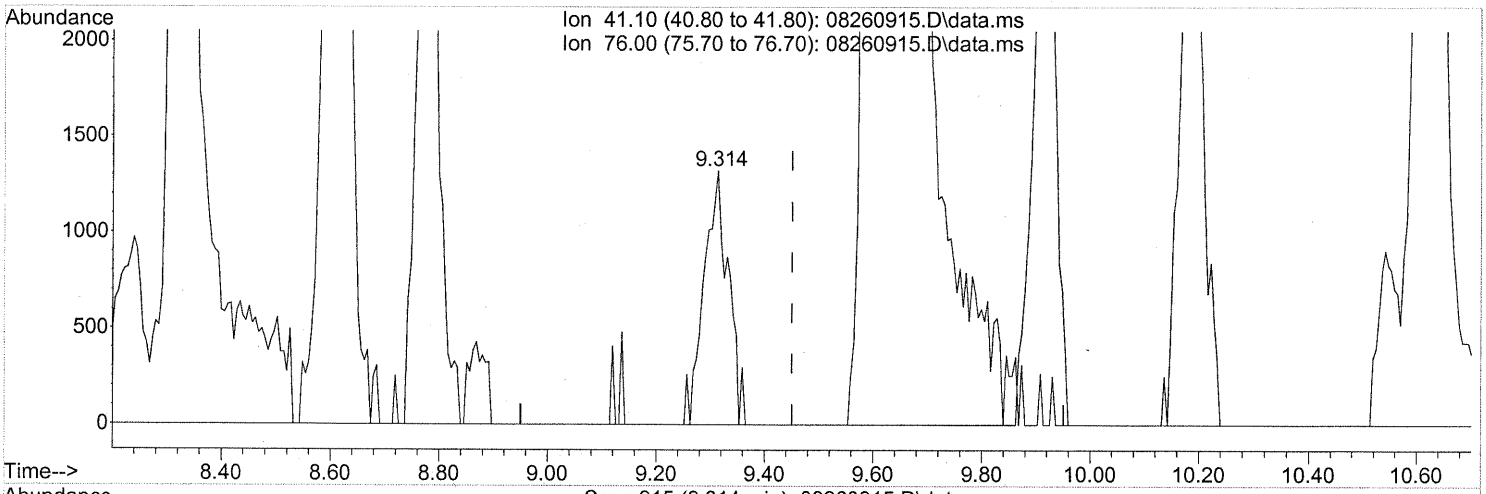
9/2/09

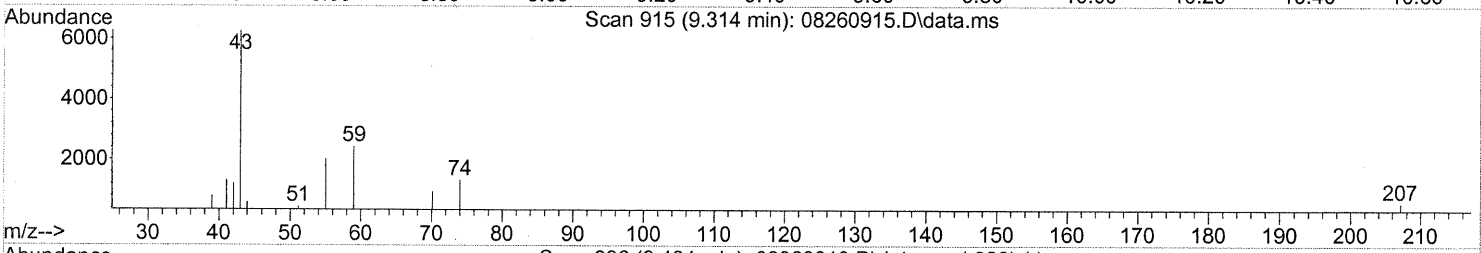
448

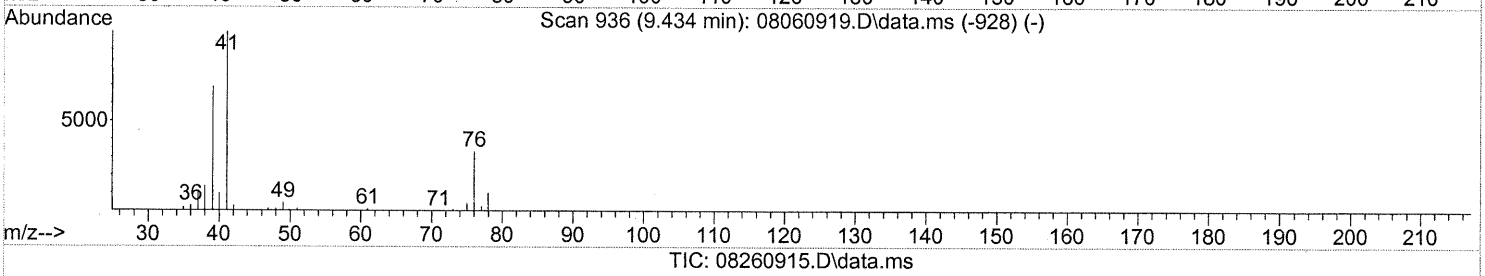
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

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

9.314min (-0.137) 0.16ng

response 4180

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FP
LM 9/1/09

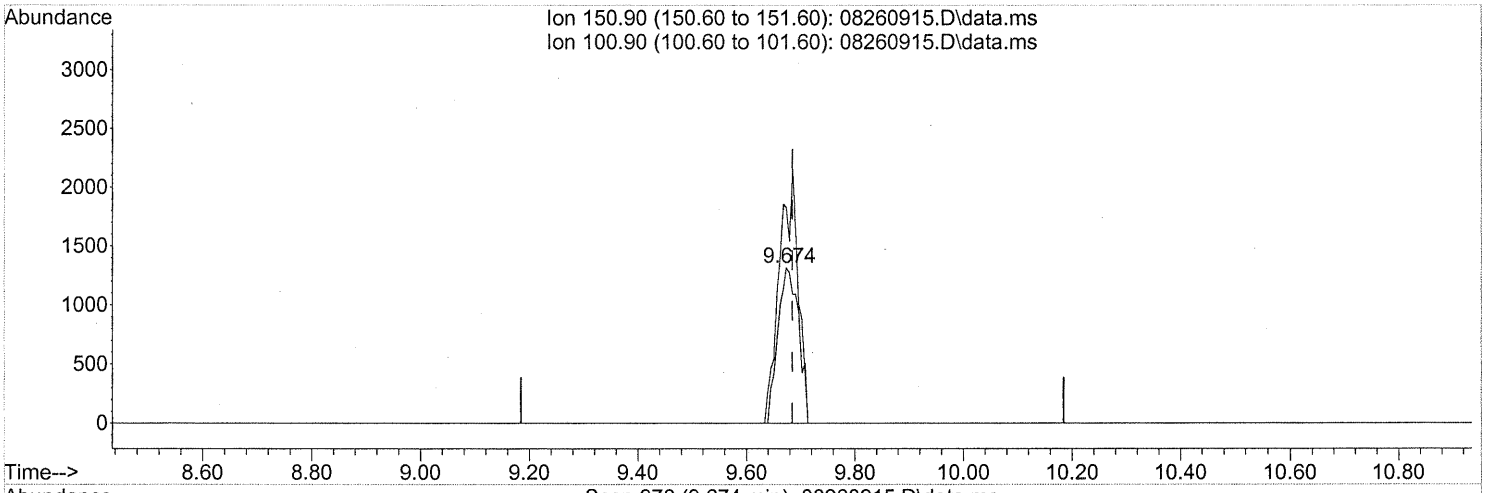
9/2/09

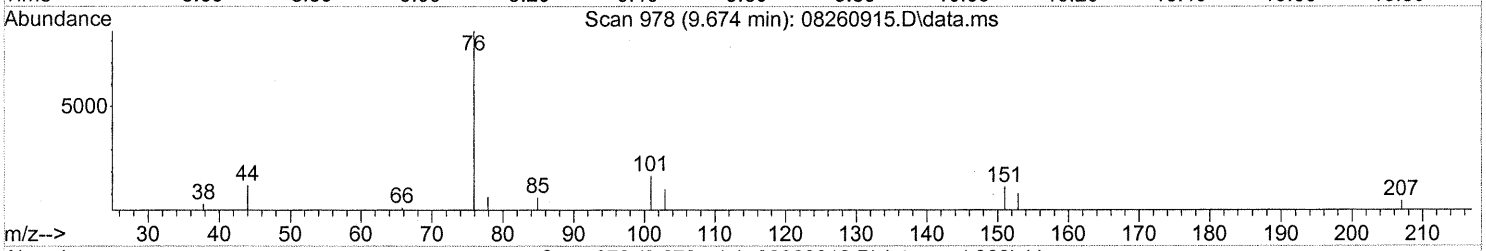
449

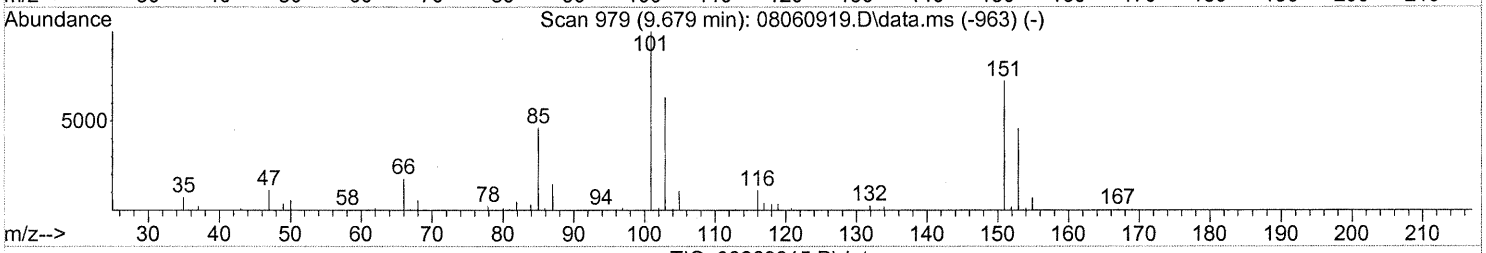
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.674min (-0.011) 0.39ng

response 3488

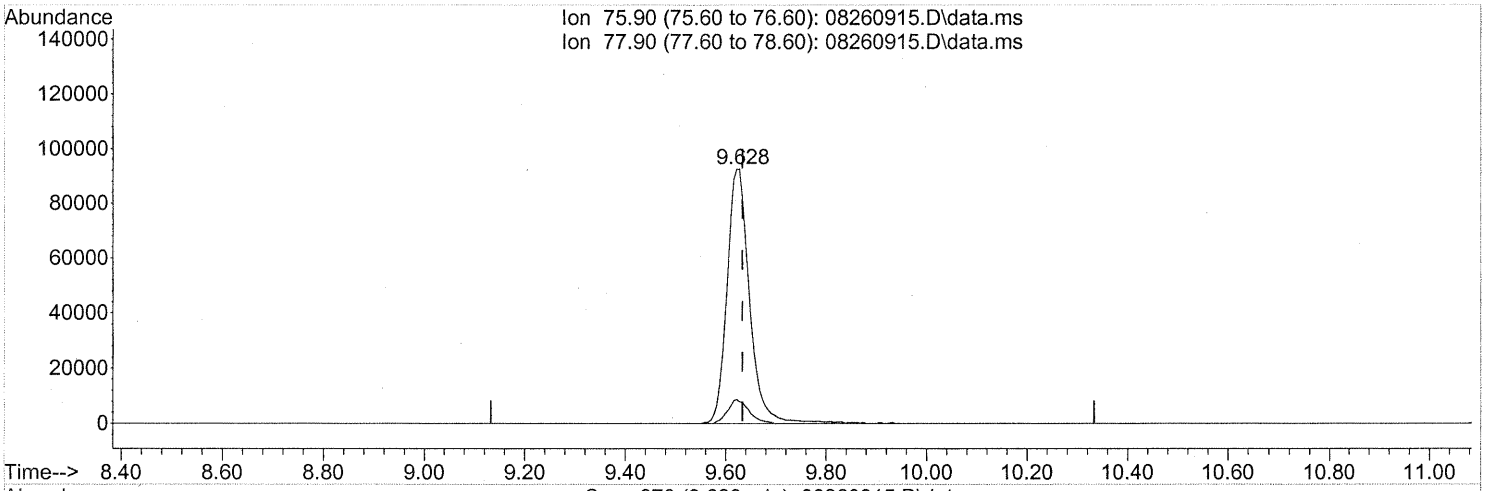
Ion	Exp%	Act%
150.90	100	100
100.90	138.40	148.14
0.00	0.00	0.00
0.00	0.00	0.00

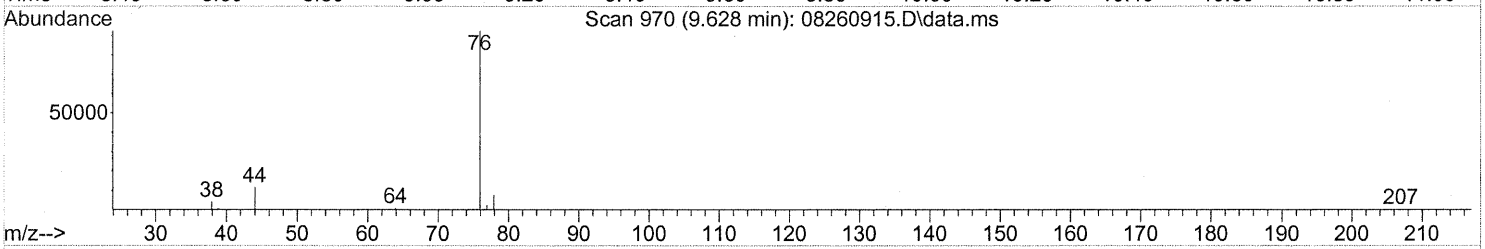
450

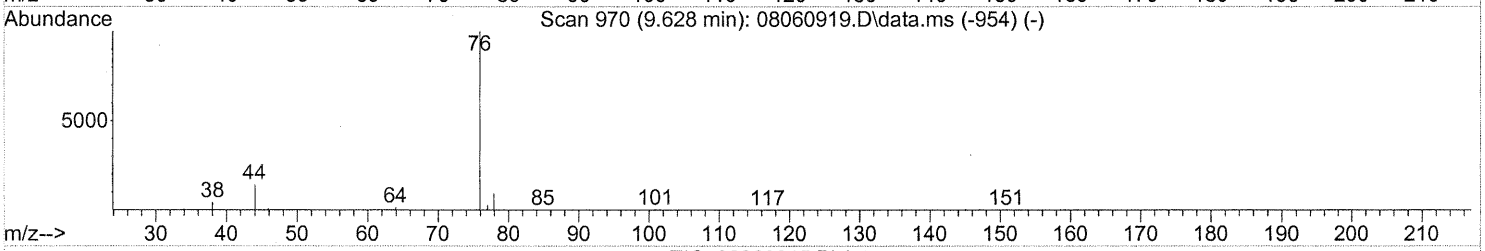
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(22) Carbon Disulfide (T)

9.628min (-0.006) 6.09ng

response 286388

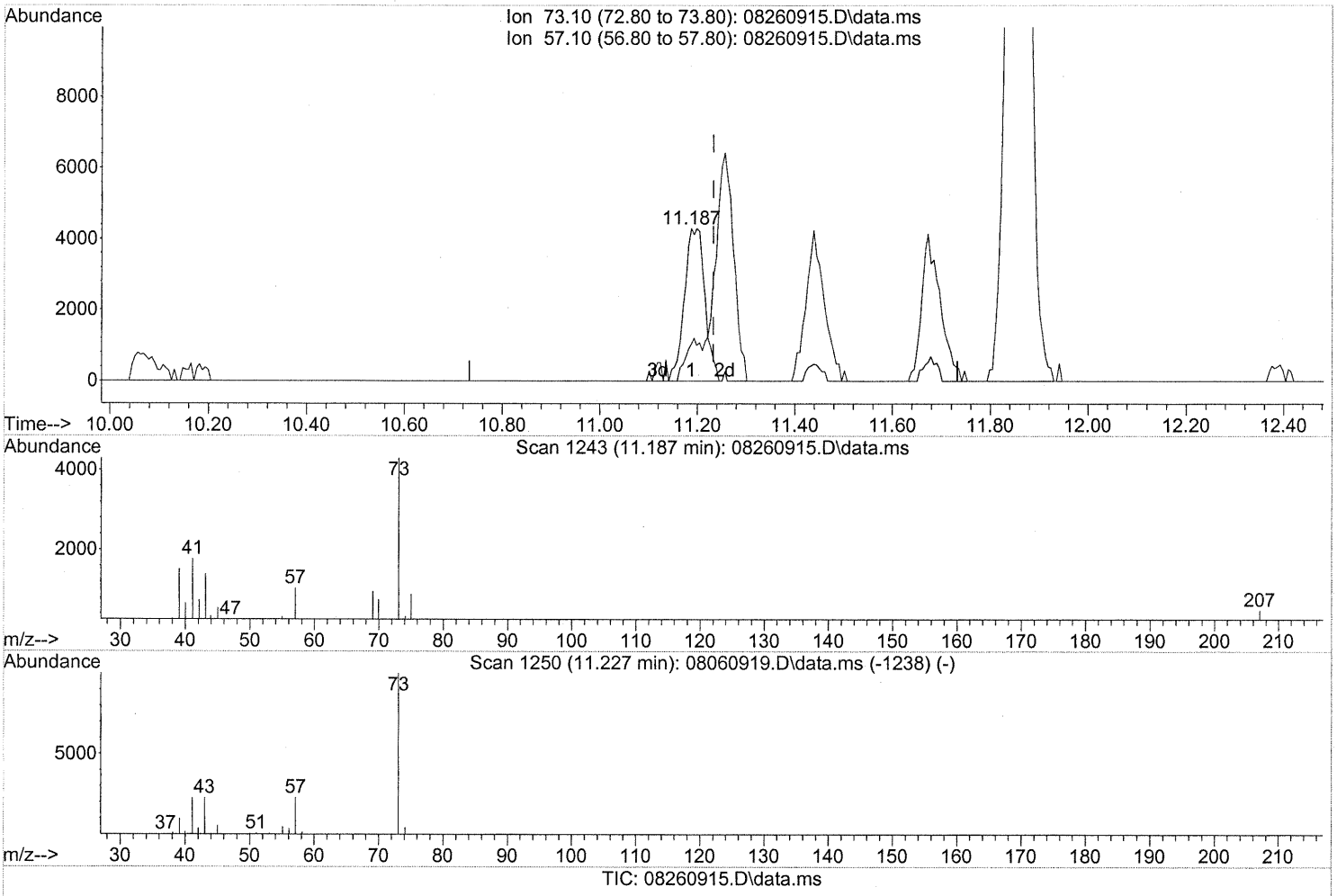
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.77
0.00	0.00	0.00
0.00	0.00	0.00

451

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(25) Methyl tert-Butyl Ether (T)

11.187min (-0.046) 0.33ng

response 12468

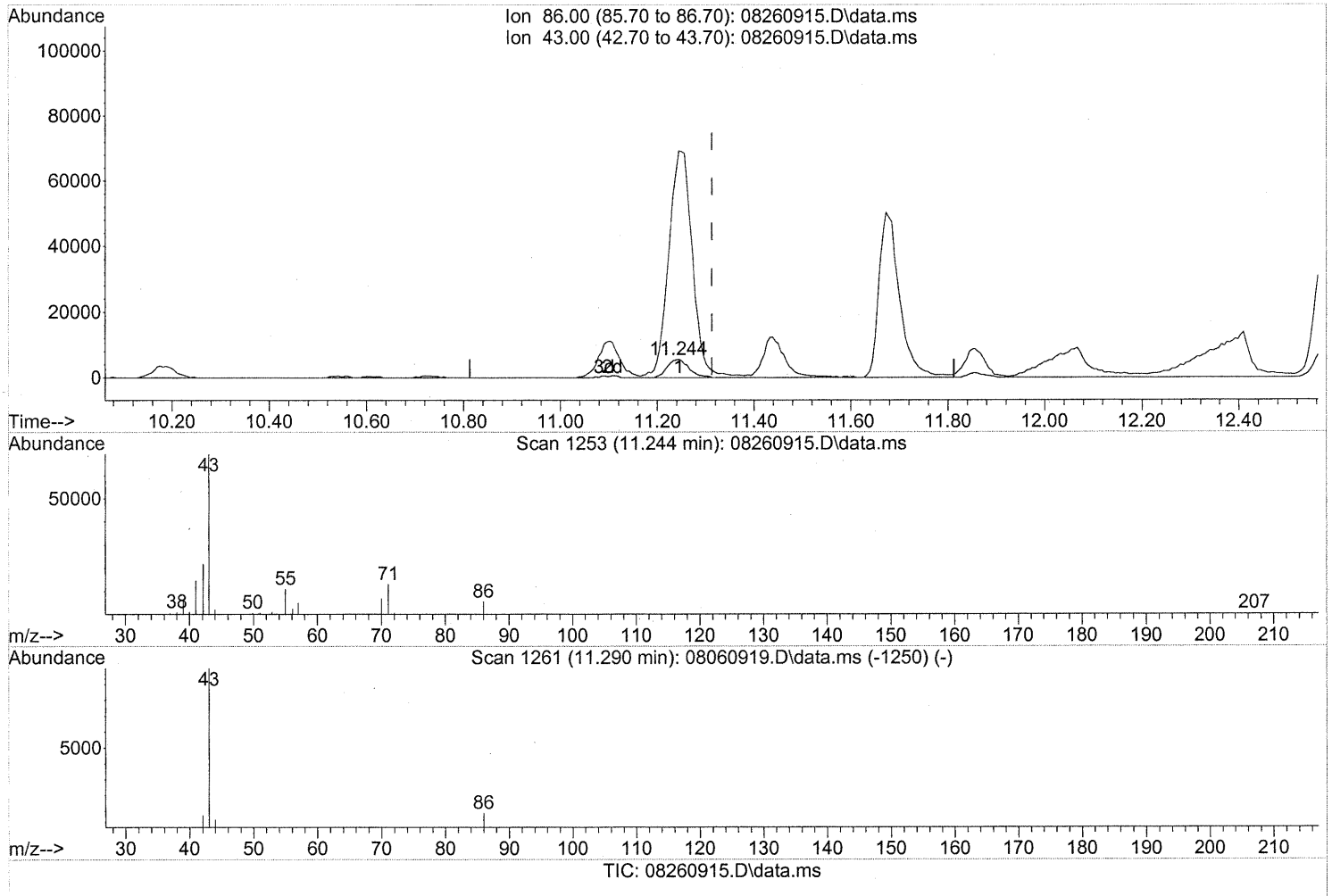
Ion	Exp%	Act%
73.10	100	100
57.10	22.50	20.69
0.00	0.00	0.00
0.00	0.00	0.00

452

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(26) Vinyl Acetate (T)

11.244min (-0.068) 8.25ng

response 16658

Ion	Exp%	Act%
86.00	100	100
43.00	1210.70	1377.77#
0.00	0.00	0.00
0.00	0.00	0.00

FP
on 9/2/09.

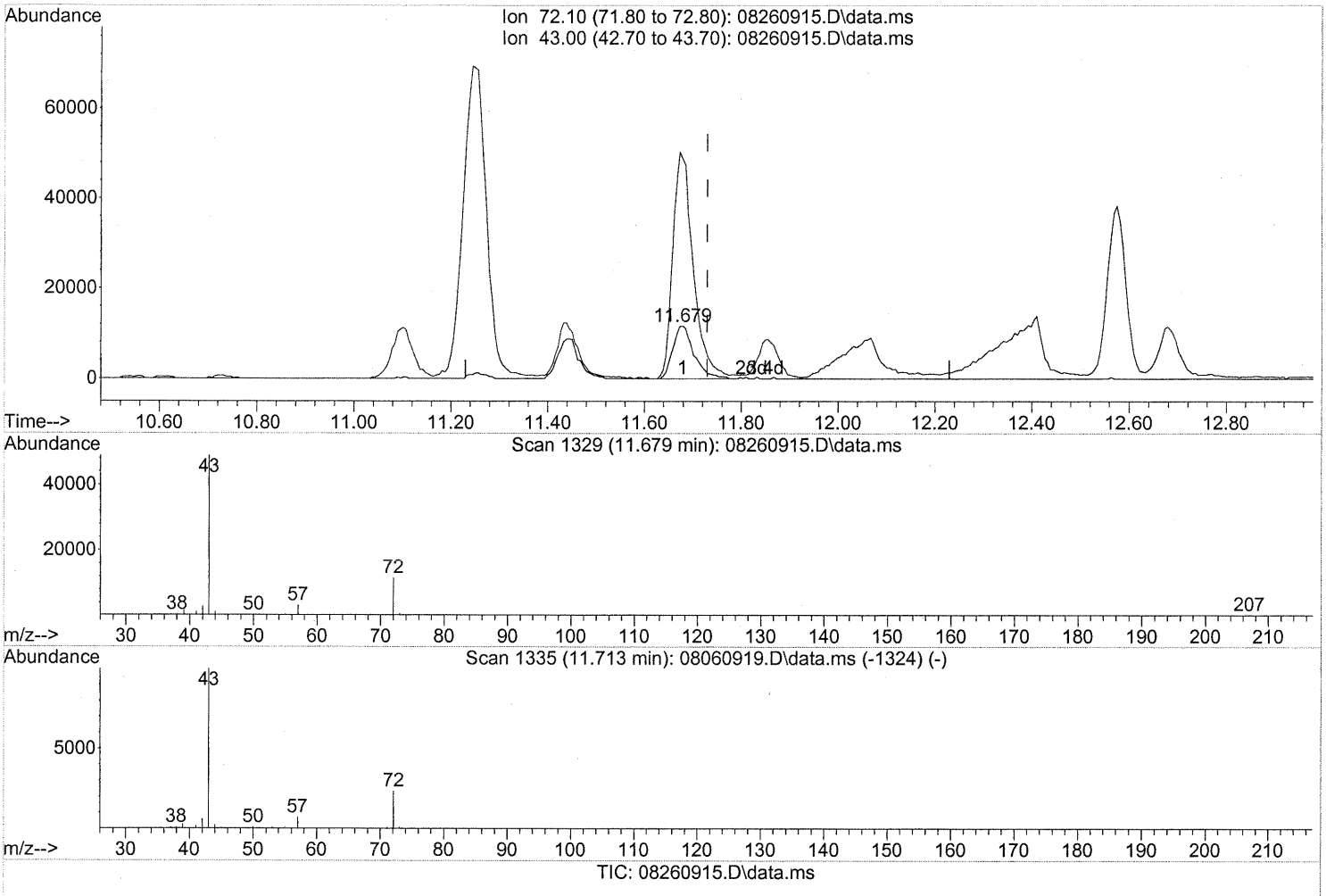
9/2/09

453

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

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

11.679min (-0.051) 3.89ng

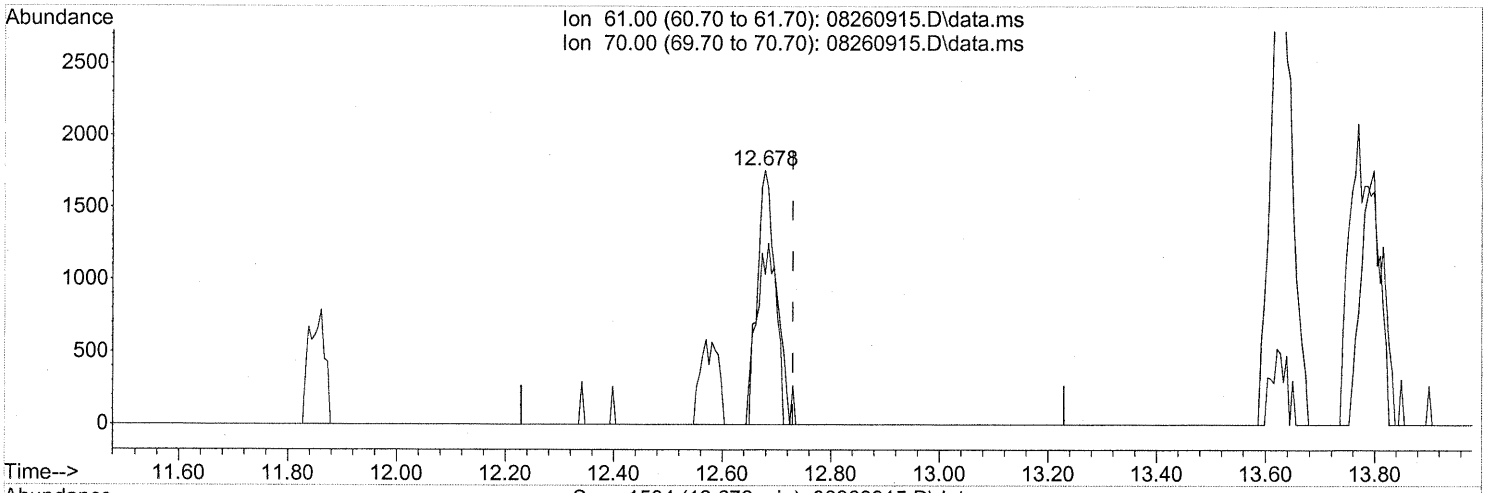
response 34859

Ion	Exp%	Act%
72.10	100	100
43.00	437.40	424.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(30) Ethyl Acetate (T)

12.678min (-0.051) 0.93ng

response 4350

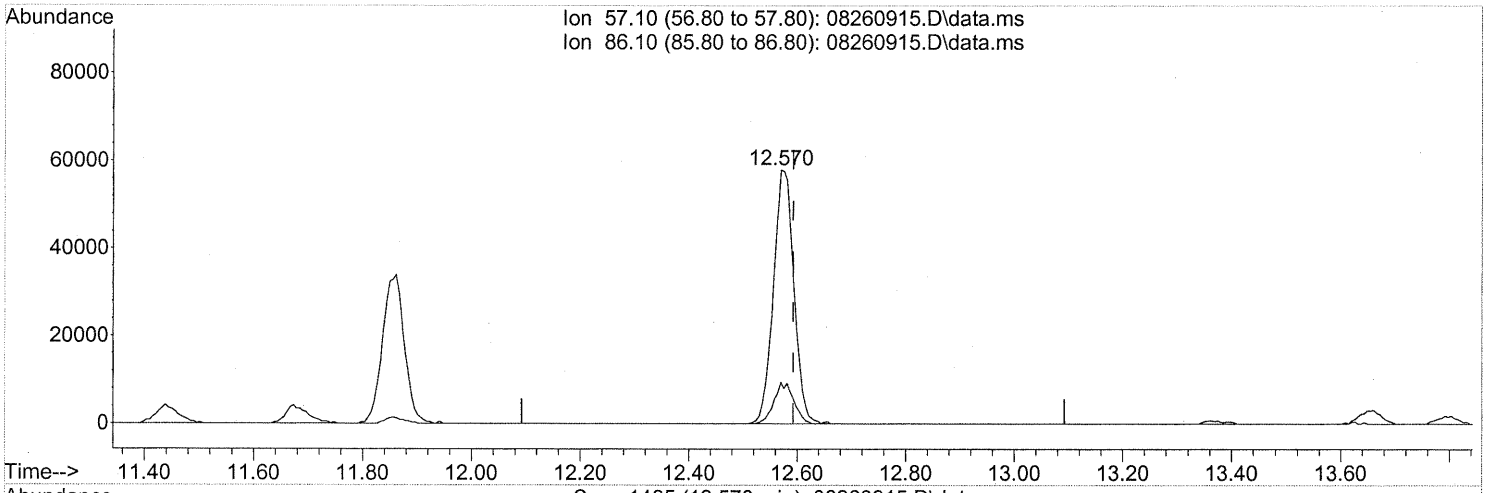
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	71.72
0.00	0.00	0.00
0.00	0.00	0.00

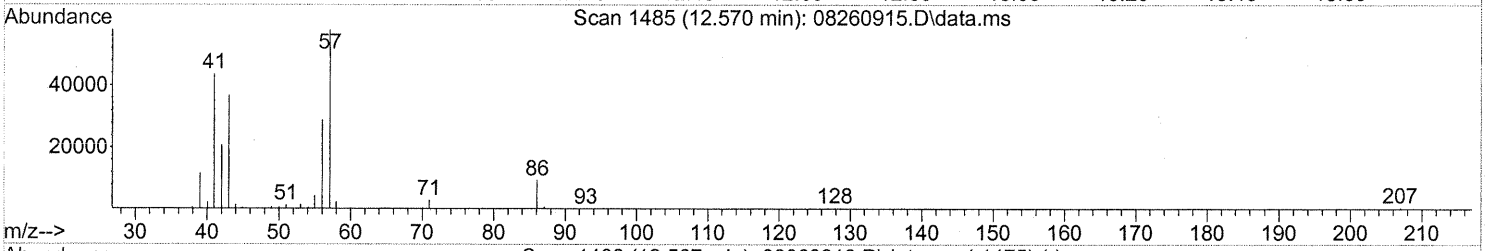
455

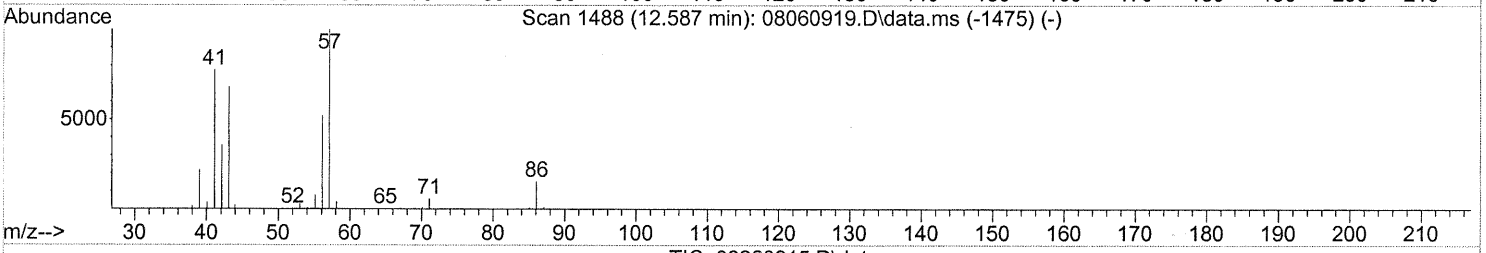
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(31) n-Hexane (T)

12.570min (-0.023) 6.33ng

response 151091

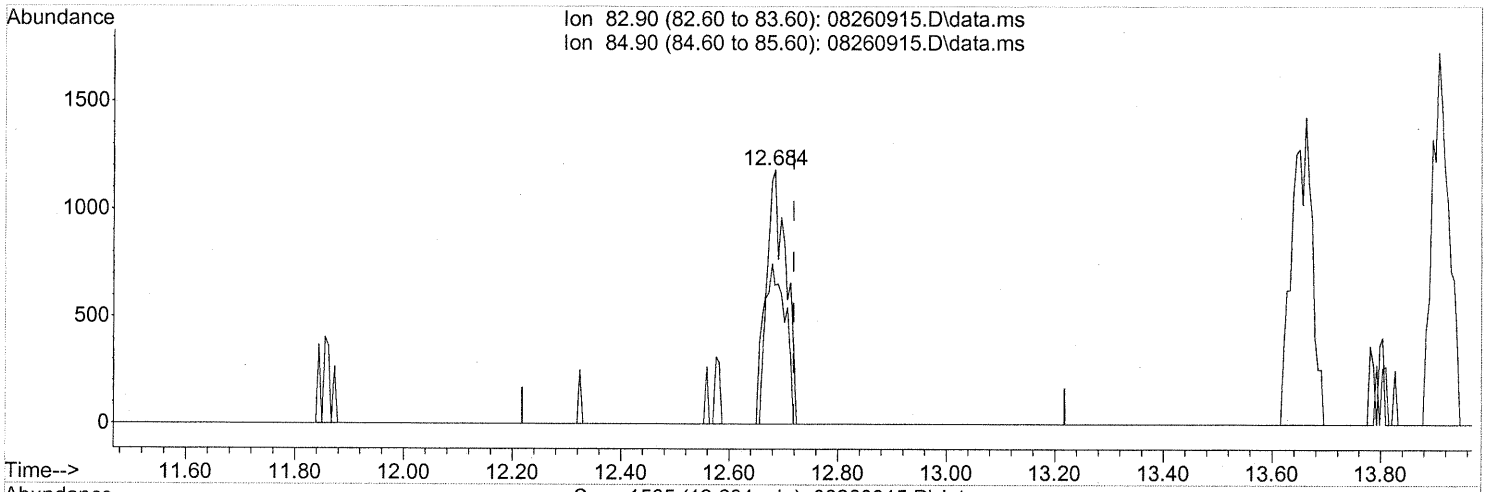
Ion	Exp%	Act%
57.10	100	100
86.10	15.70	15.57
0.00	0.00	0.00
0.00	0.00	0.00

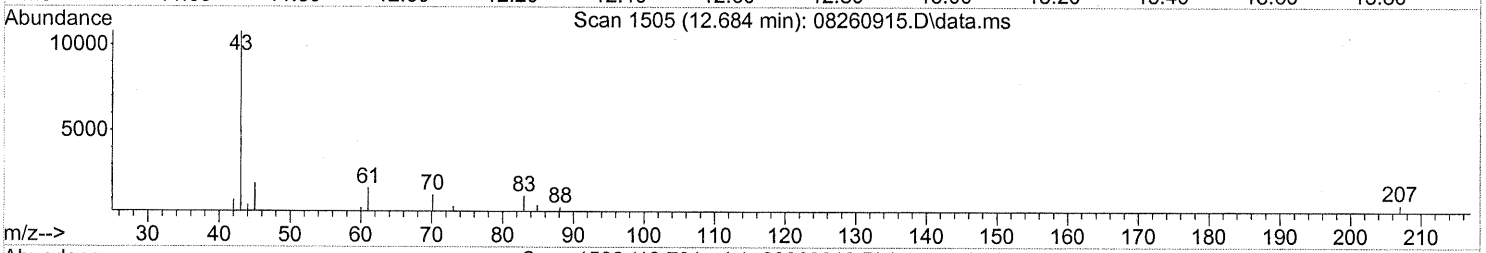
456

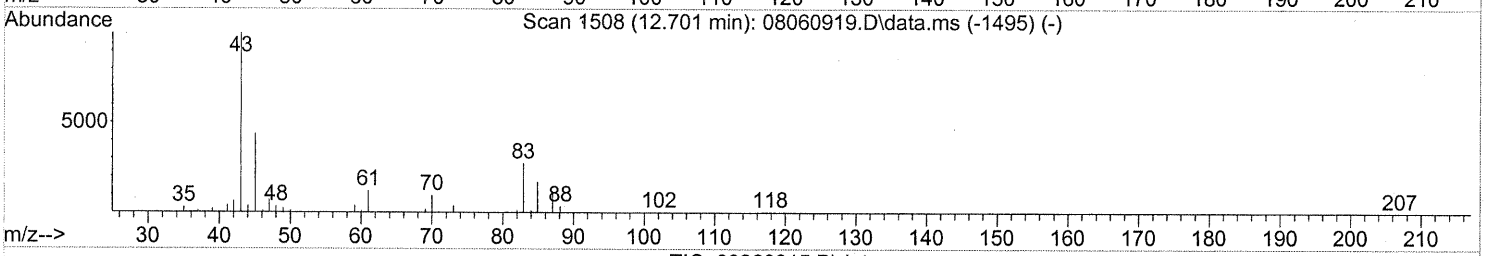
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(32) Chloroform (T)

12.684min (-0.034) 0.14ng

response 3025

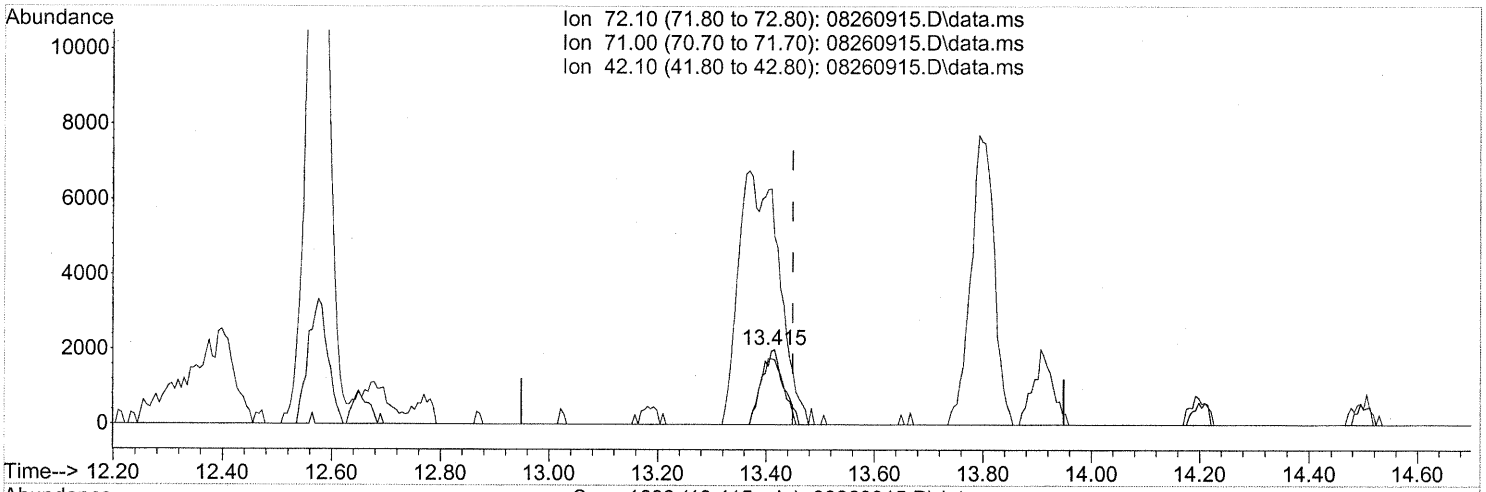
Ion	Exp%	Act%
82.90	100	100
84.90	64.30	62.12
0.00	0.00	0.00
0.00	0.00	0.00

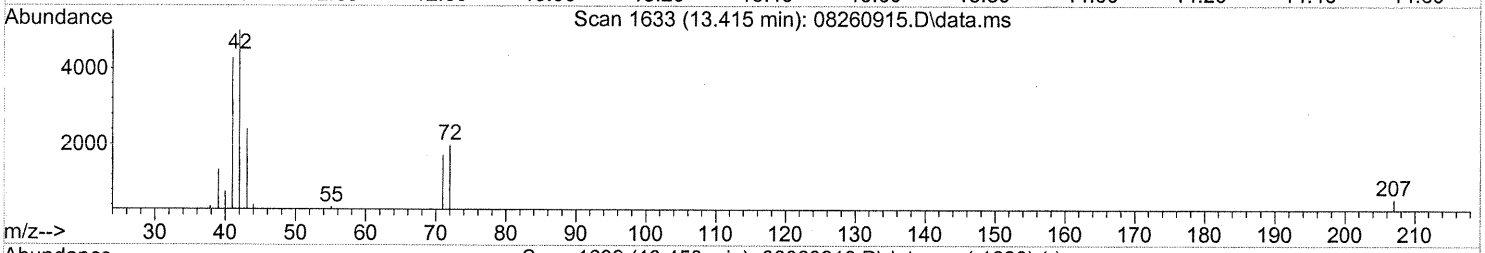
457

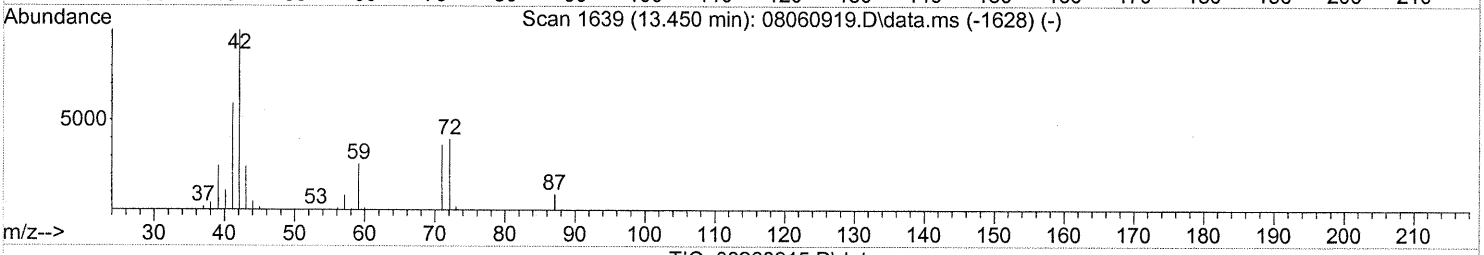
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.415min (-0.034) 0.59ng

response 5608

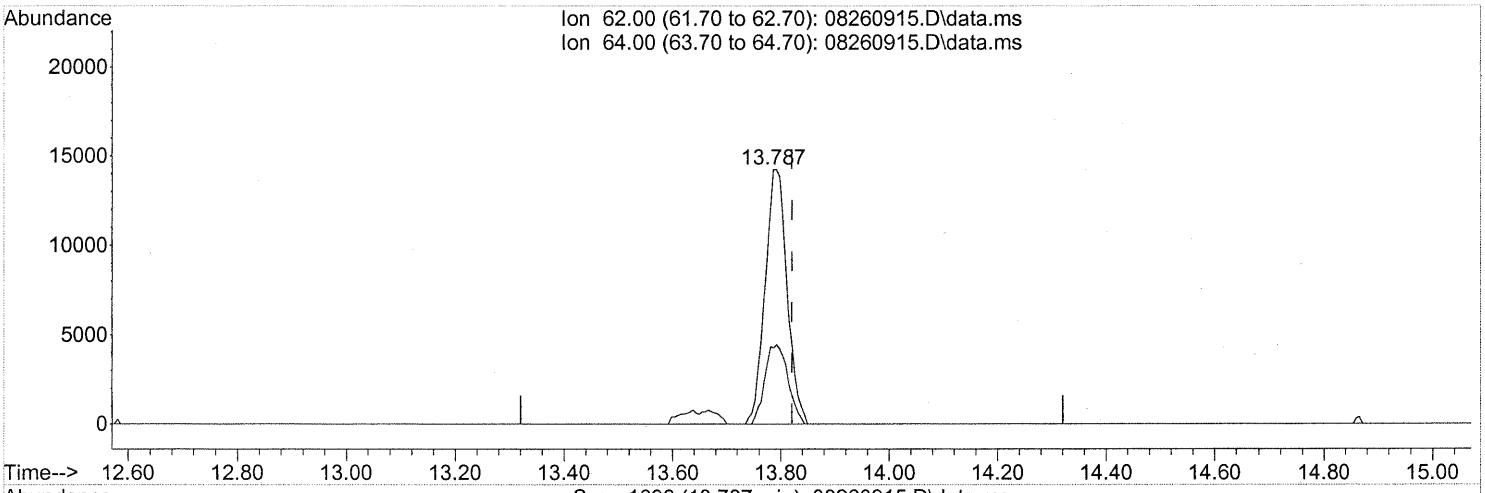
Ion	Exp%	Act%
72.10	100	100
71.00	95.70	92.72
42.10	253.40	0.00#
0.00	0.00	0.00

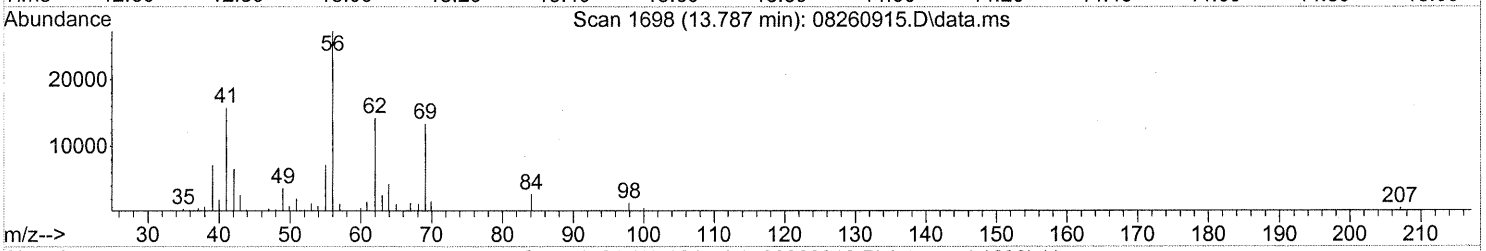
458

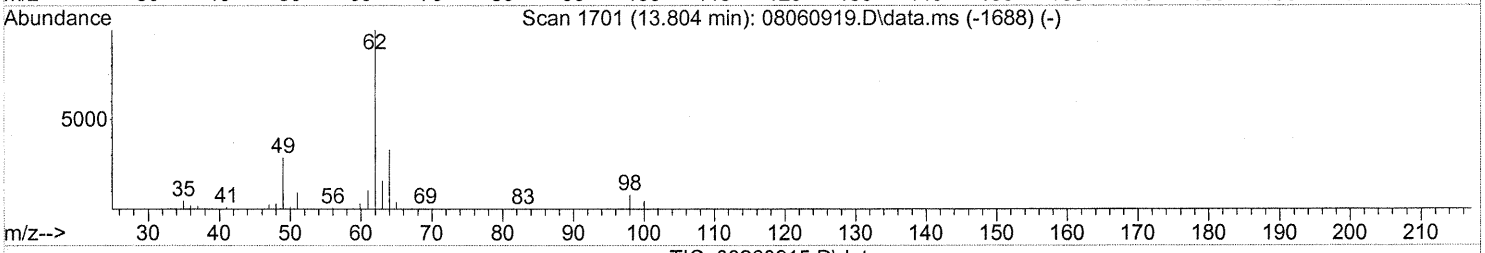
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(36) 1,2-Dichloroethane (T)

13.787min (-0.034) 2.09ng

response 40121

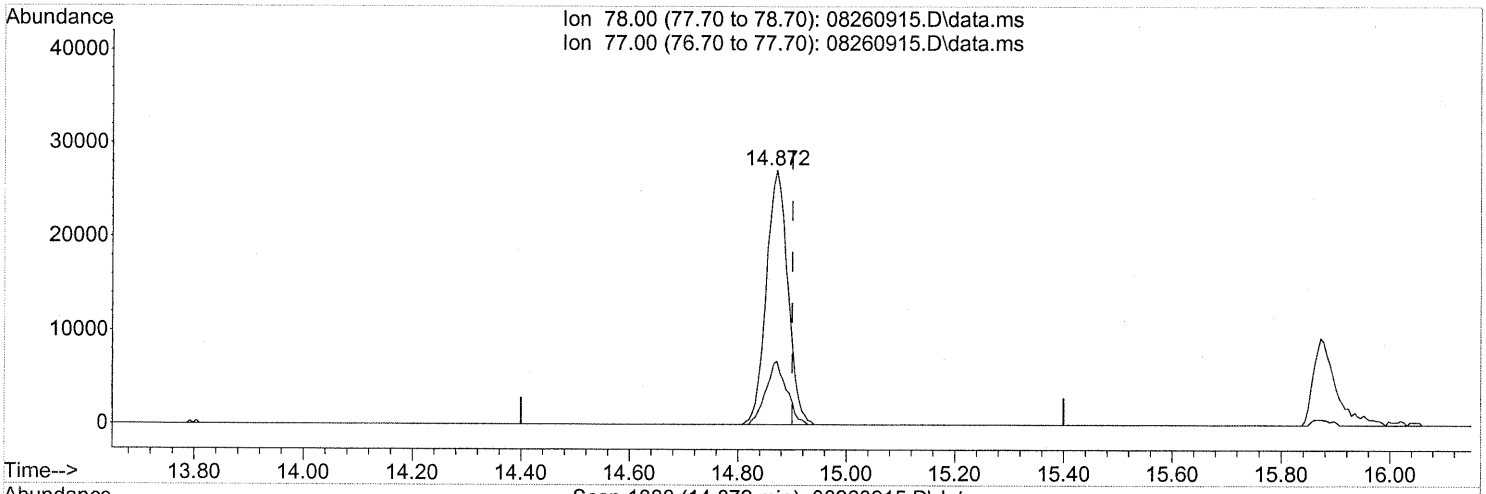
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	32.80
0.00	0.00	0.00
0.00	0.00	0.00

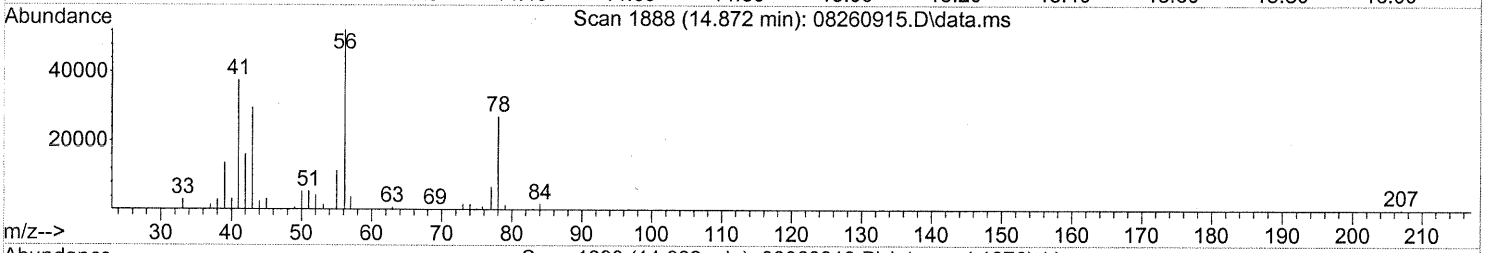
459

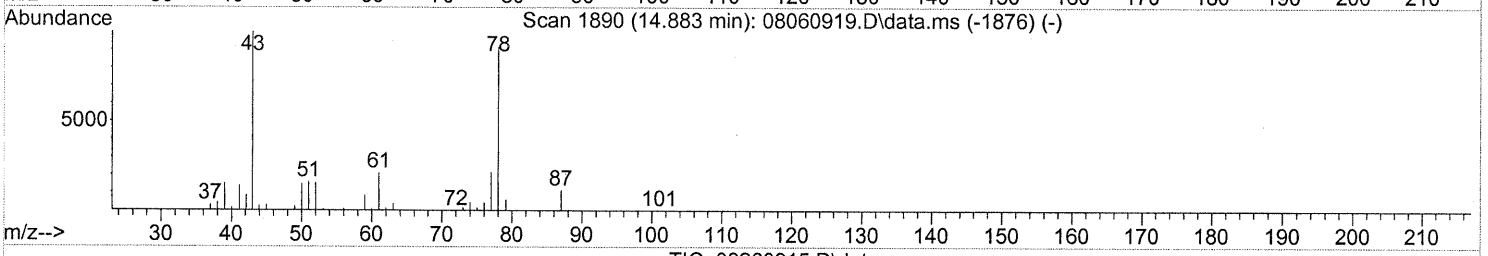
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(41) Benzene (T)

14.872min (-0.028) 1.41ng

response 74872

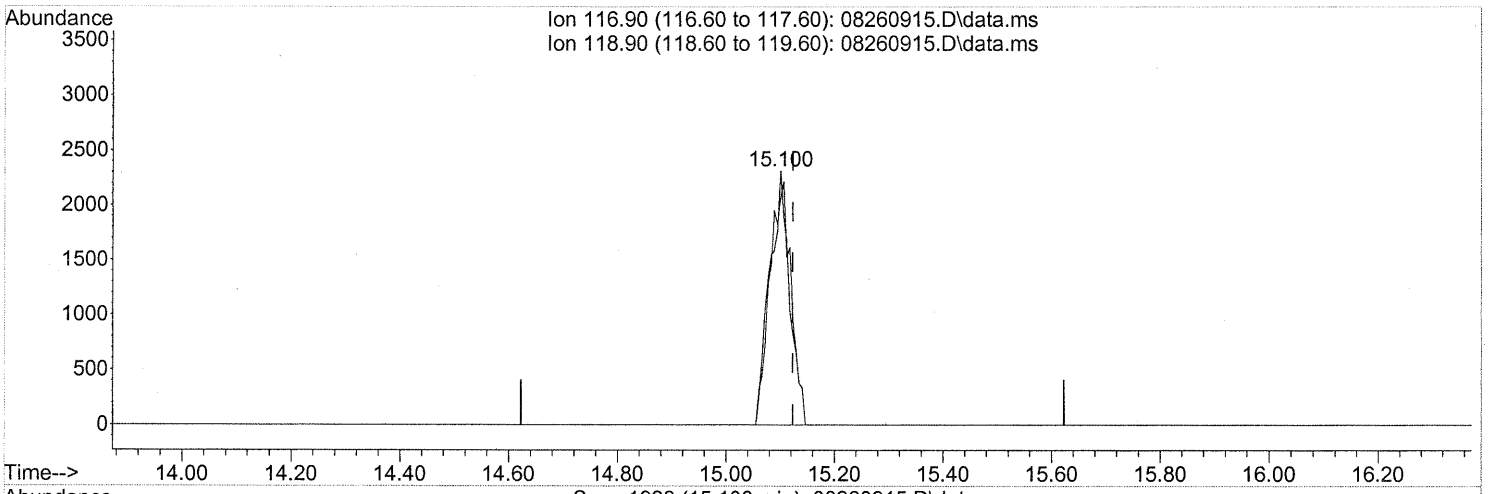
Ion	Exp%	Act%
78.00	100	100
77.00	23.60	24.14
0.00	0.00	0.00
0.00	0.00	0.00

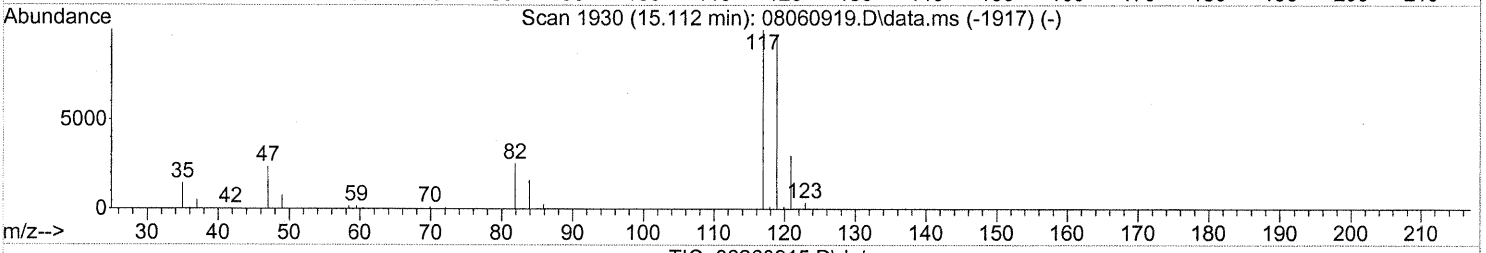
460

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration





TIC: 08260915.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 0.35ng

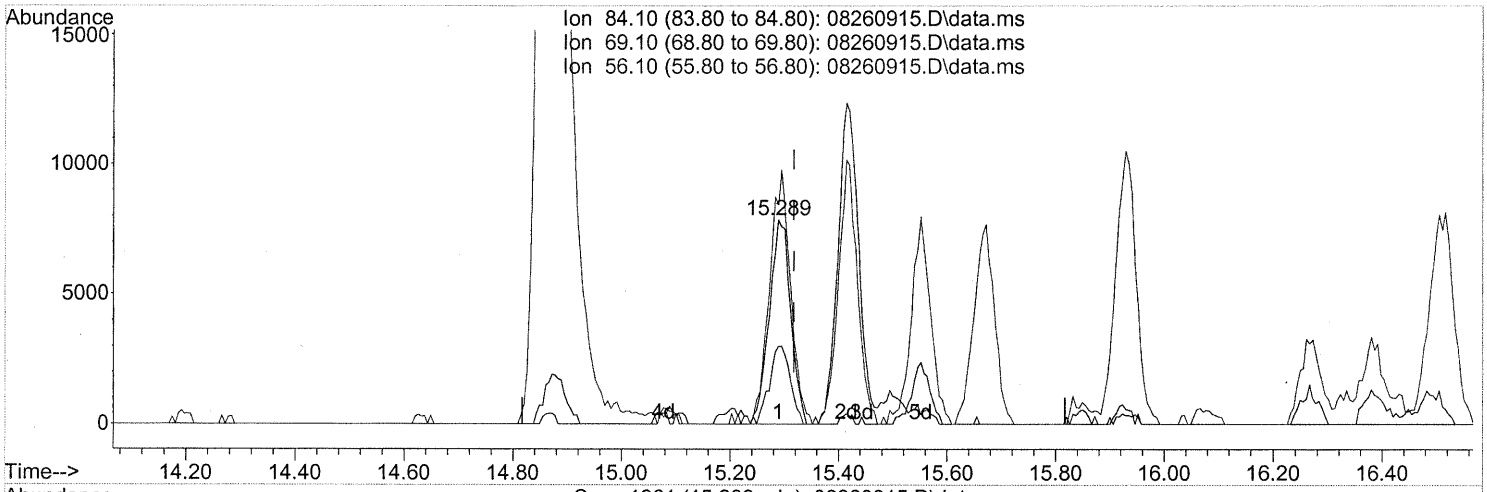
response 5901

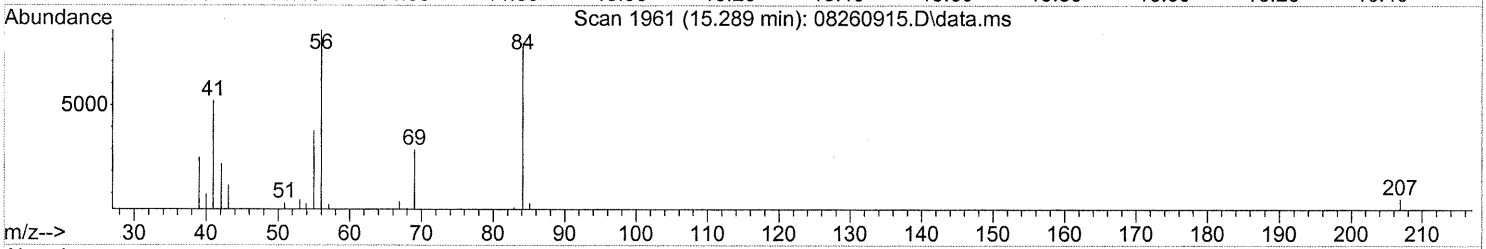
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	102.97
0.00	0.00	0.00
0.00	0.00	0.00

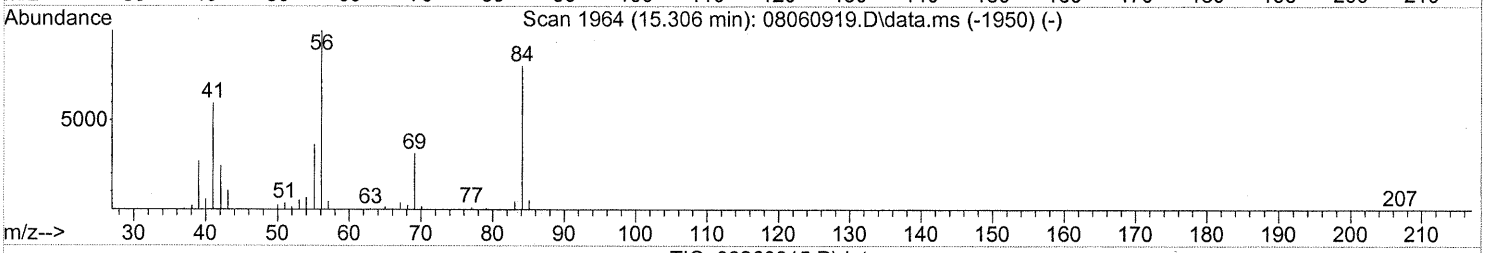
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(43) Cyclohexane (T)

15.289min (-0.028) 1.10ng

response 21443

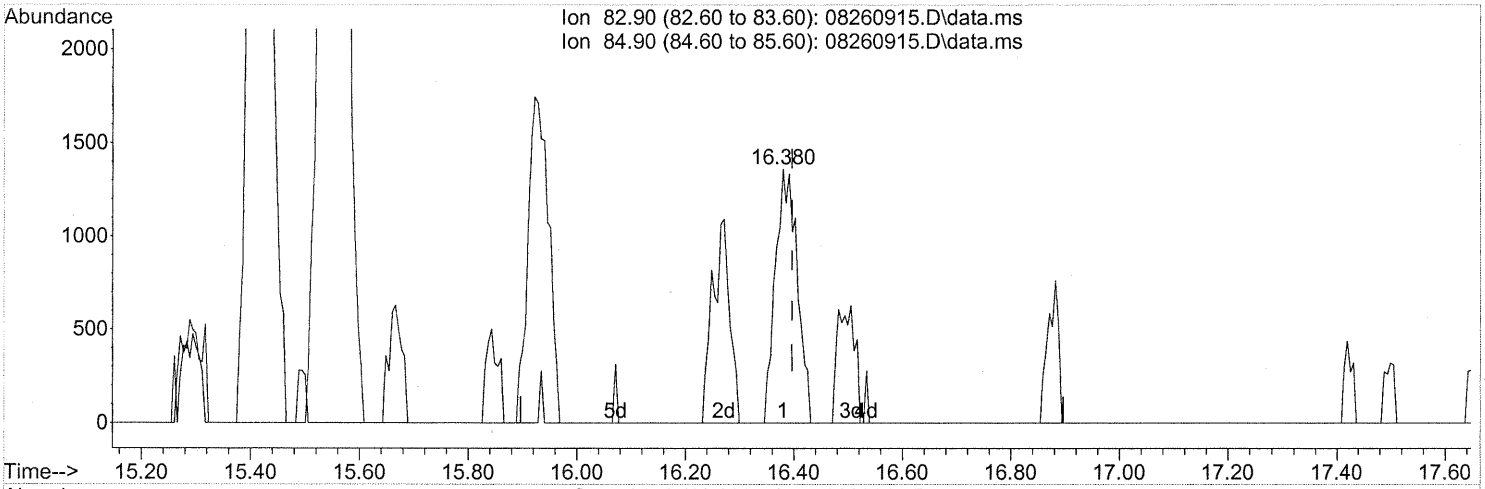
Ion	Exp%	Act%
84.10	100	100
69.10	38.70	37.54
56.10	127.50	123.35
0.00	0.00	0.00

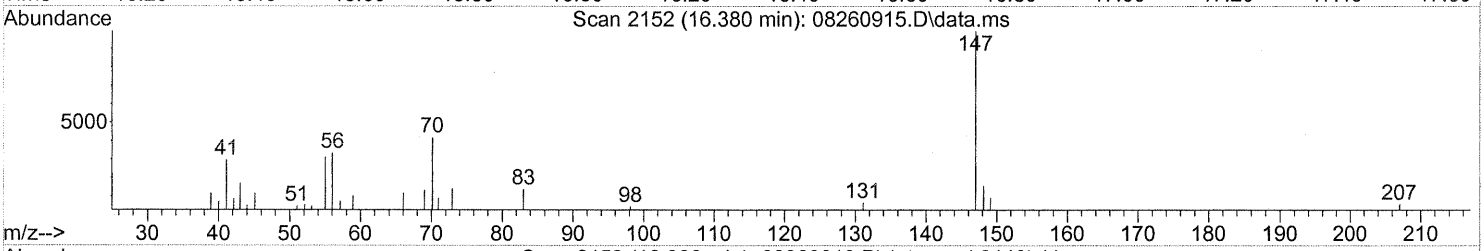
462

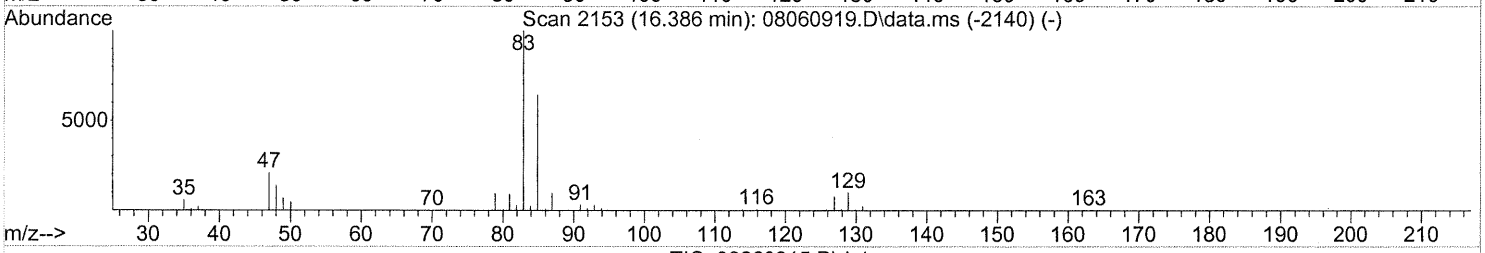
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(46) Bromodichloromethane (T)

16.380min (-0.017) 0.22ng

response 3800

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

FP
9/1/09

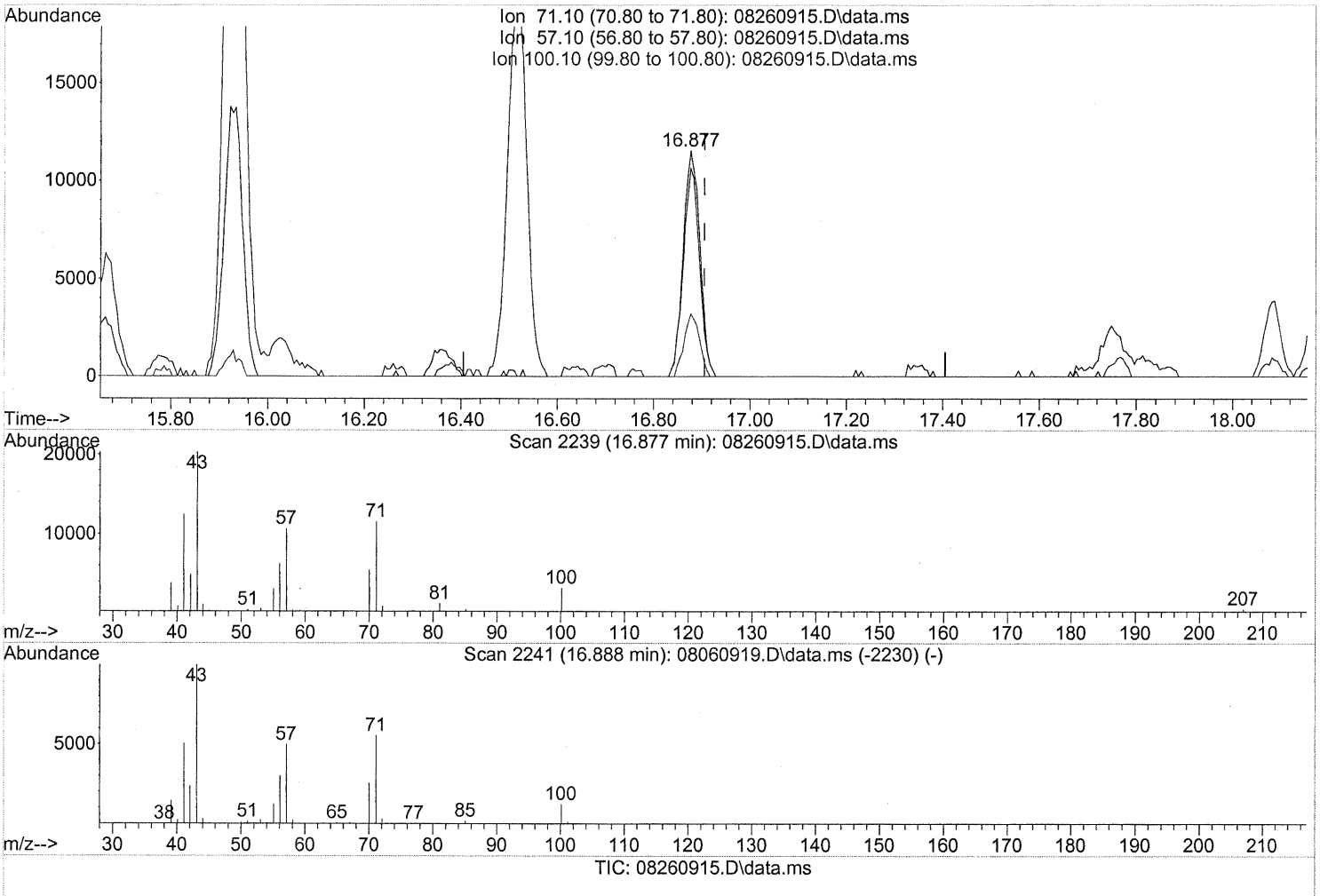
9/2/09

463

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(51) n-Heptane (T)

16.877min (-0.028) 1.94ng

response 27600

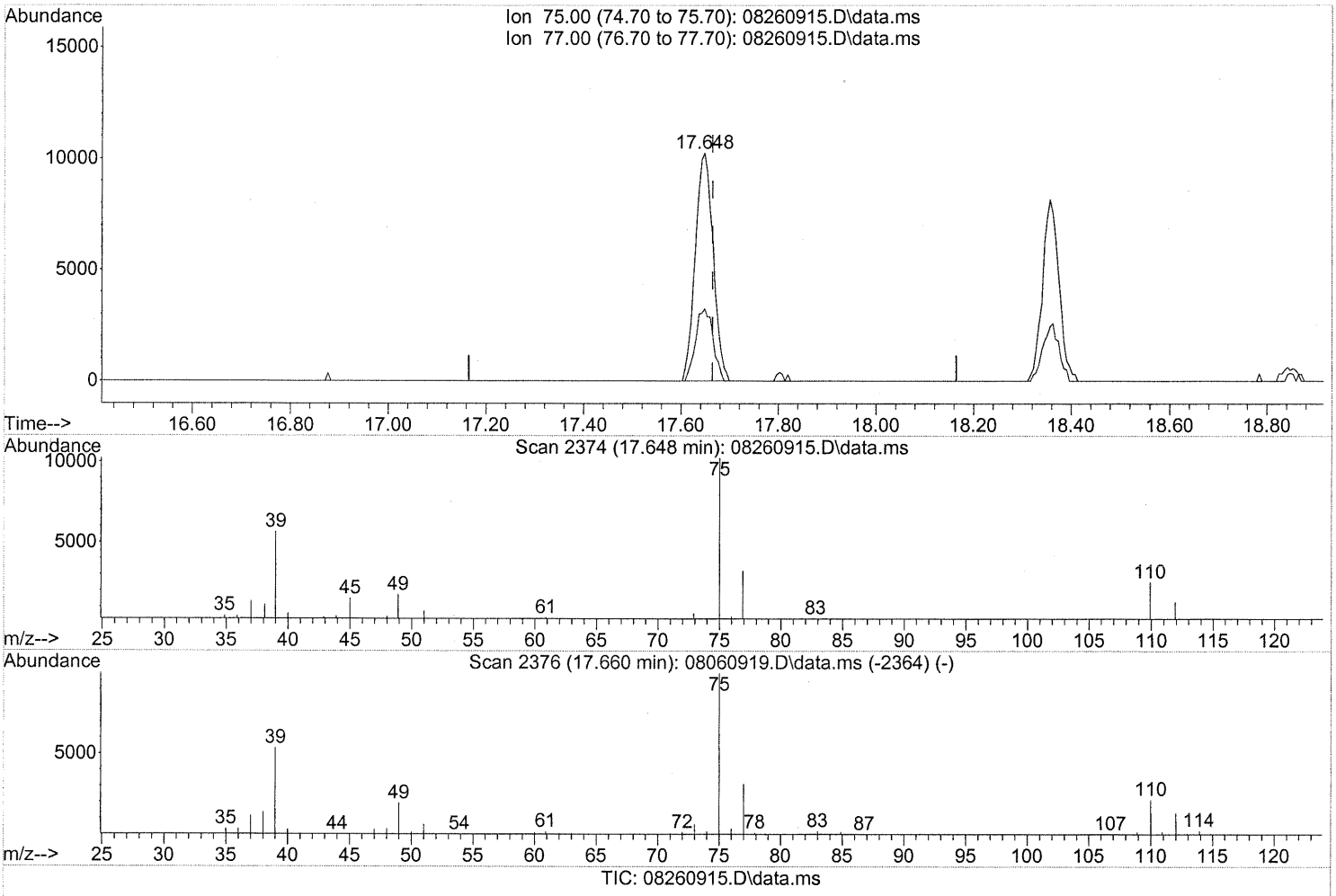
Ion	Exp%	Act%
71.10	100	100
57.10	91.90	89.31
100.10	26.40	25.58
0.00	0.00	0.00

464

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 1.18ng

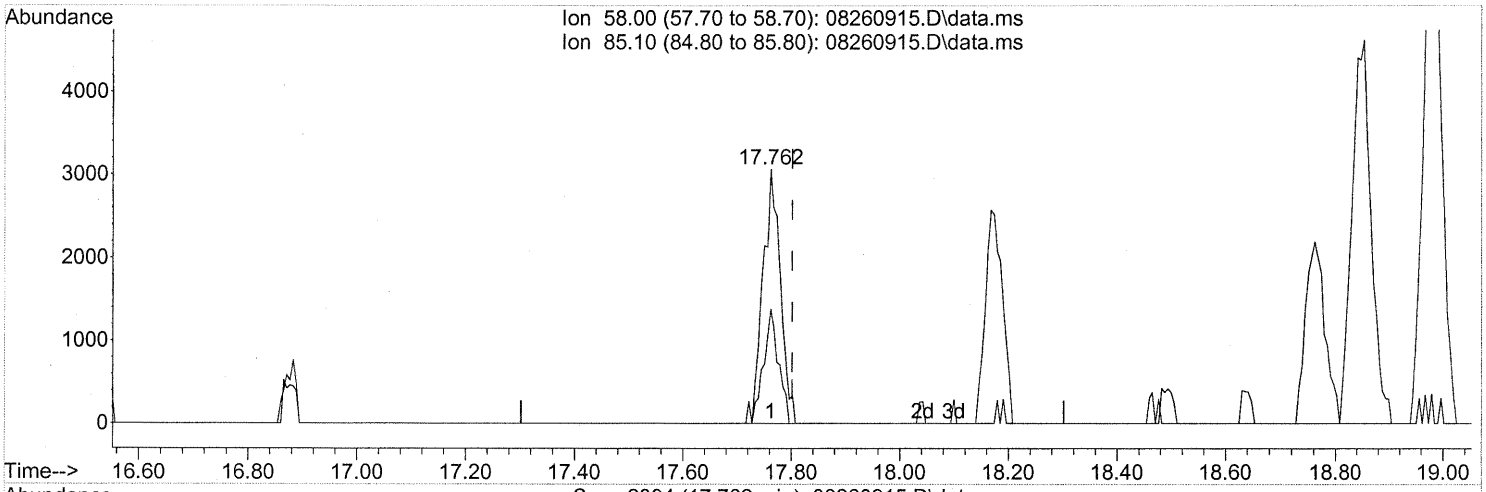
response 26196

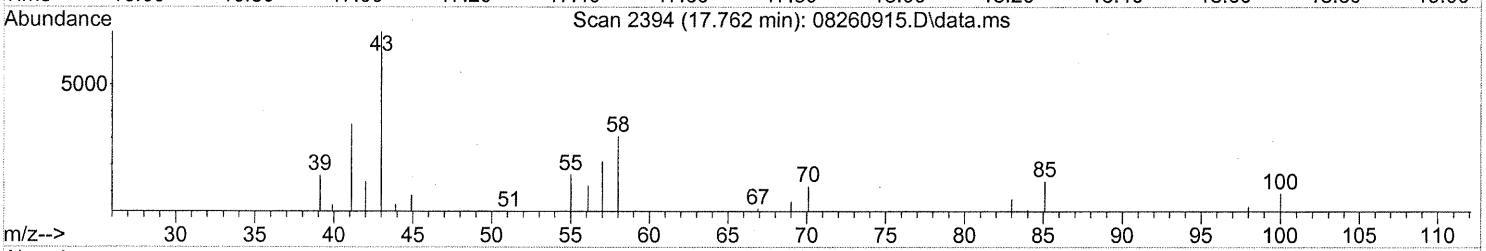
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	30.83
0.00	0.00	0.00
0.00	0.00	0.00

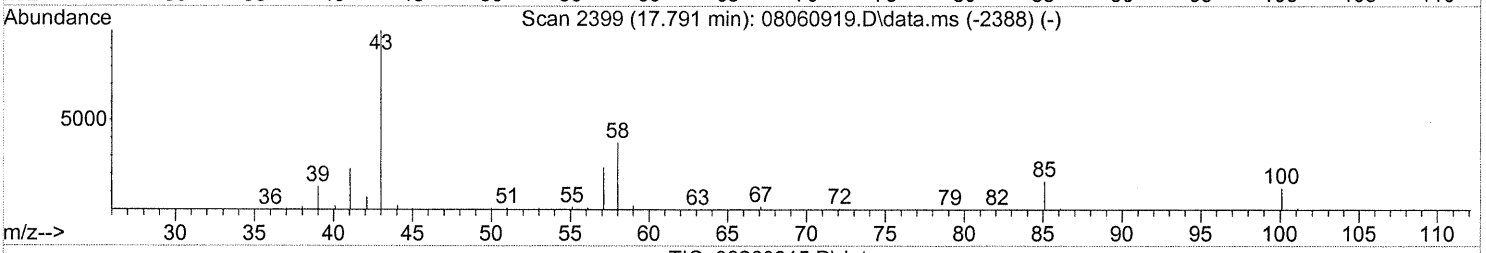
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

