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 30, 2009

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

RE: 16512

Dear Brian:

Enclosed are the results of the samples submitted to our laboratory on September 2, 2009. For your reference, these analyses have been assigned our service request number P0903080.

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 442 pages.

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

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

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

Client: Environmental Health & Engineering, Inc. CAS Project No: P0903080
Project: 16512

CASE NARRATIVE

The samples were received intact under chain of custody on September 2, 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 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: P0903080

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 #
P0903080-001.01	104834	6.0 L-Summa Canister Ambient	-1.9	-0.9	3.5				AC01016	**14339**		
P0903080-002.01	104835	6.0 L-Summa Canister Ambient	-0.7	-0.3	3.5				AC01578	**14339**		
P0903080-003.01	104836	6.0 L-Summa Canister Ambient	-3.9	-1.9	3.5				AC01572	**14339**		
P0903080-004.01	104837	6.0 L-Summa Canister Ambient	-1.3	-0.6	3.5				AC01453	**14339**		
P0903080-005.01	104838	6.0 L-Summa Canister Ambient	-3.1	-1.5	3.5				AC01529	**14339**		

Miscellaneous Items - received

AVG00916
FC00269
FC00198
AVG01104
AVG00437
AVG01011
AVG00761
FC00348
FC00530
FC00670

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 9/1/09

P0903080

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

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 # 1652

The cost of this analysis will be covered by EH&E Purchase Order # 1652

For EH & E Data Coordinator - URGENT DATA ☐

SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER:Time/Date/Vol.
104834	Summa	EPA TO-15 - Full List	9/1/09 Grab
104835	↓	↓	↓ ↓
104836			
104837			
104838			

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: 9/1/09

Received by: _____ of (company name) CAS Date: 09/02/09 0940

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

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

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

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

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

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, Inc. Work order: P0903080

Project: 16512

Sample(s) received on: 9/2/09 Date opened: 9/2/09 by: SSTAPLES

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
P0903080-001.01	6.0 L Ambient Can					
P0903080-002.01	6.0 L Ambient Can					
P0903080-003.01	6.0 L Ambient Can					
P0903080-004.01	6.0 L Ambient Can					
P0903080-005.01	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: **104834**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01016

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.32

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**80**	0.66	**46**	0.38	**D**
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.5**	0.66	**0.51**	0.13	
74-87-3	**Chloromethane**	**0.57**	0.13	**0.27**	0.064	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.66	ND	0.094	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.052	
106-99-0	**1,3-Butadiene**	**0.17**	0.13	**0.077**	0.060	
74-83-9	Bromomethane	ND	0.13	ND	0.034	
75-00-3	Chloroethane	ND	0.13	ND	0.050	
64-17-5	**Ethanol**	**1,500**	6.6	**810**	3.5	**D**
75-05-8	**Acetonitrile**	**2.2**	0.66	**1.3**	0.39	
107-02-8	**Acrolein**	**8.3**	0.66	**3.6**	0.29	
67-64-1	**Acetone**	**130**	6.6	**56**	2.8	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.13	**0.21**	0.023	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**11**	0.66	**4.5**	0.27	
107-13-1	Acrylonitrile	ND	0.66	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.033	
75-09-2	Methylene Chloride	ND	0.66	ND	0.19	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.042	
76-13-1	**Trichlorotrifluoroethane**	**0.52**	0.13	**0.067**	0.017	
75-15-0	**Carbon Disulfide**	**2.0**	0.66	**0.64**	0.21	
156-60-5	**trans-1,2-Dichloroethene**	**0.63**	0.13	**0.16**	0.033	
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	ND	6.6	ND	1.9	
78-93-3	**2-Butanone (MEK)**	**9.5**	0.66	**3.2**	0.22	

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: Re Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104834** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P0903080-001

Test Code: EPA TO-15 Date Collected: 9/1/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/2/09
Analyst: Elsa Moctezuma Date Analyzed: 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC01016

Initial Pressure (psig): -0.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.32

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	0.033	
141-78-6	**Ethyl Acetate**	**4.7**	1.3	**1.3**	0.37	
110-54-3	**n-Hexane**	**4.5**	0.66	**1.3**	0.19	
67-66-3	**Chloroform**	**0.22**	0.13	**0.045**	0.027	
109-99-9	**Tetrahydrofuran (THF)**	**3.0**	0.66	**1.0**	0.22	
107-06-2	**1,2-Dichloroethane**	**1.0**	0.13	**0.25**	0.033	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.024	
71-43-2	**Benzene**	**1.7**	0.13	**0.53**	0.041	
56-23-5	**Carbon Tetrachloride**	**1.1**	0.13	**0.17**	0.021	
110-82-7	**Cyclohexane**	**4.2**	0.66	**1.2**	0.19	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.029	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.020	
79-01-6	Trichloroethene	ND	0.13	ND	0.025	
123-91-1	1,4-Dioxane	ND	0.66	ND	0.18	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.32	
142-82-5	**n-Heptane**	**4.0**	0.66	**0.97**	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.66	ND	0.15	
108-10-1	**4-Methyl-2-pentanone**	**1.2**	0.66	**0.30**	0.16	
10061-02-6	trans-1,3-Dichloropropene	ND	0.66	ND	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.024	
108-88-3	**Toluene**	**21**	0.66	**5.6**	0.18	
591-78-6	**2-Hexanone**	**3.7**	0.66	**0.91**	0.16	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.016	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.017	
123-86-4	**n-Butyl Acetate**	**26**	0.66	**5.6**	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: Rv Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903080
Client Sample ID: **104834** CAS Sample ID: P0903080-001
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Test Code: EPA TO-15 Date Collected: 9/1/09
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Analyst: Elsa Moctezuma Date Analyzed: 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC01016

Initial Pressure (psig): -0.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.32

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.4**	0.66	**0.52**	0.14	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.019	
108-90-7	Chlorobenzene	ND	0.13	ND	0.029	
100-41-4	**Ethylbenzene**	**9.3**	0.66	**2.2**	0.15	
179601-23-1	**m,p-Xylenes**	**20**	0.66	**4.7**	0.15	
75-25-2	Bromoform	ND	0.66	ND	0.064	
100-42-5	**Styrene**	**6.2**	0.66	**1.5**	0.16	
95-47-6	**o-Xylene**	**10**	0.66	**2.4**	0.15	
111-84-2	**n-Nonane**	**0.86**	0.66	**0.16**	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.019	
98-82-8	**Cumene**	**1.0**	0.66	**0.21**	0.13	
80-56-8	**alpha-Pinene**	**200**	0.66	**35**	0.12	**D**
103-65-1	**n-Propylbenzene**	**2.5**	0.66	**0.52**	0.13	
622-96-8	**4-Ethyltoluene**	**3.5**	0.66	**0.70**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**4.2**	0.66	**0.86**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**13**	0.66	**2.6**	0.13	
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	ND	0.13	ND	0.022	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.022	
5989-27-5	**d-Limonene**	**23**	0.66	**4.1**	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.66	ND	0.068	
120-82-1	1,2,4-Trichlorobenzene	ND	0.66	ND	0.089	
91-20-3	**Naphthalene**	**2.5**	0.66	**0.49**	0.13	
87-68-3	Hexachlorobutadiene	ND	0.66	ND	0.062	

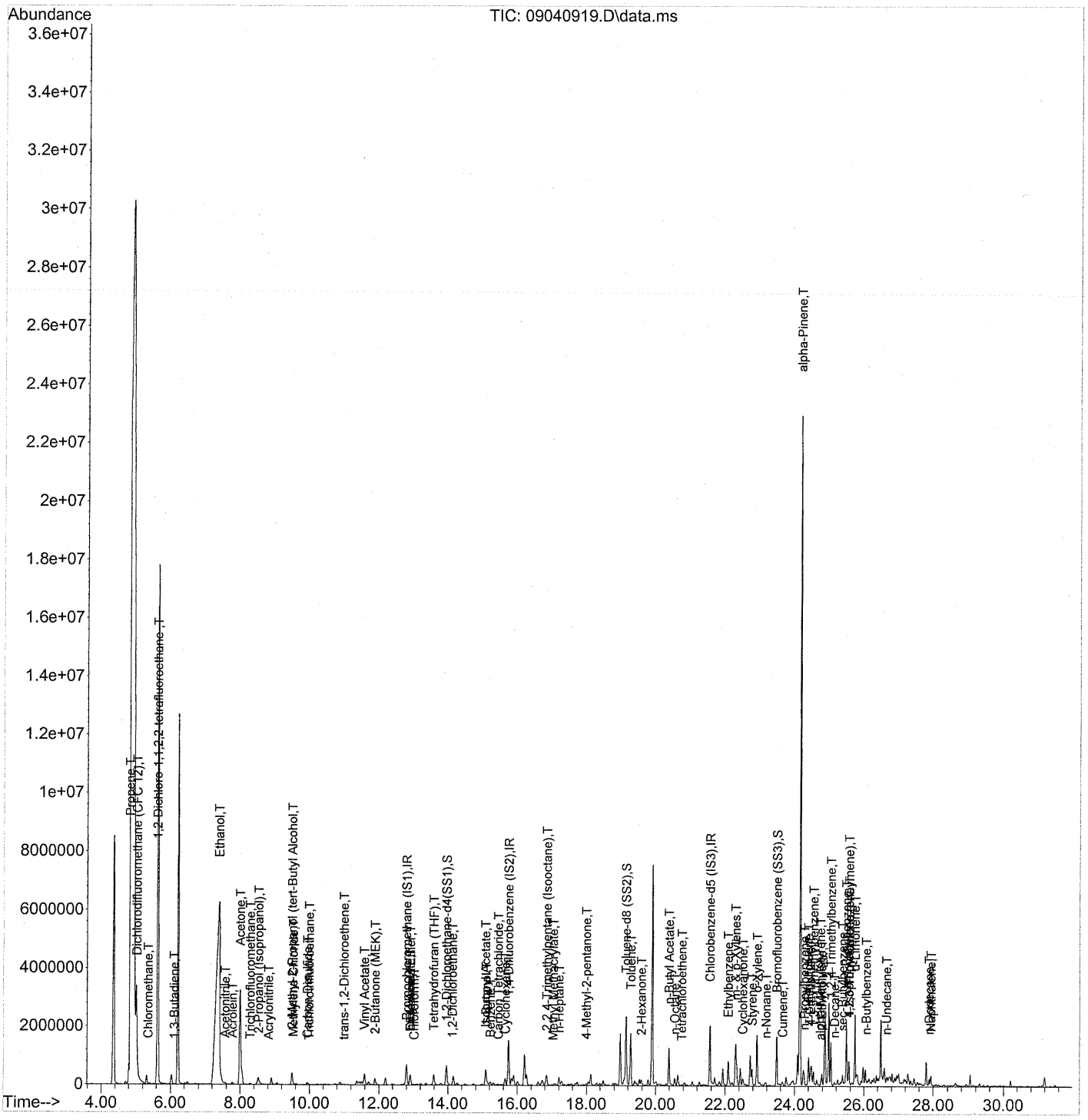
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By: Rv Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:49:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

DA 9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	346797	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1769476	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	863367	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	648360	26.441	ng		-0.03
Spiked Amount 25.000			Recovery =	105.76%			✓
57) Toluene-d8 (SS2)	19.14	98	2041392	24.872	ng		-0.02
Spiked Amount 25.000			Recovery =	99.48%			✓
73) Bromofluorobenzene (SS3)	23.49	174	572568	24.633	ng		0.00
Spiked Amount 25.000			Recovery =	98.52%			✓
Target Compounds							Qvalue
2) Propene	4.81	42	11784678m	~~387.383 ng~~			
3) Dichlorodifluoromethan...	5.03	85	82116	1.891 ng			100
4) Chloromethane	5.35	50	17379	0.429 ng			93
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1382	~~0.060 ng~~		#	57
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	3665	0.129 ng		#	41
8) Bromomethane	6.60	94	982	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.39	45	25867403	~~1355.548 ng~~			99
11) Acetonitrile	7.56	41	78414	1.684 ng			98
12) Acrolein	7.77	56	78685	6.323 ng			98
13) Acetone	8.00	58	1939429	99.875 ng			96
14) Trichlorofluoromethane	8.29	101	33576	0.904 ng			97
15) 2-Propanol (Isopropanol)	8.53	45	447438	8.414 ng			93
16) Acrylonitrile	8.82	53	4316	~~0.153 ng~~			80
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	94035	1.742 ng		#	1
19) Methylene Chloride	9.53	84	4800	~~0.198 ng~~			81
20) 3-Chloro-1-propene (Al...	9.72	41	520	N.D.			
21) Trichlorotrifluoroethane	9.98	151	6497	0.391 ng			98
22) Carbon Disulfide	9.94	76	128056	1.498 ng			100
23) trans-1,2-Dichloroethene	10.99	61	16056	0.480 ng			92
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.36	73	1510	N.D.			
26) Vinyl Acetate	11.58	86	12194	~~2.899 ng~~		#	1
27) 2-Butanone (MEK)	11.89	72	97598	7.209 ng		#	81
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.92	87	1914	0.100 ng		#	1
30) Ethyl Acetate	12.90	61	31176	3.551 ng			97
31) n-Hexane	12.92	57	145610	3.403 ng			94

5x dil

5x dil

11

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:49:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	5994	0.167	ng		94
34) Tetrahydrofuran (THF)	13.59	72	32122	2.282	ng	#	1
35) Ethyl tert-Butyl Ether	13.72	87	870	N.D.			
36) 1,2-Dichloroethane	14.13	62	20669	0.754	ng		97
38) 1,1,1-Trichloroethane	14.53	97	601	N.D.			
39) Isopropyl Acetate	15.08	61	2733	0.189	ng	#	1
40) 1-Butanol	15.09	56	448954	19.579	ng		83
41) Benzene	15.22	78	122134	1.283	ng		98
42) Carbon Tetrachloride	15.45	117	21229	0.798	ng		97
43) Cyclohexane	15.65	84	115851	3.144	ng		86
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	16.43	63	109	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.	d		
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.	d		
49) 2,2,4-Trimethylpentane...	16.85	57	372857	3.405	ng		91
50) Methyl Methacrylate	17.04	100	524	0.055	ng	#	1
51) n-Heptane	17.21	71	76081	3.003	ng		91
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	17.99	58	19261m	0.937	ng		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	19.28	91	1586607	15.946	ng		100
59) 2-Hexanone	19.59	43	146224	2.828	ng		75
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.39	43	1127790	19.988	ng		99
63) n-Octane	20.56	57	40726	1.836	ng		90
64) Tetrachloroethene	20.75	166	1390	0.056	ng		95
65) Chlorobenzene	0.00	112	0	N.D.	d		
66) Ethylbenzene	22.09	91	759712	7.072	ng		98
67) m- & p-Xylenes	22.30	91	1304599	15.319	ng		99
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	295904	4.701	ng		99
70) o-Xylene	22.92	91	663794	7.748	ng		99
71) n-Nonane	23.17	43	33728m	0.654	ng		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	d		
74) Cumene	23.66	105	84953	0.765	ng		99
75) alpha-Pinene	24.16	93	10689285	195.040	ng	su di/	100
76) n-Propylbenzene	24.28	91	263990	1.923	ng		90
77) 3-Ethyltoluene	24.40	105	655893	6.303	ng		99
78) 4-Ethyltoluene	24.46	105	274181	2.621	ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	276541	3.197	ng		99

12

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:49:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

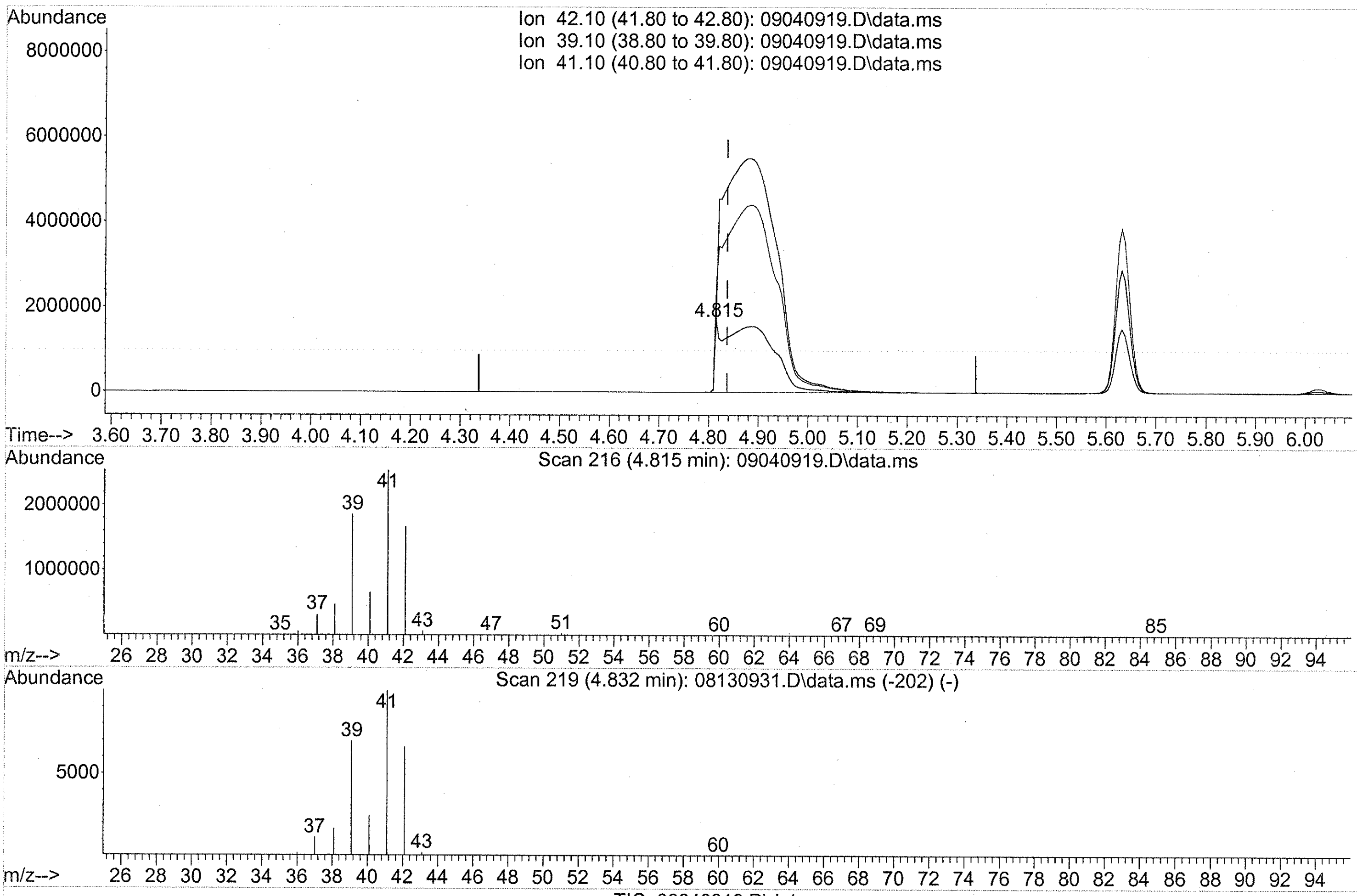
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	6284	0.134 ng	#	12
81) 2-Ethyltoluene	24.79	105	264908	2.465 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	899952	9.799 ng		89
83) n-Decane	25.15	57	38733	0.725 ng		89
84) Benzyl Chloride	25.25	91	1255	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	1771	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1771	N.D.		
87) sec-Butylbenzene	25.38	105	37381	0.309 ng		90
88) 4-Isopropyltoluene (p-...	25.56	119	315266	2.719 ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	241792	2.605 ng		98
90) 1,2-Dichlorobenzene	25.75	146	747	N.D.		
91) d-Limonene	25.74	68	654756	17.424 ng		95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	30870	0.559 ng	#	70
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	237342	1.926 ng		95
96) n-Dodecane	27.89	57	75059	1.214 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	114732	3.661 ng		97
99) tert-Butylbenzene	25.49	119	73301	0.805 ng		97
100) n-Butylbenzene	26.06	91	106313	1.104 ng	#	65

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:49:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(2) Propene (T)

4.815min (-0.023) 387.38ng m

response 11784678

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	0.00#
41.10	152.70	0.00#
0.00	0.00	0.00

reintegrated
see dilution

[initials] 9/16/09

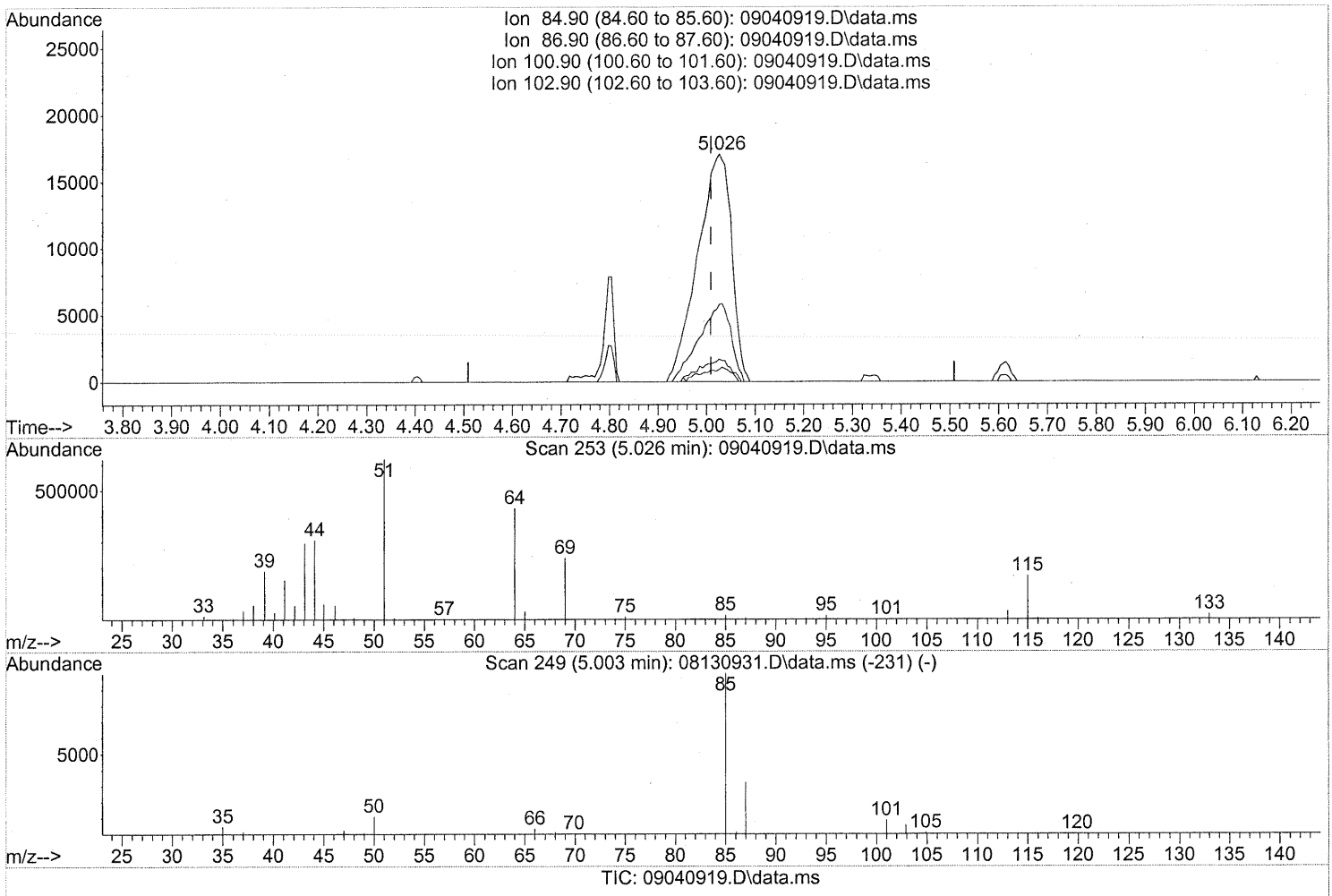
[signature] 9/16/9

14

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:03 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.026min (+0.017) 1.89ng

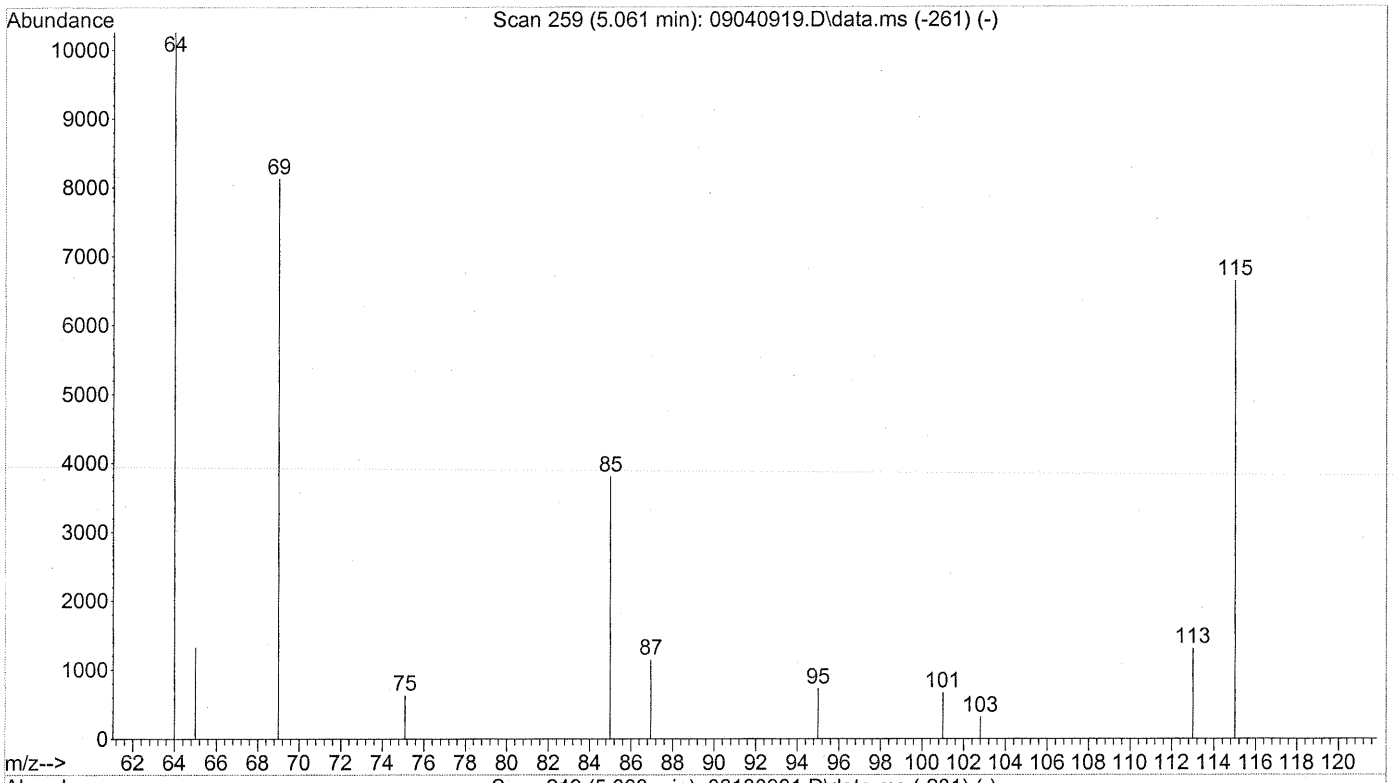
response 82116

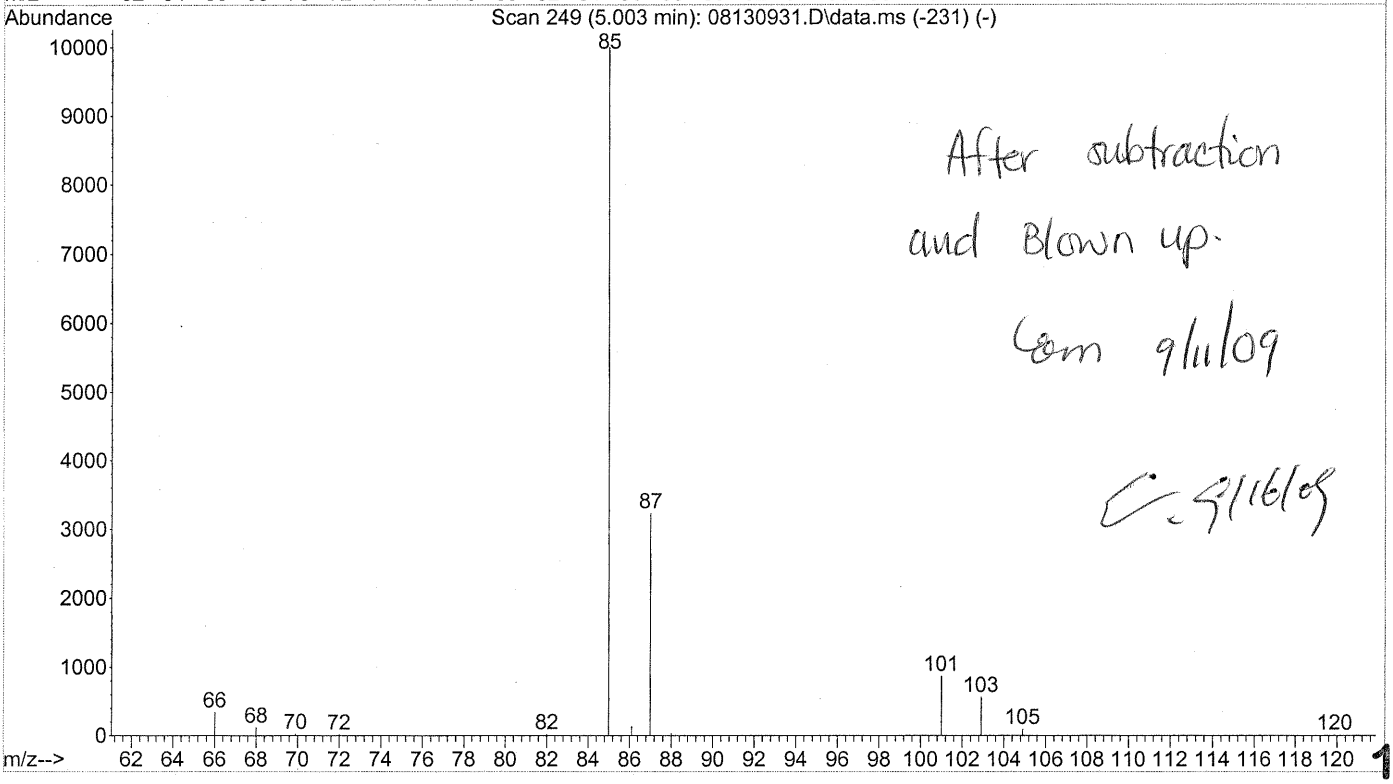
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.02
100.90	9.10	8.62
102.90	5.50	5.14

Before subtraction and Blown up.

15

File :J:\MS09\Data\2009_09\04\09040919.D
Operator : EM
Acquired : 4 Sep 2009 20:54 using AcqMethod TO15LOW.M
Instrument : MS09
Sample Name: P0903080-001 (1000ml)
Misc Info : Environmental H&E 104834
Vial Number: 9



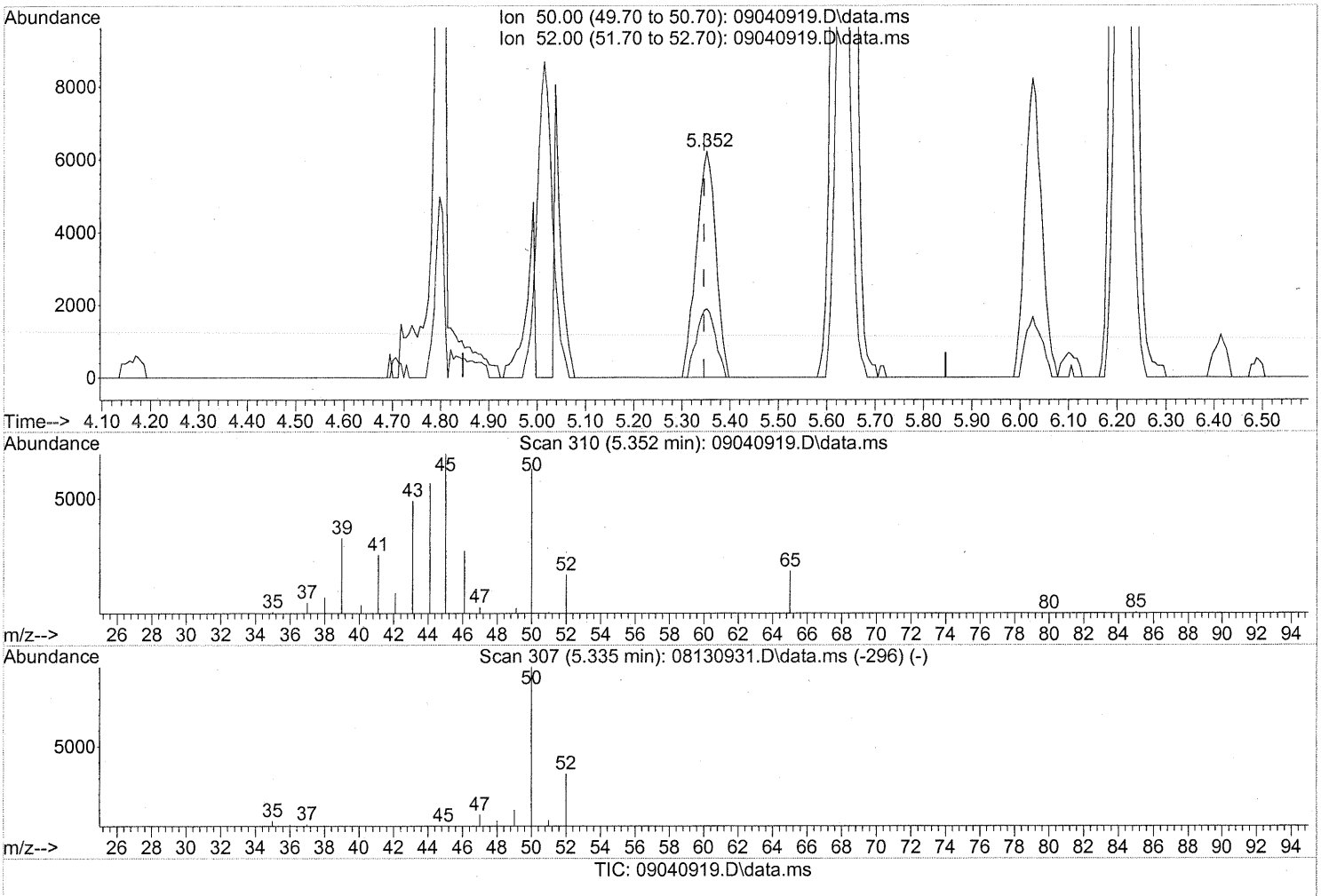


After subtraction and Blown up.
Com 9/11/09
9/16/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:03 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.352min (+0.006) 0.43ng

response 17379

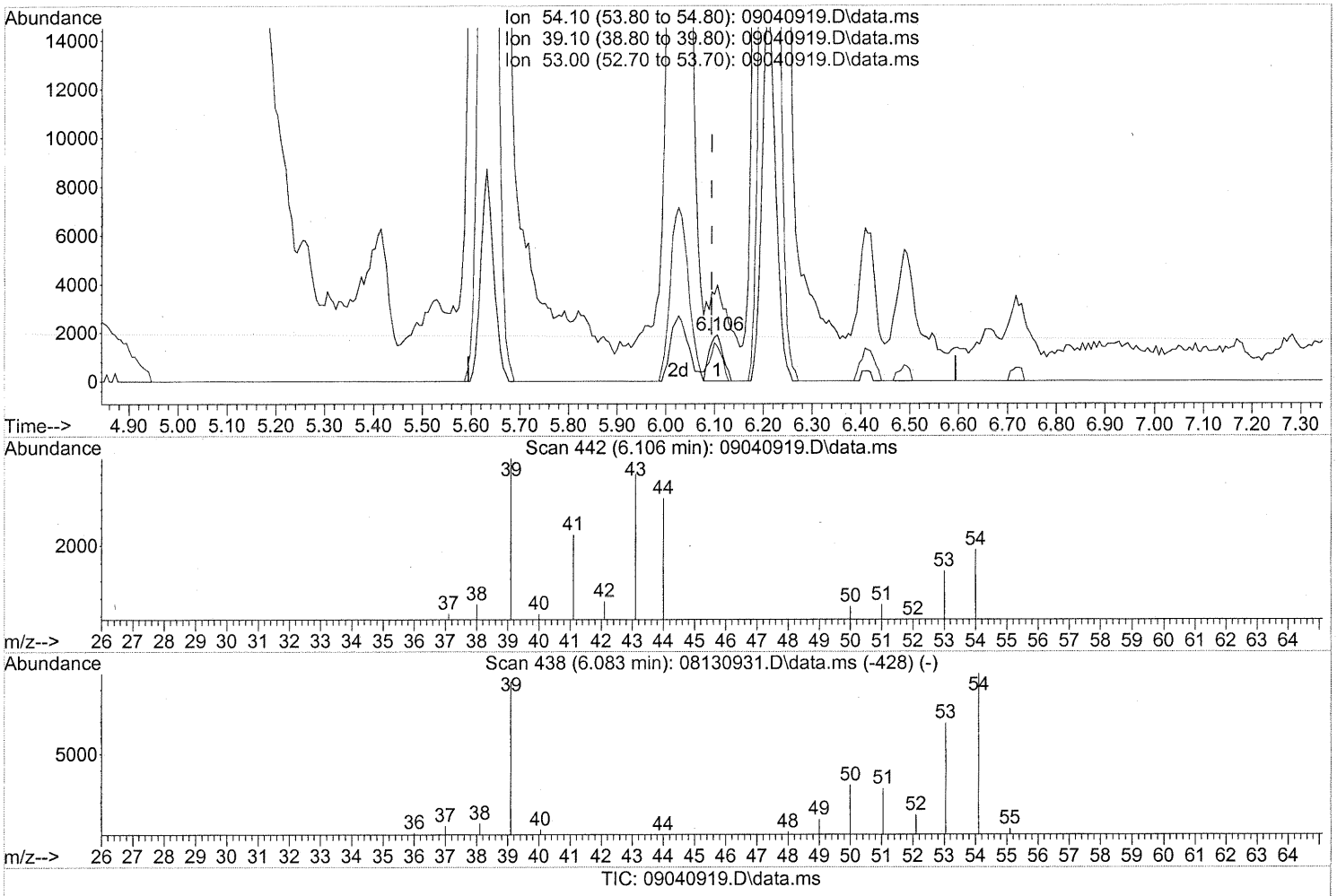
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	29.50
0.00	0.00	0.00
0.00	0.00	0.00

17

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:03 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(7) 1,3-Butadiene (T)

6.106min (+0.012) 0.13ng

response 3665

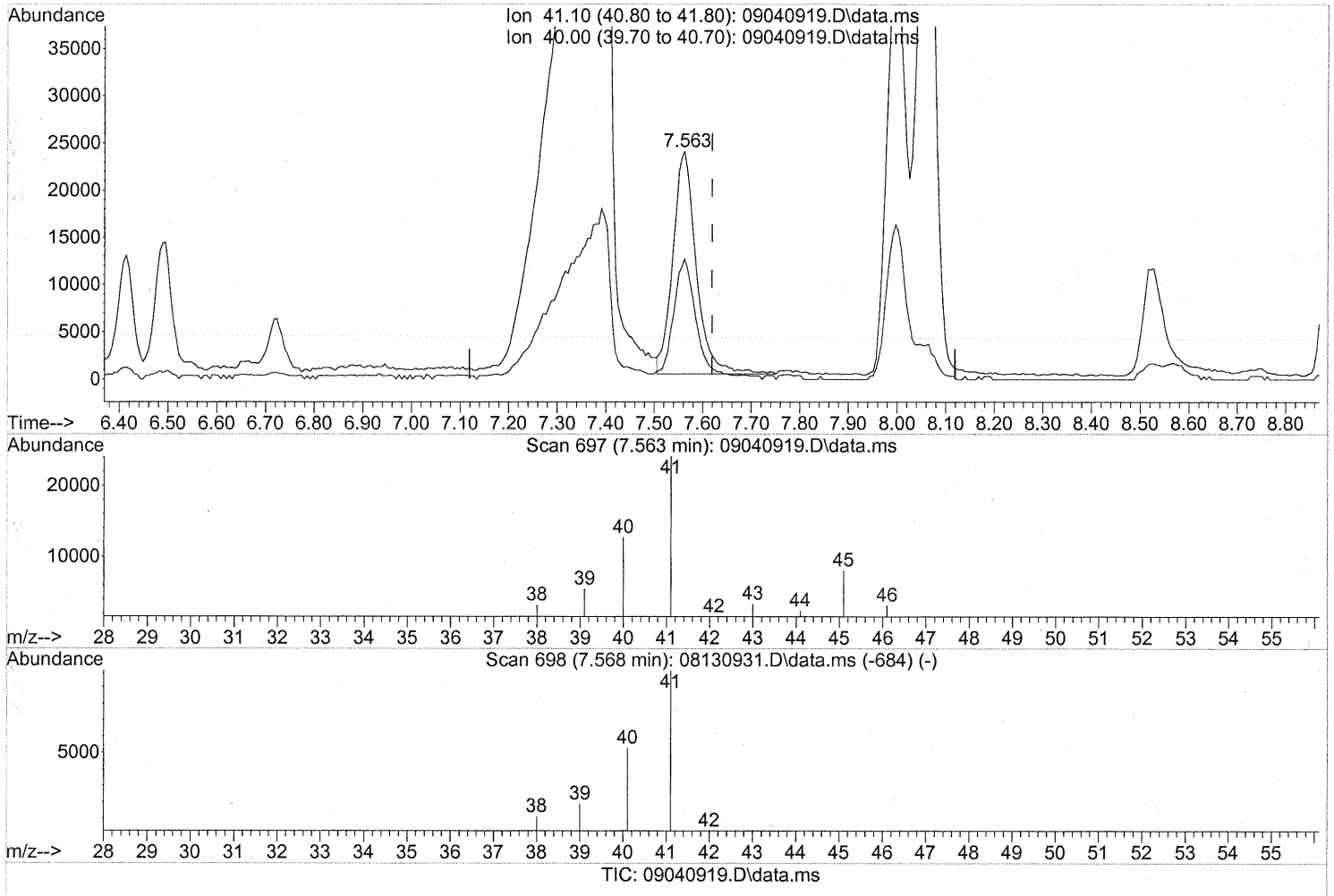
Ion	Exp%	Act%
54.10	100	100
39.10	96.60	0.00#
53.00	69.80	72.61
0.00	0.00	0.00

18

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(11) Acetonitrile (T)

7.563min (-0.057) 1.68ng

response 78414

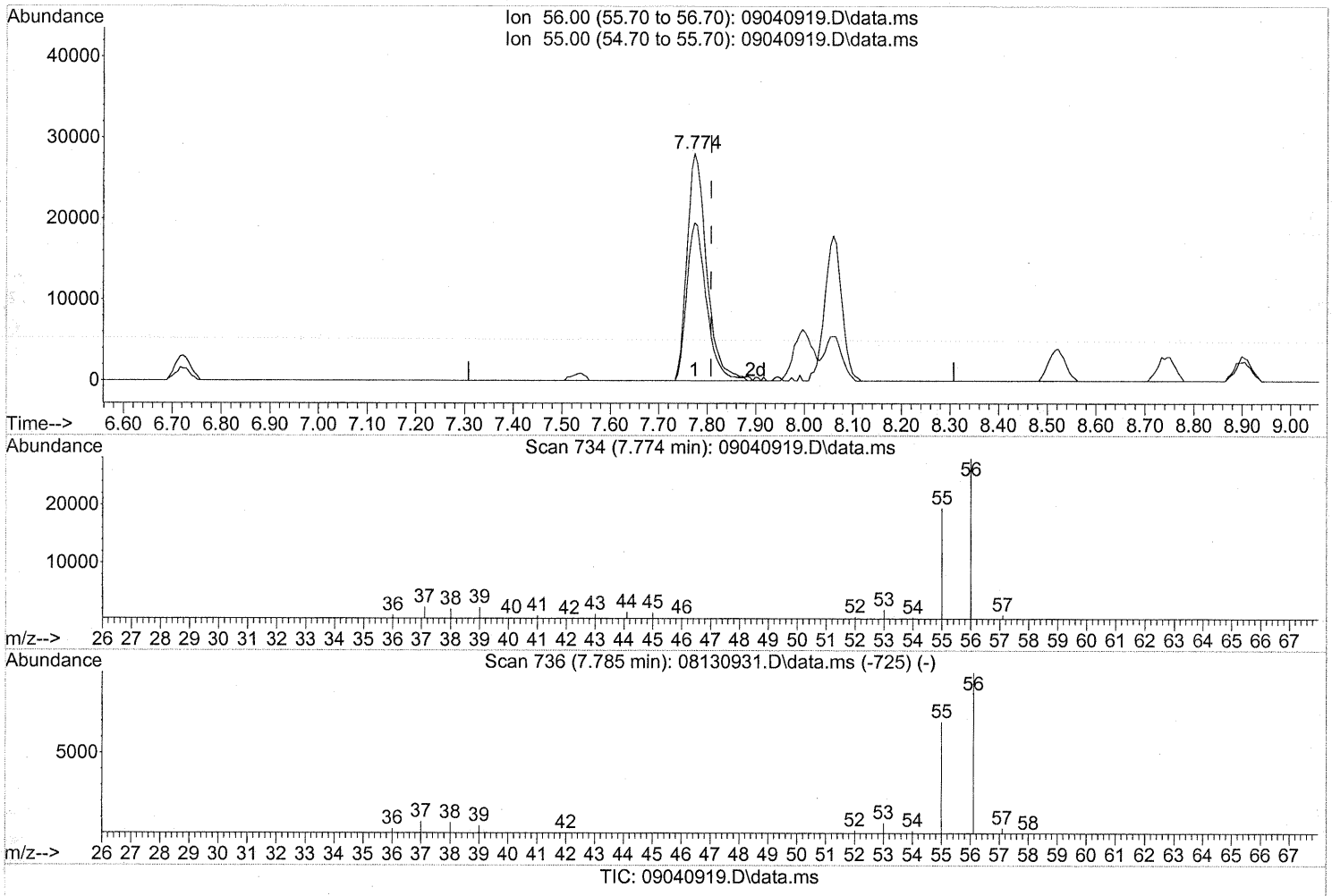
Ion	Exp%	Act%
41.10	100	100
40.00	53.30	54.56
0.00	0.00	0.00
0.00	0.00	0.00

19

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(12) Acrolein (T)

7.774min (-0.034) 6.32ng

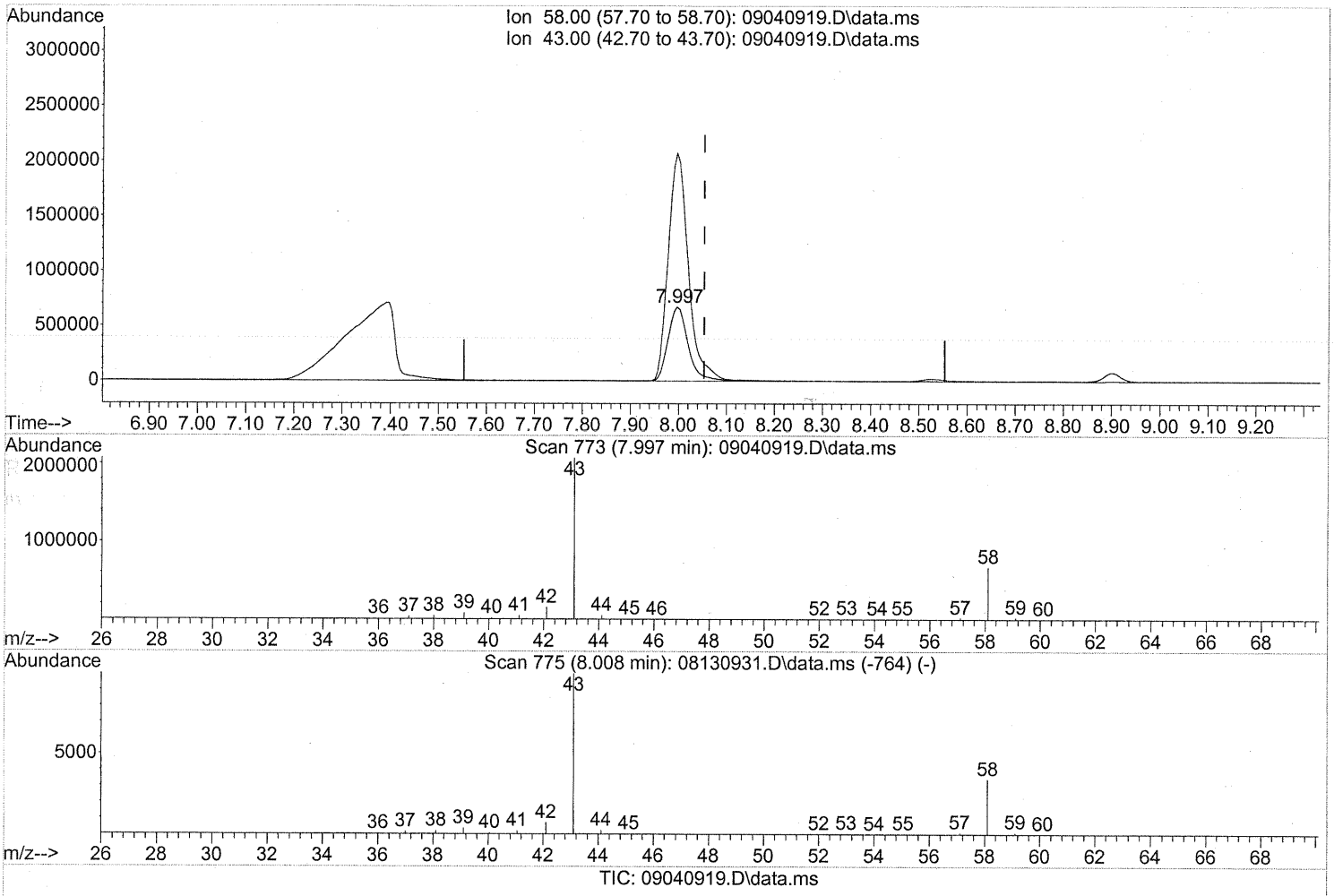
response 78685

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(13) Acetone (T)

7.997min (-0.057) 99.87ng

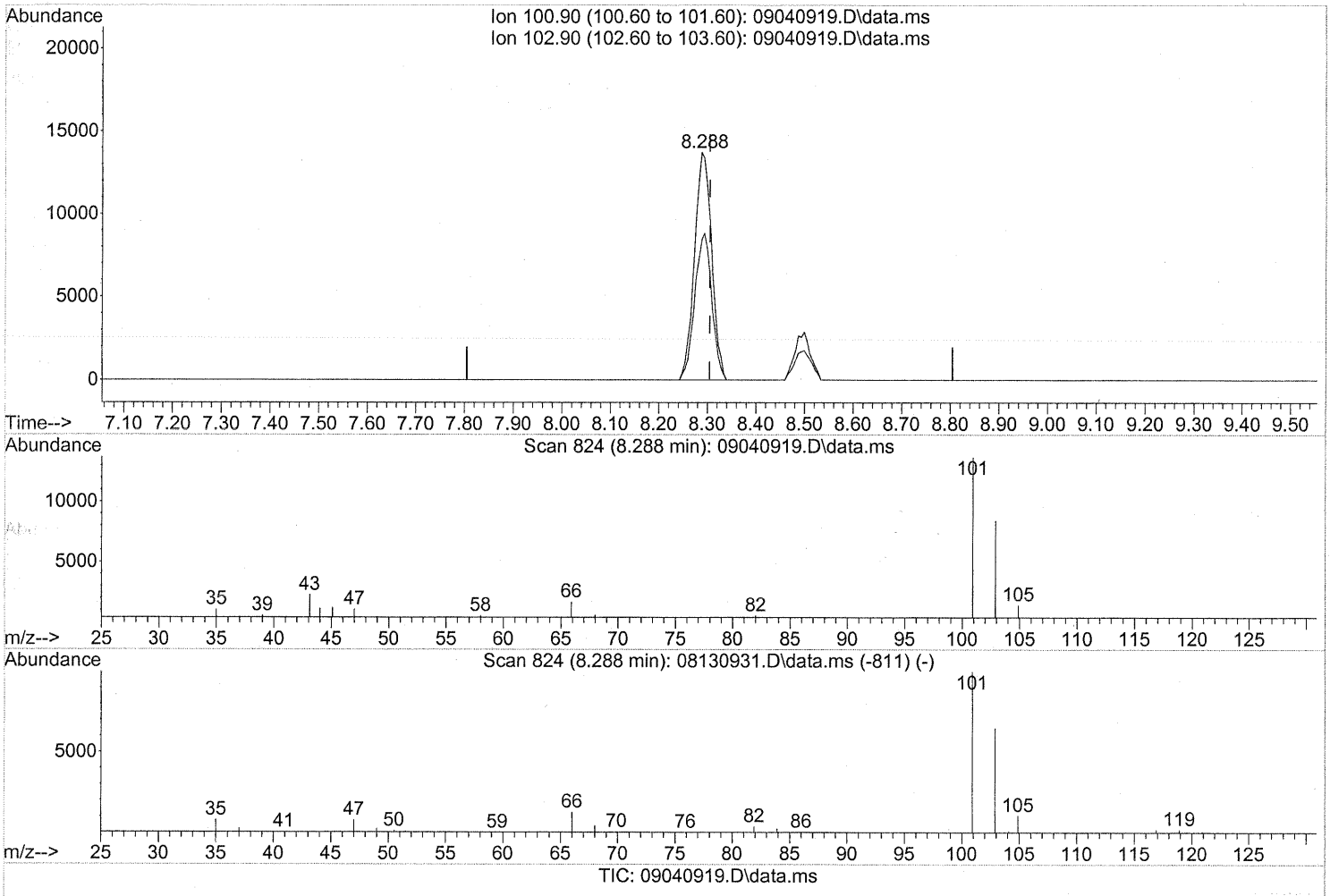
response 1939429

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	310.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(14) Trichlorofluoromethane (T)

8.288min (-0.017) 0.90ng

response 33576

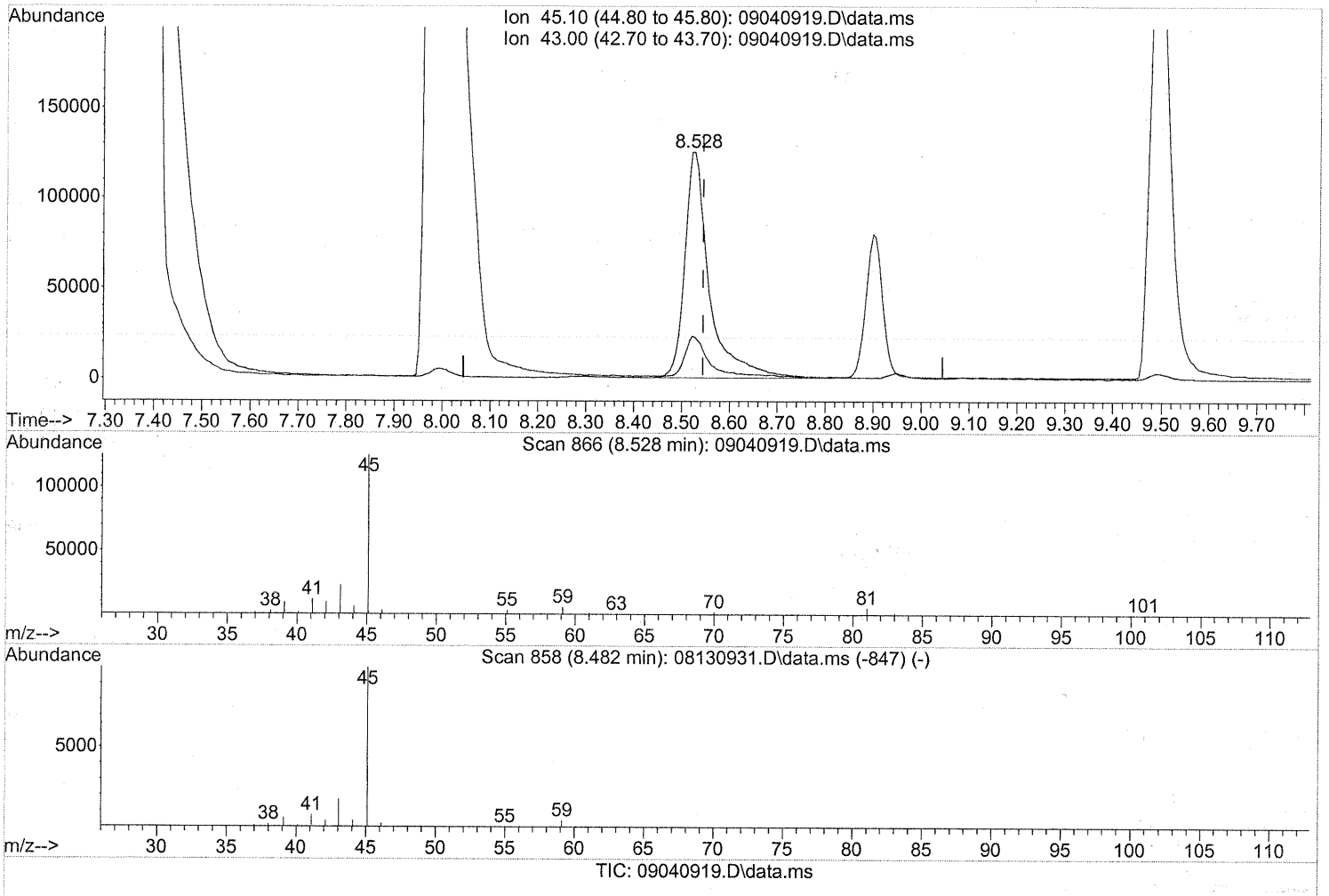
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.64
0.00	0.00	0.00
0.00	0.00	0.00

22

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

8.528min (-0.017) 8.41ng

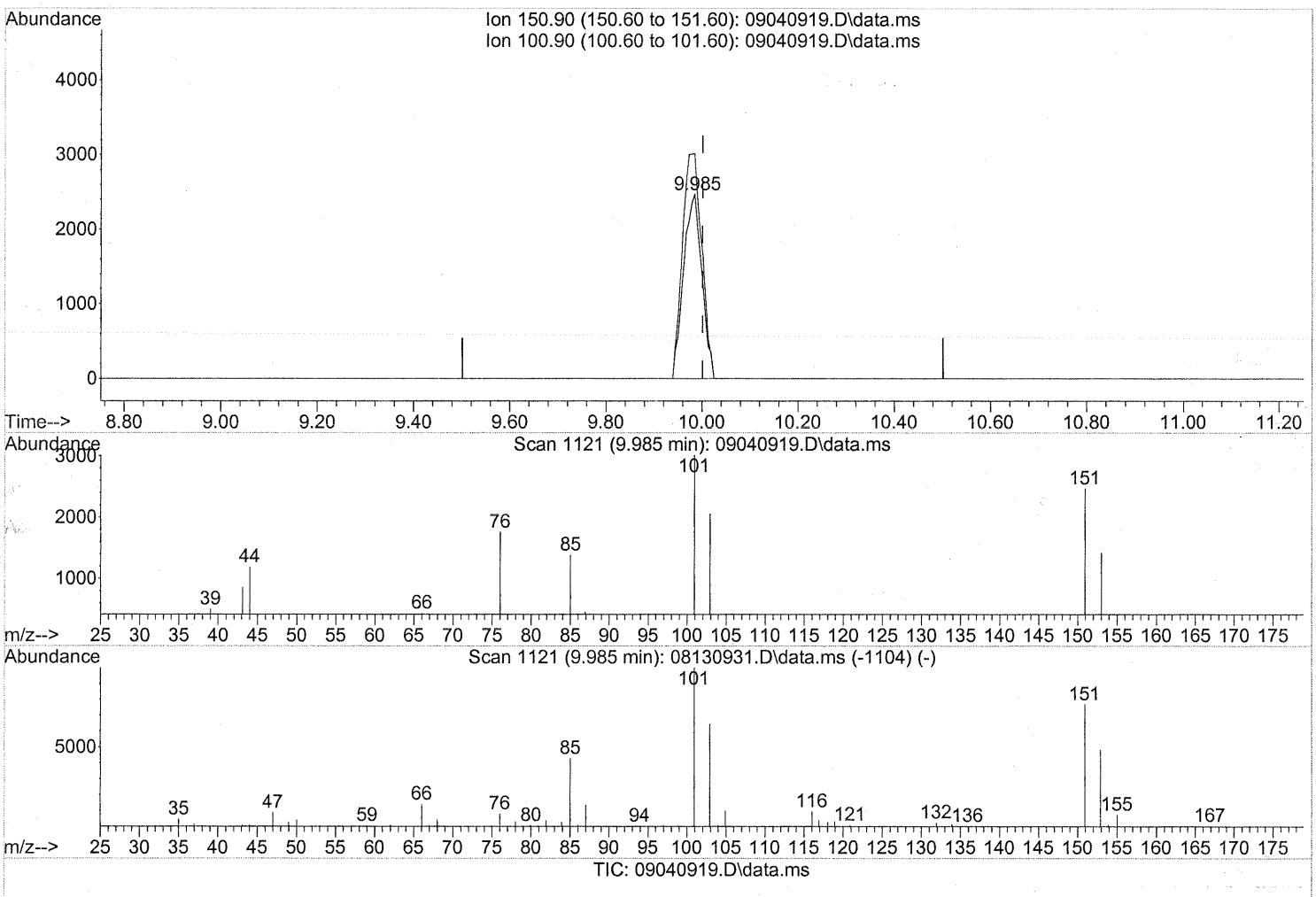
response 447438

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.39ng

response 6497

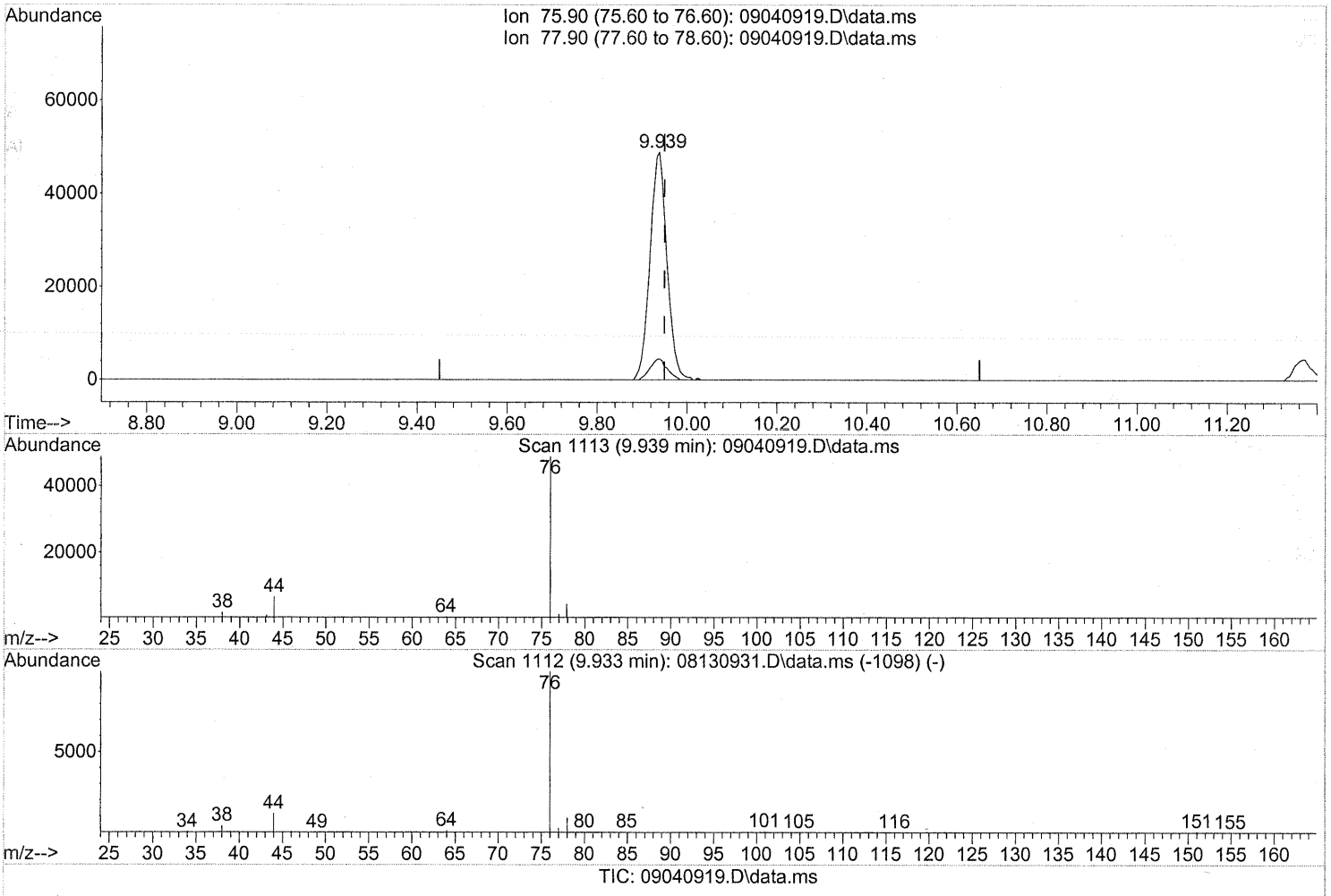
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	129.58
0.00	0.00	0.00
0.00	0.00	0.00

24

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 1.50ng

response 128056

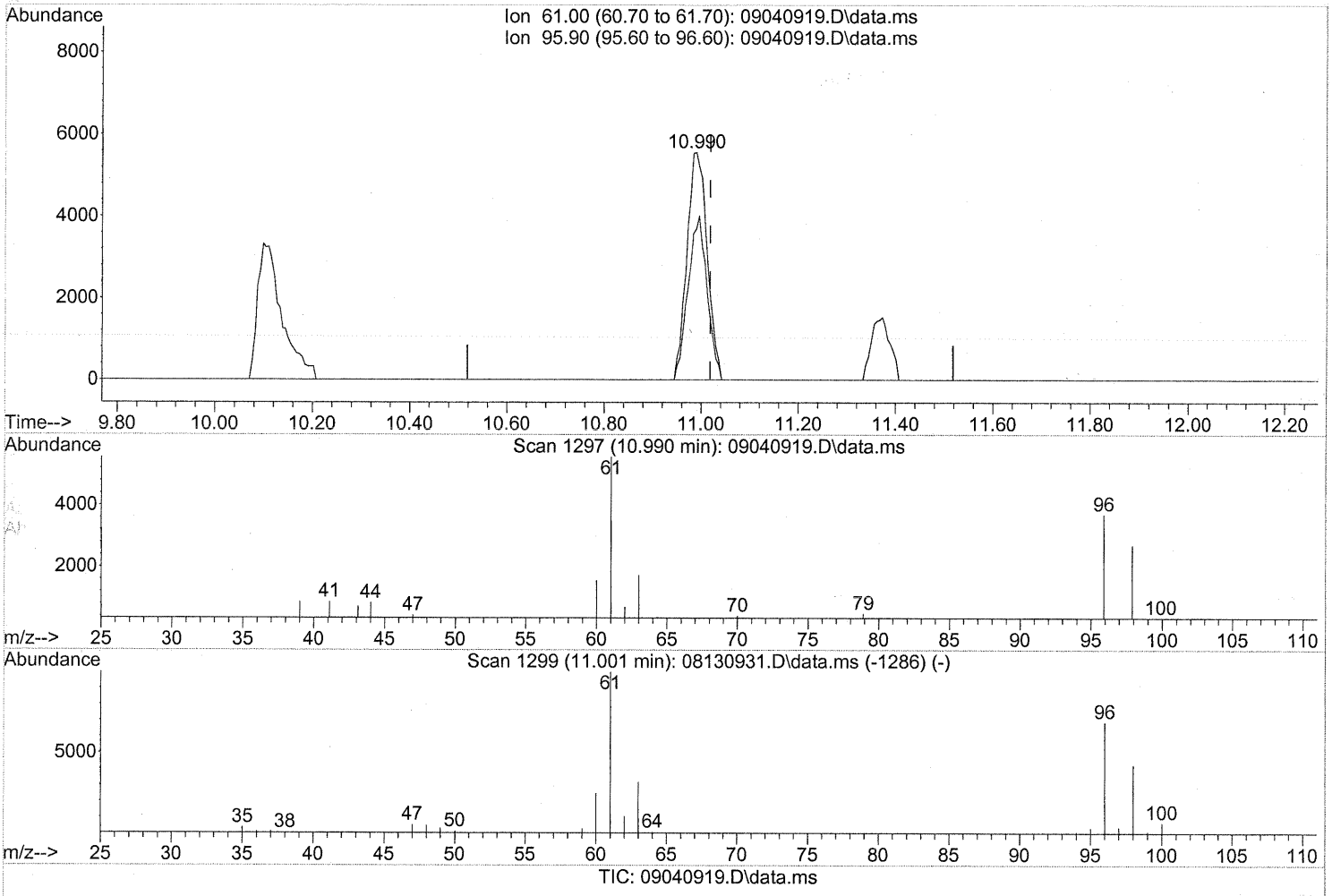
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	9.06
0.00	0.00	0.00
0.00	0.00	0.00

25

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(23) trans-1,2-Dichloroethene (T)

10.990min (-0.028) 0.48ng

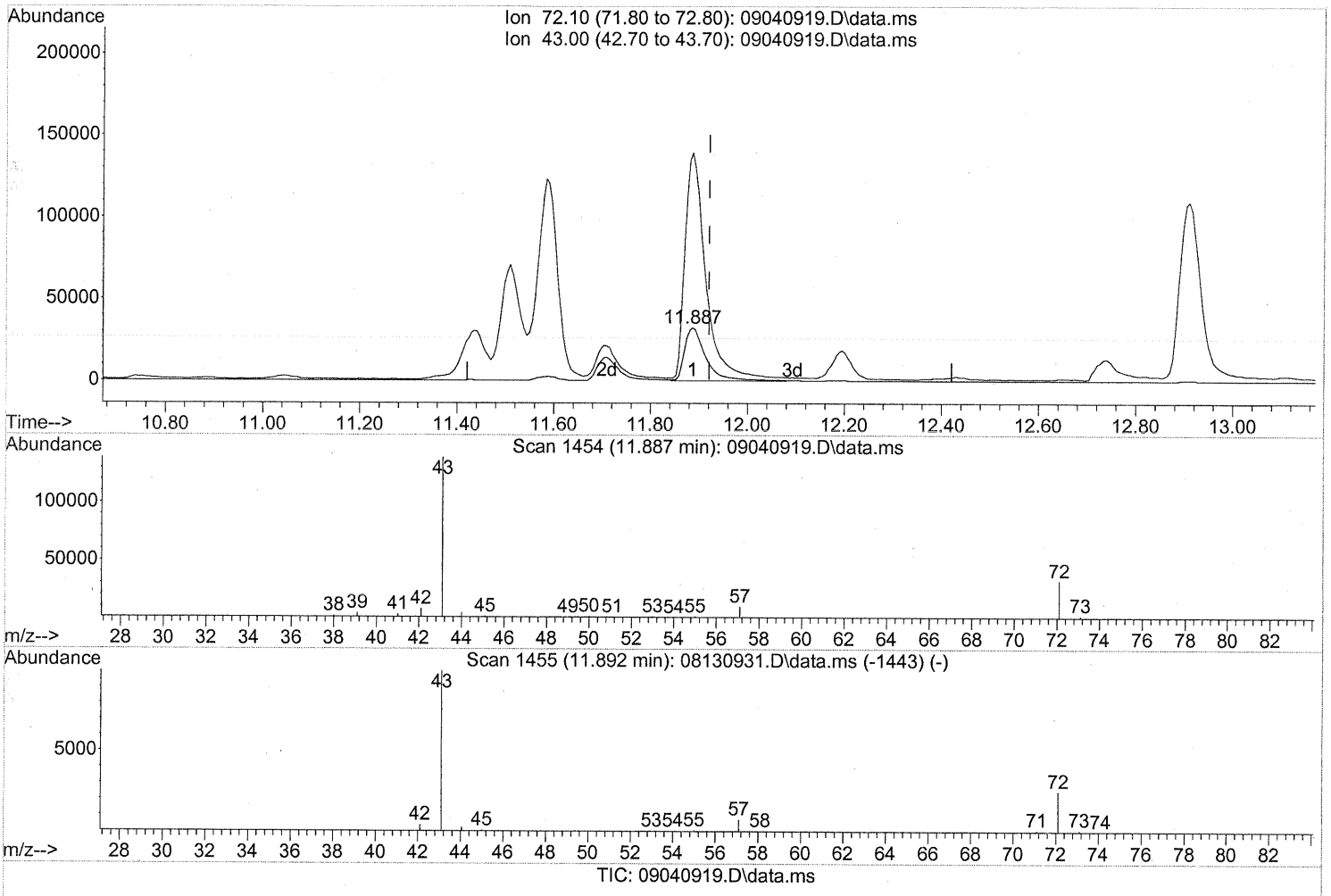
response 16056

Ion	Exp%	Act%
61.00	100	100
95.90	74.10	67.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

11.887min (-0.034) 7.21ng

response 97598

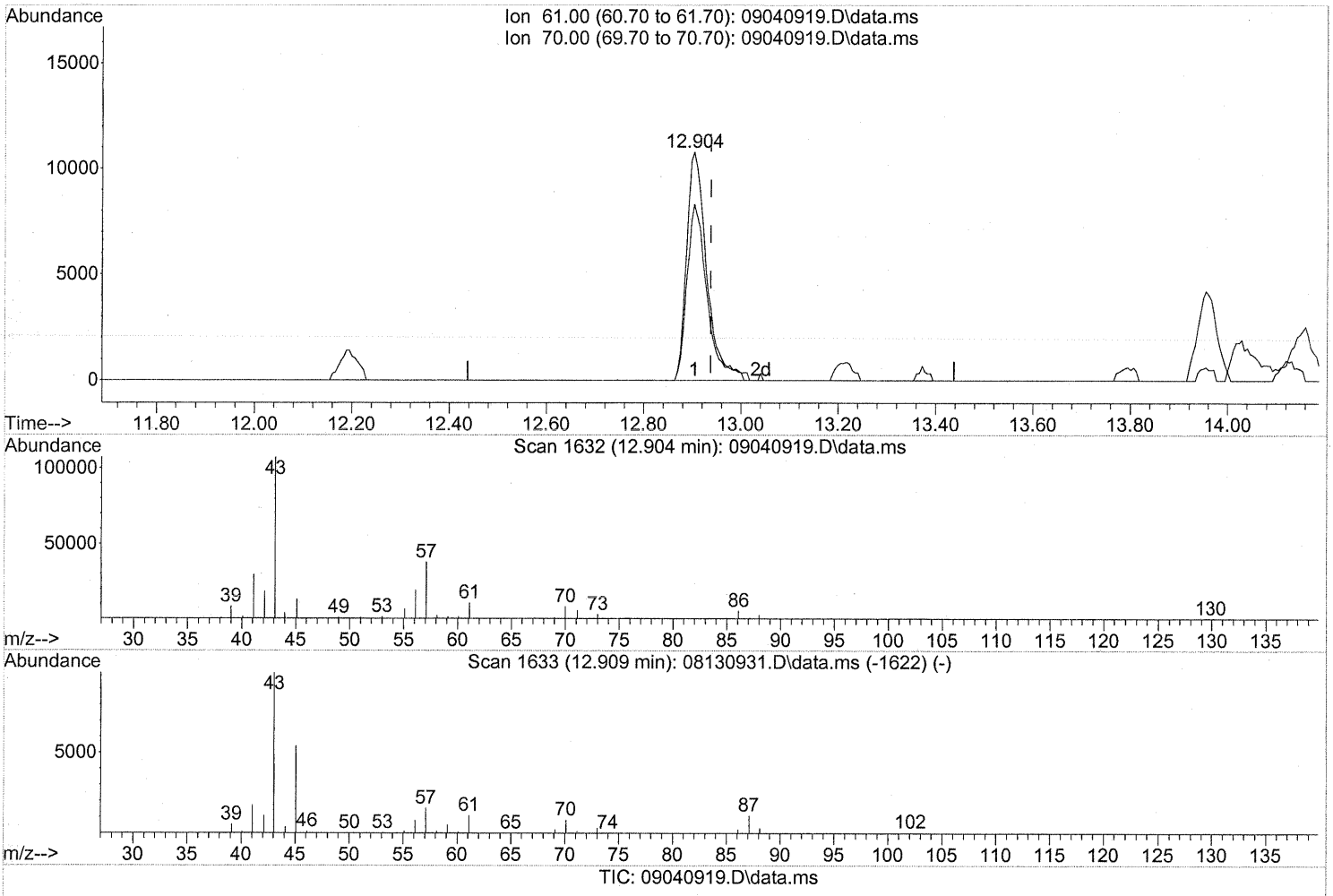
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	409.47#
0.00	0.00	0.00
0.00	0.00	0.00

27

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(30) Ethyl Acetate (T)

12.904min (-0.034) 3.55ng

response 31176

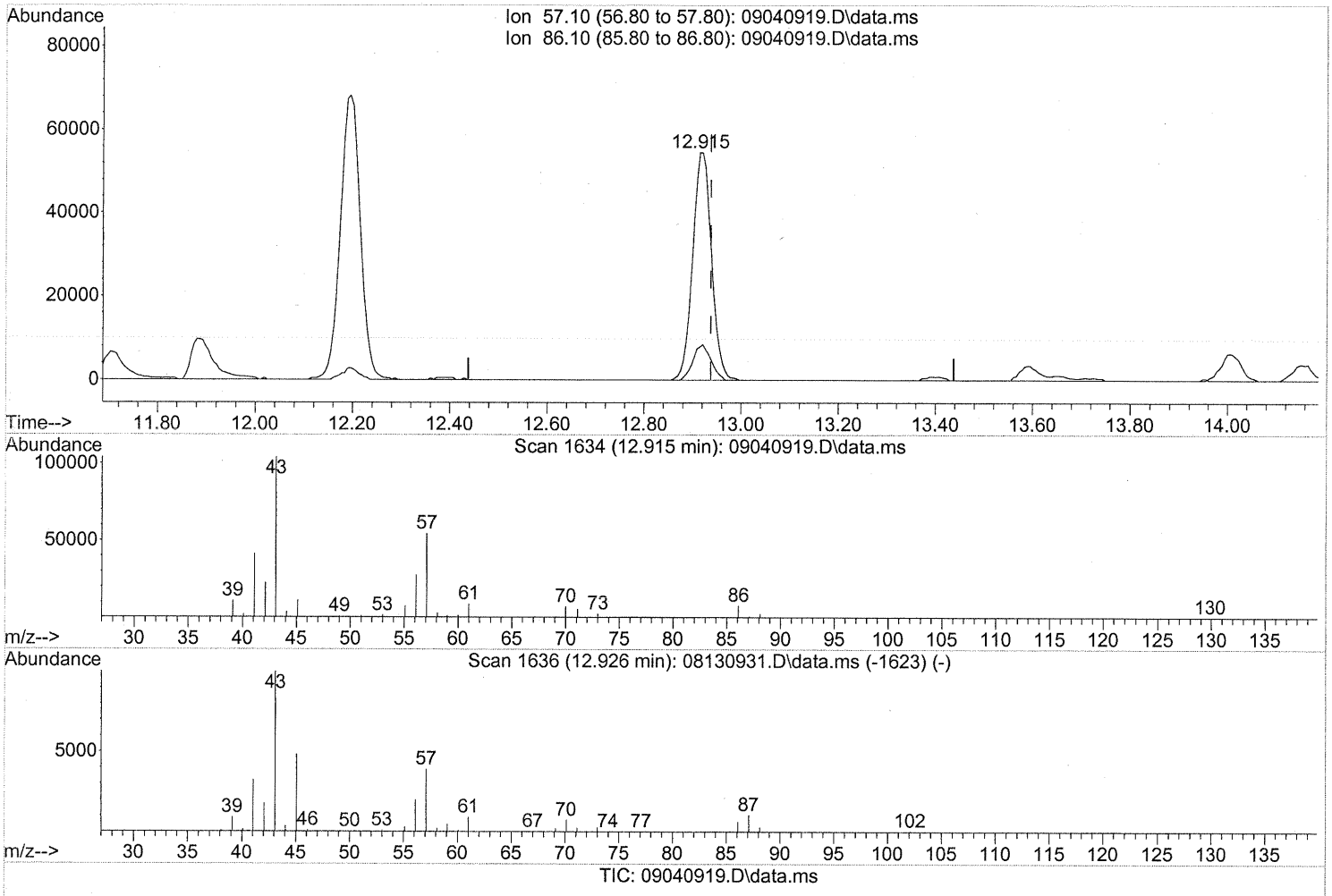
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	76.54
0.00	0.00	0.00
0.00	0.00	0.00

28

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(31) n-Hexane (T)

12.915min (-0.023) 3.40ng

response 145610

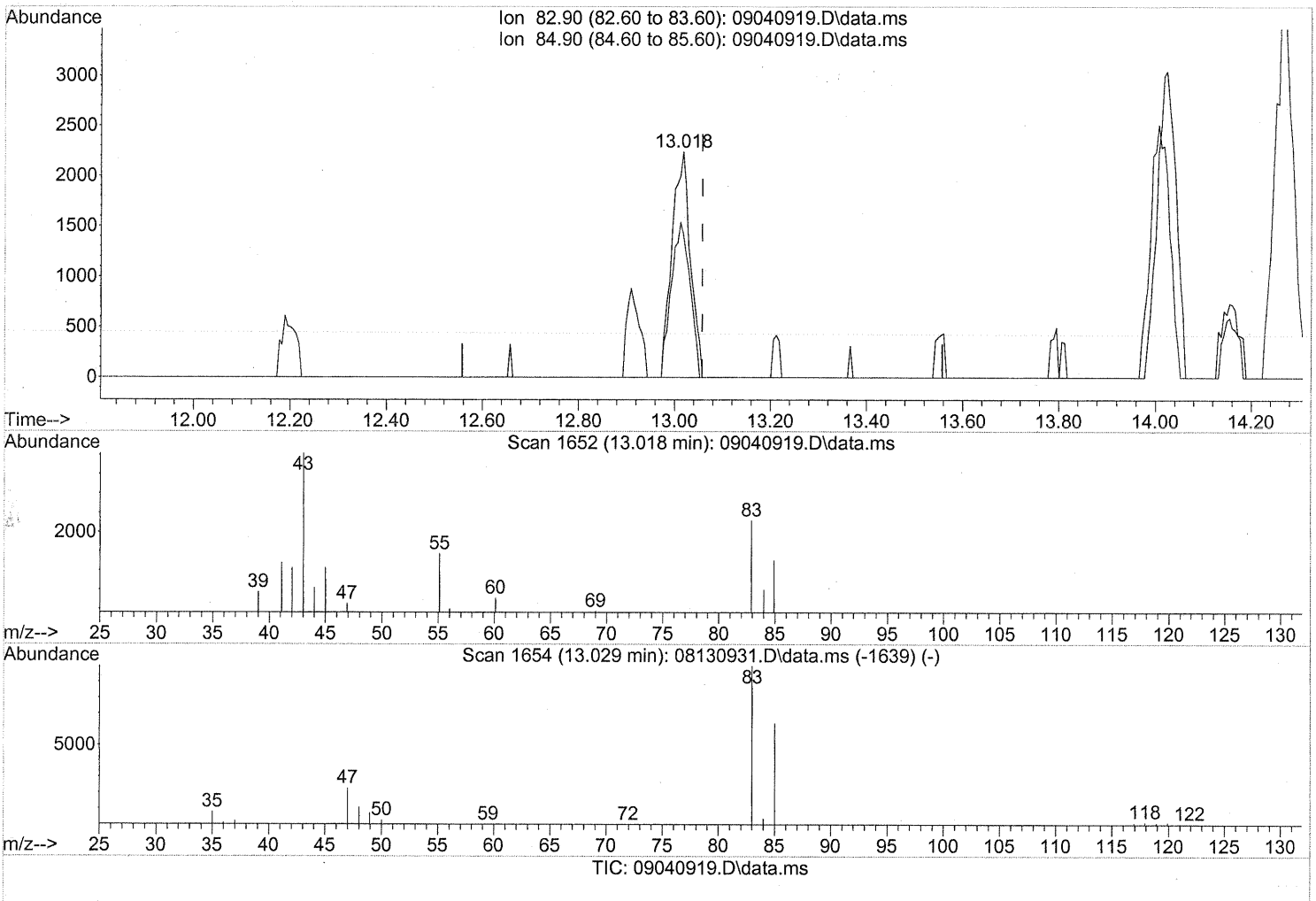
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	14.70
0.00	0.00	0.00
0.00	0.00	0.00

29

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 0.17ng

response 5994

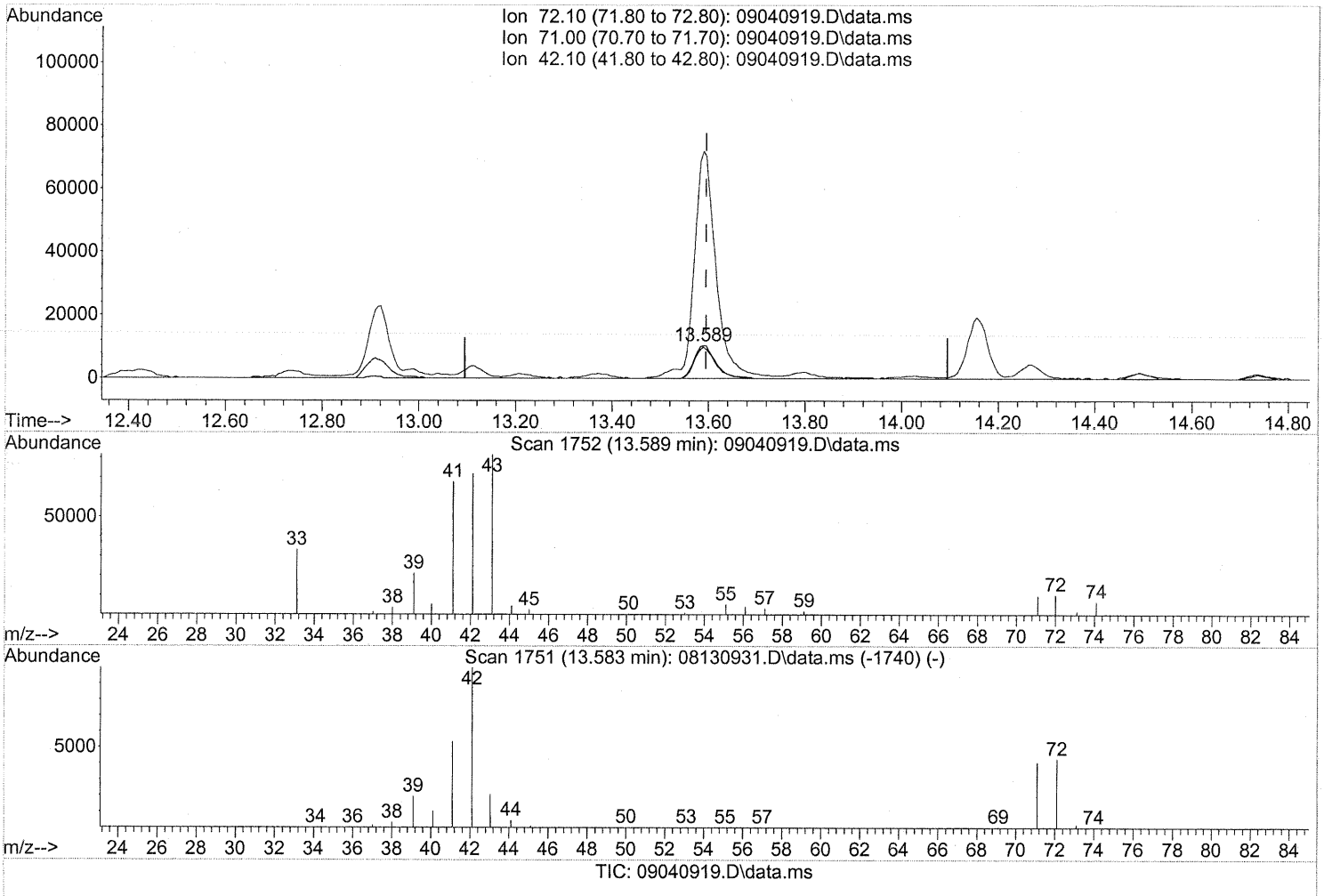
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	69.49
0.00	0.00	0.00
0.00	0.00	0.00

30

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.589min (-0.006) 2.28ng

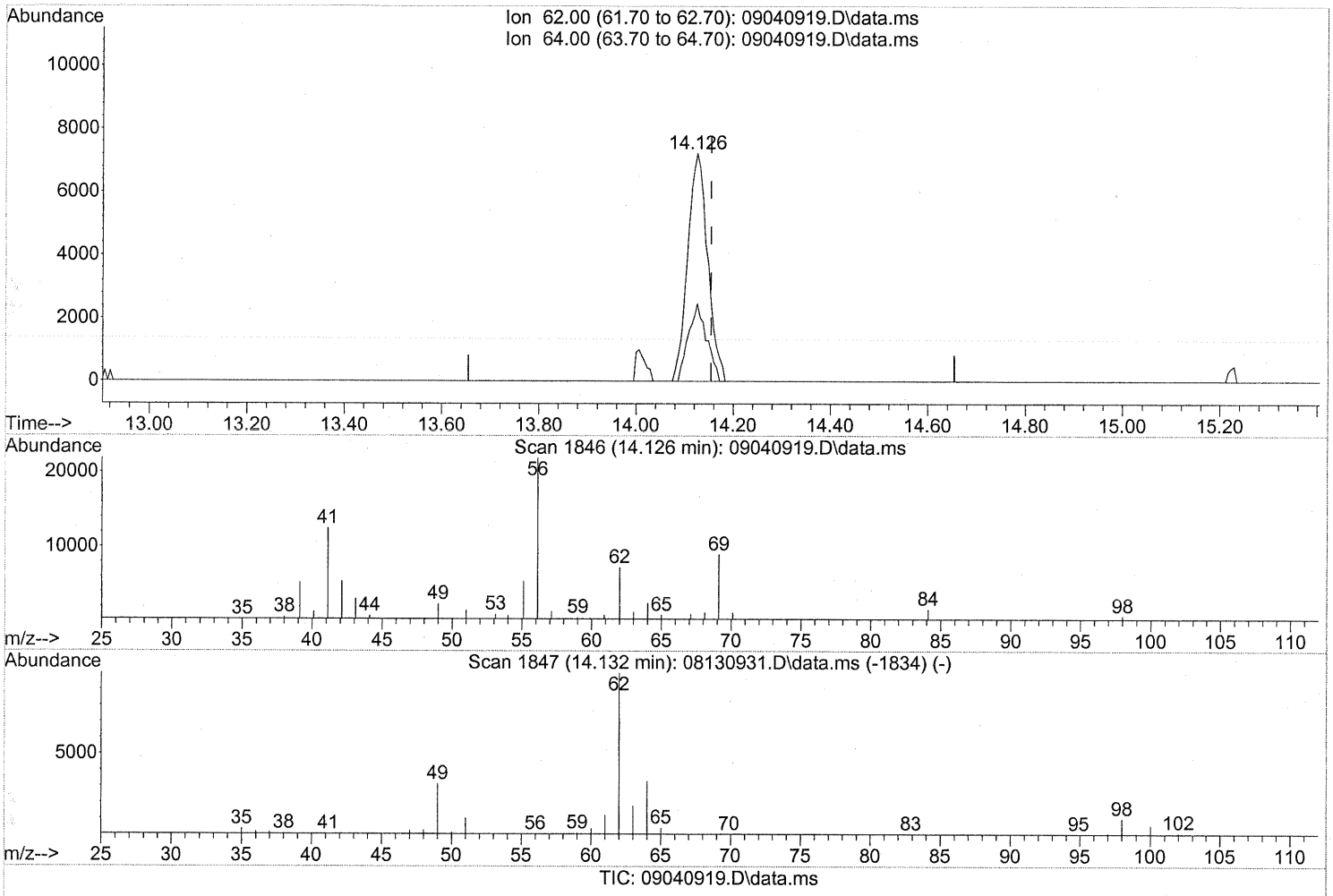
response 32122

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	90.97
42.10	206.50	710.37#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(36) 1,2-Dichloroethane (T)

14.126min (-0.028) 0.75ng

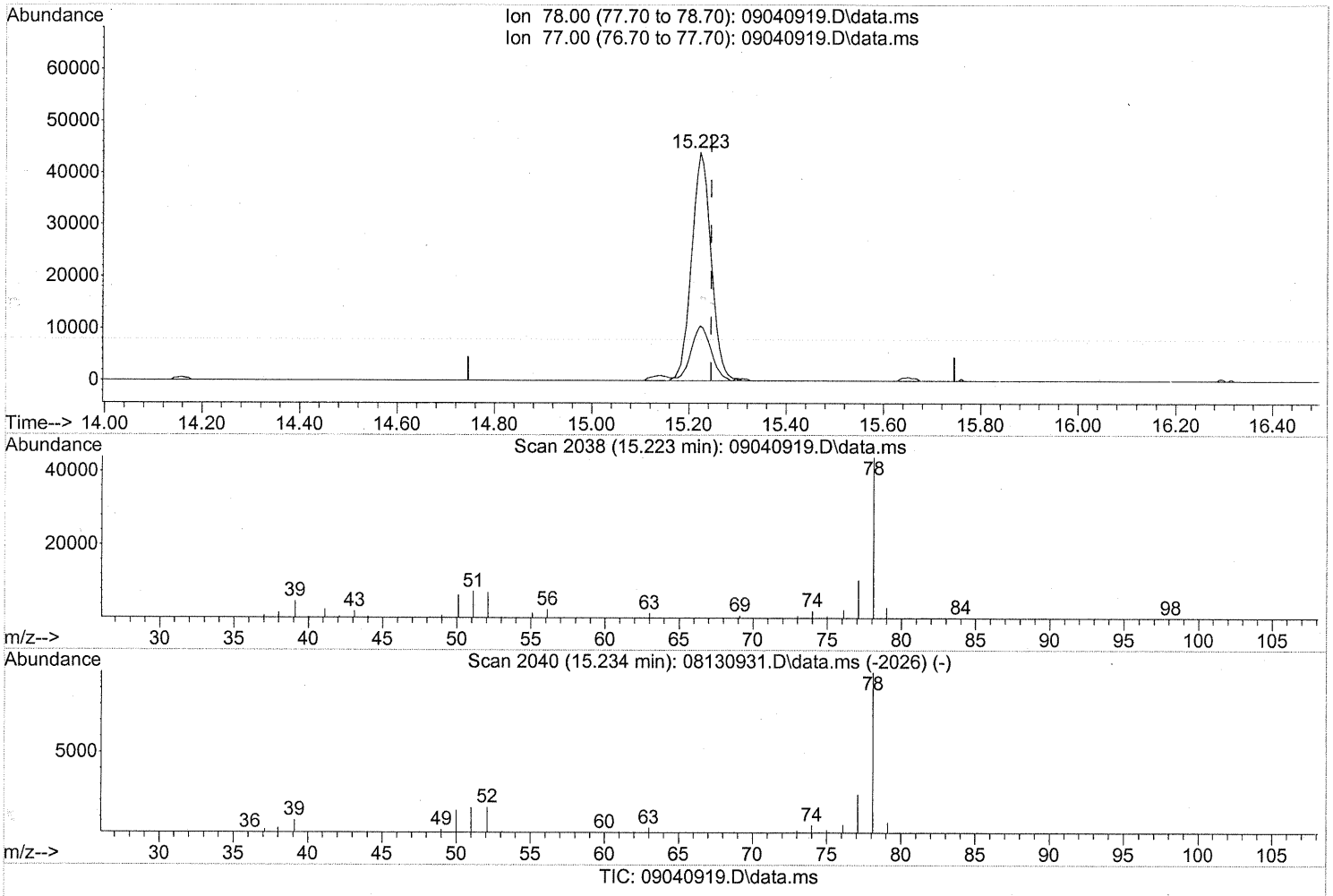
response 20669

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	31.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(41) Benzene (T)

15.223min (-0.023) 1.28ng

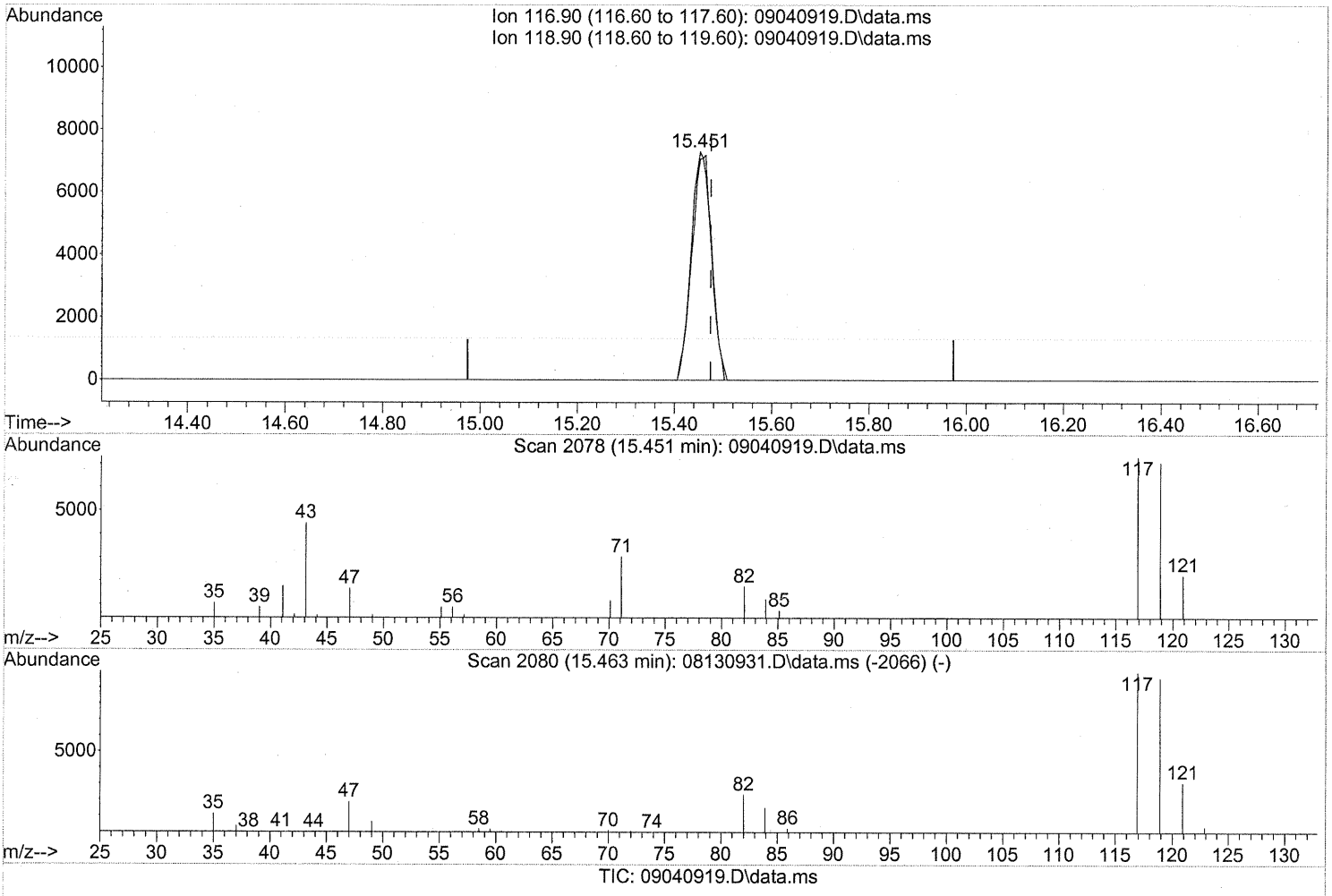
response 122134

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(42) Carbon Tetrachloride (T)

15.451min (-0.023) 0.80ng

response 21229

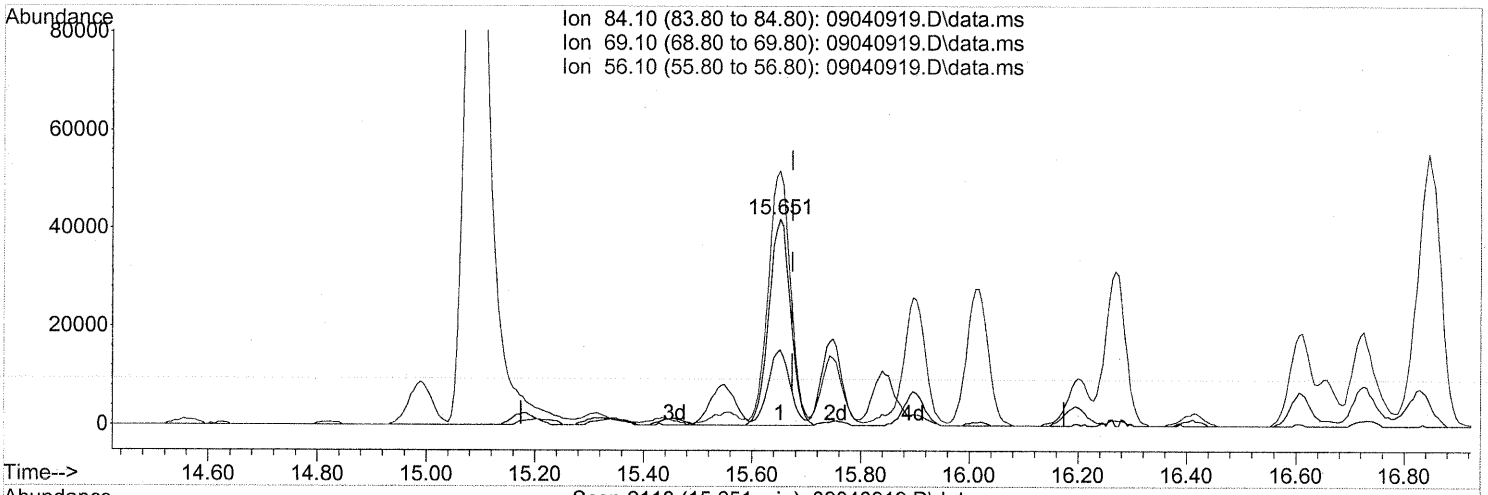
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	94.23
0.00	0.00	0.00
0.00	0.00	0.00

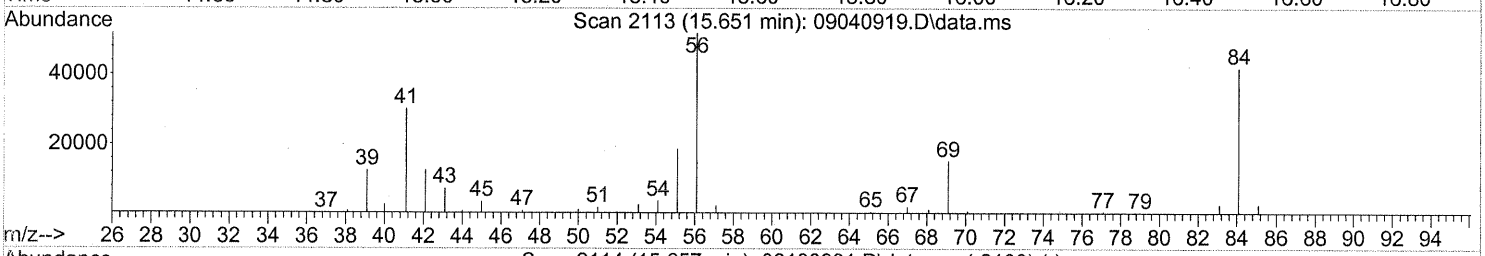
34

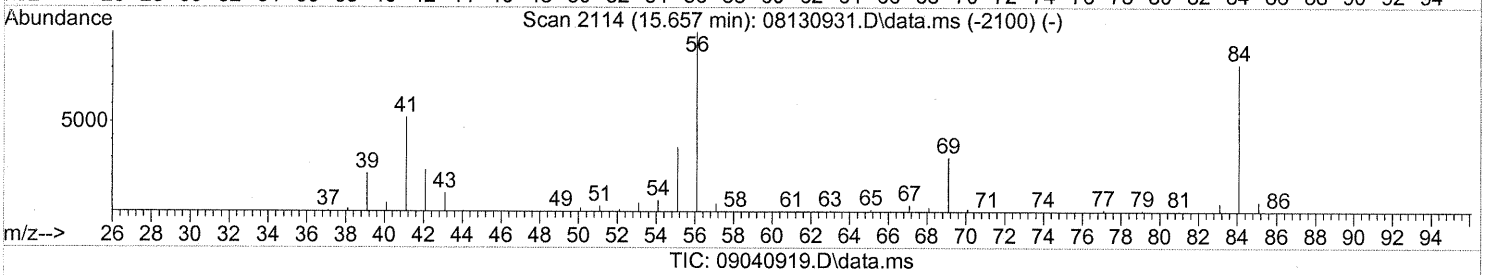
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 3.14ng

response 115851

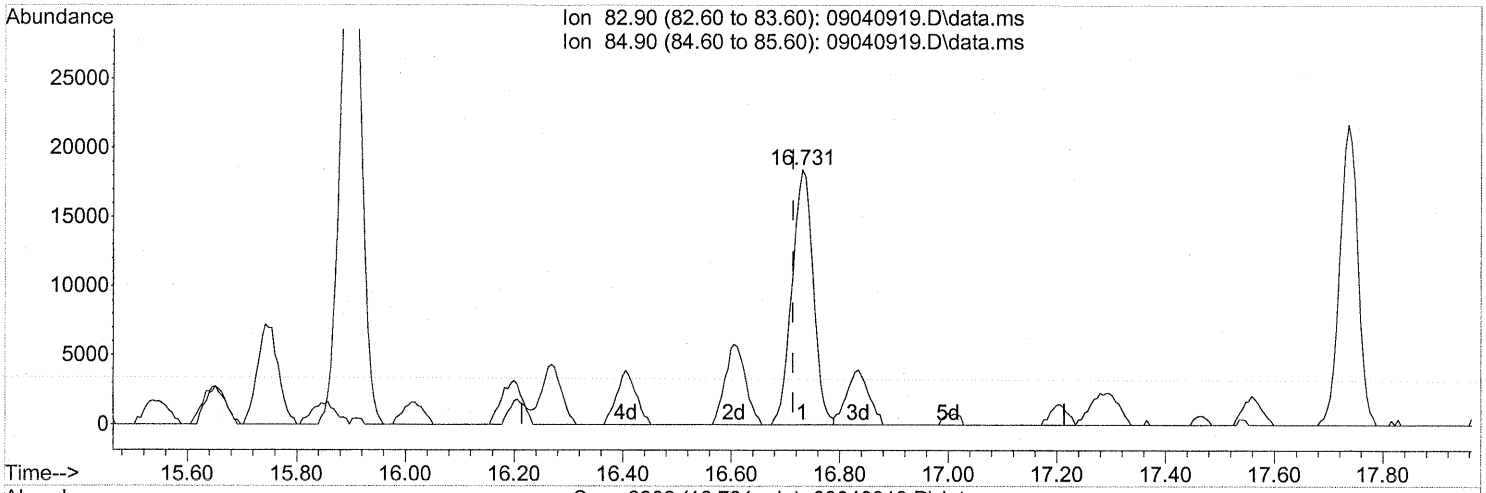
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.58
56.10	107.30	125.22
0.00	0.00	0.00

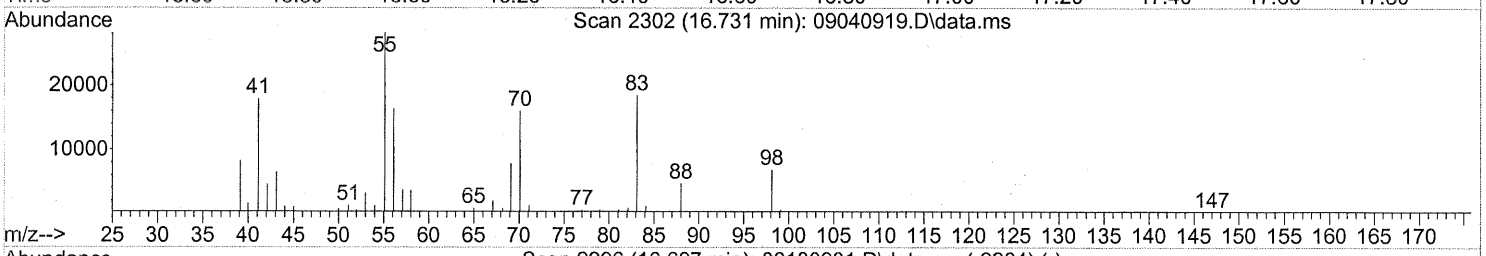
35

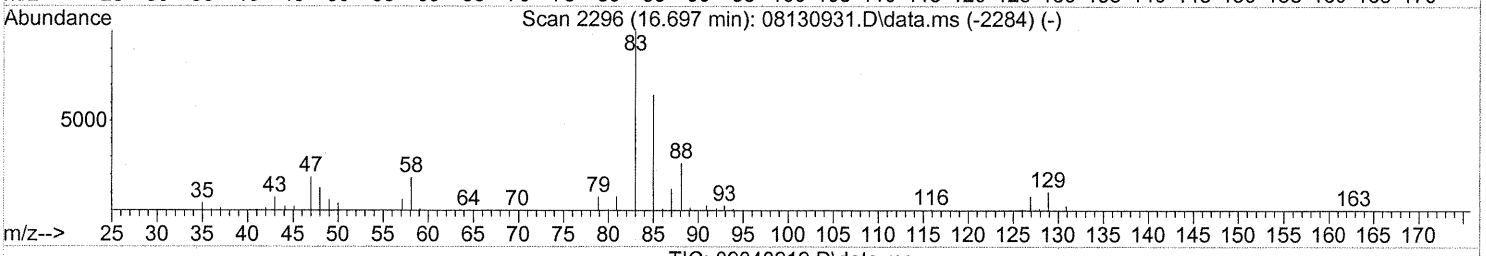
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(46) Bromodichloromethane (T)

16.731min (+0.017) 1.80ng

response 50148

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

FP

9/15/09

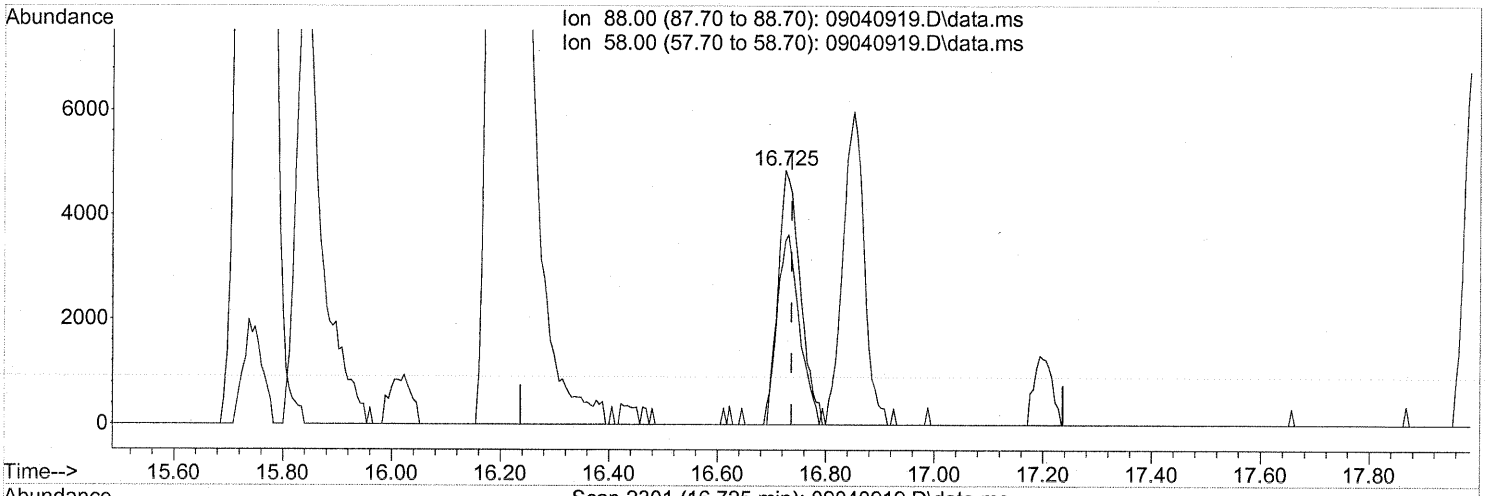
9/16/09

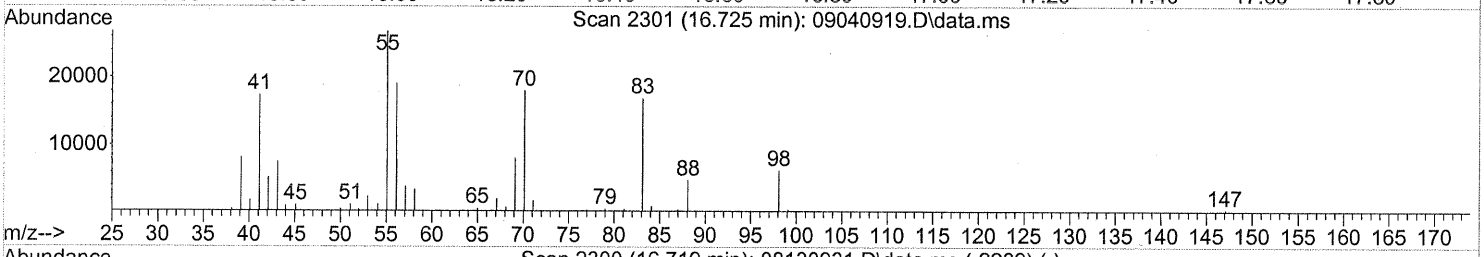
36

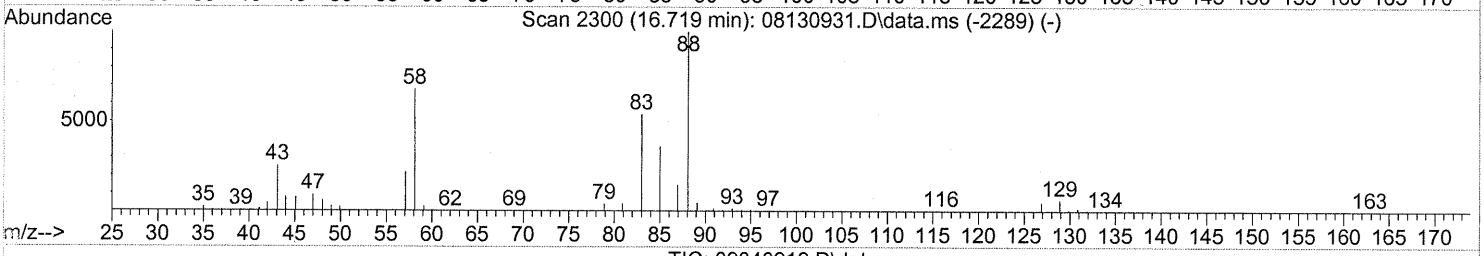
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(48) 1,4-Dioxane (T)

16.725min (-0.011) 0.81ng

response 13772

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	75.54
0.00	0.00	0.00
0.00	0.00	0.00

TP

PA 9/15/09

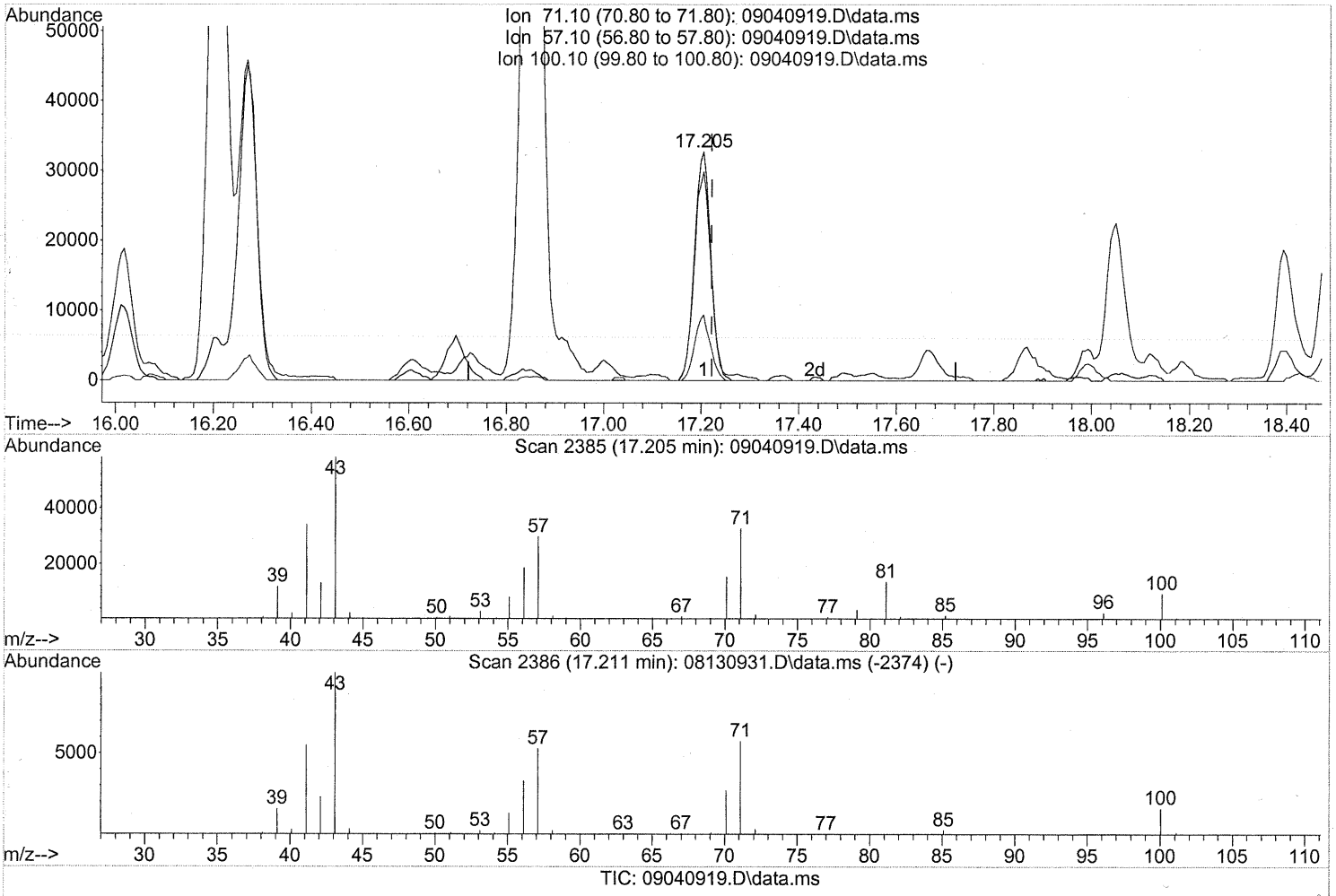
9/16/09

37

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(51) n-Heptane (T)

17.205min (-0.017) 3.00ng

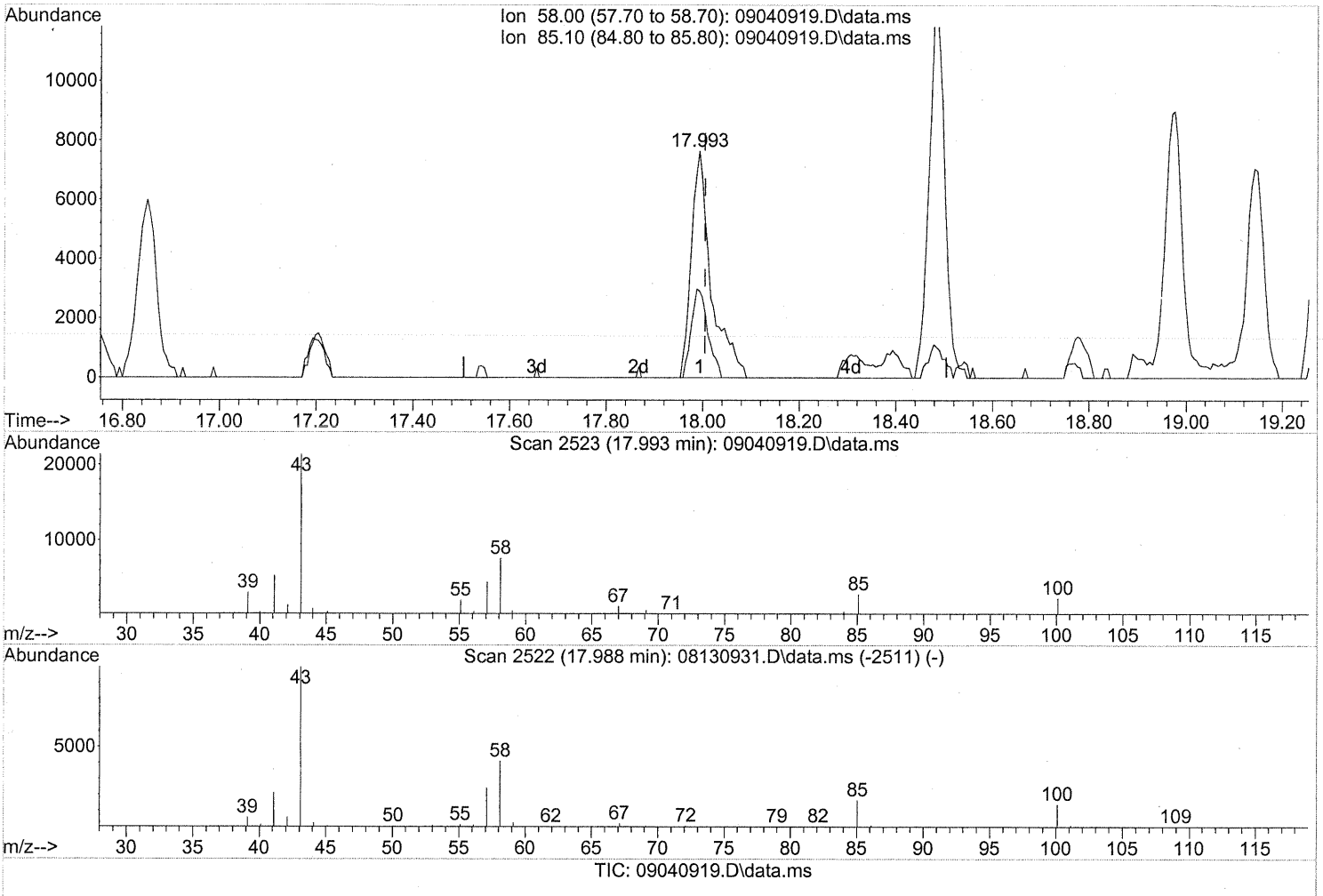
response 76081

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	95.77
100.10	30.70	27.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

17.993min (-0.012) 1.06ng

response 21782

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	32.51
0.00	0.00	0.00
0.00	0.00	0.00

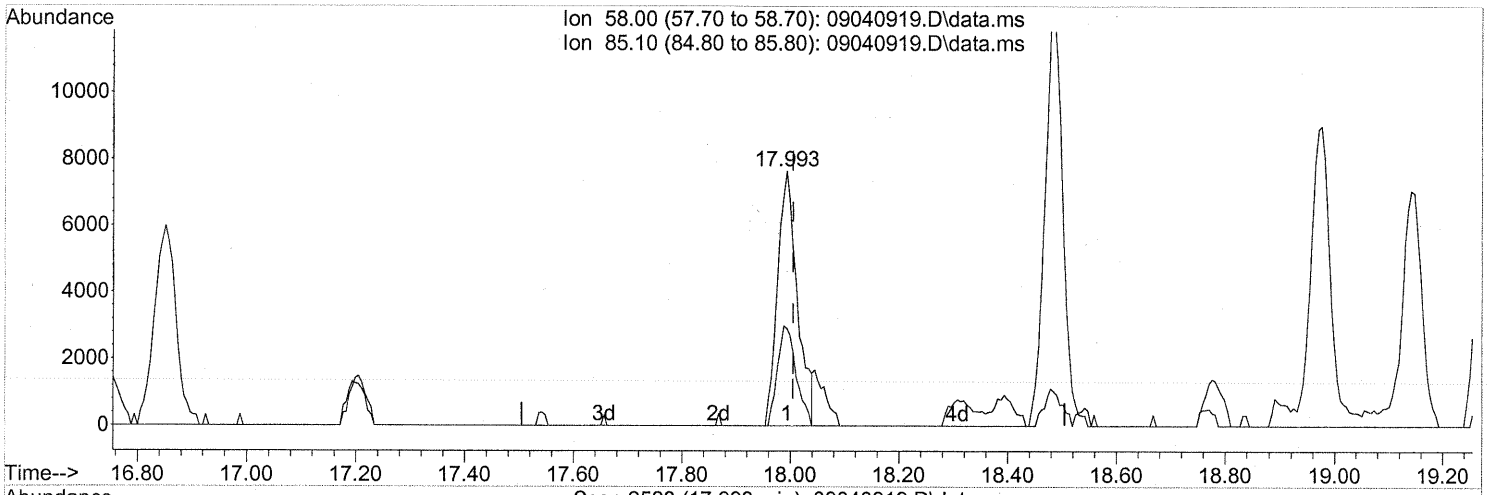
SM

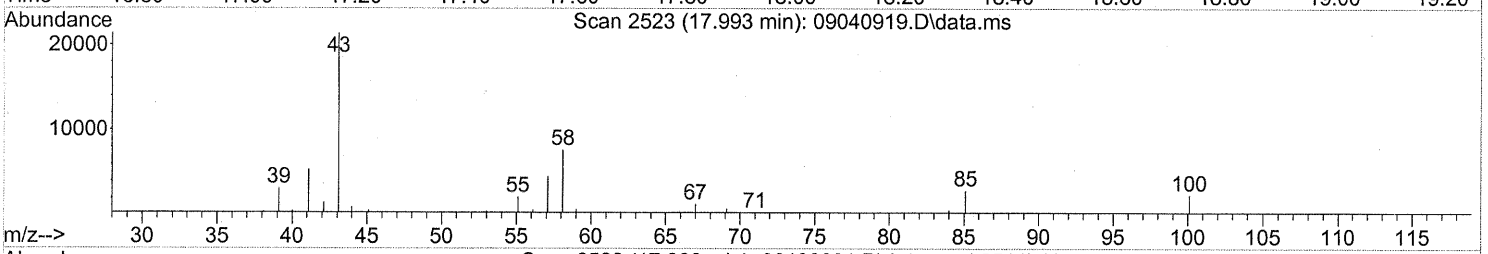
39

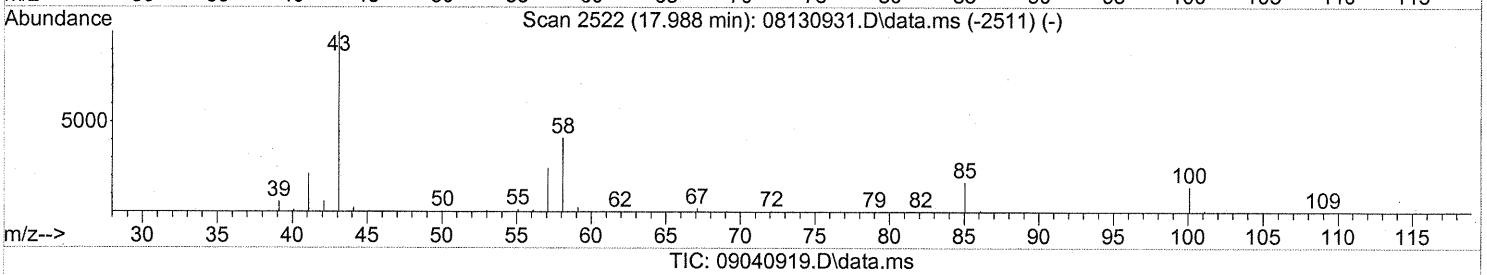
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

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

17.993min (-0.012) 0.94ng m

response 19261

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	36.76
0.00	0.00	0.00
0.00	0.00	0.00

84-71C

9/15/09

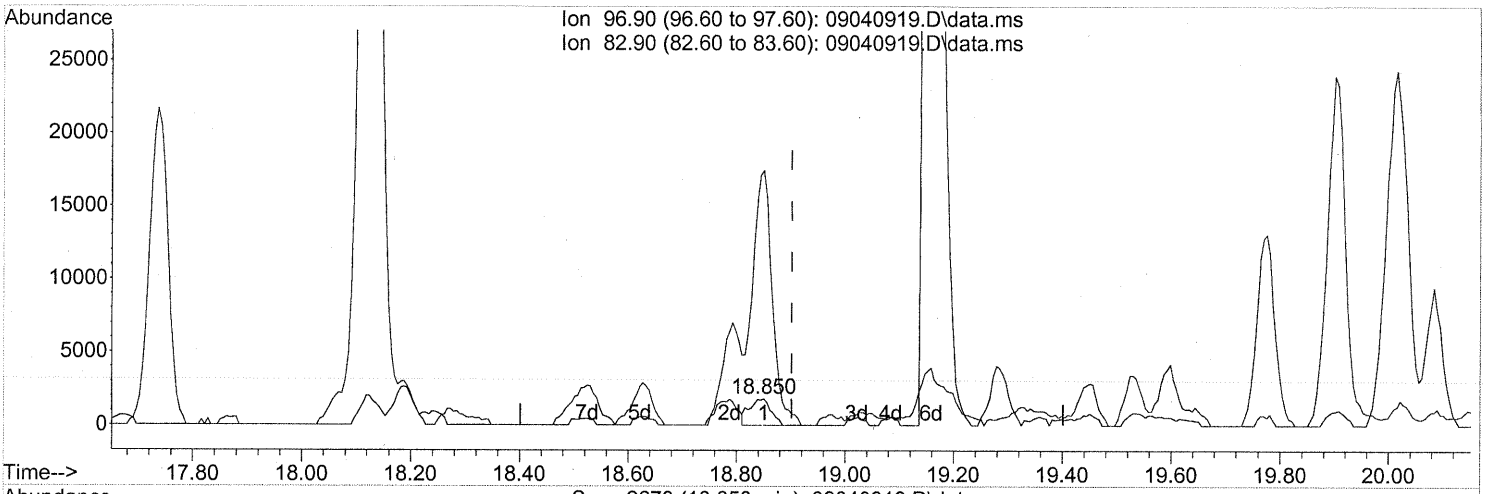
9/16/09

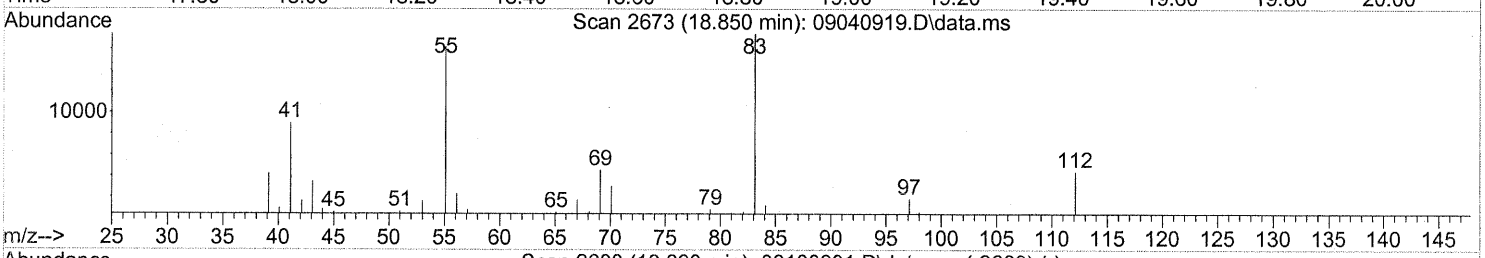
40

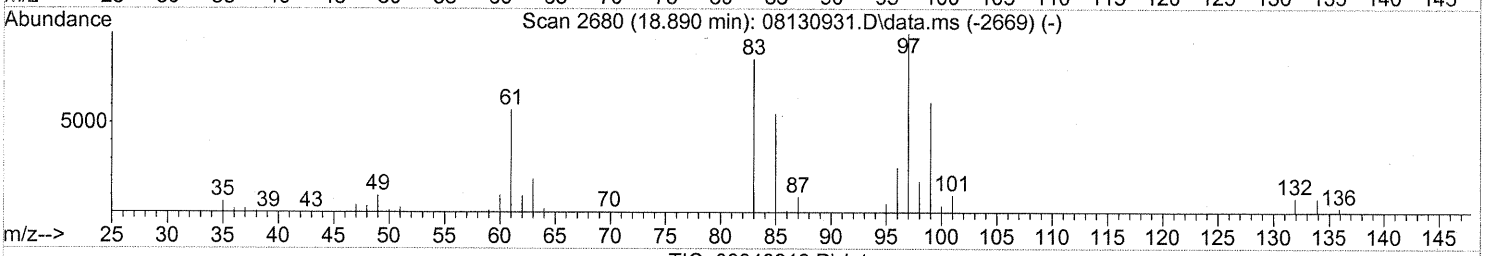
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

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

18.850min (-0.051) 0.24ng

response 4897

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	871.86#
0.00	0.00	0.00
0.00	0.00	0.00

FP

DM 9/15/09

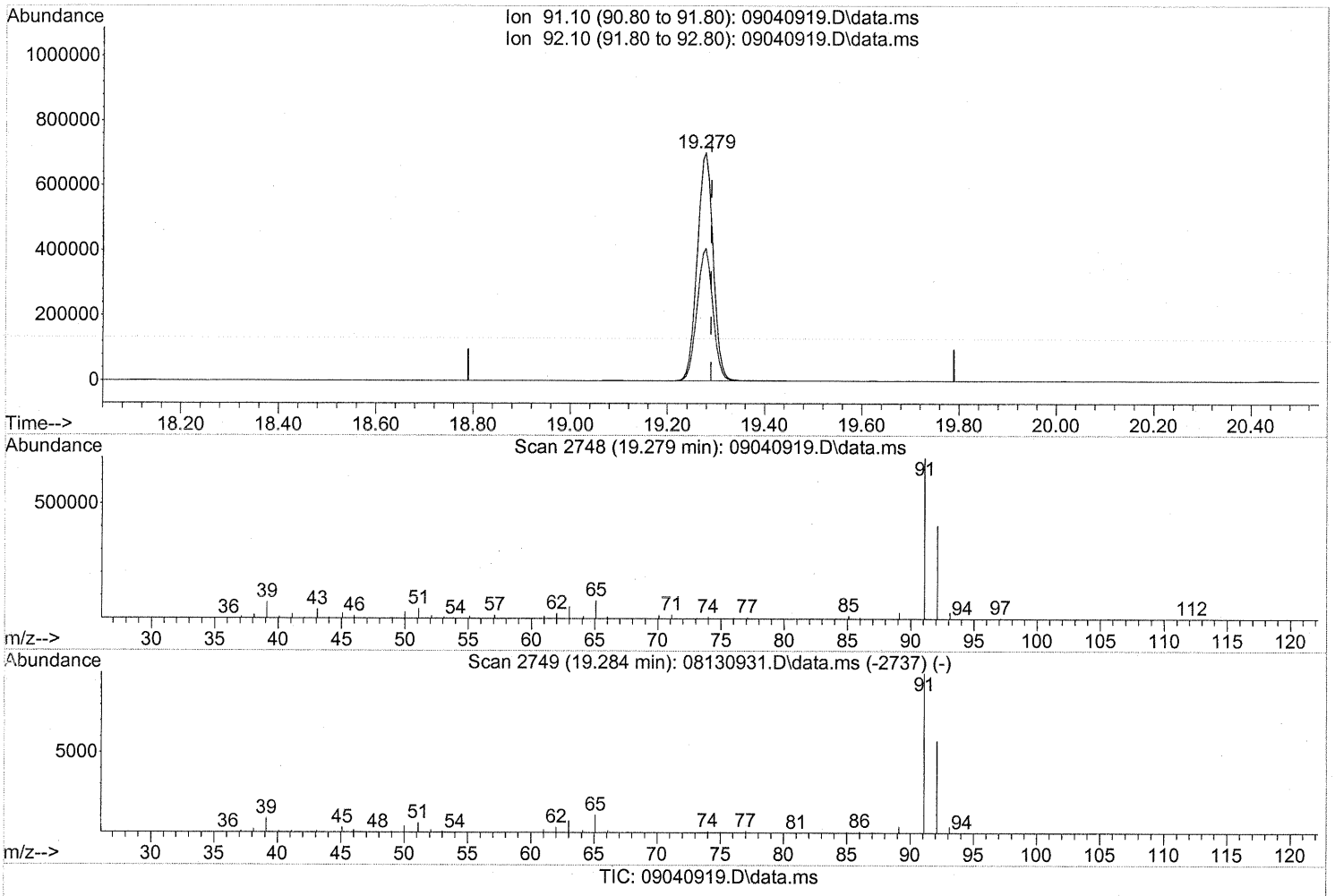
E 9/16/09

41

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 15.95ng

response 1586607

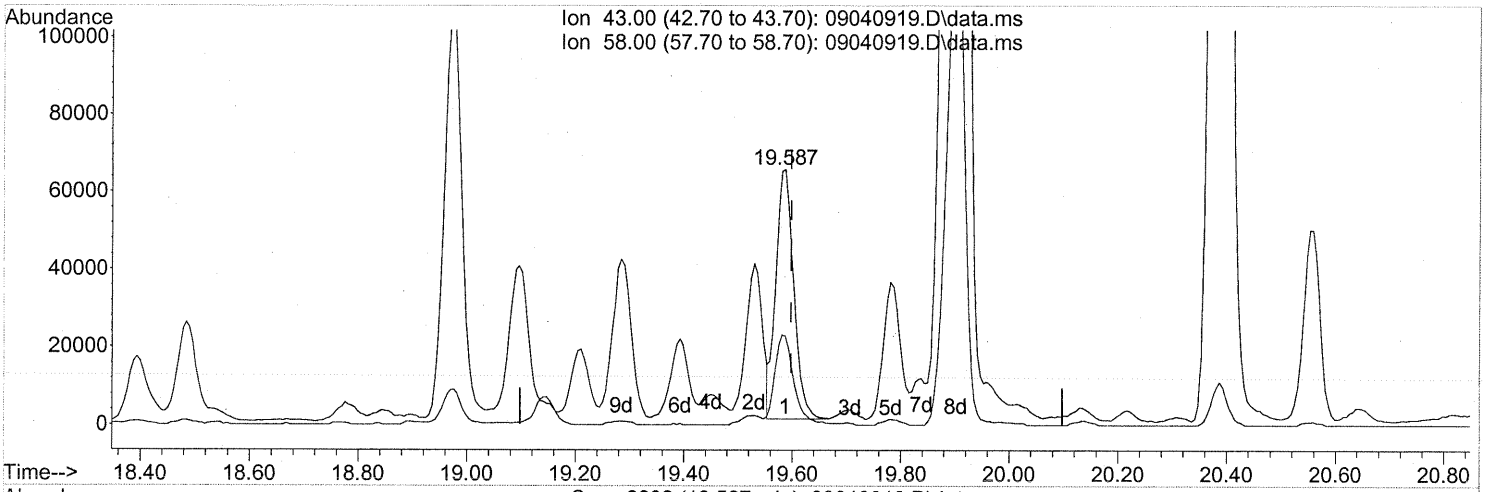
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.67
0.00	0.00	0.00
0.00	0.00	0.00

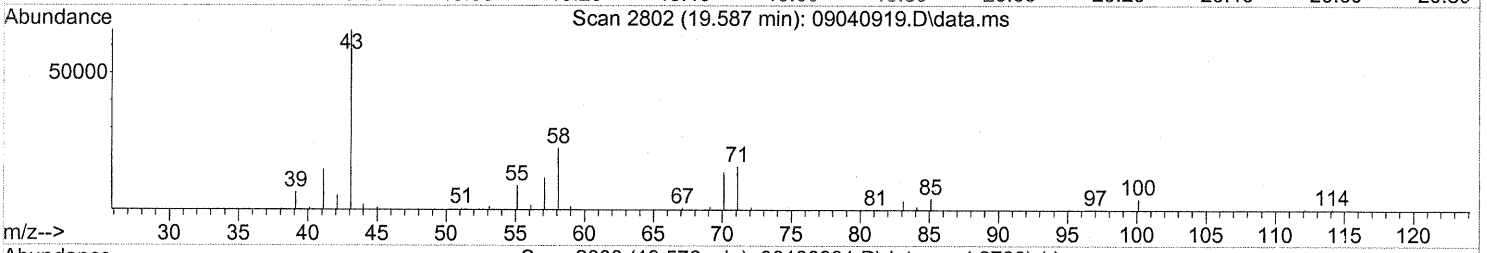
42

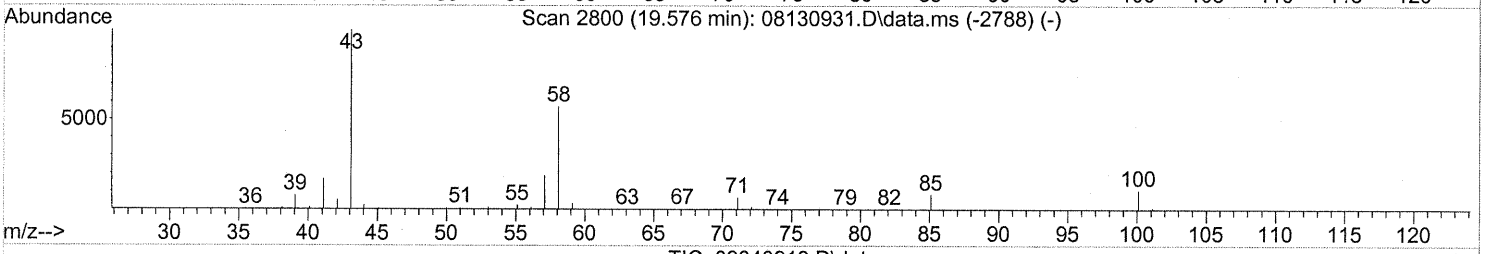
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 2.83ng

response 146224

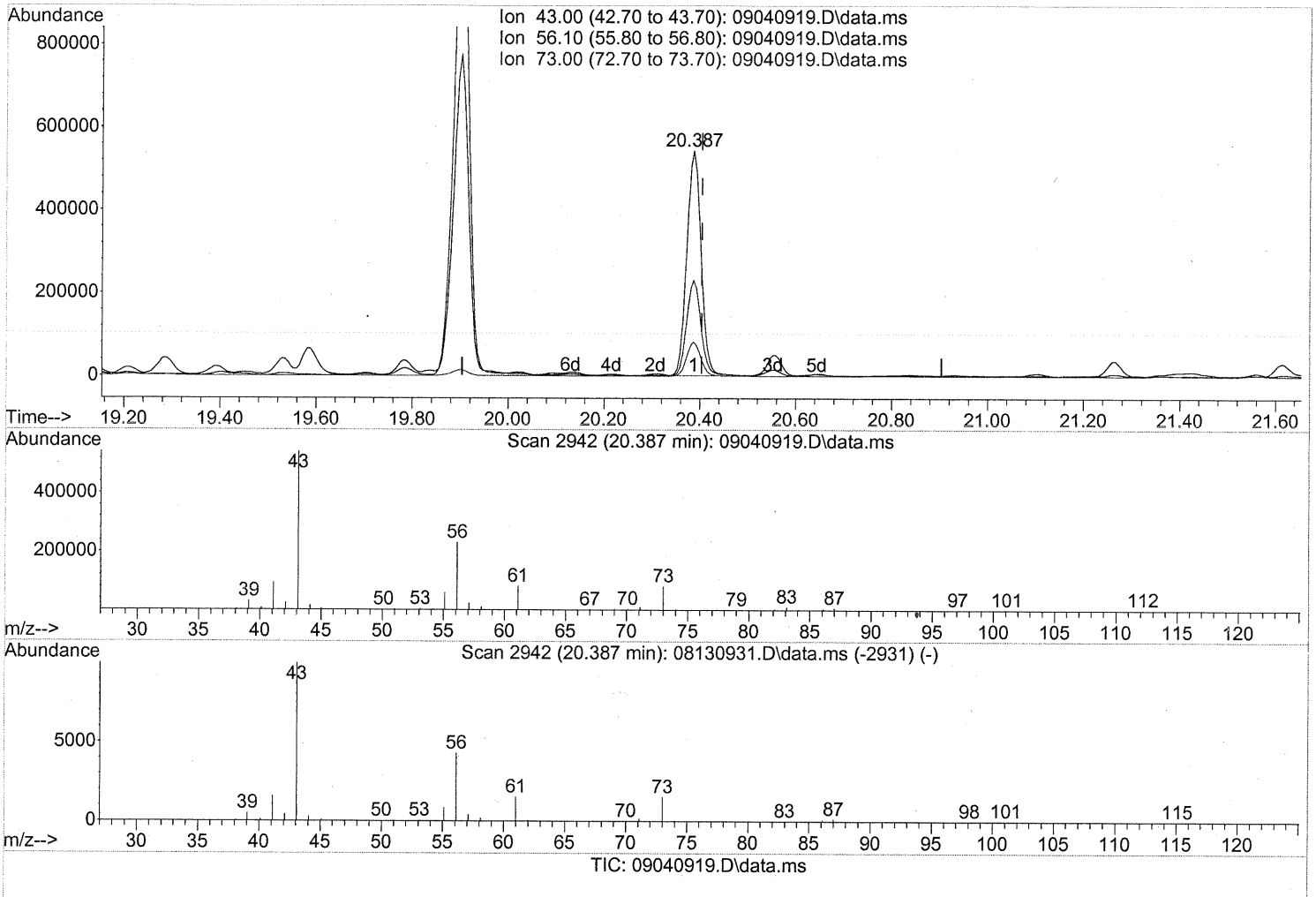
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	39.22
0.00	0.00	0.00
0.00	0.00	0.00

43

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 19.99ng

response 1127790

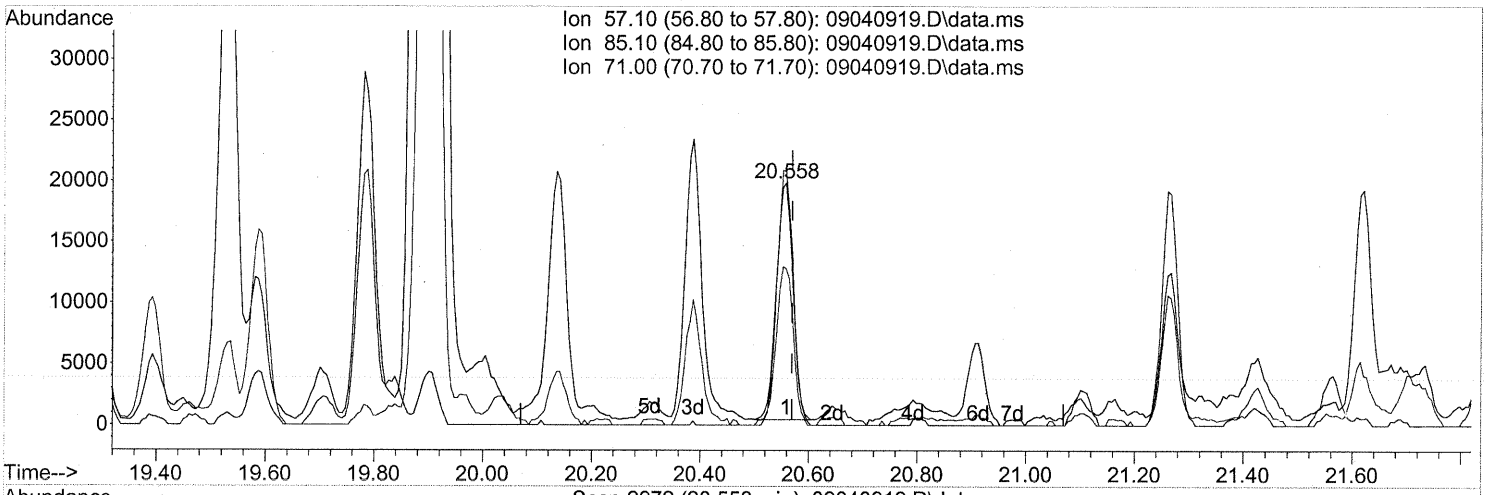
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	42.77
73.00	16.90	14.99
0.00	0.00	0.00

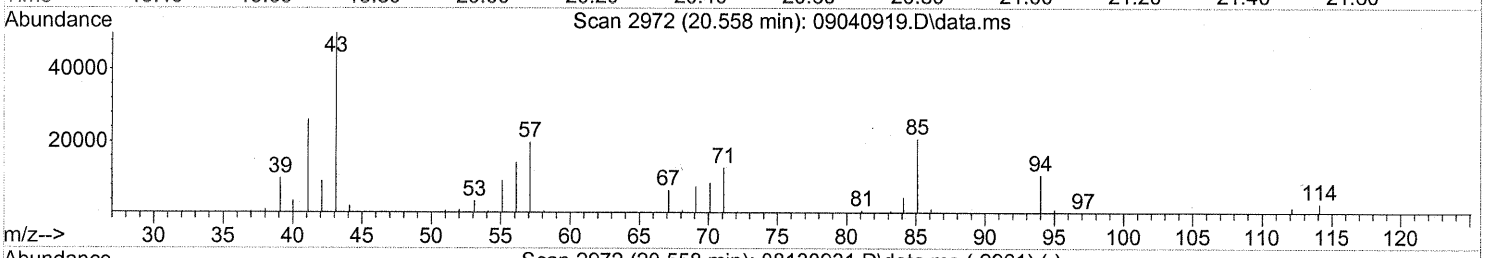
44

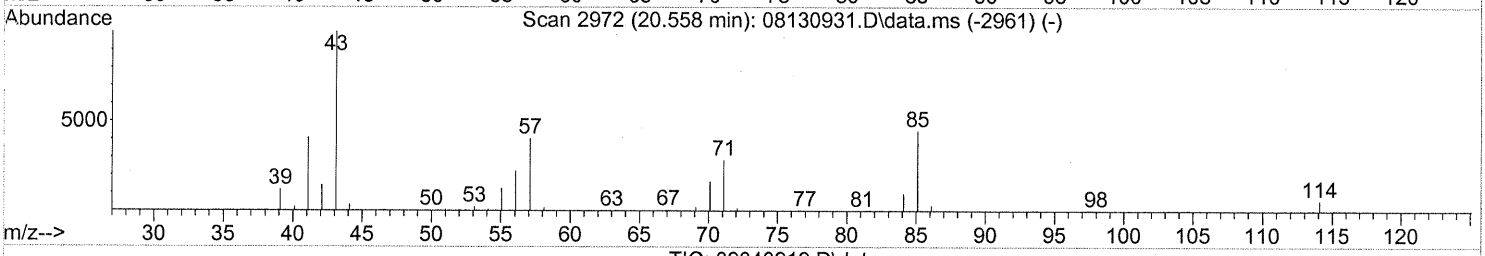
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.84ng

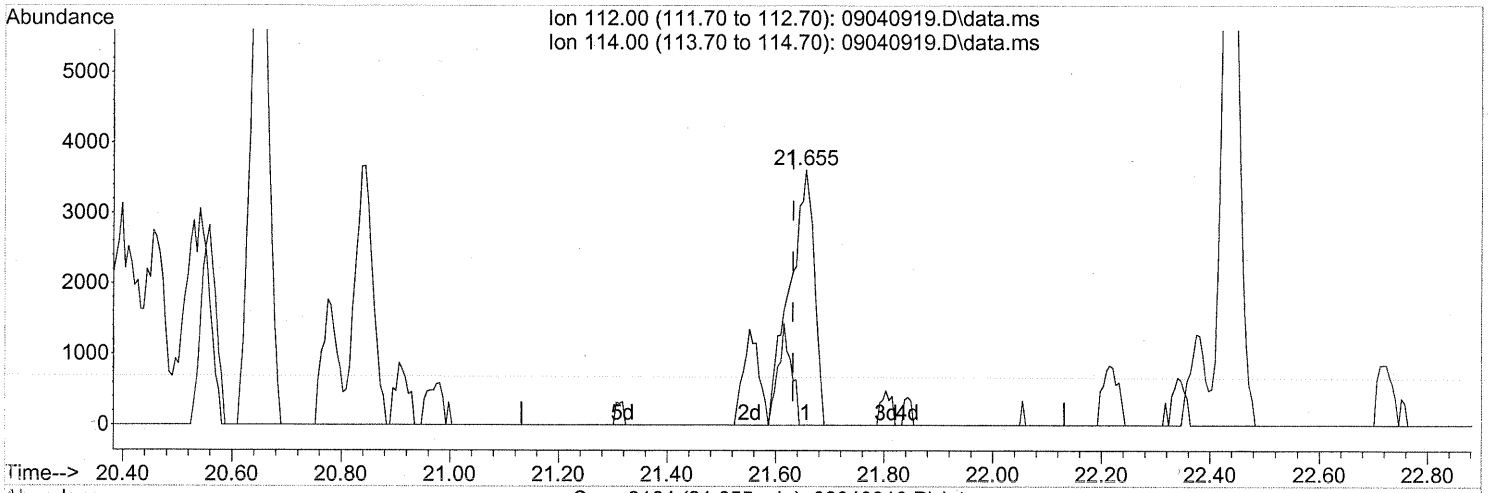
response 40726

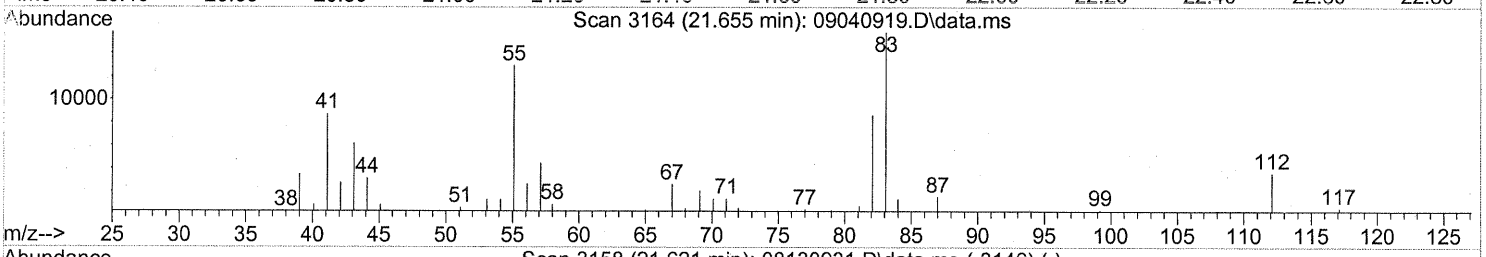
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	106.34
71.00	75.10	69.59
0.00	0.00	0.00

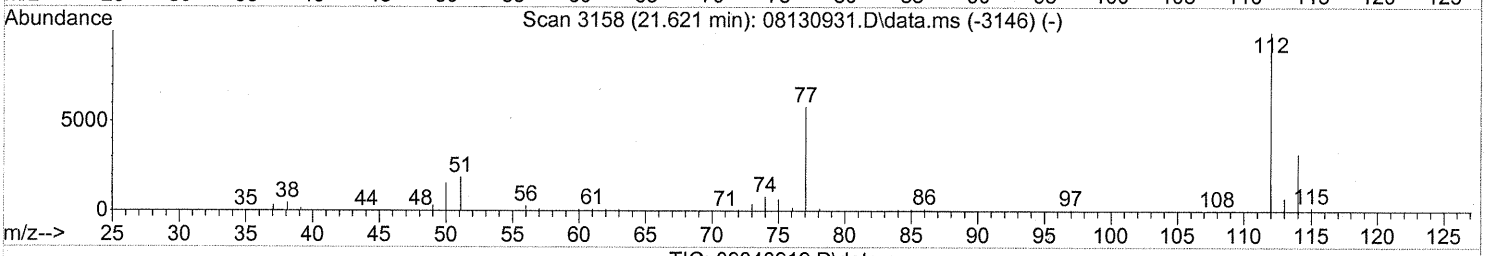
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

(65) Chlorobenzene (T)

21.655min (+0.023) 0.19ng

response 11413

Ion	Exp%	Act%
112.00	100	100
114.00	32.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

TP

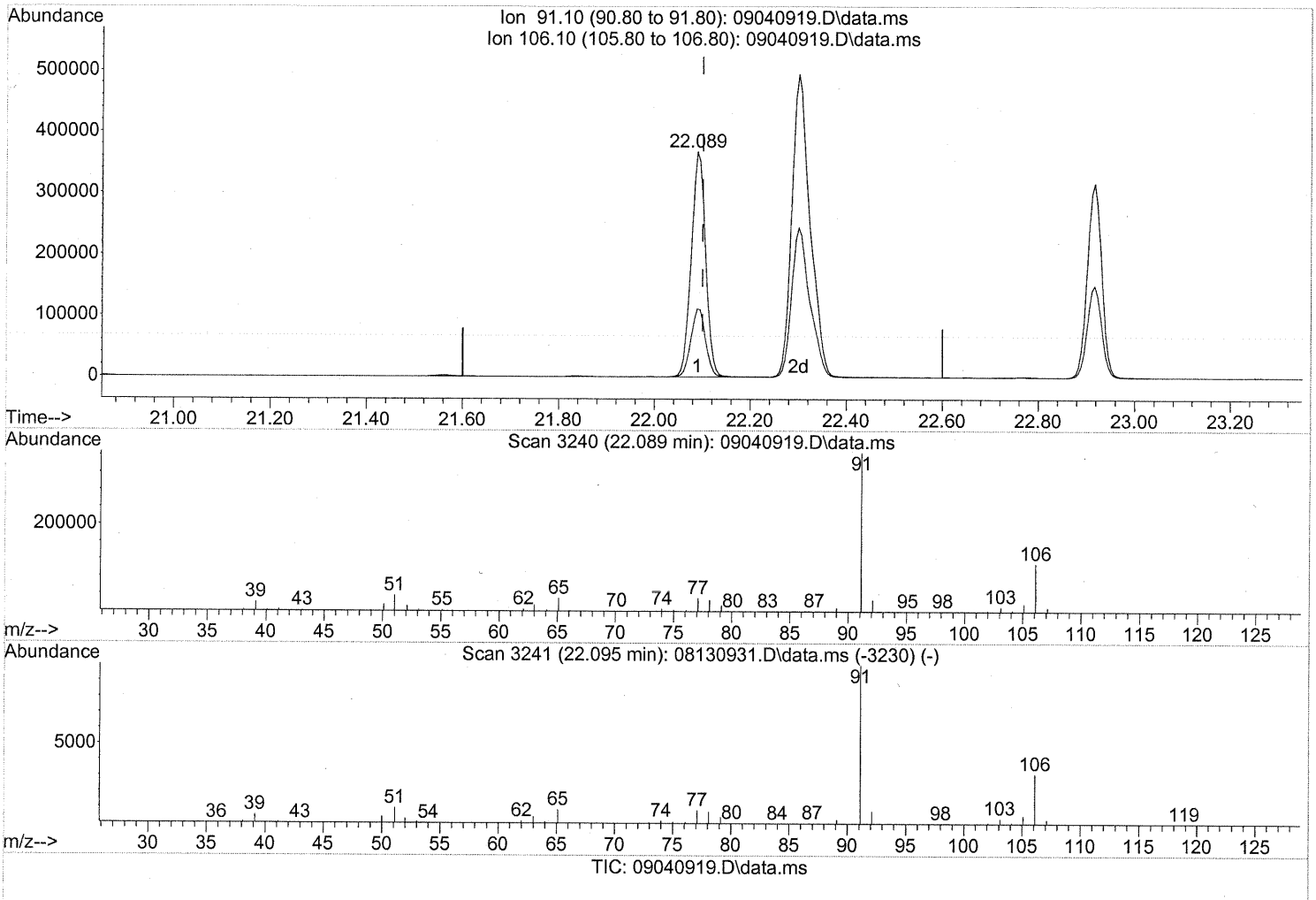
9/15/09

46

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 7.07ng

response 759712

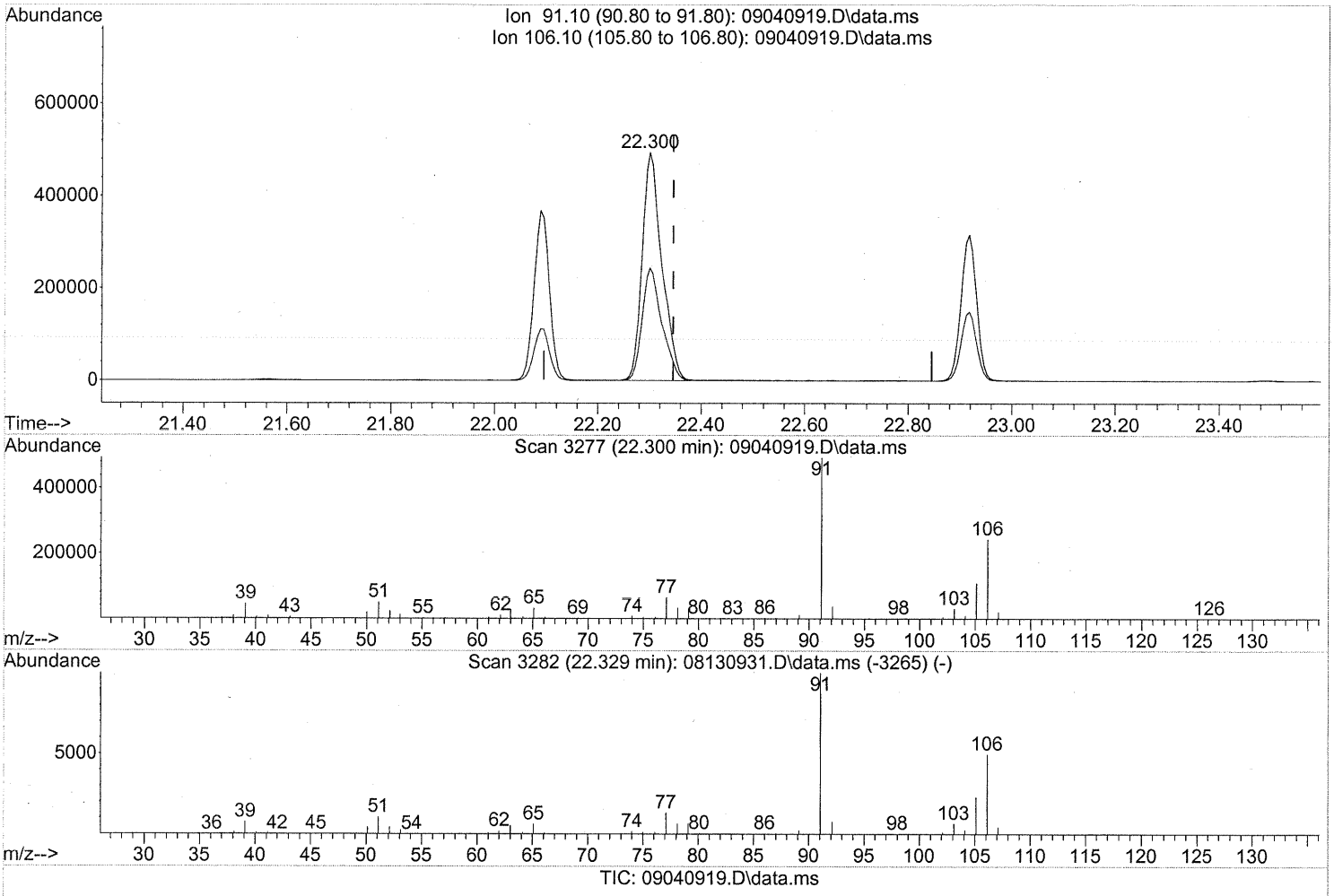
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.77
0.00	0.00	0.00
0.00	0.00	0.00

47

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

22.300min (-0.046) 15.32ng

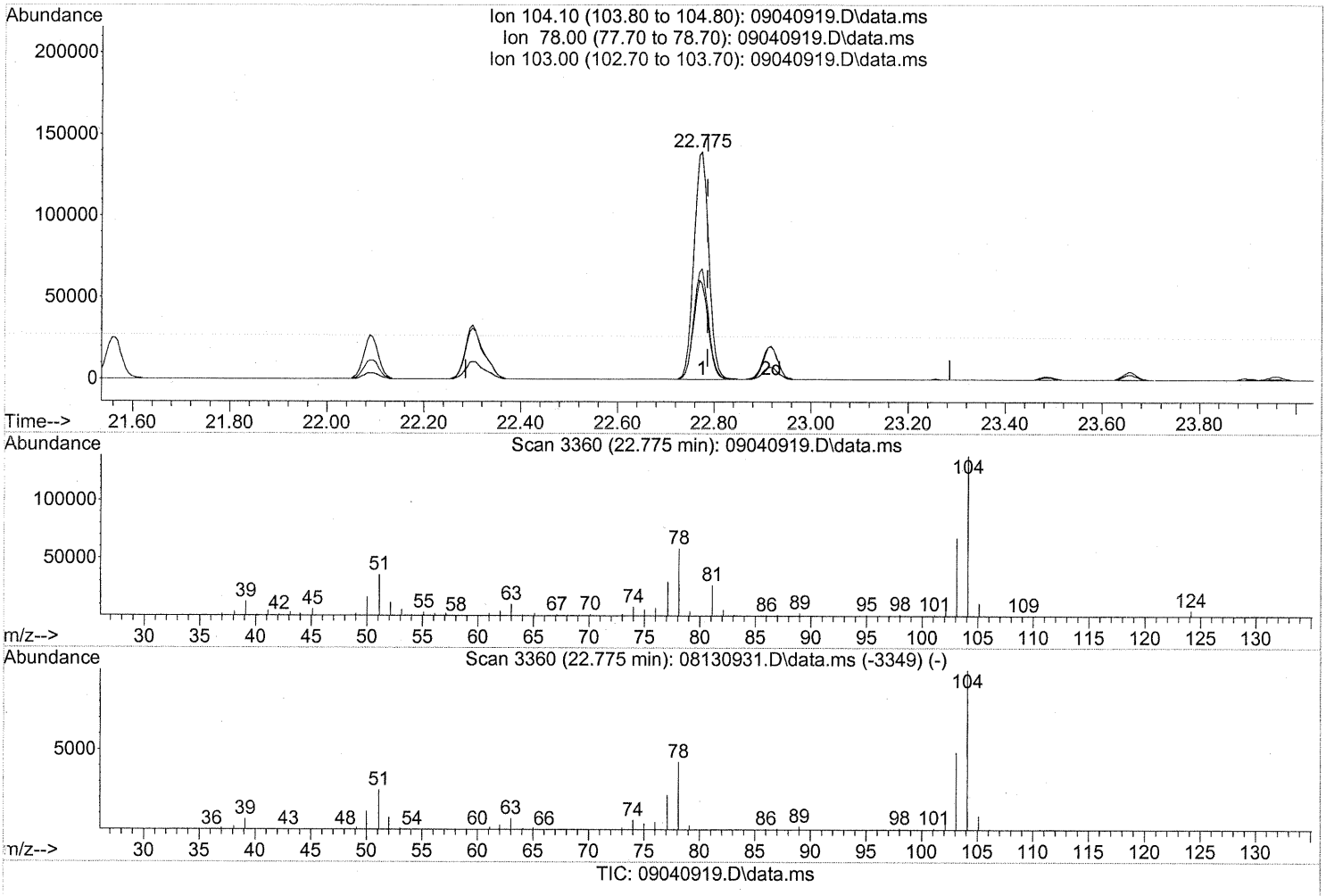
response 1304599

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 4.70ng

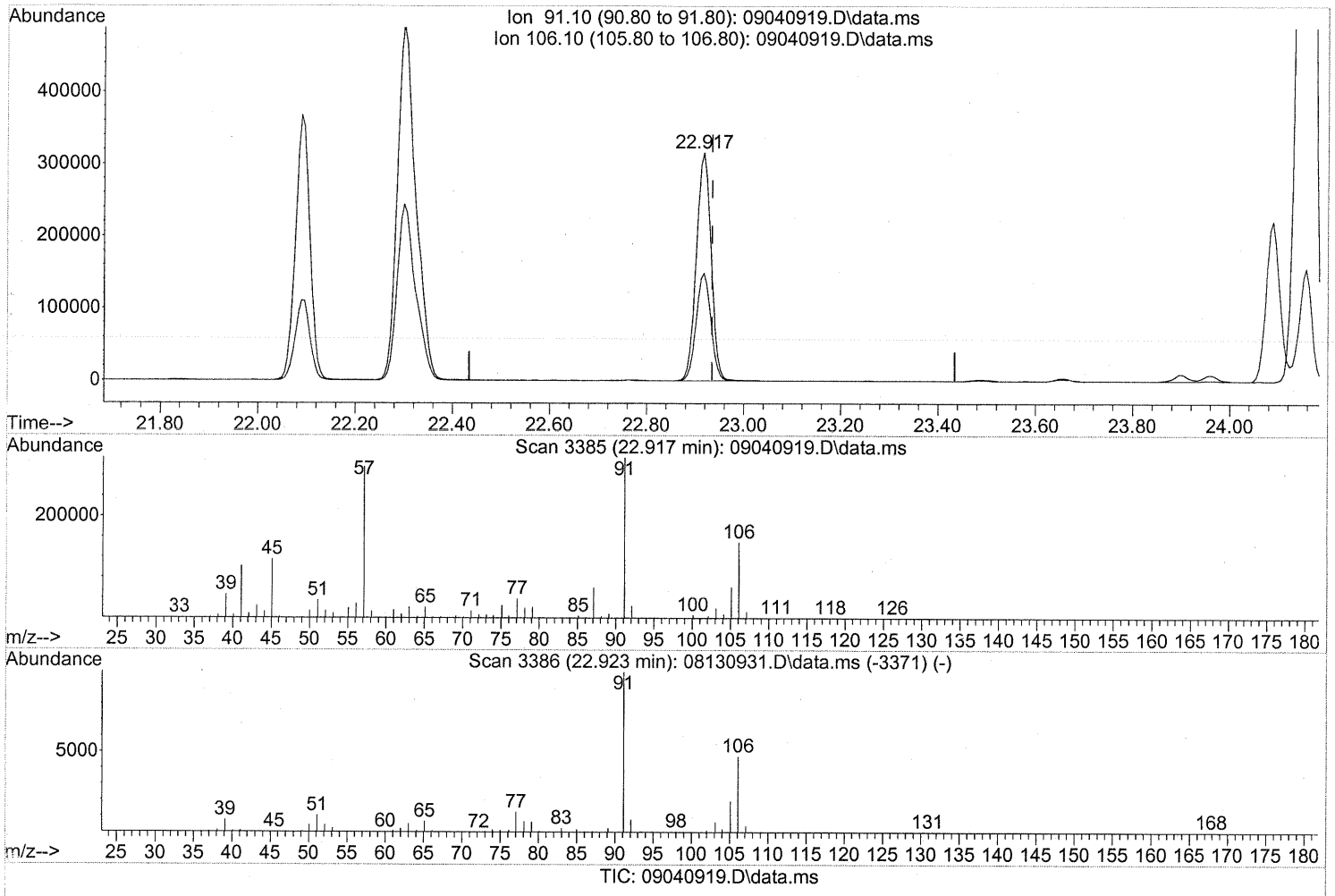
response 295904

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.83
103.00	48.70	48.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 7.75ng

response 663794

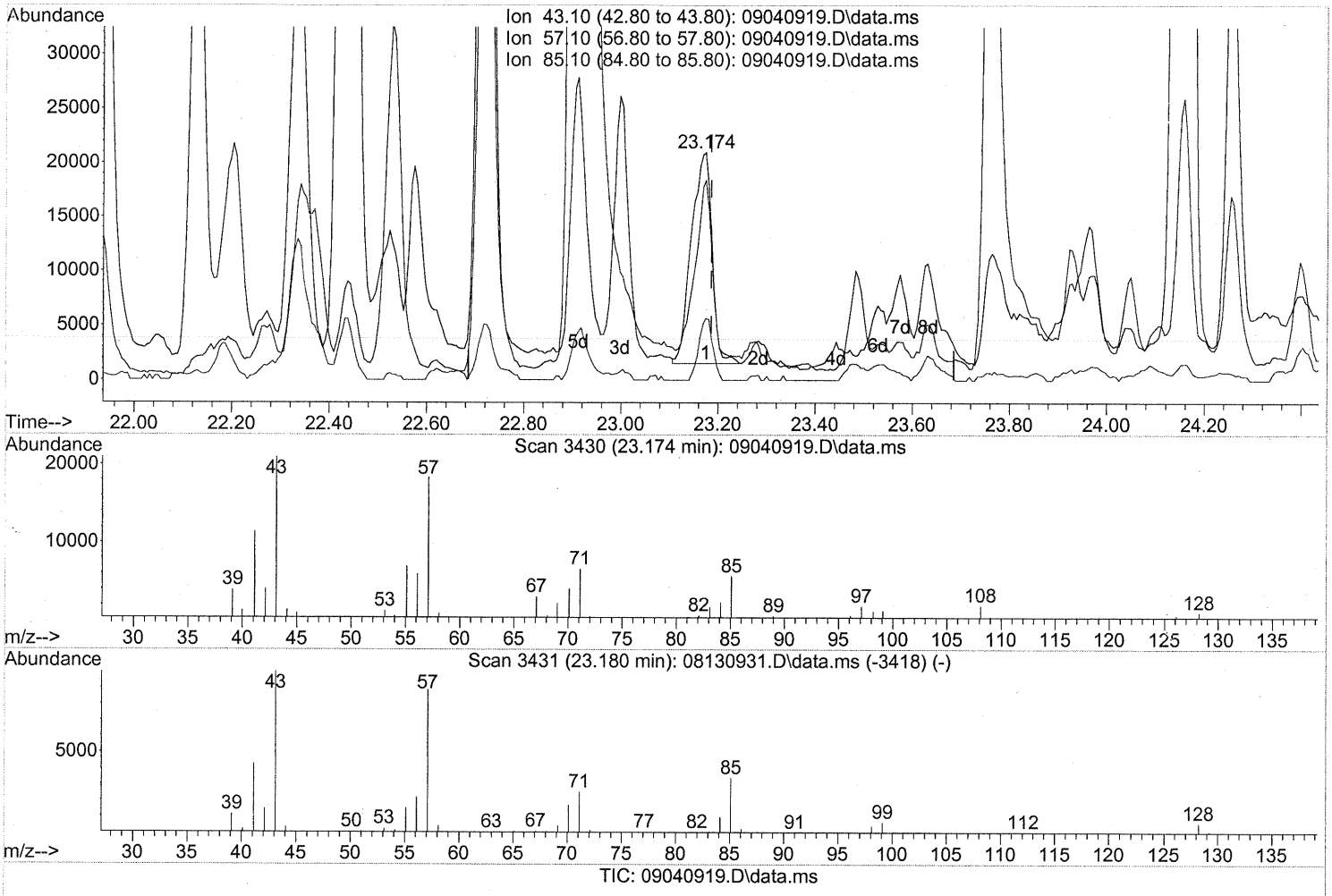
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.89
0.00	0.00	0.00
0.00	0.00	0.00

50

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 1.11ng

response 57203

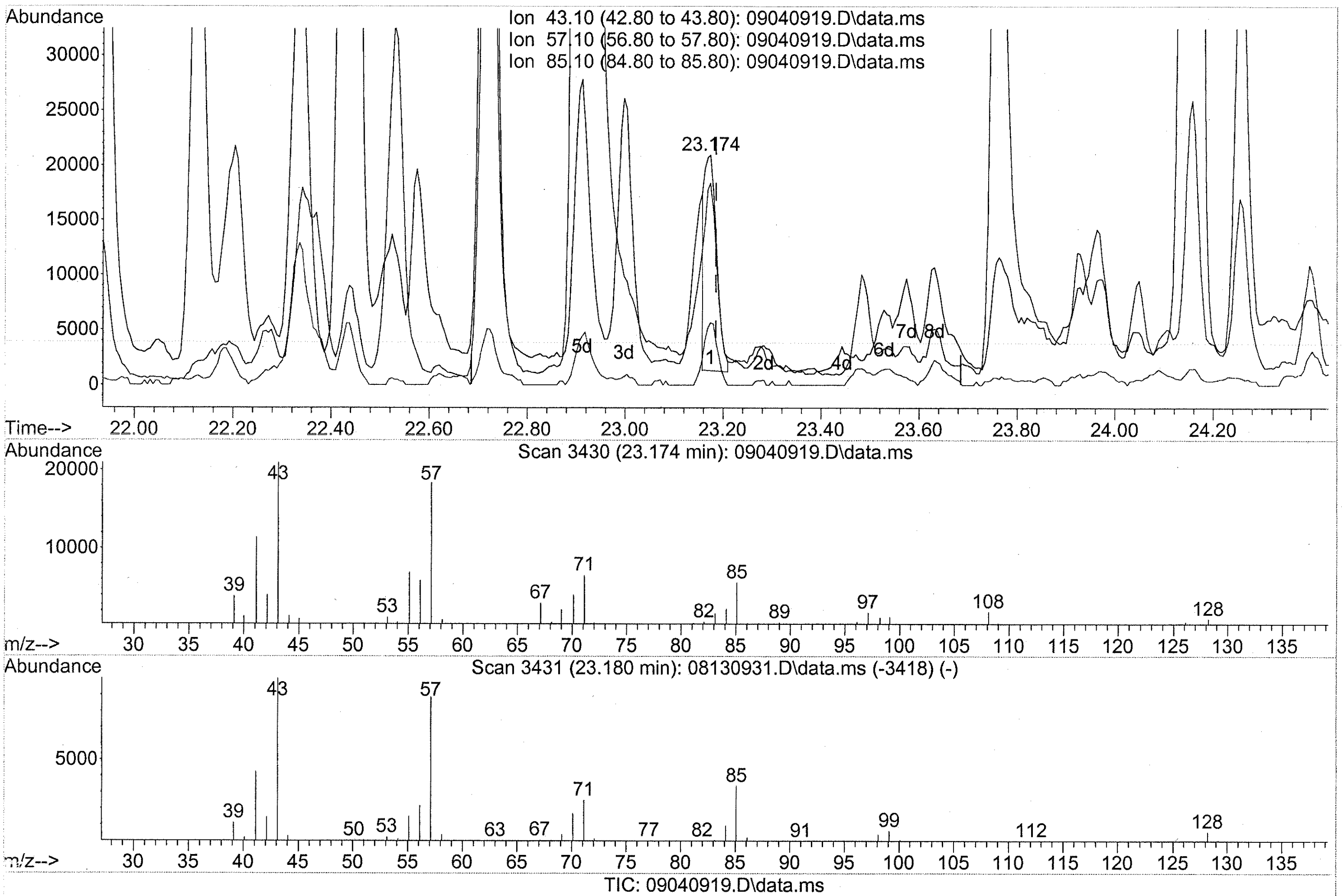
Ion	Exp%	Act%
43.10	100	100
57.10	94.00	78.10
85.10	38.80	19.45
0.00	0.00	0.00

SH

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(71) n-Nonane (T)

23.174min (-0.011) 0.65ng m

response 33728

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	132.45#
85.10	38.80	32.99
0.00	0.00	0.00

8H→IC

9/15/09

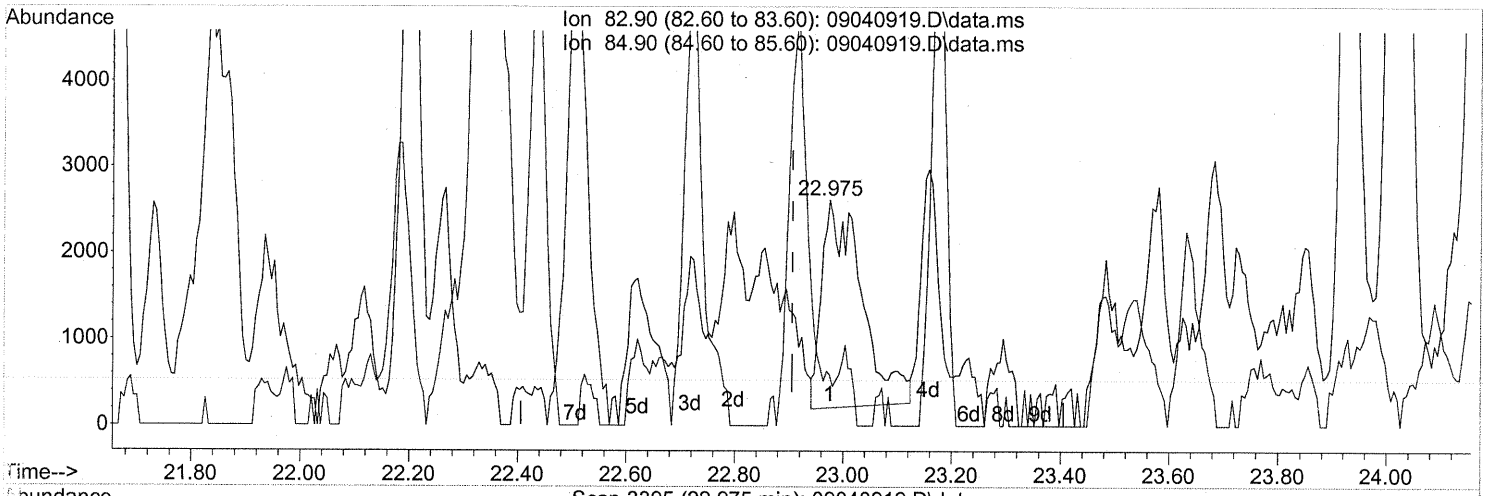
9/16/09

52

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

22.975min (+0.069) 0.33ng

response 12148

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

FP

9/15/09

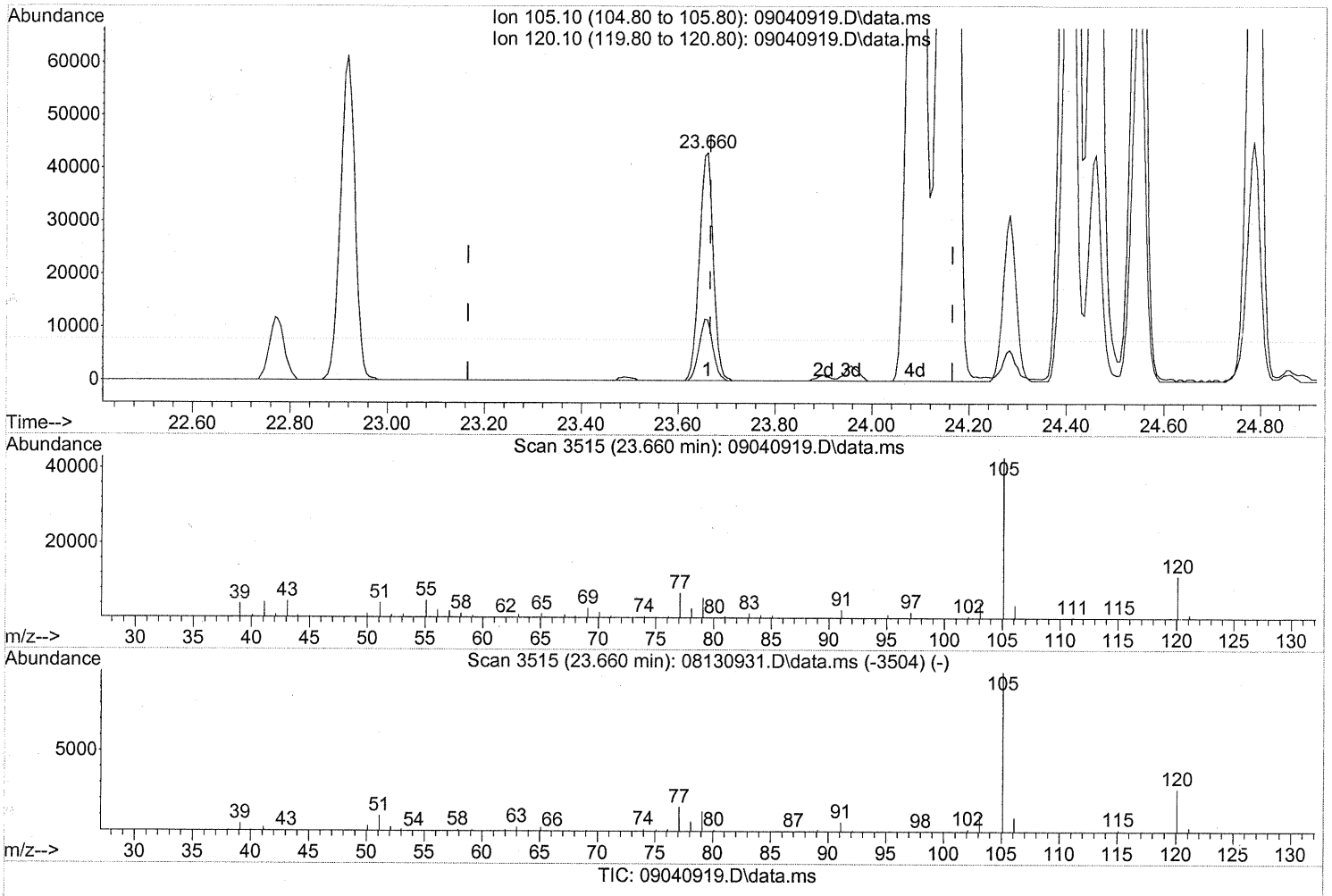
9/16/09

53

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(74) Cumene (T)

23.660min (-0.006) 0.76ng

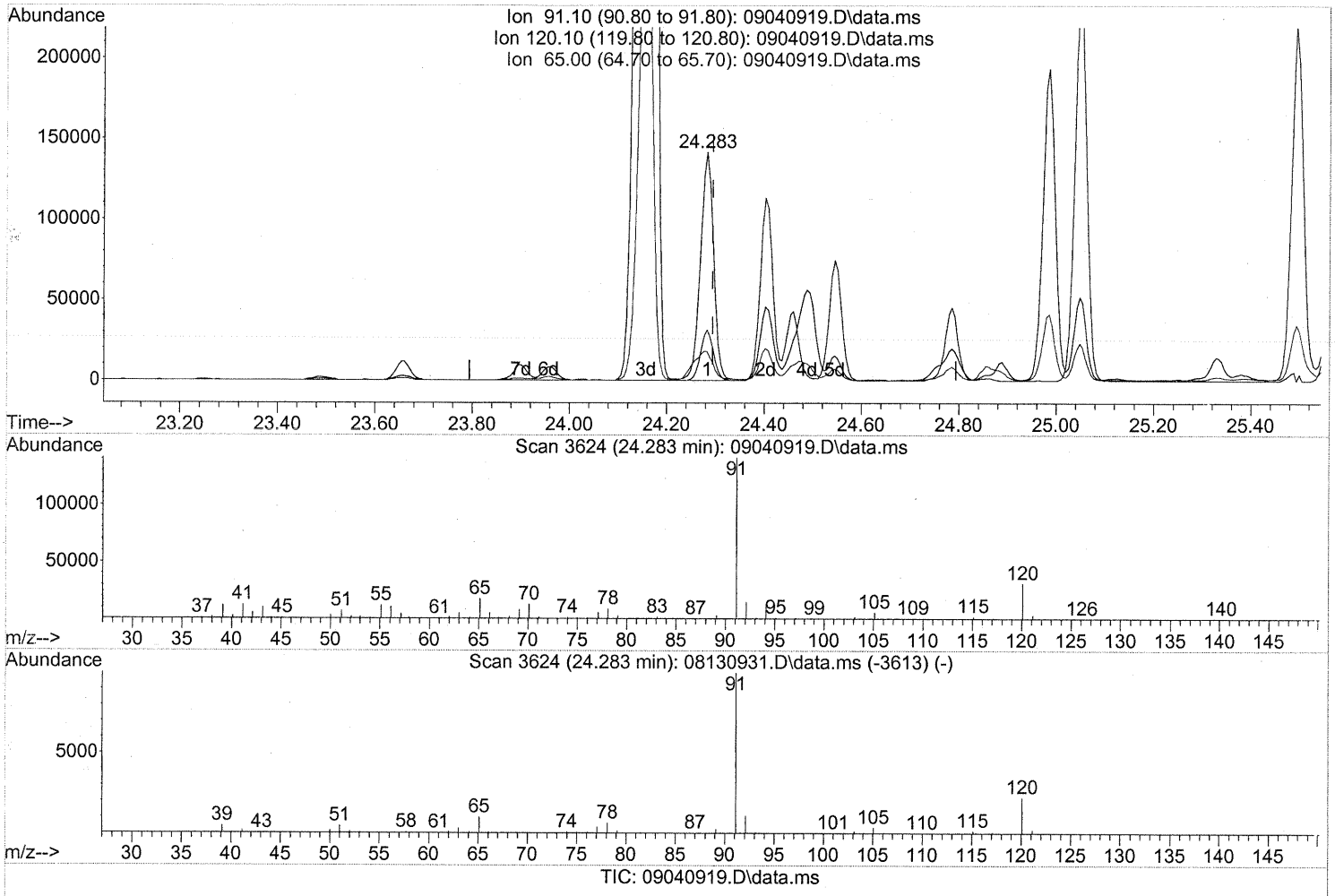
response 84953

Ion	Exp%	Act%
105.10	100	100
120.10	27.10	26.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.92ng

response 263990

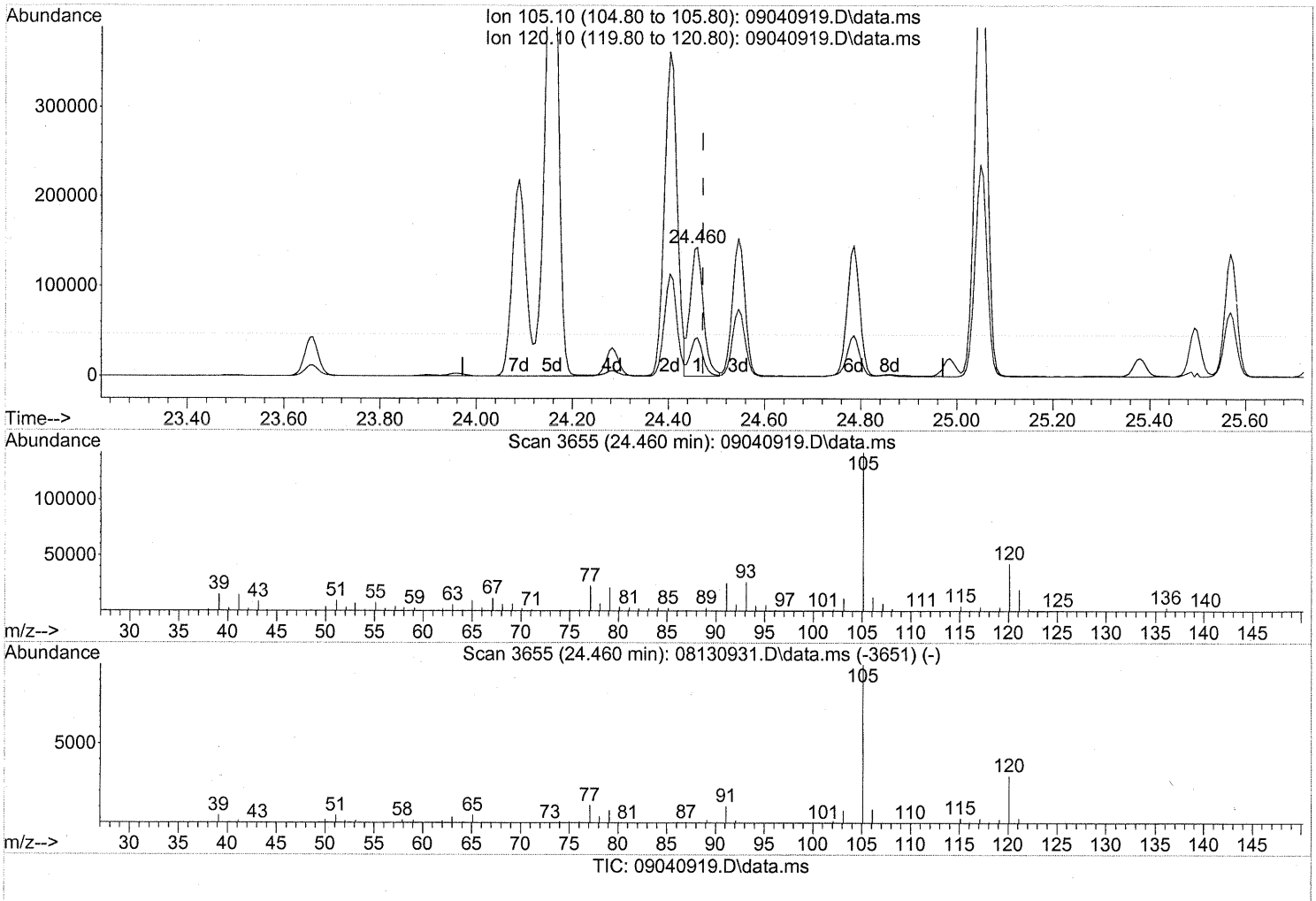
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.47
65.00	10.20	19.64
0.00	0.00	0.00

55

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 2.62ng

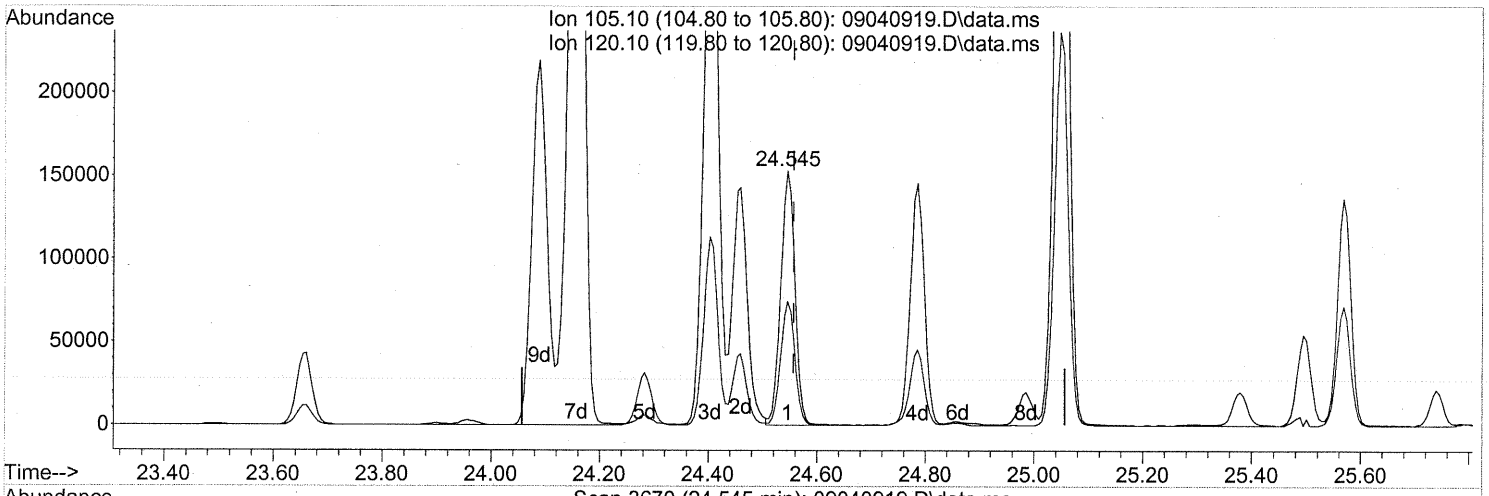
response 274181

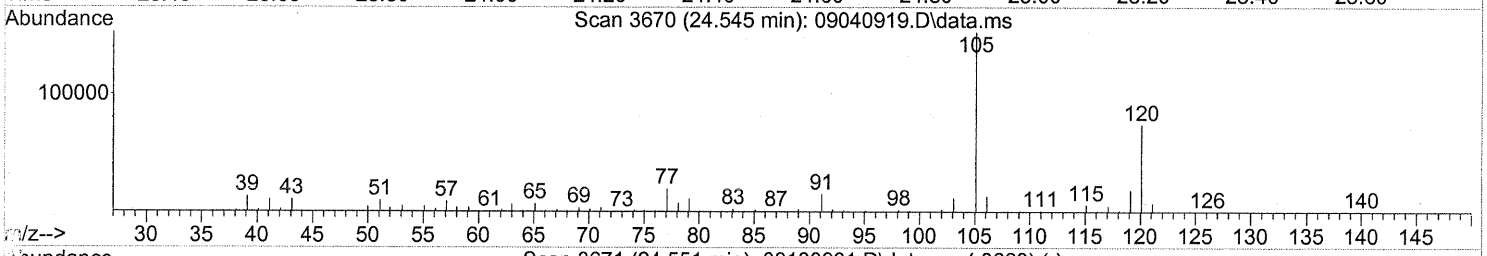
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	27.11
0.00	0.00	0.00
0.00	0.00	0.00

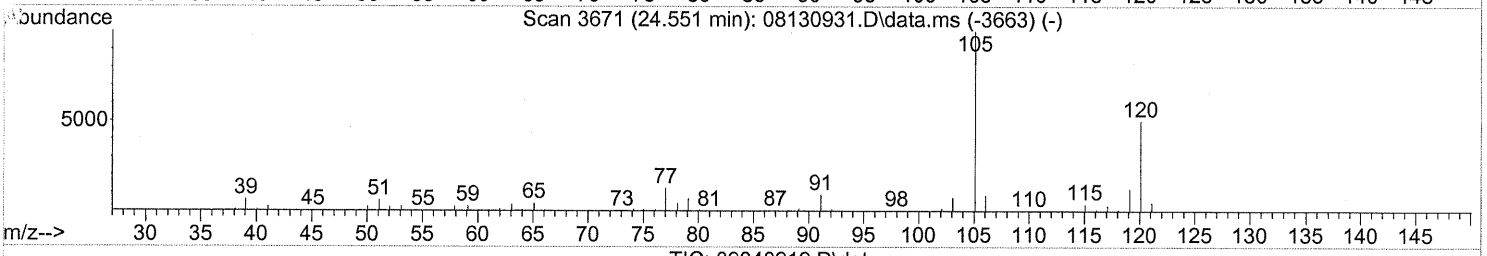
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040919.D\data.ms

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

24.545min (-0.011) 3.20ng

response 276541

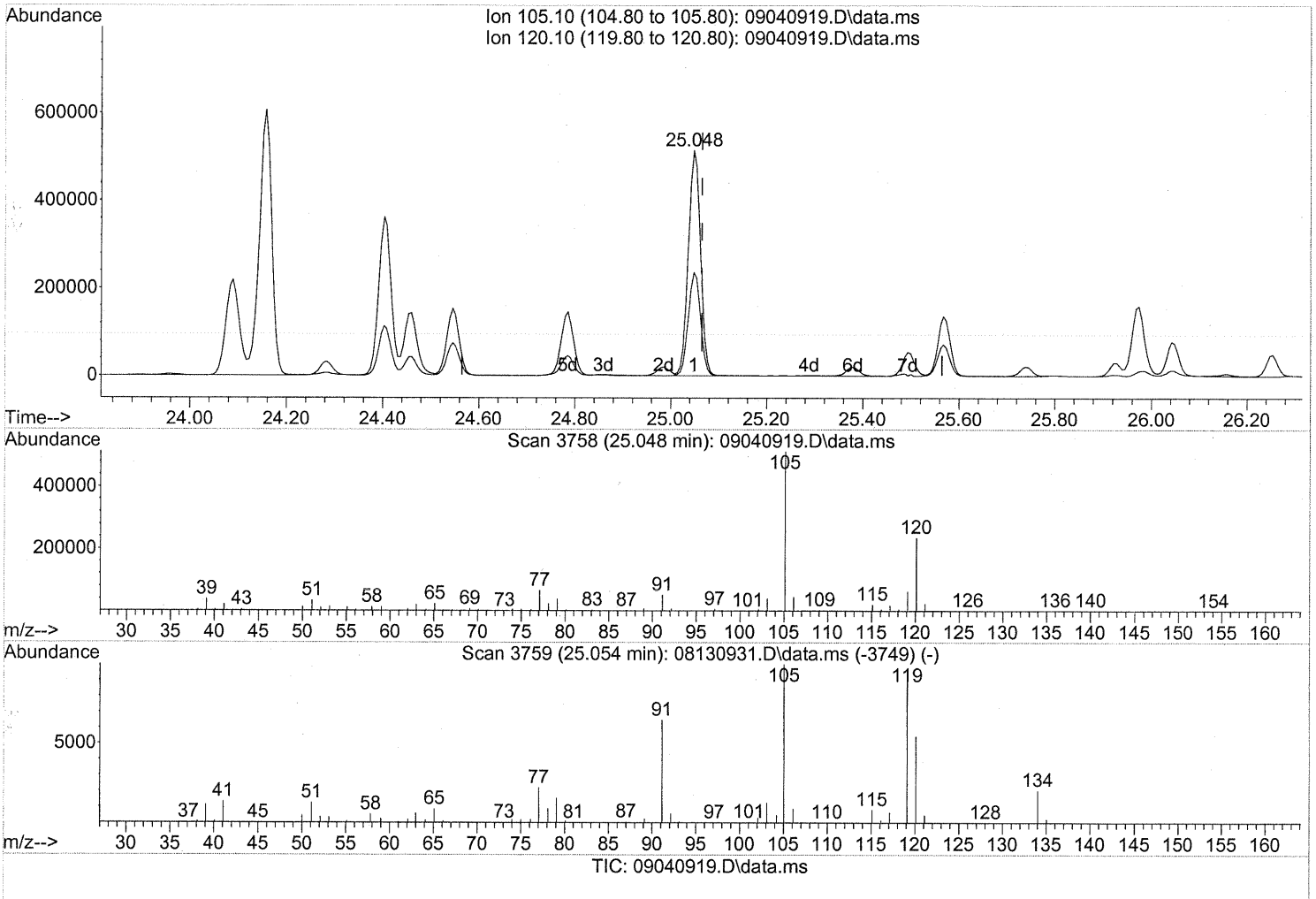
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.54
0.00	0.00	0.00
0.00	0.00	0.00

57

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

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

25.048min (-0.017) 9.80ng

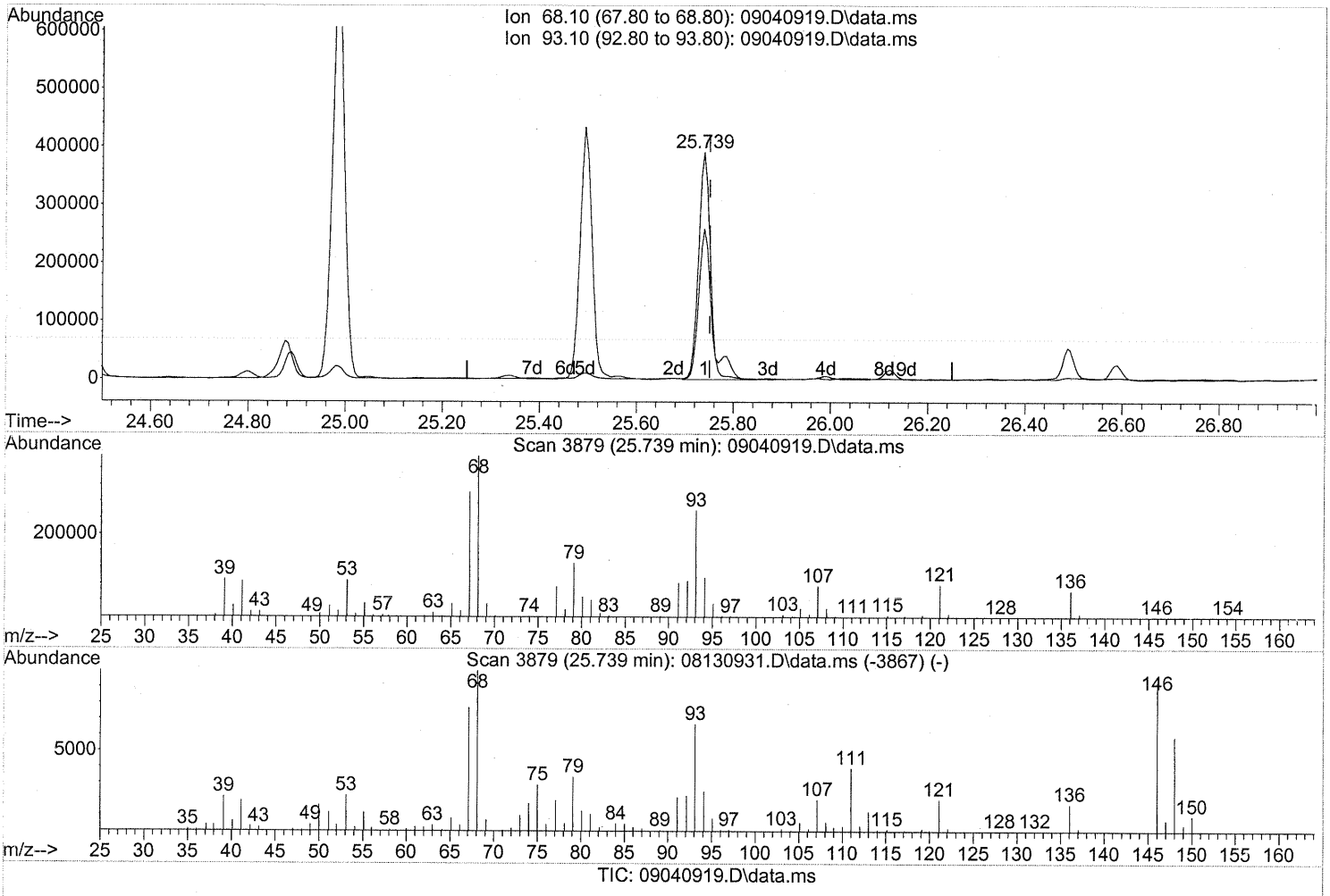
response 899952

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.99
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 17.42ng

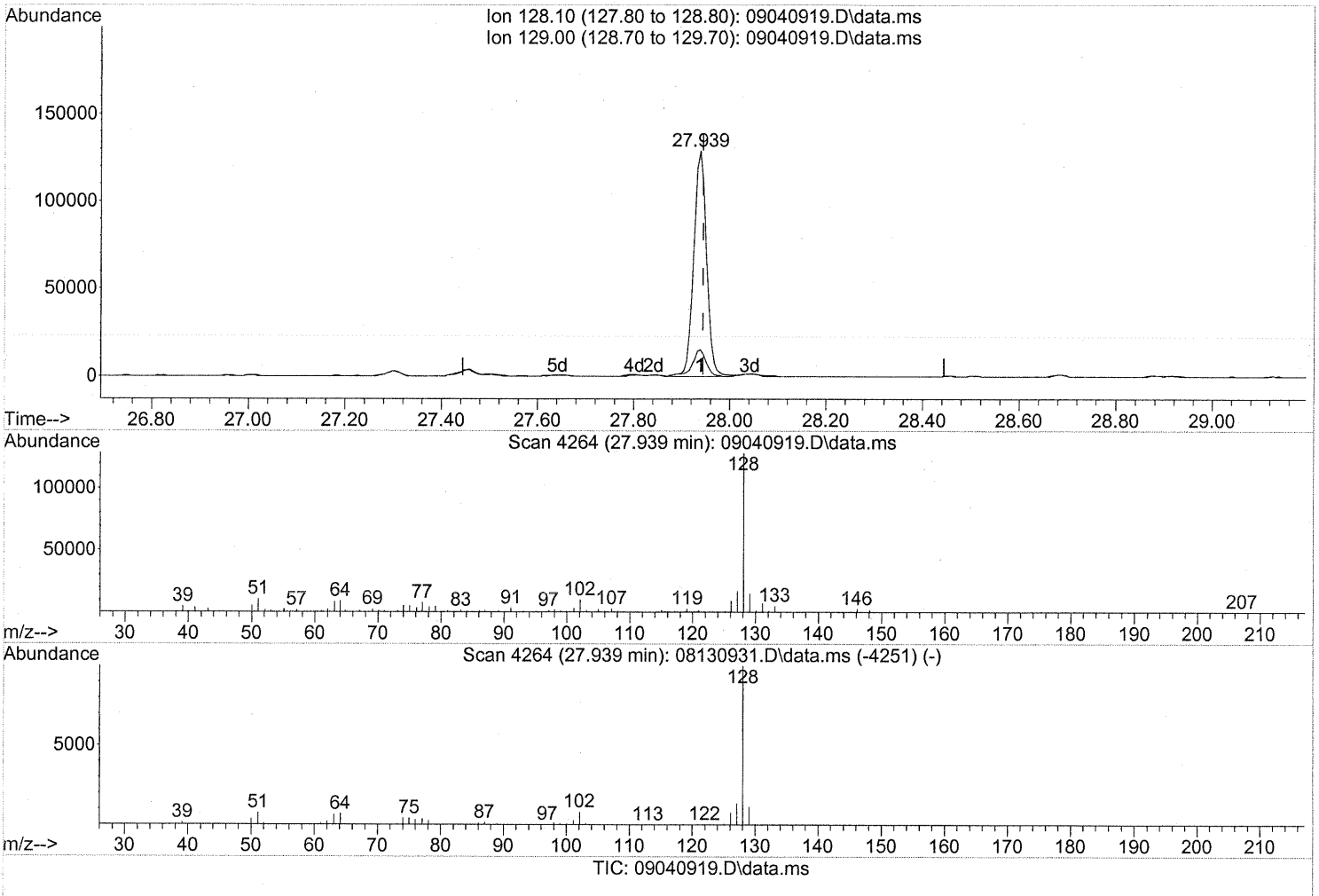
response 654756

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	76.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040919.D
Acq On : 4 Sep 2009 20:54
Operator : EM
Sample : P0903080-001 (1000ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 15:17:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040919.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 1.93ng

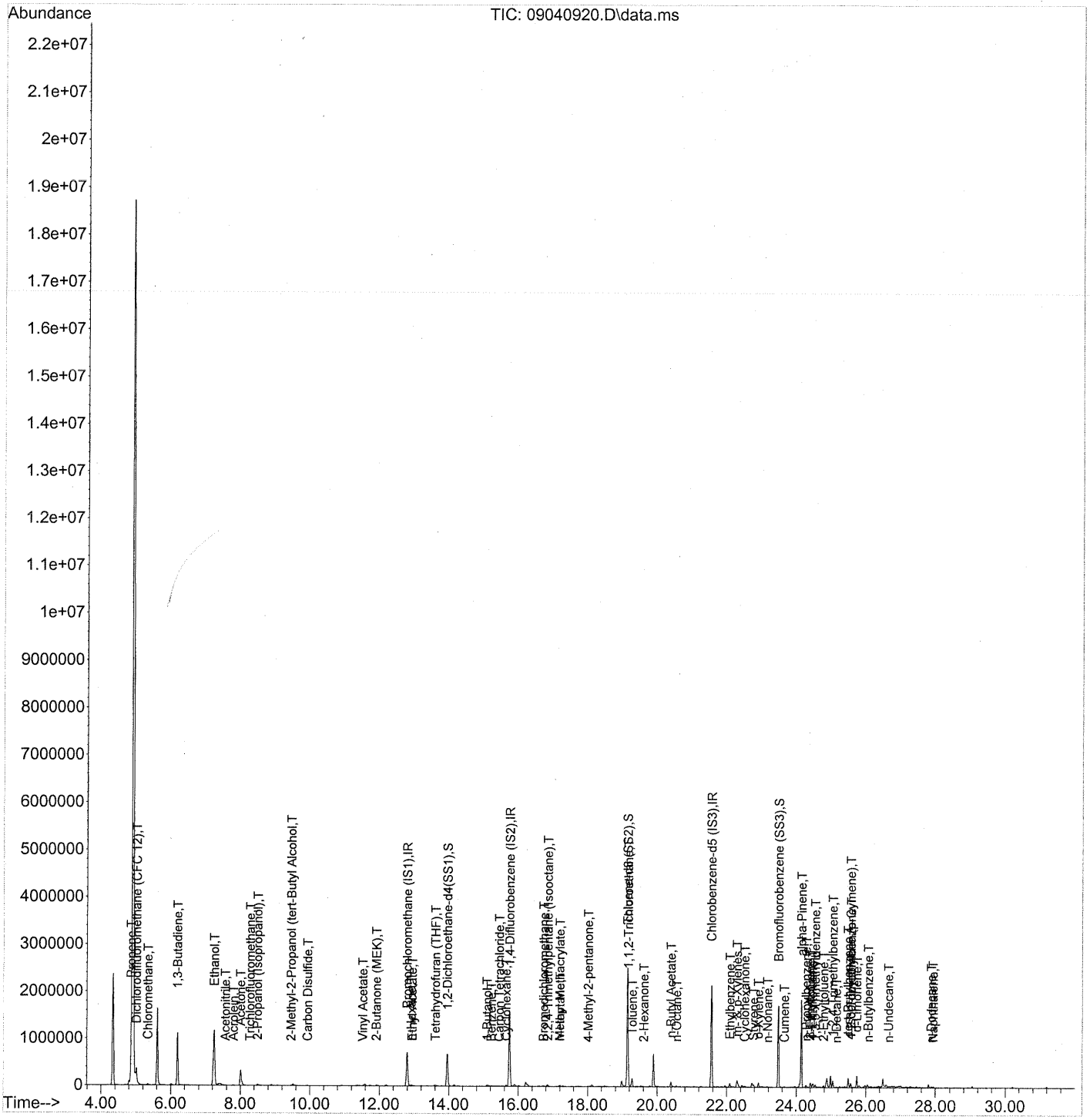
response 237342

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.72
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:26:06 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:26:06 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	365665	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1853520	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	924039	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	676231	26.154	ng		-0.03
Spiked Amount 25.000			Recovery =	104.60%			✓
57) Toluene-d8 (SS2)	19.14	98	2184121	24.863	ng		-0.02
Spiked Amount 25.000			Recovery =	99.44%			✓
73) Bromofluorobenzene (SS3)	23.49	174	603375	24.254	ng		0.00
Spiked Amount 25.000			Recovery =	97.00%			✓
Target Compounds							Qvalue
2) Propene	4.86	42	193987m	6.048	ng		
3) Dichlorodifluoromethan...	5.01	85	7265	0.159	ng	#	91
4) Chloromethane	5.34	50	3703	0.087	ng		89
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.19	54	2622	0.088	ng	#	1
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.25	45	2328546m	115.728	ng		
11) Acetonitrile	7.57	41	5424	0.110	ng		91
12) Acrolein	7.80	56	7079	0.539	ng		95
13) Acetone	8.00	58	185939	9.081	ng		100
14) Trichlorofluoromethane	8.28	101	3361	0.086	ng		91
15) 2-Propanol (Isopropanol)	8.49	45	49677	0.886	ng		82
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.46	59	18721	0.329	ng		90
19) Methylene Chloride	9.51	84	873	N.D.			
20) 3-Chloro-1-propene (Al...	9.62	41	966	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	13979	0.155	ng		93
23) trans-1,2-Dichloroethene	10.98	61	1158	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	3359	0.757	ng	#	1
27) 2-Butanone (MEK)	11.92	72	9510	0.666	ng	#	41
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.94	61	1018	0.110	ng	#	40
31) n-Hexane	12.91	57	13728	0.304	ng		92

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:26:06 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.			
34) Tetrahydrofuran (THF)	13.61	72	3189	0.215	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	14.14	62	1439	N.D.			
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	15.10	56	37371	1.556	ng		81
41) Benzene	15.22	78	12096	0.121	ng		100
42) Carbon Tetrachloride	15.45	117	1605	0.058	ng		82
43) Cyclohexane	15.65	84	10838	0.281	ng	#	78
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	16.73	83	4355	0.149	ng	#	18
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.76	88	786	N.D.			
49) 2,2,4-Trimethylpentane...	16.85	57	35059	0.306	ng		83
50) Methyl Methacrylate	17.20	100	1891	0.190	ng	#	1
51) n-Heptane	17.20	71	7218	0.272	ng		89
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	18.02	58	1173	0.054	ng	#	31
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	19.16	97	167420	7.862	ng	#	8
58) Toluene	19.28	91	155898	1.464	ng		100
59) 2-Hexanone	19.62	43	10915	0.197	ng		74
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.39	43	104642	1.733	ng		98
63) n-Octane	20.56	57	4334	0.183	ng	#	78
64) Tetrachloroethene	0.00	166	0	N.D.			
65) Chlorobenzene	21.65	112	500	N.D.			
66) Ethylbenzene	22.09	91	74829	0.651	ng		98
67) m- & p-Xylenes	22.30	91	127892	1.403	ng		98
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	27731	0.412	ng		98
70) o-Xylene	22.92	91	64511	0.704	ng		98
71) n-Nonane	23.17	43	8904	0.161	ng	#	48
72) 1,1,2,2-Tetrachloroethane	22.96	83	104	N.D.			
74) Cumene	23.66	105	8874	0.075	ng		95
75) alpha-Pinene	24.15	93	871121	14.851	ng		98
76) n-Propylbenzene	24.28	91	25792	0.176	ng		96
77) 3-Ethyltoluene	24.40	105	65521	0.588	ng		96
78) 4-Ethyltoluene	24.46	105	27090	0.242	ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	28182	0.304	ng		98

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 07:26:06 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

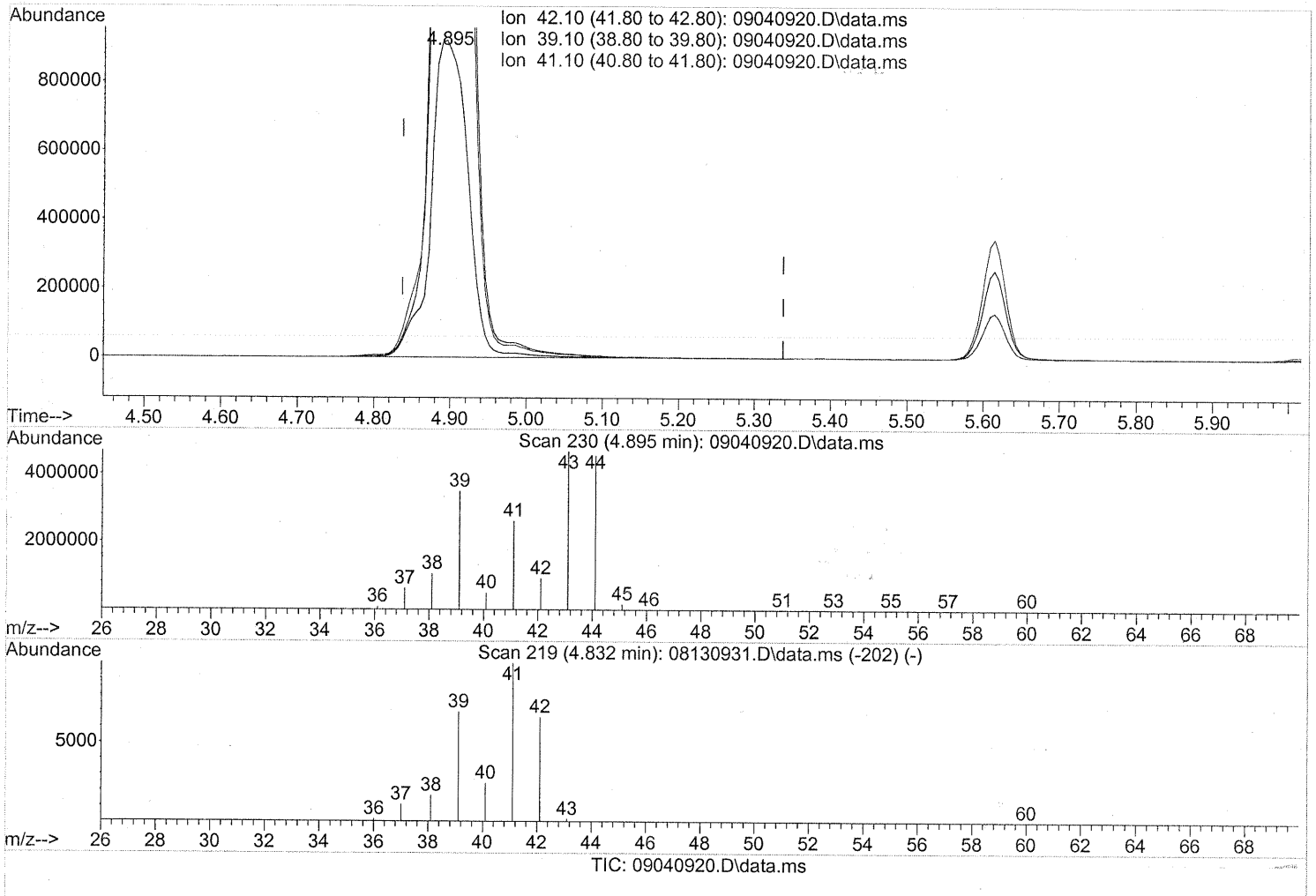
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	103	N.D.			
81) 2-Ethyltoluene	24.79	105	26900	0.234	ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	88906	0.904	ng		88
83) n-Decane	25.15	57	5907	0.103	ng		72
84) Benzyl Chloride	25.29	91	216	N.D.			
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.			
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.			
87) sec-Butylbenzene	25.38	105	4000	N.D.			
88) 4-Isopropyltoluene (p-...	25.56	119	32428	0.261	ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	24170	0.243	ng		99
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.			
91) d-Limonene	25.74	68	62437	1.552	ng		93
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	3808	0.064	ng	#	39
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.94	128	23217	0.176	ng		99
96) n-Dodecane	27.89	57	8833	0.133	ng		86
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.52	55	11729	0.350	ng		94
99) tert-Butylbenzene	25.49	119	7785	0.080	ng		97
100) n-Butylbenzene	26.06	91	11888	0.115	ng	#	59

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 15 09:16:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040920.D\data.ms

(2) Propene (T)

4.895min (+0.057) 96.54ng

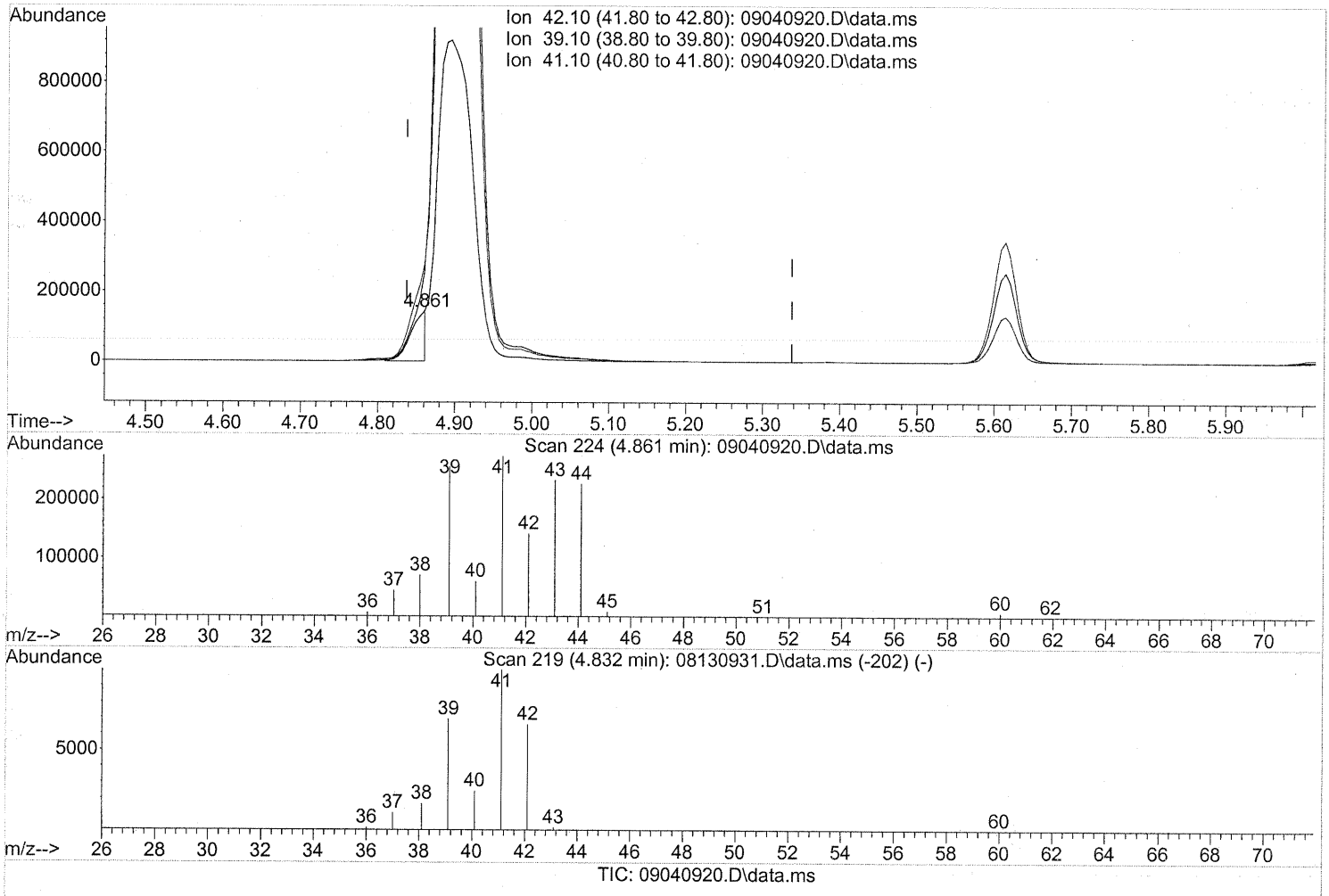
response 3096723

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	348.86#
41.10	152.70	279.87#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 15 09:16:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040920.D\data.ms

(2) Propene (T)

4.861min (+0.023) 6.05ng m

response 193987

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	5568.99#
41.10	152.70	4467.80#
0.00	0.00	0.00

SH—7 IC

JDA 9/15/09

9/16/09

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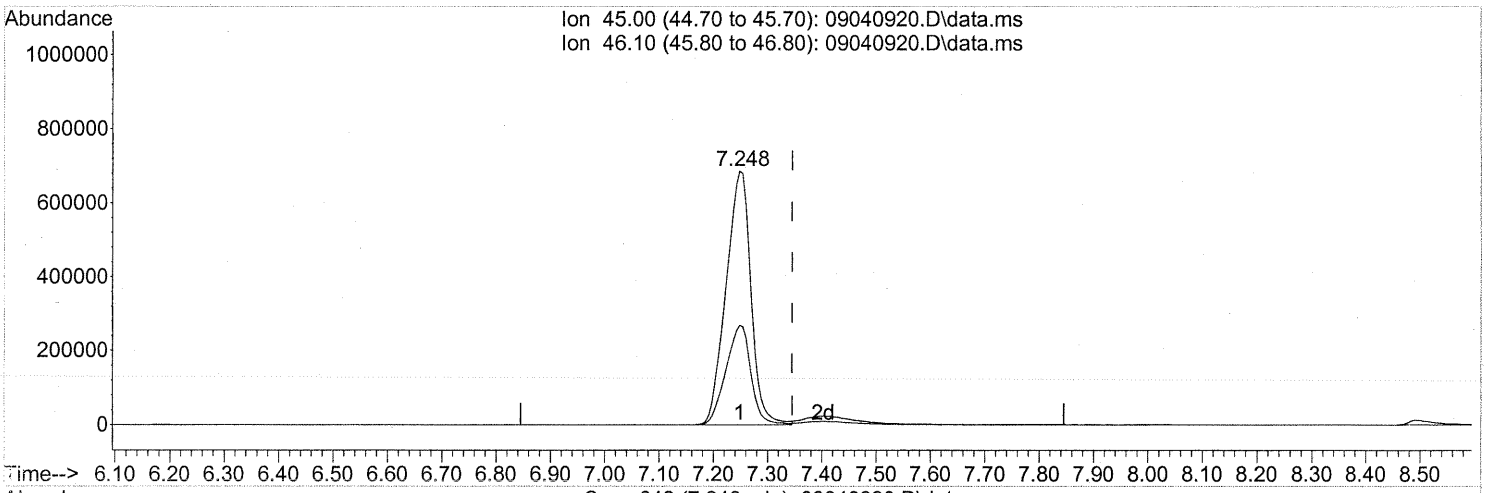
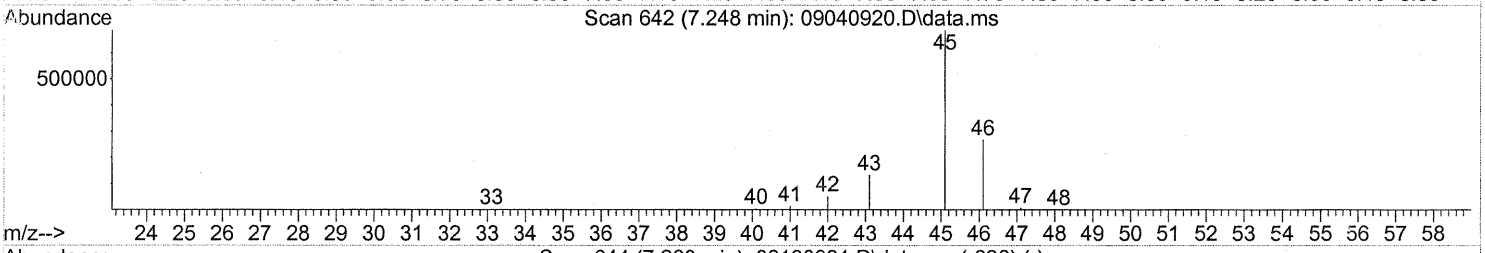
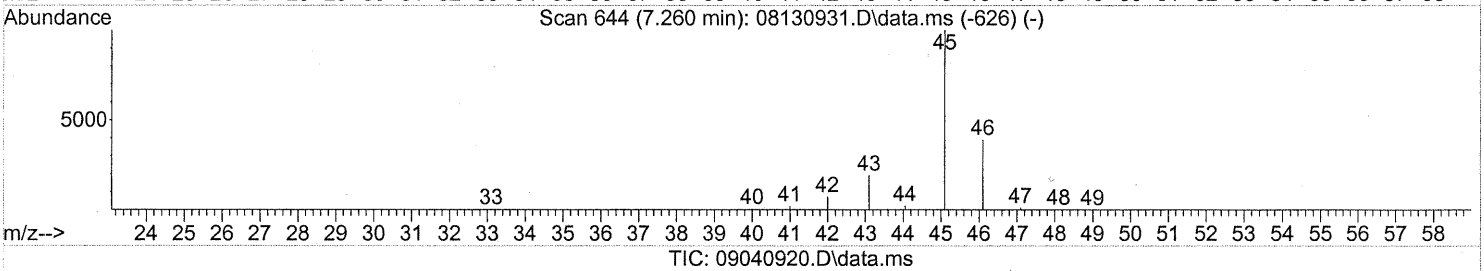
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040920.D\data.ms

(10) Ethanol (T)

7.248min (-0.097) 108.25ng

response 2178031

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.08
0.00	0.00	0.00
0.00	0.00	0.00

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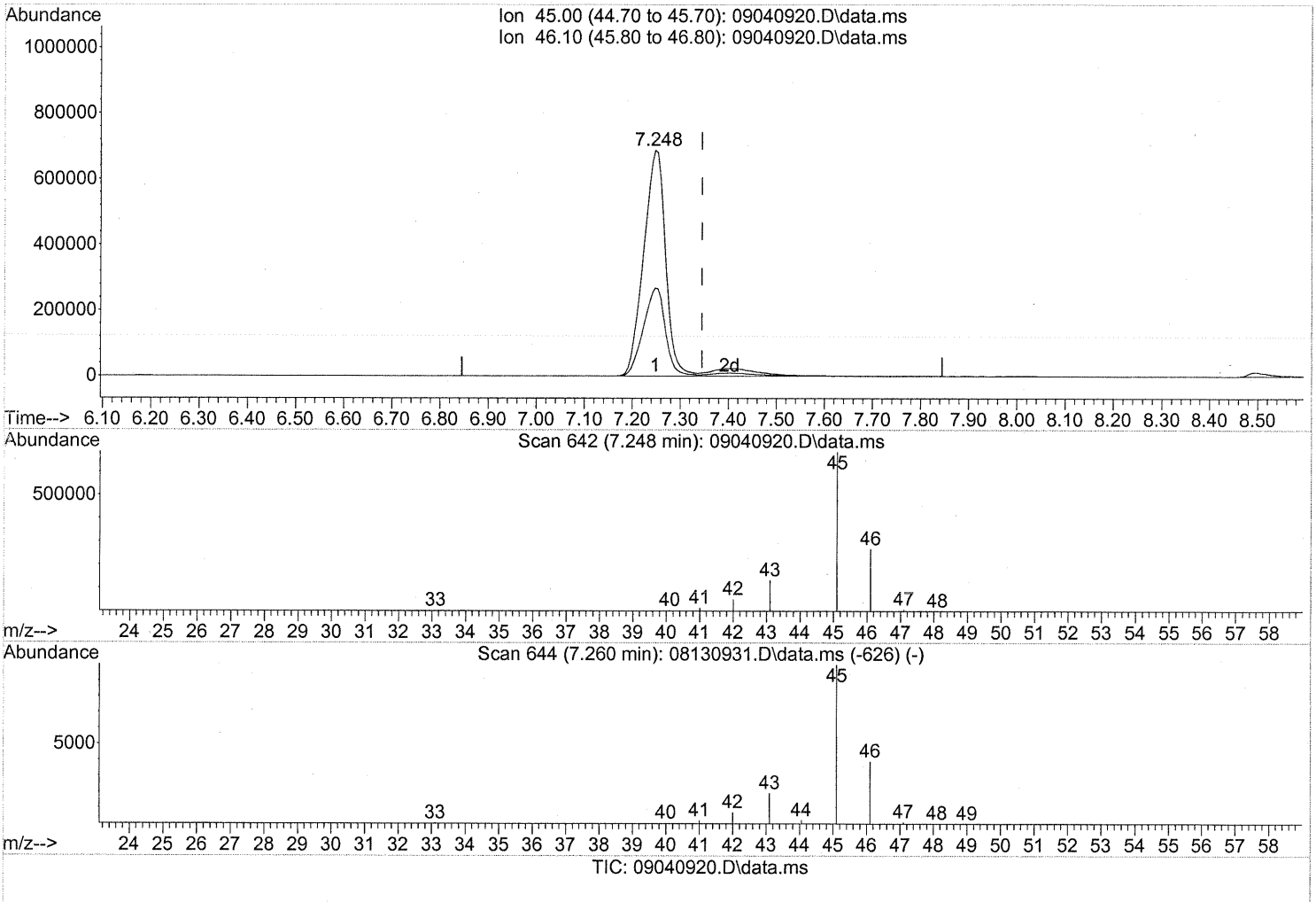
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040920.D\data.ms

(10) Ethanol (T)

7.248min (-0.097) 115.73ng m

response 2328546

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.55
0.00	0.00	0.00
0.00	0.00	0.00

SP—7 IC

JOA 9/15/09

9/16/09

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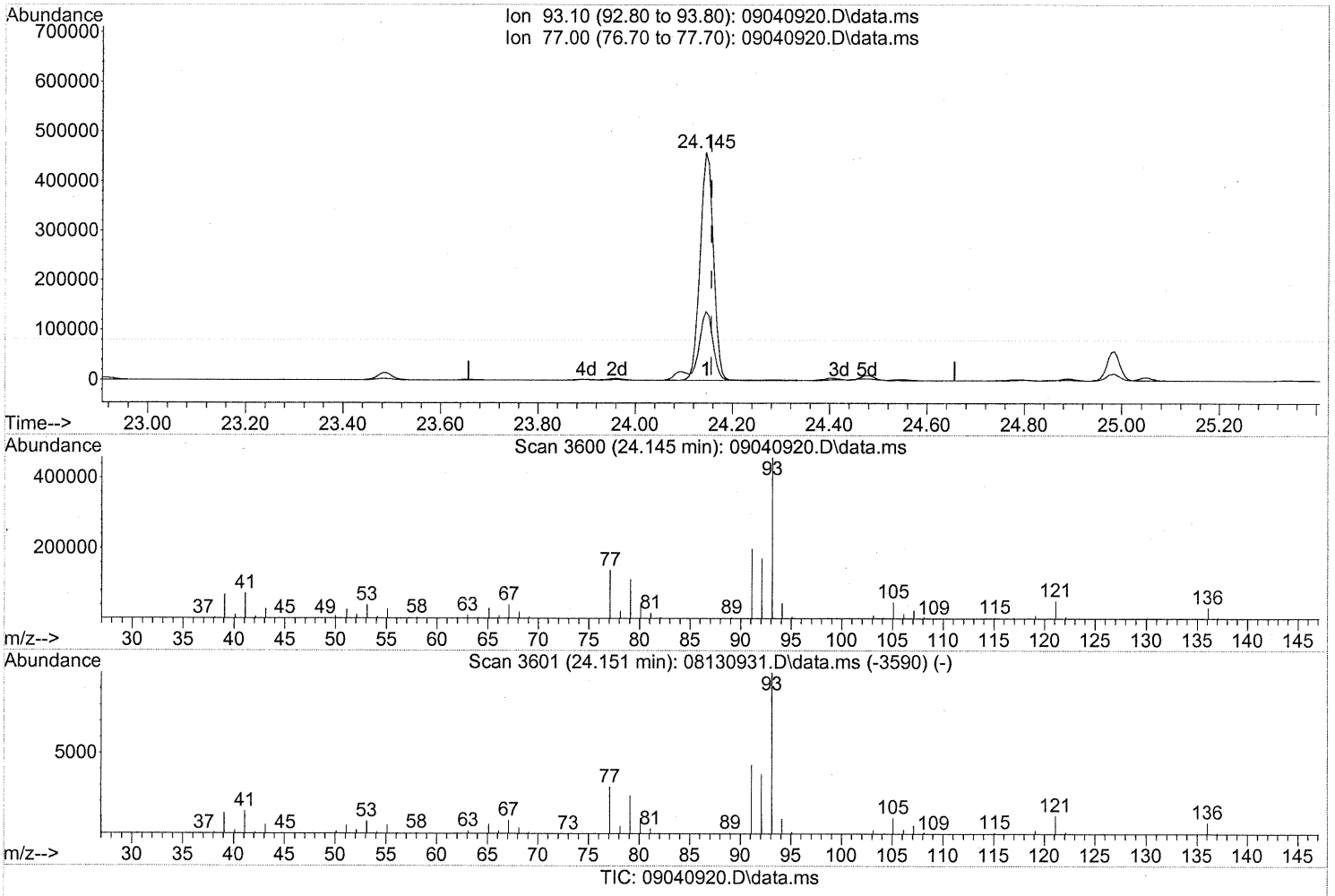
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040920.D
Acq On : 4 Sep 2009 21:35
Operator : EM
Sample : P0903080-001 dil (100ml)
Misc : Environmental H&E 104834
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 07:37:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040920.D\data.ms

(75) alpha-Pinene (T)

24.145min (-0.011) 14.85ng

response 871121

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.62
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: **104835**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01578

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

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

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**75**	0.63	**44**	0.37	**D**
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.5**	0.63	**0.50**	0.13	
74-87-3	**Chloromethane**	**0.54**	0.13	**0.26**	0.061	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.63	ND	0.090	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.049	
106-99-0	**1,3-Butadiene**	**0.19**	0.13	**0.084**	0.057	
74-83-9	Bromomethane	ND	0.13	ND	0.032	
75-00-3	Chloroethane	ND	0.13	ND	0.048	
64-17-5	**Ethanol**	**1,600**	6.3	**830**	3.3	**D**
75-05-8	Acetonitrile	ND	0.63	ND	0.38	
107-02-8	**Acrolein**	**9.2**	0.63	**4.0**	0.27	
67-64-1	**Acetone**	**140**	6.3	**58**	2.7	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.13	**0.21**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**12**	0.63	**4.8**	0.26	
107-13-1	Acrylonitrile	ND	0.63	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.032	
75-09-2	Methylene Chloride	ND	0.63	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.040	
76-13-1	**Trichlorotrifluoroethane**	**0.51**	0.13	**0.067**	0.016	
75-15-0	**Carbon Disulfide**	**2.0**	0.63	**0.63**	0.20	
156-60-5	**trans-1,2-Dichloroethene**	**0.63**	0.13	**0.16**	0.032	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.031	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.035	
108-05-4	Vinyl Acetate	ND	6.3	ND	1.8	
78-93-3	**2-Butanone (MEK)**	**10**	0.63	**3.4**	0.21	

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

Verified By: RG Date: 9/16/09

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104835**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01578

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

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

Canister Dilution Factor: 1.26

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	0.032	
141-78-6	**Ethyl Acetate**	**7.0**	1.3	**1.9**	0.35	
110-54-3	**n-Hexane**	**4.5**	0.63	**1.3**	0.18	
67-66-3	**Chloroform**	**0.23**	0.13	**0.046**	0.026	
109-99-9	**Tetrahydrofuran (THF)**	**3.0**	0.63	**1.0**	0.21	
107-06-2	**1,2-Dichloroethane**	**1.0**	0.13	**0.25**	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.023	
71-43-2	**Benzene**	**1.7**	0.13	**0.52**	0.039	
56-23-5	**Carbon Tetrachloride**	**1.1**	0.13	**0.17**	0.020	
110-82-7	**Cyclohexane**	**4.2**	0.63	**1.2**	0.18	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.019	
79-01-6	Trichloroethene	ND	0.13	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.63	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.31	
142-82-5	**n-Heptane**	**3.9**	0.63	**0.95**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.63	ND	0.14	
108-10-1	**4-Methyl-2-pentanone**	**1.3**	0.63	**0.32**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.63	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.023	
108-88-3	**Toluene**	**21**	0.63	**5.5**	0.17	
591-78-6	**2-Hexanone**	**3.9**	0.63	**0.96**	0.15	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.016	
123-86-4	**n-Butyl Acetate**	**26**	0.63	**5.4**	0.13	

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

Verified By: Re Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104835**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01578

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

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

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.4**	0.63	**0.52**	0.13	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.019	
108-90-7	Chlorobenzene	ND	0.13	ND	0.027	
100-41-4	**Ethylbenzene**	**9.1**	0.63	**2.1**	0.15	
179601-23-1	**m,p-Xylenes**	**20**	0.63	**4.6**	0.15	
75-25-2	Bromoform	ND	0.63	ND	0.061	
100-42-5	**Styrene**	**6.1**	0.63	**1.4**	0.15	
95-47-6	**o-Xylene**	**10**	0.63	**2.3**	0.15	
111-84-2	**n-Nonane**	**0.99**	0.63	**0.19**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.018	
98-82-8	**Cumene**	**1.0**	0.63	**0.20**	0.13	
80-56-8	**alpha-Pinene**	**210**	0.63	**37**	0.11	**D**
103-65-1	**n-Propylbenzene**	**2.5**	0.63	**0.51**	0.13	
622-96-8	**4-Ethyltoluene**	**3.3**	0.63	**0.66**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**4.1**	0.63	**0.84**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**13**	0.63	**2.6**	0.13	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.024	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.13	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.021	
5989-27-5	**d-Limonene**	**22**	0.63	**4.0**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.63	ND	0.065	
120-82-1	1,2,4-Trichlorobenzene	ND	0.63	ND	0.085	
91-20-3	**Naphthalene**	**2.5**	0.63	**0.47**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.63	ND	0.059	

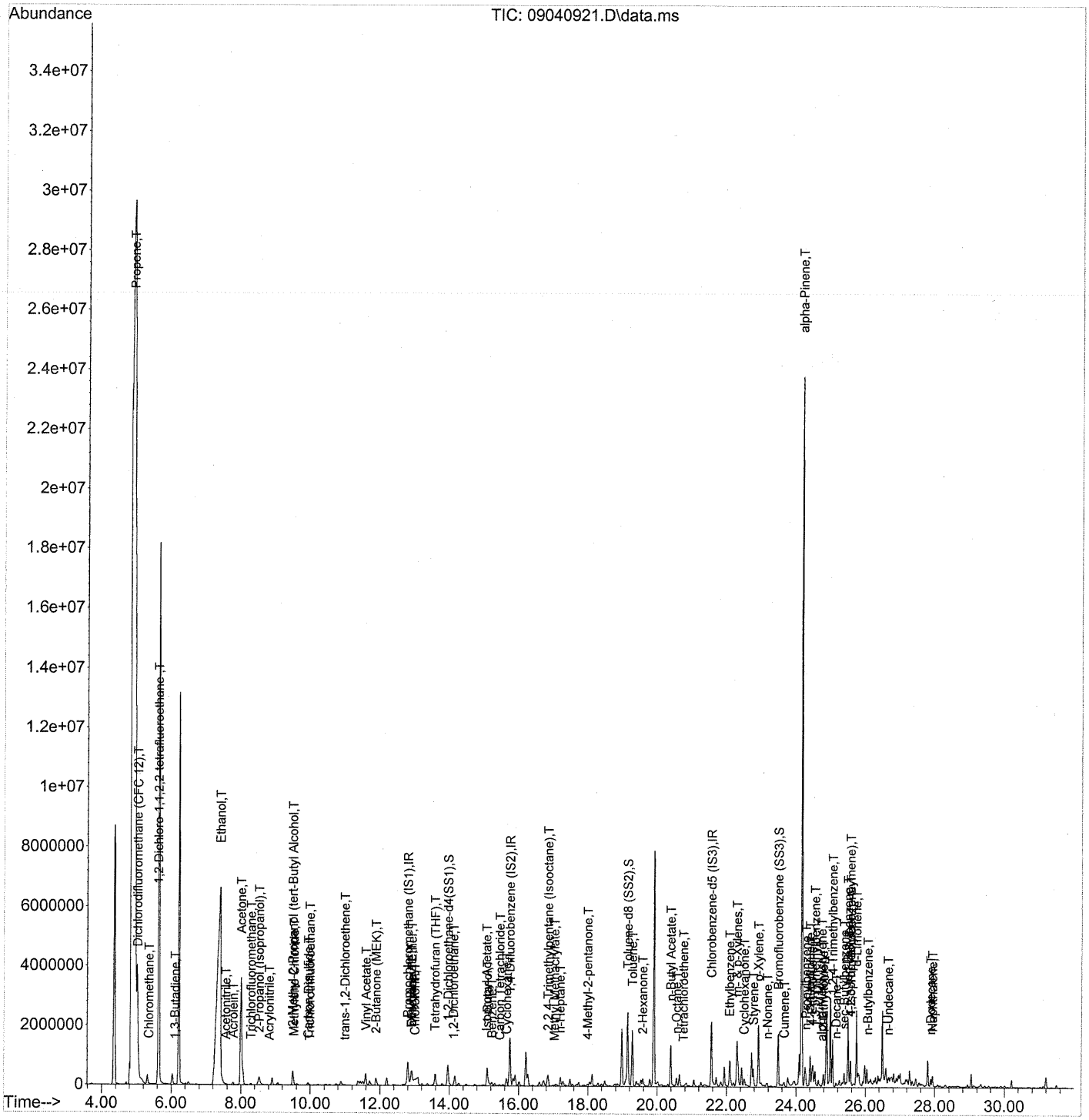
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By: Re Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:17:49 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
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Quant Time: Sep 16 08:17:49 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

SM 9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	359608	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1828336	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	893391	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.96	65	667276	26.243	ng		-0.03
Spiked Amount 25.000			Recovery =	104.96%			✓
57) Toluene-d8 (SS2)	19.15	98	2107900	24.819	ng		-0.01
Spiked Amount 25.000			Recovery =	99.28%			✓
73) Bromofluorobenzene (SS3)	23.49	174	603384	25.086	ng		0.00
Spiked Amount 25.000			Recovery =	100.36%			✓
Target Compounds							Qvalue
2) Propene	4.89	42	11957701m	~~379.068~~ ng			
3) Dichlorodifluoromethan...	5.03	85	88512	1.966 ng		#	97
4) Chloromethane	5.35	50	18040	0.430 ng			96
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1621	~~0.068~~ ng			79
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	4315	0.147 ng		#	41
8) Bromomethane	6.60	94	686	N.D.			
9) Chloroethane	6.94	64	466	N.D.			
10) Ethanol	7.40	45	27511593	~~1390.349~~ ng			99
11) Acetonitrile	7.56	41	23112	~~0.479~~ ng			97
12) Acrolein	7.78	56	94056	7.289 ng			98
13) Acetone	8.00	58	2192928	108.906 ng			94
14) Trichlorofluoromethane	8.29	101	36845	0.957 ng			98
15) 2-Propanol (Isopropanol)	8.53	45	520924	9.447 ng			93
16) Acrylonitrile	8.82	53	4656	~~0.159~~ ng			100
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	106888	1.909 ng		#	1
19) Methylene Chloride	9.53	84	5145	~~0.205~~ ng		#	76
20) 3-Chloro-1-propene (Al...	9.73	41	90	N.D.			
21) Trichlorotrifluoroethane	9.98	151	7008	0.407 ng			100
22) Carbon Disulfide	9.94	76	138844	1.566 ng			100
23) trans-1,2-Dichloroethene	10.99	61	17249	0.497 ng			90
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.40	73	2990	N.D.			
26) Vinyl Acetate	11.60	86	13746	~~3.152~~ ng		#	1
27) 2-Butanone (MEK)	11.89	72	113021	8.051 ng		#	84
28) cis-1,2-Dichloroethene	12.75	61	113	N.D.			
29) Diisopropyl Ether	12.92	87	2251	0.113 ng		#	1
30) Ethyl Acetate	12.90	61	50745	5.574 ng		#	74
31) n-Hexane	12.92	57	157472	3.549 ng			95

SM di 1

SM di 1

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Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:17:49 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	6667	0.180	ng		96
34) Tetrahydrofuran (THF)	13.58	72	34953	2.395	ng	#	1
35) Ethyl tert-Butyl Ether	13.72	87	1088	N.D.			
36) 1,2-Dichloroethane	14.12	62	22512	0.792	ng		94
38) 1,1,1-Trichloroethane	14.53	97	680	N.D.			
39) Isopropyl Acetate	15.07	61	2873	0.193	ng	#	1
40) 1-Butanol	15.09	56	511096	21.572	ng		82
41) Benzene	15.23	78	130390	1.326	ng		98
42) Carbon Tetrachloride	15.46	117	23414	0.852	ng		97
43) Cyclohexane	15.65	84	127548	3.350	ng		89
44) tert-Amyl Methyl Ether	16.10	73	104	N.D.			
45) 1,2-Dichloropropane	16.43	63	110	N.D.			
46) Bromodichloromethane	0.00	83	0	N.D.	d		
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	0.00	88	0	N.D.	d		
49) 2,2,4-Trimethylpentane...	16.85	57	387751	3.427	ng		89
50) Methyl Methacrylate	17.04	100	719	0.073	ng	#	1
51) n-Heptane	17.20	71	80544	3.077	ng		92
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	17.99	58	22125m	1.041	ng		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	d		
58) Toluene	19.28	91	1688763	16.403	ng		100
59) 2-Hexanone	19.58	43	167709	3.134	ng		74
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.39	43	1191140	20.401	ng		99
63) n-Octane	20.56	57	44284	1.930	ng		89
64) Tetrachloroethene	20.75	166	1646	0.064	ng		97
65) Chlorobenzene	0.00	112	0	N.D.	d		
66) Ethylbenzene	22.09	91	805022	7.242	ng		99
67) m- & p-Xylenes	22.30	91	1395320	15.834	ng		99
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	315302	4.841	ng		99
70) o-Xylene	22.92	91	713197	8.045	ng		99
71) n-Nonane	23.17	43	41903m	0.785	ng		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	d		
74) Cumene	23.66	105	91518	0.796	ng		97
75) alpha-Pinene	24.16	93	11262652	198.596	ng	see dil	100
76) n-Propylbenzene	24.28	91	280445	1.974	ng		89
77) 3-Ethyltoluene	24.40	105	711399	6.606	ng		98
78) 4-Ethyltoluene	24.46	105	279700	2.584	ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	294129	3.286	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:17:49 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

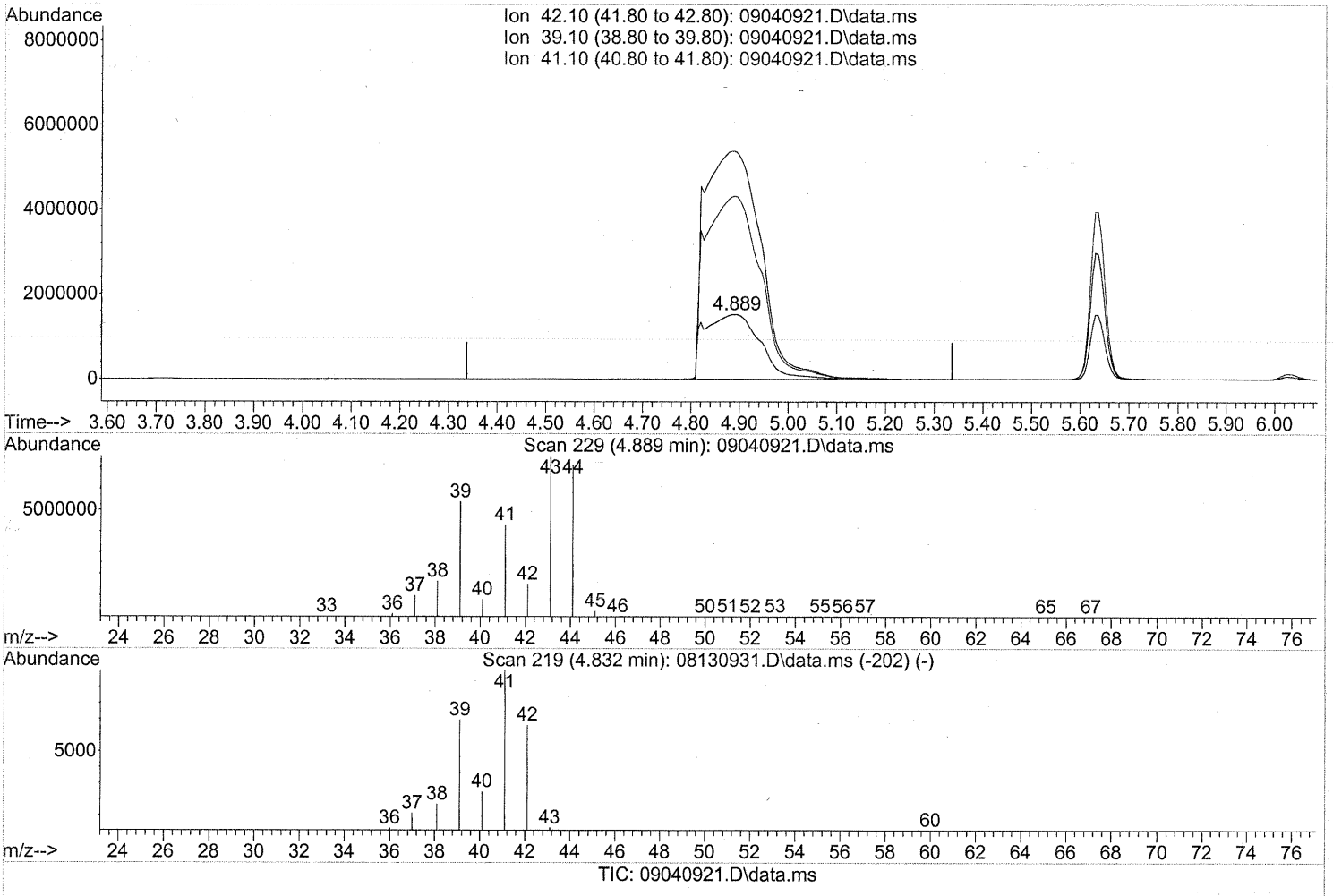
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	4355	0.090	ng	#	1
81) 2-Ethyltoluene	24.79	105	282376	2.539	ng		100
82) 1,2,4-Trimethylbenzene	25.05	105	960038	10.101	ng		89
83) n-Decane	25.15	57	40619	0.734	ng		95
84) Benzyl Chloride	25.25	91	3244	N.D.			
85) 1,3-Dichlorobenzene	25.33	146	2040	N.D.			
86) 1,4-Dichlorobenzene	25.33	146	2040	N.D.			
87) sec-Butylbenzene	25.38	105	39306	0.314	ng		88
88) 4-Isopropyltoluene (p-...	25.56	119	331057	2.759	ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	255811	2.663	ng		97
90) 1,2-Dichlorobenzene	25.74	146	975	N.D.			
91) d-Limonene	25.74	68	681493	17.526	ng		93
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	35071	0.614	ng	#	70
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.94	128	251073	1.969	ng		96
96) n-Dodecane	27.89	57	77803	1.216	ng		97
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.51	55	125800	3.880	ng		99
99) tert-Butylbenzene	25.49	119	76333	0.810	ng		99
100) n-Butylbenzene	26.06	91	116818	1.172	ng	#	37

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 15 09:43:48 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(2) Propene (T)

4.889min (+0.051) 379.07ng m

response 11957701

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	0.00#
41.10	152.70	0.00#
0.00	0.00	0.00

reintegrated — > see dil

9/16/09

9/16/09

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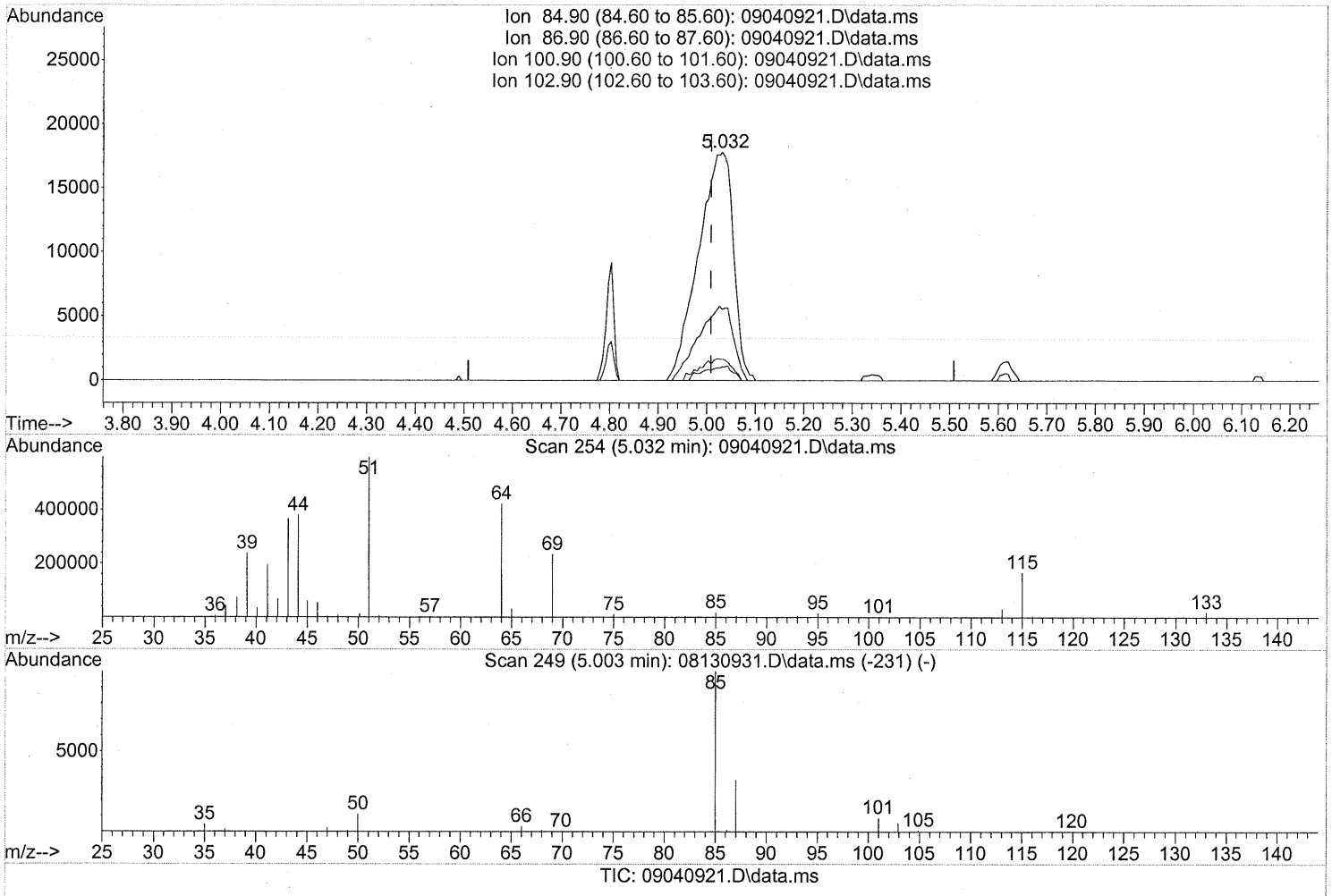
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 1.97ng

response 88512

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.24
100.90	9.10	8.45
102.90	5.50	0.00

before substraction

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Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
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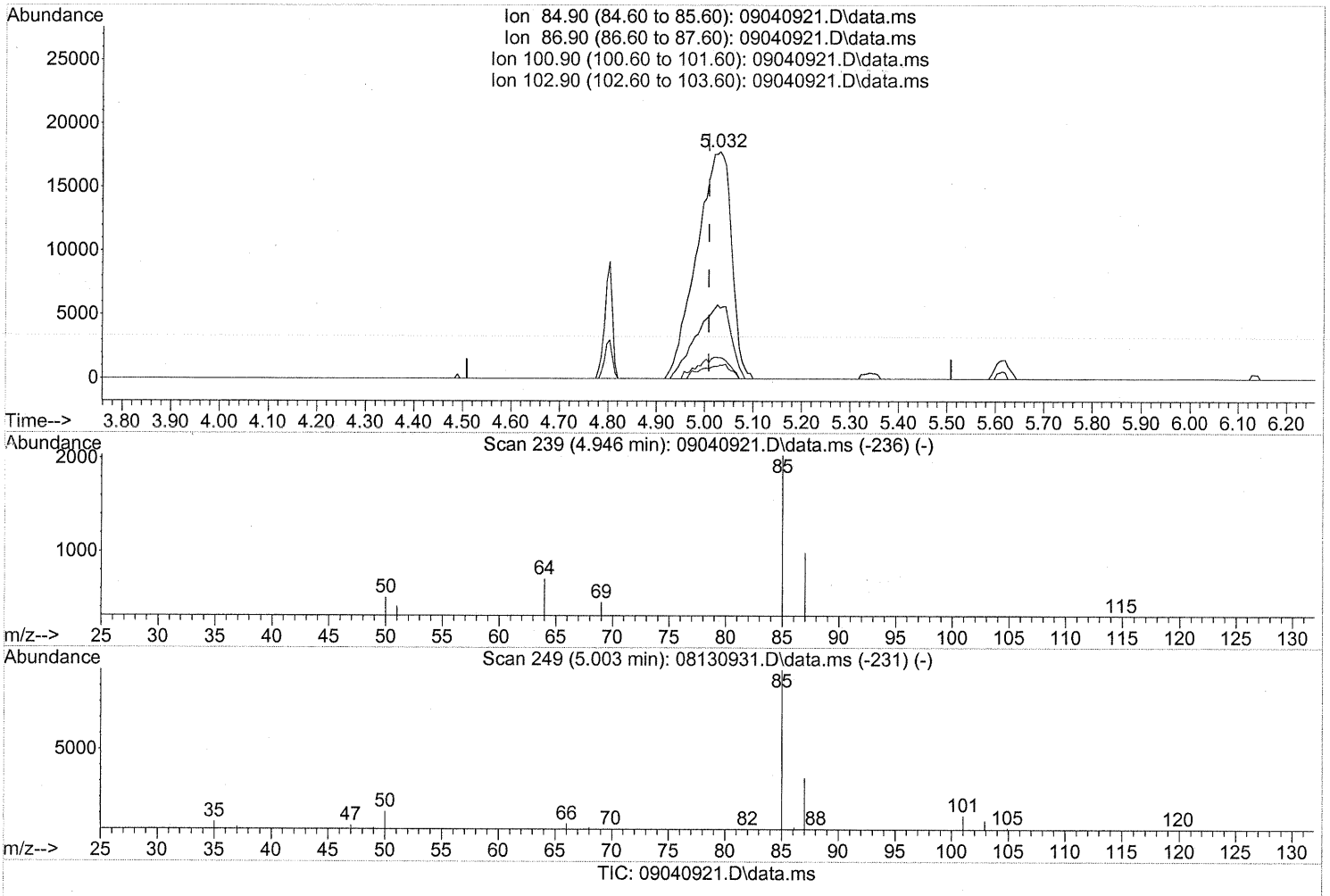
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 1.97ng

response 88512

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.24
100.90	9.10	8.45
102.90	5.50	0.00

after substr.