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

17.762min (-0.040) 0.54ng

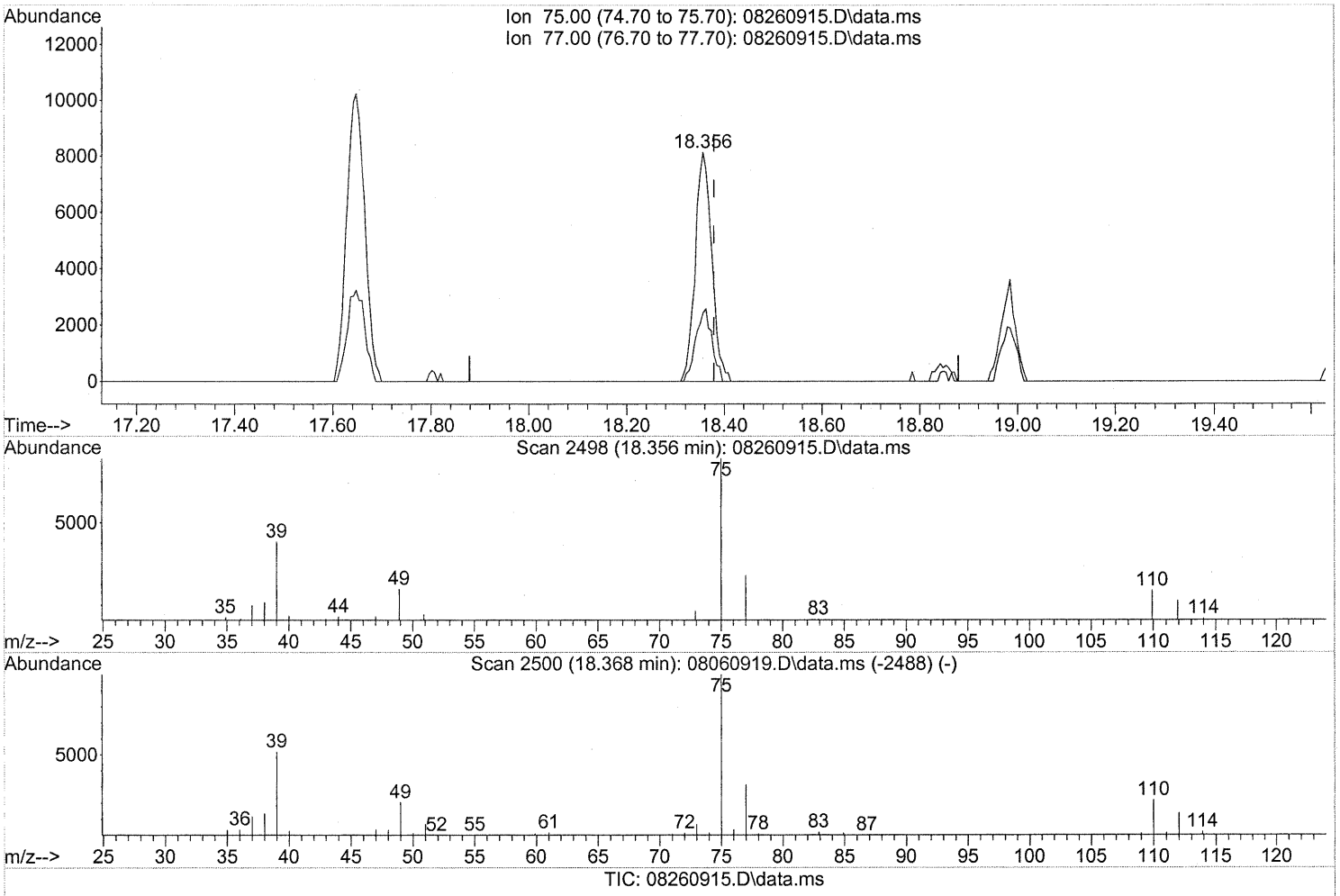
response 6899

Ion	Exp%	Act%
58.00	100	100
85.10	42.60	38.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 0.91ng

response 19187

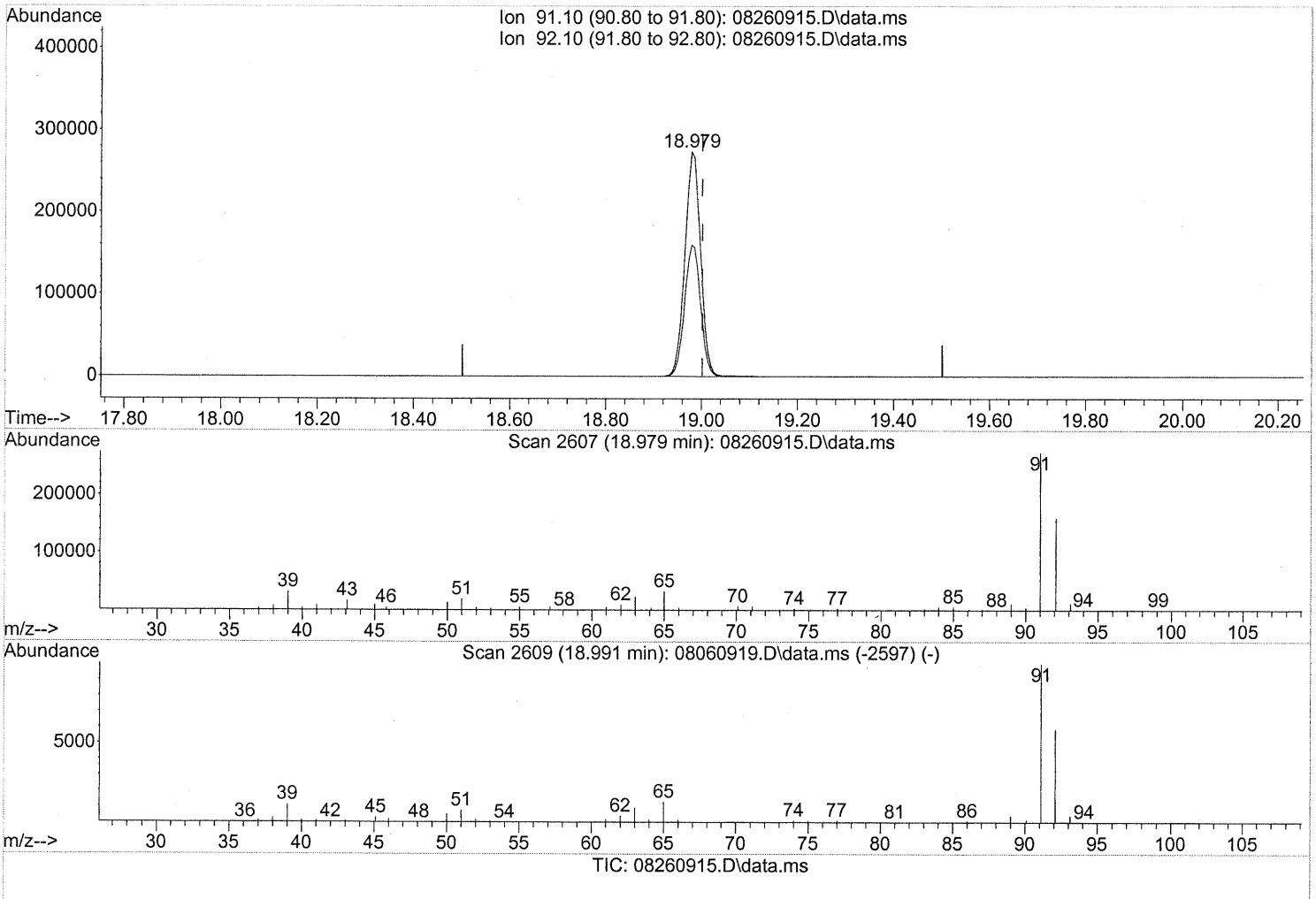
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	30.79
0.00	0.00	0.00
0.00	0.00	0.00

467

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 12.49ng

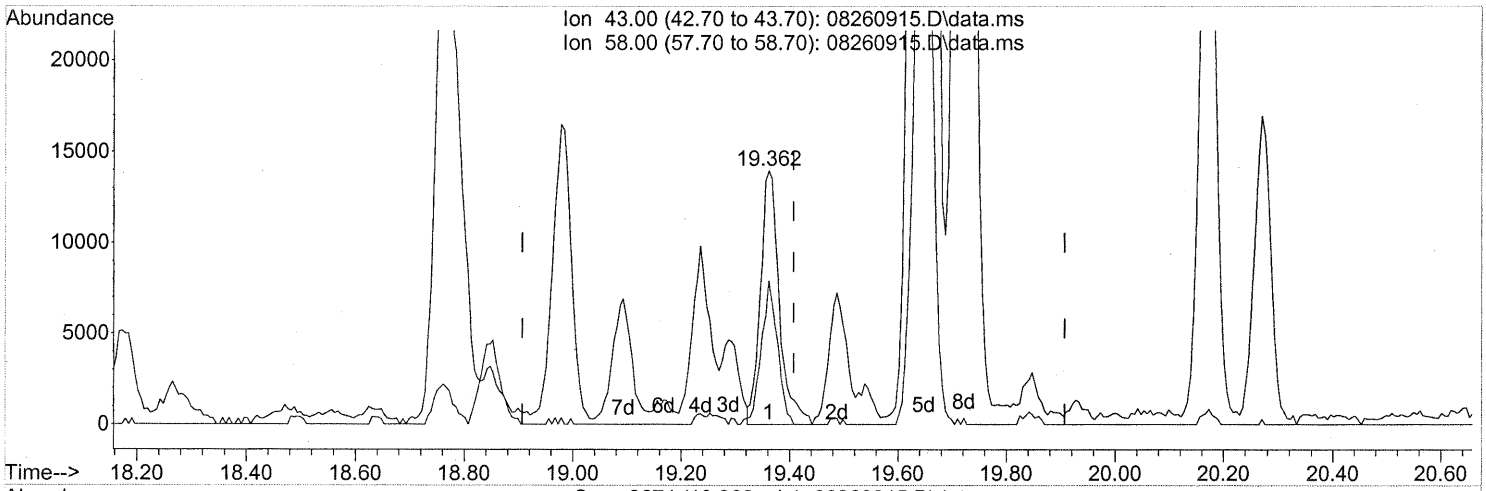
response 621970

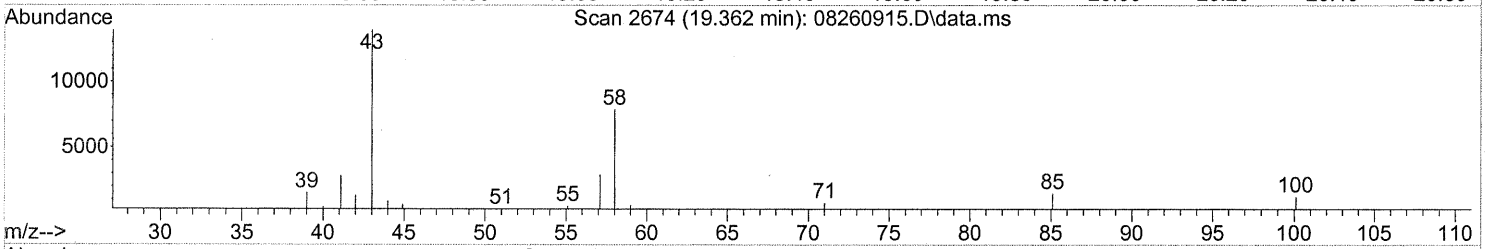
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.46
0.00	0.00	0.00
0.00	0.00	0.00

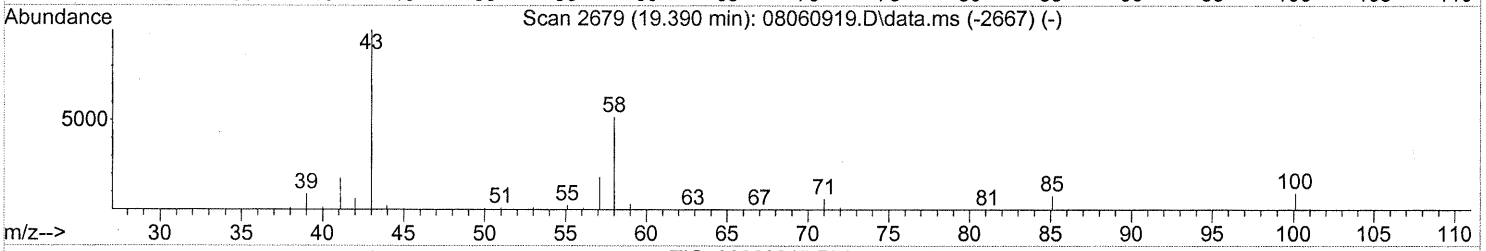
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(59) 2-Hexanone (T)

19.362min (-0.046) 1.02ng

response 33715

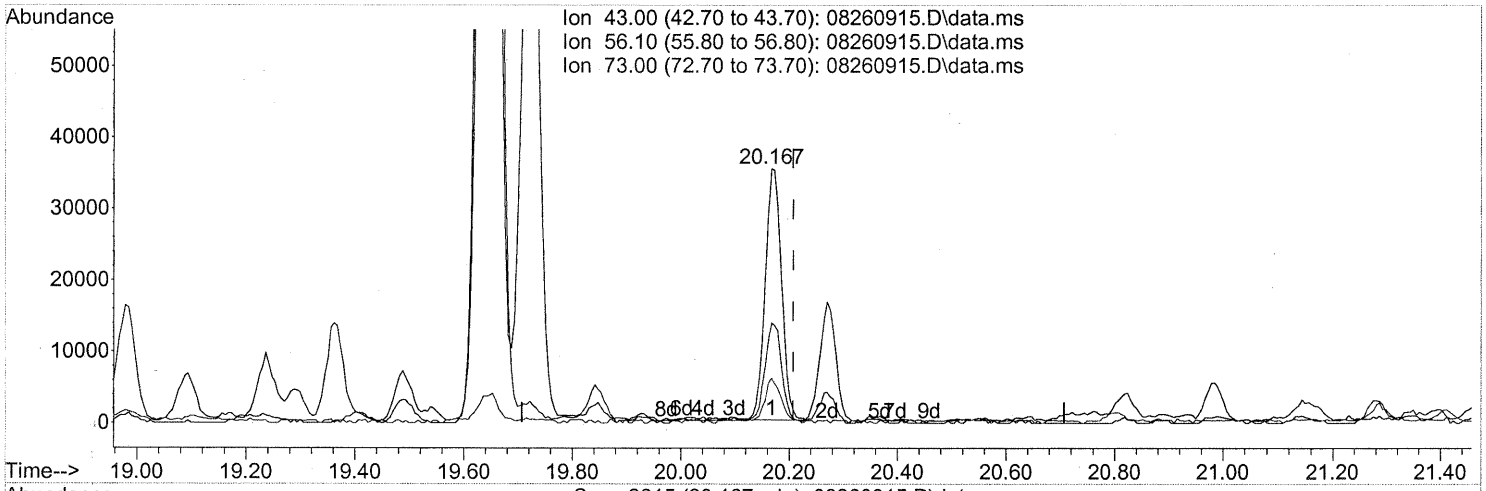
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	48.51
0.00	0.00	0.00
0.00	0.00	0.00

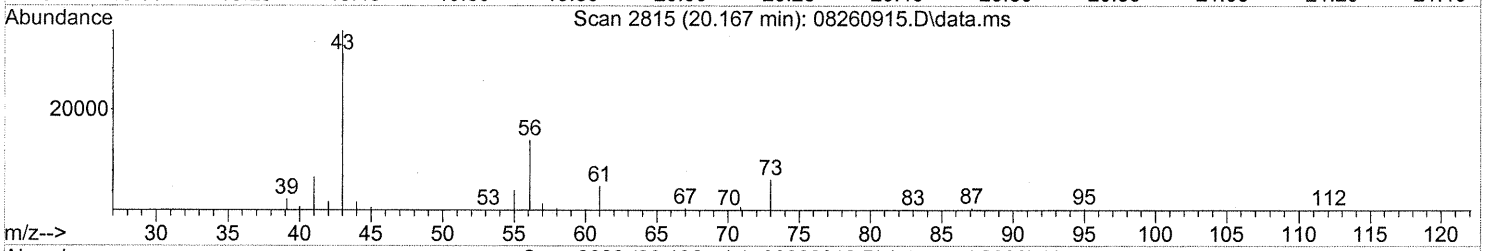
469

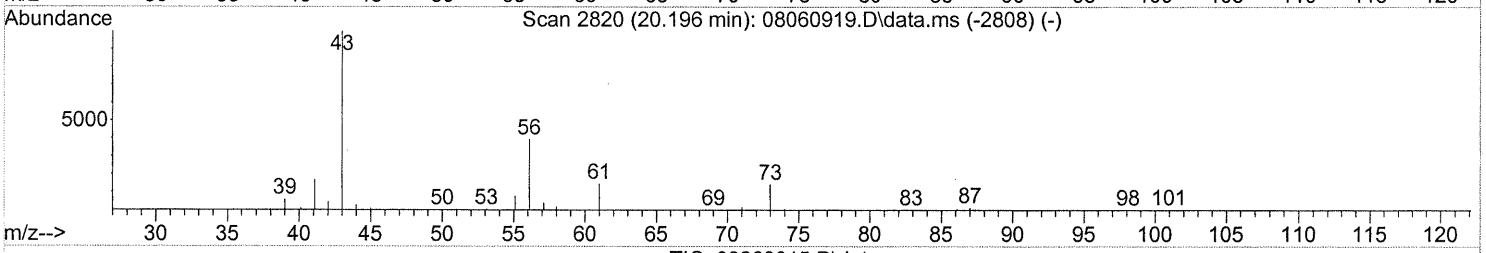
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(62) n-Butyl Acetate (T)

20.167min (-0.040) 1.88ng

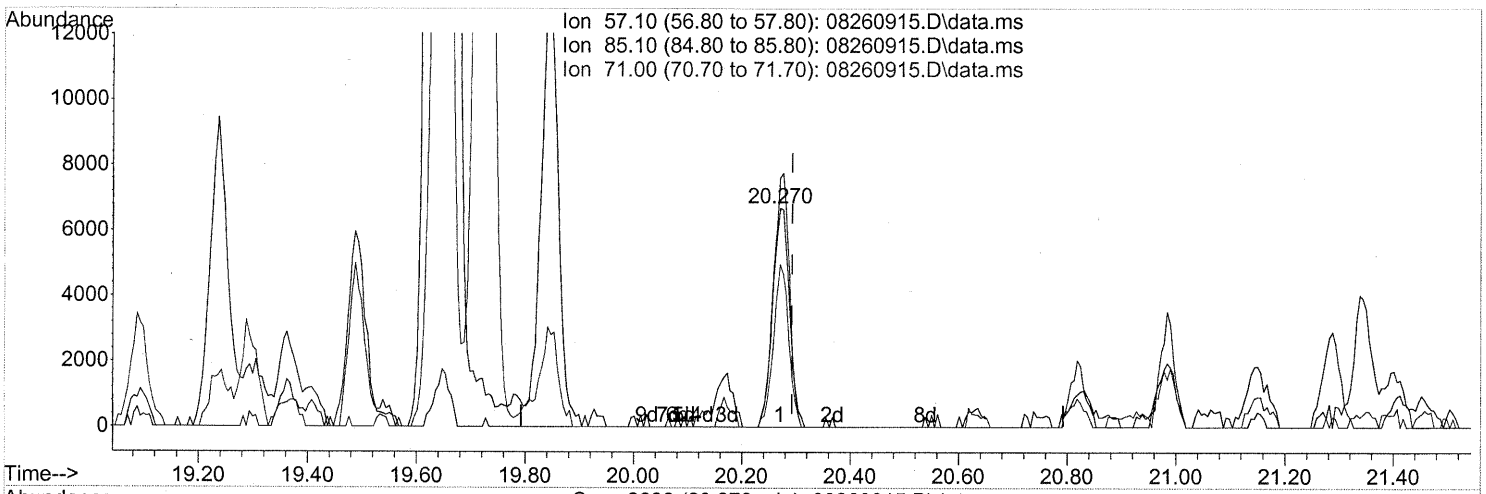
response 73474

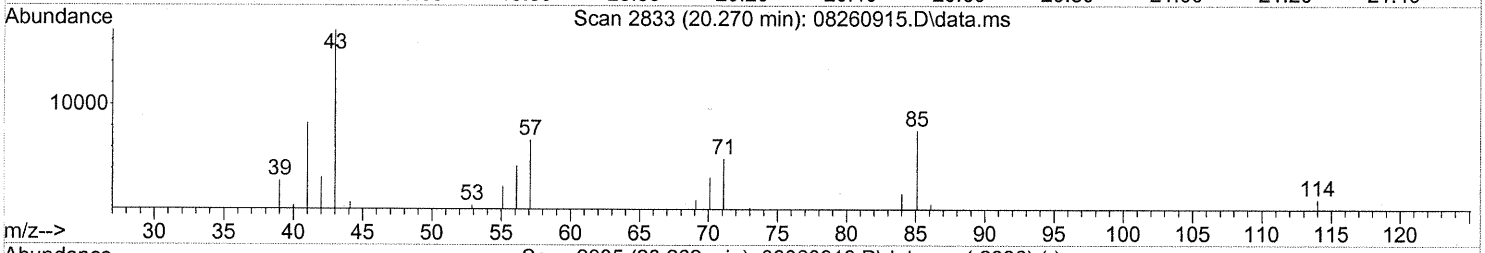
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	39.58
73.00	14.80	18.34
0.00	0.00	0.00

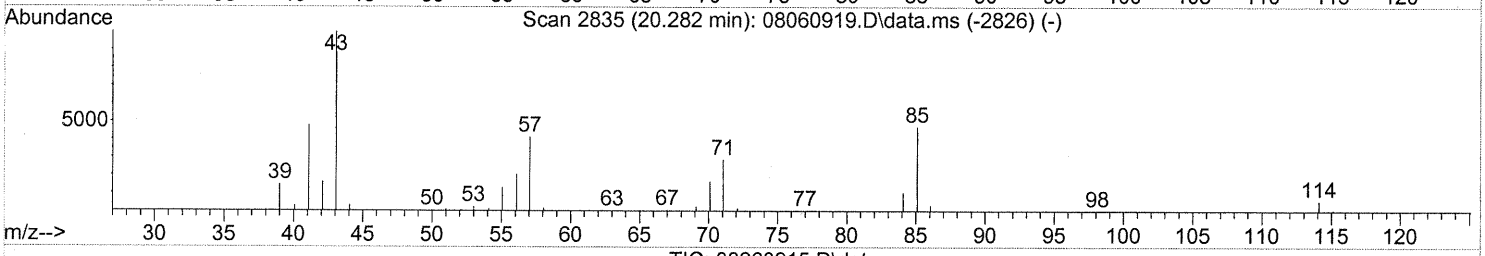
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 1.20ng

response 14456

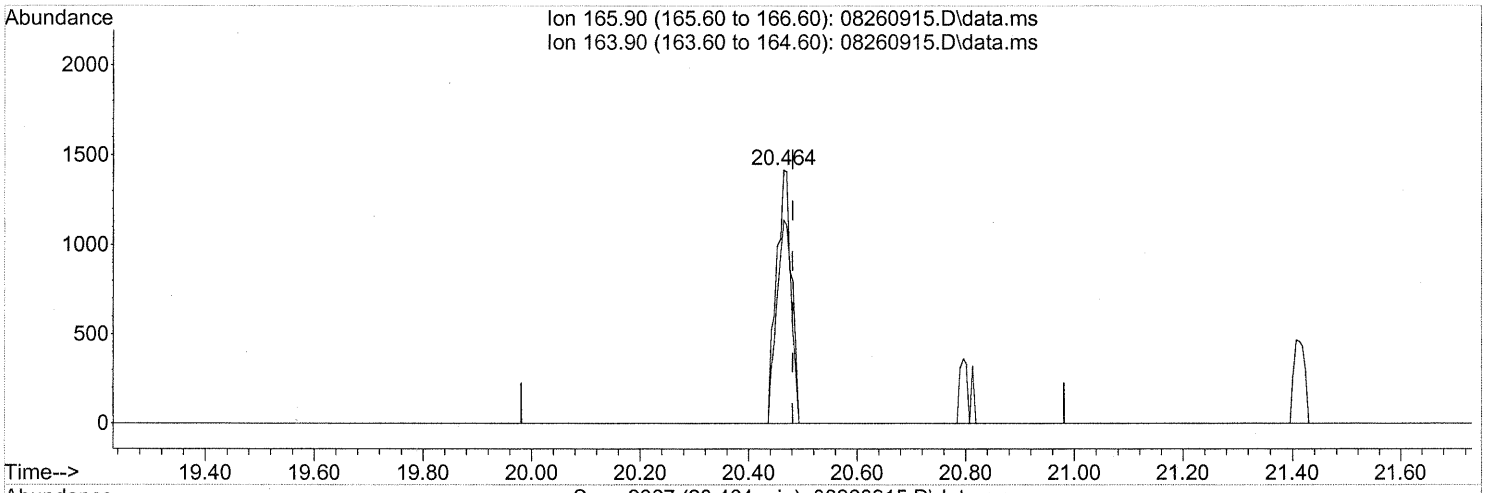
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	109.92
71.00	68.10	67.18
0.00	0.00	0.00

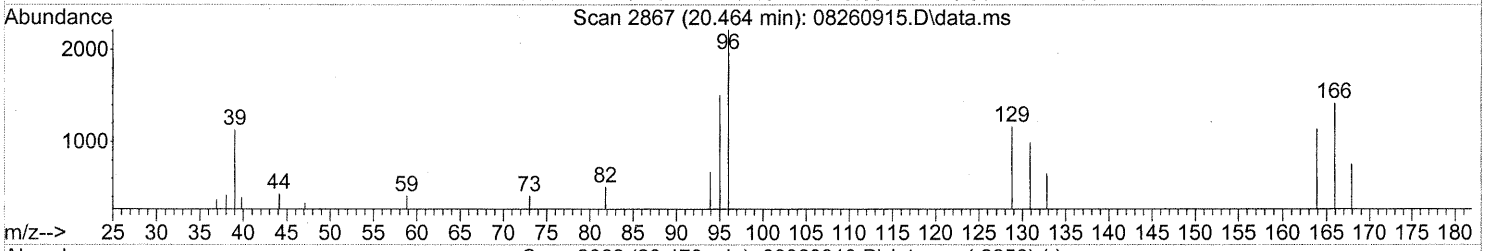
471

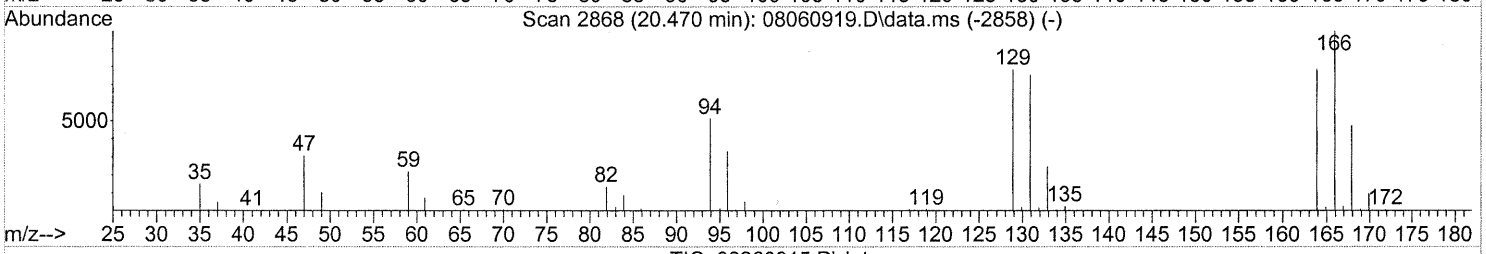
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(64) Tetrachloroethene (T)

20.464min (-0.017) 0.24ng

response 2756

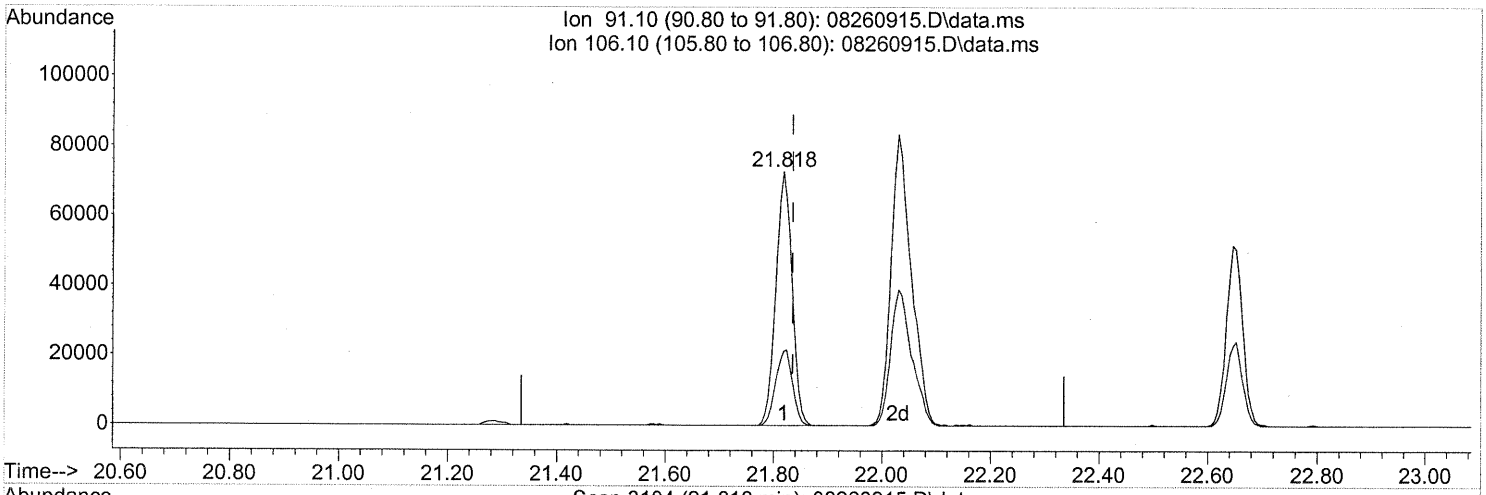
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	79.28
0.00	0.00	0.00
0.00	0.00	0.00

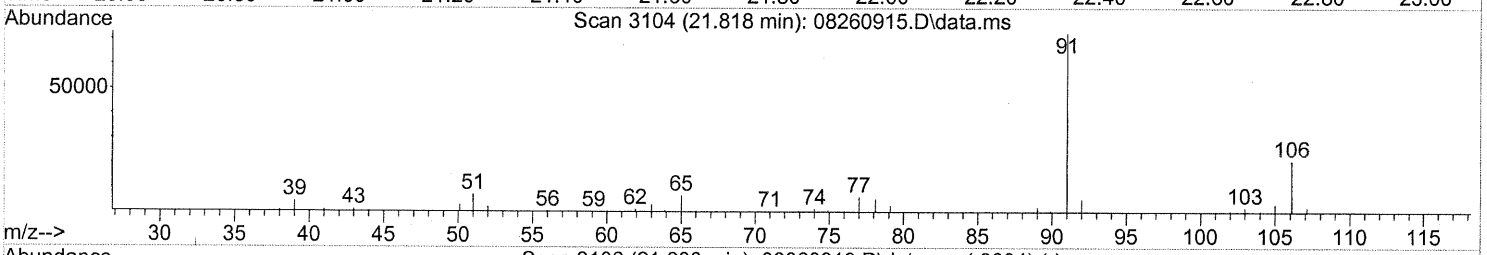
472

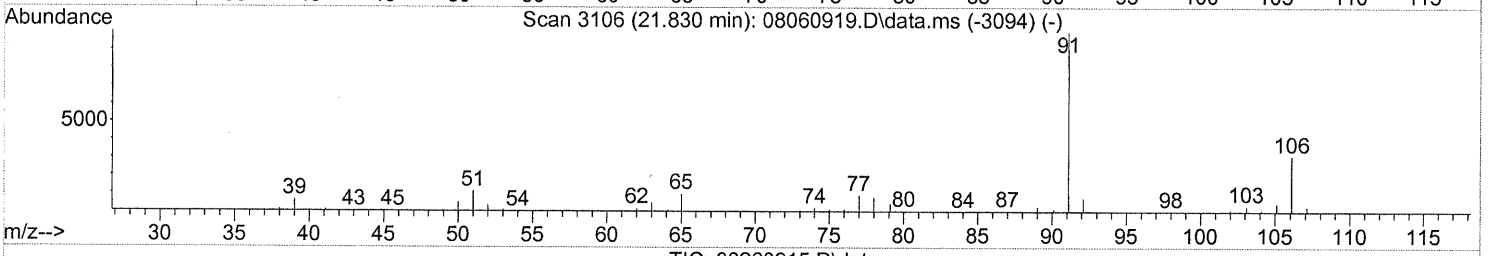
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(66) Ethylbenzene (T)

21.818min (-0.017) 2.62ng

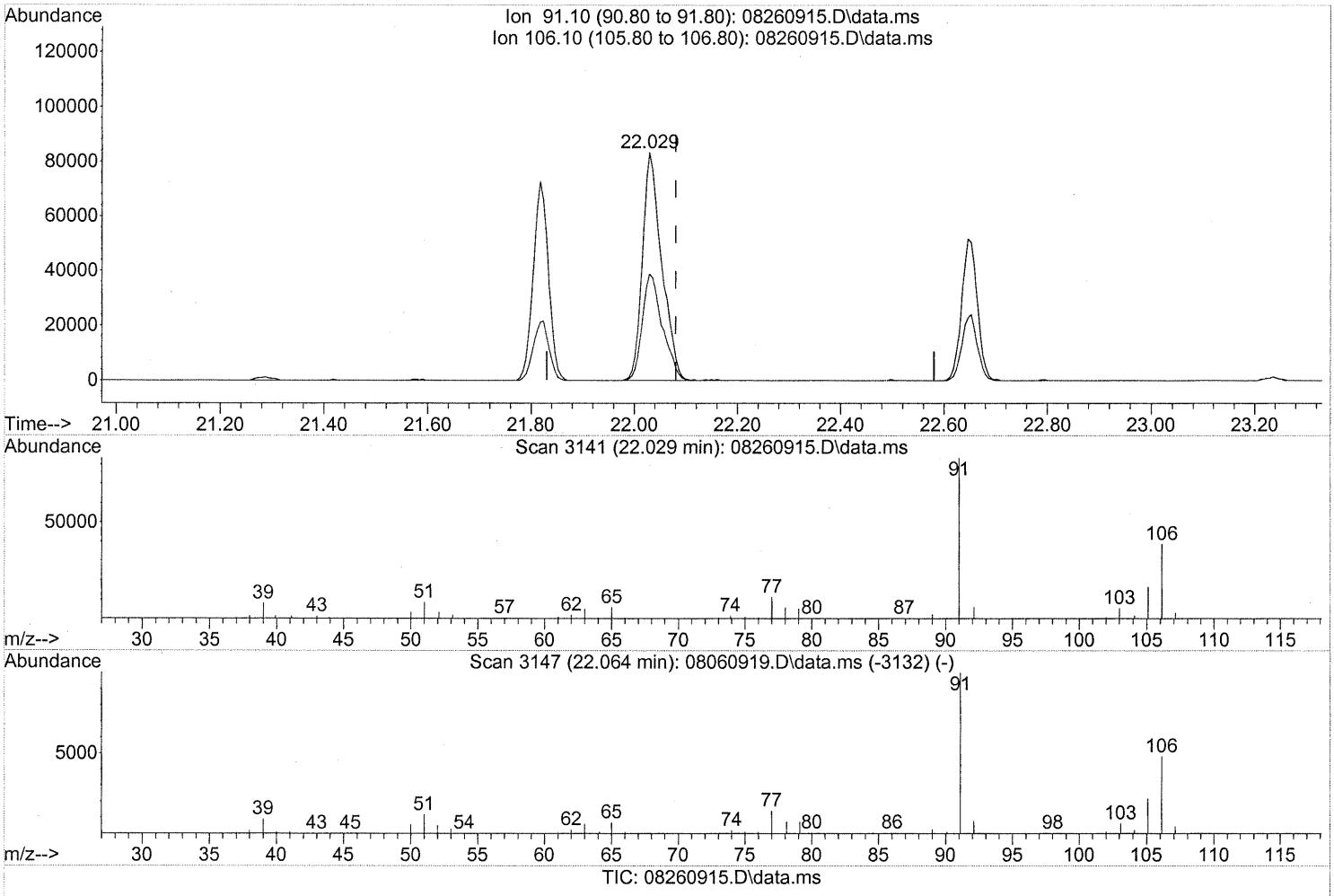
response 149228

Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

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

22.029min (-0.051) 4.71ng

response 216769

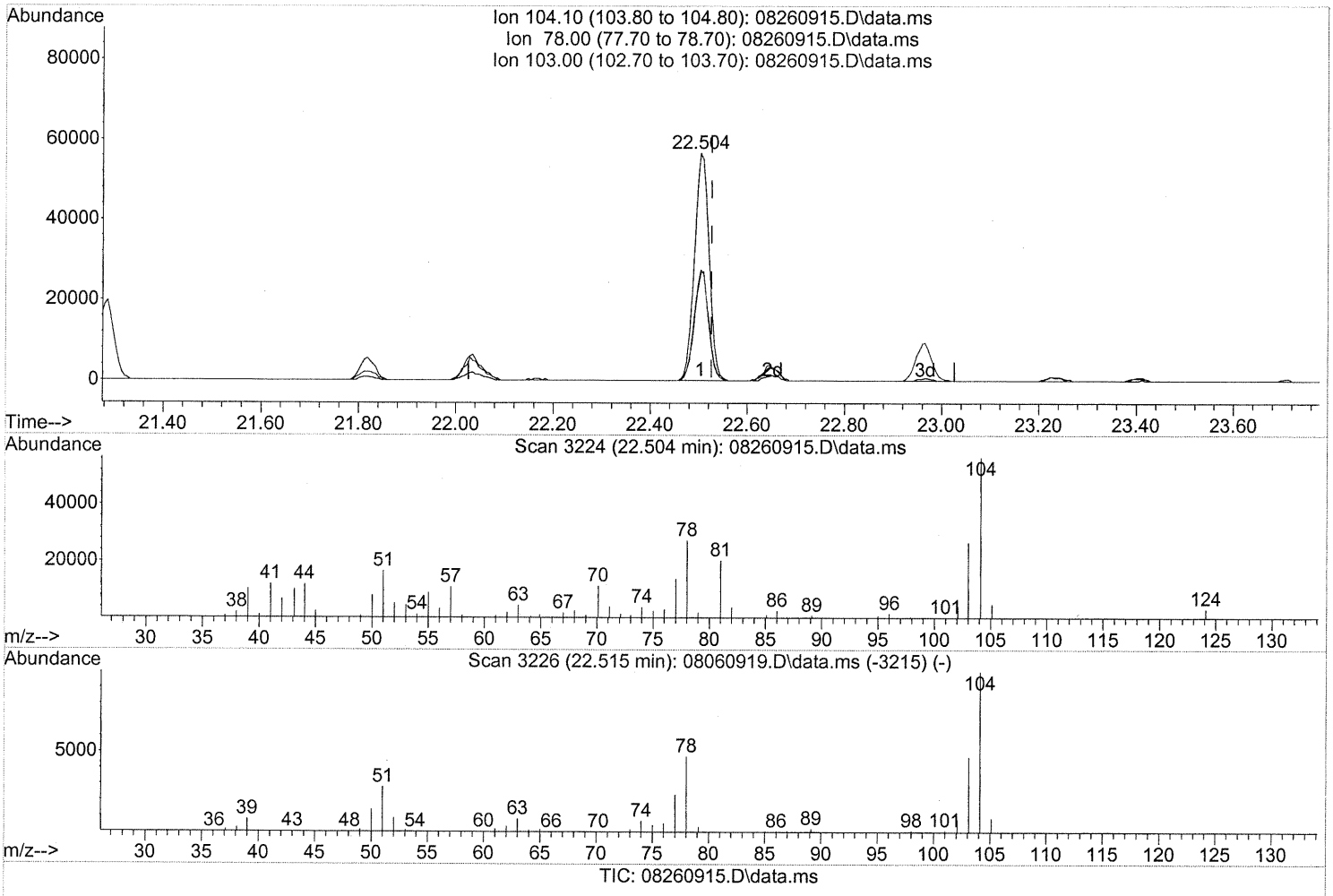
Ion	Exp%	Act%
91.10	100	100
106.10	46.90	48.47
0.00	0.00	0.00
0.00	0.00	0.00

474

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(69) Styrene (T)

22.504min (-0.023) 3.56ng

response 118539

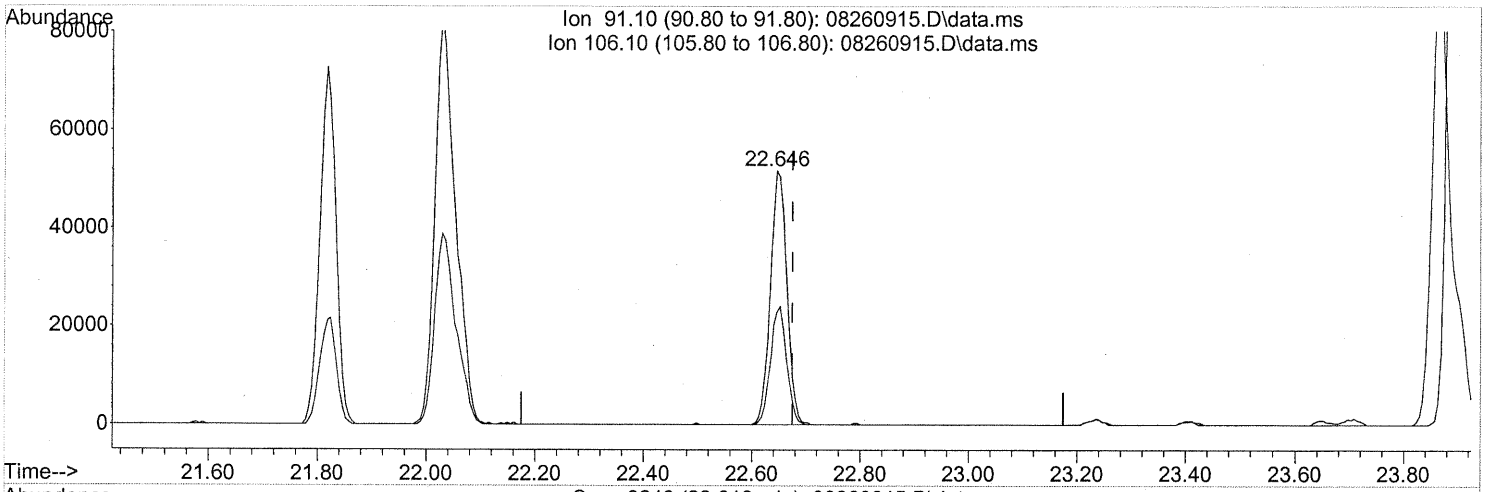
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	47.16
103.00	46.20	47.00
0.00	0.00	0.00

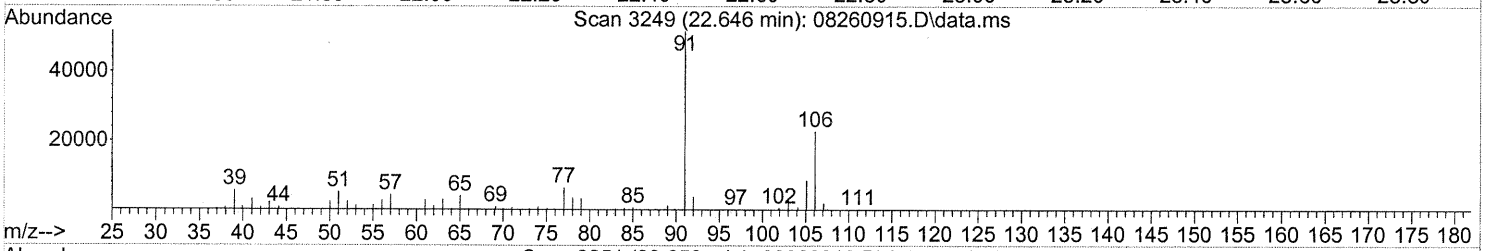
475

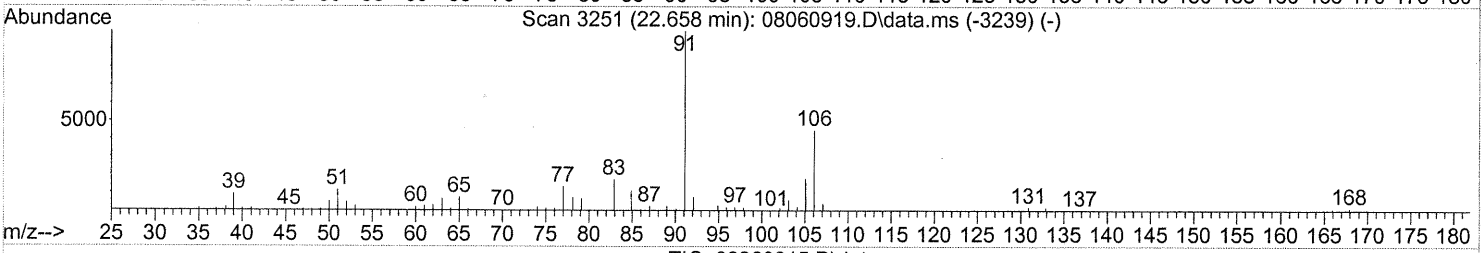
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(70) o-Xylene (T)

22.646min (-0.028) 2.36ng

response 108822

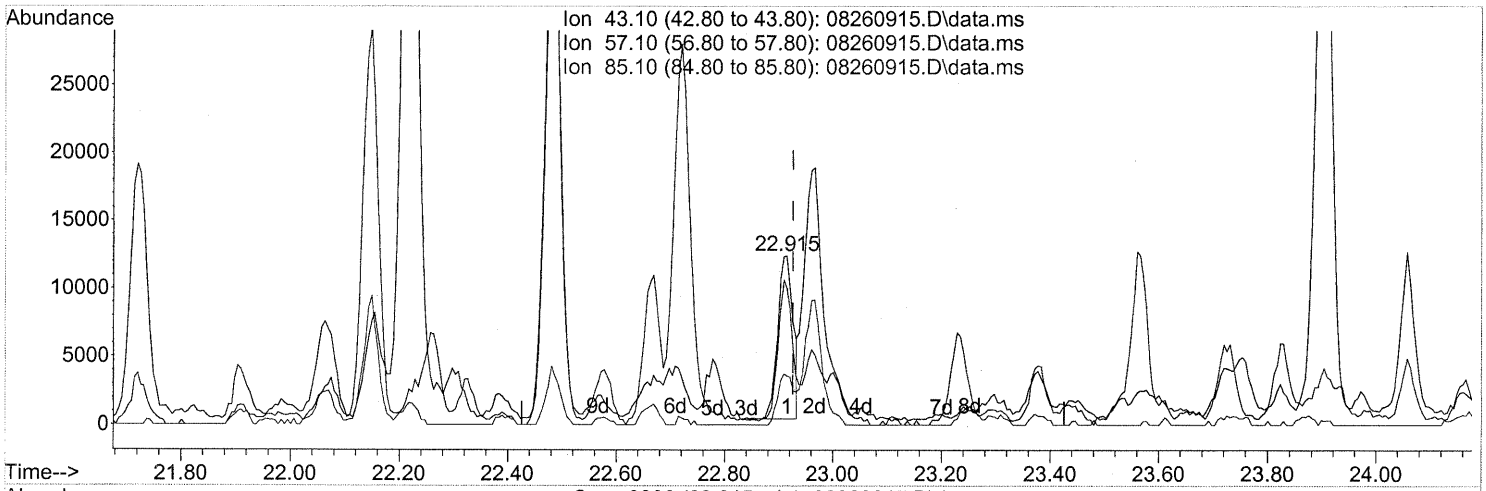
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.31
0.00	0.00	0.00
0.00	0.00	0.00

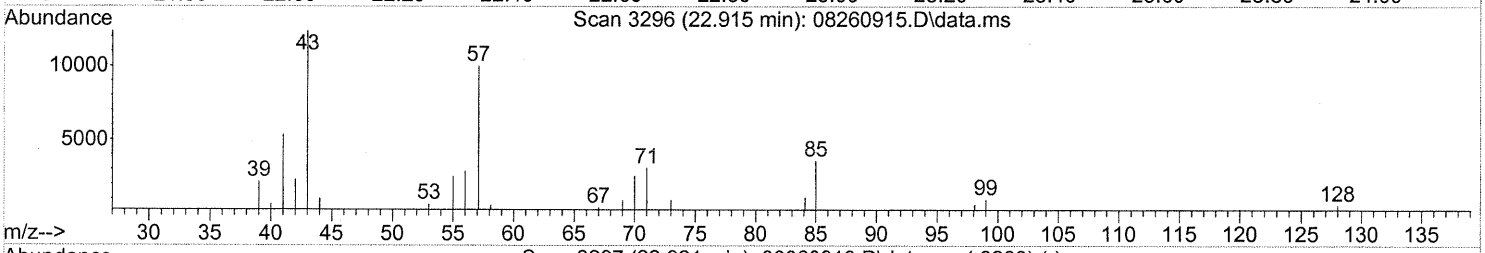
476

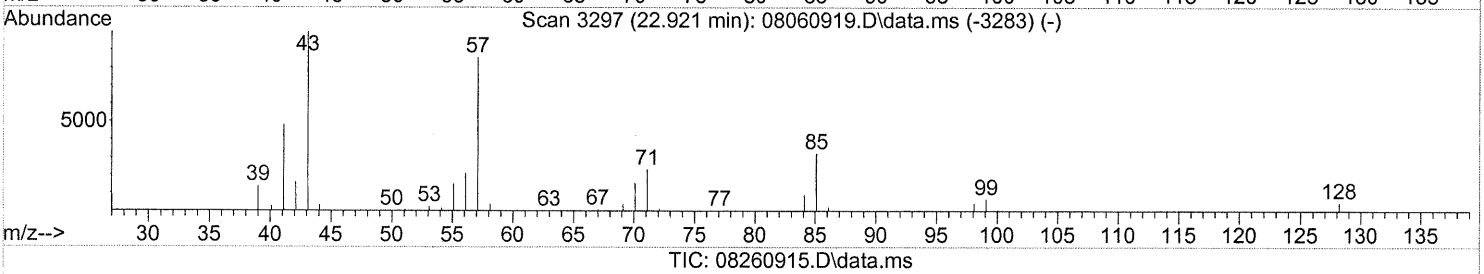
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(71) n-Nonane (T)

22.915min (-0.011) 0.77ng

response 23467

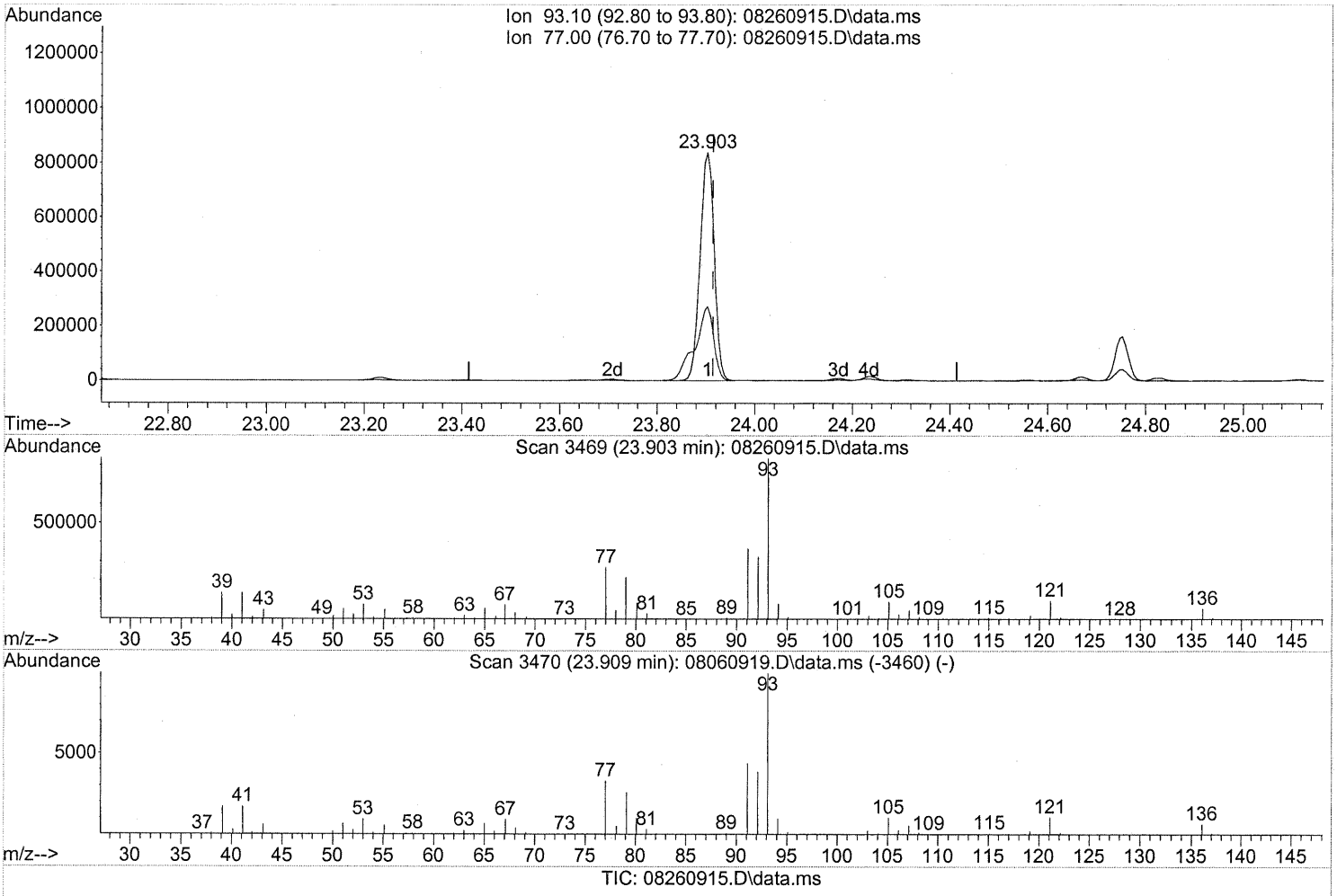
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	87.61
85.10	30.40	32.46
0.00	0.00	0.00

477

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 55.71ng

response 1665055

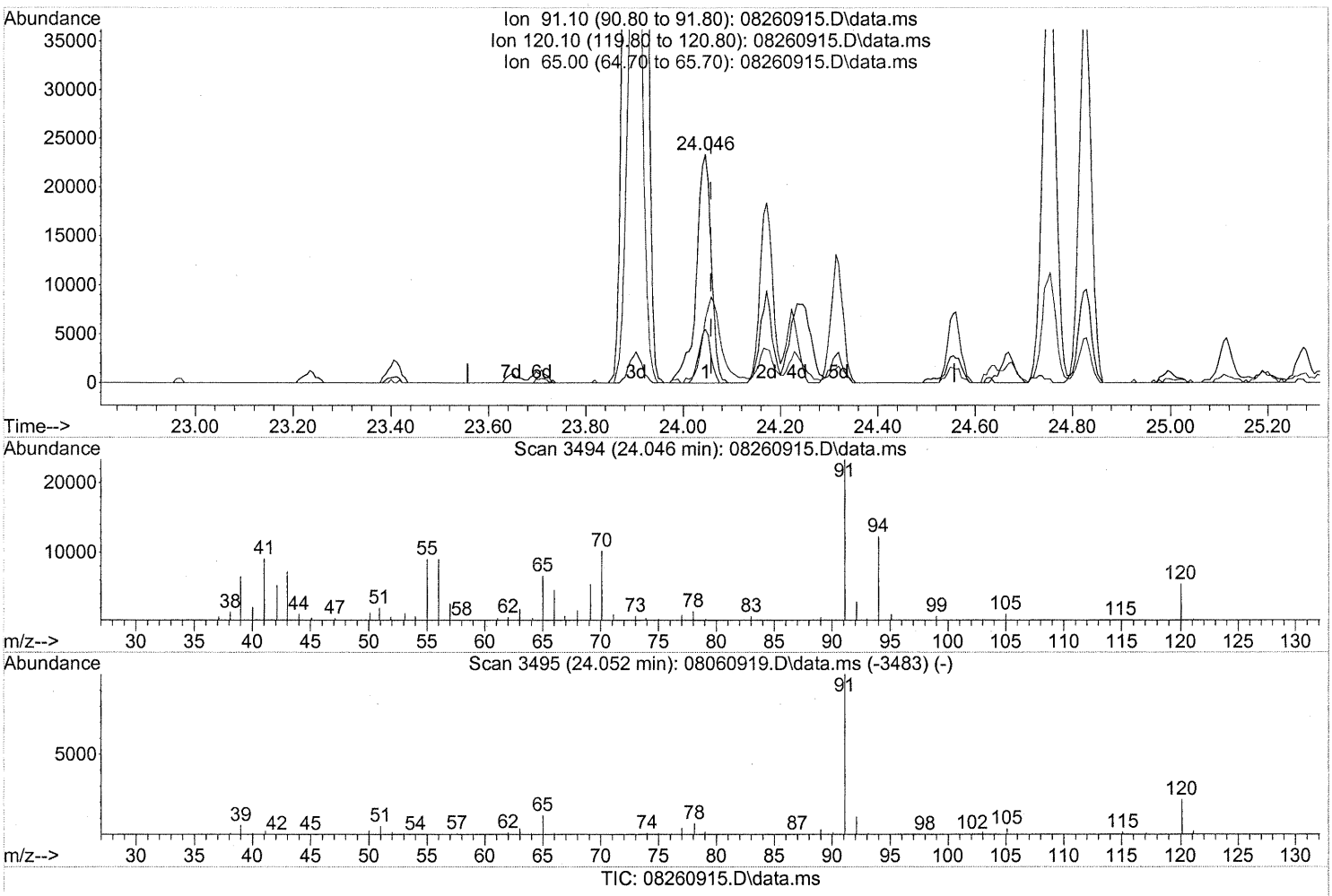
Ion	Exp%	Act%
93.10	100	100
77.00	32.40	43.13
0.00	0.00	0.00
0.00	0.00	0.00

478

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(76) n-Propylbenzene (T)

24.046min (-0.011) 0.68ng

response 49654

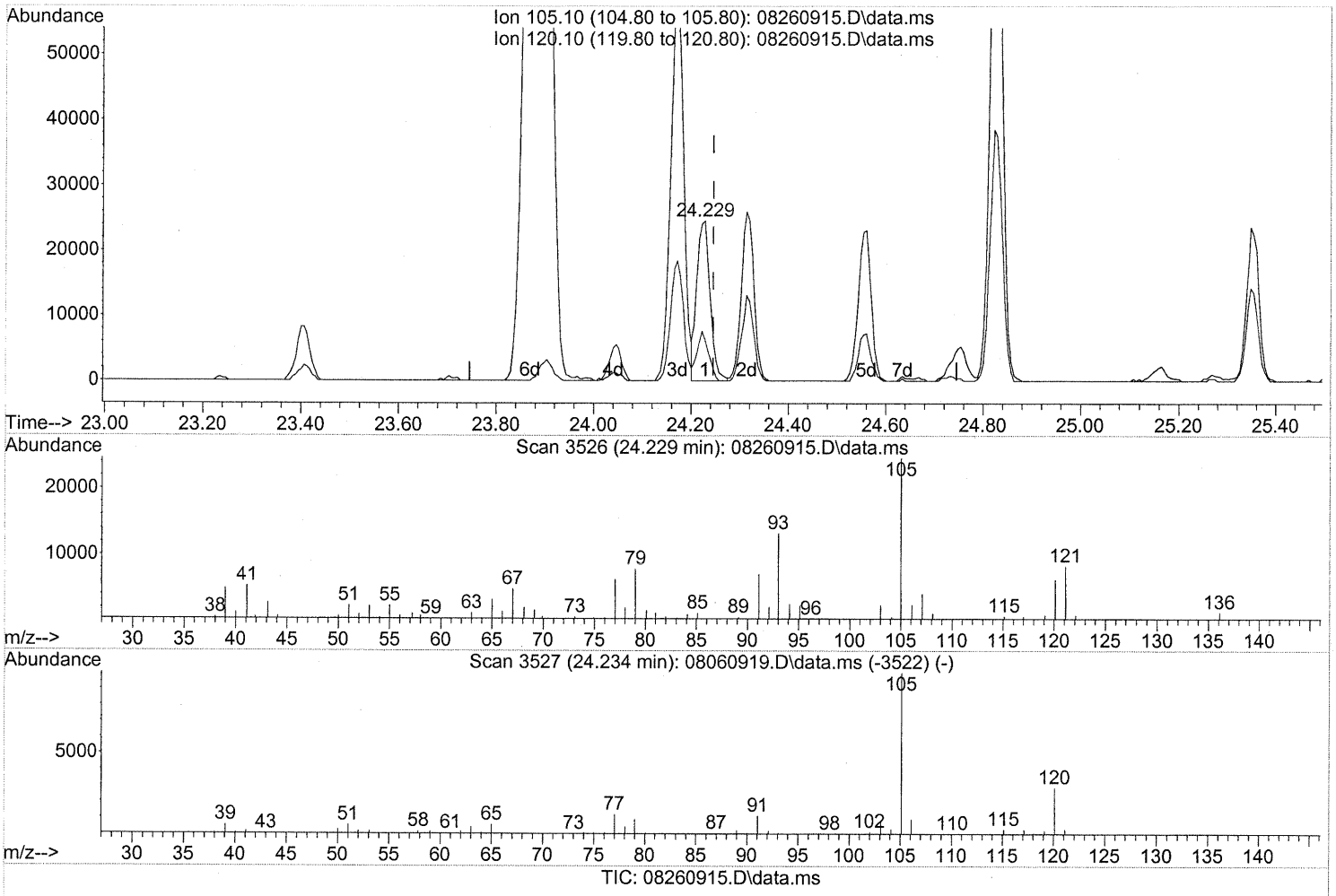
Ion	Exp%	Act%
91.10	100	100
120.10	21.60	18.76
65.00	12.00	45.91#
0.00	0.00	0.00

479

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(78) 4-Ethyltoluene (T)

24.229min (-0.017) 0.86ng

response 46382

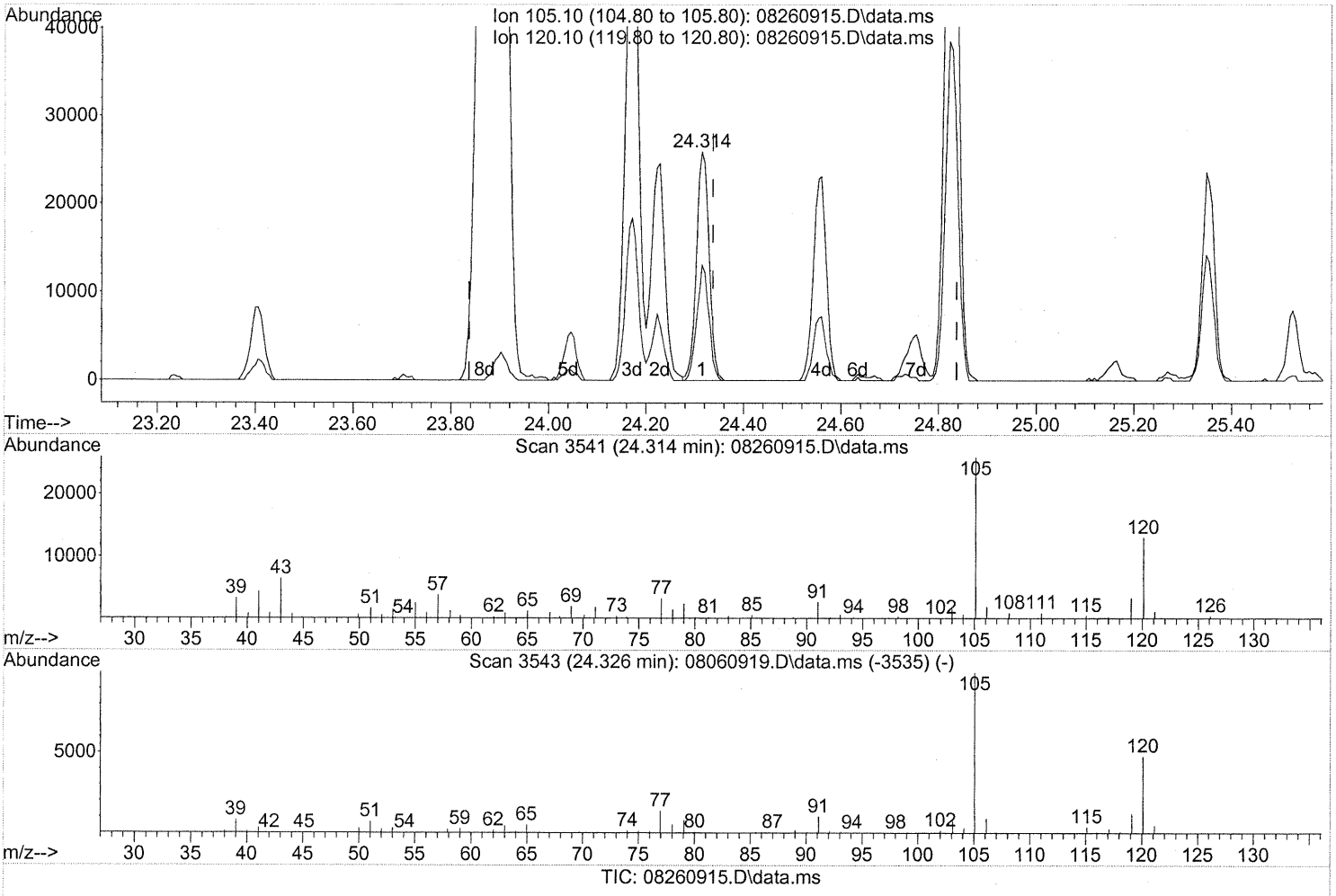
Ion	Exp%	Act%
105.10	100	100
120.10	28.40	26.66
0.00	0.00	0.00
0.00	0.00	0.00

480

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

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

24.314min (-0.023) 1.03ng

response 46721

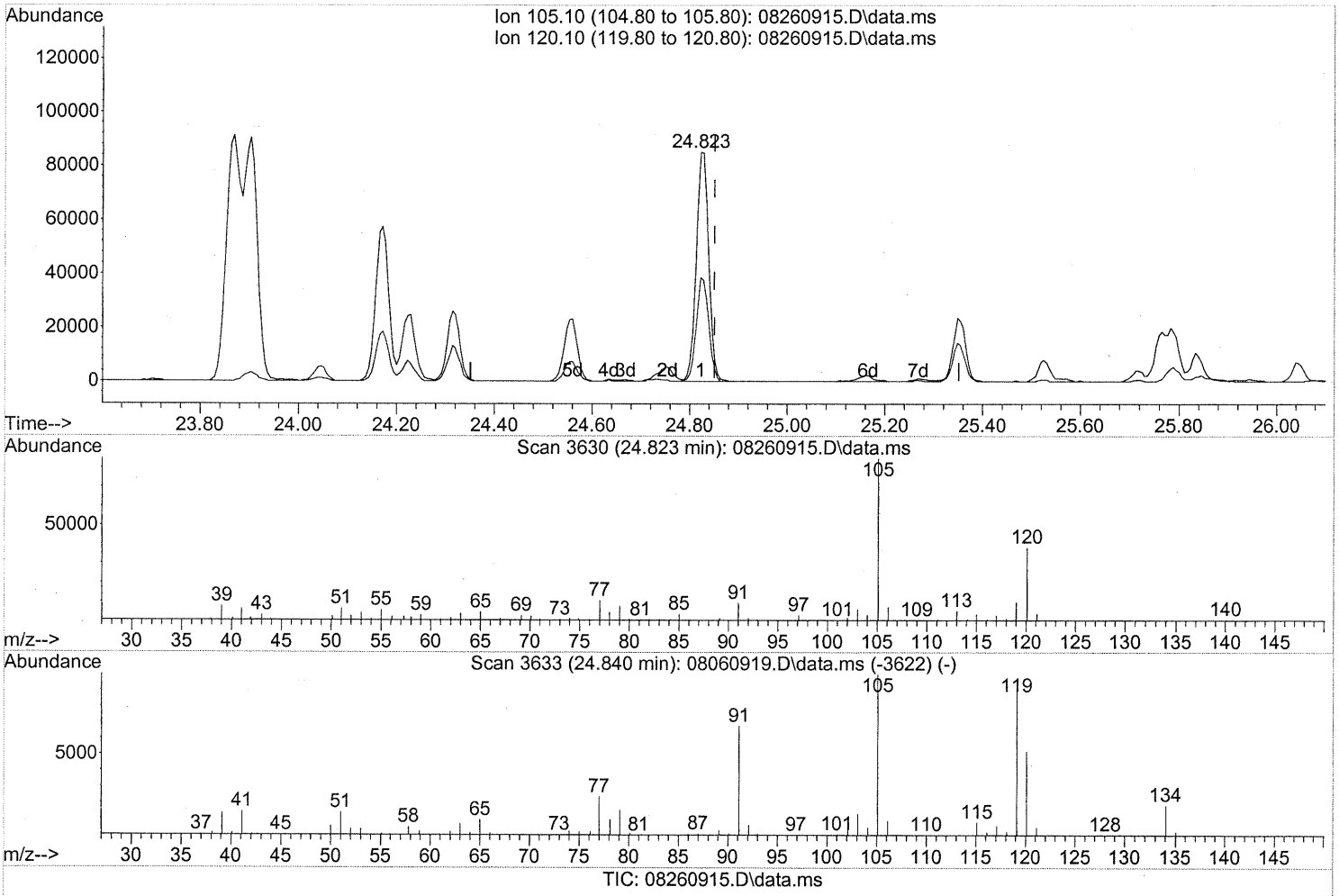
Ion	Exp%	Act%
105.10	100	100
120.10	46.80	48.00
0.00	0.00	0.00
0.00	0.00	0.00

481

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

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

24.823min (-0.028) 3.27ng

response 151780

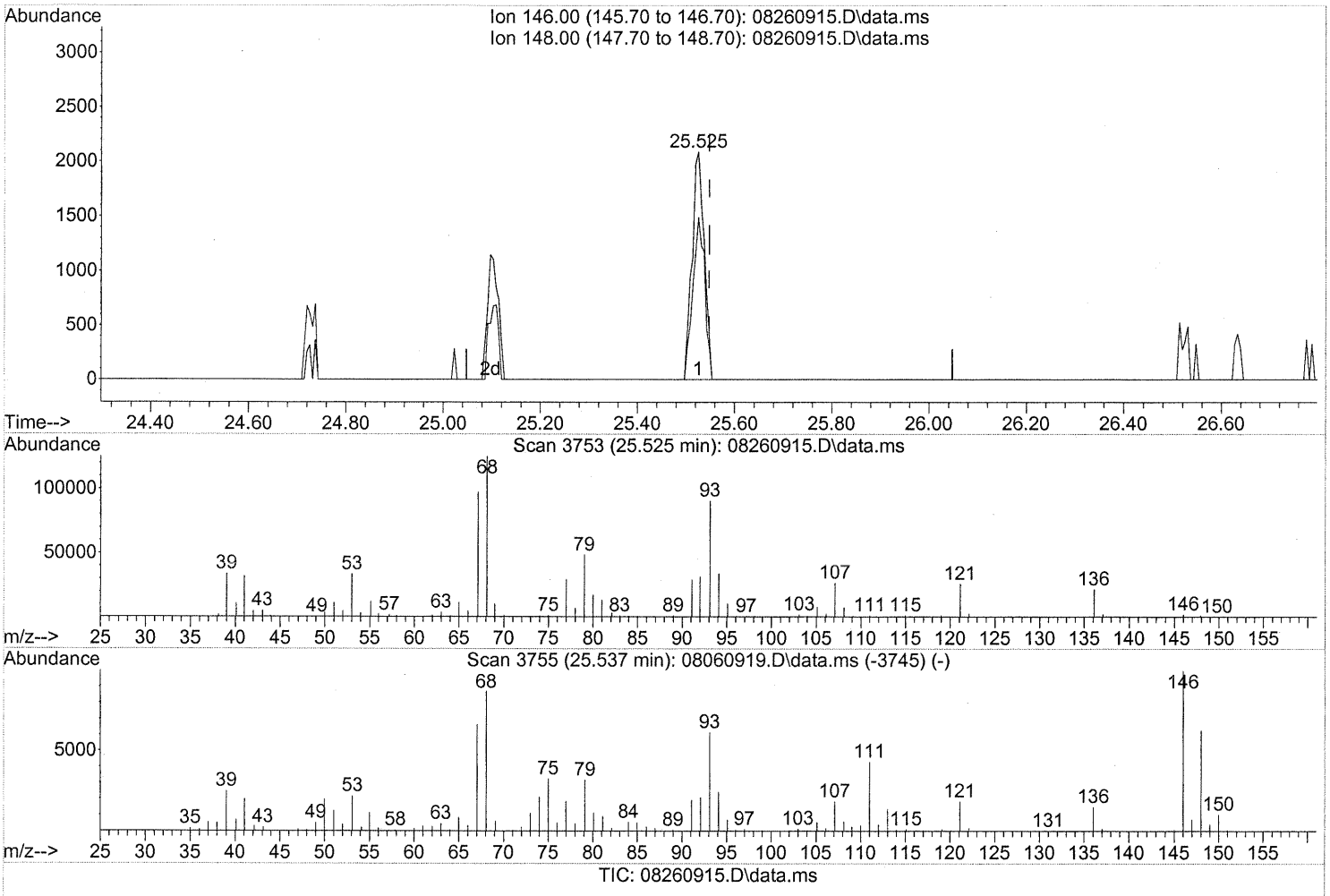
Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.14
0.00	0.00	0.00
0.00	0.00	0.00

482

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.525min (-0.023) 0.16ng

response 3632

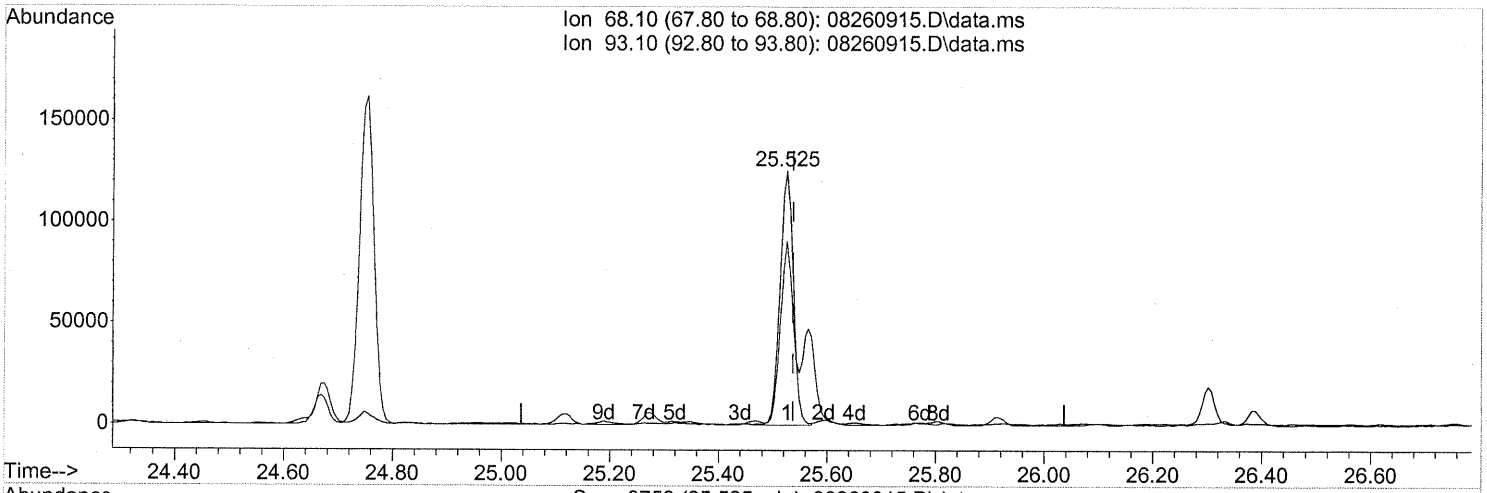
Ion	Exp%	Act%
146.00	100	100
148.00	63.70	69.93
0.00	0.00	0.00
0.00	0.00	0.00

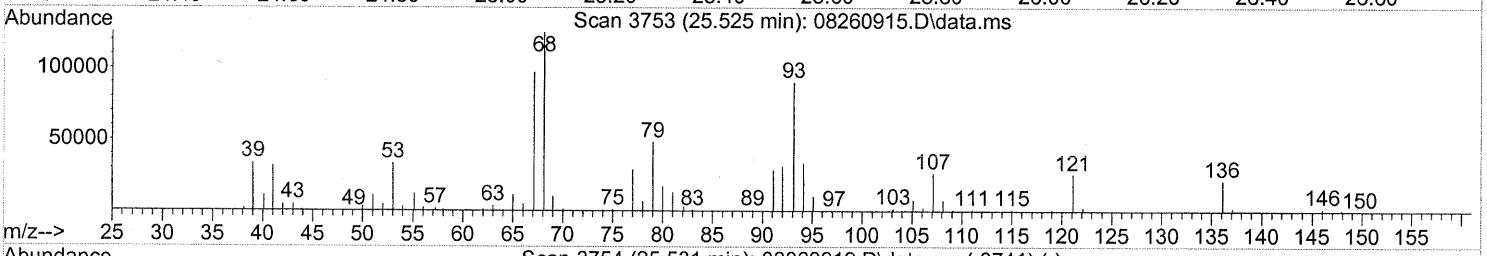
483

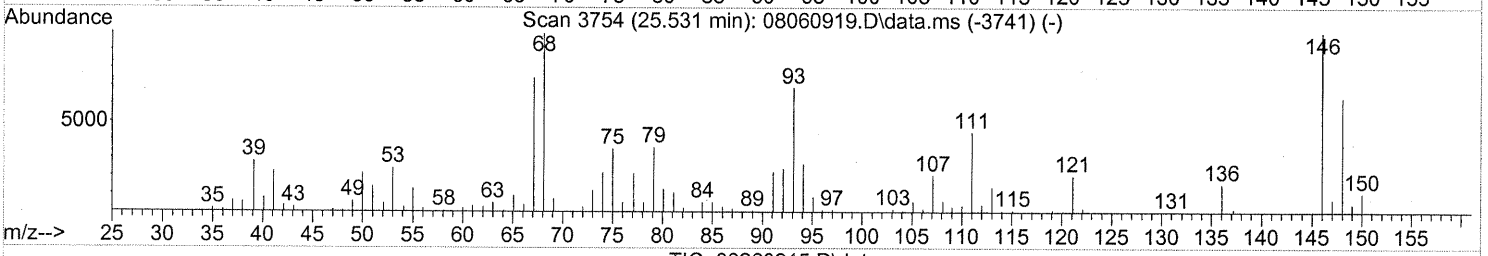
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08260915.D\data.ms

(91) d-Limonene (T)

25.525min (-0.011) 10.64ng

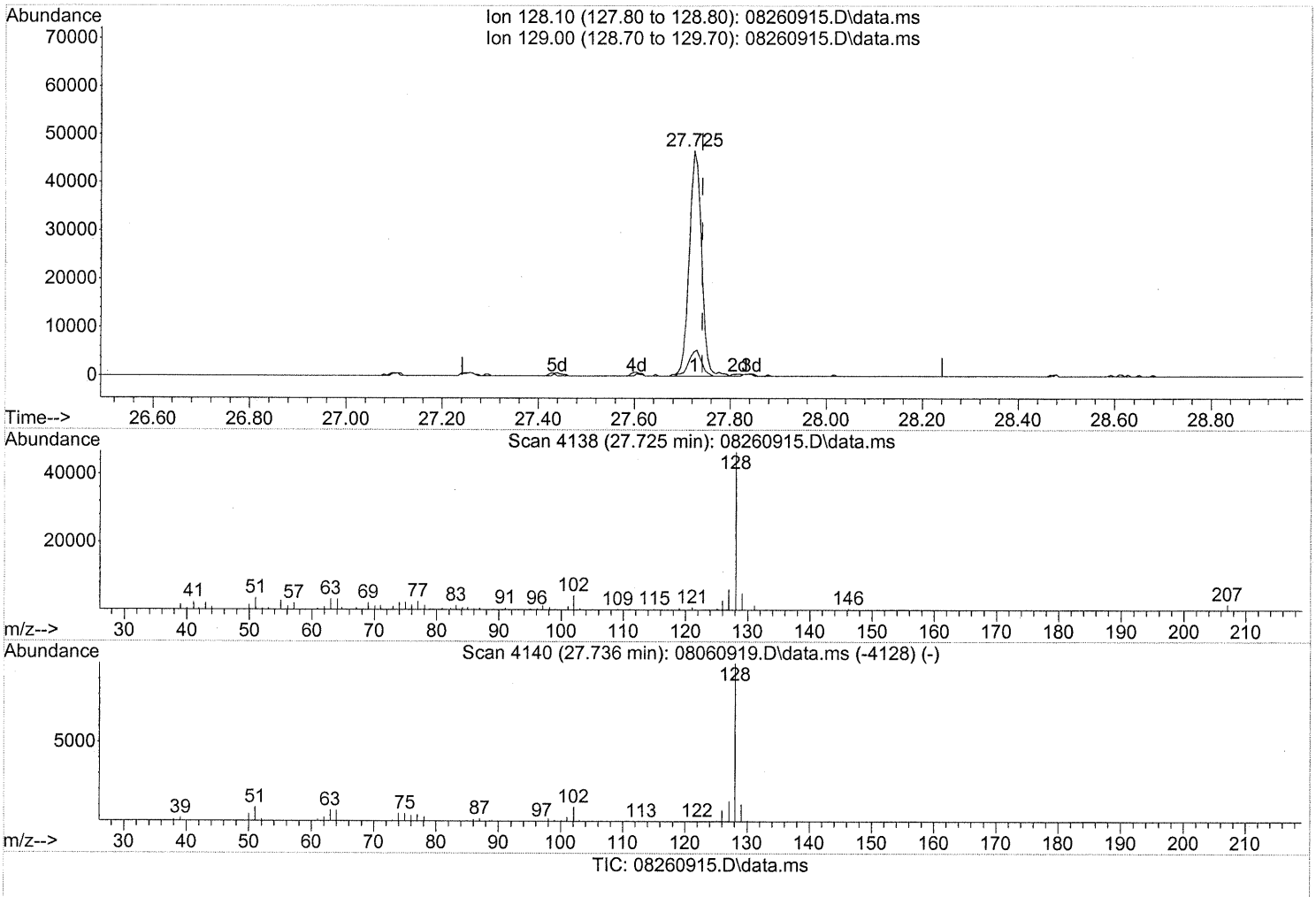
response 210056

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	72.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260915.D
Acq On : 26 Aug 2009 20:09
Operator : WA/CC
Sample : P0902876-010 (1000mL)
Misc : Environmental Health 102474
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 27 06:21:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260915.D\data.ms

(95) Naphthalene (T)

27.725min (-0.017) 1.32ng

response 83302

Ion	Exp%	Act%
128.10	100	100
129.00	10.90	11.85
0.00	0.00	0.00
0.00	0.00	0.00

485

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102475**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01659

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

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	**Acetone**	**8.5**	5.0	**3.6**	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)**	**1.3**	0.50	**0.43**	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: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102475** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-011

Test Code: EPA TO-15 Date Collected: 8/19/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01659

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102475**
Client Project ID: **16512**

CAS Project ID: P0902876
CAS Sample ID: P0902876-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01659

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

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	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	

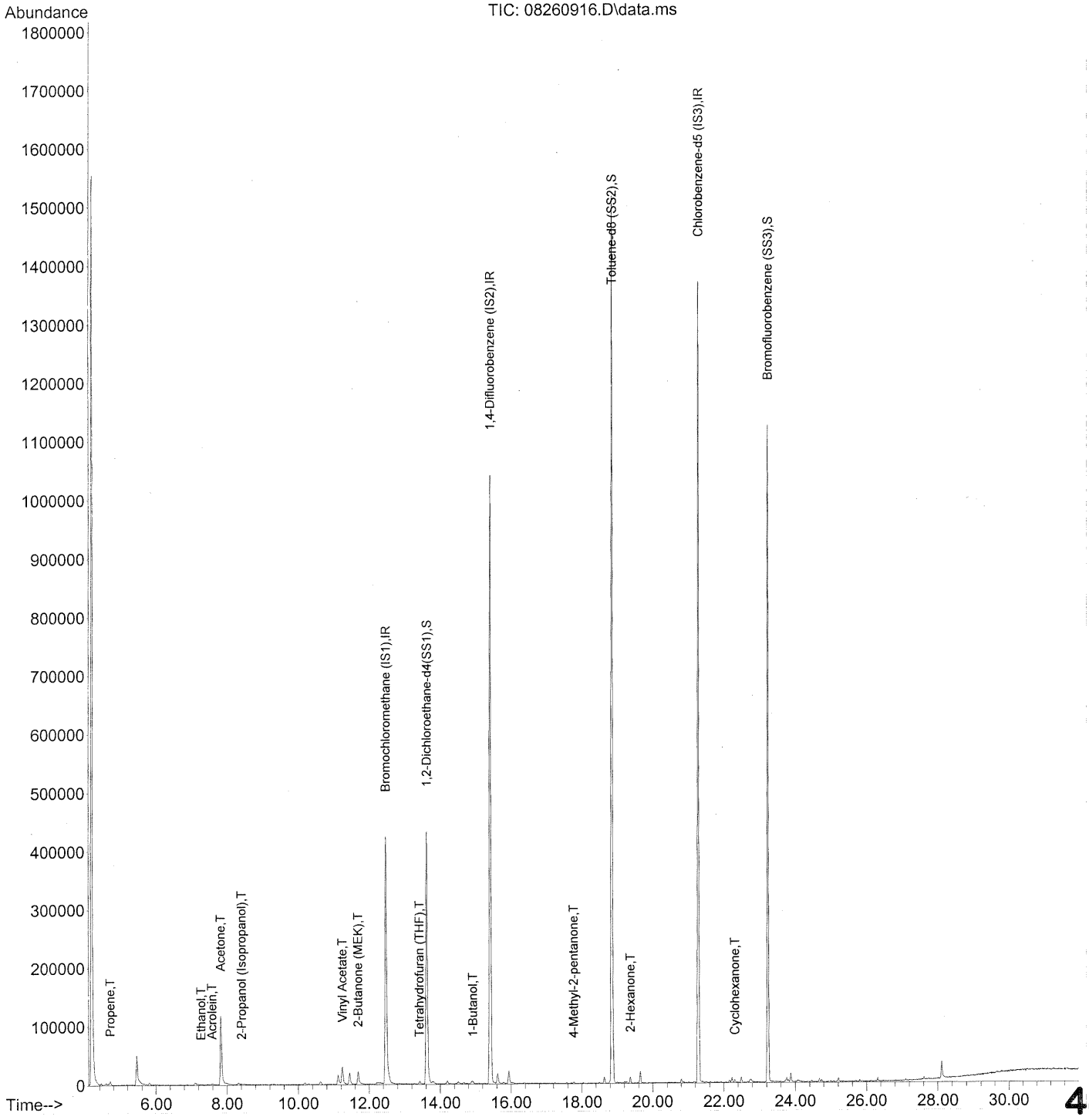
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 8:51 pm
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 01 14:44:13 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 8:51 pm
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 01 14:44:13 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS) VM 9/11/09
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)	
1) Bromochloromethane (IS1)	12.47	130	239485	25.000	ng		-0.04	
37) 1,4-Difluorobenzene (IS2)	15.41	114	1206093	25.000	ng		-0.03	
56) Chlorobenzene-d5 (IS3)	21.28	82	578422	25.000	ng		-0.02	
System Monitoring Compounds								
33) 1,2-Dichloroethane-d4(...	13.62	65	463143	22.250	ng		-0.04	✓
Spiked Amount 25.000			Recovery =	89.00%				
57) Toluene-d8 (SS2)	18.85	98	1303936	25.799	ng		-0.02	✓
Spiked Amount 25.000			Recovery =	103.20%				
73) Bromofluorobenzene (SS3)	23.23	174	371317	27.859	ng		-0.01	✓
Spiked Amount 25.000			Recovery =	111.44%				
Target Compounds							Qvalue	
2) Propene	4.71	42	2861	0.174	ng		91	
3) Dichlorodifluoromethan...	0.00	85	0	N.D.				
4) Chloromethane	0.00	50	0	N.D.				
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.				
6) Vinyl Chloride	0.00	62	0	N.D.				
7) 1,3-Butadiene	0.00	54	0	N.D.				
8) Bromomethane	0.00	94	0	N.D.				
9) Chloroethane	0.00	64	0	N.D.				
10) Ethanol	7.27	45	1507	0.145	ng	#	37	
11) Acetonitrile	7.41	41	359	N.D.				
12) Acrolein	7.58	56	3457	0.436	ng		97	
13) Acetone	7.82	58	83253	8.470	ng	#	62	
14) Trichlorofluoromethane	0.00	101	0	N.D.				
15) 2-Propanol (Isopropanol)	8.41	45	2202	0.057	ng		77	
16) Acrylonitrile	0.00	53	0	N.D.				
17) 1,1-Dichloroethene	0.00	96	0	N.D.				
18) 2-Methyl-2-Propanol (t...	9.32	59	90	N.D.				
19) Methylene Chloride	9.23	84	87	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	9.63	76	107	N.D.				
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.				
24) 1,1-Dichloroethane	0.00	63	0	N.D.				
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.				
26) Vinyl Acetate	11.23	86	9199	4.599	ng	#	4	
27) 2-Butanone (MEK)	11.68	72	11370	1.281	ng		100	
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.				