9/15/09

9/16/09

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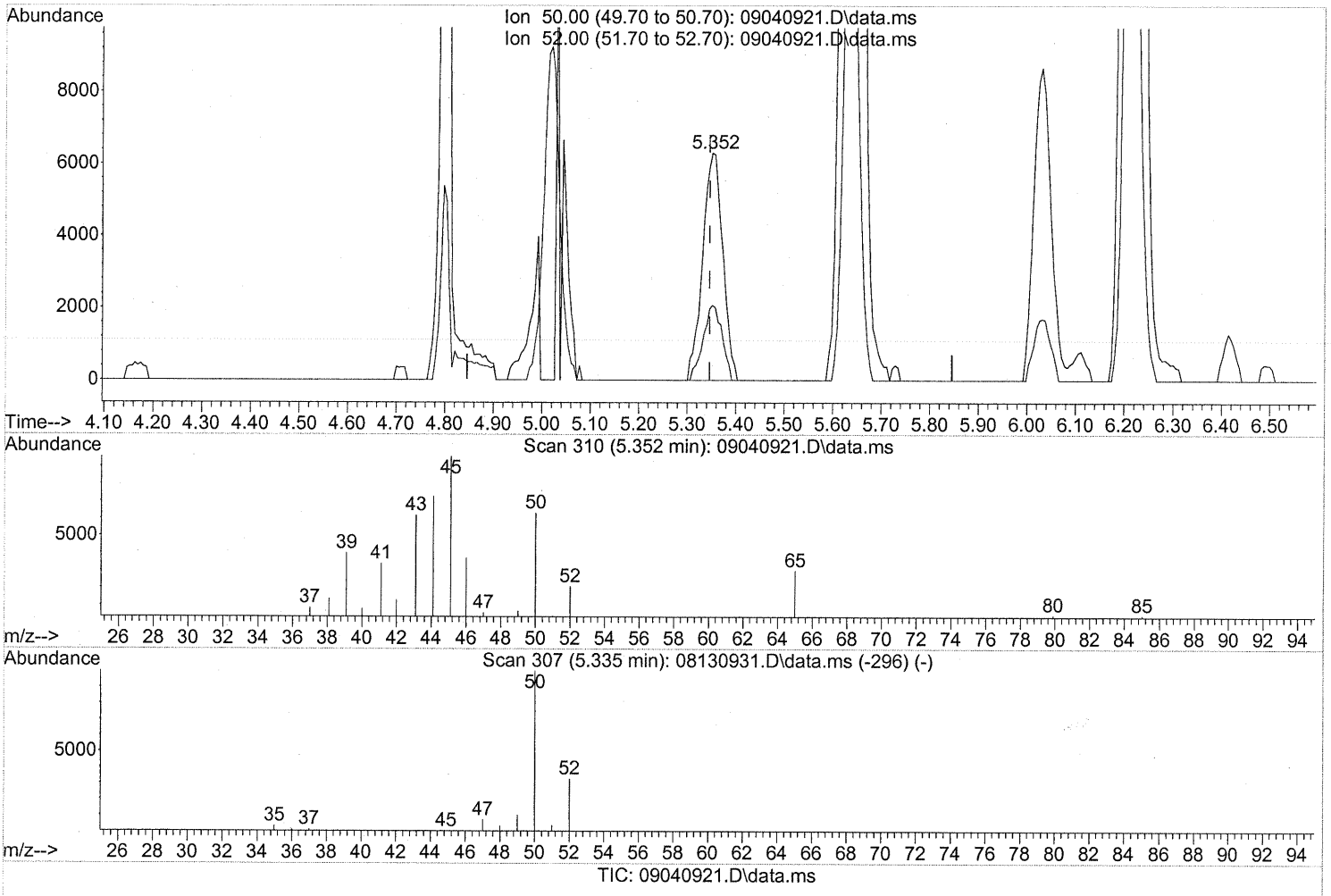
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.352min (+0.006) 0.43ng

response 18040

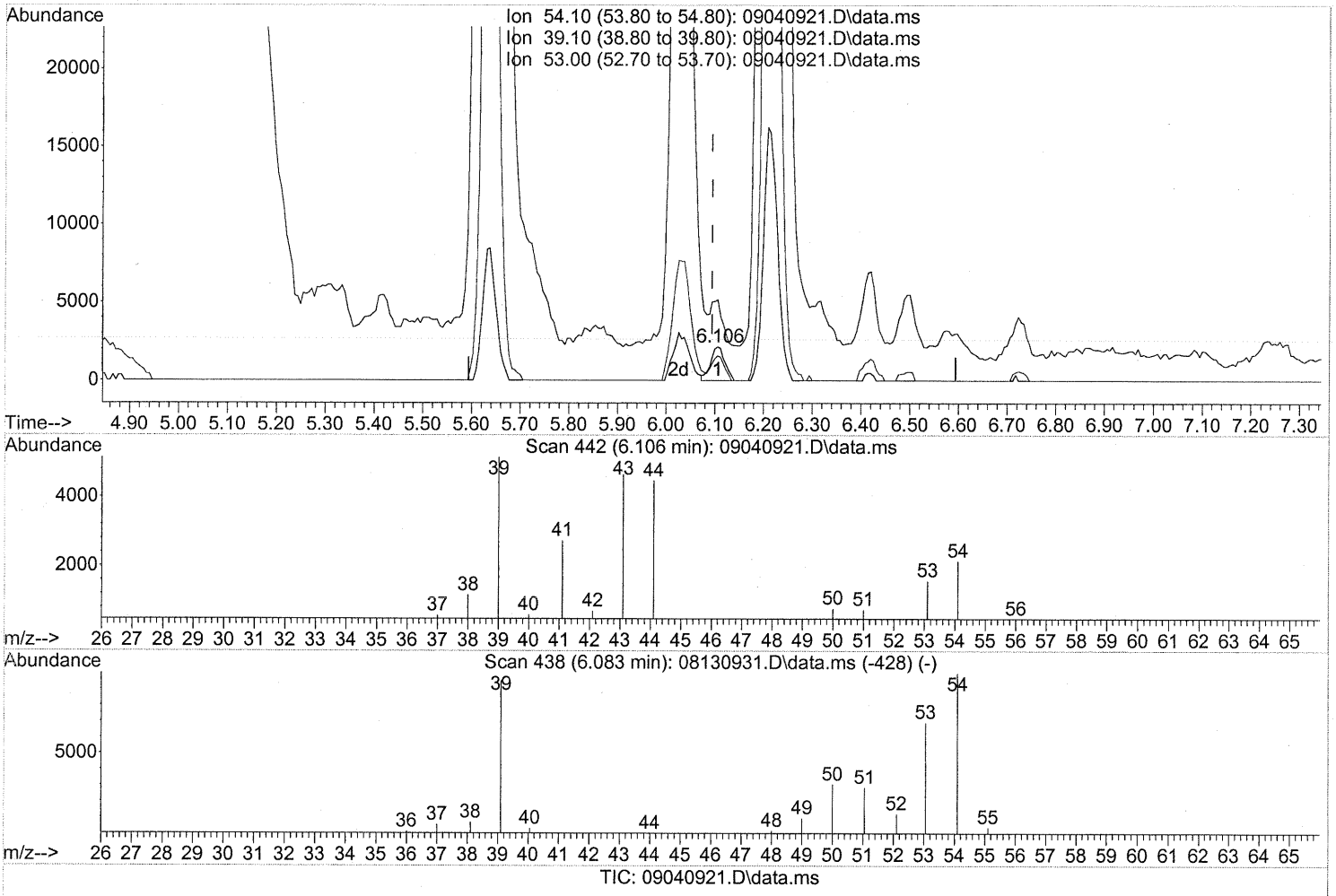
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.90
0.00	0.00	0.00
0.00	0.00	0.00

80

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(7) 1,3-Butadiene (T)

6.106min (+0.011) 0.15ng

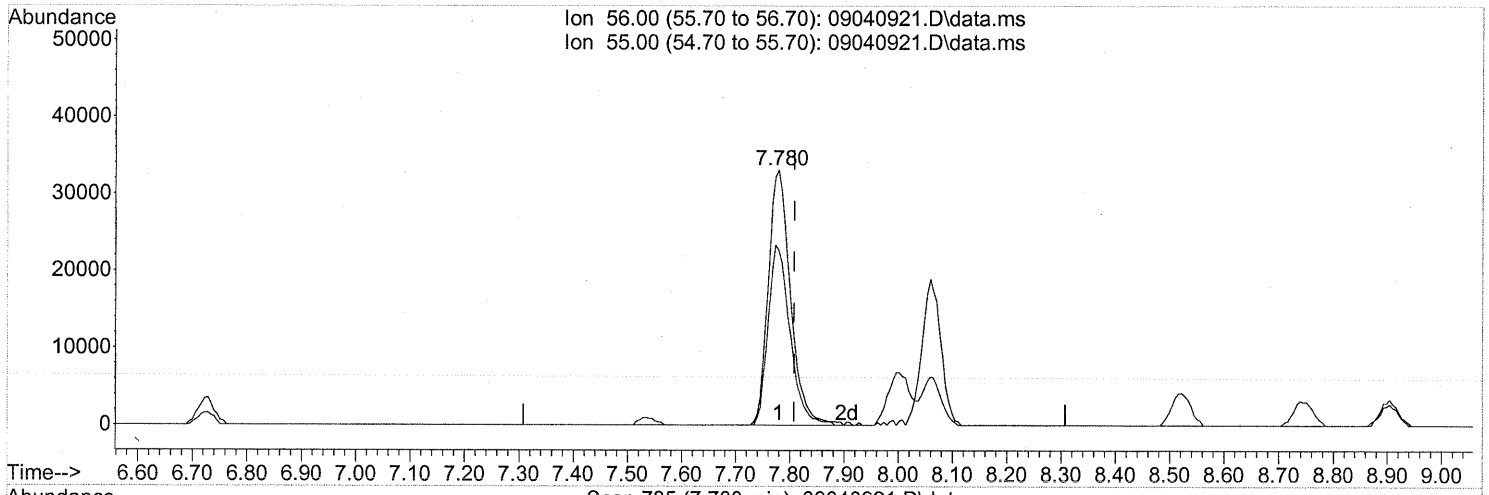
response 4315

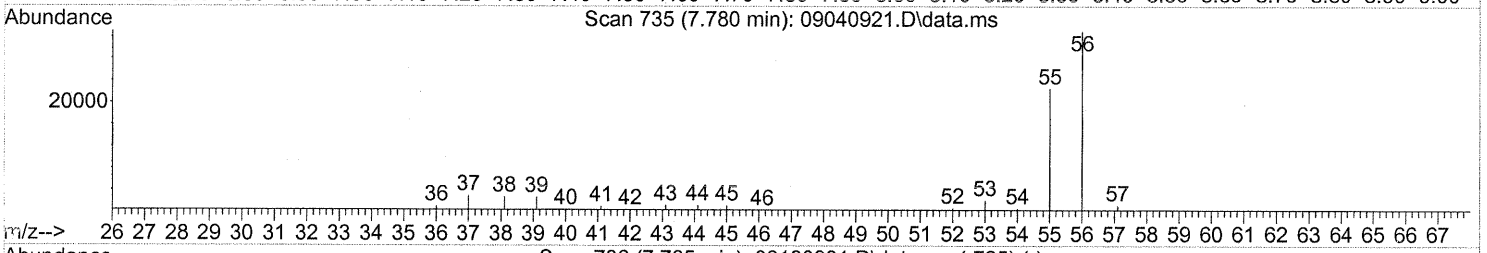
Ion	Exp%	Act%
54.10	100	100
39.10	96.60	0.00#
53.00	69.80	65.56
0.00	0.00	0.00

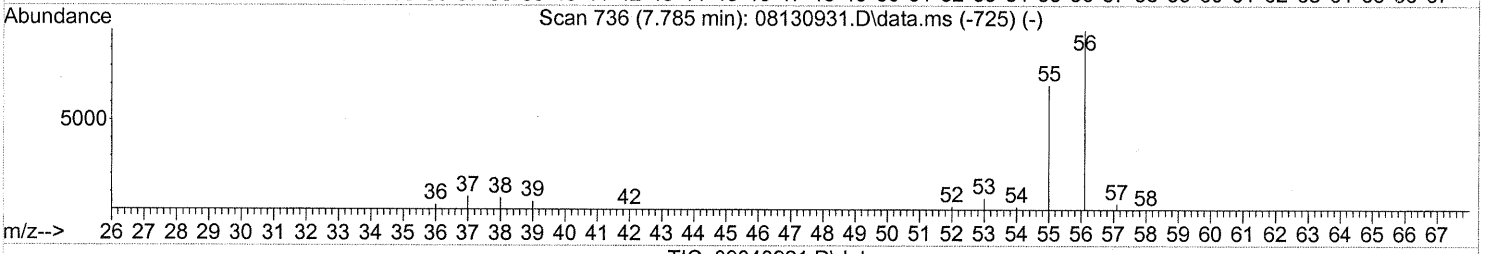
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(12) Acrolein (T)

7.780min (-0.029) 7.29ng

response 94056

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.60
0.00	0.00	0.00
0.00	0.00	0.00

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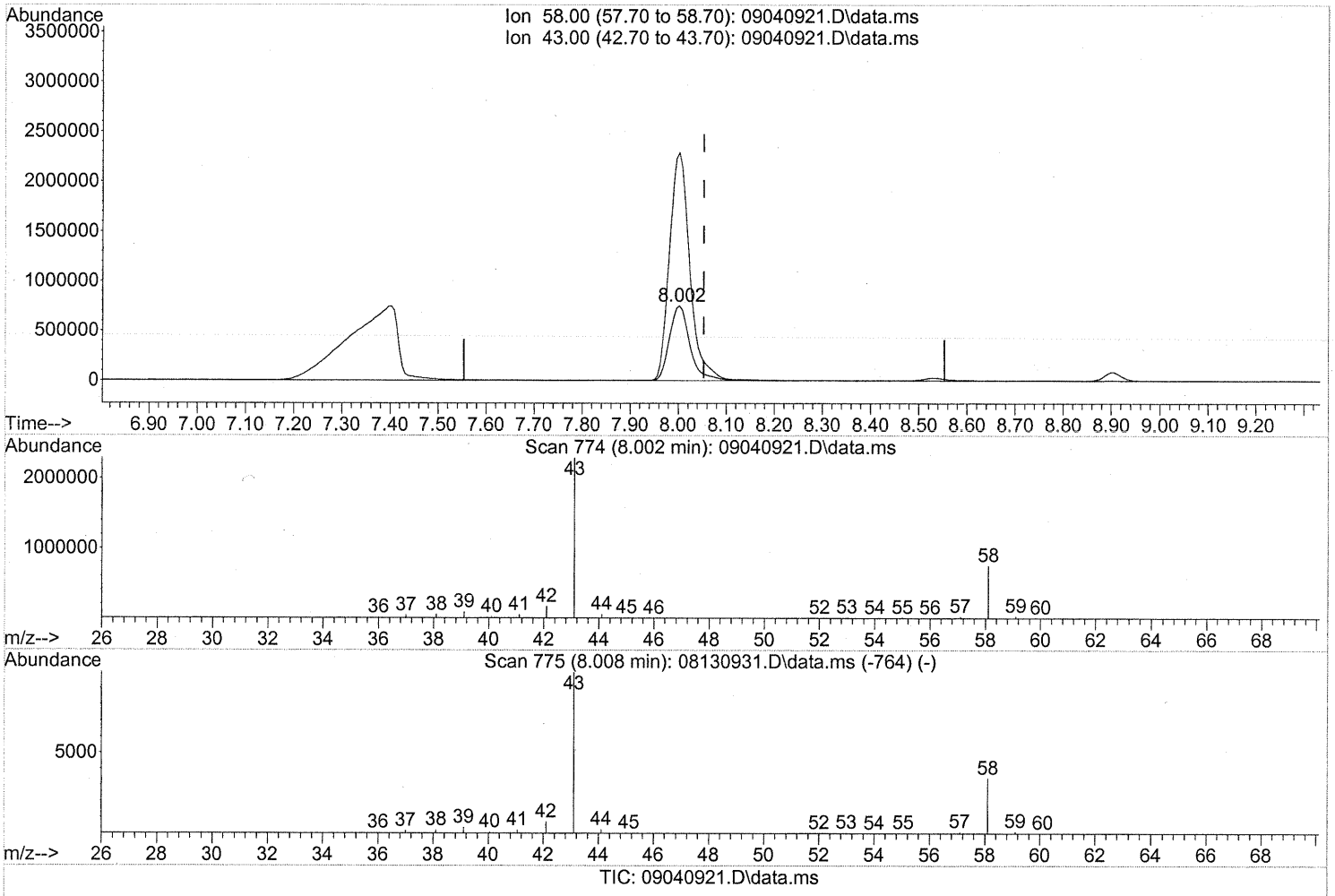
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(13) Acetone (T)

8.002min (-0.051) 108.91ng

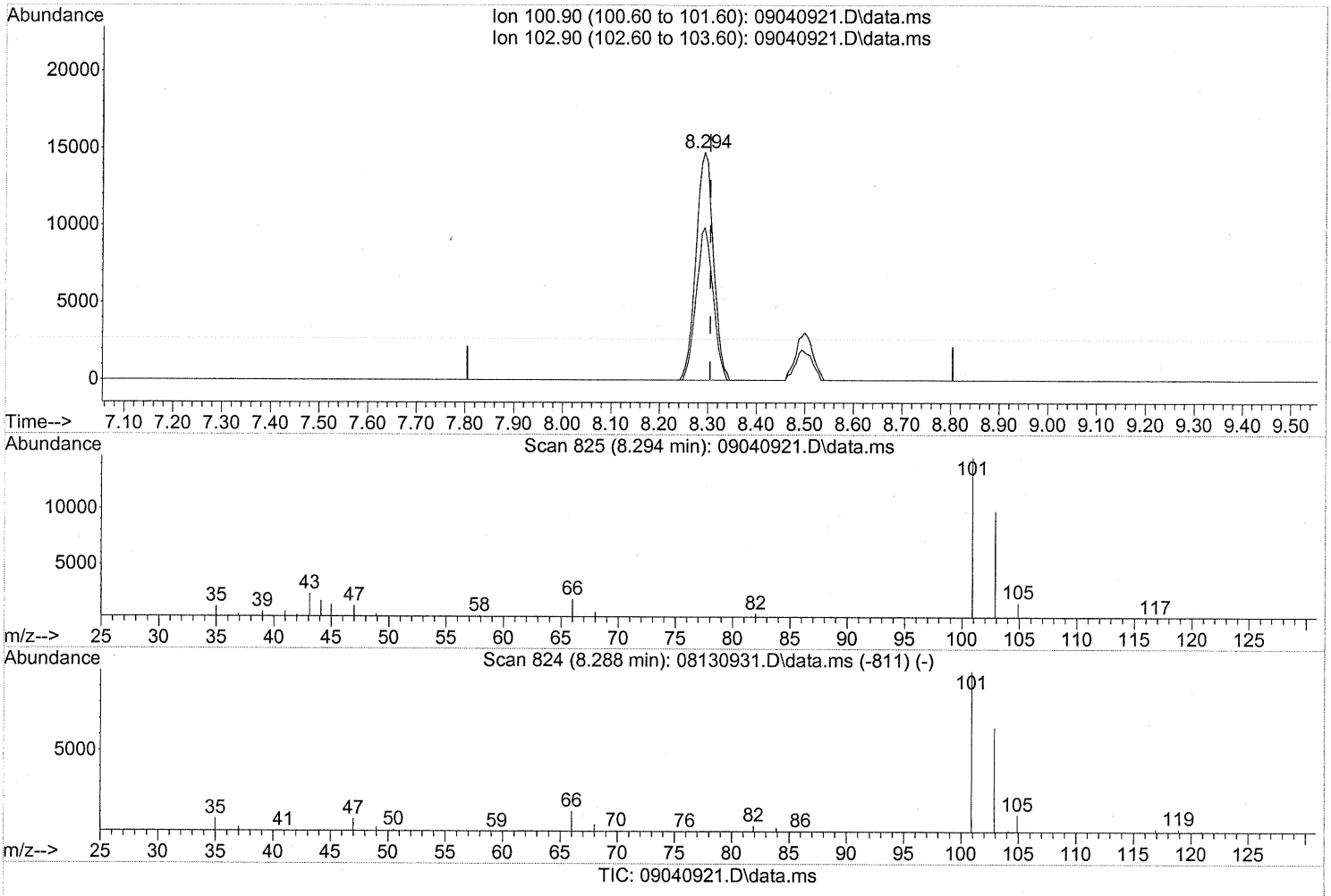
response 2192928

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	304.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(14) Trichlorofluoromethane (T)

8.294min (-0.011) 0.96ng

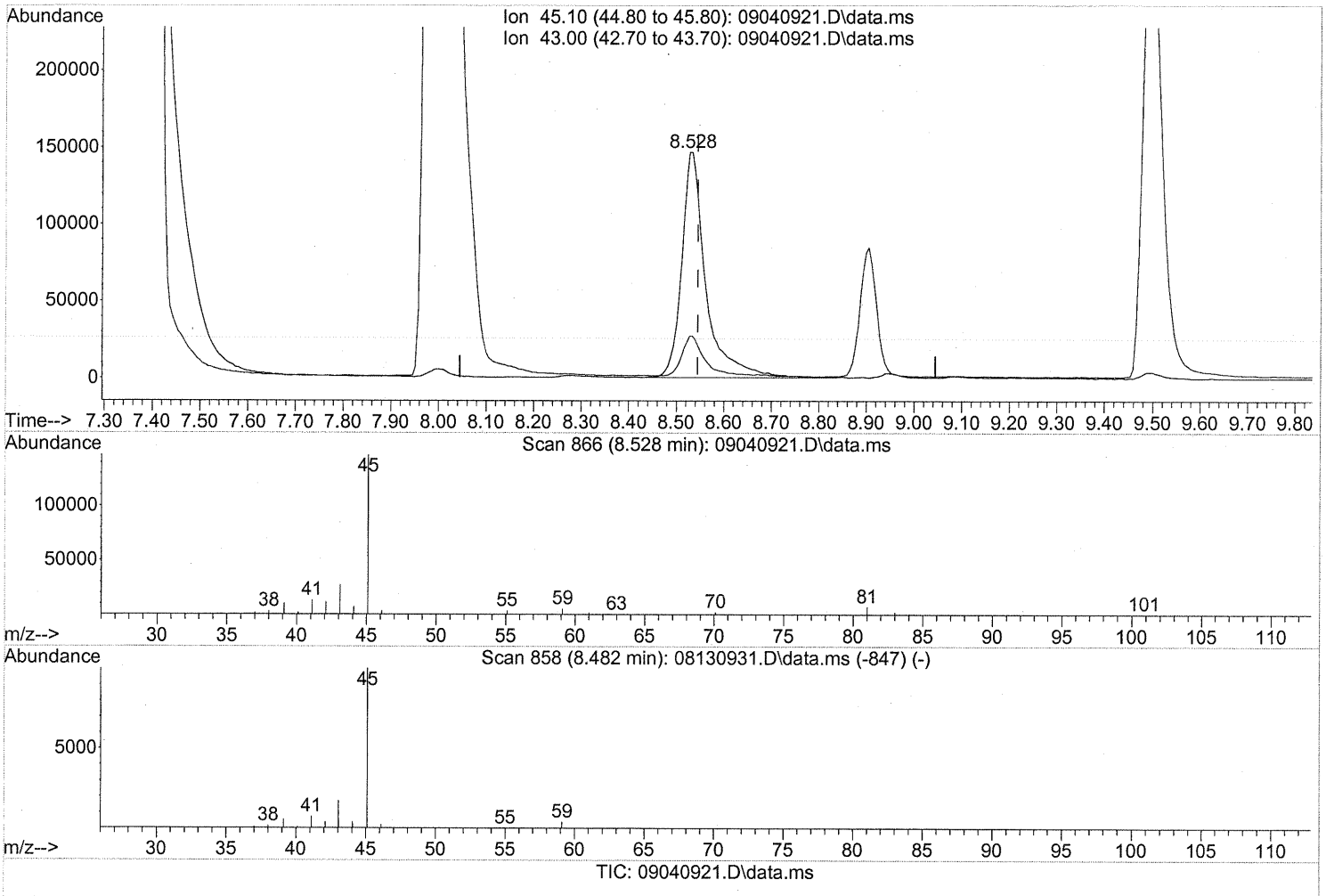
response 36845

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.528min (-0.017) 9.45ng

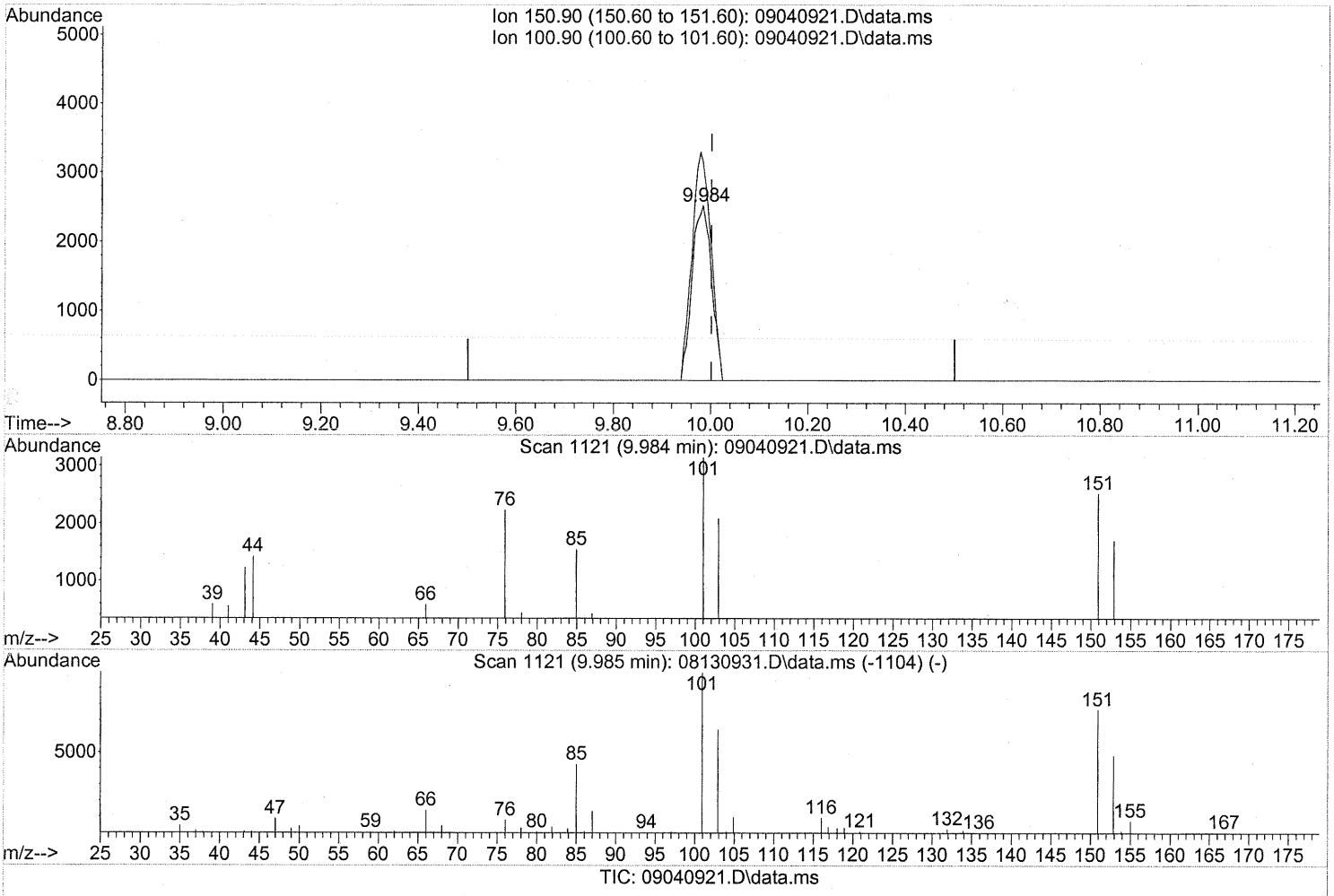
response 520924

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.40
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.984min (-0.017) 0.41ng

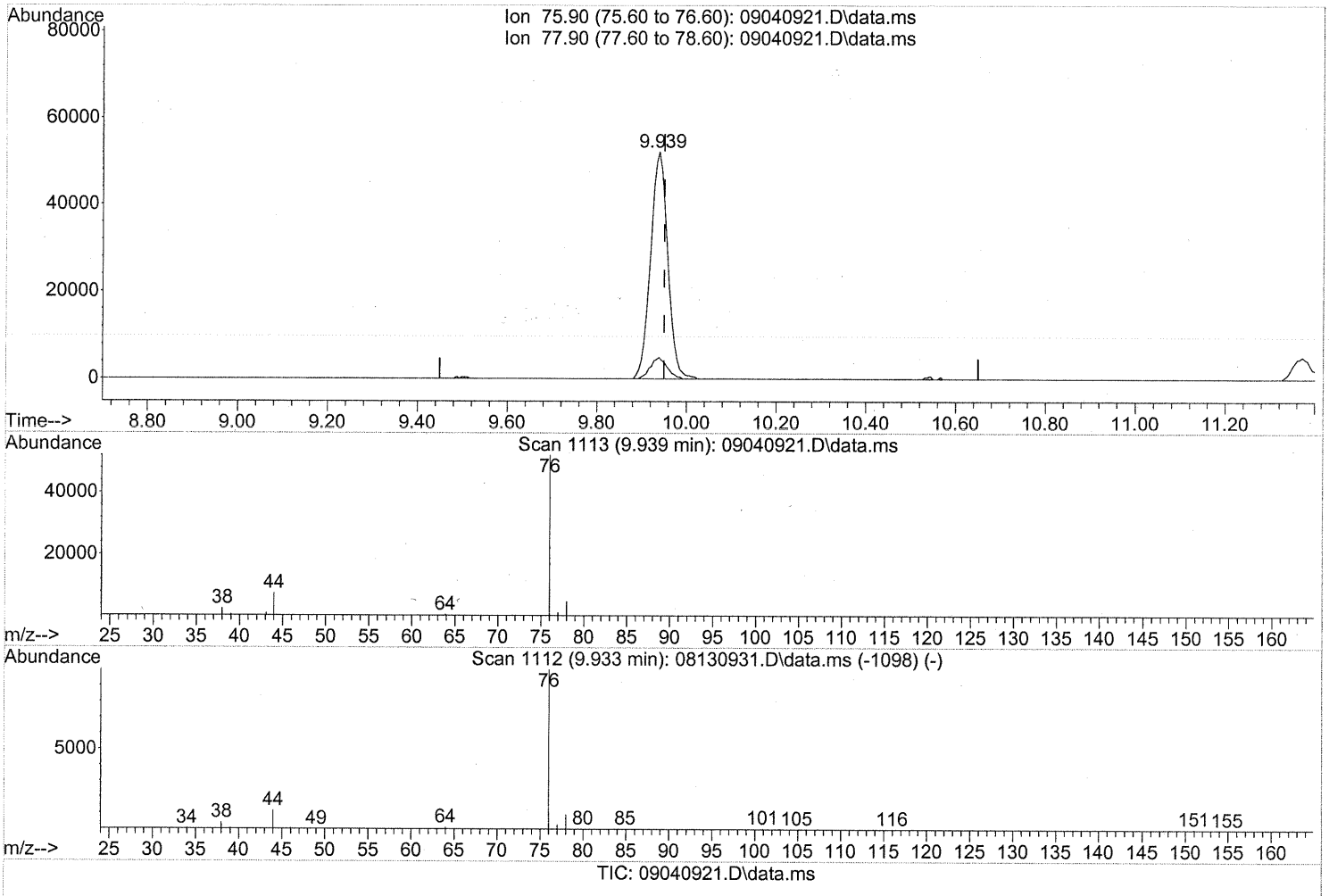
response 7008

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	126.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 1.57ng

response 138844

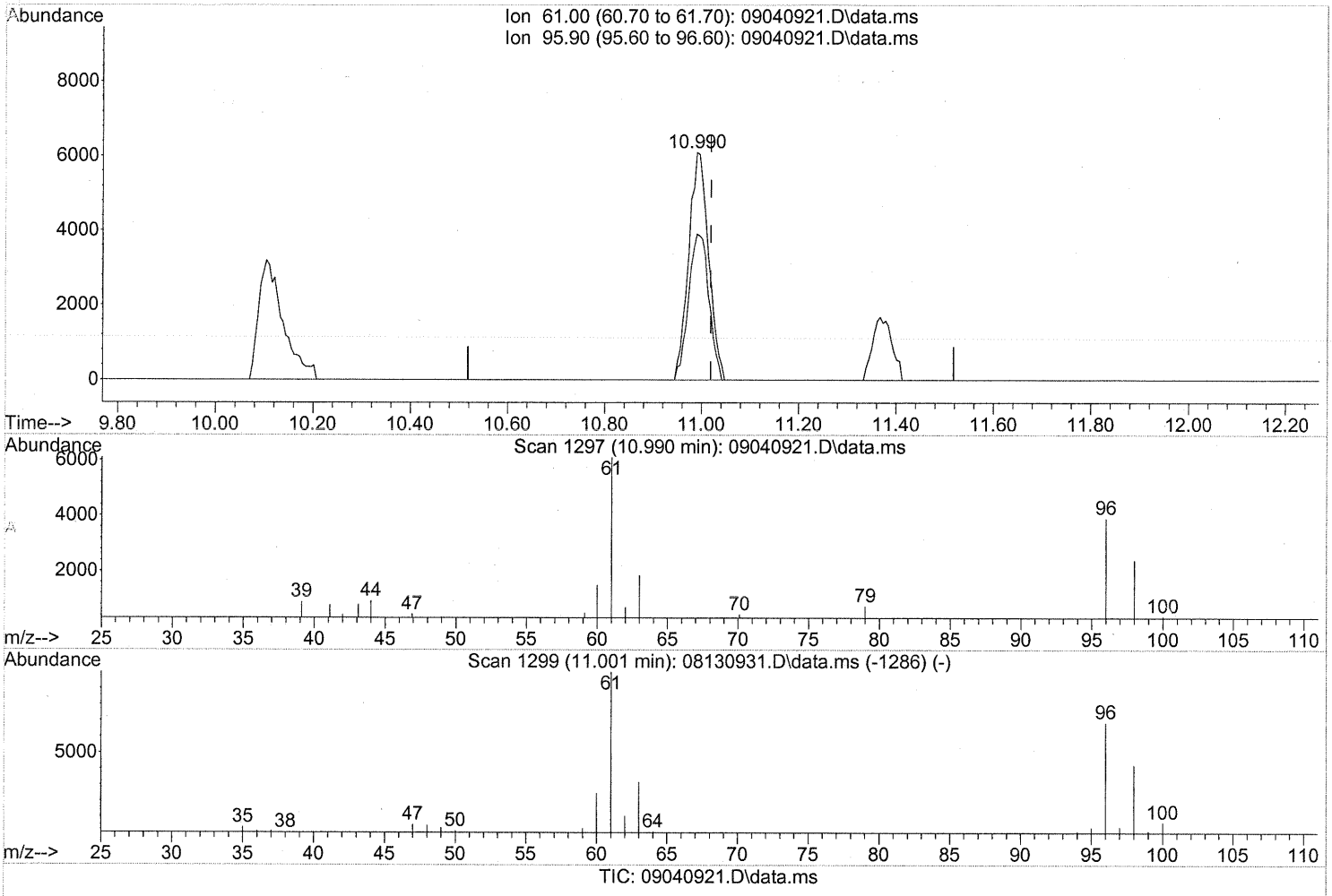
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	9.02
0.00	0.00	0.00
0.00	0.00	0.00

87

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(23) trans-1,2-Dichloroethene (T)

10.990min (-0.029) 0.50ng

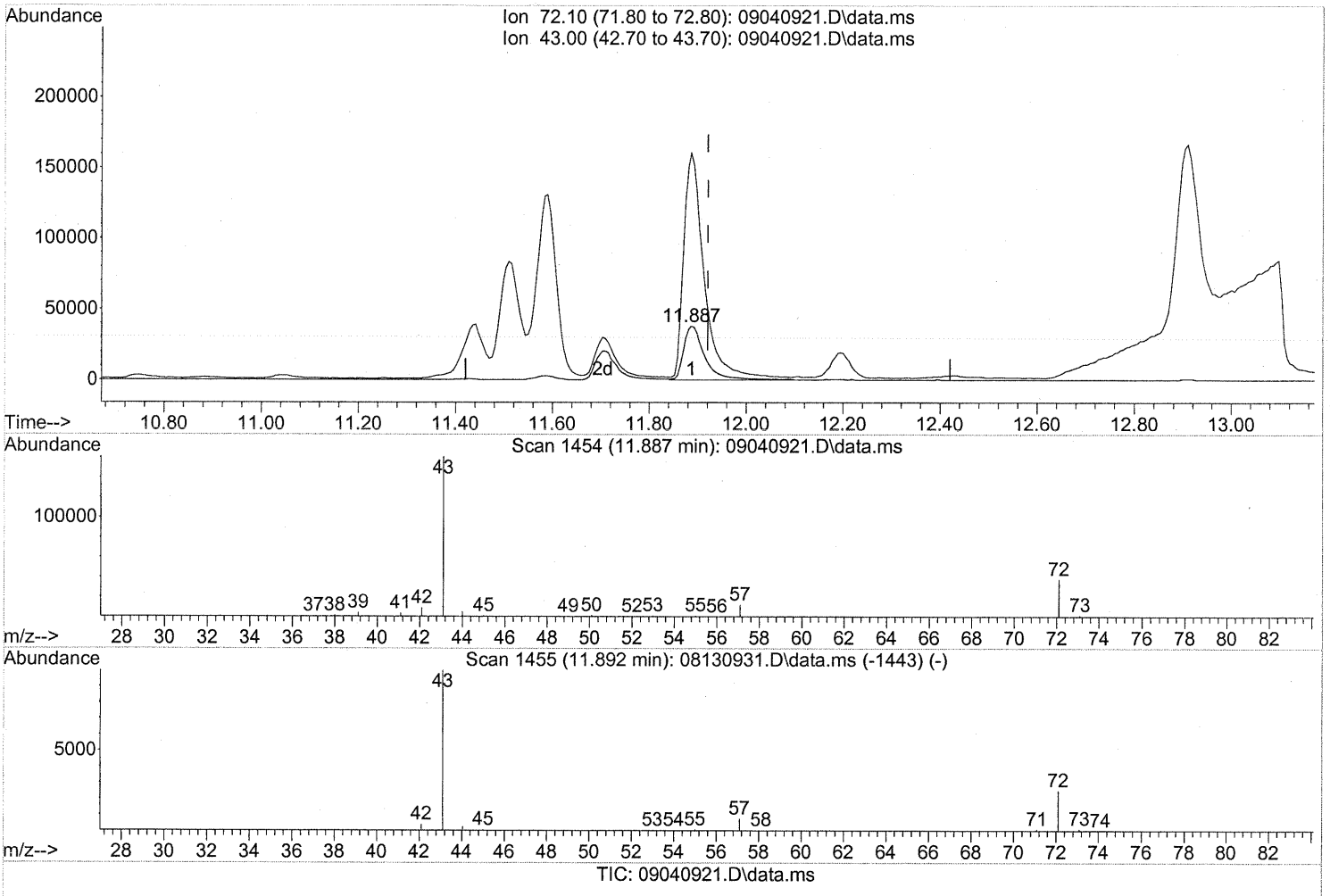
response 17249

Ion	Exp%	Act%
61.00	100	100
95.90	74.10	65.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

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

11.887min (-0.034) 8.05ng

response 113021

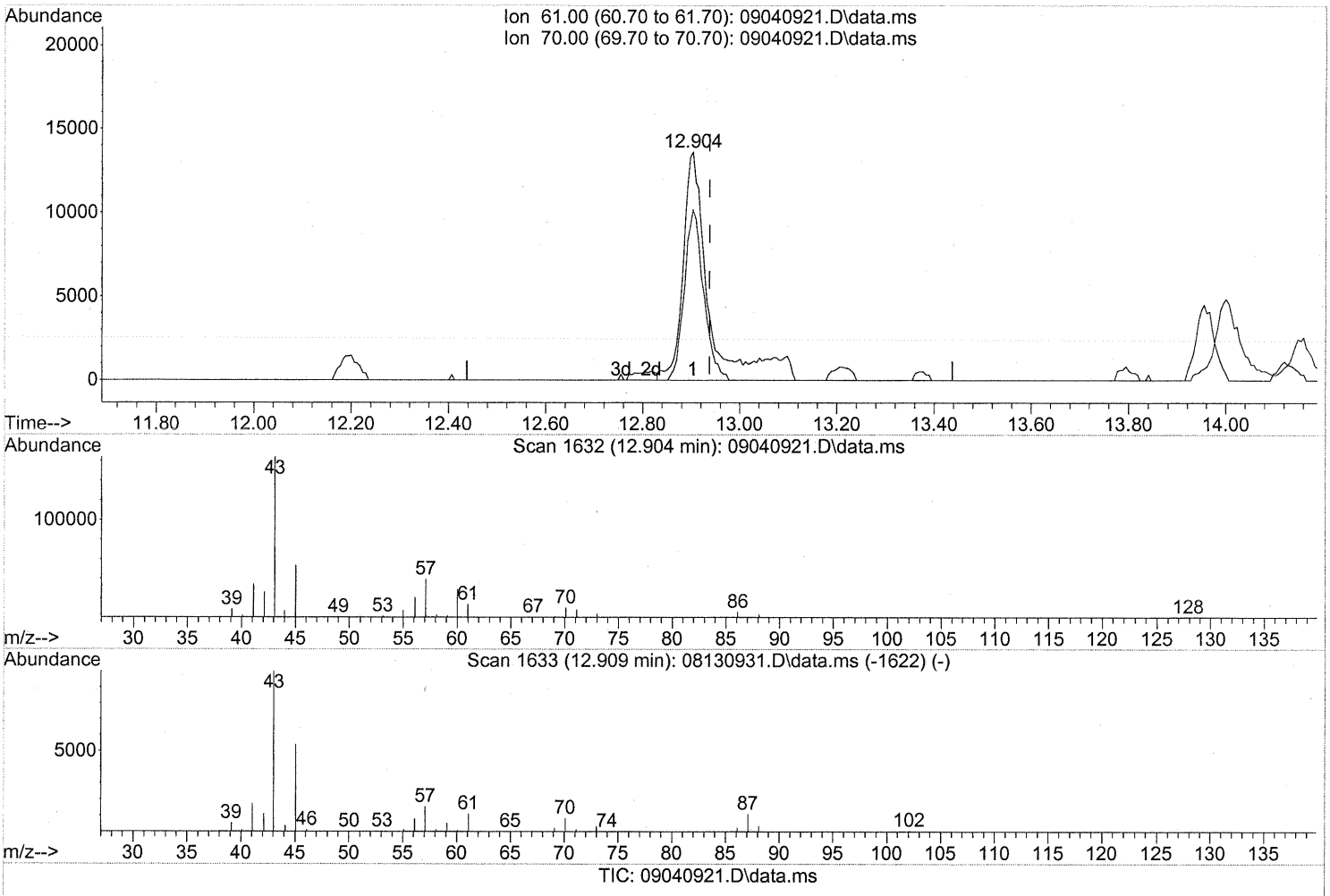
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	401.94#
0.00	0.00	0.00
0.00	0.00	0.00

89

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(30) Ethyl Acetate (T)

12.904min (-0.034) 5.57ng

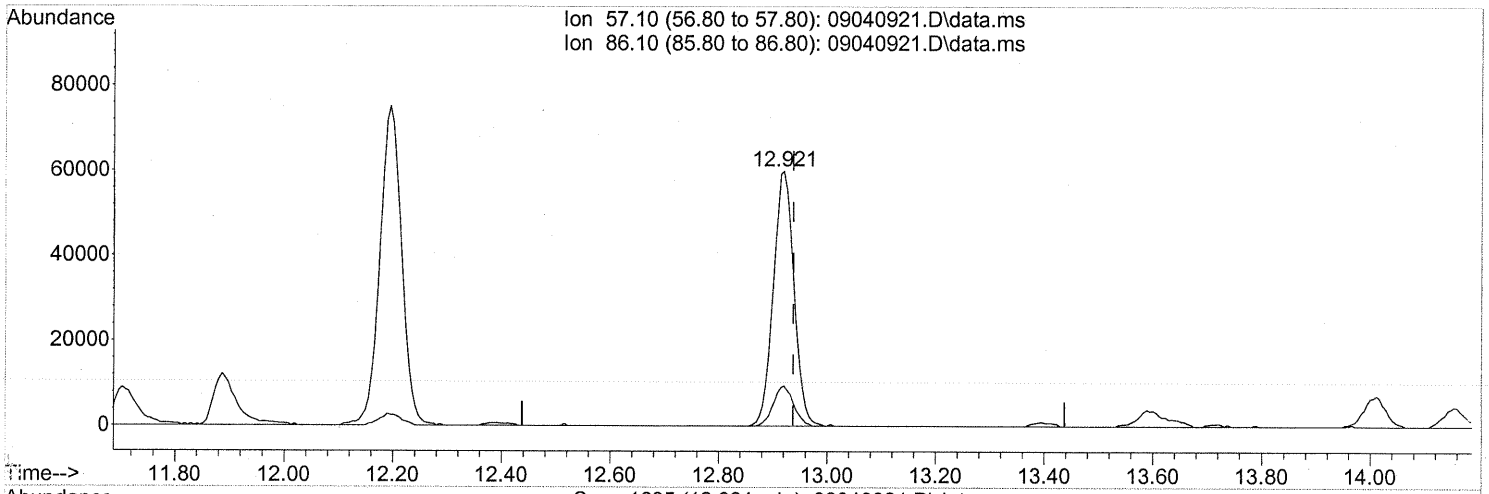
response 50745

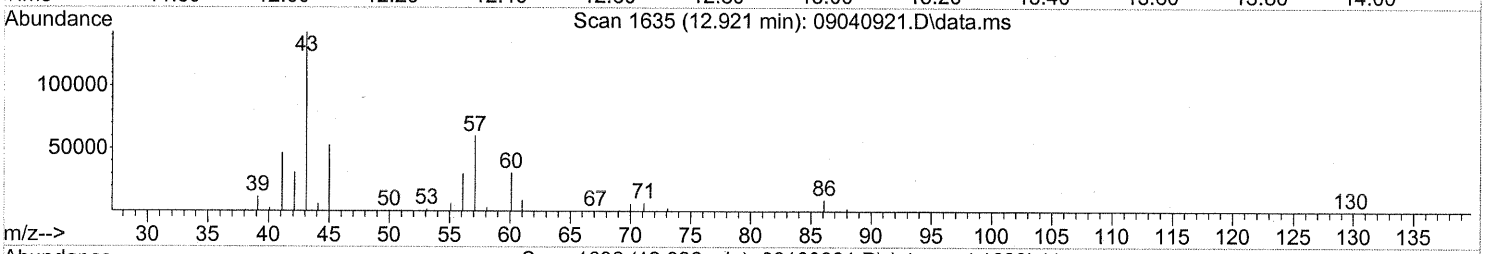
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	55.70#
0.00	0.00	0.00
0.00	0.00	0.00

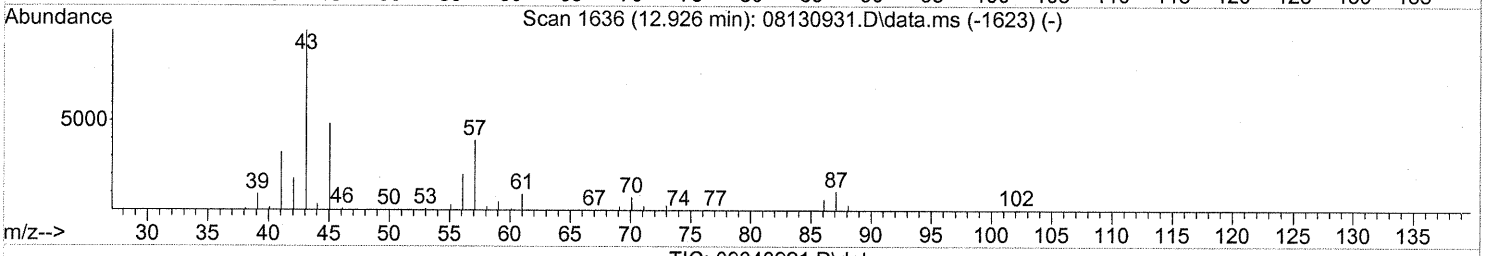
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(31) n-Hexane (T)

12.921min (-0.017) 3.55ng

response 157472

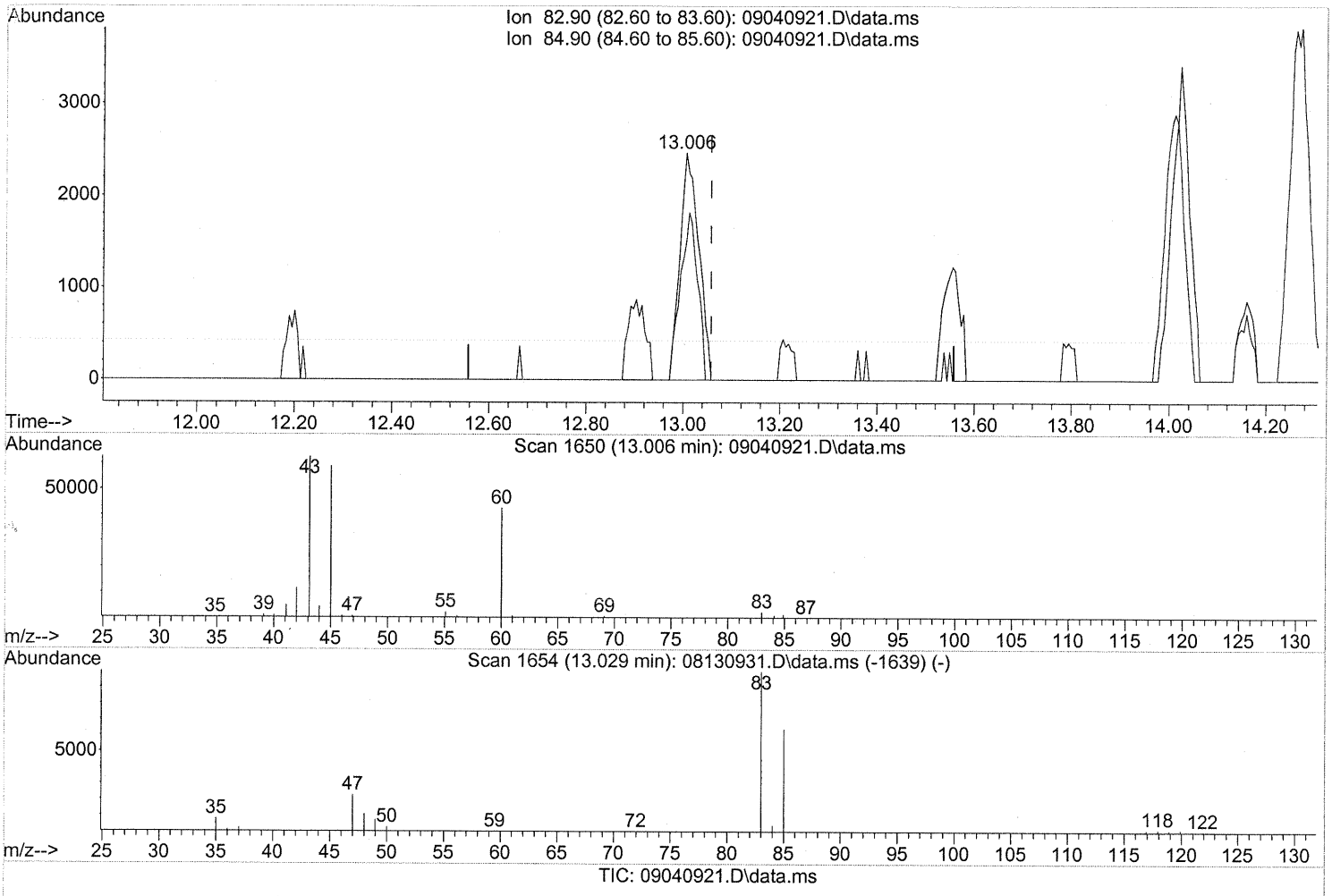
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.29
0.00	0.00	0.00
0.00	0.00	0.00

91

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(32) Chloroform (T)

13.006min (-0.051) 0.18ng

response 6667

before substr.

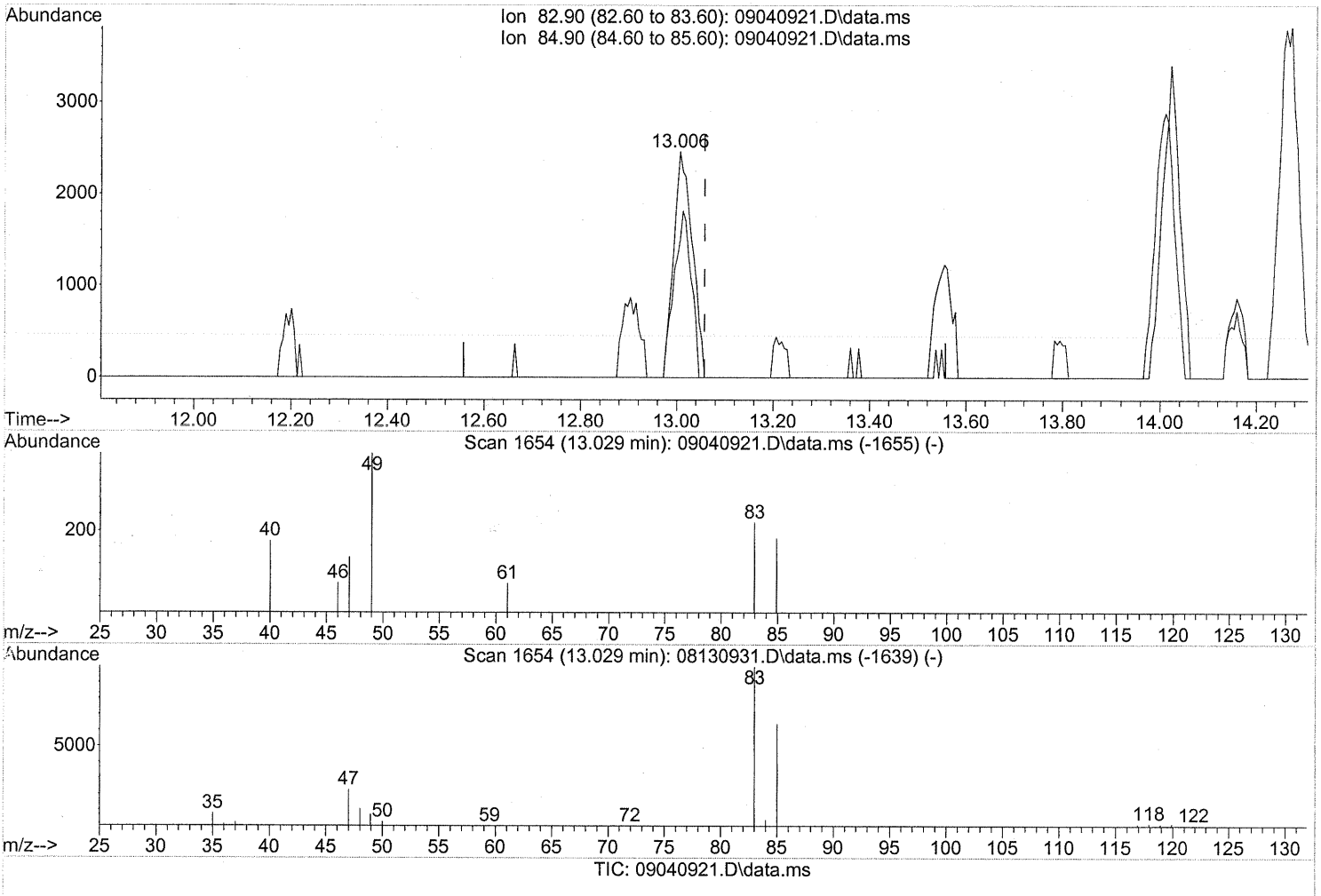
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	67.59
0.00	0.00	0.00
0.00	0.00	0.00

92

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(32) Chloroform (T)

13.006min (-0.051) 0.18ng

response 6667

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	67.59
0.00	0.00	0.00
0.00	0.00	0.00

after substr.

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9/16/09

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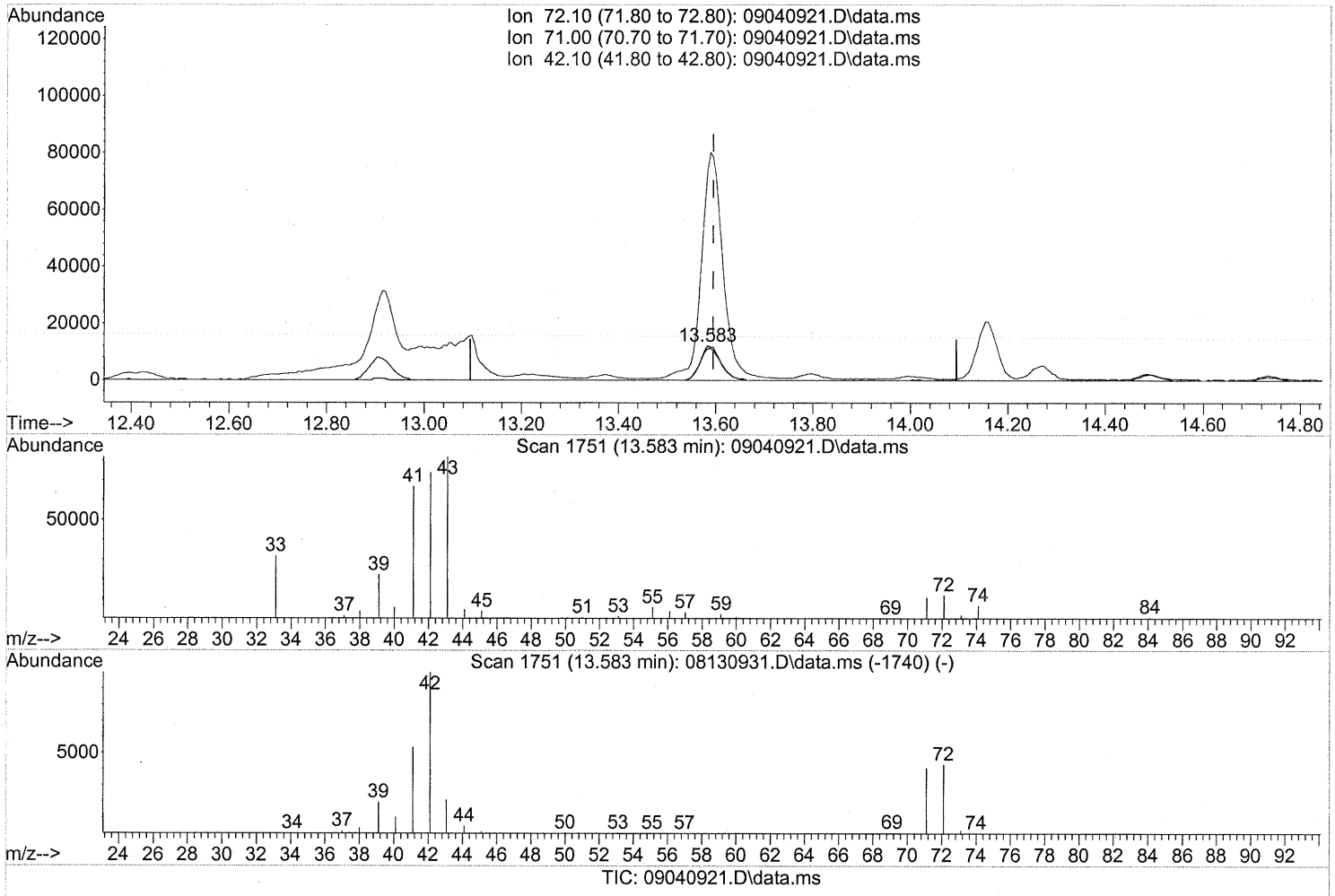
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.583min (-0.011) 2.39ng

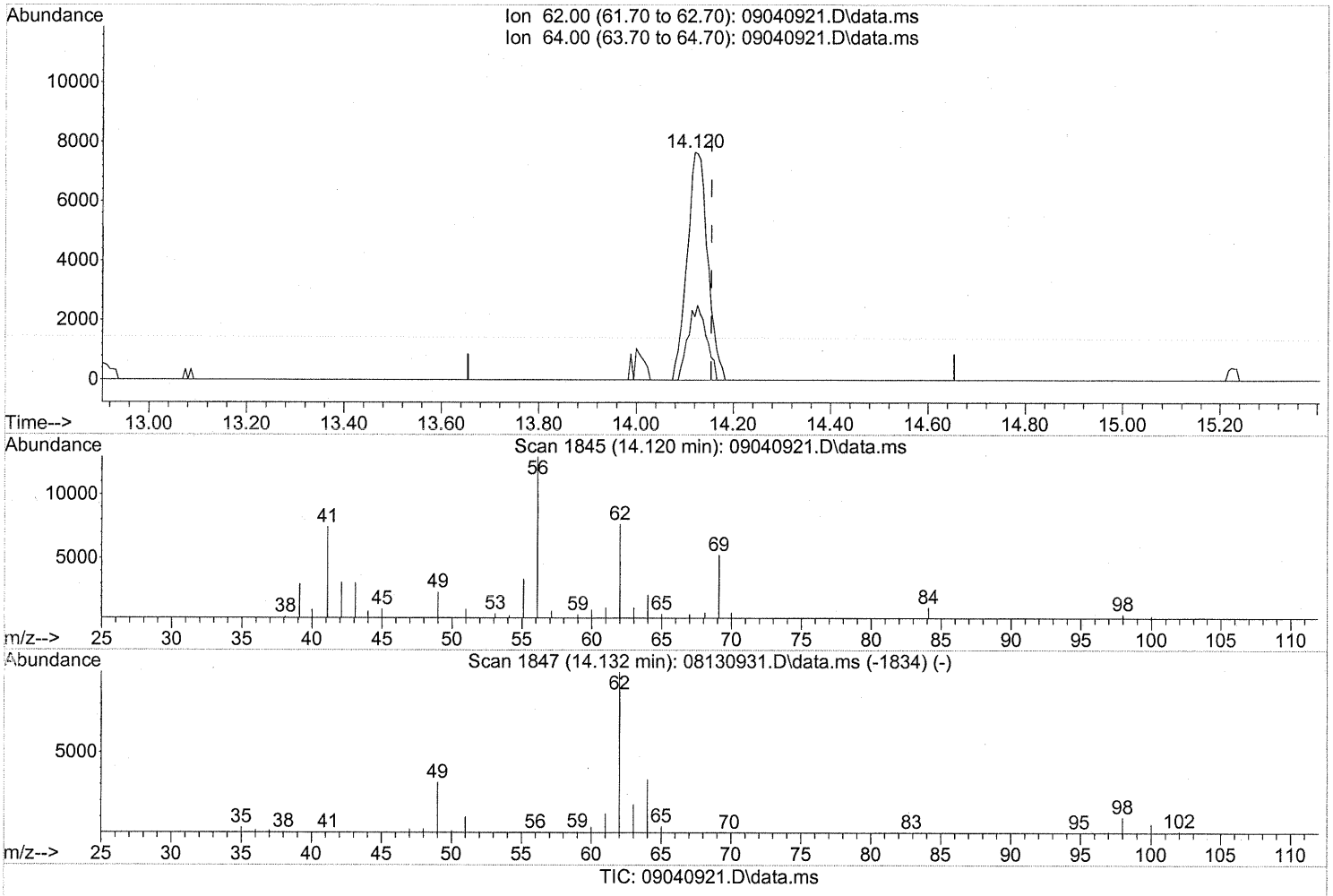
response 34953

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	94.12
42.10	206.50	696.13#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(36) 1,2-Dichloroethane (T)

14.120min (-0.034) 0.79ng

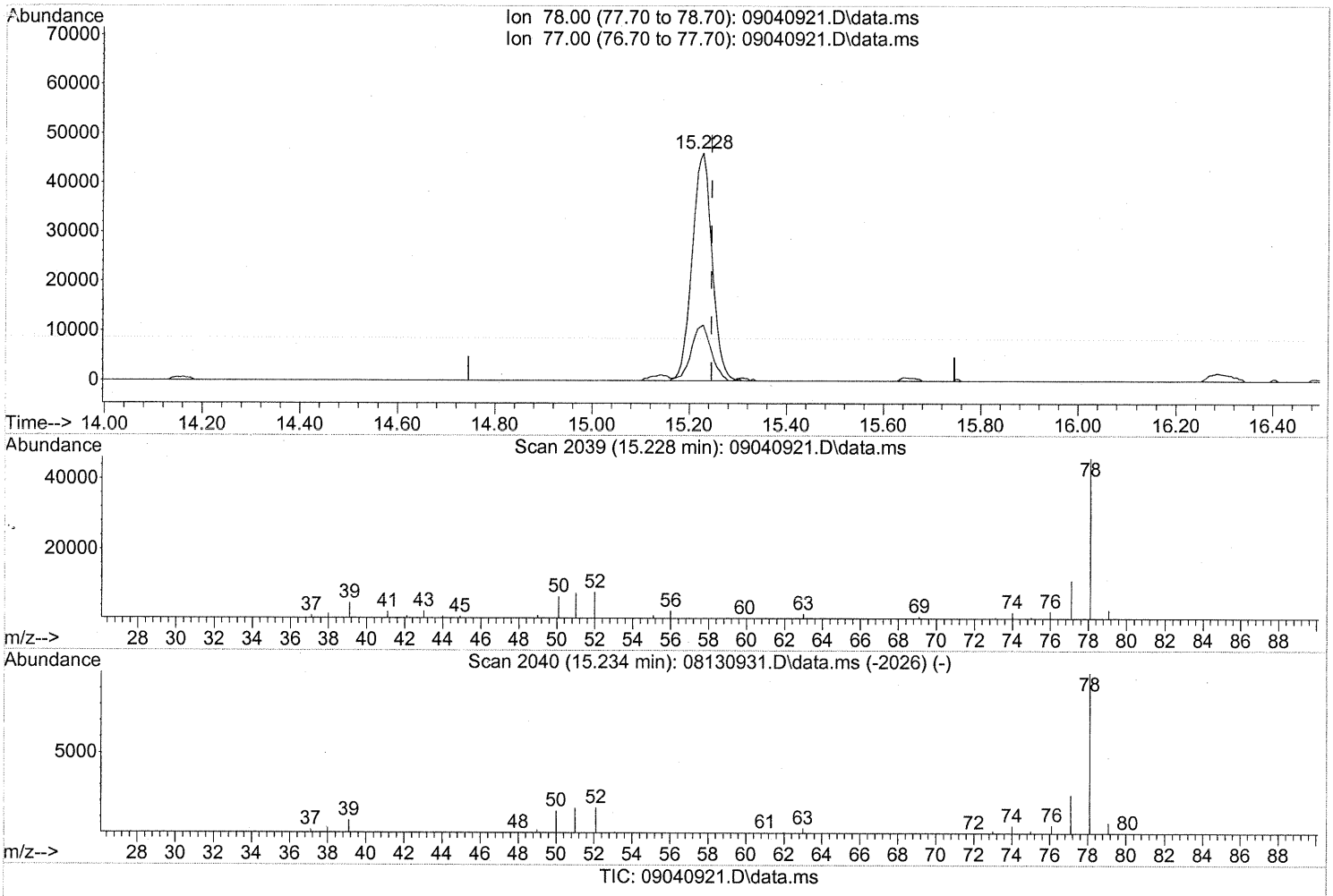
response 22512

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	29.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(41) Benzene (T)

15.228min (-0.017) 1.33ng

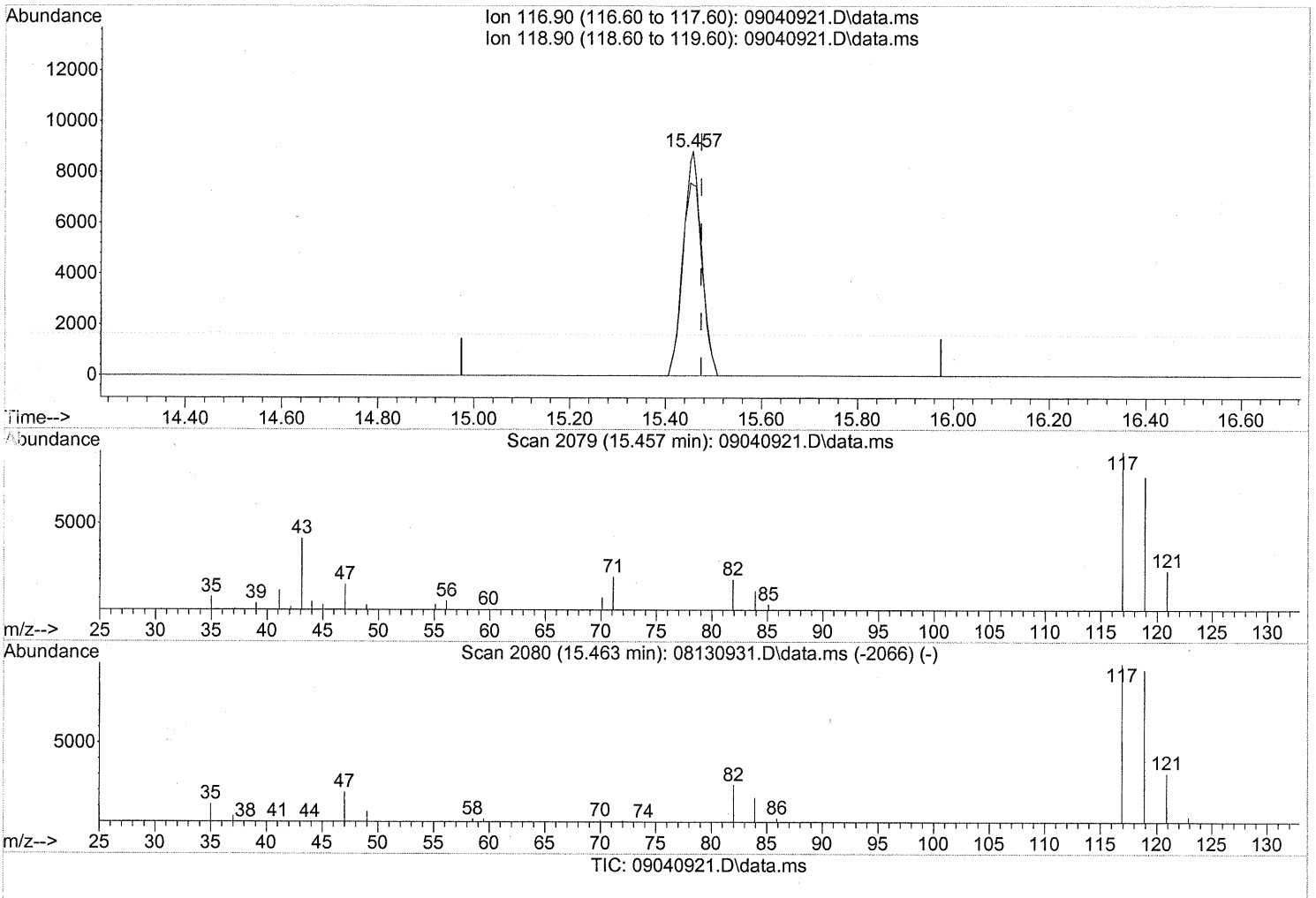
response 130390

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.85ng

response 23414

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	93.97
0.00	0.00	0.00
0.00	0.00	0.00

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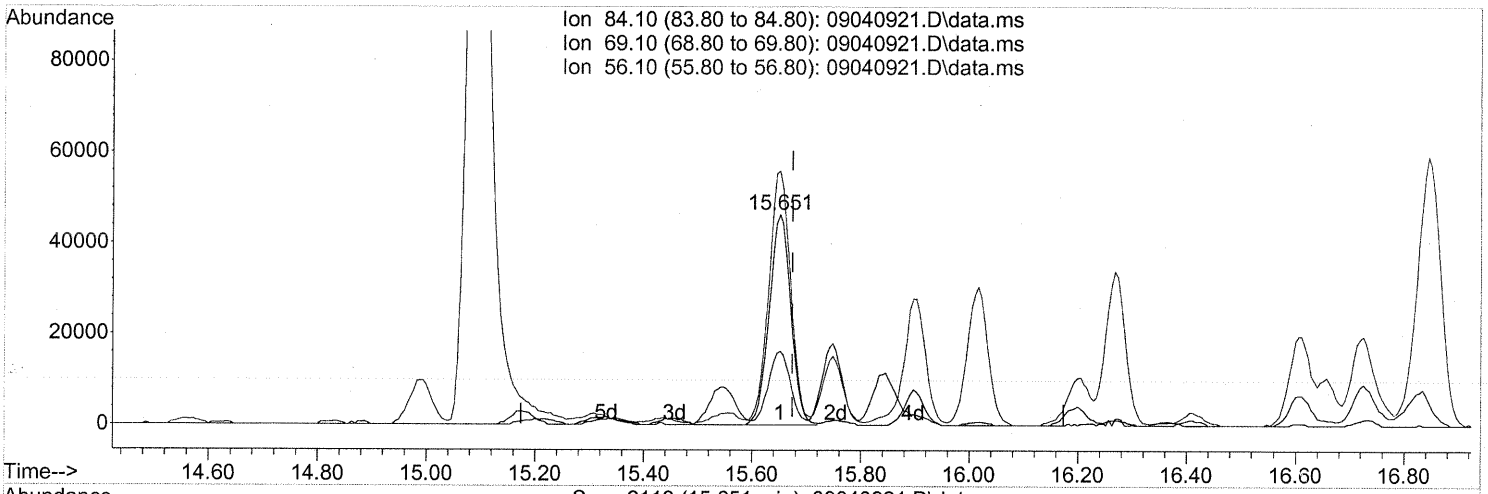
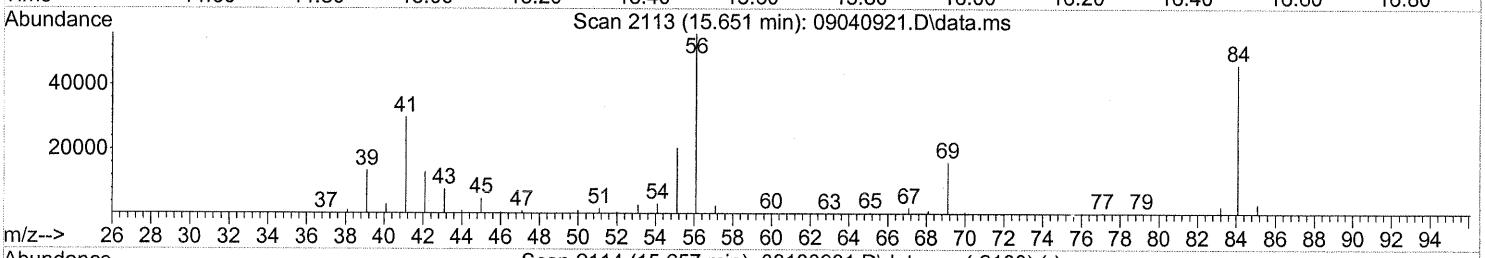
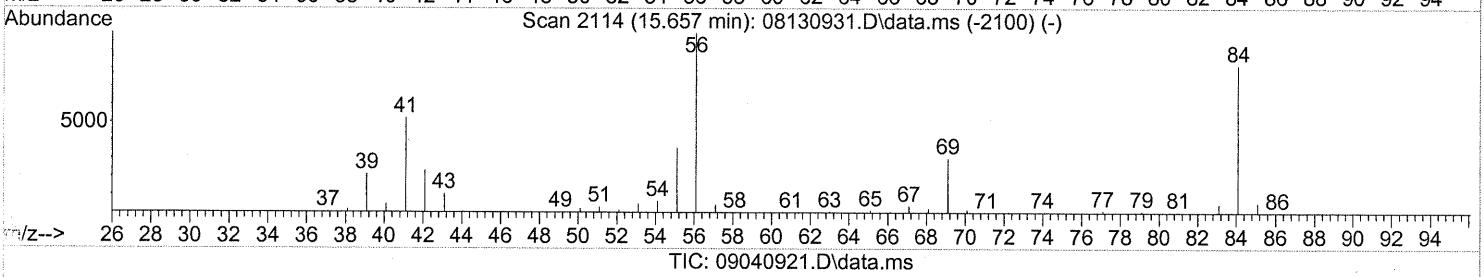
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 3.35ng

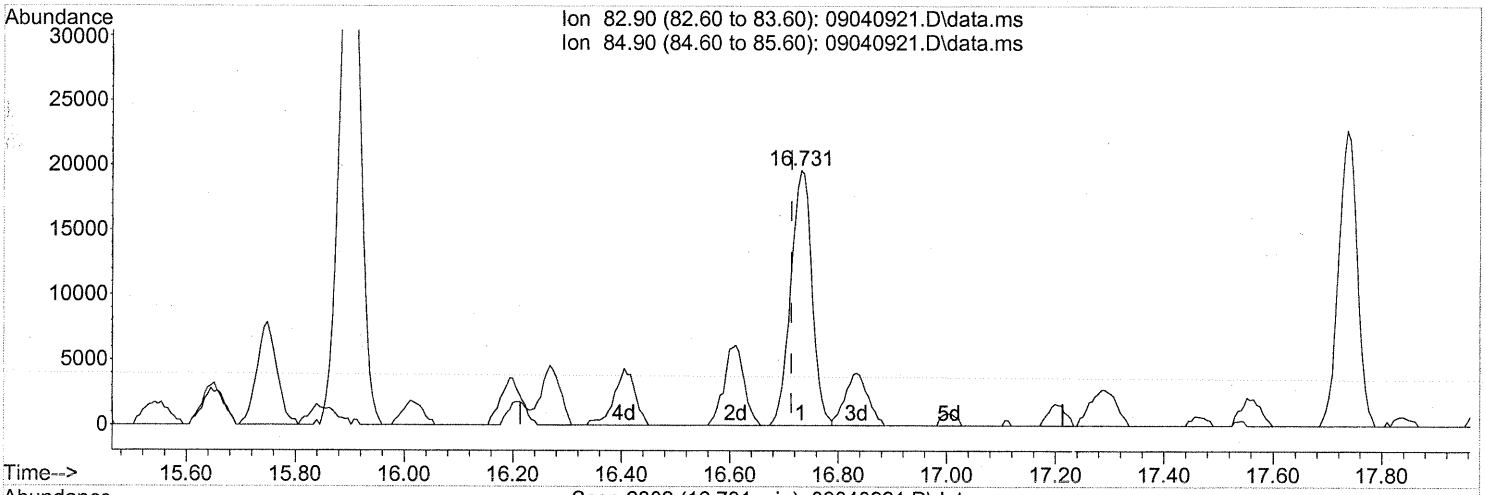
response 127548

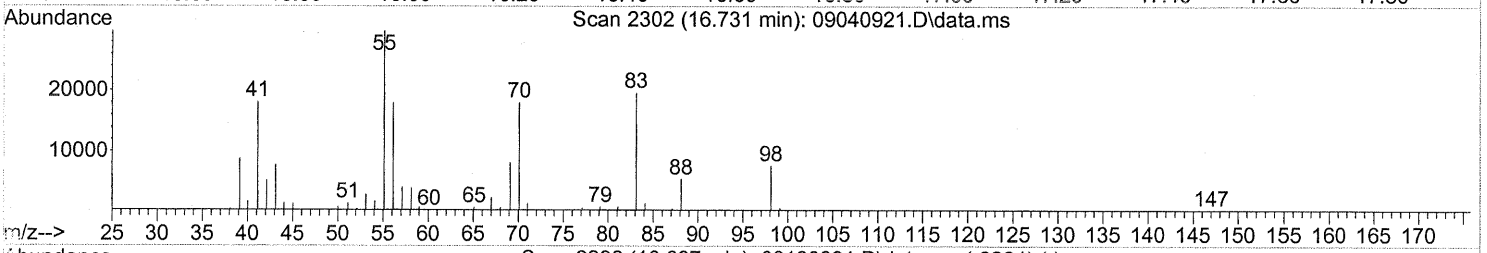
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.17
56.10	107.30	121.58
0.00	0.00	0.00

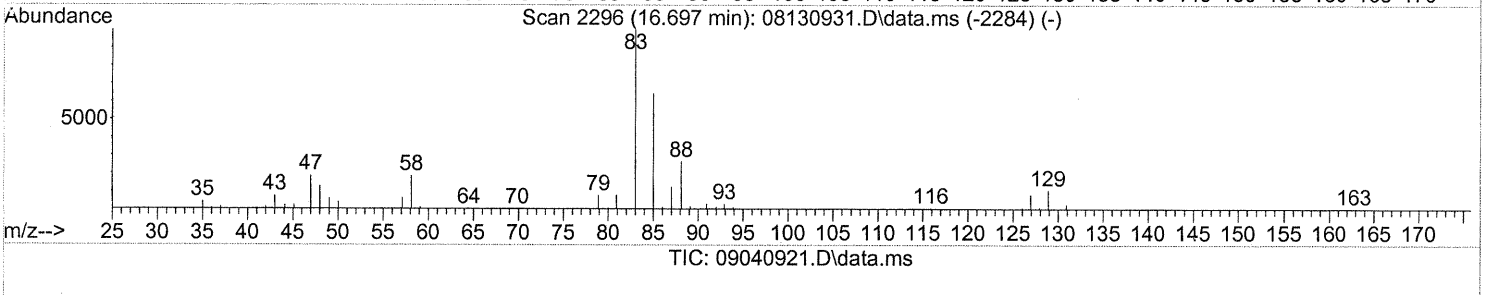
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(46) Bromodichloromethane (T)

16.731min (+0.017) 1.85ng

response 53349

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

FP

10A 9/15/09

9/16/09

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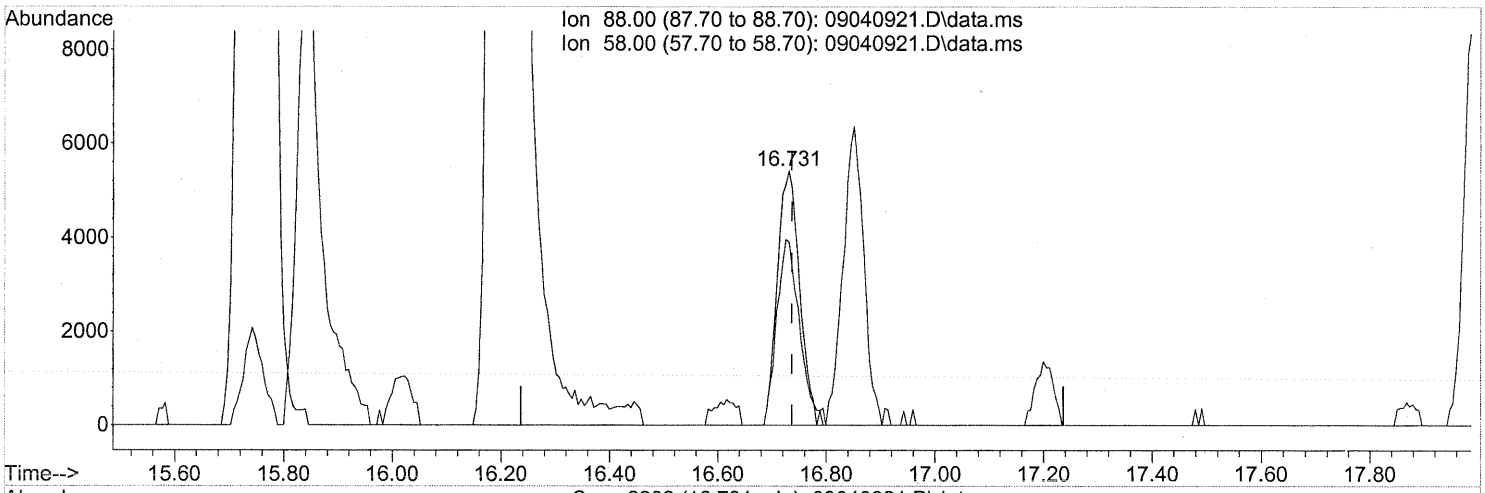
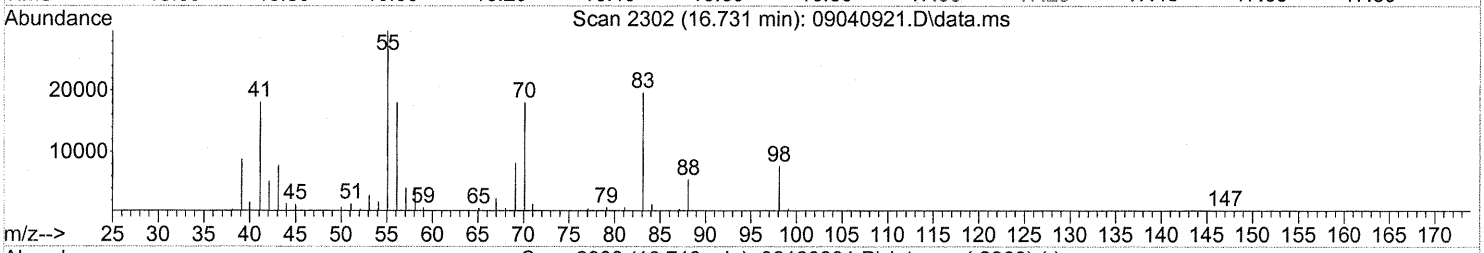
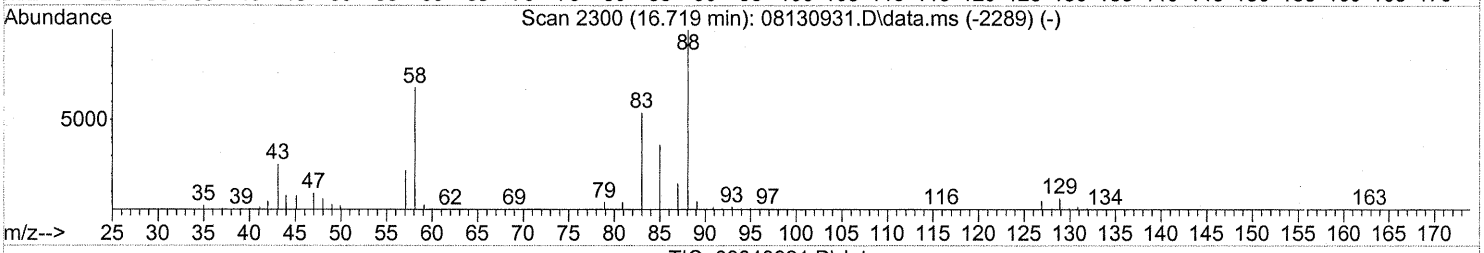
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(48) 1,4-Dioxane (T)

16.731min (-0.006) 0.89ng

response 15502

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	74.97
0.00	0.00	0.00
0.00	0.00	0.00

TP

9/15/09

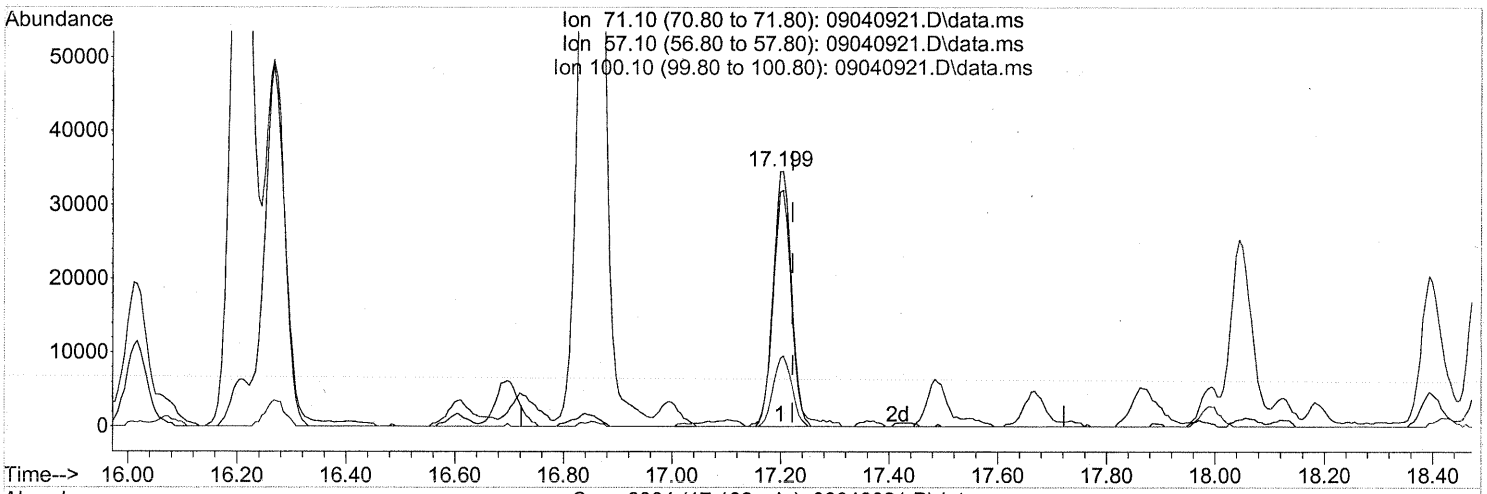
9/16/09

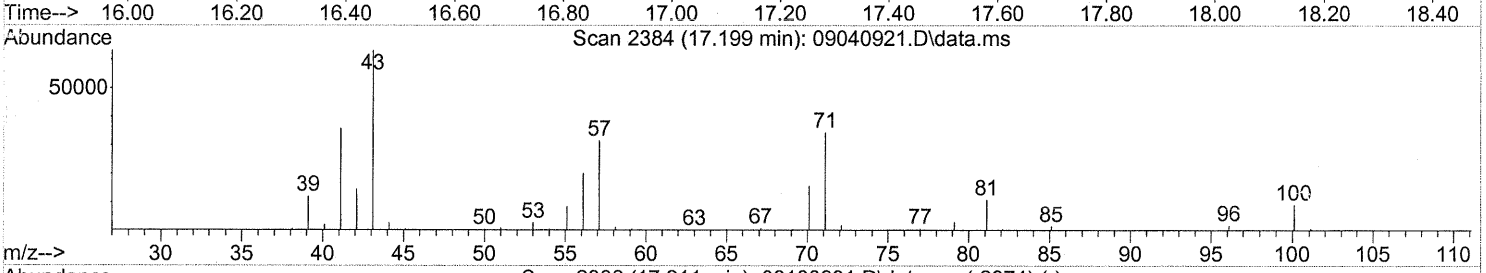
100

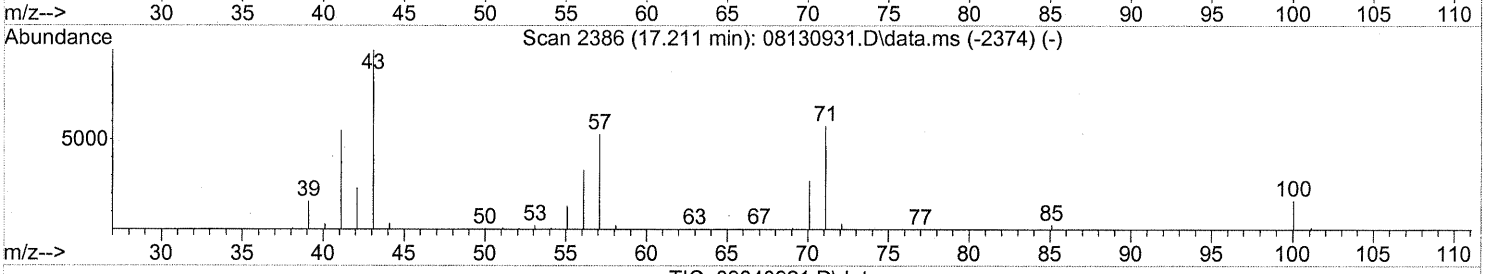
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(51) n-Heptane (T)

17.199min (-0.023) 3.08ng

response 80544

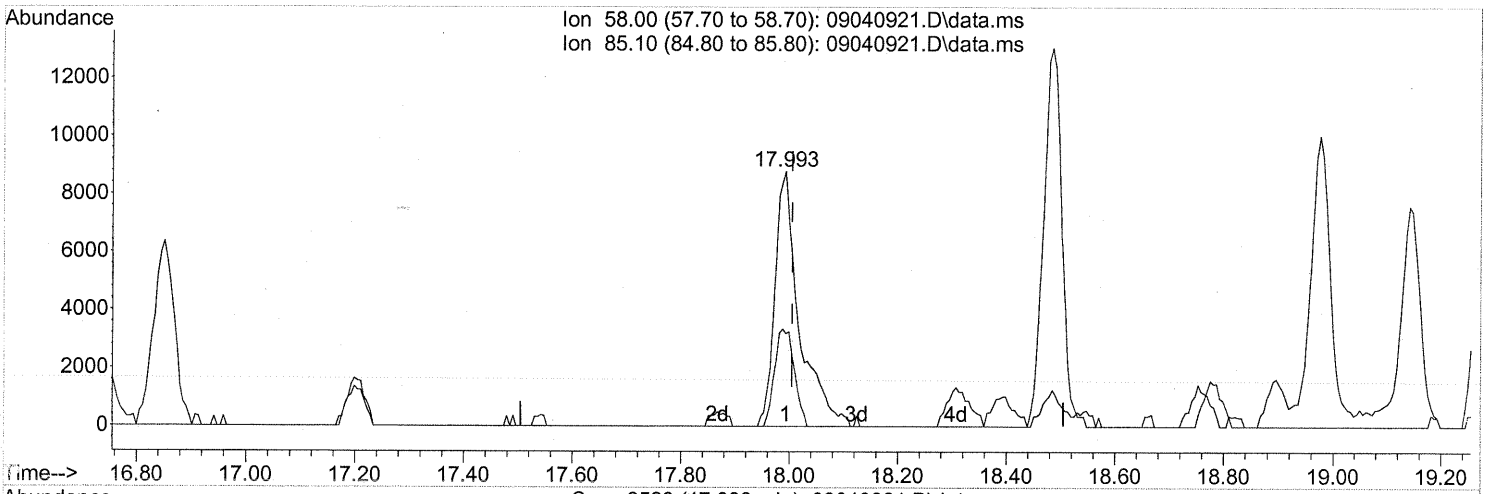
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	95.73
100.10	30.70	28.03
0.00	0.00	0.00

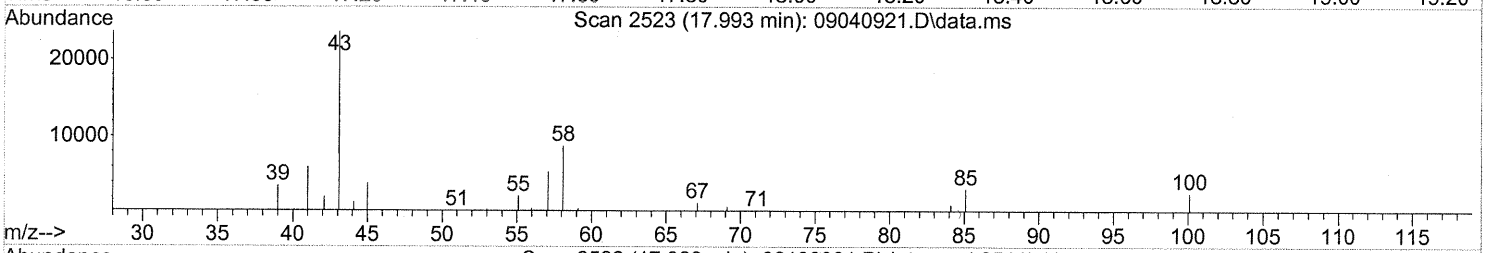
101

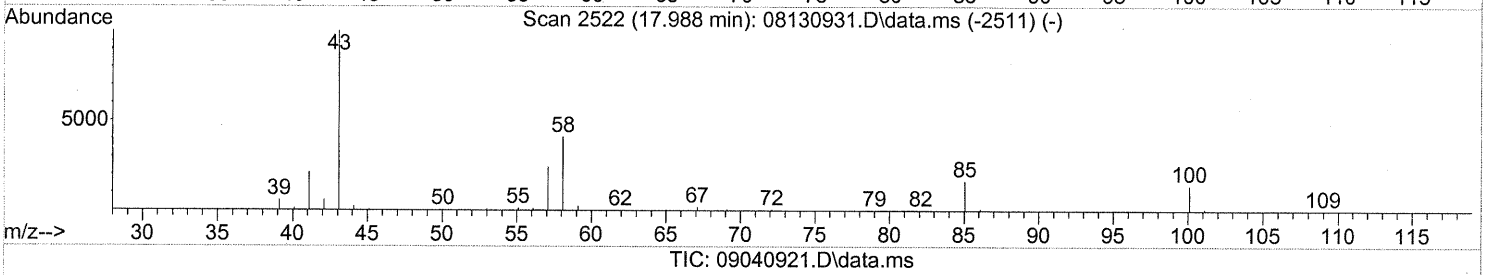
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

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

17.993min (-0.012) 1.28ng

response 27224

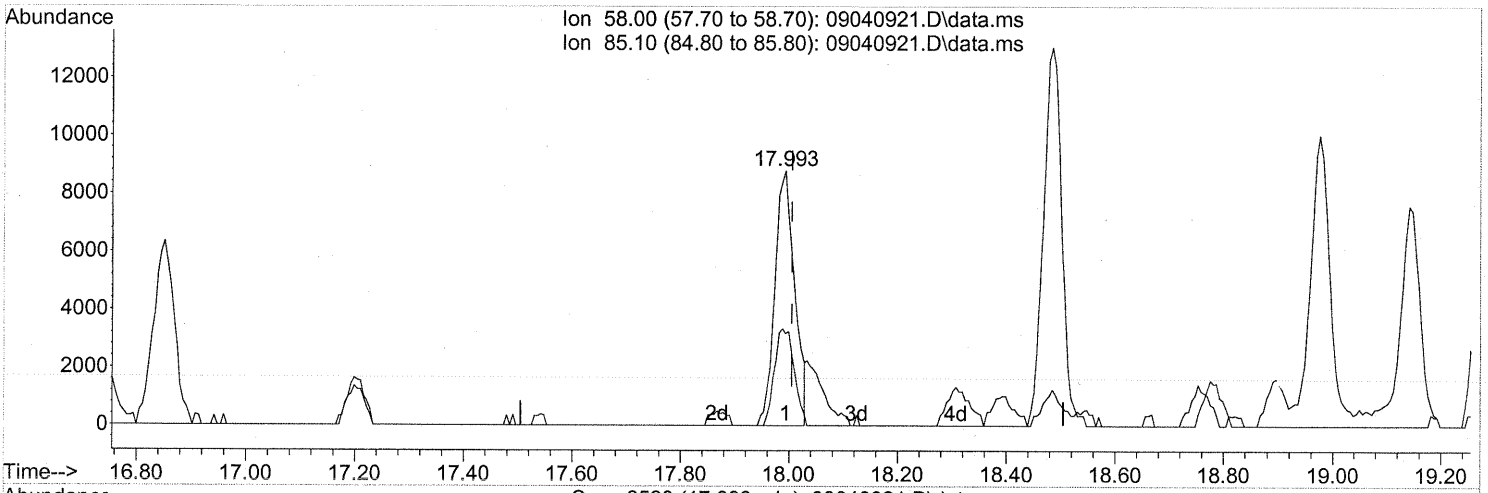
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	30.74
0.00	0.00	0.00
0.00	0.00	0.00

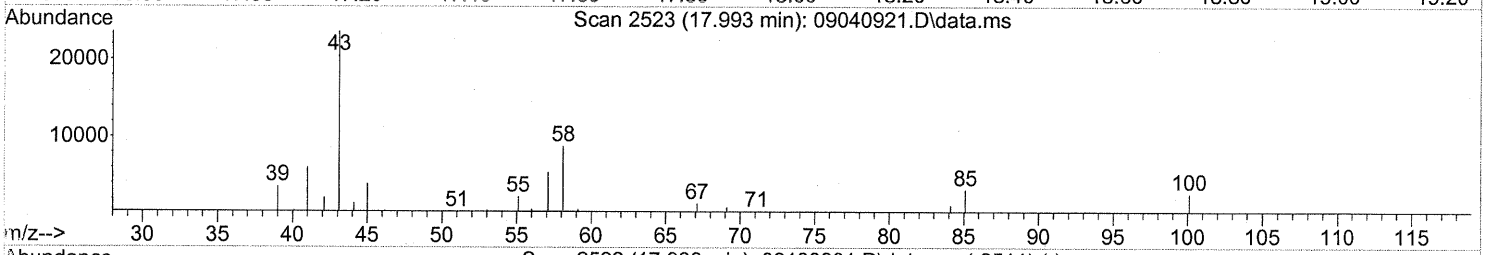
102

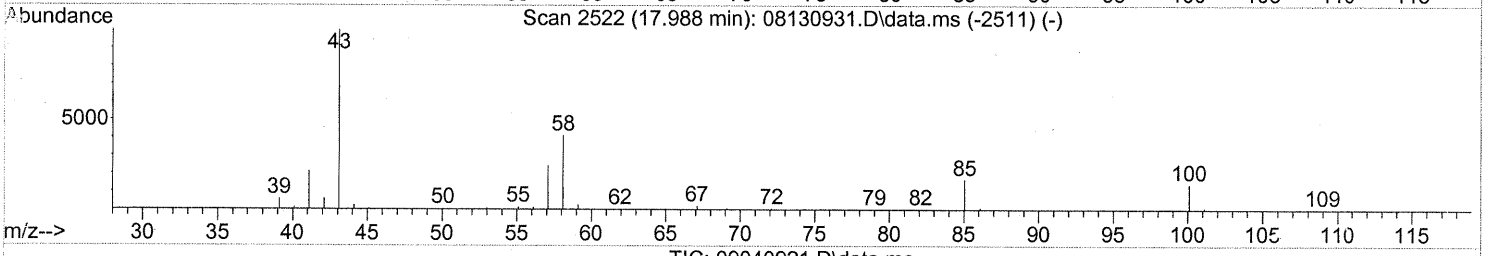
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

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

17.993min (-0.012) 1.04ng m

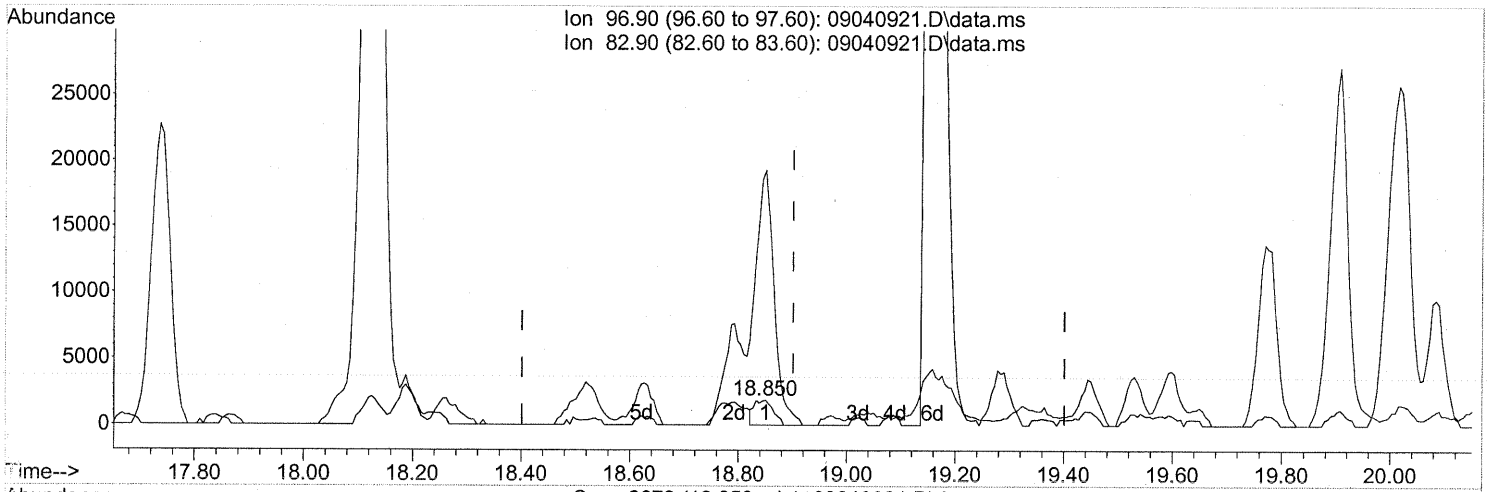
response 22125

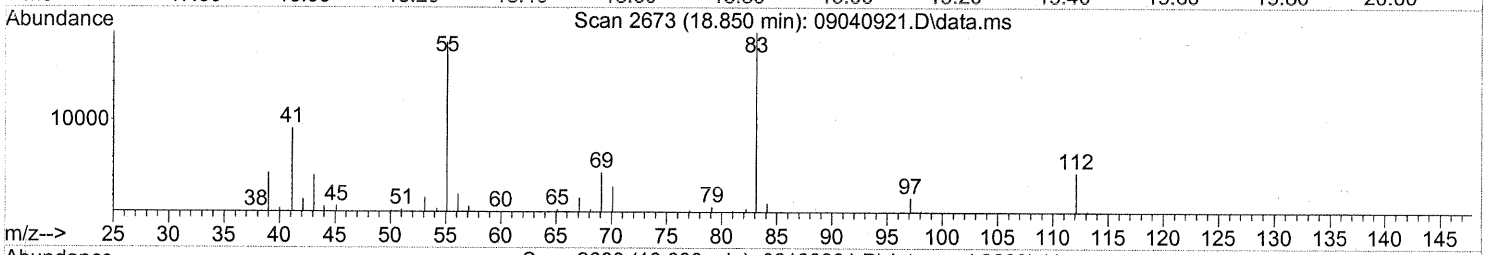
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	37.83
0.00	0.00	0.00
0.00	0.00	0.00

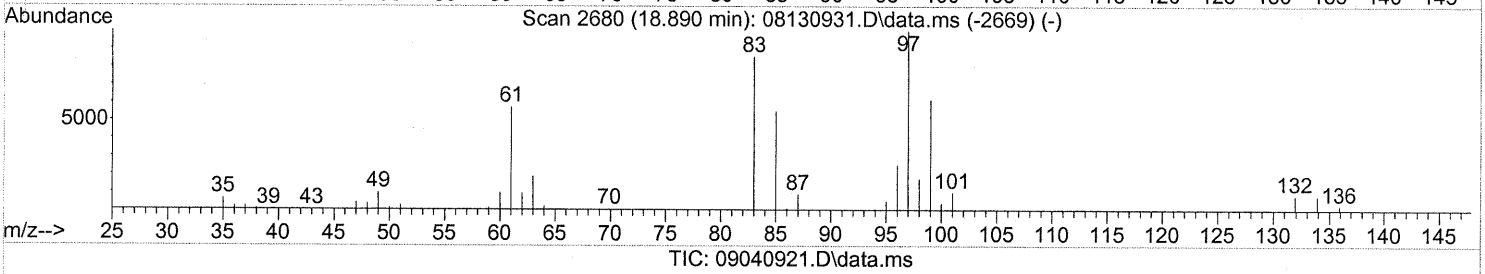
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

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

18.850min (-0.051) 0.22ng

response 4520

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1023.08#
0.00	0.00	0.00
0.00	0.00	0.00

FP

9/15/09

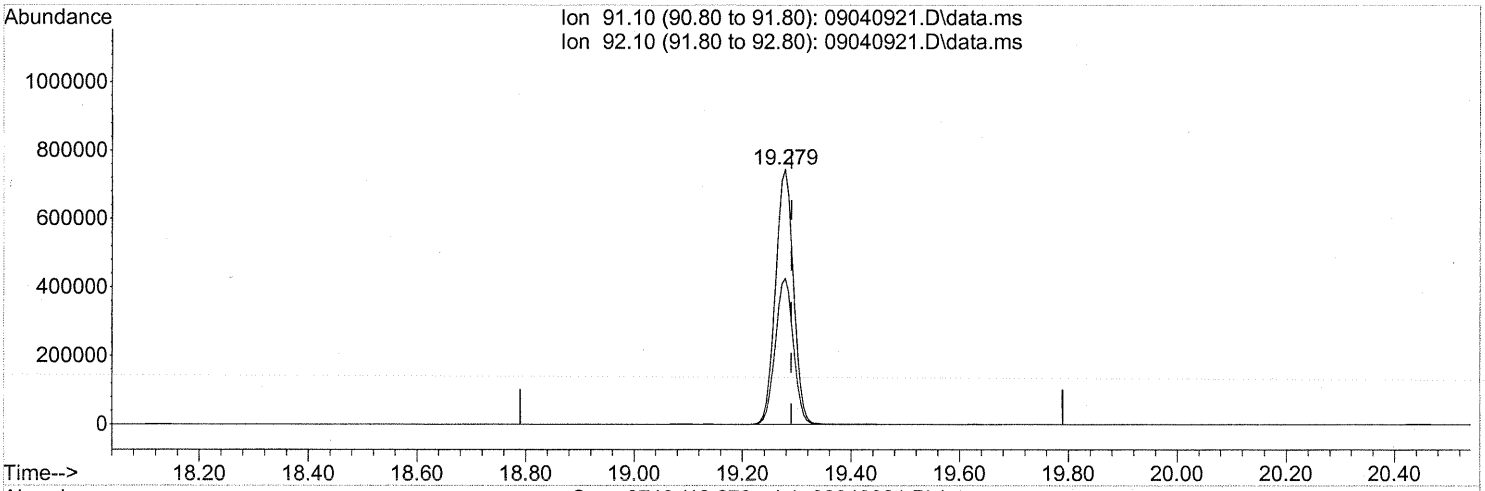
9/16/09

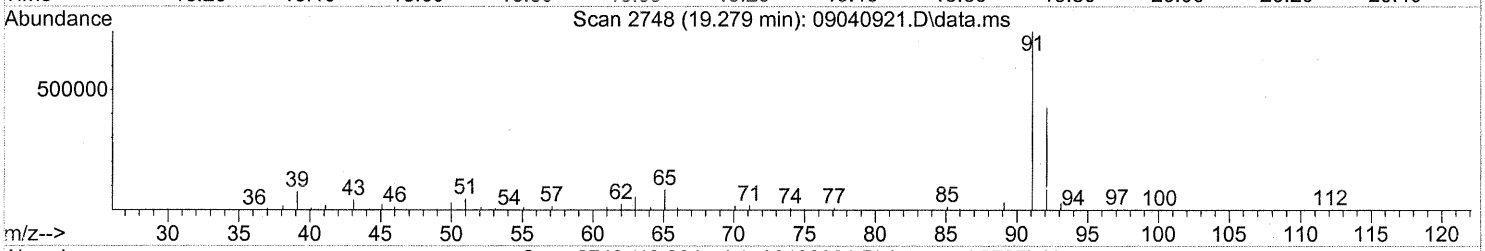
104

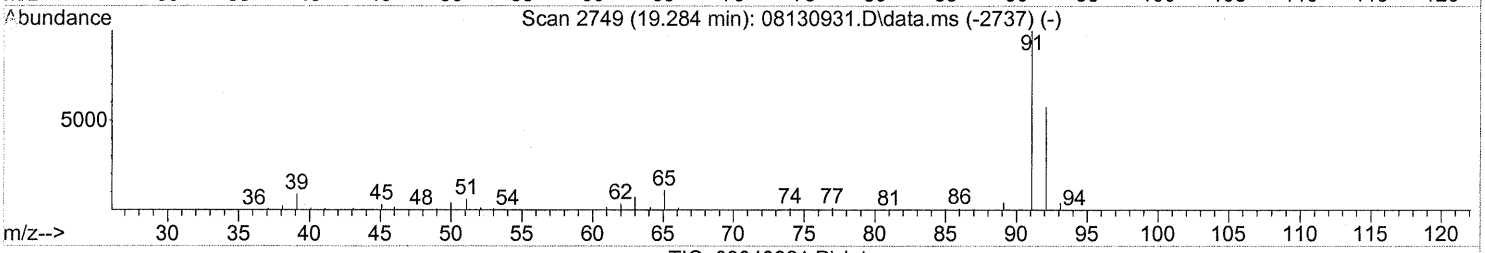
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 16.40ng

response 1688763

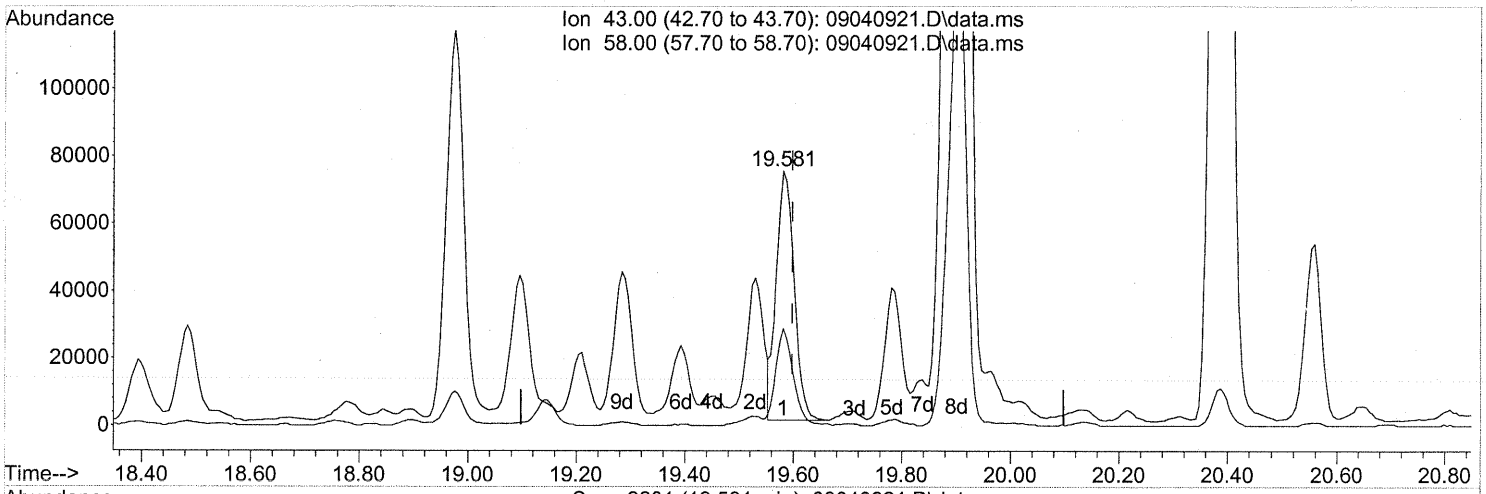
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.47
0.00	0.00	0.00
0.00	0.00	0.00