490

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 8:51 pm
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 01 14:44:13 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.41	72	1342	0.142 ng	#	77
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.92	56	3991	0.255 ng		88
41) Benzene	14.87	78	888	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.41	84	690	N.D.		
44) tert-Amyl Methyl Ether	15.72	73	123	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.76	58	909	0.071 ng	#	51
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	705	N.D.		
59) 2-Hexanone	19.37	43	9220	0.279 ng		98
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.18	43	190	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	0.00	91	0	N.D.		
67) m- & p-Xylenes	0.00	91	0	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	22.93	43	184	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.22	105	592	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.16	105	94	N.D.		
78) 4-Ethyltoluene	24.16	105	94	N.D.		
79) 1,3,5-Trimethylbenzene	24.16	105	94	N.D.		

491

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 8:51 pm
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 01 14:44:13 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.16	105	94	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	24.91	57	95	N.D.		
84) Benzyl Chloride	25.00	91	1388	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	0.00	105	0	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	25.81	105	2043	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	213	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.74	128	1634	N.D.		
96) n-Dodecane	27.69	57	126	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.31	55	2610	0.127	ng	92
99) tert-Butylbenzene	0.00	119	0	N.D.		
100) n-Butylbenzene	25.89	91	446	N.D.		

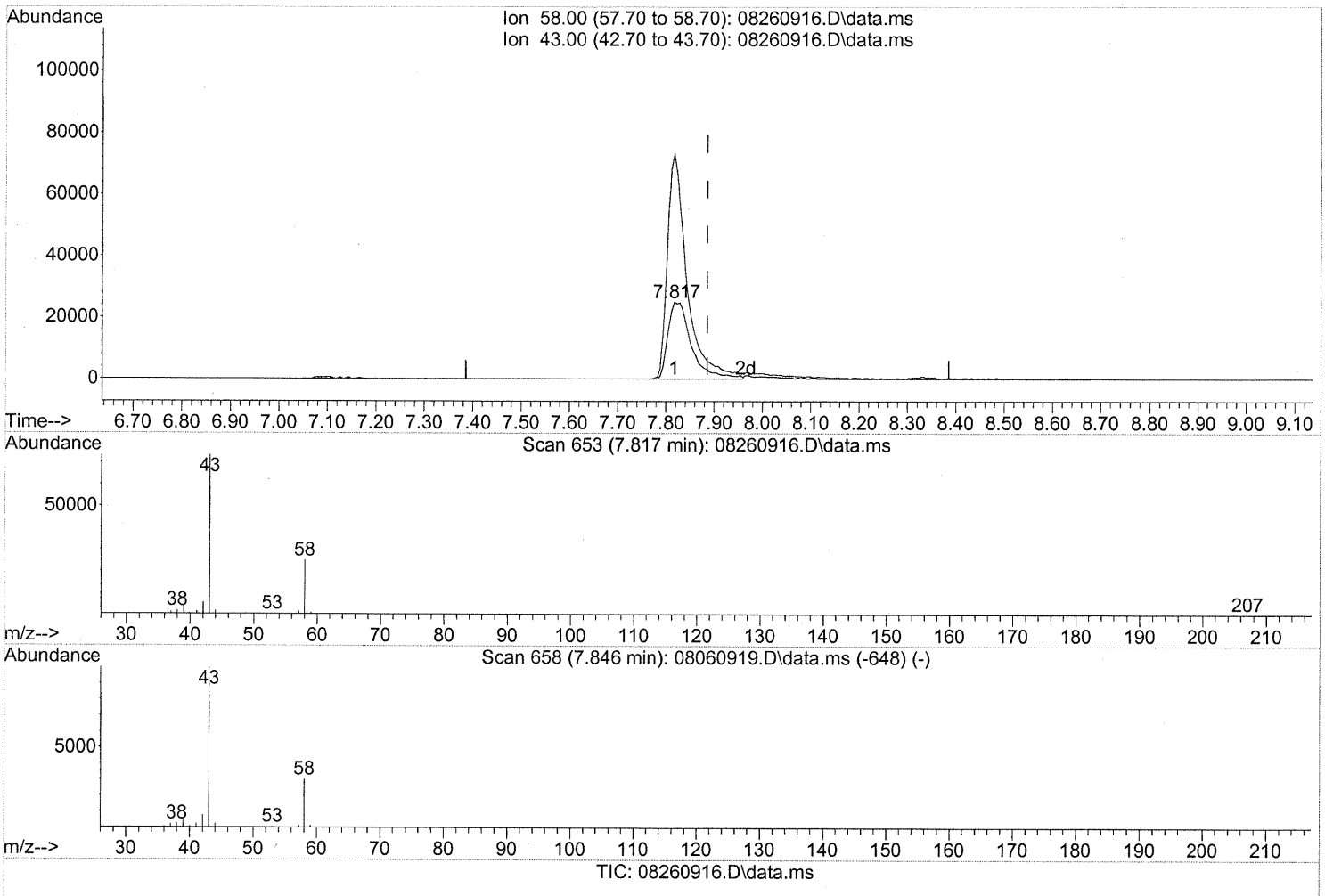
(#) = qualifier out of range (m) = manual integration (+) = signals summed

492

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 20:51
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 06:22:00 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260916.D\data.ms

(13) Acetone (T)

7.817min (-0.069) 8.47ng

response 83253

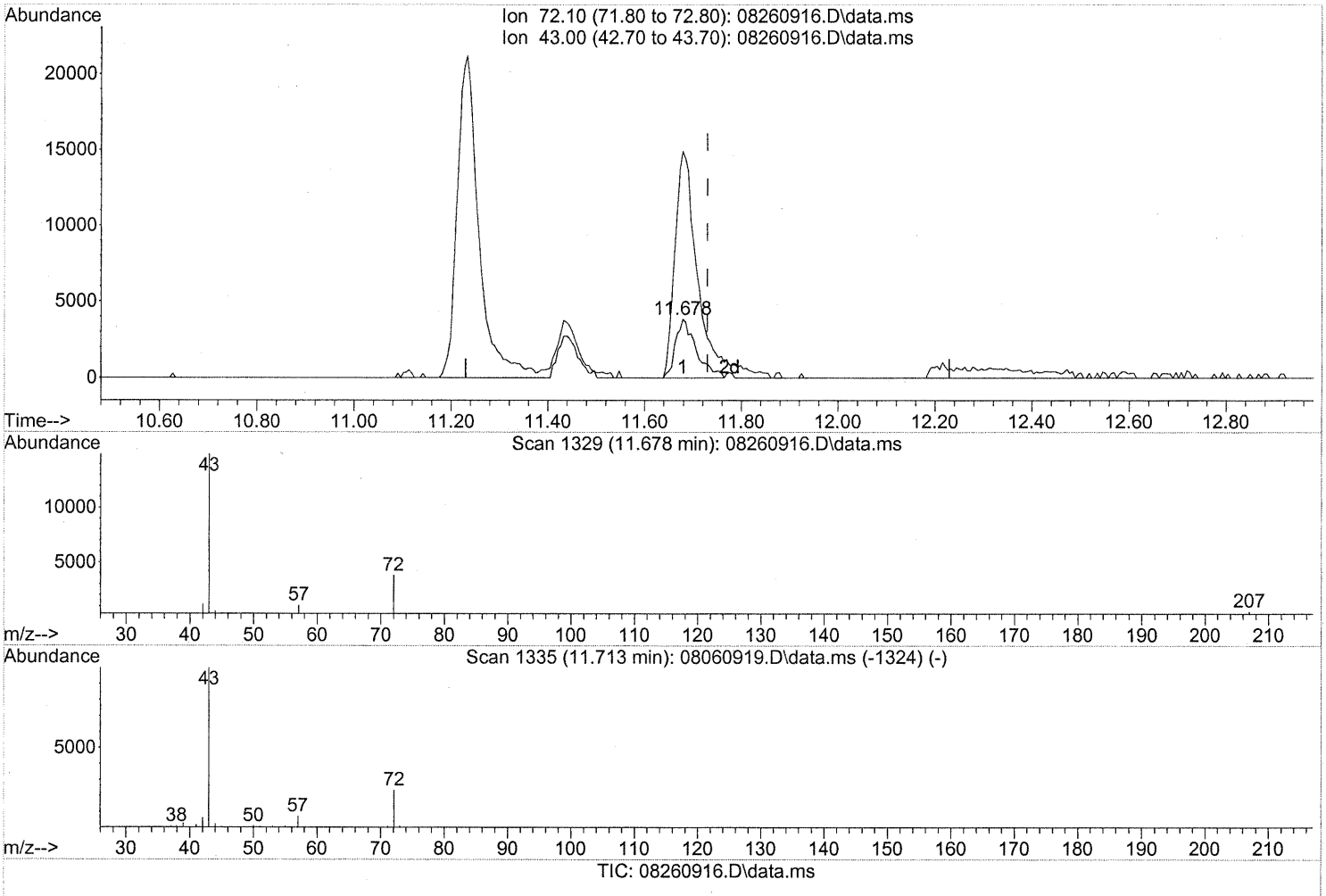
Ion	Exp%	Act%
58.00	100	100
43.00	340.40	259.15#
0.00	0.00	0.00
0.00	0.00	0.00

493

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 20:51
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 06:22:00 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260916.D\data.ms

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

11.678min (-0.052) 1.28ng

response 11370

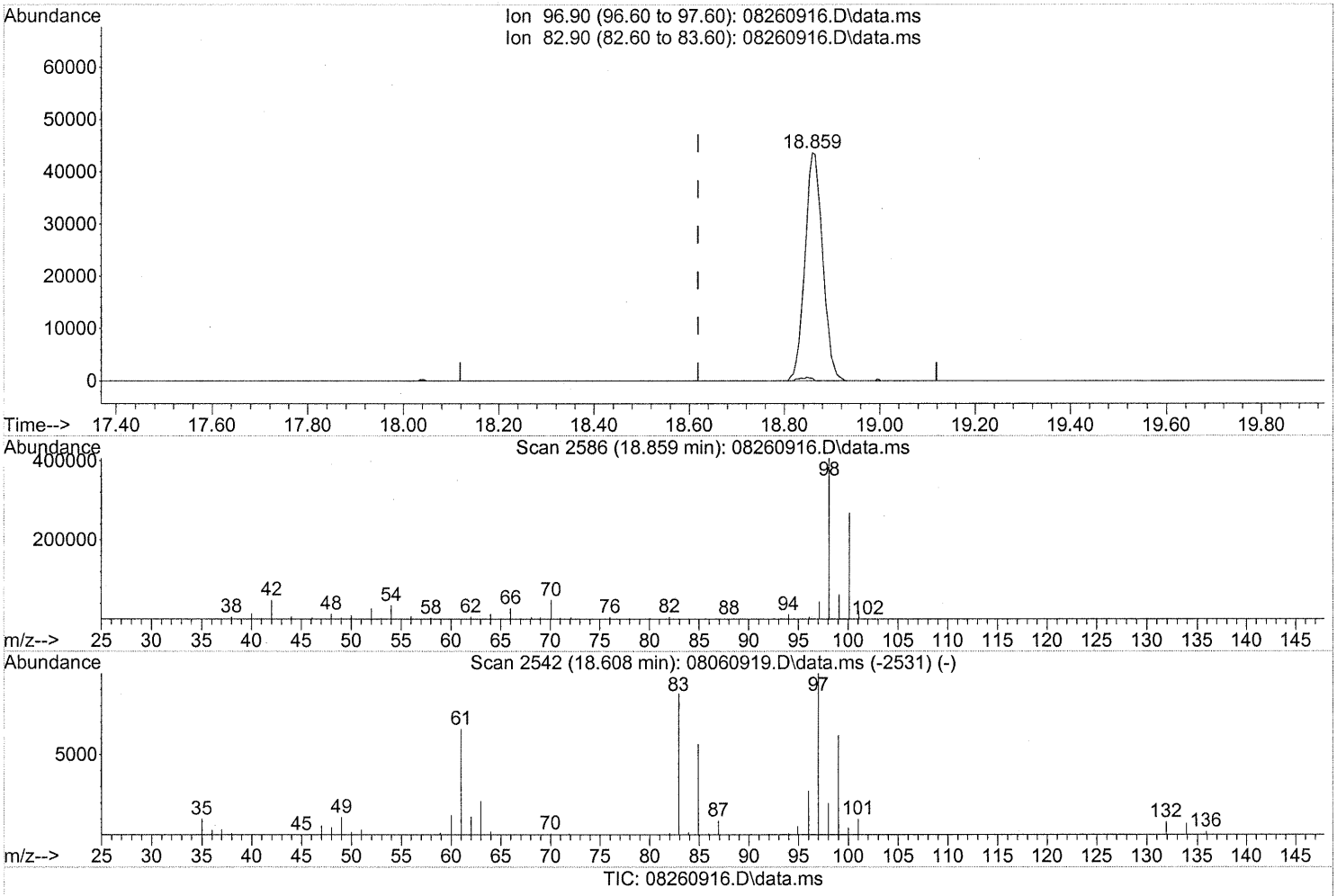
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	436.61
0.00	0.00	0.00
0.00	0.00	0.00

494

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260916.D
Acq On : 26 Aug 2009 20:51
Operator : WA/CC
Sample : P0902876-011 (1000mL)
Misc : Environmental Health 102475
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 27 06:22:00 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08260916.D\data.ms

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

18.859min (+0.240) 9.70ng

response 112949

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	0.94#
0.00	0.00	0.00
0.00	0.00	0.00

FP
VM 9/11/09

9/2/09

495

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902876
CAS Sample ID: P090825-MB

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

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

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

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

CAS Project ID: P0902876
CAS Sample ID: P090825-MB

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

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

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902876
CAS Sample ID: P090825-MB

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

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

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	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	

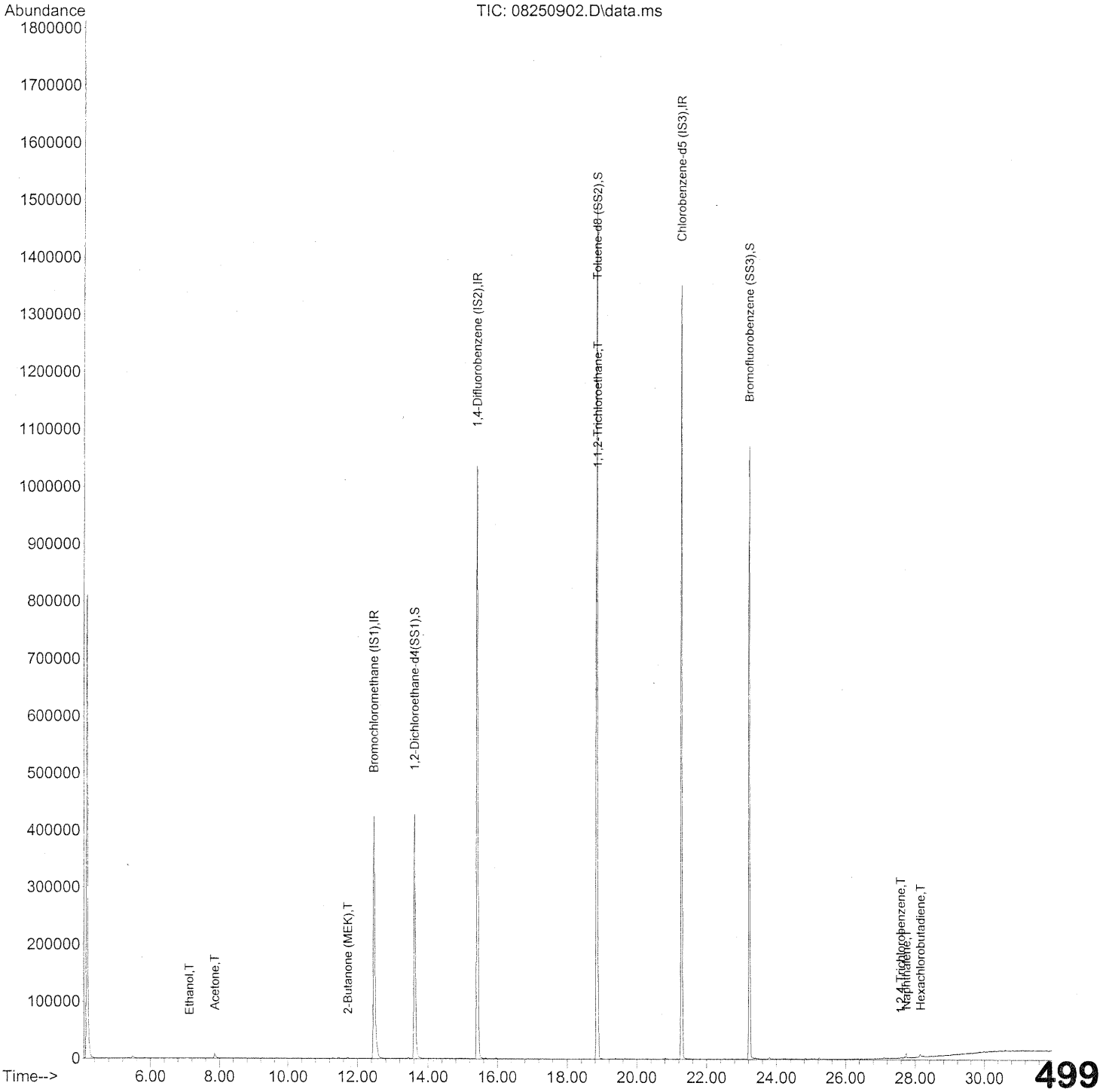
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250902.D
Acq On : 25 Aug 2009 9:47
Operator : WA
Sample : TO-15 Method Blank (1000mL)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250902.D
Acq On : 25 Aug 2009 9:47
Operator : WA
Sample : TO-15 Method Blank (1000mL)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	12.47	130	246784	25.000	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1221355	25.000	ng	-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	564229	25.000	ng	-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.63	65	466168	21.733	ng	-0.03
Spiked Amount 25.000			Recovery = 86.92%			✓
57) Toluene-d8 (SS2)	18.85	98	1313832	26.649	ng	-0.02
Spiked Amount 25.000			Recovery = 106.60%			✓
73) Bromofluorobenzene (SS3)	23.23	174	357352	27.486	ng	-0.01 ✓
Spiked Amount 25.000			Recovery = 109.96%			
Target Compounds						Qvalue
2) Propene	4.73	42	189	N.D.		
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.13	45	557	0.052	ng	# 37
11) Acetonitrile	7.47	41	104	N.D.		
12) Acrolein	7.65	56	86	N.D.		
13) Acetone	7.87	58	6806	0.672	ng	# 63
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	8.38	45	265	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.		
19) Methylene Chloride	9.25	84	278	N.D.		
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	9.65	76	196	N.D.		
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.		
27) 2-Butanone (MEK)	11.72	72	551	0~~.060~~	ng	# 1
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	0.00	61	0	N.D.		
31) n-Hexane	0.00	57	0	N.D.		

500

8/25/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250902.D
Acq On : 25 Aug 2009 9:47
Operator : WA
Sample : TO-15 Method Blank (1000mL)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Chloroform	0.00	83	0	N.D.	
34) Tetrahydrofuran (THF)	13.43	72	113	N.D.	
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	0.00	62	0	N.D.	
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
39) Isopropyl Acetate	0.00	61	0	N.D.	
40) 1-Butanol	14.97	56	95	N.D.	
41) Benzene	14.88	78	1307	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.40	84	100	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	0.00	130	0	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.	
50) Methyl Methacrylate	0.00	100	0	N.D.	
51) n-Heptane	0.00	71	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	18.86	97	113549	~~9.631 ng~~ ~~PP~~ #	4
58) Toluene	18.98	91	1223	N.D.	
59) 2-Hexanone	19.38	43	1282	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	0.00	43	0	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	21.82	91	788	N.D.	
67) m- & p-Xylenes	22.07	91	241	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	22.51	104	505	N.D.	
70) o-Xylene	22.66	91	462	N.D.	
71) n-Nonane	0.00	43	0	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.41	105	2625	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.05	91	830	N.D.	
77) 3-Ethyltoluene	24.17	105	1655	N.D.	
78) 4-Ethyltoluene	24.27	105	256	N.D.	
79) 1,3,5-Trimethylbenzene	24.32	105	1545	N.D.	

501

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250902.D
Acq On : 25 Aug 2009 9:47
Operator : WA
Sample : TO-15 Method Blank (1000mL)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 10:19:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.			
81) 2-Ethyltoluene	24.55	105	1154	N.D.			
82) 1,2,4-Trimethylbenzene	24.83	105	1151	N.D.			
83) n-Decane	24.94	57	95	N.D.			
84) Benzyl Chloride	24.99	91	1797	N.D.			
85) 1,3-Dichlorobenzene	25.02	146	243	N.D.			
86) 1,4-Dichlorobenzene	25.11	146	720	N.D.			
87) sec-Butylbenzene	25.16	105	551	N.D.			
88) 4-Isopropyltoluene (p-...	25.35	119	364	N.D.			
89) 1,2,3-Trimethylbenzene	25.35	105	676	N.D.			
90) 1,2-Dichlorobenzene	25.53	146	239	N.D.			
91) d-Limonene	0.00	68	0	N.D.			
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.46	57	175	N.D.			
94) 1,2,4-Trichlorobenzene	27.59	180	1122	0.075	ng	#	74
95) Naphthalene	27.75	128	11145	0.182	ng		89
96) n-Dodecane	27.70	57	843	N.D.			
97) Hexachlorobutadiene	28.15	225	717	0.076	ng		92
98) Cyclohexanone	22.32	55	436	N.D.			
99) tert-Butylbenzene	24.83	119	197	N.D.			
100) n-Butylbenzene	25.87	91	90	N.D.			

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

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902876
CAS Sample ID: P090826-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902876
CAS Sample ID: P090826-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902876
CAS Sample ID: P090826-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 8/26/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

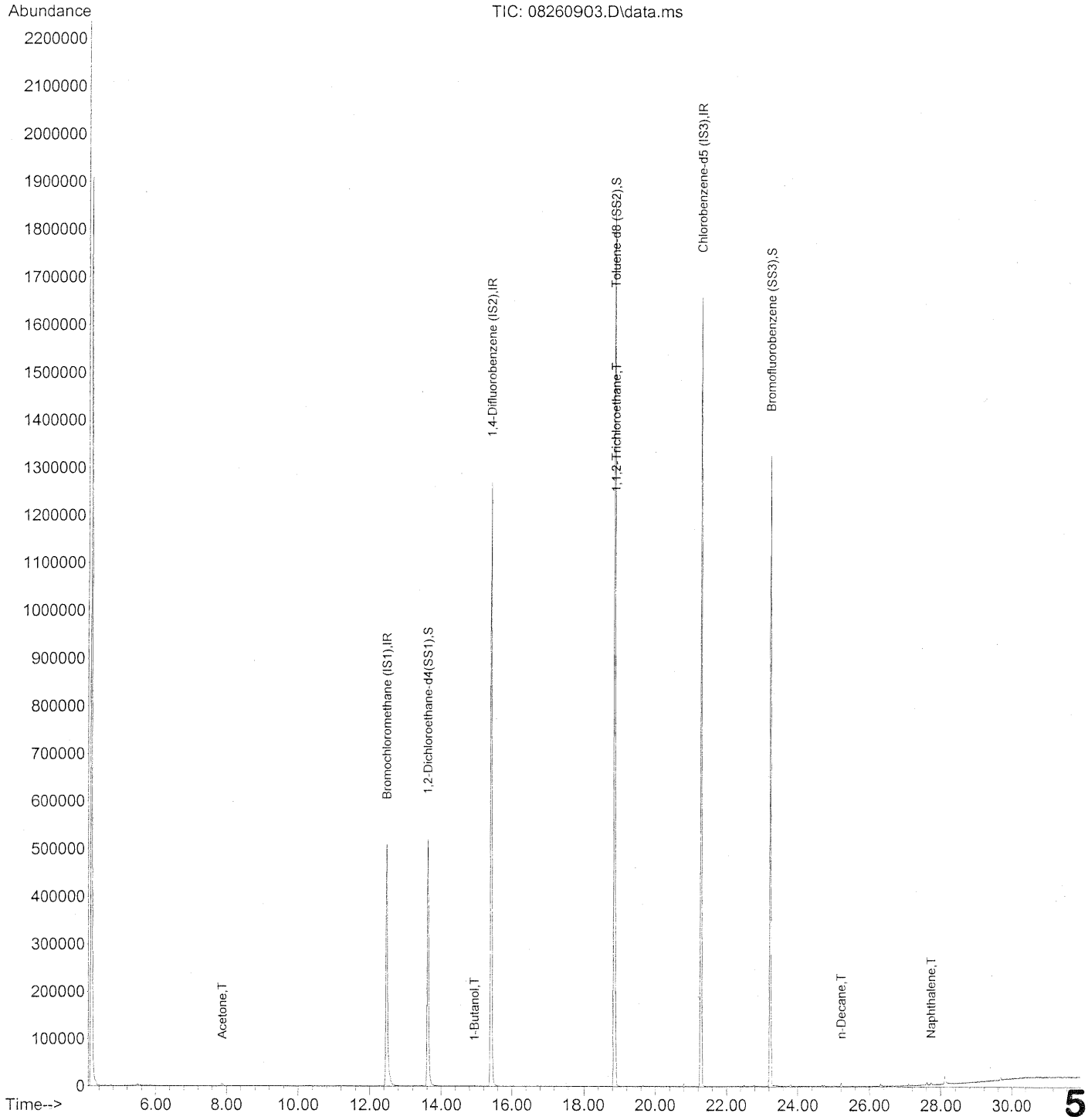
CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	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: 9/8/09

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260903.D
Acq On : 26 Aug 2009 11:30
Operator : WA/CC
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 11:59:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260903.D
Acq On : 26 Aug 2009 11:30
Operator : WA/CC
Sample : TO-15 Method Blank (1000ml)
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	
1) Bromochloromethane (IS1)	12.47	130	295358	25.000	ng	-0.03	
37) 1,4-Difluorobenzene (IS2)	15.41	114	1468107	25.000	ng	-0.03	
56) Chlorobenzene-d5 (IS3)	21.29	82	700532	25.000	ng	-0.01	
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.62	65	561104	21.857	ng	-0.04	
Spiked Amount 25.000			Recovery =	87.44%			✓
57) Toluene-d8 (SS2)	18.85	98	1612865	26.349	ng	-0.02	
Spiked Amount 25.000			Recovery =	105.40%			✓
73) Bromofluorobenzene (SS3)	23.23	174	438882	27.189	ng	-0.01	✓
Spiked Amount 25.000			Recovery =	108.76%			
Target Compounds							Qvalue
2) Propene	4.73	42	726	N.D.			
3) Dichlorodifluoromethan...	0.00	85	0	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	0.00	45	0	N.D.			
11) Acetonitrile	0.00	41	0	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	7.88	58	4488	0.370	ng	#	70
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.42	45	302	N.D.			
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.26	84	331	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	0.00	76	0	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.			

507

8/26/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260903.D
Acq On : 26 Aug 2009 11:30
Operator : WA/CC
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08140906
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 11:59:08 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.44	72	95	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.94	56	1036	0.054 ng	#	3
41) Benzene	14.88	78	1146	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.41	84	724	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.86	97	139403	~~9.837 ng~~ TP	#	5
58) Toluene	18.97	91	1032	N.D.		
59) 2-Hexanone	19.38	43	386	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	0.00	43	0	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.81	91	86	N.D.		
67) m- & p-Xylenes	22.03	91	1009	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.51	104	225	N.D.		
70) o-Xylene	22.65	91	114	N.D.		
71) n-Nonane	22.48	43	610	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.42	105	118	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.05	91	278	N.D.		
77) 3-Ethyltoluene	24.17	105	617	N.D.		
78) 4-Ethyltoluene	24.22	105	679	N.D.		
79) 1,3,5-Trimethylbenzene	24.32	105	122	N.D.		

508

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260903.D
Acq On : 26 Aug 2009 11:30
Operator : WA/CC
Sample : TO-15 Method Blank (1000ml)
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	90	N.D.			
81) 2-Ethyltoluene	24.55	105	90	N.D.			
82) 1,2,4-Trimethylbenzene	24.82	105	661	N.D.			
83) n-Decane	25.21	57	4702	0.129	ng	#	42
84) Benzyl Chloride	25.00	91	2168	N.D.			
85) 1,3-Dichlorobenzene	25.02	146	406	N.D.			
86) 1,4-Dichlorobenzene	25.10	146	584	N.D.			
87) sec-Butylbenzene	25.35	105	98	N.D.			
88) 4-Isopropyltoluene (p-...	25.35	119	101	N.D.			
89) 1,2,3-Trimethylbenzene	25.35	105	98	N.D.			
90) 1,2-Dichlorobenzene	25.53	146	278	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	26.32	57	1503	N.D.			
94) 1,2,4-Trichlorobenzene	27.59	180	907	N.D.			
95) Naphthalene	27.74	128	6931	0.091	ng		95
96) n-Dodecane	27.70	57	368	N.D.			
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.32	55	125	N.D.			
99) tert-Butylbenzene	0.00	119	0	N.D.			
100) n-Butylbenzene	25.86	91	193	N.D.			

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

QC SUMMARY FORMS

COLUMBIA ANALYTICAL SERVICES, INC.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Health & Engineering, Inc.**
Client Project ID: **16512** CAS Project ID: P0902876

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 8/18 - 8/19/09
Analyst: Wida Ang Date(s) Received: 8/20/09
Sampling Media: 6.0 L Summa Canister(s) Date(s) Analyzed: 8/25 - 8/27/09
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P090825-MB	**87**	70-130	**107**	70-130	**110**	70-130	
Method Blank	P090826-MB	**87**	70-130	**105**	70-130	**109**	70-130	
Lab Control Sample	P090825-LCS	**89**	70-130	**106**	70-130	**110**	70-130	
Lab Control Sample	P090826-LCS	**88**	70-130	**103**	70-130	**116**	70-130	
102349	P0902876-001	**87**	70-130	**105**	70-130	**113**	70-130	
102350	P0902876-002	**87**	70-130	**104**	70-130	**112**	70-130	
102350	P0902876-002DUP	**87**	70-130	**104**	70-130	**113**	70-130	
102351	P0902876-003	**88**	70-130	**103**	70-130	**112**	70-130	
102352	P0902876-004	**87**	70-130	**103**	70-130	**112**	70-130	
102353	P0902876-005	**87**	70-130	**103**	70-130	**114**	70-130	
102470	P0902876-006	**86**	70-130	**104**	70-130	**113**	70-130	
102471	P0902876-007	**89**	70-130	**102**	70-130	**112**	70-130	
102472	P0902876-008	**91**	70-130	**104**	70-130	**111**	70-130	
102473	P0902876-009	**89**	70-130	**103**	70-130	**112**	70-130	
102474	P0902876-010	**90**	70-130	**104**	70-130	**109**	70-130	
102475	P0902876-011	**89**	70-130	**103**	70-130	**111**	70-130	

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090825-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang 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 Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**20.5**	**78**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**21.8**	**84**	61-118	
74-87-3	Chloromethane	25.0	**25.3**	**101**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**24.3**	**93**	65-122	
75-01-4	Vinyl Chloride	25.3	**22.7**	**90**	57-132	
106-99-0	1,3-Butadiene	26.8	**25.0**	**93**	66-161	
74-83-9	Bromomethane	25.8	**28.3**	**110**	67-130	
75-00-3	Chloroethane	25.5	**22.5**	**88**	68-123	
64-17-5	Ethanol	130	**118**	**91**	50-155	
75-05-8	Acetonitrile	26.0	**20.4**	**78**	48-148	
107-02-8	Acrolein	26.3	**25.0**	**95**	67-138	
67-64-1	Acetone	132	**119**	**90**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**23.8**	**90**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**42.8**	**89**	54-126	
107-13-1	Acrylonitrile	25.8	**25.0**	**97**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**27.5**	**100**	70-123	
75-09-2	Methylene Chloride	26.8	**23.2**	**87**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**20.0**	**74**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**29.3**	**107**	69-126	
75-15-0	Carbon Disulfide	26.0	**24.0**	**92**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**23.5**	**92**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**23.9**	**90**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.2**	**92**	72-132	
108-05-4	Vinyl Acetate	126	**184**	**146**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**25.7**	**96**	68-126	

Verified By: _____ Date: 9/2/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090825-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang 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 Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	**25.1**	**93**	69-124	
141-78-6	Ethyl Acetate	52.0	**50.9**	**98**	65-126	
110-54-3	n-Hexane	26.0	**21.6**	**83**	63-125	
67-66-3	Chloroform	27.5	**26.6**	**97**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**22.9**	**86**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**23.8**	**90**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**24.5**	**94**	69-127	
71-43-2	Benzene	25.8	**23.4**	**91**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**26.7**	**102**	68-137	
110-82-7	Cyclohexane	51.8	**47.9**	**92**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**24.3**	**93**	69-128	
75-27-4	Bromodichloromethane	26.3	**25.2**	**96**	71-131	
79-01-6	Trichloroethene	25.8	**27.8**	**108**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.0**	**100**	73-127	
80-62-6	Methyl Methacrylate	52.8	**55.8**	**106**	80-133	
142-82-5	n-Heptane	25.8	**23.6**	**91**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**23.5**	**96**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**24.8**	**93**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**25.9**	**96**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**26.0**	**100**	76-125	
108-88-3	Toluene	26.8	**27.7**	**103**	74-119	
591-78-6	2-Hexanone	27.0	**24.9**	**92**	64-118	
124-48-1	Dibromochloromethane	28.3	**32.0**	**113**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**29.3**	**111**	79-125	
123-86-4	n-Butyl Acetate	27.5	**24.9**	**91**	70-136	

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090825-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

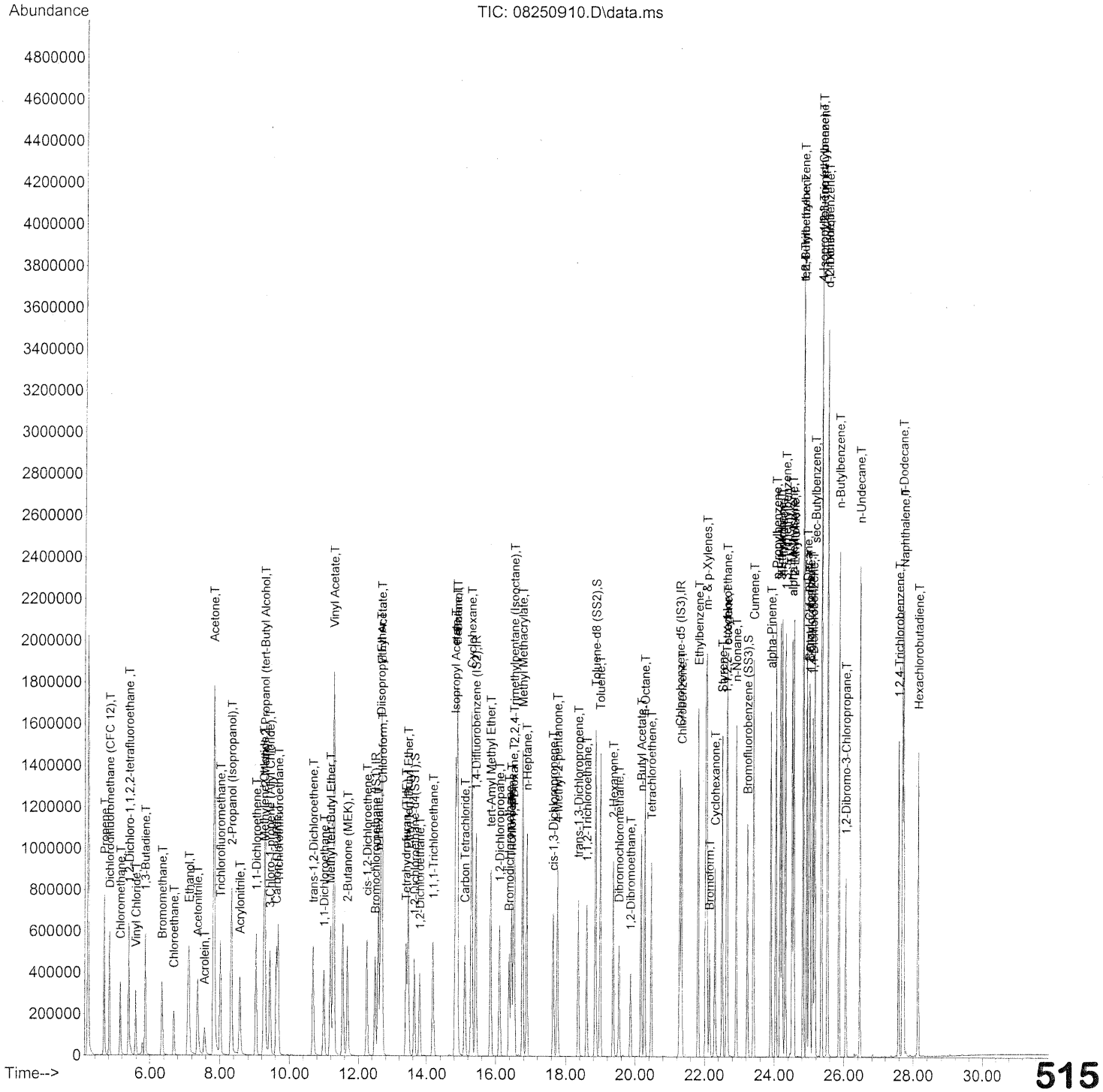
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**25.5**	**97**	75-126	
127-18-4	Tetrachloroethene	25.3	**29.7**	**117**	72-125	
108-90-7	Chlorobenzene	26.5	**29.0**	**109**	74-121	
100-41-4	Ethylbenzene	26.3	**27.5**	**105**	76-120	
179601-23-1	m,p-Xylenes	51.5	**52.9**	**103**	75-120	
75-25-2	Bromoform	26.5	**31.0**	**117**	76-143	
100-42-5	Styrene	26.3	**28.8**	**110**	78-124	
95-47-6	o-Xylene	26.0	**27.2**	**105**	76-121	
111-84-2	n-Nonane	25.8	**22.9**	**89**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**28.2**	**104**	77-126	
98-82-8	Cumene	25.3	**26.7**	**106**	78-125	
80-56-8	alpha-Pinene	24.8	**26.2**	**106**	78-125	
103-65-1	n-Propylbenzene	25.3	**26.5**	**105**	80-127	
622-96-8	4-Ethyltoluene	26.3	**28.5**	**108**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**28.7**	**108**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**28.0**	**110**	76-123	
100-44-7	Benzyl Chloride	26.8	**29.4**	**110**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**30.3**	**117**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**29.0**	**110**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**29.7**	**115**	75-124	
5989-27-5	d-Limonene	26.5	**27.5**	**104**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**33.2**	**123**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**33.1**	**121**	70-139	
91-20-3	Naphthalene	25.0	**29.3**	**117**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**29.6**	**110**	68-138	

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250910.D
Acq On : 25 Aug 2009 17:17
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 18:01:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250910.D
Acq On : 25 Aug 2009 17:17
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 18:01:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.49	130	248135	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1255711	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	582061	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.64	65	478513	22.187	ng		-0.02
Spiked Amount 25.000			Recovery = 88.76%				
57) Toluene-d8 (SS2)	18.85	98	1344332	26.432	ng		-0.01
Spiked Amount 25.000			Recovery = 105.72%				
73) Bromofluorobenzene (SS3)	23.24	174	368860	27.502	ng		0.00
Spiked Amount 25.000			Recovery = 110.00%				
Target Compounds							Qvalue
2) Propene	4.67	42	349571	20.530	ng		99
3) Dichlorodifluoromethan...	4.83	85	606238	21.783	ng		99
4) Chloromethane	5.14	50	473460	25.321	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	275099	24.330	ng		98
6) Vinyl Chloride	5.59	62	408473	22.738	ng		98
7) 1,3-Butadiene	5.86	54	322148	25.019	ng		100
8) Bromomethane	6.35	94	309524	28.303	ng		99
9) Chloroethane	6.69	64	234711	22.478	ng		98
10) Ethanol	7.11	45	1274569	118.089	ng		100
11) Acetonitrile	7.37	41	646221	20.444	ng		100
12) Acrolein	7.56	56	205114	24.966	ng		99
13) Acetone	7.82	58	1211521	118.964	ng		93
14) Trichlorofluoromethane	8.01	101	599342	23.820	ng		100
15) 2-Propanol (Isopropanol)	8.33	45	1713430	42.814	ng		99
16) Acrylonitrile	8.56	53	460361	25.018	ng		99
17) 1,1-Dichloroethene	9.03	96	321397	27.510	ng	#	84
18) 2-Methyl-2-Propanol (t...	9.28	59	1752614	49.338	ng		97
19) Methylene Chloride	9.25	84	316980	23.177	ng		90
20) 3-Chloro-1-propene (Al...	9.43	41	527728	20.017	ng		93
21) Trichlorotrifluoroethane	9.68	151	267799	29.272	ng		95
22) Carbon Disulfide	9.62	76	1155946	23.973	ng		99
23) trans-1,2-Dichloroethene	10.68	61	484951	23.459	ng		90
24) 1,1-Dichloroethane	10.99	63	599535	23.915	ng		100
25) Methyl tert-Butyl Ether	11.19	73	933322	24.222	ng		100
26) Vinyl Acetate	11.28	86	381417	184.040	ng	#	78
27) 2-Butanone (MEK)	11.67	72	236684	25.740	ng	#	89
28) cis-1,2-Dichloroethene	12.25	61	482209	25.059	ng		91
29) Diisopropyl Ether	12.66	87	327267	26.596	ng	#	1
30) Ethyl Acetate	12.67	61	243955	50.929	ng		99
31) n-Hexane	12.58	57	529796	21.621	ng		99

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250910.D
Acq On : 25 Aug 2009 17:17
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 25 18:01:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.70	83	573602	26.589	ng		100
34) Tetrahydrofuran (THF)	13.39	72	224624	22.917	ng		94
35) Ethyl tert-Butyl Ether	13.46	87	384245	24.138	ng		91
36) 1,2-Dichloroethane	13.80	62	468464	23.760	ng		96
38) 1,1,1-Trichloroethane	14.19	97	522923	24.549	ng		97
39) Isopropyl Acetate	14.83	61	439977	47.233	ng	#	91
40) 1-Butanol	14.88	56	717834	44.047	ng	#	72
41) Benzene	14.88	78	1289944	23.365	ng		99
42) Carbon Tetrachloride	15.11	117	470445	26.736	ng		99
43) Cyclohexane	15.30	84	968683	47.904	ng		93
44) tert-Amyl Methyl Ether	15.85	73	989123	23.857	ng		96
45) 1,2-Dichloropropane	16.11	63	337386	24.332	ng		100
46) Bromodichloromethane	16.38	83	457888	25.167	ng		99
47) Trichloroethene	16.45	130	346095	27.794	ng		100
48) 1,4-Dioxane	16.51	88	274535	26.019	ng		83
49) 2,2,4-Trimethylpentane...	16.52	57	1478340	22.733	ng		95
50) Methyl Methacrylate	16.77	100	283649	55.810	ng		91
51) n-Heptane	16.89	71	349149	23.565	ng		96
52) cis-1,3-Dichloropropene	17.65	75	539938	23.496	ng		99
53) 4-Methyl-2-pentanone	17.76	58	328438	24.753	ng		99
54) trans-1,3-Dichloropropene	18.36	75	565933	25.901	ng		99
55) 1,1,2-Trichloroethane	18.60	97	315615	26.037	ng		96
58) Toluene	18.98	91	1385901	27.727	ng		99
59) 2-Hexanone	19.36	43	827183	24.886	ng		95
60) Dibromochloromethane	19.53	129	378308	31.989	ng		99
61) 1,2-Dibromoethane	19.86	107	367019	29.273	ng		99
62) n-Butyl Acetate	20.17	43	975176	24.891	ng		98
63) n-Octane	20.28	57	307753	25.468	ng		91
64) Tetrachloroethene	20.47	166	342972	29.652	ng		99
65) Chlorobenzene	21.34	112	896393	28.987	ng		100
66) Ethylbenzene	21.82	91	1569362	27.466	ng		98
67) m- & p-Xylenes	22.06	91	2444907	52.896	ng		97
68) Bromoform	22.15	173	304113	30.971	ng		100
69) Styrene	22.51	104	963453	28.839	ng		98
70) o-Xylene	22.66	91	1260637	27.203	ng		97
71) n-Nonane	22.91	43	706639	22.948	ng		94
72) 1,1,2,2-Tetrachloroethane	22.64	83	579698	28.187	ng		99
74) Cumene	23.41	105	1562320	26.689	ng		100
75) alpha-Pinene	23.90	93	786478	26.210	ng		98
76) n-Propylbenzene	24.05	91	1948358	26.477	ng		98
77) 3-Ethyltoluene	24.18	105	1557928	27.848	ng		100
78) 4-Ethyltoluene	24.23	105	1542925	28.463	ng		97
79) 1,3,5-Trimethylbenzene	24.32	105	1311757	28.692	ng		98

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250910.D
Acq On : 25 Aug 2009 17:17
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Misc : S20-08140906/S20-08240912
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Quant Time: Aug 25 18:01:18 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	721654	29.483	ng	96
81) 2-Ethyltoluene	24.56	105	1551342	27.498	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	1306390	28.019	ng	99
83) n-Decane	24.94	57	750916	24.771	ng	97
84) Benzyl Chloride	25.00	91	1283911	29.377	ng	98
85) 1,3-Dichlorobenzene	25.03	146	714313	30.272	ng	97
86) 1,4-Dichlorobenzene	25.11	146	730319	29.027	ng	98
87) sec-Butylbenzene	25.17	105	1759572	27.936	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1569315	27.941	ng	98
89) 1,2,3-Trimethylbenzene	25.36	105	1318564	27.761	ng	95
90) 1,2-Dichlorobenzene	25.53	146	663622	29.663	ng	100
91) d-Limonene	25.53	68	545896	27.533	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.06	157	255155	33.160	ng	83
93) n-Undecane	26.46	57	808311	25.063	ng	97
94) 1,2,4-Trichlorobenzene	27.59	180	508479	33.056	ng	99
95) Naphthalene	27.73	128	1852227	29.252	ng	100
96) n-Dodecane	27.70	57	845668	22.571	ng	98
97) Hexachlorobutadiene	28.15	225	289355	29.575	ng	99
98) Cyclohexanone	22.30	55	498233	24.059	ng	96
99) tert-Butylbenzene	24.83	119	1246322	27.619	ng	99
100) n-Butylbenzene	25.86	91	1469122	28.289	ng	99

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

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090826-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**22.6**	**86**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**22.3**	**86**	61-118	
74-87-3	Chloromethane	25.0	**25.0**	**100**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**25.4**	**98**	65-122	
75-01-4	Vinyl Chloride	25.3	**23.5**	**93**	57-132	
106-99-0	1,3-Butadiene	26.8	**26.3**	**98**	66-161	
74-83-9	Bromomethane	25.8	**27.6**	**107**	67-130	
75-00-3	Chloroethane	25.5	**23.0**	**90**	68-123	
64-17-5	Ethanol	130	**120**	**92**	50-155	
75-05-8	Acetonitrile	26.0	**21.0**	**81**	48-148	
107-02-8	Acrolein	26.3	**25.4**	**97**	67-138	
67-64-1	Acetone	132	**121**	**92**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**23.8**	**90**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**39.5**	**82**	54-126	
107-13-1	Acrylonitrile	25.8	**25.4**	**98**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**27.8**	**101**	70-123	
75-09-2	Methylene Chloride	26.8	**23.6**	**88**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**20.3**	**75**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**29.9**	**109**	69-126	
75-15-0	Carbon Disulfide	26.0	**24.4**	**94**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.0**	**94**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**24.3**	**92**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**25.1**	**95**	72-132	
108-05-4	Vinyl Acetate	126	**177**	**140**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**25.7**	**96**	68-126	

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090826-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	**25.2**	**93**	69-124	
141-78-6	Ethyl Acetate	52.0	**52.1**	**100**	65-126	
110-54-3	n-Hexane	26.0	**22.5**	**87**	63-125	
67-66-3	Chloroform	27.5	**26.7**	**97**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**23.4**	**88**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**23.7**	**90**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**25.1**	**97**	69-127	
71-43-2	Benzene	25.8	**24.0**	**93**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**27.3**	**104**	68-137	
110-82-7	Cyclohexane	51.8	**50.1**	**97**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**24.8**	**95**	69-128	
75-27-4	Bromodichloromethane	26.3	**25.3**	**96**	71-131	
79-01-6	Trichloroethene	25.8	**27.8**	**108**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.4**	**102**	73-127	
80-62-6	Methyl Methacrylate	52.8	**56.8**	**108**	80-133	
142-82-5	n-Heptane	25.8	**24.0**	**93**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**23.7**	**97**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**25.3**	**94**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**26.1**	**97**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**26.3**	**101**	76-125	
108-88-3	Toluene	26.8	**26.7**	**100**	74-119	
591-78-6	2-Hexanone	27.0	**24.7**	**91**	64-118	
124-48-1	Dibromochloromethane	28.3	**31.0**	**110**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**28.1**	**107**	79-125	
123-86-4	n-Butyl Acetate	27.5	**24.6**	**89**	70-136	

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P090826-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 8/26/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

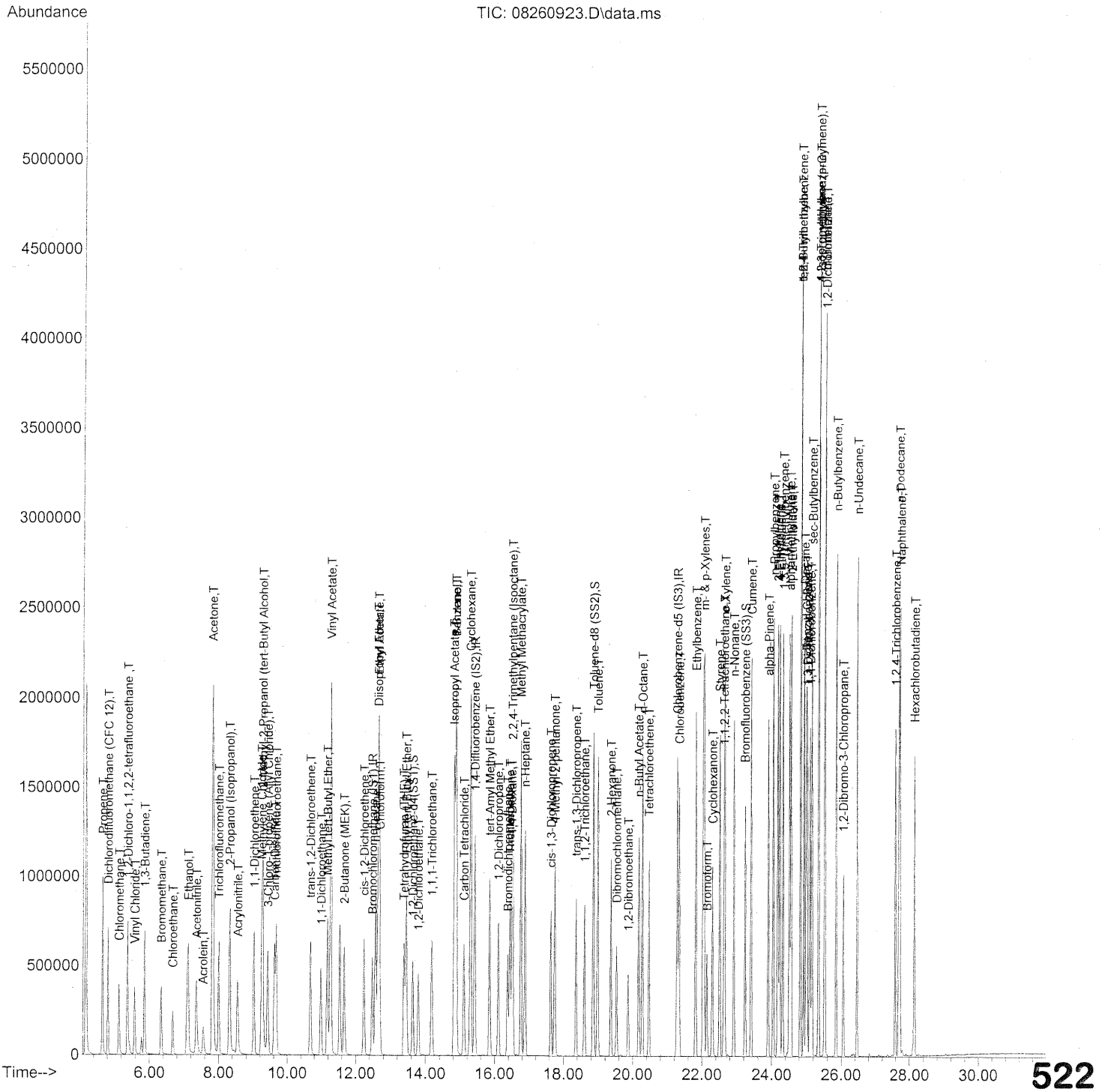
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**24.8**	**94**	75-126	
127-18-4	Tetrachloroethene	25.3	**28.3**	**112**	72-125	
108-90-7	Chlorobenzene	26.5	**28.0**	**106**	74-121	
100-41-4	Ethylbenzene	26.3	**26.6**	**101**	76-120	
179601-23-1	m,p-Xylenes	51.5	**51.6**	**100**	75-120	
75-25-2	Bromoform	26.5	**29.7**	**112**	76-143	
100-42-5	Styrene	26.3	**28.1**	**107**	78-124	
95-47-6	o-Xylene	26.0	**26.6**	**102**	76-121	
111-84-2	n-Nonane	25.8	**22.6**	**88**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**27.4**	**101**	77-126	
98-82-8	Cumene	25.3	**25.8**	**102**	78-125	
80-56-8	alpha-Pinene	24.8	**25.1**	**101**	78-125	
103-65-1	n-Propylbenzene	25.3	**25.8**	**102**	80-127	
622-96-8	4-Ethyltoluene	26.3	**27.2**	**103**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**27.6**	**104**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**27.1**	**106**	76-123	
100-44-7	Benzyl Chloride	26.8	**28.4**	**106**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**29.2**	**112**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**27.9**	**106**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**28.7**	**111**	75-124	
5989-27-5	d-Limonene	26.5	**27.0**	**102**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**32.7**	**121**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**32.1**	**118**	70-139	
91-20-3	Naphthalene	25.0	**28.2**	**113**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**28.7**	**107**	68-138	

Verified By: _____ Date: 9/8/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260923.D
Acq On : 27 Aug 2009 1:38
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 27 04:04:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
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Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	285021	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1434452	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	692092	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	546797	22.072	ng		-0.03
Spiked Amount 25.000			Recovery = 88.28%				
57) Toluene-d8 (SS2)	18.85	98	1552675	25.675	ng		-0.01
Spiked Amount 25.000			Recovery = 102.72%				
73) Bromofluorobenzene (SS3)	23.23	174	460831	28.897	ng		-0.01
Spiked Amount 25.000			Recovery = 115.60%				
Target Compounds							Qvalue
2) Propene	4.65	42	441213	22.558	ng		99
3) Dichlorodifluoromethan...	4.82	85	714298	22.345	ng		100
4) Chloromethane	5.14	50	537478	25.024	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.38	135	330046	25.412	ng		98
6) Vinyl Chloride	5.58	62	484814	23.495	ng		98
7) 1,3-Butadiene	5.86	54	388316	26.255	ng		100
8) Bromomethane	6.34	94	346301	27.568	ng		98
9) Chloroethane	6.67	64	275413	22.963	ng		97
10) Ethanol	7.11	45	1484782	119.762	ng		100
11) Acetonitrile	7.36	41	762497	21.001	ng		99
12) Acrolein	7.55	56	239488	25.377	ng		99
13) Acetone	7.81	58	1421197	121.493	ng		93
14) Trichlorofluoromethane	8.00	101	687791	23.798	ng		99
15) 2-Propanol (Isopropanol)	8.32	45	1814896	39.480	ng		100
16) Acrylonitrile	8.55	53	536430	25.380	ng		98
17) 1,1-Dichloroethene	9.02	96	372521	27.759	ng	#	83
18) 2-Methyl-2-Propanol (t...	9.27	59	2020403	49.516	ng		98
19) Methylene Chloride	9.24	84	370567	23.589	ng		90
20) 3-Chloro-1-propene (Al...	9.42	41	614735	20.299	ng		95
21) Trichlorotrifluoroethane	9.67	151	313955	29.876	ng		94
22) Carbon Disulfide	9.62	76	1349997	24.374	ng		99
23) trans-1,2-Dichloroethene	10.68	61	569679	23.991	ng		90
24) 1,1-Dichloroethane	10.99	63	699979	24.309	ng		99
25) Methyl tert-Butyl Ether	11.18	73	1109875	25.076	ng		100
26) Vinyl Acetate	11.27	86	421270	176.963	ng	#	80
27) 2-Butanone (MEK)	11.67	72	271450	25.700	ng		93
28) cis-1,2-Dichloroethene	12.24	61	556084	25.159	ng		91
29) Diisopropyl Ether	12.65	87	379733	26.866	ng	#	1
30) Ethyl Acetate	12.67	61	286475	52.066	ng		99
31) n-Hexane	12.58	57	634192	22.532	ng		9

8/26/09

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260923.D
Acq On : 27 Aug 2009 1:38
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 27 04:04:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.70	83	662591	26.739	ng		100
34) Tetrahydrofuran (THF)	13.38	72	263697	23.422	ng		95
35) Ethyl tert-Butyl Ether	13.45	87	432729	23.665	ng		93
36) 1,2-Dichloroethane	13.79	62	537227	23.722	ng		97
38) 1,1,1-Trichloroethane	14.18	97	610422	25.086	ng		96
39) Isopropyl Acetate	14.82	61	520368	48.902	ng	#	91
40) 1-Butanol	14.88	56	836126	44.912	ng	#	65
41) Benzene	14.88	78	1512050	23.975	ng		98
42) Carbon Tetrachloride	15.11	117	547955	27.261	ng		99
43) Cyclohexane	15.29	84	1157606	50.114	ng		93
44) tert-Amyl Methyl Ether	15.85	73	1082152	22.849	ng		97
45) 1,2-Dichloropropane	16.11	63	392084	24.754	ng		100
46) Bromodichloromethane	16.38	83	524798	25.251	ng		98
47) Trichloroethene	16.44	130	395333	27.792	ng		98
48) 1,4-Dioxane	16.50	88	317721	26.360	ng		82
49) 2,2,4-Trimethylpentane...	16.52	57	1722919	23.193	ng		95
50) Methyl Methacrylate	16.76	100	329597	56.770	ng		91
51) n-Heptane	16.88	71	406422	24.012	ng		97
52) cis-1,3-Dichloropropene	17.65	75	622050	23.696	ng		99
53) 4-Methyl-2-pentanone	17.76	58	383412	25.295	ng		99
54) trans-1,3-Dichloropropene	18.36	75	650887	26.077	ng		98
55) 1,1,2-Trichloroethane	18.60	97	364194	26.301	ng		96
58) Toluene	18.98	91	1586898	26.701	ng		99
59) 2-Hexanone	19.36	43	976838	24.716	ng		96
60) Dibromochloromethane	19.53	129	436418	31.036	ng		99
61) 1,2-Dibromoethane	19.86	107	419067	28.110	ng		98
62) n-Butyl Acetate	20.17	43	1145671	24.594	ng		98
63) n-Octane	20.28	57	356841	24.835	ng		92
64) Tetrachloroethene	20.46	166	389515	28.322	ng		99
65) Chlorobenzene	21.34	112	1029037	27.986	ng		100
66) Ethylbenzene	21.82	91	1809568	26.635	ng		98
67) m- & p-Xylenes	22.06	91	2835084	51.586	ng		97
68) Bromoform	22.15	173	347345	29.749	ng		99
69) Styrene	22.51	104	1116954	28.118	ng		98
70) o-Xylene	22.65	91	1463056	26.551	ng		97
71) n-Nonane	22.91	43	828592	22.631	ng		95
72) 1,1,2,2-Tetrachloroethane	22.63	83	670647	27.425	ng		100
74) Cumene	23.41	105	1792318	25.750	ng		100
75) alpha-Pinene	23.90	93	897110	25.144	ng		99
76) n-Propylbenzene	24.05	91	2253581	25.756	ng		99
77) 3-Ethyltoluene	24.17	105	1791763	26.935	ng		100
78) 4-Ethyltoluene	24.23	105	1753157	27.199	ng		98
79) 1,3,5-Trimethylbenzene	24.32	105	1501096	27.613	ng		99

Quantitation Report (Not Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260923.D
Acq On : 27 Aug 2009 1:38
Operator : WA/CC
Sample : 25ng TO-15 LCS STD
Misc : S20-08140906/S20-08240912
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 27 04:04:41 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	827771	28.442	ng	97
81) 2-Ethyltoluene	24.56	105	1775179	26.463	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	1504982	27.147	ng	100
83) n-Decane	24.94	57	872711	24.212	ng	97
84) Benzyl Chloride	25.00	91	1476492	28.412	ng	98
85) 1,3-Dichlorobenzene	25.03	146	819762	29.218	ng	97
86) 1,4-Dichlorobenzene	25.11	146	835961	27.943	ng	98
87) sec-Butylbenzene	25.16	105	2016142	26.921	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1803247	27.002	ng	99
89) 1,2,3-Trimethylbenzene	25.35	105	1531124	27.111	ng	96
90) 1,2-Dichlorobenzene	25.53	146	762725	28.673	ng	100
91) d-Limonene	25.53	68	637037	27.022	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.06	157	299580	32.744	ng	83
93) n-Undecane	26.46	57	944758	24.637	ng	98
94) 1,2,4-Trichlorobenzene	27.58	180	586385	32.060	ng	99
95) Naphthalene	27.73	128	2125961	28.237	ng	100
96) n-Dodecane	27.69	57	984978	22.109	ng	98
97) Hexachlorobutadiene	28.15	225	333576	28.674	ng	99
98) Cyclohexanone	22.30	55	575262	23.362	ng	96
99) tert-Butylbenzene	24.83	119	1447980	26.987	ng	99
100) n-Butylbenzene	25.86	91	1694358	27.439	ng	99

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

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102350** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-002DUP

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
Propene	15.8	9.16	19.0	11.1	17.4	**18**	25	**M1**
Dichlorodifluoromethane (CFC 12)	2.75	0.556	3.28	0.664	3.015	**18**	25	
Chloromethane	0.804	0.389	0.704	0.341	0.754	**13**	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	866	460	996	529	931	**14**	25	
Acetonitrile	105	62.3	121	72.1	113	**14**	25	
Acrolein	5.74	2.50	6.62	2.89	6.18	**14**	25	
Acetone	221	93.0	258	109	239.5	**15**	25	
Trichlorofluoromethane	1.35	0.240	1.63	0.291	1.49	**19**	25	
2-Propanol (Isopropyl Alcohol)	73.4	29.9	85.3	34.7	79.35	**15**	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	0.581	0.0759	0.694	0.0905	0.6375	**18**	25	
Carbon Disulfide	2.64	0.847	3.17	1.02	2.905	**18**	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	6.28	2.13	7.38	2.50	6.83	**16**	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
M1 = Matrix interference due to coelution with a non-target compound; results may be biased high.

Verified By: _____ Date: 9/4/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102350** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-002DUP

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
Ethyl Acetate	9.65	2.68	11.0	3.06	10.325	**13**	25	
n-Hexane	ND	ND	ND	ND	-	-	25	
Chloroform	2.03	0.417	2.31	0.472	2.17	**13**	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	2.11	0.522	2.54	0.629	2.325	**18**	25	
1,1,1-Trichloroethane	ND	ND	ND	ND	-	-	25	
Benzene	0.930	0.291	1.09	0.341	1.01	**16**	25	
Carbon Tetrachloride	0.532	0.0847	0.590	0.0938	0.561	**10**	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	0.375	0.0561	0.420	0.0628	0.3975	**11**	25	
Trichloroethene	ND	ND	ND	ND	-	-	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	1.68	0.409	1.83	0.447	1.755	**9**	25	
cis-1,3-Dichloropropene	6.79	1.50	7.85	1.73	7.32	**14**	25	
4-Methyl-2-pentanone	2.16	0.527	2.47	0.604	2.315	**13**	25	
trans-1,3-Dichloropropene	4.78	1.05	5.55	1.22	5.165	**15**	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	20.8	5.52	24.3	6.46	22.55	**16**	25	
2-Hexanone	ND	ND	1.06	0.260	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	4.83	1.02	5.57	1.17	5.2	**14**	25	

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

Verified By: _____ Date: 9/8/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **102350** CAS Project ID: P0902876
Client Project ID: **16512** CAS Sample ID: P0902876-002DUP

Test Code: EPA TO-15 Date Collected: 8/18/09
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 8/20/09
Analyst: Wida Ang Date Analyzed: 8/25/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01185

Initial Pressure (psig): -5.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.04

Compound	Sample Result		Duplicate Sample Result		Average	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV	µg/m³			
n-Octane	1.67	0.358	2.08	0.446	1.875	**22**	25	
Tetrachloroethene	0.224	0.0331	0.255	0.0376	0.2395	**13**	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	1.19	0.274	1.39	0.321	1.29	**16**	25	
m,p-Xylenes	3.12	0.719	3.65	0.840	3.385	**16**	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	2.73	0.642	3.18	0.747	2.955	**15**	25	
o-Xylene	1.31	0.303	1.57	0.361	1.44	**18**	25	
n-Nonane	3.81	0.727	4.40	0.839	4.105	**14**	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	103	18.5	120	21.6	111.5	**15**	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	2.15	0.438	2.47	0.503	2.31	**14**	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	0.290	0.0482	0.328	0.0547	0.309	**12**	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	39.3	7.06	46.1	8.28	42.7	**16**	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

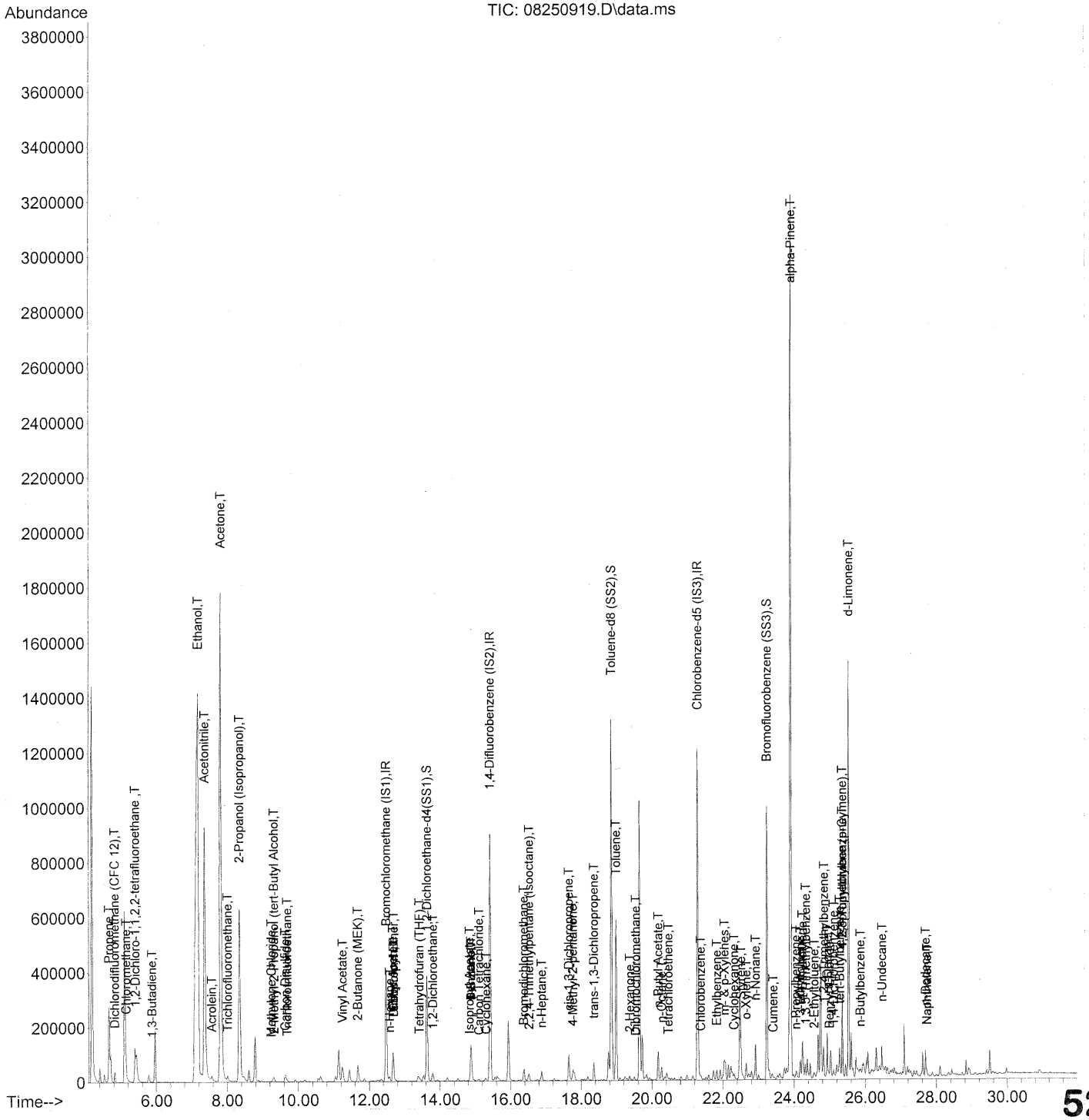
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By: _____ Date: 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 11:41 pm
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 17:11:24 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 11:41 pm
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 17:11:24 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

MT 9/8/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	209184	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.41	114	1048750	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.28	82	499910	25.000	ng		-0.02
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	394441	21.695	ng		-0.03
Spiked Amount 25.000			Recovery = 86.76%				
57) Toluene-d8 (SS2)	18.85	98	1133979	25.960	ng		-0.02
Spiked Amount 25.000			Recovery = 103.84%				
73) Bromofluorobenzene (SS3)	23.23	174	323996	28.127	ng		-0.01
Spiked Amount 25.000			Recovery = 112.52%				
Target Compounds							Qvalue
2) Propene	4.66	42	133889	9.327	ng	M	89
3) Dichlorodifluoromethan...	4.83	85	37761	1.609	ng		98
4) Chloromethane	5.14	50	5434	0.345	ng	yes 0.1mg	94
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	1688	0.177	ng		65
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.87	54	790	0.073	ng	#	29
8) Bromomethane	6.35	94	90	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.17	45	4443749	488.378	ng		100
11) Acetonitrile	7.36	41	1581411	59.346	ng		99
12) Acrolein	7.56	56	22473	3.245	ng		98
13) Acetone	7.81	58	1087627	126.685	ng		91
14) Trichlorofluoromethane	8.01	101	16995	0.801	ng		100
15) 2-Propanol (Isopropanol)	8.34	45	1410323	41.802	ng		99
16) Acrylonitrile	8.60	53	546	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.31	59	8132	0.272	ng	#	57
19) Methylene Chloride	9.24	84	1614	0.140	ng		92
20) 3-Chloro-1-propene (Al...	9.41	41	89	N.D.			
21) Trichlorotrifluoroethane	9.68	151	2620	0.340	ng		92
22) Carbon Disulfide	9.63	76	63083	1.552	ng		99
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.20	73	428	N.D.			
26) Vinyl Acetate	11.24	86	8076	4.622	ng	#	68
27) 2-Butanone (MEK)	11.67	72	28027	3.616	ng	#	91
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.69	87	2585	0.249	ng	#	1
30) Ethyl Acetate	12.67	61	21835	5.407	ng		95
31) n-Hexane	12.58	57	10106	0.489	ng	0.5	9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 11:41 pm
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 17:11:24 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.68	83	20545	1.130 ng		100
34) Tetrahydrofuran (THF)	13.41	72	3290	0.398 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	13.79	62	20729	1.247 ng		99
38) 1,1,1-Trichloroethane	14.18	97	87	N.D.		
39) Isopropyl Acetate	14.83	61	1881	0.242 ng	#	1
40) 1-Butanol	14.87	56	100643	7.394 ng		79
41) Benzene	14.87	78	24611	0.534 ng		100
42) Carbon Tetrachloride	15.10	117	4252	0.289 ng		100
43) Cyclohexane	15.30	84	4902	0.290 ng		95
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.09	63	87	N.D.		
46) Bromodichloromethane	16.37	83	3126	0.206 ng		94
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.55	88	112	N.D.		
49) 2,2,4-Trimethylpentane...	16.52	57	26428	0.487 ng		87
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	16.87	71	11094	0.897 ng		98
52) cis-1,3-Dichloropropene	17.65	75	73847	3.848 ng		100
53) 4-Methyl-2-pentanone	17.76	58	13435	1.212 ng		99
54) trans-1,3-Dichloropropene	18.36	75	49659	2.721 ng		99
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	18.98	91	512040	11.928 ng		99
59) 2-Hexanone	19.37	43	14910	0.522 ng		93
60) Dibromochloromethane	19.54	129	931	0.092 ng	#	76
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.17	43	91800	2.728 ng		95
63) n-Octane	20.27	57	10602	1.022 ng		98
64) Tetrachloroethene	20.46	166	1241	0.125 ng		78
65) Chlorobenzene	21.37	112	1897	0.071 ng	#	43
66) Ethylbenzene	21.82	91	33535	0.683 ng		99
67) m- & p-Xylenes	22.04	91	70949	1.787 ng		99
68) Bromoform	22.15	173	209	N.D.		
69) Styrene	22.50	104	44698	1.558 ng		96
70) o-Xylene	22.65	91	30587	0.768 ng		98
71) n-Nonane	22.91	43	57050	2.157 ng		98
72) 1,1,2,2-Tetrachloroethane	22.65	83	440	N.D.		
74) Cumene	23.41	105	4068	0.081 ng		91
75) alpha-Pinene	23.90	93	1521602	59.042 ng		83
76) n-Propylbenzene	24.05	91	11757	0.186 ng	#	85
77) 3-Ethyltoluene	24.17	105	30645	0.638 ng		98
78) 4-Ethyltoluene	24.23	105	17208	0.370 ng		92
79) 1,3,5-Trimethylbenzene	24.32	105	15079	0.384 ng		95

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 11:41 pm
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 31 17:11:24 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

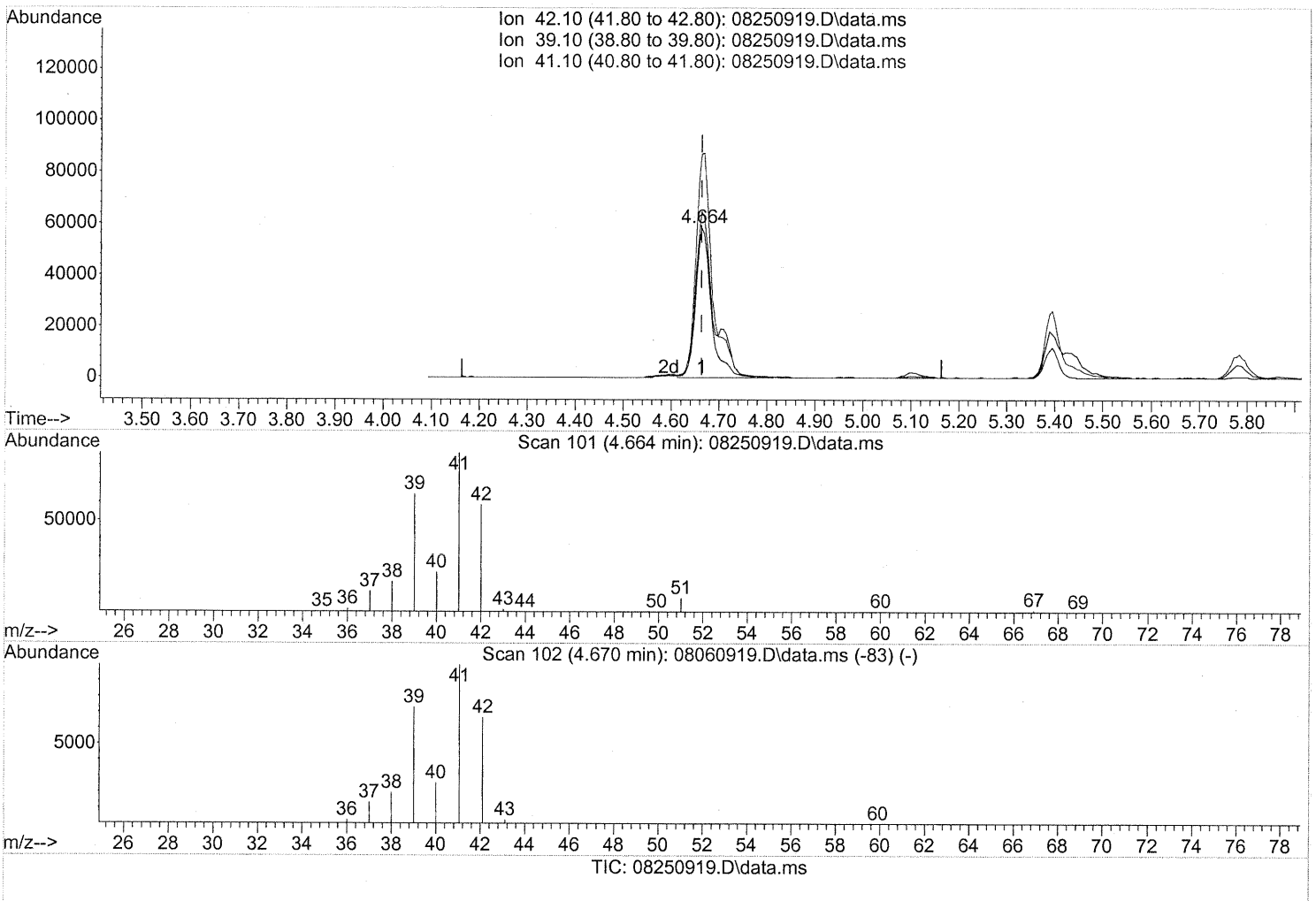
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	862	N.D.		
81) 2-Ethyltoluene	24.56	105	13052	0.269 ng		99
82) 1,2,4-Trimethylbenzene	24.83	105	48532	1.212 ng		89
83) n-Decane	24.93	57	63106	2.424 ng		89
84) Benzyl Chloride	24.99	91	2334	0.062 ng		68
85) 1,3-Dichlorobenzene	0.00	146	0	N.D. d		
86) 1,4-Dichlorobenzene	25.10	146	3479	0.161 ng		89
87) sec-Butylbenzene	25.16	105	2195	N.D.		
88) 4-Isopropyltoluene (p-...	25.35	119	146611	3.039 ng		92
89) 1,2,3-Trimethylbenzene	25.35	105	20215	0.496 ng	#	21
90) 1,2-Dichlorobenzene	25.53	146	92	N.D.		
91) d-Limonene	25.53	68	384816	22.598 ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.46	57	36307	1.311 ng		79
94) 1,2,4-Trichlorobenzene	27.59	180	502	N.D.		
95) Naphthalene	27.73	128	17732	0.326 ng		98
96) n-Dodecane	27.69	57	30417	0.945 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.30	55	12830	0.721 ng		91
99) tert-Butylbenzene	25.27	119	4426	0.114 ng		96
100) n-Butylbenzene	25.85	91	8592	0.193 ng	#	48