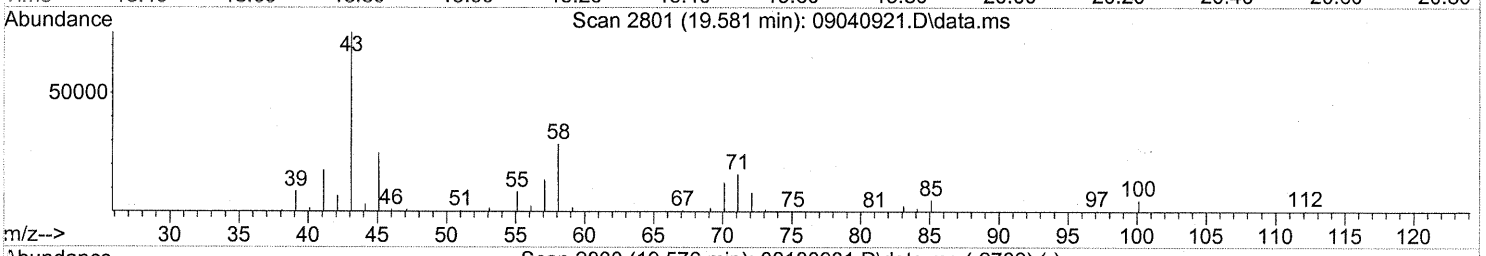
105

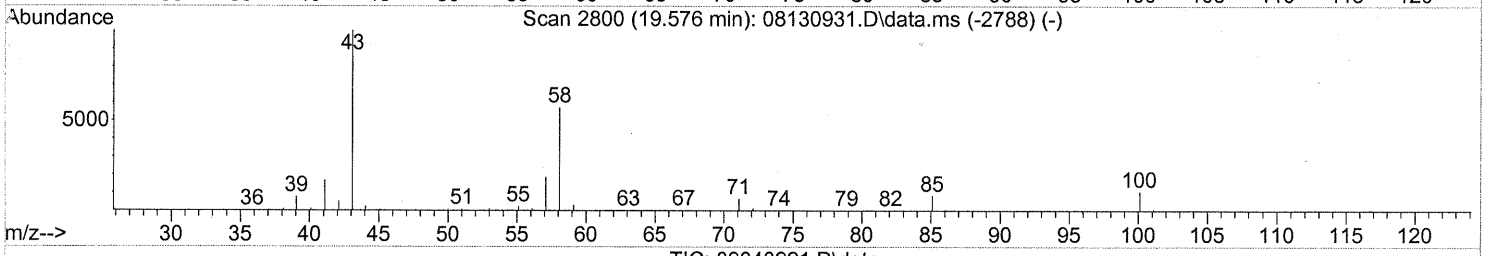
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(59) 2-Hexanone (T)

19.581min (-0.017) 3.13ng

response 167709

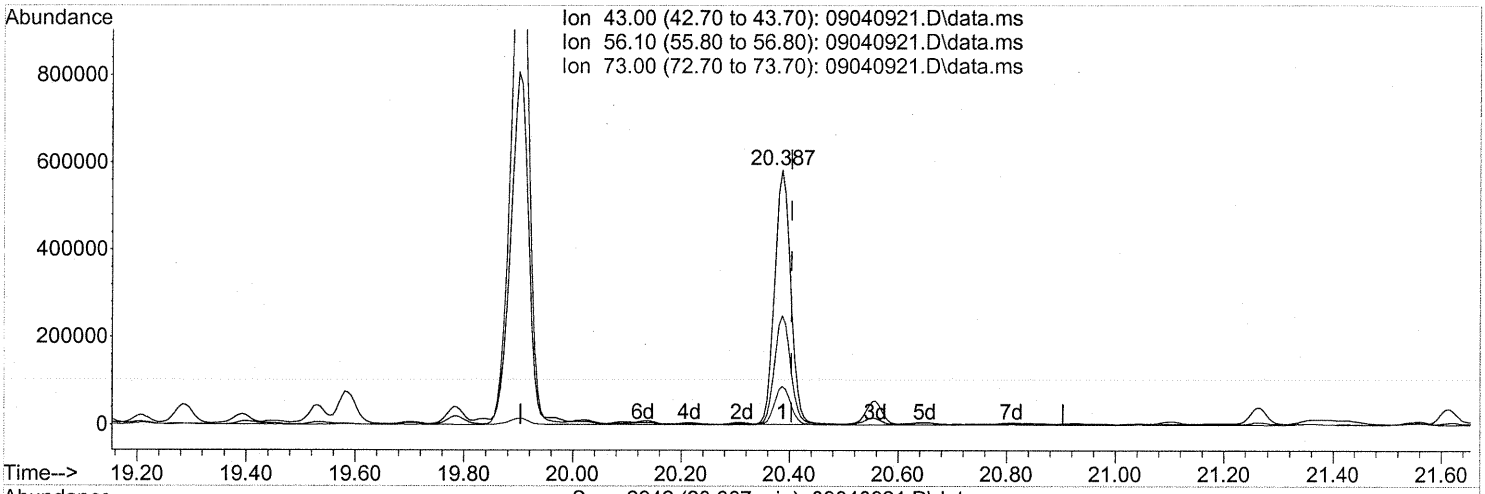
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	38.41
0.00	0.00	0.00
0.00	0.00	0.00

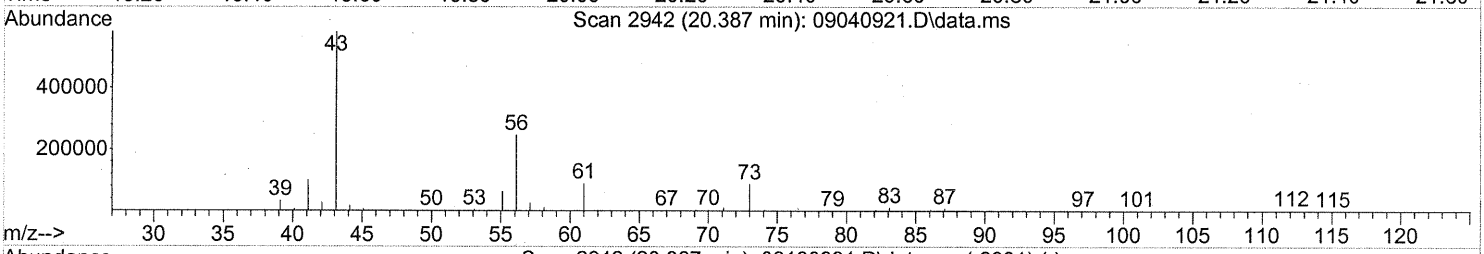
106

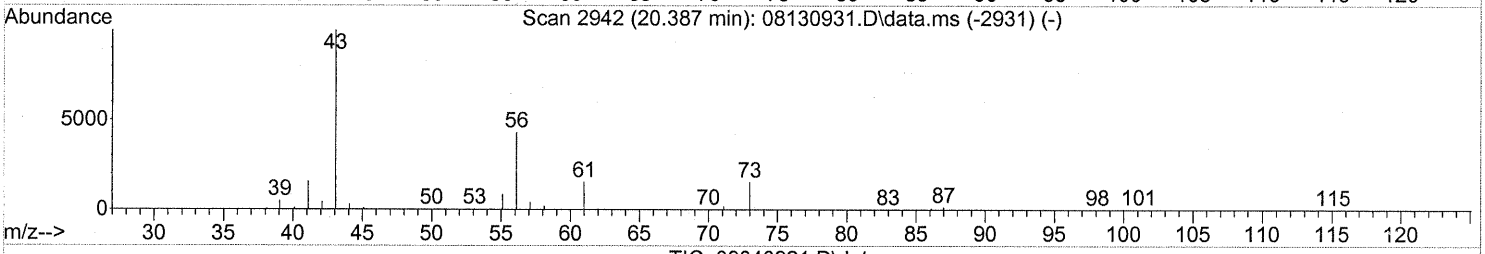
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 20.40ng

response 1191140

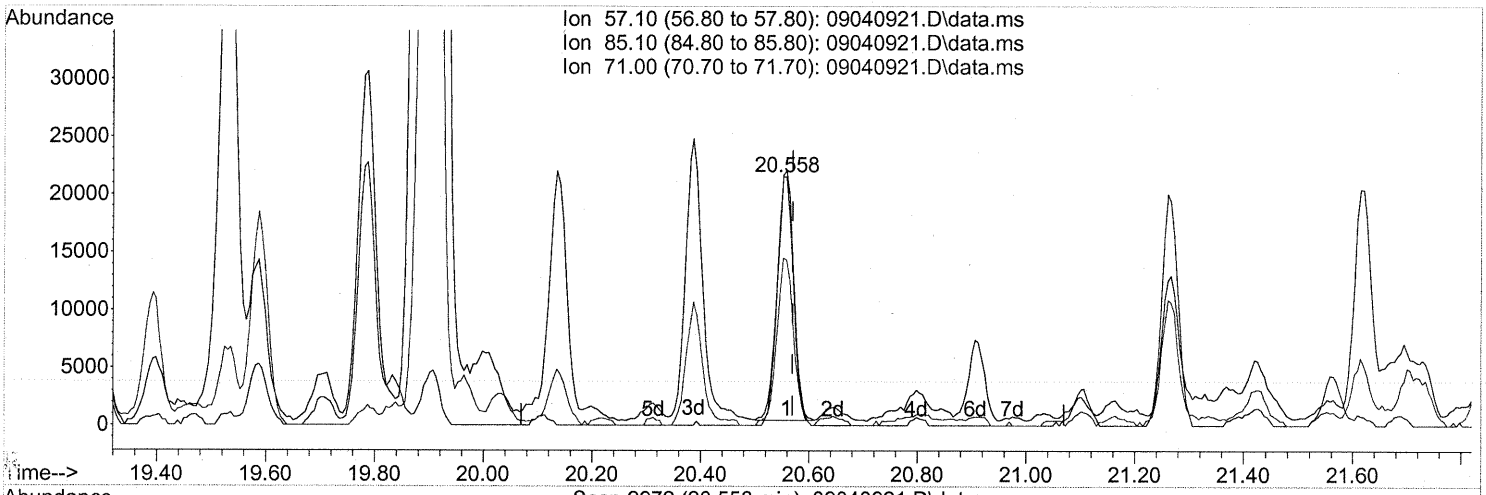
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	43.10
73.00	16.90	15.34
0.00	0.00	0.00

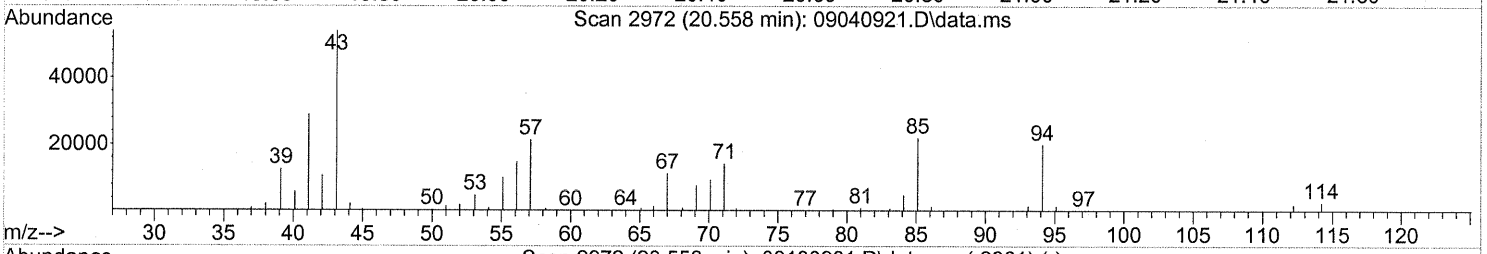
107

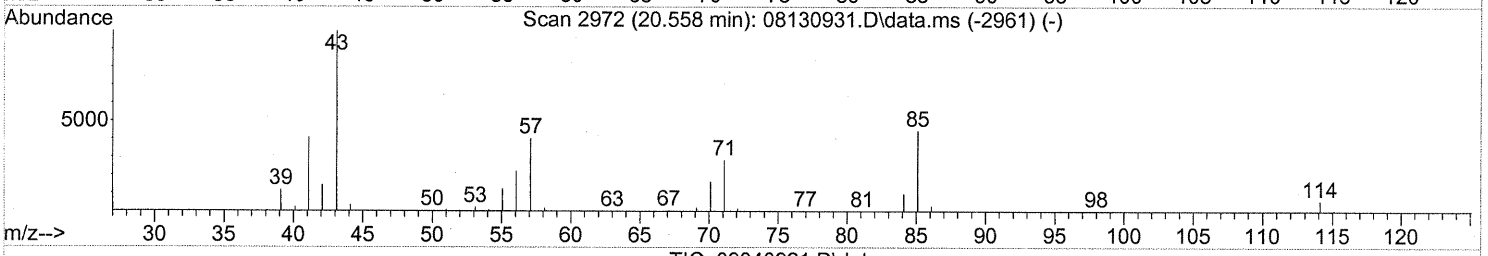
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.93ng

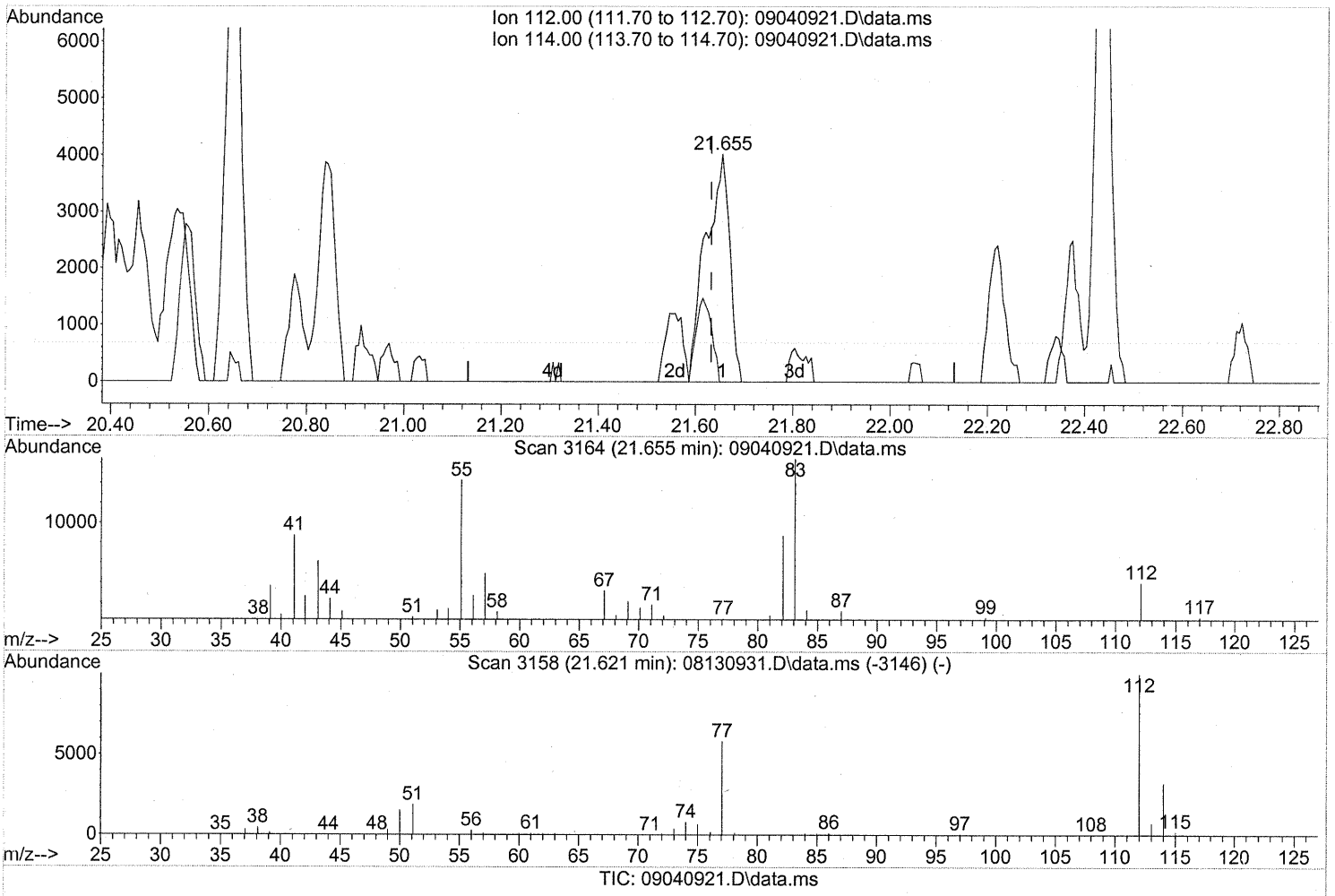
response 44284

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	104.32
71.00	75.10	70.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(65) Chlorobenzene (T)

21.655min (+0.023) 0.22ng

response 13653

Ion	Exp%	Act%
112.00	100	100
114.00	32.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

TP

9/15/09

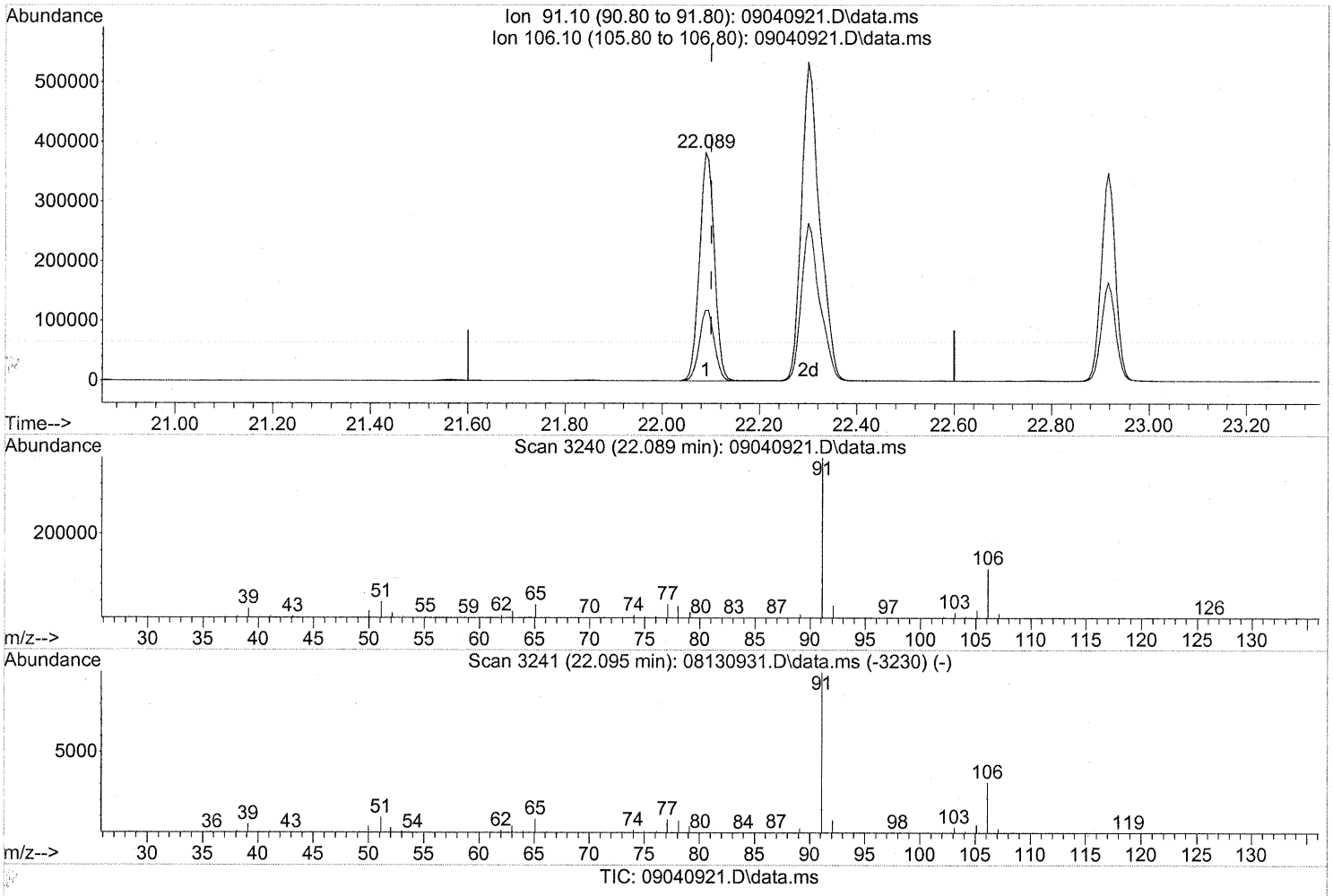
9/16/09

109

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 7.24ng

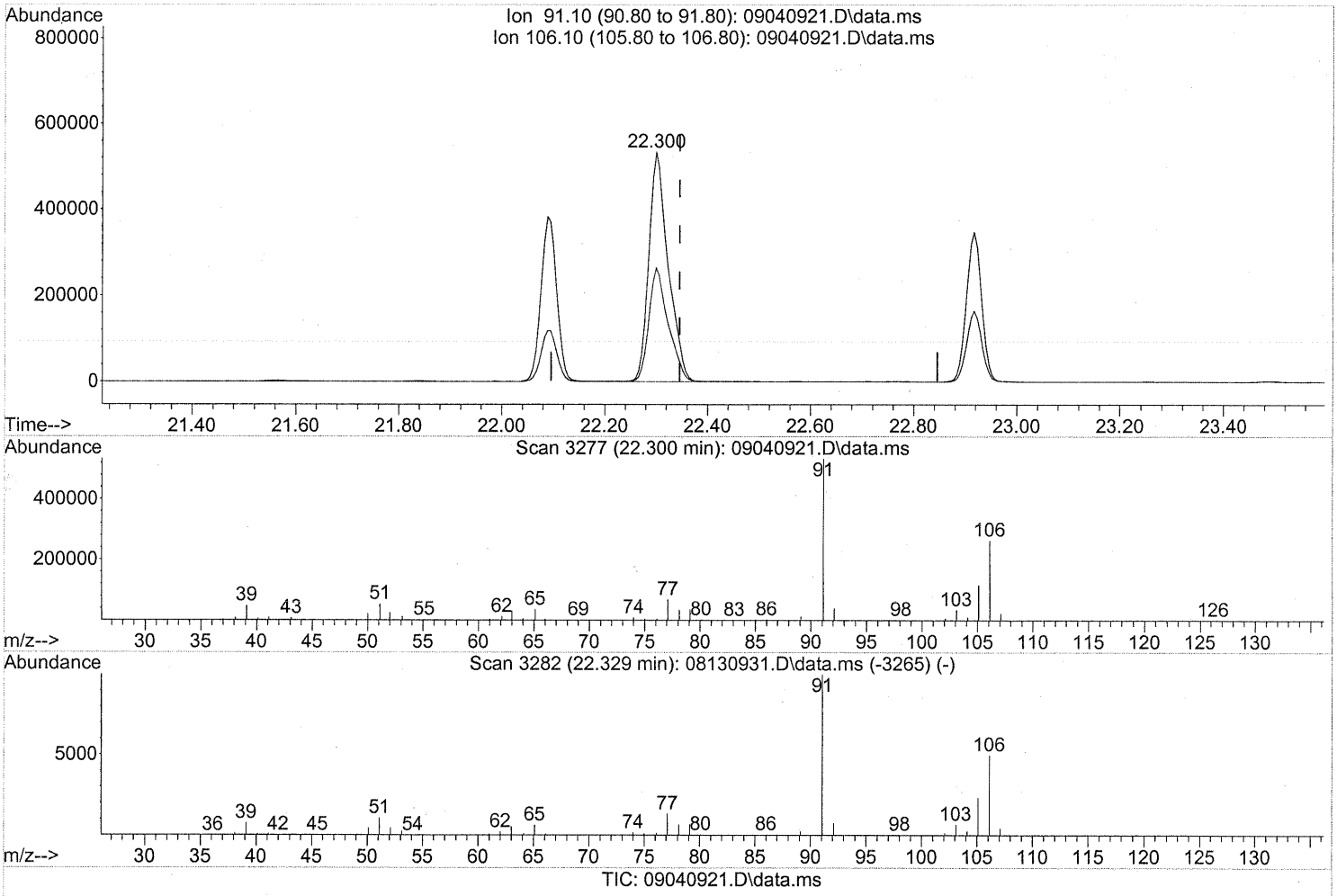
response 805022

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

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

22.300min (-0.046) 15.83ng

response 1395320

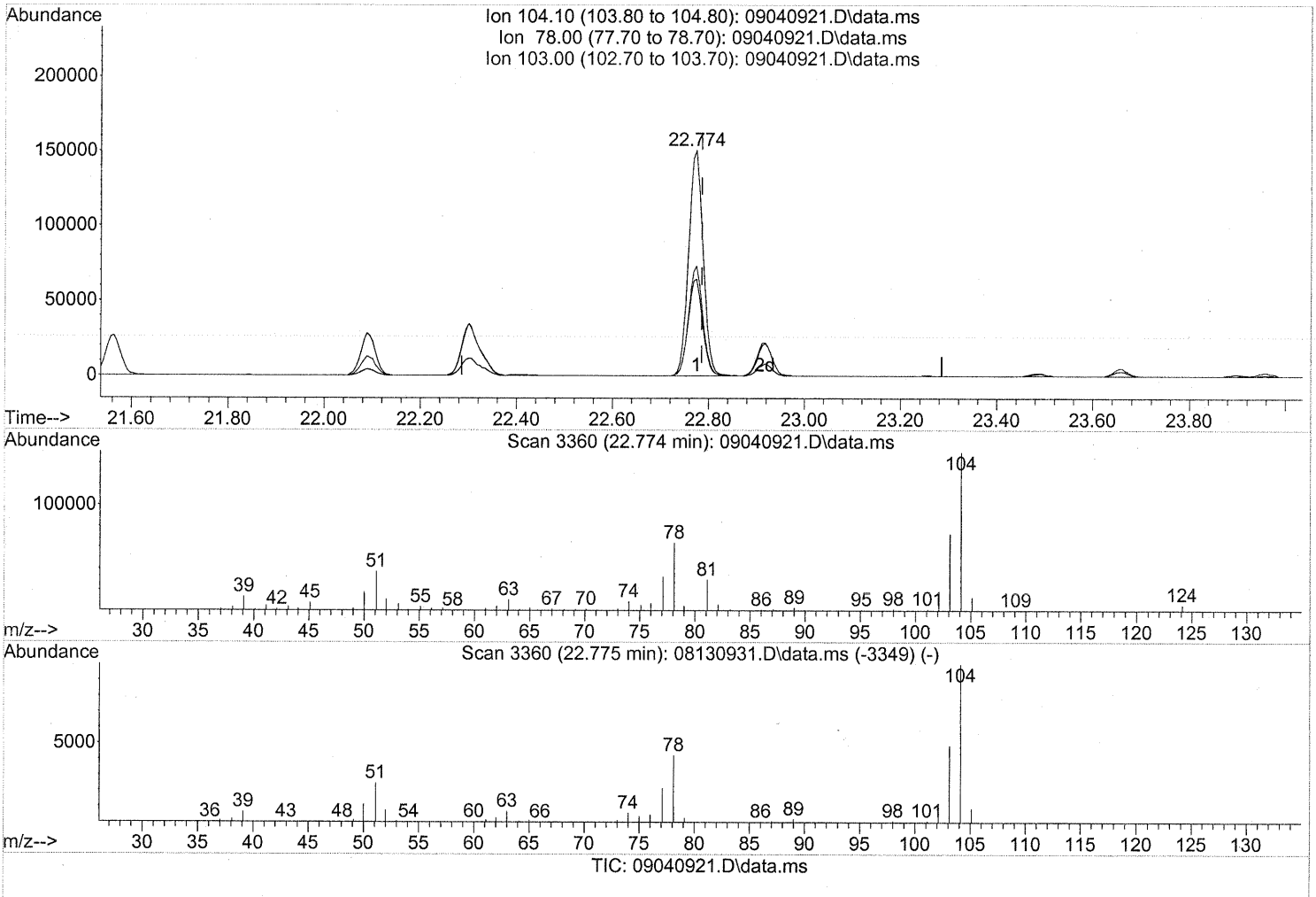
Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.36
0.00	0.00	0.00
0.00	0.00	0.00

111

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(69) Styrene (T)

22.774min (-0.011) 4.84ng

response 315302

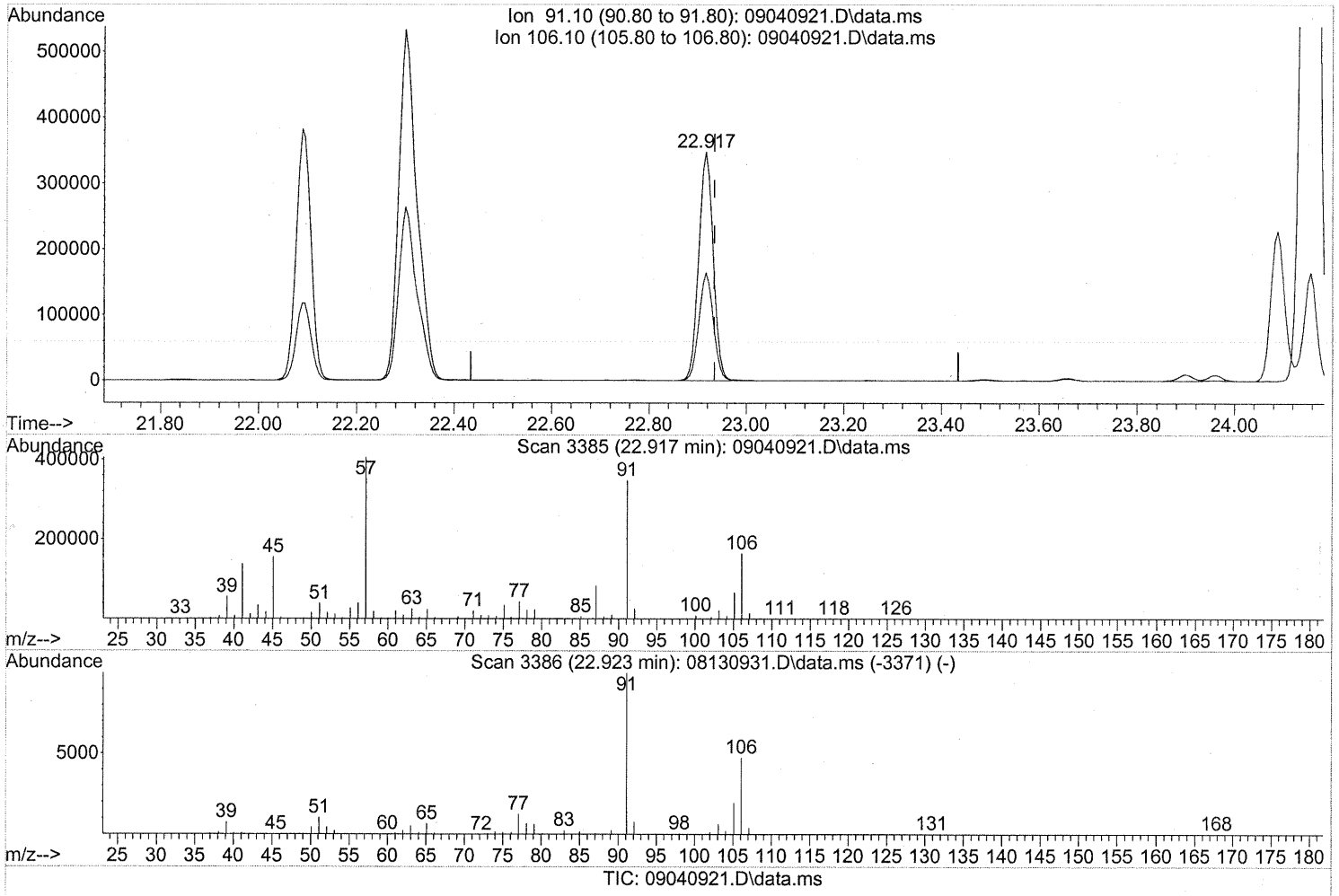
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.65
103.00	48.70	47.72
0.00	0.00	0.00

112

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.04ng

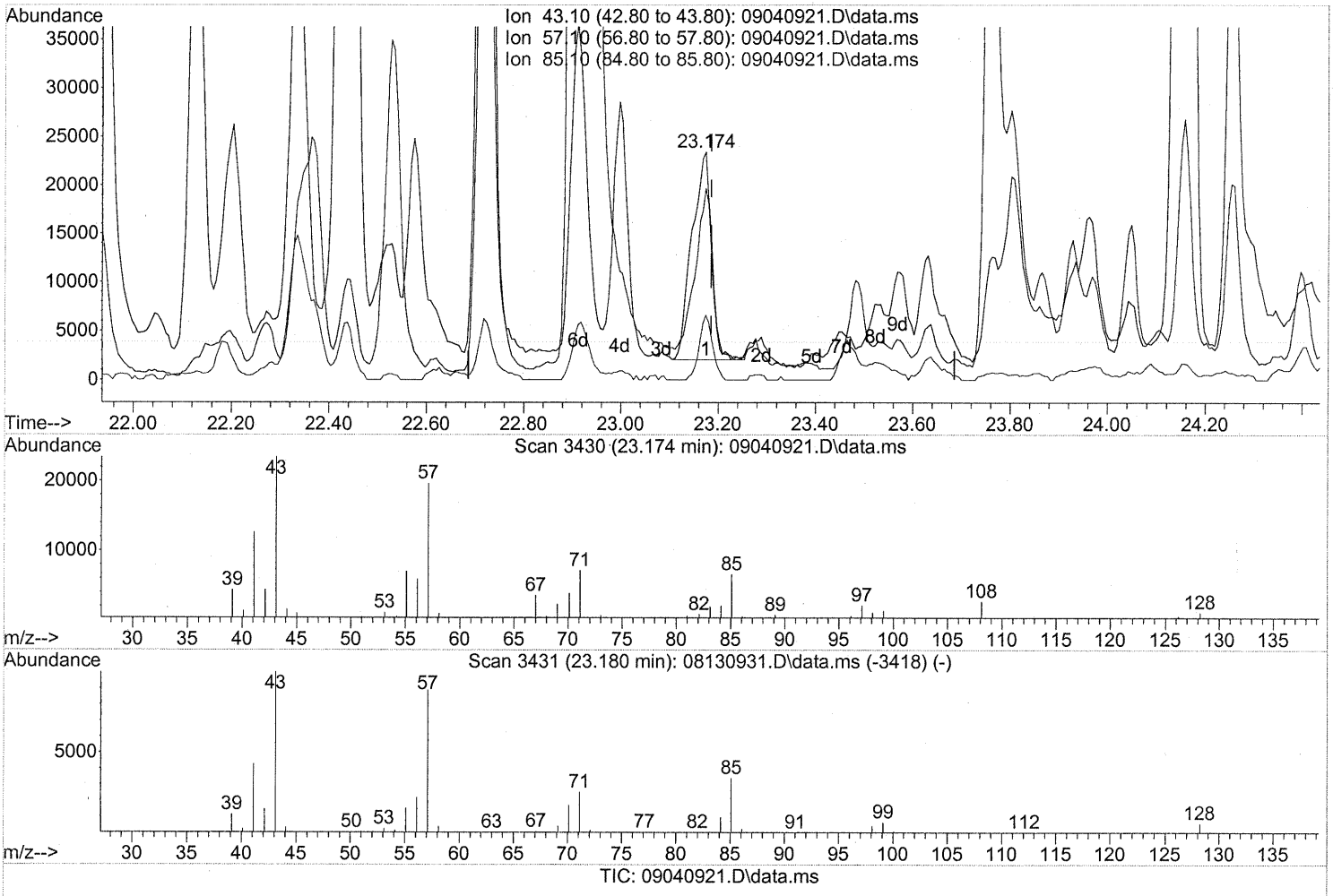
response 713197

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	47.20
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 1.12ng

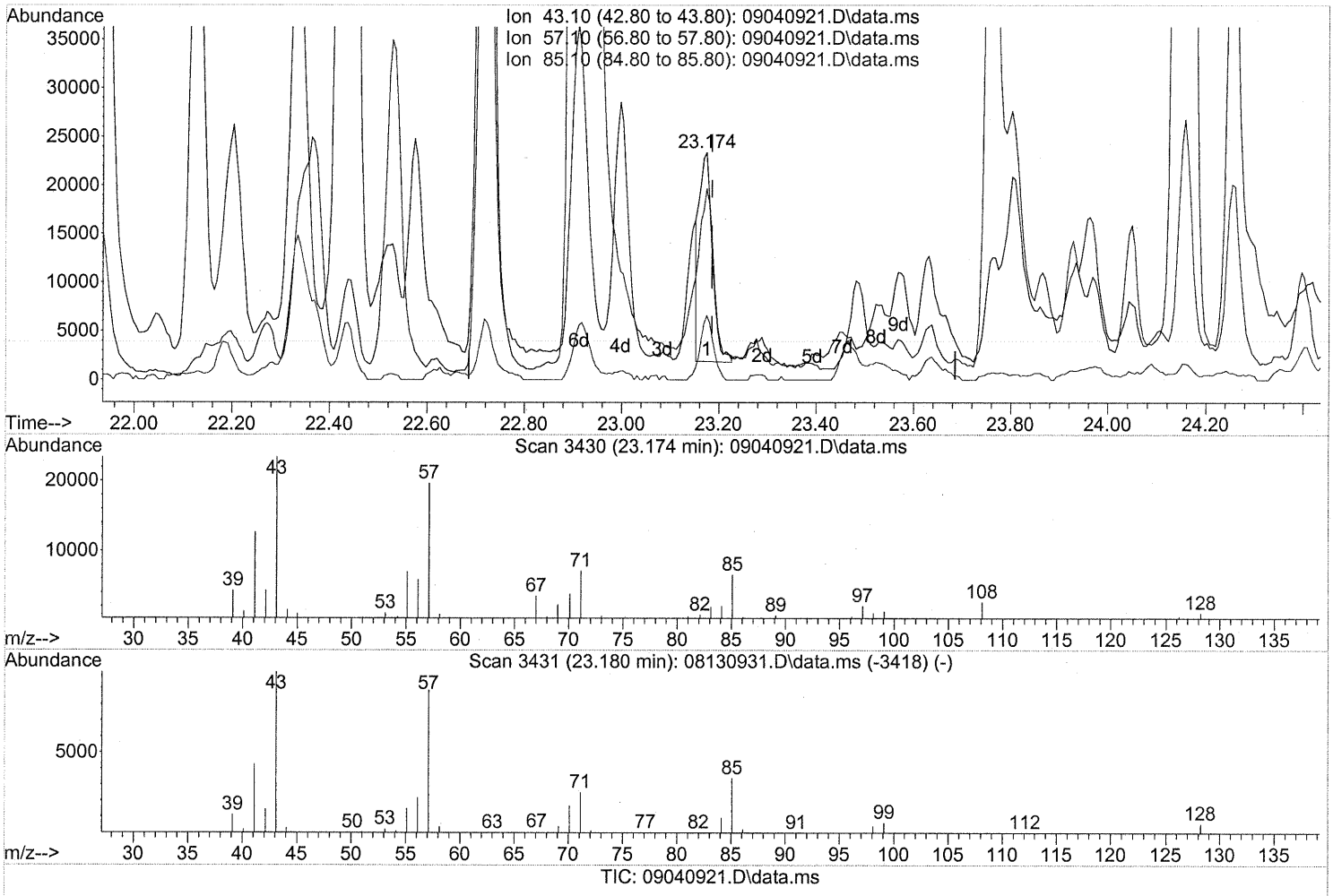
response 59891

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	82.90
85.10	38.80	20.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 0.78ng m

response 41903

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	118.48#
85.10	38.80	29.80
0.00	0.00	0.00

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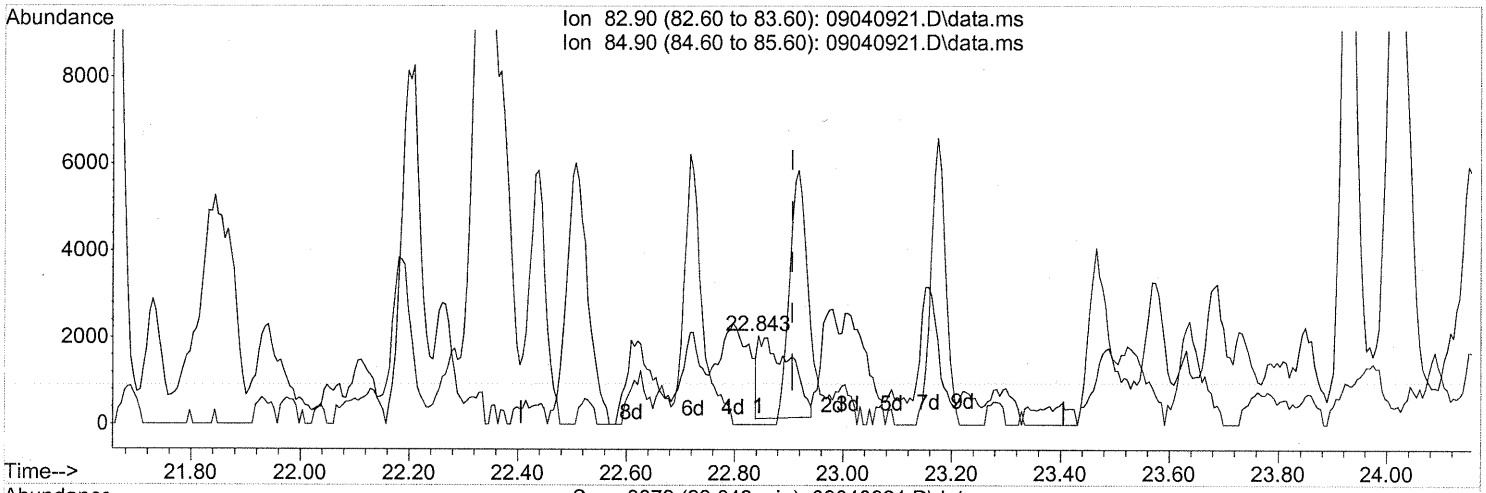
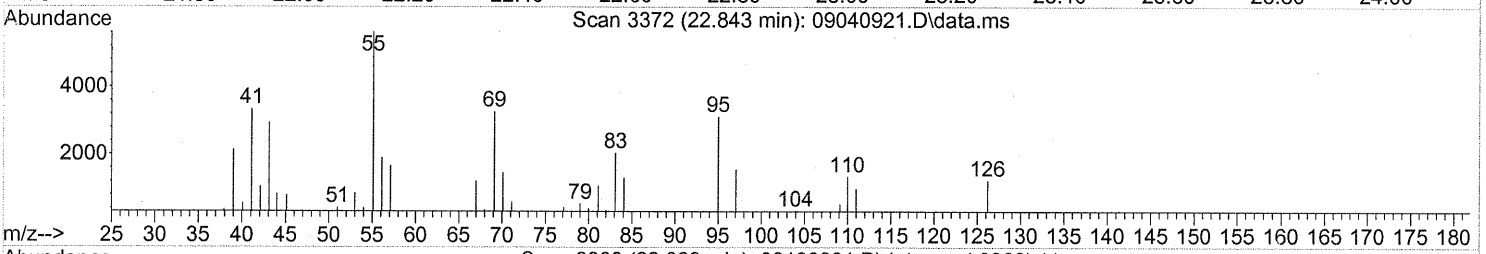
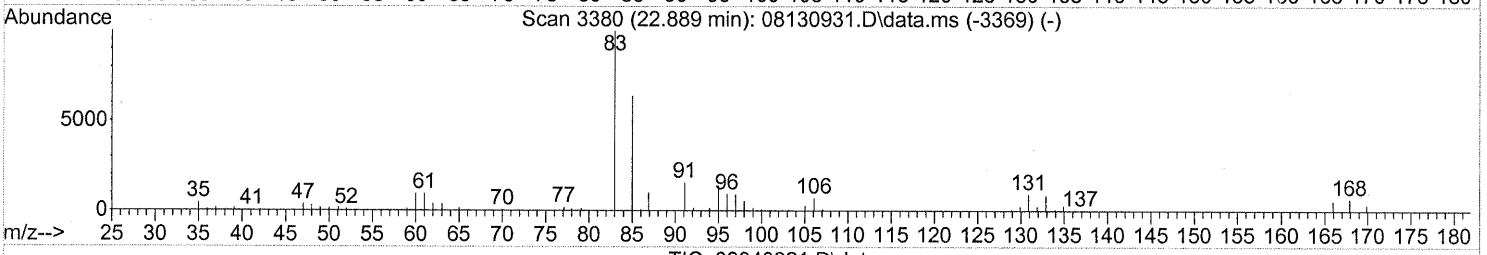
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

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

22.843min (-0.063) 0.20ng

response 7722

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

FP

JSH 9/15/09

E. 9/16/09

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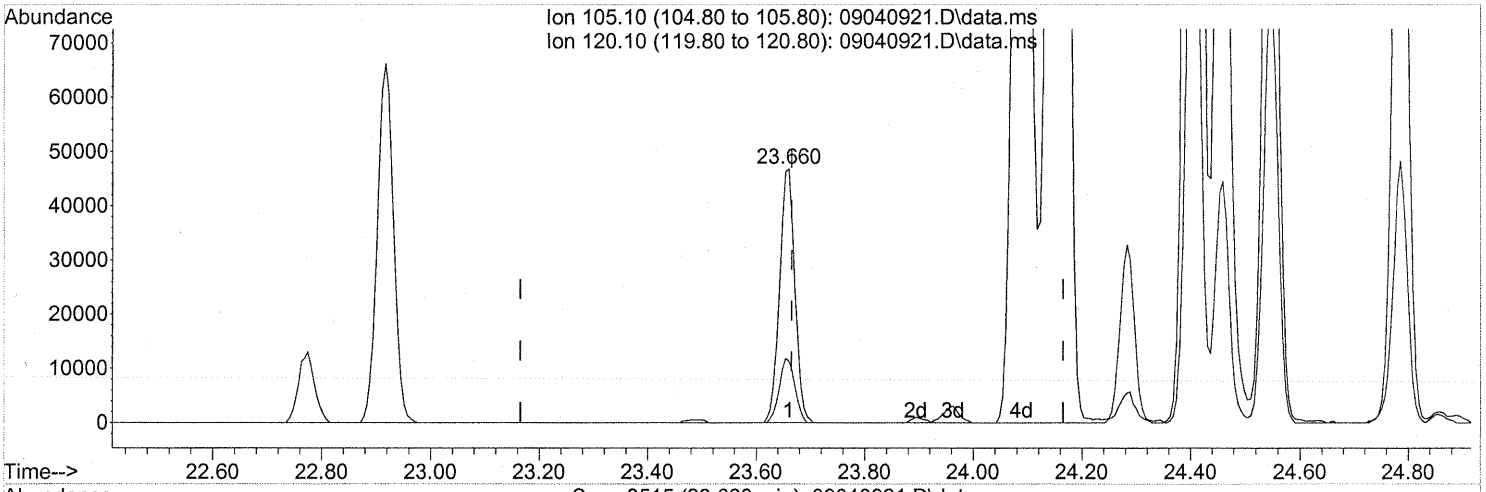
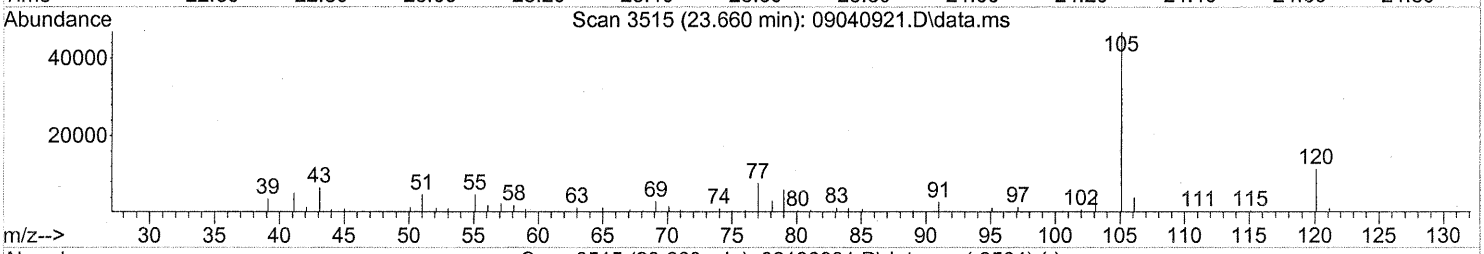
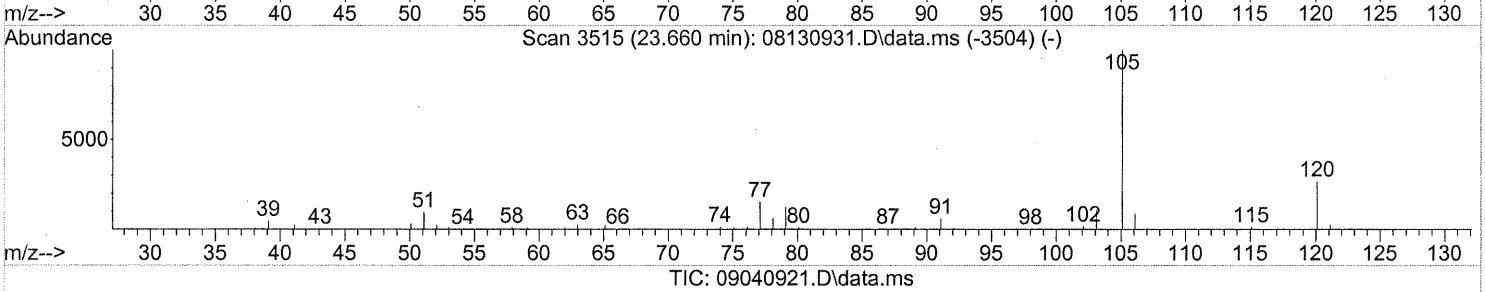
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040921.D\data.ms

(74) Cumene (T)

23.660min (-0.006) 0.80ng

response 91518

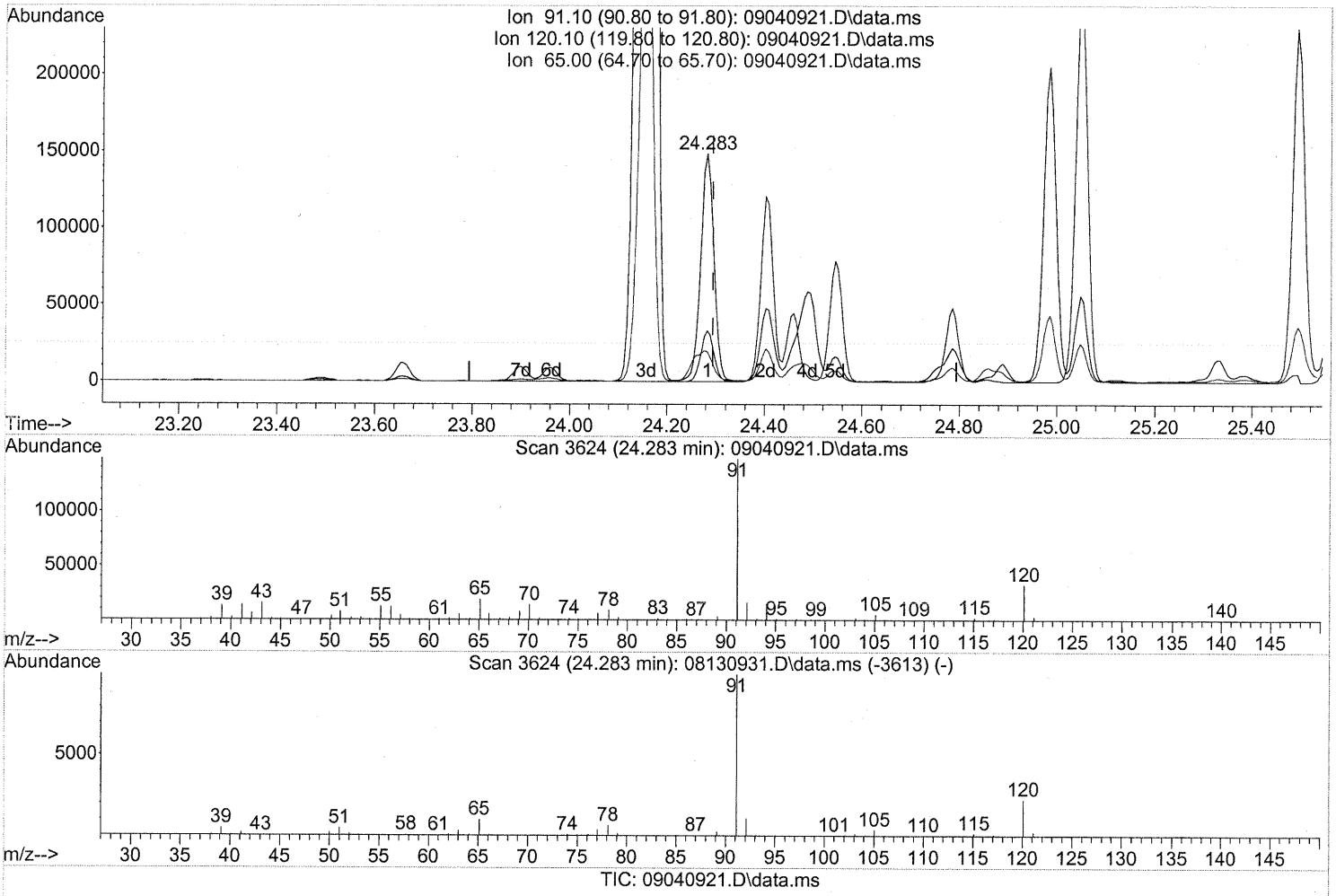
Ion	Exp%	Act%
105.10	100	100
120.10	27.10	25.63
0.00	0.00	0.00
0.00	0.00	0.00

117

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.97ng

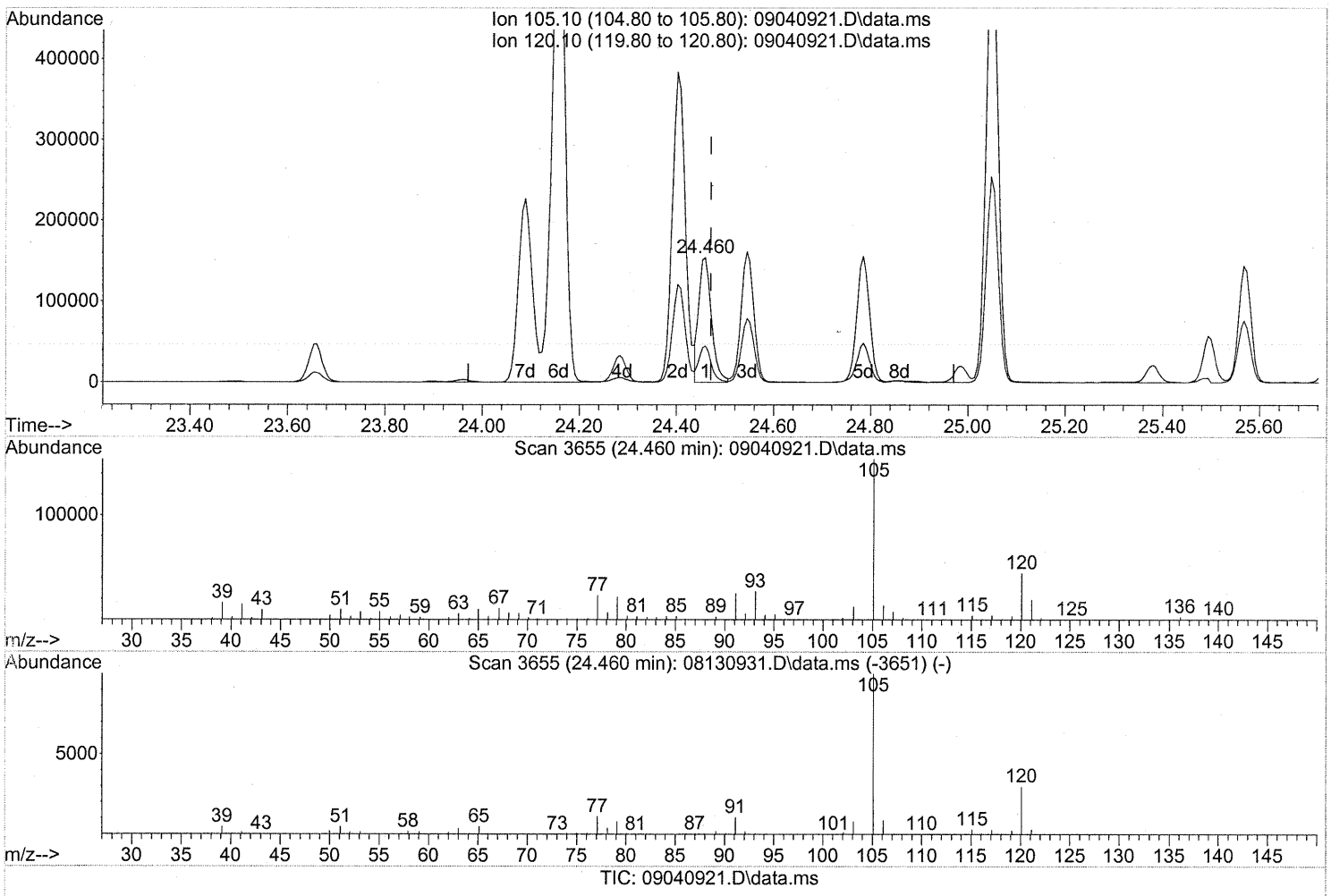
response 280445

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.54
65.00	10.20	21.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 2.58ng

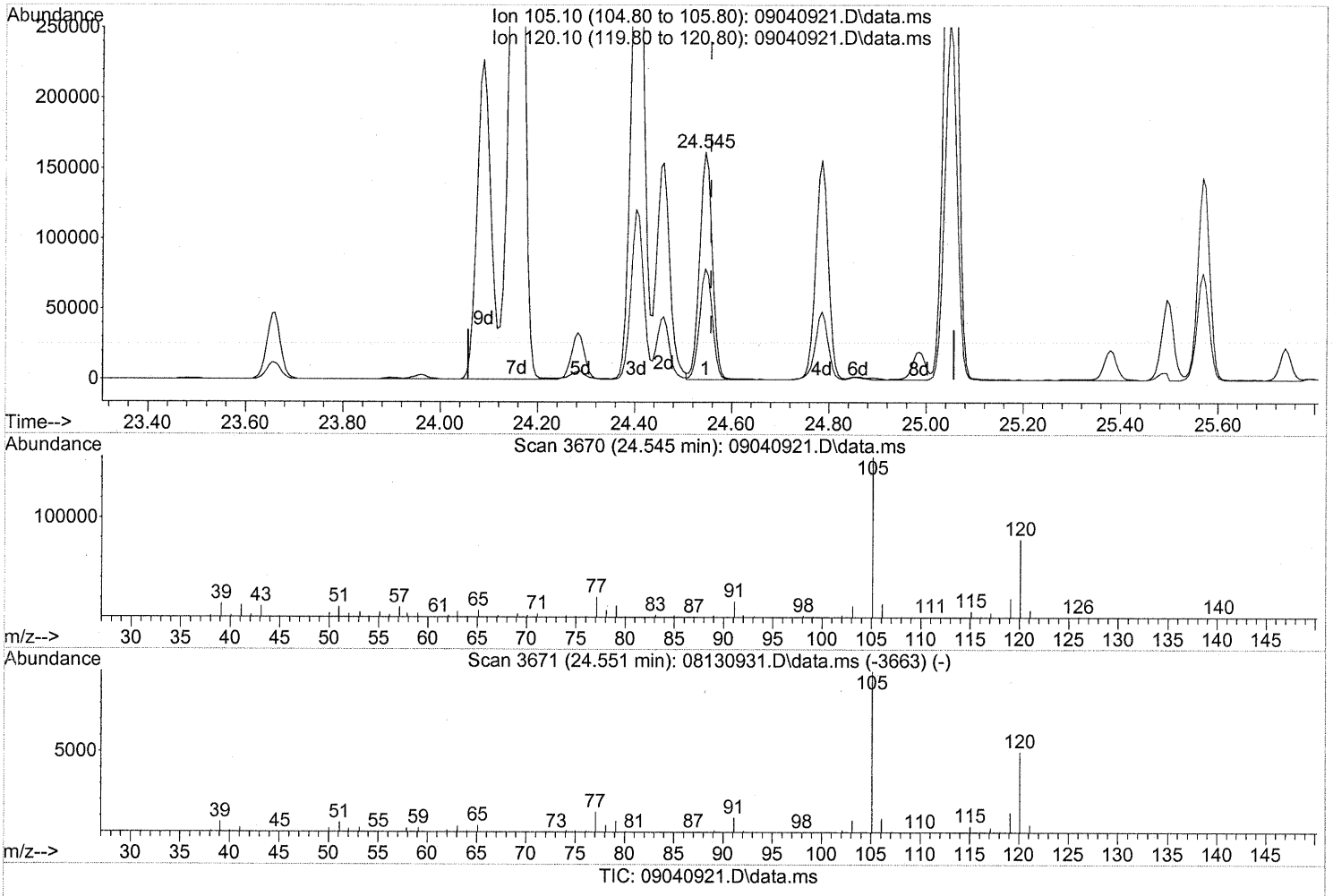
response 279700

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.11
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

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

24.545min (-0.011) 3.29ng

response 294129

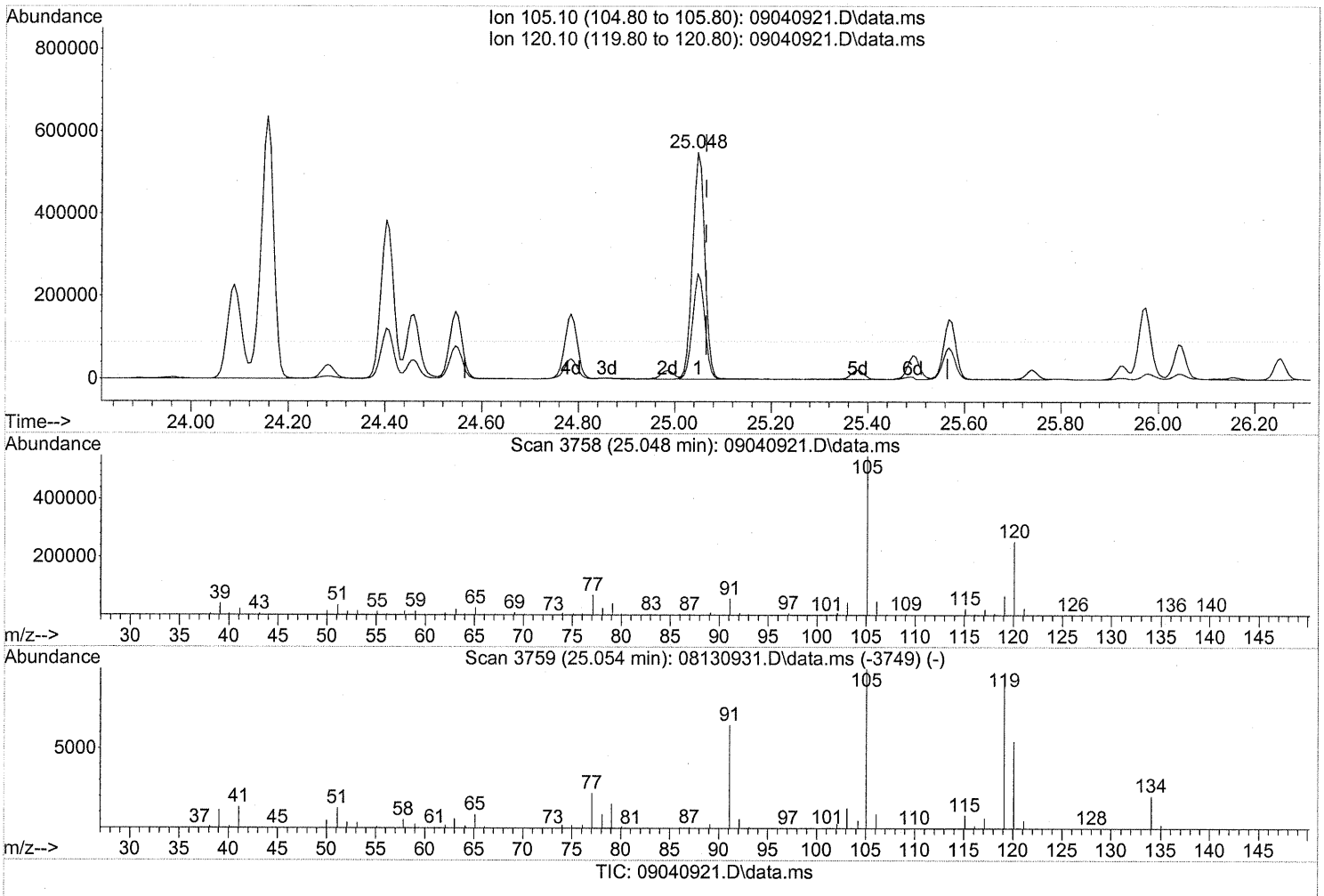
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.80
0.00	0.00	0.00
0.00	0.00	0.00

120

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

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

25.048min (-0.017) 10.10ng

response 960038

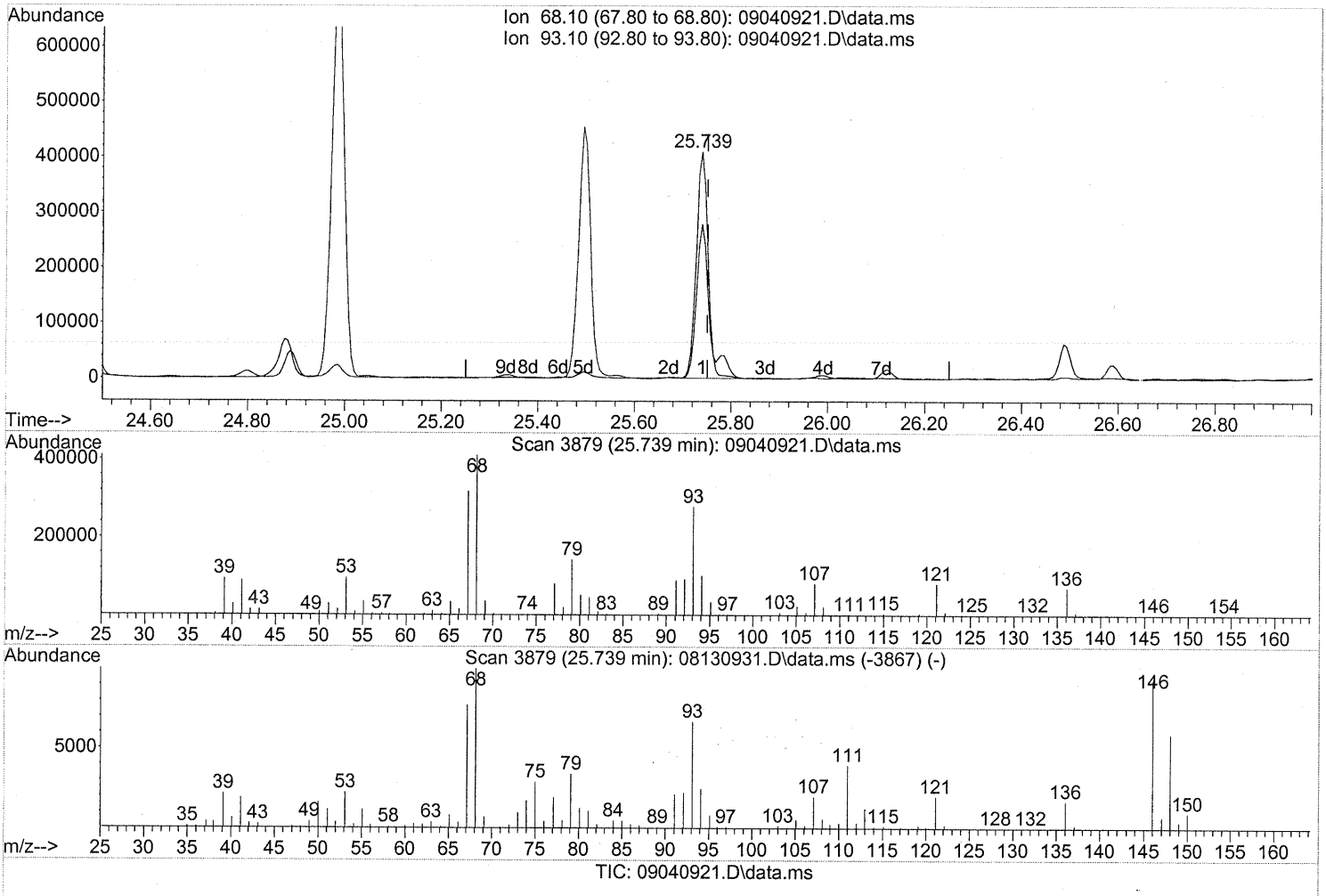
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.10
0.00	0.00	0.00
0.00	0.00	0.00

121

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 17.53ng

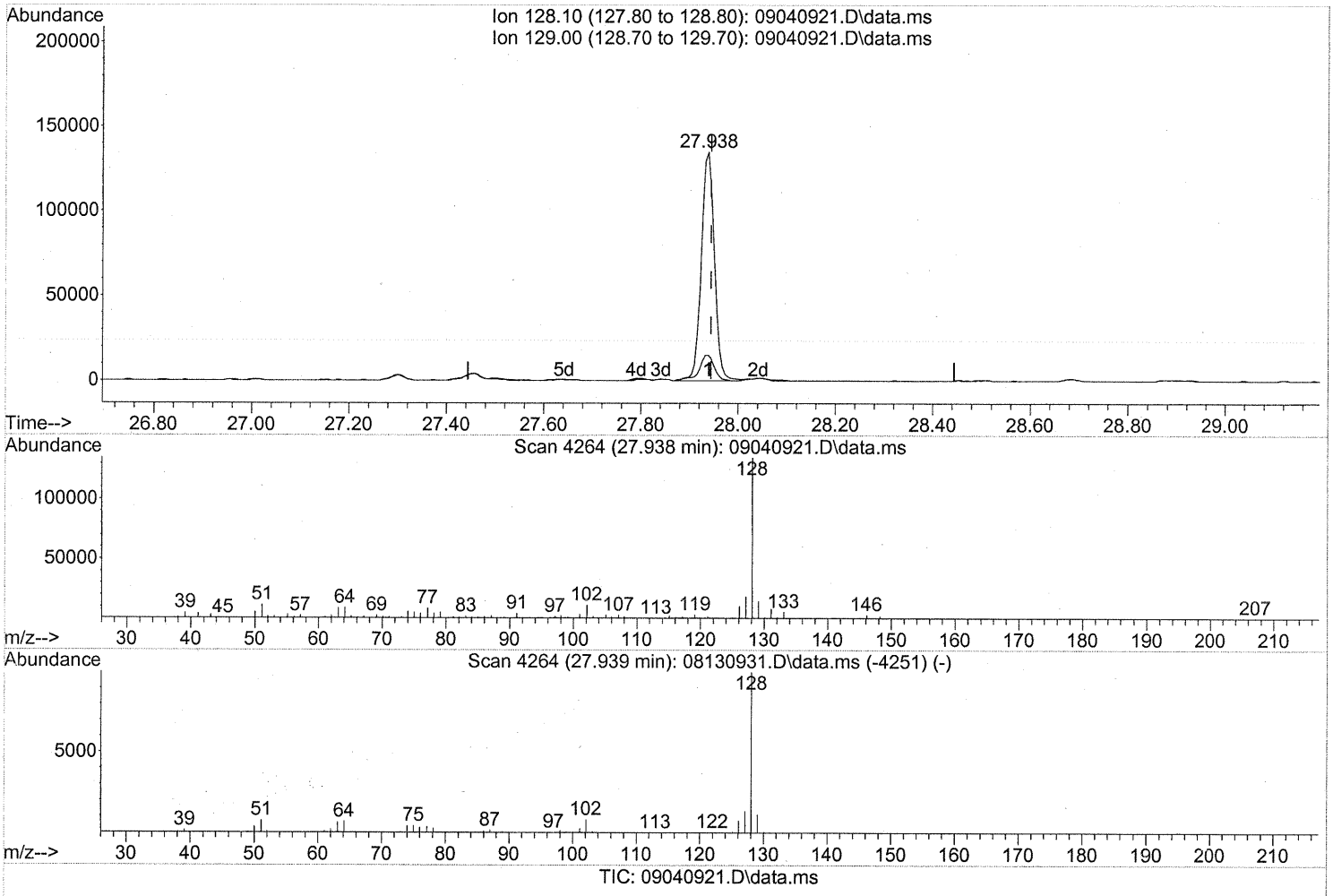
response 681493

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	77.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040921.D
Acq On : 4 Sep 2009 22:17
Operator : EM
Sample : P0903080-002 (1000ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040921.D\data.ms

(95) Naphthalene (T)

27.938min (-0.006) 1.97ng

response 251073

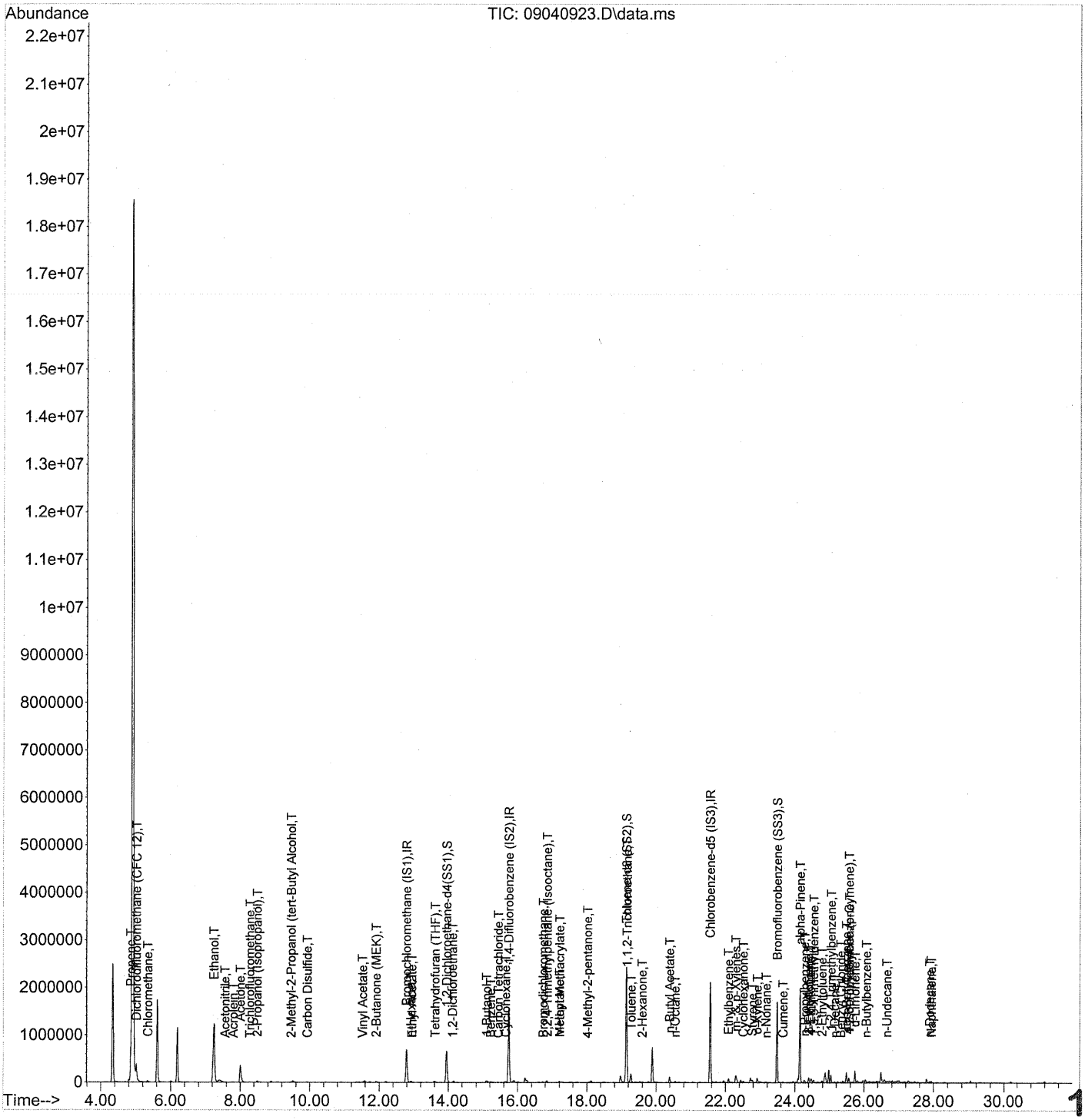
Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.59
0.00	0.00	0.00
0.00	0.00	0.00

123

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:30:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



124

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:30:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

JDA 9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	355173	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1802435	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	893613	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	654485	26.061	ng		-0.03
Spiked Amount 25.000			Recovery	= 104.24%			✓
57) Toluene-d8 (SS2)	19.14	98	2119045	24.944	ng		-0.02
Spiked Amount 25.000			Recovery	= 99.76%			✓
73) Bromofluorobenzene (SS3)	23.49	174	590405	24.540	ng		0.00
Spiked Amount 25.000			Recovery	= 98.16%			✓
Target Compounds							Qvalue
2) Propene	4.86	42	185254m	5.946	ng		
3) Dichlorodifluoromethan...	5.02	85	7918	0.178	ng	#	88
4) Chloromethane	5.35	50	3853	0.093	ng		91
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.09	54	110	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.25	45	2427903m	124.231	ng		
11) Acetonitrile	7.56	41	3348	0.070	ng		90
12) Acrolein	7.80	56	8264	0.648	ng		96
13) Acetone	8.00	58	210330	10.576	ng		96
14) Trichlorofluoromethane	8.28	101	3442	0.091	ng		90
15) 2-Propanol (Isopropanol)	8.49	45	53379	0.980	ng		87
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.46	59	21545	0.390	ng		88
19) Methylene Chloride	9.52	84	953	N.D.			
20) 3-Chloro-1-propene (Al...	9.62	41	1215	N.D.			
21) Trichlorotrifluoroethane	9.97	151	109	N.D.			
22) Carbon Disulfide	9.93	76	14529	0.166	ng		92
23) trans-1,2-Dichloroethene	10.99	61	1458	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	3514	0.816	ng	#	1
27) 2-Butanone (MEK)	11.92	72	10532	0.760	ng	#	60
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.95	61	804	0.089	ng	#	42
31) n-Hexane	12.92	57	14608	0.333	ng		89

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:30:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.62	72	3659	0.254 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	1804	0.064 ng	#	42
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.10	56	44591	1.909 ng		81
41) Benzene	15.22	78	15055	0.155 ng		98
42) Carbon Tetrachloride	15.45	117	1892	0.070 ng		98
43) Cyclohexane	15.65	84	11876	0.316 ng	#	82
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.74	83	4671	0.165 ng	#	18
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	16.76	88	712	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	36278	0.325 ng		82
50) Methyl Methacrylate	17.21	100	1992	0.206 ng	#	1
51) n-Heptane	17.20	71	7958	0.308 ng		88
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.02	58	1388	0.066 ng	#	31
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	171982	8.305 ng	#	8
58) Toluene	19.28	91	166995	1.622 ng		99
59) 2-Hexanone	19.60	43	15160	0.283 ng	#	69
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	112824	1.932 ng		98
63) n-Octane	20.55	57	5399	0.235 ng	#	73
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	21.62	112	717	N.D.		
66) Ethylbenzene	22.09	91	79238	0.713 ng		97
67) m- & p-Xylenes	22.30	91	138628	1.573 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	29430	0.452 ng		100
70) o-Xylene	22.92	91	69492	0.784 ng		99
71) n-Nonane	23.17	43	7220	0.135 ng	#	20
72) 1,1,2,2-Tetrachloroethane	22.97	83	707	N.D.		
74) Cumene	23.66	105	9784	0.085 ng		93
75) alpha-Pinene	24.15	93	925462	16.315 ng		99
76) n-Propylbenzene	24.28	91	27417	0.193 ng		92
77) 3-Ethyltoluene	24.40	105	69704	0.647 ng		99
78) 4-Ethyltoluene	24.46	105	28392	0.262 ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	30775	0.344 ng		97

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:30:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

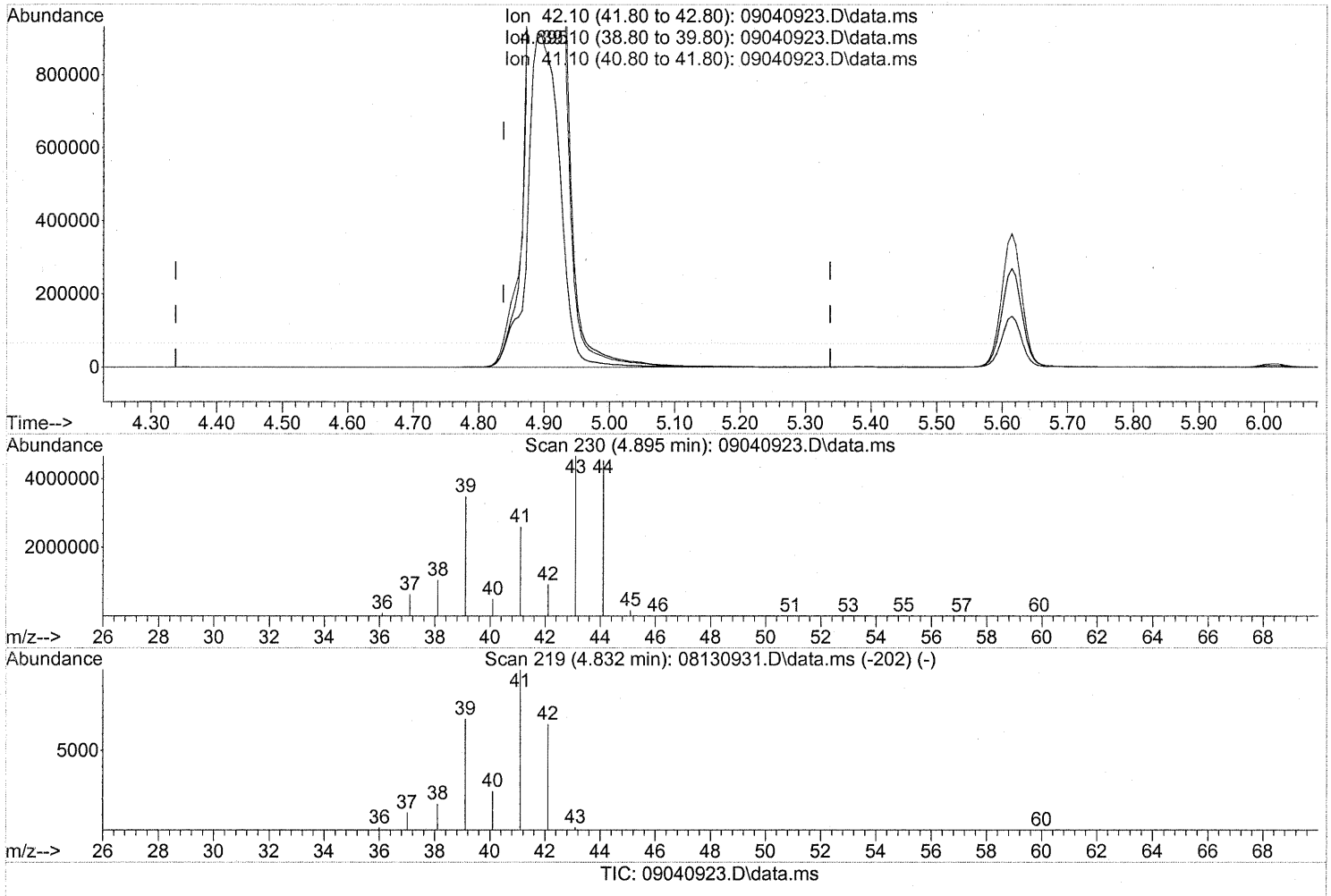
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	220	N.D.		
81) 2-Ethyltoluene	24.79	105	27861	0.250 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	94667	0.996 ng		87
83) n-Decane	25.15	57	5173	0.093 ng		92
84) Benzyl Chloride	25.33	91	4310	0.059 ng	#	55
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	25.38	105	4379	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	33761	0.281 ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	26531	0.276 ng		100
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	25.74	68	64926	1.669 ng		93
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	5851	0.102 ng	#	71
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	24439	0.192 ng		100
96) n-Dodecane	27.89	57	10935	0.171 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	12446	0.384 ng	#	88
99) tert-Butylbenzene	25.49	119	8860	0.094 ng		99
100) n-Butylbenzene	26.07	91	12413	0.124 ng	#	61

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 15 09:45:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040923.D\data.ms

(2) Propene (T)

4.895min (+0.057) 99.68ng

response 3105696

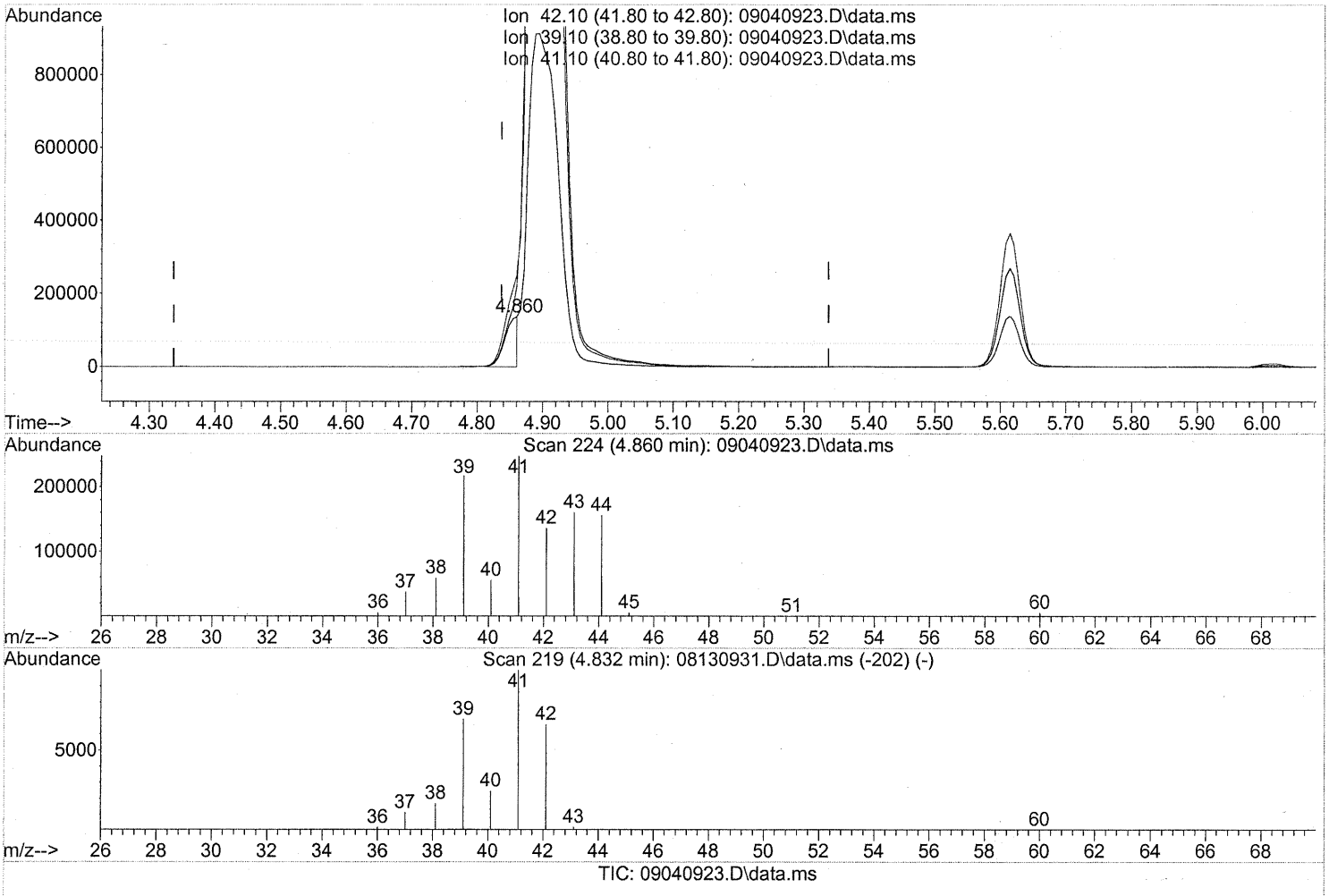
SH

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	349.22#
41.10	152.70	279.20#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 15 09:45:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040923.D\data.ms

(2) Propene (T)

4.860min (+0.023) 5.95ng m

response 185254

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	5854.51#
41.10	152.70	4680.63#
0.00	0.00	0.00

SH-7 1C

9/16/09

9/16/09

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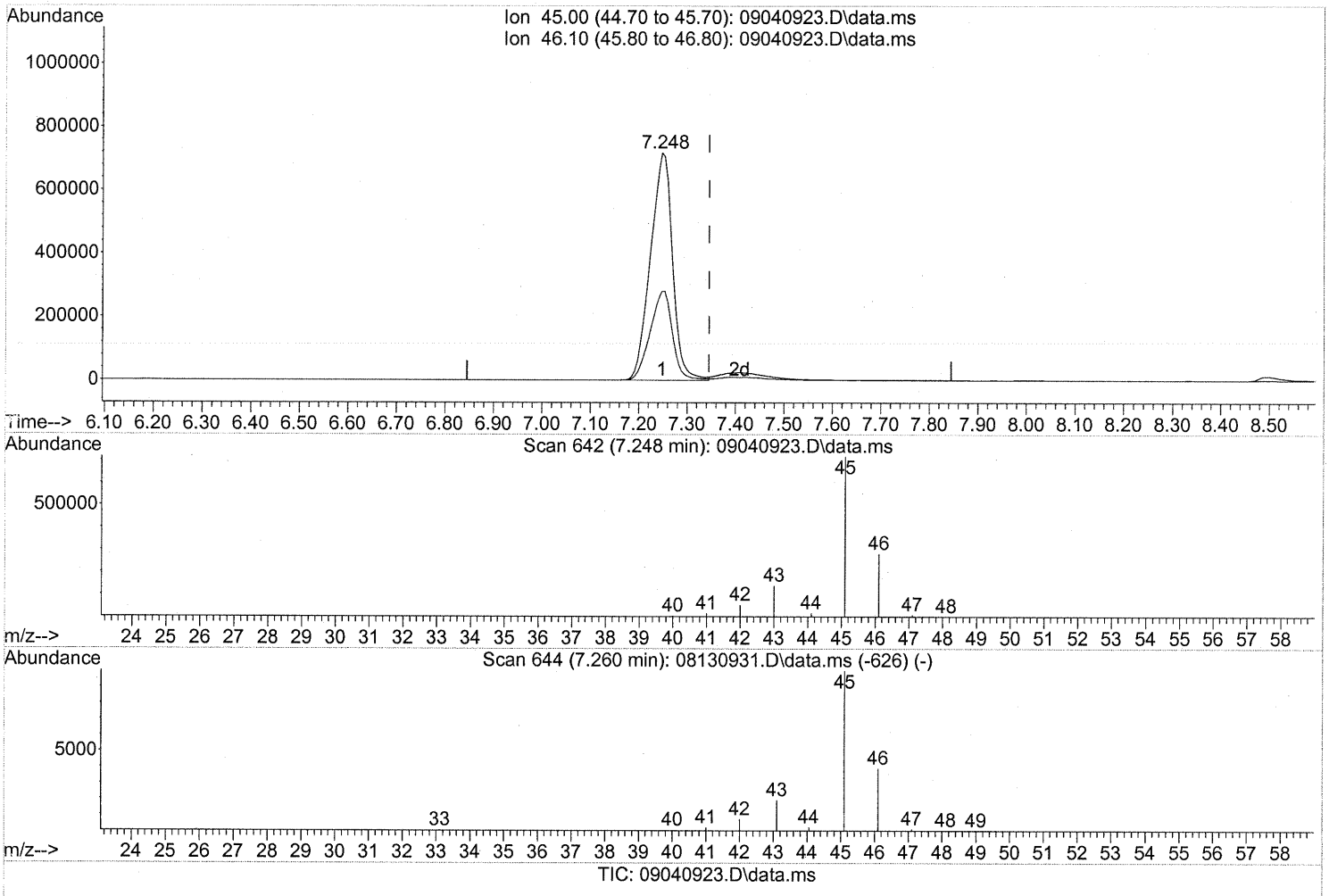
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:15 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.248min (-0.097) 116.02ng

response 2267500

SP

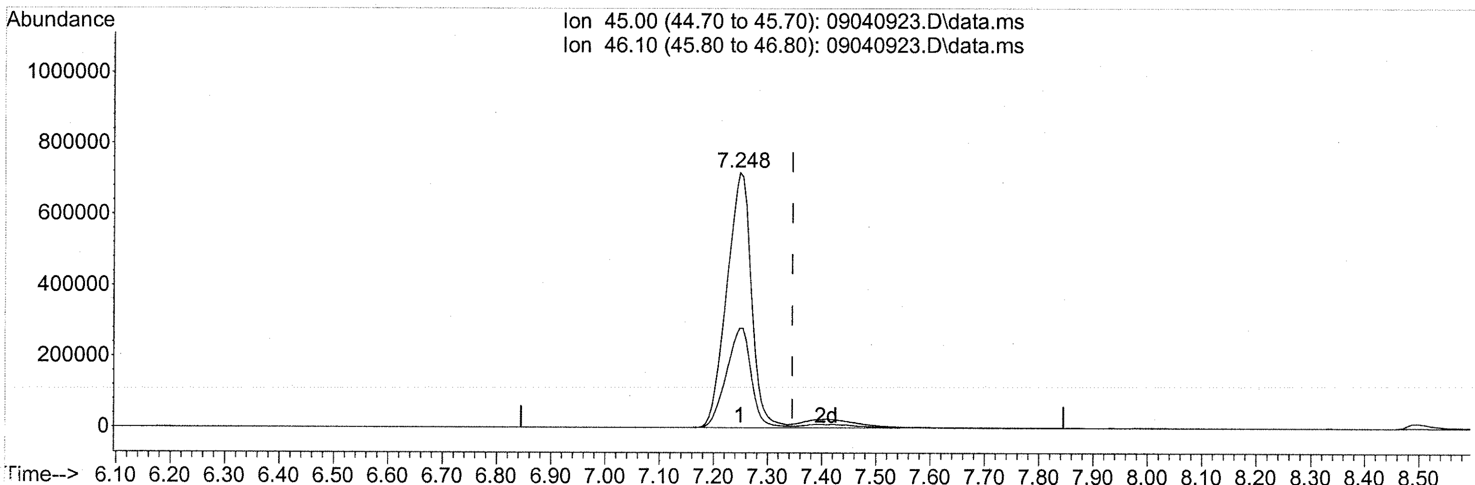
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.20
0.00	0.00	0.00
0.00	0.00	0.00

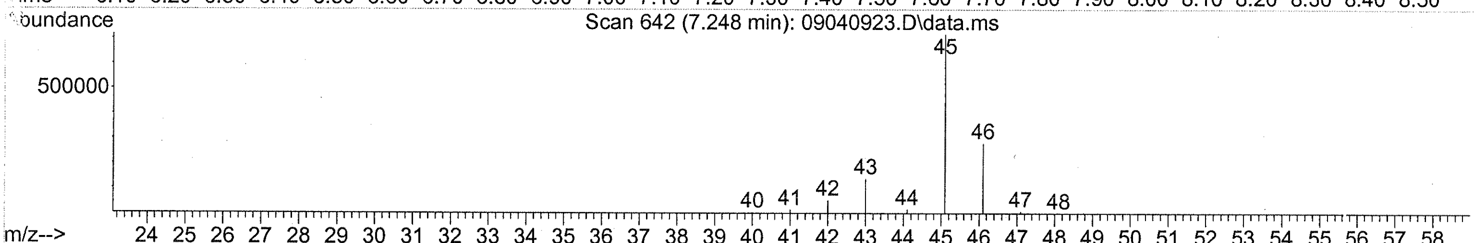
130

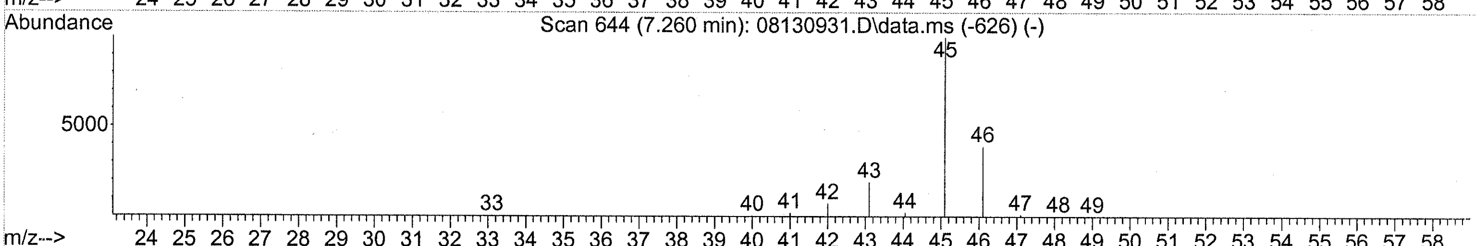
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:15 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040923.D\data.ms

(10) Ethanol (T)

7.248min (-0.097) 124.23ng m

response 2427903

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.61
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

NDH 9/15/09

E 9/16/09

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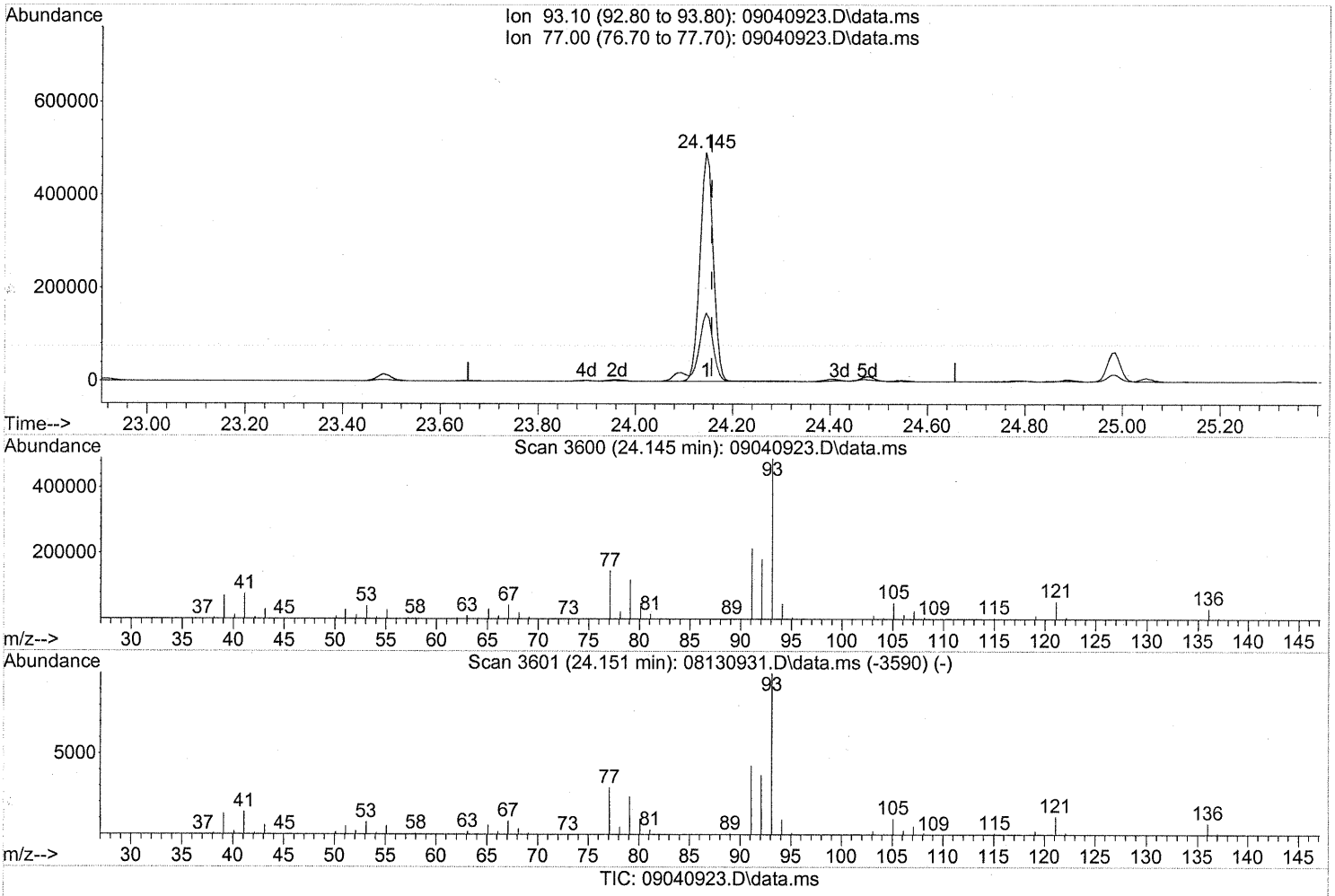
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040923.D
Acq On : 4 Sep 2009 23:41
Operator : EM
Sample : P0903080-002 dil (100ml)
Misc : Environmental H&E 104835
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 08 07:37:15 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040923.D\data.ms

(75) alpha-Pinene (T)

24.145min (-0.011) 16.31ng

response 925462

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.23
0.00	0.00	0.00
0.00	0.00	0.00

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104836**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01572

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09 & 9/8 - 9/9/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)
0.030 Liter(s)

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**60**	0.71	**35**	0.41	**D**
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.7**	0.71	**0.54**	0.14	
74-87-3	**Chloromethane**	**0.55**	0.14	**0.26**	0.069	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.71	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.14	ND	0.056	
106-99-0	**1,3-Butadiene**	**0.17**	0.14	**0.076**	0.064	
74-83-9	Bromomethane	ND	0.14	ND	0.037	
75-00-3	Chloroethane	ND	0.14	ND	0.054	
64-17-5	**Ethanol**	**7,600**	7.1	**4,000**	3.8	**D**
75-05-8	Acetonitrile	ND	0.71	ND	0.42	
107-02-8	**Acrolein**	**8.4**	0.71	**3.7**	0.31	
67-64-1	**Acetone**	**130**	7.1	**57**	3.0	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.14	**0.23**	0.025	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.71	ND	0.29	
107-13-1	Acrylonitrile	ND	0.71	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.14	ND	0.036	
75-09-2	Methylene Chloride	ND	0.71	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.14	ND	0.045	
76-13-1	**Trichlorotrifluoroethane**	**0.51**	0.14	**0.067**	0.019	
75-15-0	**Carbon Disulfide**	**2.0**	0.71	**0.66**	0.23	
156-60-5	**trans-1,2-Dichloroethene**	**0.63**	0.14	**0.16**	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	0.039	
108-05-4	**Vinyl Acetate**	**9.8**	7.1	**2.8**	2.0	
78-93-3	**2-Butanone (MEK)**	**12**	0.71	**4.1**	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: Re Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104836** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P0903080-003

Test Code:	EPA TO-15	Date Collected:	9/1/09
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received:	9/2/09
Analyst:	Elsa Moctezuma	Date Analyzed:	9/5/09 & 9/8 - 9/9/09
Sampling Media:	6.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			0.10 Liter(s)
Container ID:	AC01572		0.030 Liter(s)

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

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**	**9.7**	1.4	**2.7**	0.39	
110-54-3	**n-Hexane**	**3.3**	0.71	**0.94**	0.20	
67-66-3	**Chloroform**	**0.24**	0.14	**0.049**	0.029	
109-99-9	**Tetrahydrofuran (THF)**	**4.3**	0.71	**1.5**	0.24	
107-06-2	**1,2-Dichloroethane**	**0.79**	0.14	**0.20**	0.035	
71-55-6	1,1,1-Trichloroethane	ND	0.14	ND	0.026	
71-43-2	**Benzene**	**1.3**	0.14	**0.41**	0.044	
56-23-5	**Carbon Tetrachloride**	**0.96**	0.14	**0.15**	0.023	
110-82-7	**Cyclohexane**	**3.1**	0.71	**0.90**	0.21	
78-87-5	1,2-Dichloropropane	ND	0.14	ND	0.031	
75-27-4	Bromodichloromethane	ND	0.14	ND	0.021	
79-01-6	Trichloroethene	ND	0.14	ND	0.026	
123-91-1	1,4-Dioxane	ND	0.71	ND	0.20	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.35	
142-82-5	**n-Heptane**	**2.9**	0.71	**0.70**	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.71	ND	0.16	
108-10-1	**4-Methyl-2-pentanone**	**1.1**	0.71	**0.28**	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	0.71	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.14	ND	0.026	
108-88-3	**Toluene**	**18**	0.71	**4.8**	0.19	
591-78-6	**2-Hexanone**	**3.5**	0.71	**0.86**	0.17	
124-48-1	Dibromochloromethane	ND	0.14	ND	0.017	
106-93-4	1,2-Dibromoethane	ND	0.14	ND	0.018	
123-86-4	**n-Butyl Acetate**	**28**	0.71	**6.0**	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: Rec Date: 9/15/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104836**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01572

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09 & 9/8 - 9/9/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)
0.030 Liter(s)

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.8**	0.71	**0.39**	0.15	
127-18-4	Tetrachloroethene	ND	0.14	ND	0.021	
108-90-7	Chlorobenzene	ND	0.14	ND	0.031	
100-41-4	**Ethylbenzene**	**8.3**	0.71	**1.9**	0.16	
179601-23-1	**m,p-Xylenes**	**16**	0.71	**3.7**	0.16	
75-25-2	Bromoform	ND	0.71	ND	0.069	
100-42-5	**Styrene**	**6.4**	0.71	**1.5**	0.17	
95-47-6	**o-Xylene**	**8.1**	0.71	**1.9**	0.16	
111-84-2	**n-Nonane**	**1.3**	0.71	**0.25**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.14	ND	0.021	
98-82-8	**Cumene**	**0.75**	0.71	**0.15**	0.14	
80-56-8	**alpha-Pinene**	**180**	0.71	**33**	0.13	**D**
103-65-1	**n-Propylbenzene**	**1.8**	0.71	**0.36**	0.14	
622-96-8	**4-Ethyltoluene**	**2.5**	0.71	**0.51**	0.14	
108-67-8	**1,3,5-Trimethylbenzene**	**2.9**	0.71	**0.59**	0.14	
95-63-6	**1,2,4-Trimethylbenzene**	**9.0**	0.71	**1.8**	0.14	
100-44-7	Benzyl Chloride	ND	0.14	ND	0.027	
541-73-1	1,3-Dichlorobenzene	ND	0.14	ND	0.024	
106-46-7	1,4-Dichlorobenzene	ND	0.14	ND	0.024	
95-50-1	1,2-Dichlorobenzene	ND	0.14	ND	0.024	
5989-27-5	**d-Limonene**	**22**	0.71	**4.0**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.71	ND	0.073	
120-82-1	1,2,4-Trichlorobenzene	ND	0.71	ND	0.096	
91-20-3	**Naphthalene**	**1.7**	0.71	**0.33**	0.14	
87-68-3	Hexachlorobutadiene	ND	0.71	ND	0.067	

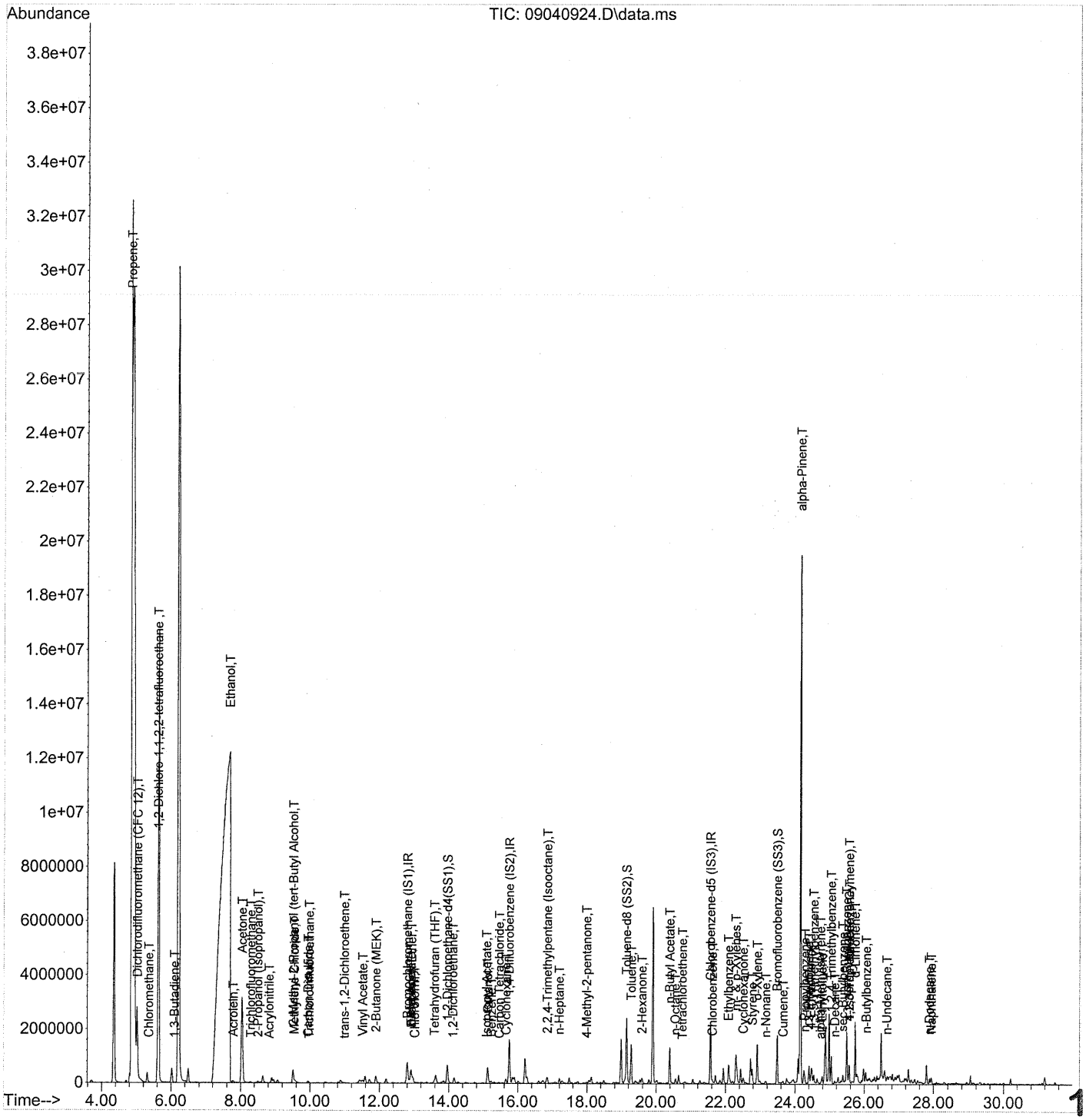
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By: _____ Date: 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:39:36 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:39:36 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009 JDA 9/16/09
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	362746	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1848844	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	907302	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.96	65	669627	26.107	ng		-0.03
Spiked Amount 25.000			Recovery = 104.44%				✓
57) Toluene-d8 (SS2)	19.14	98	2127119	24.661	ng		-0.02
Spiked Amount 25.000			Recovery = 98.64%				✓
73) Bromofluorobenzene (SS3)	23.49	174	614062	25.138	ng		0.00 ✓
Spiked Amount 25.000			Recovery = 100.56%				
Target Compounds							Qvalue
2) Propene	4.84	42	1490685m	~~46.847 ng~~ NR			see dil
3) Dichlorodifluoromethan...	5.03	85	85670	1.886 ng			99
4) Chloromethane	5.35	50	16291	0.385 ng			95
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1399	~~0.058 ng~~		#	57
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.10	54	3522	0.119 ng		#	43
8) Bromomethane	6.59	94	647	N.D.			
9) Chloroethane	6.93	64	127	N.D.			
10) Ethanol	7.68	45	126815801m	~~6353.430 ng~~			see dil
11) Acetonitrile	0.00	41	0	N.D. d			
12) Acrolein	7.79	56	77394	5.946 ng			97
13) Acetone	8.04	58	1928303	94.936 ng			94
14) Trichlorofluoromethane	8.29	101	35634	0.917 ng			97
15) 2-Propanol (Isopropanol)	8.50	45	12094	~~0.217 ng~~		#	56
16) Acrylonitrile	8.82	53	3603	~~0.122 ng~~		#	73
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.51	59	71405	1.264 ng		#	1
19) Methylene Chloride	9.54	84	4591	~~0.181 ng~~			82
20) 3-Chloro-1-propene (Al...	9.86	41	543	N.D.			
21) Trichlorotrifluoroethane	9.97	151	6295	0.362 ng			95
22) Carbon Disulfide	9.94	76	129040	1.443 ng			100
23) trans-1,2-Dichloroethene	10.99	61	15574	0.445 ng			91
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.42	73	1738	N.D.			
26) Vinyl Acetate	11.52	86	30421m	6.915 ng			
27) 2-Butanone (MEK)	11.90	72	121667	8.592 ng		#	87
28) cis-1,2-Dichloroethene	12.79	61	1195	N.D.			
29) Diisopropyl Ether	12.93	87	1849	0.092 ng		#	1
30) Ethyl Acetate	12.92	61	62817	6.841 ng			86
31) n-Hexane	12.92	57	104028	2.324 ng			95

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:39:36 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.02	83	6384	0.170 ng		98
34) Tetrahydrofuran (THF)	13.59	72	45063	3.061 ng	#	8
35) Ethyl tert-Butyl Ether	13.72	87	939	N.D.		
36) 1,2-Dichloroethane	14.12	62	16012	0.559 ng		96
38) 1,1,1-Trichloroethane	14.54	97	541	N.D.		
39) Isopropyl Acetate	15.09	61	2911	0.193 ng	#	1
40) 1-Butanol	15.12	56	475382	19.842 ng		81
41) Benzene	15.23	78	90821	0.913 ng		99
42) Carbon Tetrachloride	15.46	117	18834	0.678 ng		100
43) Cyclohexane	15.65	84	84108	2.184 ng		88
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.43	63	121	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.77	130	226	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D. d		
49) 2,2,4-Trimethylpentane...	16.85	57	248093	2.168 ng		91
50) Methyl Methacrylate	17.03	100	256	N.D.		
51) n-Heptane	17.20	71	53399	2.017 ng		92
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	17251m	0.803 ng		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	19.28	91	1328370	12.704 ng		100
59) 2-Hexanone	19.59	43	135106	2.486 ng		78
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	1184578	19.978 ng		99
63) n-Octane	20.55	57	30281	1.299 ng		89
64) Tetrachloroethene	20.75	166	1613	0.062 ng		86
65) Chlorobenzene	21.62	112	5853	0.091 ng	#	54
66) Ethylbenzene	22.09	91	657997	5.829 ng		98
67) m- & p-Xylenes	22.30	91	1007322	11.256 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	297026	4.490 ng		99
70) o-Xylene	22.92	91	514994	5.720 ng		99
71) n-Nonane	23.16	43	49761	0.918 ng	#	77
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D. d		
74) Cumene	23.66	105	61313	0.525 ng		99
75) alpha-Pinene	24.16	93	9271396	160.977 ng		100
76) n-Propylbenzene	24.28	91	178633	1.238 ng		87
77) 3-Ethyltoluene	24.40	105	433744	3.966 ng		99
78) 4-Ethyltoluene	24.46	105	193399	1.759 ng		94
79) 1,3,5-Trimethylbenzene	24.55	105	184514	2.030 ng		99

See dil

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:39:36 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

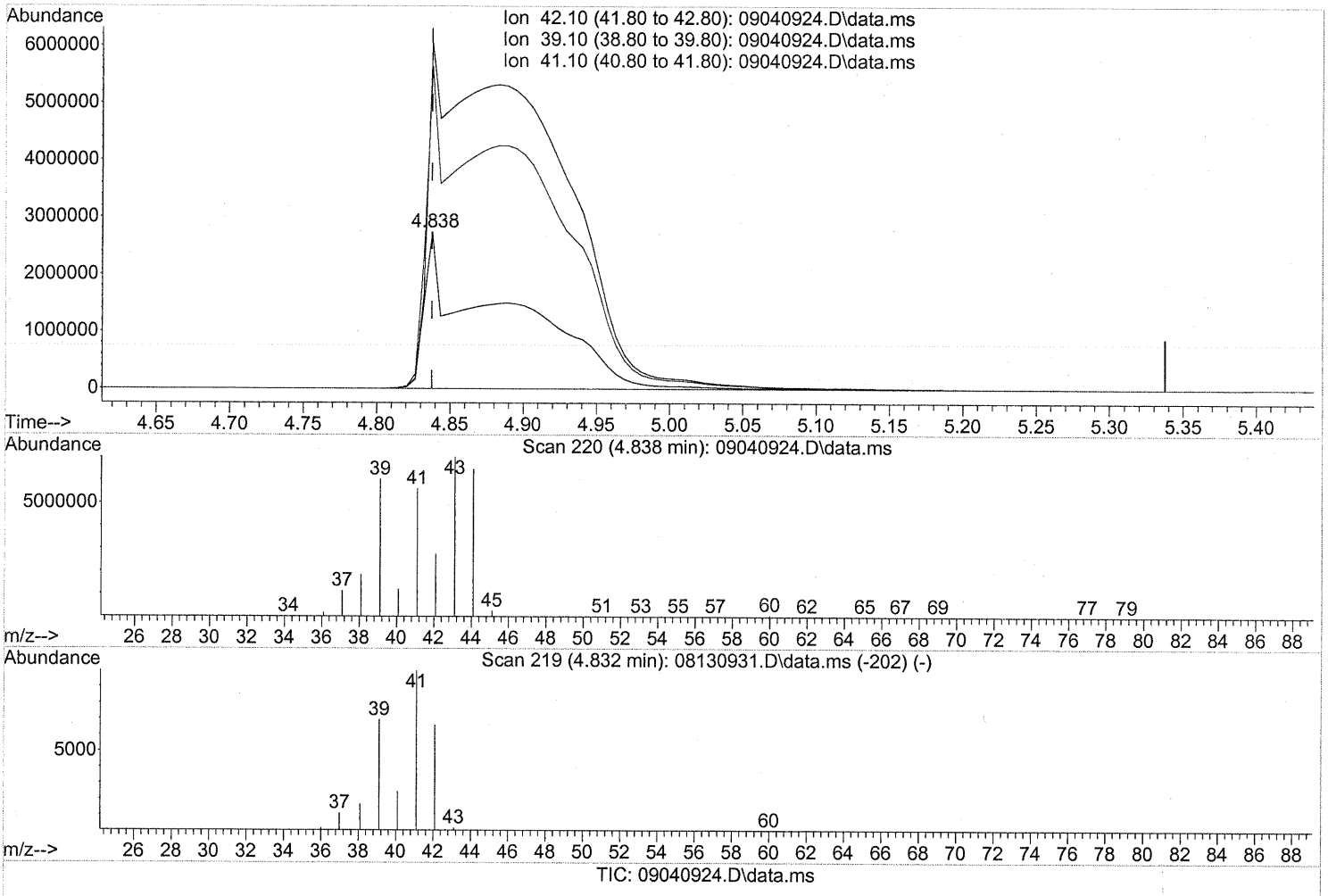
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	4193	0.085 ng	#	1
81) 2-Ethyltoluene	24.79	105	180522	1.598 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	614109	6.363 ng		89
83) n-Decane	25.15	57	31243	0.556 ng		95
84) Benzyl Chloride	25.24	91	1874	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	2091	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	2091	N.D.		
87) sec-Butylbenzene	25.38	105	25524	0.201 ng		83
88) 4-Isopropyltoluene (p-...	25.56	119	278693	2.287 ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	178693	1.832 ng		95
90) 1,2-Dichlorobenzene	25.74	146	760	N.D.		
91) d-Limonene	25.74	68	618018	15.650 ng		95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	28359	0.489 ng	#	68
94) 1,2,4-Trichlorobenzene	27.79	180	251	N.D.		
95) Naphthalene	27.94	128	158457	1.224 ng		96
96) n-Dodecane	27.89	57	64677	0.995 ng		92
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	106785	3.243 ng		98
99) tert-Butylbenzene	25.49	119	55448	0.579 ng		96
100) n-Butylbenzene	26.06	91	85267	0.842 ng	#	62

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 15 09:55:03 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(2) Propene (T)

4.838min (+0.000) 329.33ng

response 10479242

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	336.06#
41.10	152.70	271.26#
0.00	0.00	0.00

SH

see dil

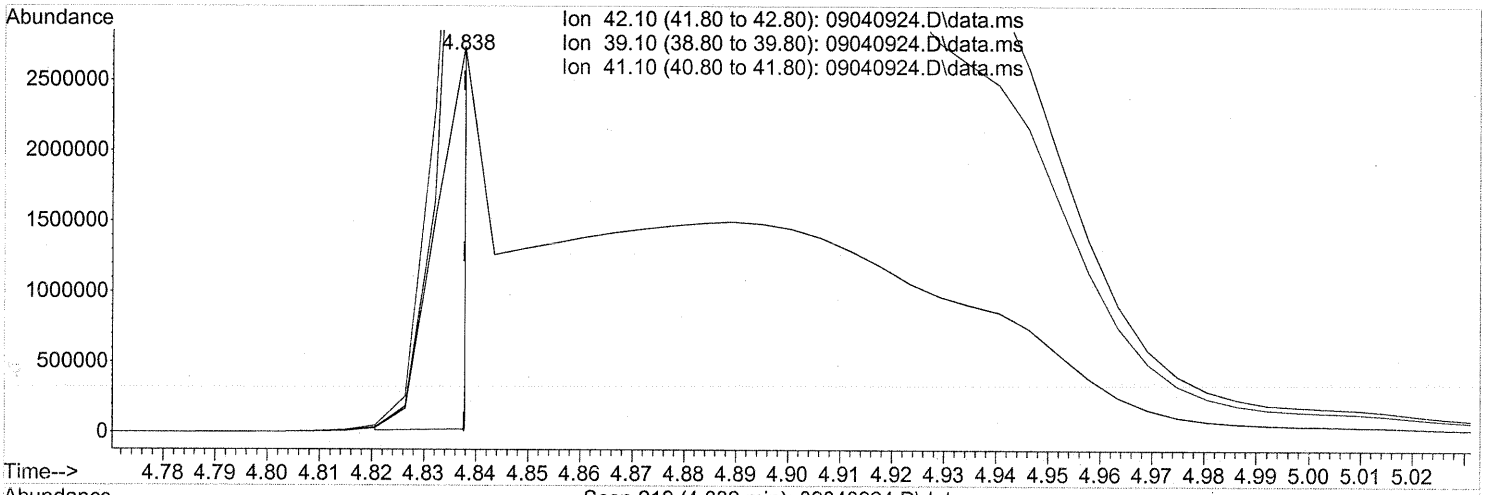
DA 9/18/09

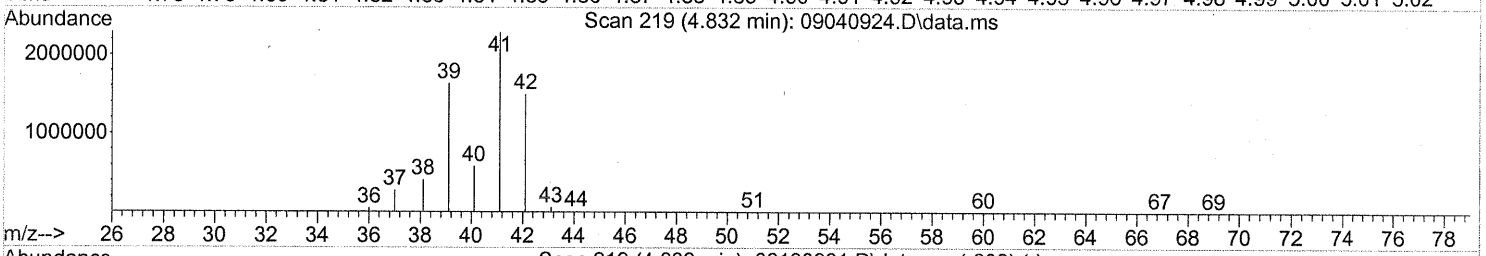
140

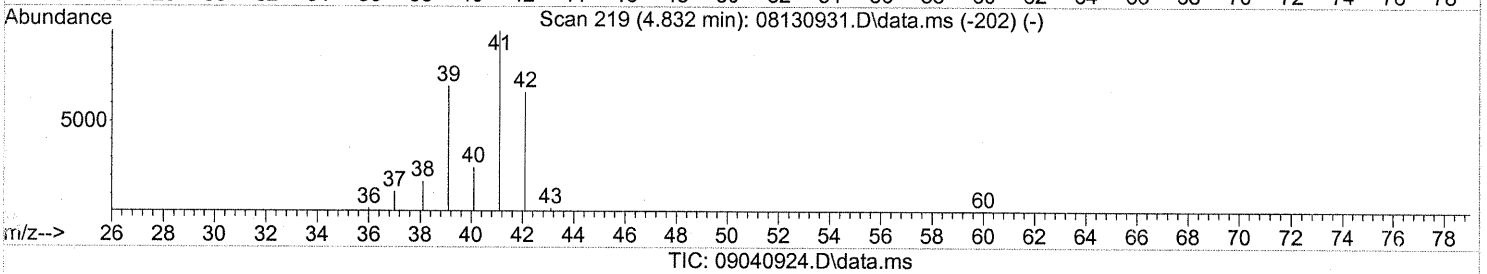
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 15 09:55:03 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(2) Propene (T)

4.838min (+0.000) 46.85ng m

response 1490685

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	2362.42#
41.10	152.70	1906.93#
0.00	0.00	0.00

Not used

SH → IC see dil

SH 9/16/09

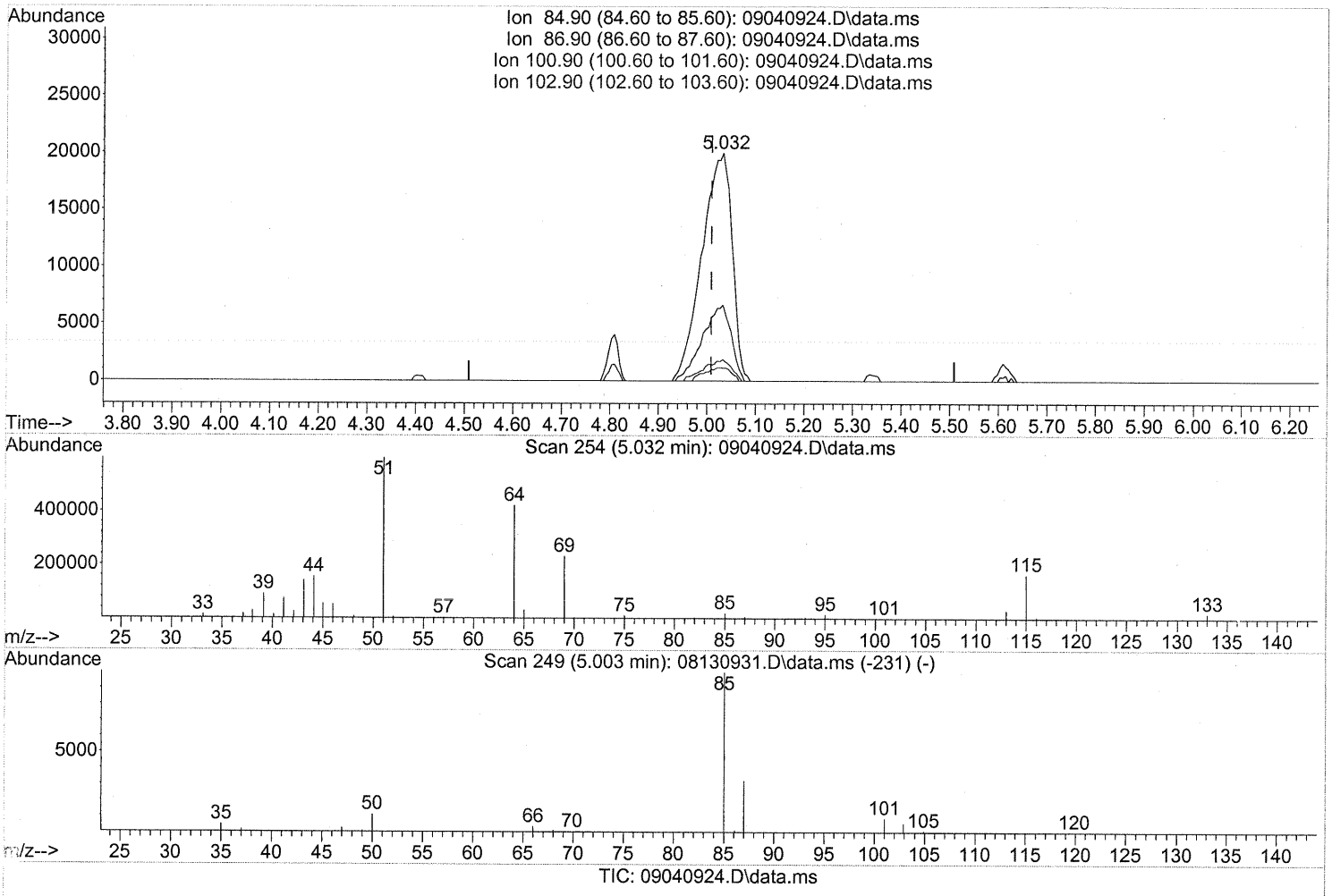
9/16/09

141

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 1.89ng

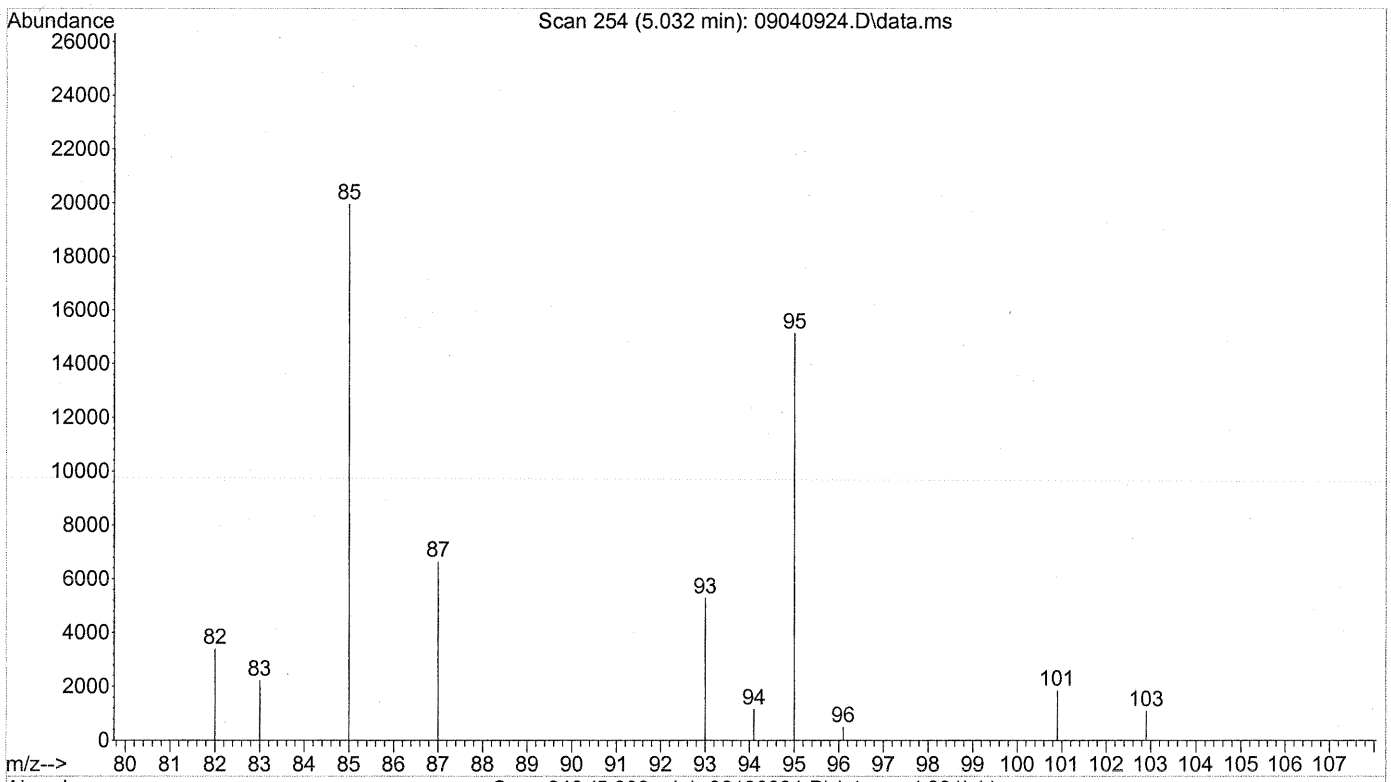
response 85670

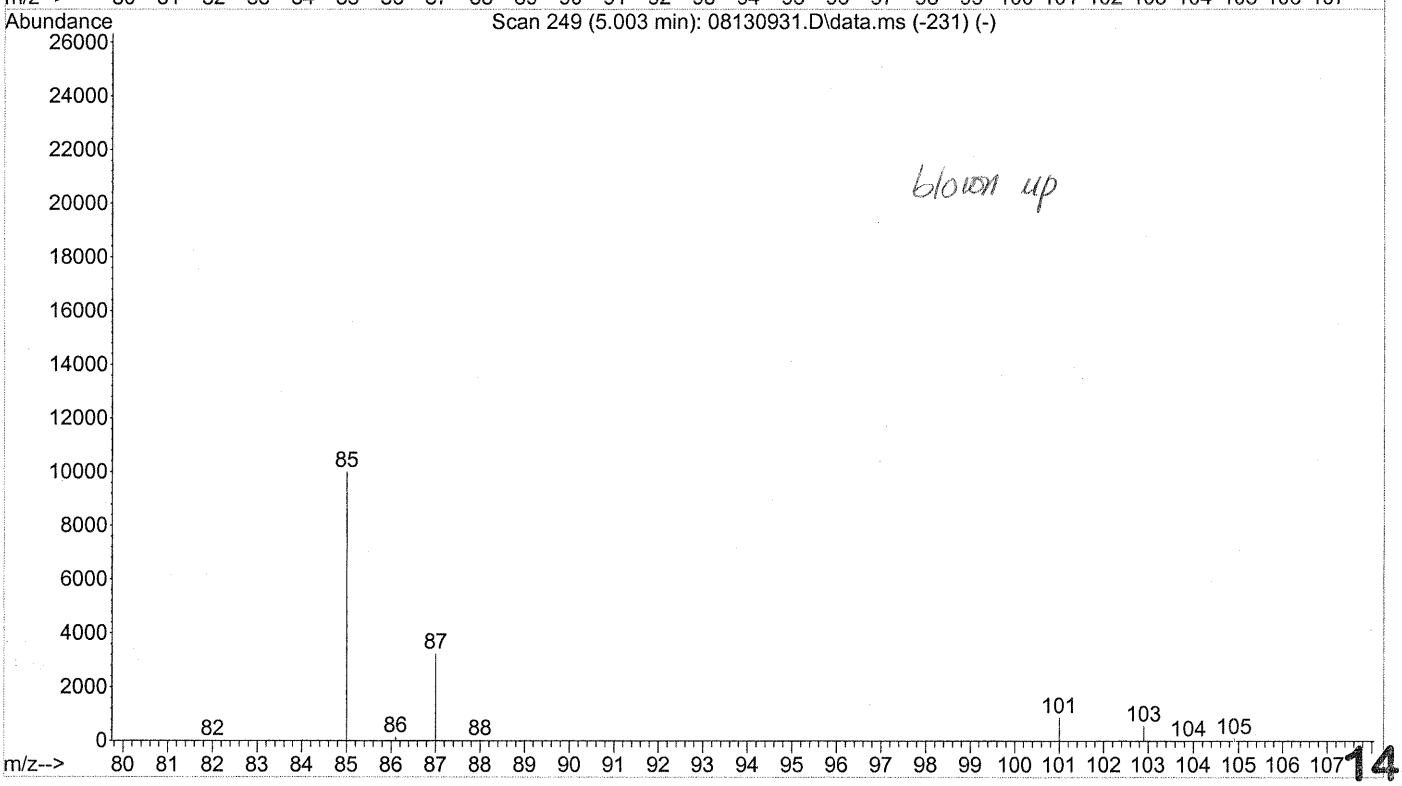
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.62
100.90	9.10	8.51
102.90	5.50	5.08

see blown up spectra

142

File :J:\MS09\Data\2009_09\04\09040924.D
Operator : EM
Acquired : 5 Sep 2009 00:23 using AcqMethod TO15LOW.M
Instrument : MS09
Sample Name: P0903080-003 (1000ml)
Misc Info : Environmental H&E 104836
Vial Number: 11

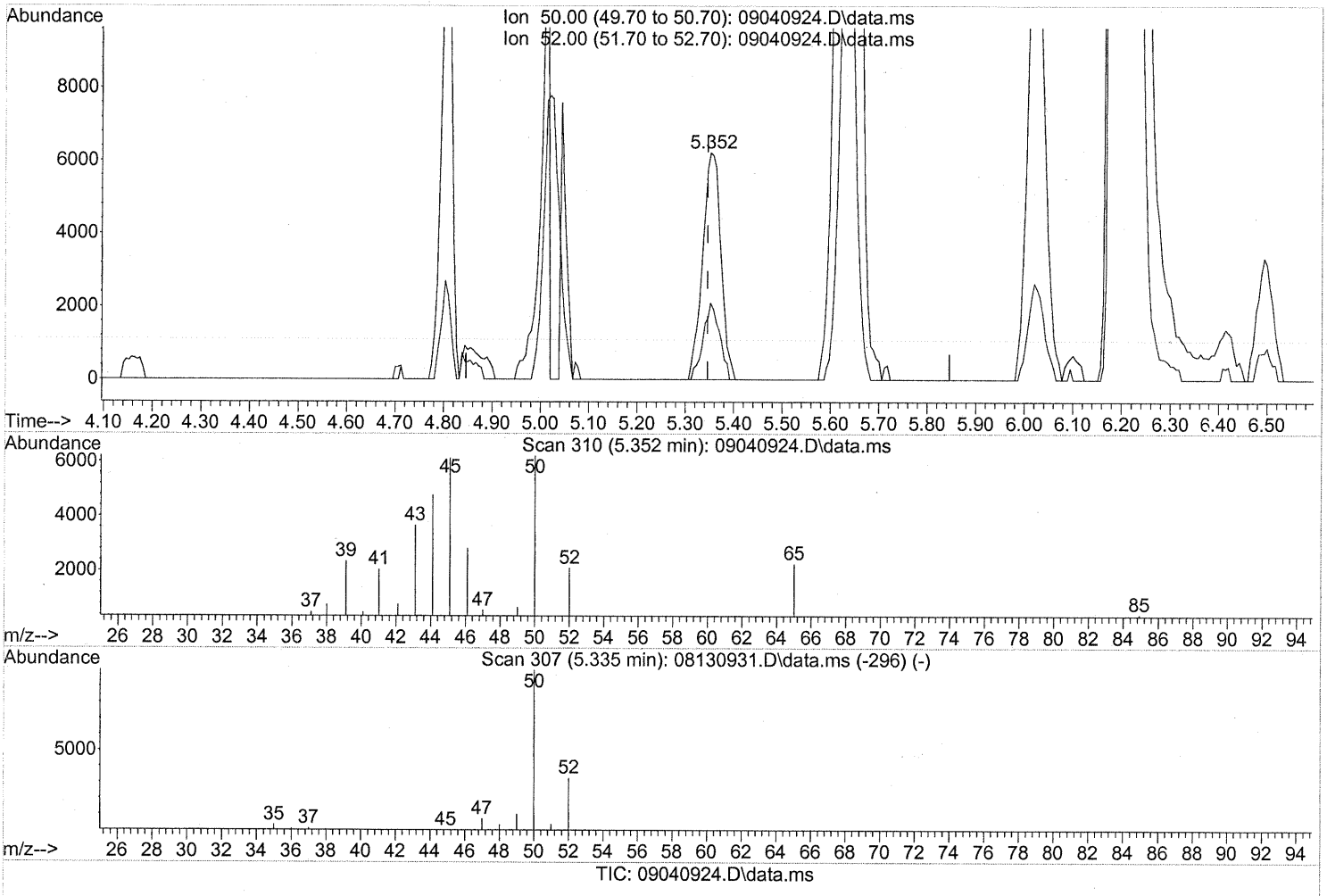




Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(4) Chloromethane (T)

5.352min (+0.006) 0.38ng

response 16291

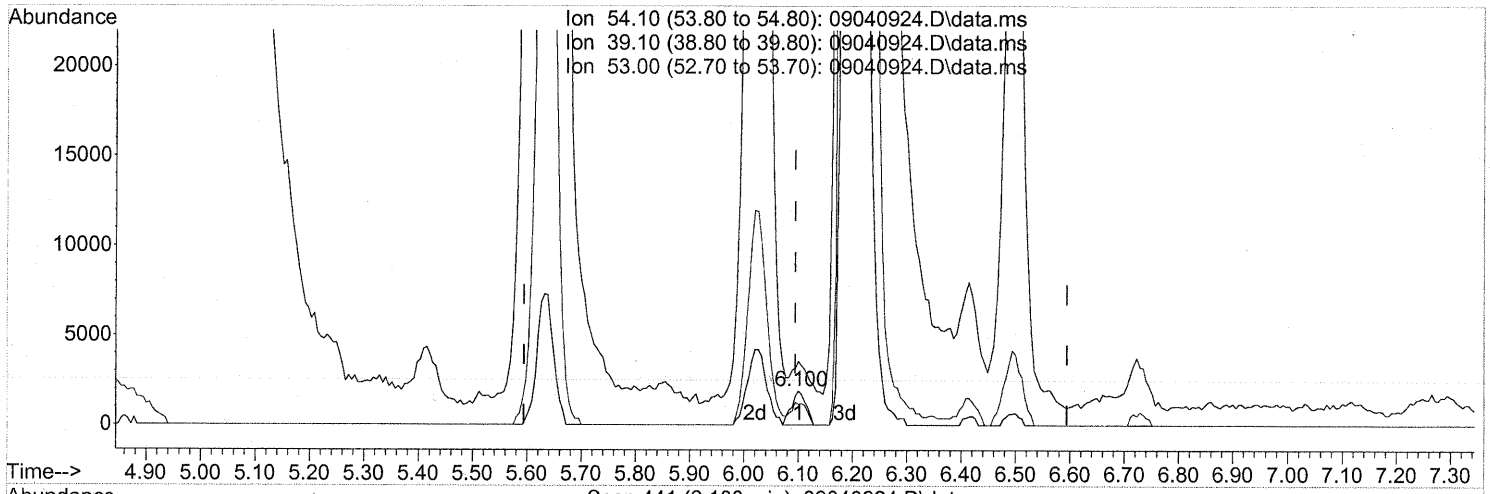
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.24
0.00	0.00	0.00
0.00	0.00	0.00

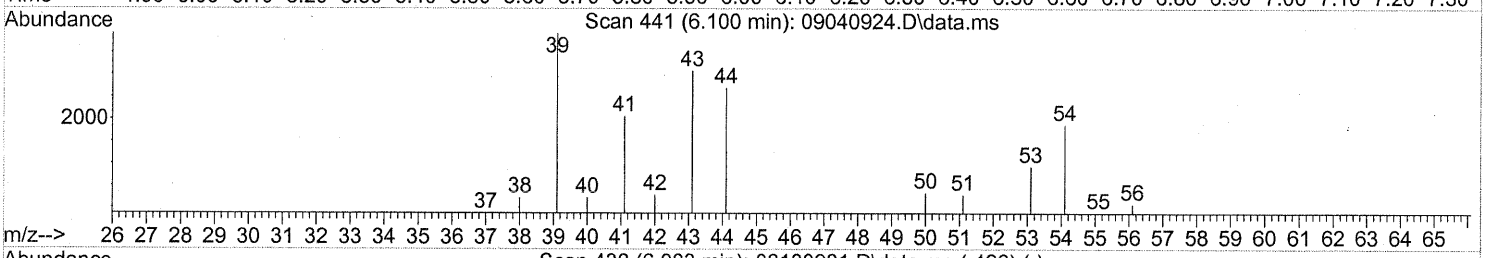
144

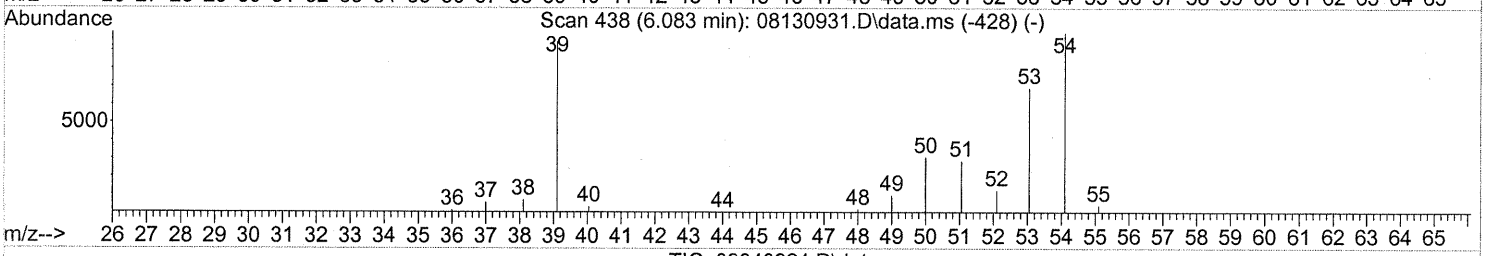
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(7) 1,3-Butadiene (T)

6.100min (+0.006) 0.12ng

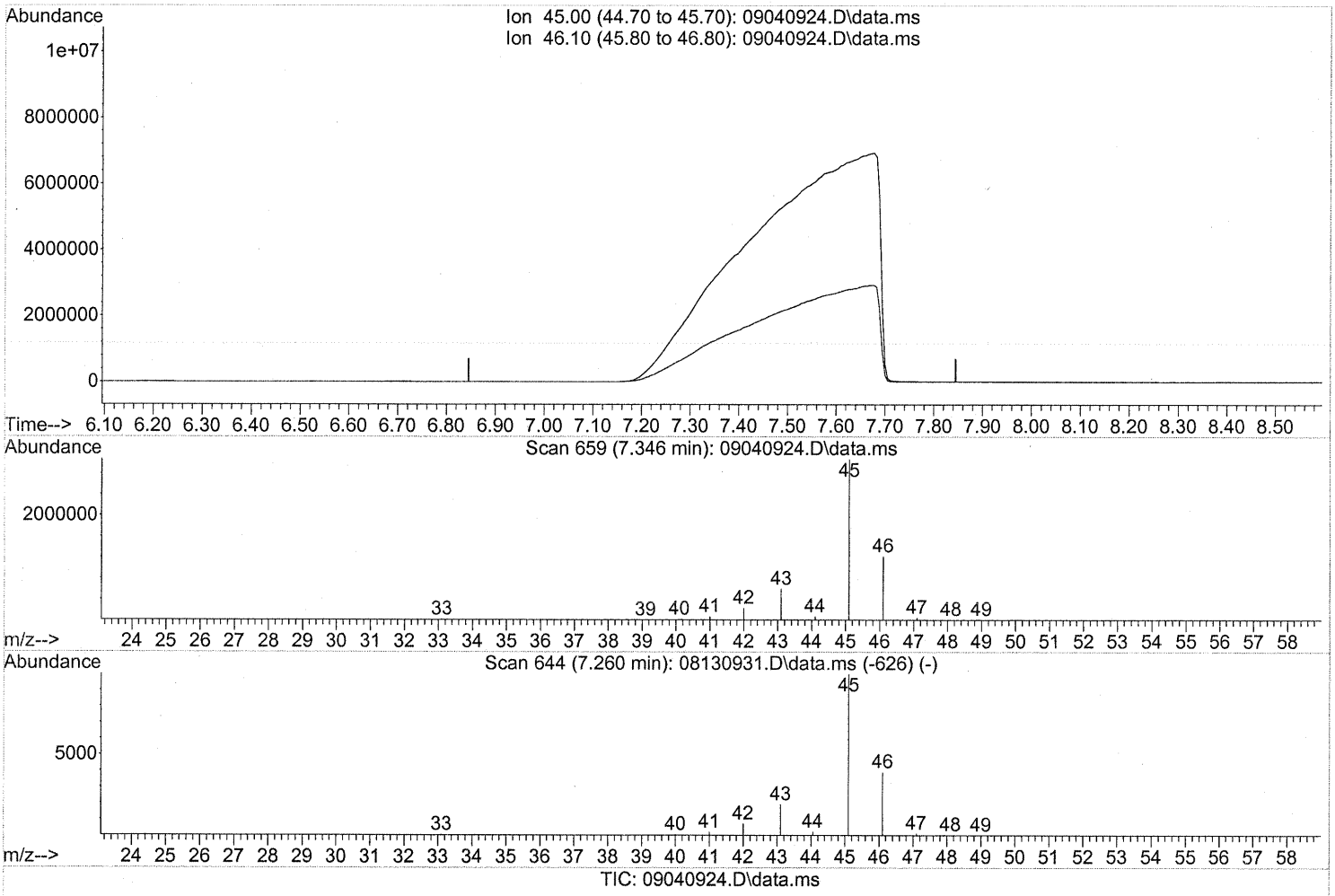
response 3522

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	0.00#
53.00	69.80	69.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(10) Ethanol (T)

7.345min (-7.345) 0.00ng

response 0

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

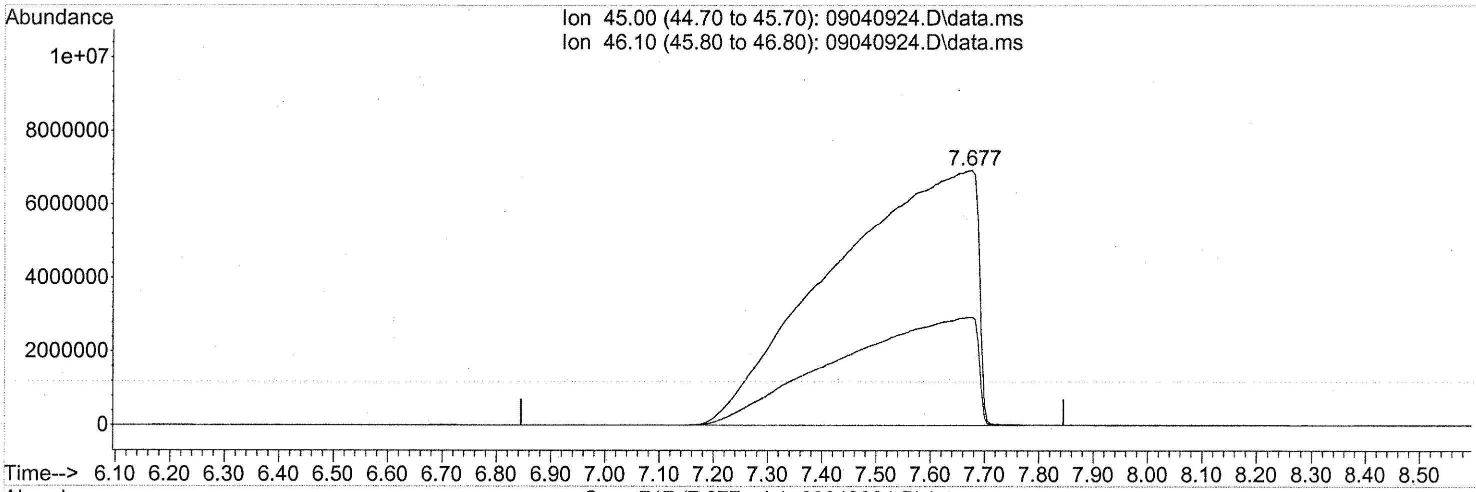
MP

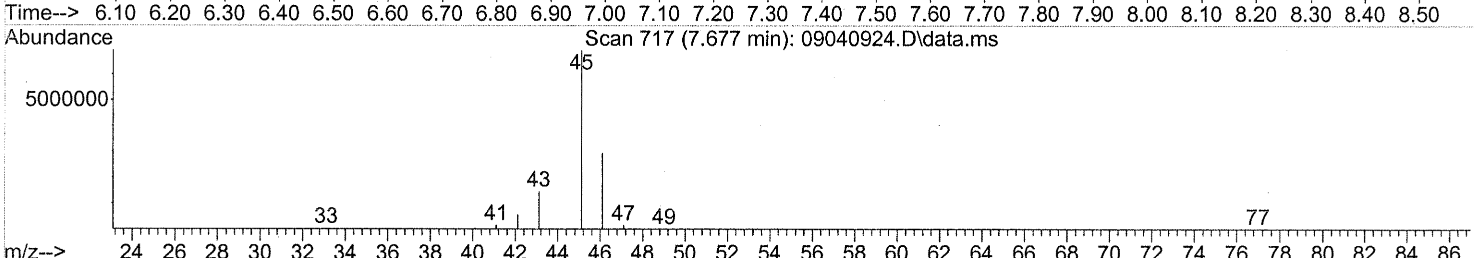
146

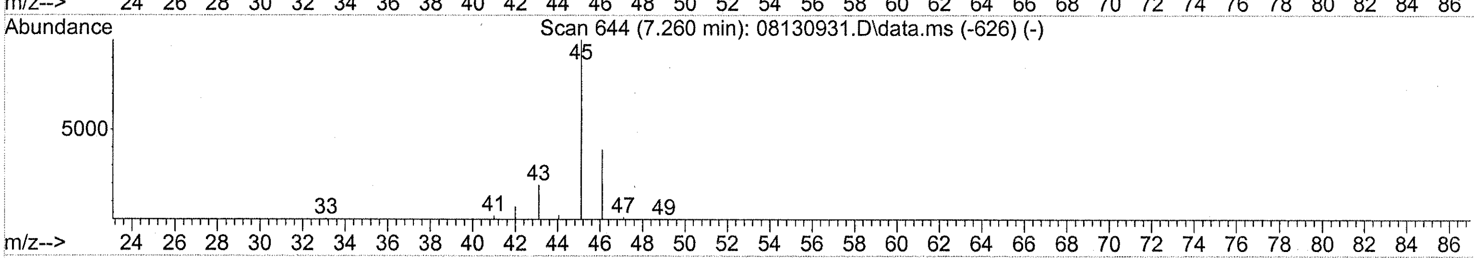
Quantitation Report (Qedit)

```
Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On    :  5 Sep 2009  00:23
Operator  : EM
Sample    : P0903080-003 (1000ml)
Misc      : Environmental H&E 104836
ALS Vial  : 11   Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title  : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration
```







TIC: 09040924.D\data.ms

(10) Ethanol (T)

7.677min (+0.331) 6353.43ng m

response 126815801

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

MP → IC

LDA 9/15/09

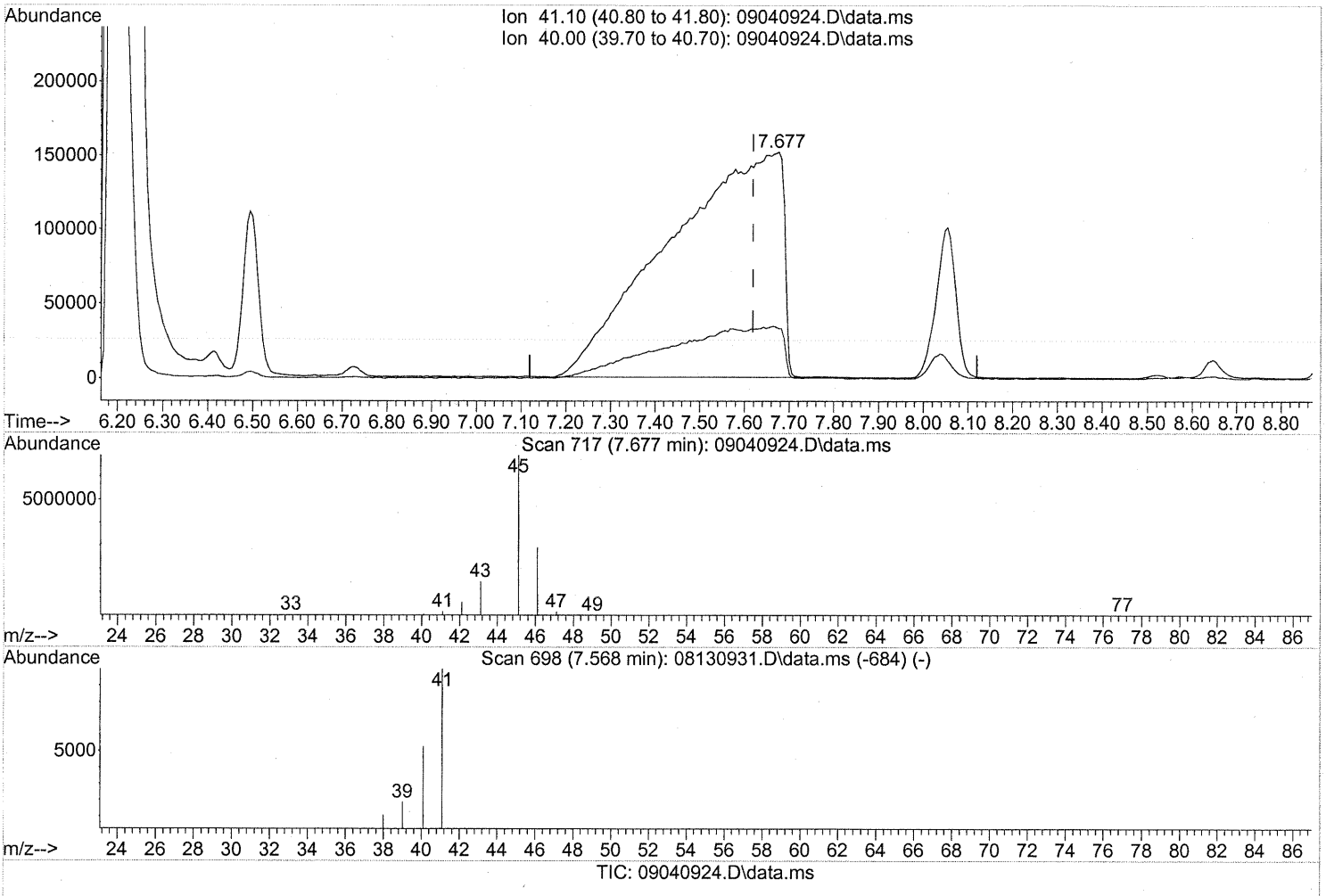
E 9/16/09

147

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(11) Acetonitrile (T)

7.677min (+0.057) 54.95ng

response 2676514

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	23.23#
0.00	0.00	0.00
0.00	0.00	0.00

FP

9/15/09

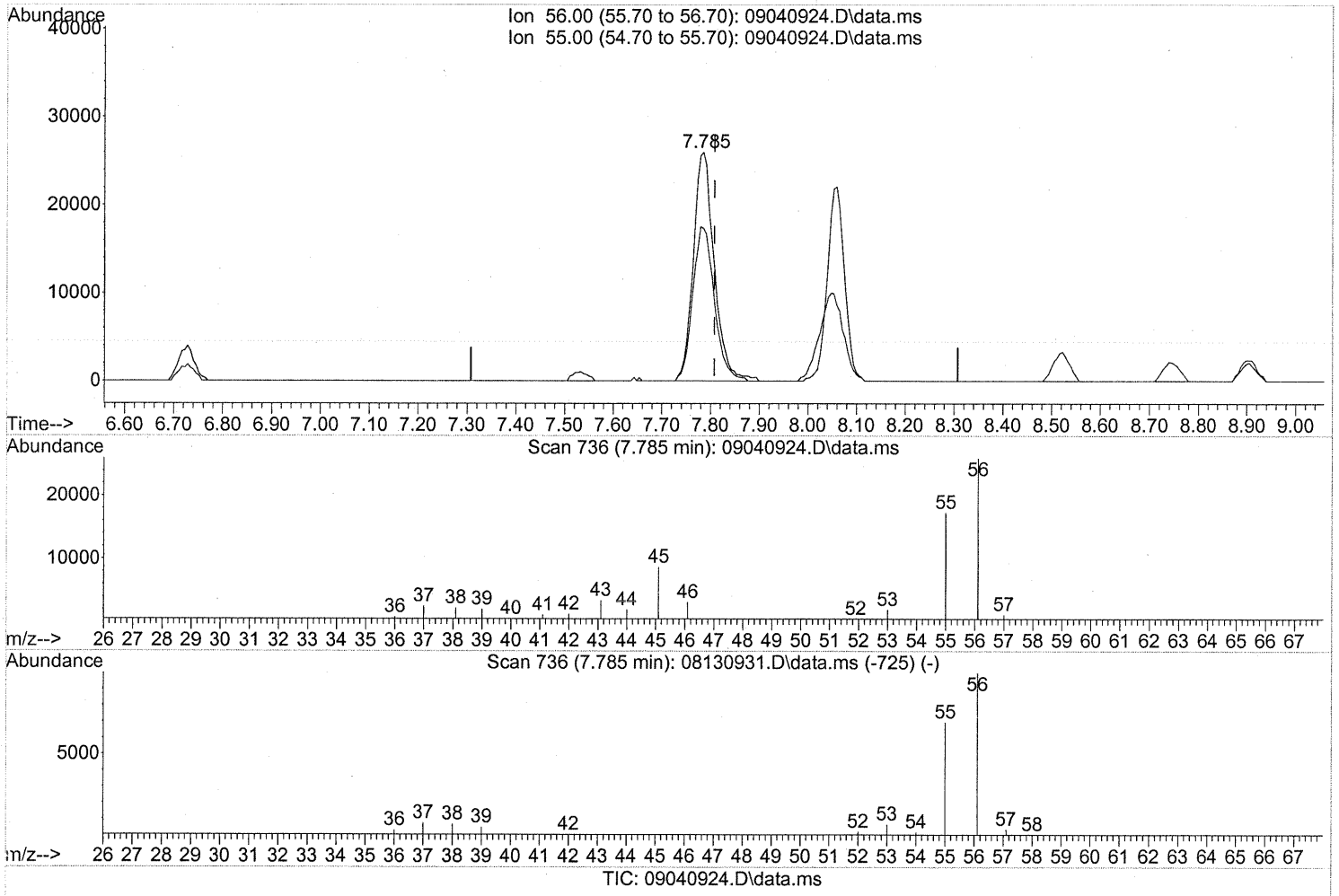
9/16/09

148

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(12) Acrolein (T)

7.785min (-0.023) 5.95ng

response 77394

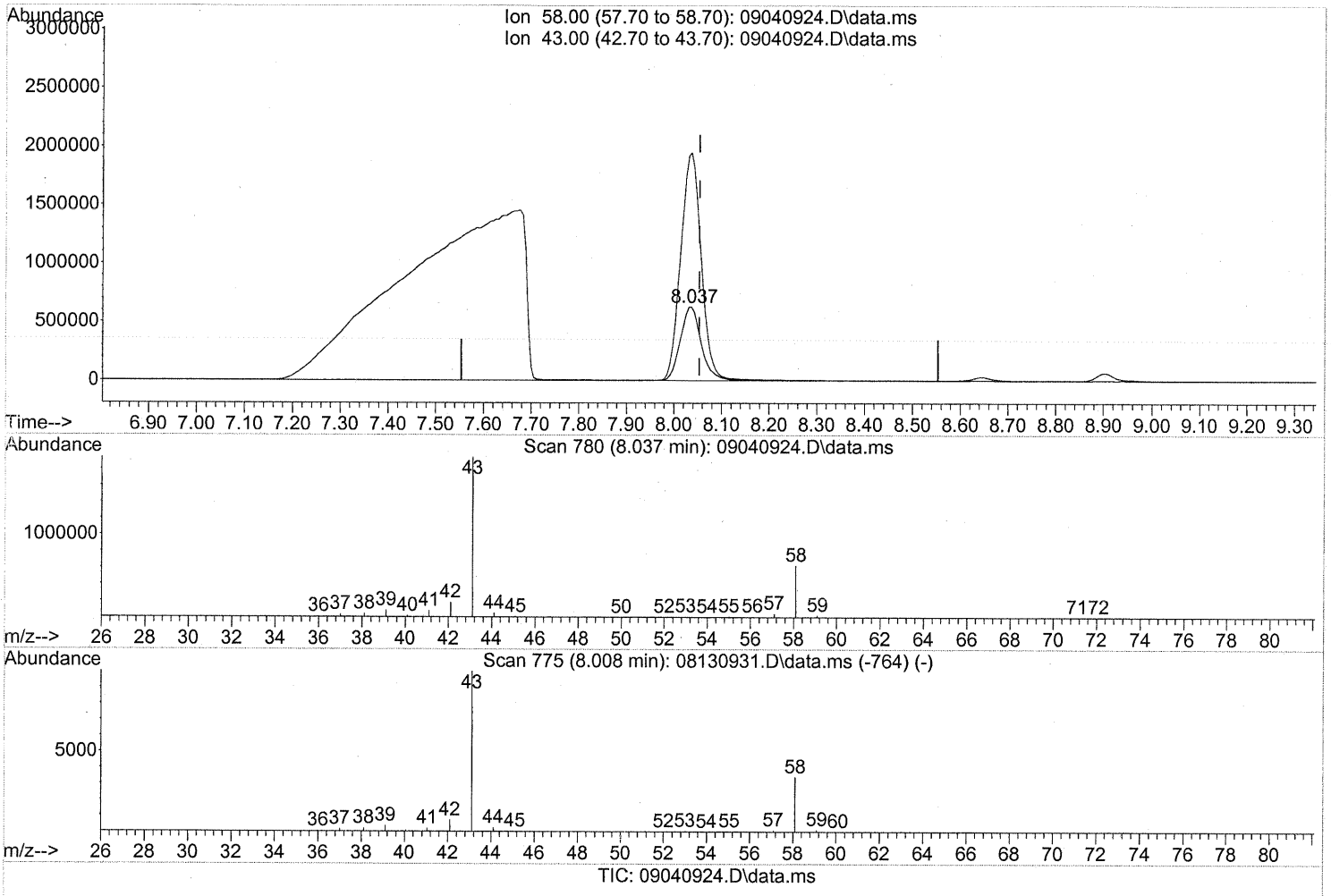
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.82
0.00	0.00	0.00
0.00	0.00	0.00

149

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(13) Acetone (T)

8.037min (-0.017) 94.94ng

response 1928303

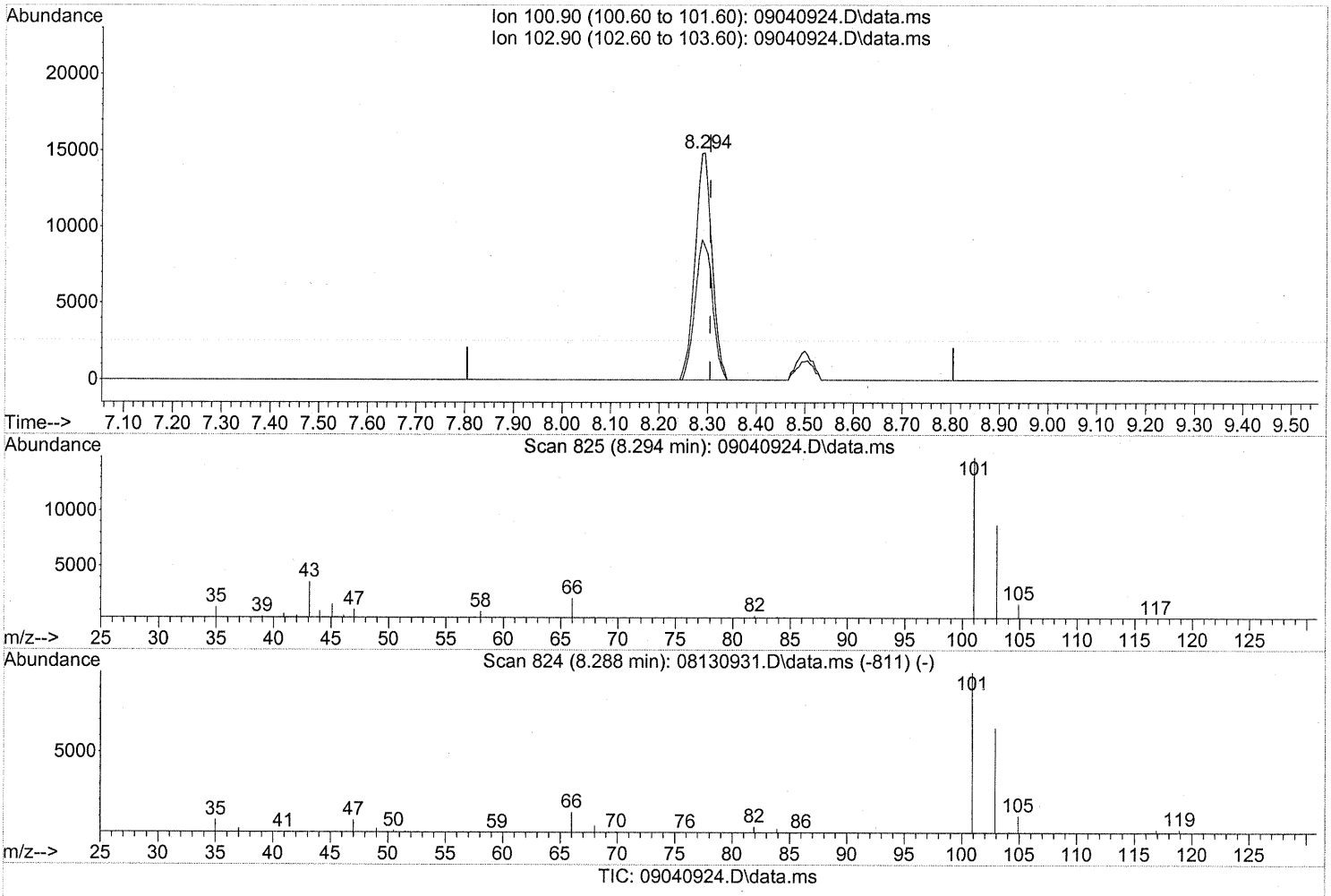
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	304.67
0.00	0.00	0.00
0.00	0.00	0.00

150

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(14) Trichlorofluoromethane (T)

8.294min (-0.011) 0.92ng

response 35634

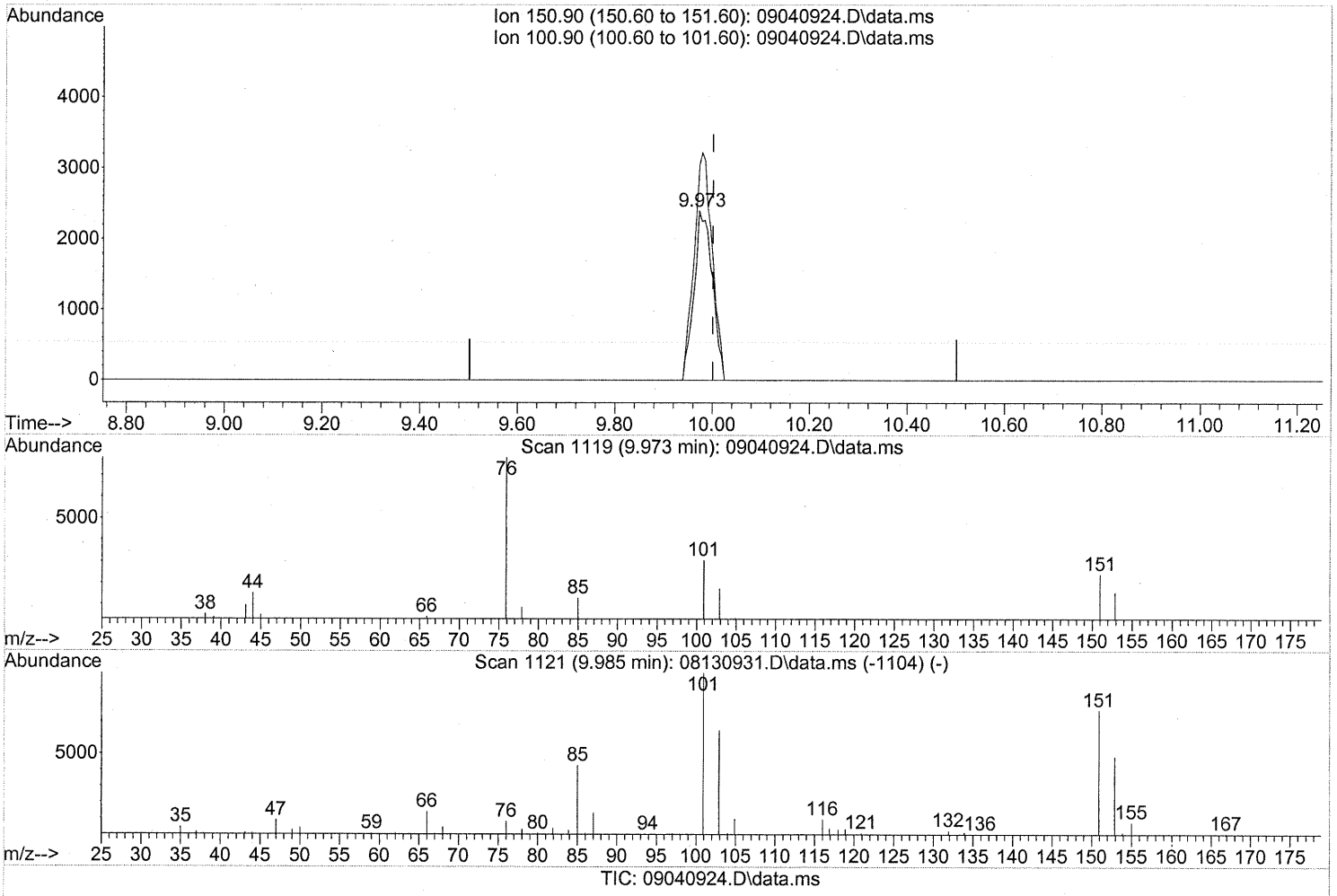
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.39
0.00	0.00	0.00
0.00	0.00	0.00

151

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.973min (-0.028) 0.36ng

response 6295

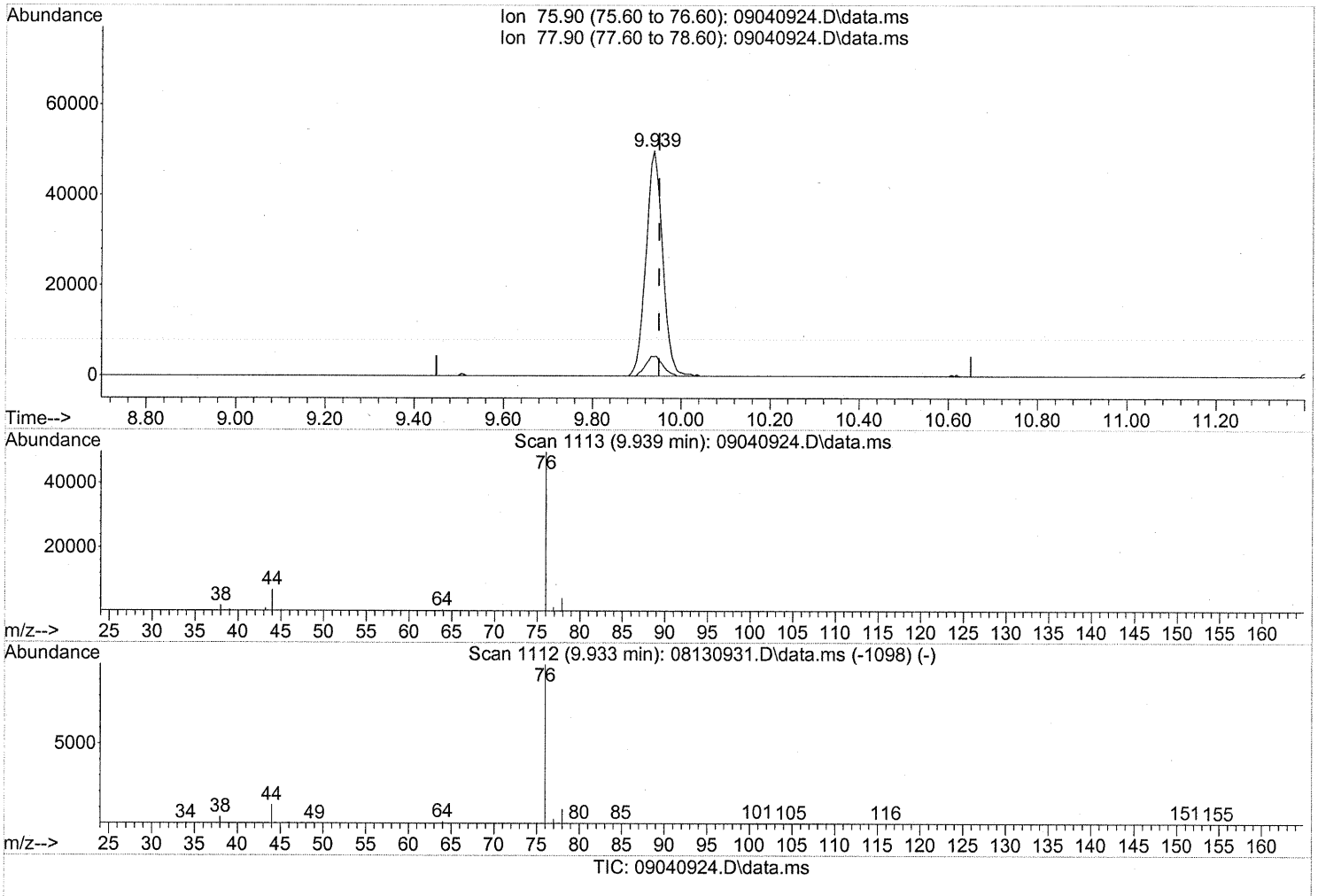
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	133.12
0.00	0.00	0.00
0.00	0.00	0.00

152

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 1.44ng

response 129040

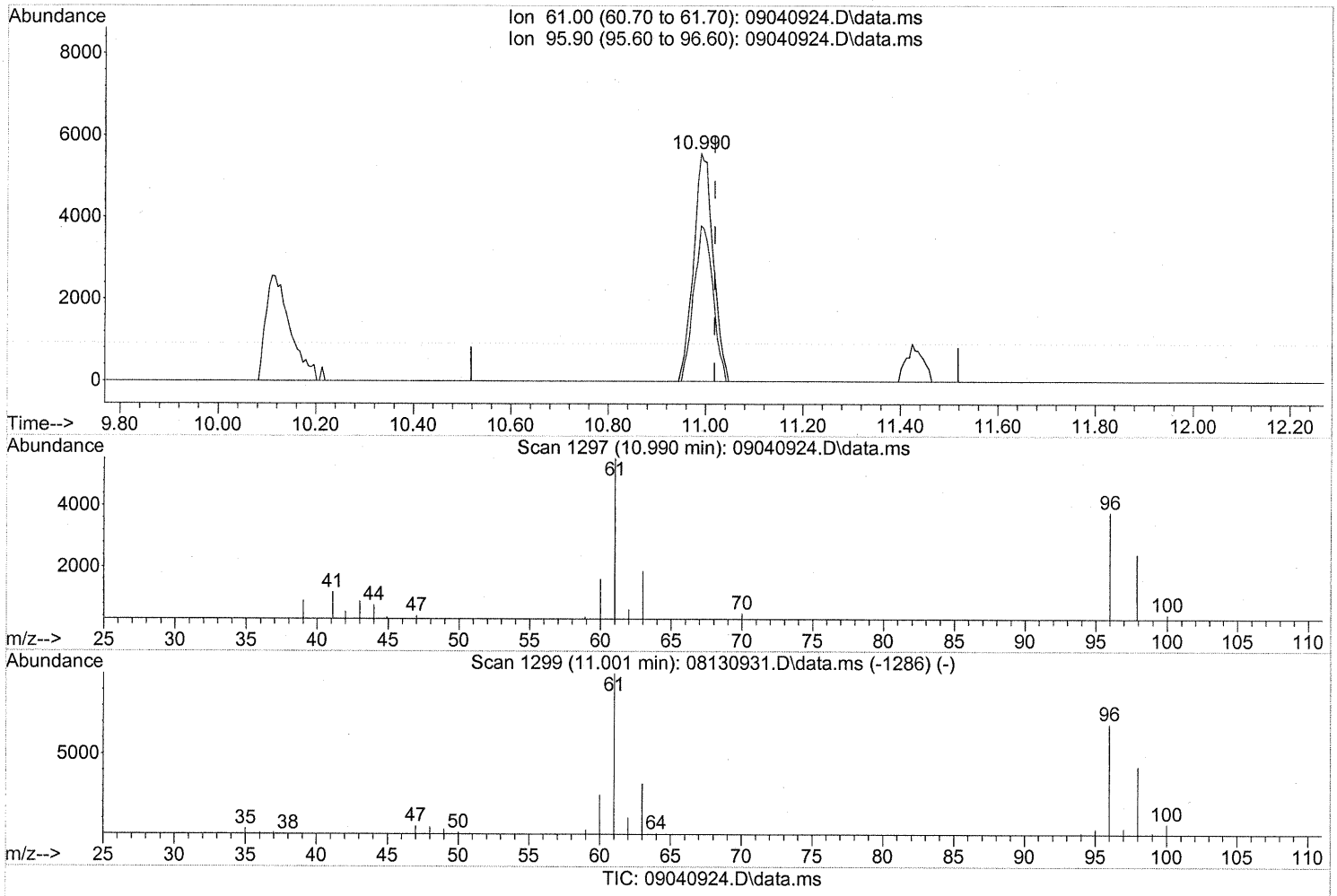
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.96
0.00	0.00	0.00
0.00	0.00	0.00

153

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(23) trans-1,2-Dichloroethene (T)

10.990min (-0.028) 0.45ng

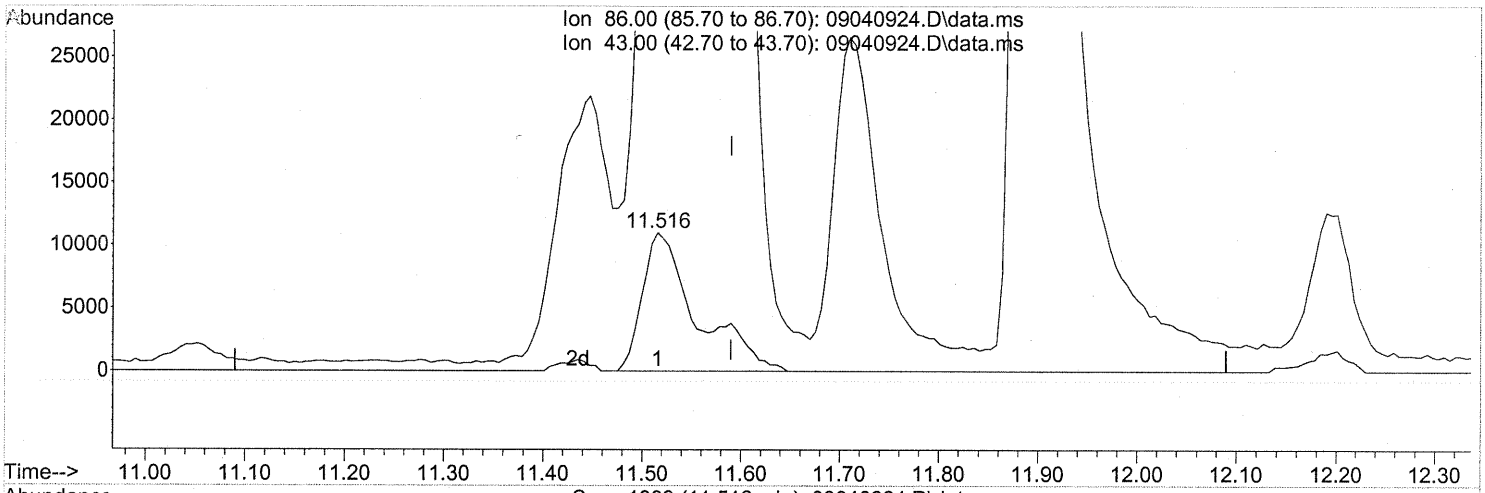
response 15574

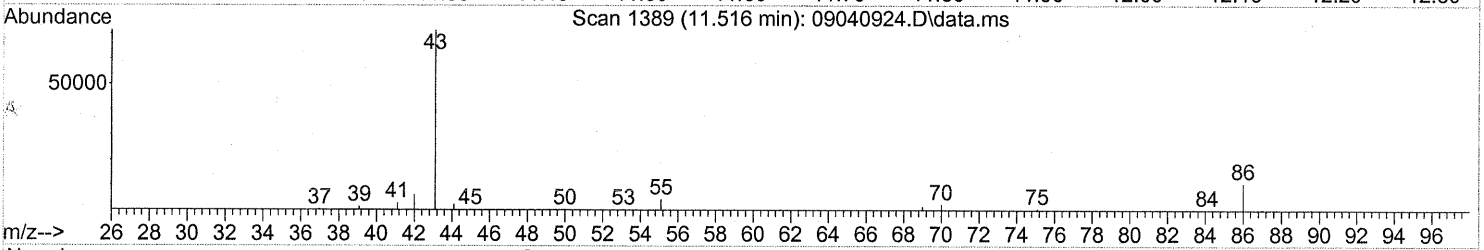
Ion	Exp%	Act%
61.00	100	100
95.90	74.10	66.13
0.00	0.00	0.00
0.00	0.00	0.00

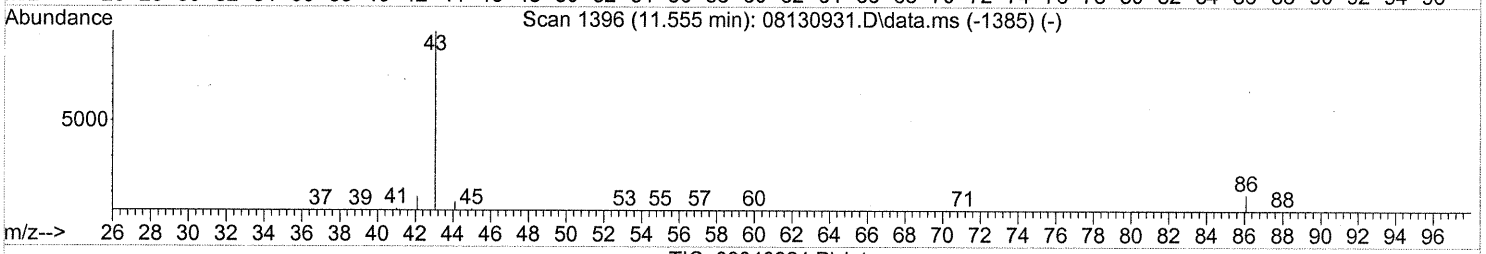
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(26) Vinyl Acetate (T)

11.516min (-0.074) 9.44ng

response 41507

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	476.99#
0.00	0.00	0.00
0.00	0.00	0.00

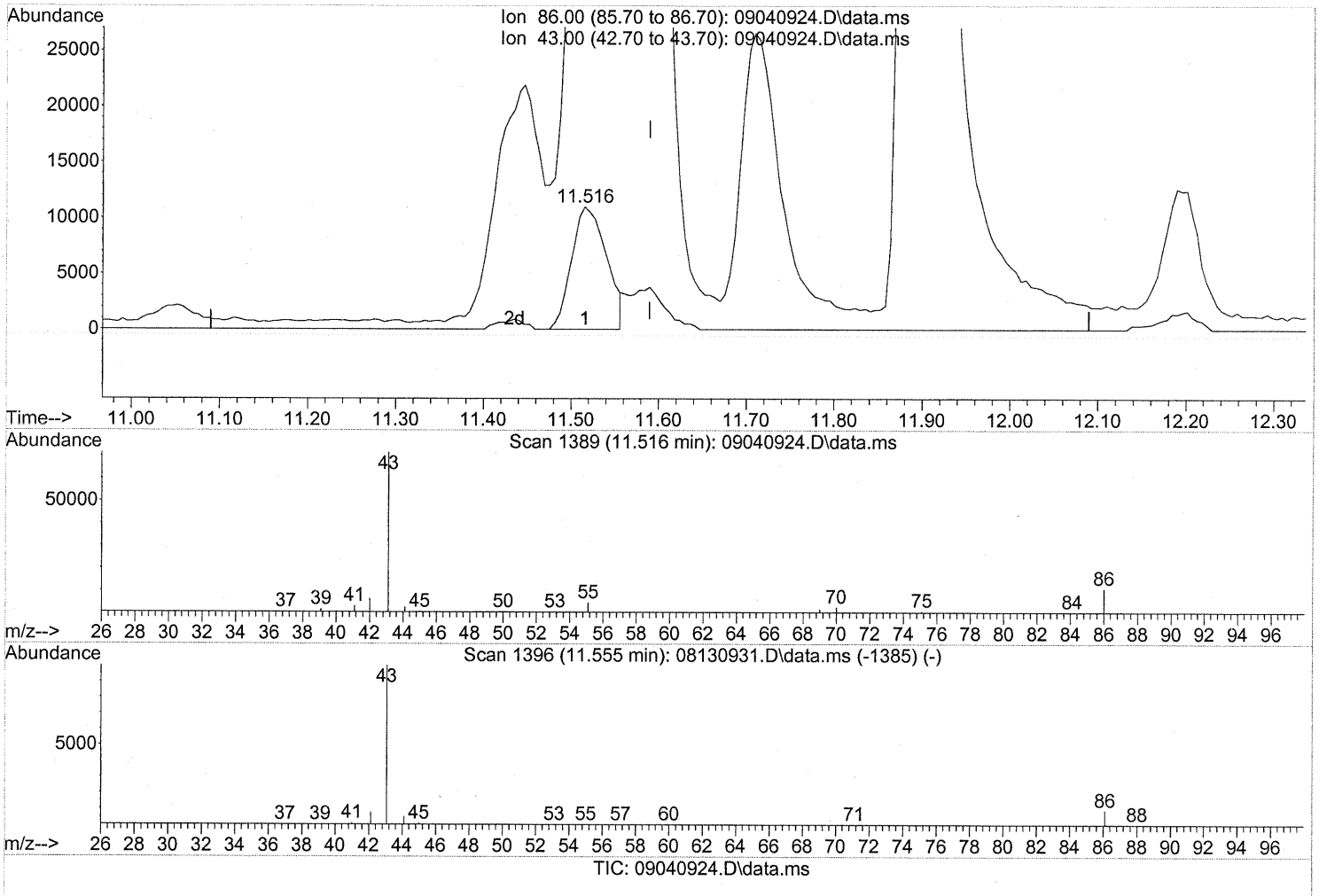
SH

155

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(26) Vinyl Acetate (T)

11.516min (-0.074) 6.92ng m

response 30421

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	650.82#
0.00	0.00	0.00
0.00	0.00	0.00

9/7/C

9/15/09

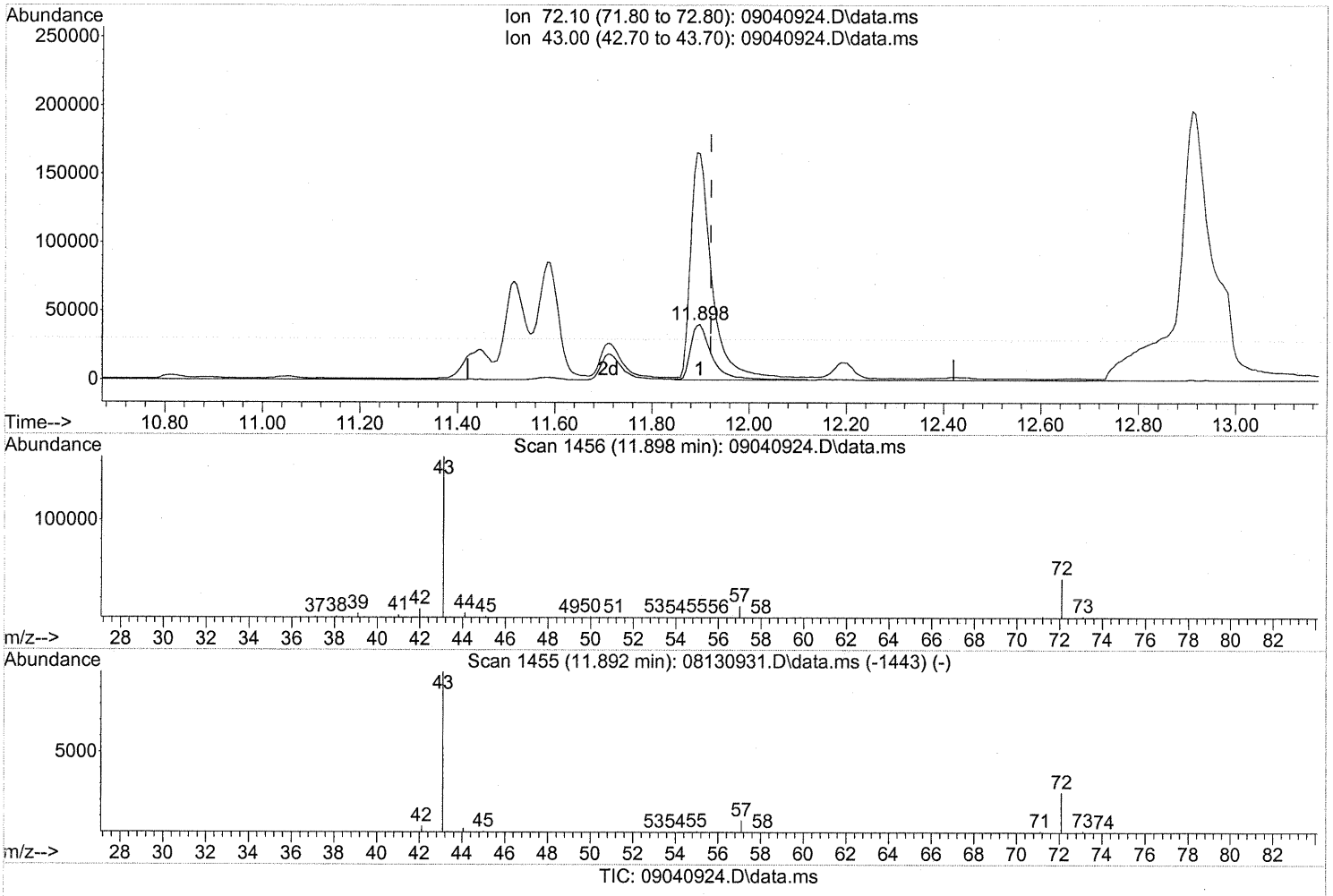
9/16/09

156

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

11.898min (-0.023) 8.59ng

response 121667

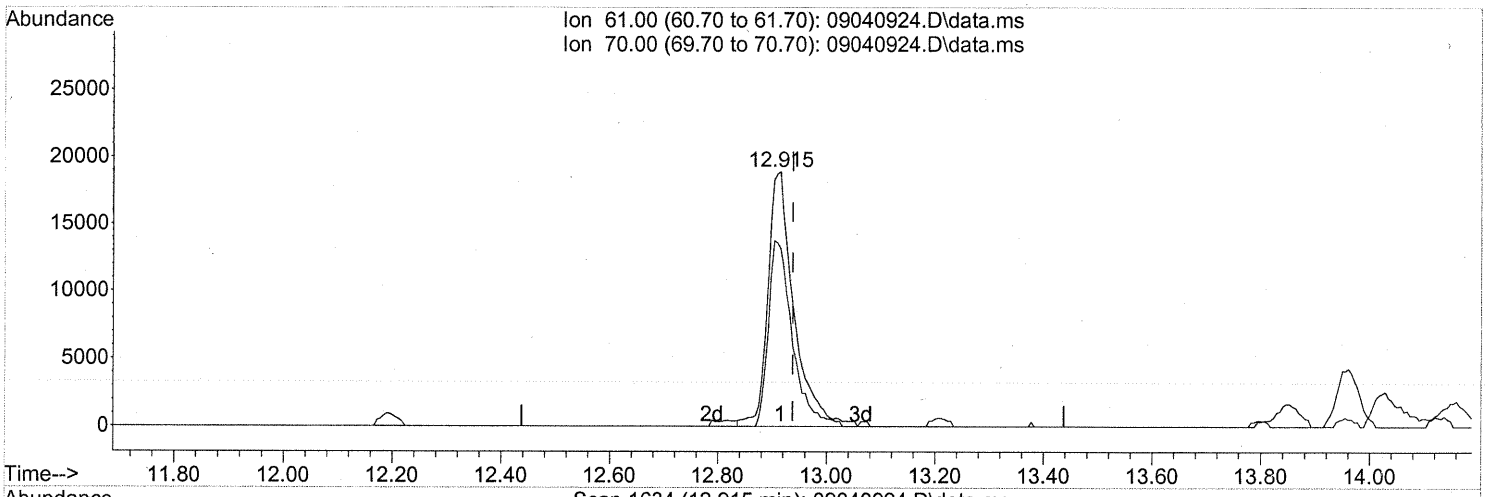
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	395.90#
0.00	0.00	0.00
0.00	0.00	0.00

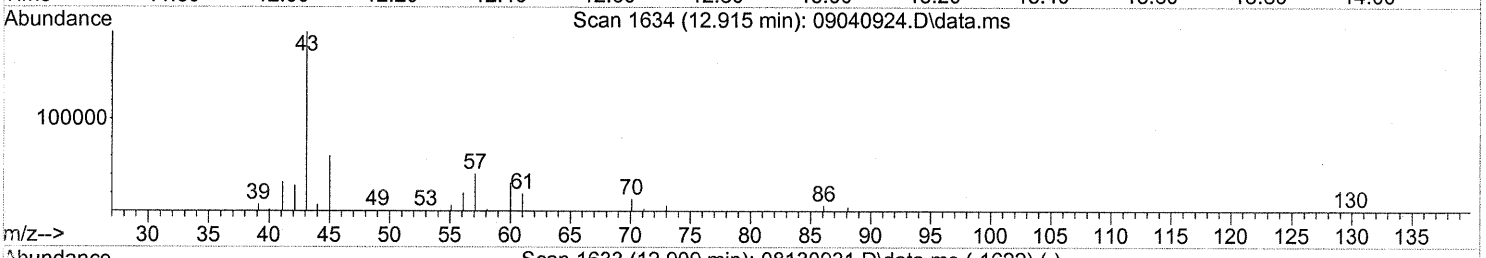
157

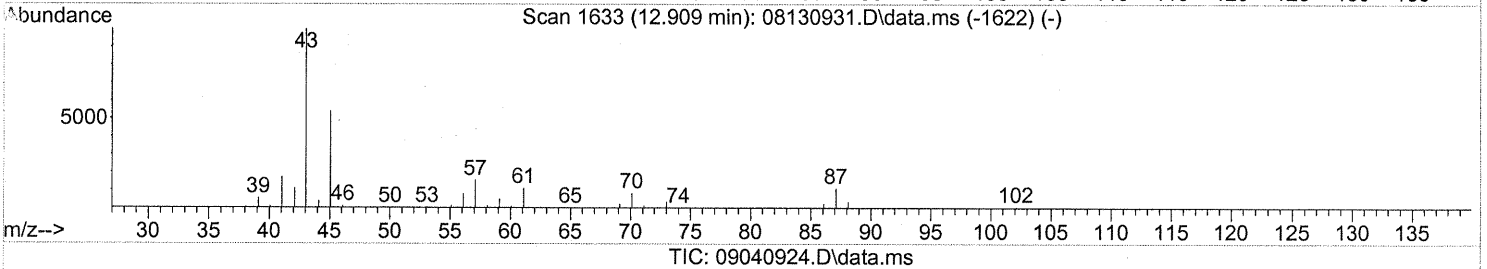
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(30) Ethyl Acetate (T)

12.915min (-0.023) 6.84ng

response 62817

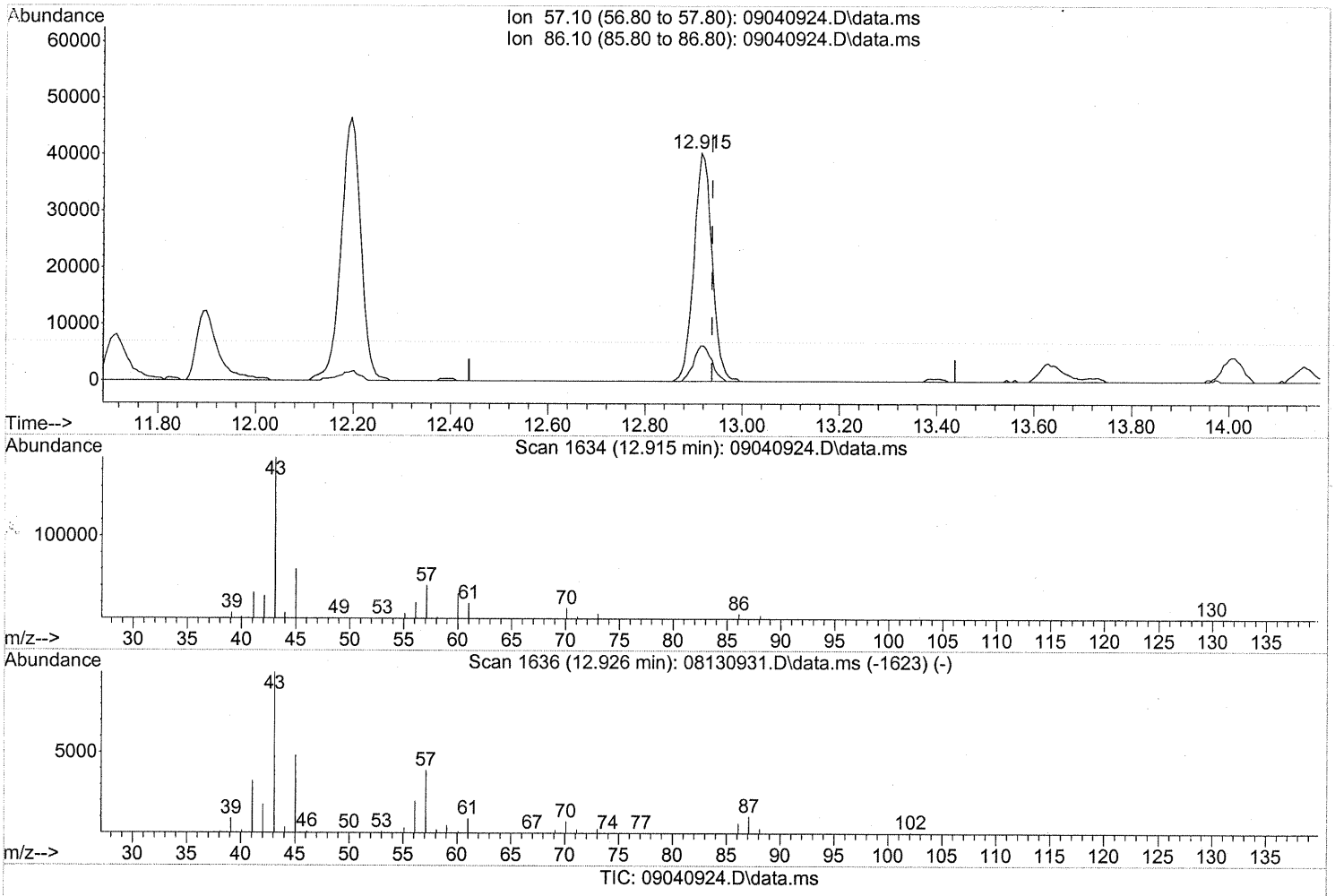
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	66.96
0.00	0.00	0.00
0.00	0.00	0.00

158

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(31) n-Hexane (T)

12.915min (-0.023) 2.32ng

response 104028

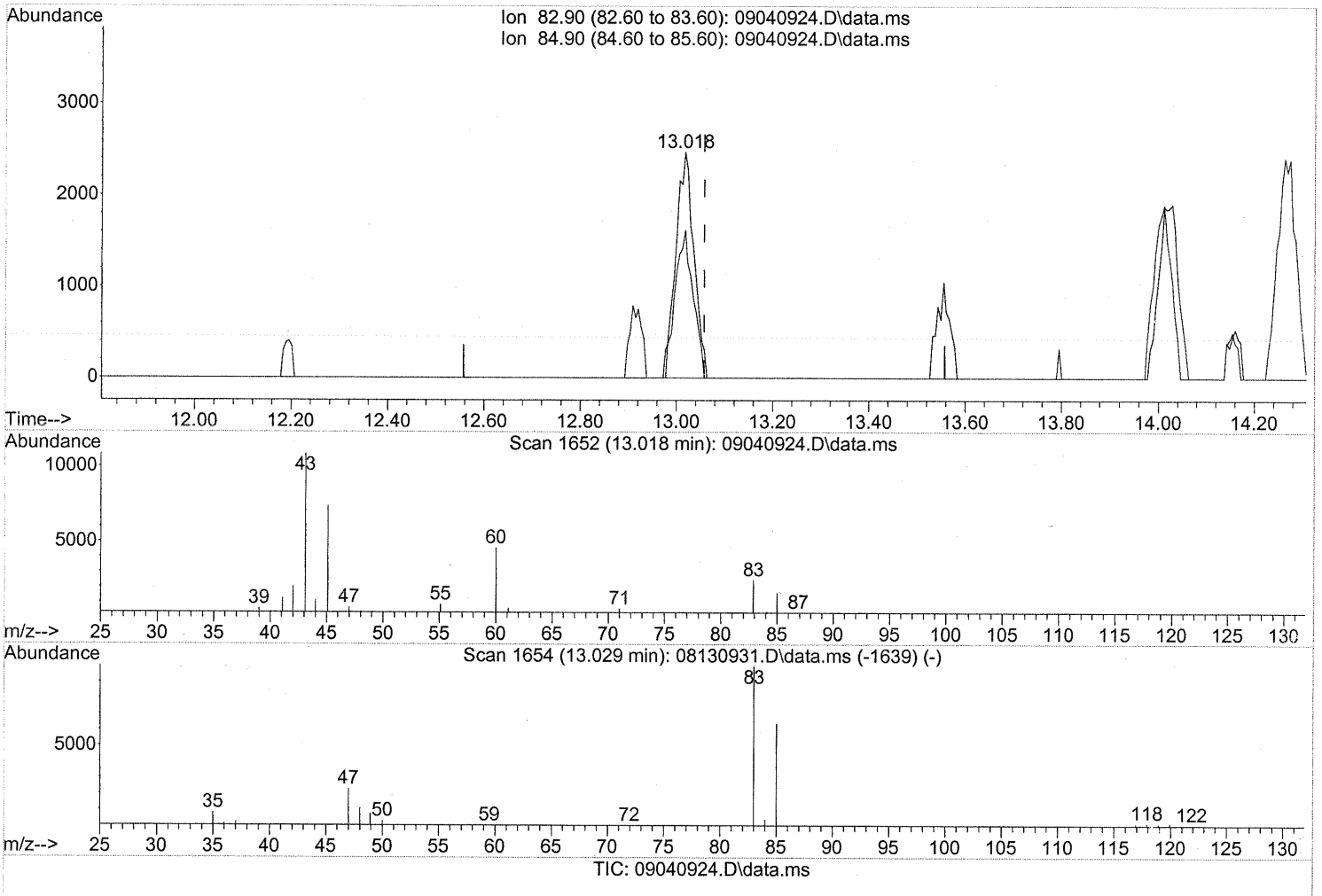
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.44
0.00	0.00	0.00
0.00	0.00	0.00

159

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 0.17ng

response 6384

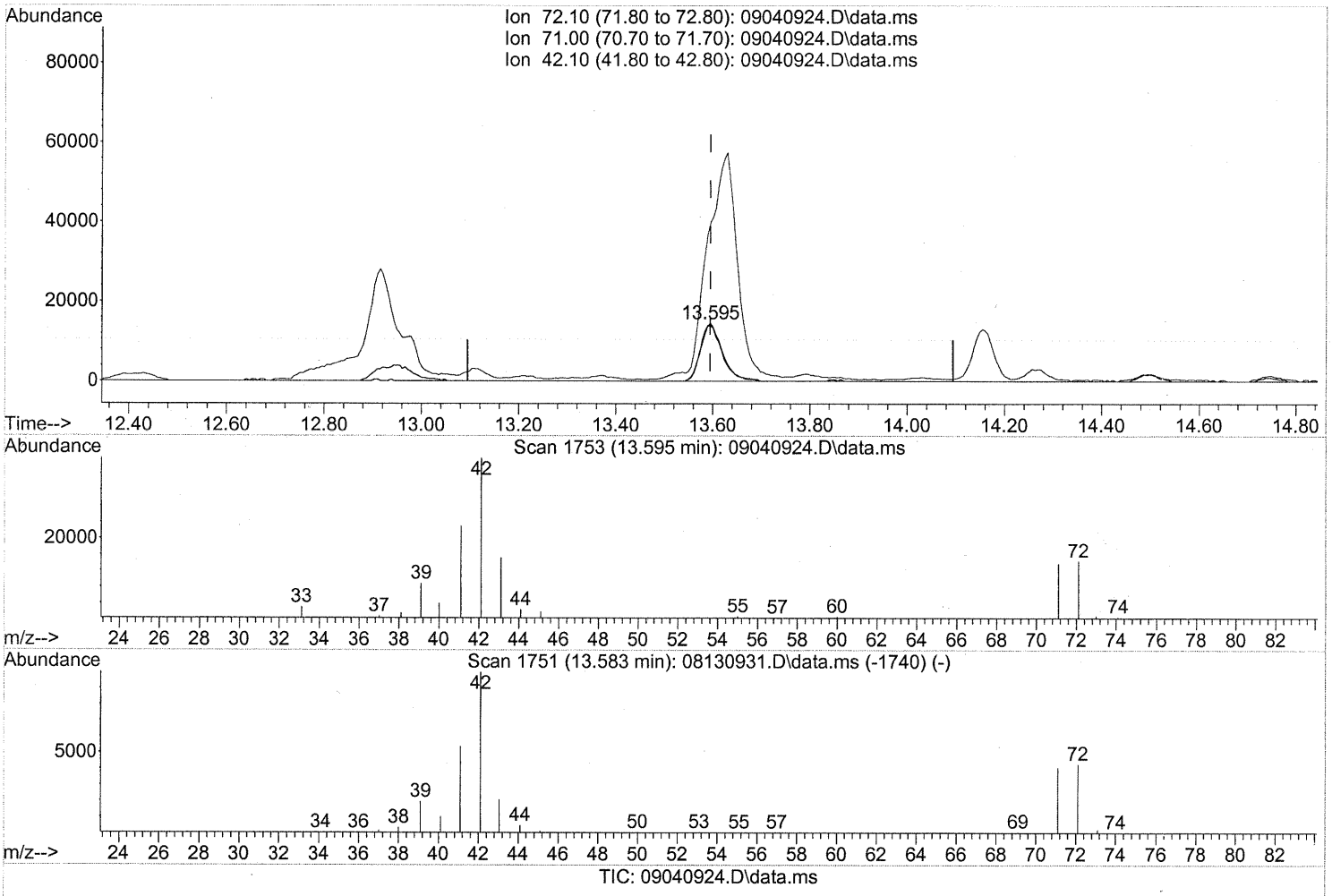
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	66.64
0.00	0.00	0.00
0.00	0.00	0.00

160

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.595min (+0.000) 3.06ng

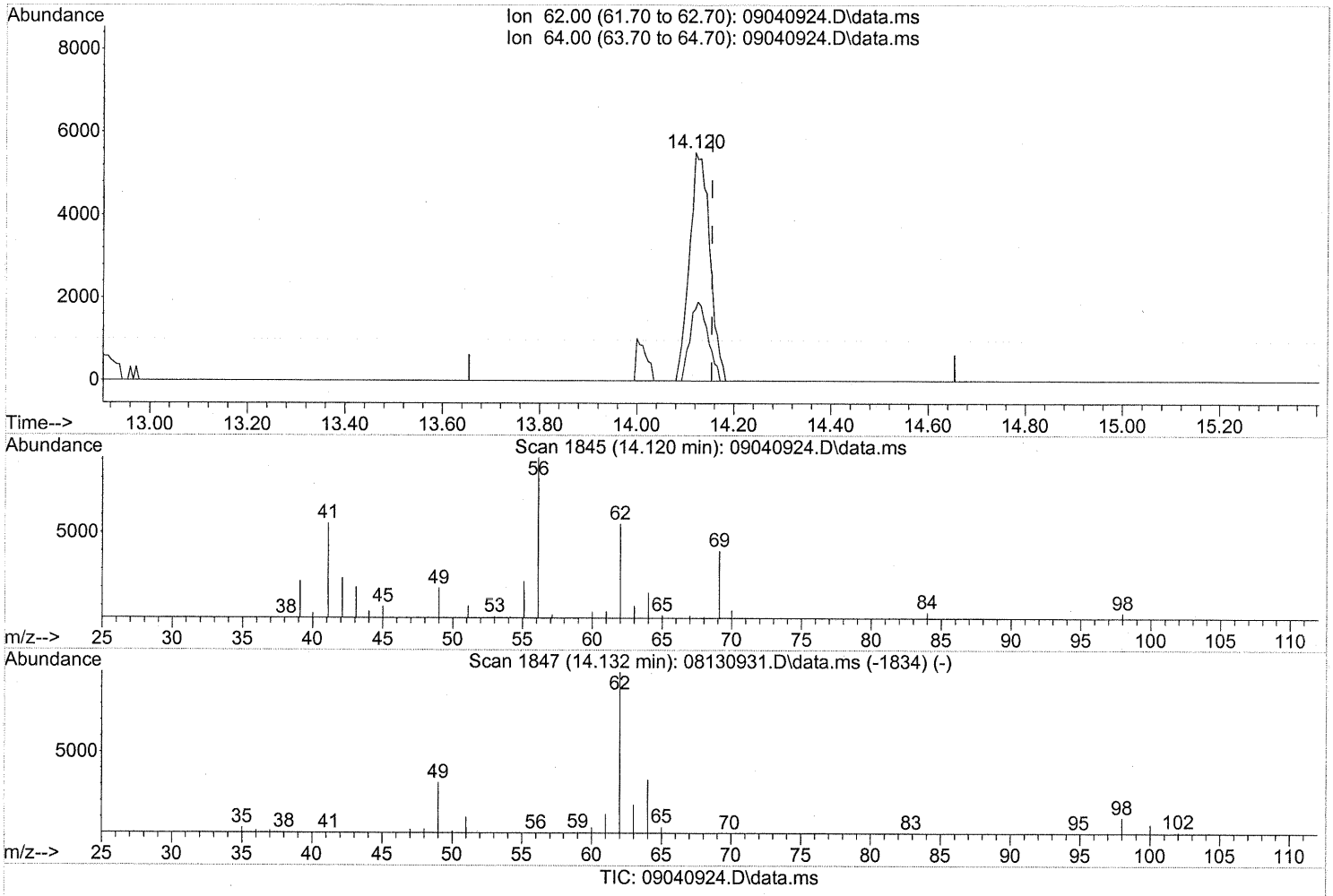
response 45063

Ion	Exp%	Act%
72.10	100	100
71.00	95.20	95.04
42.10	206.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(36) 1,2-Dichloroethane (T)

14.120min (-0.034) 0.56ng

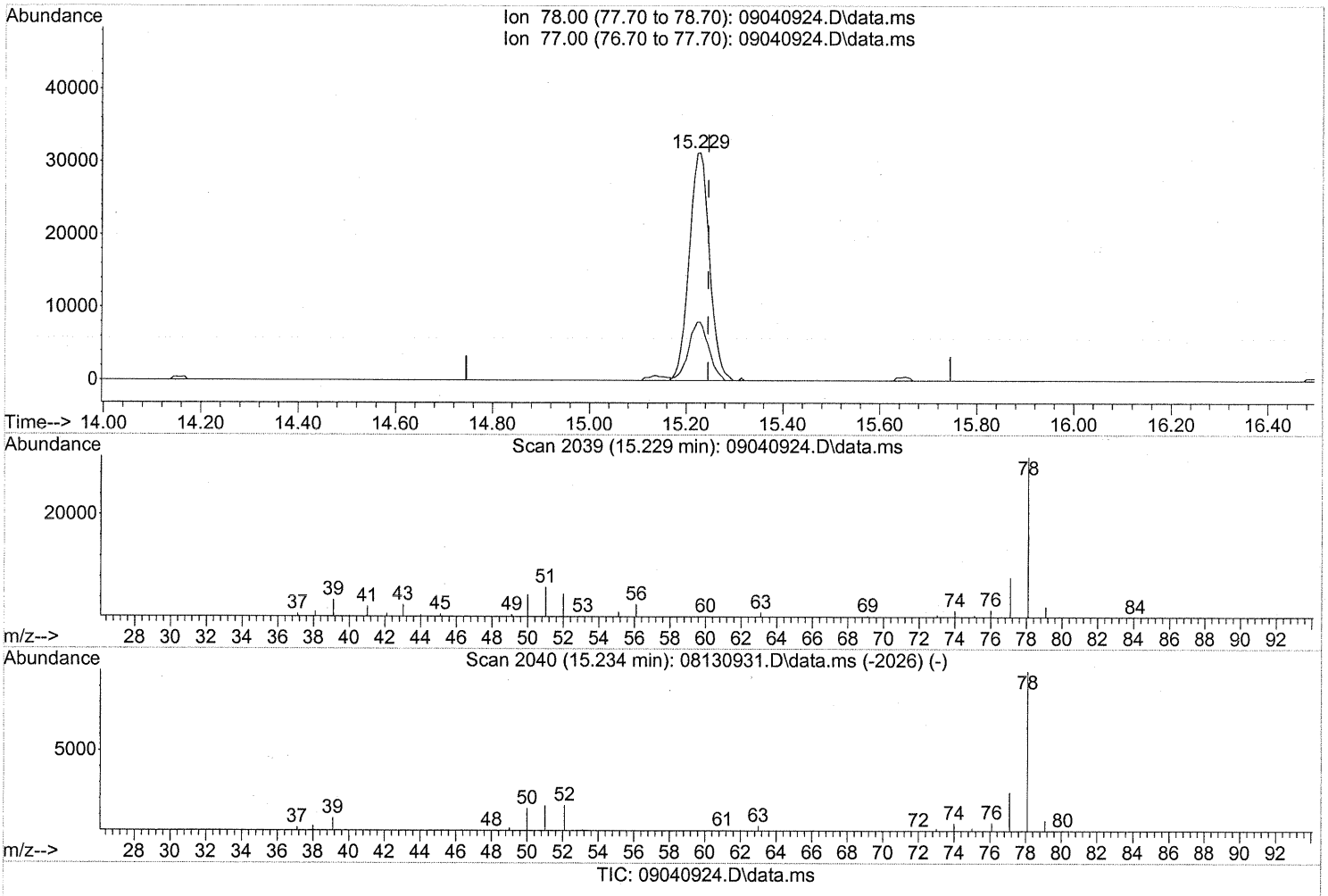
response 16012

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	30.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(41) Benzene (T)

15.229min (-0.017) 0.91ng

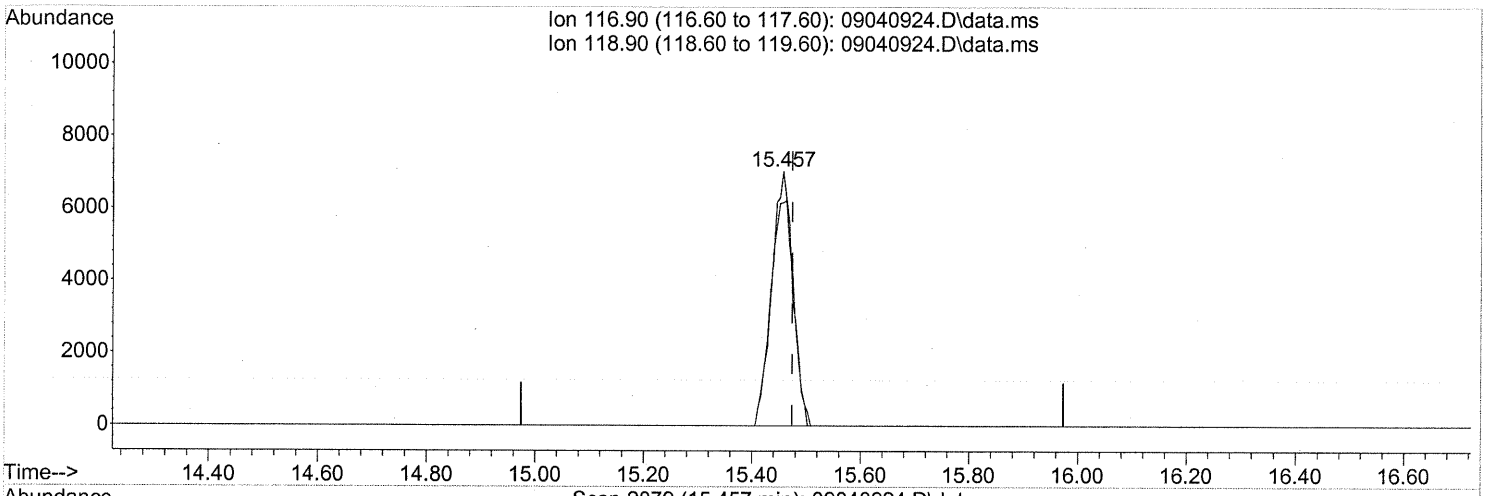
response 90821

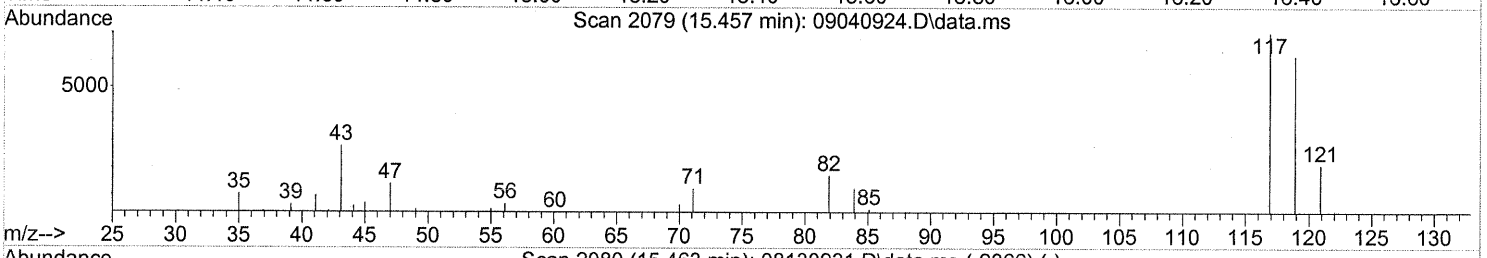
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	25.46
0.00	0.00	0.00
0.00	0.00	0.00

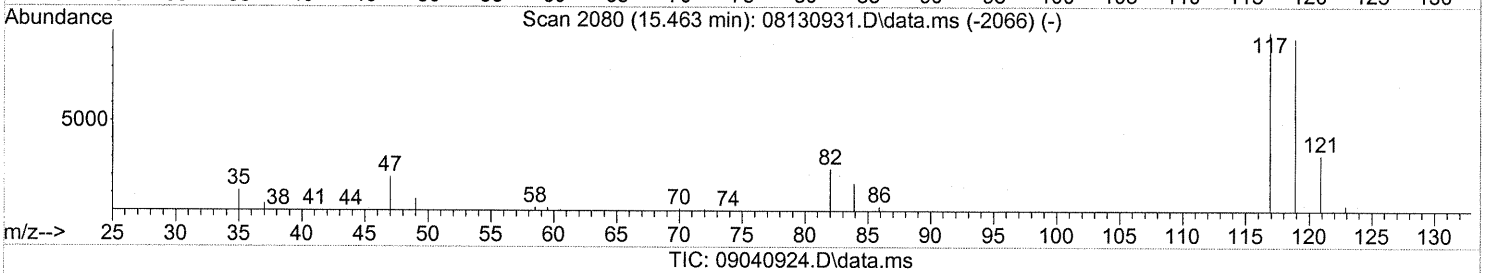
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.68ng

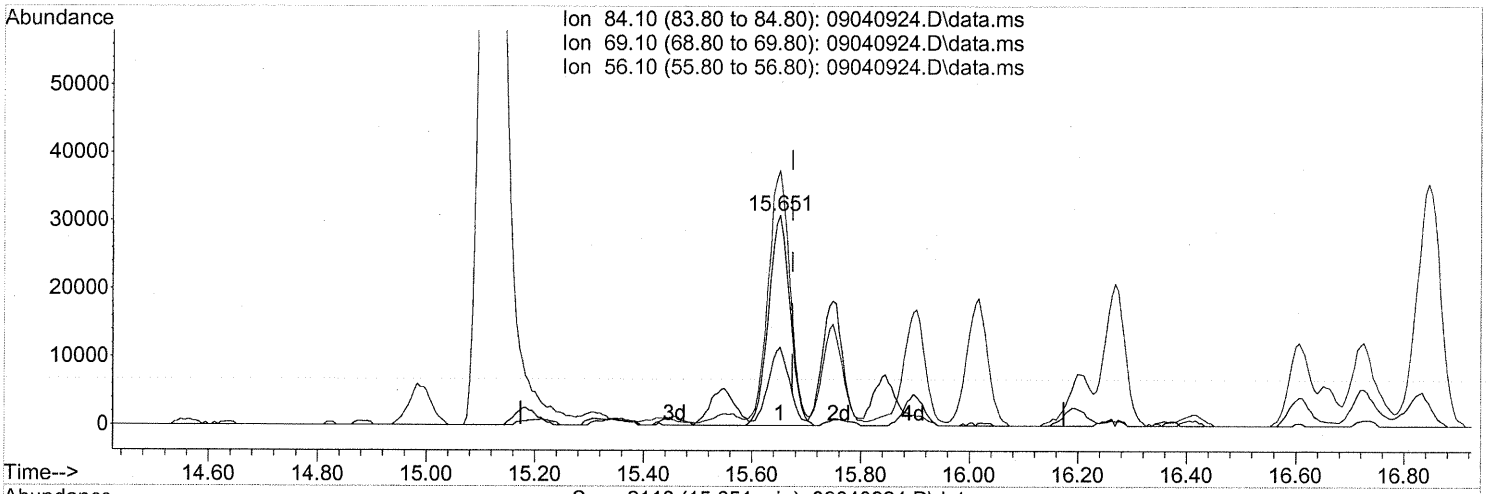
response 18834

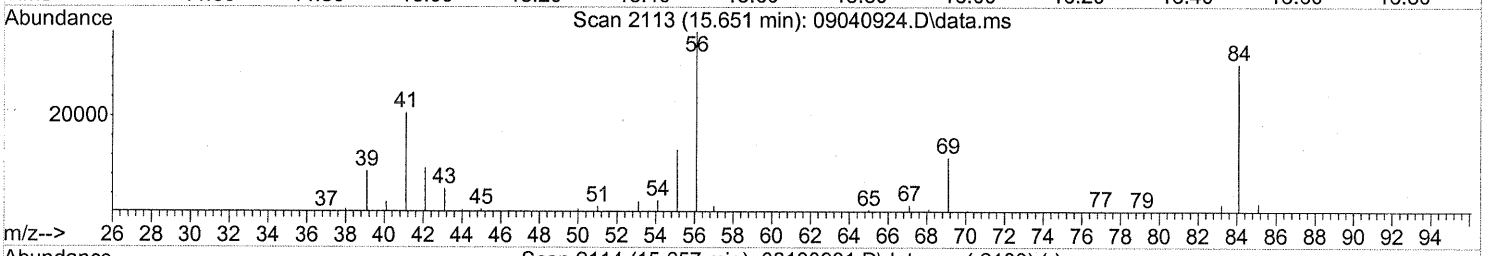
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	96.82
0.00	0.00	0.00
0.00	0.00	0.00

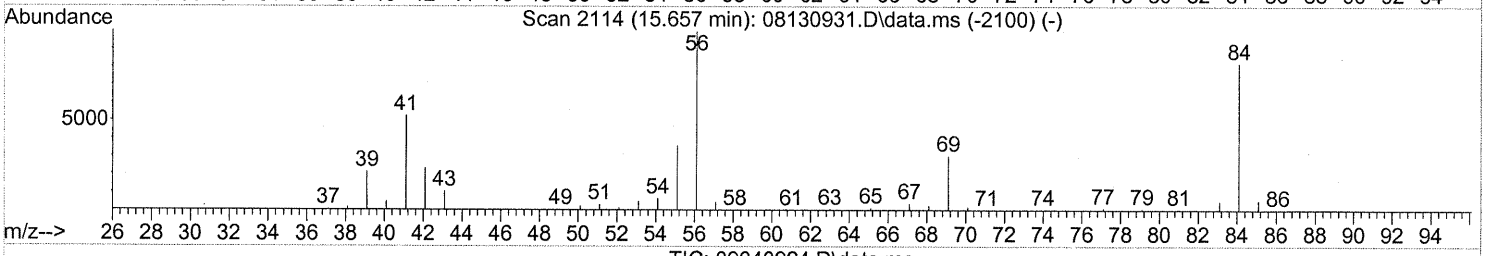
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 2.18ng

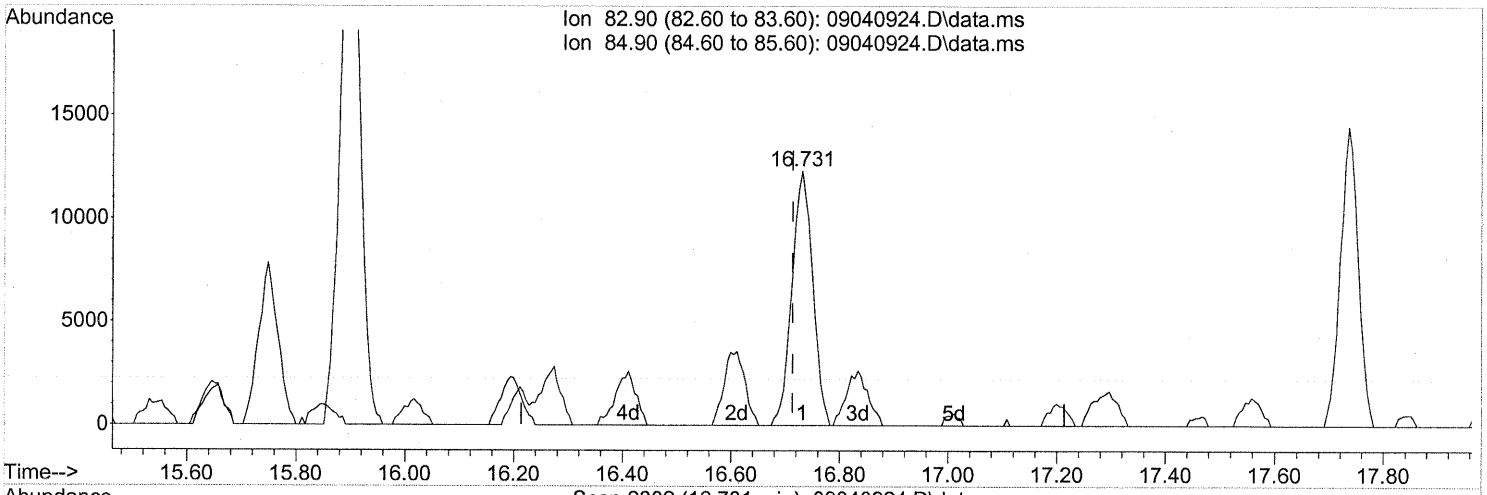
response 84108

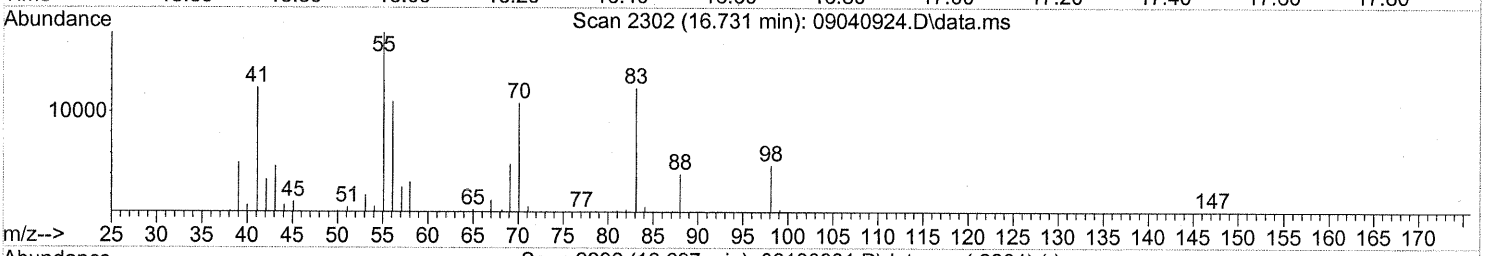
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.99
56.10	107.30	122.14
0.00	0.00	0.00

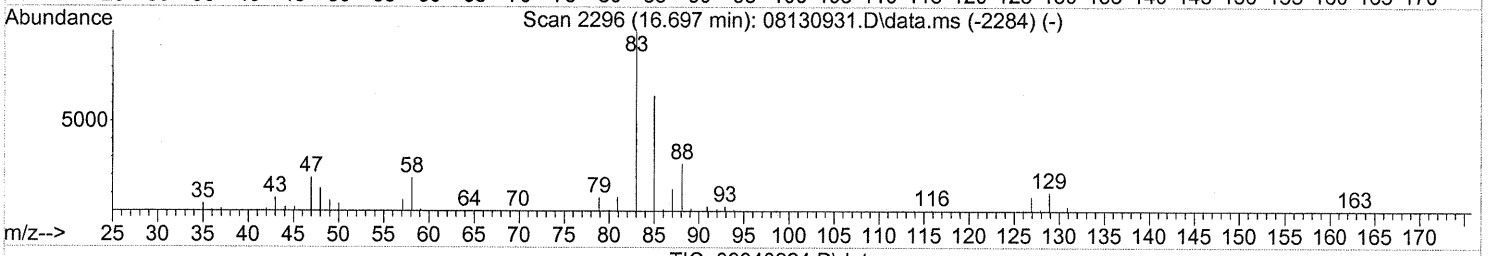
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(46) Bromodichloromethane (T)

16.731min (+0.017) 1.12ng

response 32529

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

FP

9/15/09

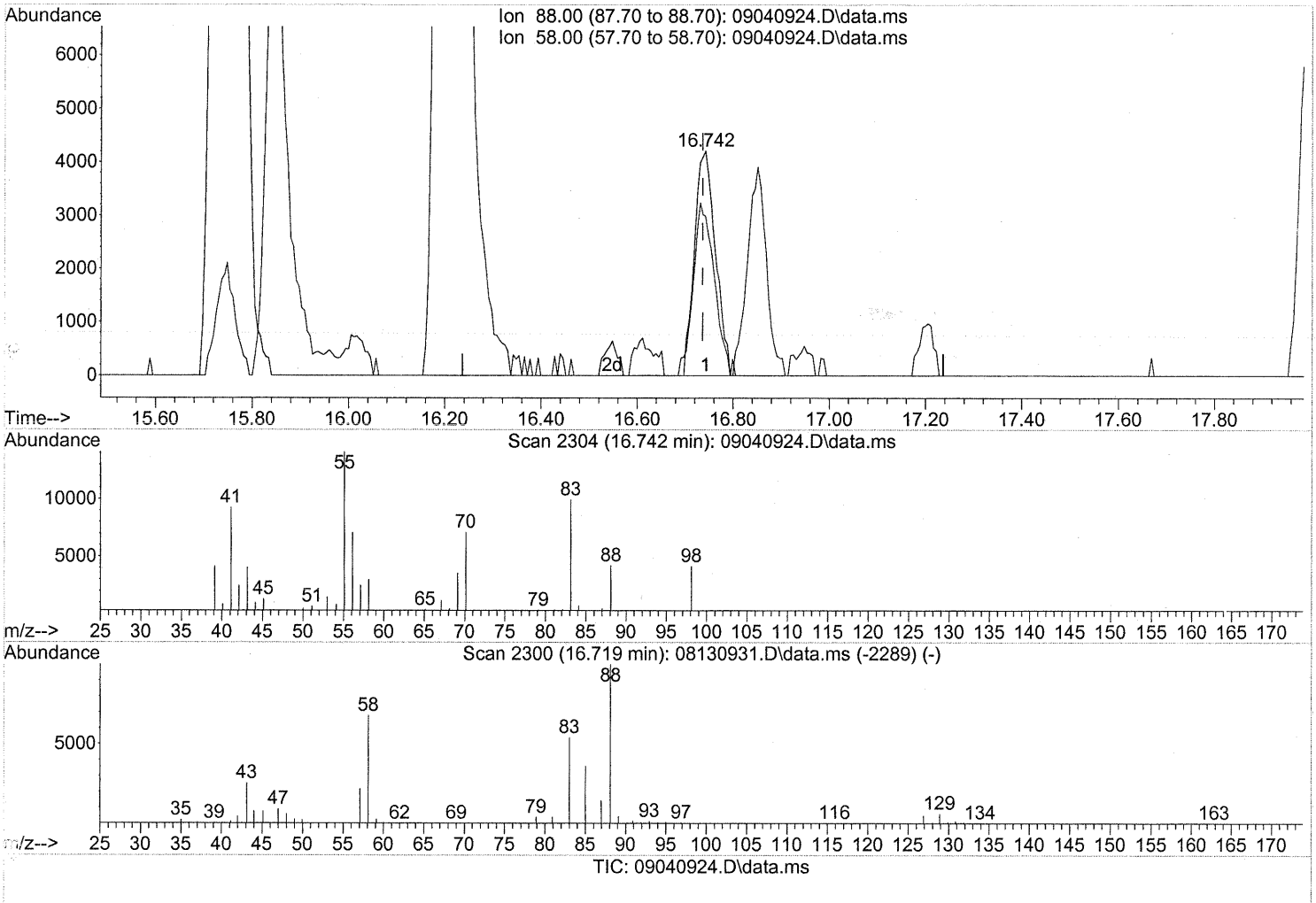
9/16/09

166

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(48) 1,4-Dioxane (T)

16.742min (+0.006) 0.73ng

response 12857

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	75.94
0.00	0.00	0.00
0.00	0.00	0.00

TP

JDH 9/15/09

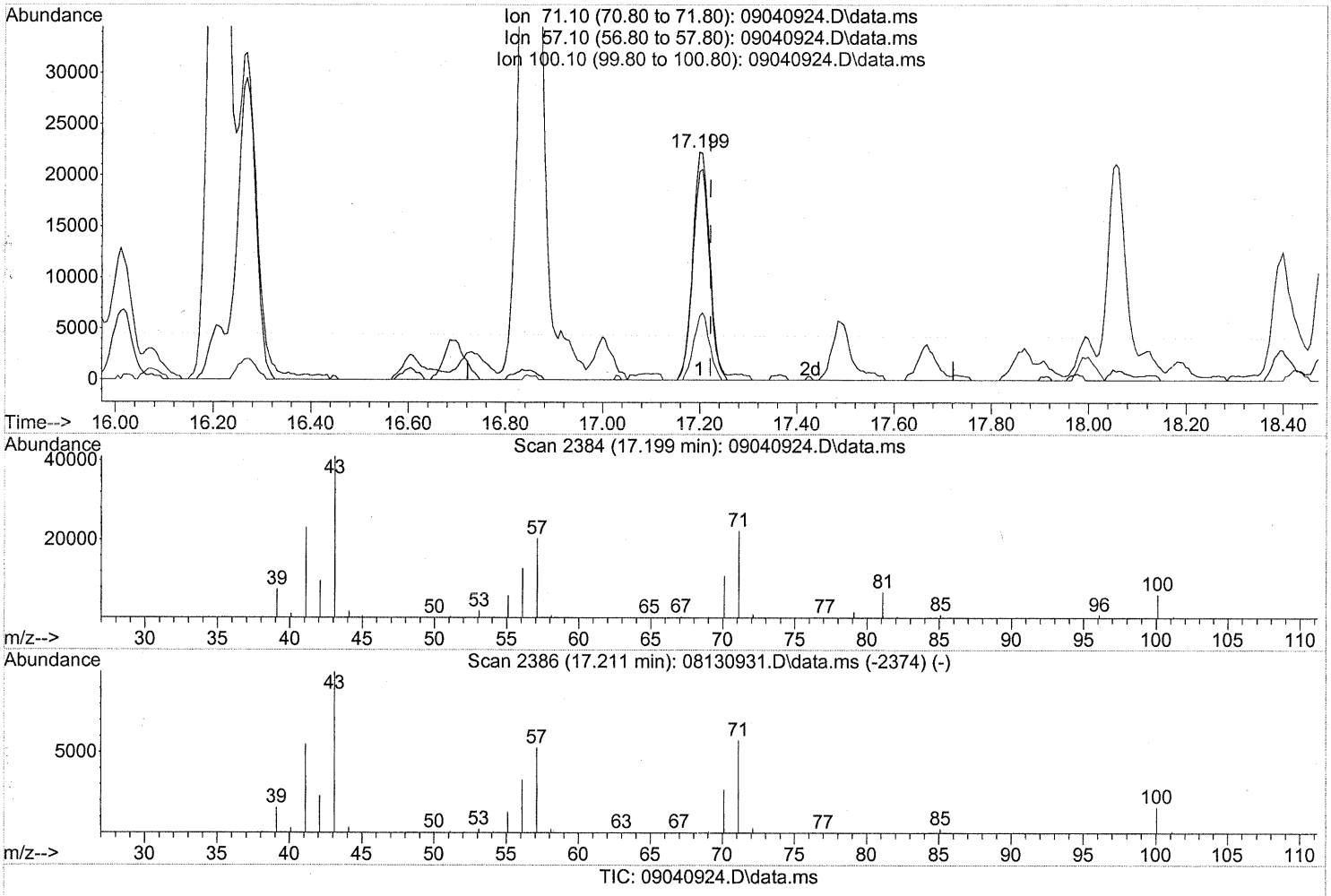
9/16/09

167

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(51) n-Heptane (T)

17.199min (-0.023) 2.02ng

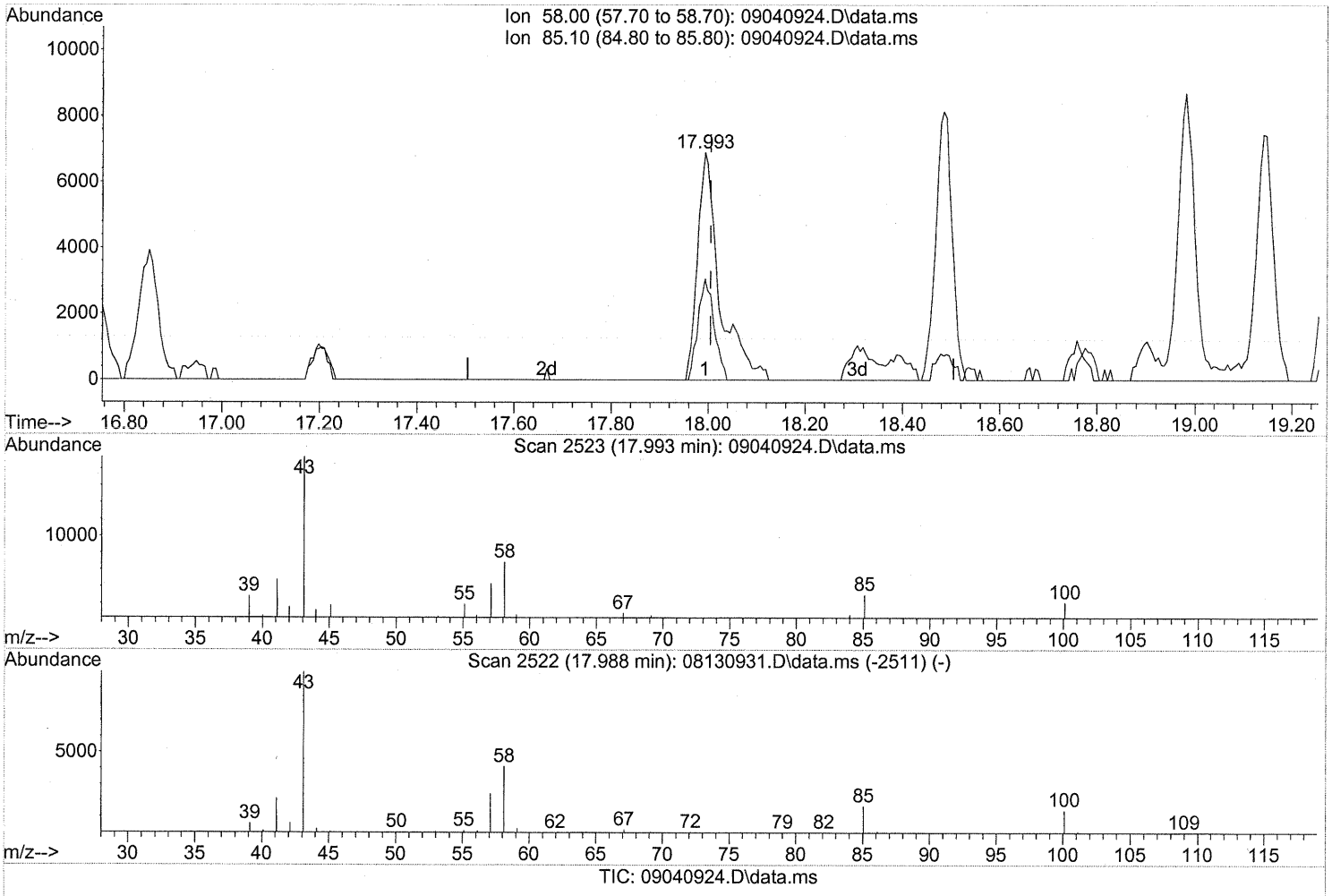
response 53399

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	95.09
100.10	30.70	27.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

17.993min (-0.012) 1.01ng

response 21627

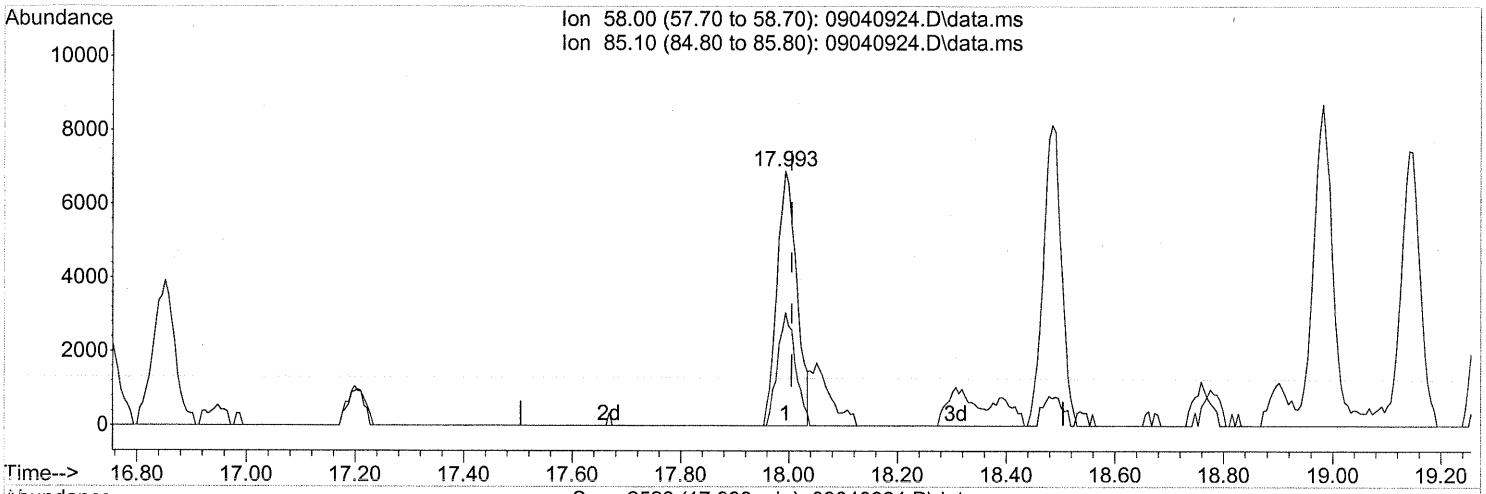
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	32.27
0.00	0.00	0.00
0.00	0.00	0.00