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

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(2) Propene (T)

4.664min (-0.000) 9.33ng

response 133889

M

Ion	Exp%	Act%
42.10	100	100
39.10	111.90	127.59
41.10	150.20	160.61
0.00	0.00	0.00

533

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
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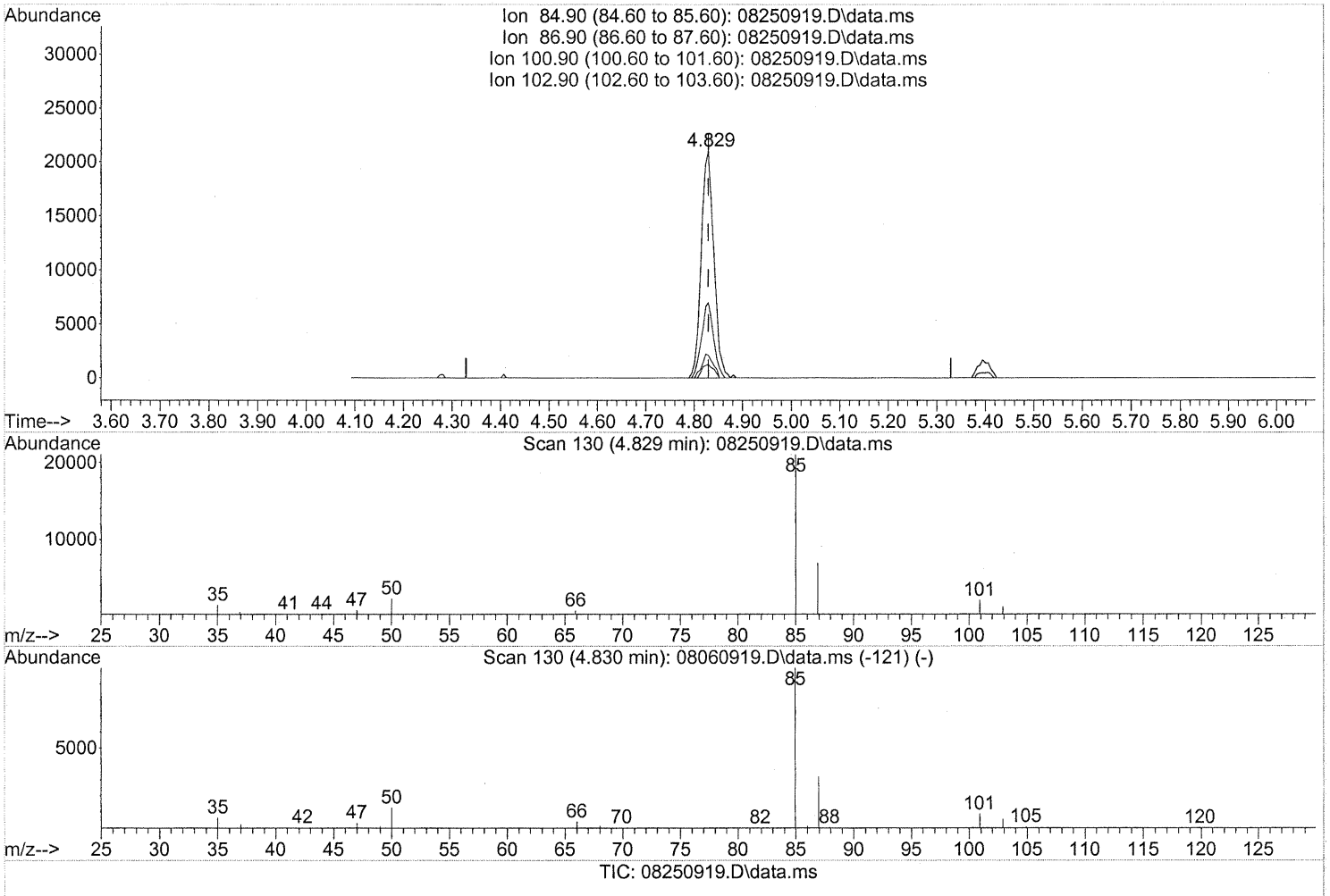
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.829min (-0.000) 1.61ng

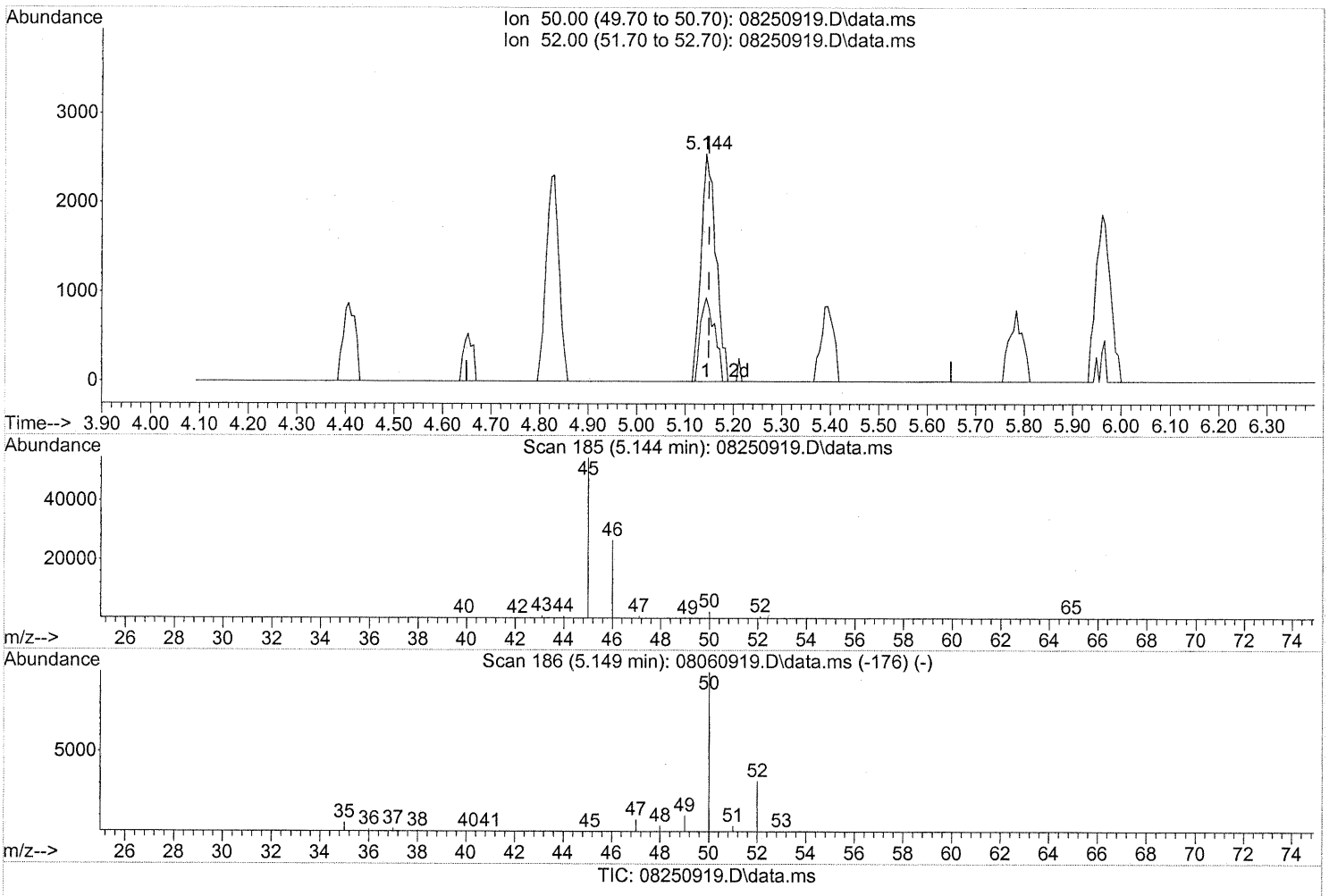
response 37761

Ion	Exp%	Act%
84.90	100	100
86.90	32.80	31.52
100.90	8.80	9.35
102.90	5.20	5.30

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(4) Chloromethane (T)

5.144min (-0.006) 0.34ng

response 5434

Ion	Exp%	Act%
50.00	100	100
52.00	31.60	34.78
0.00	0.00	0.00
0.00	0.00	0.00

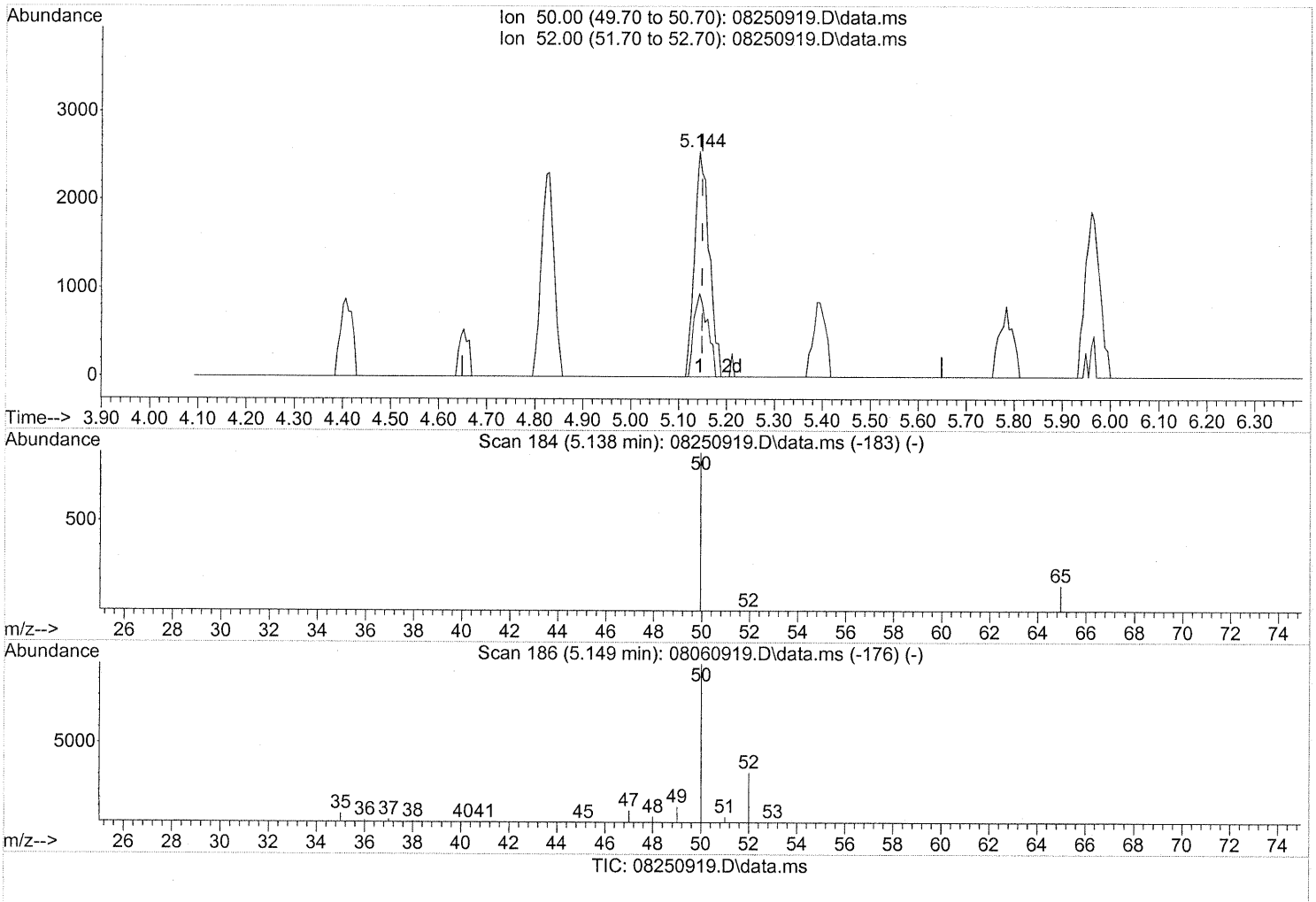
Before subtr.

535

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(4) Chloromethane (T)

5.144min (-0.006) 0.34ng

response 5434

After subtr.

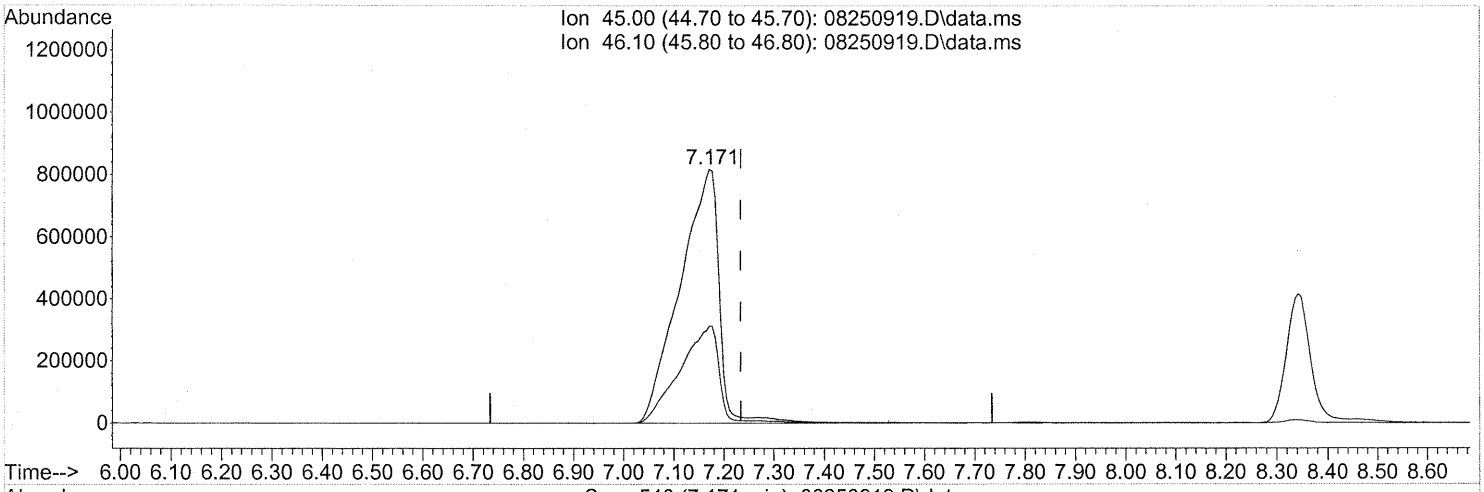
Ion	Exp%	Act%
50.00	100	100
52.00	31.60	34.78
0.00	0.00	0.00
0.00	0.00	0.00

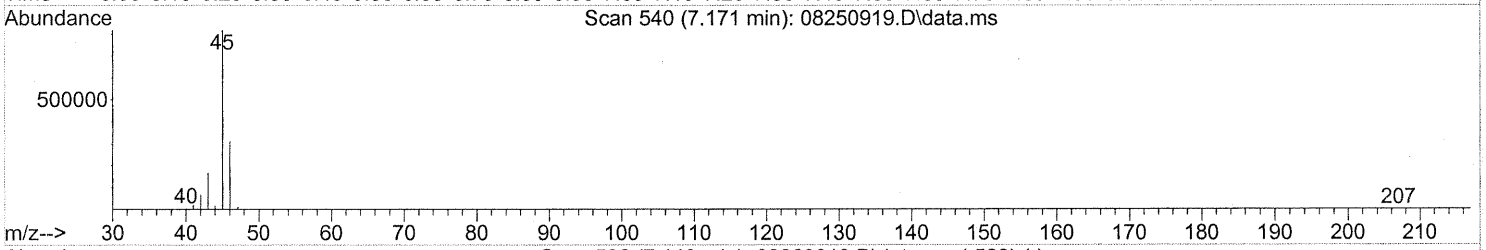
536

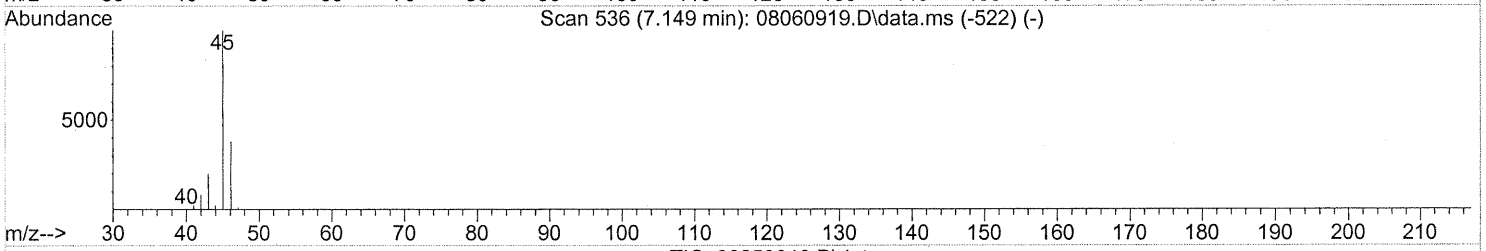
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(10) Ethanol (T)

7.171min (-0.063) 488.38ng

response 4443749

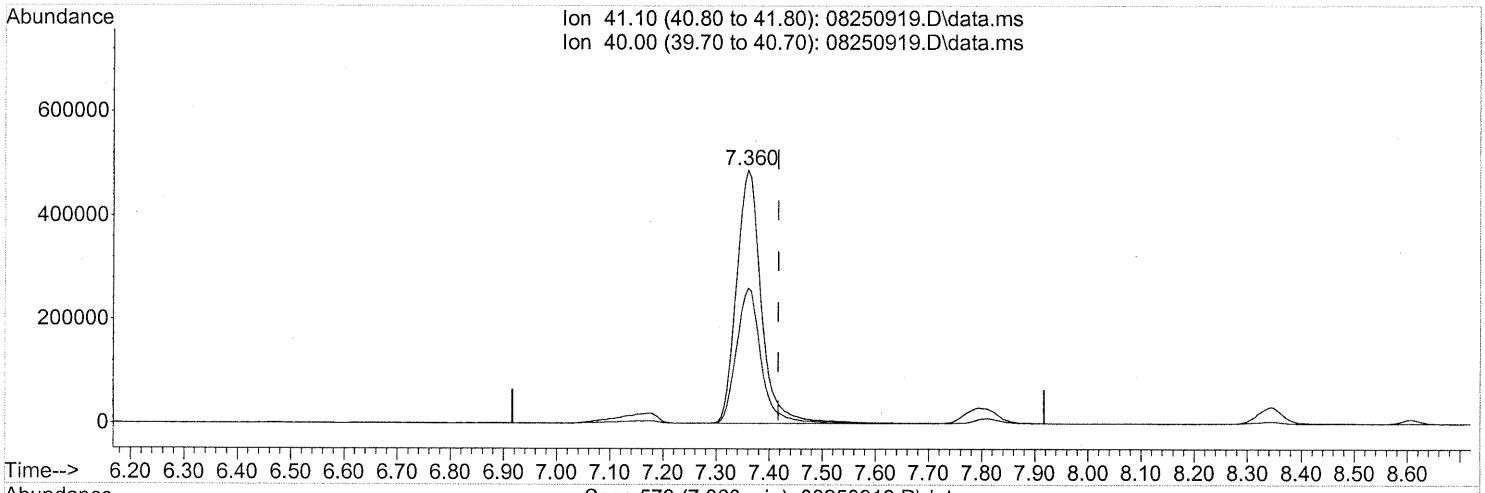
Ion	Exp%	Act%
45.00	100	100
46.10	38.40	38.41
0.00	0.00	0.00
0.00	0.00	0.00

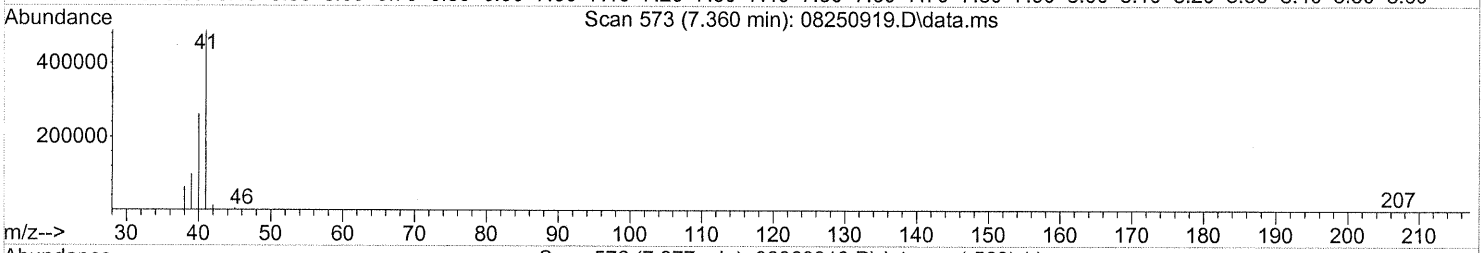
537

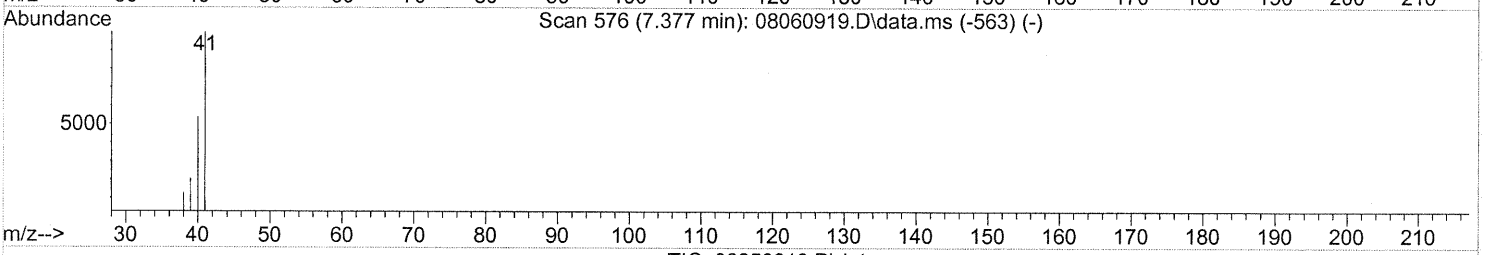
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(11) Acetonitrile (T)

7.360min (-0.057) 59.35ng

response 1581411

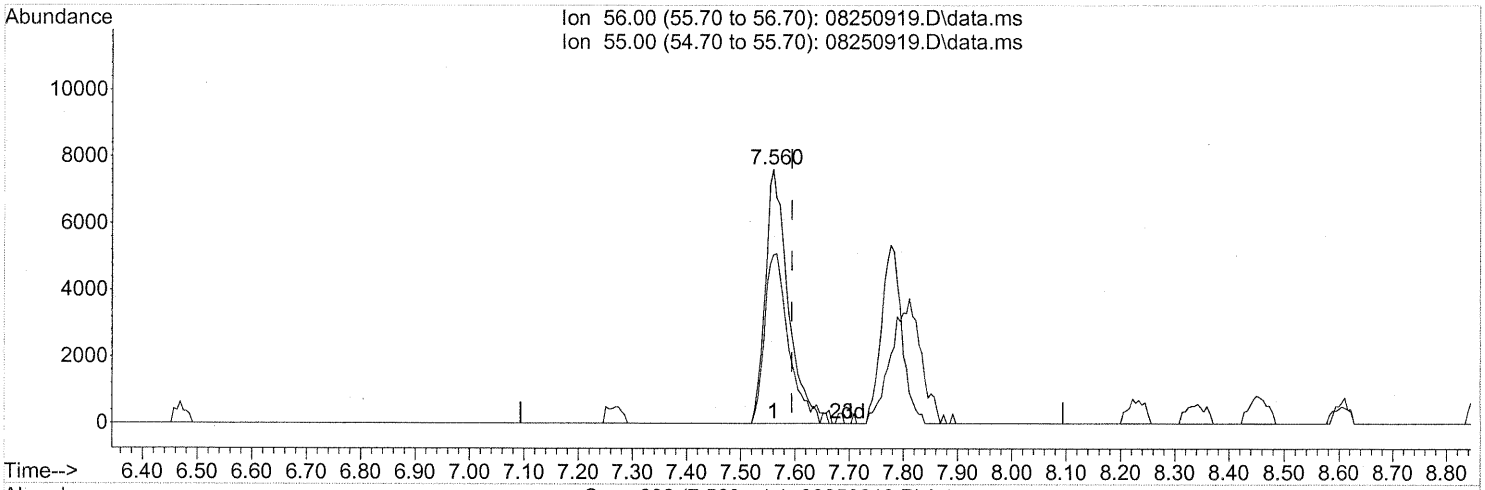
Ion	Exp%	Act%
41.10	100	100
40.00	53.70	53.27
0.00	0.00	0.00
0.00	0.00	0.00

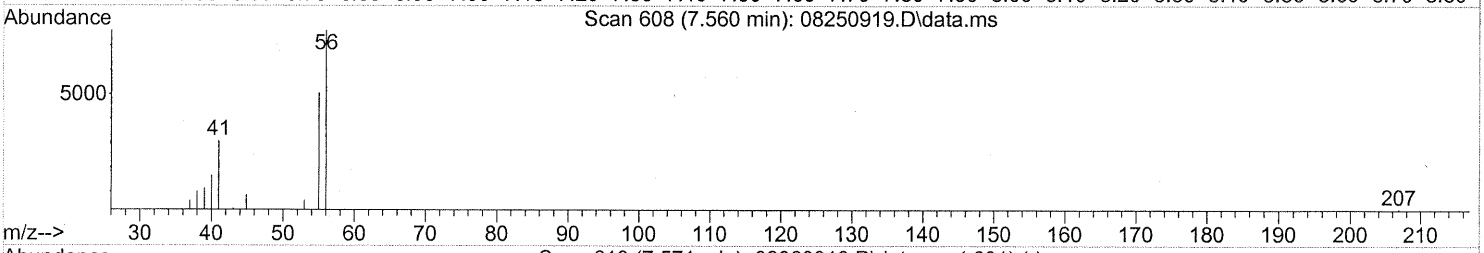
538

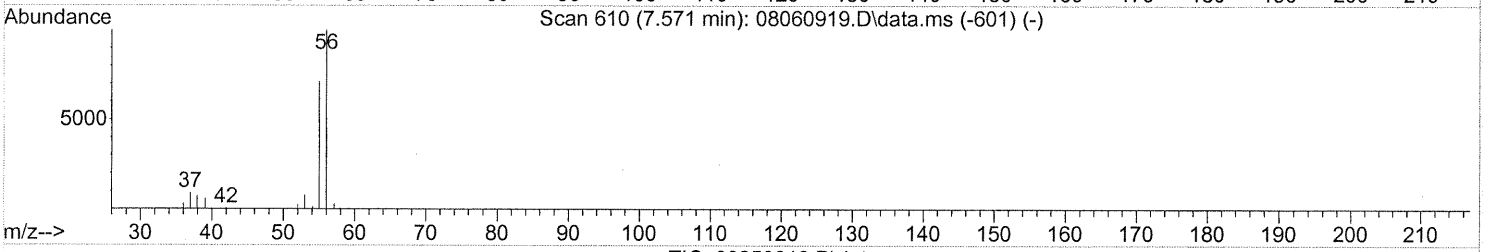
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(12) Acrolein (T)

7.560min (-0.034) 3.24ng

response 22473

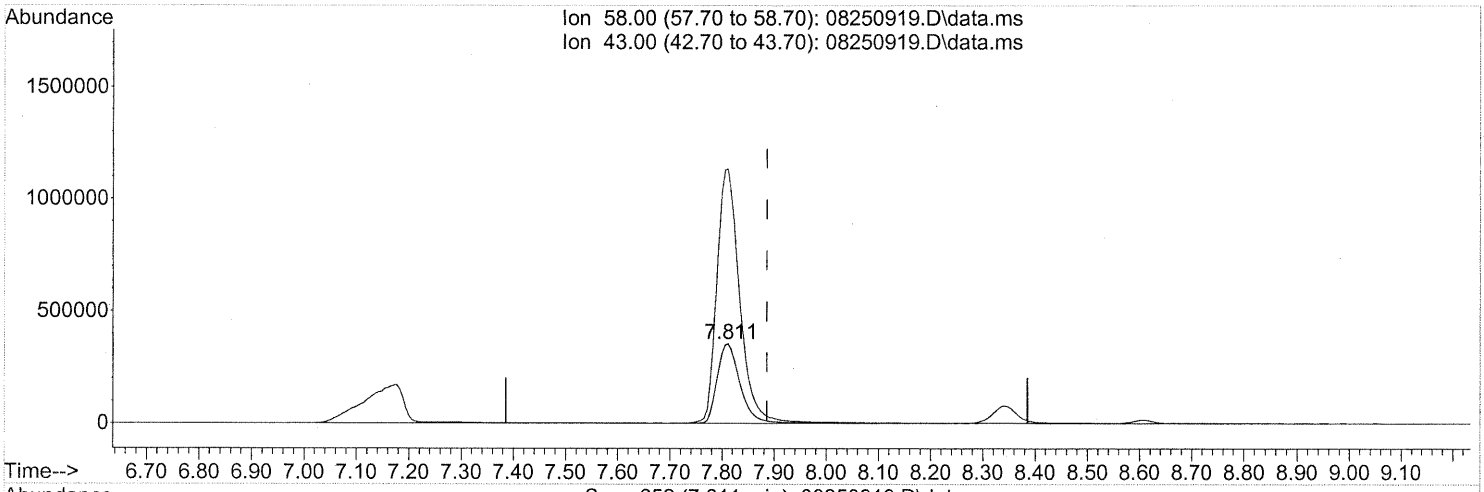
Ion	Exp%	Act%
56.00	100	100
55.00	68.10	69.47
0.00	0.00	0.00
0.00	0.00	0.00

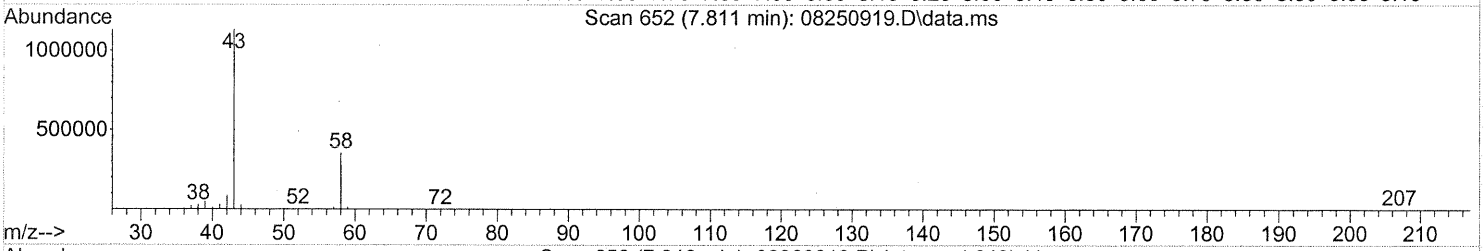
539

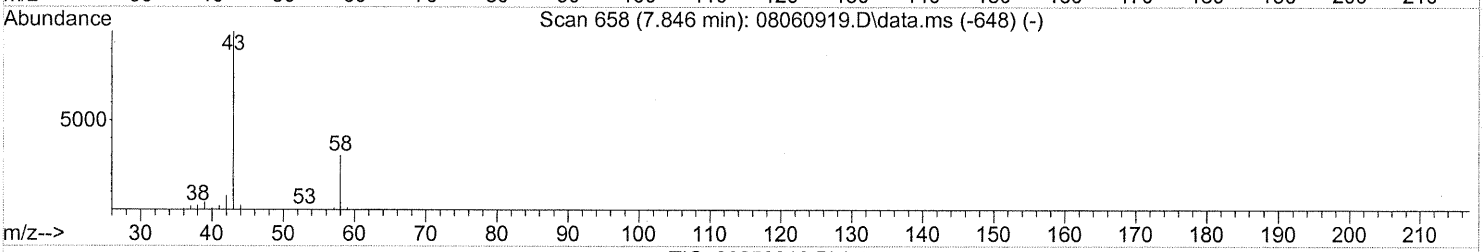
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(13) Acetone (T)

7.811min (-0.075) 126.69ng

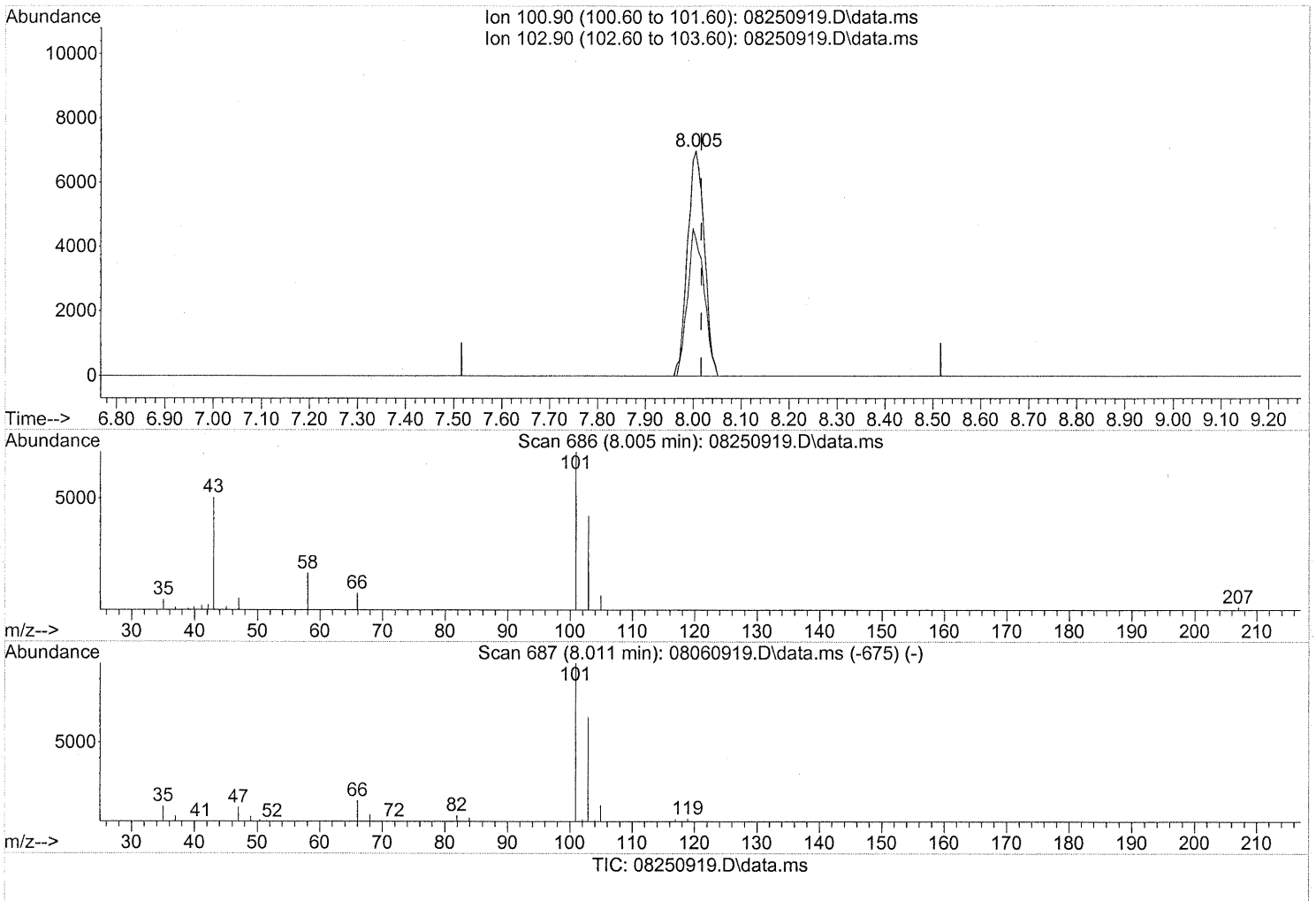
response 1087627

Ion	Exp%	Act%
58.00	100	100
43.00	340.40	321.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(14) Trichlorofluoromethane (T)

8.005min (-0.011) 0.80ng

response 16995

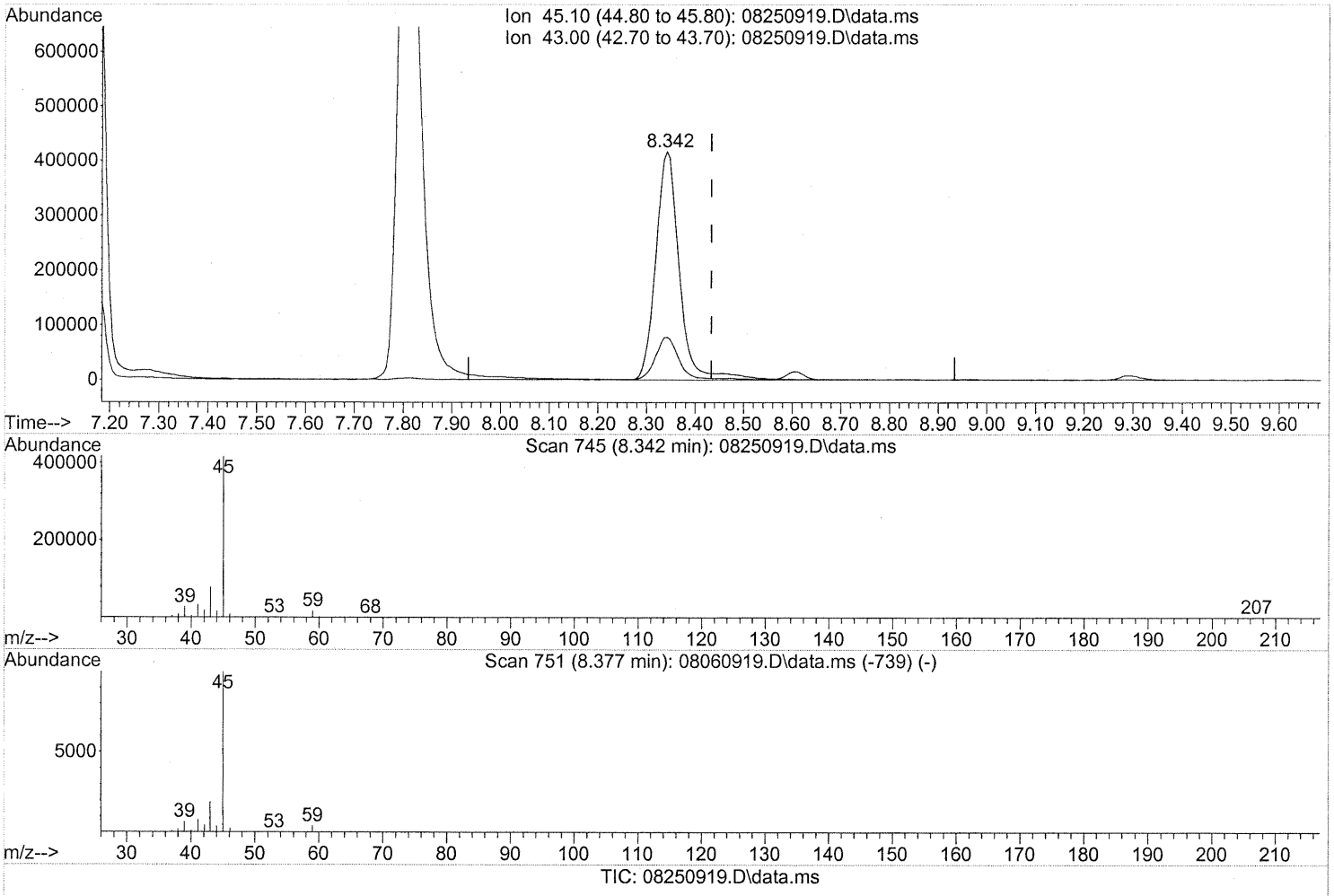
Ion	Exp%	Act%
100.90	100	100
102.90	64.40	64.09
0.00	0.00	0.00
0.00	0.00	0.00

541

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

8.342min (-0.091) 41.80ng

response 1410323

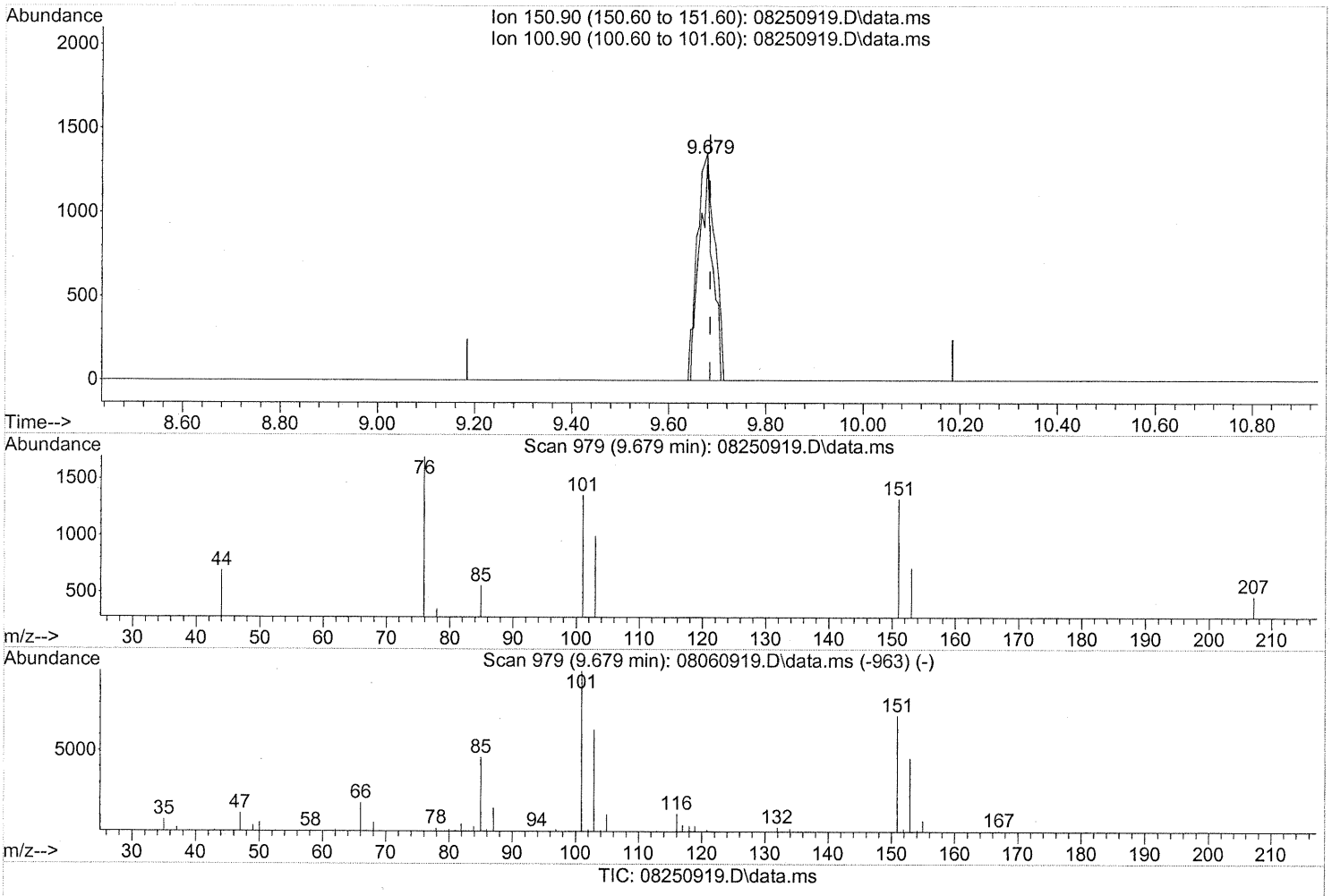
Ion	Exp%	Act%
45.10	100	100
43.00	19.00	18.56
0.00	0.00	0.00
0.00	0.00	0.00

542

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.679min (-0.006) 0.34ng

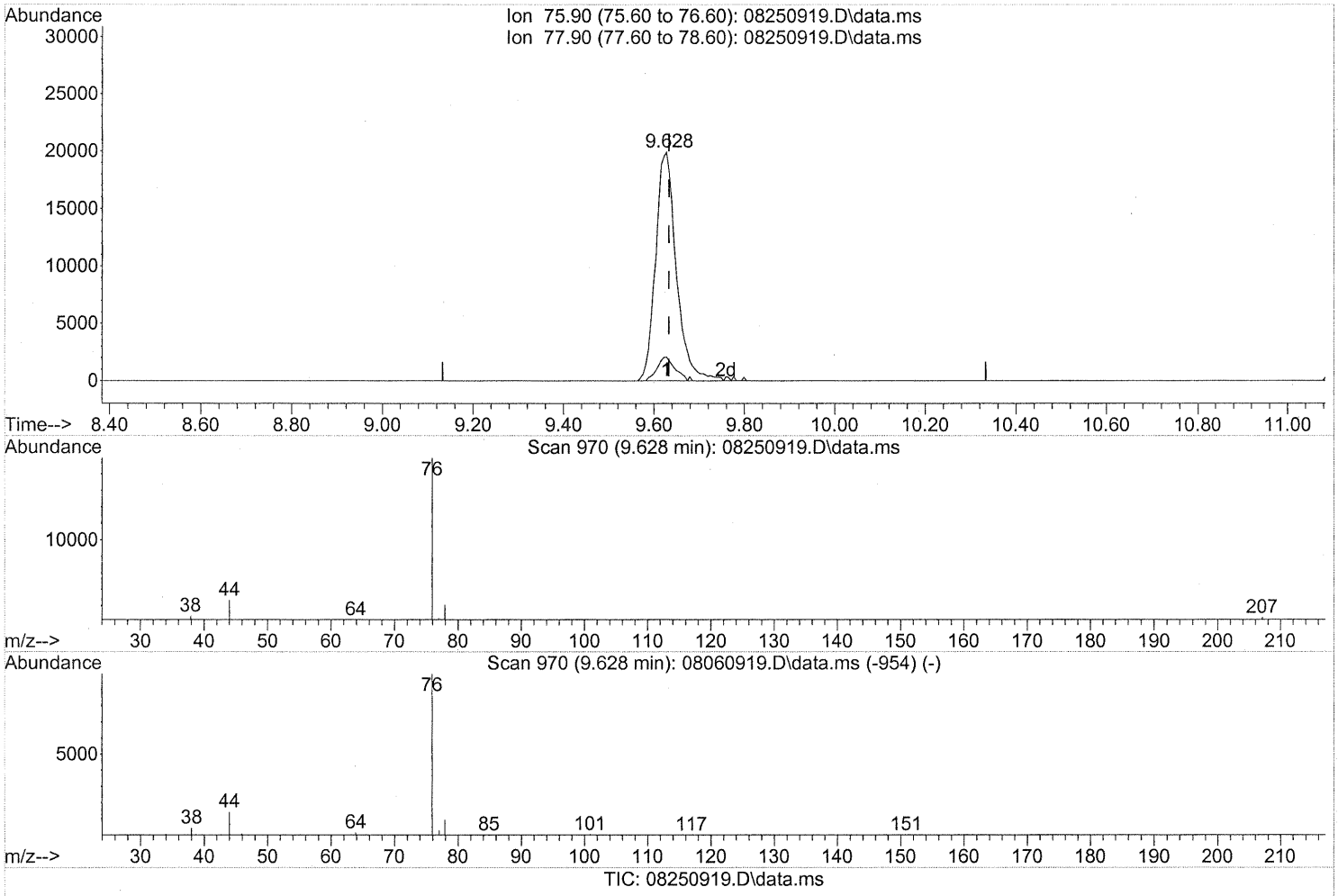
response 2620

Ion	Exp%	Act%
150.90	100	100
100.90	138.40	128.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(22) Carbon Disulfide (T)

9.628min (-0.006) 1.55ng

response 63083

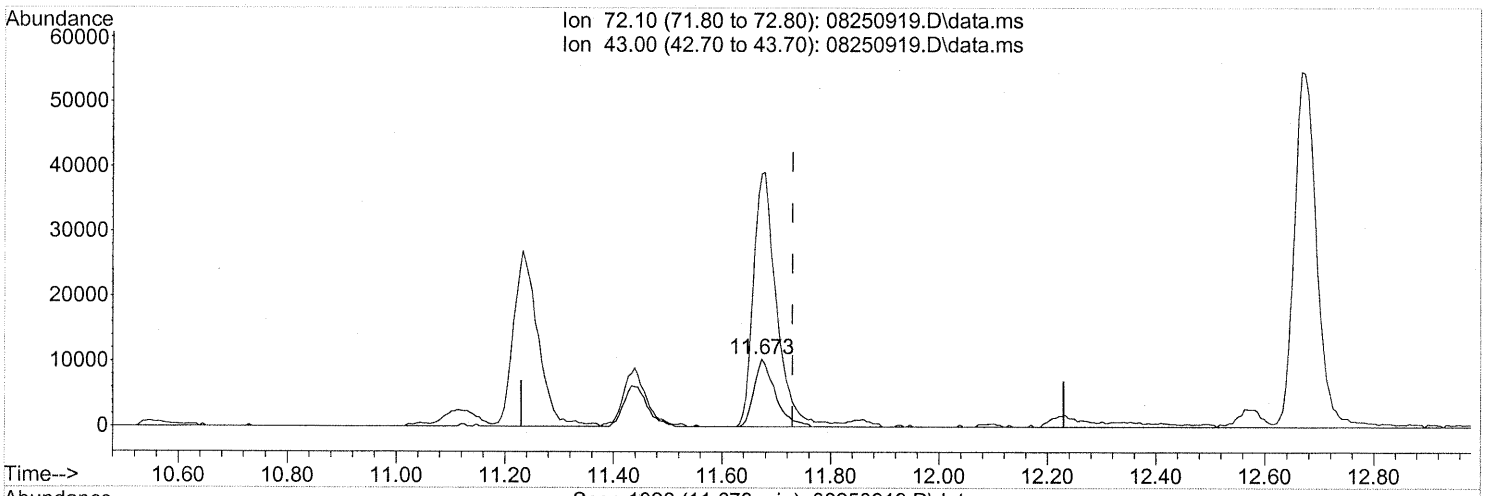
Ion	Exp%	Act%
75.90	100	100
77.90	9.40	8.93
0.00	0.00	0.00
0.00	0.00	0.00

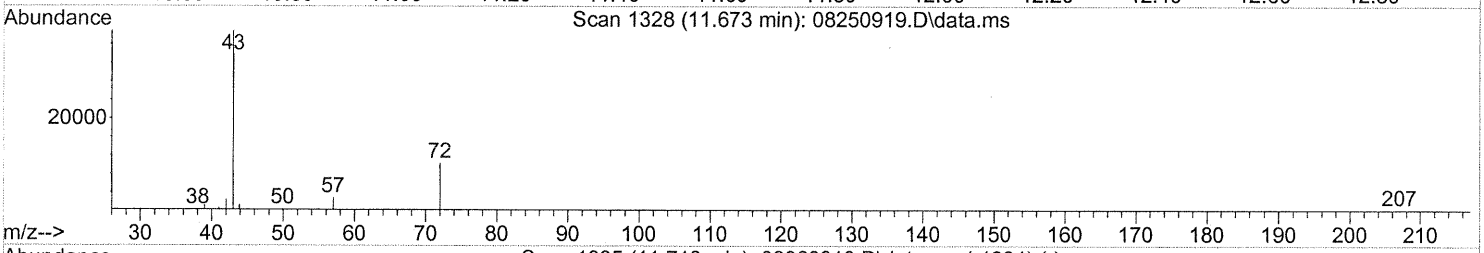
544

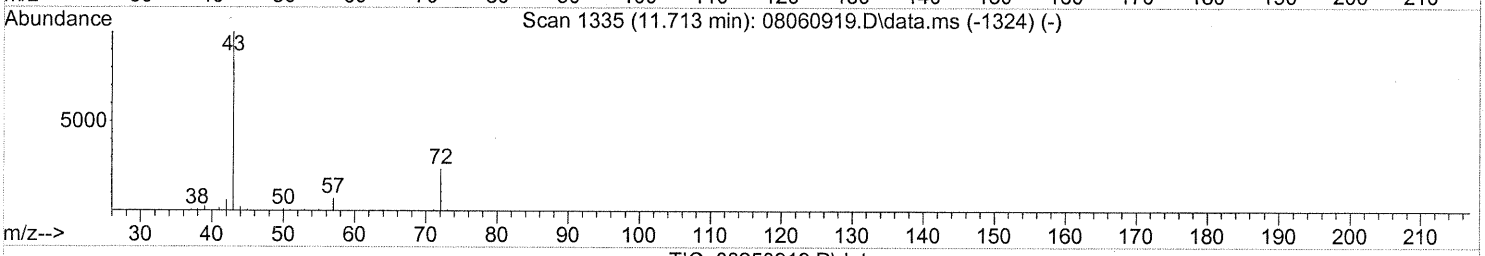
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

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

11.673min (-0.057) 3.62ng

response 28027

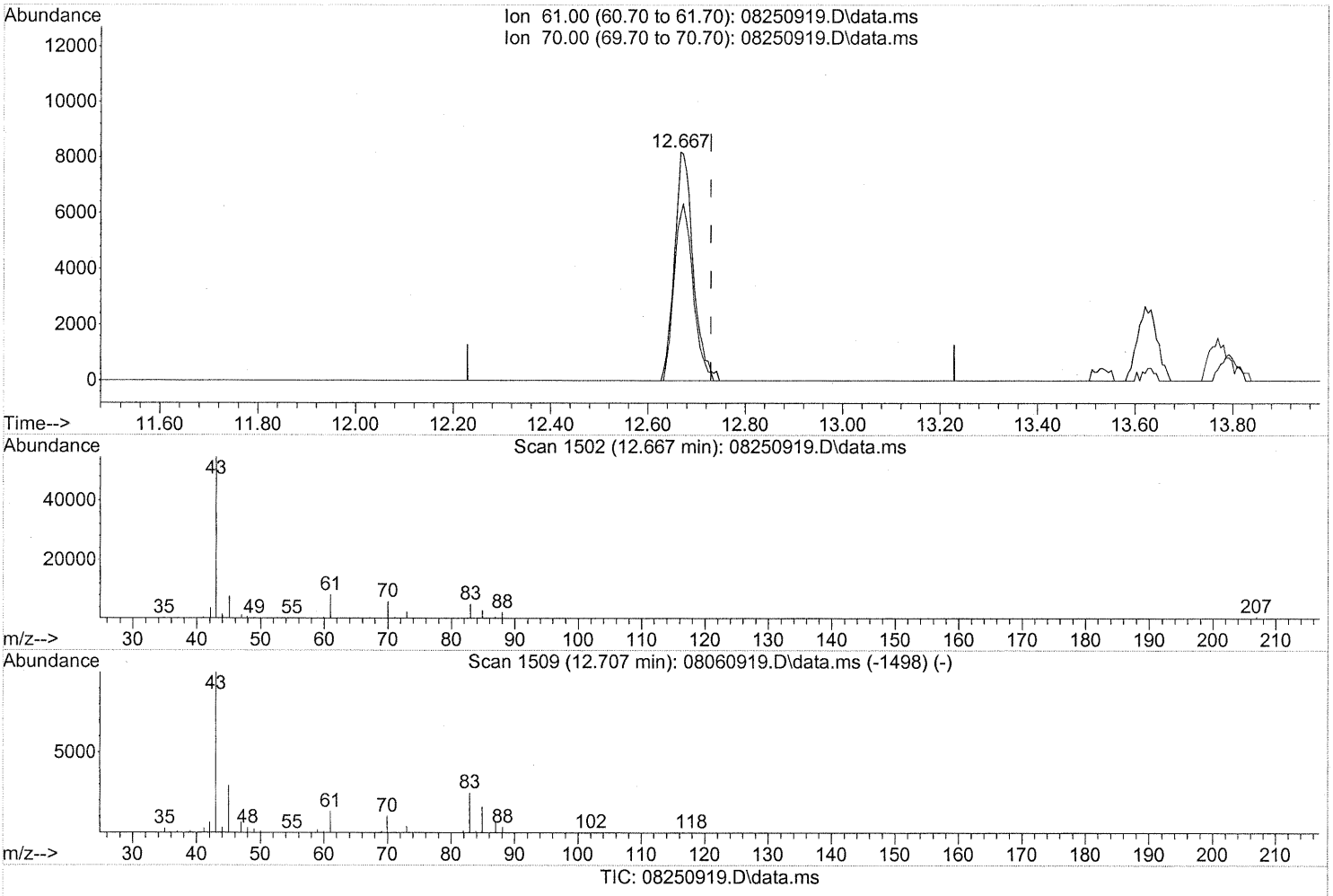
Ion	Exp%	Act%
72.10	100	100
43.00	437.40	413.72#
0.00	0.00	0.00
0.00	0.00	0.00

545

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(30) Ethyl Acetate (T)

12.667min (-0.063) 5.41ng

response 21835

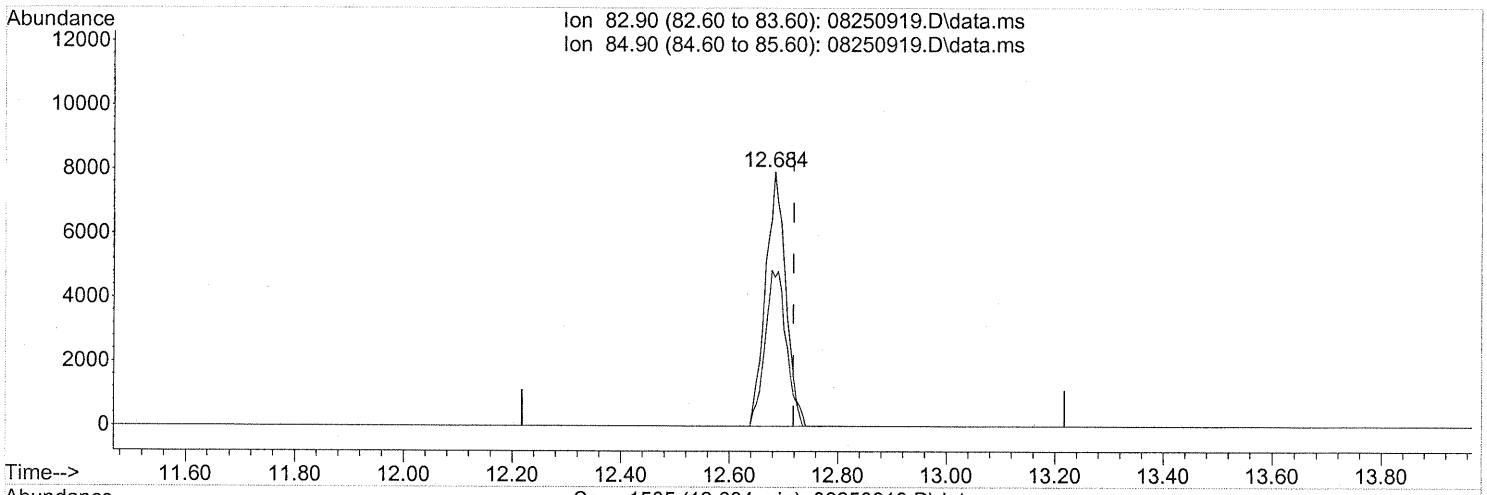
Ion	Exp%	Act%
61.00	100	100
70.00	82.00	77.36
0.00	0.00	0.00
0.00	0.00	0.00

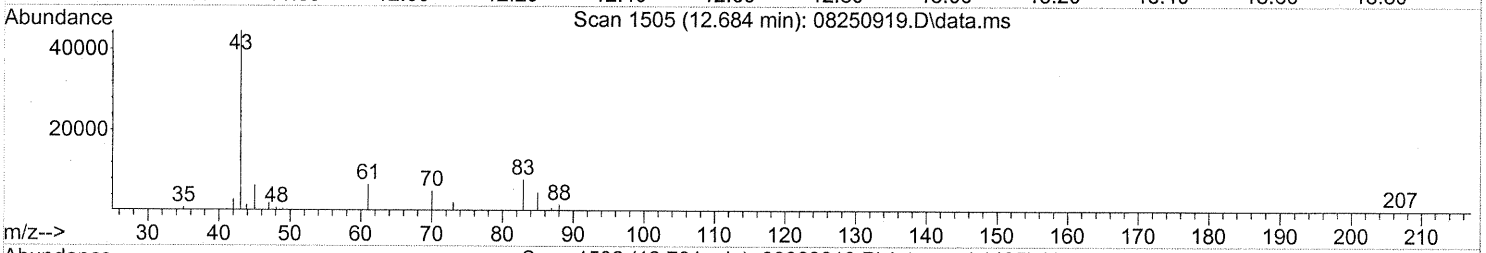
546

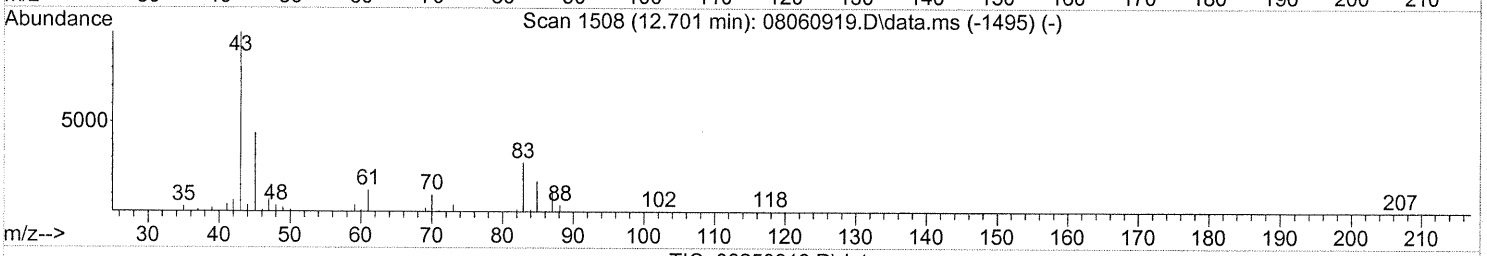
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(32) Chloroform (T)

12.684min (-0.034) 1.13ng

response 20545

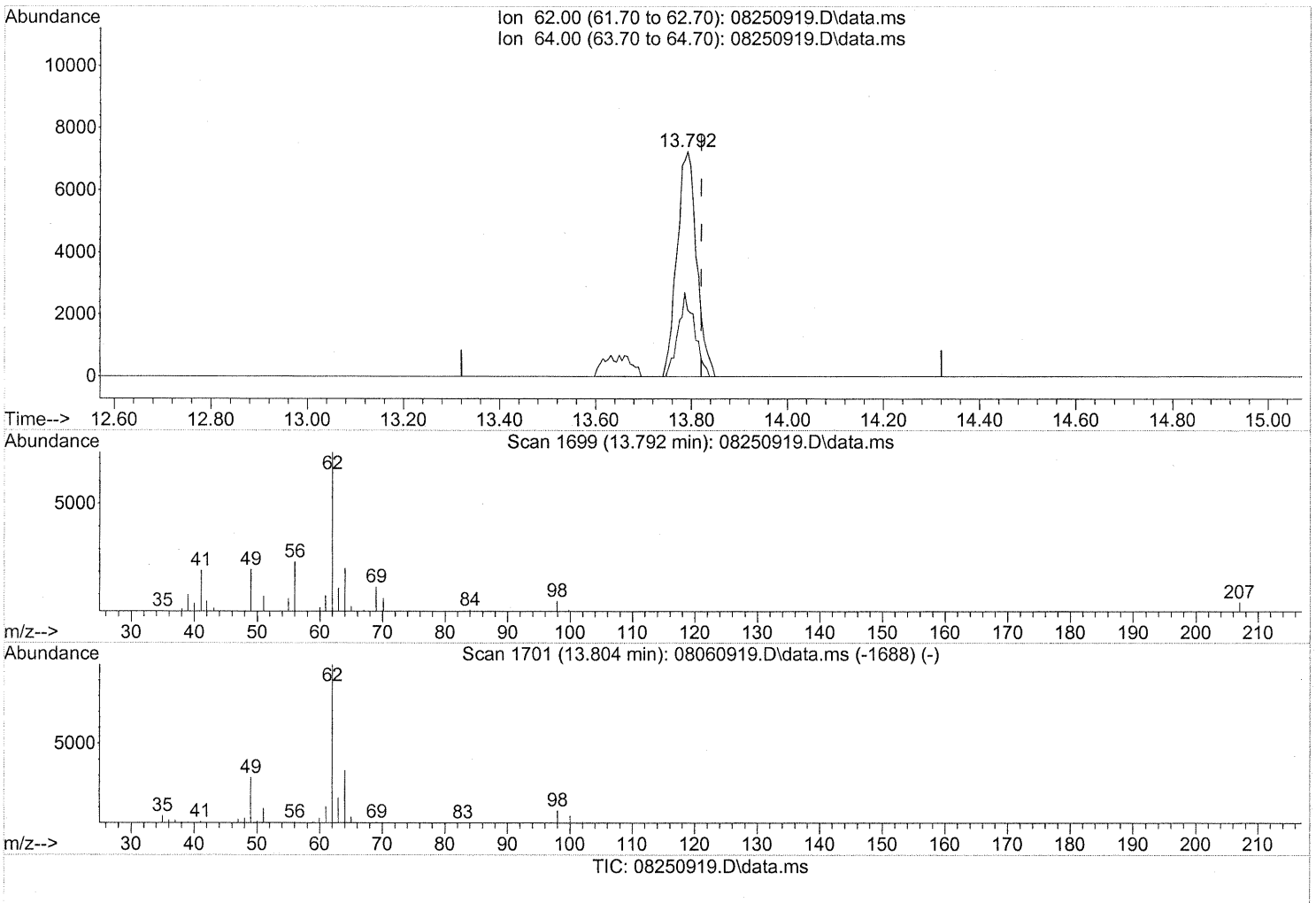
Ion	Exp%	Act%
82.90	100	100
84.90	64.30	64.06
0.00	0.00	0.00
0.00	0.00	0.00

547

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(36) 1,2-Dichloroethane (T)

13.792min (-0.029) 1.25ng

response 20729

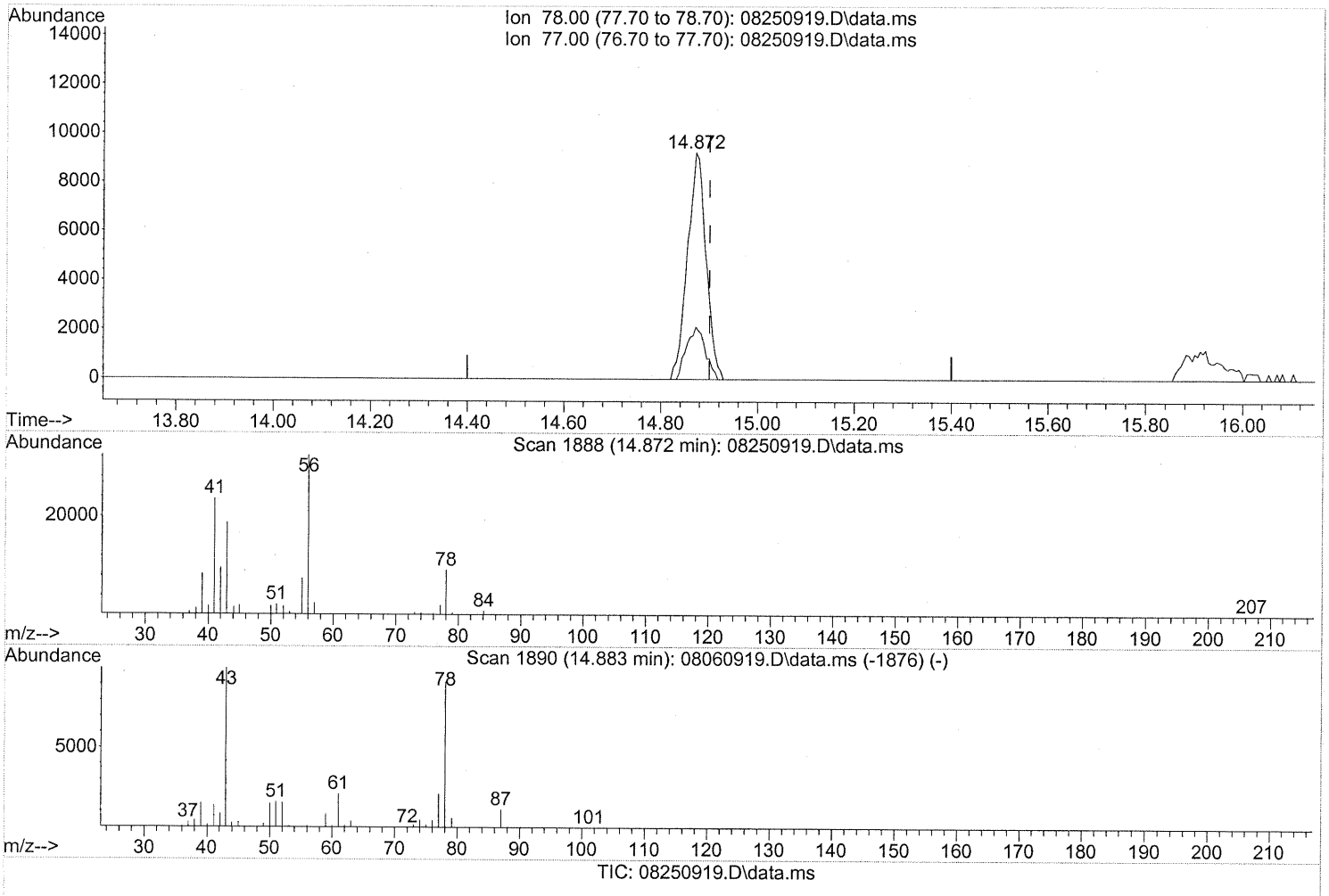
Ion	Exp%	Act%
62.00	100	100
64.00	30.80	31.24
0.00	0.00	0.00
0.00	0.00	0.00

548

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(41) Benzene (T)

14.872min (-0.029) 0.53ng

response 24611

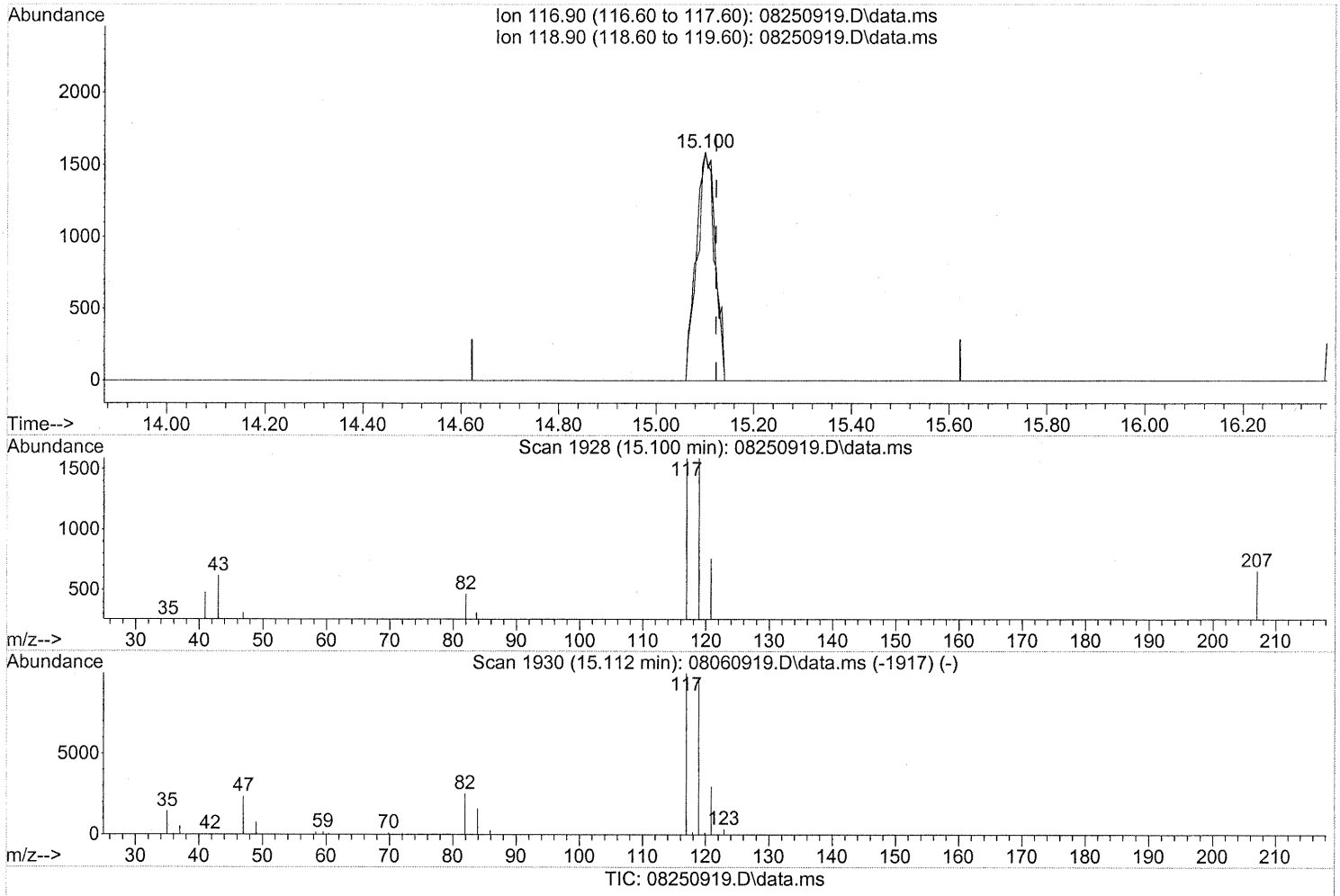
Ion	Exp%	Act%
78.00	100	100
77.00	23.60	23.37
0.00	0.00	0.00
0.00	0.00	0.00

549

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(42) Carbon Tetrachloride (T)

15.100min (-0.023) 0.29ng

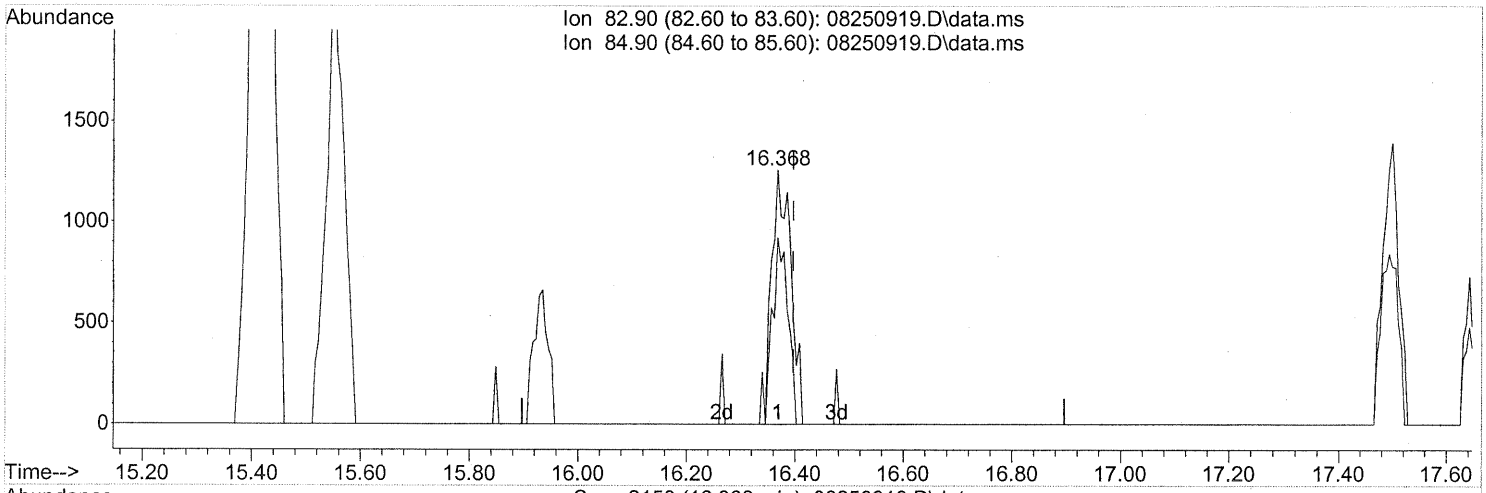
response 4252

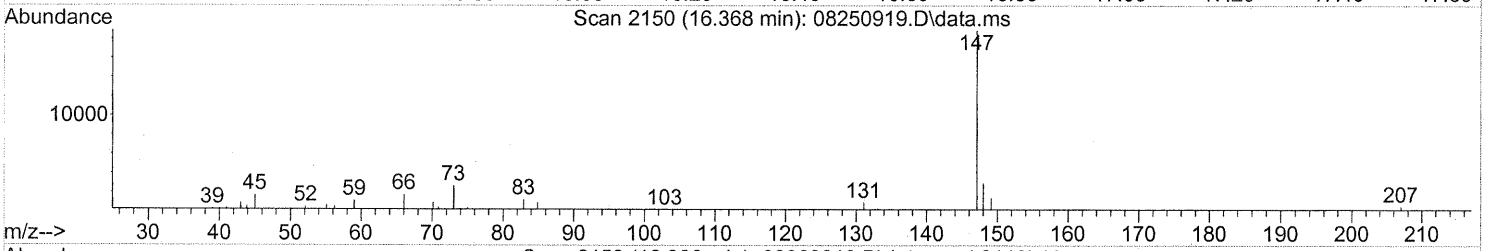
Ion	Exp%	Act%
116.90	100	100
118.90	97.10	96.85
0.00	0.00	0.00
0.00	0.00	0.00

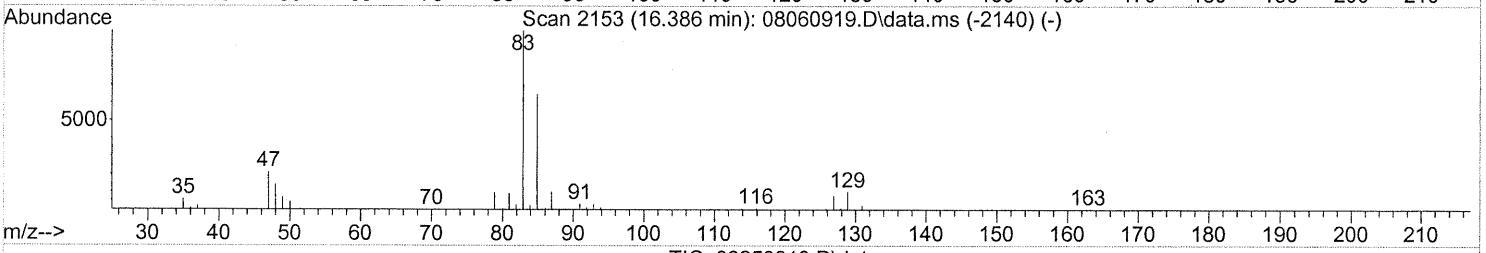
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(46) Bromodichloromethane (T)

16.368min (-0.029) 0.21ng

response 3126

Ion	Exp%	Act%
82.90	100	100
84.90	62.80	58.19
0.00	0.00	0.00
0.00	0.00	0.00

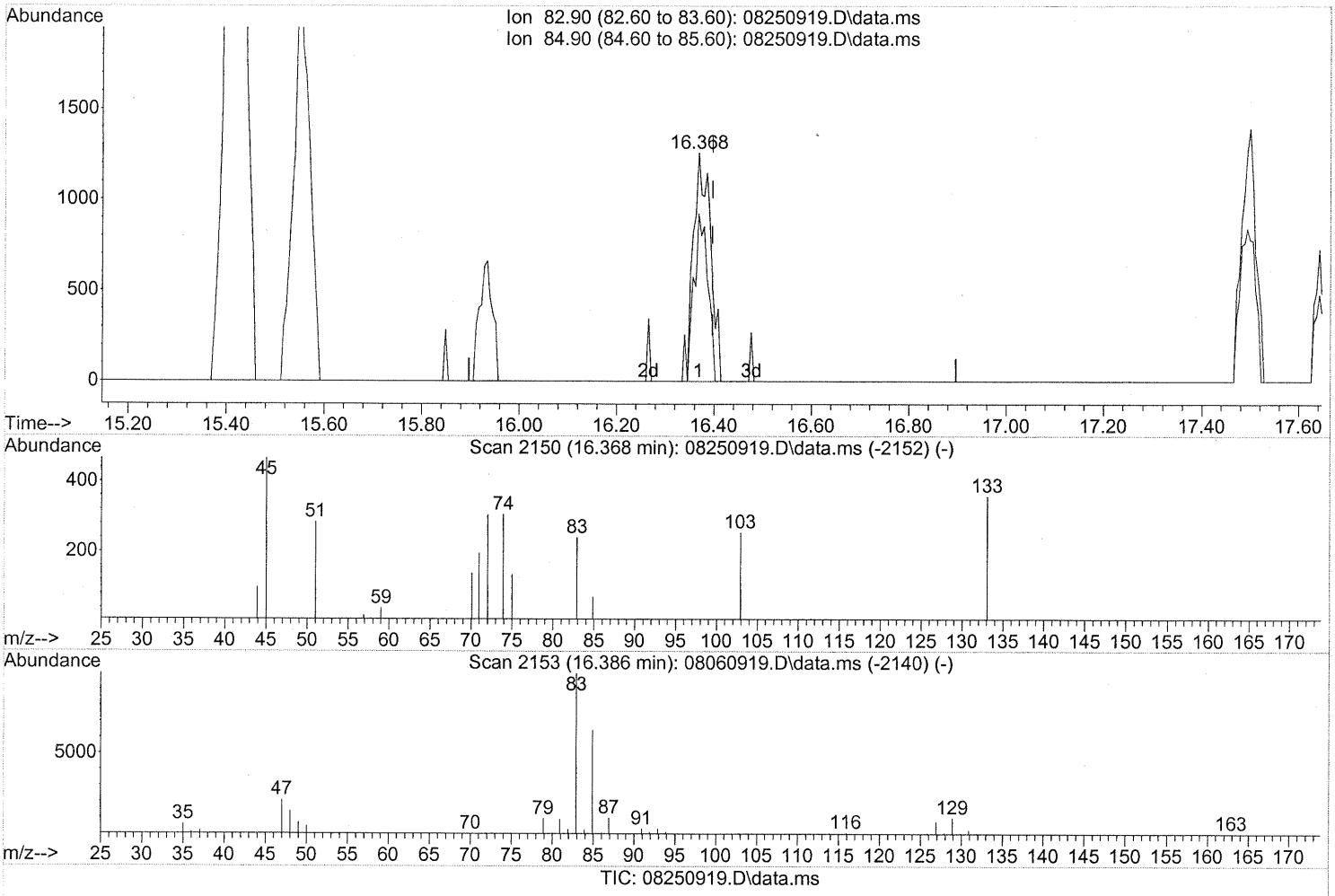
Before subtr.

551

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(46) Bromodichloromethane (T)

16.368min (-0.029) 0.21ng

response 3126

After subtr.

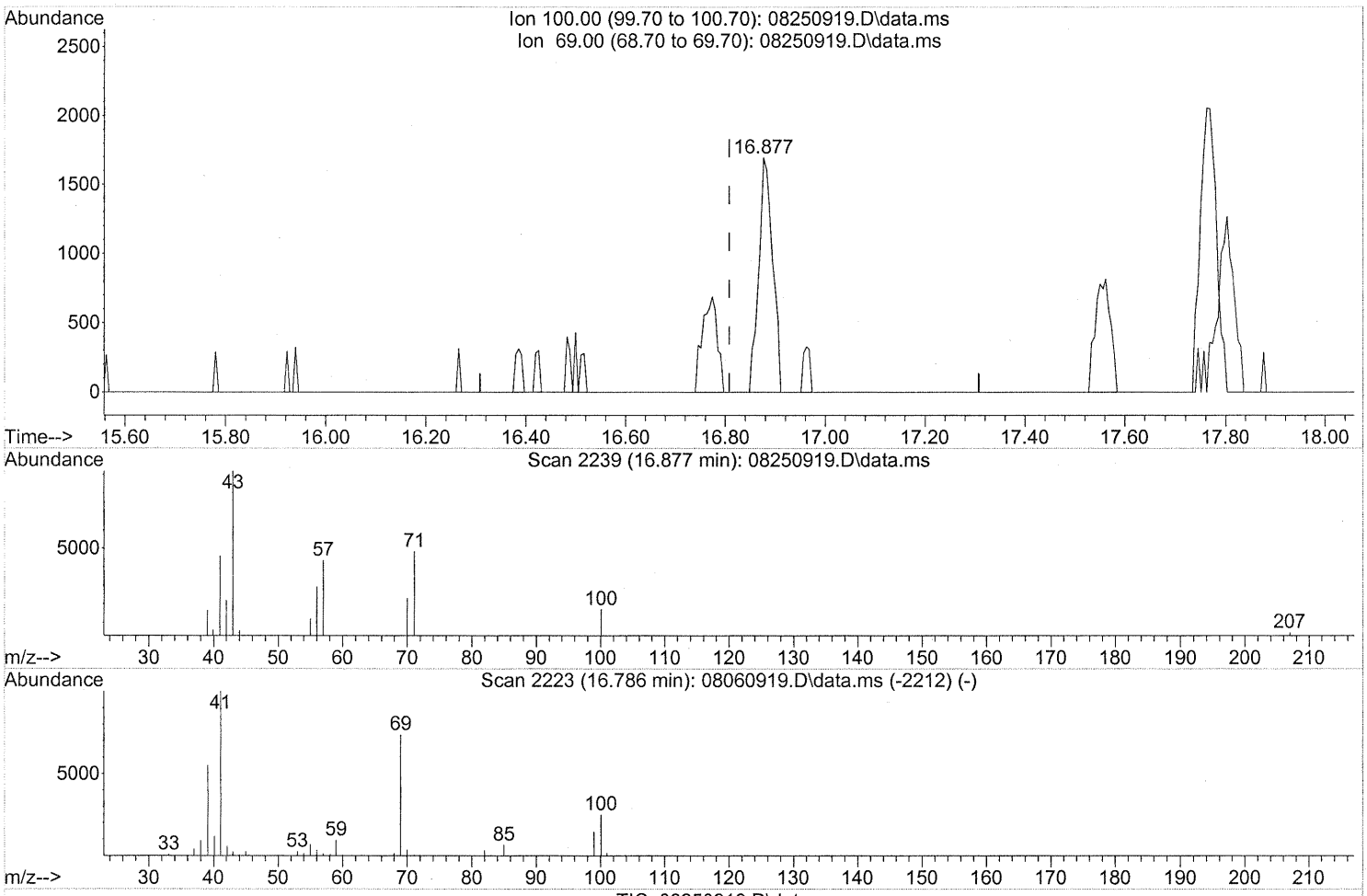
Ion	Exp%	Act%
82.90	100	100
84.90	62.80	58.19
0.00	0.00	0.00
0.00	0.00	0.00

552

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(50) Methyl Methacrylate (T)

16.877min (+0.068) 0.77ng

response 3256

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

FP
M 8/31/09

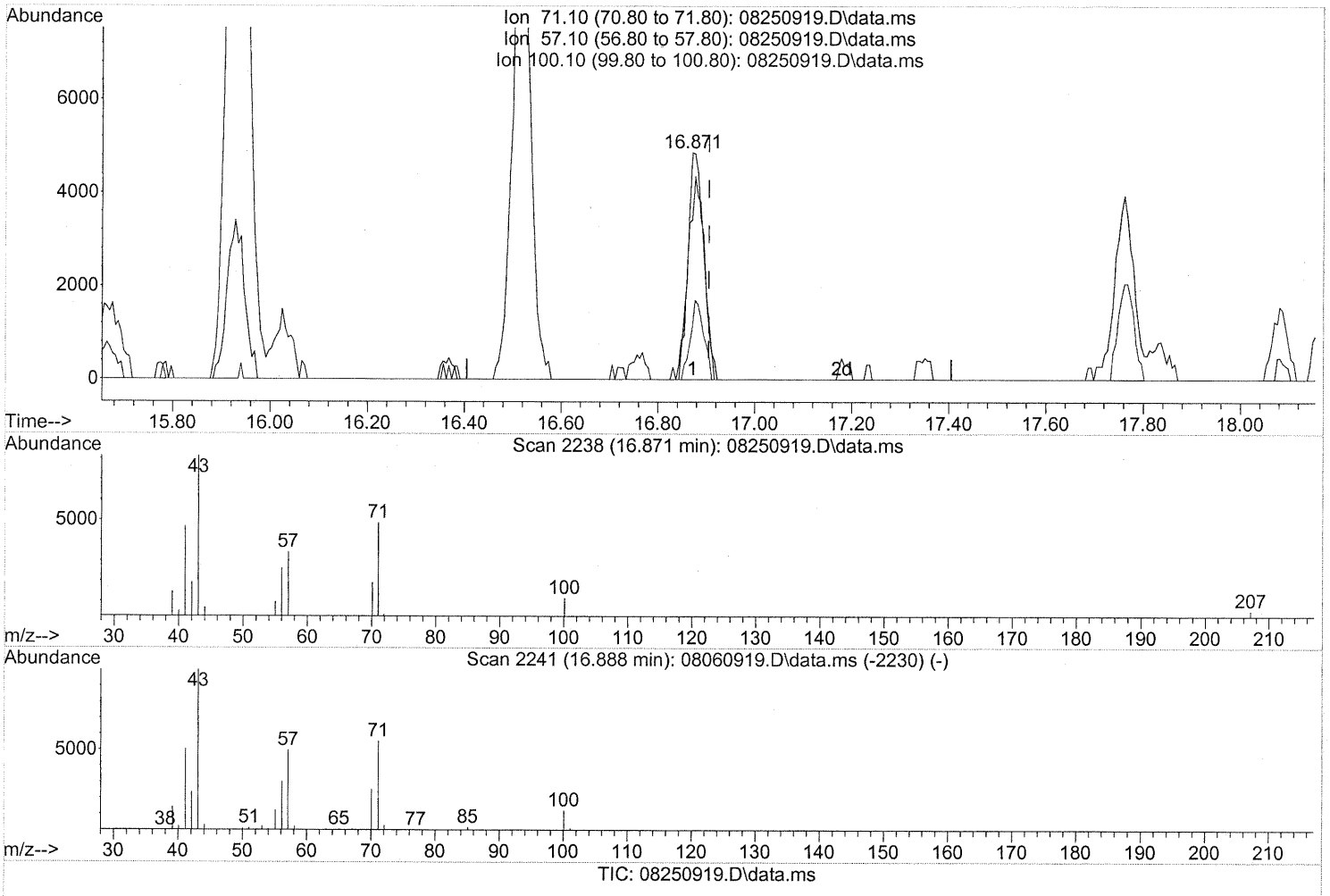
9/2/09

553

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(51) n-Heptane (T)

16.871min (-0.034) 0.90ng

response 11094

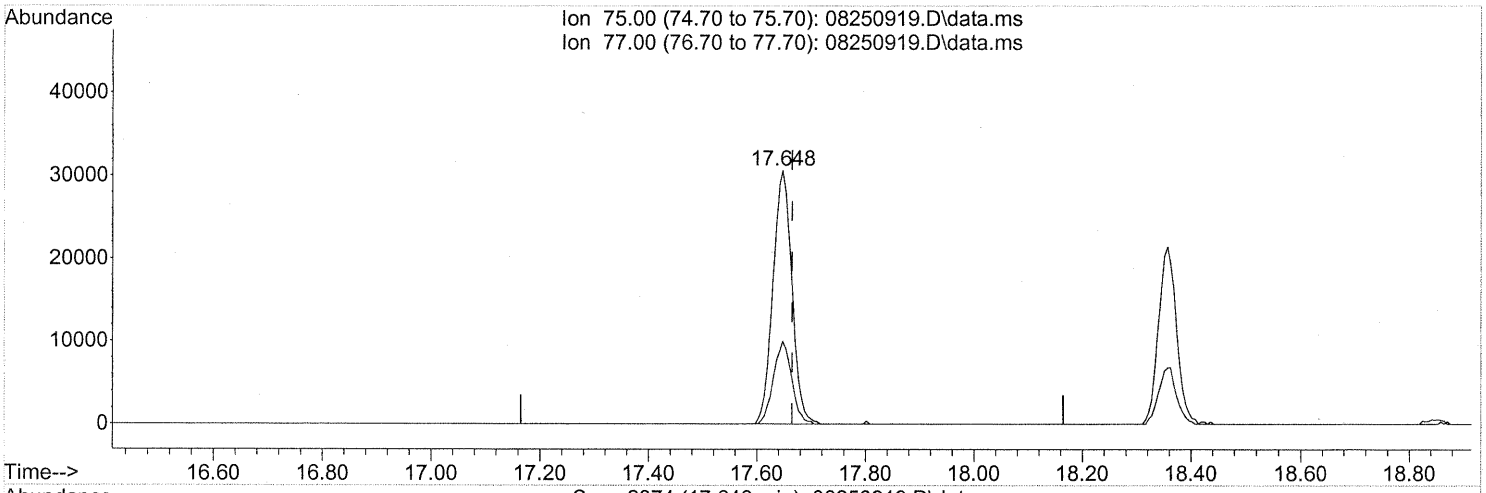
Ion	Exp%	Act%
71.10	100	100
57.10	91.90	92.64
100.10	26.40	29.35
0.00	0.00	0.00

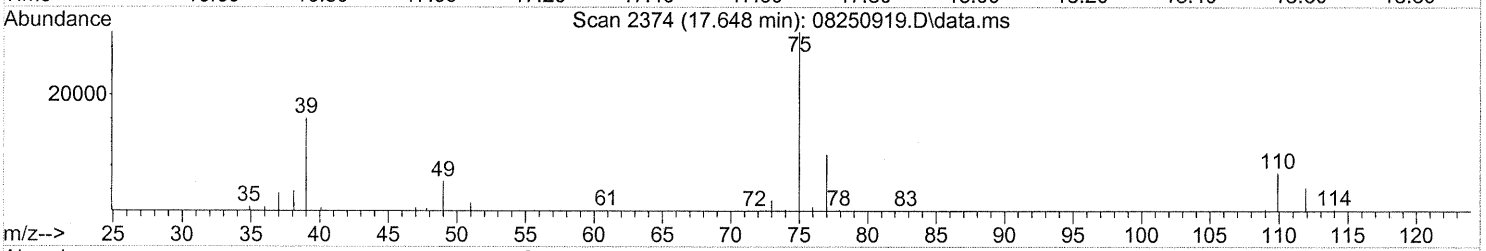
554

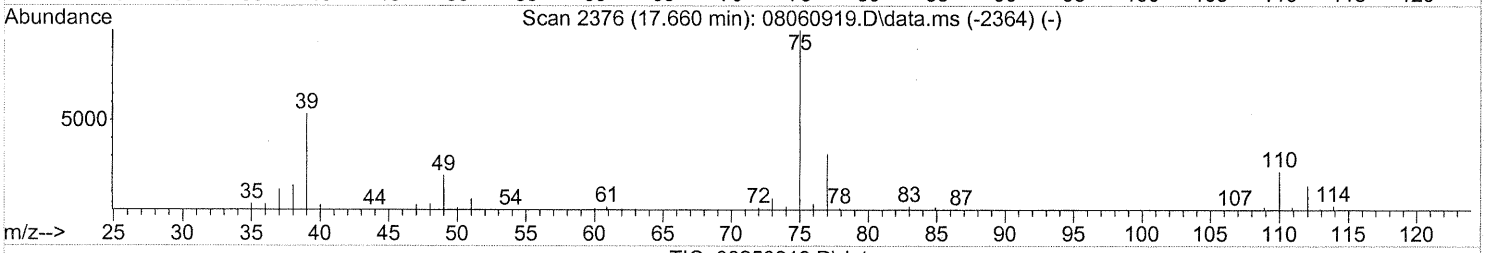
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(52) cis-1,3-Dichloropropene (T)

17.648min (-0.017) 3.85ng

response 73847

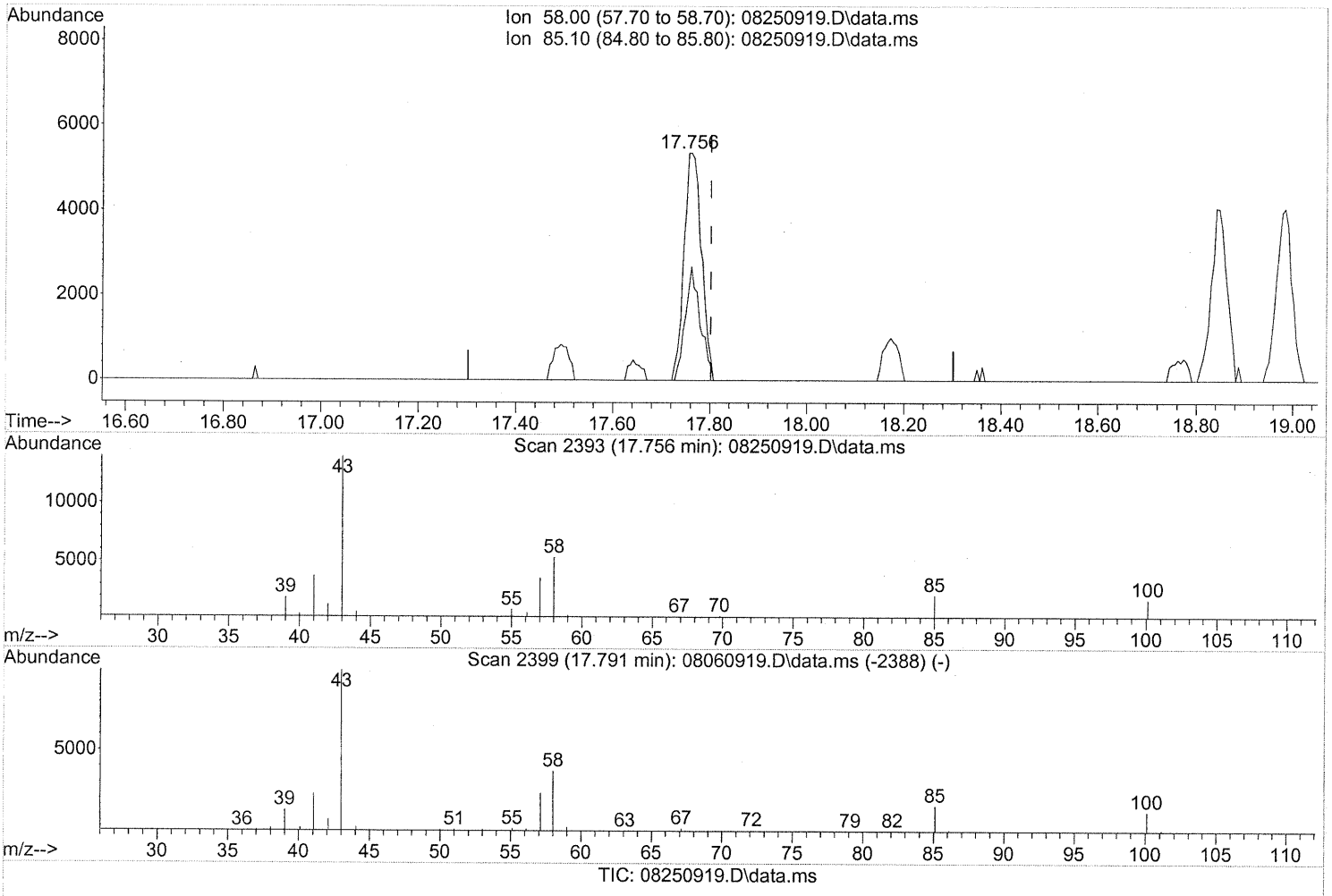
Ion	Exp%	Act%
75.00	100	100
77.00	31.00	31.18
0.00	0.00	0.00
0.00	0.00	0.00

555

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

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

17.756min (-0.046) 1.21ng

response 13435

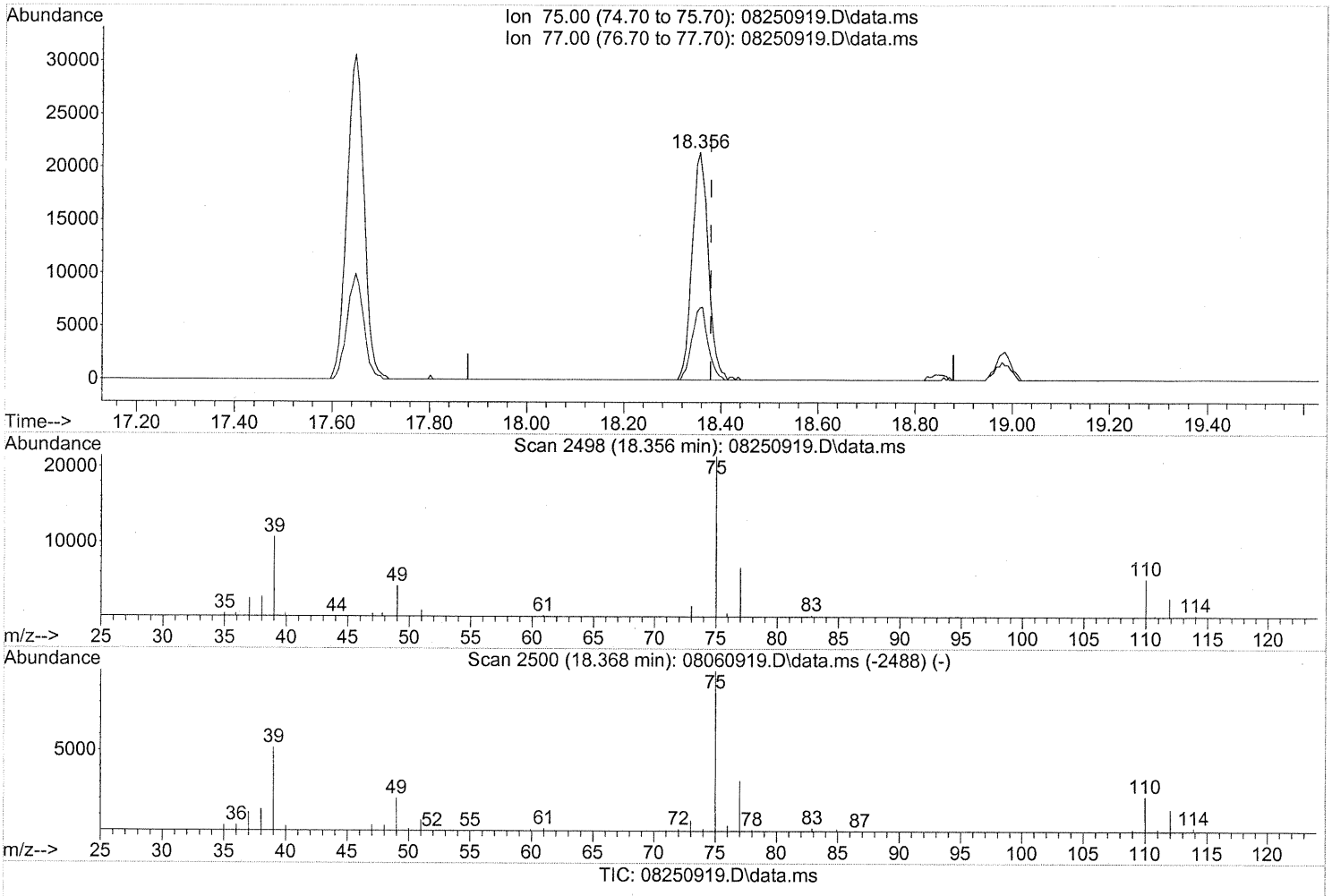
Ion	Exp%	Act%
58.00	100	100
85.10	42.60	43.12
0.00	0.00	0.00
0.00	0.00	0.00

556

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(54) trans-1,3-Dichloropropene (T)

18.356min (-0.023) 2.72ng

response 49659

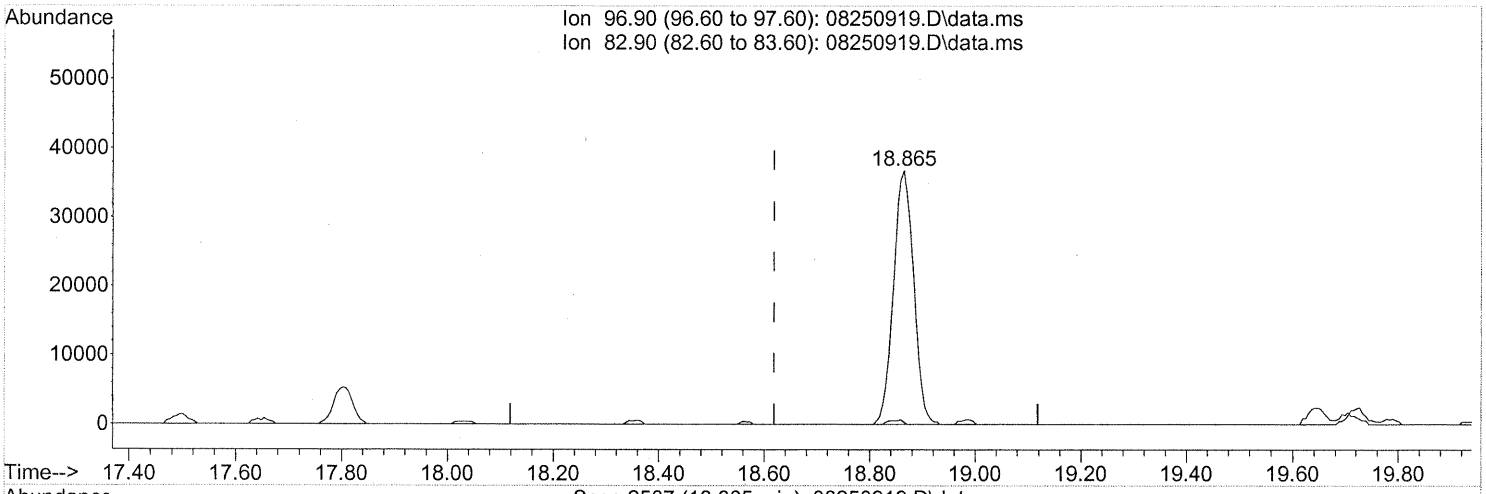
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	31.21
0.00	0.00	0.00
0.00	0.00	0.00

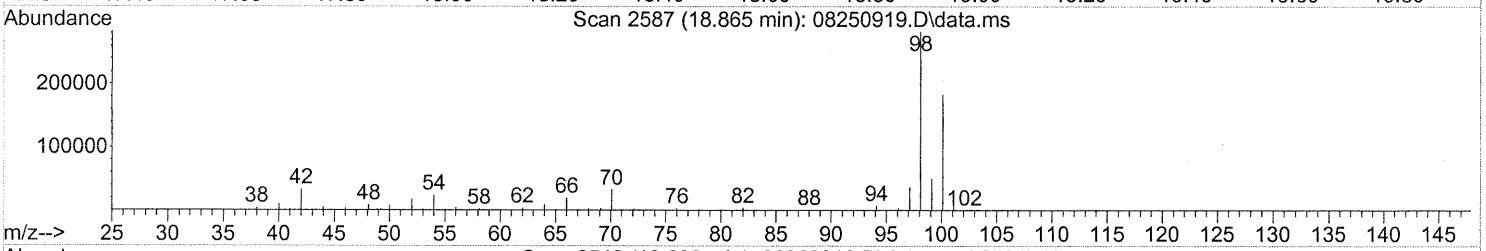
557

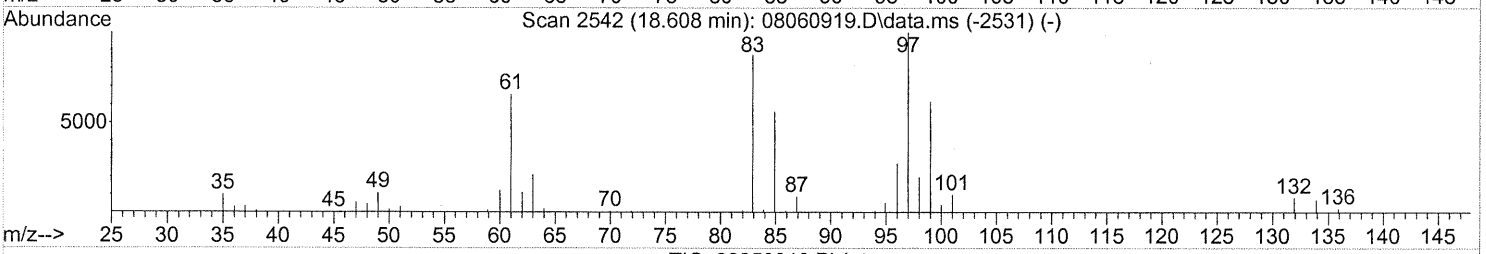
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

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

18.865min (+0.246) 9.62ng

response 97361

Ion	Exp%	Act%
96.90	100	100
82.90	90.30	1.08#
0.00	0.00	0.00
0.00	0.00	0.00

FP
8/31/09

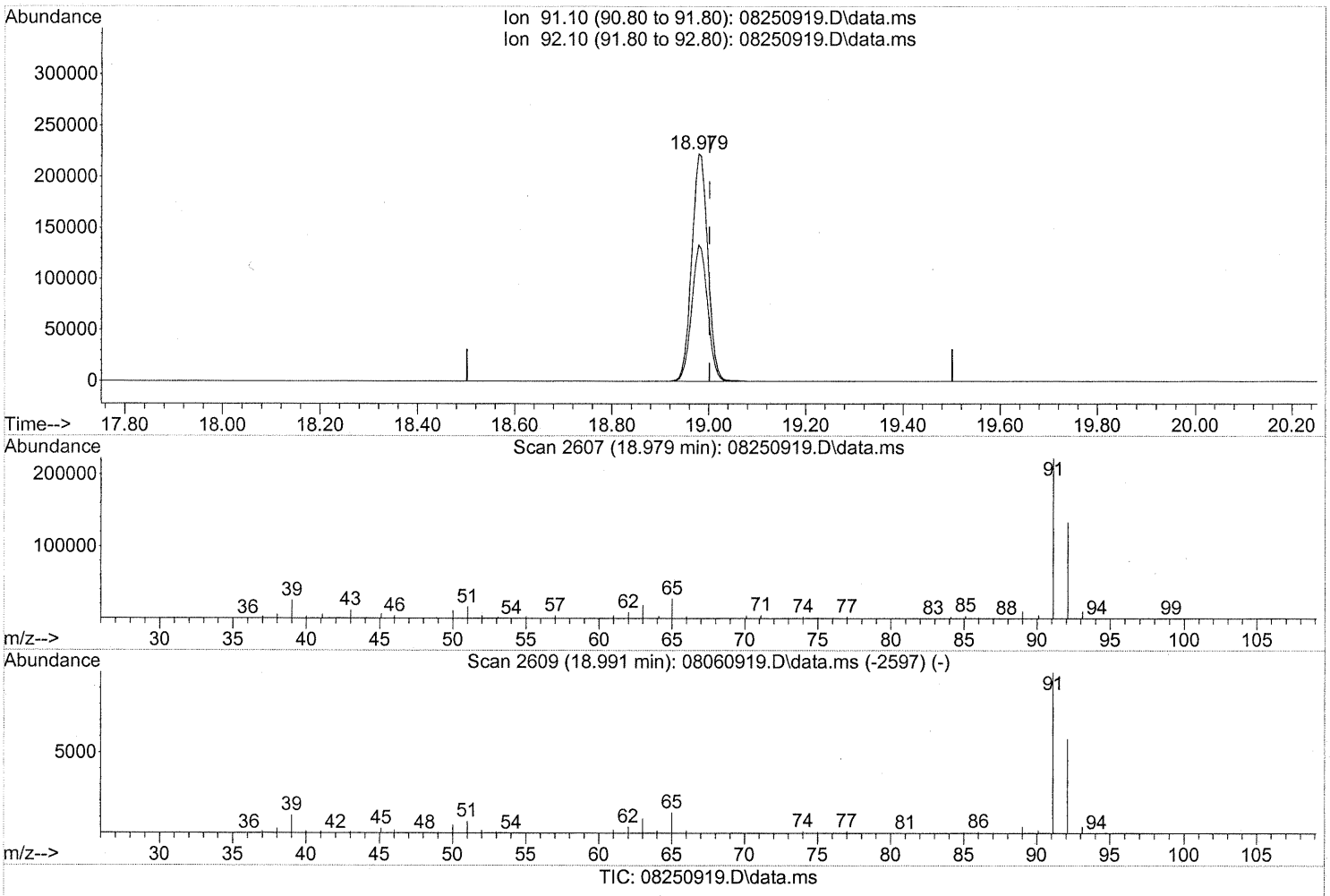
9/2/09

558

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(58) Toluene (T)

18.979min (-0.023) 11.93ng

response 512040

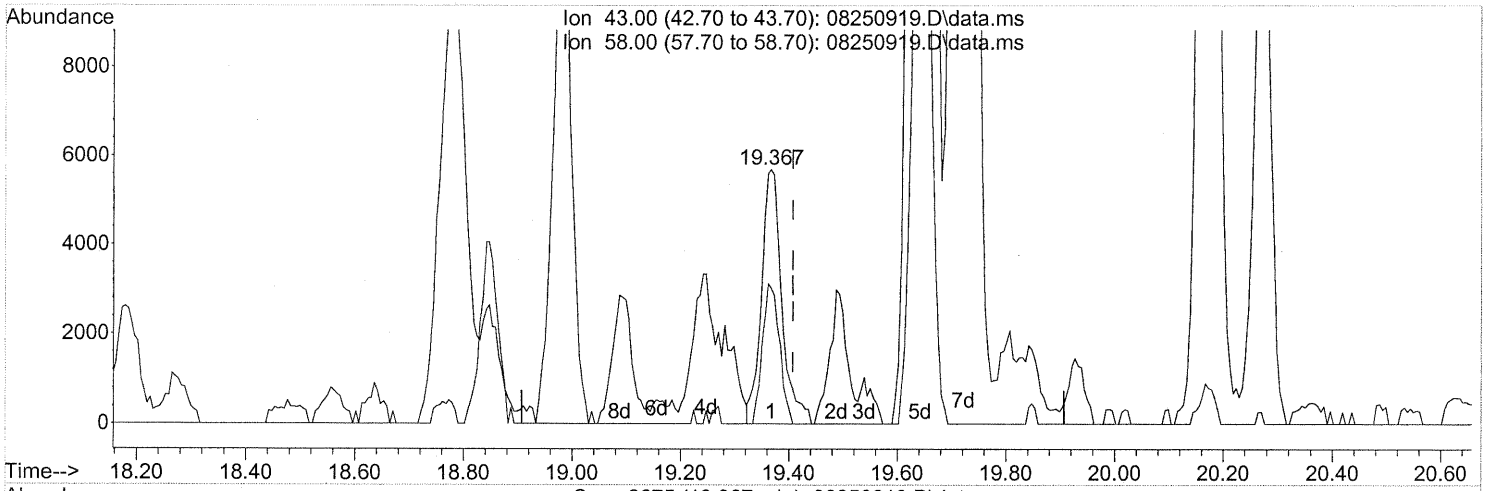
Ion	Exp%	Act%
91.10	100	100
92.10	58.60	59.44
0.00	0.00	0.00
0.00	0.00	0.00

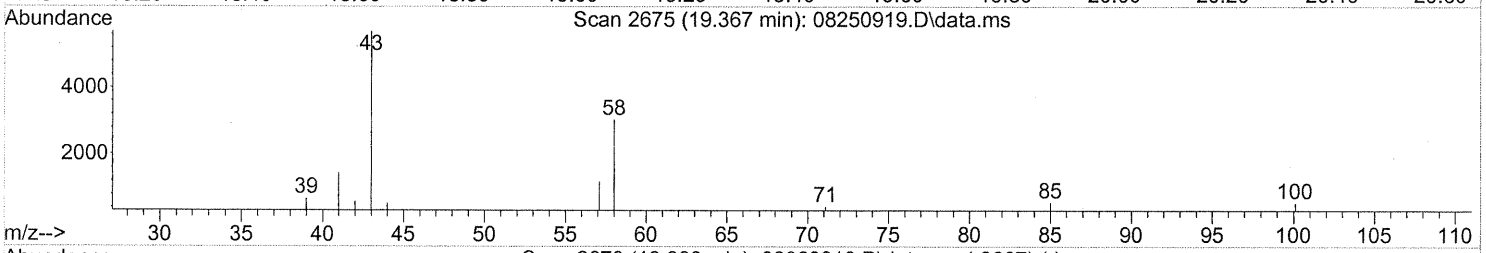
559

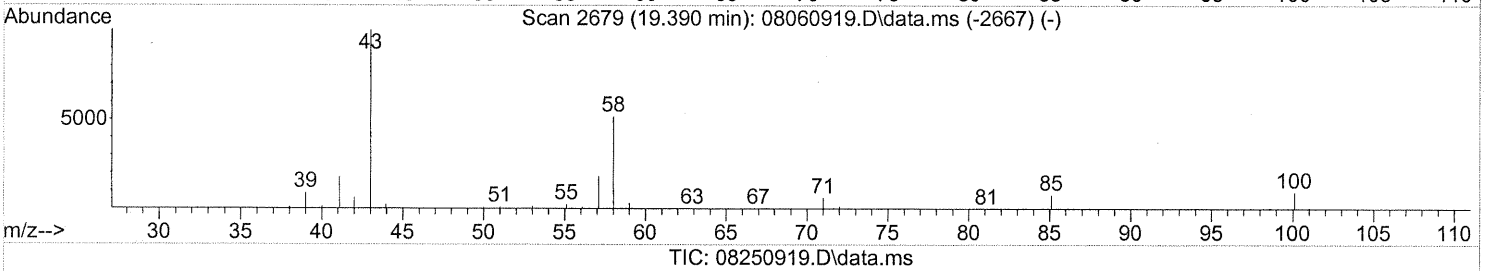
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(59) 2-Hexanone (T)

19.367min (-0.040) 0.52ng

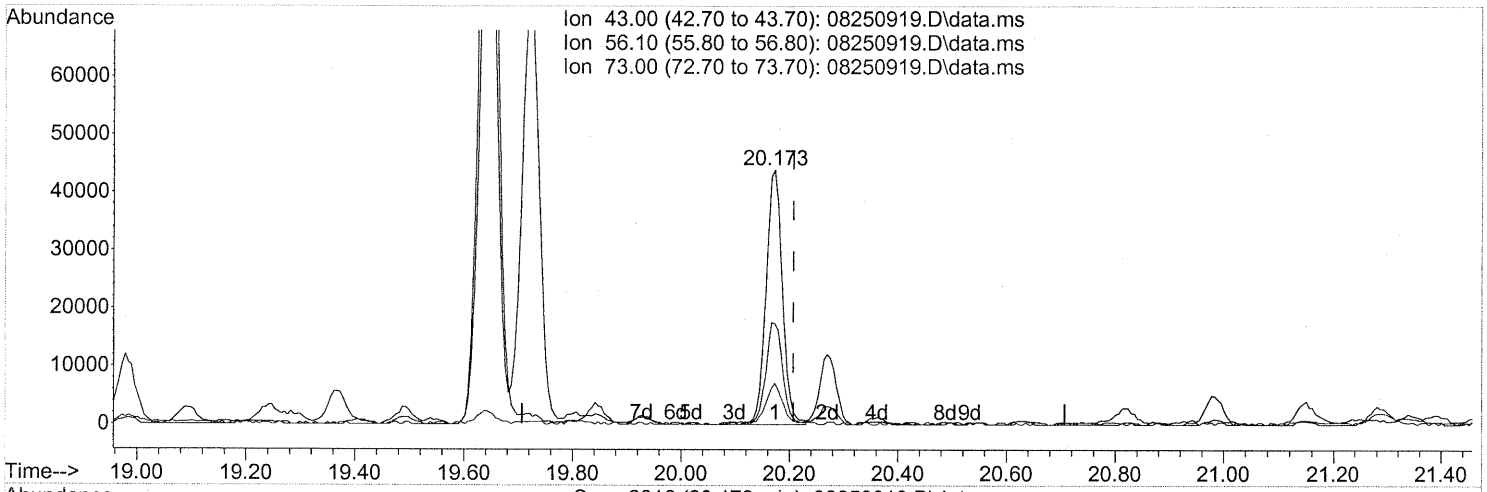
response 14910

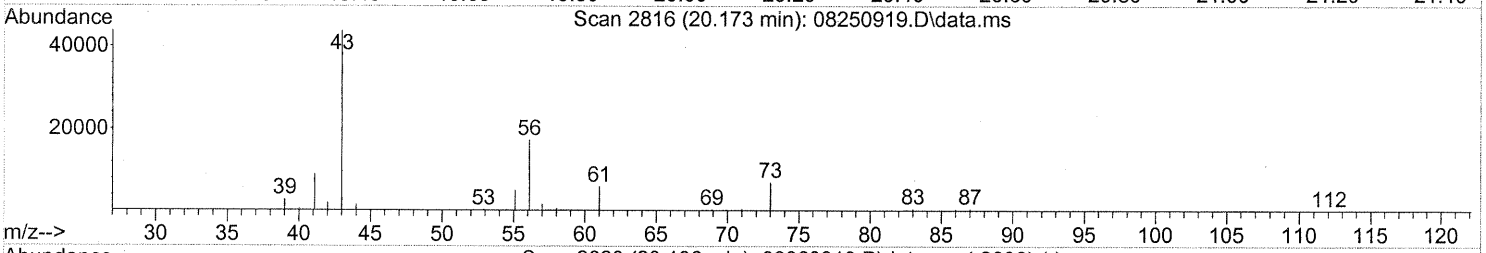
Ion	Exp%	Act%
43.00	100	100
58.00	50.90	45.86
0.00	0.00	0.00
0.00	0.00	0.00

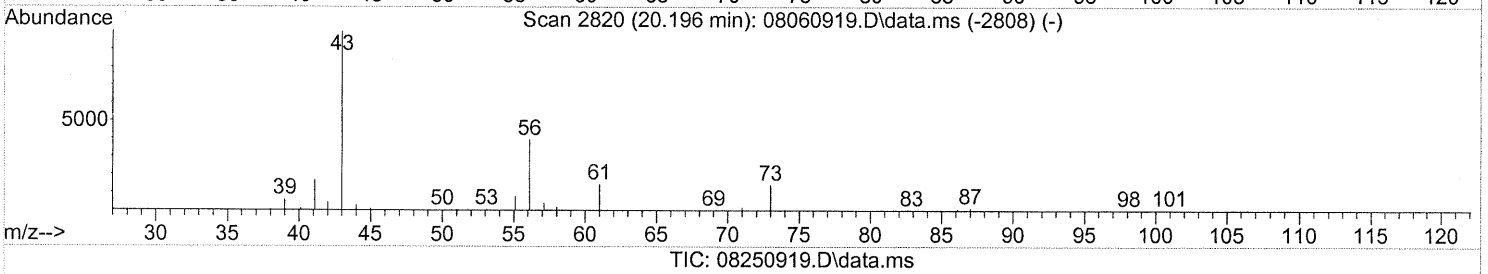
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(62) n-Butyl Acetate (T)

20.173min (-0.034) 2.73ng

response 91800

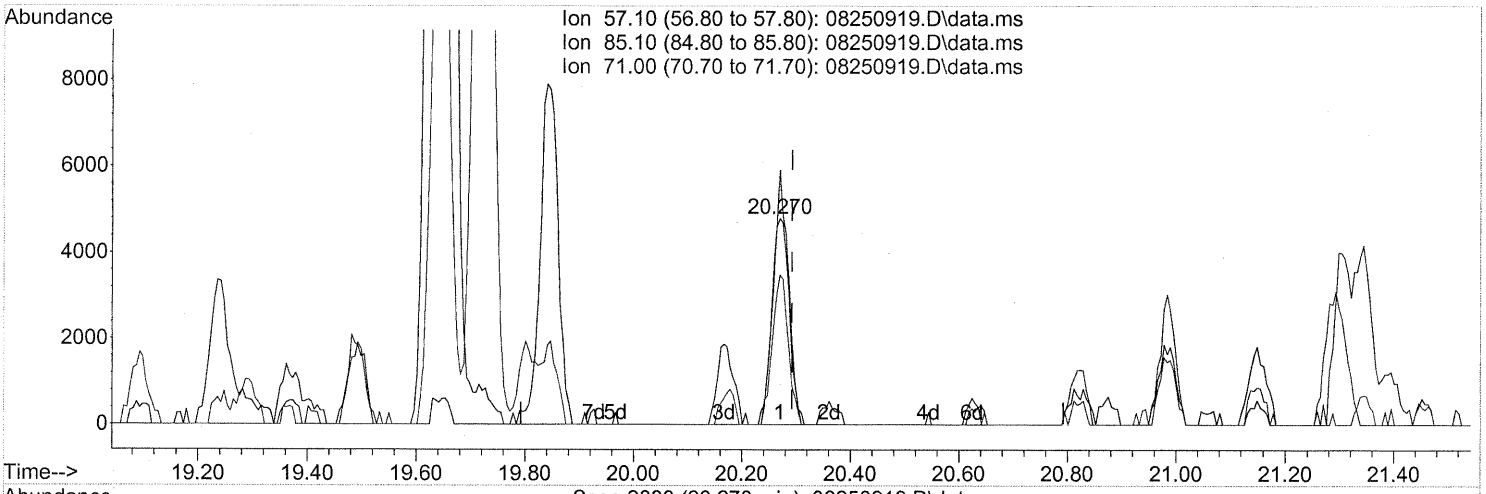
Ion	Exp%	Act%
43.00	100	100
56.10	38.50	41.10
73.00	14.80	17.19
0.00	0.00	0.00

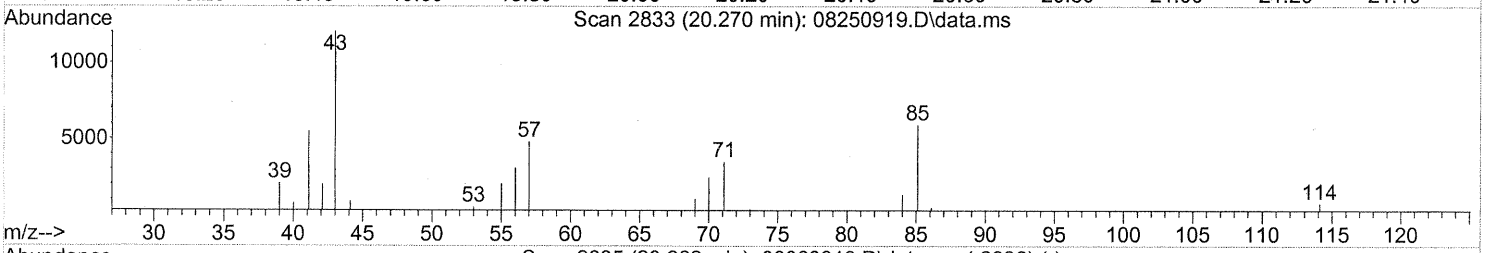
561

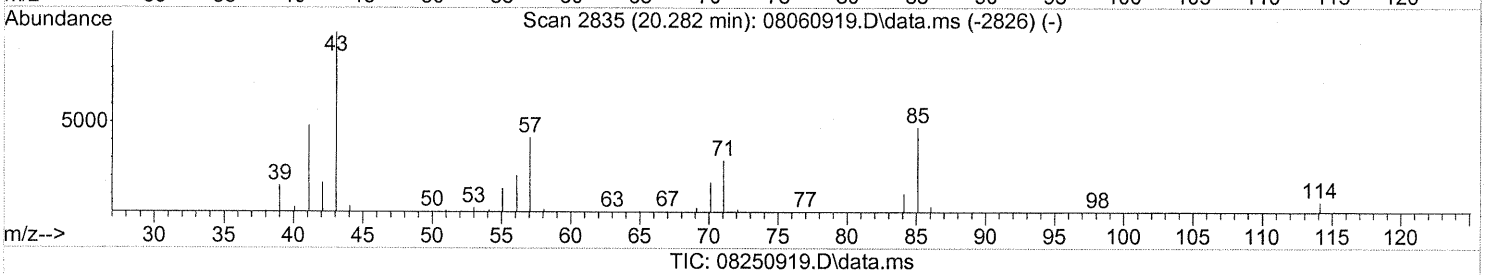
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(63) n-Octane (T)

20.270min (-0.023) 1.02ng

response 10602

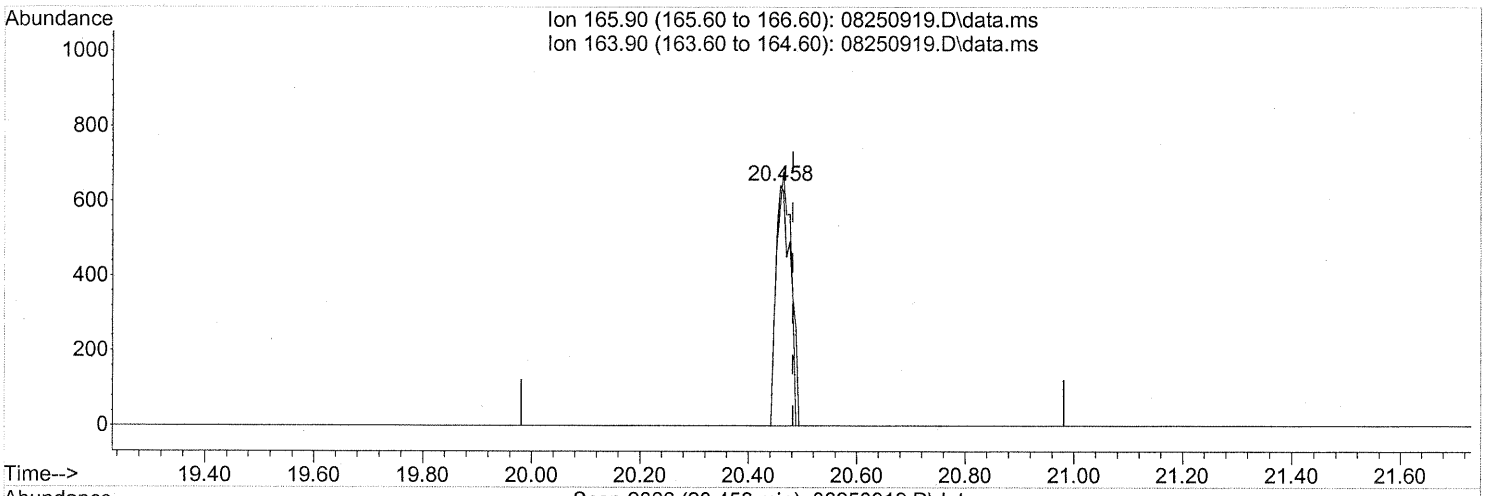
Ion	Exp%	Act%
57.10	100	100
85.10	107.00	109.58
71.00	68.10	67.21
0.00	0.00	0.00

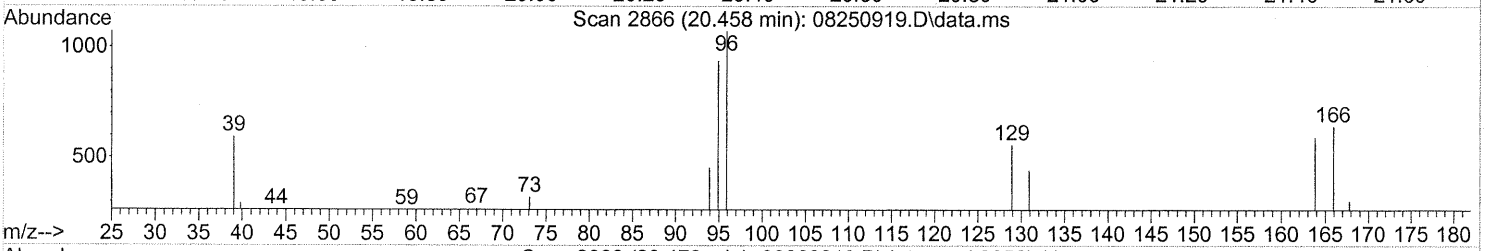
562

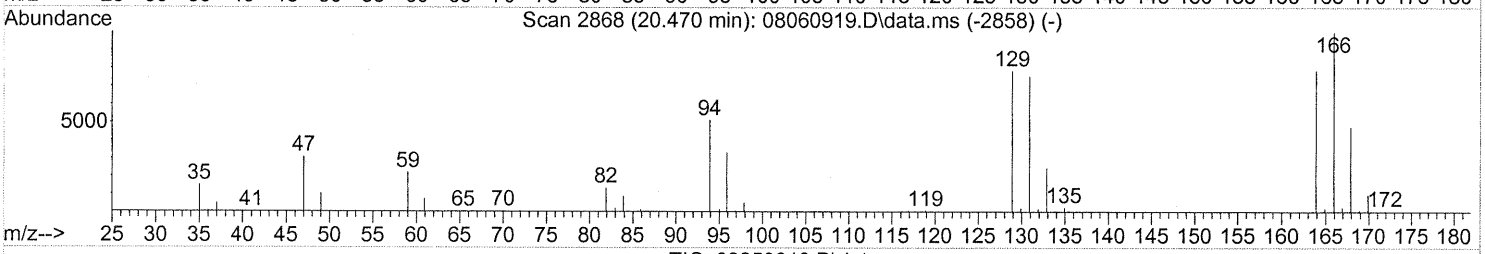
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(64) Tetrachloroethene (T)

20.458min (-0.023) 0.12ng

response 1241

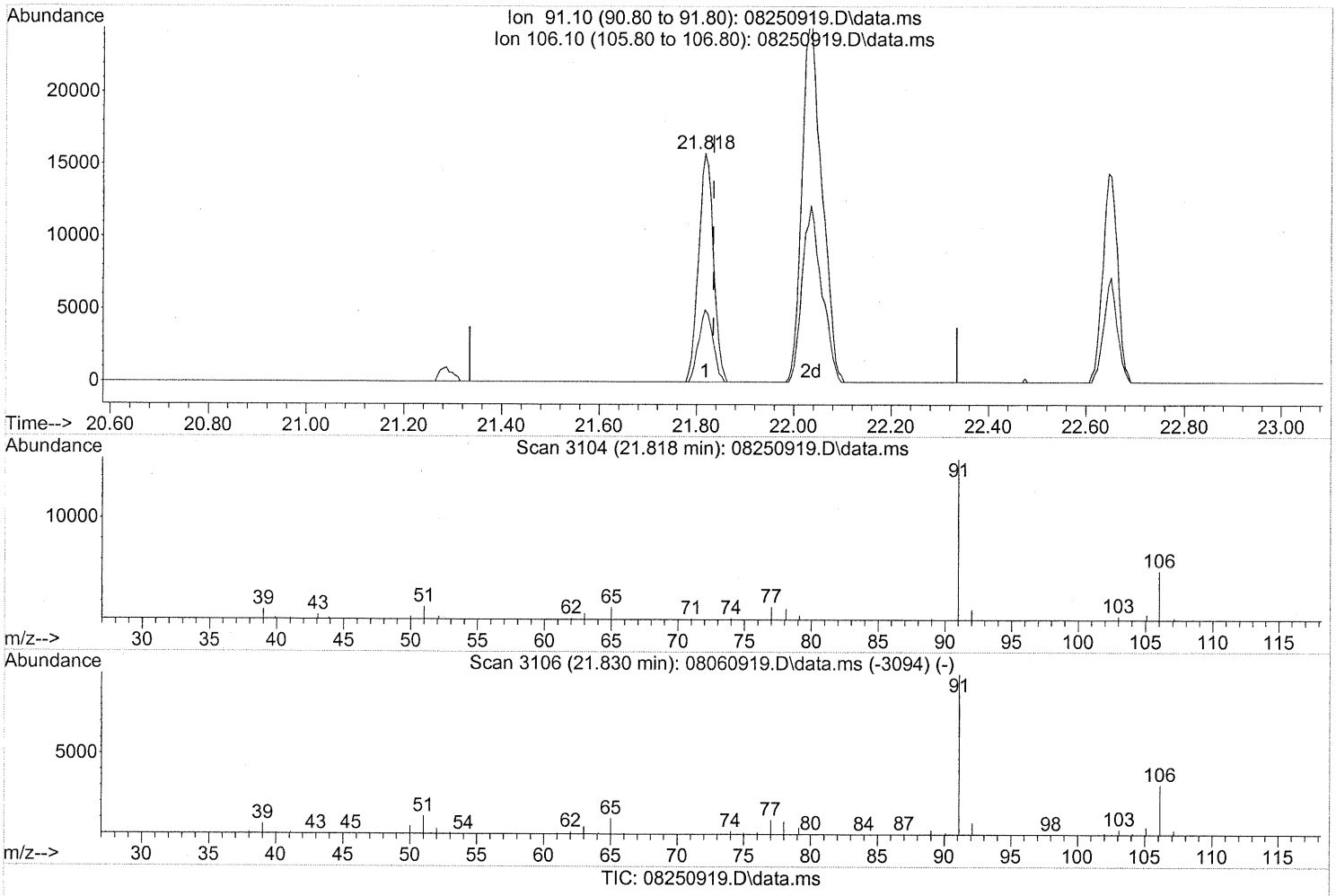
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	97.02
0.00	0.00	0.00
0.00	0.00	0.00

563

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



(66) Ethylbenzene (T)

21.818min (-0.017) 0.68ng

response 33535

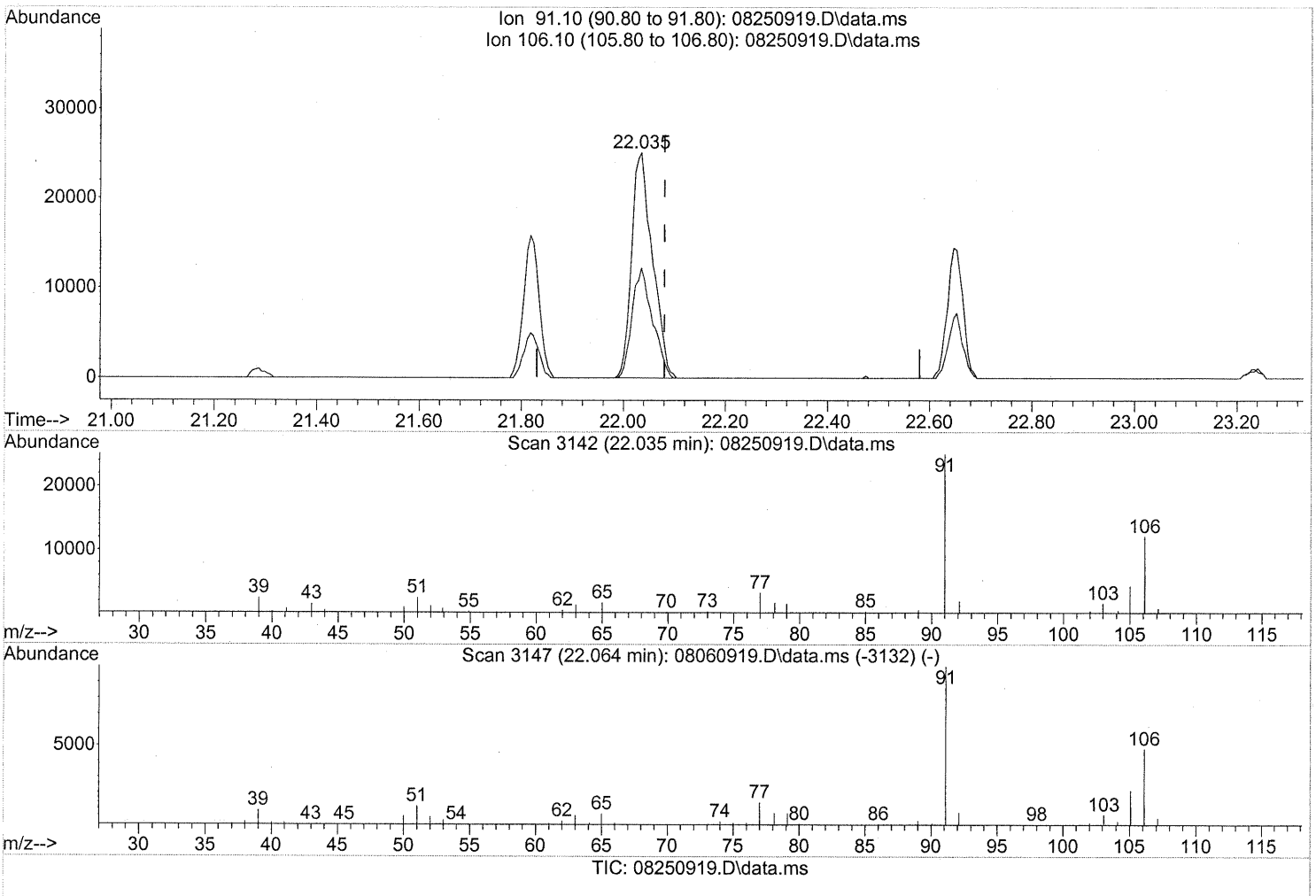
Ion	Exp%	Act%
91.10	100	100
106.10	30.10	30.48
0.00	0.00	0.00
0.00	0.00	0.00

564

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



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

22.035min (-0.046) 1.79ng

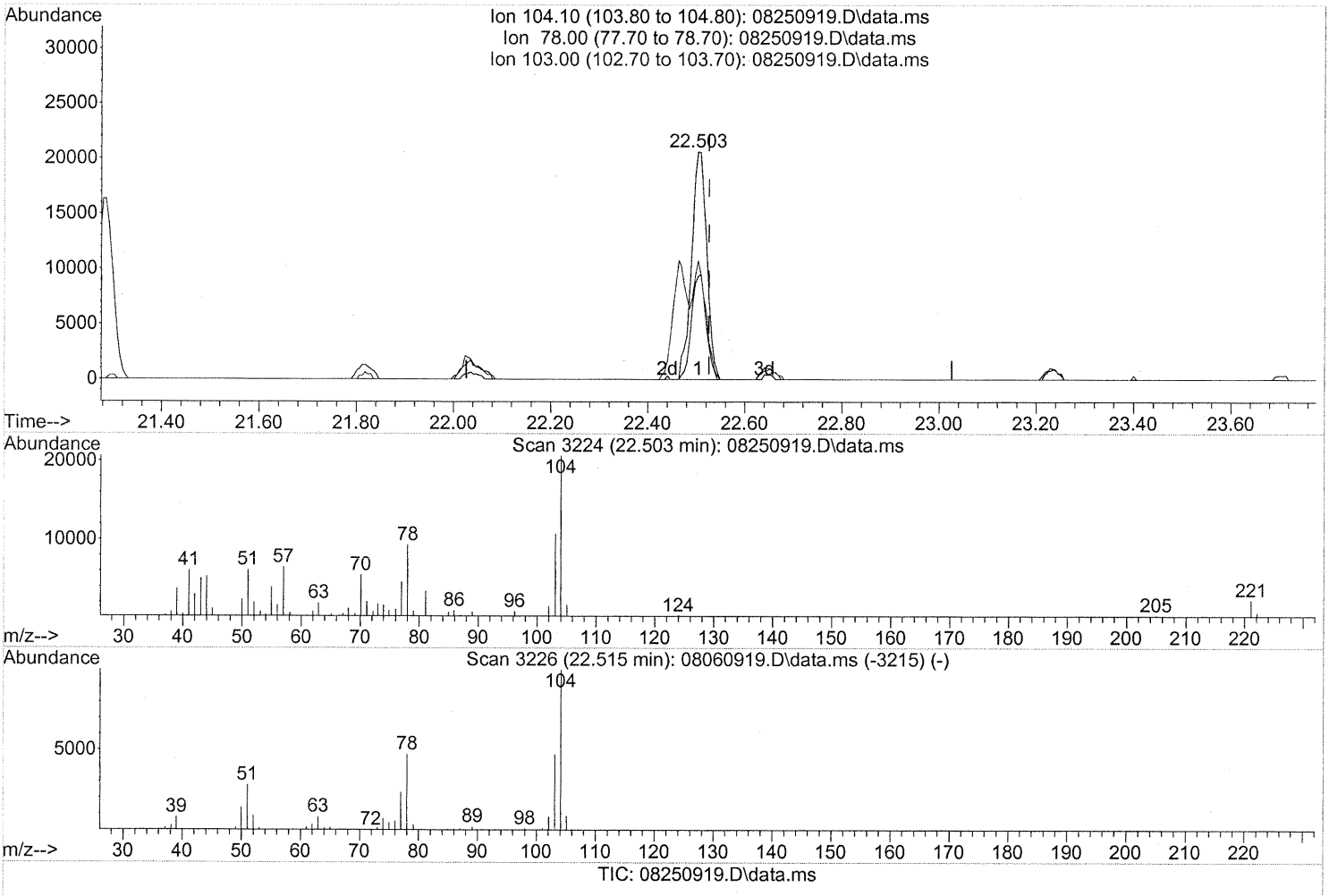
response 70949

Ion	Exp%	Act%
91.10	100	100
106.10	46.90	47.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(69) Styrene (T)

22.503min (-0.023) 1.56ng

response 44698

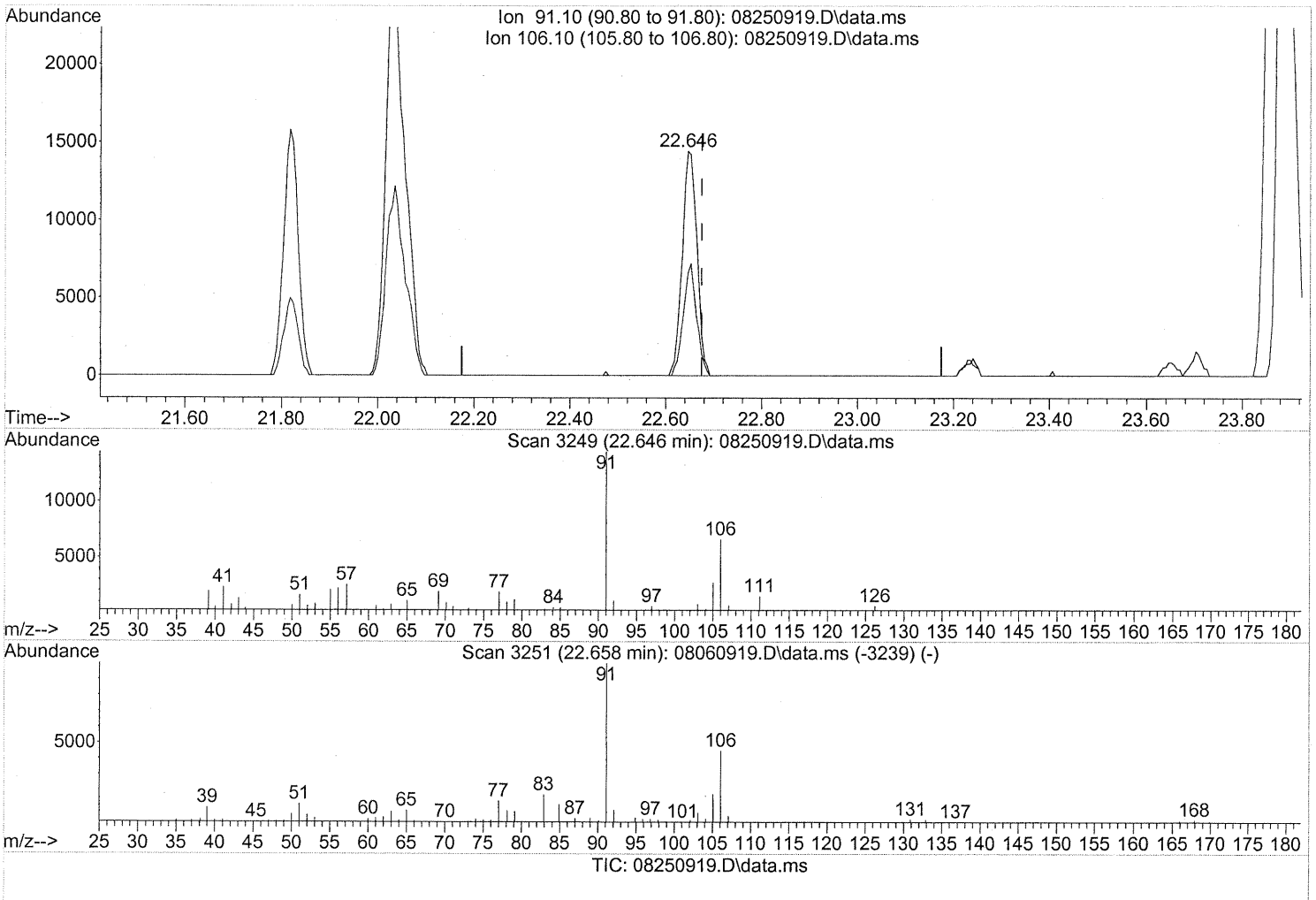
Ion	Exp%	Act%
104.10	100	100
78.00	47.10	44.04
103.00	46.20	43.92
0.00	0.00	0.00

566

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(70) o-Xylene (T)

22.646min (-0.029) 0.77ng

response 30587

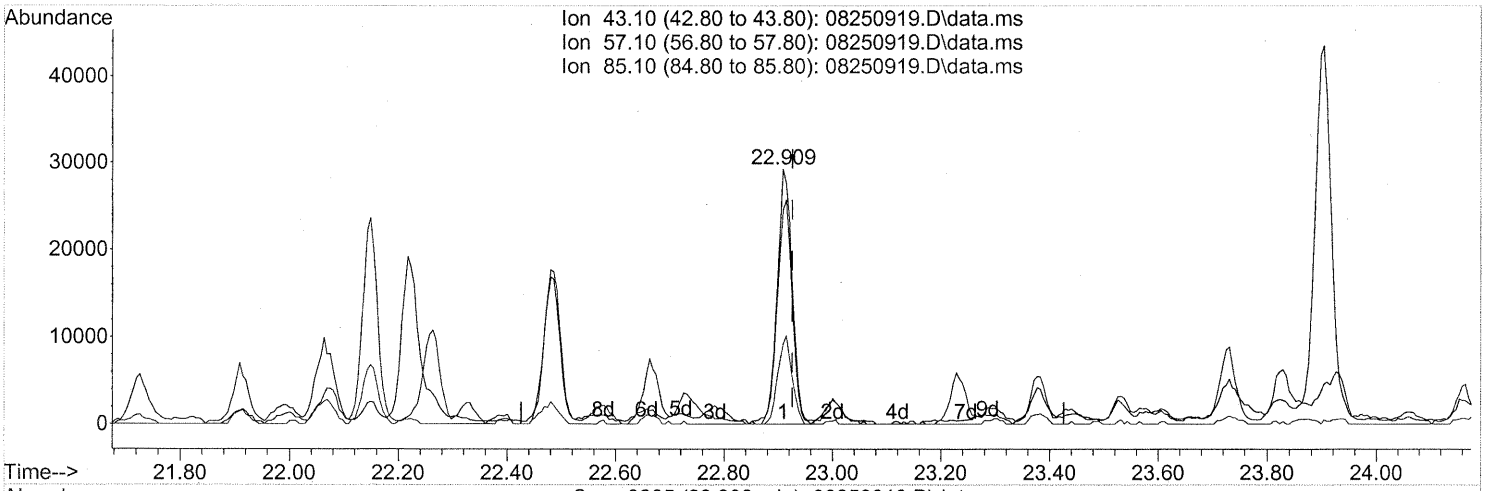
Ion	Exp%	Act%
91.10	100	100
106.10	44.10	45.15
0.00	0.00	0.00
0.00	0.00	0.00

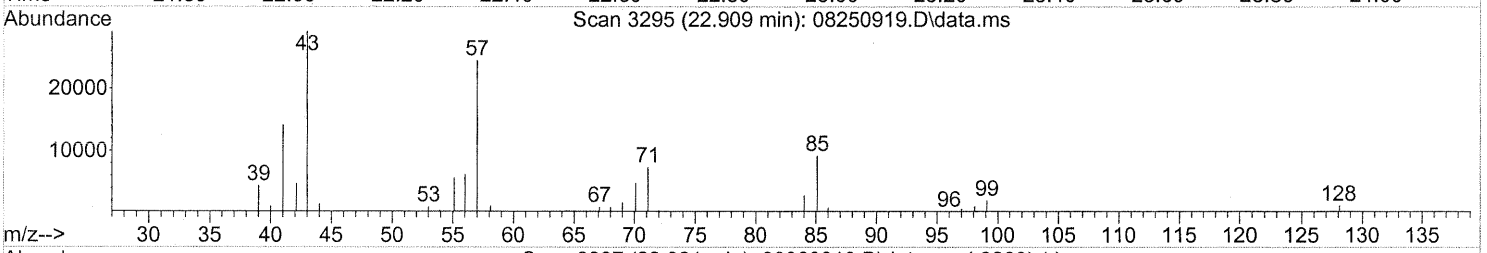
567

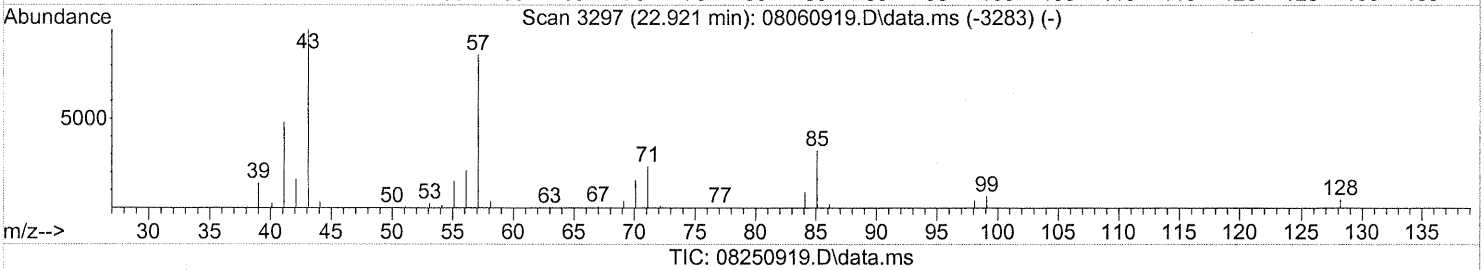
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(71) n-Nonane (T)

22.909min (-0.017) 2.16ng

response 57050

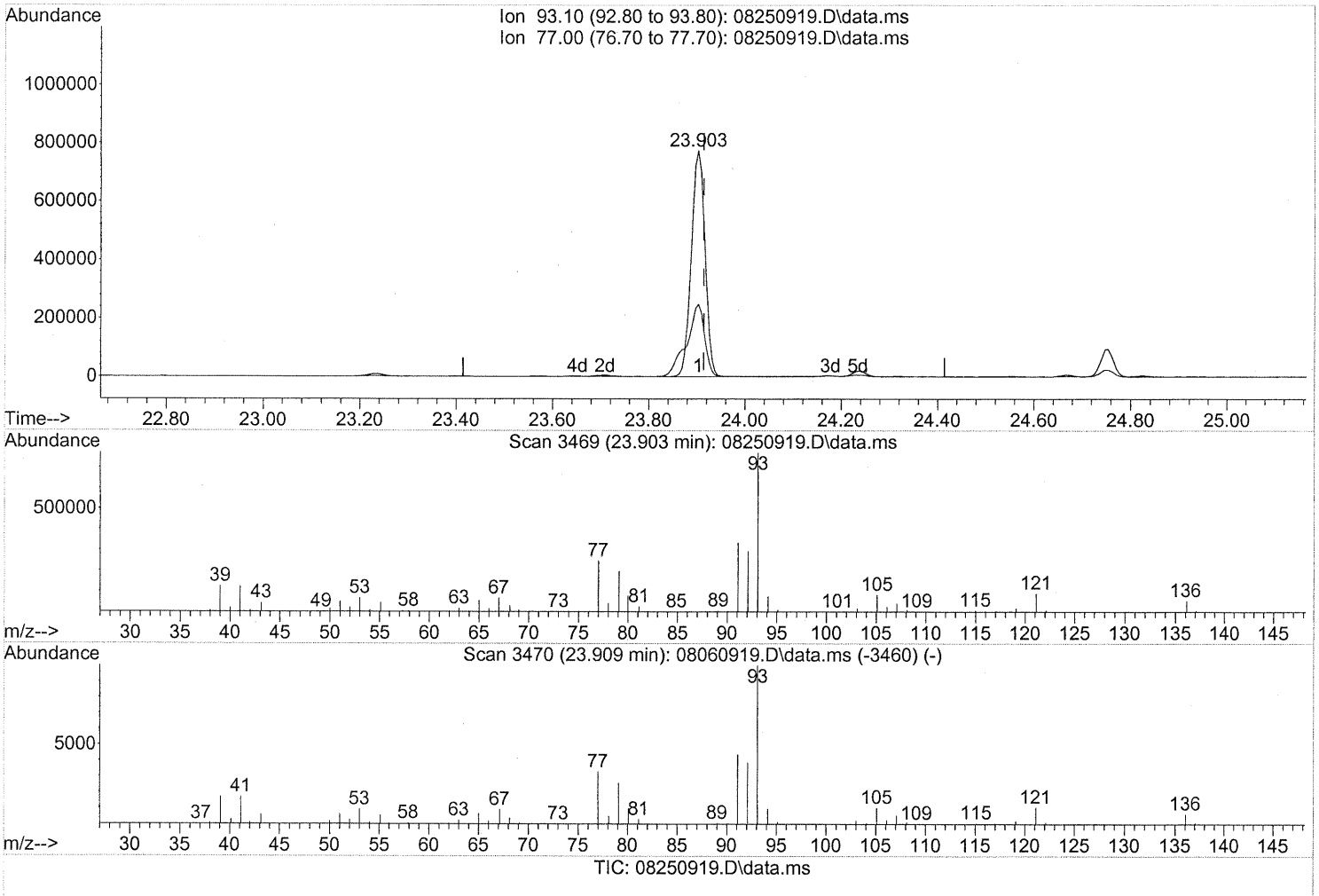
Ion	Exp%	Act%
43.10	100	100
57.10	84.90	86.19
85.10	30.40	32.27
0.00	0.00	0.00

568

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(75) alpha-Pinene (T)

23.903min (-0.011) 59.04ng

response 1521602

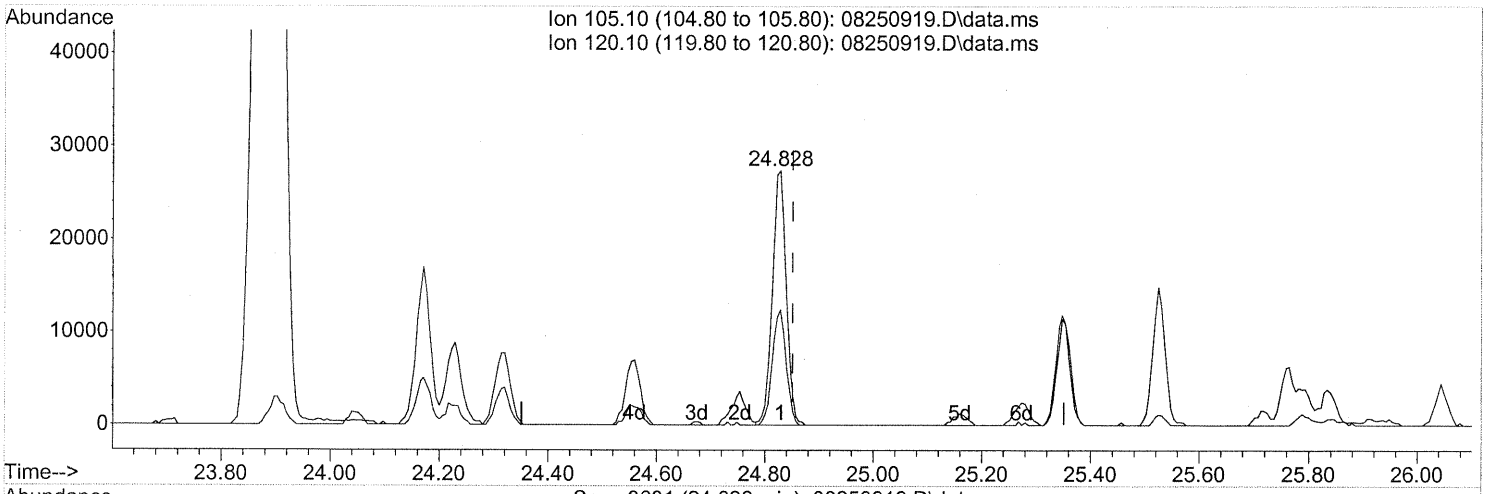
Ion	Exp%	Act%
93.10	100	100
77.00	32.40	42.16
0.00	0.00	0.00
0.00	0.00	0.00

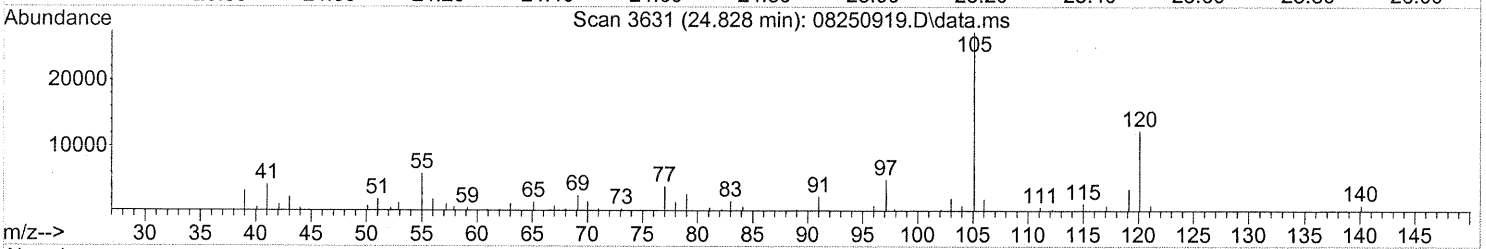
569

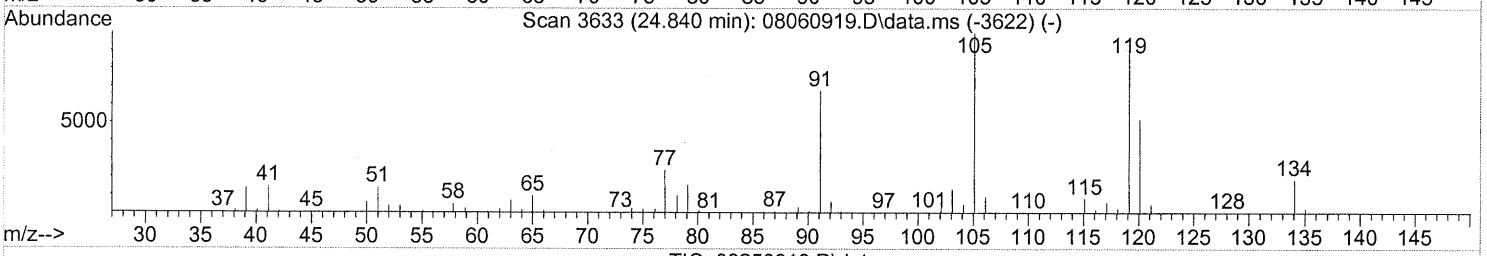
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