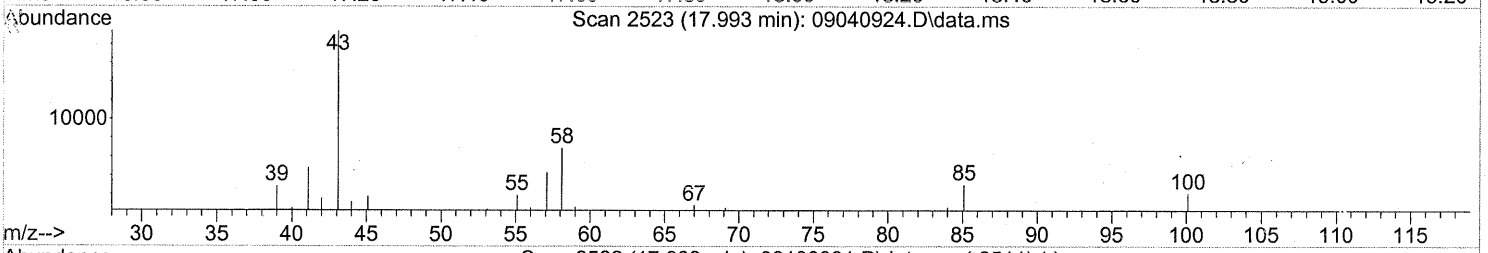
169

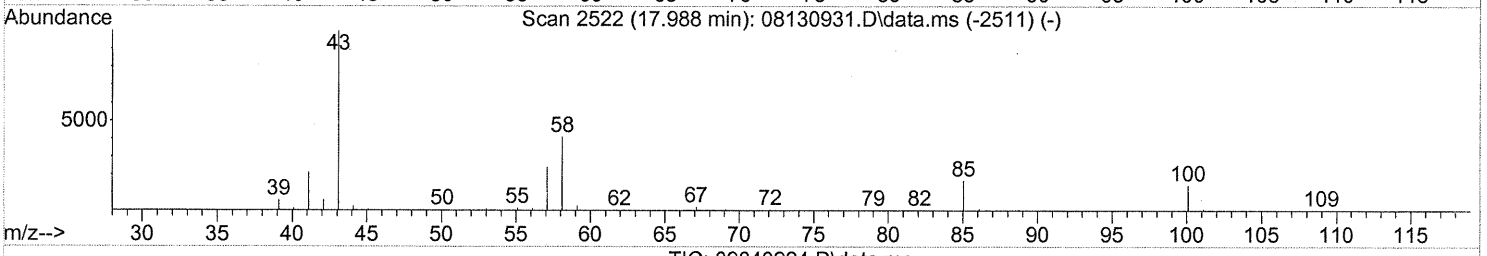
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

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

17.993min (-0.012) 0.80ng m

response 17251

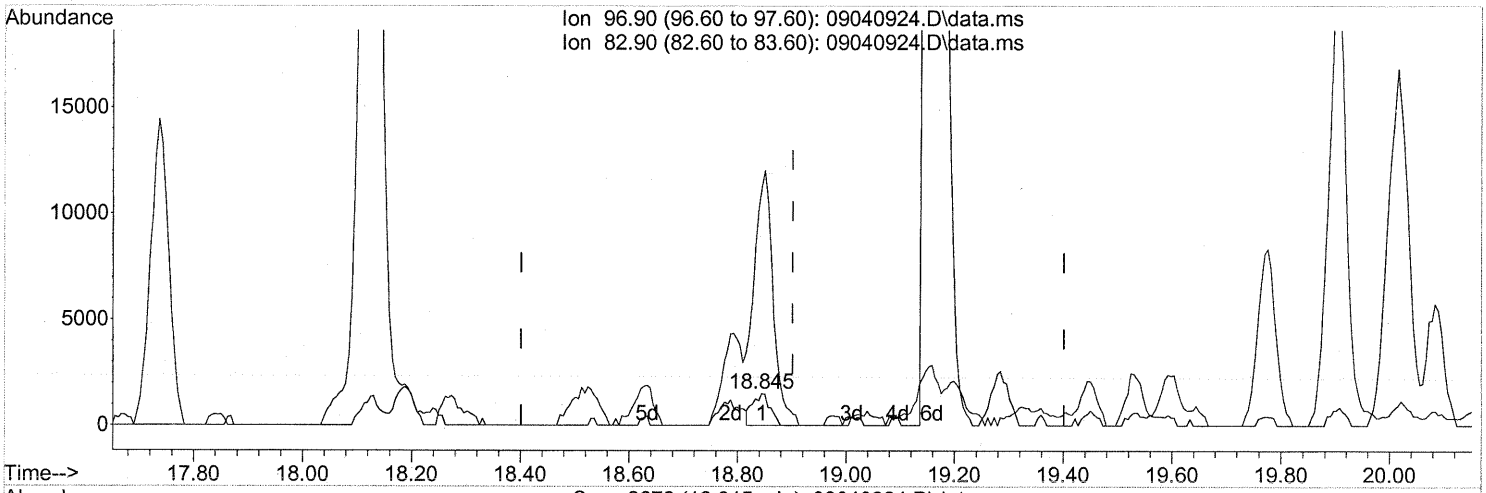
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	40.45
0.00	0.00	0.00
0.00	0.00	0.00

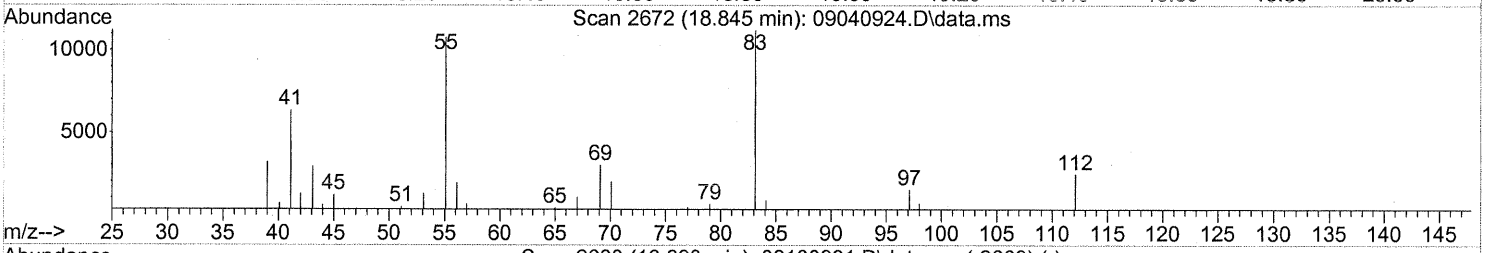
170

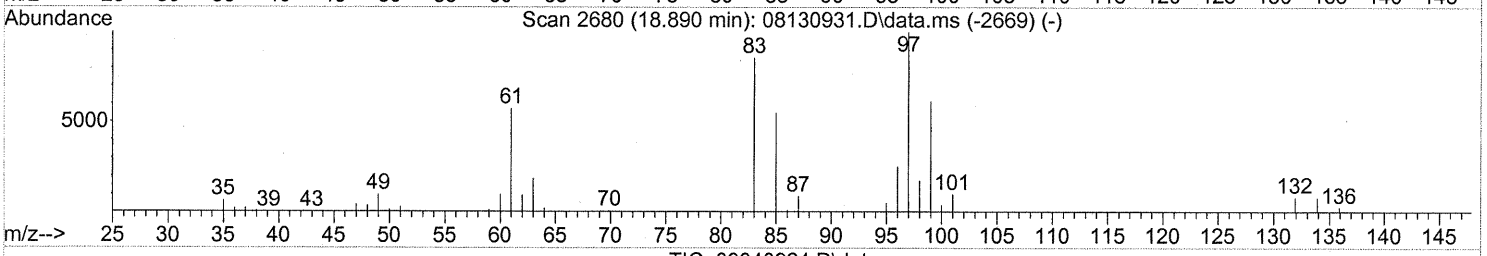
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

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

18.845min (-0.057) 0.16ng

response 3344

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	901.20#
0.00	0.00	0.00
0.00	0.00	0.00

FP

9/15/09

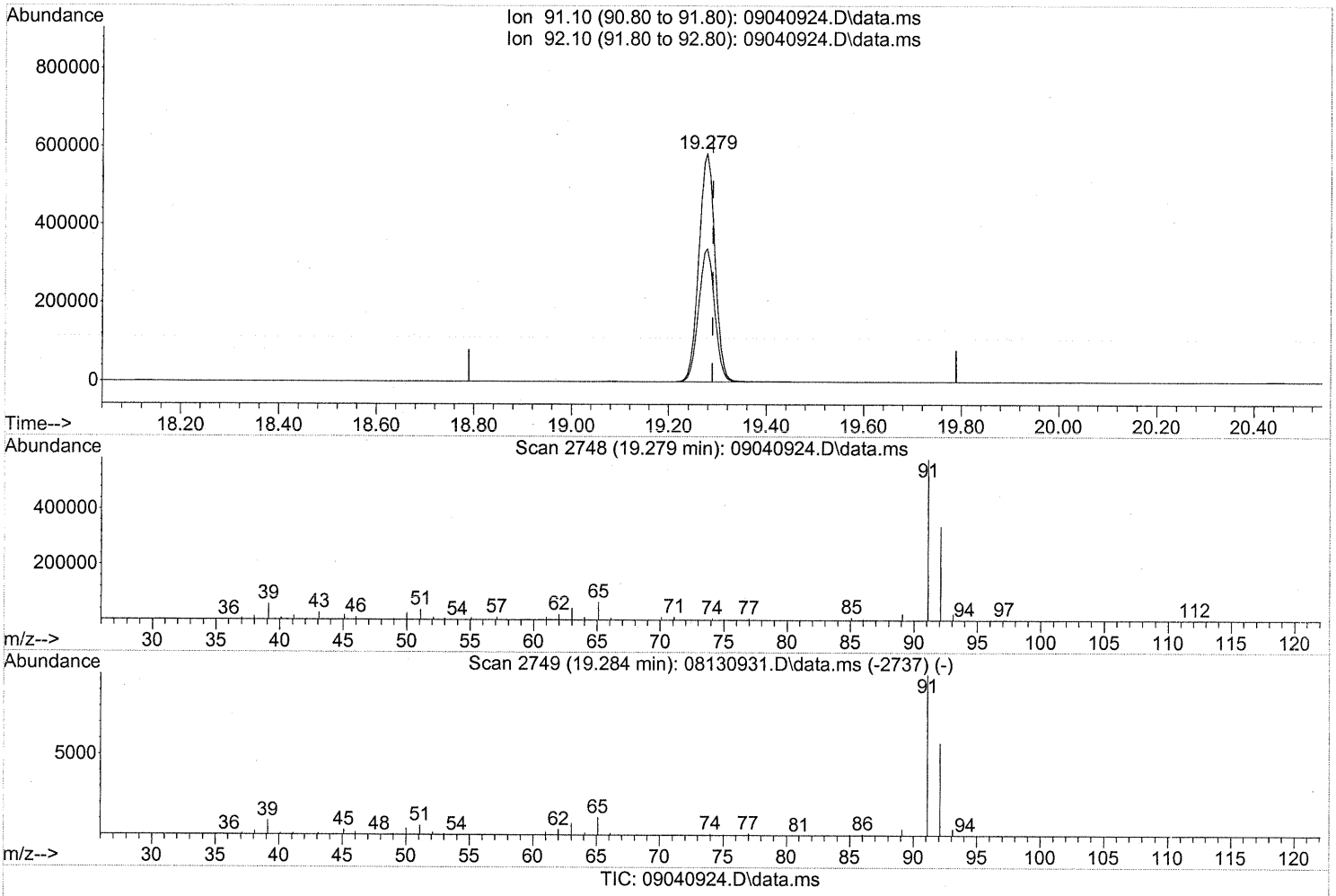
9/16/09

171

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 12.70ng

response 1328370

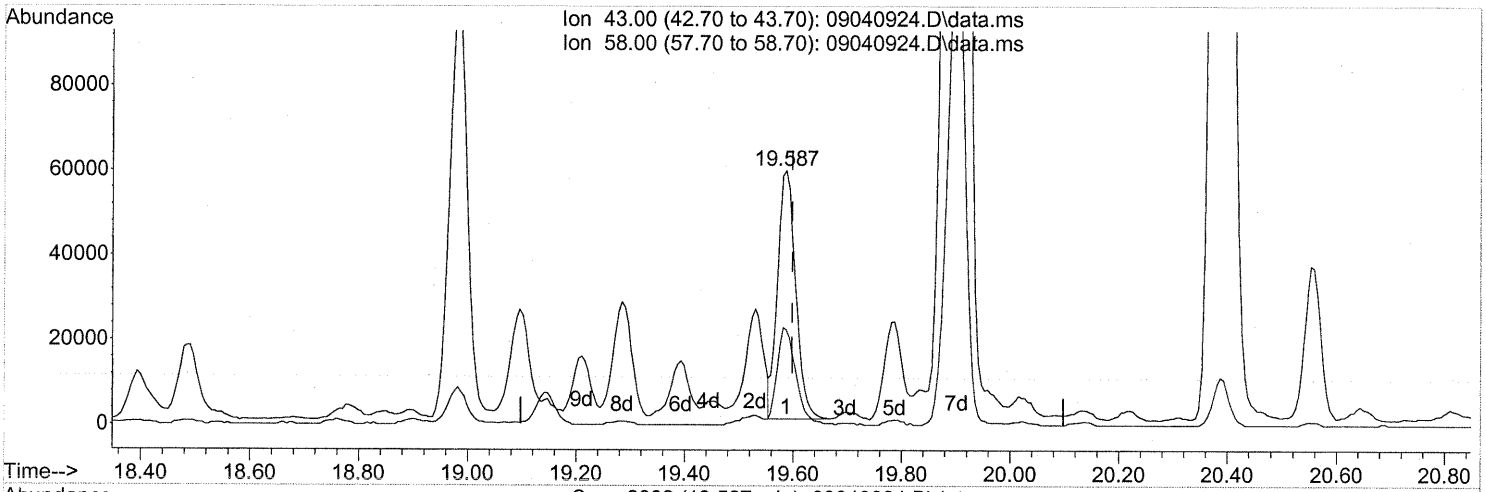
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.81
0.00	0.00	0.00
0.00	0.00	0.00

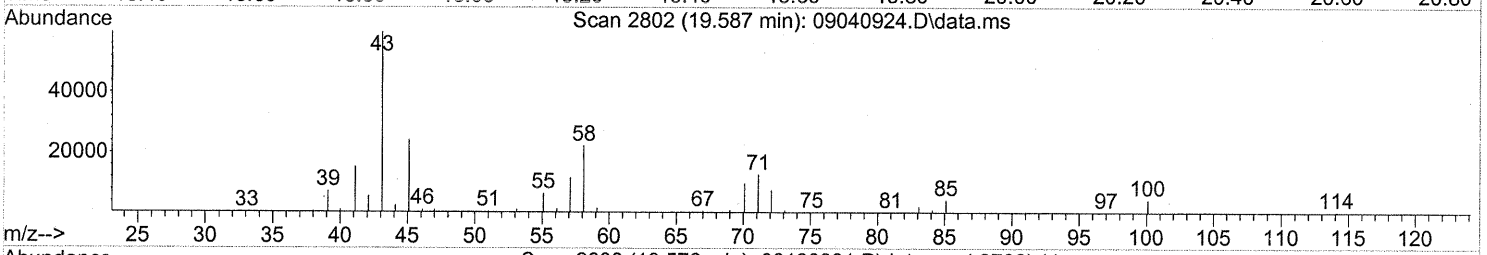
172

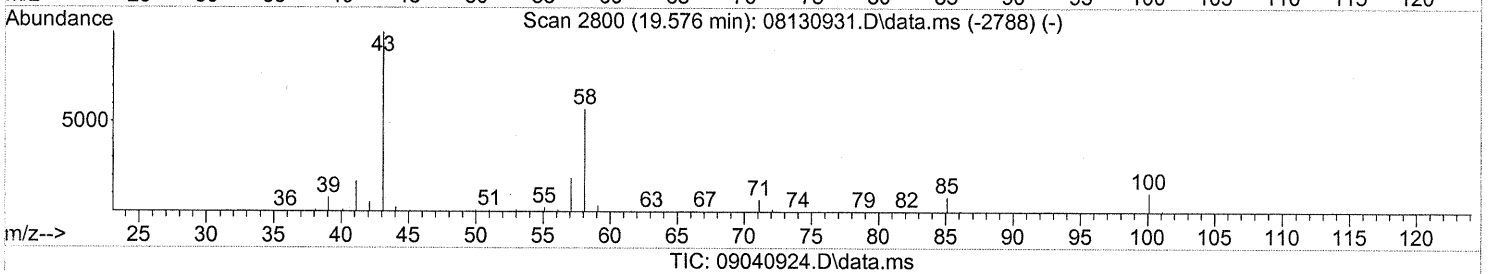
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 2.49ng

response 135106

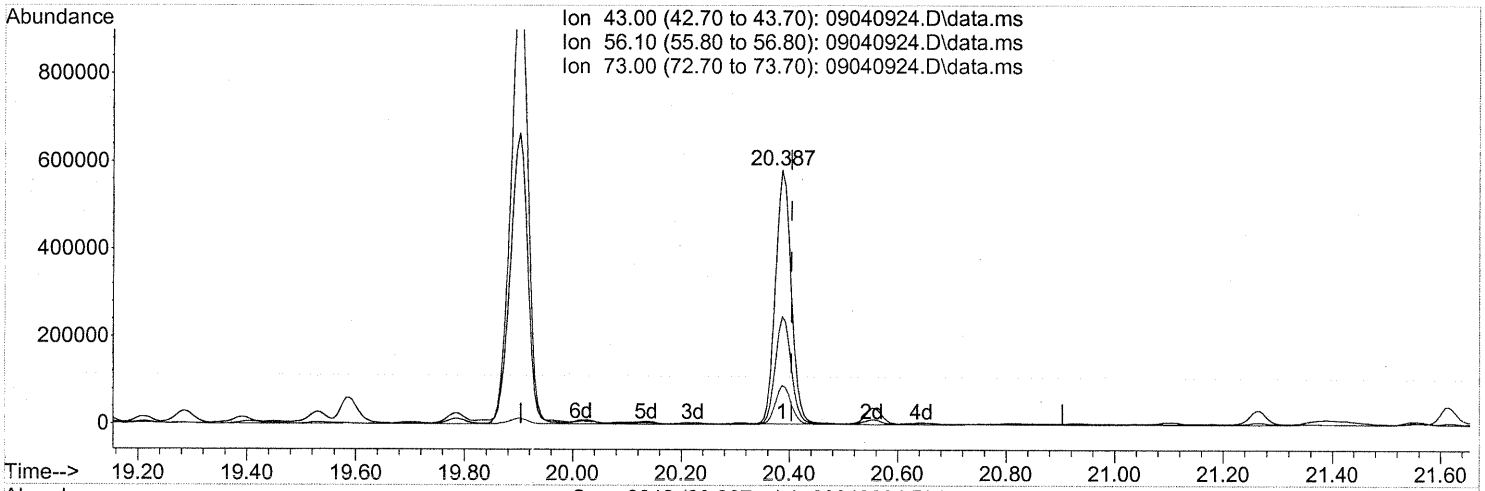
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	41.24
0.00	0.00	0.00
0.00	0.00	0.00

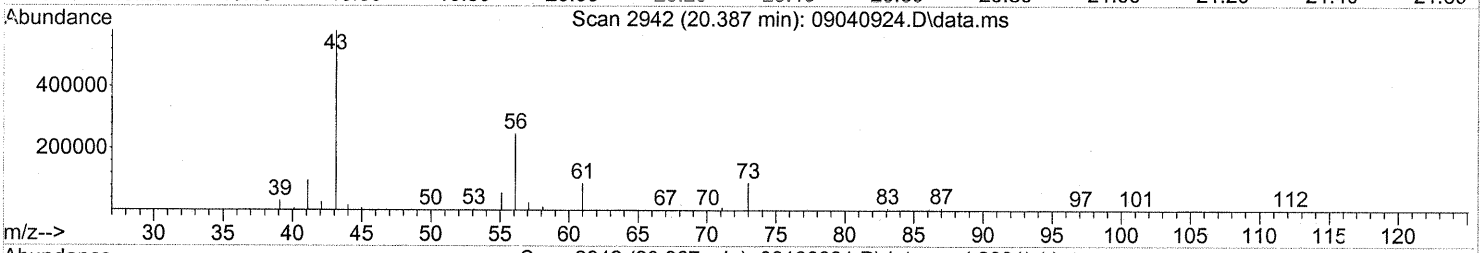
173

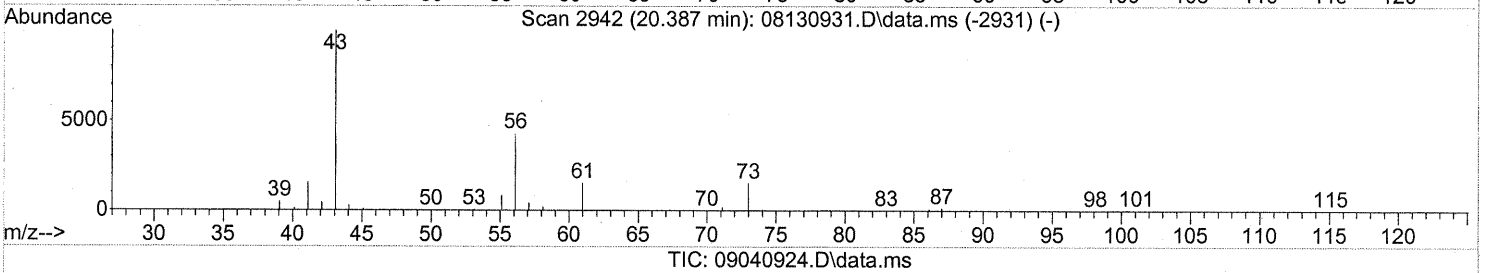
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 19.98ng

response 1184578

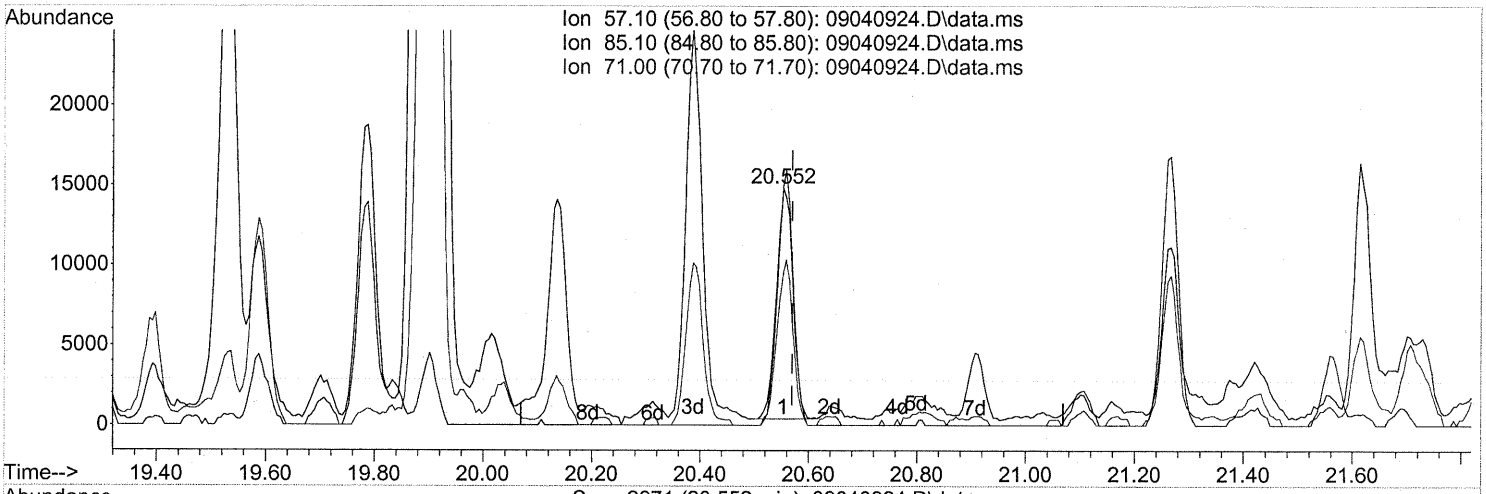
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	42.89
73.00	16.90	15.53
0.00	0.00	0.00

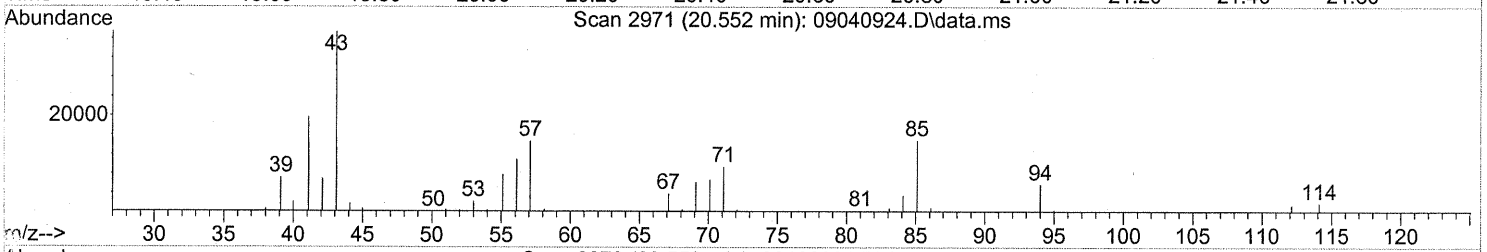
174

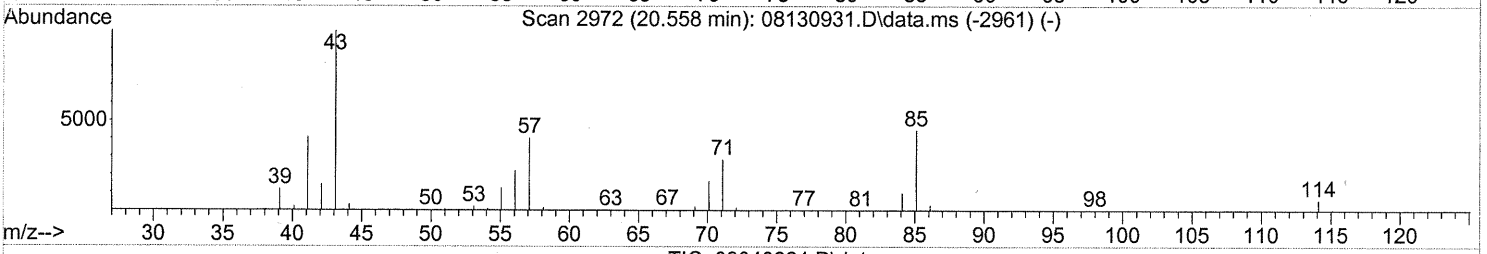
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(63) n-Octane (T)

20.552min (-0.017) 1.30ng

response 30281

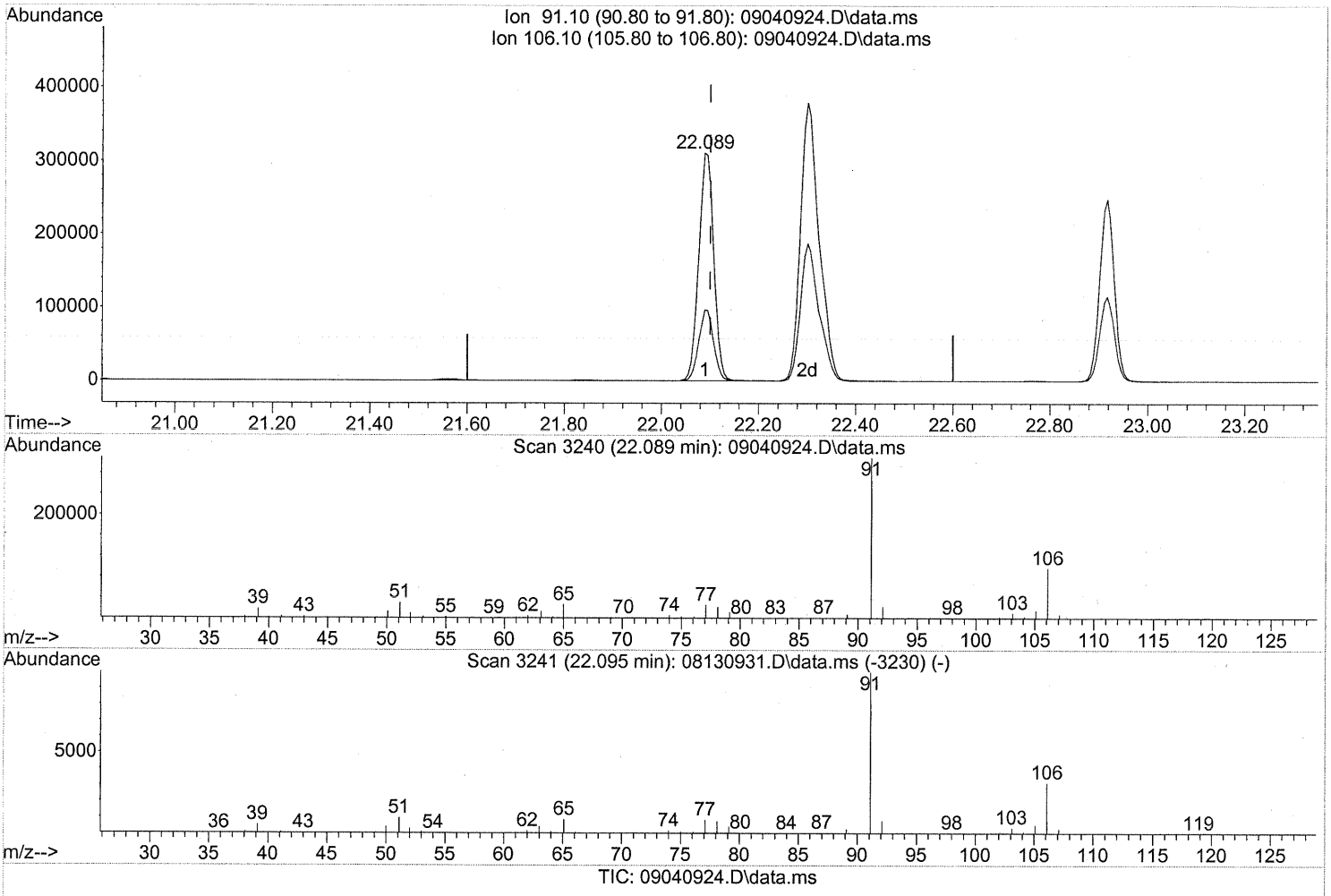
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	105.03
71.00	75.10	69.86
0.00	0.00	0.00

175

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 5.83ng

response 657997

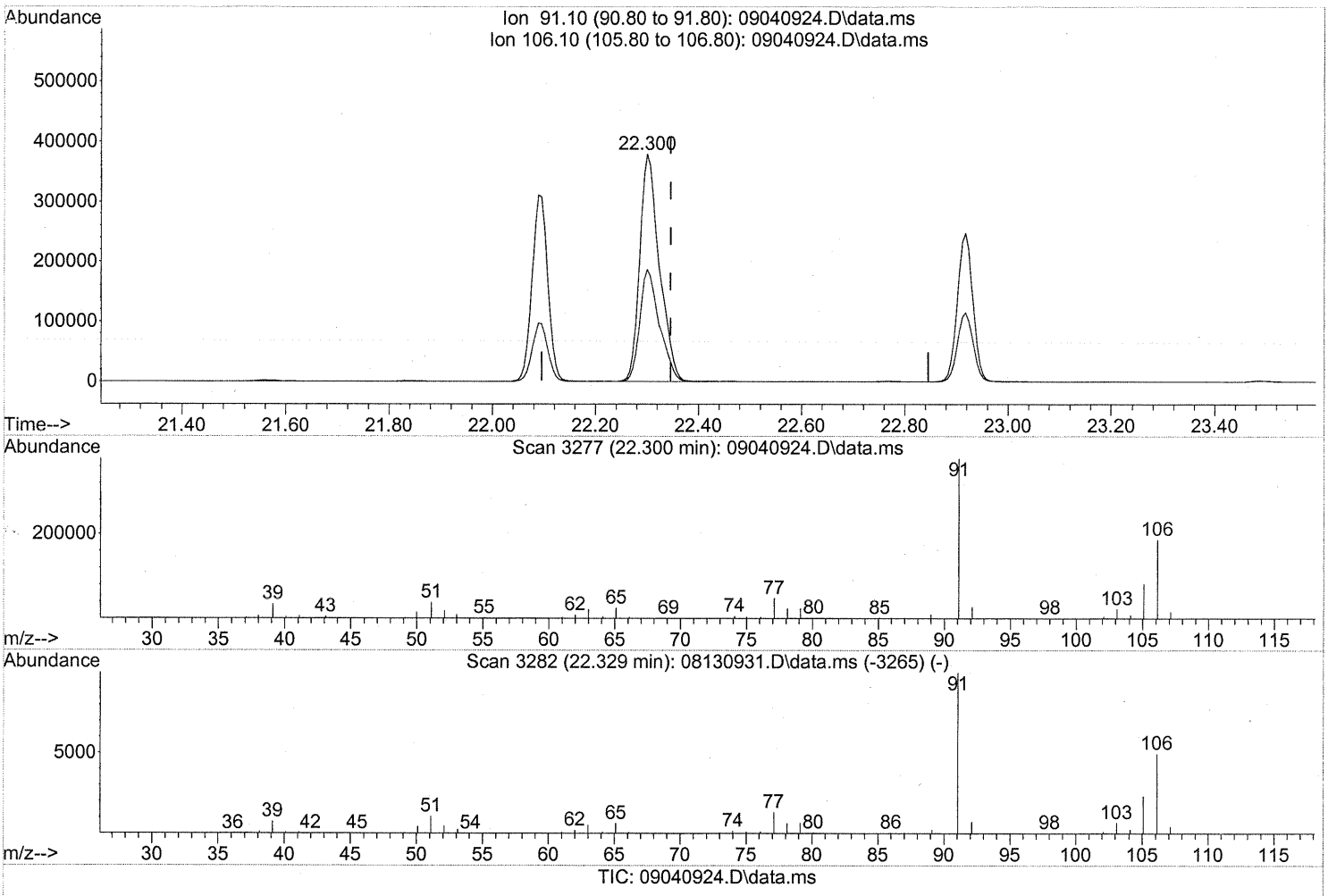
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.76
0.00	0.00	0.00
0.00	0.00	0.00

176

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

22.300min (-0.046) 11.26ng

response 1007322

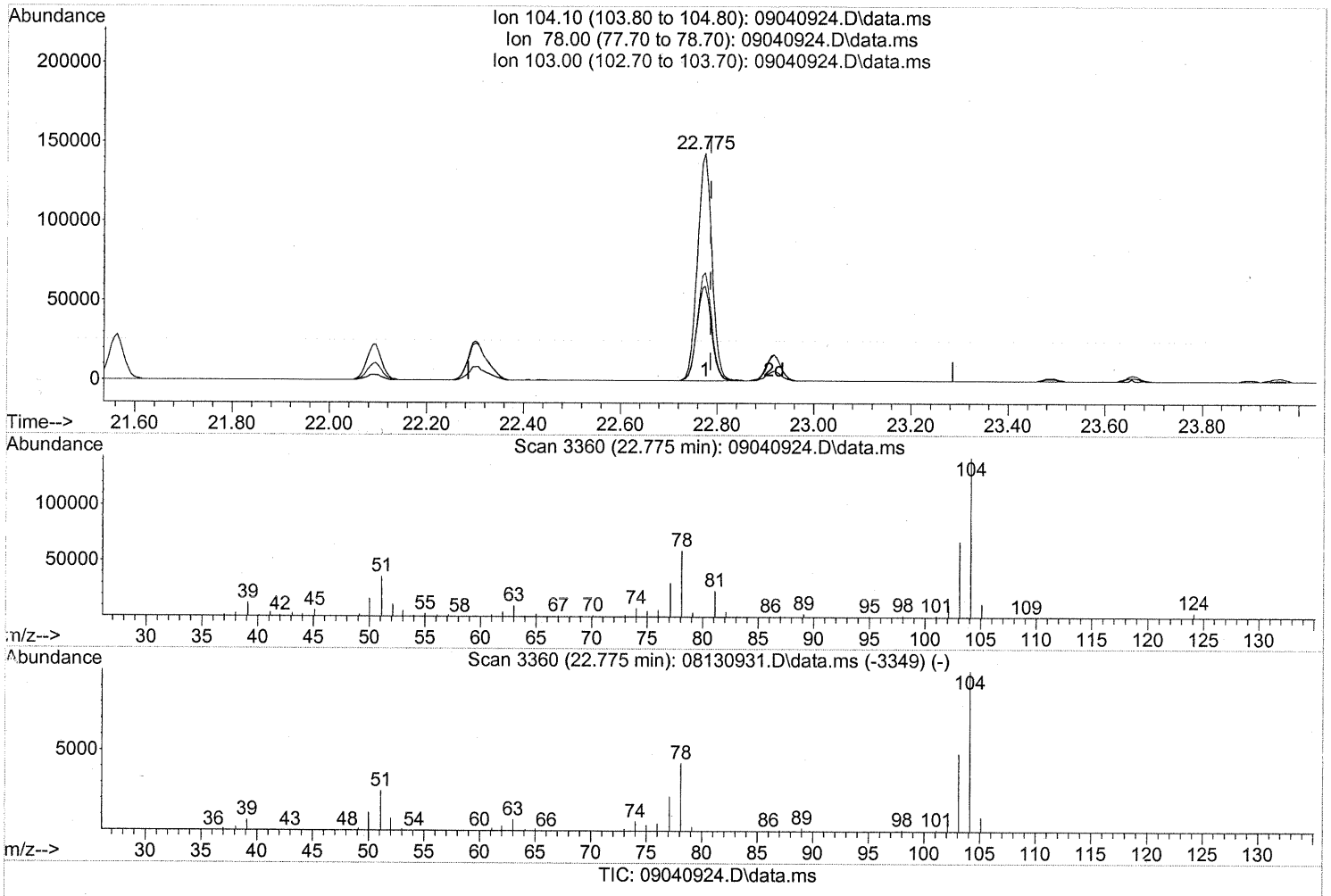
Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.15
0.00	0.00	0.00
0.00	0.00	0.00

177

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 4.49ng

response 297026

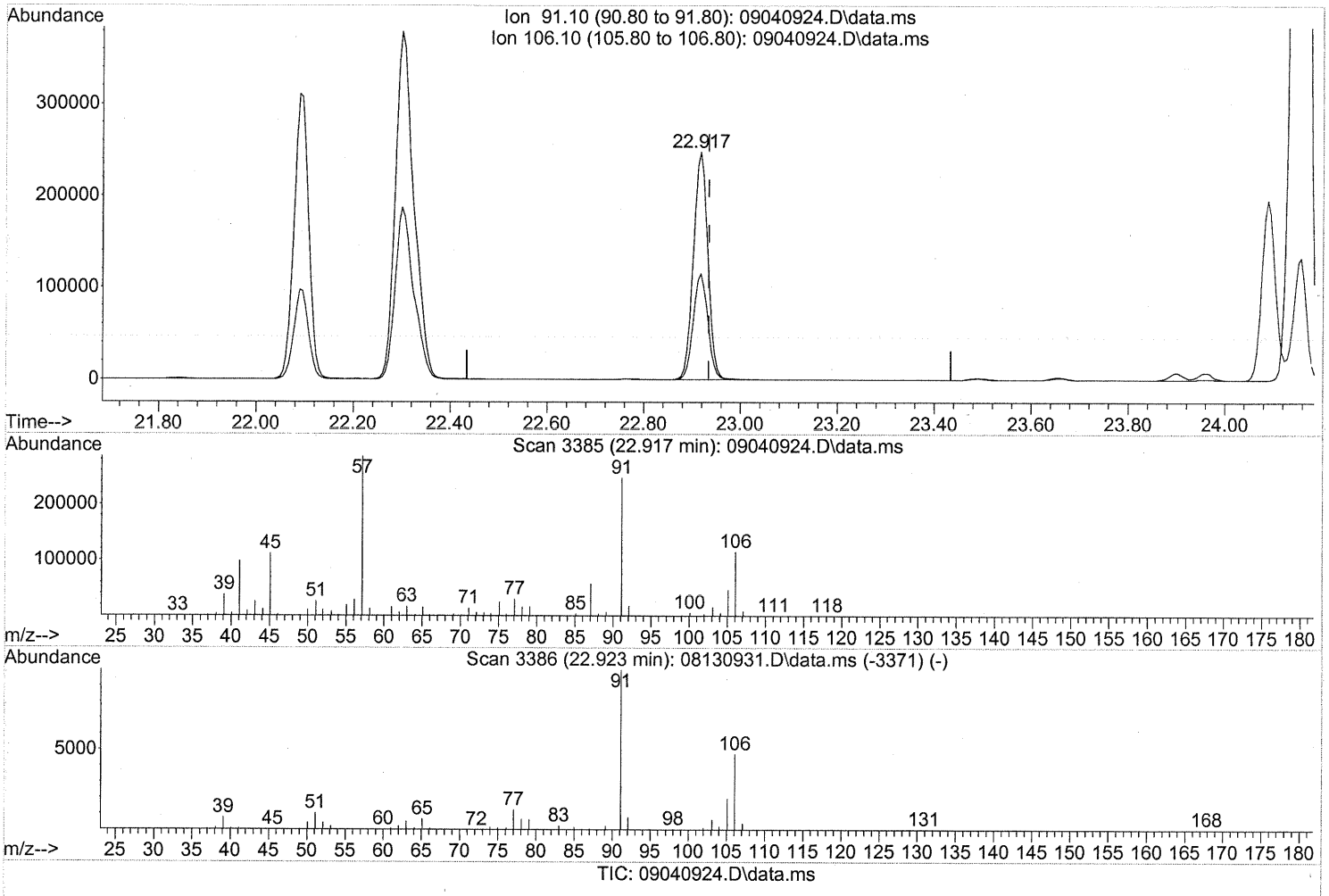
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.23
103.00	48.70	47.80
0.00	0.00	0.00

178

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 5.72ng

response 514994

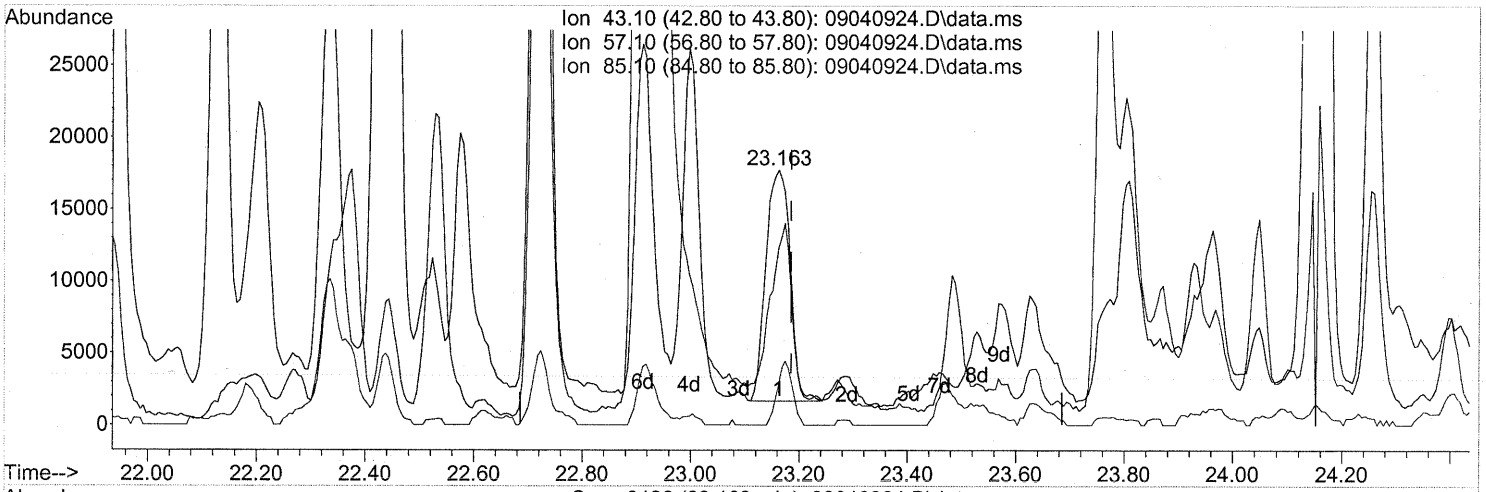
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.83
0.00	0.00	0.00
0.00	0.00	0.00

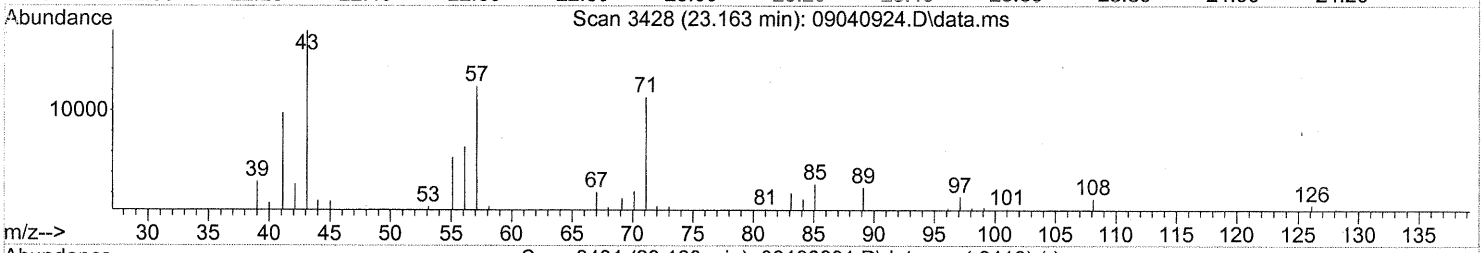
179

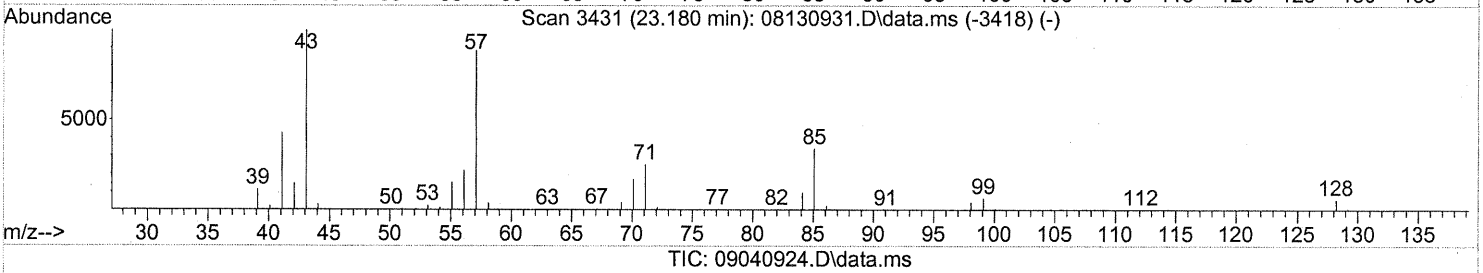
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(71) n-Nonane (T)

23.163min (-0.023) 0.92ng

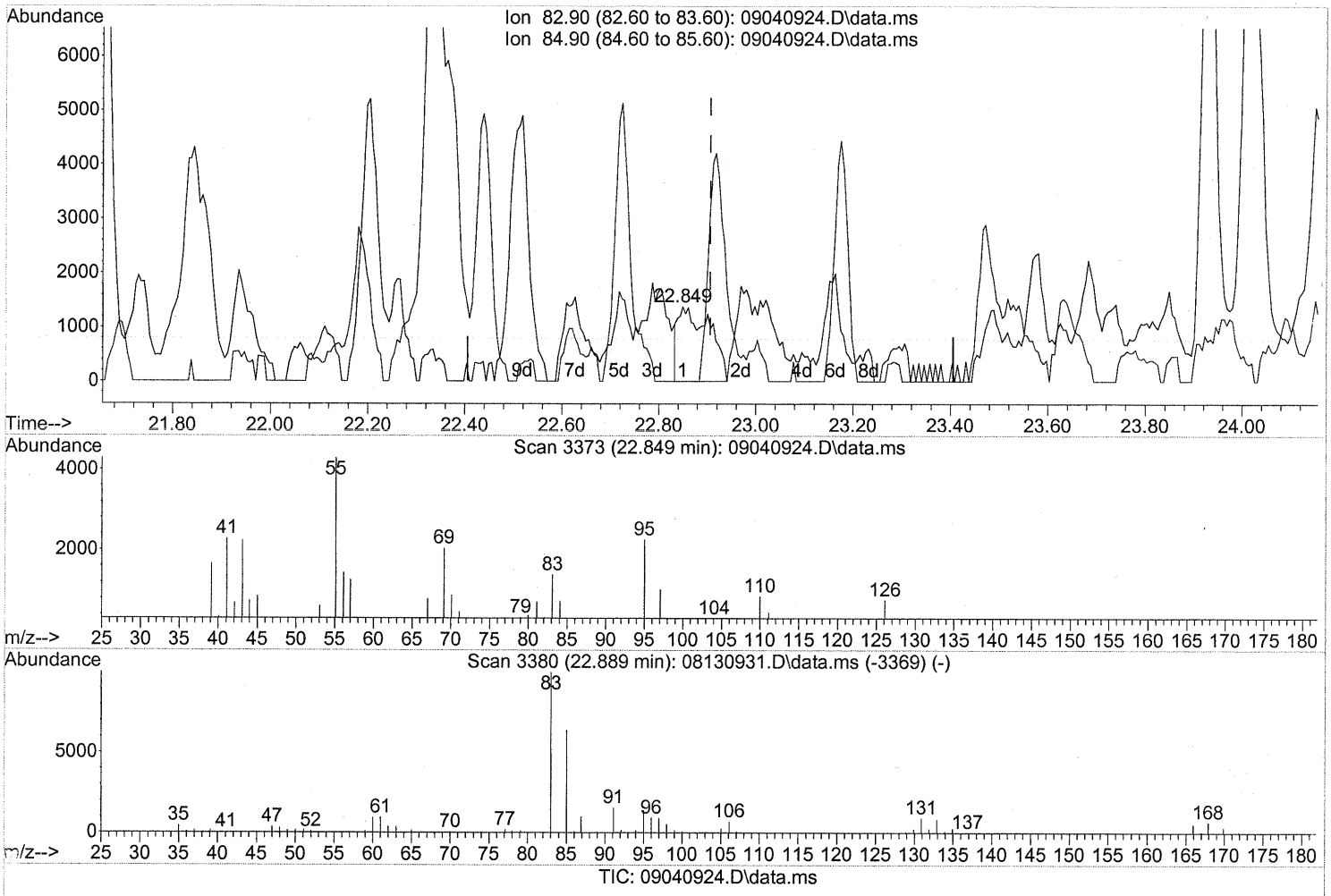
response 49761

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	76.50
85.10	38.80	16.95#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

22.849min (-0.057) 0.16ng

response 6196

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

FP

9/15/09

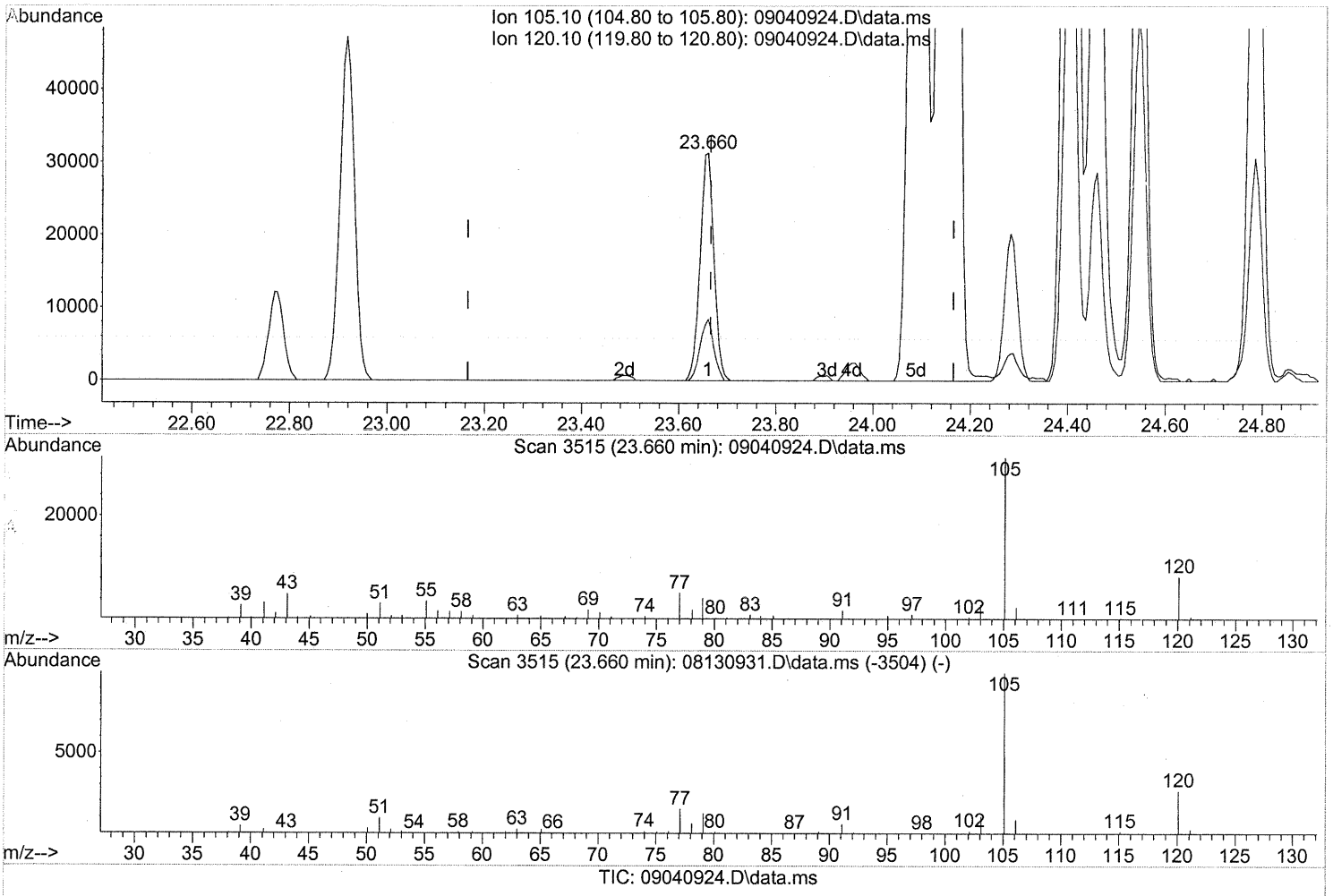
9/16/09

181

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(74) Cumene (T)

23.660min (-0.006) 0.53ng

response 61313

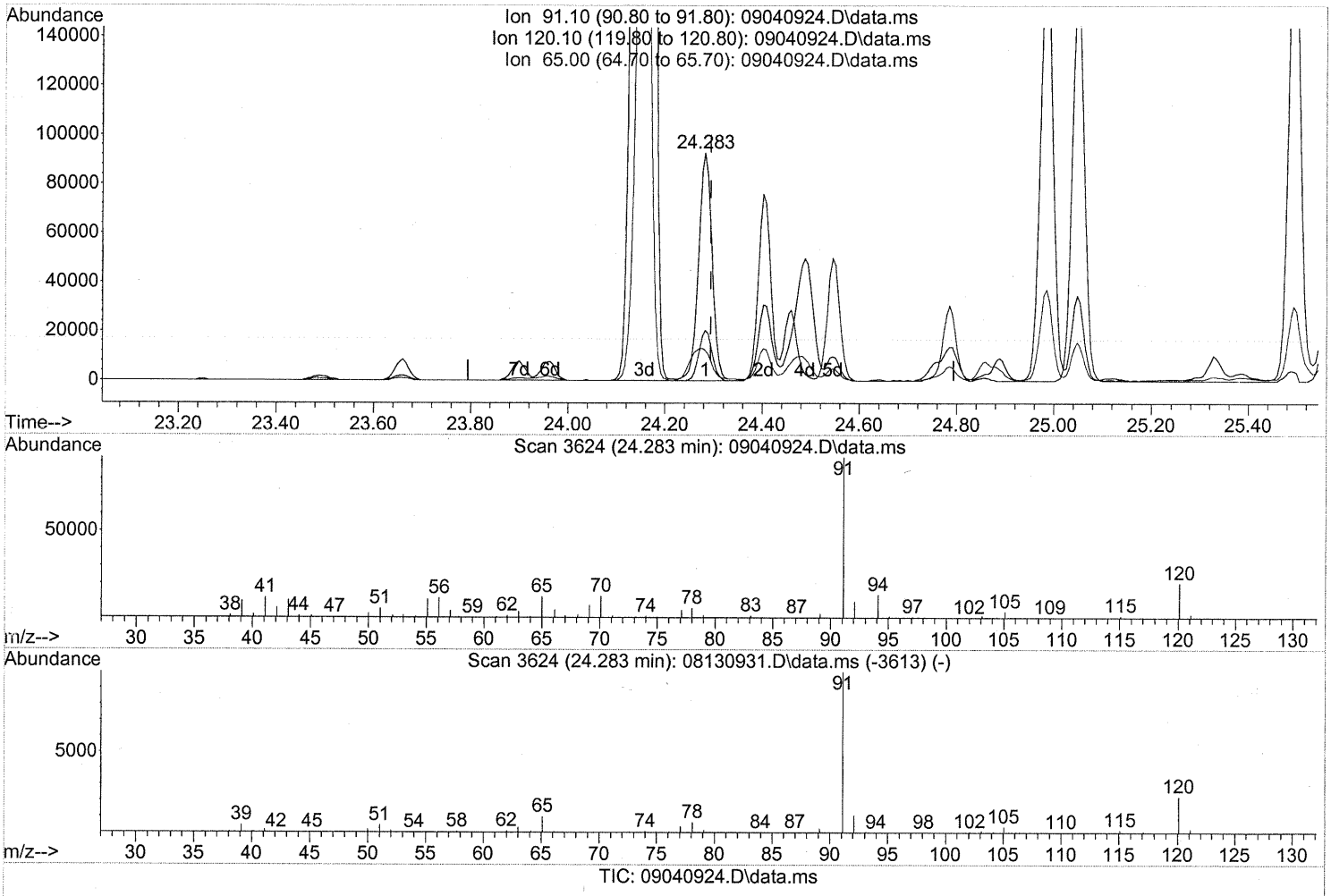
Ion	Exp%	Act%
105.10	100	100
120.10	27.10	26.46
0.00	0.00	0.00
0.00	0.00	0.00

182

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.24ng

response 178633

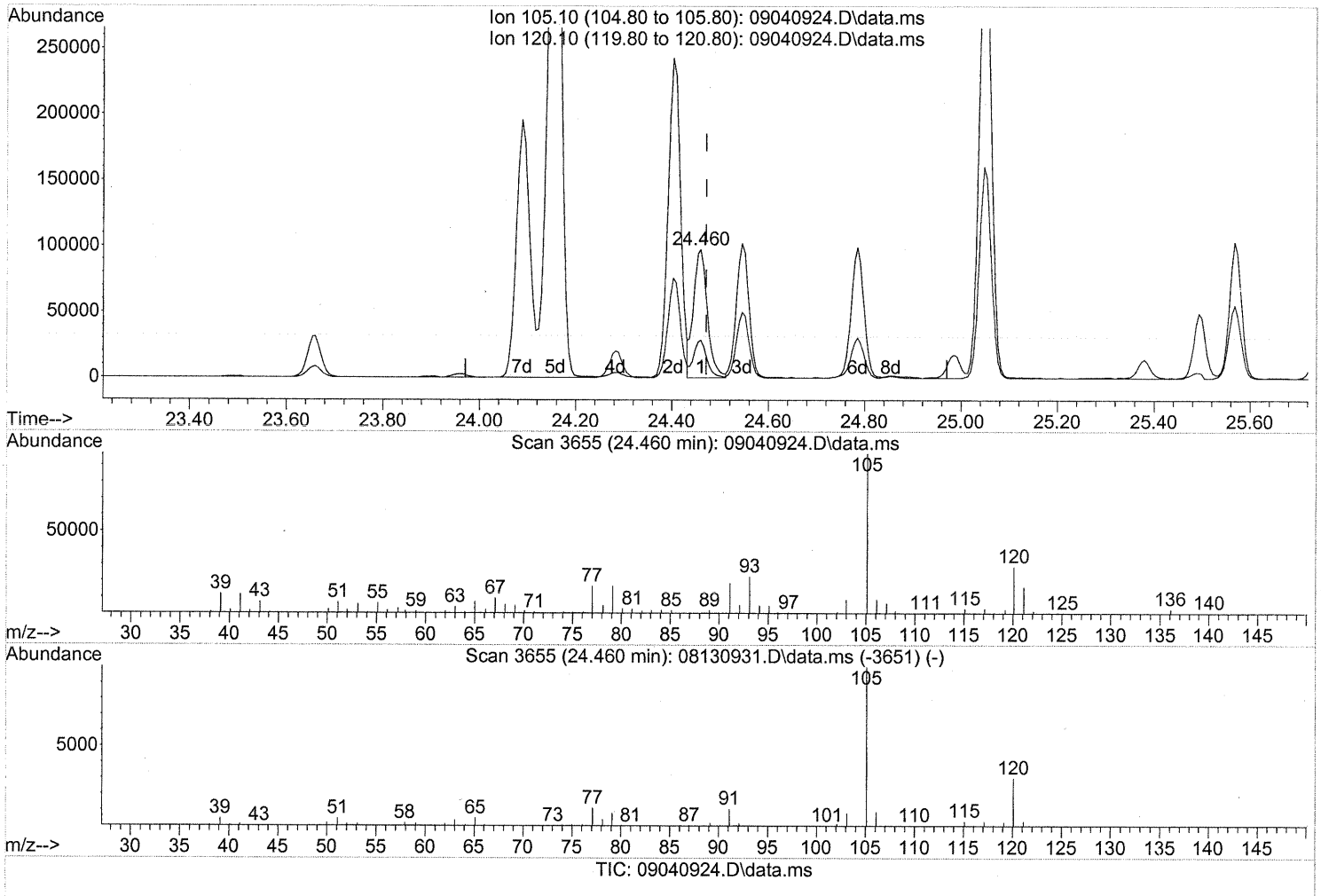
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.11
65.00	10.20	22.66
0.00	0.00	0.00

183

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 1.76ng

response 193399

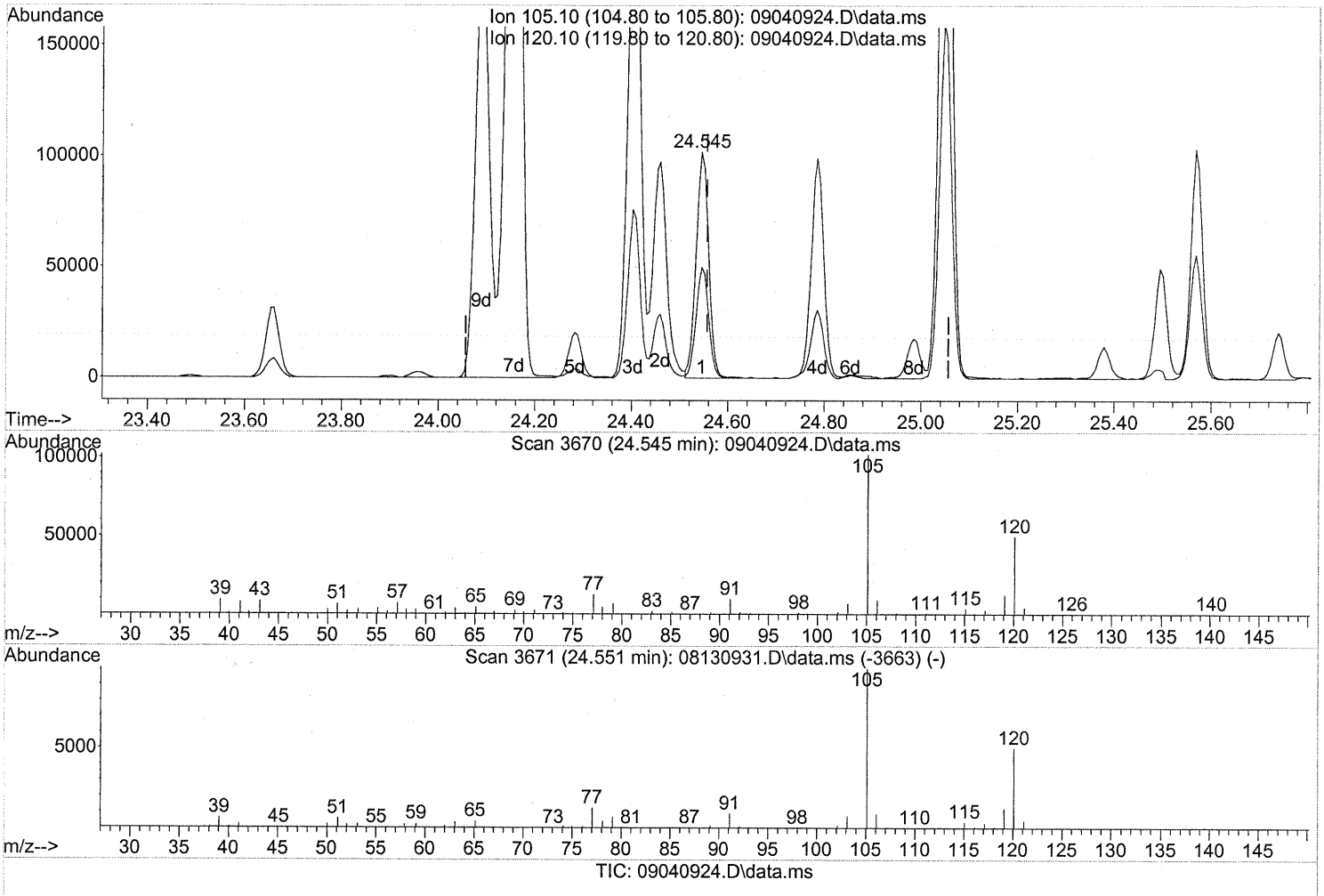
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	26.45
0.00	0.00	0.00
0.00	0.00	0.00

184

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

24.545min (-0.011) 2.03ng

response 184514

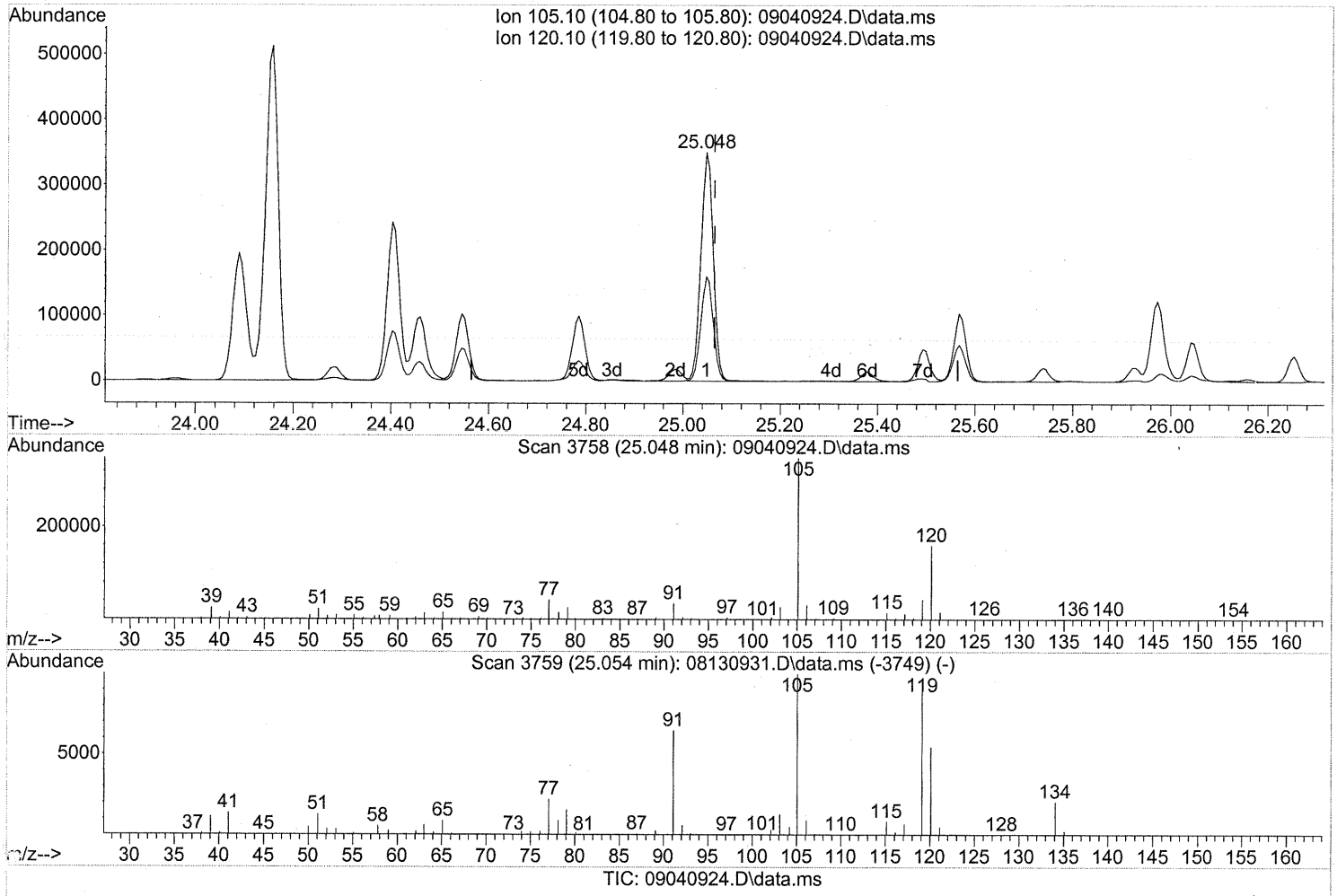
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.70
0.00	0.00	0.00
0.00	0.00	0.00

185

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

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

25.048min (-0.017) 6.36ng

response 614109

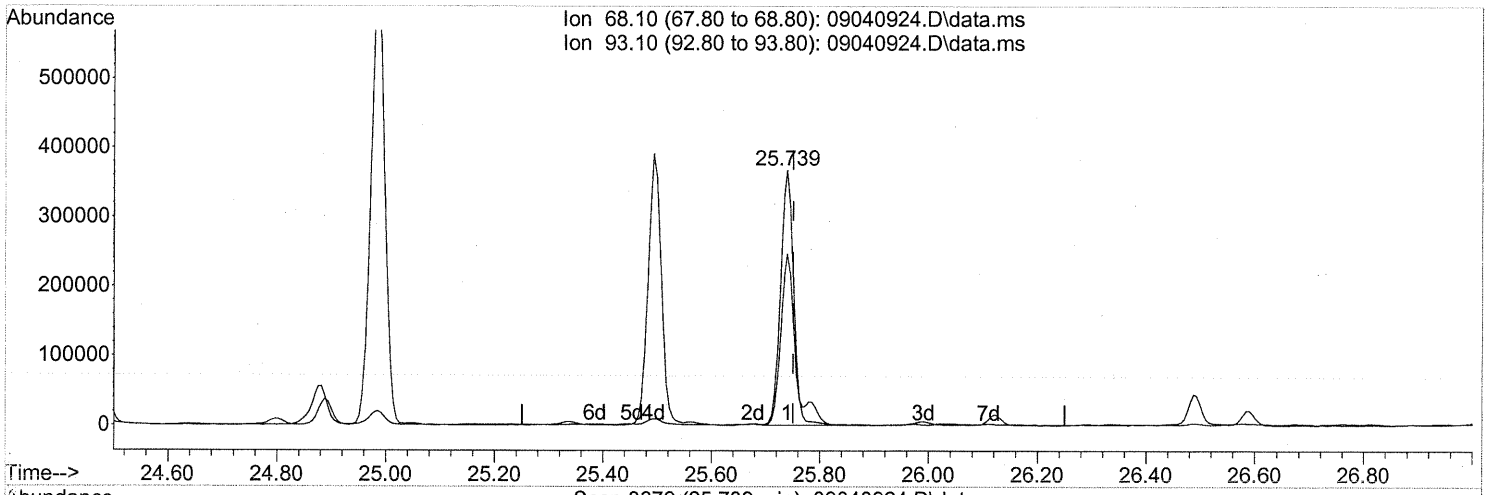
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.85
0.00	0.00	0.00
0.00	0.00	0.00

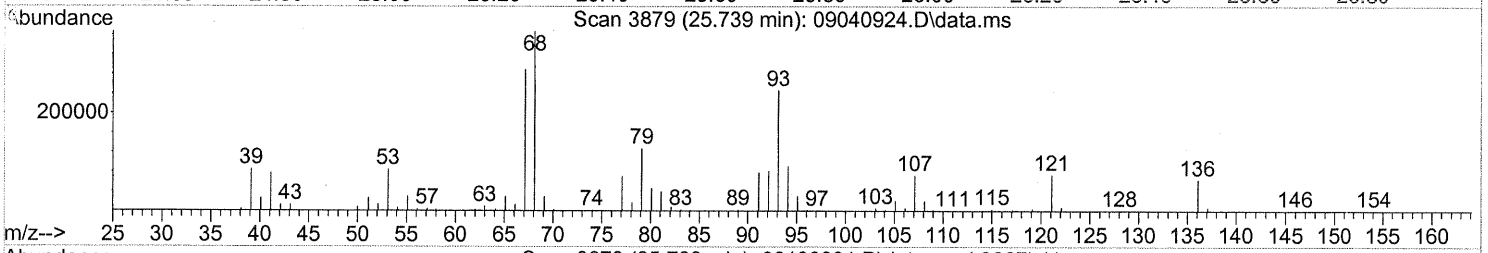
186

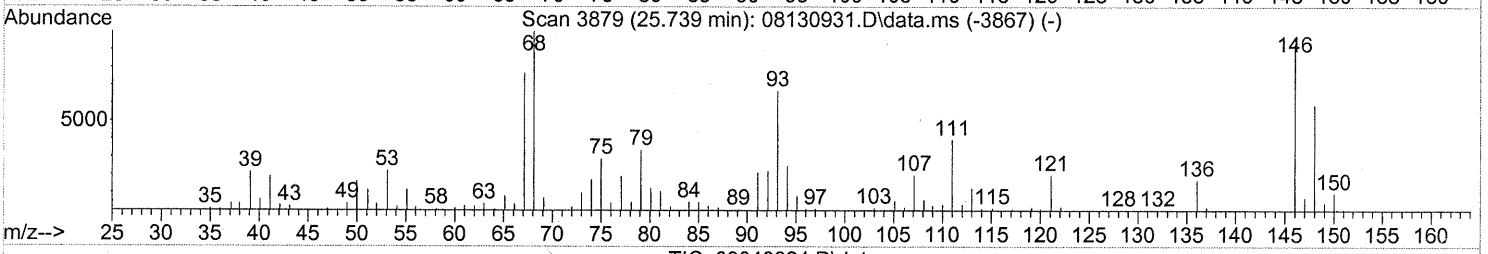
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040924.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 15.65ng

response 618018

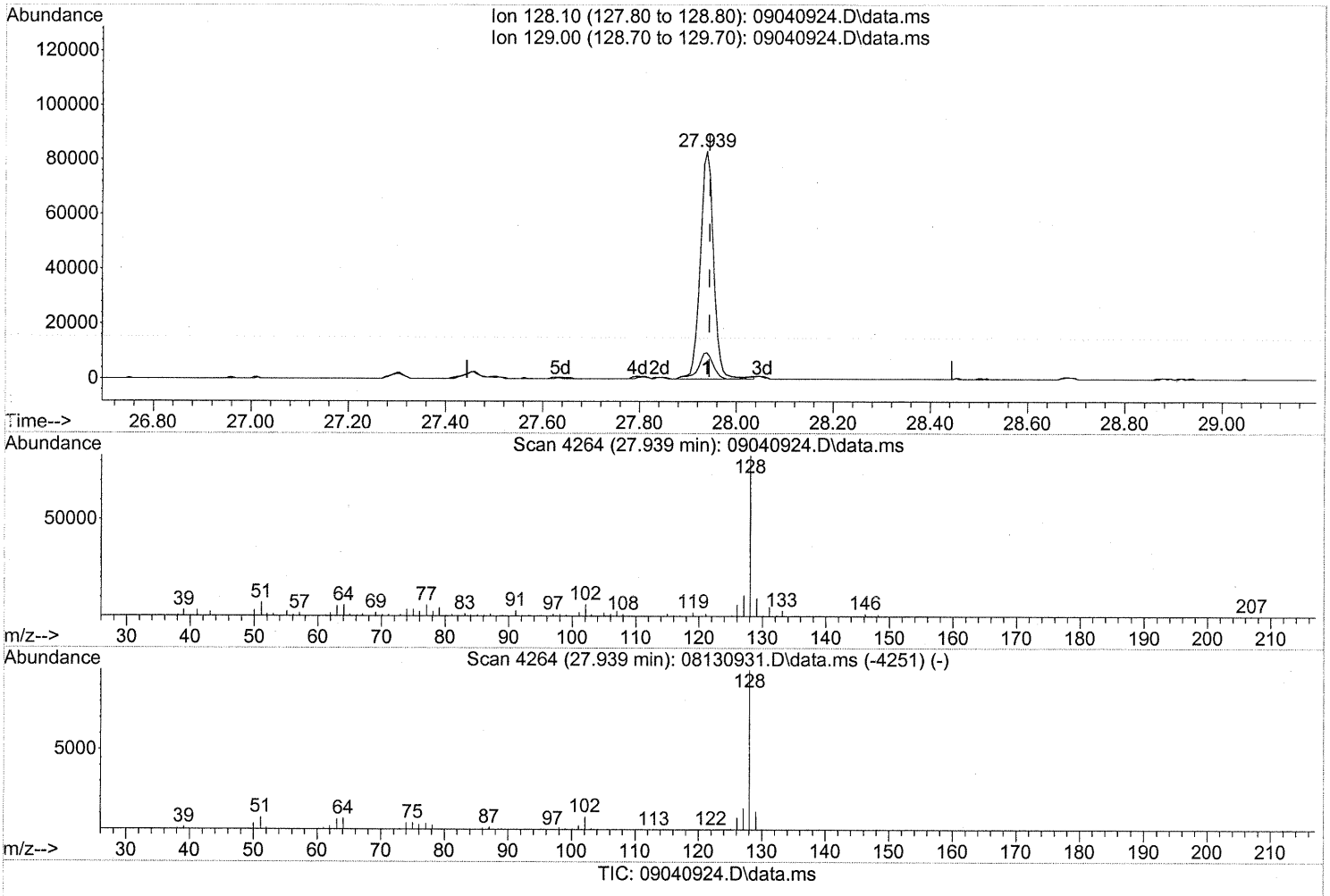
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	75.90
0.00	0.00	0.00
0.00	0.00	0.00

187

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040924.D
Acq On : 5 Sep 2009 00:23
Operator : EM
Sample : P0903080-003 (1000ml)
Misc : Environmental H&E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 08 07:37:19 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040924.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 1.22ng

response 158457

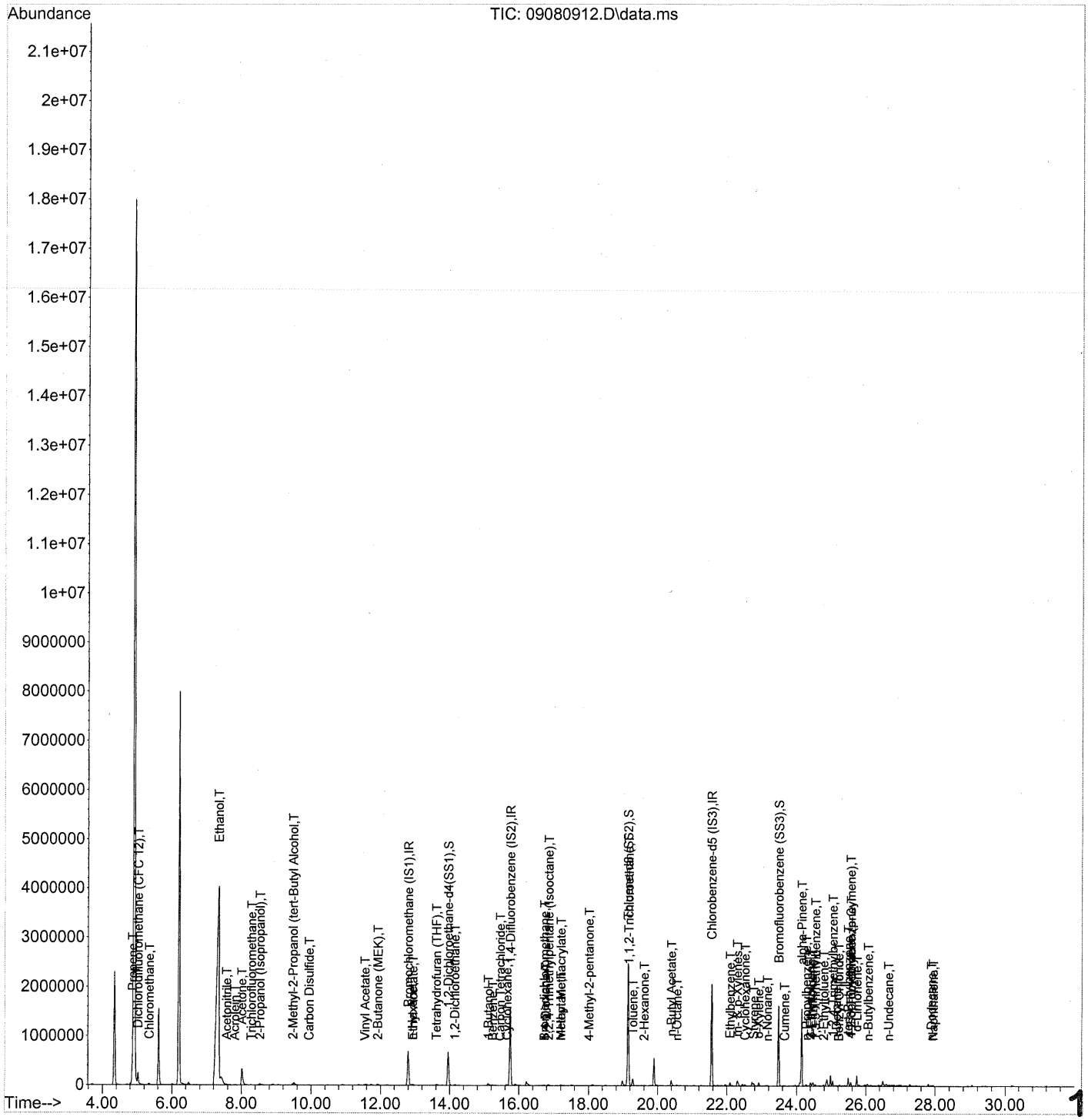
Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.54
0.00	0.00	0.00
0.00	0.00	0.00

188

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

DA 9/18/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	356882	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1835702	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	885913	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	672489	26.650	ng		-0.03
Spiked Amount 25.000			Recovery = 106.60%				
57) Toluene-d8 (SS2)	19.14	98	2150127	25.530	ng		-0.02
Spiked Amount 25.000			Recovery = 102.12%				
73) Bromofluorobenzene (SS3)	23.49	174	564546	23.669	ng		0.00
Spiked Amount 25.000			Recovery = 94.68%				
Target Compounds							Qvalue
2) Propene	4.87	42	132866m	4.244	ng		
3) Dichlorodifluoromethan...	5.02	85	8008	0.179	ng	#	91
4) Chloromethane	5.35	50	3820	0.092	ng		89
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.08	54	470	N.D.			
8) Bromomethane	6.57	94	316	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.34	45	11833562	602.599	ng		99
11) Acetonitrile	7.57	41	8986	0.188	ng		94
12) Acrolein	7.80	56	7765	0.606	ng		98
13) Acetone	8.01	58	190953	9.556	ng		96
14) Trichlorofluoromethane	8.29	101	3456	0.090	ng		96
15) 2-Propanol (Isopropanol)	8.53	45	50193	0.917	ng		82
16) Acrylonitrile	8.87	53	1297	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.48	59	60229	1.084	ng	#	86
19) Methylene Chloride	9.52	84	1202	N.D.			
20) 3-Chloro-1-propene (Al...	9.73	41	105	N.D.			
21) Trichlorotrifluoroethane	9.97	151	111	N.D.			
22) Carbon Disulfide	9.94	76	14620	0.166	ng		90
23) trans-1,2-Dichloroethene	10.98	61	1332	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.43	73	109	N.D.			
26) Vinyl Acetate	11.55	86	2470	0.571	ng	#	29
27) 2-Butanone (MEK)	11.92	72	11663	0.837	ng	#	50
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.94	61	1974	0.219	ng		83
31) n-Hexane	12.92	57	9128	0.207	ng		7[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	577	N.D.			
34) Tetrahydrofuran (THF)	13.61	72	4334	0.299	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	14.14	62	1565	0.055	ng	#	42
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	15.10	61	124	N.D.			
40) 1-Butanol	15.11	56	43911	1.846	ng		79
41) Benzene	15.23	78	10869	0.110	ng		99
42) Carbon Tetrachloride	15.46	117	1731	0.063	ng		88
43) Cyclohexane	15.65	84	8117	0.212	ng	#	81
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	16.73	83	2796	0.097	ng	#	18
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.76	88	1297	0.074	ng		93
49) 2,2,4-Trimethylpentane...	16.85	57	22337	0.197	ng		82
50) Methyl Methacrylate	17.21	100	1043	0.106	ng	#	1
51) n-Heptane	17.21	71	4905	0.187	ng		84
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	18.01	58	1479	0.069	ng	#	31
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	19.16	97	166565	7.897	ng	#	8
58) Toluene	19.28	91	124414	1.219	ng		99
59) 2-Hexanone	19.61	43	11460	0.216	ng		88
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.39	43	107255	1.853	ng		99
63) n-Octane	20.56	57	3169	0.139	ng	#	80
64) Tetrachloroethene	20.75	166	110	N.D.			
65) Chlorobenzene	21.62	112	2140	N.D.			
66) Ethylbenzene	22.09	91	62066	0.563	ng		98
67) m- & p-Xylenes	22.30	91	95038	1.088	ng		98
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	28074	0.435	ng		99
70) o-Xylene	22.92	91	50993	0.580	ng		93
71) n-Nonane	23.16	43	7624	0.144	ng	#	64
72) 1,1,2,2-Tetrachloroethane	22.89	83	460	N.D.			
74) Cumene	23.66	105	8236	0.072	ng		86
75) alpha-Pinene	24.15	93	728601	12.956	ng		98
76) n-Propylbenzene	24.28	91	22074	0.157	ng		97
77) 3-Ethyltoluene	24.41	105	42001	0.393	ng		100
78) 4-Ethyltoluene	24.46	105	20783	0.194	ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	19540	0.220	ng		99

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

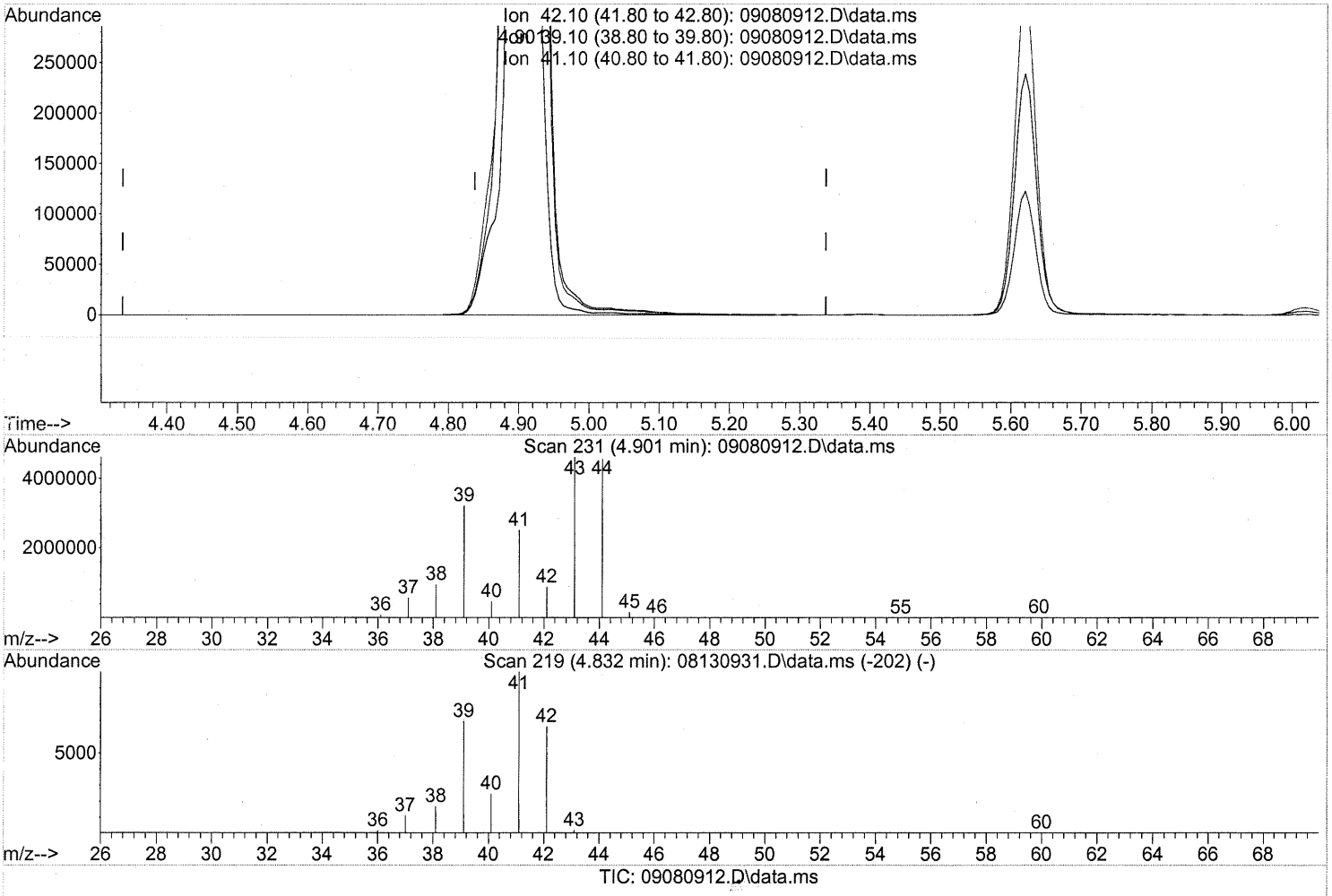
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	1088	N.D.		
81) 2-Ethyltoluene	24.79	105	18596	0.169 ng		96
82) 1,2,4-Trimethylbenzene	25.05	105	61570	0.653 ng		86
83) n-Decane	25.15	57	4439	0.081 ng		75
84) Benzyl Chloride	25.22	91	4362	0.060 ng	#	55
85) 1,3-Dichlorobenzene	25.25	146	1201	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1826	N.D.		
87) sec-Butylbenzene	25.38	105	4528	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	28403	0.239 ng		94
89) 1,2,3-Trimethylbenzene	25.57	105	18606	0.195 ng		96
90) 1,2-Dichlorobenzene	25.75	146	992	N.D.		
91) d-Limonene	25.74	68	55671	1.444 ng		95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	3740	0.066 ng	#	29
94) 1,2,4-Trichlorobenzene	27.80	180	1546	N.D.		
95) Naphthalene	27.94	128	22738	0.180 ng		99
96) n-Dodecane	27.89	57	7845	0.124 ng		92
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.52	55	16161	0.503 ng	#	84
99) tert-Butylbenzene	25.49	119	5881	0.063 ng		94
100) n-Butylbenzene	26.07	91	11178	0.113 ng	#	61

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 09 07:51:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080912.D\data.ms

(2) Propene (T)

4.901min (+0.063) 81.53ng

response 2552485

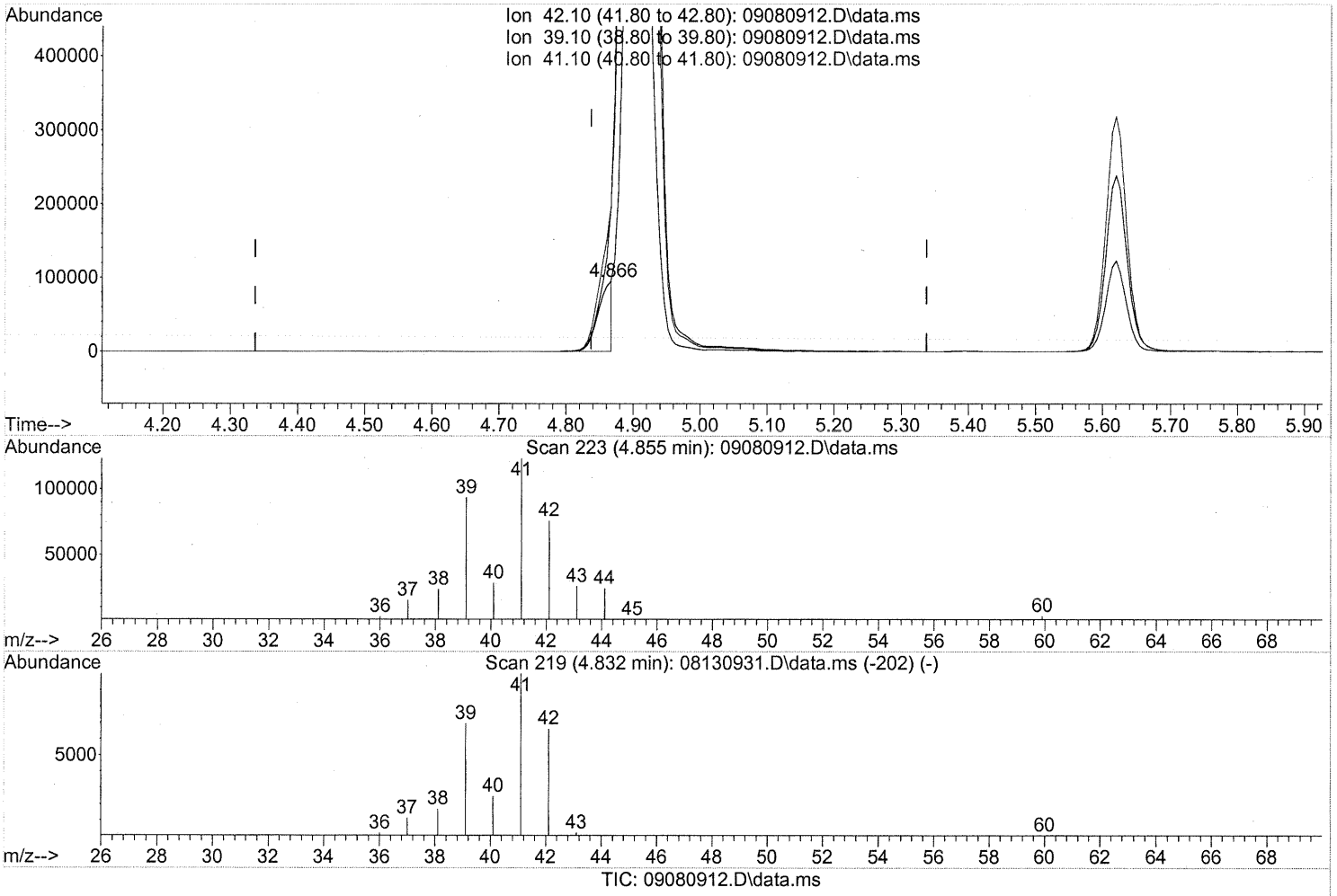
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	344.73#
41.10	152.70	284.02#
0.00	0.00	0.00

SH

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080912.D\data.ms

(2) Propene (T)

4.866min (+0.029) 4.24ng m

response 132866

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	6622.52#
41.10	152.70	5456.21#
0.00	0.00	0.00

SH-71C

9/18/09

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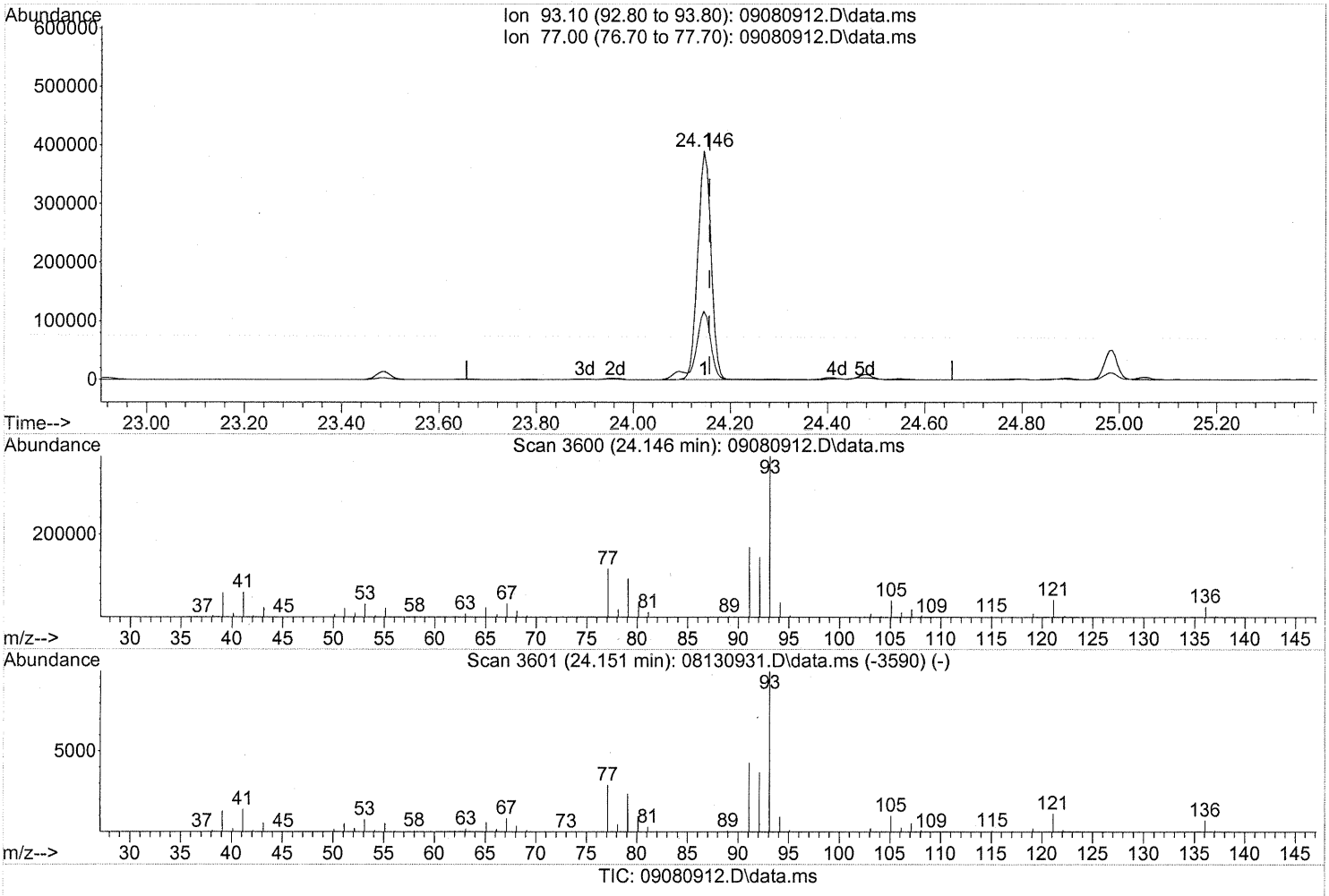
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 16:08
Operator : EM
Sample : P0903080-003 dil (100ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 15:09:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080912.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 12.96ng

response 728601

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.69
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: **104837**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01453

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.6 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.29

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**50**	0.65	**29**	0.37	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.4**	0.65	**0.48**	0.13	
74-87-3	**Chloromethane**	**0.50**	0.13	**0.24**	0.062	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.65	ND	0.092	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.050	
106-99-0	**1,3-Butadiene**	**0.16**	0.13	**0.072**	0.058	
74-83-9	Bromomethane	ND	0.13	ND	0.033	
75-00-3	Chloroethane	ND	0.13	ND	0.049	
64-17-5	**Ethanol**	**680**	6.5	**360**	3.4	**D**
75-05-8	Acetonitrile	ND	0.65	ND	0.38	
107-02-8	**Acrolein**	**8.6**	0.65	**3.8**	0.28	
67-64-1	**Acetone**	**140**	6.5	**57**	2.7	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.13	**0.21**	0.023	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**11**	0.65	**4.6**	0.26	
107-13-1	Acrylonitrile	ND	0.65	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.033	
75-09-2	Methylene Chloride	ND	0.65	ND	0.19	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.041	
76-13-1	**Trichlorotrifluoroethane**	**0.51**	0.13	**0.067**	0.017	
75-15-0	**Carbon Disulfide**	**1.9**	0.65	**0.62**	0.21	
156-60-5	**trans-1,2-Dichloroethene**	**0.64**	0.13	**0.16**	0.033	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.032	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.036	
108-05-4	Vinyl Acetate	ND	6.5	ND	1.8	
78-93-3	**2-Butanone (MEK)**	**10**	0.65	**3.5**	0.22	

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: Rc Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104837**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01453

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.6 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.29

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	0.033	
141-78-6	**Ethyl Acetate**	**4.9**	1.3	**1.4**	0.36	
110-54-3	**n-Hexane**	**4.7**	0.65	**1.3**	0.18	
67-66-3	**Chloroform**	**0.21**	0.13	**0.043**	0.026	
109-99-9	**Tetrahydrofuran (THF)**	**2.7**	0.65	**0.91**	0.22	
107-06-2	**1,2-Dichloroethane**	**1.2**	0.13	**0.30**	0.032	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.024	
71-43-2	**Benzene**	**1.8**	0.13	**0.56**	0.040	
56-23-5	**Carbon Tetrachloride**	**1.1**	0.13	**0.17**	0.021	
110-82-7	**Cyclohexane**	**4.5**	0.65	**1.3**	0.19	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.028	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.019	
79-01-6	Trichloroethene	ND	0.13	ND	0.024	
123-91-1	1,4-Dioxane	ND	0.65	ND	0.18	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.32	
142-82-5	**n-Heptane**	**4.2**	0.65	**1.0**	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.65	ND	0.14	
108-10-1	**4-Methyl-2-pentanone**	**1.3**	0.65	**0.31**	0.16	
10061-02-6	trans-1,3-Dichloropropene	ND	0.65	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.024	
108-88-3	**Toluene**	**22**	0.65	**5.9**	0.17	
591-78-6	**2-Hexanone**	**3.9**	0.65	**0.95**	0.16	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.017	
123-86-4	**n-Butyl Acetate**	**25**	0.65	**5.3**	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: Rc Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903080
Client Sample ID: **104837** CAS Sample ID: P0903080-004
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 9/1/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/2/09
Analyst: Elsa Moctezuma Date Analyzed: 9/5/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC01453

Initial Pressure (psig): -0.6 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.29

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.5**	0.65	**0.54**	0.14	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.019	
108-90-7	Chlorobenzene	ND	0.13	ND	0.028	
100-41-4	**Ethylbenzene**	**9.7**	0.65	**2.2**	0.15	
179601-23-1	**m,p-Xylenes**	**22**	0.65	**5.0**	0.15	
75-25-2	Bromoform	ND	0.65	ND	0.062	
100-42-5	**Styrene**	**6.2**	0.65	**1.5**	0.15	
95-47-6	**o-Xylene**	**11**	0.65	**2.5**	0.15	
111-84-2	**n-Nonane**	**1.5**	0.65	**0.28**	0.12	**M1**
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.019	
98-82-8	**Cumene**	**1.1**	0.65	**0.23**	0.13	
80-56-8	**alpha-Pinene**	**210**	0.65	**37**	0.12	**D**
103-65-1	**n-Propylbenzene**	**2.7**	0.65	**0.55**	0.13	
622-96-8	**4-Ethyltoluene**	**3.6**	0.65	**0.73**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**4.6**	0.65	**0.93**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**14**	0.65	**2.9**	0.13	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.025	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.021	
106-46-7	1,4-Dichlorobenzene	ND	0.13	ND	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.021	
5989-27-5	**d-Limonene**	**23**	0.65	**4.1**	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.65	ND	0.067	
120-82-1	1,2,4-Trichlorobenzene	ND	0.65	ND	0.087	
91-20-3	**Naphthalene**	**2.8**	0.65	**0.53**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.65	ND	0.060	

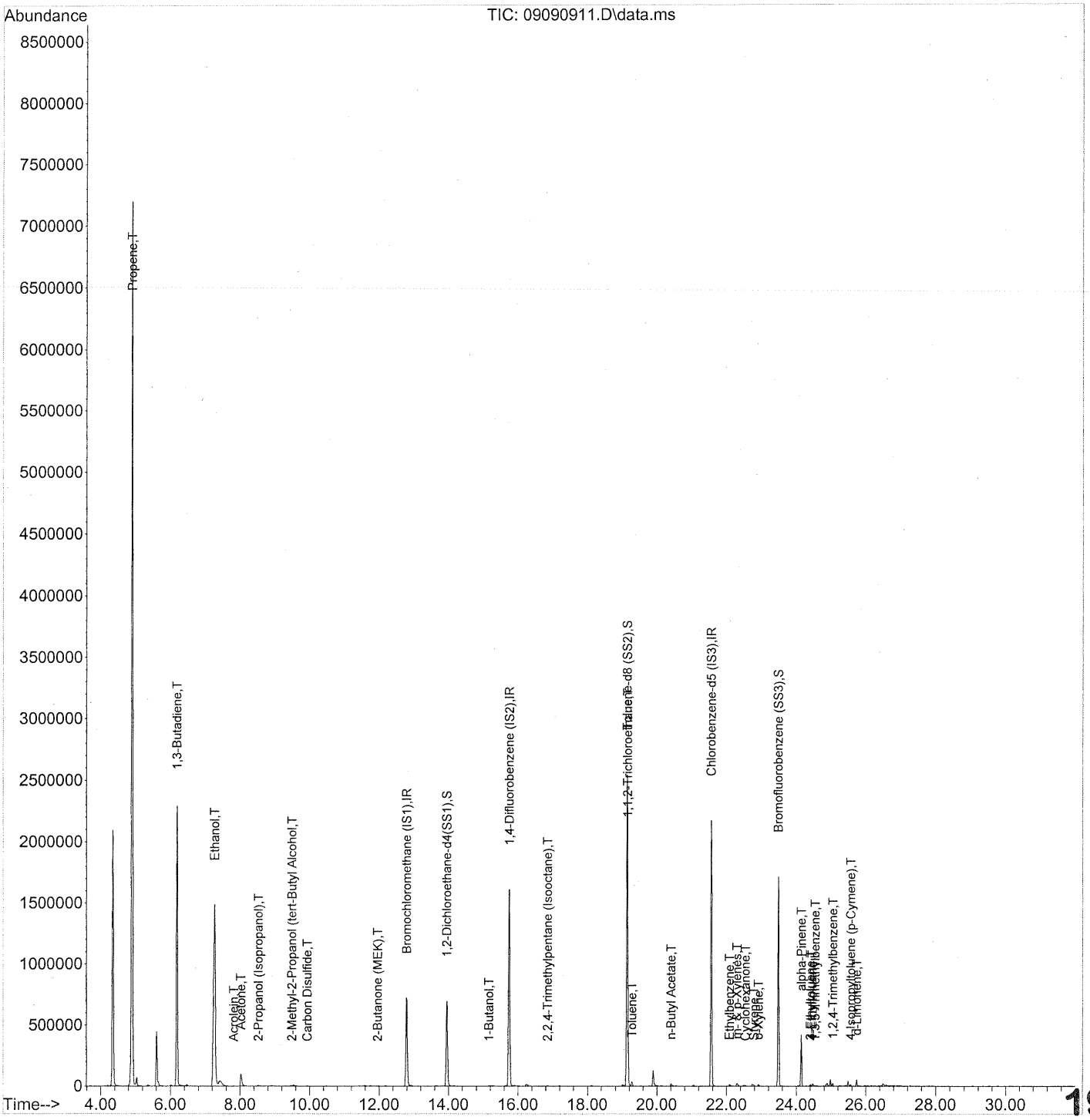
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.
M1 = Matrix interference due to coelution with a non-target compound; results may be biased high.

Verified By: Ro Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil2(30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:31:23 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil (30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:31:23 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	366004	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.74	114	1866311	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	918038	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	693016	26.779	ng		-0.04
Spiked Amount 25.000			Recovery = 107.12%				
57) Toluene-d8 (SS2)	19.14	98	2191399	25.109	ng		-0.02
Spiked Amount 25.000			Recovery = 100.44%				
73) Bromofluorobenzene (SS3)	23.48	174	577433	23.362	ng		-0.01
Spiked Amount 25.000			Recovery = 93.44%				
Target Compounds							Qvalue
2) Propene	4.89	42	796584	24.811	ng	#	1
3) Dichlorodifluoromethan...	5.01	85	1887	N.D.			
4) Chloromethane	5.35	50	772	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	6.19	54	5727	0.191	ng	#	1
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.27	45	3223385m	160.053	ng		
11) Acetonitrile	7.59	41	979	N.D.			
12) Acrolein	7.82	56	1457	0.111	ng		80
13) Acetone	8.03	58	56756	2.769	ng		96
14) Trichlorofluoromethane	8.28	101	479	N.D.			
15) 2-Propanol (Isopropanol)	8.53	45	15217	0.271	ng		92
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	15509	0.272	ng	#	86
19) Methylene Chloride	9.53	84	658	N.D.			
20) 3-Chloro-1-propene (Al...	9.58	41	103	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	5699	0.063	ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.96	72	1355	0.095	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	12.92	57	2143	N.D.			