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

24.828min (-0.023) 1.21ng

response 48532

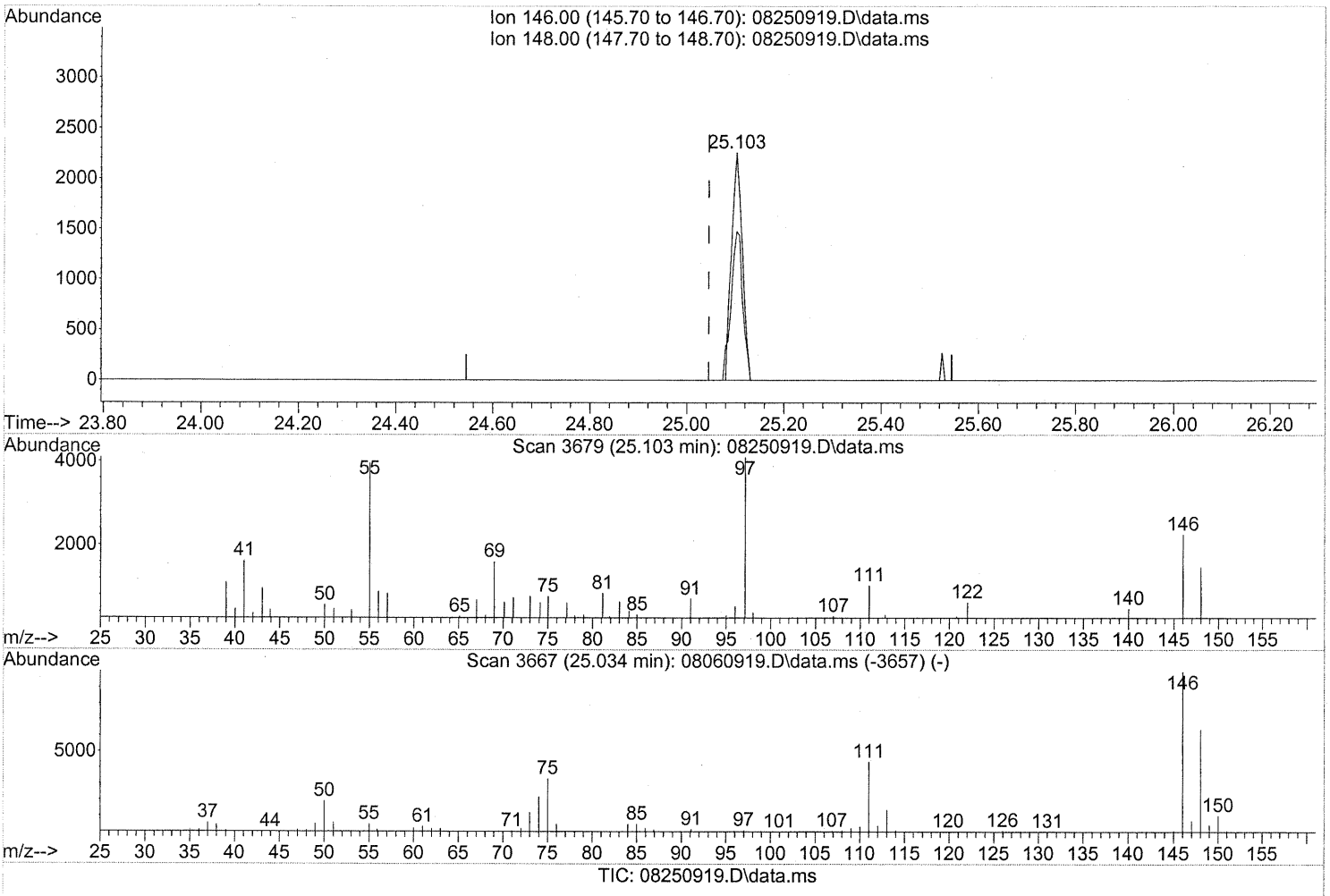
Ion	Exp%	Act%
105.10	100	100
120.10	52.60	45.01
0.00	0.00	0.00
0.00	0.00	0.00

570

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



TIC: 08250919.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.103min (+0.057) 0.17ng

response 3479

Ion	Exp%	Act%
146.00	100	100
148.00	61.60	70.31
0.00	0.00	0.00
0.00	0.00	0.00

FP
MB 8/31/09

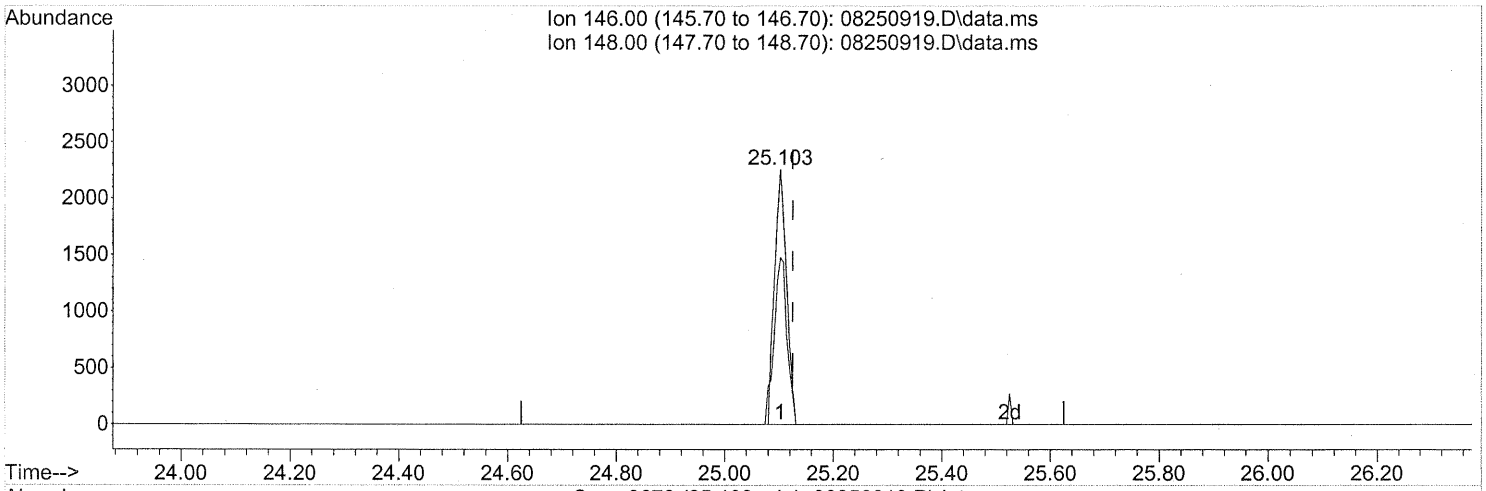
L 9/2/09

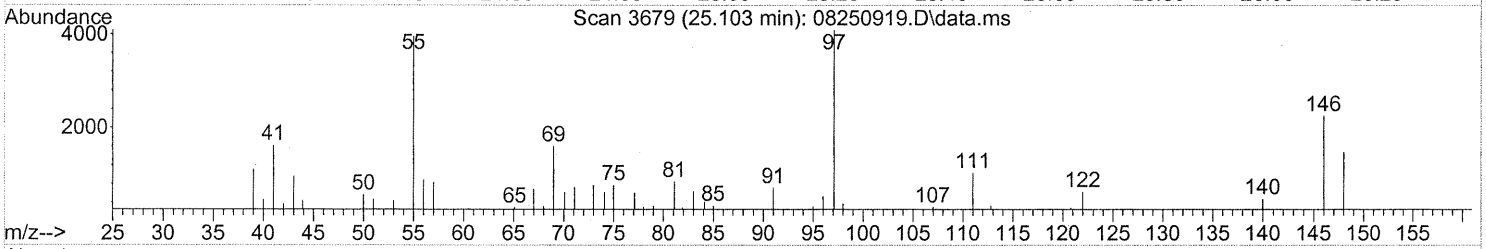
571

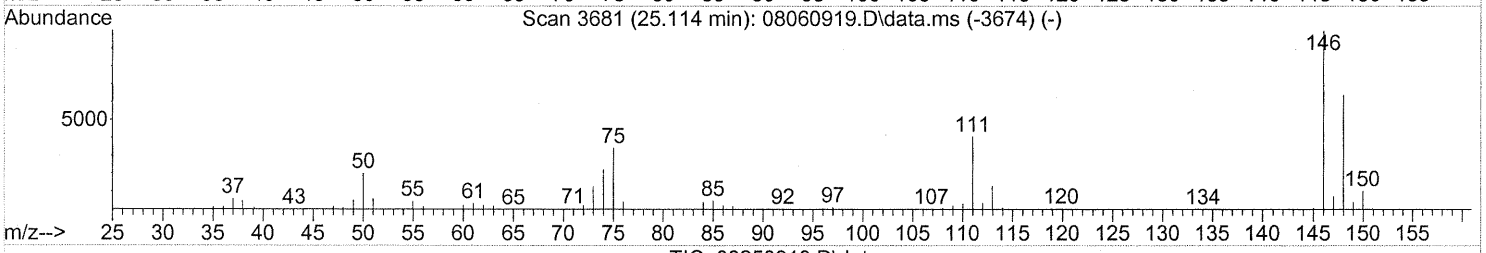
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.103min (-0.023) 0.16ng

response 3479

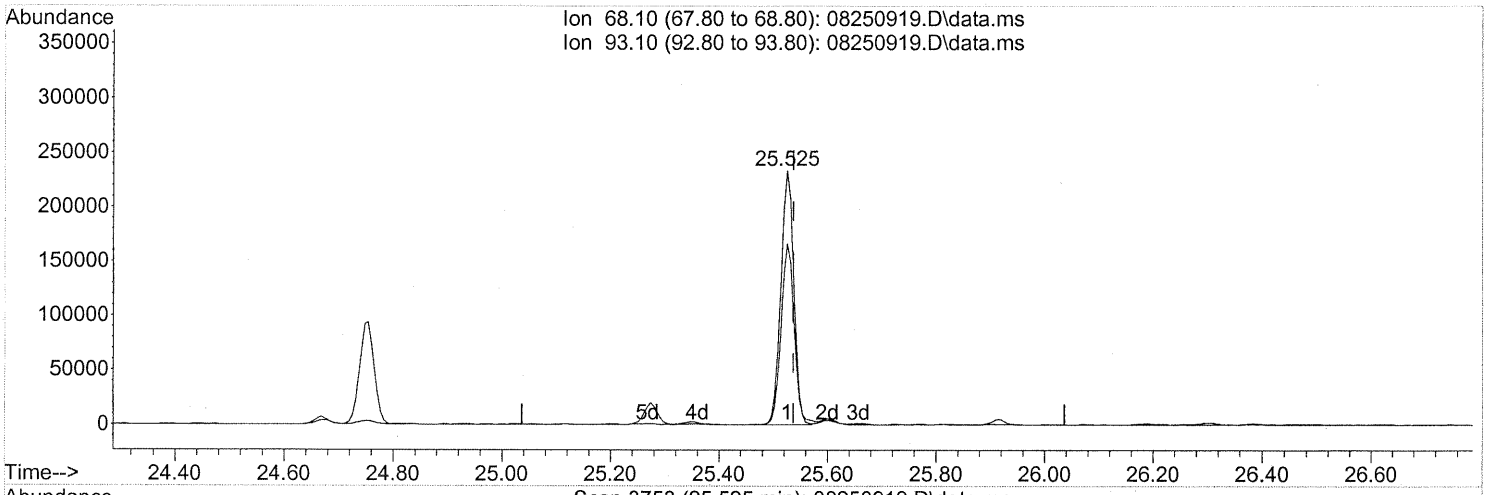
Ion	Exp%	Act%
146.00	100	100
148.00	62.20	70.31
0.00	0.00	0.00
0.00	0.00	0.00

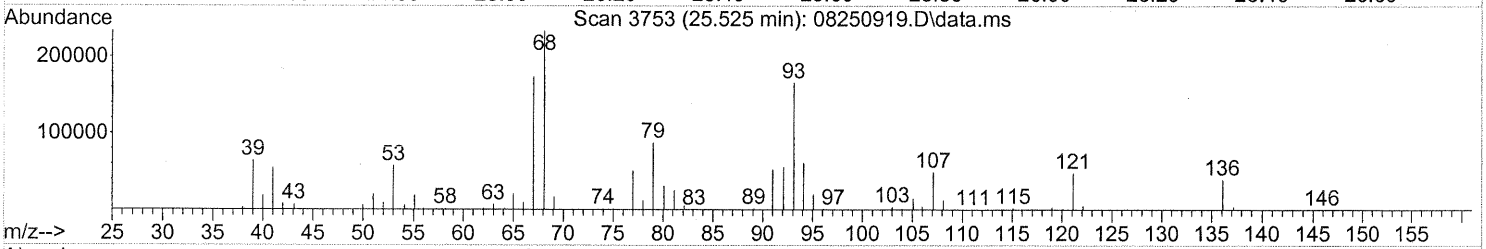
572

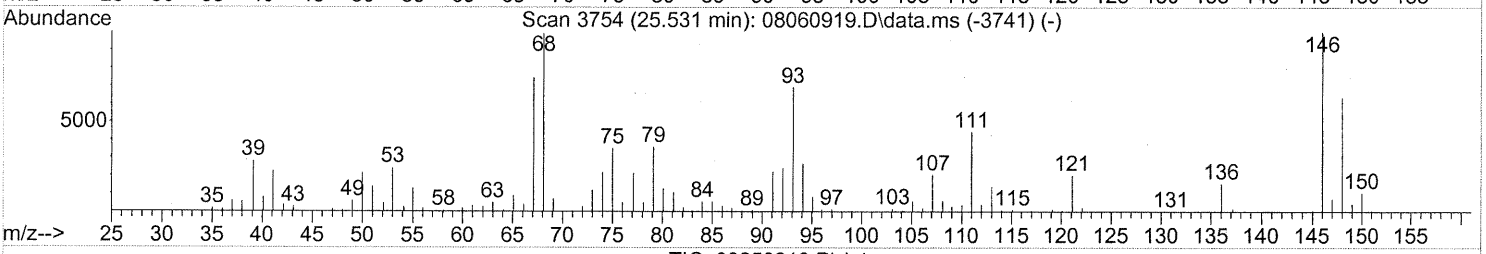
Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250919.D
Acq On : 25 Aug 2009 23:41
Operator : WA/CC
Sample : P0902876-002 dup (1000mL)
Misc : Environmental Health 102350
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 06:39:40 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration







TIC: 08250919.D\data.ms

(91) d-Limonene (T)

25.525min (-0.012) 22.60ng

response 384816

Ion	Exp%	Act%
68.10	100	100
93.10	67.90	72.68
0.00	0.00	0.00
0.00	0.00	0.00

573

INITIAL CALIBRATION STANDARDS

Response Factor Report GCMS13

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

Calibration Files
0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D
25 =08060919.D 50 =08060920.D 100 =08060921.D = =

	Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR Bromochloromethan	ISTD									
2)	T Propene	2.083	2.046	1.527	1.452	1.677	1.785	1.456	1.699	1.716	14.33
3)	T Dichlorodifluorom	3.199	3.005	2.791	2.724	2.691	2.912	2.335	2.776	2.804	9.02
4)	T Chloromethane	1.963	2.024	1.872	1.893	1.705	2.186	1.722	1.706	1.884	9.13
5)	T 1,2-Dichloro-1,1,	1.177	1.316	1.196	1.051	1.039	1.184	0.985	1.166	1.139	9.39
6)	T Vinyl Chloride	1.724	1.755	1.687	1.750	1.769	2.054	1.707	2.034	1.810	8.12
7)	T 1,3-Butadiene	1.207	1.292	1.234	1.222	1.230	1.502	1.236	1.455	1.297	8.89
8)	T Bromomethane	1.264	1.072	1.027	1.044	1.036	1.293	0.980	1.098	1.102	10.39
9)	T Chloroethane	1.075	1.160	0.919	1.000	1.033	1.173	0.945	1.112	1.052	9.00
10)	T Ethanol	1.345	1.232	1.028	1.032	0.995	1.126	0.909	1.031	1.087	12.94
11)	T Acetonitrile	3.791	3.815	3.200	2.940	2.879	3.247	2.591	3.014	3.185	13.55
12)	T Acrolein	0.735	0.915	0.767	0.793	0.825	0.940	0.758	0.890	0.828	9.42
13)	T Acetone			1.167	1.074	1.016	1.100	0.854	0.946	1.026	11.02
14)	T Trichlorofluorome	2.730	2.602	2.531	2.419	2.360	2.816	2.244	2.579	2.535	7.48
15)	T 2-Propanol (Isopr	5.316	4.773	4.266	4.079	3.198	4.177	3.091	3.356	4.032	19.47
16)	T Acrylonitrile	1.226	1.941	1.770	1.848	1.903	2.263	1.804	2.077	1.854	16.20
17)	T 1,1-Dichloroethen	1.098	1.161	1.131	1.150	1.132	1.359	1.091	1.293	1.177	8.20
18)	T 2-Methyl-2-Propan	4.615	4.098	3.719	3.708	3.575	4.214	3.280	1.423	3.579	26.97
19)	T Methylene Chlorid	1.722	1.622	1.254	1.259	1.232	1.428	1.151	1.356	1.378	14.59
20)	T 3-Chloro-1-propen	2.983	2.989	2.818	2.826	2.401	2.664	2.134	2.435	2.656	11.56
21)	T Trichlorotrifluor	0.856	0.905	0.889	0.896	0.873	1.064	0.870	1.021	0.922	8.37
22)	T Carbon Disulfide	5.485	5.227	4.603	4.594	4.557	5.329	4.218	4.851	4.858	9.16
23)	T trans-1,2-Dichlor	1.848	2.189	1.929	2.047	2.041	2.440	1.938	2.230	2.083	9.32
24)	T 1,1-Dichloroethan	2.670	2.757	2.264	2.426	2.360	2.850	2.271	2.607	2.526	8.94
25)	T Methyl tert-Butyl	4.114	4.046	3.646	3.595	3.643	4.360	3.538	4.115	3.882	8.02
26)	T Vinyl Acetate	0.230	0.243	0.237	0.239	0.177	0.222	0.165	0.156	0.209	17.35
27)	T 2-Butanone (MEK)	0.989	1.007	0.915	0.892	0.915	1.072	0.855	0.766	0.926	10.32
28)	T cis-1,2-Dichloroe	1.913	1.980	1.790	1.854	1.890	2.244	1.789	2.049	1.939	7.84
29)	T Diisopropyl Ether	1.013	1.376	1.212	1.246	1.214	1.425	1.129	1.303	1.240	10.65

(#) Out of Range ### Number of calibration levels exceeded format ###

575

8/16/09

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

Calibration Files
0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D
25 =08060919.D 50 =08060920.D 100 =08060921.D = =

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
30)	T	Ethyl Acetate	0.395	0.513	0.492	0.479	0.491	0.561	0.439	0.491	0.483	10.18
31)	T	n-Hexane	2.766	2.862	2.319	2.390	2.266	2.624	2.095	2.429	2.469	10.60
32)	T	Chloroform	2.301	2.230	2.080	2.148	2.129	2.436	1.910	2.154	2.174	7.16
33)	S	1,2-Dichloroethan	2.180	2.200	2.208	2.191	2.172	2.156	2.144	2.133	2.173	1.24
34)	T	Tetrahydrofuran (		1.393	1.027	0.901	0.860	1.025	0.804	0.903	0.988	19.90
35)	T	Ethyl tert-Butyl	1.747	1.639	1.589	1.578	1.501	1.752	1.405	1.621	1.604	7.26
36)	T	1,2-Dichloroethan	2.106	2.083	1.937	1.868	1.850	2.232	1.788	2.028	1.986	7.62
37)	IR	1,4-Difluorobenze	----------	----------	----------	ISTD	----------	----------	----------	----------		
38)	T	1,1,1-Trichloroet	0.493	0.438	0.396	0.402	0.392	0.469	0.380	0.422	0.424	9.47
39)	T	Isopropyl Acetate	0.199	0.203	0.176	0.176	0.176	0.207	0.163	0.183	0.185	8.43
40)	T	1-Butanol	0.444	0.385	0.301	0.293	0.285	0.330	0.265	0.291	0.324	18.74
41)	T	Benzene	1.390	1.294	1.057	1.020	0.989	1.140	0.898	1.005	1.099	15.15
42)	T	Carbon Tetrachlor	0.346	0.351	0.327	0.329	0.336	0.408	0.329	0.377	0.350	8.13
43)	T	Cyclohexane	0.465	0.420	0.379	0.382	0.383	0.440	0.351	0.401	0.403	9.21
44)	T	tert-Amyl Methyl	0.924	0.905	0.814	0.799	0.775	0.901	0.707	0.778	0.825	9.32
45)	T	1,2-Dichloropropa	0.283	0.286	0.260	0.268	0.261	0.313	0.251	0.286	0.276	7.20
46)	T	Bromodichlorometh	0.375	0.388	0.340	0.344	0.339	0.408	0.331	0.371	0.362	7.63
47)	T	Trichloroethene	0.255	0.248	0.231	0.233	0.233	0.283	0.230	0.270	0.248	8.13
48)	T	1,4-Dioxane	0.211	0.210	0.217	0.202	0.205	0.235	0.190	0.211	0.210	6.08
49)	T	2,2,4-Trimethylpe	1.459	1.421	1.232	1.243	1.233	1.428	1.112	1.229	1.295	9.62
50)	T	Methyl Methacryla	0.084	0.106	0.097	0.096	0.098	0.118	0.098	0.112	0.101	10.64
51)	T	n-Heptane	0.330	0.309	0.283	0.282	0.275	0.328	0.259	0.294	0.295	8.56
52)	T	cis-1,3-Dichlorop	0.492	0.469	0.422	0.433	0.431	0.517	0.421	0.476	0.458	7.87
53)	T	4-Methyl-2-pentan	0.262	0.275	0.257	0.255	0.252	0.302	0.239	0.271	0.264	7.19
54)	T	trans-1,3-Dichlor	0.492	0.436	0.391	0.413	0.408	0.489	0.399	0.452	0.435	9.06
55)	T	1,1,2-Trichloroet	0.248	0.251	0.226	0.234	0.227	0.270	0.220	0.254	0.241	7.12
56)	IR	Chlorobenzene-d5	----------	----------	----------	ISTD	----------	----------	----------	----------		
57)	S	Toluene-d8 (SS2)	2.196	2.196	2.181	2.184	2.176	2.177	2.188	2.177	2.184	0.37

576

(#) Out of Range ### Number of calibration levels exceeded format ###
R13080609.M Thu Aug 06 17:21:25 2009

8/16/09

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

Calibration Files
0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D
25 =08060919.D 50 =08060920.D 100 =08060921.D = =

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
58)	T	Toluene	2.598	2.282	2.011	2.028	1.956	2.323	1.860	2.115	2.147	11.21
59)	T	2-Hexanone	1.631	1.475	1.347	1.365	1.367	1.586	1.255	1.396	1.428	8.91
60)	T	Dibromochlorometh	0.488	0.496	0.473	0.476	0.482	0.597	0.487	0.566	0.508	9.17
61)	T	1,2-Dibromoethane	0.567	0.548	0.480	0.512	0.510	0.617	0.496	0.577	0.539	8.68
62)	T	n-Butyl Acetate	1.970	1.781	1.544	1.562	1.554	1.839	1.464	1.748	1.683	10.51
63)	T	n-Octane	0.560	0.571	0.505	0.499	0.491	0.570	0.450	0.506	0.519	8.42
64)	T	Tetrachloroethene	0.482	0.483	0.476	0.481	0.458	0.568	0.469	0.556	0.497	8.29
65)	T	Chlorobenzene	1.590	1.363	1.215	1.270	1.217	1.454	1.169	1.348	1.328	10.63
66)	T	Ethylbenzene	2.854	2.575	2.315	2.330	2.298	2.695	2.145	2.421	2.454	9.60
67)	T	m- & p-Xylenes	2.378	2.159	1.844	1.903	1.829	2.151	1.706	1.913	1.985	11.21
68)	T	Bromoform	0.336	0.384	0.393	0.381	0.411	0.521	0.432	0.516	0.422	15.56
69)	T	Styrene	1.591	1.461	1.301	1.326	1.336	1.629	1.314	1.522	1.435	9.31
70)	T	o-Xylene	2.315	2.130	1.894	1.892	1.861	2.164	1.722	1.945	1.990	9.78
71)	T	n-Nonane	1.652	1.463	1.265	1.289	1.228	1.399	1.084	1.200	1.323	13.39
72)	T	1,1,2,2-Tetrachlo	0.950	0.931	0.839	0.860	0.839	0.977	0.776	0.894	0.883	7.62
73)	S	Bromofluorobenzen	0.571	0.566	0.563	0.563	0.577	0.579	0.594	0.595	0.576	2.23
74)	T	Cumene	3.046	2.701	2.336	2.364	2.307	2.723	2.181	2.456	2.514	11.39
75)	T	alpha-Pinene	1.405	1.389	1.184	1.219	1.220	1.431	1.152	1.311	1.289	8.49
76)	T	n-Propylbenzene	3.730	3.286	2.971	3.088	2.984	3.473	2.742	3.012	3.161	10.05
77)	T	3-Ethyltoluene	2.856	2.585	2.264	2.204	2.239	2.593	2.105	2.377	2.403	10.55
78)	T	4-Ethyltoluene	2.821	2.428	2.122	2.235	2.150	2.576	2.035	2.260	2.328	11.34
79)	T	1,3,5-Trimethylbe	2.371	1.981	1.833	1.859	1.835	2.153	1.724	1.953	1.964	10.62
80)	T	alpha-Methylstyre	1.173	1.018	0.919	0.971	1.006	1.205	0.983	1.135	1.051	9.98
81)	T	2-Ethyltoluene	2.866	2.524	2.246	2.299	2.267	2.666	2.132	2.386	2.423	10.14
82)	T	1,2,4-Trimethylbe	2.204	2.160	1.885	1.969	1.896	2.217	1.758	1.932	2.003	8.49
83)	T	n-Decane	1.505	1.419	1.273	1.281	1.242	1.408	1.089	1.199	1.302	10.36
84)	T	Benzyl Chloride	1.924	1.912	1.669	1.773	1.834	2.197	1.749	1.959	1.877	8.66
85)	T	1,3-Dichlorobenze	1.163	0.993	0.903	0.959	0.940	1.131	0.925	1.094	1.013	9.96
86)	T	1,4-Dichlorobenze	1.251	1.103	0.995	0.996	0.980	1.192	0.979	1.149	1.081	9.99
87)	T	sec-Butylbenzene	3.139	2.866	2.554	2.575	2.546	2.985	2.364	2.613	2.705	9.71

(#) Out of Range ### Number of calibration levels exceeded format ###

577

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

Calibration Files
0.1 =08060914.D 0.2 =08060915.D 0.5 =08060916.D 1.0 =08060917.D 5.0 =08060918.D
25 =08060919.D 50 =08060920.D 100 =08060921.D = =

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
88)	T	4-Isopropyltoluen	2.658	2.459	2.338	2.329	2.319	2.712	2.154	2.330	2.412	7.80
89)	T	1,2,3-Trimethylbe	2.247	2.205	1.983	1.961	1.936	2.249	1.789	1.951	2.040	8.39
90)	T	1,2-Dichlorobenze	1.053	0.935	0.895	0.923	0.908	1.091	0.885	0.997	0.961	8.06
91)	T	d-Limonene	0.947	0.884	0.819	0.808	0.816	0.953	0.756	0.831	0.852	8.22
92)	T	1,2-Dibromo-3-Chl	0.255	0.322	0.281	0.316	0.334	0.407	0.333	0.395	0.330	15.52
93)	T	n-Undecane	1.637	1.515	1.310	1.387	1.321	1.489	1.157	1.266	1.385	11.15
94)	T	1,2,4-Trichlorobe	0.633	0.617	0.569	0.628	0.635	0.782	0.647	0.775	0.661	11.53
95)	T	Naphthalene	3.212	2.782	2.370	2.515	2.600	3.038	2.466	2.774	2.720	10.71
96)	T	n-Dodecane	2.008	1.787	1.580	1.604	1.487	1.664	1.312	1.433	1.609	13.47
97)	T	Hexachlorobutadie	0.508	0.450	0.382	0.370	0.364	0.452	0.378	0.458	0.420	12.69
98)	T	Cyclohexanone	1.058	0.930	0.839	0.840	0.827	0.975	0.777	0.870	0.889	10.33
99)	T	tert-Butylbenzene	2.338	1.994	1.824	1.861	1.804	2.116	1.695	1.873	1.938	10.59
100)	T	n-Butylbenzene	2.495	2.246	2.121	2.16	2.160	2.504	1.975	2.174	2.231	8.20

(#) Out of Range ### Number of calibration levels exceeded format ###

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240912
20ng/L Std. ID: S20-07310903
200ng/L Std. ID: S20-07310901
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Propene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Dichlorodifluoromethane	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
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

8/11/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240912
20ng/L Std. ID:
200ng/L Std. ID:
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.050	0.025	0.05	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Bromoform	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
Styrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
o-Xylene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Nonane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1,2,2-Tetrachloroethane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Cumene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
alpha-Pinene	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
n-Propylbenzene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
3-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
4-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,3,5-Trimethylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
alpha-Methylstyrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
2-Ethyltoluene	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
1,2,4-Trimethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Decane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Benzyl Chloride	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
1,3-Dichlorobenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,4-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
sec-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
p-Isopropyltoluene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
1,2,3-Trimethylbenzene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
1,2-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
d-Limonene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
chloropropane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
n-Undecane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48		0.112	0.224	0.560	1.12	5.60	28.0	56.0	112
Naphthalene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Dodecane	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
Hexachloro-1,3-butadiene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Methacrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Cyclohexanone	0.98	196	19.6	3.92		0.098	0.196	0.490	0.980	4.90	24.5	49.0	98.0
tert-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Butylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109

*Enter Information in the Solid Shaded Areas ONLY.

8/11/09

Calibration Status Report GCMS13

Method Path : J:\MS13\METHODS\
Method File : R13080609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Thu Aug 06 17:14:07 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS13\DATA\2009_08\06\08060914.D
2	0.2	0	25	J:\MS13\DATA\2009_08\06\08060915.D
3	0.5	1	25	J:\MS13\DATA\2009_08\06\08060916.D
4	1.0	1	25	J:\MS13\DATA\2009_08\06\08060917.D
5	5.0	5	25	J:\MS13\DATA\2009_08\06\08060918.D
6	25	27	25	J:\MS13\DATA\2009_08\06\08060919.D
7	50	54	25	J:\MS13\DATA\2009_08\06\08060920.D
8	100	107	25	J:\MS13\DATA\2009_08\06\08060921.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Aug 06 17:09 2009	Aug 06 13:44 2009	06 Aug 2009 11:55
2	0.2	Aug 06 17:10 2009	Aug 06 13:51 2009	06 Aug 2009 12:36
3	0.5	Aug 06 17:10 2009	Aug 06 13:52 2009	06 Aug 2009 13:17
4	1.0	Aug 06 17:10 2009	Aug 06 14:32 2009	06 Aug 2009 13:57
5	5.0	Aug 06 17:10 2009	Aug 06 15:06 2009	06 Aug 2009 14:38
6	25	Aug 06 17:11 2009	Aug 06 16:11 2009	06 Aug 2009 15:18
7	50	Aug 06 17:13 2009	Aug 06 17:00 2009	06 Aug 2009 15:59
8	100	Aug 06 17:14 2009	Aug 06 17:08 2009	06 Aug 2009 16:39

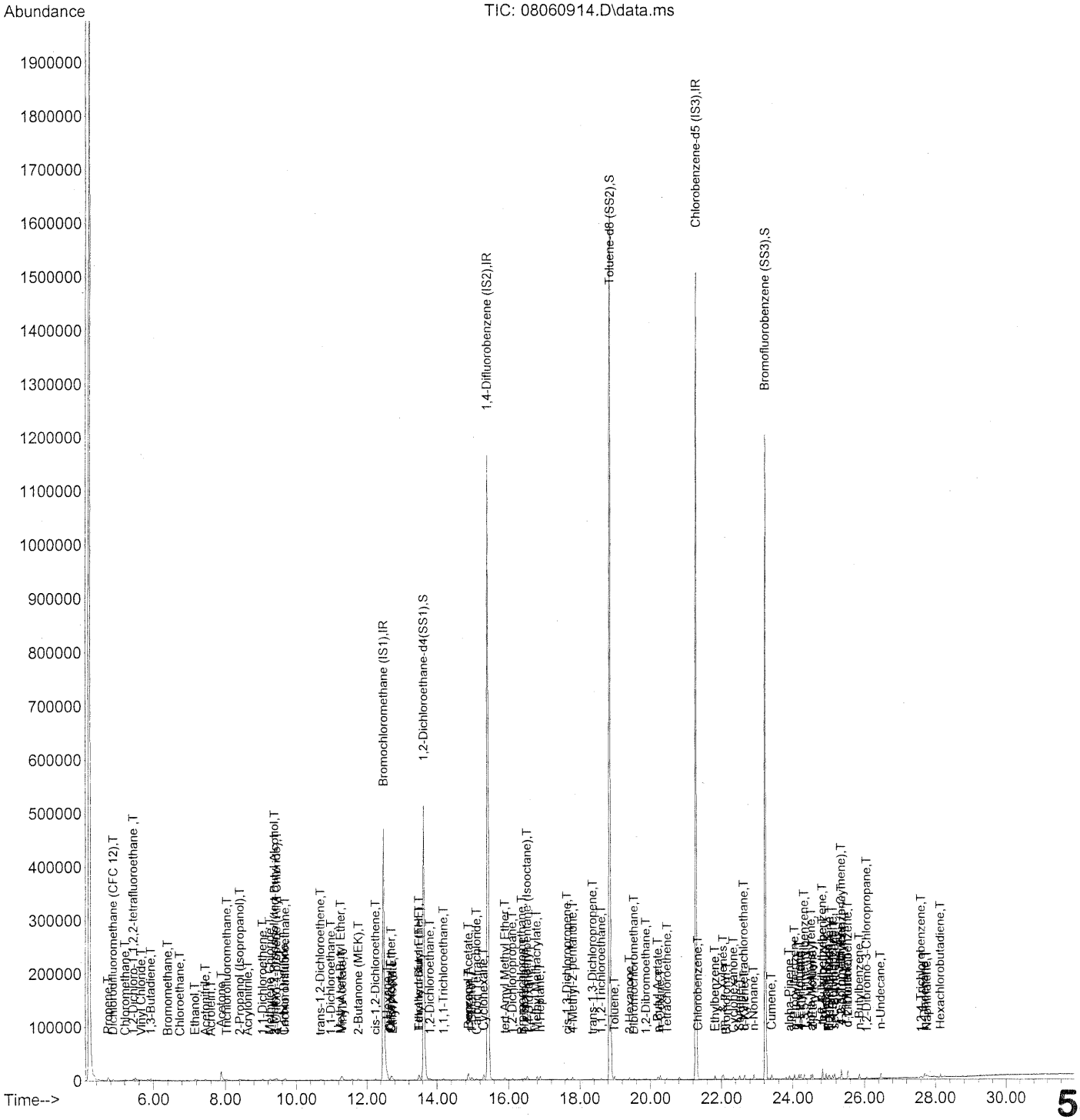
R13080609.M Thu Aug 06 17:33:51 2009

USA 8/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	255549	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.42	114	1302832	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	644252	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	557049	23.882	ng		0.00
Spiked Amount 25.000			Recovery =	95.52%			
57) Toluene-d8 (SS2)	18.85	98	1414545	25.331	ng		0.00
Spiked Amount 25.000			Recovery =	101.32%			
73) Bromofluorobenzene (SS3)	23.24	174	367818	25.794	ng		0.00
Spiked Amount 25.000			Recovery =	103.16%			
Target Compounds							Qvalue
2) Propene	4.73	42	2278m	0.115	ng		
3) Dichlorodifluoromethan...	4.88	85	3433	0.104	ng	#	94
4) Chloromethane	5.22	50	2007	0.097	ng		65
5) 1,2-Dichloro-1,1,2,2-t...	5.44	135	1275	0.099	ng	#	57
6) Vinyl Chloride	5.66	62	1780	0.088	ng		74
7) 1,3-Butadiene	5.93	54	1480	0.102	ng	#	57
8) Bromomethane	6.41	94	1318	0.141	ng		87
9) Chloroethane	6.74	64	1110	0.099	ng	#	41
10) Ethanol	7.16	45	7147	0.588	ng		69
11) Acetonitrile	7.45	41	4069	0.095	ng		91
12) Acrolein	7.61	56	811	0.069	ng	#	31
13) Acetone	7.89	58	11564	0.833	ng		96
14) Trichlorofluoromethane	8.05	101	2930	0.103	ng		93
15) 2-Propanol (Isopropanol)	8.41	45	10270	0.224	ng		74
16) Acrylonitrile	8.64	53	1328m	0.066	ng		
17) 1,1-Dichloroethene	9.05	96	1235	0.096	ng		87
18) 2-Methyl-2-Propanol (t...	9.38	59	9529	0.242	ng	#	74
19) Methylene Chloride	9.25	84	1883	0.126	ng		97
20) 3-Chloro-1-propene (Al...	9.45	41	3293m	0.136	ng		
21) Trichlorotrifluoroethane	9.69	151	962	0.092	ng	#	76
22) Carbon Disulfide	9.66	76	5999	0.117	ng	#	74
23) trans-1,2-Dichloroethene	10.68	61	2002	0.090	ng		97
24) 1,1-Dichloroethane	10.98	63	2893	0.104	ng		89
25) Methyl tert-Butyl Ether	11.26	73	4584	0.102	ng		94
26) Vinyl Acetate	11.31	86	1182	0.392	ng	#	1
27) 2-Butanone (MEK)	11.76	72	1112	0.111	ng	#	28
28) cis-1,2-Dichloroethene	12.25	61	2132	0.099	ng		90
29) Diisopropyl Ether	12.70	87	1108	0.091	ng	#	1
30) Ethyl Acetate	12.74	61	860	0.165	ng	#	73
31) n-Hexane	12.59	57	3082	0.112	ng		70

8/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	2517	0.100	ng		93
34) Tetrahydrofuran (THF)	13.49	72	2071	0.175	ng	#	78
35) Ethyl tert-Butyl Ether	13.50	87	1839	0.099	ng	#	87
36) 1,2-Dichloroethane	13.80	62	2282	0.103	ng	#	62
38) 1,1,1-Trichloroethane	14.19	97	2700	0.112	ng		89
39) Isopropyl Acetate	14.88	61	2167	0.217	ng	#	92
40) 1-Butanol	14.97	56	4795	0.282	ng	#	79
41) Benzene	14.88	78	7680	0.120	ng		96
42) Carbon Tetrachloride	15.11	117	1945	0.096	ng		94
43) Cyclohexane	15.30	84	5207	0.231	ng		98
44) tert-Amyl Methyl Ether	15.91	73	5009	0.107	ng		91
45) 1,2-Dichloropropane	16.11	63	1549	0.100	ng		99
46) Bromodichloromethane	16.37	83	2109	0.107	ng		98
47) Trichloroethene	16.45	130	1409	0.106	ng		98
48) 1,4-Dioxane	16.57	88	1174	0.103	ng	#	56
49) 2,2,4-Trimethylpentane...	16.52	57	7907	0.112	ng		98
50) Methyl Methacrylate	16.79	100	927	0.171	ng	#	35
51) n-Heptane	16.89	71	1821	0.109	ng	#	88
52) cis-1,3-Dichloropropene	17.66	75	2536	0.105	ng		86
53) 4-Methyl-2-pentanone	17.81	58	1504	0.104	ng		85
54) trans-1,3-Dichloropropene	18.36	75	2818	0.128	ng		86
55) 1,1,2-Trichloroethane	18.61	97	1358	0.101	ng		92
58) Toluene	18.98	91	7232	0.125	ng		97
59) 2-Hexanone	19.41	43	4623	0.119	ng		91
60) Dibromochloromethane	19.53	129	1445	0.107	ng		97
61) 1,2-Dibromoethane	19.87	107	1548	0.111	ng		98
62) n-Butyl Acetate	20.21	43	5583	0.127	ng		97
63) n-Octane	20.28	57	1545	0.106	ng		95
64) Tetrachloroethene	20.47	166	1267	0.096	ng		98
65) Chlorobenzene	21.35	112	4424	0.127	ng		91
66) Ethylbenzene	21.82	91	7796	0.119	ng		99
67) m- & p-Xylenes	22.06	91	12746	0.242	ng	#	30
68) Bromoform	22.15	173	892	0.081	ng		95
69) Styrene	22.51	104	4388	0.119	ng		97
70) o-Xylene	22.66	91	6325	0.119	ng		98
71) n-Nonane	22.91	43	4513	0.122	ng		93
72) 1,1,2,2-Tetrachloroethane	22.64	83	2620	0.112	ng		100
74) Cumene	23.41	105	8086	0.125	ng		97
75) alpha-Pinene	23.91	93	3657	0.107	ng		94
76) n-Propylbenzene	24.05	91	9900	0.119	ng		97
77) 3-Ethyltoluene	24.18	105	8022	0.131	ng		93
78) 4-Ethyltoluene	24.23	105	7924	0.128	ng		98
79) 1,3,5-Trimethylbenzene	24.33	105	6660	0.126	ng		97

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:21 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

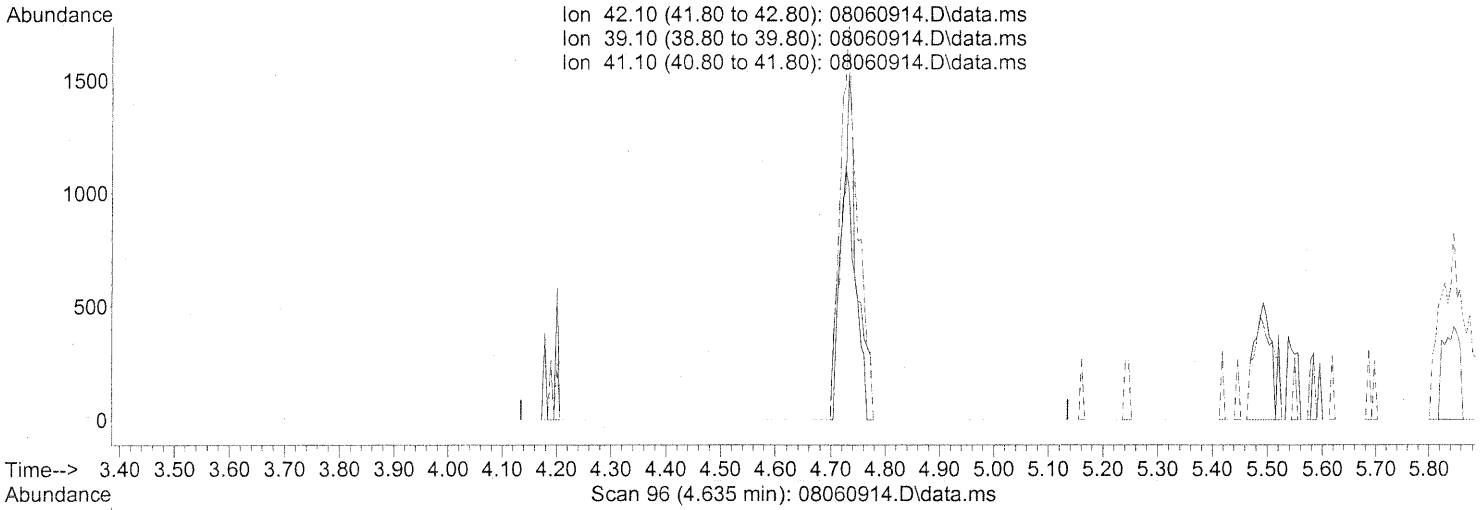
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.52	118	3235	0.121	ng		93
81) 2-Ethyltoluene	24.56	105	7755	0.121	ng		95
82) 1,2,4-Trimethylbenzene	24.83	105	6020	0.114	ng		98
83) n-Decane	24.93	57	4190	0.120	ng		96
84) Benzyl Chloride	25.01	91	5455	0.120	ng		96
85) 1,3-Dichlorobenzene	25.03	146	3266	0.129	ng		95
86) 1,4-Dichlorobenzene	25.11	146	3418	0.127	ng		96
87) sec-Butylbenzene	25.17	105	8575	0.121	ng		94
88) 4-Isopropyltoluene (p-...	25.35	119	7056	0.112	ng		94
89) 1,2,3-Trimethylbenzene	25.36	105	6195	0.115	ng		95
90) 1,2-Dichlorobenzene	25.53	146	2877	0.118	ng		94
91) d-Limonene	25.53	68	2659	0.116	ng		97
92) 1,2-Dibromo-3-Chloropr...	26.07	157	724	0.093	ng	#	73
93) n-Undecane	26.46	57	4598	0.129	ng		92
94) 1,2,4-Trichlorobenzene	27.61	180	1826	0.118	ng	#	75
95) Naphthalene	27.77	128	8775	0.145	ng		72
96) n-Dodecane	27.71	57	5122m	0.135	ng		
97) Hexachlorobutadiene	28.15	225	1439	0.145	ng		94
98) Cyclohexanone	22.35	55	2671	0.101	ng		91
99) tert-Butylbenzene	24.83	119	6387	0.126	ng		92
100) n-Butylbenzene	25.86	91	7008	0.122	ng		96

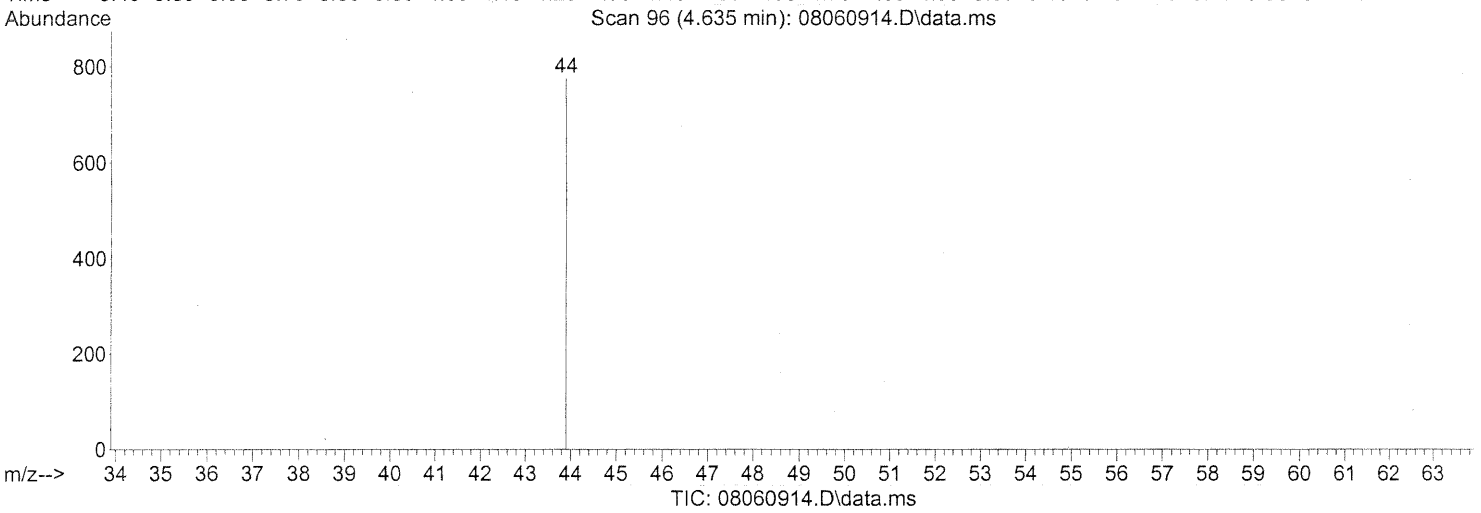
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





(2) Propene (T)

4.635min (-4.635) 0.00ng

response 0

HP

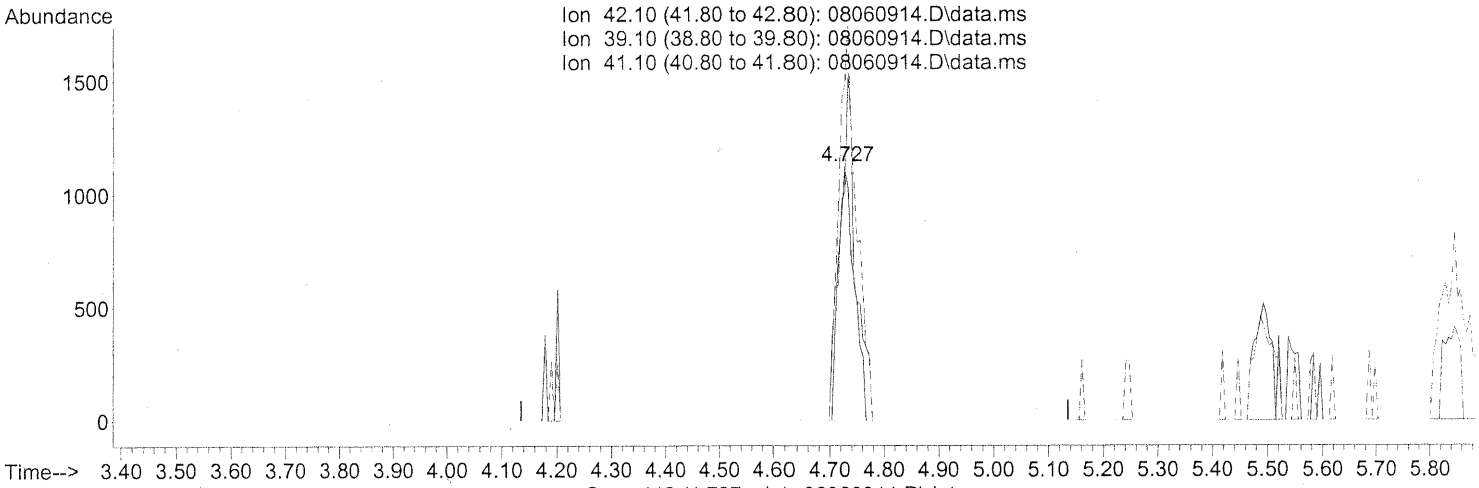
Ion	Exp%	Act%
42.10	100	0.00
39.10	111.90	0.00#
41.10	150.20	0.00#
0.00	0.00	0.00

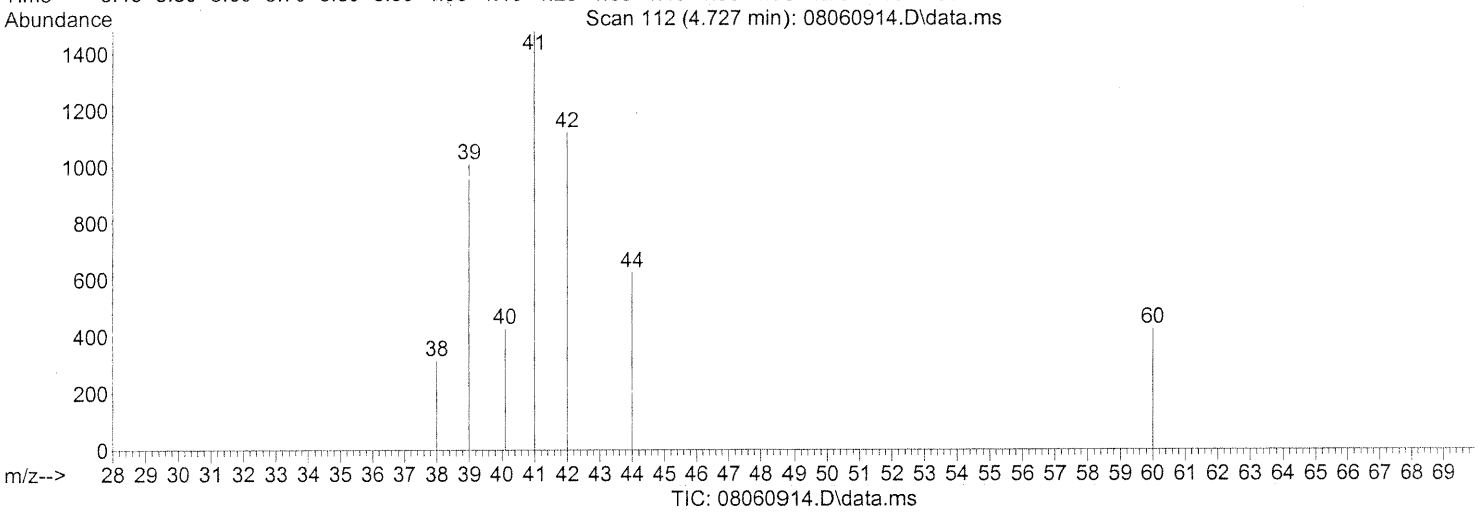
586

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





TIC: 08060914.D\data.ms

(2) Propene (T)

4.727min (+0.092) 0.12ng m

response 2278

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

HP-7 1C

8/6/09

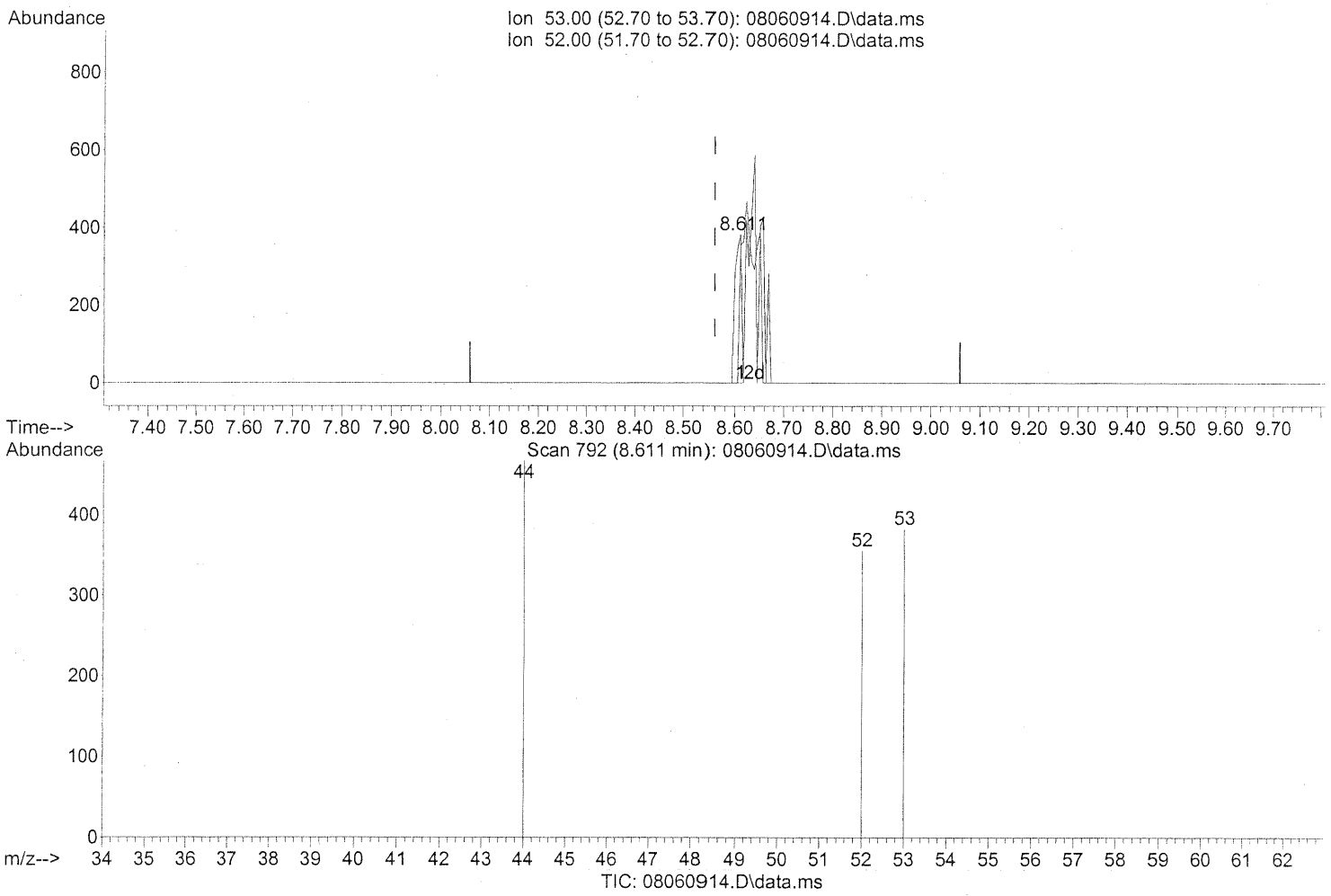
8/11/09

587

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.611min (+0.052) 0.02ng

response 347

MP

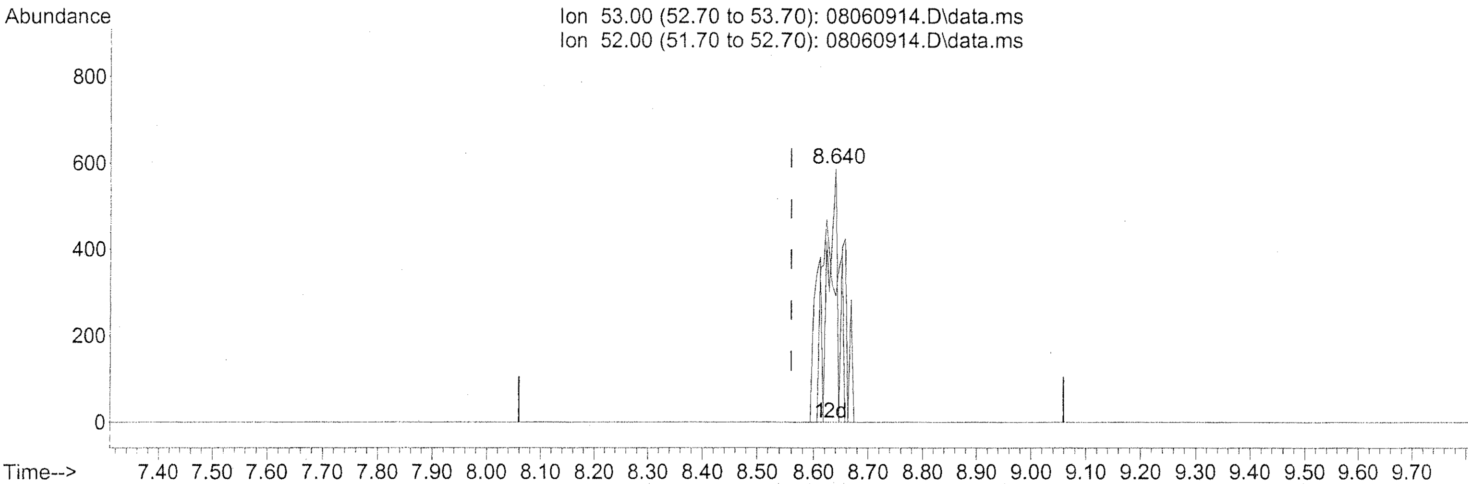
Ion	Exp%	Act%
53.00	100	100
52.00	81.20	289.91#
0.00	0.00	0.00
0.00	0.00	0.00

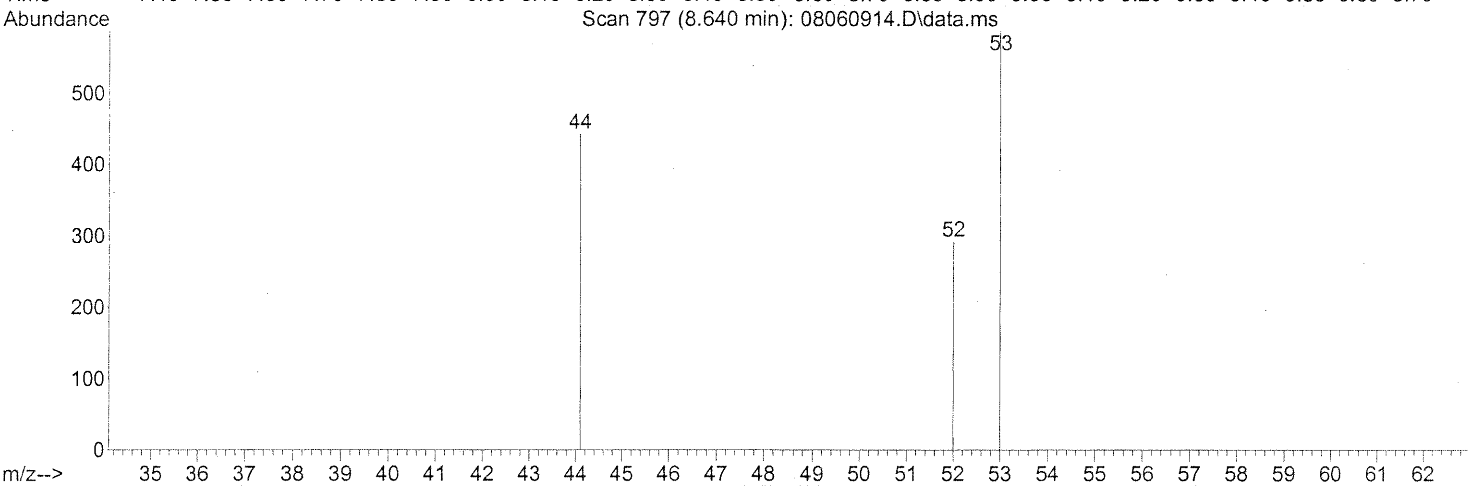
588

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





(16) Acrylonitrile (T)

8.640min (+0.080) 0.07ng m

response 1328

Ion	Exp%	Act%
53.00	100	100
52.00	81.20	75.75
0.00	0.00	0.00
0.00	0.00	0.00

MP → IC

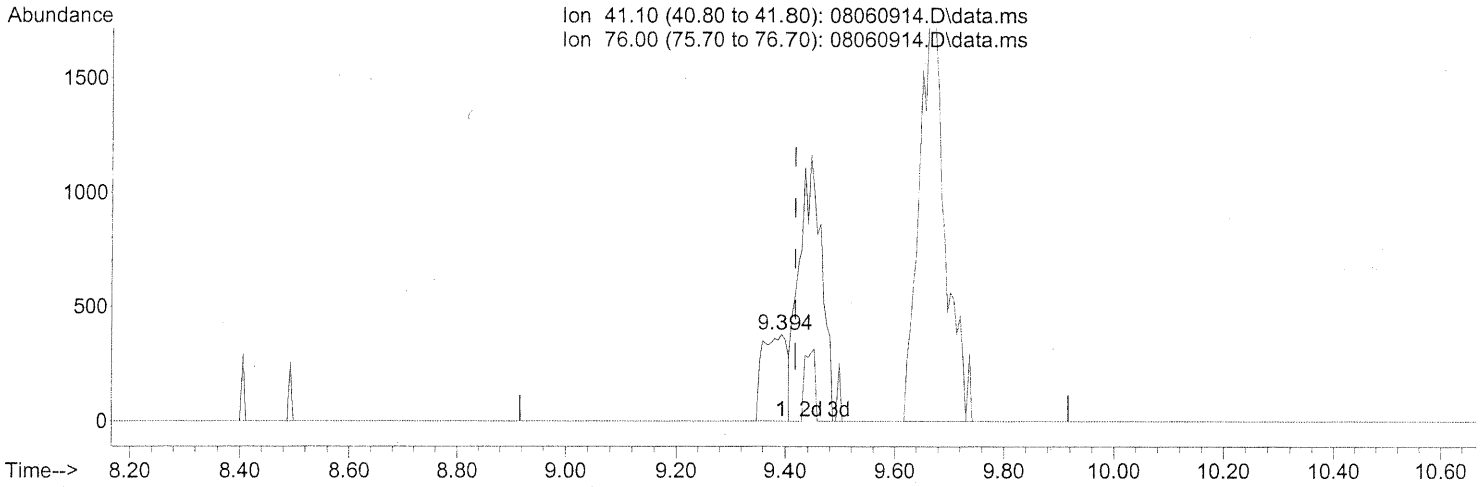
WA 8/6/09
 8/11/09

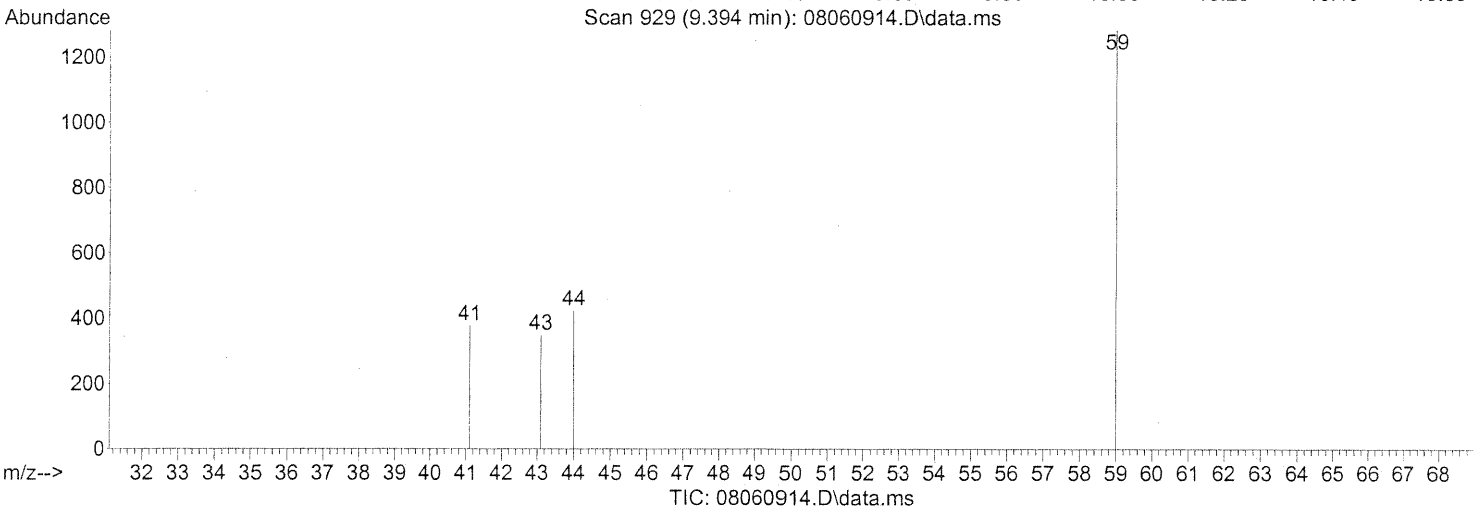
589

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





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

9.394min (-0.023) 0.05ng

response 1147

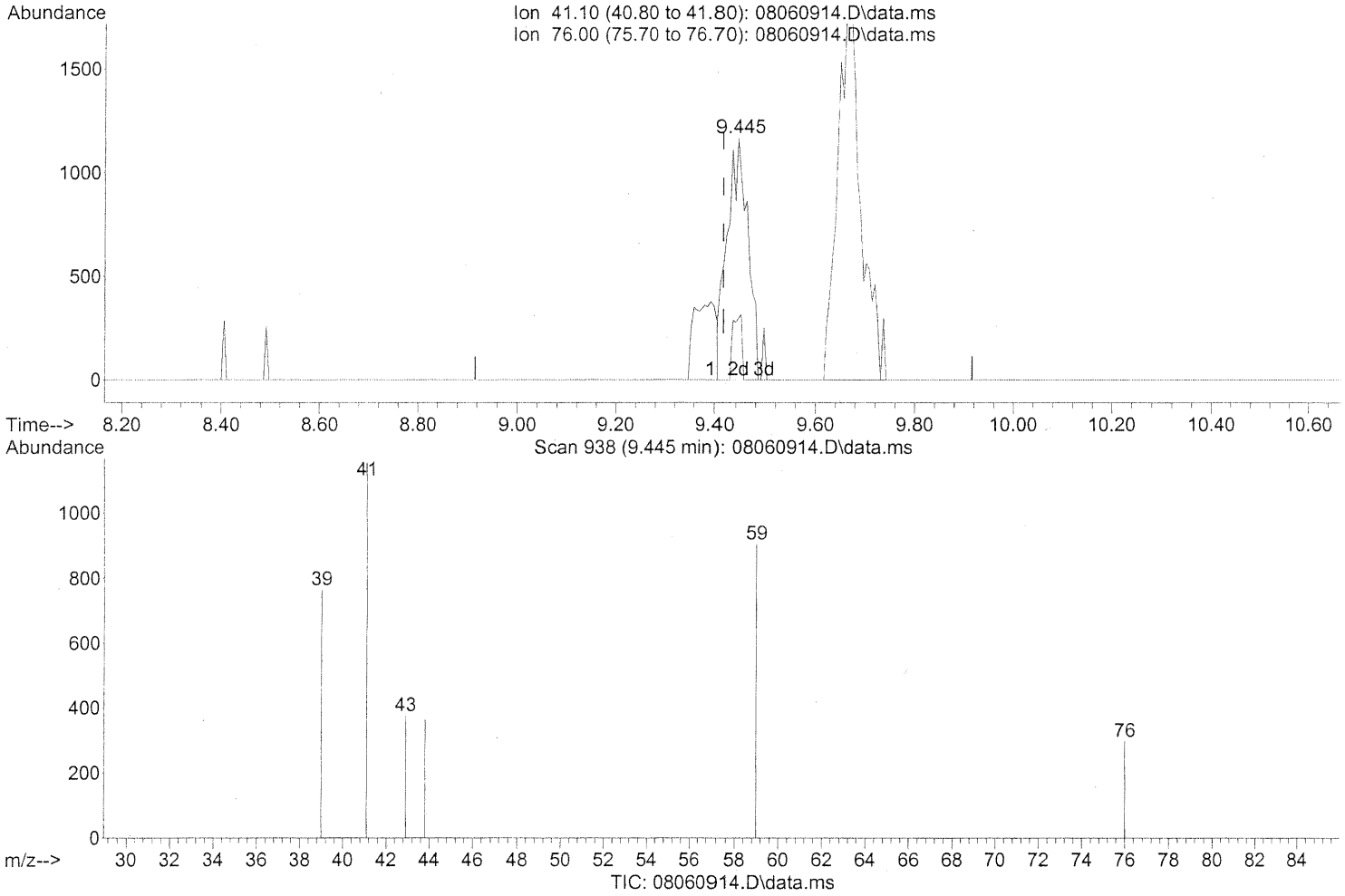
IP1

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



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

9.445min (+0.029) 0.14ng m

response 3293

Ion	Exp%	Act%
41.10	100	100
76.00	31.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

IP1 → IC

SA 8/16/09

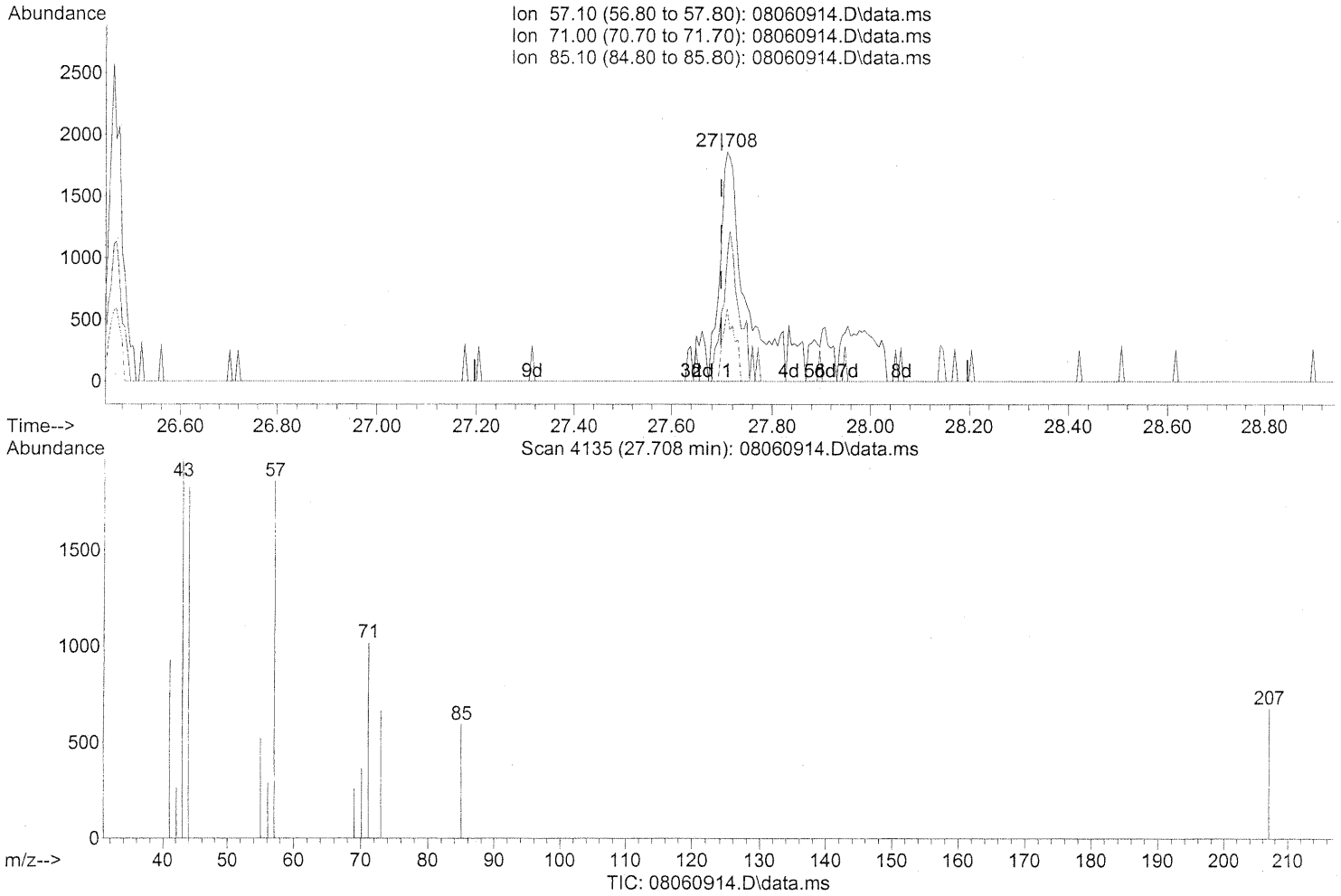
LH 8/11/09

591

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



(96) n-Dodecane (T)

27.708min (+0.012) 0.17ng

response 6461

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	44.30
85.10	31.00	15.03
0.00	0.00	0.00

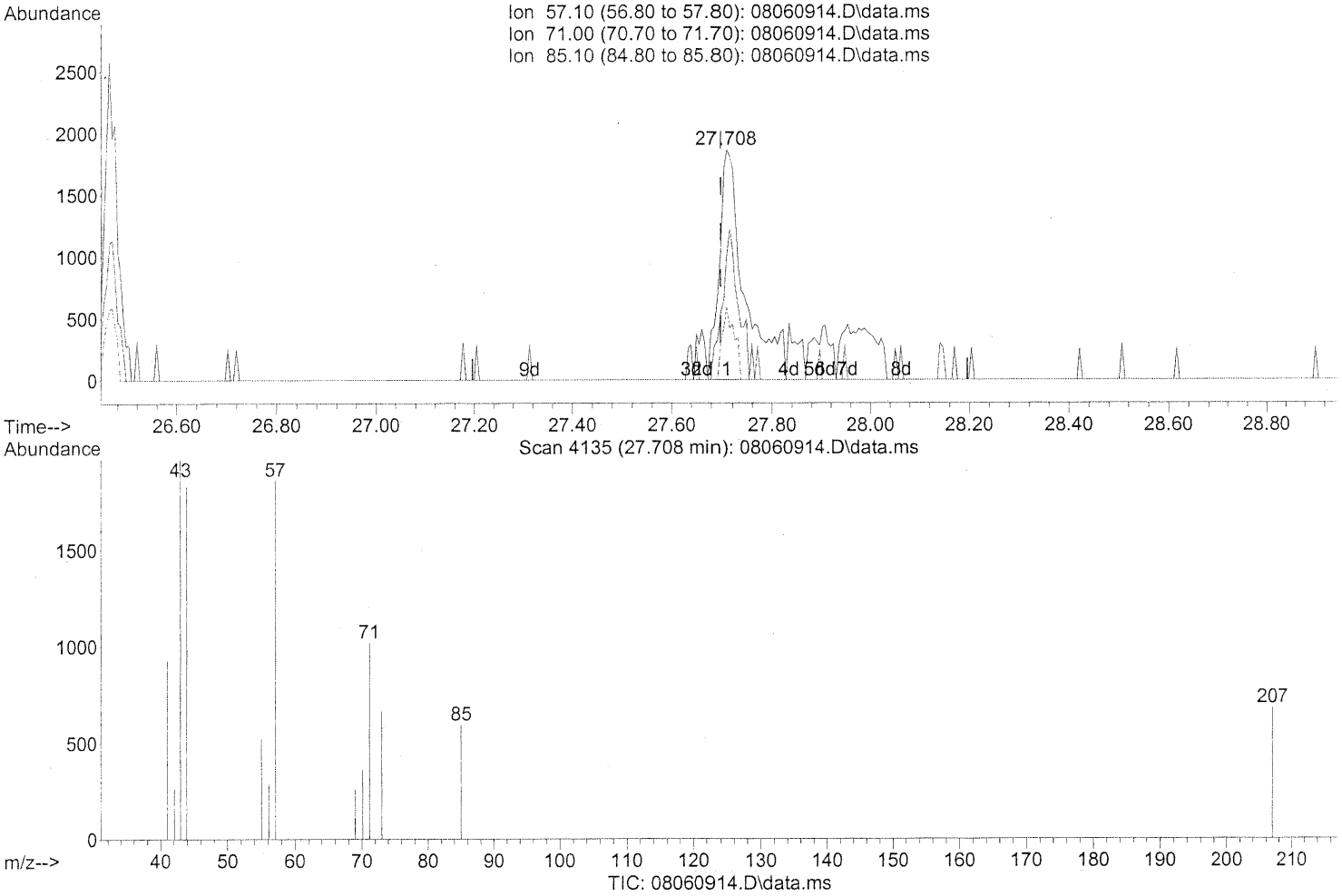
PT

592

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060914.D
Acq On : 6 Aug 2009 11:55
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:40:33 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



(96) n-Dodecane (T)

27.708min (+0.012) 0.14ng m

response 5122

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	55.88
85.10	31.00	18.96
0.00	0.00	0.00

PT-7 IC

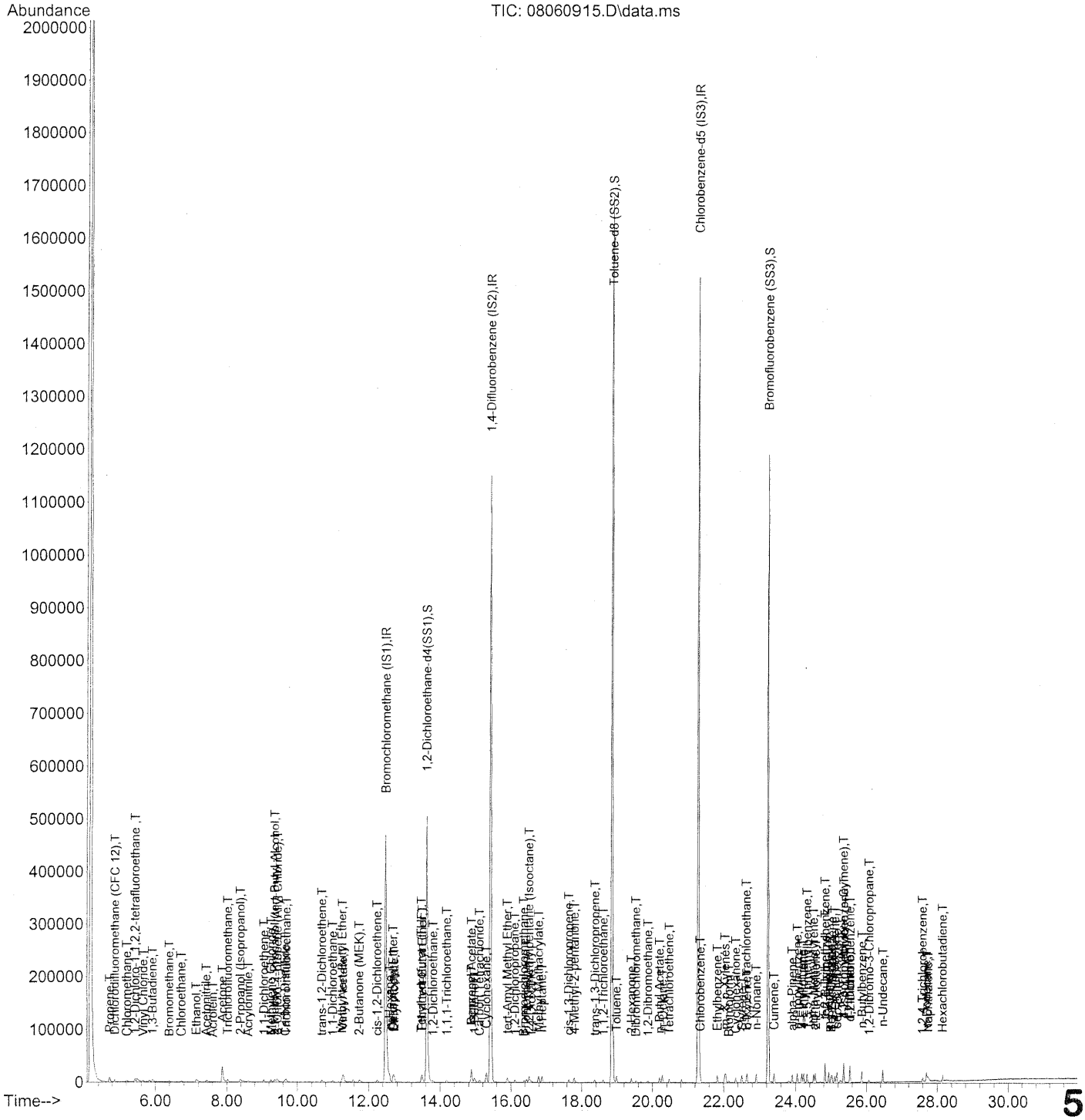
8/6/09

8/11/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	252357	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1287515	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	648408	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	555188	24.104	ng		-0.01
Spiked Amount 25.000			Recovery = 96.40%				
57) Toluene-d8 (SS2)	18.85	98	1423881	25.335	ng		0.00
Spiked Amount 25.000			Recovery = 101.32%				
73) Bromofluorobenzene (SS3)	23.24	174	367233	25.587	ng		0.00
Spiked Amount 25.000			Recovery = 102.36%				
Target Compounds							Qvalue
2) Propene	4.72	42	4419	0.226	ng		95
3) Dichlorodifluoromethan...	4.88	85	6369	0.196	ng	#	87
4) Chloromethane	5.21	50	4086	0.199	ng		83
5) 1,2-Dichloro-1,1,2,2-t...	5.43	135	2817	0.221	ng		91
6) Vinyl Chloride	5.65	62	3579	0.178	ng		98
7) 1,3-Butadiene	5.92	54	3131	0.218	ng	#	84
8) Bromomethane	6.39	94	2208	0.240	ng		96
9) Chloroethane	6.73	64	2365	0.214	ng		76
10) Ethanol	7.14	45	12938	1.079	ng		90
11) Acetonitrile	7.43	41	8087	0.191	ng		98
12) Acrolein	7.61	56	1996	0.172	ng		97
13) Acetone	7.88	58	19631	1.432	ng		90
14) Trichlorofluoromethane	8.03	101	5515	0.196	ng		100
15) 2-Propanol (Isopropanol)	8.39	45	18213	0.402	ng		92
16) Acrylonitrile	8.61	53	4154	0.208	ng	#	68
17) 1,1-Dichloroethene	9.06	96	2579	0.203	ng		95
18) 2-Methyl-2-Propanol (t...	9.36	59	16711	0.430	ng	#	72
19) Methylene Chloride	9.26	84	3503	0.237	ng		87
20) 3-Chloro-1-propene (Al...	9.45	41	6518	0.274	ng		75
21) Trichlorotrifluoroethane	9.70	151	2010	0.194	ng		88
22) Carbon Disulfide	9.66	76	11291	0.222	ng		89
23) trans-1,2-Dichloroethene	10.69	61	4685	0.213	ng		98
24) 1,1-Dichloroethane	10.99	63	5901	0.215	ng		94
25) Methyl tert-Butyl Ether	11.26	73	8904	0.200	ng		96
26) Vinyl Acetate	11.29	86	2463	0.826	ng	#	18
27) 2-Butanone (MEK)	11.74	72	2236	0.225	ng	#	50
28) cis-1,2-Dichloroethene	12.24	61	4357	0.205	ng		93
29) Diisopropyl Ether	12.69	87	2973	0.247	ng	#	1
30) Ethyl Acetate	12.72	61	2207	0.428	ng		92
31) n-Hexane	12.59	57	6299	0.232	ng		84