200

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil (30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:31:23 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.65	72	397	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.16	56	7255	0.300 ng		95
41) Benzene	15.23	78	4302	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	1846	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	16.73	83	123	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...	16.85	57	6204	0.054 ng		86
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.21	71	1151	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.15	97	174277	8.127 ng	#	8
58) Toluene	19.28	91	34273	0.324 ng		98
59) 2-Hexanone	19.59	43	1027	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.40	43	24997	0.417 ng		95
63) n-Octane	20.56	57	561	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	16780	0.147 ng		94
67) m- & p-Xylenes	22.30	91	24891	0.275 ng		98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.79	104	6311	0.094 ng		97
70) o-Xylene	22.92	91	12741	0.140 ng		93
71) n-Nonane	23.17	43	1635	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.66	105	1694	N.D.		
75) alpha-Pinene	24.15	93	190172	~~3.263 ng~~	NR	92
76) n-Propylbenzene	24.29	91	4436	N.D.		
77) 3-Ethyltoluene	24.41	105	10953	0.099 ng		91
78) 4-Ethyltoluene	24.46	105	5617	0.050 ng		86
79) 1,3,5-Trimethylbenzene	24.55	105	5236	0.057 ng		8

201

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil (30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:31:23 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

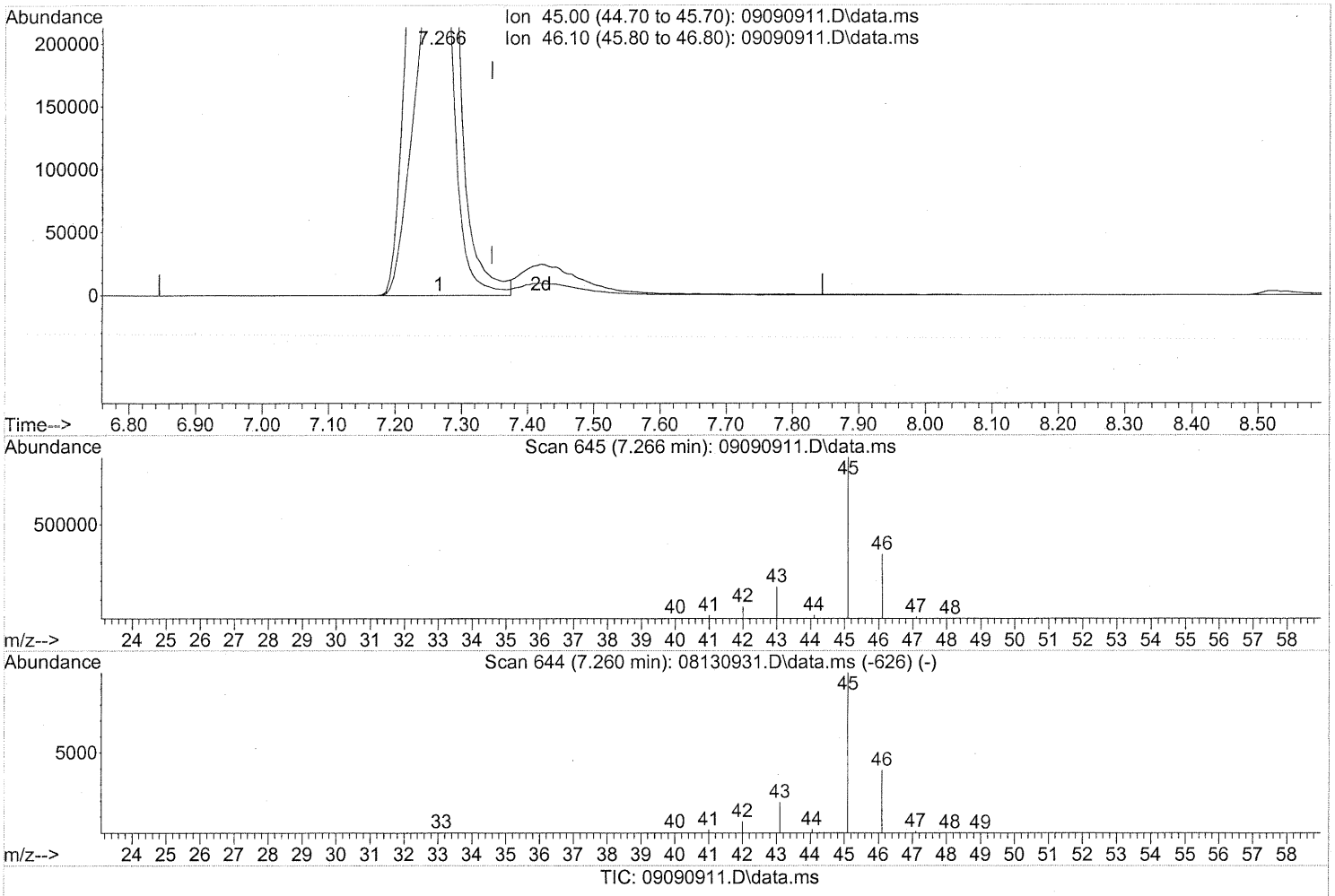
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.			
81) 2-Ethyltoluene	24.79	105	4653	N.D.			
82) 1,2,4-Trimethylbenzene	25.05	105	14566	0.149	ng		87
83) n-Decane	25.15	57	2196	N.D.			
84) Benzyl Chloride	25.33	91	129	N.D.			
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.			
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.			
87) sec-Butylbenzene	25.37	105	394	N.D.			
88) 4-Isopropyltoluene (p-...	25.57	119	6957	0.056	ng		93
89) 1,2,3-Trimethylbenzene	25.57	105	4335	N.D.			
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.			
91) d-Limonene	25.74	68	14096	0.353	ng		100
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.66	57	2108	N.D.			
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.95	128	3324	N.D.			
96) n-Dodecane	27.89	57	1655	N.D.			
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.54	55	3625	0.109	ng	#	80
99) tert-Butylbenzene	25.05	119	1645	N.D.			
100) n-Butylbenzene	26.07	91	2199	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil (30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:30:53 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09090911.D\data.ms

(10) Ethanol (T)

7.266min (-0.080) 152.02ng

response 3061675

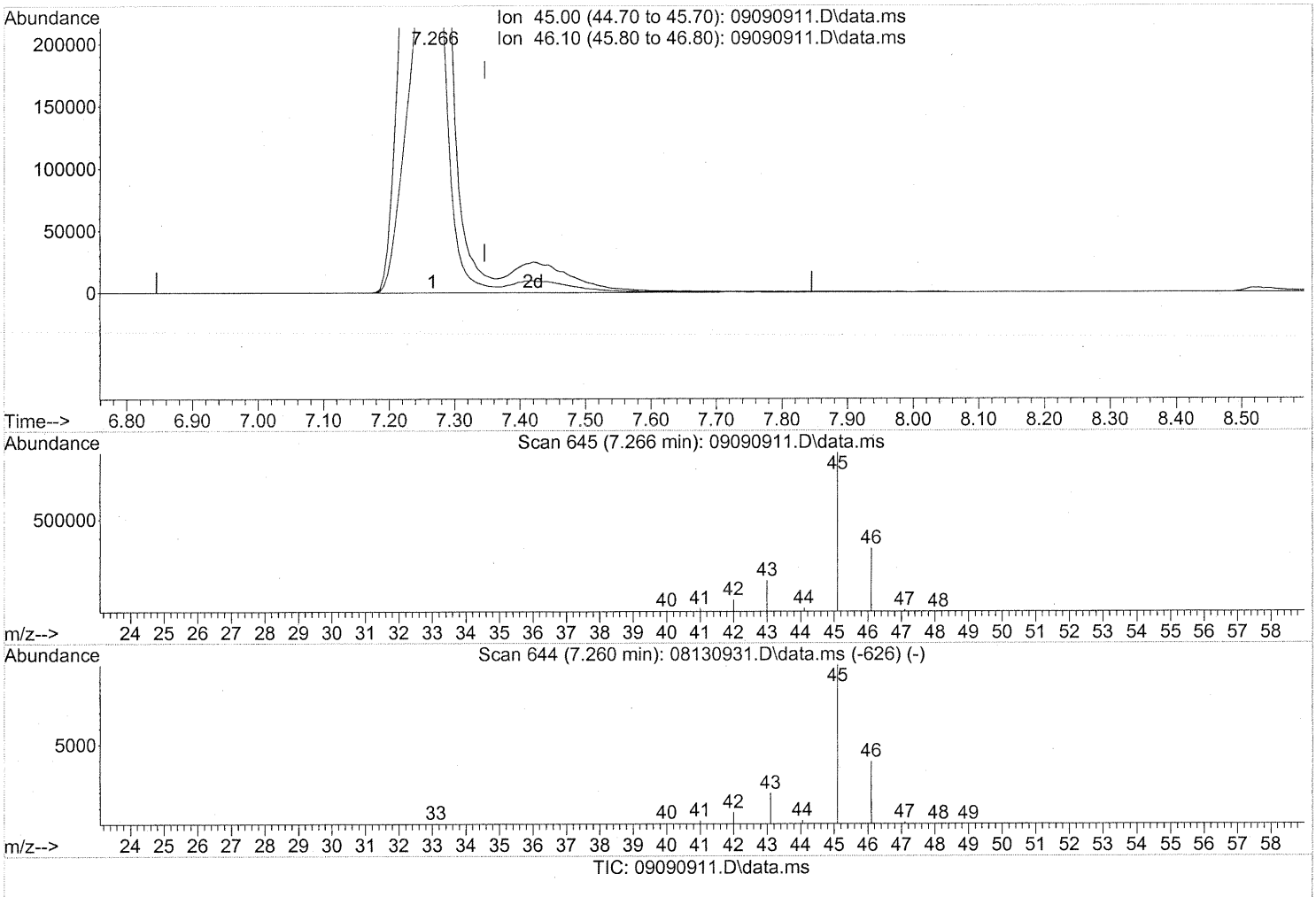
PT

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090911.D
Acq On : 9 Sep 2009 16:22
Operator : EM
Sample : P0903080-003 dil (30ml)
Misc : Environmental H & E 104836
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 08:30:53 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09090911.D\data.ms

(10) Ethanol (T)

7.266min (-0.080) 160.05ng m

response 3223385

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.50
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

9/10/09

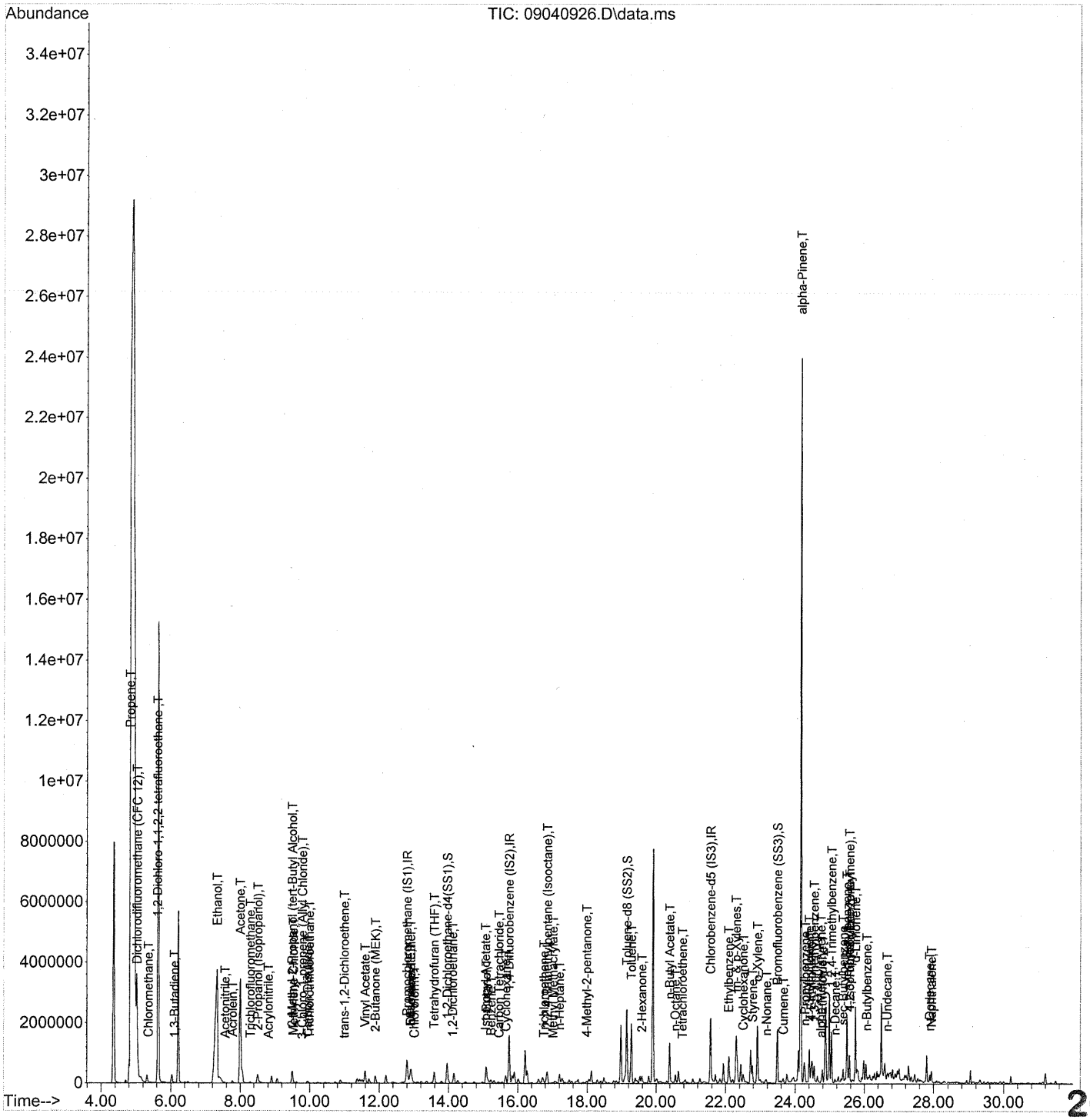
9/16/09

204

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:46:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:46:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

DT 9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	360575	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1830523	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	893790	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.96	65	657307	25.781	ng		-0.03
Spiked Amount 25.000			Recovery = 103.12%				
57) Toluene-d8 (SS2)	19.15	98	2110203	24.835	ng		-0.01
Spiked Amount 25.000			Recovery = 99.32%				
73) Bromofluorobenzene (SS3)	23.49	174	618540	25.705	ng		0.00
Spiked Amount 25.000			Recovery = 102.80%				
Target Compounds							Qvalue
2) Propene	4.82	42	1218707m	38.530	ng		
3) Dichlorodifluoromethan...	5.03	85	82720	1.832	ng		99
4) Chloromethane	5.35	50	16393	0.390	ng		95
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1610	~~0.067~~	ng	#	43
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	3664	0.124	ng	#	34
8) Bromomethane	6.60	94	810	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.33	45	11202434	~~564.617~~	ng	su dil	100
11) Acetonitrile	7.56	41	19615	~~0.405~~	ng		98
12) Acrolein	7.77	56	86718	6.702	ng		98
13) Acetone	8.00	58	2116274	104.817	ng		92
14) Trichlorofluoromethane	8.29	101	35807	0.927	ng		97
15) 2-Propanol (Isopropanol)	8.51	45	479717	8.676	ng		93
16) Acrylonitrile	8.81	53	4543	~~0.155~~	ng		98
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	85914	1.531	ng	#	1
19) Methylene Chloride	9.53	84	5022	~~0.199~~	ng		85
20) 3-Chloro-1-propene (Al...	9.78	41	3401	~~0.101~~	ng TP	#	34
21) Trichlorotrifluoroethane	9.98	151	6878	0.398	ng		96
22) Carbon Disulfide	9.94	76	132546	1.491	ng		100
23) trans-1,2-Dichloroethene	11.00	61	17357	0.499	ng		91
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	11.36	73	3296	N.D.			
26) Vinyl Acetate	11.59	86	13568	~~3.103~~	ng	#	1
27) 2-Butanone (MEK)	11.89	72	112802	8.014	ng	#	86
28) cis-1,2-Dichloroethene	12.58	61	557	N.D.			
29) Diisopropyl Ether	12.91	87	2449	0.123	ng	#	1
30) Ethyl Acetate	12.90	61	34959	3.830	ng		87
31) n-Hexane	12.92	57	163740	3.680	ng		95

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:46:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.01	83	6070	0.163 ng		87
34) Tetrahydrofuran (THF)	13.58	72	30389	2.077 ng	#	1
35) Ethyl tert-Butyl Ether	13.72	87	1162	N.D.		
36) 1,2-Dichloroethane	14.12	62	26426	0.927 ng		99
38) 1,1,1-Trichloroethane	14.53	97	794	N.D.		
39) Isopropyl Acetate	15.07	61	2706	0.181 ng	#	1
40) 1-Butanol	15.09	56	487793	20.564 ng		81
41) Benzene	15.23	78	136721	1.389 ng		98
42) Carbon Tetrachloride	15.46	117	22831	0.830 ng		97
43) Cyclohexane	15.65	84	133583	3.504 ng		89
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.42	63	103	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.76	130	1968	0.079 ng		98
48) 1,4-Dioxane	0.00	88	0	N.D. d		
49) 2,2,4-Trimethylpentane...	16.85	57	411167	3.629 ng		90
50) Methyl Methacrylate	17.02	100	749	0.076 ng	#	1
51) n-Heptane	17.20	71	84945	3.241 ng		91
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	21072m	0.991 ng		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	19.28	91	1763304	17.119 ng		100
59) 2-Hexanone	19.59	43	162108	3.028 ng		74
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	1136309	19.454 ng		98
63) n-Octane	20.55	57	44970	1.959 ng		90
64) Tetrachloroethene	20.75	166	1598	0.063 ng		93
65) Chlorobenzene	0.00	112	0	N.D. d		
66) Ethylbenzene	22.09	91	838692	7.542 ng		98
67) m- & p-Xylenes	22.30	91	1476079	16.743 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	312352	4.793 ng		100
70) o-Xylene	22.92	91	752971	8.490 ng		98
71) n-Nonane	23.17	43	61276	1.147 ng		82
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D. d		
74) Cumene	23.66	105	99300	0.864 ng		97
75) alpha-Pinene	24.16	93	11201918	197.437 ng se dil		100
76) n-Propylbenzene	24.28	91	297382	2.092 ng		90
77) 3-Ethyltoluene	24.40	105	772211	7.168 ng		98
78) 4-Ethyltoluene	24.46	105	302471	2.793 ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	318463	3.556 ng		10

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:46:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

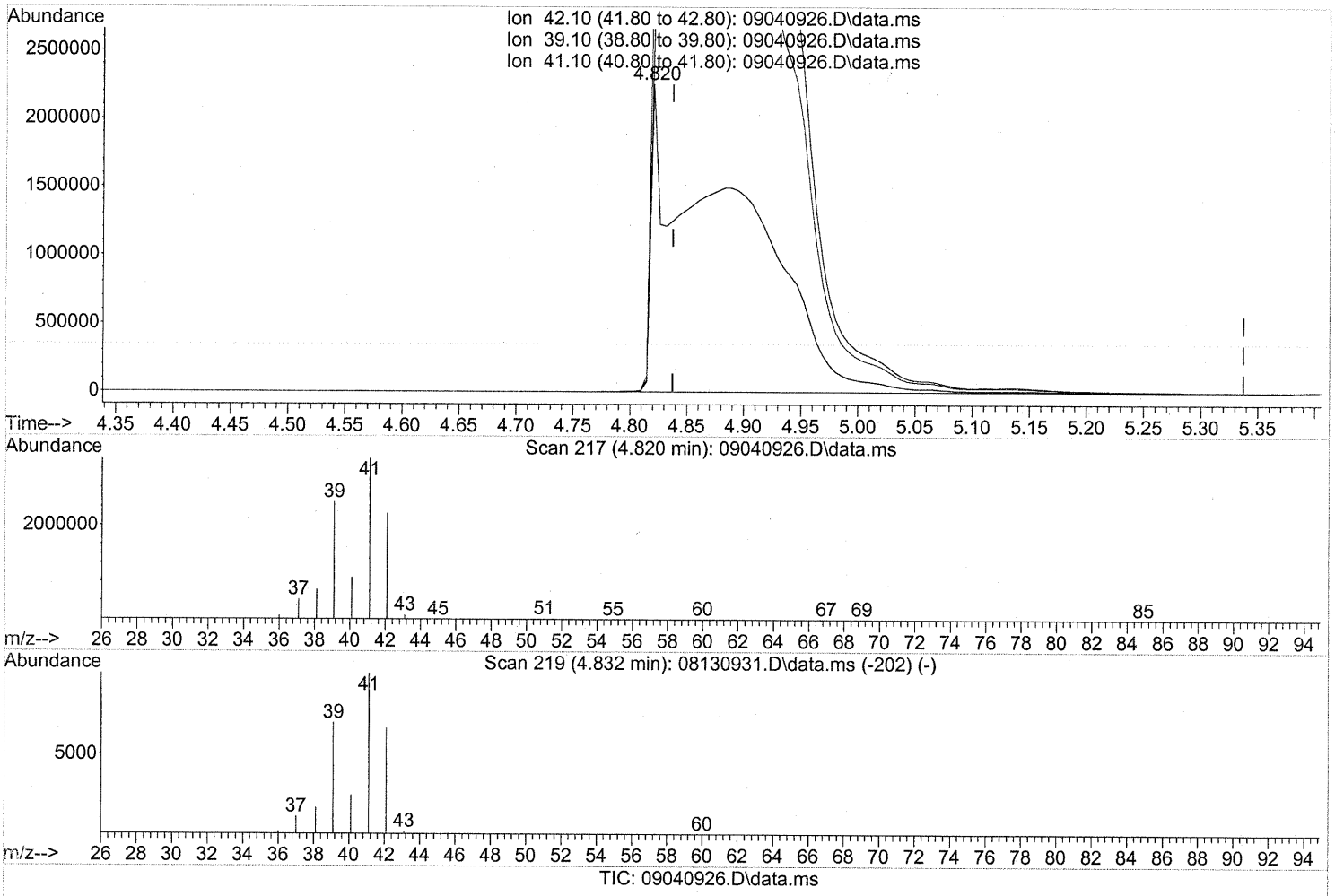
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	5122	0.105 ng	#	19
81) 2-Ethyltoluene	24.79	105	305470	2.746 ng		100
82) 1,2,4-Trimethylbenzene	25.05	105	1043869	10.979 ng		89
83) n-Decane	25.15	57	40822	0.738 ng		93
84) Benzyl Chloride	25.24	91	1039	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	1847	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1847	N.D.		
87) sec-Butylbenzene	25.38	105	43629	0.348 ng		93
88) 4-Isopropyltoluene (p-...	25.56	119	338407	2.819 ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	278458	2.897 ng		99
90) 1,2-Dichlorobenzene	25.74	146	949	N.D.		
91) d-Limonene	25.74	68	683629	17.573 ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	36638	0.641 ng	#	69
94) 1,2,4-Trichlorobenzene	27.79	180	110	N.D.		
95) Naphthalene	27.94	128	277225	2.173 ng		95
96) n-Dodecane	27.89	57	76838	1.200 ng		97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	147104	4.535 ng		98
99) tert-Butylbenzene	25.49	119	81384	0.863 ng		99
100) n-Butylbenzene	26.06	91	121370	1.217 ng	#	35

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:06:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(2) Propene (T)

4.820min (-0.017) 361.94ng

response 11448138

SH

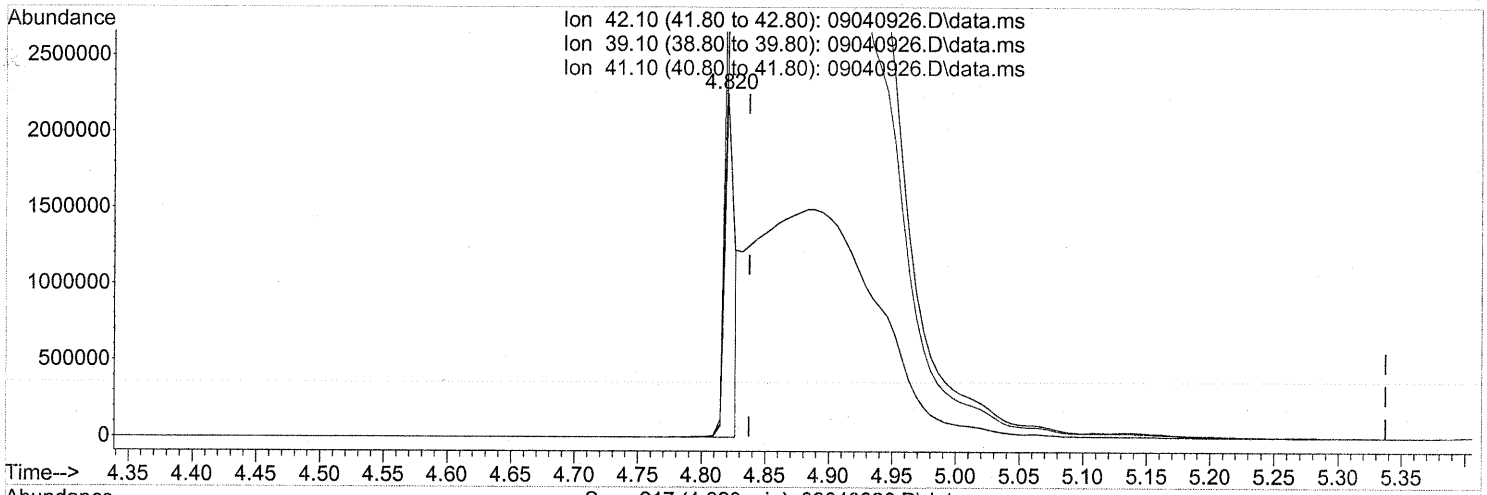
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	0.00#
41.10	152.70	0.00#
0.00	0.00	0.00

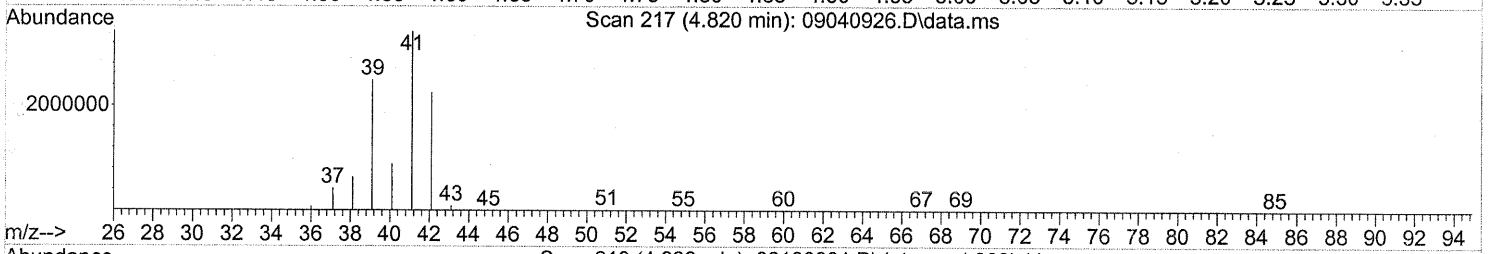
209

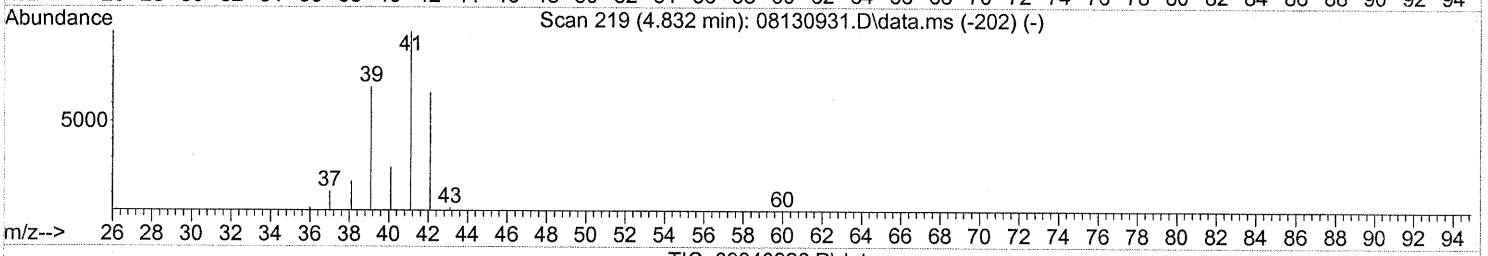
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:06:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(2) Propene (T)

4.820min (-0.017) 38.53ng m

response 1218707

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	0.00#
41.10	152.70	0.00#
0.00	0.00	0.00

SH → IC

9/16/09

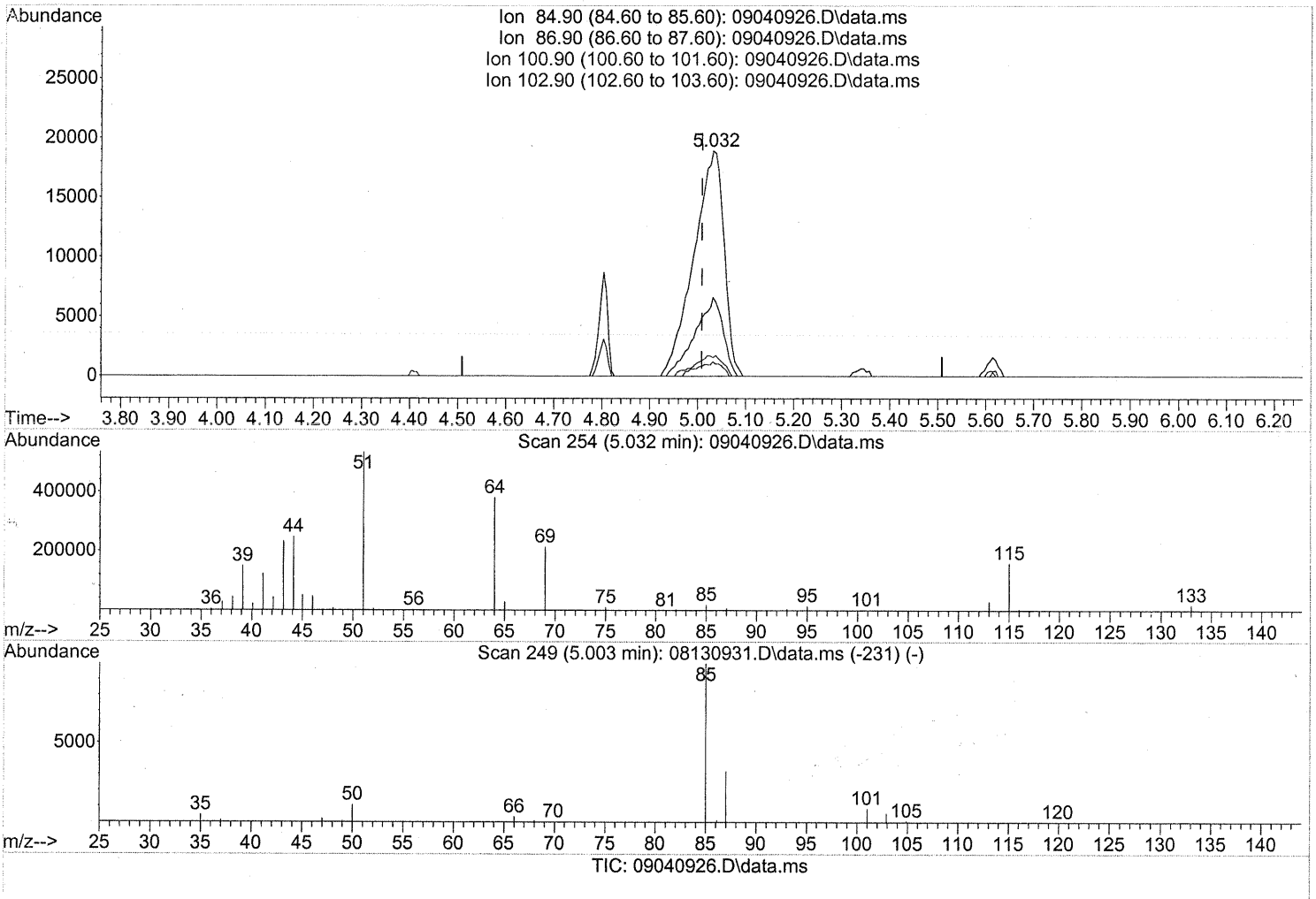
9/16/09

210

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 1.83ng

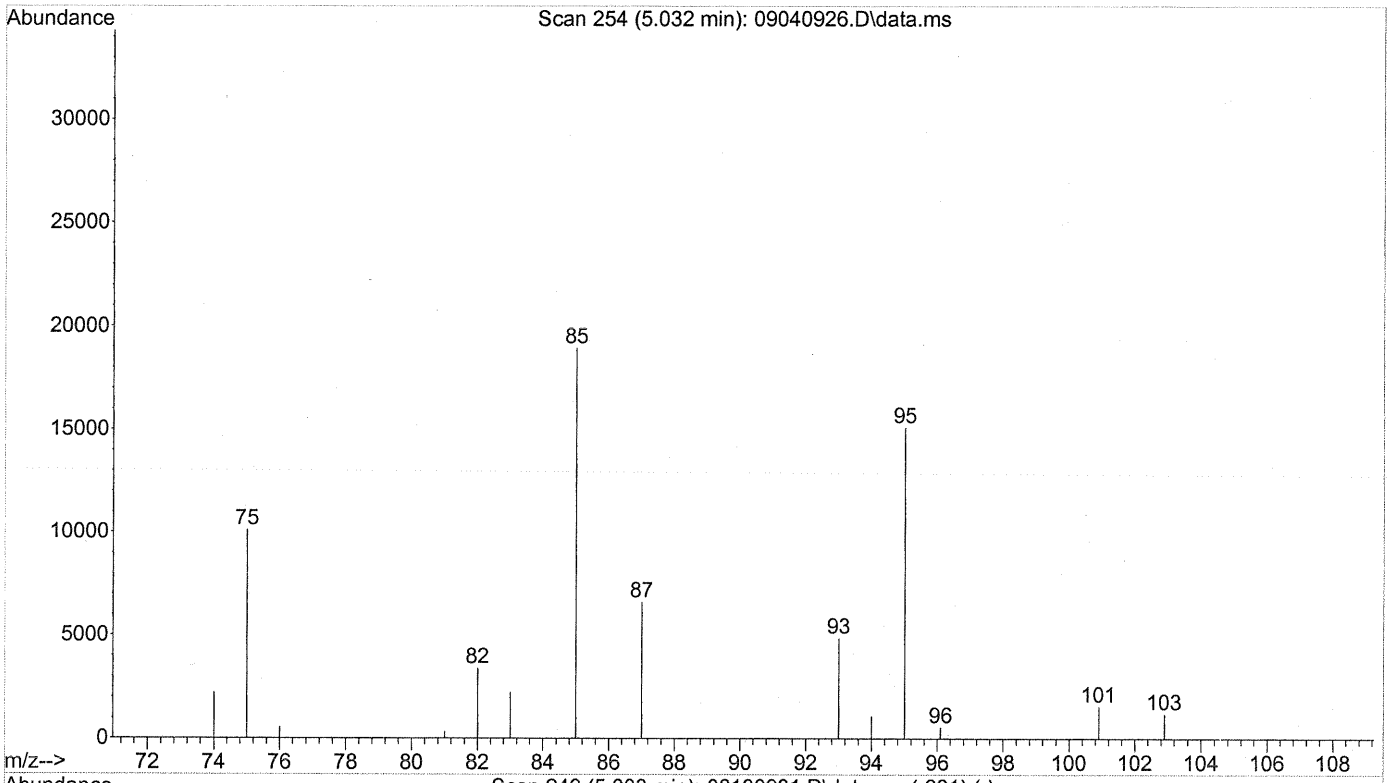
response 82720

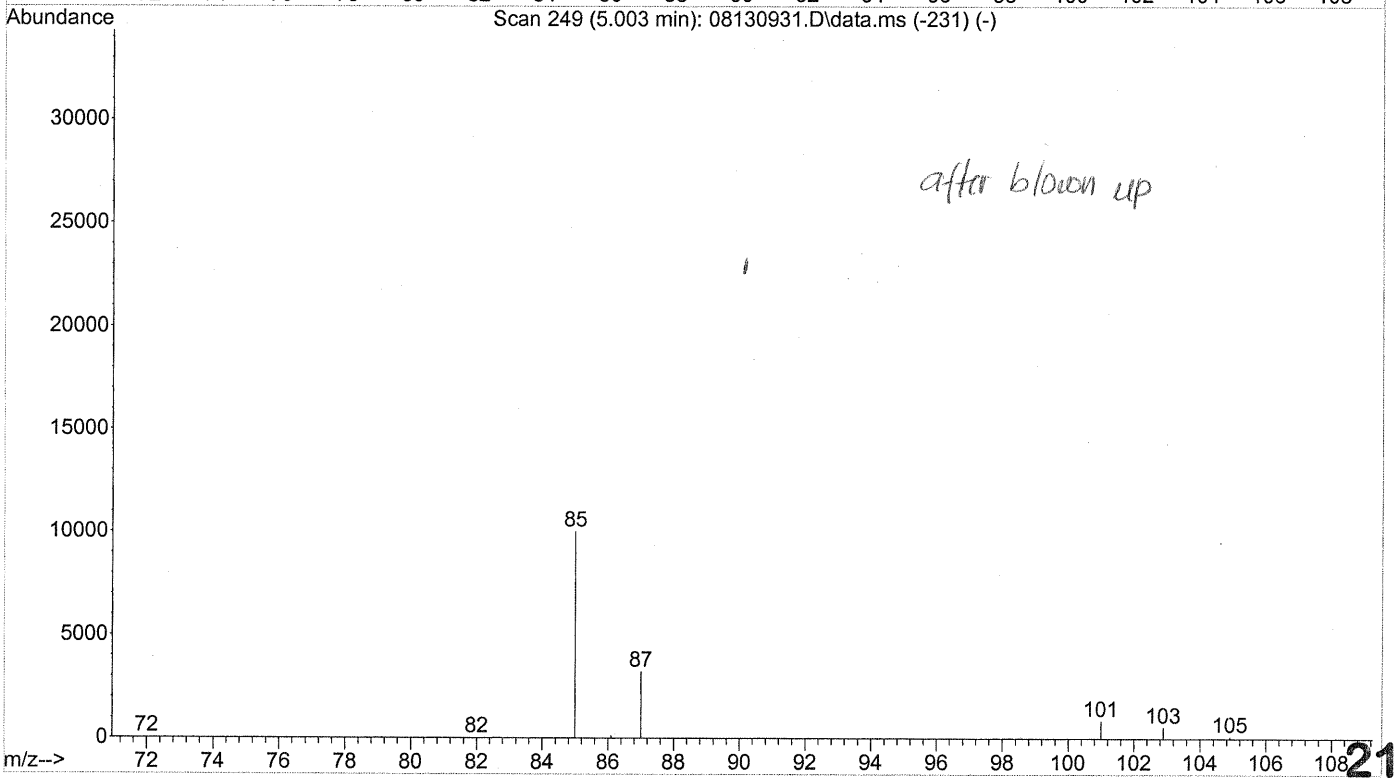
before

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.33
100.90	9.10	8.45
102.90	5.50	5.01

211

File :J:\MS09\Data\2009_09\04\09040926.D
Operator : EM
Acquired : 5 Sep 2009 1:46 using AcqMethod TO15LOW.M
Instrument : MS09
Sample Name: P0903080-004 (1000ml)
Misc Info : Environmental H&E 104837
Vial Number: 12



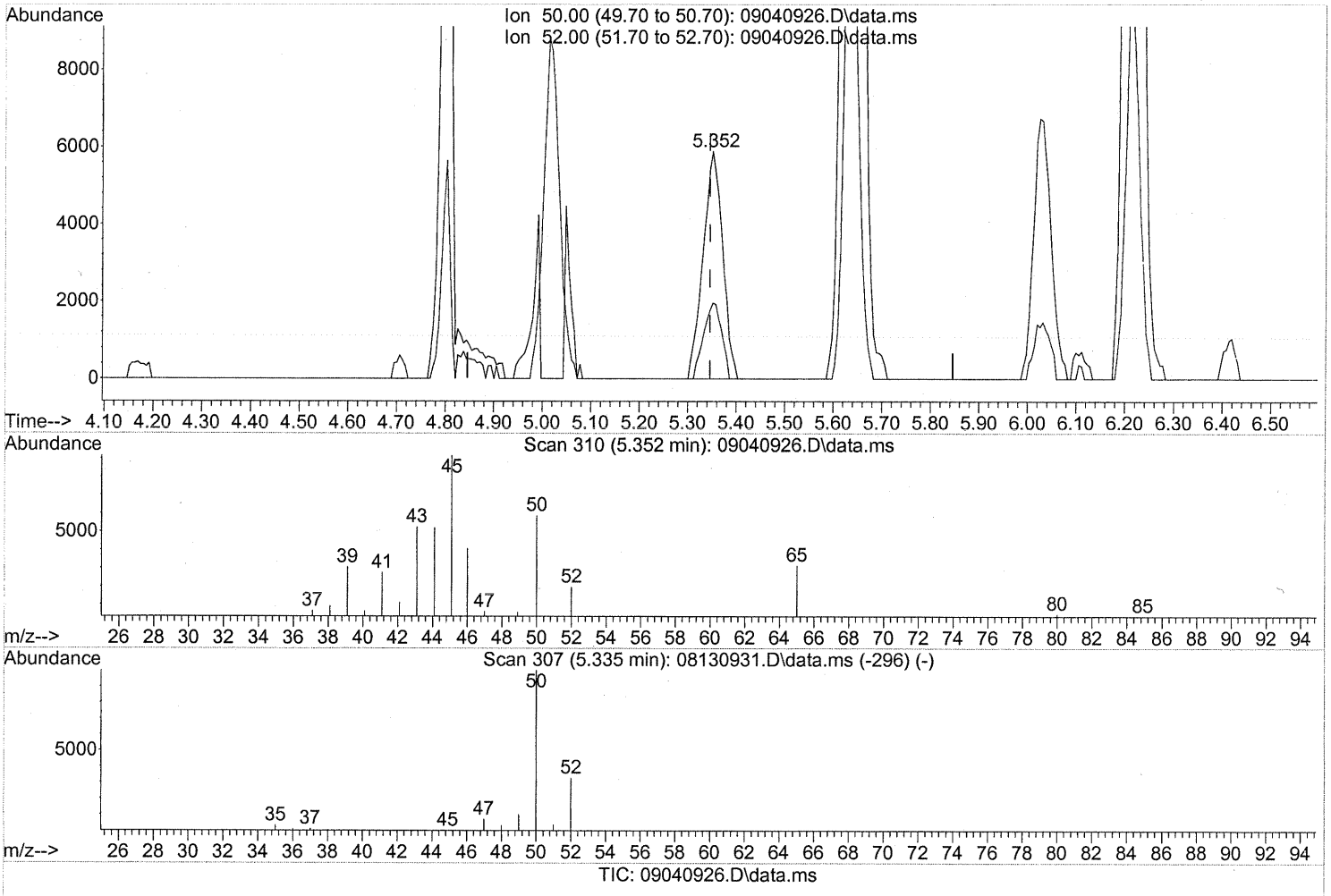


after blown up

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.352min (+0.006) 0.39ng

response 16393

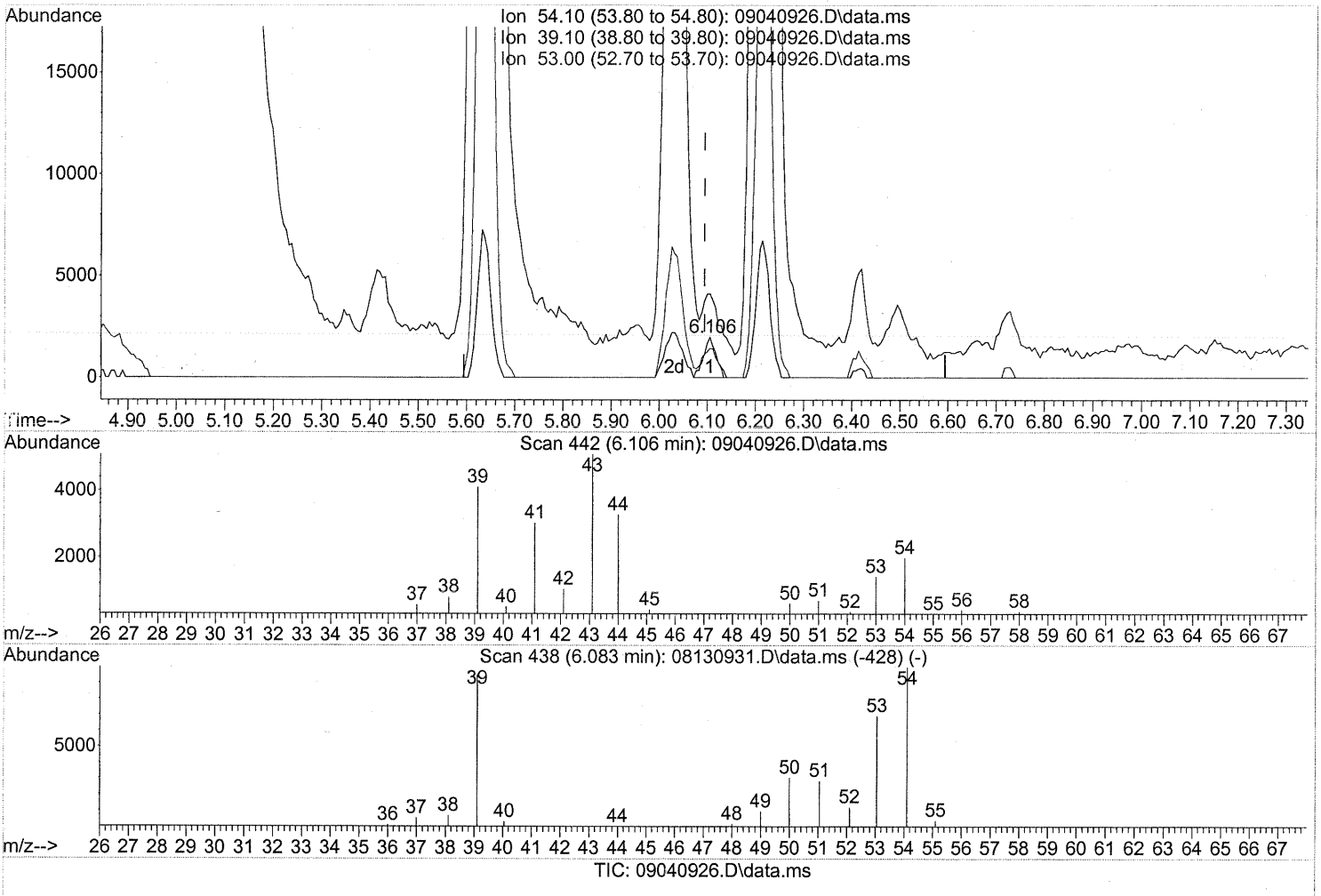
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.53
0.00	0.00	0.00
0.00	0.00	0.00

213

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(7) 1,3-Butadiene (T)

6.106min (+0.011) 0.12ng

response 3664

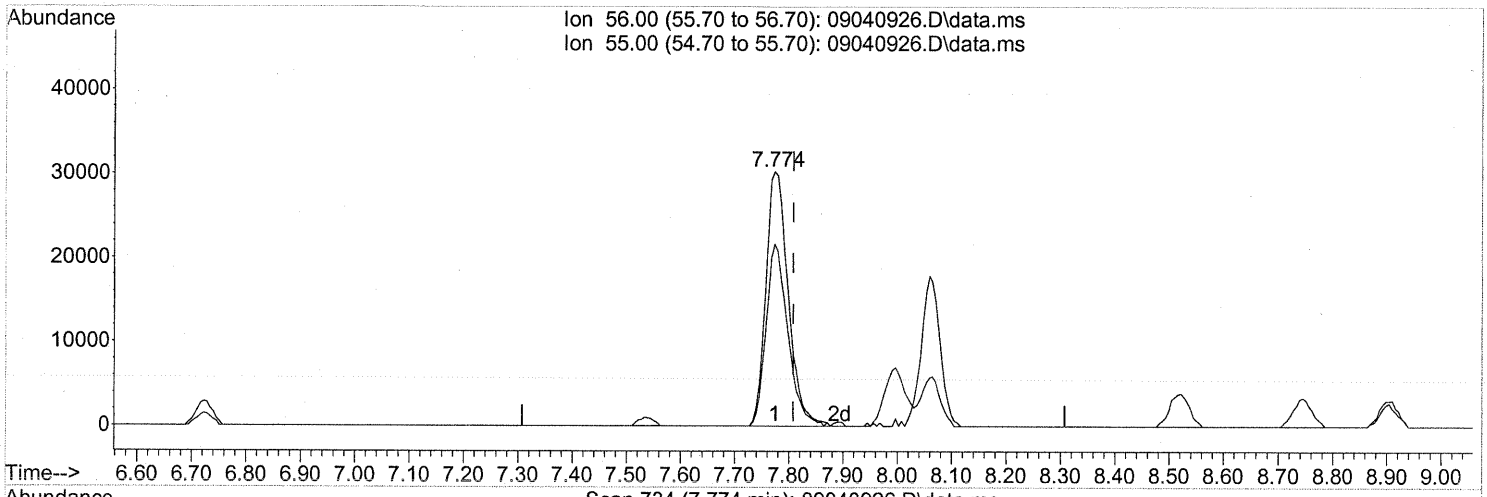
Ion	Exp%	Act%
54.10	100	100
39.10	96.60	198.42#
53.00	69.80	81.06
0.00	0.00	0.00

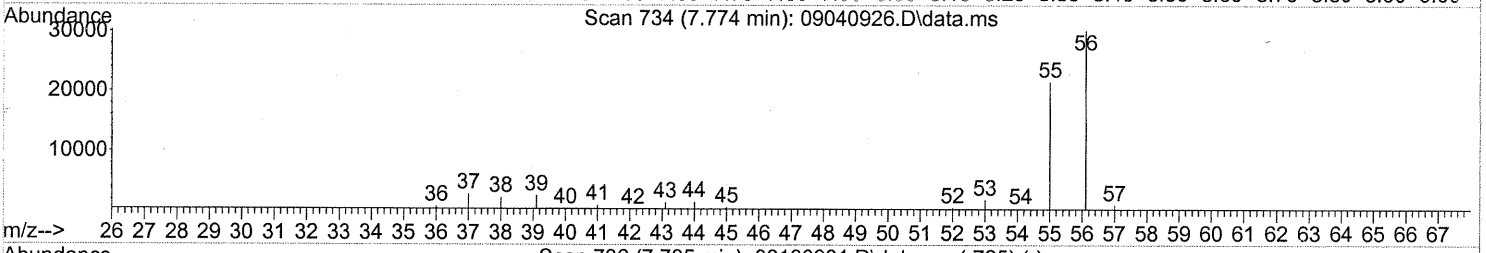
214

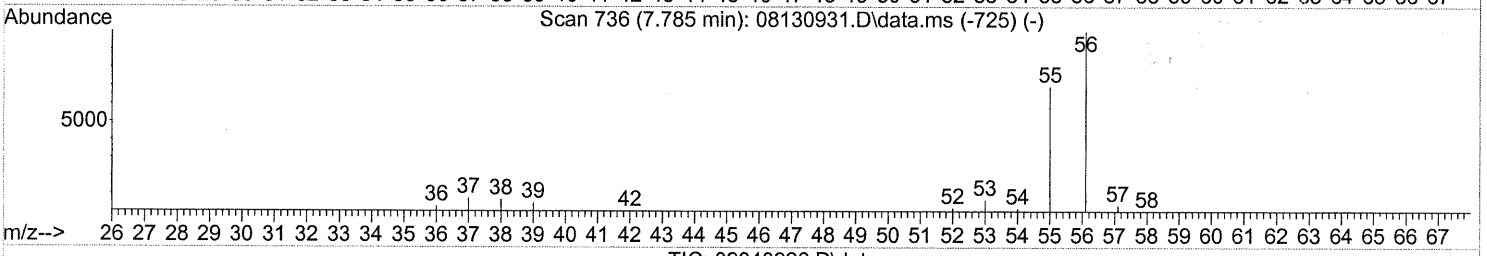
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(12) Acrolein (T)

7.774min (-0.034) 6.70ng

response 86718

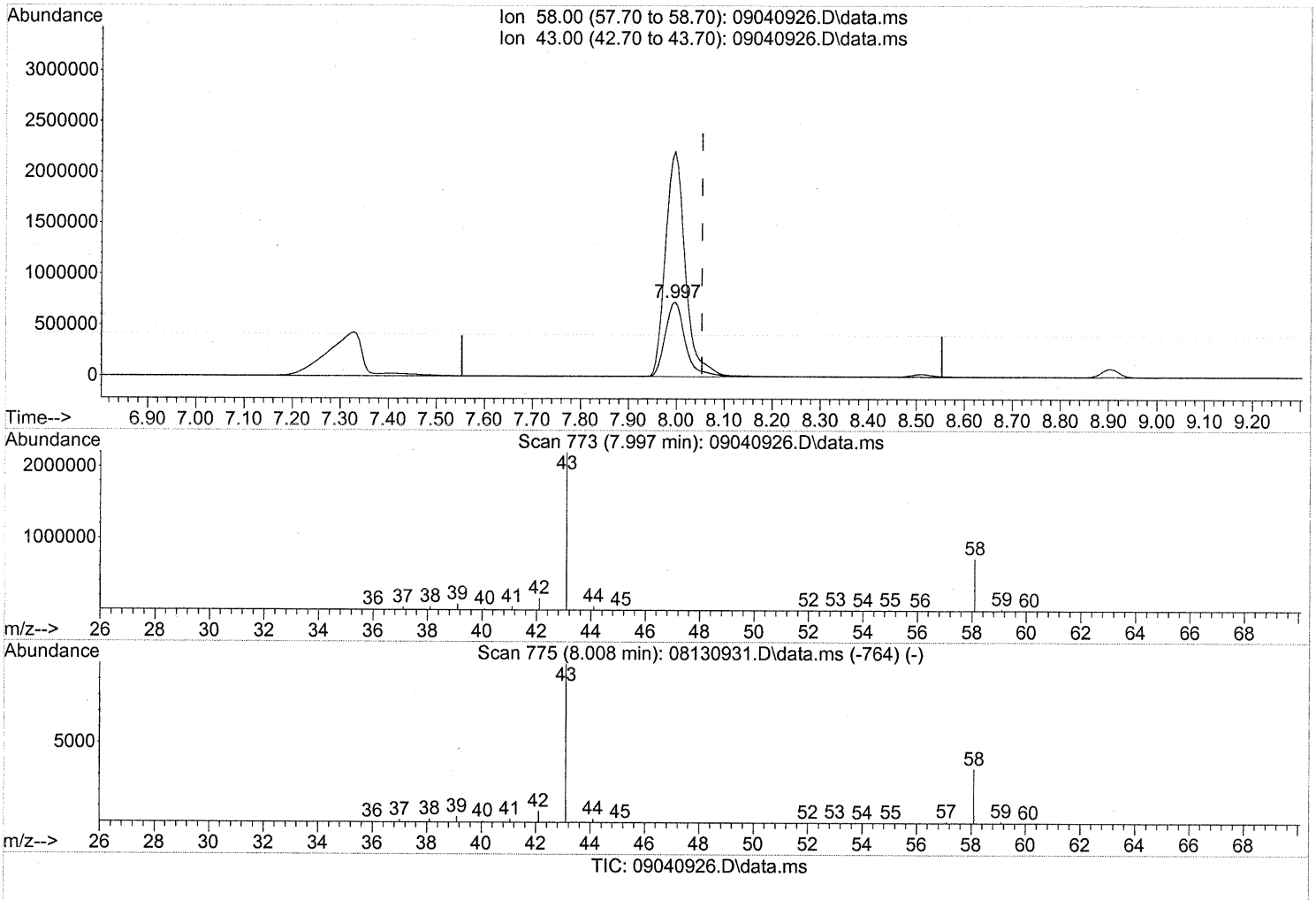
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.59
0.00	0.00	0.00
0.00	0.00	0.00

215

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(13) Acetone (T)

7.997min (-0.057) 104.82ng

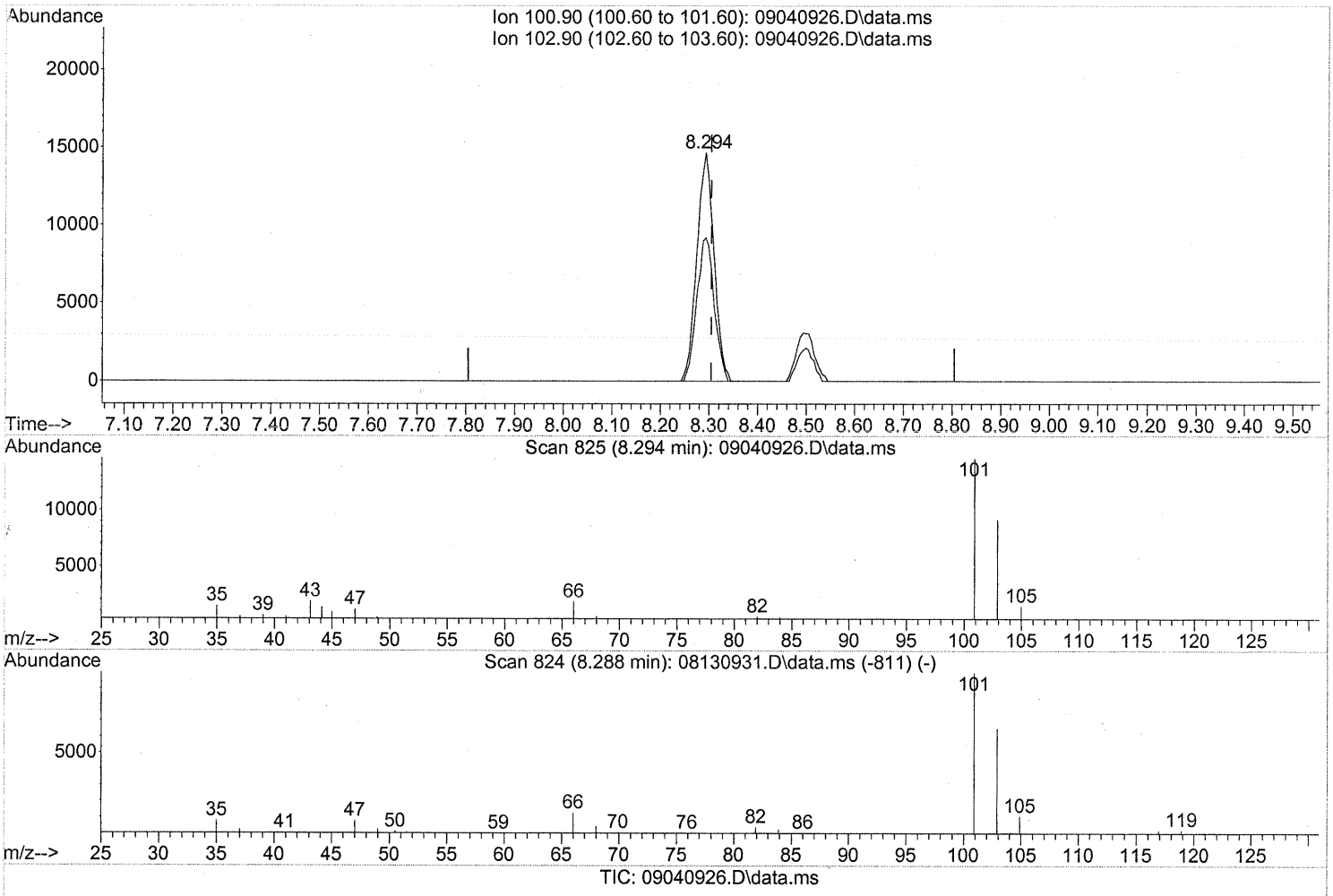
response 2116274

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	302.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(14) Trichlorofluoromethane (T)

8.294min (-0.011) 0.93ng

response 35807

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.80
0.00	0.00	0.00
0.00	0.00	0.00

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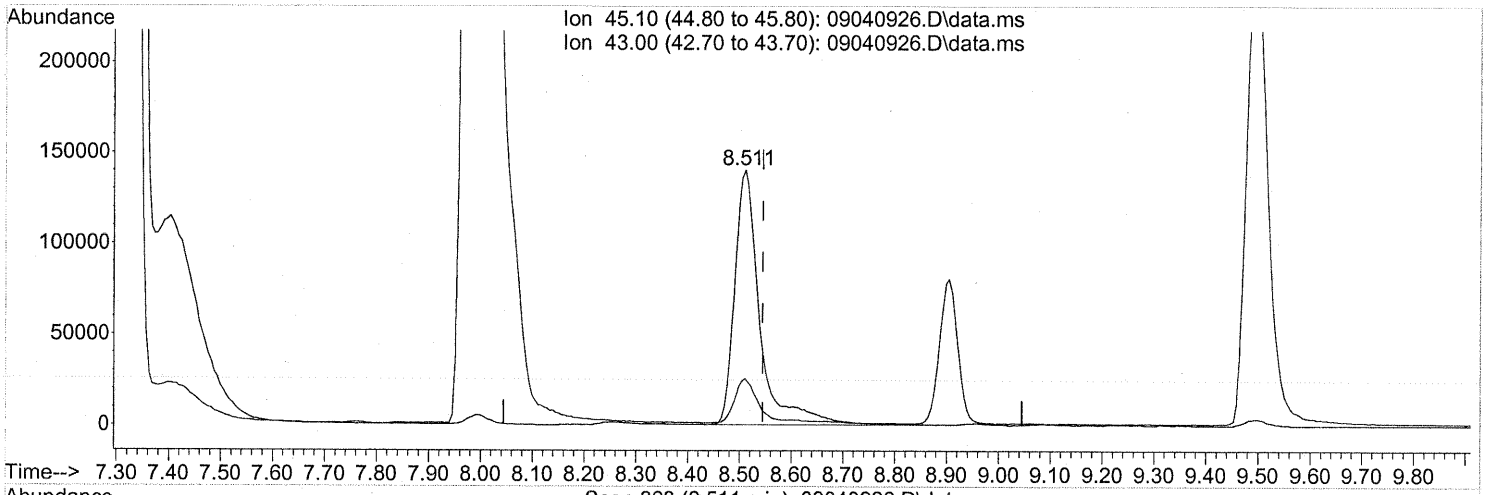
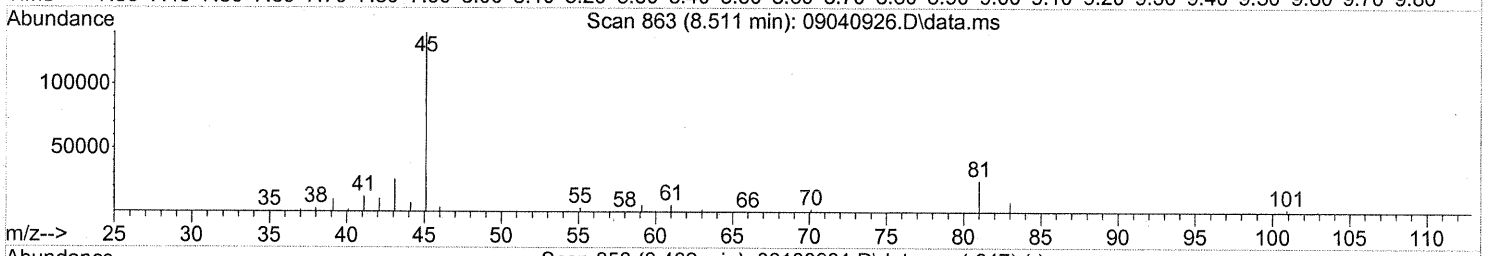
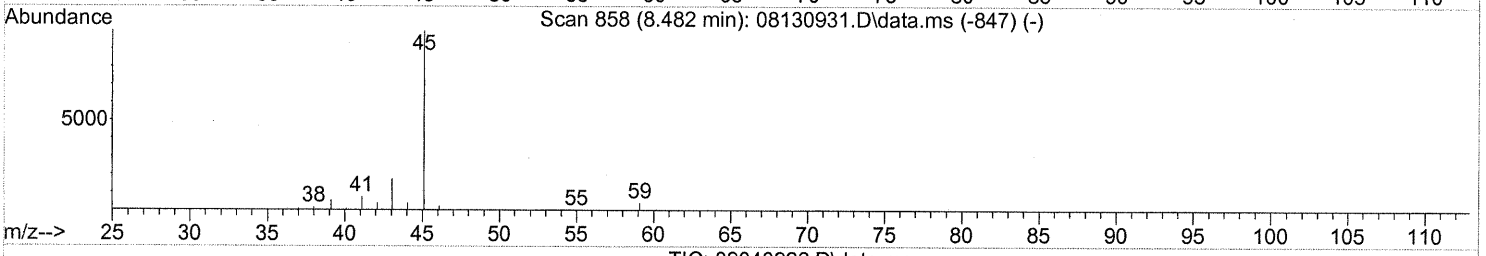
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

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

8.511min (-0.034) 8.68ng

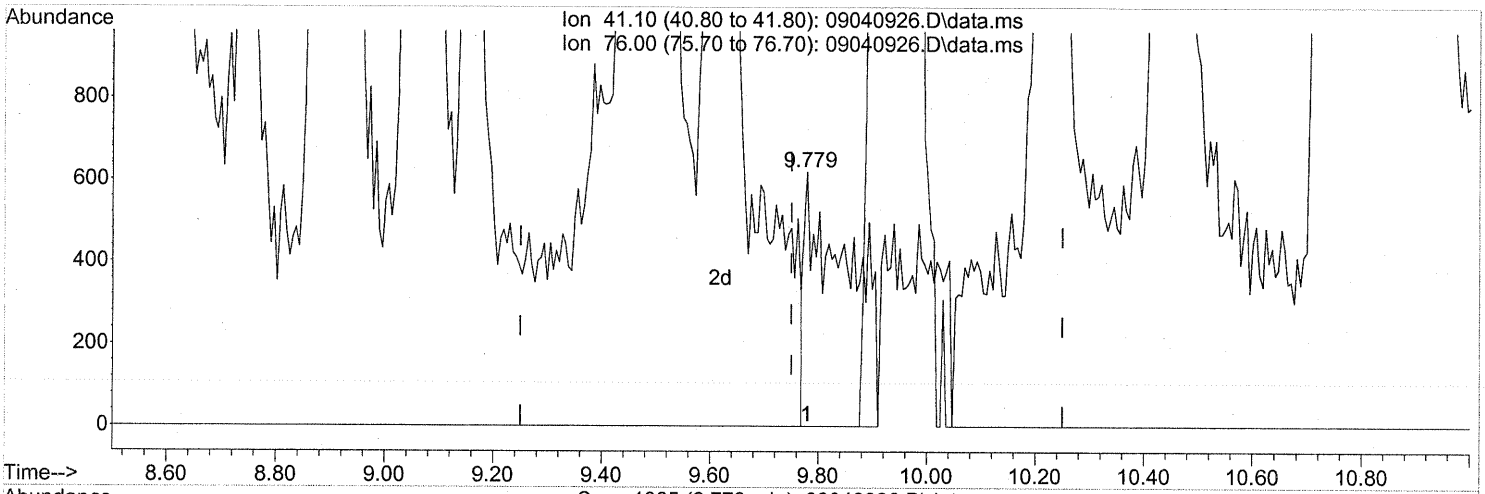
response 479717

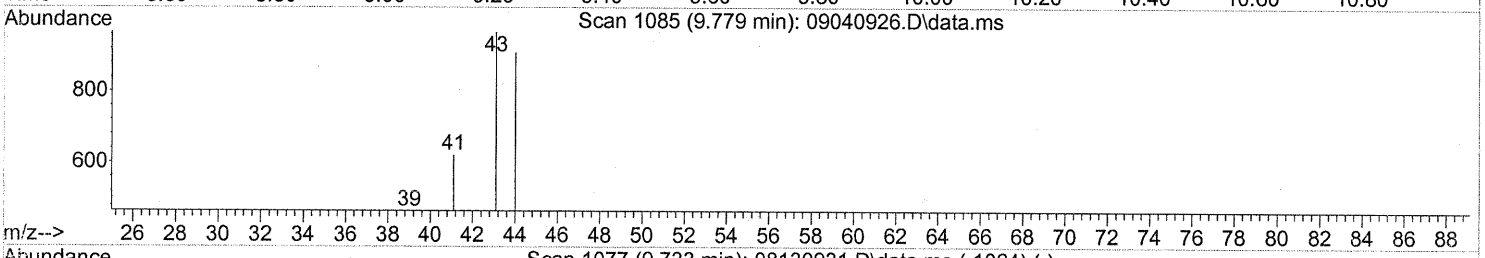
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.48
0.00	0.00	0.00
0.00	0.00	0.00

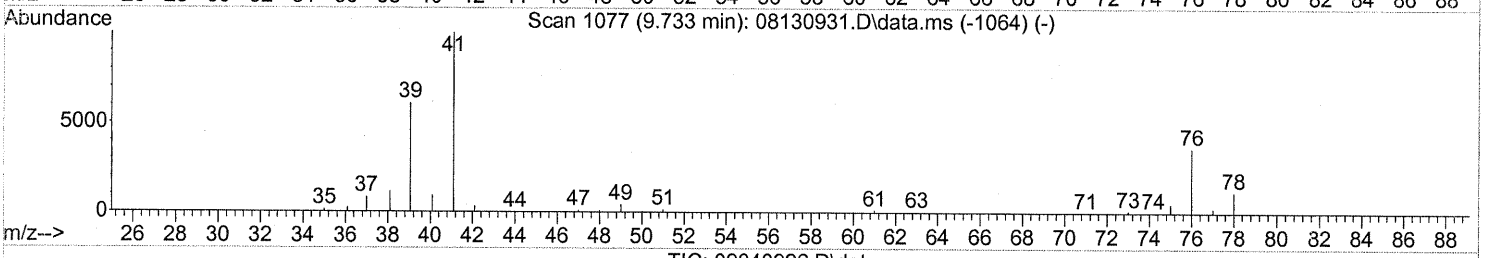
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:46:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

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

9.779min (+0.028) 0.10ng

response 3401

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

TP
9/16/09

9/16/09

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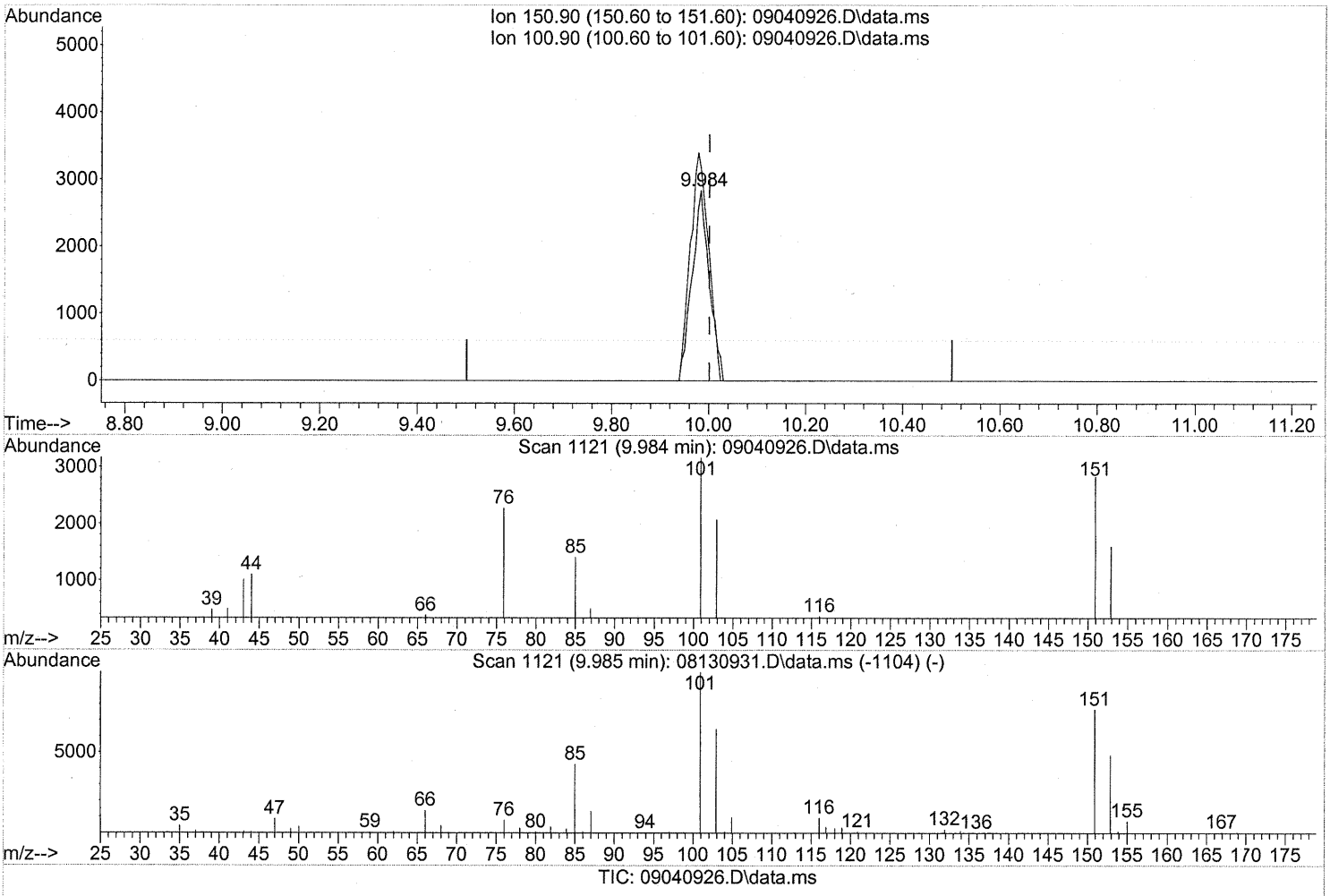
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.984min (-0.017) 0.40ng

response 6878

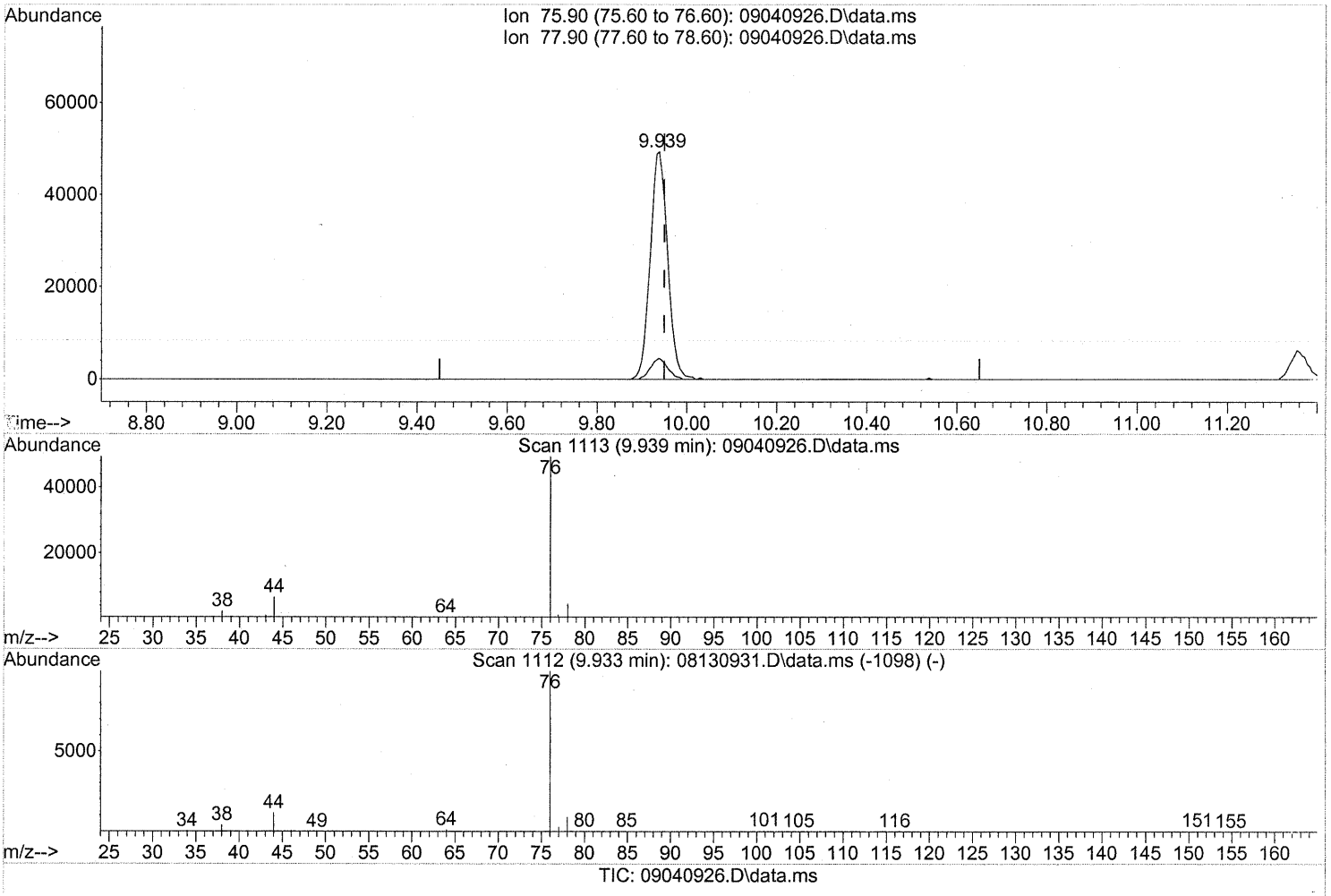
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	131.86
0.00	0.00	0.00
0.00	0.00	0.00

220

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 1.49ng

response 132546

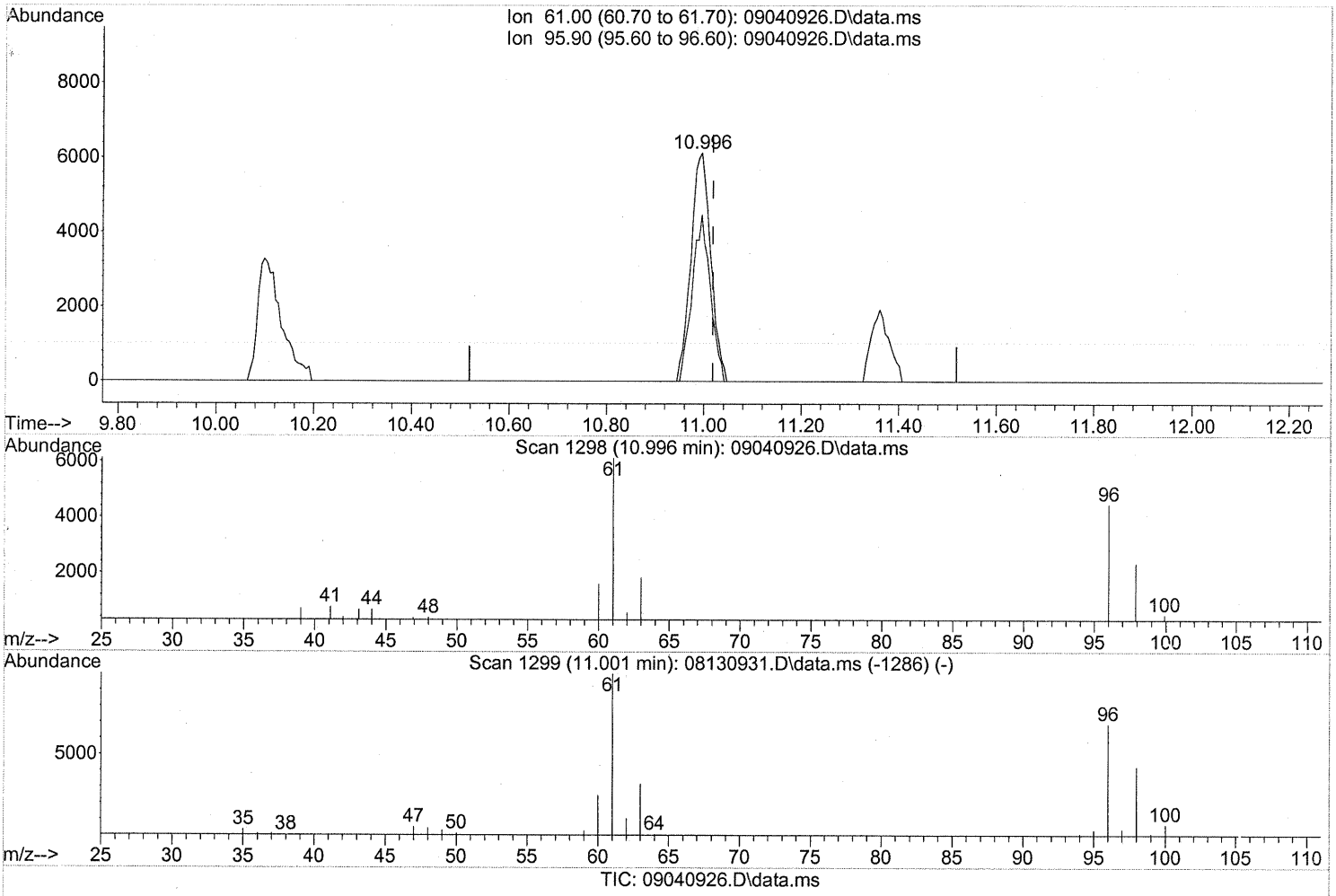
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.90
0.00	0.00	0.00
0.00	0.00	0.00

221

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(23) trans-1,2-Dichloroethene (T)

10.996min (-0.023) 0.50ng

response 17357

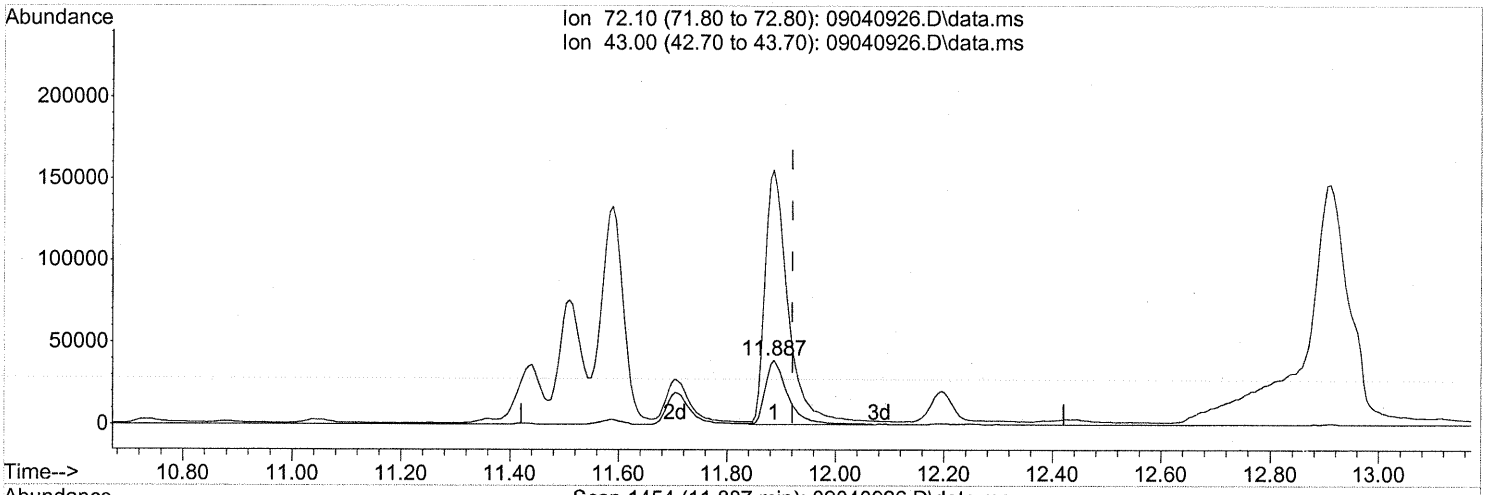
Ion	Exp%	Act%
61.00	100	100
95.90	74.10	66.69
0.00	0.00	0.00
0.00	0.00	0.00

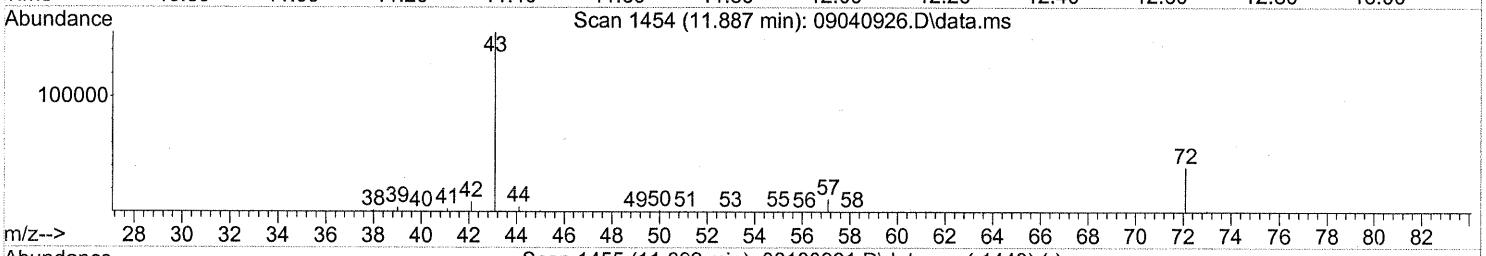
222

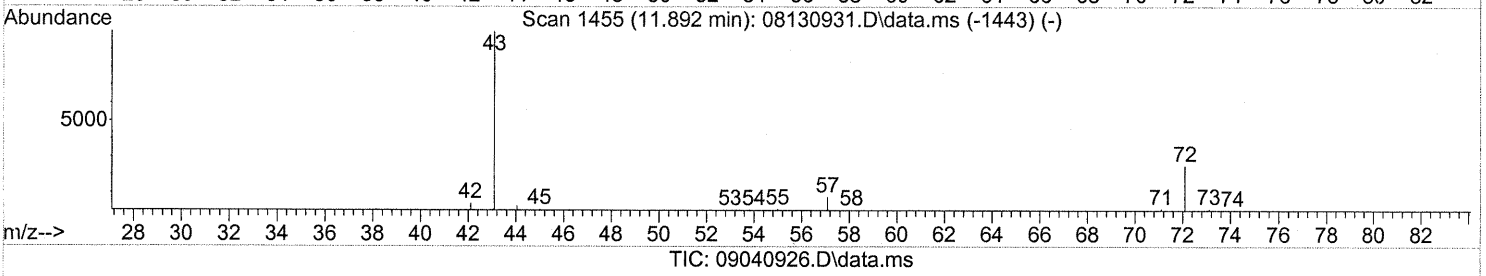
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

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

11.887min (-0.034) 8.01ng

response 112802

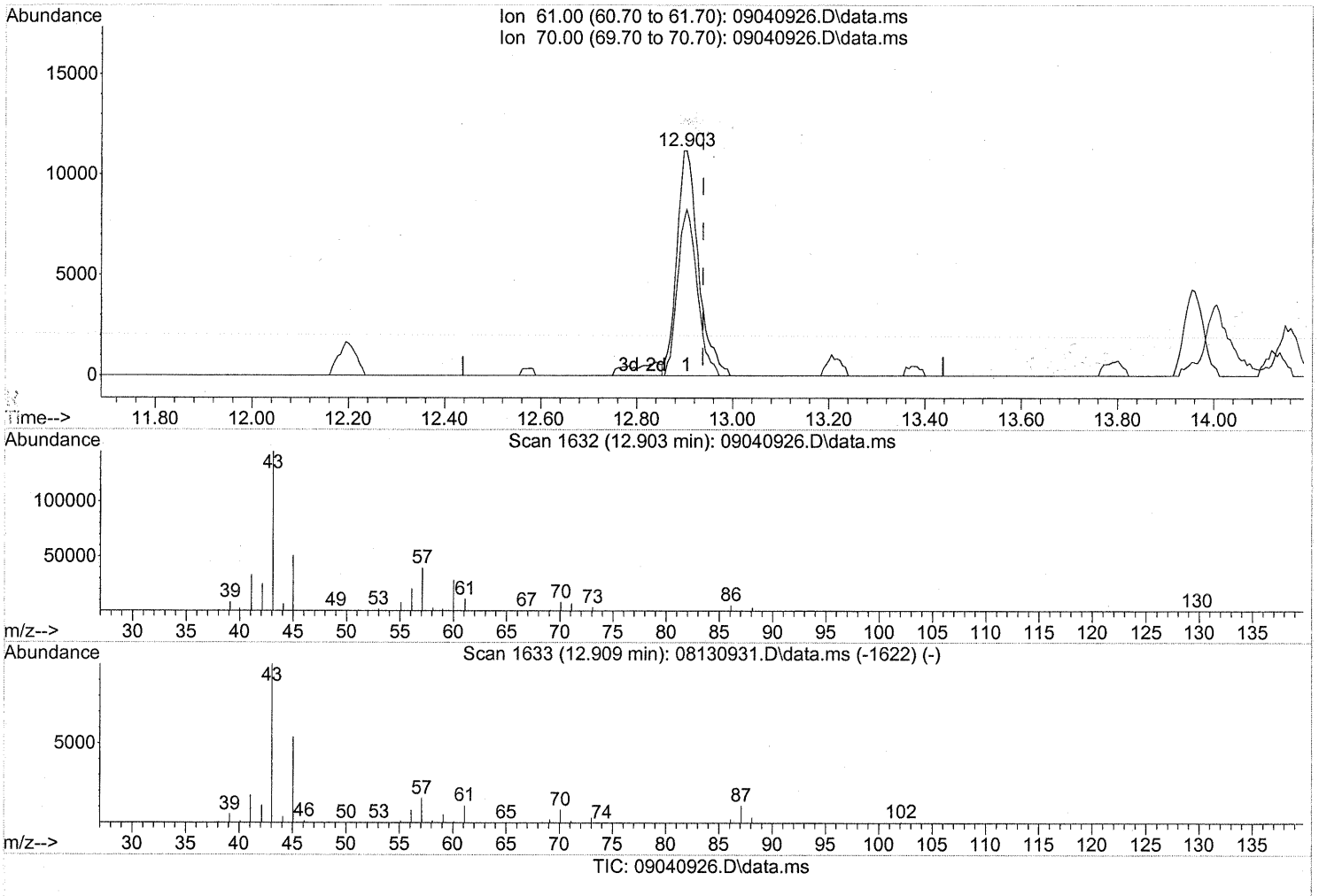
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	396.87#
0.00	0.00	0.00
0.00	0.00	0.00

223

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(30) Ethyl Acetate (T)

12.903min (-0.035) 3.83ng

response 34959

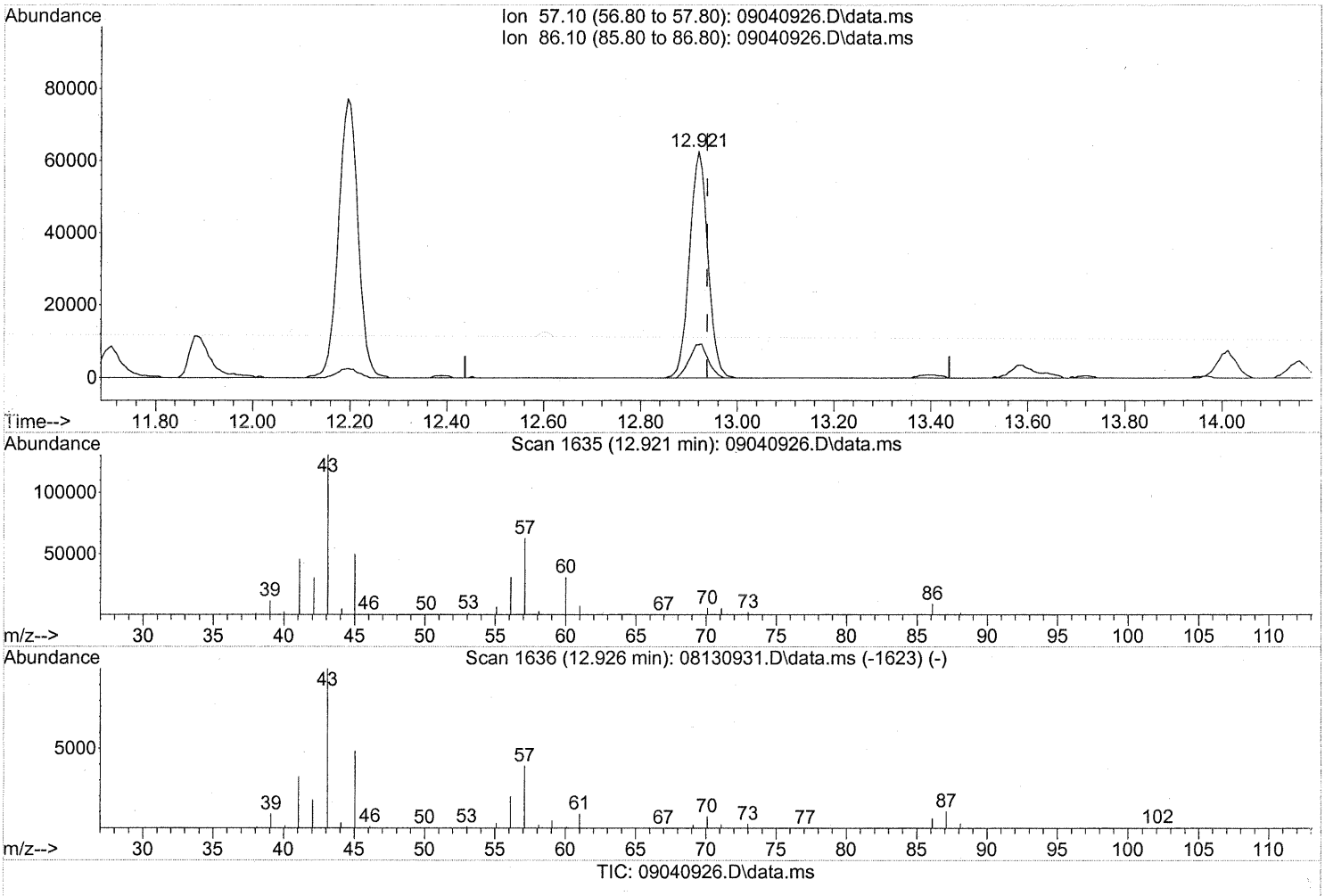
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	67.42
0.00	0.00	0.00
0.00	0.00	0.00

224

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(31) n-Hexane (T)

12.921min (-0.017) 3.68ng

response 163740

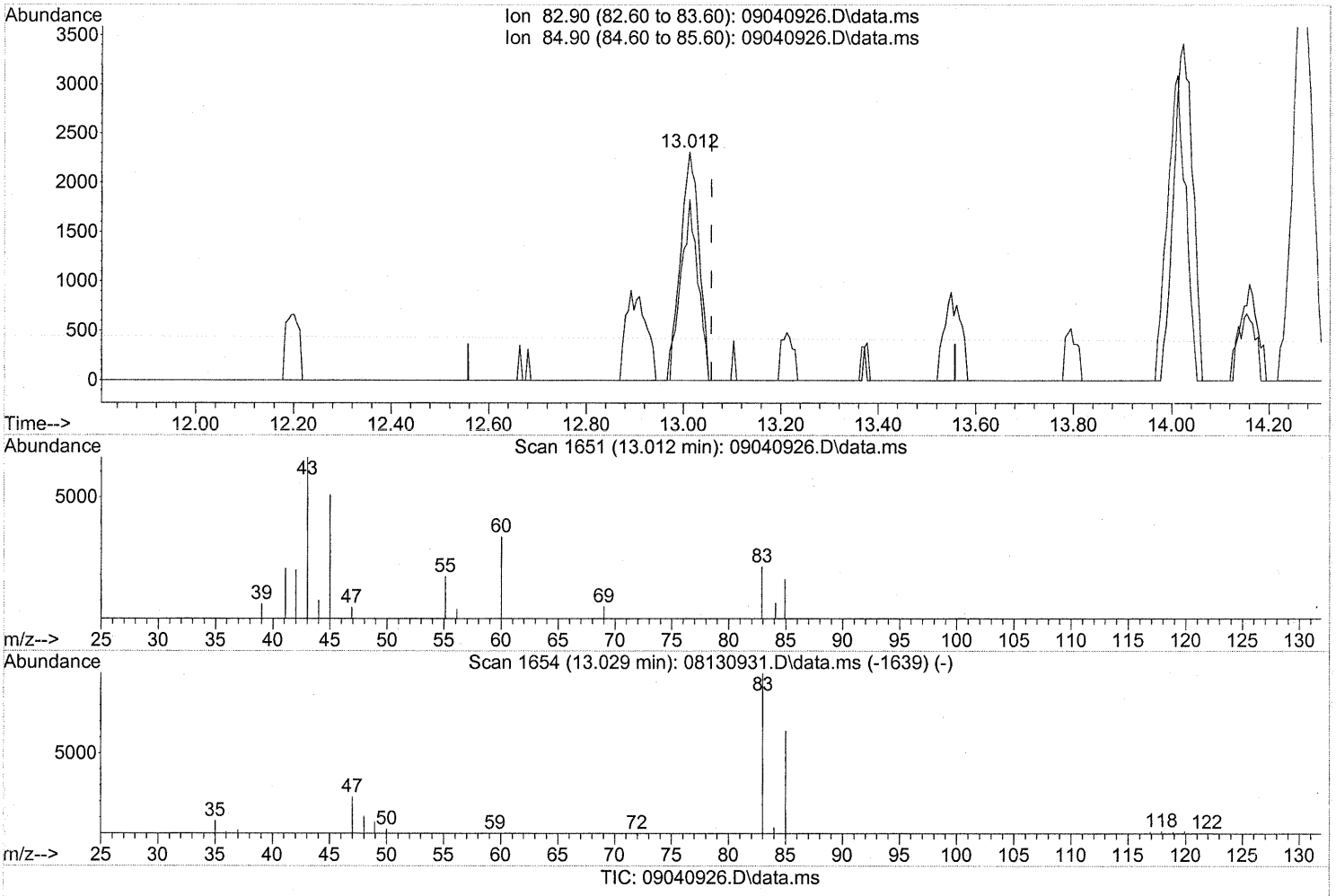
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.12
0.00	0.00	0.00
0.00	0.00	0.00

225

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(32) Chloroform (T)

13.012min (-0.046) 0.16ng

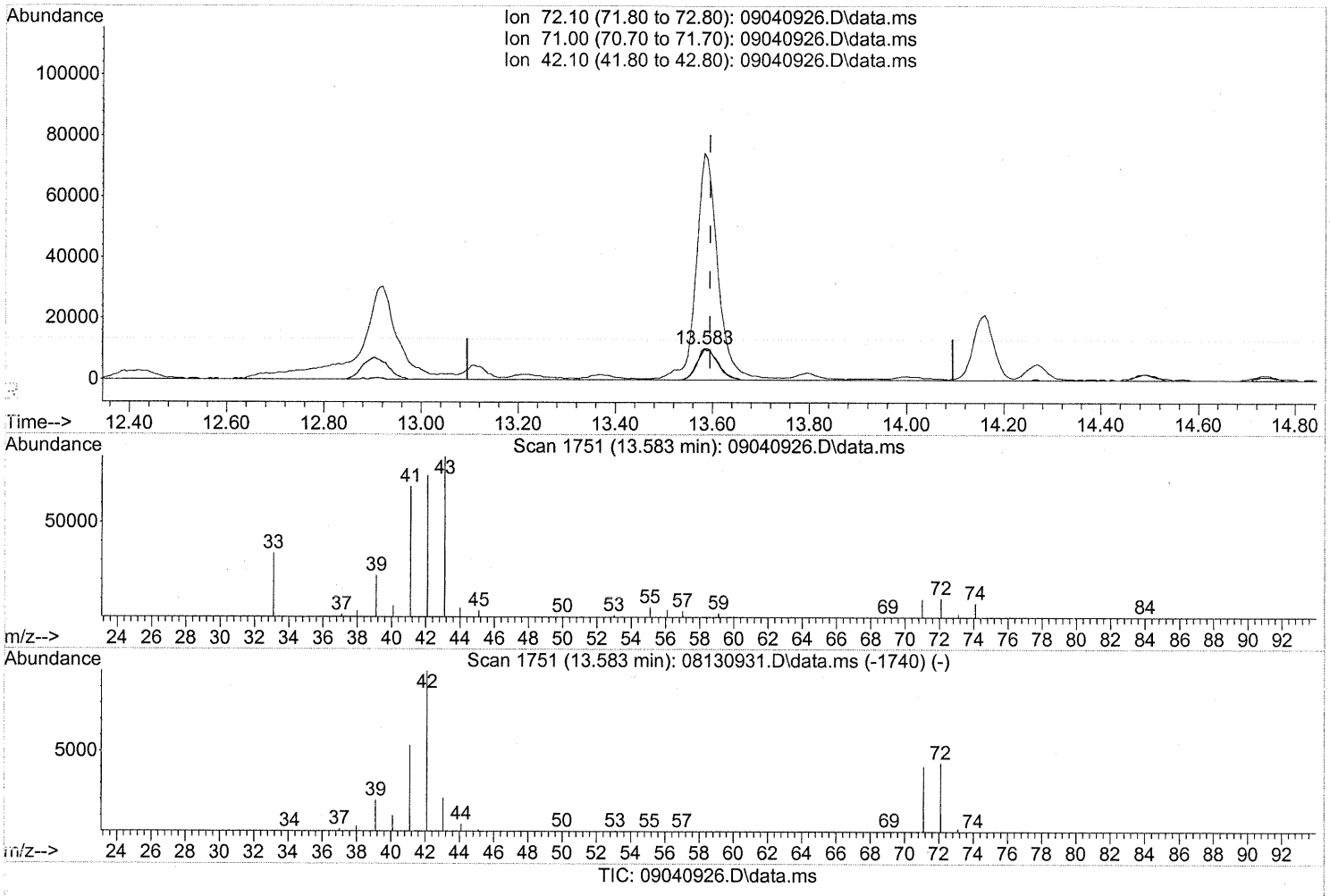
response 6070

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	75.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.583min (-0.011) 2.08ng

response 30389

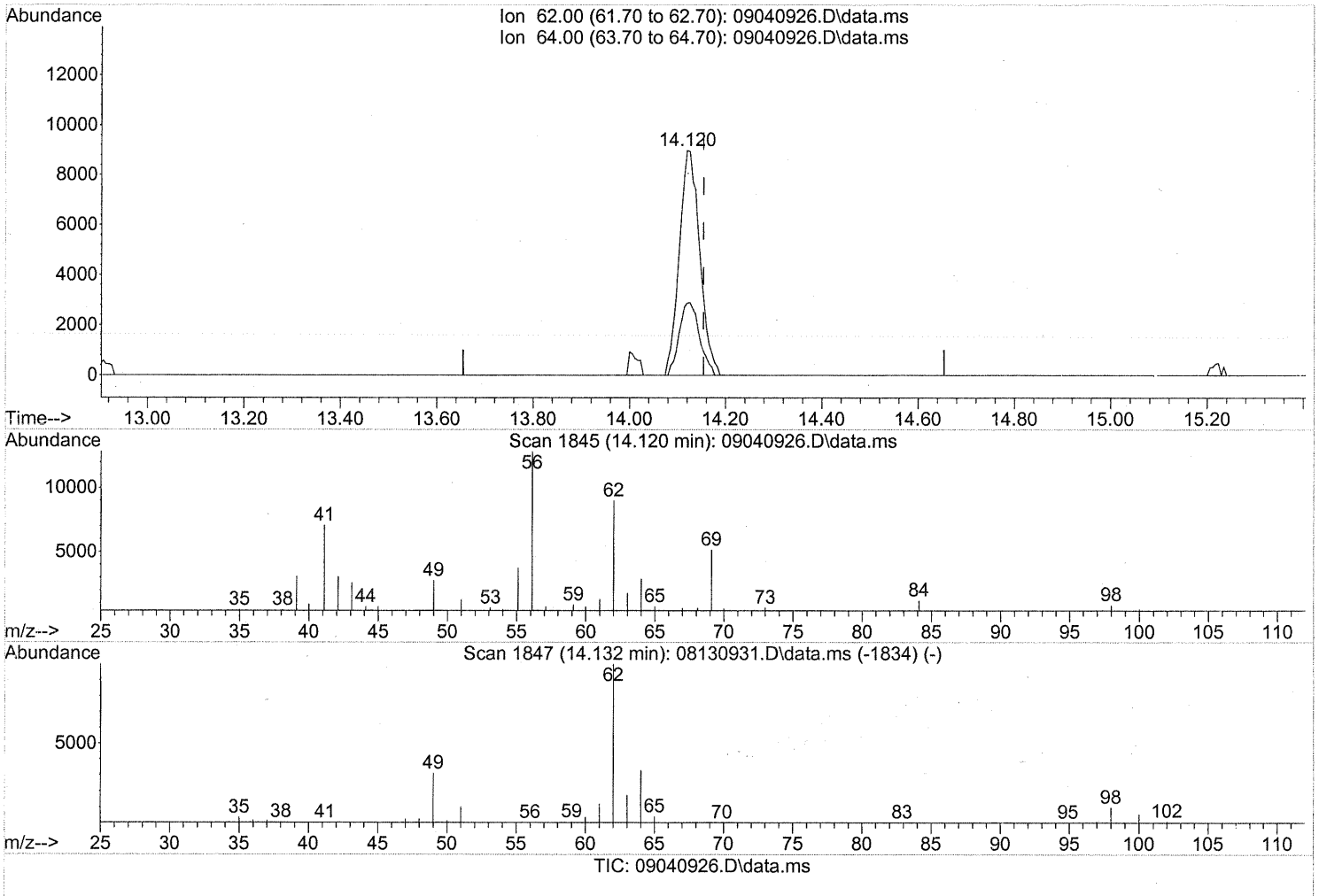
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	95.33
42.10	206.50	740.18#
0.00	0.00	0.00

227

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(36) 1,2-Dichloroethane (T)

14.120min (-0.034) 0.93ng

response 26426

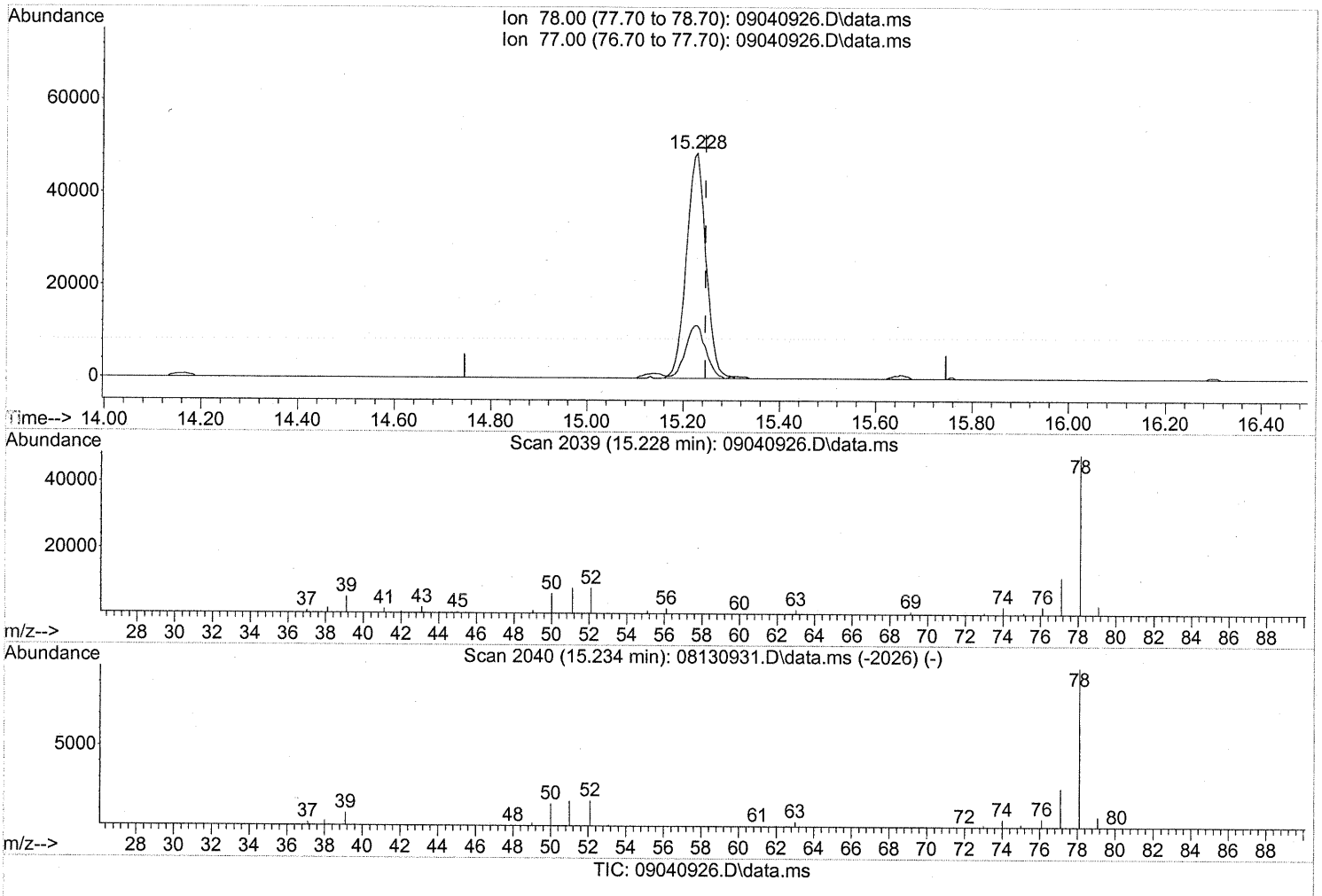
Ion	Exp%	Act%
62.00	100	100
64.00	32.70	31.91
0.00	0.00	0.00
0.00	0.00	0.00

228

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(41) Benzene (T)

15.228min (-0.017) 1.39ng

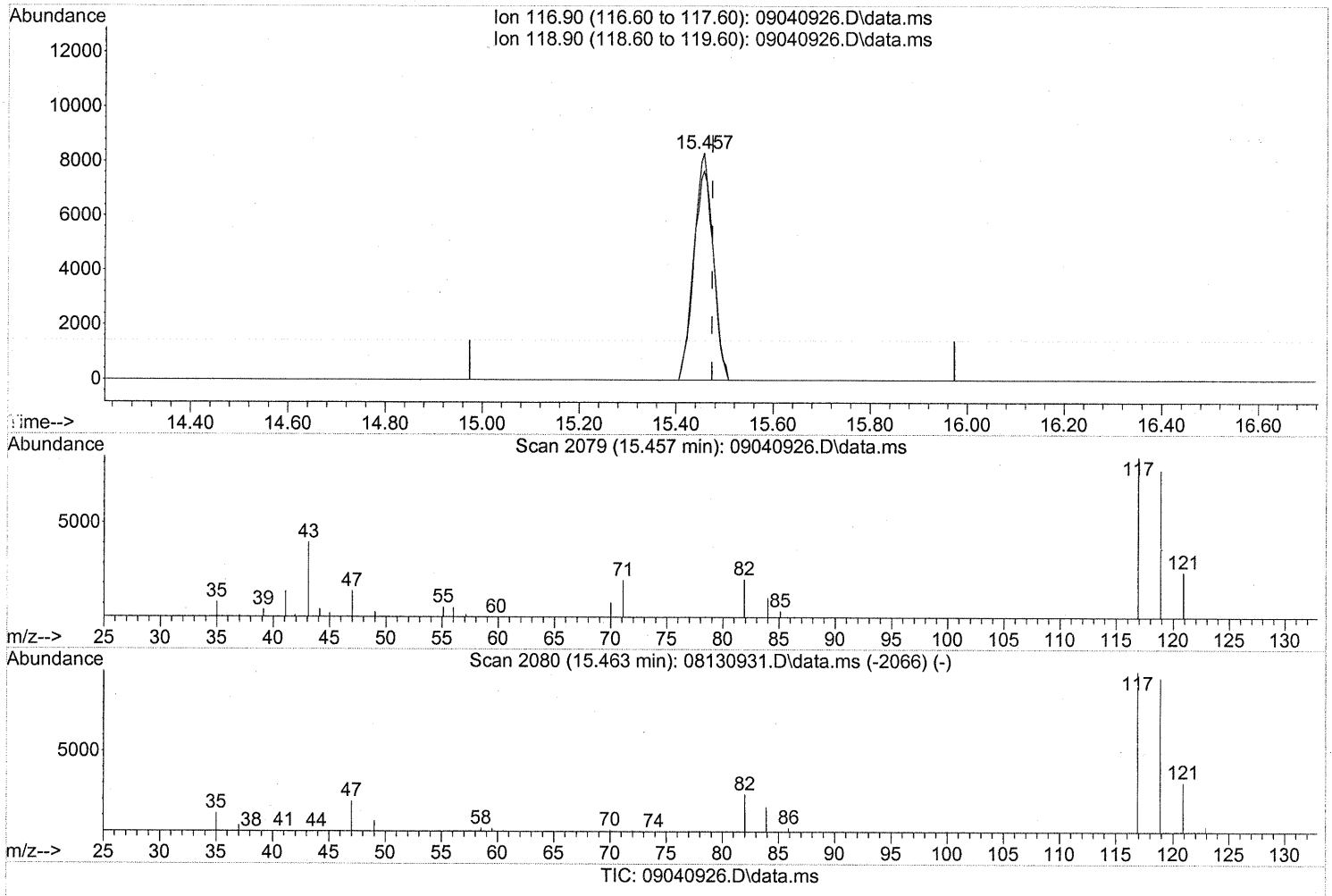
response 136721

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.83ng

response 22831

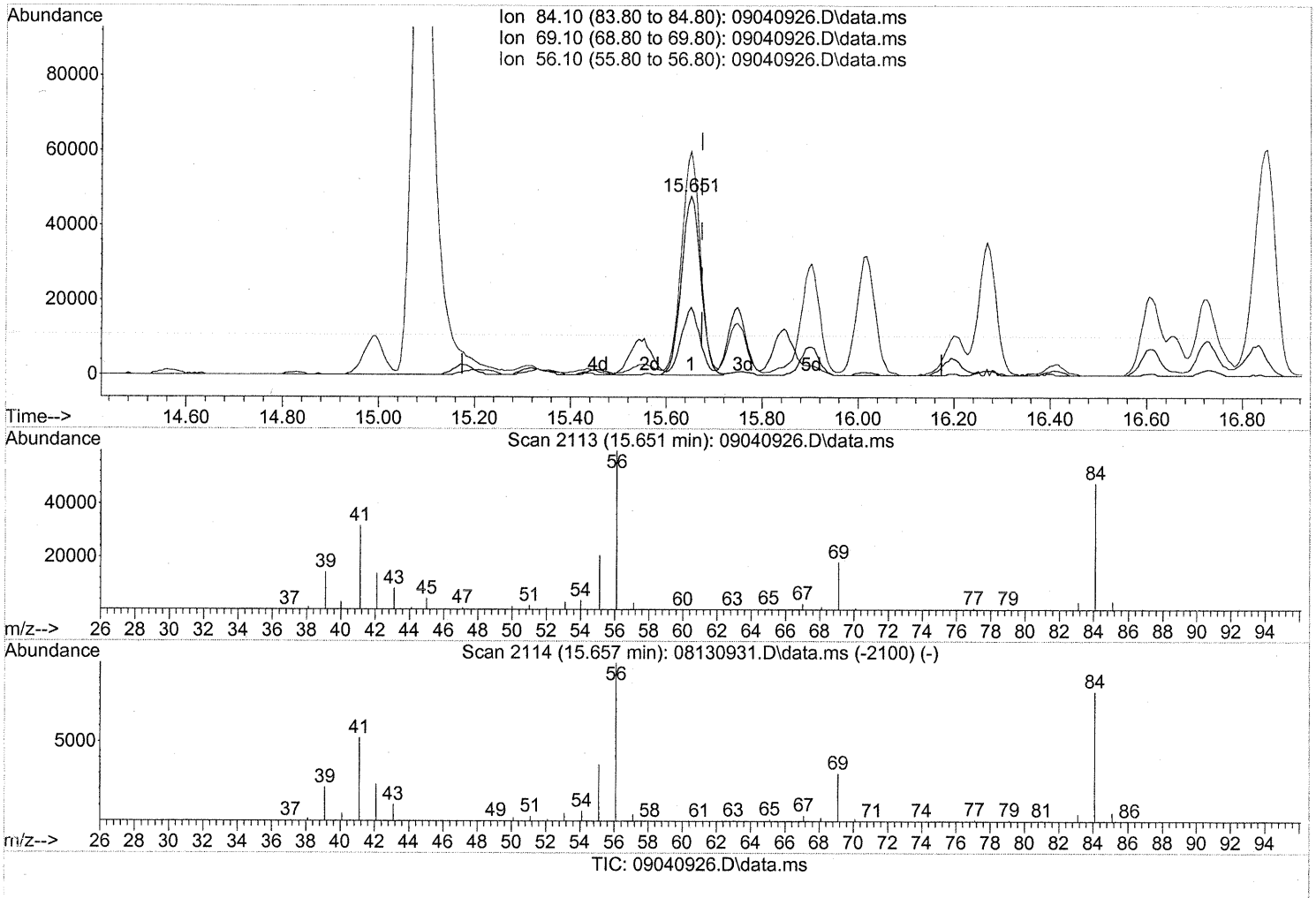
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	94.02
0.00	0.00	0.00
0.00	0.00	0.00

230

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 3.50ng

response 133583

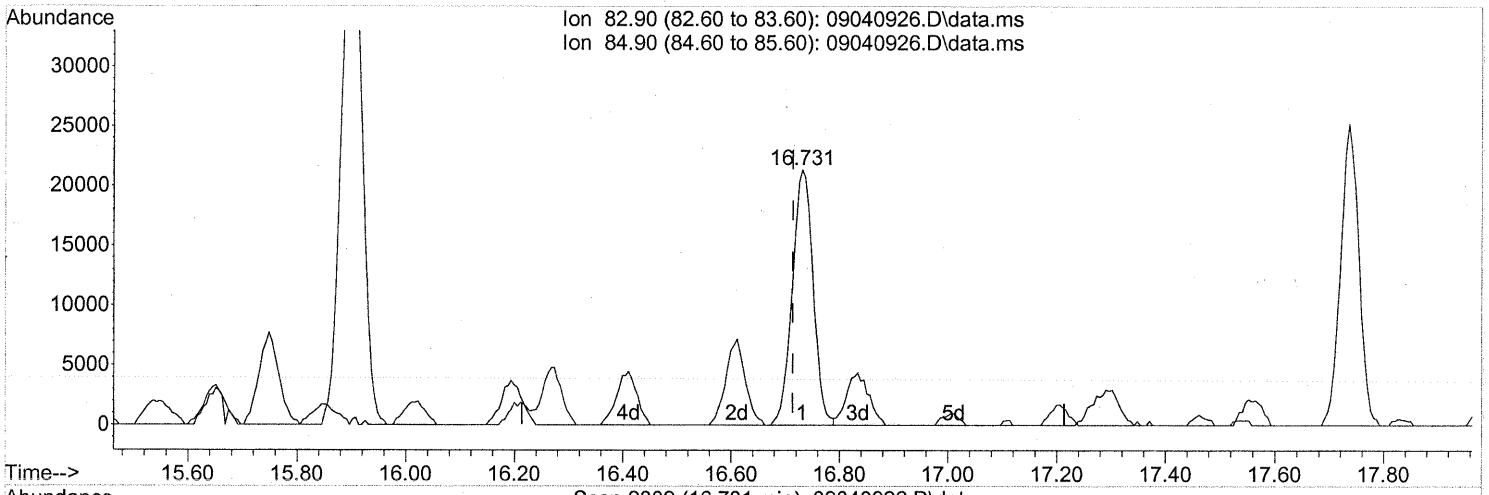
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.45
56.10	107.30	121.34
0.00	0.00	0.00

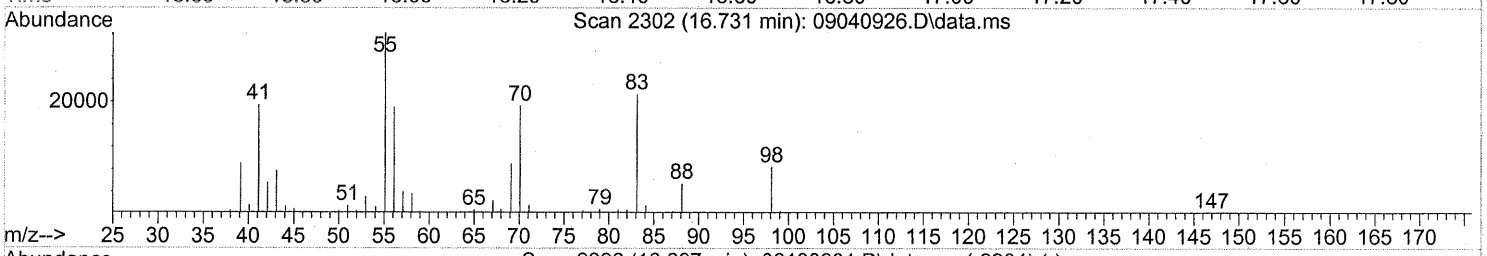
231

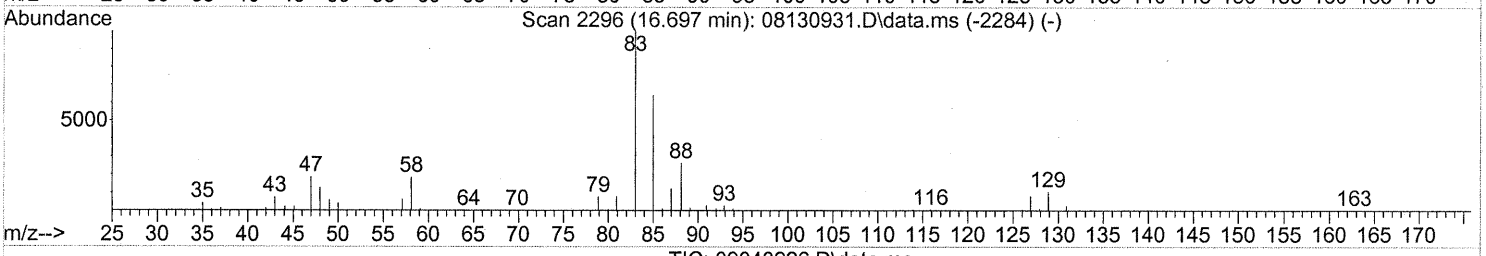
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(46) Bromodichloromethane (T)

16.731min (+0.017) 1.99ng

response 57215

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

TP

9/15/09

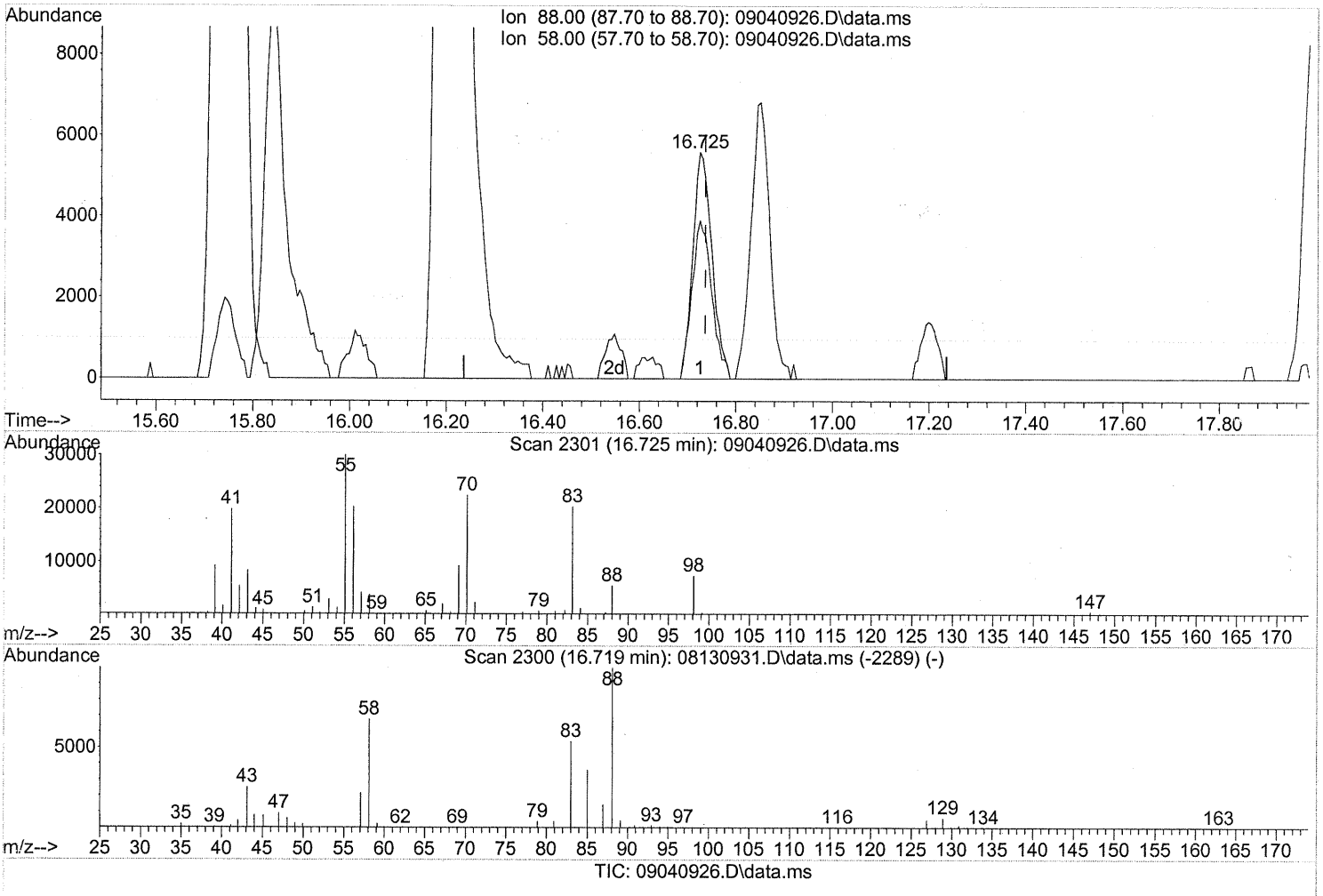
9/16/09

232

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(48) 1,4-Dioxane (T)

16.725min (-0.012) 0.88ng

response 15372

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	72.12
0.00	0.00	0.00
0.00	0.00	0.00

TP

9/15/09

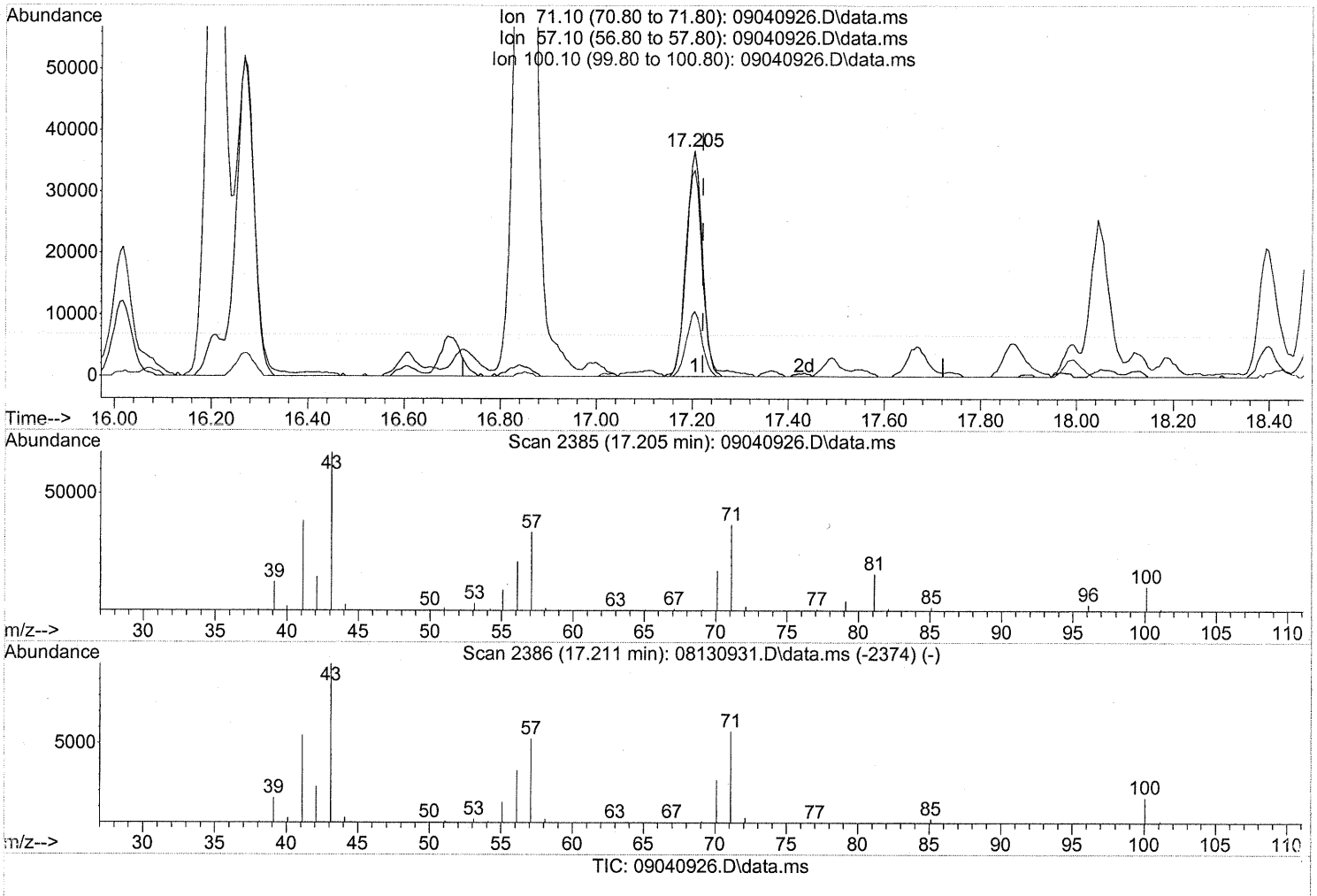
9/16/09

233

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(51) n-Heptane (T)

17.205min (-0.017) 3.24ng

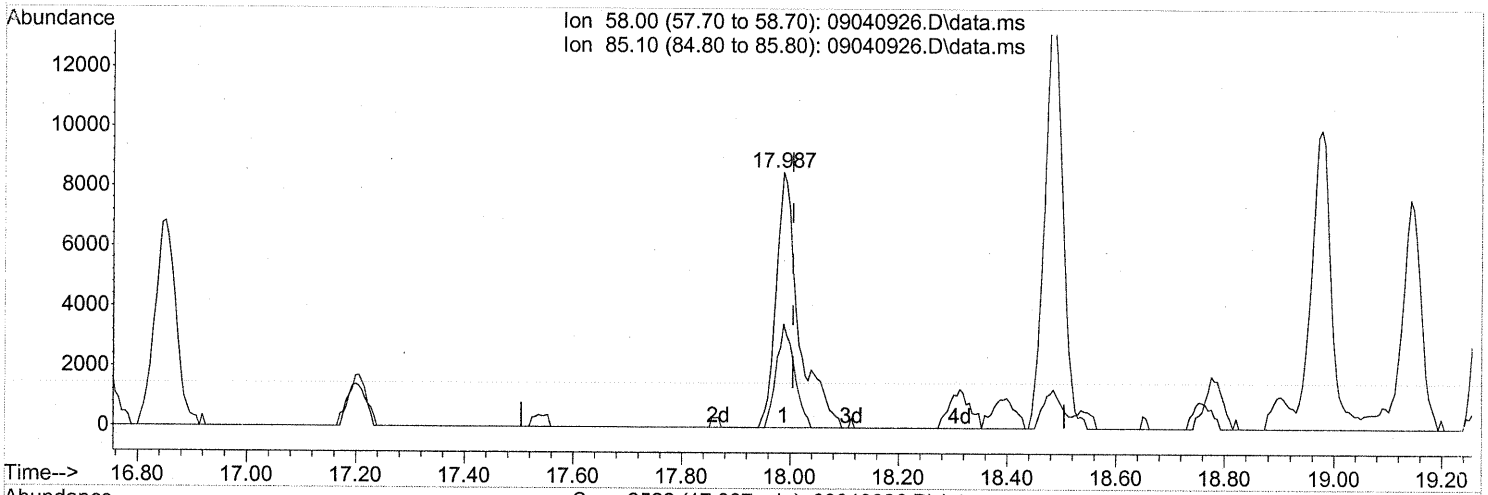
response 84945

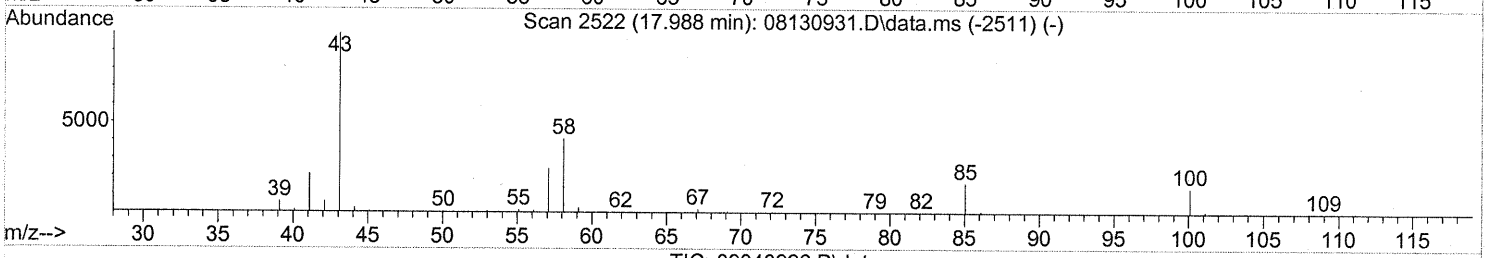
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	96.78
100.10	30.70	27.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration





TIC: 09040926.D\data.ms

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

17.987min (-0.018) 1.16ng

response 24731

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	32.20
0.00	0.00	0.00
0.00	0.00	0.00

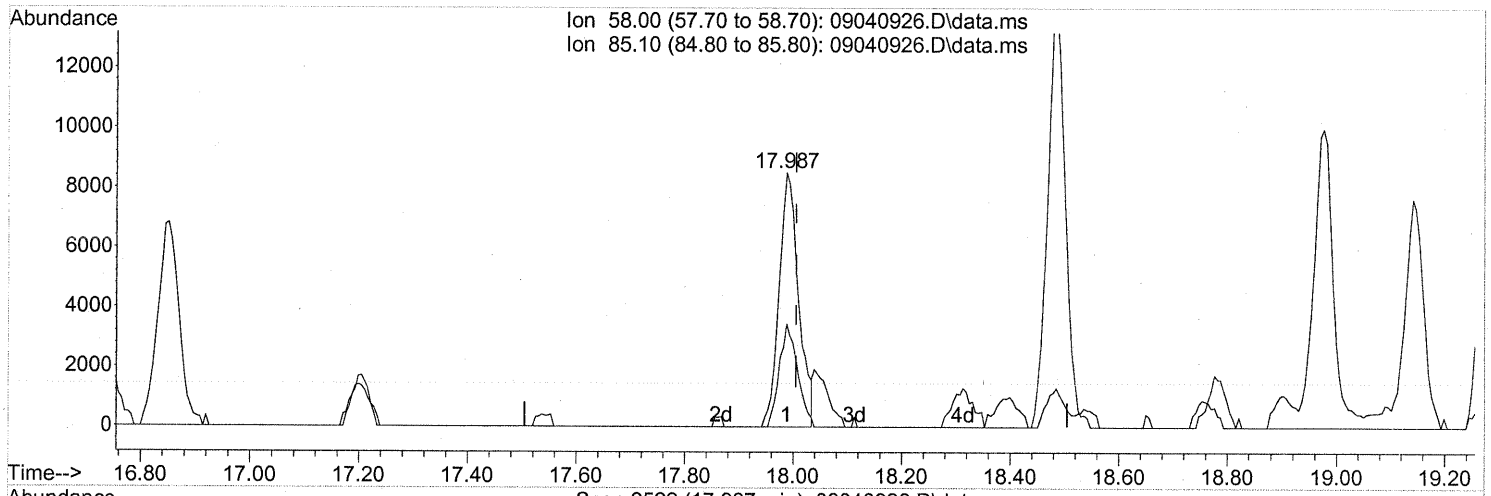
SH

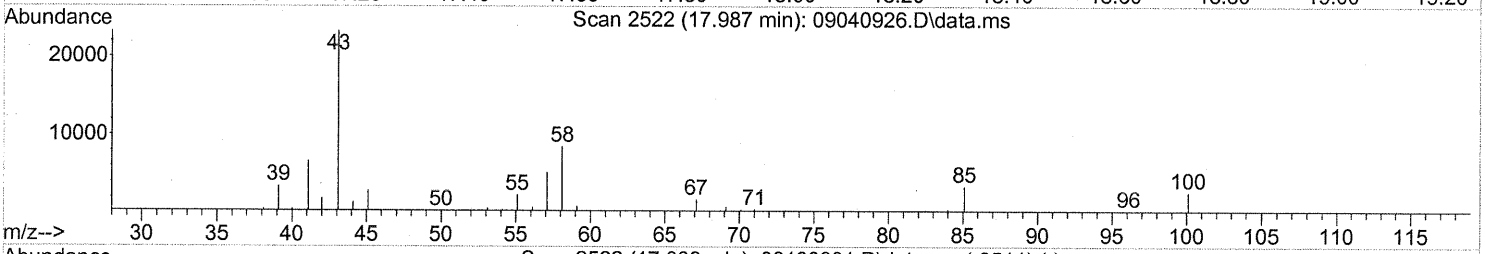
235

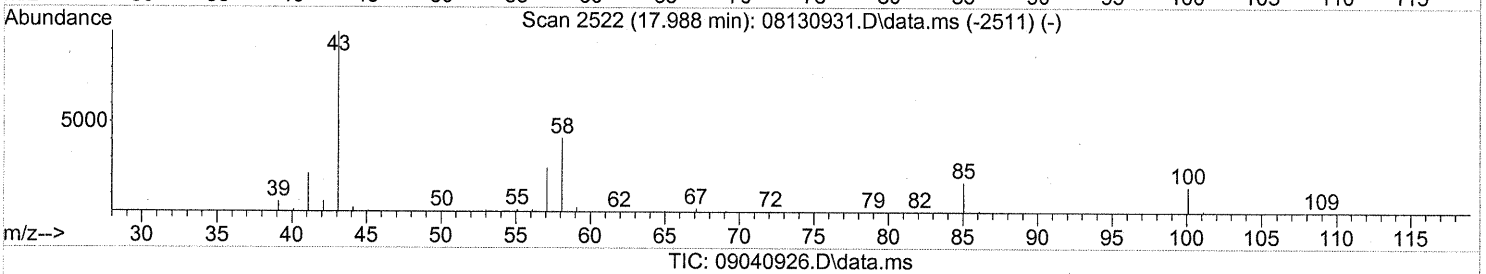
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

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

17.987min (-0.018) 0.99ng m

response 21072

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	37.79
0.00	0.00	0.00
0.00	0.00	0.00

SH-71C

MA 9/16/09

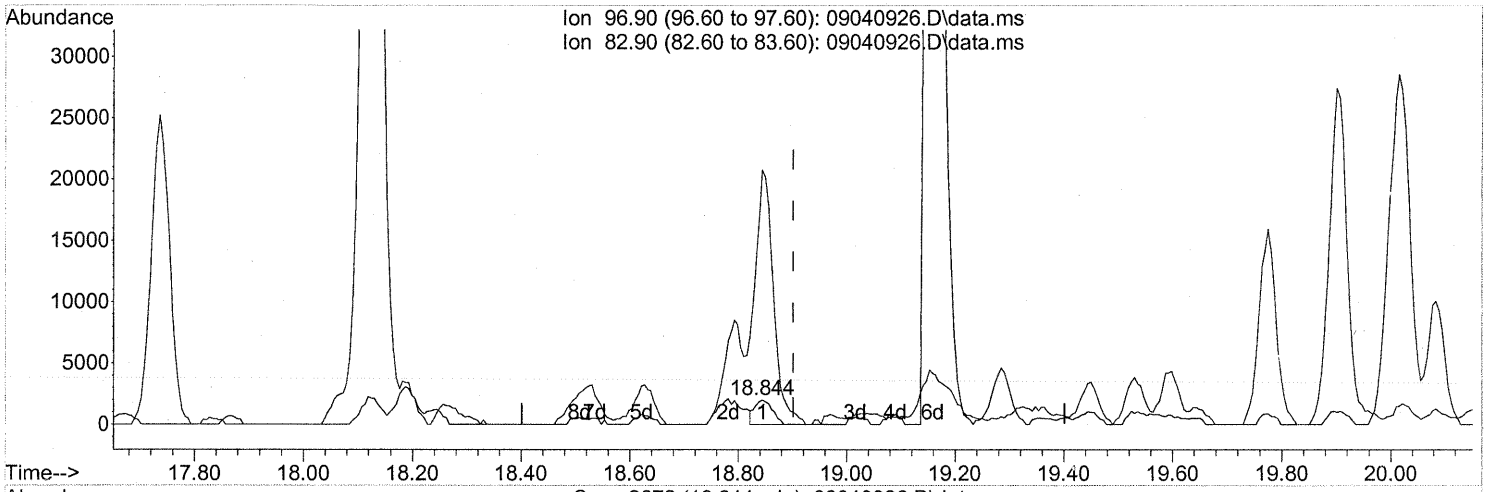
9/16/09

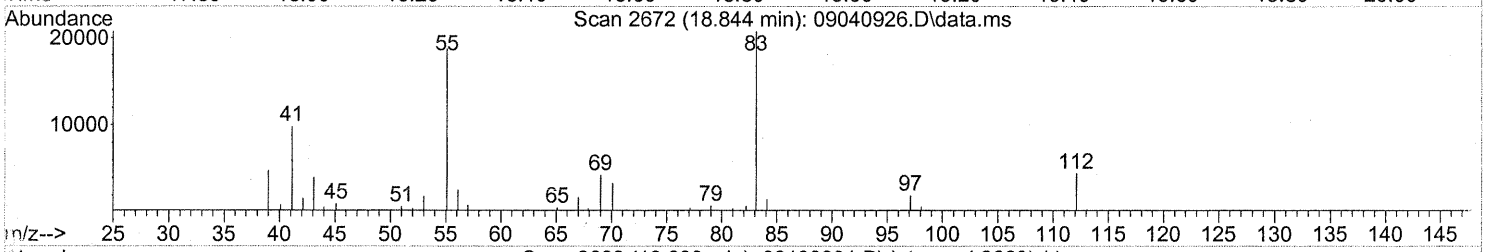
236

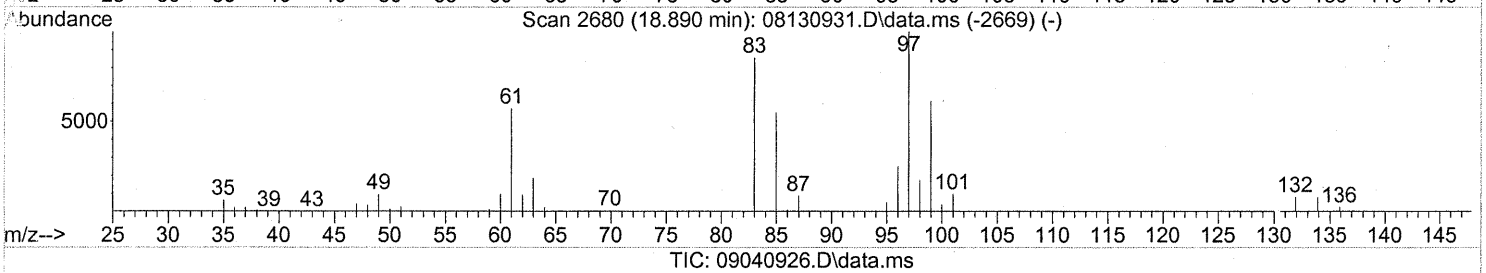
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