DA 8/6/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	4817	0.193	ng		98
34) Tetrahydrofuran (THF)	13.47	72	3093	0.264	ng	#	79
35) Ethyl tert-Butyl Ether	13.50	87	3408	0.185	ng		93
36) 1,2-Dichloroethane	13.80	62	4457	0.203	ng		93
38) 1,1,1-Trichloroethane	14.18	97	4737	0.198	ng		94
39) Isopropyl Acetate	14.88	61	4379	0.444	ng	#	93
40) 1-Butanol	14.96	56	8215	0.489	ng		83
41) Benzene	14.87	78	14131	0.224	ng		100
42) Carbon Tetrachloride	15.11	117	3903	0.195	ng		90
43) Cyclohexane	15.30	84	9304	0.418	ng		95
44) tert-Amyl Methyl Ether	15.90	73	9698	0.210	ng		97
45) 1,2-Dichloropropane	16.11	63	3093	0.202	ng		90
46) Bromodichloromethane	16.37	83	4318	0.222	ng		99
47) Trichloroethene	16.43	130	2706	0.206	ng		96
48) 1,4-Dioxane	16.59	88	2311	0.204	ng		80
49) 2,2,4-Trimethylpentane...	16.52	57	15224	0.219	ng		98
50) Methyl Methacrylate	16.80	100	2319	0.433	ng	#	89
51) n-Heptane	16.89	71	3376	0.205	ng		94
52) cis-1,3-Dichloropropene	17.65	75	4783	0.201	ng		95
53) 4-Methyl-2-pentanone	17.81	58	3120	0.219	ng		83
54) trans-1,3-Dichloropropene	18.37	75	4944	0.227	ng		98
55) 1,1,2-Trichloroethane	18.61	97	2714	0.205	ng		97
58) Toluene	18.98	91	12787	0.220	ng		99
59) 2-Hexanone	19.41	43	8414	0.215	ng		94
60) Dibromochloromethane	19.53	129	2958	0.217	ng		97
61) 1,2-Dibromoethane	19.87	107	3012	0.214	ng		96
62) n-Butyl Acetate	20.20	43	10164	0.229	ng		95
63) n-Octane	20.28	57	3172	0.216	ng		90
64) Tetrachloroethene	20.47	166	2555	0.193	ng		91
65) Chlorobenzene	21.35	112	7635	0.217	ng		94
66) Ethylbenzene	21.82	91	14159	0.215	ng		100
67) m- & p-Xylenes	22.04	91	23298	0.439	ng	#	30
68) Bromoform	22.15	173	2052	0.184	ng		92
69) Styrene	22.51	104	8110	0.219	ng		96
70) o-Xylene	22.65	91	11714	0.220	ng		99
71) n-Nonane	22.91	43	8045	0.216	ng		83
72) 1,1,2,2-Tetrachloroethane	22.63	83	5167	0.220	ng		91
74) Cumene	23.41	105	14433	0.222	ng		97
75) alpha-Pinene	23.91	93	7275	0.211	ng		82
76) n-Propylbenzene	24.05	91	17557	0.210	ng		99
77) 3-Ethyltoluene	24.18	105	14616	0.237	ng		95
78) 4-Ethyltoluene	24.23	105	13728	0.220	ng		98
79) 1,3,5-Trimethylbenzene	24.33	105	11202	0.210	ng		96

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:51:56 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

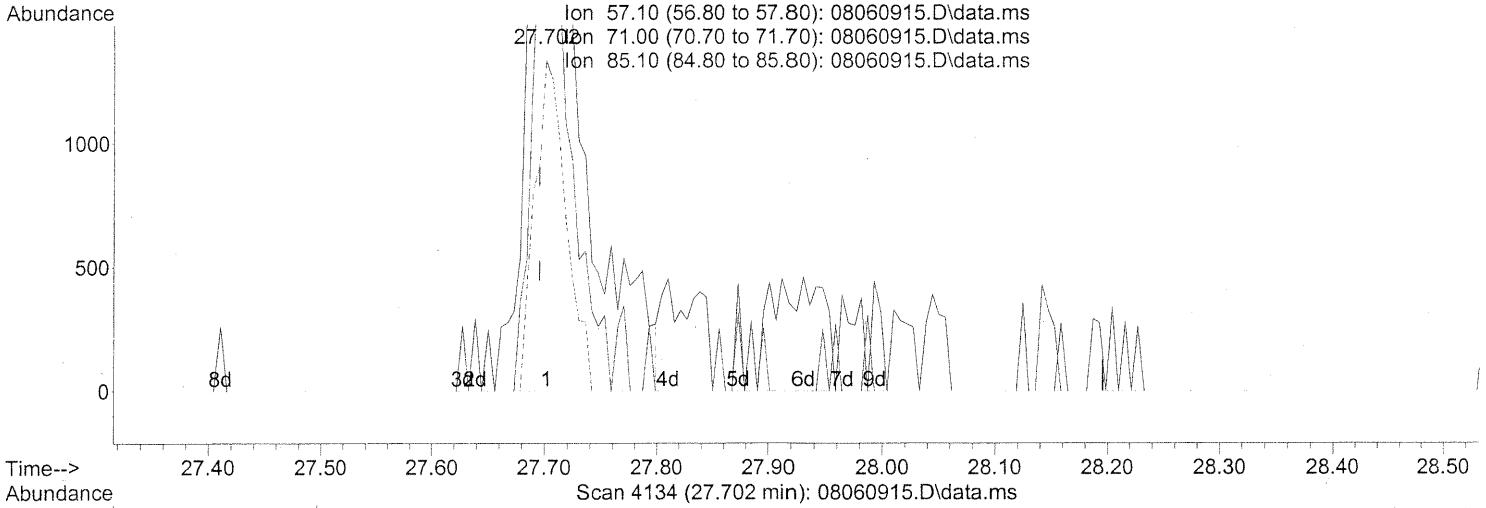
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.51	118	5651	0.210	ng		99
81) 2-Ethyltoluene	24.57	105	13747	0.213	ng		99
82) 1,2,4-Trimethylbenzene	24.83	105	11876	0.224	ng		98
83) n-Decane	24.93	57	7948	0.226	ng		95
84) Benzyl Chloride	25.00	91	10911	0.238	ng		97
85) 1,3-Dichlorobenzene	25.03	146	5614	0.221	ng		98
86) 1,4-Dichlorobenzene	25.11	146	6064	0.225	ng		94
87) sec-Butylbenzene	25.17	105	15761	0.221	ng		96
88) 4-Isopropyltoluene (p-...	25.35	119	13140	0.207	ng		95
89) 1,2,3-Trimethylbenzene	25.36	105	12238	0.227	ng		97
90) 1,2-Dichlorobenzene	25.53	146	5142	0.209	ng		95
91) d-Limonene	25.53	68	5001	0.217	ng		93
92) 1,2-Dibromo-3-Chloropr...	26.07	157	1840	0.234	ng		93
93) n-Undecane	26.46	57	8565	0.238	ng		94
94) 1,2,4-Trichlorobenzene	27.58	180	3584	0.231	ng	#	89
95) Naphthalene	27.74	128	15295	0.251	ng		84
96) n-Dodecane	27.70	57	9176m	0.241	ng		
97) Hexachlorobutadiene	28.14	225	2566	0.257	ng		96
98) Cyclohexanone	22.34	55	4726	0.178	ng		94
99) tert-Butylbenzene	24.83	119	10963	0.214	ng		100
100) n-Butylbenzene	25.87	91	12700	0.219	ng		99

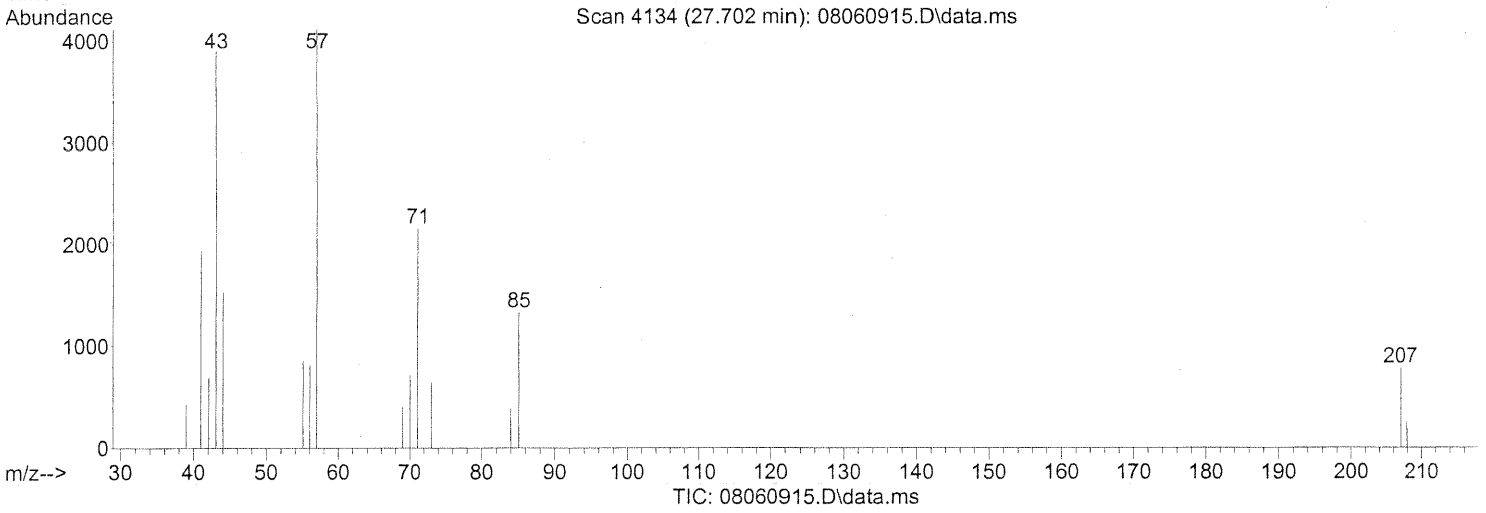
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:57 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





TIC: 08060915.D\data.ms

(96) n-Dodecane (T)

27.702min (+0.006) 0.27ng

response 10324

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	48.39
85.10	31.00	24.76
0.00	0.00	0.00

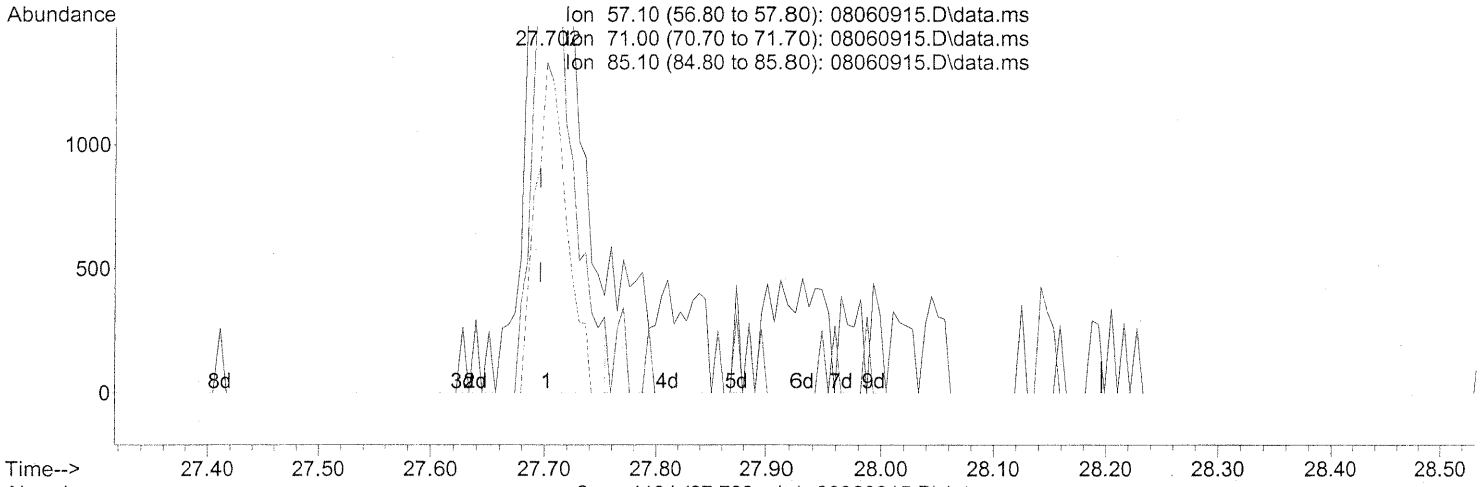
PT

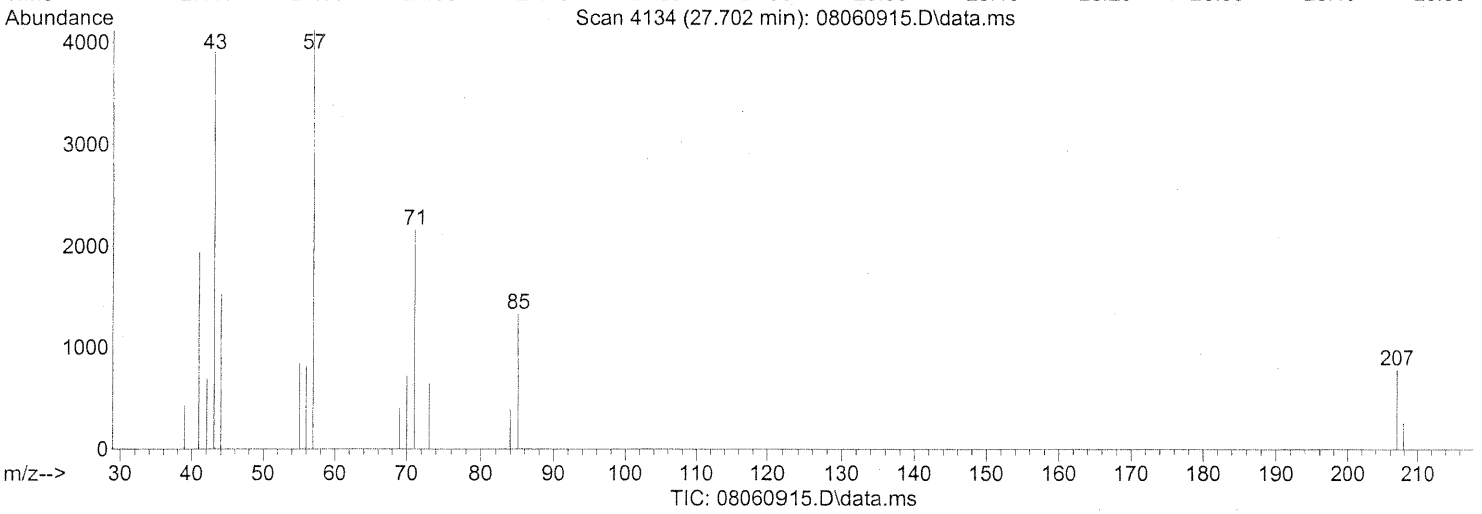
598

Quantitation Report (Qedit)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060915.D
Acq On : 6 Aug 2009 12:36
Operator : WA
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-07200902/S20-07240912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 13:44:57 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration





(96) n-Dodecane (T)

27.702min (+0.006) 0.24ng m

response 9176

Ion	Exp%	Act%
57.10	100	100
71.00	55.20	54.45
85.10	31.00	27.86
0.00	0.00	0.00

PT → IC

DA 8/6/09

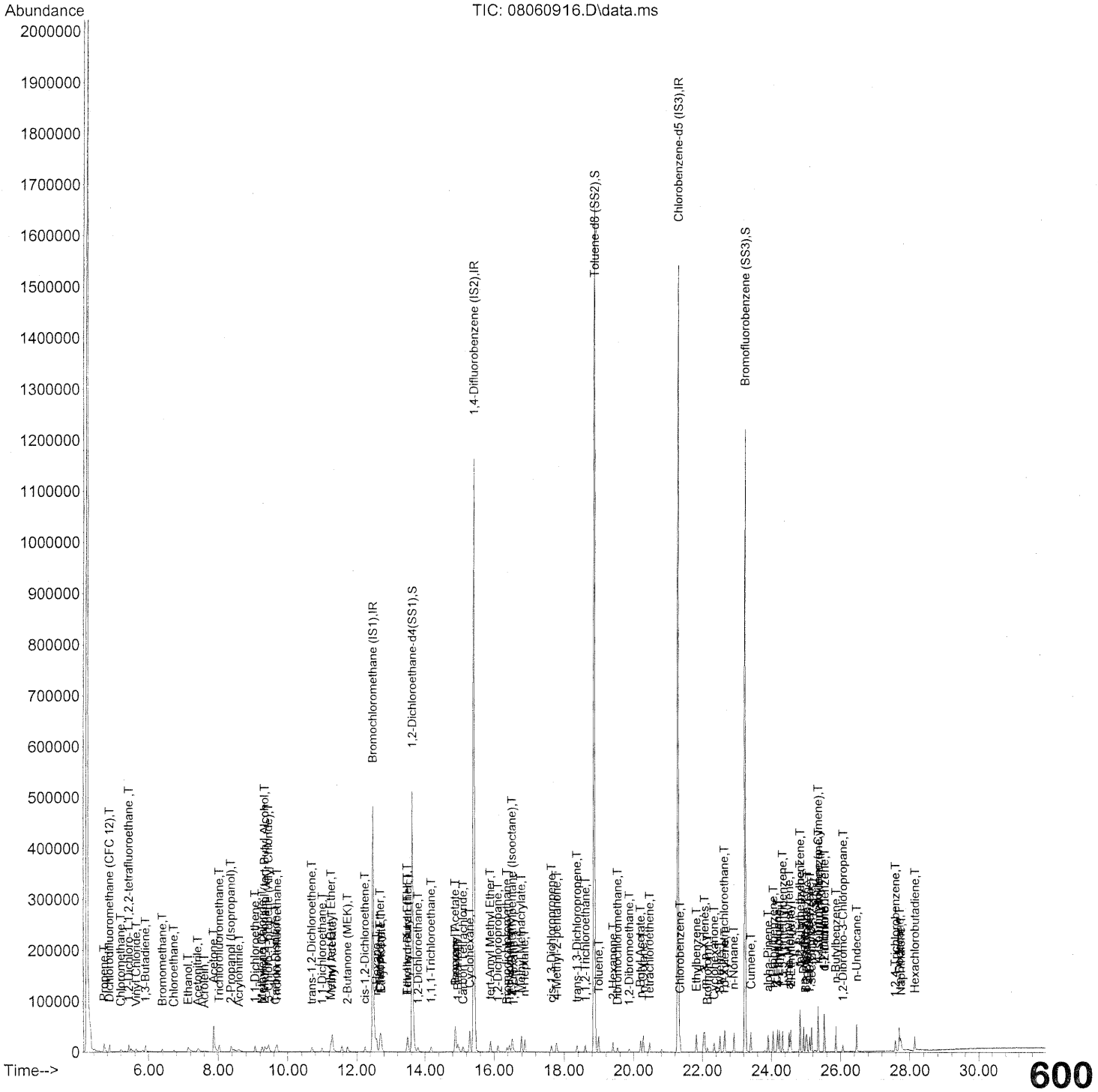
LH 8/11/09

599

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060916.D
Acq On : 6 Aug 2009 13:17
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



600

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060916.D
Acq On : 6 Aug 2009 13:17
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	251360	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1297306	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	659325	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	555033	24.193	ng		0.00
Spiked Amount 25.000			Recovery = 96.76%				
57) Toluene-d8 (SS2)	18.85	98	1438185	25.165	ng		0.00
Spiked Amount 25.000			Recovery = 100.68%				
73) Bromofluorobenzene (SS3)	23.24	174	371243	25.439	ng		0.00
Spiked Amount 25.000			Recovery = 101.76%				
Target Compounds							Qvalue
2) Propene	4.70	42	8216	0.422	ng		95
3) Dichlorodifluoromethan...	4.86	85	14734	0.455	ng		97
4) Chloromethane	5.20	50	9411	0.460	ng		96
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	6371	0.503	ng		100
6) Vinyl Chloride	5.64	62	8565	0.428	ng		99
7) 1,3-Butadiene	5.91	54	7445	0.520	ng		95
8) Bromomethane	6.40	94	5266	0.574	ng		94
9) Chloroethane	6.73	64	4665	0.424	ng		97
10) Ethanol	7.13	45	26864	2.249	ng		95
11) Acetonitrile	7.42	41	16894	0.401	ng		99
12) Acrolein	7.61	56	4162	0.360	ng		96
13) Acetone	7.87	58	32266	2.363	ng		95
14) Trichlorofluoromethane	8.03	101	13358	0.476	ng		98
15) 2-Propanol (Isopropanol)	8.37	45	40537	0.898	ng		83
16) Acrylonitrile	8.59	53	9433	0.475	ng		98
17) 1,1-Dichloroethene	9.06	96	6255	0.494	ng		91
18) 2-Methyl-2-Propanol (t...	9.33	59	37768	0.976	ng		82
19) Methylene Chloride	9.26	84	6743	0.459	ng		98
20) 3-Chloro-1-propene (Al...	9.44	41	15298	0.645	ng		80
21) Trichlorotrifluoroethane	9.70	151	4915	0.477	ng		96
22) Carbon Disulfide	9.65	76	24760	0.489	ng	#	74
23) trans-1,2-Dichloroethene	10.69	61	10278	0.469	ng		99
24) 1,1-Dichloroethane	10.99	63	12065	0.442	ng		98
25) Methyl tert-Butyl Ether	11.25	73	19979	0.451	ng		99
26) Vinyl Acetate	11.29	86	5981	2.014	ng	#	48
27) 2-Butanone (MEK)	11.74	72	5062	0.512	ng	#	88
28) cis-1,2-Dichloroethene	12.24	61	9809	0.463	ng		99
29) Diisopropyl Ether	12.69	87	6520	0.544	ng	#	1
30) Ethyl Acetate	12.72	61	5291	1.030	ng		97
31) n-Hexane	12.58	57	12706	0.470	ng		601

8/16/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060916.D
Acq On : 6 Aug 2009 13:17
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.68	83	11191	0.451 ng		99
34) Tetrahydrofuran (THF)	13.48	72	5678	0.487 ng	#	86
35) Ethyl tert-Butyl Ether	13.49	87	8229	0.448 ng		97
36) 1,2-Dichloroethane	13.80	62	10322	0.472 ng		97
38) 1,1,1-Trichloroethane	14.18	97	10785	0.448 ng		98
39) Isopropyl Acetate	14.87	61	9606	0.968 ng	#	90
40) 1-Butanol	14.96	56	16246	0.959 ng		85
41) Benzene	14.88	78	29072	0.458 ng		99
42) Carbon Tetrachloride	15.11	117	9173	0.455 ng		100
43) Cyclohexane	15.30	84	21267	0.948 ng		99
44) tert-Amyl Methyl Ether	15.89	73	21956	0.472 ng		98
45) 1,2-Dichloropropane	16.11	63	7082	0.459 ng		98
46) Bromodichloromethane	16.37	83	9525	0.486 ng		99
47) Trichloroethene	16.45	130	6343	0.479 ng		98
48) 1,4-Dioxane	16.57	88	6011	0.528 ng		89
49) 2,2,4-Trimethylpentane...	16.52	57	33244	0.475 ng		99
50) Methyl Methacrylate	16.79	100	5377	0.998 ng		95
51) n-Heptane	16.88	71	7790	0.470 ng		99
52) cis-1,3-Dichloropropene	17.66	75	10842	0.453 ng		98
53) 4-Methyl-2-pentanone	17.80	58	7333	0.511 ng		91
54) trans-1,3-Dichloropropene	18.36	75	11151	0.509 ng		100
55) 1,1,2-Trichloroethane	18.61	97	6160	0.462 ng		98
58) Toluene	18.99	91	28640	0.484 ng		99
59) 2-Hexanone	19.40	43	19538	0.492 ng		97
60) Dibromochloromethane	19.53	129	7167	0.517 ng		93
61) 1,2-Dibromoethane	19.87	107	6714	0.470 ng		98
62) n-Butyl Acetate	20.20	43	22390	0.496 ng		99
63) n-Octane	20.28	57	7129	0.478 ng		100
64) Tetrachloroethene	20.46	166	6404	0.475 ng		100
65) Chlorobenzene	21.34	112	17302	0.484 ng		100
66) Ethylbenzene	21.82	91	32353	0.484 ng		98
67) m- & p-Xylenes	22.06	91	50569	0.938 ng	#	30
68) Bromoform	22.15	173	5337	0.471 ng		97
69) Styrene	22.51	104	18352	0.488 ng		98
70) o-Xylene	22.65	91	26471	0.488 ng		97
71) n-Nonane	22.91	43	17683	0.467 ng		93
72) 1,1,2,2-Tetrachloroethane	22.63	83	11841	0.496 ng		95
74) Cumene	23.41	105	31734	0.479 ng		97
75) alpha-Pinene	23.90	93	15763	0.450 ng		95
76) n-Propylbenzene	24.05	91	40346	0.474 ng		99
77) 3-Ethyltoluene	24.18	105	32540	0.519 ng		95
78) 4-Ethyltoluene	24.23	105	30506	0.480 ng		100
79) 1,3,5-Trimethylbenzene	24.32	105	26350	0.487 ng		100

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060916.D
Acq On : 6 Aug 2009 13:17
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 13:52:36 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

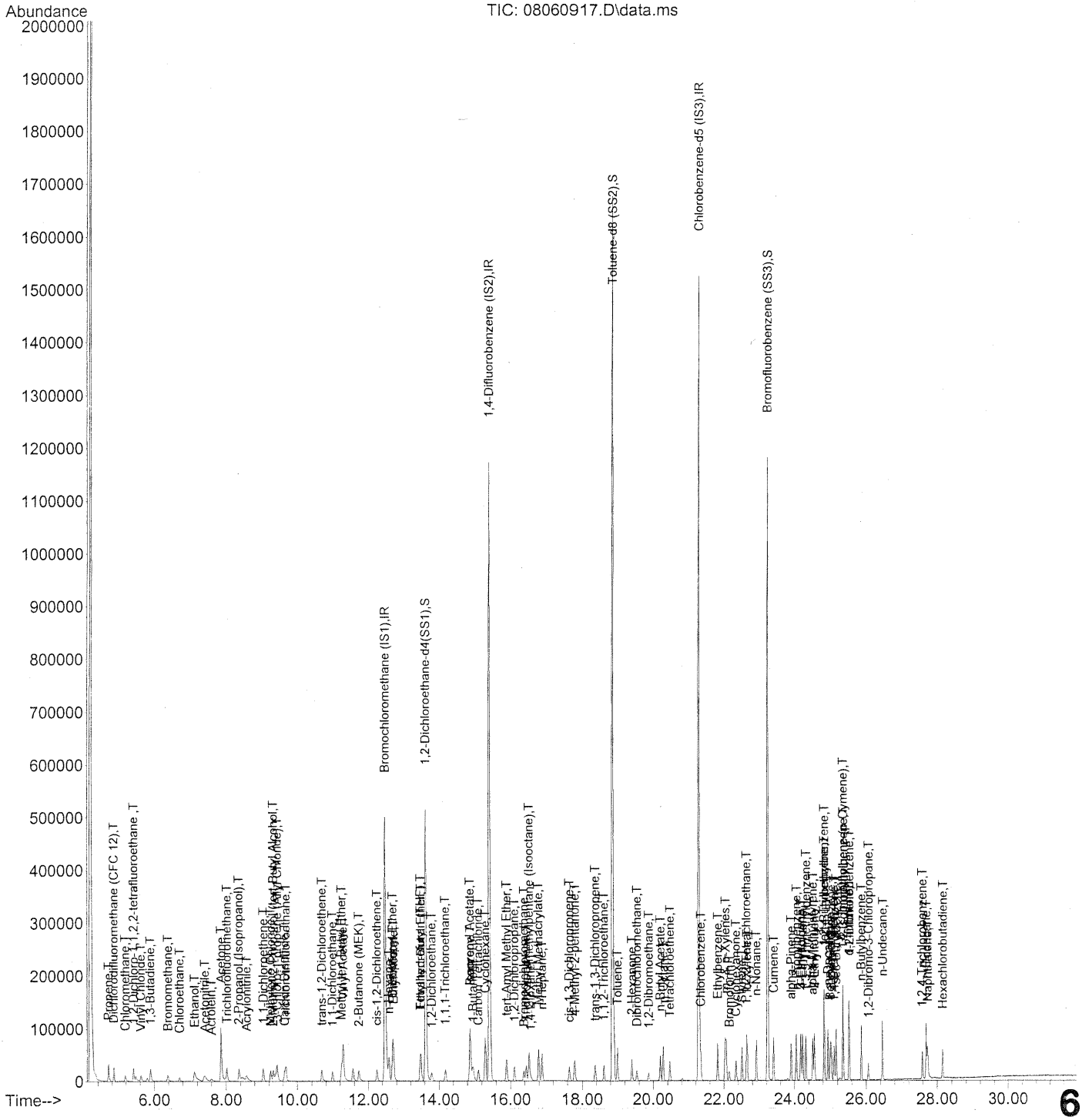
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	12971	0.473	ng	97
81) 2-Ethyltoluene	24.57	105	31095	0.473	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	26353	0.488	ng	96
83) n-Decane	24.94	57	18126	0.506	ng	98
84) Benzyl Chloride	25.00	91	24206	0.520	ng	100
85) 1,3-Dichlorobenzene	25.03	146	12977	0.502	ng	98
86) 1,4-Dichlorobenzene	25.11	146	13901	0.506	ng	97
87) sec-Butylbenzene	25.17	105	35698	0.493	ng	98
88) 4-Isopropyltoluene (p-...	25.35	119	31753	0.493	ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	27977	0.510	ng	100
90) 1,2-Dichlorobenzene	25.53	146	12508	0.501	ng	98
91) d-Limonene	25.53	68	11768	0.502	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.07	157	4075	0.510	ng	90
93) n-Undecane	26.46	57	18836	0.515	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	8410	0.533	ng	97
95) Naphthalene	27.74	128	33134	0.535	ng	93
96) n-Dodecane	27.70	57	20632	0.533	ng	95
97) Hexachlorobutadiene	28.15	225	5535	0.546	ng	100
98) Cyclohexanone	22.34	55	10843	0.402	ng	97
99) tert-Butylbenzene	24.83	119	25490	0.490	ng	97
100) n-Butylbenzene	25.86	91	30481	0.517	ng	98

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060917.D
Acq On : 6 Aug 2009 13:57
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060917.D
Acq On : 6 Aug 2009 13:57
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	253159	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.42	114	1287874	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	650609	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	554603	24.002	ng		-0.01
Spiked Amount 25.000			Recovery = 96.00%				
57) Toluene-d8 (SS2)	18.85	98	1420867	25.196	ng		0.00
Spiked Amount 25.000			Recovery = 100.80%				
73) Bromofluorobenzene (SS3)	23.24	174	366142	25.425	ng		0.00
Spiked Amount 25.000			Recovery = 101.72%				
Target Compounds							Qvalue
2) Propene	4.70	42	15729	0.803	ng		98
3) Dichlorodifluoromethan...	4.86	85	28962	0.889	ng		99
4) Chloromethane	5.18	50	19165	0.931	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.42	135	11280	0.884	ng		99
6) Vinyl Chloride	5.62	62	17901	0.889	ng		98
7) 1,3-Butadiene	5.89	54	14844	1.029	ng		95
8) Bromomethane	6.38	94	10788	1.167	ng		95
9) Chloroethane	6.71	64	10224	0.923	ng		92
10) Ethanol	7.12	45	54360	4.518	ng		98
11) Acetonitrile	7.42	41	31256	0.737	ng		99
12) Acrolein	7.59	56	8675	0.746	ng		98
13) Acetone	7.86	58	59842	4.351	ng		99
14) Trichlorofluoromethane	8.03	101	25722	0.909	ng		98
15) 2-Propanol (Isopropanol)	8.35	45	78074	1.717	ng		95
16) Acrylonitrile	8.58	53	19833	0.991	ng		100
17) 1,1-Dichloroethene	9.05	96	12813	1.005	ng		91
18) 2-Methyl-2-Propanol (t...	9.32	59	75842	1.947	ng		80
19) Methylene Chloride	9.25	84	13644	0.922	ng		99
20) 3-Chloro-1-propene (Al...	9.44	41	30907	1.293	ng		82
21) Trichlorotrifluoroethane	9.68	151	9982	0.961	ng		98
22) Carbon Disulfide	9.65	76	49774	0.977	ng		100
23) trans-1,2-Dichloroethene	10.68	61	21976	0.995	ng		99
24) 1,1-Dichloroethane	10.98	63	26037	0.946	ng		100
25) Methyl tert-Butyl Ether	11.24	73	39678	0.890	ng		100
26) Vinyl Acetate	11.28	86	12172	4.070	ng	#	63
27) 2-Butanone (MEK)	11.72	72	9933	0.997	ng	#	84
28) cis-1,2-Dichloroethene	12.24	61	20467	0.958	ng		96
29) Diisopropyl Ether	12.68	87	13497	1.117	ng	#	1
30) Ethyl Acetate	12.71	61	10334	1.998	ng		99
31) n-Hexane	12.58	57	26377	0.968	ng		95

8/6/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060917.D
Acq On : 6 Aug 2009 13:57
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	23278	0.931	ng		100
34) Tetrahydrofuran (THF)	13.47	72	10036	0.854	ng	#	89
35) Ethyl tert-Butyl Ether	13.49	87	16455	0.890	ng		99
36) 1,2-Dichloroethane	13.79	62	20046	0.910	ng		98
38) 1,1,1-Trichloroethane	14.17	97	21730	0.909	ng		96
39) Isopropyl Acetate	14.87	61	18933	1.921	ng	#	82
40) 1-Butanol	14.95	56	31282	1.861	ng		83
41) Benzene	14.88	78	55682	0.883	ng		99
42) Carbon Tetrachloride	15.10	117	18312	0.914	ng		99
43) Cyclohexane	15.30	84	42338	1.901	ng		99
44) tert-Amyl Methyl Ether	15.89	73	42797	0.926	ng		98
45) 1,2-Dichloropropane	16.11	63	14488	0.946	ng		100
46) Bromodichloromethane	16.38	83	19155	0.984	ng		98
47) Trichloroethene	16.44	130	12738	0.969	ng		99
48) 1,4-Dioxane	16.57	88	11142	0.985	ng	#	68
49) 2,2,4-Trimethylpentane...	16.52	57	66591	0.958	ng		97
50) Methyl Methacrylate	16.79	100	10587	1.978	ng		96
51) n-Heptane	16.89	71	15425	0.937	ng		99
52) cis-1,3-Dichloropropene	17.65	75	22102	0.930	ng		100
53) 4-Methyl-2-pentanone	17.80	58	14470	1.016	ng		94
54) trans-1,3-Dichloropropene	18.36	75	23424	1.078	ng		99
55) 1,1,2-Trichloroethane	18.61	97	12640	0.955	ng		96
58) Toluene	18.99	91	57012	0.977	ng		99
59) 2-Hexanone	19.40	43	39077	0.996	ng		99
60) Dibromochloromethane	19.54	129	14256	1.042	ng		99
61) 1,2-Dibromoethane	19.87	107	14117	1.001	ng		100
62) n-Butyl Acetate	20.20	43	44725	1.004	ng		99
63) n-Octane	20.28	57	13890	0.944	ng		97
64) Tetrachloroethene	20.47	166	12781	0.961	ng		97
65) Chlorobenzene	21.35	112	35691	1.012	ng		99
66) Ethylbenzene	21.82	91	64286	0.974	ng		100
67) m- & p-Xylenes	22.04	91	102993	1.935	ng	#	30
68) Bromoform	22.16	173	10221	0.914	ng		96
69) Styrene	22.51	104	36918	0.995	ng		98
70) o-Xylene	22.65	91	52204	0.975	ng		100
71) n-Nonane	22.91	43	35568	0.951	ng		96
72) 1,1,2,2-Tetrachloroethane	22.63	83	23941	1.017	ng		98
74) Cumene	23.41	105	63375	0.970	ng		98
75) alpha-Pinene	23.90	93	32053	0.926	ng		96
76) n-Propylbenzene	24.05	91	82766	0.986	ng		98
77) 3-Ethyltoluene	24.18	105	62532	1.011	ng		99
78) 4-Ethyltoluene	24.23	105	63400	1.011	ng		100
79) 1,3,5-Trimethylbenzene	24.32	105	52731	0.987	ng		100

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060917.D
Acq On : 6 Aug 2009 13:57
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 14:32:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

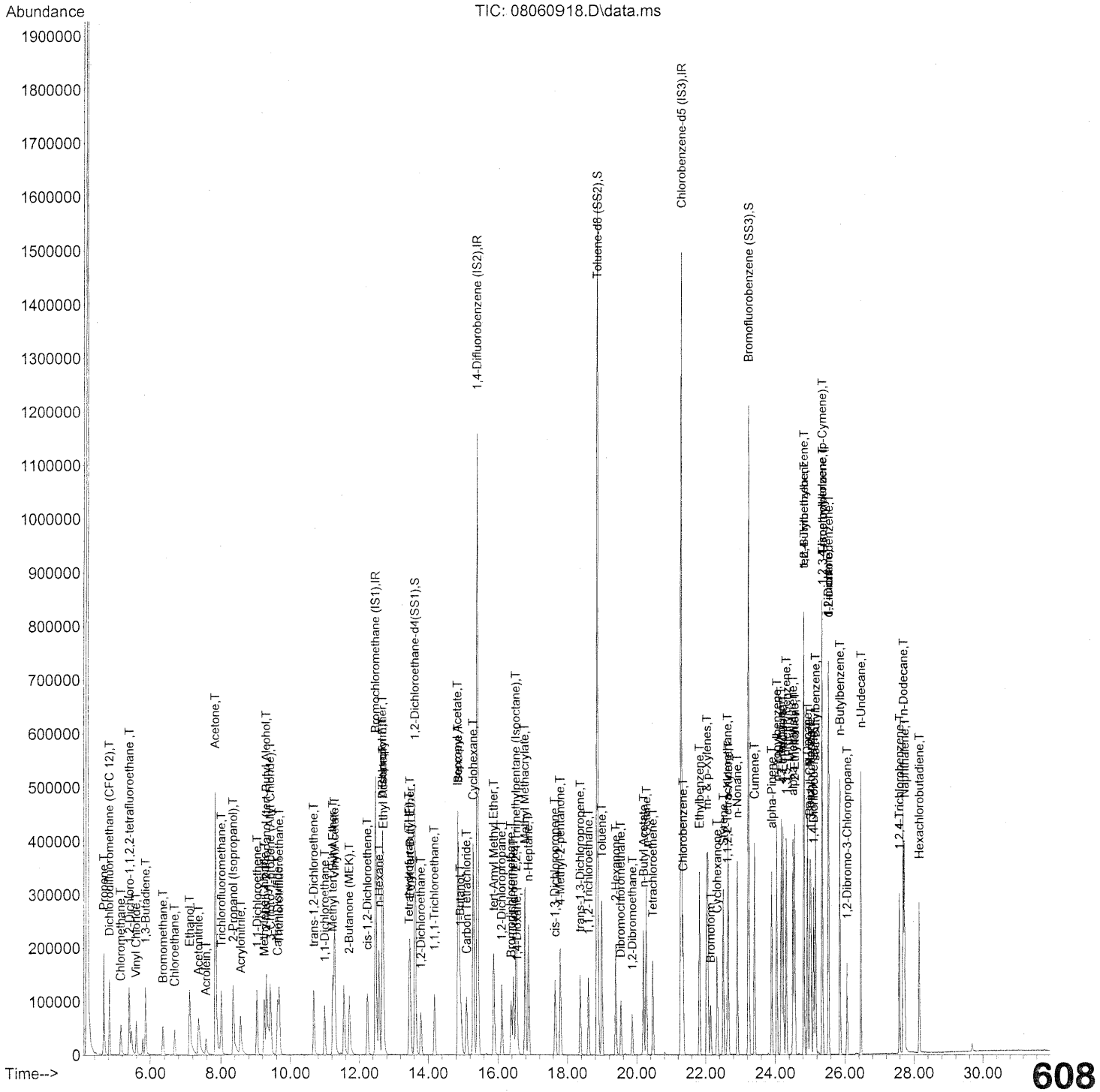
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	27052	1.000	ng	96
81) 2-Ethyltoluene	24.56	105	62808	0.968	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	54320	1.019	ng	99
83) n-Decane	24.94	57	36002	1.019	ng	99
84) Benzyl Chloride	25.00	91	50759	1.106	ng	97
85) 1,3-Dichlorobenzene	25.03	146	27203	1.066	ng	98
86) 1,4-Dichlorobenzene	25.11	146	27477	1.014	ng	100
87) sec-Butylbenzene	25.17	105	71023	0.994	ng	98
88) 4-Isopropyltoluene (p-...	25.35	119	62425	0.982	ng	97
89) 1,2,3-Trimethylbenzene	25.36	105	54604	1.008	ng	98
90) 1,2-Dichlorobenzene	25.53	146	25453	1.032	ng	99
91) d-Limonene	25.53	68	22906	0.991	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.07	157	9032	1.145	ng	96
93) n-Undecane	26.46	57	39335	1.089	ng	97
94) 1,2,4-Trichlorobenzene	27.59	180	18307	1.175	ng	98
95) Naphthalene	27.74	128	69383	1.134	ng	97
96) n-Dodecane	27.70	57	41338	1.082	ng	95
97) Hexachlorobutadiene	28.15	225	10594	1.059	ng	98
98) Cyclohexanone	22.34	55	21416	0.805	ng	99
99) tert-Butylbenzene	24.83	119	51340	1.000	ng	98
100) n-Butylbenzene	25.86	91	61539	1.058	ng	99

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060918.D
Acq On : 6 Aug 2009 14:38
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



608

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060918.D
Acq On : 6 Aug 2009 14:38
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	249215	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.43	114	1269404	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	640609	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	541276	23.796	ng		0.00
Spiked Amount 25.000			Recovery = 95.20%				
57) Toluene-d8 (SS2)	18.86	98	1393939	25.104	ng		0.00
Spiked Amount 25.000			Recovery = 100.40%				
73) Bromofluorobenzene (SS3)	23.24	174	369692	26.072	ng		0.00
Spiked Amount 25.000			Recovery = 104.28%				
Target Compounds							Qvalue
2) Propene	4.67	42	89432	4.636	ng		99
3) Dichlorodifluoromethan...	4.84	85	140828	4.390	ng		99
4) Chloromethane	5.15	50	84961	4.191	ng		100
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	54919	4.370	ng		97
6) Vinyl Chloride	5.59	62	89033	4.491	ng		100
7) 1,3-Butadiene	5.87	54	73562	5.181	ng		98
8) Bromomethane	6.36	94	52677	5.786	ng		99
9) Chloroethane	6.69	64	52005	4.770	ng		95
10) Ethanol	7.11	45	258014	21.785	ng		100
11) Acetonitrile	7.37	41	150692	3.611	ng		99
12) Acrolein	7.57	56	44402	3.876	ng		99
13) Acetone	7.84	58	278483	20.568	ng		96
14) Trichlorofluoromethane	8.02	101	123504	4.435	ng		99
15) 2-Propanol (Isopropanol)	8.35	45	301287	6.731	ng		97
16) Acrylonitrile	8.57	53	100540	5.104	ng		100
17) 1,1-Dichloroethene	9.04	96	62068	4.946	ng		93
18) 2-Methyl-2-Propanol (t...	9.31	59	359931	9.384	ng		95
19) Methylene Chloride	9.24	84	65696	4.508	ng		99
20) 3-Chloro-1-propene (Al...	9.43	41	129259	5.493	ng		92
21) Trichlorotrifluoroethane	9.68	151	47871	4.683	ng		96
22) Carbon Disulfide	9.63	76	243057	4.846	ng		100
23) trans-1,2-Dichloroethene	10.68	61	107824	4.959	ng		99
24) 1,1-Dichloroethane	10.99	63	124688	4.604	ng		99
25) Methyl tert-Butyl Ether	11.23	73	197911	4.509	ng		99
26) Vinyl Acetate	11.28	86	44312	15.052	ng	#	69
27) 2-Butanone (MEK)	11.71	72	50182	5.115	ng	#	92
28) cis-1,2-Dichloroethene	12.24	61	102666	4.883	ng		99
29) Diisopropyl Ether	12.68	87	64732	5.444	ng	#	1
30) Ethyl Acetate	12.71	61	52338	10.281	ng		97
31) n-Hexane	12.58	57	123098	4.588	ng		98

DM 8/6/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060918.D
Acq On : 6 Aug 2009 14:38
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.69	83	113521	4.612	ng		99
34) Tetrahydrofuran (THF)	13.46	72	47151	4.075	ng		95
35) Ethyl tert-Butyl Ether	13.48	87	77046	4.234	ng		99
36) 1,2-Dichloroethane	13.80	62	97747	4.510	ng		97
38) 1,1,1-Trichloroethane	14.18	97	104481	4.435	ng		98
39) Isopropyl Acetate	14.86	61	94088	9.685	ng	#	84
40) 1-Butanol	14.92	56	150422	9.077	ng		82
41) Benzene	14.88	78	266073	4.281	ng		99
42) Carbon Tetrachloride	15.11	117	92233	4.673	ng		99
43) Cyclohexane	15.30	84	209843	9.557	ng		98
44) tert-Amyl Methyl Ether	15.89	73	204750	4.496	ng		100
45) 1,2-Dichloropropane	16.11	63	69671	4.617	ng		100
46) Bromodichloromethane	16.38	83	93085	4.854	ng		99
47) Trichloroethene	16.45	130	62720	4.839	ng		98
48) 1,4-Dioxane	16.56	88	55737	5.001	ng	#	73
49) 2,2,4-Trimethylpentane...	16.52	57	325558	4.752	ng		96
50) Methyl Methacrylate	16.79	100	53436	10.131	ng		96
51) n-Heptane	16.88	71	74028	4.561	ng		98
52) cis-1,3-Dichloropropene	17.65	75	108231	4.619	ng		99
53) 4-Methyl-2-pentanone	17.79	58	70345	5.011	ng		97
54) trans-1,3-Dichloropropene	18.36	75	114007	5.321	ng		99
55) 1,1,2-Trichloroethane	18.61	97	60472	4.636	ng		100
58) Toluene	18.99	91	270680	4.712	ng		99
59) 2-Hexanone	19.39	43	192690	4.989	ng		99
60) Dibromochloromethane	19.53	129	70986	5.272	ng		98
61) 1,2-Dibromoethane	19.87	107	69321	4.990	ng		98
62) n-Butyl Acetate	20.20	43	218998	4.994	ng		100
63) n-Octane	20.28	57	67291	4.644	ng		97
64) Tetrachloroethene	20.47	166	59893	4.573	ng		98
65) Chlorobenzene	21.35	112	168463	4.853	ng		99
66) Ethylbenzene	21.82	91	312047	4.800	ng		100
67) m- & p-Xylenes	22.04	91	487391	9.302	ng	#	30
68) Bromoform	22.15	173	54281	4.930	ng		100
69) Styrene	22.51	104	183096	5.011	ng		97
70) o-Xylene	22.66	91	252696	4.794	ng		98
71) n-Nonane	22.91	43	166786	4.529	ng		98
72) 1,1,2,2-Tetrachloroethane	22.63	83	115016	4.963	ng		100
74) Cumene	23.41	105	304404	4.730	ng		99
75) alpha-Pinene	23.90	93	157830	4.632	ng		98
76) n-Propylbenzene	24.05	91	393830	4.766	ng		99
77) 3-Ethyltoluene	24.18	105	312687	5.133	ng		99
78) 4-Ethyltoluene	24.23	105	300258	4.865	ng		99
79) 1,3,5-Trimethylbenzene	24.32	105	256223	4.871	ng		100

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060918.D
Acq On : 6 Aug 2009 14:38
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 15:06:30 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

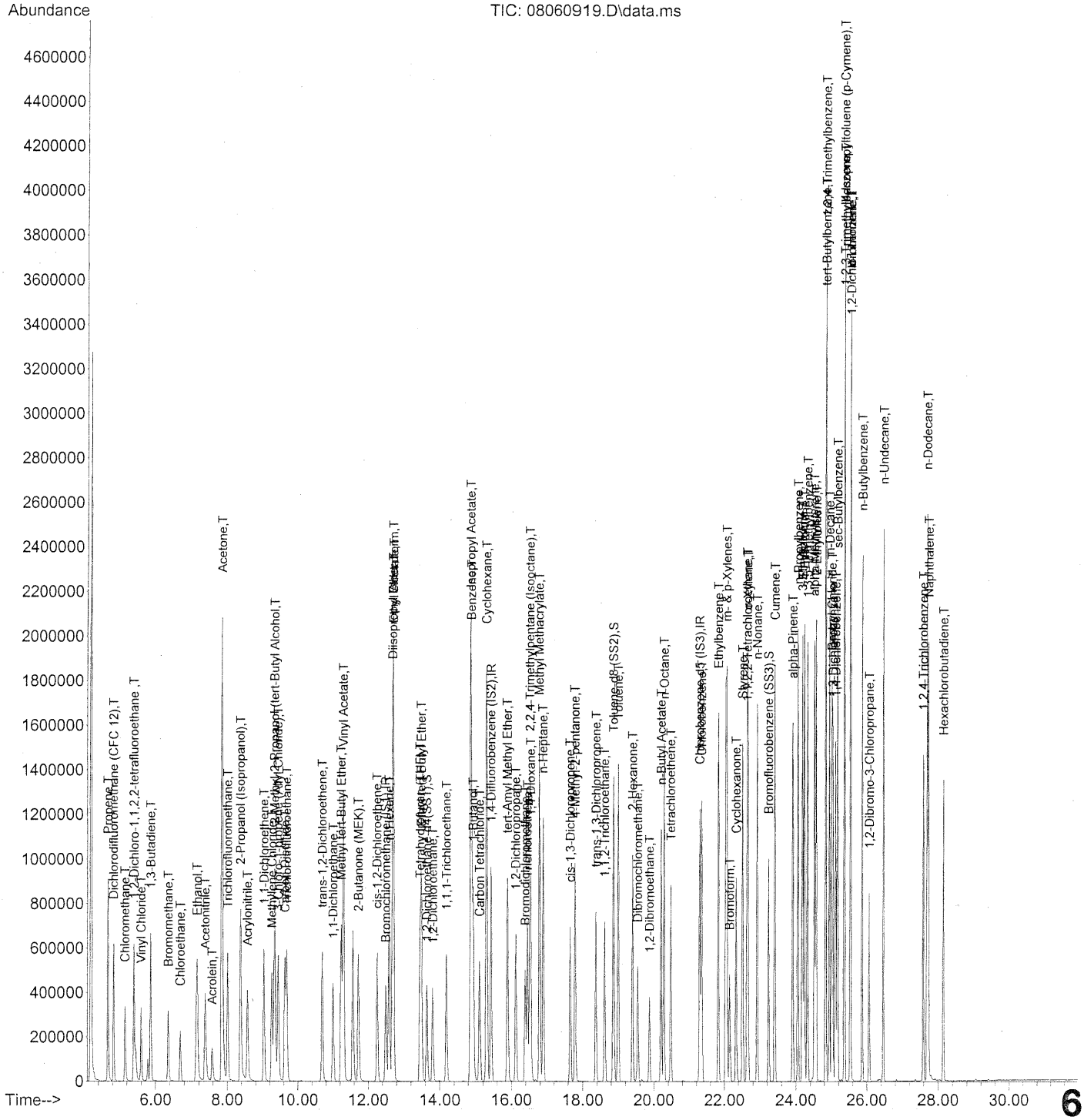
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	137848	5.174	ng	98
81) 2-Ethyltoluene	24.56	105	305024	4.773	ng	100
82) 1,2,4-Trimethylbenzene	24.83	105	257449	4.905	ng	99
83) n-Decane	24.94	57	171862	4.941	ng	99
84) Benzyl Chloride	25.01	91	258427	5.717	ng	99
85) 1,3-Dichlorobenzene	25.03	146	131275	5.227	ng	97
86) 1,4-Dichlorobenzene	25.11	146	133153	4.993	ng	100
87) sec-Butylbenzene	25.17	105	345740	4.915	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	305963	4.889	ng	98
89) 1,2,3-Trimethylbenzene	25.36	105	265359	4.975	ng	98
90) 1,2-Dichlorobenzene	25.53	146	123261	5.077	ng	100
91) d-Limonene	25.53	68	113934	5.005	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	47123	6.066	ng	96
93) n-Undecane	26.46	57	184521	5.189	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	91111	5.938	ng	99
95) Naphthalene	27.73	128	353074	5.862	ng	100
96) n-Dodecane	27.70	57	188594	5.016	ng	99
97) Hexachlorobutadiene	28.15	225	51370	5.213	ng	100
98) Cyclohexanone	22.33	55	103876	3.963	ng	99
99) tert-Butylbenzene	24.83	119	245043	4.847	ng	99
100) n-Butylbenzene	25.86	91	301669	5.270	ng	100

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060919.D
Acq On : 6 Aug 2009 15:18
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060919.D
Acq On : 6 Aug 2009 15:18
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.50	130	207495	25.000	ng		0.01
37) 1,4-Difluorobenzene (IS2)	15.43	114	1056146	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	528644	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.64	65	447374	23.622	ng		0.00
Spiked Amount 25.000			Recovery = 94.48%				
57) Toluene-d8 (SS2)	18.86	98	1150944	25.118	ng		0.00
Spiked Amount 25.000			Recovery = 100.48%				
73) Bromofluorobenzene (SS3)	23.24	174	306340	26.180	ng		0.00
Spiked Amount 25.000			Recovery = 104.72%				
Target Compounds							Qvalue
2) Propene	4.67	42	397150	24.727	ng		100
3) Dichlorodifluoromethan...	4.83	85	635550	23.796	ng		99
4) Chloromethane	5.15	50	453590	26.875	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	260375	24.887	ng		98
6) Vinyl Chloride	5.59	62	431248	26.129	ng		98
7) 1,3-Butadiene	5.87	54	374047	31.641	ng		98
8) Bromomethane	6.35	94	273614	36.099	ng		99
9) Chloroethane	6.69	64	246290	27.134	ng		97
10) Ethanol	7.15	45	1215448	123.257	ng		100
11) Acetonitrile	7.38	41	708708	20.399	ng		100
12) Acrolein	7.57	56	210551	22.077	ng		98
13) Acetone	7.85	58	1259513	111.728	ng		97
14) Trichlorofluoromethane	8.01	101	614629	26.506	ng		100
15) 2-Propanol (Isopropanol)	8.38	45	1639705	43.999	ng		99
16) Acrylonitrile	8.57	53	497820	30.352	ng		99
17) 1,1-Dichloroethene	9.03	96	310280	29.696	ng		93
18) 2-Methyl-2-Propanol (t...	9.34	59	1766301	55.312	ng		98
19) Methylene Chloride	9.26	84	317656	26.180	ng		98
20) 3-Chloro-1-propene (Al...	9.43	41	596921	30.468	ng		99
21) Trichlorotrifluoroethane	9.68	151	242878	28.535	ng		100
22) Carbon Disulfide	9.63	76	1185465	28.386	ng		98
23) trans-1,2-Dichloroethene	10.69	61	536758	29.651	ng		99
24) 1,1-Dichloroethane	10.99	63	626914	27.802	ng		100
25) Methyl tert-Butyl Ether	11.23	73	988001	27.035	ng		99
26) Vinyl Acetate	11.29	86	232023	94.663	ng	#	94
27) 2-Butanone (MEK)	11.71	72	244752	29.962	ng		99
28) cis-1,2-Dichloroethene	12.25	61	508498	29.050	ng		99
29) Diisopropyl Ether	12.68	87	316984	32.016	ng	#	1
30) Ethyl Acetate	12.71	61	248217	58.562	ng		99
31) n-Hexane	12.59	57	594541	26.616	ng		[illegible]

DA 8/6/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060919.D
Acq On : 6 Aug 2009 15:18
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 16:11:17 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.70	83	541847	26.440	ng		100
34) Tetrahydrofuran (THF)	13.45	72	234041	24.295	ng		95
35) Ethyl tert-Butyl Ether	13.48	87	375069	24.759	ng		99
36) 1,2-Dichloroethane	13.80	62	490990	27.208	ng		98
38) 1,1,1-Trichloroethane	14.19	97	521245	26.595	ng		98
39) Isopropyl Acetate	14.87	61	456771	56.511	ng	#	86
40) 1-Butanol	14.93	56	723046	52.443	ng		80
41) Benzene	14.88	78	1276338	24.685	ng		99
42) Carbon Tetrachloride	15.11	117	465095	28.320	ng		98
43) Cyclohexane	15.31	84	1000496	54.769	ng		99
44) tert-Amyl Methyl Ether	15.89	73	989673	26.122	ng		99
45) 1,2-Dichloropropane	16.12	63	347675	27.694	ng		99
46) Bromodichloromethane	16.39	83	465949	29.201	ng		98
47) Trichloroethene	16.45	130	316970	29.394	ng		99
48) 1,4-Dioxane	16.55	88	266033	28.691	ng	#	71
49) 2,2,4-Trimethylpentane...	16.53	57	1568435	27.515	ng		96
50) Methyl Methacrylate	16.79	100	266630	60.760	ng		100
51) n-Heptane	16.89	71	366787	27.159	ng		99
52) cis-1,3-Dichloropropene	17.66	75	541590	27.780	ng		99
53) 4-Methyl-2-pentanone	17.79	58	350647	30.023	ng		98
54) trans-1,3-Dichloropropene	18.37	75	568419	31.884	ng		98
55) 1,1,2-Trichloroethane	18.61	97	299989	27.639	ng		98
58) Toluene	18.99	91	1326296	27.980	ng		99
59) 2-Hexanone	19.39	43	922020	28.929	ng		99
60) Dibromochloromethane	19.54	129	363307	32.695	ng		99
61) 1,2-Dibromoethane	19.87	107	346018	30.184	ng		99
62) n-Butyl Acetate	20.20	43	1069244	29.546	ng		99
63) n-Octane	20.28	57	322871	27.000	ng		96
64) Tetrachloroethene	20.47	166	306228	28.331	ng		99
65) Chlorobenzene	21.35	112	830316	28.987	ng		100
66) Ethylbenzene	21.83	91	1510329	28.156	ng		99
67) m- & p-Xylenes	22.06	91	2364755	54.690	ng		99
68) Bromoform	22.16	173	284337	31.297	ng		99
69) Styrene	22.52	104	922923	30.607	ng		99
70) o-Xylene	22.66	91	1212719	27.879	ng		98
71) n-Nonane	22.92	43	783849	25.792	ng		99
72) 1,1,2,2-Tetrachloroethane	22.64	83	553928	28.964	ng		100
74) Cumene	23.41	105	1485450	27.968	ng		99
75) alpha-Pinene	23.91	93	765795	27.237	ng		100
76) n-Propylbenzene	24.05	91	1894473	27.785	ng		100
77) 3-Ethyltoluene	24.18	105	1496922	29.775	ng		100
78) 4-Ethyltoluene	24.23	105	1487030	29.196	ng		99
79) 1,3,5-Trimethylbenzene	24.33	105	1242874	28.633	ng		[illegible]

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060919.D
Acq On : 6 Aug 2009 15:18
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

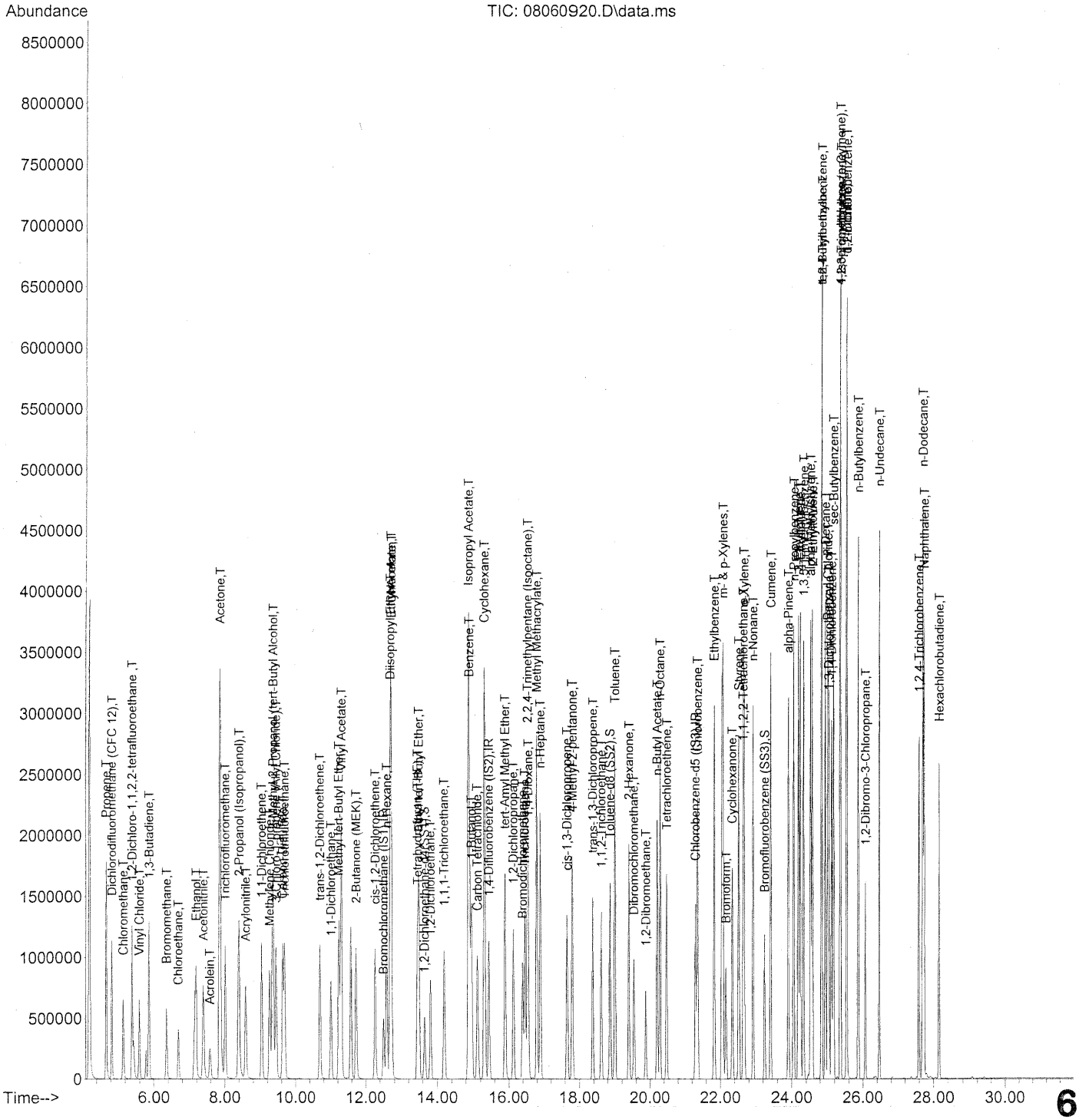
Quant Time: Aug 06 16:11:17 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	682695	31.049	ng	99
81) 2-Ethyltoluene	24.57	105	1482611	28.115	ng	99
82) 1,2,4-Trimethylbenzene	24.84	105	1242291	28.679	ng	100
83) n-Decane	24.94	57	804056	28.011	ng	100
84) Benzyl Chloride	25.01	91	1277690	34.250	ng	100
85) 1,3-Dichlorobenzene	25.03	146	652647	31.489	ng	97
86) 1,4-Dichlorobenzene	25.11	146	668115	30.359	ng	99
87) sec-Butylbenzene	25.17	105	1672528	28.809	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1479621	28.648	ng	100
89) 1,2,3-Trimethylbenzene	25.36	105	1274600	28.960	ng	97
90) 1,2-Dichlorobenzene	25.54	146	611625	30.525	ng	99
91) d-Limonene	25.53	68	550190	29.286	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.07	157	236587	36.905	ng	94
93) n-Undecane	26.46	57	859590	29.294	ng	100
94) 1,2,4-Trichlorobenzene	27.59	180	463024	36.569	ng	100
95) Naphthalene	27.74	128	1702428	34.252	ng	100
96) n-Dodecane	27.70	57	872418	28.116	ng	99
97) Hexachlorobutadiene	28.15	225	262946	32.338	ng	99
98) Cyclohexanone	22.33	55	505166	23.356	ng	99
99) tert-Butylbenzene	24.83	119	1185720	28.423	ng	99
100) n-Butylbenzene	25.87	91	1445418	30.597	ng	99

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

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060920.D
Acq On : 6 Aug 2009 15:59
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060920.D
Acq On : 6 Aug 2009 15:59
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.50	130	246064	25.000	ng		0.02
37) 1,4-Difluorobenzene (IS2)	15.44	114	1247385	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.29	82	628572	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.65	65	527588	23.491	ng		0.01
Spiked Amount 25.000			Recovery =	93.96%			
57) Toluene-d8 (SS2)	18.86	98	1375416	25.245	ng		0.00
Spiked Amount 25.000			Recovery =	100.96%			
73) Bromofluorobenzene (SS3)	23.25	174	373273	26.829	ng		0.00
Spiked Amount 25.000			Recovery =	107.32%			
Target Compounds							Qvalue
2) Propene	4.66	42	766697	40.253	ng		99
3) Dichlorodifluoromethan...	4.82	85	1206456	38.091	ng		99
4) Chloromethane	5.14	50	847645	42.351	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	513921	41.422	ng		99
6) Vinyl Chloride	5.59	62	848331	43.343	ng		98
7) 1,3-Butadiene	5.87	54	730169	52.084	ng		99
8) Bromomethane	6.35	94	491871	54.723	ng		99
9) Chloroethane	6.69	64	469575	43.625	ng		97
10) Ethanol	7.18	45	2326754	198.970	ng		100
11) Acetonitrile	7.39	41	1338822	32.495	ng		100
12) Acrolein	7.58	56	402755	35.611	ng		97
13) Acetone	7.86	58	2311019	172.872	ng		95
14) Trichlorofluoromethane	8.01	101	1159734	42.175	ng		100
15) 2-Propanol (Isopropanol)	8.40	45	2875108	65.056	ng		100
16) Acrylonitrile	8.58	53	940966	48.379	ng		98
17) 1,1-Dichloroethene	9.03	96	590850	47.685	ng		92
18) 2-Methyl-2-Propanol (t...	9.35	59	3260768	86.106	ng		99
19) Methylene Chloride	9.26	84	606273	42.136	ng		98
20) 3-Chloro-1-propene (Al...	9.44	41	1134104	48.813	ng		100
21) Trichlorotrifluoroethane	9.68	151	470831	46.646	ng		99
22) Carbon Disulfide	9.63	76	2221081	44.848	ng		98
23) trans-1,2-Dichloroethene	10.69	61	1011038	47.097	ng		98
24) 1,1-Dichloroethane	11.00	63	1184763	44.306	ng		99
25) Methyl tert-Butyl Ether	11.23	73	1897731	43.789	ng		99
26) Vinyl Acetate	11.30	86	408724	140.617	ng		100
27) 2-Butanone (MEK)	11.72	72	462913	47.786	ng		99
28) cis-1,2-Dichloroethene	12.26	61	959785	46.237	ng		98
29) Diisopropyl Ether	12.69	87	594750	50.655	ng	#	1
30) Ethyl Acetate	12.71	61	462477	92.010	ng		99
31) n-Hexane	12.59	57	1123585	42.416	ng		9[illegible]

DA 8/16/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060920.D
Acq On : 6 Aug 2009 15:59
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.71	83	1005869	41.389	ng		99
34) Tetrahydrofuran (THF)	13.45	72	435280	38.102	ng		97
35) Ethyl tert-Butyl Ether	13.49	87	712110	39.639	ng		97
36) 1,2-Dichloroethane	13.81	62	932796	43.588	ng		98
38) 1,1,1-Trichloroethane	14.19	97	995605	43.010	ng		98
39) Isopropyl Acetate	14.87	61	855760	89.642	ng	#	86
40) 1-Butanol	14.96	56	1373976	84.377	ng	#	79
41) Benzene	14.89	78	2375406	38.898	ng		99
42) Carbon Tetrachloride	15.12	117	885200	45.637	ng		99
43) Cyclohexane	15.31	84	1889680	87.585	ng		98
44) tert-Amyl Methyl Ether	15.89	73	1834473	40.996	ng		99
45) 1,2-Dichloropropane	16.12	63	658137	44.386	ng		99
46) Bromodichloromethane	16.39	83	892711	47.368	ng		99
47) Trichloroethene	16.45	130	608434	47.772	ng		98
48) 1,4-Dioxane	16.55	88	507842	46.373	ng	#	75
49) 2,2,4-Trimethylpentane...	16.53	57	2886330	42.872	ng		97
50) Methyl Methacrylate	16.80	100	522781	100.868	ng		93
51) n-Heptane	16.89	71	684826	42.934	ng		99
52) cis-1,3-Dichloropropene	17.66	75	1039036	45.124	ng		99
53) 4-Methyl-2-pentanone	17.80	58	654840	47.472	ng		99
54) trans-1,3-Dichloropropene	18.37	75	1094561	51.984	ng		99
55) 1,1,2-Trichloroethane	18.61	97	577490	45.049	ng		97
58) Toluene	19.00	91	2525620	44.811	ng		98
59) 2-Hexanone	19.40	43	1735363	45.792	ng		99
60) Dibromochloromethane	19.54	129	703485	53.244	ng		98
61) 1,2-Dibromoethane	19.88	107	661208	48.510	ng		98
62) n-Butyl Acetate	20.20	43	2024198	47.042	ng		99
63) n-Octane	20.28	57	605076	42.555	ng		96
64) Tetrachloroethene	20.48	166	601947	46.837	ng		99
65) Chlorobenzene	21.36	112	1587286	46.604	ng		100
66) Ethylbenzene	21.83	91	2858886	44.823	ng		99
67) m- & p-Xylenes	22.07	91	4460386	86.756	ng		98
68) Bromoform	22.16	173	558777	51.727	ng		99
69) Styrene	22.52	104	1767058	49.286	ng		99
70) o-Xylene	22.66	91	2294449	44.361	ng		97
71) n-Nonane	22.92	43	1444078	39.962	ng		98
72) 1,1,2,2-Tetrachloroethane	22.64	83	1043616	45.894	ng		100
74) Cumene	23.42	105	2823456	44.709	ng		100
75) alpha-Pinene	23.91	93	1462451	43.746	ng		99
76) n-Propylbenzene	24.06	91	3551148	43.802	ng		99
77) 3-Ethyltoluene	24.18	105	2884181	48.248	ng		99
78) 4-Ethyltoluene	24.24	105	2788015	46.037	ng		98
79) 1,3,5-Trimethylbenzene	24.33	105	2362085	45.766	ng		98

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060920.D
Acq On : 6 Aug 2009 15:59
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:00:10 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

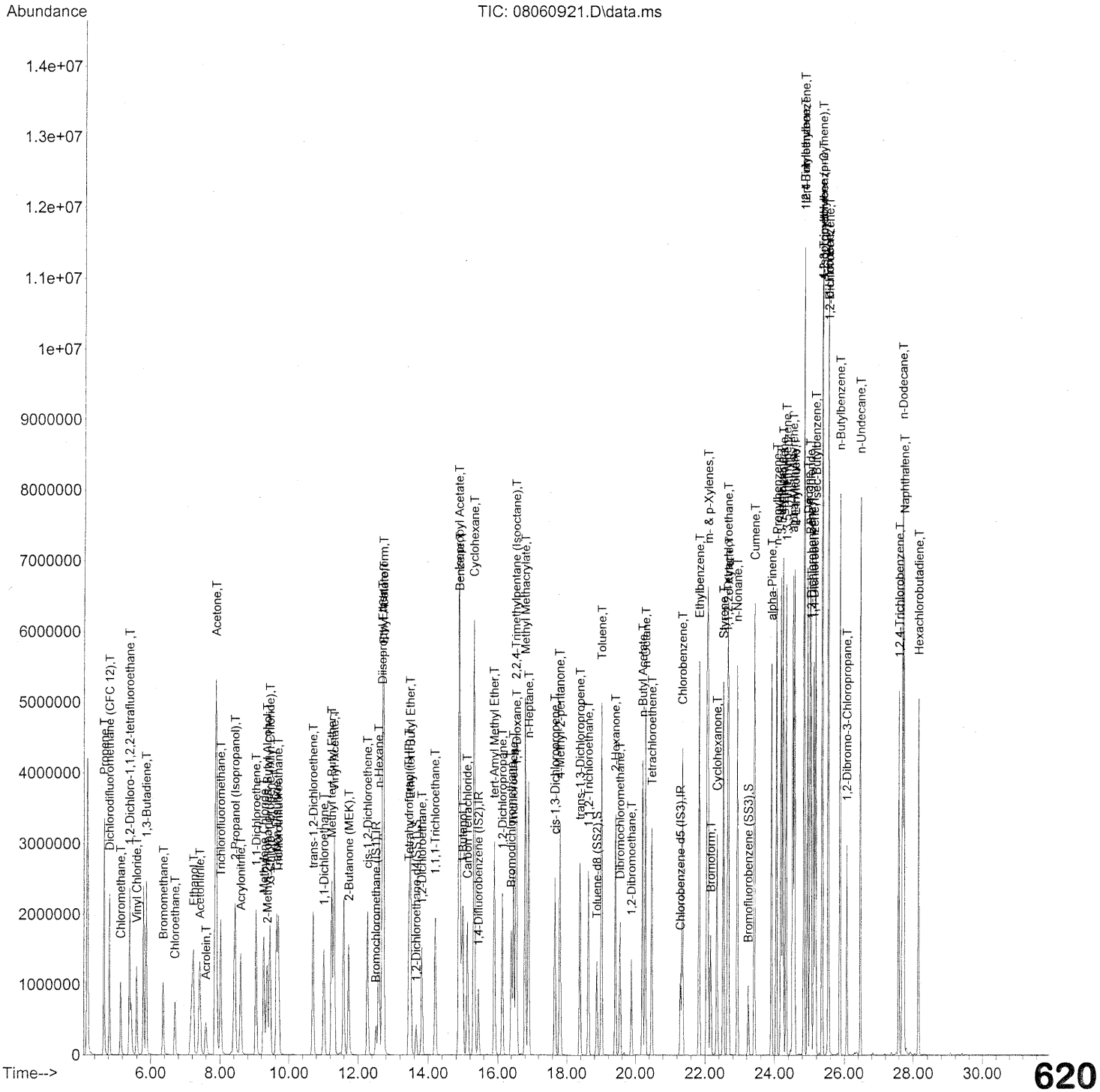
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.52	118	1322010	50.567	ng	96
81) 2-Ethyltoluene	24.57	105	2813751	44.875	ng	99
82) 1,2,4-Trimethylbenzene	24.84	105	2342546	45.481	ng	99
83) n-Decane	24.94	57	1477979	43.303	ng	99
84) Benzyl Chloride	25.01	91	2418762	54.530	ng	99
85) 1,3-Dichlorobenzene	25.04	146	1268117	51.457	ng	97
86) 1,4-Dichlorobenzene	25.11	146	1304869	49.866	ng	99
87) sec-Butylbenzene	25.17	105	3150159	45.635	ng	99
88) 4-Isopropyltoluene (p-...	25.36	119	2788519	45.407	ng	99
89) 1,2,3-Trimethylbenzene	25.37	105	2406323	45.982	ng	97
90) 1,2-Dichlorobenzene	25.54	146	1179498	49.508	ng	100
91) d-Limonene	25.54	68	1035586	46.360	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	460773	60.449	ng	91
93) n-Undecane	26.46	57	1584968	45.428	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	910868	60.503	ng	99
95) Naphthalene	27.74	128	3285610	55.597	ng	99
96) n-Dodecane	27.70	57	1632372	44.244	ng	99
97) Hexachlorobutadiene	28.15	225	522278	54.021	ng	99
98) Cyclohexanone	22.34	55	957787	37.242	ng	98
99) tert-Butylbenzene	24.84	119	2258738	45.537	ng	99
100) n-Butylbenzene	25.87	91	2706705	48.188	ng	99

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060921.D
Acq On : 6 Aug 2009 16:39
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060921.D
Acq On : 6 Aug 2009 16:39
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.51	130	204063	25.000	ng		0.02
37) 1,4-Difluorobenzene (IS2)	15.44	114	1040695	25.000	ng		0.01
56) Chlorobenzene-d5 (IS3)	21.30	82	521975	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.66	65	435176	23.365	ng		0.02
Spiked Amount 25.000			Recovery = 93.44%				
57) Toluene-d8 (SS2)	18.86	98	1136569	25.121	ng		0.00
Spiked Amount 25.000			Recovery = 100.48%				
73) Bromofluorobenzene (SS3)	23.25	174	310567	26.881	ng		0.00
Spiked Amount 25.000			Recovery = 107.52%				
Target Compounds							Qvalue
2) Propene	4.66	42	1483597	93.924	ng		99
3) Dichlorodifluoromethan...	4.83	85	2379344	90.583	ng		99
4) Chloromethane	5.15	50	1392812	83.913	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.39	135	1008644	98.029	ng		98
6) Vinyl Chloride	5.59	62	1677099	103.322	ng		98
7) 1,3-Butadiene	5.87	54	1425350	122.599	ng		98
8) Bromomethane	6.36	94	914093	122.628	ng		99
9) Chloroethane	6.70	64	916786	102.702	ng		98
10) Ethanol	7.23	45	4377562	451.390	ng		100
11) Acetonitrile	7.42	41	2583362	75.607	ng		100
12) Acrolein	7.59	56	784600	83.651	ng		96
13) Acetone	7.89	58	4244786	382.878	ng		87
14) Trichlorofluoromethane	8.02	101	2210255	96.921	ng		99
15) 2-Propanol (Isopropanol)	8.43	45	5177262	141.260	ng		100
16) Acrylonitrile	8.60	53	1796721	111.390	ng		97
17) 1,1-Dichloroethene	9.04	96	1160669	112.953	ng		90
18) 2-Methyl-2-Propanol (t...	9.37	59	2345913	74.698	ng		100
19) Methylene Chloride	9.27	84	1184348	99.253	ng		96
20) 3-Chloro-1-propene (Al...	9.45	41	2146772	111.416	ng		98
21) Trichlorotrifluoroethane	9.68	151	916963	109.542	ng		96
22) Carbon Disulfide	9.63	76	4236854	103.158	ng		98
23) trans-1,2-Dichloroethene	10.70	61	1929408	108.376	ng		96
24) 1,1-Dichloroethane	11.01	63	2255773	101.720	ng		100
25) Methyl tert-Butyl Ether	11.23	73	3661547	101.878	ng		99
26) Vinyl Acetate	11.31	86	640109	265.549	ng	#	93
27) 2-Butanone (MEK)	11.73	72	687553	85.584	ng		97
28) cis-1,2-Dichloroethene	12.27	61	1822976	105.896	ng		97
29) Diisopropyl Ether	12.70	87	1137931	116.867	ng	#	1
30) Ethyl Acetate	12.73	61	853386	204.726	ng		100
31) n-Hexane	12.59	57	2161223	98.379	ng		9

8/16/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060921.D
Acq On : 6 Aug 2009 16:39
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.72	83	1880936	93.325	ng		100
34) Tetrahydrofuran (THF)	13.45	72	810456	85.544	ng		98
35) Ethyl tert-Butyl Ether	13.50	87	1363054	91.490	ng		96
36) 1,2-Dichloroethane	13.82	62	1754433	98.856	ng		97
38) 1,1,1-Trichloroethane	14.20	97	1846555	95.614	ng		98
39) Isopropyl Acetate	14.88	61	1588242	199.413	ng		95
40) 1-Butanol	14.99	56	2511497	184.865	ng	#	77
41) Benzene	14.90	78	4433680	87.021	ng		100
42) Carbon Tetrachloride	15.12	117	1694678	104.722	ng		99
43) Cyclohexane	15.32	84	3585086	199.167	ng		97
44) tert-Amyl Methyl Ether	15.90	73	3367820	90.211	ng		99
45) 1,2-Dichloropropane	16.13	63	1250257	101.067	ng		99
46) Bromodichloromethane	16.40	83	1669484	106.178	ng		99
47) Trichloroethene	16.47	130	1192304	112.208	ng		99
48) 1,4-Dioxane	16.56	88	940853	102.975	ng	#	76
49) 2,2,4-Trimethylpentane...	16.54	57	5320898	94.731	ng		97
50) Methyl Methacrylate	16.81	100	995395	230.200	ng	#	90
51) n-Heptane	16.91	71	1295628	97.360	ng		98
52) cis-1,3-Dichloropropene	17.67	75	1960789	102.068	ng		99
53) 4-Methyl-2-pentanone	17.80	58	1240802	107.815	ng		100
54) trans-1,3-Dichloropropene	18.38	75	2068198	117.733	ng		99
55) 1,1,2-Trichloroethane	18.62	97	1112067	103.980	ng		96
58) Toluene	19.00	91	4768847	101.891	ng		98
59) 2-Hexanone	19.41	43	3205631	101.863	ng		97
60) Dibromochloromethane	19.54	129	1359408	123.901	ng		98
61) 1,2-Dibromoethane	19.88	107	1277917	112.901	ng		99
62) n-Butyl Acetate	20.21	43	4015589	112.379	ng		98
63) n-Octane	20.29	57	1130161	95.715	ng		95
64) Tetrachloroethene	20.48	166	1184412	110.979	ng		99
65) Chlorobenzene	21.36	112	3039056	107.452	ng		100
66) Ethylbenzene	21.84	91	5357238	101.146	ng		97
67) m- & p-Xylenes	22.08	91	8307914	194.593	ng		96
68) Bromoform	22.17	173	1108833	123.609	ng		99
69) Styrene	22.53	104	3401279	114.239	ng		98
70) o-Xylene	22.67	91	4304194	100.212	ng		96
71) n-Nonane	22.93	43	2656292	88.519	ng		97
72) 1,1,2,2-Tetrachloroethane	22.65	83	1997850	105.799	ng		100
74) Cumene	23.42	105	5281477	100.712	ng		99
75) alpha-Pinene	23.91	93	2764527	99.583	ng		98
76) n-Propylbenzene	24.06	91	6477041	96.207	ng		97
77) 3-Ethyltoluene	24.19	105	5409334	108.970	ng		98
78) 4-Ethyltoluene	24.25	105	5142381	102.255	ng		95
79) 1,3,5-Trimethylbenzene	24.34	105	4445745	103.729	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060921.D
Acq On : 6 Aug 2009 16:39
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-07200902/S20-07310901
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 17:08:49 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 07:59:49 2009
Response via : Initial Calibration

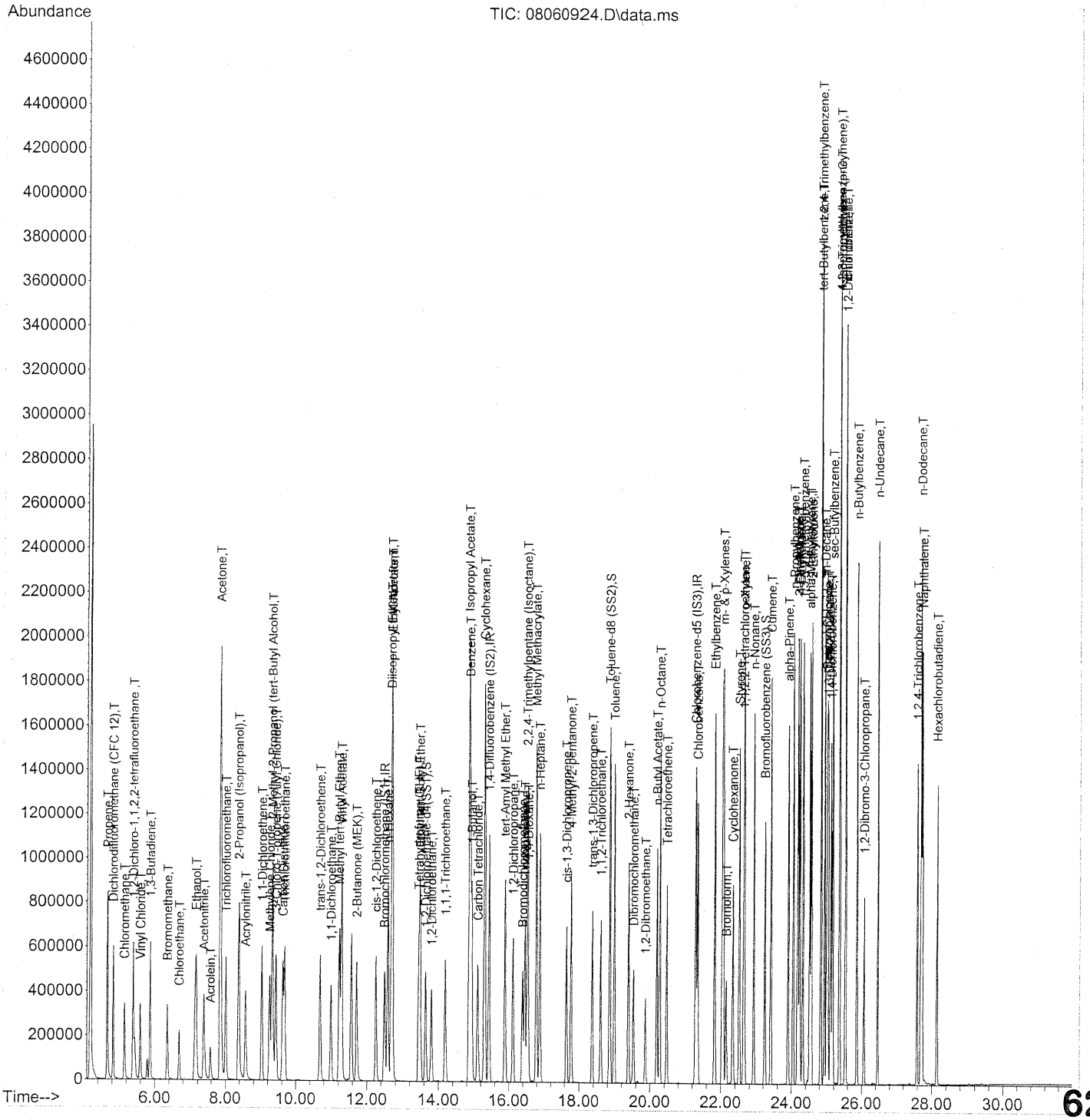
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.53	118	2536487	116.834	ng	96
81) 2-Ethyltoluene	24.58	105	5229998	100.443	ng	97
82) 1,2,4-Trimethylbenzene	24.85	105	4275494	99.962	ng	98
83) n-Decane	24.95	57	2704263	95.412	ng	98
84) Benzyl Chloride	25.02	91	4499020	122.142	ng	97
85) 1,3-Dichlorobenzene	25.05	146	2490794	121.712	ng	97
86) 1,4-Dichlorobenzene	25.13	146	2542028	116.984	ng	98
87) sec-Butylbenzene	25.18	105	5783982	100.902	ng	98
88) 4-Isopropyltoluene (p-...	25.37	119	5010569	98.251	ng	99
89) 1,2,3-Trimethylbenzene	25.37	105	4359650	100.320	ng	95
90) 1,2-Dichlorobenzene	25.55	146	2206686	111.538	ng	100
91) d-Limonene	25.54	68	1890339	101.906	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	907634	143.389	ng	86
93) n-Undecane	26.47	57	2880684	99.426	ng	99
94) 1,2,4-Trichlorobenzene	27.60	180	1811250	144.878	ng	100
95) Naphthalene	27.74	128	6139171	125.097	ng	98
96) n-Dodecane	27.70	57	2961251	96.654	ng	98
97) Hexachlorobutadiene	28.15	225	1052824	131.135	ng	99
98) Cyclohexanone	22.35	55	1779789	83.337	ng	98
99) tert-Butylbenzene	24.85	119	4145655	100.646	ng	98
100) n-Butylbenzene	25.87	91	4947974	106.080	ng	97

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060924.D
Acq On : 6 Aug 2009 18:51
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-07200902/S20-07240917
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



624

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060924.D
Acq On : 6 Aug 2009 18:51
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-07200902/S20-07240917
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.50	130	238664	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.43	114	1224547	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.29	82	614774	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.64	65	510896	24.629	ng		-0.02
Spiked Amount 25.000			Recovery =	98.52%			
57) Toluene-d8 (SS2)	18.86	98	1345950	25.056	ng		0.00
Spiked Amount 25.000			Recovery =	100.24%			
73) Bromofluorobenzene (SS3)	23.24	174	365031	25.768	ng		0.00
Spiked Amount 25.000			Recovery =	103.08%			
Target Compounds							Qvalue
2) Propene	4.67	42	372783	22.762	ng		99
3) Dichlorodifluoromethan...	4.83	85	610303	22.800	ng		99
4) Chloromethane	5.15	50	470357	26.153	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	266041	24.462	ng		98
6) Vinyl Chloride	5.59	62	440187	25.475	ng		98
7) 1,3-Butadiene	5.87	54	341677	27.589	ng		98
8) Bromomethane	6.35	94	287643	27.346	ng		99
9) Chloroethane	6.69	64	244762	24.371	ng		98
10) Ethanol	7.15	45	1296320	124.871	ng		100
11) Acetonitrile	7.38	41	687211	22.604	ng		100
12) Acrolein	7.58	56	203458	25.747	ng		98
13) Acetone	7.85	58	1224977	125.059	ng		98
14) Trichlorofluoromethane	8.01	101	586848	24.249	ng		100
15) 2-Propanol (Isopropanol)	8.38	45	1711755	44.469	ng		100
16) Acrylonitrile	8.57	53	479431	27.089	ng		99
17) 1,1-Dichloroethene	9.03	96	310330	27.616	ng		92
18) 2-Methyl-2-Propanol (t...	9.33	59	1753114	51.311	ng		98
19) Methylene Chloride	9.26	84	314029	23.873	ng		98
20) 3-Chloro-1-propene (Al...	9.43	41	592052	23.348	ng		99
21) Trichlorotrifluoroethane	9.68	151	249618	28.368	ng		98
22) Carbon Disulfide	9.63	76	1135664	24.487	ng		99
23) trans-1,2-Dichloroethene	10.69	61	514272	25.864	ng		97
24) 1,1-Dichloroethane	11.00	63	617936	25.628	ng		99
25) Methyl tert-Butyl Ether	11.23	73	950000	25.633	ng		100
26) Vinyl Acetate	11.30	86	177094	88.842	ng	#	94
27) 2-Butanone (MEK)	11.71	72	233396	26.390	ng		98
28) cis-1,2-Dichloroethene	12.26	61	497051	26.856	ng		98
29) Diisopropyl Ether	12.68	87	313290	26.470	ng	#	1
30) Ethyl Acetate	12.71	61	234351	50.865	ng		100
31) n-Hexane	12.59	57	571801	24.261	ng		9[illegible]

DH 8/6/09

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060924.D
Acq On : 6 Aug 2009 18:51
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-07200902/S20-07240917
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.70	83	539974	26.023	ng		100
34) Tetrahydrofuran (THF)	13.45	72	224798	23.845	ng		97
35) Ethyl tert-Butyl Ether	13.49	87	370406	24.192	ng		97
36) 1,2-Dichloroethane	13.80	62	484412	25.544	ng		98
38) 1,1,1-Trichloroethane	14.19	97	519036	24.987	ng		98
39) Isopropyl Acetate	14.87	61	451344	49.686	ng	#	86
40) 1-Butanol	14.94	56	736605	46.349	ng		81
41) Benzene	14.89	78	1265289	23.502	ng		99
42) Carbon Tetrachloride	15.11	117	450418	26.249	ng		100
43) Cyclohexane	15.31	84	972612	49.322	ng		98
44) tert-Amyl Methyl Ether	15.89	73	971883	24.038	ng		100
45) 1,2-Dichloropropane	16.12	63	344710	25.493	ng		100
46) Bromodichloromethane	16.39	83	451868	25.469	ng		99
47) Trichloroethene	16.45	130	316605	26.073	ng		98
48) 1,4-Dioxane	16.55	88	267355	25.984	ng	#	75
49) 2,2,4-Trimethylpentane...	16.53	57	1523182	24.019	ng		97
50) Methyl Methacrylate	16.79	100	272103	54.901	ng		95
51) n-Heptane	16.89	71	350866	24.283	ng		99
52) cis-1,3-Dichloropropene	17.66	75	537674	23.993	ng		99
53) 4-Methyl-2-pentanone	17.79	58	336616	26.015	ng		99
54) trans-1,3-Dichloropropene	18.37	75	569561	26.731	ng		99
55) 1,1,2-Trichloroethane	18.61	97	303093	25.641	ng		97
58) Toluene	18.99	91	1339186	25.367	ng		99
59) 2-Hexanone	19.39	43	883623	25.170	ng		98
60) Dibromochloromethane	19.54	129	352845	28.249	ng		98
61) 1,2-Dibromoethane	19.87	107	345699	26.105	ng		98
62) n-Butyl Acetate	20.20	43	981251	23.714	ng		100
63) n-Octane	20.28	57	319723	25.050	ng		97
64) Tetrachloroethene	20.48	166	313916	25.696	ng		99
65) Chlorobenzene	21.35	112	837660	25.646	ng		100
66) Ethylbenzene	21.83	91	1521202	25.207	ng		99
67) m- & p-Xylenes	22.07	91	2387430	48.904	ng		99
68) Bromoform	22.16	173	274178	26.436	ng		99
69) Styrene	22.52	104	931476	26.398	ng		100
70) o-Xylene	22.66	91	1225251	25.032	ng		98
71) n-Nonane	22.92	43	765549	23.539	ng		98
72) 1,1,2,2-Tetrachloroethane	22.64	83	551441	25.386	ng		100
74) Cumene	23.41	105	1481888	23.968	ng		99
75) alpha-Pinene	23.91	93	760032	23.981	ng		100
76) n-Propylbenzene	24.05	91	1878570	24.170	ng		100
77) 3-Ethyltoluene	24.18	105	1492441	25.257	ng		99
78) 4-Ethyltoluene	24.23	105	1464128	25.572	ng		99
79) 1,3,5-Trimethylbenzene	24.33	105	1255212	25.994	ng		99

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060924.D
Acq On : 6 Aug 2009 18:51
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-07200902/S20-07240917
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 19:33:01 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	680016	26.303	ng	97
81) 2-Ethyltoluene	24.57	105	1474596	24.747	ng	100
82) 1,2,4-Trimethylbenzene	24.84	105	1248319	25.349	ng	100
83) n-Decane	24.94	57	783579	24.473	ng	99
84) Benzyl Chloride	25.01	91	1232630	26.703	ng	100
85) 1,3-Dichlorobenzene	25.03	146	665342	26.696	ng	98
86) 1,4-Dichlorobenzene	25.11	146	674734	25.391	ng	98
87) sec-Butylbenzene	25.17	105	1664439	25.020	ng	100
88) 4-Isopropyltoluene (p-...	25.36	119	1472106	24.816	ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	1264769	25.211	ng	97
90) 1,2-Dichlorobenzene	25.54	146	618612	26.180	ng	100
91) d-Limonene	25.53	68	540824	25.826	ng	98
92) 1,2-Dibromo-3-Chloropr...	26.07	157	235275	28.950	ng	92
93) n-Undecane	26.46	57	834523	24.499	ng	99
94) 1,2,4-Trichlorobenzene	27.59	180	459074	28.256	ng	99
95) Naphthalene	27.74	128	1677315	25.080	ng	100
96) n-Dodecane	27.70	57	837508	21.164	ng	99
97) Hexachlorobutadiene	28.15	225	258900	25.054	ng	99
98) Cyclohexanone	22.34	55	491779	22.484	ng	98
99) tert-Butylbenzene	24.83	119	1186643	24.898	ng	99
100) n-Butylbenzene	25.87	91	1423055	25.944	ng	100

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

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08060924.D
Data File Path: J:\MS13\DATA\2009_08\06\
Operator: WA
Date Acquired: 8/6/09 18:51
Acq. Method File: TO15.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-07200902/S20-07240917
Instrument Name: GCMS13

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.67	22.8	26.3	86.7	70	130	*
3)	Dichlorodifluoromethane (CFC	4.83	22.8	26.0	87.7	70	130	*
4)	Chloromethane	5.15	26.2	25.0	104.8	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro(	5.40	24.5	26.0	94.2	70	130	*
6)	Vinyl Chloride	5.60	25.5	25.3	100.8	70	130	*
7)	1,3-Butadiene	5.87	27.6	26.8	103.0	70	130	*
8)	Bromomethane	6.35	27.3	25.8	105.8	70	130	*
9)	Chloroethane	6.69	24.4	25.5	95.7	70	130	*
10)	Ethanol	7.15	124.9	130.0	96.1	70	130	*
11)	Acetonitrile	7.38	22.6	26.0	86.9	70	130	*
12)	Acrolein	7.58	25.7	26.3	97.7	70	130	*
13)	Acetone	7.85	125.1	132.0	94.8	70	130	*
14)	Trichlorofluoromethane	8.01	24.2	26.3	92.0	70	130	*
15)	2-Propanol (Isopropanol)	8.38	44.5	48.0	92.7	70	130	*
16)	Acrylonitrile	8.57	27.1	25.8	105.0	70	130	*
17)	1,1-Dichloroethene	9.03	27.6	27.5	100.4	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	9.33	51.3	50.0	102.6	70	130	*
19)	Methylene Chloride	9.26	23.9	26.8	89.2	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.43	23.3	27.0	86.3	70	130	*
21)	Trichlorotrifluoroethane	9.68	28.4	27.5	103.3	70	130	*
22)	Carbon Disulfide	9.63	24.5	26.0	94.2	70	130	*
23)	trans-1,2-Dichloroethene	10.69	25.9	25.5	101.6	70	130	*
24)	1,1-Dichloroethane	11.00	25.6	26.5	96.6	70	130	*
25)	Methyl tert-Butyl Ether	11.23	25.6	26.3	97.3	70	130	*
26)	Vinyl Acetate	11.30	88.8	126.0	70.5	70	130	*
27)	2-Butanone (MEK)	11.71	26.4	26.8	98.5	70	130	*
28)	cis-1,2-Dichloroethene	12.26	26.9	27.0	99.6	70	130	*
29)	Diisopropyl Ether	12.68	26.5	26.5	100.0	70	130	*
30)	Ethyl Acetate	12.71	50.9	52.0	97.9	70	130	*
31)	n-Hexane	12.59	24.3	26.0	93.5	70	130	*
32)	Chloroform	12.70	26.0	27.5	94.5	70	130	*
34)	Tetrahydrofuran (THF)	13.45	23.8	26.5	89.8	70	130	*
35)	Ethyl tert-Butyl Ether	13.49	24.2	25.5	94.9	70	130	*
36)	1,2-Dichloroethane	13.80	25.5	26.3	97.0	70	130	*
38)	1,1,1-Trichloroethane	14.19	25.0	26.0	96.2	70	130	*
39)	Isopropyl Acetate	14.87	49.7	52.3	95.0	70	130	*
40)	1-Butanol	14.94	46.3	52.8	87.7	70	130	*
41)	Benzene	14.89	23.5	25.8	91.1	70	130	*
42)	Carbon Tetrachloride	15.11	26.2	26.3	99.6	70	130	*
43)	Cyclohexane	15.31	49.3	51.8	95.2	70	130	*
44)	tert-Amyl Methyl Ether	15.89	24.0	25.5	94.1	70	130	*
45)	1,2-Dichloropropane	16.12	25.5	26.0	98.1	70	130	*
46)	Bromodichloromethane	16.39	25.5	26.3	97.0	70	130	*
47)	Trichloroethene	16.45	26.1	25.8	101.2	70	130	*
48)	1,4-Dioxane	16.55	26.0	26.0	100.0	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.53	24.0	25.8	93.0	70	130	*
50)	Methyl Methacrylate	16.79	54.9	52.8	104.0	70	130	*

DA 8/6/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08060924.D **Acq. Method File:** TO15.M
Data File Path: J:\MS13\DATA\2009_08\06\ **Name:** 25ng TO-15 ICV STD
Operator: WA **Misc Info:** S20-07200902/S20-07240917
Date Acquired: 8/6/09 18:51 **Instrument Name:** GCMS13

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	16.89	24.3	25.8	94.2	70	130	*
52)	cis-1,3-Dichloropropene	17.66	24.0	24.5	98.0	70	130	*
53)	4-Methyl-2-pentanone	17.79	26.0	26.8	97.0	70	130	*
54)	trans-1,3-Dichloropropene	18.37	26.7	27.0	98.9	70	130	*
55)	1,1,2-Trichloroethane	18.61	25.6	26.0	98.5	70	130	*
58)	Toluene	18.99	25.4	26.8	94.8	70	130	*
59)	2-Hexanone	19.39	25.2	27.0	93.3	70	130	*
60)	Dibromochloromethane	19.54	28.2	28.3	99.6	70	130	*
61)	1,2-Dibromoethane	19.87	26.1	26.3	99.2	70	130	*
62)	n-Butyl Acetate	20.20	23.7	27.5	86.2	70	130	*
63)	n-Octane	20.28	25.1	26.3	95.4	70	130	*
64)	Tetrachloroethene	20.48	25.7	25.3	101.6	70	130	*
65)	Chlorobenzene	21.35	25.6	26.5	96.6	70	130	*
66)	Ethylbenzene	21.83	25.2	26.3	95.8	70	130	*
67)	m- & p-Xylenes	22.07	48.9	51.5	95.0	70	130	*
68)	Bromoform	22.16	26.4	26.5	99.6	70	130	*
69)	Styrene	22.52	26.4	26.3	100.4	70	130	*
70)	o-Xylene	22.66	25.0	26.0	96.2	70	130	*
71)	n-Nonane	22.92	23.5	25.8	91.1	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.64	25.4	27.0	94.1	70	130	*
74)	Cumene	23.41	24.0	25.3	94.9	70	130	*
75)	alpha-Pinene	23.91	24.0	24.8	96.8	70	130	*
76)	n-Propylbenzene	24.05	24.2	25.3	95.7	70	130	*
77)	3-Ethyltoluene	24.18	25.3	26.3	96.2	70	130	*
78)	4-Ethyltoluene	24.23	25.6	26.3	97.3	70	130	*
79)	1,3,5-Trimethylbenzene	24.33	26.0	26.5	98.1	70	130	*
80)	alpha-Methylstyrene	24.51	26.3	26.0	101.2	70	130	*
81)	2-Ethyltoluene	24.57	24.7	26.0	95.0	70	130	*
82)	1,2,4-Trimethylbenzene	24.84	25.3	25.5	99.2	70	130	*
83)	n-Decane	24.94	24.5	26.3	93.2	70	130	*
84)	Benzyl Chloride	25.01	26.7	26.8	99.6	70	130	*
85)	1,3-Dichlorobenzene	25.03	26.7	26.0	102.7	70	130	*
86)	1,4-Dichlorobenzene	25.11	25.4	26.3	96.6	70	130	*
87)	sec-Butylbenzene	25.17	25.0	25.8	96.9	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.36	24.8	25.0	99.2	70	130	*
89)	1,2,3-Trimethylbenzene	25.36	25.2	26.0	96.9	70	130	*
90)	1,2-Dichlorobenzene	25.54	26.2	25.8	101.6	70	130	*
91)	d-Limonene	25.53	25.8	26.5	97.4	70	130	*
92)	1,2-Dibromo-3-Chloropropane	26.07	28.9	27.0	107.0	70	130	*
93)	n-Undecane	26.46	24.5	26.3	93.2	70	130	*
94)	1,2,4-Trichlorobenzene	27.59	28.3	27.3	103.7	70	130	*
95)	Naphthalene	27.74	25.1	25.0	100.4	70	130	*
96)	n-Dodecane	27.70	21.2	24.3	87.2	70	130	*
97)	Hexachlorobutadiene	28.15	25.1	26.8	93.7	70	130	*
98)	Cyclohexanone	22.34	22.5	24.8	90.7	70	130	*
99)	tert-Butylbenzene	24.83	24.9	26.5	94.0	70	130	*
100)	n-Butylbenzene	25.87	25.9	26.5	97.7	70	130	*

* Denotes Passing Criterion

DAT 8/6/09

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	118	-0.02
2	T	Propene	1.716	1.431	16.6	94	0.00
3	T	Dichlorodifluoromethane (CF	2.804	2.444	12.8	99	0.00
4	T	Chloromethane	1.884	1.770	6.1	95	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.139	1.068	6.2	106	0.00
6	T	Vinyl Chloride	1.810	1.673	7.6	96	0.00
7	T	1,3-Butadiene	1.297	1.258	3.0	99	0.00
8	T	Bromomethane	1.102	1.174	-6.5	107	-0.01
9	T	Chloroethane	1.052	0.931	11.5	94	-0.01
10	T	Ethanol	1.087	0.909	16.4	95	-0.11
11	T	Acetonitrile	3.185	2.416	24.1	88	-0.05
12	T	Acrolein	0.828	0.722	12.8	90	-0.03
13	T	Acetone	1.026	0.882	14.0	94	-0.07
14	T	Trichlorofluoromethane	2.535	2.341	7.7	98	0.00
15	T	2-Propanol (Isopropanol)	4.032	2.919	27.6	82	-0.10
16	T	Acrylonitrile	1.854	1.704	8.1	89	-0.04
17	T	1,1-Dichloroethene	1.177	1.145	2.7	99	-0.01
18	T	2-Methyl-2-Propanol (tert-B	3.579	3.218	10.1	90	-0.09
19	T	Methylene Chloride	1.378	1.164	15.5	96	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.656	1.901	28.4	84	-0.02
21	T	Trichlorotrifluoroethane	0.922	0.968	-5.0	107	0.00
22	T	Carbon Disulfide	4.858	4.439	8.6	98	-0.01
23	T	trans-1,2-Dichloroethene	2.083	1.844	11.5	89	-0.02
24	T	1,1-Dichloroethane	2.526	2.214	12.4	91	-0.02
25	T	Methyl tert-Butyl Ether	3.882	3.514	9.5	95	-0.05
26	T	Vinyl Acetate	0.209	0.249	-19.1	132	-0.03
27	T	2-Butanone (MEK)	0.926	0.854	7.8	94	-0.06
28	T	cis-1,2-Dichloroethene	1.939	1.717	11.4	90	-0.02
29	T	Diisopropyl Ether	1.240	1.196	3.5	99	-0.04
30	T	Ethyl Acetate	0.483	0.460	4.8	97	-0.06
31	T	n-Hexane	2.469	2.028	17.9	91	-0.01
32	T	Chloroform	2.174	2.062	5.2	100	-0.02
33	S	1,2-Dichloroethane-d4(SS1)	2.173	1.916	11.8	105	-0.02
34	T	Tetrahydrofuran (THF)	0.988	0.828	16.2	95	-0.06
35	T	Ethyl tert-Butyl Ether	1.604	1.452	9.5	98	-0.04
36	T	1,2-Dichloroethane	1.986	1.733	12.7	91	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	116	-0.02
38	T	1,1,1-Trichloroethane	0.424	0.391	7.8	97	-0.01

631

8/25/09

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.185	0.162	12.4	91	-0.05
40	T	1-Butanol	0.324	0.260	19.8	91	-0.10
41	T	Benzene	1.099	0.942	14.3	96	-0.02
42	T	Carbon Tetrachloride	0.350	0.344	1.7	98	-0.01
43	T	Cyclohexane	0.403	0.371	7.9	98	-0.01
44	T	tert-Amyl Methyl Ether	0.825	0.732	11.3	94	-0.05
45	T	1,2-Dichloropropane	0.276	0.248	10.1	92	-0.02
46	T	Bromodichloromethane	0.362	0.339	6.4	96	-0.02
47	T	Trichloroethene	0.248	0.256	-3.2	105	-0.02
48	T	1,4-Dioxane	0.210	0.202	3.8	100	-0.05
49	T	2,2,4-Trimethylpentane (Iso	1.295	1.108	14.4	90	-0.02
50	T	Methyl Methacrylate	0.101	0.102	-1.0	100	-0.04
51	T	n-Heptane	0.295	0.262	11.2	93	-0.02
52	T	cis-1,3-Dichloropropene	0.458	0.425	7.2	95	-0.02
53	T	4-Methyl-2-pentanone	0.264	0.236	10.6	91	-0.04
54	T	trans-1,3-Dichloropropene	0.435	0.403	7.4	96	-0.02
55	T	1,1,2-Trichloroethane	0.241	0.234	2.9	101	-0.02
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	109	-0.01
57	S	Toluene-d8 (SS2)	2.184	2.281	-4.4	114	-0.01
58	T	Toluene	2.147	2.105	2.0	98	-0.02
59	T	2-Hexanone	1.428	1.262	11.6	86	-0.05
60	T	Dibromochloromethane	0.508	0.564	-11.0	103	-0.01
61	T	1,2-Dibromoethane	0.539	0.577	-7.1	101	-0.02
62	T	n-Butyl Acetate	1.683	1.433	14.9	85	-0.03
63	T	n-Octane	0.519	0.478	7.9	91	-0.02
64	T	Tetrachloroethene	0.497	0.558	-12.3	107	-0.01
65	T	Chlorobenzene	1.328	1.381	-4.0	103	-0.01
66	T	Ethylbenzene	2.454	2.454	0.0	99	-0.01
67	T	m- & p-Xylenes	1.985	1.965	1.0	99	-0.02
68	T	Bromoform	0.422	0.506	-19.9	105	-0.02
69	T	Styrene	1.435	1.509	-5.2	101	-0.02
70	T	o-Xylene	1.990	1.984	0.3	99	-0.02
71	T	n-Nonane	1.323	1.115	15.7	86	-0.01
72	T	1,1,2,2-Tetrachloroethane	0.883	0.905	-2.5	100	-0.02
73	S	Bromofluorobenzene (SS3)	0.576	0.642	-11.5	120	-0.01
74	T	Cumene	2.514	2.548	-1.4	102	-0.02
75	T	alpha-Pinene	1.289	1.301	-0.9	99	-0.01
76	T	n-Propylbenzene	3.161	3.197	-1.1	100	-0.01

8/25/09

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	2.403	2.419	-0.7	101	-0.01
78	T	4-Ethyltoluene	2.328	2.427	-4.3	102	-0.02
79	T	1,3,5-Trimethylbenzene	1.964	2.007	-2.2	101	-0.02
80	T	alpha-Methylstyrene	1.051	1.143	-8.8	103	-0.02
81	T	2-Ethyltoluene	2.423	2.490	-2.8	101	-0.02
82	T	1,2,4-Trimethylbenzene	2.003	2.067	-3.2	101	-0.02
83	T	n-Decane	1.302	1.176	9.7	91	-0.01
84	T	Benzyl Chloride	1.877	2.003	-6.7	99	-0.02
85	T	1,3-Dichlorobenzene	1.013	1.110	-9.6	107	-0.02
86	T	1,4-Dichlorobenzene	1.081	1.165	-7.8	106	-0.02
87	T	sec-Butylbenzene	2.705	2.818	-4.2	102	-0.02
88	T	4-Isopropyltoluene (p-Cymen	2.412	2.572	-6.6	103	-0.01
89	T	1,2,3-Trimethylbenzene	2.040	2.107	-3.3	102	-0.01
90	T	1,2-Dichlorobenzene	0.961	1.062	-10.5	106	-0.02
91	T	d-Limonene	0.852	0.847	0.6	96	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.330	0.407	-23.3	109	-0.01
93	T	n-Undecane	1.385	1.276	7.9	93	-0.01
94	T	1,2,4-Trichlorobenzene	0.661	0.791	-19.7	110	-0.02
95	T	Naphthalene	2.720	3.055	-12.3	109	-0.01
96	T	n-Dodecane	1.609	1.448	10.0	94	0.00
97	T	Hexachlorobutadiene	0.420	0.451	-7.4	108	0.00
98	T	Cyclohexanone	0.889	0.797	10.3	89	-0.05
99	T	tert-Butylbenzene	1.938	1.997	-3.0	102	-0.02
100	T	n-Butylbenzene	2.231	2.307	-3.4	100	-0.01

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

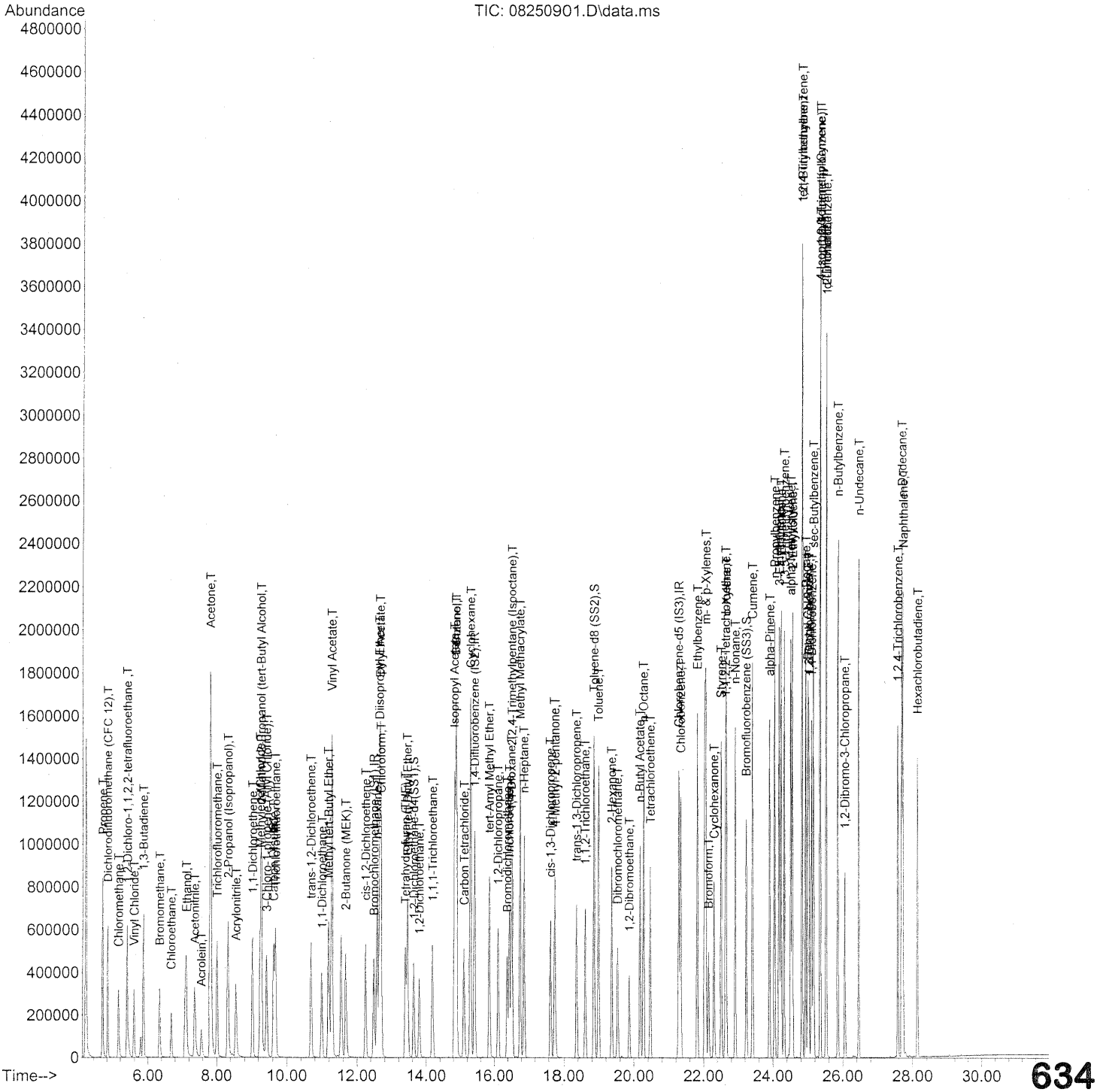
633

8/25/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.49	130	244365	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.43	114	1224563	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	573637	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.64	65	468095	22.039	ng		-0.02
Spiked Amount 25.000			Recovery = 88.16%				
57) Toluene-d8 (SS2)	18.85	98	1308374	26.103	ng		-0.01
Spiked Amount 25.000			Recovery = 104.40%				
73) Bromofluorobenzene (SS3)	23.23	174	368137	27.851	ng		-0.01
Spiked Amount 25.000			Recovery = 111.40%				
Target Compounds							Qvalue
2) Propene	4.66	42	374952	22.360	ng		100
3) Dichlorodifluoromethan...	4.83	85	628331	22.926	ng		99
4) Chloromethane	5.15	50	432504	23.487	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	276713	24.850	ng		98
6) Vinyl Chloride	5.59	62	413674	23.382	ng		98
7) 1,3-Butadiene	5.86	54	368835	29.087	ng		100
8) Bromomethane	6.35	94	292601	27.169	ng		98
9) Chloroethane	6.69	64	230320	22.398	ng		98
10) Ethanol	7.12	45	1155623	108.721	ng		100
11) Acetonitrile	7.37	41	621183	19.955	ng		100
12) Acrolein	7.56	56	190484	23.543	ng		98
13) Acetone	7.82	58	1189653	118.619	ng		92
14) Trichlorofluoromethane	8.01	101	601874	24.290	ng		100
15) 2-Propanol (Isopropanol)	8.33	45	1349716	34.246	ng		99
16) Acrylonitrile	8.56	53	441294	24.352	ng		99
17) 1,1-Dichloroethene	9.03	96	307762	26.749	ng	#	83
18) 2-Methyl-2-Propanol (t...	9.28	59	1588645	45.412	ng		98
19) Methylene Chloride	9.25	84	304861	22.635	ng		89
20) 3-Chloro-1-propene (Al...	9.43	41	501745	19.325	ng		93
21) Trichlorotrifluoroethane	9.68	151	260151	28.875	ng		94
22) Carbon Disulfide	9.62	76	1162834	24.488	ng		99
23) trans-1,2-Dichloroethene	10.68	61	477650	23.462	ng		89
24) 1,1-Dichloroethane	10.99	63	573480	23.229	ng		100
25) Methyl tert-Butyl Ether	11.18	73	937718	24.711	ng		99
26) Vinyl Acetate	11.28	86	307137	150.485	ng	#	77
27) 2-Butanone (MEK)	11.67	72	229529	25.347	ng	#	87
28) cis-1,2-Dichloroethene	12.25	61	458100	24.174	ng		90
29) Diisopropyl Ether	12.66	87	313223	25.847	ng	#	1
30) Ethyl Acetate	12.67	61	239703	50.813	ng		98
31) n-Hexane	12.58	57	541178	22.426	ng		9[illegible]

8/25/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.70	83	540098	25.422	ng		99
34) Tetrahydrofuran (THF)	13.39	72	222572	23.058	ng		92
35) Ethyl tert-Butyl Ether	13.46	87	366240	23.362	ng		91
36) 1,2-Dichloroethane	13.80	62	448913	23.120	ng		98
38) 1,1,1-Trichloroethane	14.19	97	503861	24.256	ng		96
39) Isopropyl Acetate	14.83	61	415598	45.751	ng	#	92
40) 1-Butanol	14.88	56	659865	41.520	ng		84
41) Benzene	14.88	78	1222902	22.714	ng		99
42) Carbon Tetrachloride	15.11	117	454568	26.491	ng		99
43) Cyclohexane	15.31	84	977448	49.567	ng		92
44) tert-Amyl Methyl Ether	15.85	73	932403	23.061	ng		97
45) 1,2-Dichloropropane	16.11	63	319464	23.626	ng		99
46) Bromodichloromethane	16.38	83	447773	25.238	ng		98
47) Trichloroethene	16.45	130	332325	27.367	ng		100
48) 1,4-Dioxane	16.51	88	265298	25.784	ng		83
49) 2,2,4-Trimethylpentane...	16.52	57	1411665	22.260	ng		94
50) Methyl Methacrylate	16.77	100	266177	53.704	ng		91
51) n-Heptane	16.88	71	340423	23.560	ng		96
52) cis-1,3-Dichloropropene	17.65	75	516189	23.034	ng		100
53) 4-Methyl-2-pentanone	17.76	58	317692	24.552	ng		99
54) trans-1,3-Dichloropropene	18.36	75	542896	25.479	ng		99
55) 1,1,2-Trichloroethane	18.60	97	301733	25.525	ng		96
58) Toluene	18.98	91	1304410	26.480	ng		99
59) 2-Hexanone	19.36	43	796585	24.318	ng		95
60) Dibromochloromethane	19.53	129	372559	31.966	ng		99
61) 1,2-Dibromoethane	19.86	107	350986	28.405	ng		98
62) n-Butyl Acetate	20.17	43	904032	23.414	ng		97
63) n-Octane	20.28	57	294117	24.697	ng		92
64) Tetrachloroethene	20.47	166	326669	28.657	ng		99
65) Chlorobenzene	21.34	112	855575	28.073	ng		100
66) Ethylbenzene	21.82	91	1492068	26.497	ng		98
67) m- & p-Xylenes	22.06	91	2344010	51.458	ng		97
68) Bromoform	22.15	173	299646	30.964	ng		99
69) Styrene	22.51	104	928130	28.189	ng		98
70) o-Xylene	22.65	91	1206508	26.417	ng		96
71) n-Nonane	22.91	43	677712	22.332	ng		93
72) 1,1,2,2-Tetrachloroethane	22.63	83	556587	27.461	ng		100
74) Cumene	23.41	105	1508257	26.143	ng		99
75) alpha-Pinene	23.90	93	755286	25.540	ng		98
76) n-Propylbenzene	24.05	91	1892687	26.098	ng		98
77) 3-Ethyltoluene	24.18	105	1515141	27.480	ng		99
78) 4-Ethyltoluene	24.23	105	1520563	28.462	ng		97
79) 1,3,5-Trimethylbenzene	24.32	105	1257469	27.908	ng		96

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 09:39:34 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	702636	29.127 ng	96
81) 2-Ethyltoluene	24.56	105	1502773	27.029 ng	98
82) 1,2,4-Trimethylbenzene	24.83	105	1256822	27.352 ng	99
83) n-Decane	24.94	57	728366	24.380 ng	97
84) Benzyl Chloride	25.00	91	1263770	29.340 ng	98
85) 1,3-Dichlorobenzene	25.03	146	695348	29.901 ng	98
86) 1,4-Dichlorobenzene	25.11	146	708668	28.580 ng	98
87) sec-Butylbenzene	25.16	105	1713334	27.602 ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	1522535	27.507 ng	99
89) 1,2,3-Trimethylbenzene	25.36	105	1295772	27.681 ng	96
90) 1,2-Dichlorobenzene	25.53	146	645884	29.294 ng	99
91) d-Limonene	25.53	68	530538	27.152 ng	97
92) 1,2-Dibromo-3-Chloropr...	26.06	157	257042	33.896 ng	82
93) n-Undecane	26.46	57	799339	25.149 ng	97
94) 1,2,4-Trichlorobenzene	27.58	180	508494	33.542 ng	99
95) Naphthalene	27.73	128	1857814	29.771 ng	100
96) n-Dodecane	27.70	57	824123	22.319 ng	98
97) Hexachlorobutadiene	28.15	225	284495	29.505 ng	100
98) Cyclohexanone	22.30	55	448113	21.956 ng	95
99) tert-Butylbenzene	24.83	119	1214172	27.302 ng	99
100) n-Butylbenzene	25.86	91	1445358	28.240 ng	99

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

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

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	120	-0.03
2	T	Propene	1.716	1.659	3.3	119	0.01
3	T	Dichlorodifluoromethane (CF	2.804	2.691	4.0	120	0.00
4	T	Chloromethane	1.884	1.928	-2.3	136	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.139	1.179	-3.5	137	0.00
6	T	Vinyl Chloride	1.810	1.853	-2.4	126	0.00
7	T	1,3-Butadiene	1.297	1.362	-5.0	133	0.00
8	T	Bromomethane	1.102	1.188	-7.8	138	0.00
9	T	Chloroethane	1.052	1.036	1.5	121	0.00
10	T	Ethanol	1.087	1.019	6.3	123	-0.16
11	T	Acetonitrile	3.185	2.716	14.7	113	-0.06
12	T	Acrolein	0.828	0.755	8.8	110	-0.03
13	T	Acetone	1.026	0.996	2.9	118	-0.07
14	T	Trichlorofluoromethane	2.535	2.435	3.9	124	0.00
15	T	2-Propanol (Isopropanol)	4.032	3.119	22.6	117	-0.13
16	T	Acrylonitrile	1.854	1.815	2.1	115	-0.05
17	T	1,1-Dichloroethene	1.177	1.216	-3.3	129	0.00
18	T	2-Methyl-2-Propanol (tert-B	3.579	3.506	2.0	118	-0.12
19	T	Methylene Chloride	1.378	1.300	5.7	127	-0.03
20	T	3-Chloro-1-propene (Allyl C	2.656	2.117	20.3	106	-0.02
21	T	Trichlorotrifluoroethane	0.922	1.001	-8.6	138	-0.01
22	T	Carbon Disulfide	4.858	4.686	3.5	124	0.00
23	T	trans-1,2-Dichloroethene	2.083	1.974	5.2	116	-0.02
24	T	1,1-Dichloroethane	2.526	2.376	5.9	121	-0.03
25	T	Methyl tert-Butyl Ether	3.882	3.675	5.3	121	-0.05
26	T	Vinyl Acetate	0.209	0.294	-40.7#	200	-0.05
27	T	2-Butanone (MEK)	0.926	0.883	4.6	116	-0.06
28	T	cis-1,2-Dichloroethene	1.939	1.838	5.2	117	-0.03
29	T	Diisopropyl Ether	1.240	1.265	-2.0	125	-0.05
30	T	Ethyl Acetate	0.483	0.477	1.2	117	-0.06
31	T	n-Hexane	2.469	2.208	10.6	117	-0.02
32	T	Chloroform	2.174	2.201	-1.2	124	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	2.173	1.902	12.5	105	-0.03
34	T	Tetrahydrofuran (THF)	0.988	0.841	14.9	118	-0.06
35	T	Ethyl tert-Butyl Ether	1.604	1.573	1.9	126	-0.05
36	T	1,2-Dichloroethane	1.986	1.755	11.6	114	-0.03
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	119	-0.02
38	T	1,1,1-Trichloroethane	0.424	0.404	4.7	122	-0.02

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.185	0.172	7.0	116	-0.05
40	T	1-Butanol	0.324	0.276	14.8	115	-0.12
41	T	Benzene	1.099	1.033	6.0	124	-0.02
42	T	Carbon Tetrachloride	0.350	0.358	-2.3	126	-0.02
43	T	Cyclohexane	0.403	0.399	1.0	124	-0.02
44	T	tert-Amyl Methyl Ether	0.825	0.782	5.2	120	-0.05
45	T	1,2-Dichloropropane	0.276	0.259	6.2	118	-0.03
46	T	Bromodichloromethane	0.362	0.343	5.2	120	-0.02
47	T	Trichloroethene	0.248	0.259	-4.4	132	-0.03
48	T	1,4-Dioxane	0.210	0.214	-1.9	124	-0.05
49	T	2,2,4-Trimethylpentane (Iso	1.295	1.200	7.3	115	-0.02
50	T	Methyl Methacrylate	0.101	0.107	-5.9	130	-0.05
51	T	n-Heptane	0.295	0.278	5.8	120	-0.03
52	T	cis-1,3-Dichloropropene	0.458	0.434	5.2	119	-0.02
53	T	4-Methyl-2-pentanone	0.264	0.245	7.2	115	-0.04
54	T	trans-1,3-Dichloropropene	0.435	0.418	3.9	121	-0.02
55	T	1,1,2-Trichloroethane	0.241	0.240	0.4	126	-0.02
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	111	-0.01
57	S	Toluene-d8 (SS2)	2.184	2.291	-4.9	117	-0.02
58	T	Toluene	2.147	2.239	-4.3	127	-0.02
59	T	2-Hexanone	1.428	1.338	6.3	109	-0.05
60	T	Dibromochloromethane	0.508	0.563	-10.8	130	-0.01
61	T	1,2-Dibromoethane	0.539	0.587	-8.9	128	-0.02
62	T	n-Butyl Acetate	1.683	1.554	7.7	111	-0.03
63	T	n-Octane	0.519	0.511	1.5	116	-0.02
64	T	Tetrachloroethene	0.497	0.580	-16.7	141	-0.02
65	T	Chlorobenzene	1.328	1.441	-8.5	132	-0.01
66	T	Ethylbenzene	2.454	2.564	-4.5	124	-0.02
67	T	m- & p-Xylenes	1.985	2.053	-3.4	125	-0.05
68	T	Bromoform	0.422	0.480	-13.7	130	-0.02
69	T	Styrene	1.435	1.525	-6.3	127	-0.02
70	T	o-Xylene	1.990	2.094	-5.2	125	-0.02
71	T	n-Nonane	1.323	1.229	7.1	111	-0.01
72	T	1,1,2,2-Tetrachloroethane	0.883	0.934	-5.8	124	-0.02
73	S	Bromofluorobenzene (SS3)	0.576	0.638	-10.8	123	-0.01
74	T	Cumene	2.514	2.725	-8.4	131	-0.02
75	T	alpha-Pinene	1.289	1.343	-4.2	122	-0.01
76	T	n-Propylbenzene	3.161	3.352	-6.0	125	-0.01

8/26/09

Evaluate Continuing Calibration Report

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	2.403	2.551	-6.2	127	-0.02
78	T	4-Ethyltoluene	2.328	2.490	-7.0	129	-0.02
79	T	1,3,5-Trimethylbenzene	1.964	2.088	-6.3	127	-0.02
80	T	alpha-Methylstyrene	1.051	1.135	-8.0	125	-0.02
81	T	2-Ethyltoluene	2.423	2.602	-7.4	128	-0.02
82	T	1,2,4-Trimethylbenzene	2.003	2.175	-8.6	128	-0.02
83	T	n-Decane	1.302	1.255	3.6	112	-0.02
84	T	Benzyl Chloride	1.877	2.057	-9.6	125	-0.03
85	T	1,3-Dichlorobenzene	1.013	1.115	-10.1	132	-0.02
86	T	1,4-Dichlorobenzene	1.081	1.170	-8.2	133	-0.02
87	T	sec-Butylbenzene	2.705	2.915	-7.8	127	-0.02
88	T	4-Isopropyltoluene (p-Cymen	2.412	2.703	-12.1	130	-0.02
89	T	1,2,3-Trimethylbenzene	2.040	2.197	-7.7	126	-0.02
90	T	1,2-Dichlorobenzene	0.961	1.083	-12.7	133	-0.02
91	T	d-Limonene	0.852	0.871	-2.2	119	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.330	0.394	-19.4	131	-0.01
93	T	n-Undecane	1.385	1.344	3.0	113	-0.01
94	T	1,2,4-Trichlorobenzene	0.661	0.774	-17.1	136	-0.02
95	T	Naphthalene	2.720	3.020	-11.0	129	-0.01
96	T	n-Dodecane	1.609	1.507	6.3	113	-0.01
97	T	Hexachlorobutadiene	0.420	0.457	-8.8	139	0.00
98	T	Cyclohexanone	0.889	0.847	4.7	114	-0.05
99	T	tert-Butylbenzene	1.938	2.116	-9.2	130	-0.02
100	T	n-Butylbenzene	2.231	2.374	-6.4	122	-0.01

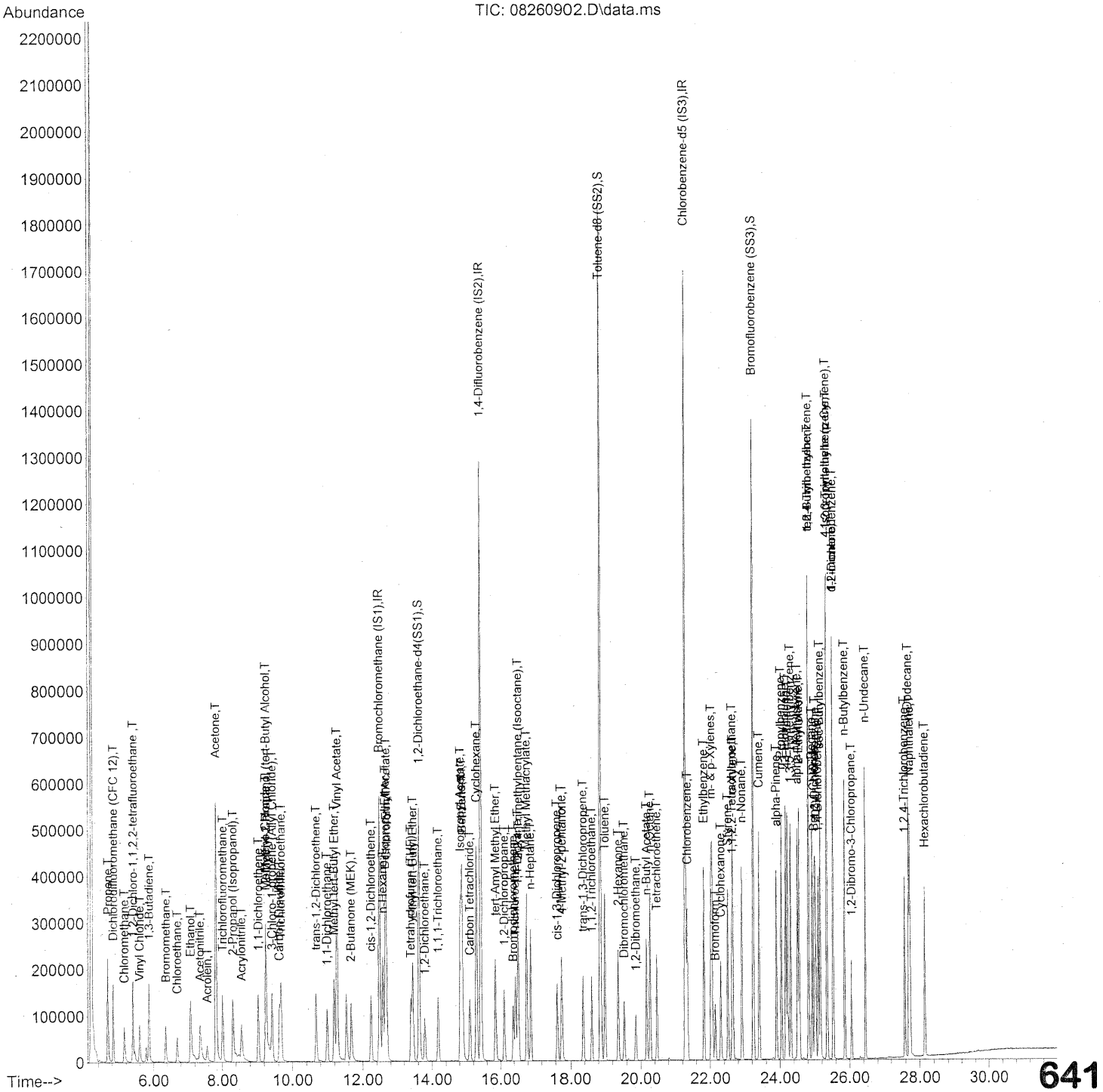
(#) = Out of Range SPCC's out = 0 CCC's out = 0

640

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.48	130	299899	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.42	114	1505911	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.29	82	711991	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.63	65	570429	21.884	ng		-0.03
Spiked Amount 25.000			Recovery = 87.52%				
57) Toluene-d8 (SS2)	18.85	98	1631185	26.220	ng		-0.02
Spiked Amount 25.000			Recovery = 104.88%				
73) Bromofluorobenzene (SS3)	23.23	174	454506	27.703	ng		-0.01
Spiked Amount 25.000			Recovery = 110.80%				
Target Compounds							Qvalue
2) Propene	4.68	42	106458	5.173	ng		97
3) Dichlorodifluoromethan...	4.84	85	169486	5.039	ng		98
4) Chloromethane	5.15	50	115612	5.116	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.40	135	74970	5.486	ng		97
6) Vinyl Chloride	5.59	62	112235	5.169	ng		98
7) 1,3-Butadiene	5.87	54	98016	6.298	ng		99
8) Bromomethane	6.36	94	72665	5.498	ng		97
9) Chloroethane	6.69	64	62788	4.975	ng		96
10) Ethanol	7.07	45	317884	24.368	ng		100
11) Acetonitrile	7.35	41	171035	4.477	ng		100
12) Acrolein	7.56	56	48922	4.927	ng		100
13) Acetone	7.81	58	328580	26.696	ng		93
14) Trichlorofluoromethane	8.01	101	153358	5.043	ng		99
15) 2-Propanol (Isopropanol)	8.30	45	353610	7.311	ng		97
16) Acrylonitrile	8.55	53	115388	5.188	ng		99
17) 1,1-Dichloroethene	9.03	96	80236	5.682	ng	#	83
18) 2-Methyl-2-Propanol (t...	9.25	59	424827	9.895	ng		97
19) Methylene Chloride	9.24	84	83455	5.049	ng		90
20) 3-Chloro-1-propene (Al...	9.43	41	137108	4.303	ng		99
21) Trichlorotrifluoroethane	9.67	151	66011	5.970	ng		98
22) Carbon Disulfide	9.63	76	300714	5.160	ng		99
23) trans-1,2-Dichloroethene	10.68	61	125474	5.022	ng		89
24) 1,1-Dichloroethane	10.98	63	151094	4.987	ng		100
25) Methyl tert-Butyl Ether	11.18	73	240262	5.159	ng		100
26) Vinyl Acetate	11.27	86	88464	35.318	ng	#	85
27) 2-Butanone (MEK)	11.67	72	58257	5.242	ng		96
28) cis-1,2-Dichloroethene	12.24	61	120166	5.167	ng		89
29) Diisopropyl Ether	12.64	87	81163	5.457	ng	#	1
30) Ethyl Acetate	12.67	61	61225	10.575	ng		98
31) n-Hexane	12.58	57	144372	4.875	ng		642

Quantitation Report (QT Reviewed)

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.68	83	141275	5.418	ng		99
34) Tetrahydrofuran (THF)	13.39	72	55518	4.687	ng		98
35) Ethyl tert-Butyl Ether	13.45	87	97194	5.052	ng		93
36) 1,2-Dichloroethane	13.79	62	111590	4.683	ng		96
38) 1,1,1-Trichloroethane	14.17	97	127910	5.007	ng		97
39) Isopropyl Acetate	14.83	61	108737	9.734	ng	#	88
40) 1-Butanol	14.87	56	173202	8.862	ng		82
41) Benzene	14.88	78	329937	4.983	ng		99
42) Carbon Tetrachloride	15.10	117	116601	5.526	ng		98
43) Cyclohexane	15.29	84	259889	10.717	ng		93
44) tert-Amyl Methyl Ether	15.85	73	244890	4.925	ng		97
45) 1,2-Dichloropropane	16.11	63	81967	4.929	ng		100
46) Bromodichloromethane	16.37	83	111721	5.120	ng		98
47) Trichloroethene	16.44	130	82643	5.534	ng		98
48) 1,4-Dioxane	16.51	88	68850	5.441	ng		81
49) 2,2,4-Trimethylpentane...	16.52	57	375985	4.821	ng		94
50) Methyl Methacrylate	16.76	100	69214	11.356	ng		91
51) n-Heptane	16.88	71	88723	4.993	ng		97
52) cis-1,3-Dichloropropene	17.65	75	129315	4.692	ng		99
53) 4-Methyl-2-pentanone	17.76	58	81154	5.100	ng		99
54) trans-1,3-Dichloropropene	18.36	75	138443	5.283	ng		100
55) 1,1,2-Trichloroethane	18.60	97	75933	5.223	ng		97
58) Toluene	18.98	91	344288	5.631	ng		100
59) 2-Hexanone	19.36	43	209619	5.156	ng		96
60) Dibromochloromethane	19.53	129	92252	6.377	ng		98
61) 1,2-Dibromoethane	19.86	107	88640	5.780	ng		99
62) n-Butyl Acetate	20.17	43	243476	5.081	ng		98
63) n-Octane	20.27	57	77810	5.264	ng		92
64) Tetrachloroethene	20.46	166	84262	5.956	ng		100
65) Chlorobenzene	21.34	112	221666	5.860	ng		100
66) Ethylbenzene	21.82	91	387052	5.538	ng		98
67) m- & p-Xylenes	22.04	91	608069	10.755	ng	#	30
68) Bromoform	22.15	173	70379	5.859	ng		98
69) Styrene	22.51	104	232324	5.685	ng		98
70) o-Xylene	22.65	91	316067	5.576	ng		99
71) n-Nonane	22.91	43	185505	4.925	ng		96
72) 1,1,2,2-Tetrachloroethane	22.63	83	142346	5.658	ng		100
74) Cumene	23.41	105	399671	5.582	ng		100
75) alpha-Pinene	23.90	93	193115	5.261	ng		99
76) n-Propylbenzene	24.05	91	491650	5.462	ng		98
77) 3-Ethyltoluene	24.17	105	395879	5.785	ng		100
78) 4-Ethyltoluene	24.22	105	386500	5.829	ng		98
79) 1,3,5-Trimethylbenzene	24.31	105	324154	5.796	ng		99

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 12:15:04 2009
Quant Method : J:\MS13\METHODS\R13080609.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Thu Aug 06 17:14:07 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.51	118	172969	5.777	ng	98
81) 2-Ethyltoluene	24.56	105	389118	5.639	ng	99
82) 1,2,4-Trimethylbenzene	24.83	105	328293	5.756	ng	100
83) n-Decane	24.93	57	193058	5.206	ng	97
84) Benzyl Chloride	24.99	91	322148	6.026	ng	99
85) 1,3-Dichlorobenzene	25.02	146	173109	5.997	ng	97
86) 1,4-Dichlorobenzene	25.10	146	176655	5.740	ng	97
87) sec-Butylbenzene	25.16	105	440029	5.711	ng	99
88) 4-Isopropyltoluene (p-...	25.35	119	396460	5.771	ng	99
89) 1,2,3-Trimethylbenzene	25.35	105	334804	5.763	ng	97
90) 1,2-Dichlorobenzene	25.53	146	163542	5.976	ng	99
91) d-Limonene	25.53	68	135191	5.574	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.06	157	61639	6.549	ng	86
93) n-Undecane	26.46	57	208628	5.288	ng	98
94) 1,2,4-Trichlorobenzene	27.58	180	123468	6.562	ng	97
95) Naphthalene	27.73	128	455796	5.885	ng	100
96) n-Dodecane	27.69	57	212396	4.634	ng	98
97) Hexachlorobutadiene	28.15	225	71522	5.976	ng	98
98) Cyclohexanone	22.30	55	118266	4.669	ng	95
99) tert-Butylbenzene	24.83	119	319465	5.788	ng	98
100) n-Butylbenzene	25.86	91	368541	5.801	ng	99

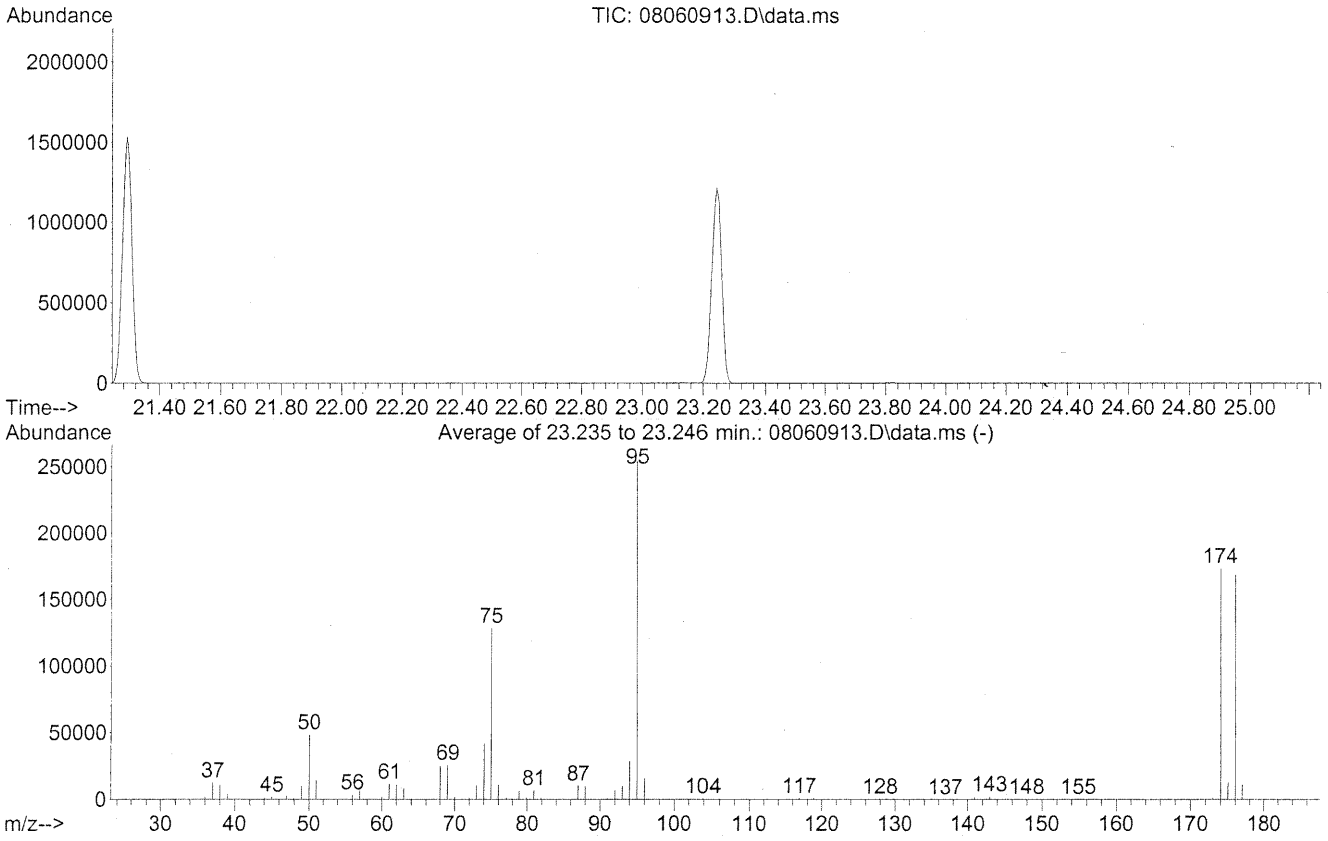
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS13\DATA\2009_08\06\
Data File : 08060913.D
Acq On : 6 Aug 2009 11:15
Operator : WA
Sample : 25ng BFB STD
Misc : S20-07200902
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS13\METHODS\R13080609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Thu Aug 06 07:59:49 2009



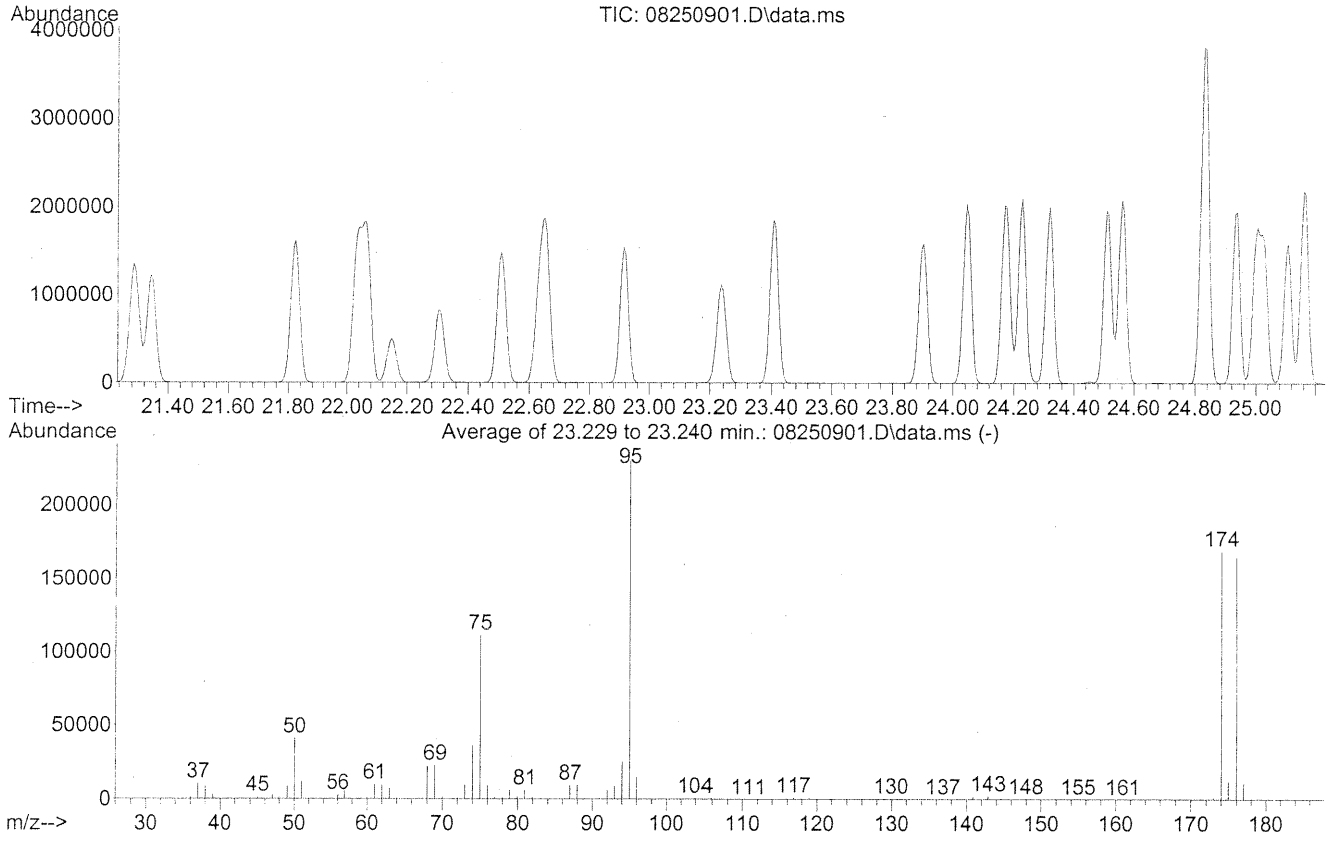
AutoFind: Scans 3352, 3353, 3354; Background Corrected with Scan 3342

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	48845	PASS
75	95	30	66	50.6	128627	PASS
95	95	100	100	100.0	254165	PASS
96	95	5	9	6.3	16094	PASS
173	174	0.00	2	0.9	1624	PASS
174	95	50	120	68.4	173931	PASS
175	174	4	9	7.5	13043	PASS
176	174	93	101	97.2	168981	PASS
177	176	5	9	6.6	11200	PASS

Data Path : J:\MS13\DATA\2009_08\25\
Data File : 08250901.D
Acq On : 25 Aug 2009 8:51
Operator : WA
Sample : 25ng TO-15 CCV STD
Misc : S20-08140906/S20-08100903
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS13\METHODS\R13080609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Thu Aug 06 17:14:07 2009



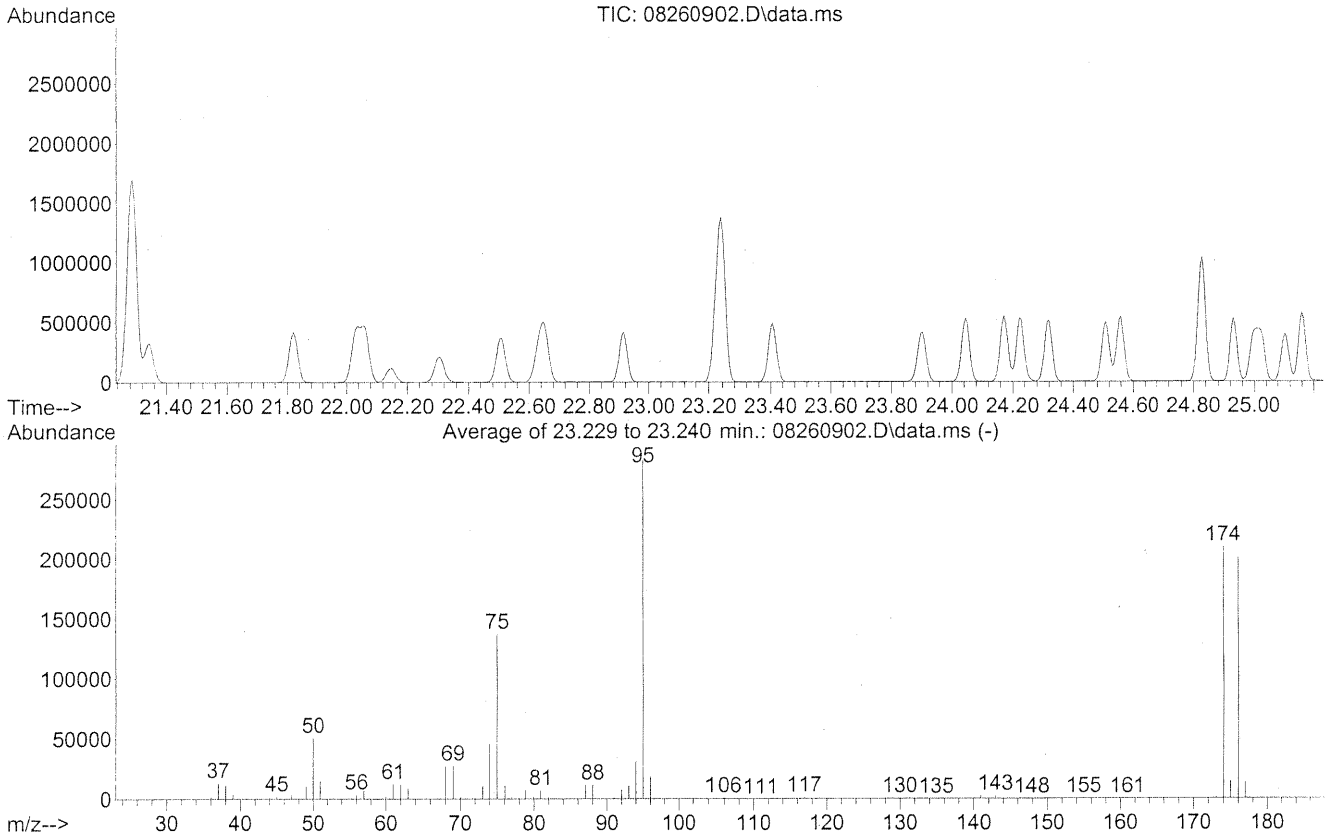
AutoFind: Scans 3351, 3352, 3353; Background Corrected with Scan 3341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.0	41328	PASS
75	95	30	66	48.5	111672	PASS
95	95	100	100	100.0	230123	PASS
96	95	5	9	6.6	15137	PASS
173	174	0.00	2	1.0	1684	PASS
174	95	50	120	73.6	169323	PASS
175	174	4	9	7.4	12463	PASS
176	174	93	101	97.3	164693	PASS
177	176	5	9	6.7	11054	PASS

Data Path : J:\MS13\DATA\2009_08\26\
Data File : 08260902.D
Acq On : 26 Aug 2009 10:15
Operator : WA/CC
Sample : 5ng TO-15 CCV STD
Misc : S20-08140906/S20-07310904
ALS Vial : 9 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS13\METHODS\R13080609.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Thu Aug 06 17:14:07 2009



AutoFind: Scans 3351, 3352, 3353; Background Corrected with Scan 3341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	51235	PASS
75	95	30	66	48.7	137680	PASS
95	95	100	100	100.0	282944	PASS
96	95	5	9	6.7	18941	PASS
173	174	0.00	2	0.8	1760	PASS
174	95	50	120	74.3	210261	PASS
175	174	4	9	7.2	15077	PASS
176	174	93	101	95.7	201280	PASS
177	176	5	9	6.8	13677	PASS

 8/25/09

RUN LOGS

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
13	08/06/09 11:15	08060913.D	25ng BFB STD	S20-07200902	WA	4	Passed
14	08/06/09 11:55	08060914.D	0.1ng TO-15 ICAL STD	S20-07200902/S20-07240912	WA	1	
15	08/06/09 12:36	08060915.D	0.2ng TO-15 ICAL STD	S20-07200902/S20-07240912	WA	1	
16	08/06/09 13:17	08060916.D	0.5ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
17	08/06/09 13:57	08060917.D	1.0ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
18	08/06/09 14:38	08060918.D	5.0ng TO-15 ICAL STD	S20-07200902/S20-07310903	WA	4	
19	08/06/09 15:18	08060919.D	25ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
20	08/06/09 15:59	08060920.D	50ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
21	08/06/09 16:39	08060921.D	100ng TO-15 ICAL STD	S20-07200902/S20-07310901	WA	4	
	ICAL saved as R13080609.M; Good from 0.1ng --> 100ng, except: Acetone: 2.5ng -->500ng and THF: 0.2ng -->100ng						
22	08/06/09 17:20	08060922.D	25ng TO-15 ICV STD	S20-07200902/S20-07240916	WA	2	failed, case file
23	08/06/09 18:10	08060923.D	Blank	S20-07200902	WA	4	
24	08/06/09 18:51	08060924.D	25ng TO-15 ICV STD	S20-07200902/S20-07240917	WA	2	Passed all cmpds.
25	08/06/09 19:31	08060925.D	1.0ng TO-15 LOQ Verification	S20-07200902/S20-07310903	WA	4	
26	08/06/09 20:11	08060926.D	1.0ng TO-15 LOQ Verification	S20-07200902/S20-07310903	WA	4	
27	08/06/09 20:53	08060927.D	CAS QC CAN/FC/Gauge (1000mL)	AC00687/FC00232/AVG00940	WA	5	
28	08/06/09 21:35	08060928.D	CAS QC CAN/FC/Gauge (1000mL)	AC00705/FC00189/AVG00655	WA	6	
29	08/06/09 22:17	08060929.D	CAS QC CAN/FC/Gauge (1000mL)	AC00931/FC00407/AVG01149	WA	7	
30	08/06/09 22:59	08060930.D	CAS QC CAN/FC/Gauge (1000mL)	AC00672/FC00783/AVG00900	WA	8	
31	08/06/09 23:41	08060931.D	CAS QC CAN/FC/Gauge (1000mL)	AC01257/FC00515/AVG00906	WA	9	
32	08/07/09 0:23	08060932.D	CAS QC CAN/FC/Gauge (1000mL)	AC00958/FC00678/AVG01072	WA	10	
33	08/07/09 1:04	08060933.D	CAS QC CAN/FC/Gauge (1000mL)	AC01527/FC00508/AVG01046	WA	11	
34	08/07/09 1:46	08060934.D	CAS QC CAN/FC/Gauge (1000mL)	AC01172/FC00256/AVG00986	WA	12	
35	08/07/09 2:27	08060935.D	0.2ng LOD Verification	S20-07200902/S20-07240912	WA	1	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
16	08/24/09 22:19	08240916.D	P0902842-006 (1000mL)	[redacted]	WA	8	
17	08/24/09 23:01	08240917.D	P0902842-008 (1000mL)	[redacted]	WA	11	
18	08/24/09 23:43	08240918.D	P0902842-010 (1000mL)	[redacted]	WA	15	
19	08/25/09 0:24	08240919.D	Blank		WA	4	
20	08/25/09 1:06	08240920.D	P0902842-011 (1000mL)	[redacted]	WA	14	
21	08/25/09 1:46	08240921.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA	13	Passed
22	08/25/09 5:24	08240922.D	P0902842-008 dup (1000mL)	[redacted]	WA	11	Passed
23	08/25/09 6:04	08240923.D	P0902842-002 (35mL)	[redacted]	WA	3	
24	08/25/09 6:47	08240924.D	P0902842-009 dil (3.0mL)	[redacted]	WA	12	
25	08/25/09 7:31	08240925.D	P0902842-009 dil (3.0mL)	[redacted]	WA	4	KM 8/25/09

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/25/09 8:51	08250901.D	25ng TO-15 CCV STD	S20-08140906/S20-08100903	WA	4	Passed
2	08/25/09 9:47	08250902.D	TO-15 Method Blank (1000mL)	S20-08140906	WA	4	Passed
3	08/25/09 10:52	08250903.D	P0902856-002 (1.0mL)	[redacted]	WA/CC	4	not used
4	08/25/09 11:55	08250904.D	P0902875-001 (100.0mL) screen only	[redacted]	WA/CC	1	screen
5	08/25/09 12:35	08250905.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	2	case file
6	08/25/09 13:15	08250906.D	Blank		WA/CC	4	
7	08/25/09 13:57	08250907.D	P0902875-001 (1000mL)	[redacted]	WA/CC	1	
8	08/25/09 14:39	08250908.D	P0902875-002 (1000mL)	[redacted]	WA/CC	2	
9	08/25/09 16:14	08250909.D	Blank		WA/CC	4	
10	08/25/09 17:17	08250910.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	13	Passed
11	08/25/09 18:06	08250911.D	Blank		WA/CC	4	
12	08/25/09 18:48	08250912.D	P0902875-003 (1000mL)	[redacted]	WA/CC	3	
13	08/25/09 19:30	08250913.D	P0902875-004 (1000mL)	[redacted]	WA/CC	5	
14	08/25/09 20:12	08250914.D	P0902875-005 (1000mL)	[redacted]	WA/CC	6	
15	08/25/09 20:54	08250915.D	P0902875-006 (1000mL)	[redacted]	WA/CC	7	
16	08/25/09 21:35	08250916.D	System		WA/CC	16	
17	08/25/09 22:17	08250917.D	P0902876-001 (1000mL)	Environmental Health 102349	WA/CC	8	
18	08/25/09 22:59	08250918.D	P0902876-002 (1000mL)	Environmental Health 102350	WA/CC	10	
19	08/25/09 23:41	08250919.D	P0902876-002 dup (1000mL)	Environmental Health 102350	WA/CC	10	Passed
20	08/26/09 0:23	08250920.D	P0902876-003 (1000mL)	Environmental Health 102351	WA/CC	11	
21	08/26/09 1:05	08250921.D	P0902876-004 (1000mL)	Environmental Health 102352	WA/CC	12	
22	08/26/09 1:47	08250922.D	P0902876-005 (1000mL)	Environmental Health 102353	WA/CC	14	
23	08/26/09 2:28	08250923.D	P0902876-006 (1000mL)	Environmental Health 102470	WA/CC	15	
24	08/26/09 3:09	08250924.D	P0902875-003 dil (100mL)	[redacted]	WA/CC	3	
25	08/26/09 5:22	08250925.D	P0902875-005 dil (200mL)	[redacted]	WA/CC	6	
26	08/26/09 6:03	08250926.D	P0902875-006 dil (200mL)	[redacted]	WA/CC	7	
27	08/26/09 7:04	08250927.D	P0902875-002 dil (200mL)	[redacted]	WA/CC	2	KM 8/26/09

74

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/26/09 10:15	08260902.D	5ng TO-15 CCV STD	S20-08140906/S20-07310904	WA/CC	9	Passed (EM=1424)
2	08/26/09 11:30	08260903.D	TO-15 Method Blank (1000ml)	S20-08140906	WA/CC	4	Passed
3	08/26/09 12:23	08260904.D	P0902949-001 dil (25mL)	[redacted]	WA/CC	7	
4	08/26/09 13:03	08260905.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	13	*case file*
5	08/26/09 13:43	08260906.D	P0902876-001 dil (200mL)	Environmental Health 102349	WA/CC	8	
6	08/26/09 14:42	08260907.D	P0902949-006 (0.25mL)	[redacted]	WA/CC	12	
7	08/26/09 15:22	08260908.D	System		WA/CC	16	
8	08/26/09 16:02	08260909.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	13	*case file*
9	08/26/09 16:43	08260910.D	P0902949-005 (20mL)	[redacted]	WA/CC	15	
10	08/26/09 17:25	08260911.D	P0902876-007 (1000mL)	Environmental Health 102471	WA/CC	1	
11	08/26/09 18:05	08260912.D	P0902949-005 dup (20mL)	[redacted]	WA/CC	15	Passed
12	08/26/09 18:47	08260913.D	P0902876-008 (1000mL)	Environmental Health 102472	WA/CC	2	
13	08/26/09 19:28	08260914.D	P0902876-009 (1000mL)	Environmental Health 102473	WA/CC	3	
14	08/26/09 20:09	08260915.D	P0902876-010 (1000mL)	Environmental Health 102474	WA/CC	5	
15	08/26/09 20:51	08260916.D	P0902876-011 (1000mL)	Environmental Health 102475	WA/CC	6	
16	08/26/09 21:32	08260917.D	System		WA/CC	16	
17	08/26/09 22:13	08260918.D	P0902876-004 dil (200mL)	Environmental Health 102352	WA/CC	12	
18	08/26/09 22:53	08260919.D	P0902876-005 dil (200mL)	Environmental Health 102353	WA/CC	14	
19	08/26/09 23:34	08260920.D	P0902949-001 (250mL)	[redacted]	WA/CC	7	
20	08/27/09 0:16	08260921.D	P0902949-003 (1000mL)	[redacted]	WA/CC	10	
21	08/27/09 0:58	08260922.D	P0902949-004 (1000mL)	[redacted]	WA/CC	11	
22	08/27/09 1:38	08260923.D	25ng TO-15 LCS STD	S20-08140906/S20-08240912	WA/CC	13	Passed
23	08/27/09 4:32	08260924.D	Blank		WA/CC	4	
24	08/27/09 6:39	08260925.D	P0902876-009 (1000mL)	Environmental Health 102473	WA/CC	3	
25	08/27/09 7:25	08260926.D	P0902949-002 (200mL)	[redacted]	WA/CC	8	8/27/09