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

18.844min (-0.057) 0.21ng

response 4477

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1145.37#
0.00	0.00	0.00
0.00	0.00	0.00

FP

1st 9/15/09

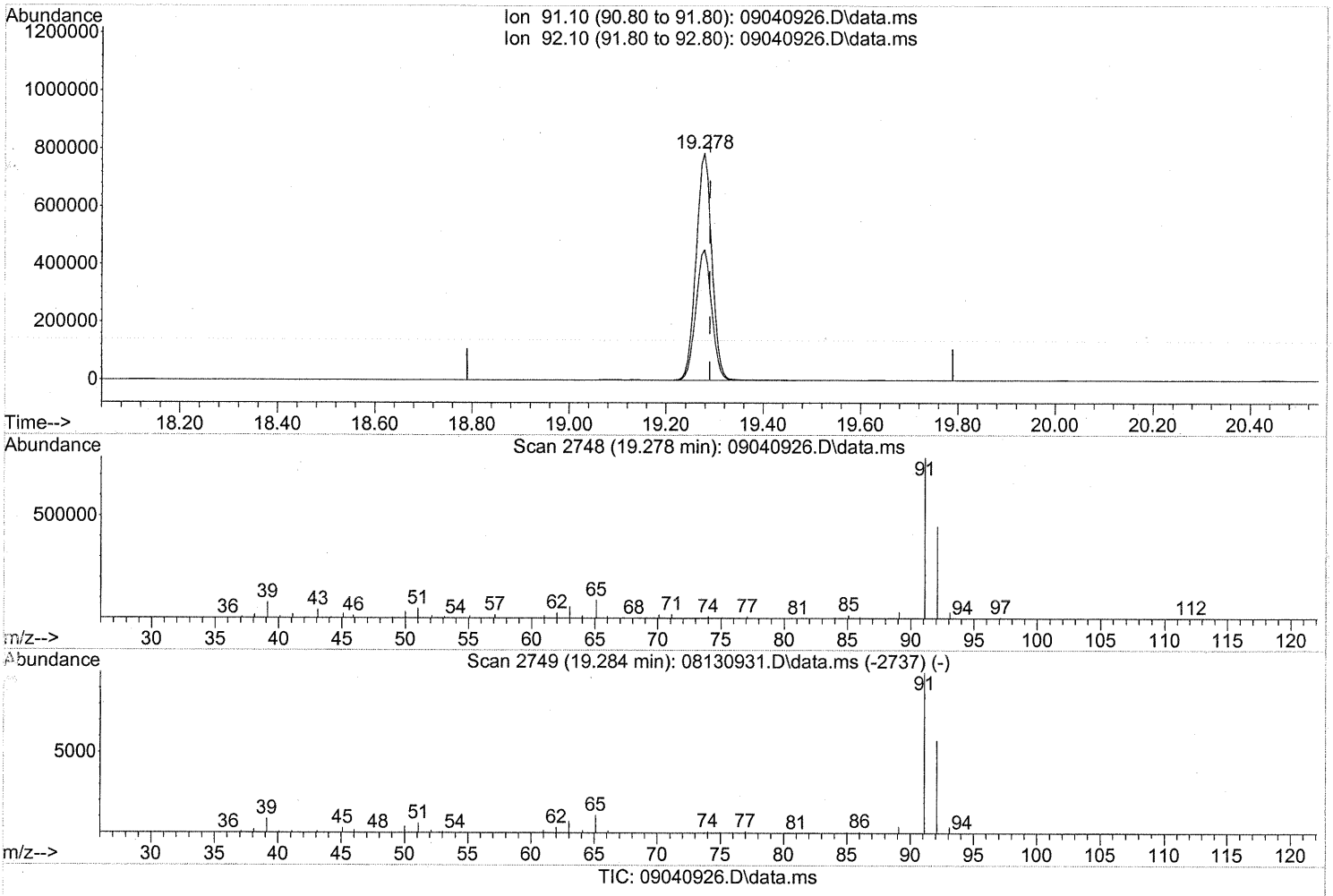
2nd 9/16/09

237

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(58) Toluene (T)

19.278min (-0.011) 17.12ng

response 1763304

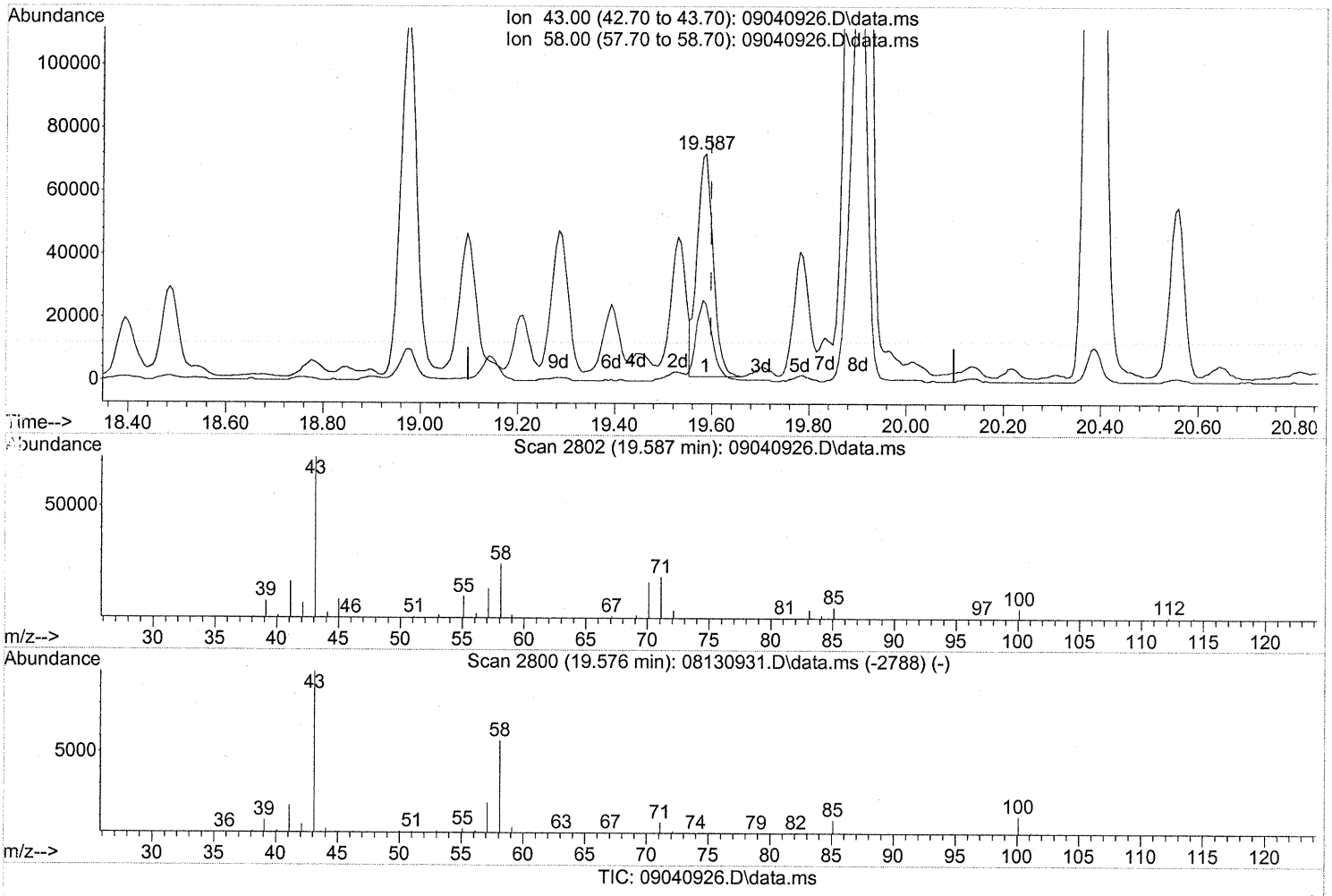
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.58
0.00	0.00	0.00
0.00	0.00	0.00

238

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 3.03ng

response 162108

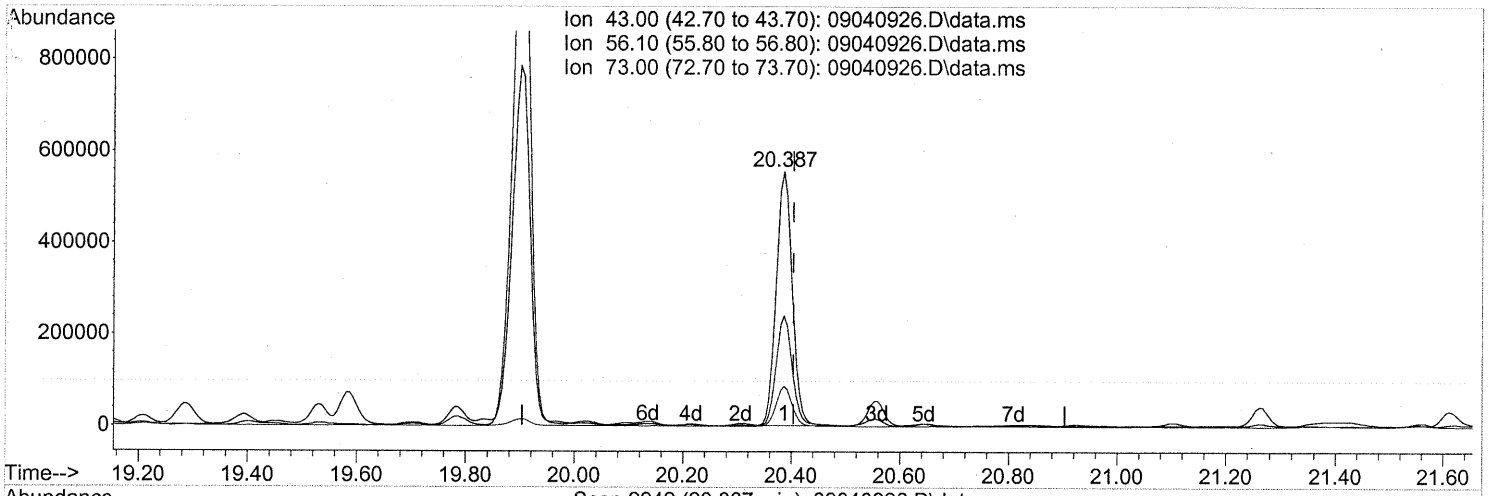
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	38.35
0.00	0.00	0.00
0.00	0.00	0.00

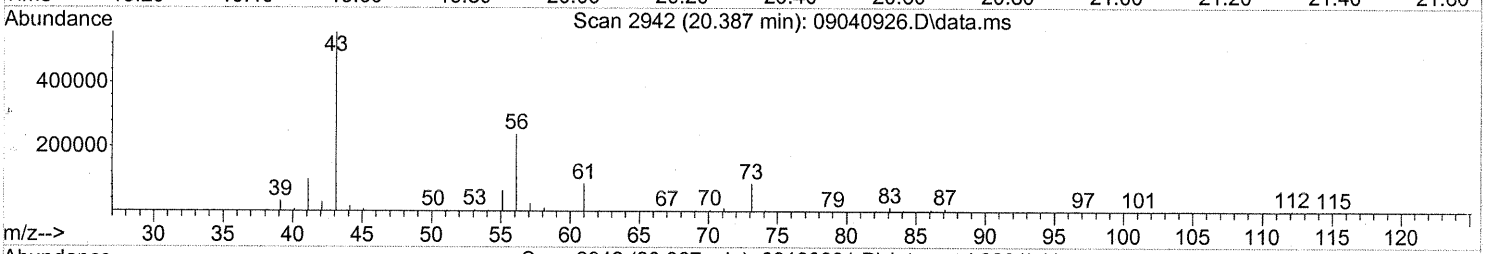
239

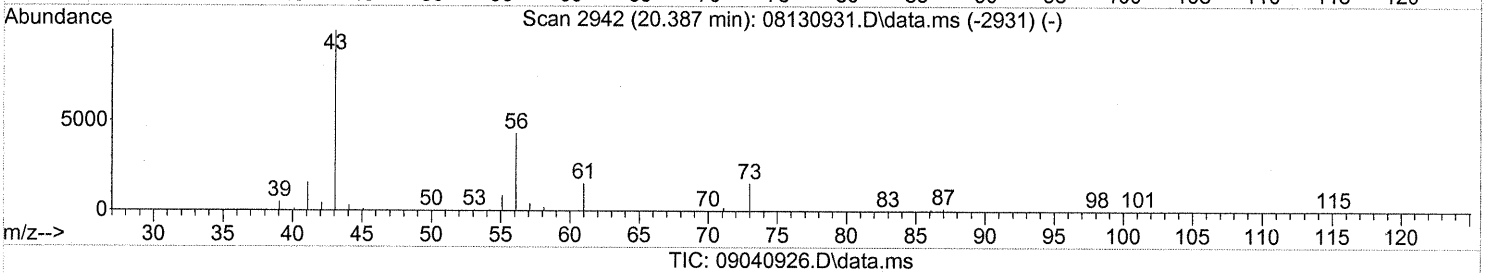
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 19.45ng

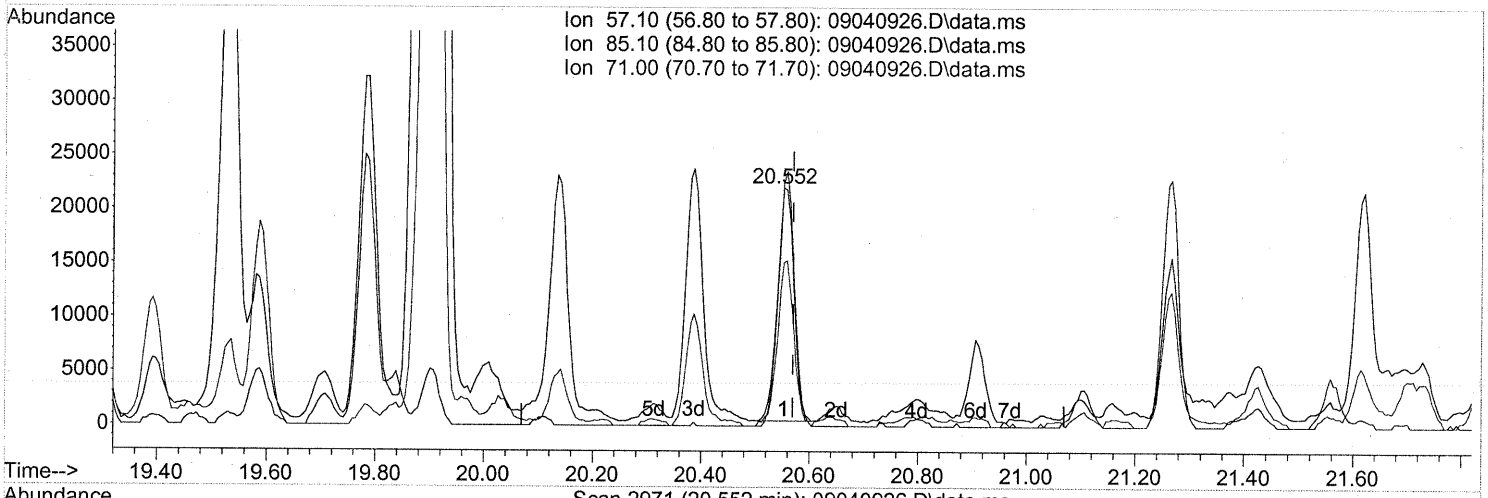
response 1136309

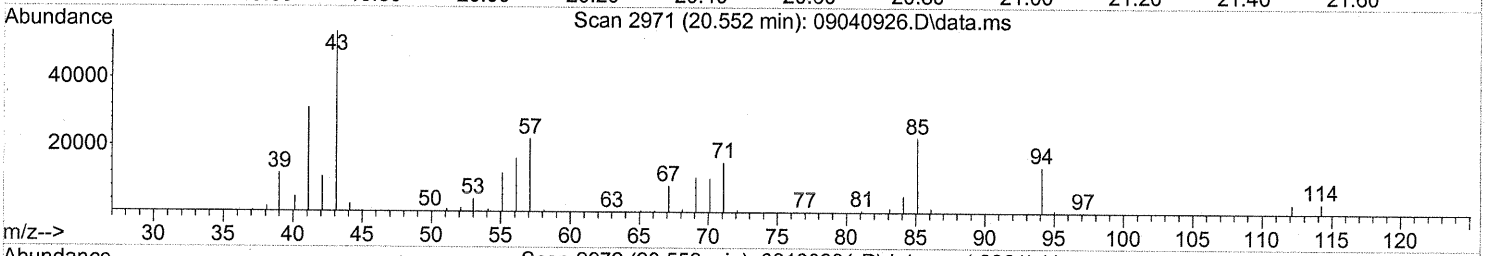
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	43.58
73.00	16.90	15.59
0.00	0.00	0.00

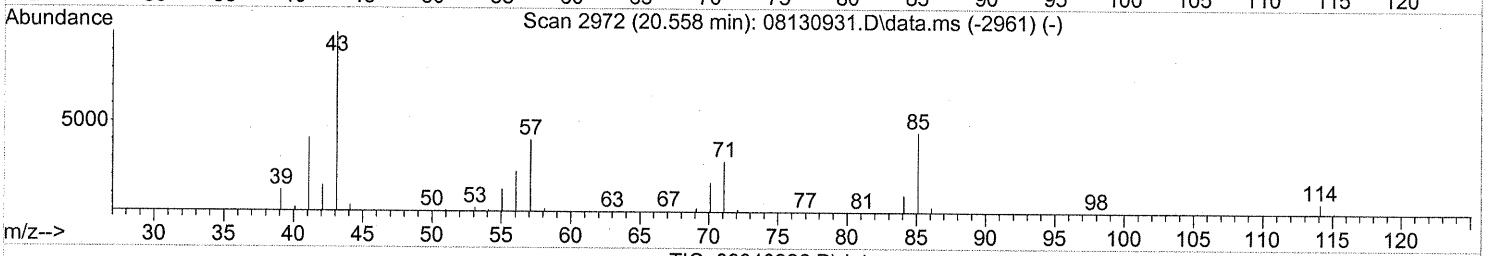
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(63) n-Octane (T)

20.552min (-0.017) 1.96ng

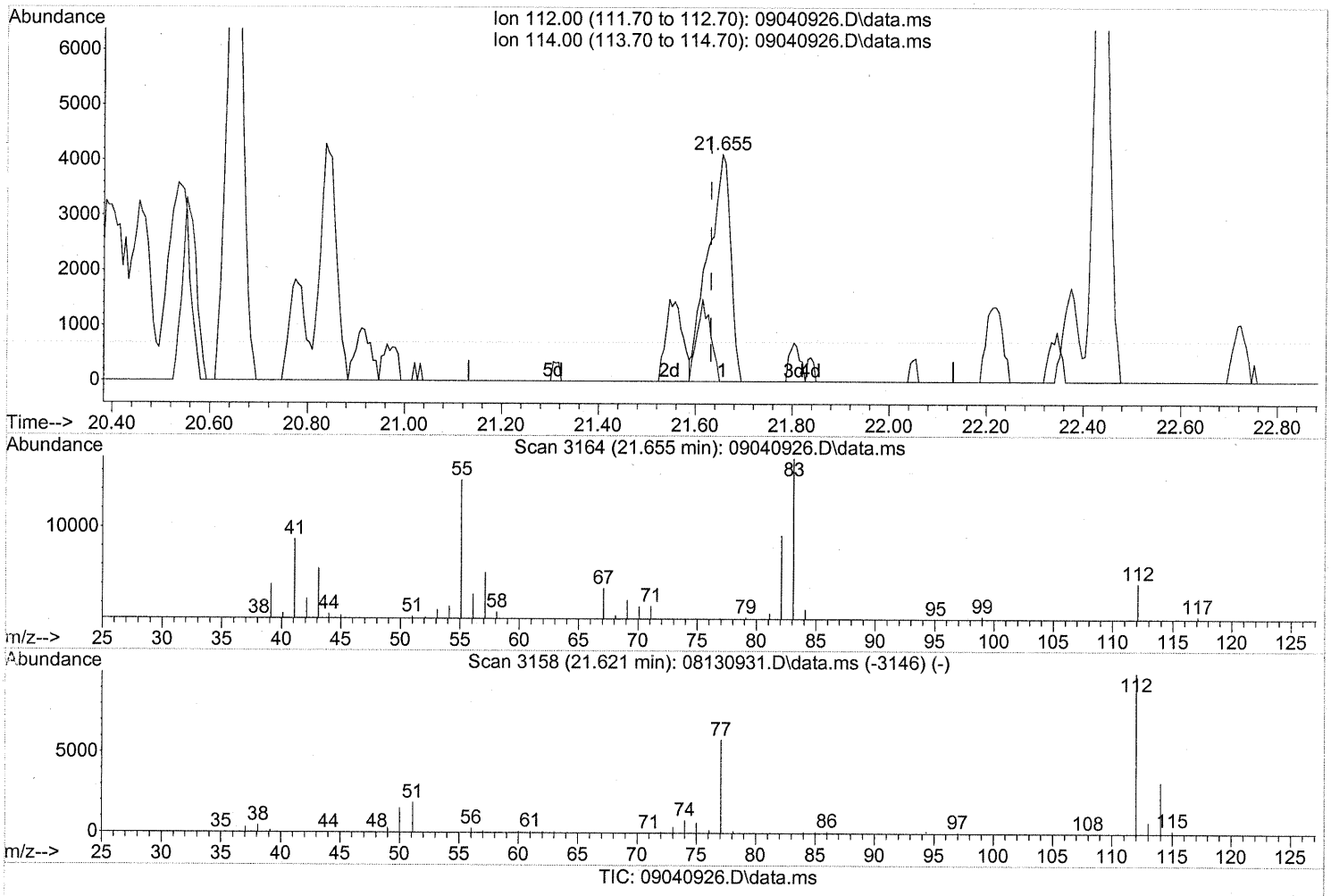
response 44970

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	105.88
71.00	75.10	71.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(65) Chlorobenzene (T)

21.655min (+0.023) 0.21ng

response 13342

Ion	Exp%	Act%
112.00	100	100
114.00	32.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

FP

9/15/09

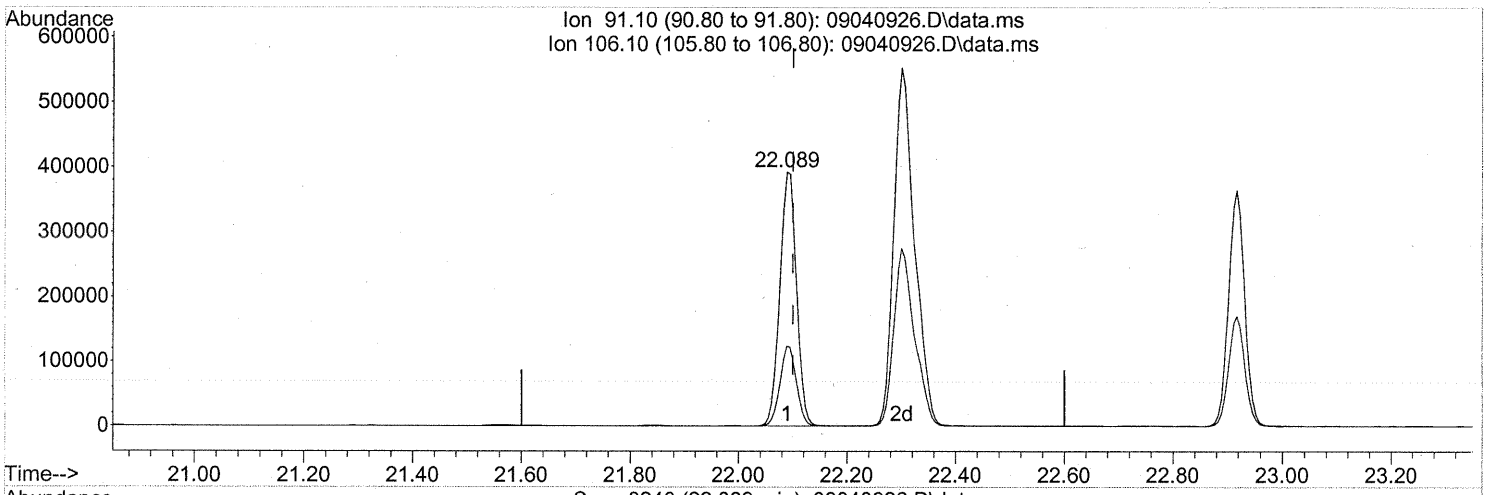
9/16/09

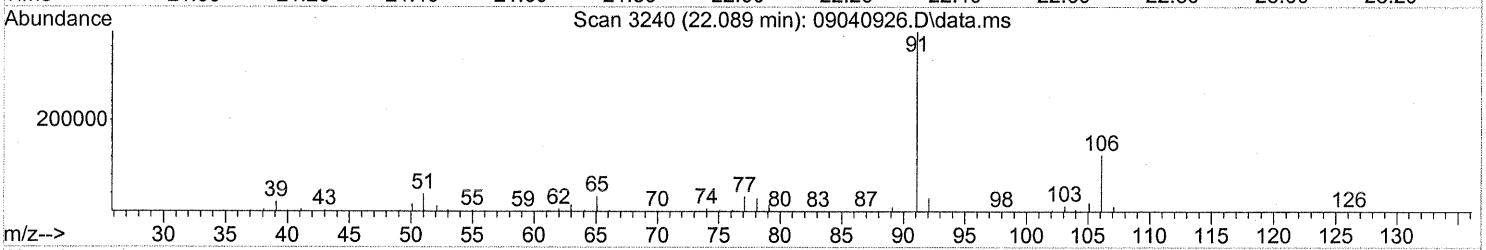
242

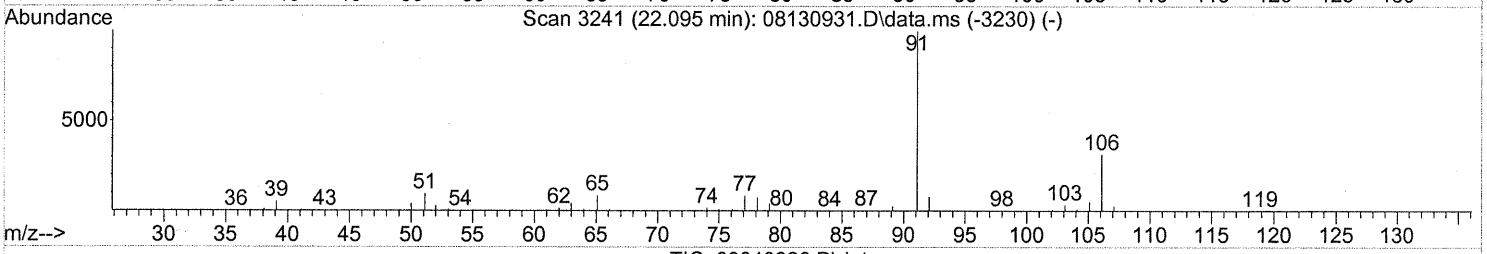
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 7.54ng

response 838692

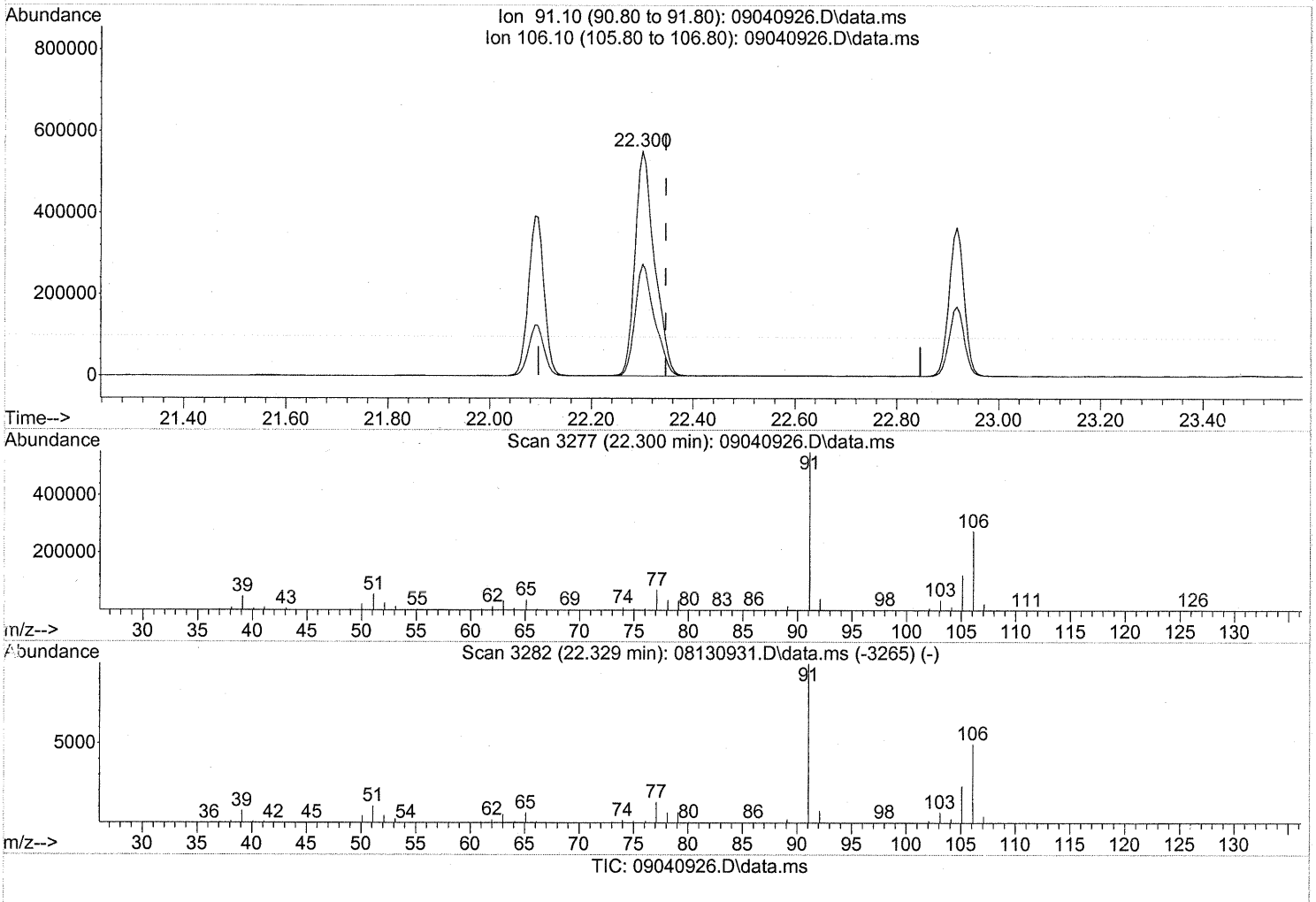
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.90
0.00	0.00	0.00
0.00	0.00	0.00

243

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

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

22.300min (-0.046) 16.74ng

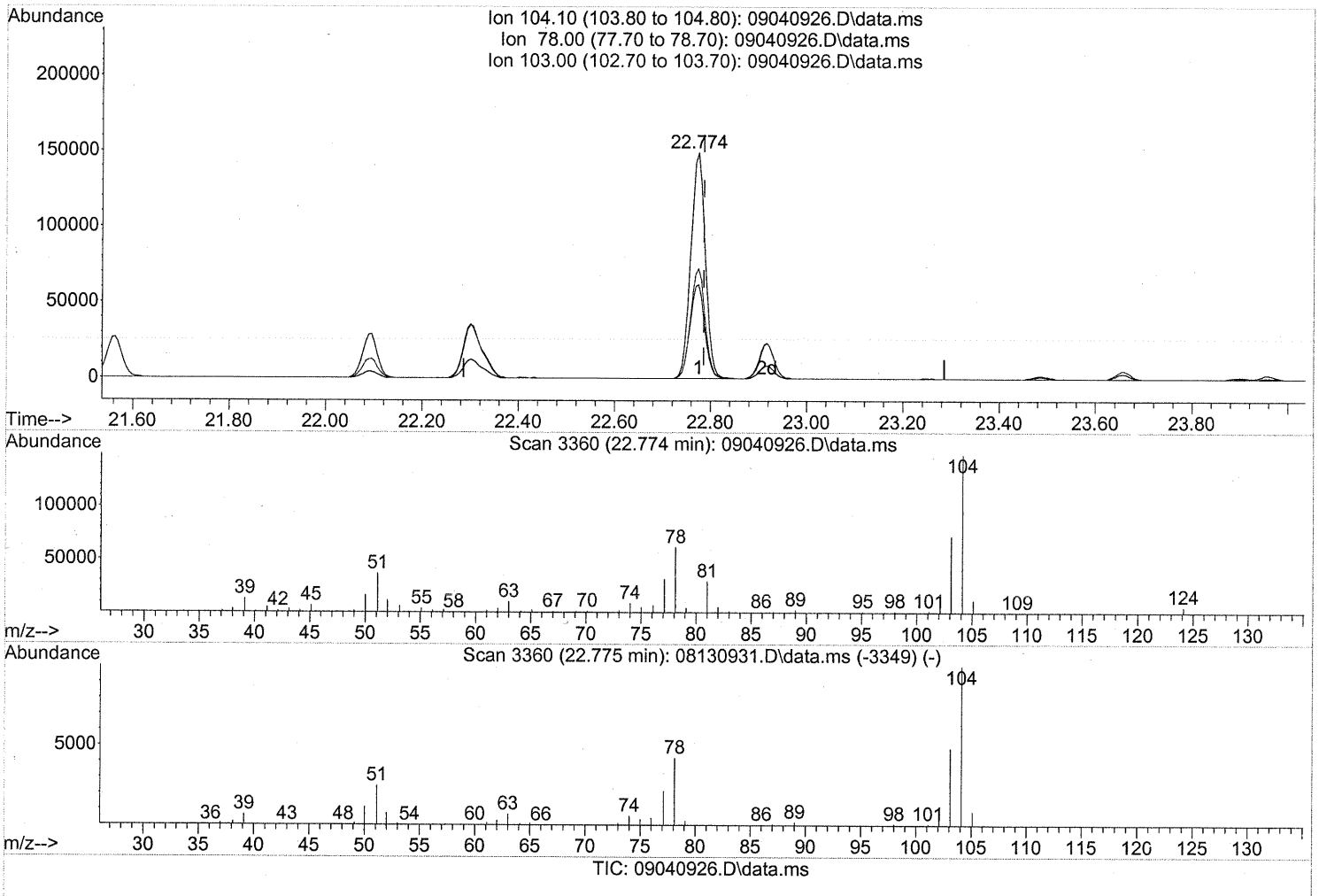
response 1476079

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(69) Styrene (T)

22.774min (-0.011) 4.79ng

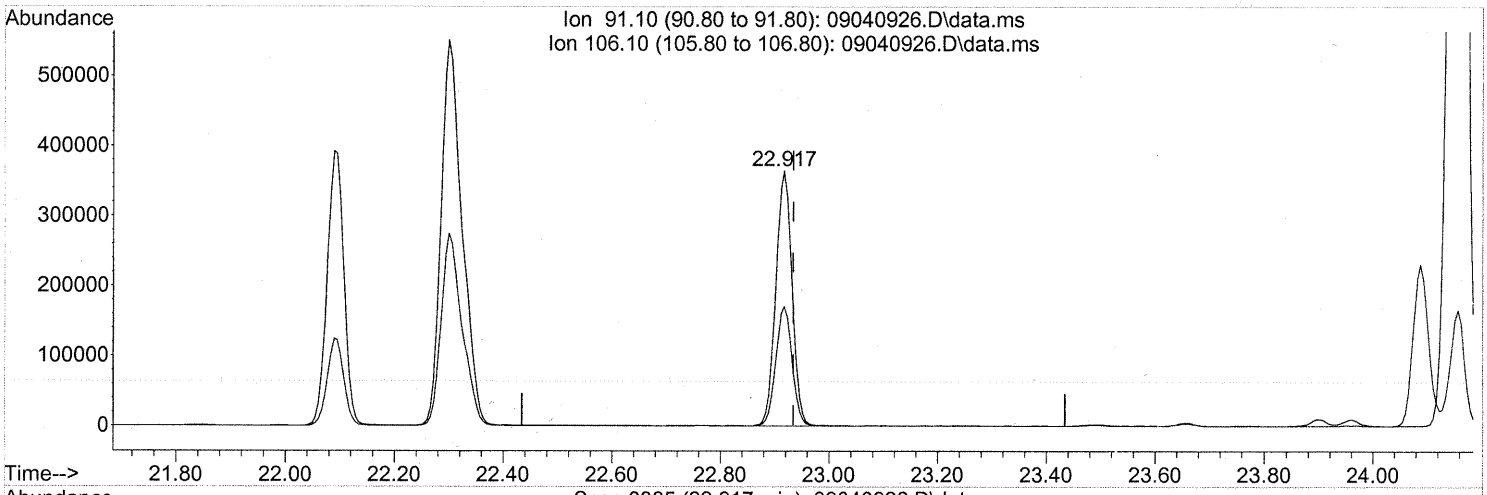
response 312352

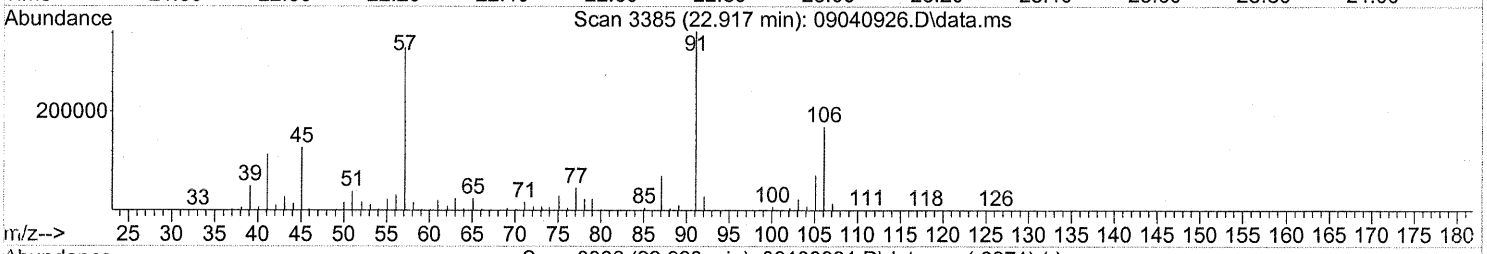
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.28
103.00	48.70	48.59
0.00	0.00	0.00

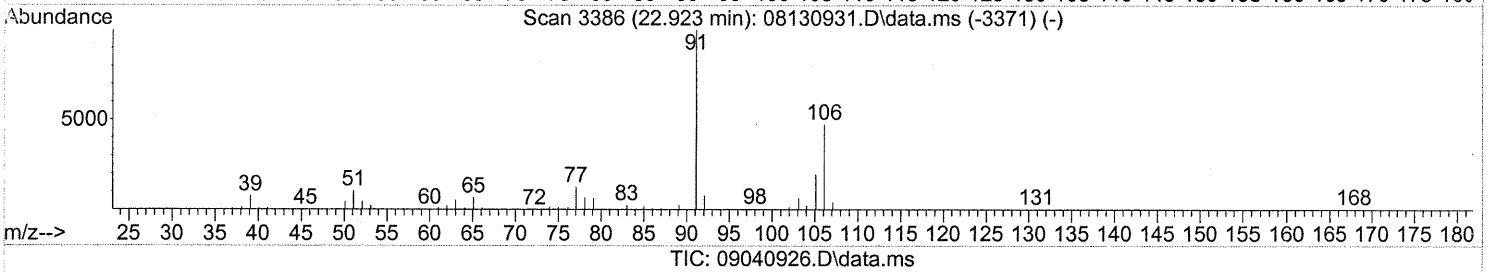
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 8.49ng

response 752971

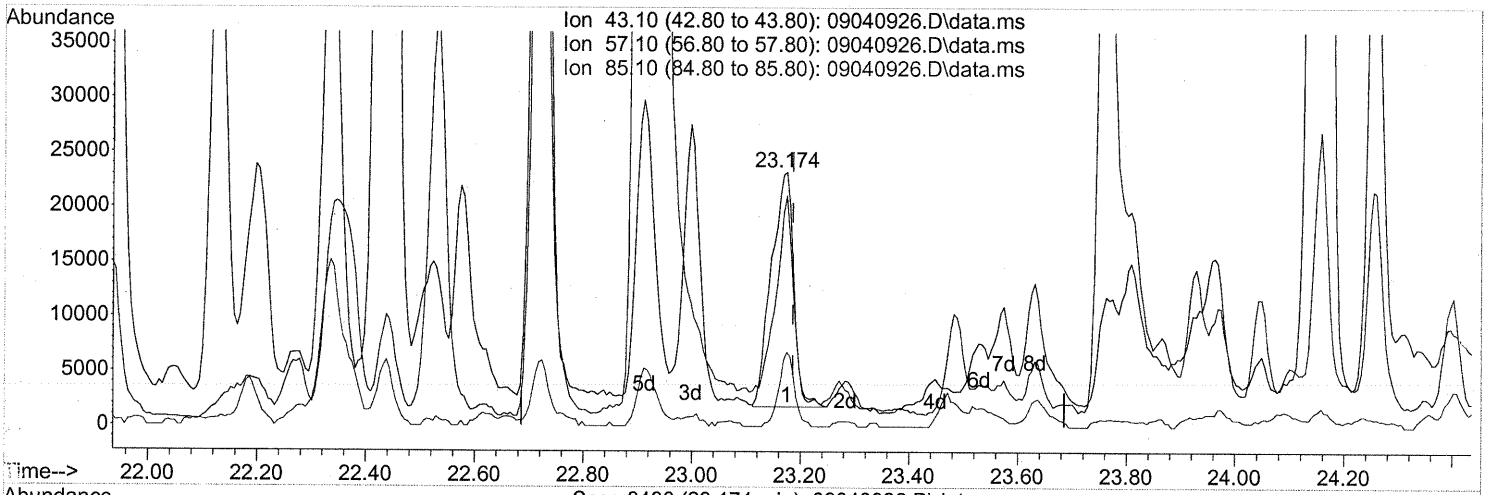
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.71
0.00	0.00	0.00
0.00	0.00	0.00

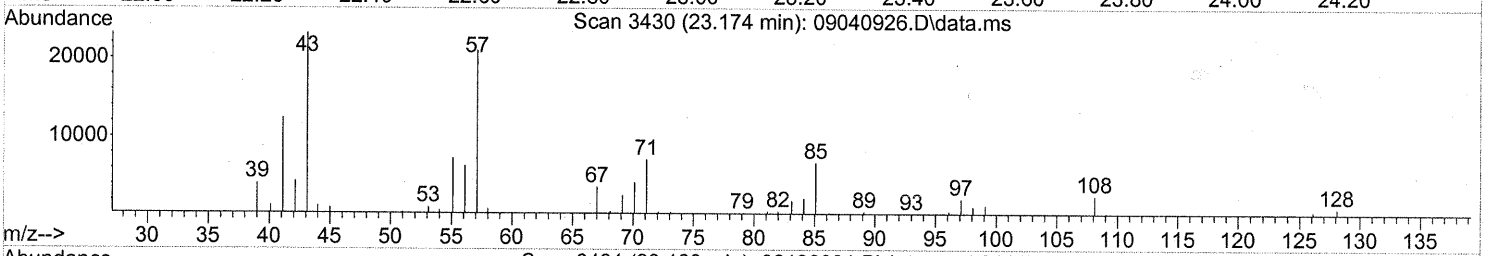
246

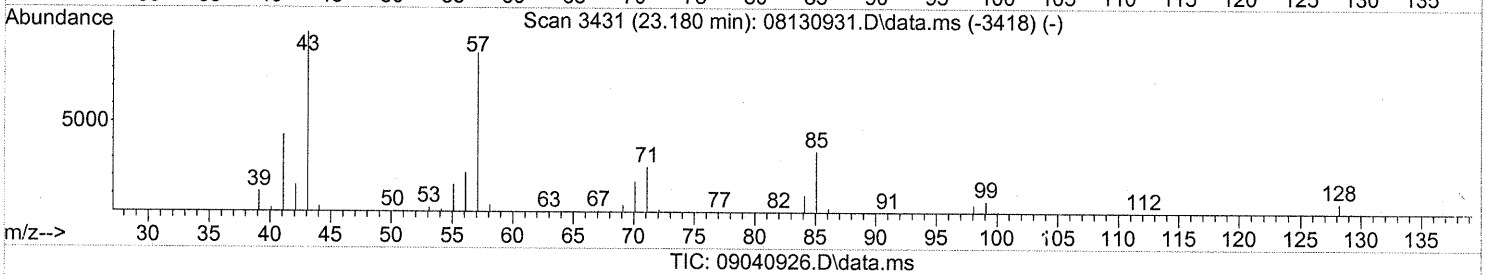
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(71) n-Nonane (T)

23.174min (-0.012) 1.15ng

response 61276

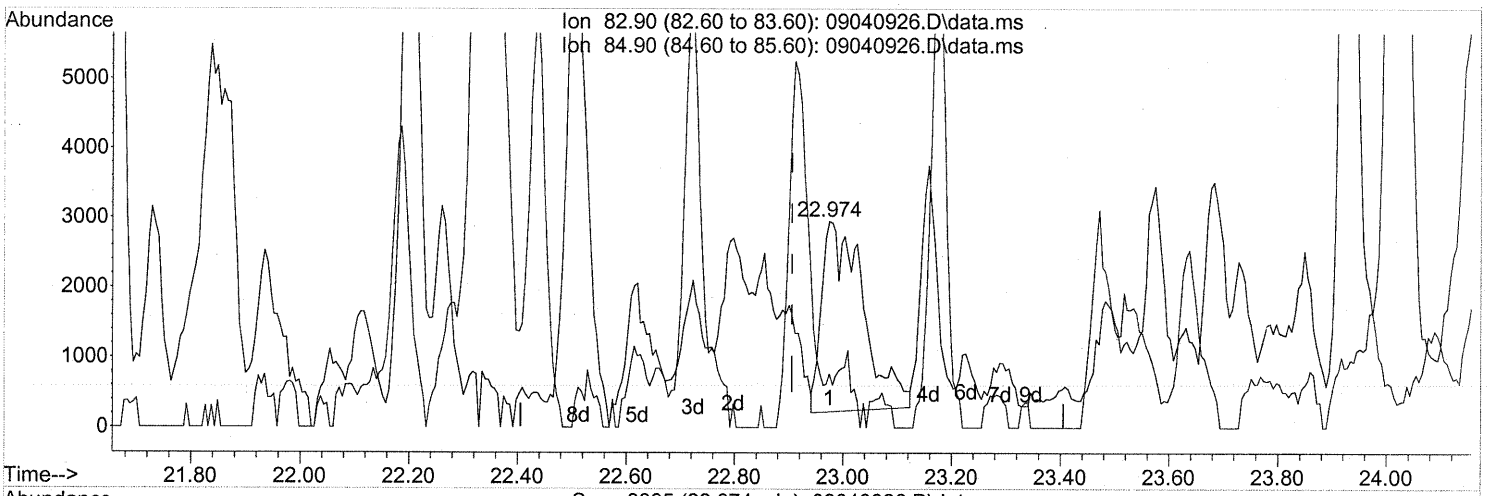
Ion	Exp%	Act%
43.10	100	100
57.10	94.00	80.79
85.10	38.80	22.09
0.00	0.00	0.00

247

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

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

22.974min (+0.068) 0.38ng

response 14348

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

FP

9/15/09

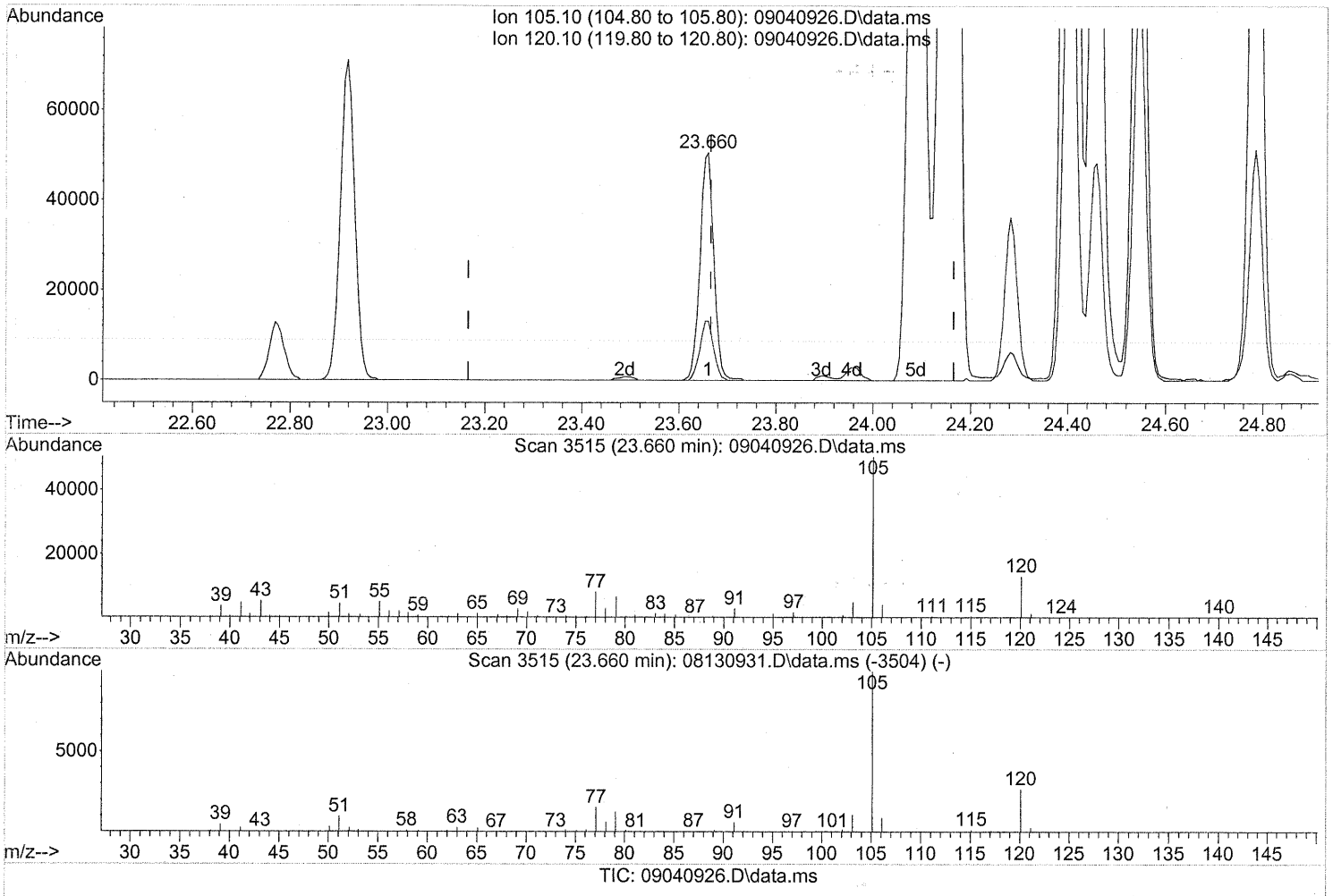
9/16/09

248

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(74) Cumene (T)

23.660min (-0.006) 0.86ng

response 99300

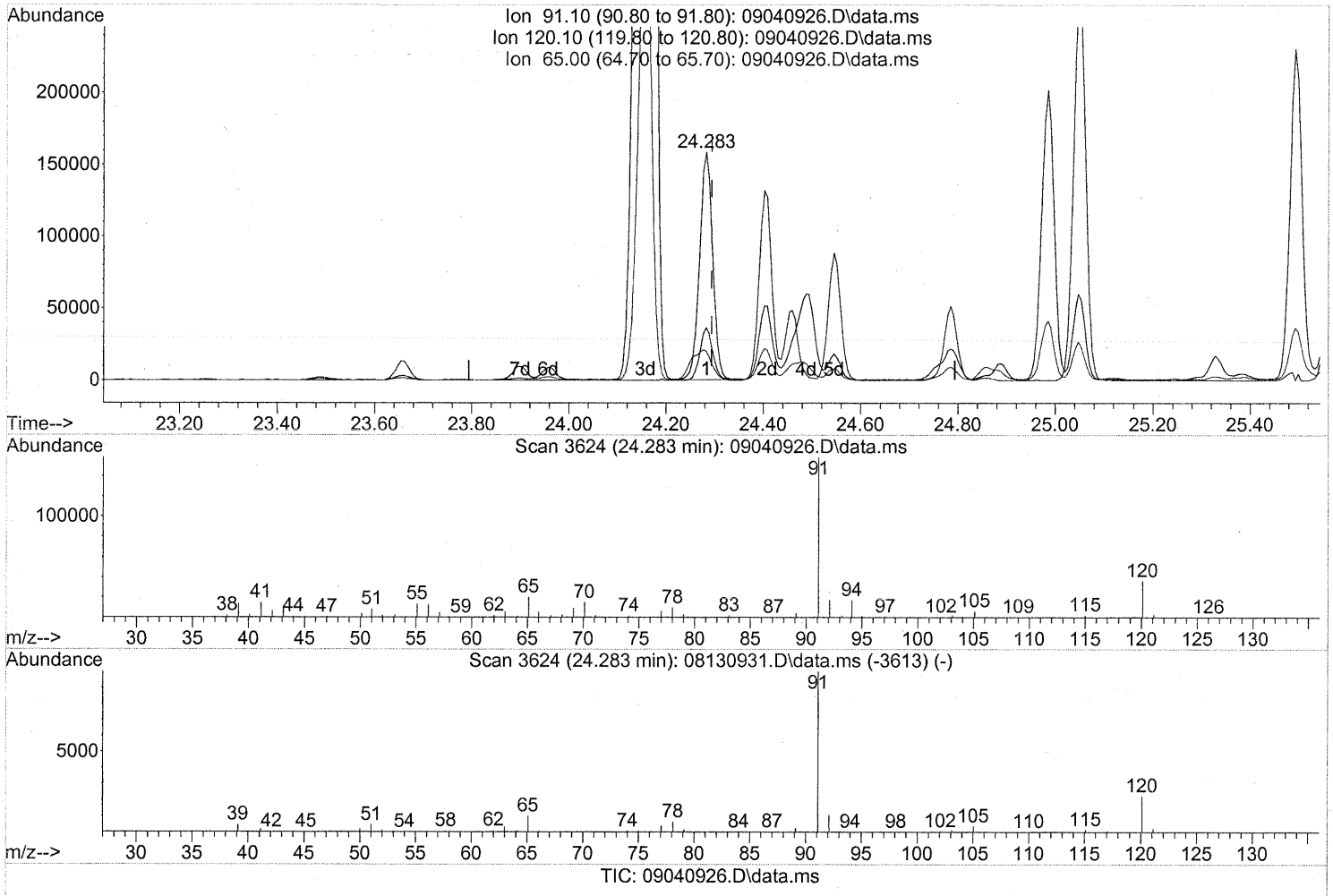
Ion	Exp%	Act%
105.10	100	100
120.10	27.10	25.77
0.00	0.00	0.00
0.00	0.00	0.00

249

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.012) 2.09ng

response 297382

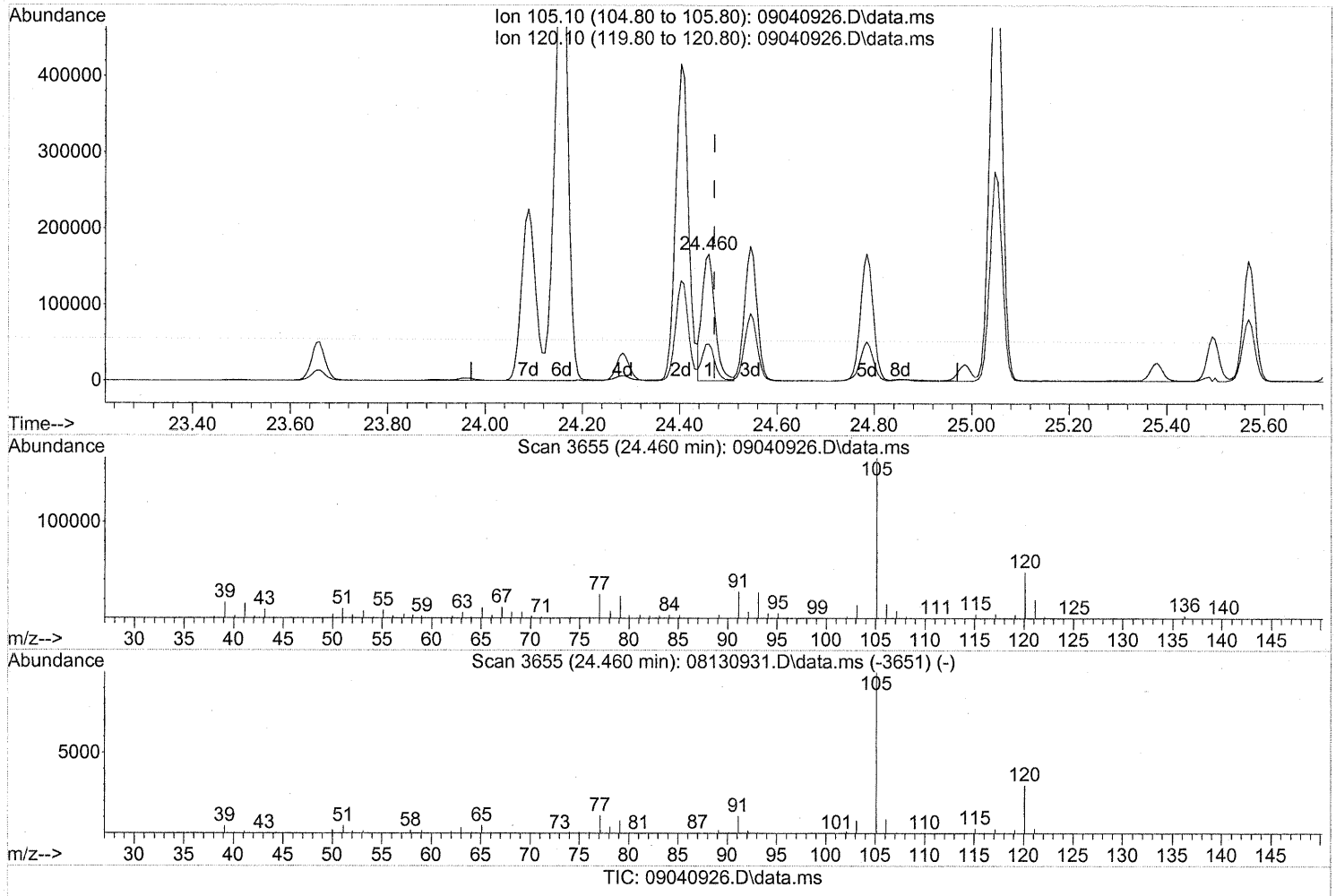
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	22.12
65.00	10.20	20.79
0.00	0.00	0.00

250

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.012) 2.79ng

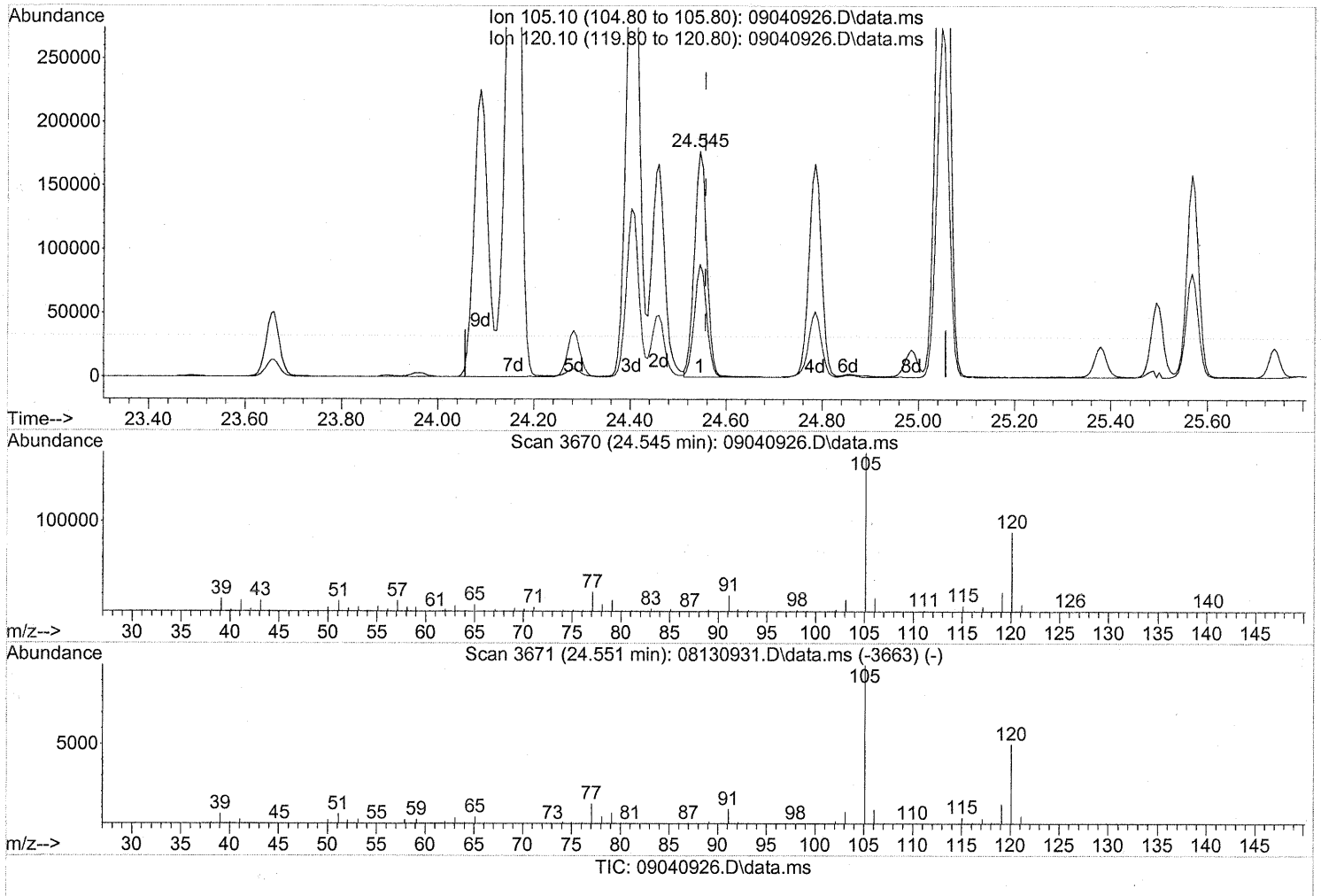
response 302471

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

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

24.545min (-0.011) 3.56ng

response 318463

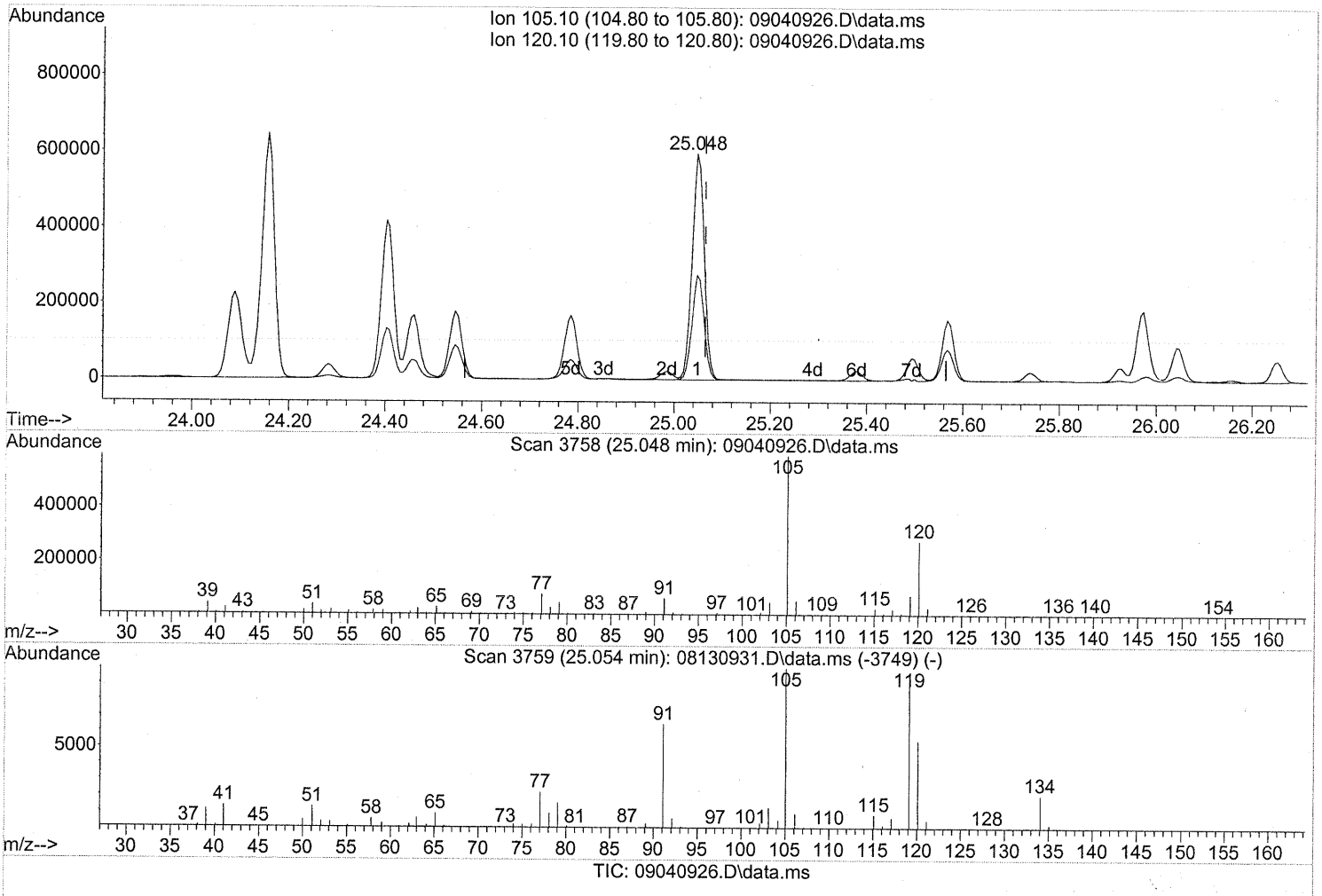
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	49.62
0.00	0.00	0.00
0.00	0.00	0.00

252

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

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

25.048min (-0.017) 10.98ng

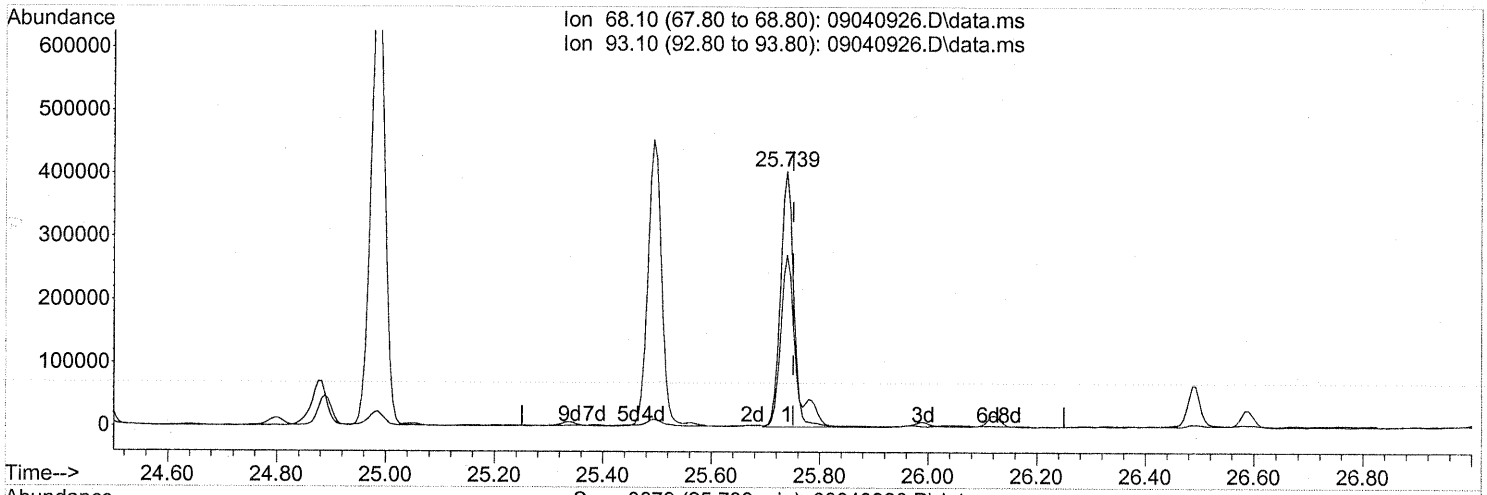
response 1043869

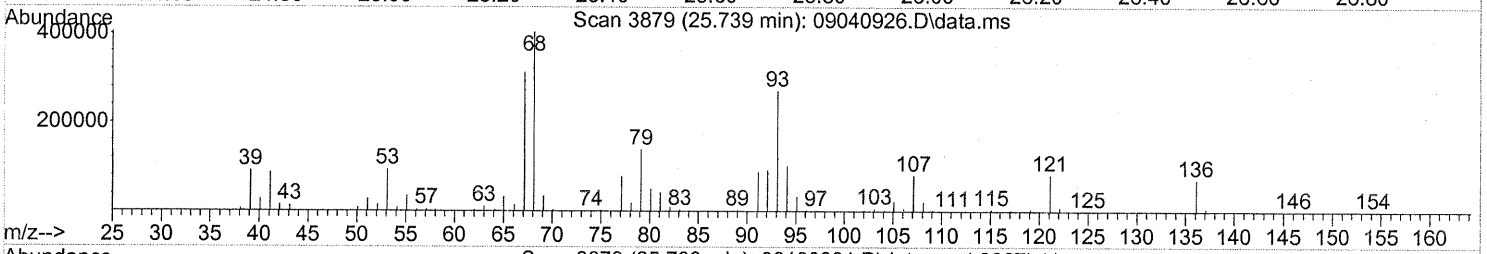
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.17
0.00	0.00	0.00
0.00	0.00	0.00

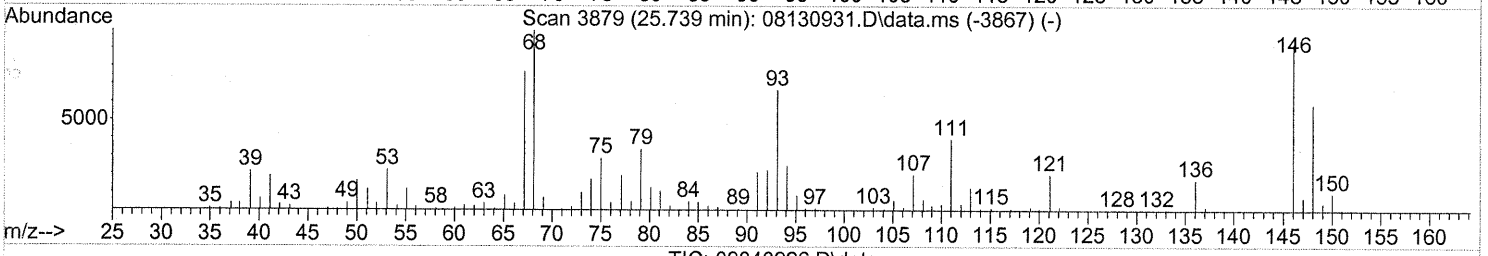
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040926.D\data.ms

(91) d-Limonene (T)

25.739min (-0.012) 17.57ng

response 683629

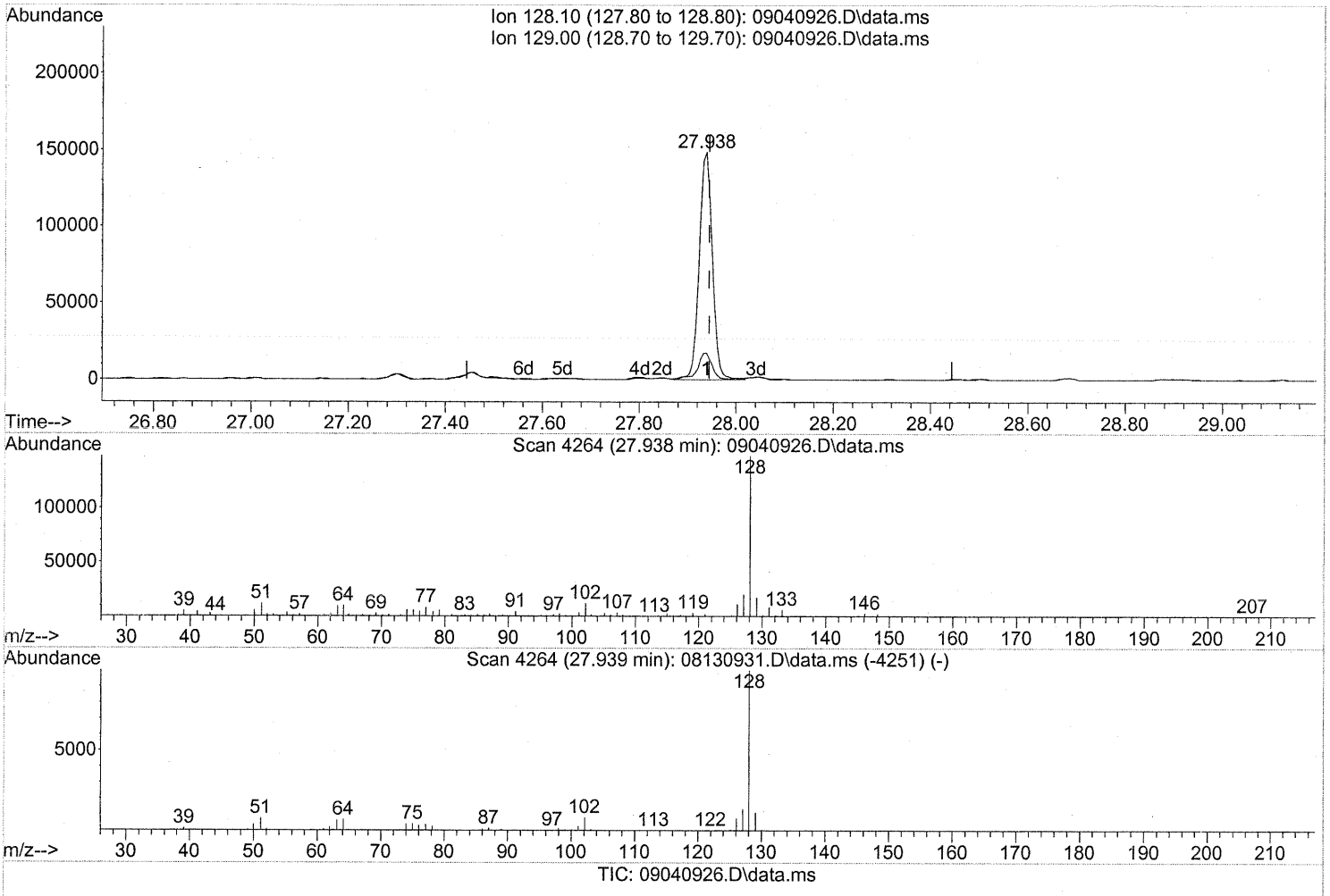
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	77.18
0.00	0.00	0.00
0.00	0.00	0.00

254

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040926.D
Acq On : 5 Sep 2009 1:46
Operator : EM
Sample : P0903080-004 (1000ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040926.D\data.ms

(95) Naphthalene (T)

27.938min (-0.006) 2.17ng

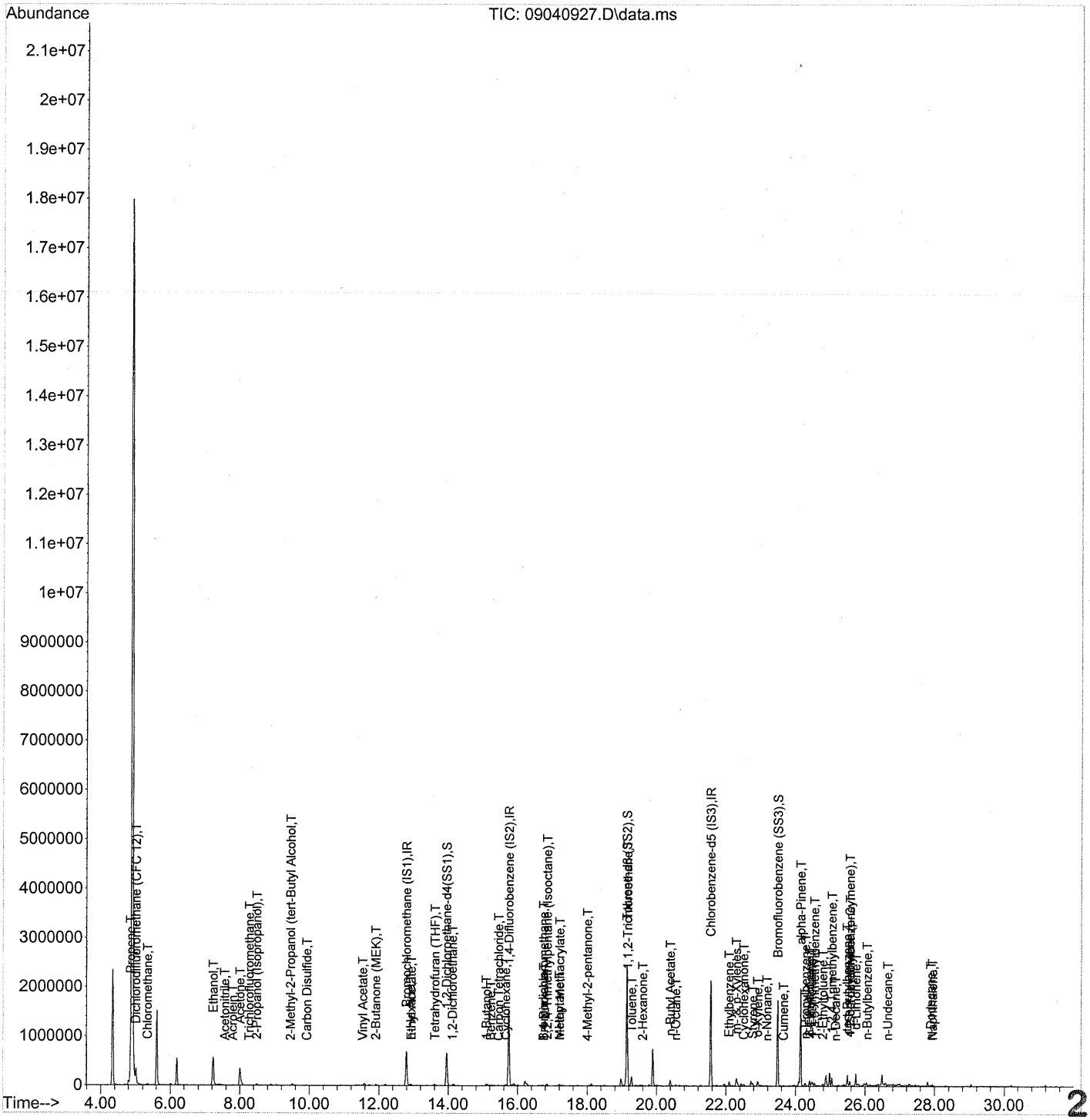
response 277225

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:34:39 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:34:39 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

JDH 9/16/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	356782	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1816921	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	909326	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	653644	25.910	ng		-0.04
Spiked Amount 25.000			Recovery =	103.64%			✓
57) Toluene-d8 (SS2)	19.14	98	2127263	24.608	ng		-0.02
Spiked Amount 25.000			Recovery =	98.44%			✓
73) Bromofluorobenzene (SS3)	23.49	174	608378	24.850	ng		0.00
Spiked Amount 25.000			Recovery =	99.40%			✓
Target Compounds							Qvalue
2) Propene	4.86	42	192446m	6.149	ng	NR	
3) Dichlorodifluoromethan...	5.01	85	7537	0.169	ng	#	94
4) Chloromethane	5.34	50	3686	0.089	ng		89
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.19	54	1106	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	1036752m	52.809	ng		
11) Acetonitrile	7.57	41	2832	0.059	ng		83
12) Acrolein	7.79	56	7984	0.624	ng		99
13) Acetone	8.00	58	204965	10.260	ng		96
14) Trichlorofluoromethane	8.28	101	3470	0.091	ng		95
15) 2-Propanol (Isopropanol)	8.48	45	51373	0.939	ng		85
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.45	59	7036	0.127	ng	#	68
19) Methylene Chloride	9.52	84	1007	N.D.			
20) 3-Chloro-1-propene (Al...	9.62	41	1171	N.D.			
21) Trichlorotrifluoroethane	9.97	151	216	N.D.			
22) Carbon Disulfide	9.92	76	14655	0.167	ng		91
23) trans-1,2-Dichloroethene	10.98	61	1342	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	2314	0.535	ng	#	4
27) 2-Butanone (MEK)	11.91	72	10719	0.770	ng	#	53
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.94	61	1244	0.138	ng		90
31) n-Hexane	12.92	57	15403	0.350	ng		92

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:34:39 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.			
34) Tetrahydrofuran (THF)	13.61	72	3247	0.224	ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	14.12	62	2284	0.081	ng	#	52
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	15.10	56	40154	1.705	ng		87
41) Benzene	15.22	78	14106	0.144	ng		92
42) Carbon Tetrachloride	15.45	117	1791	0.066	ng		94
43) Cyclohexane	15.65	84	12739	0.337	ng		85
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	16.74	83	4999	0.175	ng	#	18
47) Trichloroethene	0.00	130	0	N.D.			
48) 1,4-Dioxane	16.75	88	1124	0.065	ng		86
49) 2,2,4-Trimethylpentane...	16.85	57	40205	0.358	ng		85
50) Methyl Methacrylate	17.21	100	2142	0.219	ng	#	1
51) n-Heptane	17.20	71	8148	0.313	ng		90
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	18.00	58	1293	0.061	ng	#	31
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	19.16	97	172655	8.271	ng	#	8
58) Toluene	19.28	91	171391	1.636	ng		99
59) 2-Hexanone	19.60	43	14103	0.259	ng	#	72
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.39	43	110269	1.856	ng		99
63) n-Octane	20.55	57	5111	0.219	ng	#	80
64) Tetrachloroethene	0.00	166	0	N.D.			
65) Chlorobenzene	21.64	112	109	N.D.			
66) Ethylbenzene	22.09	91	81461	0.720	ng		98
67) m- & p-Xylenes	22.30	91	143921	1.605	ng		99
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.77	104	29856	0.450	ng		99
70) o-Xylene	22.91	91	73700	0.817	ng		98
71) n-Nonane	23.17	43	7033	0.129	ng	#	16
72) 1,1,2,2-Tetrachloroethane	22.85	83	250	N.D.			
74) Cumene	23.65	105	11061	0.095	ng		92
75) alpha-Pinene	24.15	93	926118	16.044	ng		99
76) n-Propylbenzene	24.28	91	30400	0.210	ng		92
77) 3-Ethyltoluene	24.40	105	76081	0.694	ng		99
78) 4-Ethyltoluene	24.46	105	30903	0.280	ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	32429	0.356	ng		9

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 10:34:39 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

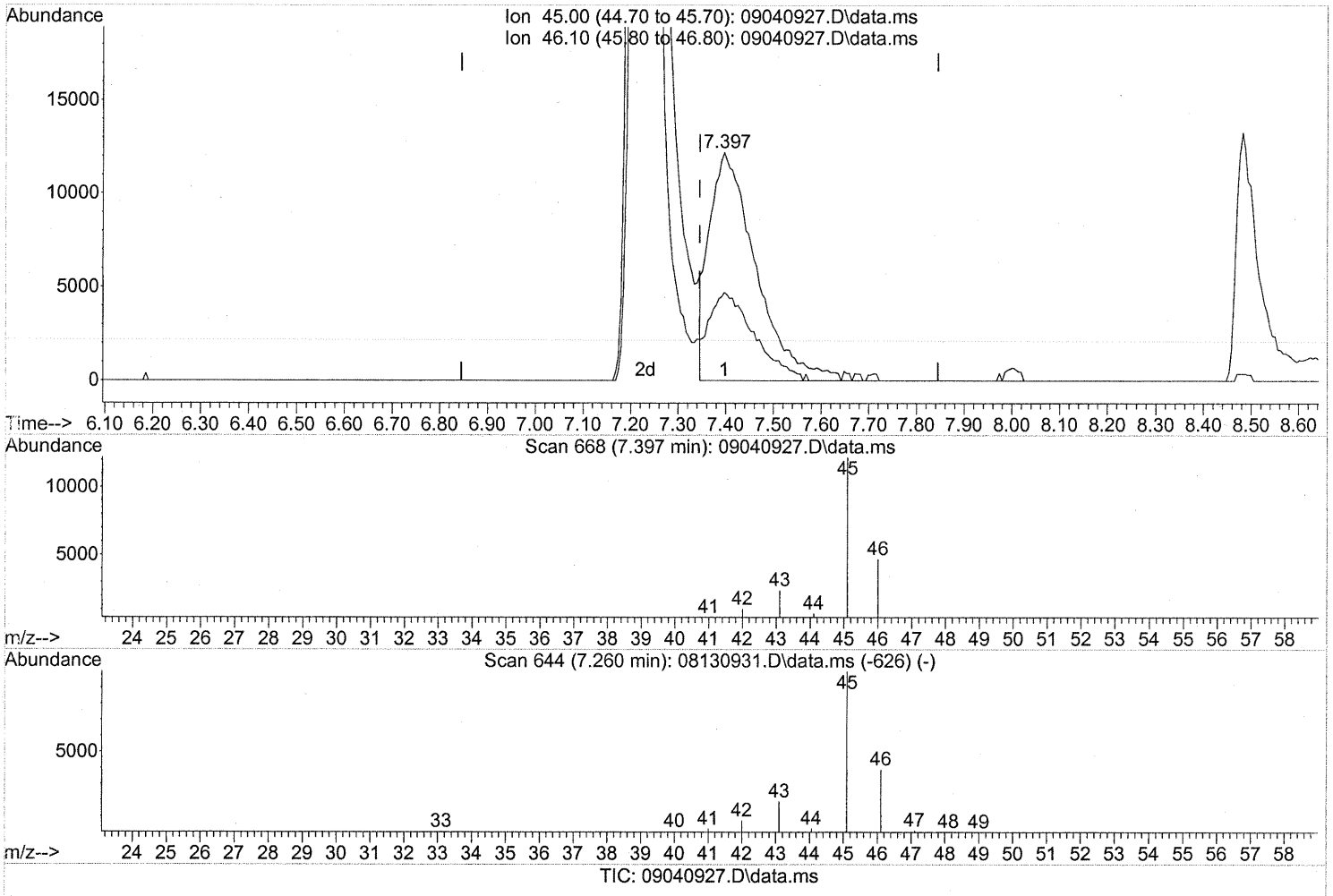
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	474	N.D.		
81) 2-Ethyltoluene	24.79	105	32027	0.283 ng		97
82) 1,2,4-Trimethylbenzene	25.05	105	101829	1.053 ng		89
83) n-Decane	25.15	57	4158	0.074 ng		82
84) Benzyl Chloride	25.23	91	103	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	25.38	105	4548	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	34347	0.281 ng		97
89) 1,2,3-Trimethylbenzene	25.57	105	28213	0.289 ng		100
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	25.74	68	66497	1.680 ng		94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	4131	0.071 ng	#	48
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	27113	0.209 ng		97
96) n-Dodecane	27.89	57	8317	0.128 ng		94
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	15397	0.467 ng		93
99) tert-Butylbenzene	25.49	119	8775	0.091 ng		98
100) n-Butylbenzene	26.06	91	12578	0.124 ng	#	8

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040927.D\data.ms

(10) Ethanol (T)

7.397min (+0.051) 4.22ng

response 82932

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.59
0.00	0.00	0.00
0.00	0.00	0.00

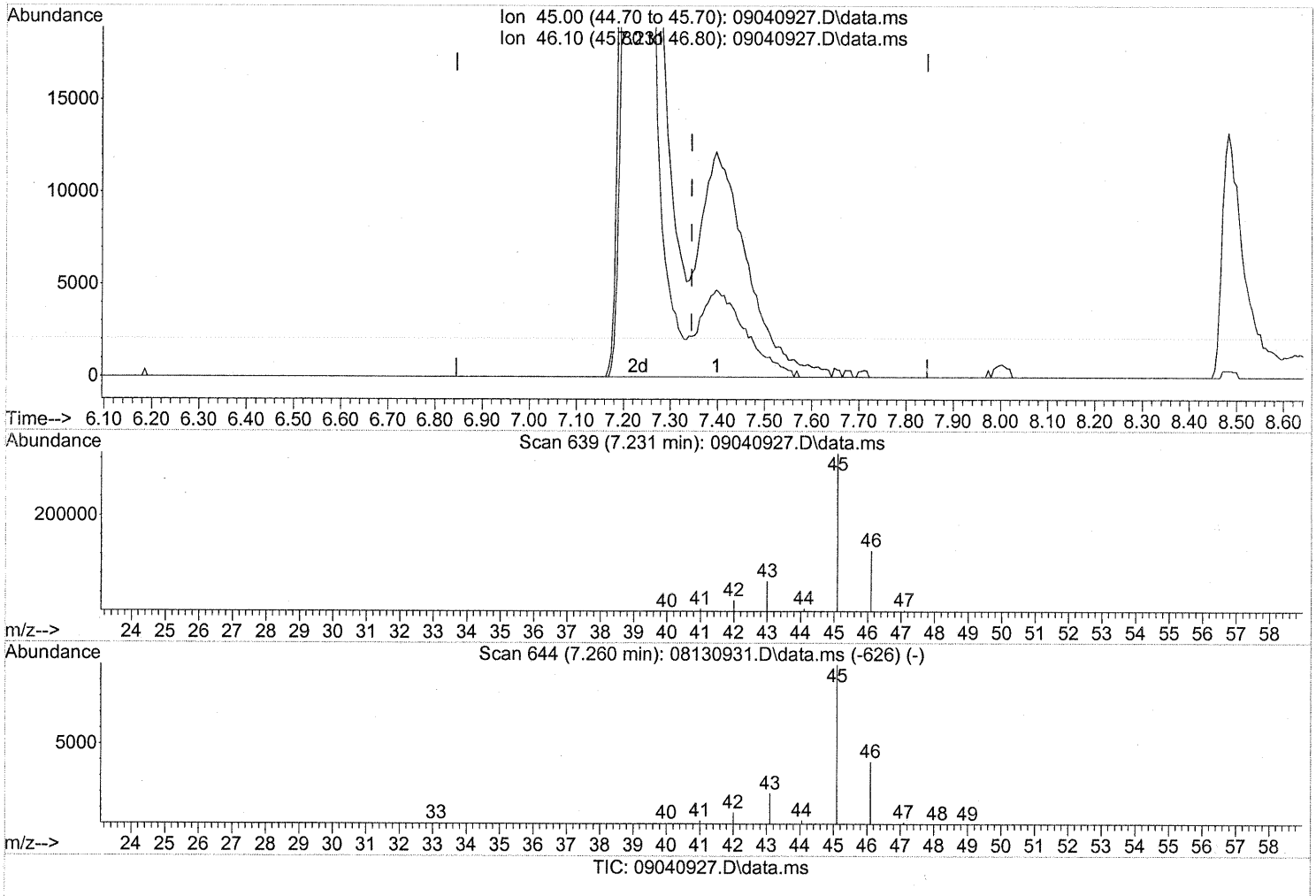
SP

260

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.231min (-0.114) 52.81ng m

response 1036752

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	2.93#
0.00	0.00	0.00
0.00	0.00	0.00

SP-71C

JDA 9/15/09

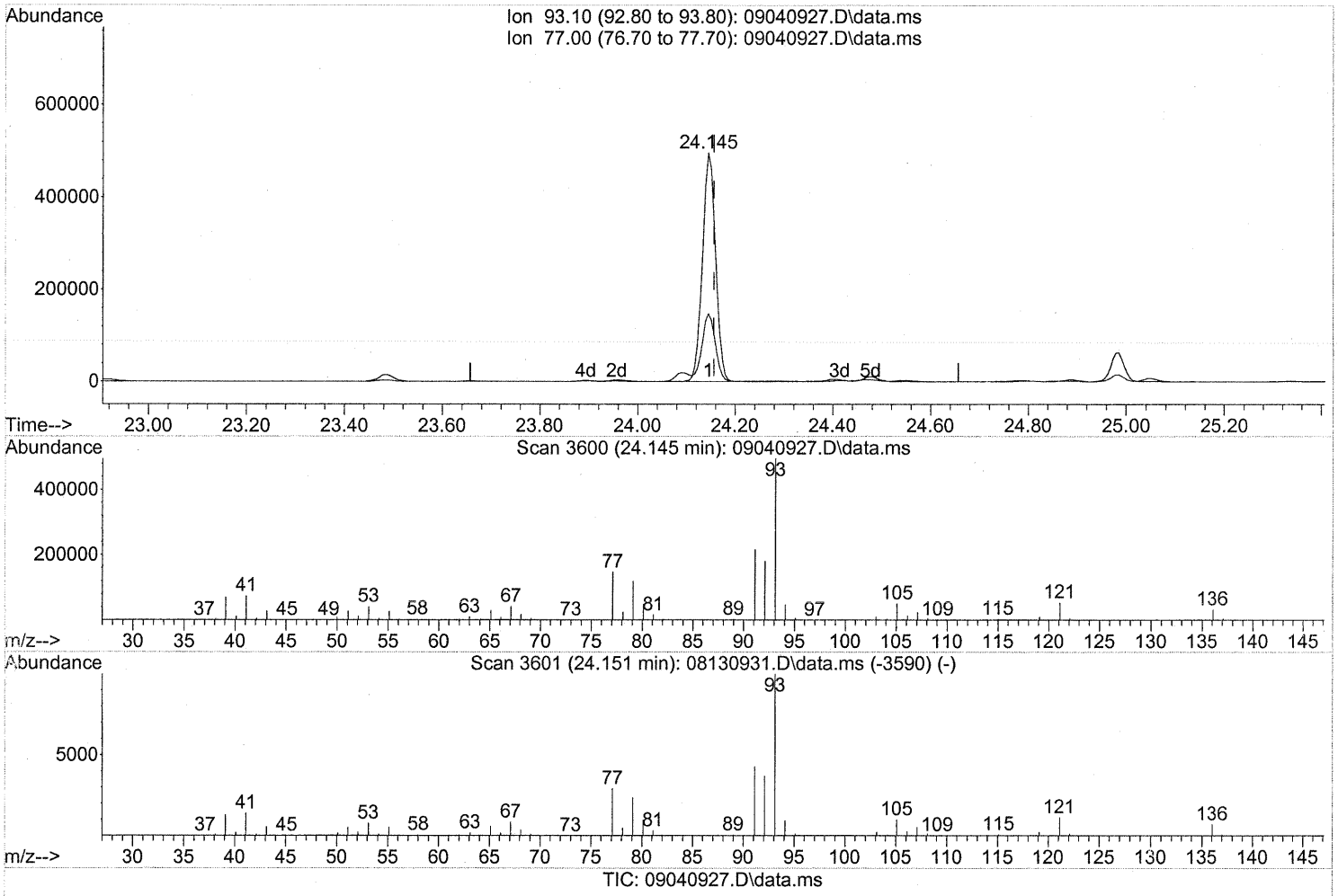
9/16/09

261

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040927.D
Acq On : 5 Sep 2009 2:28
Operator : EM
Sample : P0903080-004 dil (100ml)
Misc : Environmental H&E 104837
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 08 07:37:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040927.D\data.ms

(75) alpha-Pinene (T)

24.145min (-0.011) 16.04ng

response 926118

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.28
0.00	0.00	0.00
0.00	0.00	0.00

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104838**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01529

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.69	ND	0.40	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.2**	0.69	**0.45**	0.14	
74-87-3	**Chloromethane**	**0.39**	0.14	**0.19**	0.067	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.69	ND	0.099	
75-01-4	Vinyl Chloride	ND	0.14	ND	0.054	
106-99-0	1,3-Butadiene	ND	0.14	ND	0.062	
74-83-9	Bromomethane	ND	0.14	ND	0.036	
75-00-3	Chloroethane	ND	0.14	ND	0.052	
64-17-5	Ethanol	ND	6.9	ND	3.7	
75-05-8	Acetonitrile	ND	0.69	ND	0.41	
107-02-8	Acrolein	ND	0.69	ND	0.30	
67-64-1	Acetone	ND	6.9	ND	2.9	
75-69-4	**Trichlorofluoromethane**	**1.1**	0.14	**0.20**	0.025	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.69	ND	0.28	
107-13-1	Acrylonitrile	ND	0.69	ND	0.32	
75-35-4	1,1-Dichloroethene	ND	0.14	ND	0.035	
75-09-2	Methylene Chloride	ND	0.69	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.14	ND	0.044	
76-13-1	**Trichlorotrifluoroethane**	**0.52**	0.14	**0.068**	0.018	
75-15-0	Carbon Disulfide	ND	0.69	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.14	ND	0.035	
75-34-3	1,1-Dichloroethane	ND	0.14	ND	0.034	
1634-04-4	Methyl tert-Butyl Ether	ND	0.14	ND	0.038	
108-05-4	Vinyl Acetate	ND	6.9	ND	2.0	
78-93-3	**2-Butanone (MEK)**	**0.78**	0.69	**0.26**	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.

Verified By: Re Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **104838**
Client Project ID: **16512**

CAS Project ID: P0903080
CAS Sample ID: P0903080-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01529

Date Collected: 9/1/09
Date Received: 9/2/09
Date Analyzed: 9/5/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.38

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	0.035	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.38	
110-54-3	n-Hexane	ND	0.69	ND	0.20	
67-66-3	Chloroform	ND	0.14	ND	0.028	
109-99-9	Tetrahydrofuran (THF)	ND	0.69	ND	0.23	
107-06-2	1,2-Dichloroethane	ND	0.14	ND	0.034	
71-55-6	1,1,1-Trichloroethane	ND	0.14	ND	0.025	
71-43-2	**Benzene**	**0.15**	0.14	**0.048**	0.043	
56-23-5	**Carbon Tetrachloride**	**0.48**	0.14	**0.076**	0.022	
110-82-7	Cyclohexane	ND	0.69	ND	0.20	
78-87-5	1,2-Dichloropropane	ND	0.14	ND	0.030	
75-27-4	Bromodichloromethane	ND	0.14	ND	0.021	
79-01-6	Trichloroethene	ND	0.14	ND	0.026	
123-91-1	1,4-Dioxane	ND	0.69	ND	0.19	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.34	
142-82-5	n-Heptane	ND	0.69	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.69	ND	0.15	
108-10-1	4-Methyl-2-pentanone	ND	0.69	ND	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	0.69	ND	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.14	ND	0.025	
108-88-3	Toluene	ND	0.69	ND	0.18	
591-78-6	2-Hexanone	ND	0.69	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.14	ND	0.016	
106-93-4	1,2-Dibromoethane	ND	0.14	ND	0.018	
123-86-4	n-Butyl Acetate	ND	0.69	ND	0.15	

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

Verified By: RC Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903080
Client Sample ID: **104838** CAS Sample ID: P0903080-005
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 9/1/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/2/09
Analyst: Elsa Moctezuma Date Analyzed: 9/5/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01529

Initial Pressure (psig): -1.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.69	ND	0.15	
127-18-4	Tetrachloroethene	ND	0.14	ND	0.020	
108-90-7	Chlorobenzene	ND	0.14	ND	0.030	
100-41-4	Ethylbenzene	ND	0.69	ND	0.16	
179601-23-1	m,p-Xylenes	ND	0.69	ND	0.16	
75-25-2	Bromoform	ND	0.69	ND	0.067	
100-42-5	Styrene	ND	0.69	ND	0.16	
95-47-6	o-Xylene	ND	0.69	ND	0.16	
111-84-2	n-Nonane	ND	0.69	ND	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.14	ND	0.020	
98-82-8	Cumene	ND	0.69	ND	0.14	
80-56-8	**alpha-Pinene**	**0.75**	0.69	**0.13**	0.12	
103-65-1	n-Propylbenzene	ND	0.69	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.69	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.69	ND	0.14	
95-63-6	1,2,4-Trimethylbenzene	ND	0.69	ND	0.14	
100-44-7	Benzyl Chloride	ND	0.14	ND	0.027	
541-73-1	1,3-Dichlorobenzene	ND	0.14	ND	0.023	
106-46-7	1,4-Dichlorobenzene	ND	0.14	ND	0.023	
95-50-1	1,2-Dichlorobenzene	ND	0.14	ND	0.023	
5989-27-5	d-Limonene	ND	0.69	ND	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.69	ND	0.071	
120-82-1	1,2,4-Trichlorobenzene	ND	0.69	ND	0.093	
91-20-3	Naphthalene	ND	0.69	ND	0.13	
87-68-3	Hexachlorobutadiene	ND	0.69	ND	0.065	

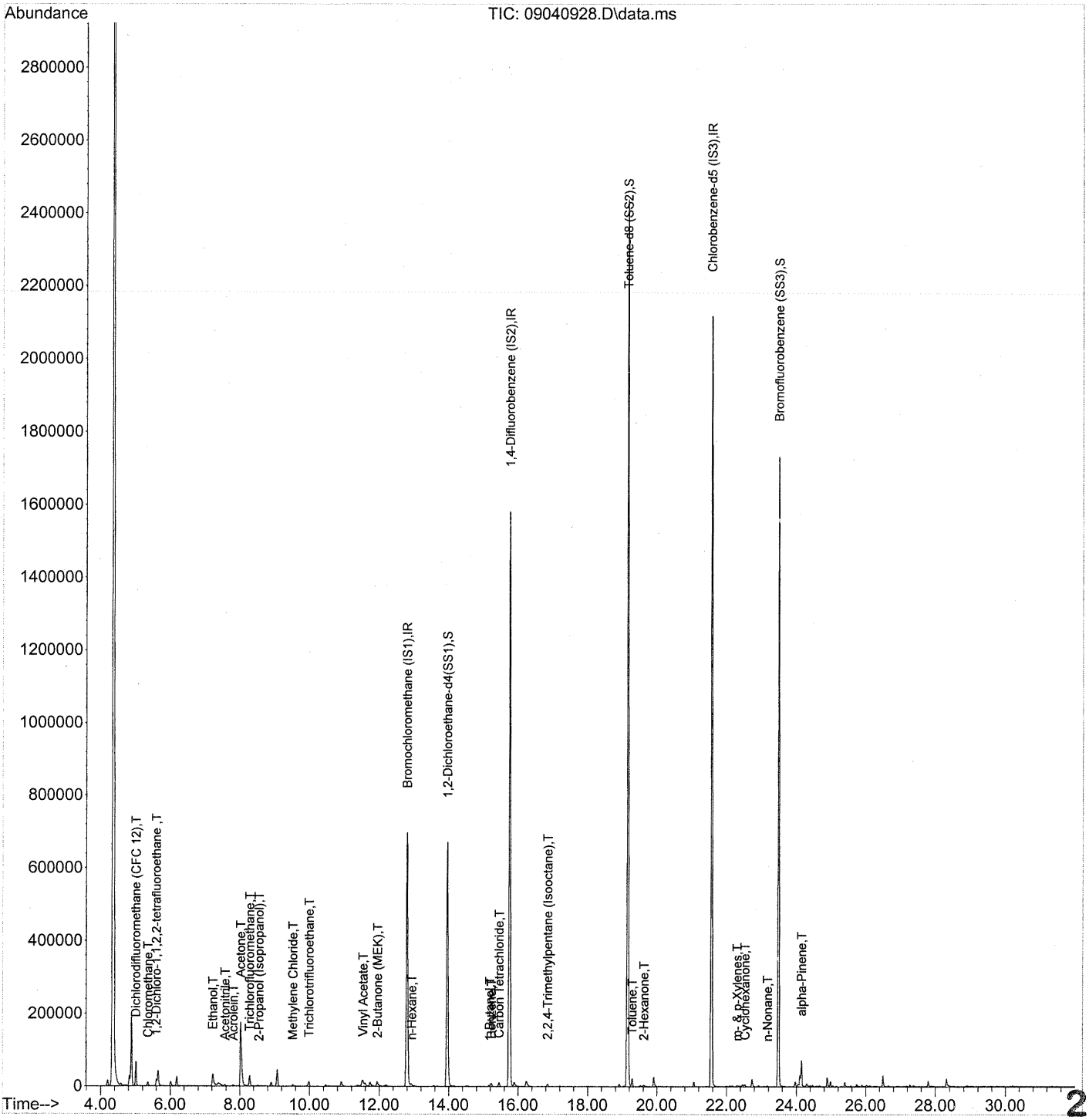
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 10:37:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
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QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

JDA 9/15/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	361024	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1846510	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	916260	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	666627	26.114	ng		-0.03
Spiked Amount 25.000			Recovery =	104.44%			
57) Toluene-d8 (SS2)	19.14	98	2150558	24.689	ng		-0.02
Spiked Amount 25.000			Recovery =	98.76%			
73) Bromofluorobenzene (SS3)	23.49	174	603388	24.460	ng		0.00
Spiked Amount 25.000			Recovery =	97.84%			
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D. d			
3) Dichlorodifluoromethan...	5.01	85	73170	1.619 ng			99
4) Chloromethane	5.35	50	11749	0.279 ng			95
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1279	0.054 ng	#		57
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	6.59	94	103	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	93768m	4.720 ng			
11) Acetonitrile	7.57	41	5697	0.118 ng			92
12) Acrolein	7.81	56	4584	0.354 ng			98
13) Acetone	8.02	58	92097m	4.556 ng			
14) Trichlorofluoromethane	8.28	101	31775	0.822 ng			99
15) 2-Propanol (Isopropanol)	8.55	45	3395	0.061 ng			70
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.53	59	785	N.D.			
19) Methylene Chloride	9.52	84	2972	0.118 ng			89
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.			
21) Trichlorotrifluoroethane	9.98	151	6540	0.378 ng			92
22) Carbon Disulfide	9.93	76	2582	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	11.53	86	4623	1.056 ng	#		95
27) 2-Butanone (MEK)	11.95	72	7951	0.564 ng	#		48
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	12.93	57	2910	0.065 ng	#		60

Quantitation Report (QT Reviewed)

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ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 10:37:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.00	83	1581	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	123	N.D.		
38) 1,1,1-Trichloroethane	14.53	97	536	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.18	56	6097	0.255 ng		89
41) Benzene	15.23	78	10899	0.110 ng		93
42) Carbon Tetrachloride	15.45	117	9645	0.347 ng		100
43) Cyclohexane	15.74	84	712	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	7611	0.067 ng		93
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.20	71	482	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	19.28	91	21265	0.201 ng		98
59) 2-Hexanone	19.62	43	8290	0.151 ng		76
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.43	43	2096	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	20.75	166	510	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.10	91	3527	N.D.		
67) m- & p-Xylenes	22.31	91	6194	0.069 ng		94
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.79	104	885	N.D.		
70) o-Xylene	22.92	91	2747	N.D.		
71) n-Nonane	23.17	43	4011	0.073 ng	#	52
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.67	105	613	N.D.		
75) alpha-Pinene	24.15	93	31585	0.543 ng		83
76) n-Propylbenzene	24.28	91	1043	N.D.		
77) 3-Ethyltoluene	24.40	105	2425	N.D.		
78) 4-Ethyltoluene	24.45	105	1417	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	413	N.D.		

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ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 10:37:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.	
81) 2-Ethyltoluene	24.79	105	865	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	2477	N.D.	
83) n-Decane	25.15	57	1092	N.D.	
84) Benzyl Chloride	24.99	91	1869	N.D.	
85) 1,3-Dichlorobenzene	25.34	146	106	N.D.	
86) 1,4-Dichlorobenzene	25.34	146	106	N.D.	
87) sec-Butylbenzene	25.57	105	522	N.D.	
88) 4-Isopropyltoluene (p-...	25.56	119	1439	N.D.	
89) 1,2,3-Trimethylbenzene	25.57	105	522	N.D.	
90) 1,2-Dichlorobenzene	25.34	146	106	N.D.	
91) d-Limonene	25.74	68	1925	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	1317	N.D.	
94) 1,2,4-Trichlorobenzene	27.80	180	539	N.D.	
95) Naphthalene	27.94	128	2215	N.D.	
96) n-Dodecane	27.89	57	666	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.53	55	3141	0.094 ng	# 78
99) tert-Butylbenzene	0.00	119	0	N.D.	
100) n-Butylbenzene	26.12	91	1547	N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
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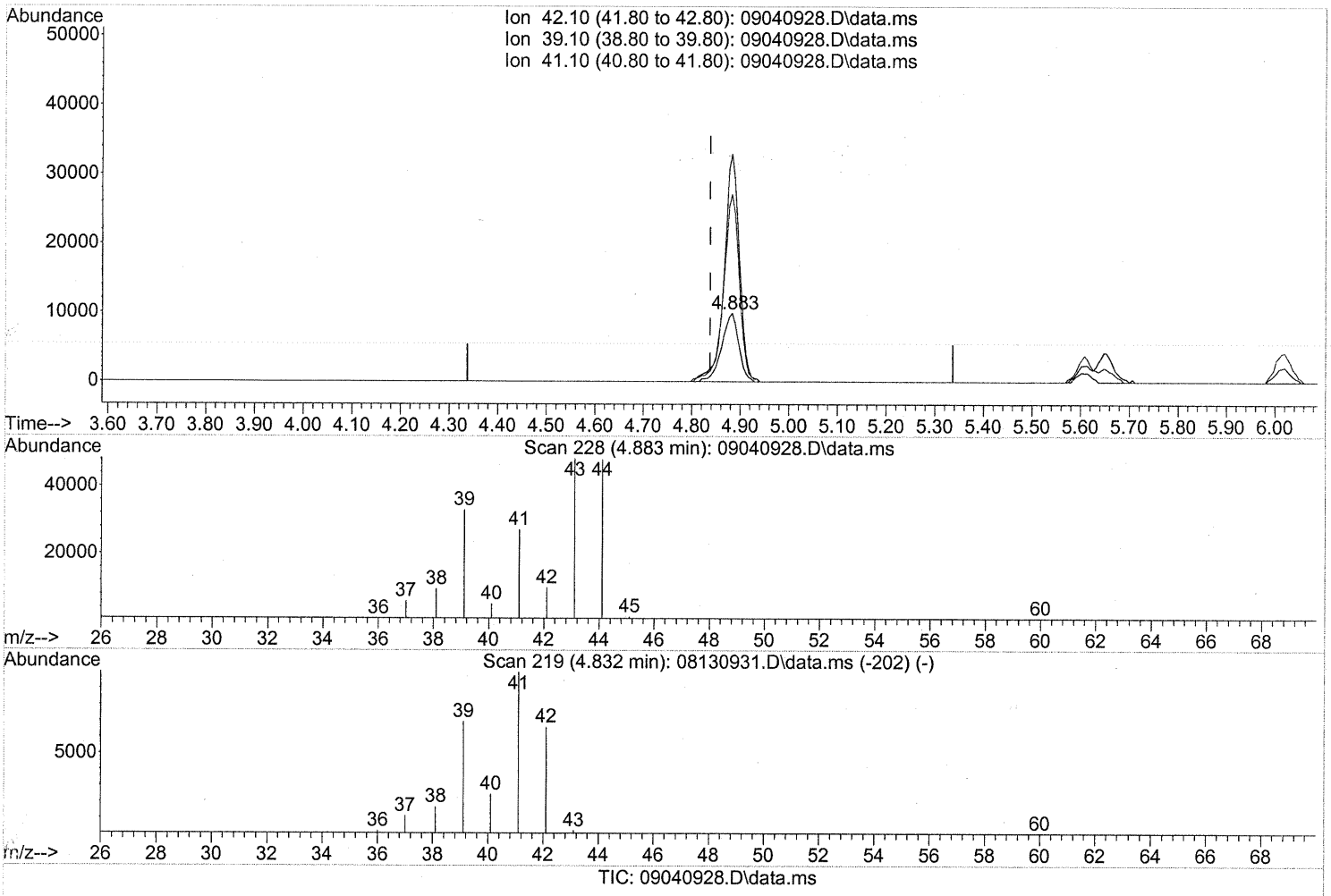
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(2) Propene (T)

4.883min (+0.046) 0.76ng

response 24035

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	300.10#
41.10	152.70	255.83#
0.00	0.00	0.00

FP

9/15/09

9/16/09

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Quantitation Report (Qedit)

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Operator : EM
Sample : P0903080-005 (1000ml)
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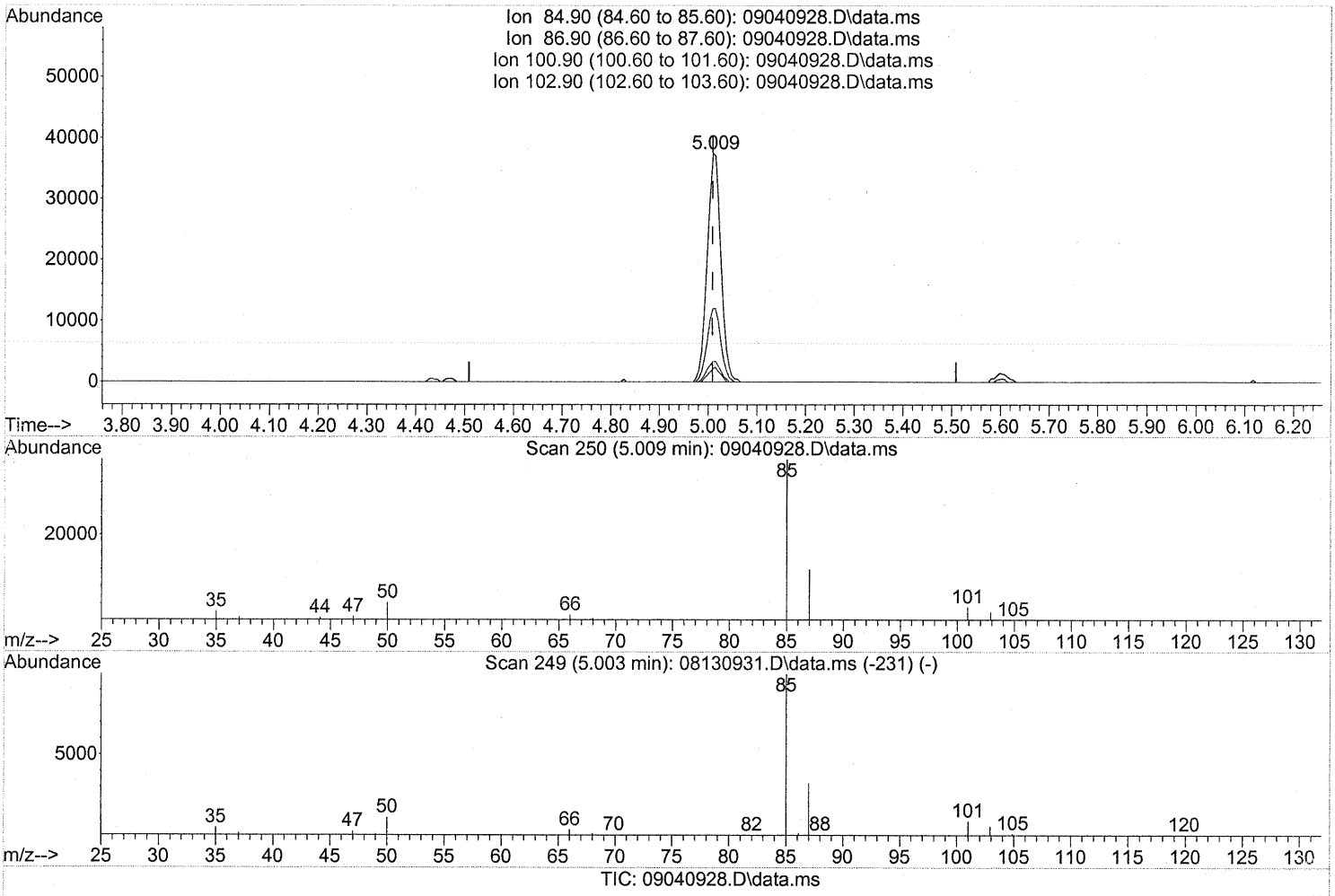

TIC: 09040928.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.009min (0.000) 1.62ng

response 73170

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.31
100.90	9.10	8.57
102.90	5.50	5.28

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Quantitation Report (Qedit)

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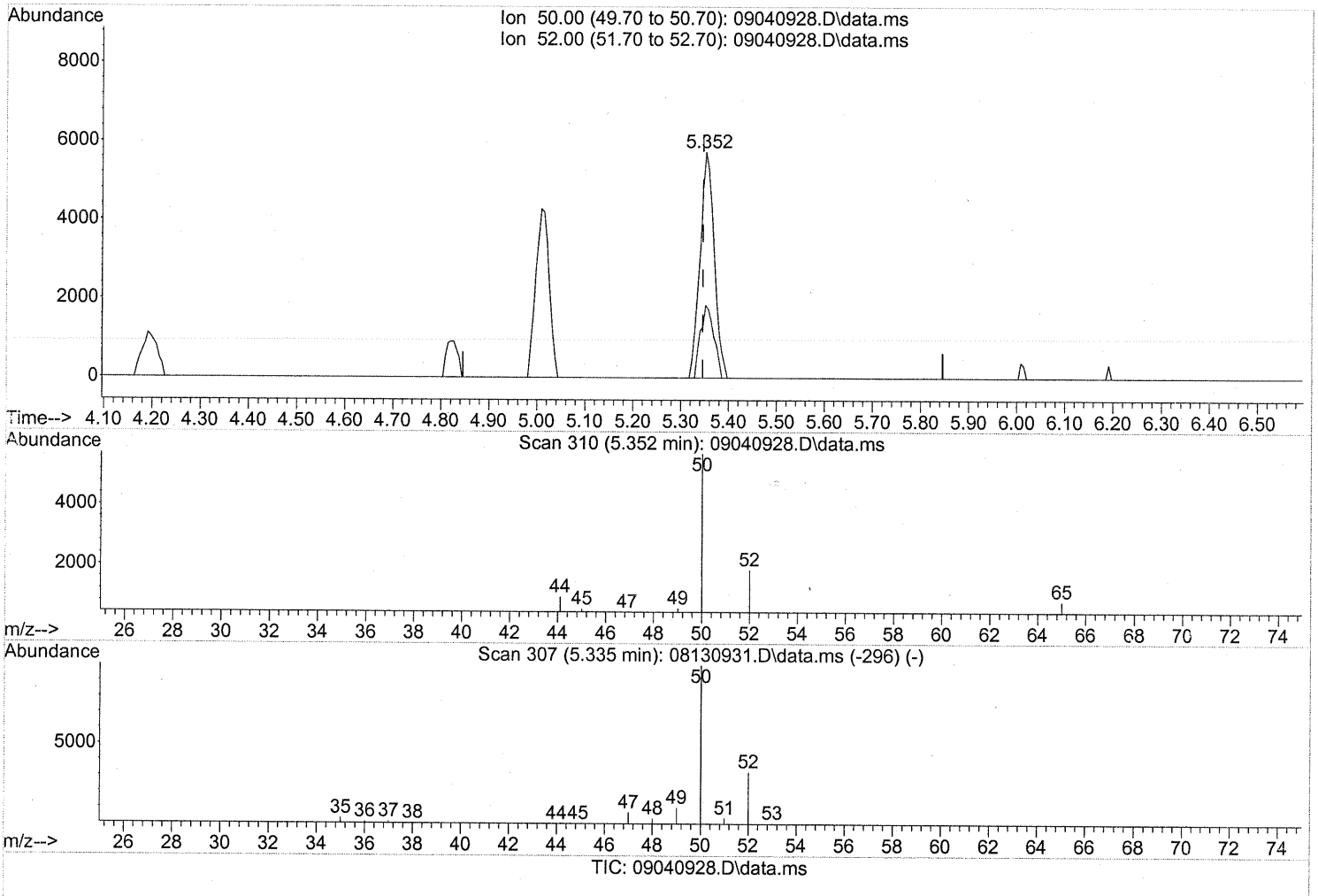

(4) Chloromethane (T)

5.352min (+0.006) 0.28ng

response 11749

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.31
0.00	0.00	0.00
0.00	0.00	0.00

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Quantitation Report (Qedit)

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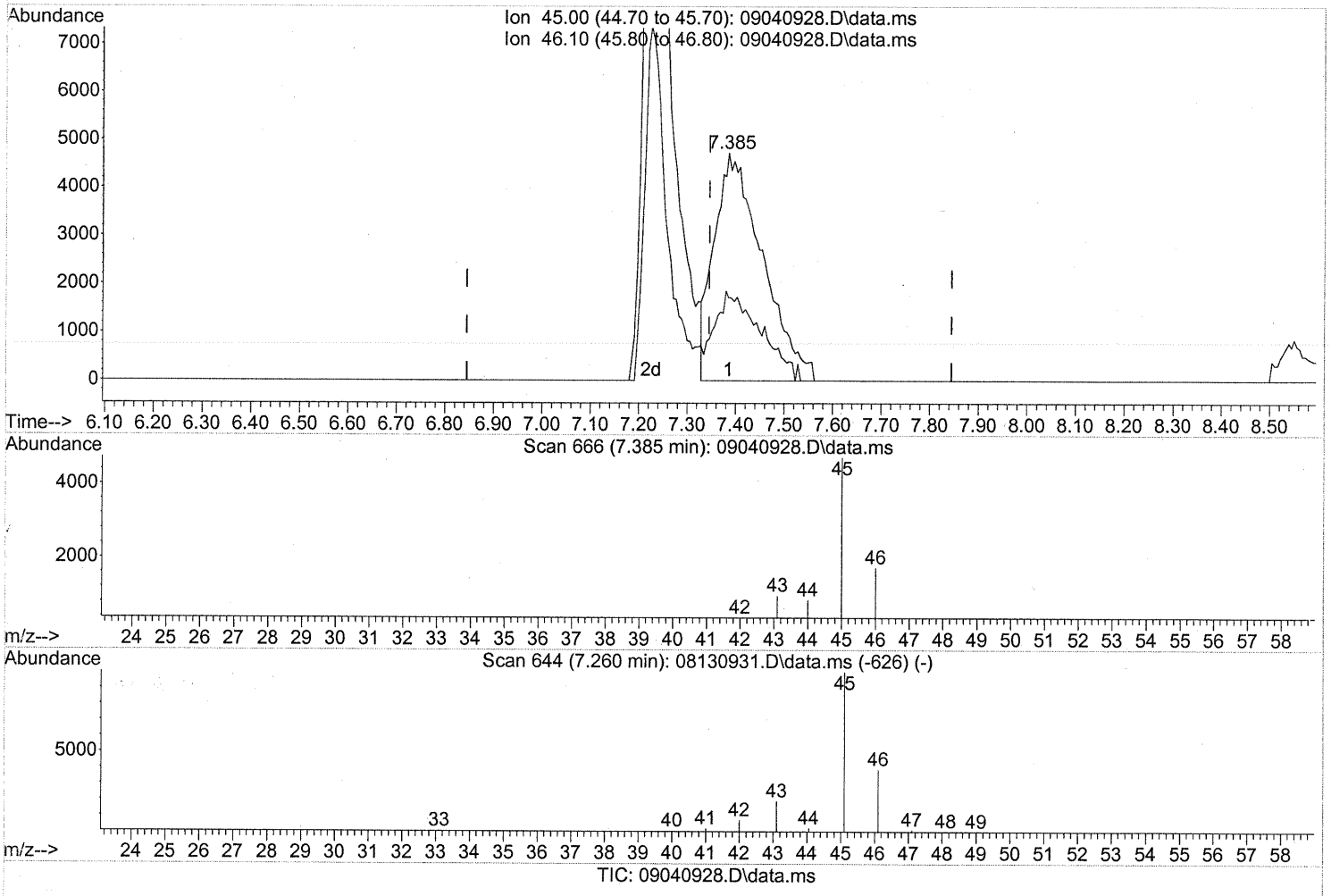

TIC: 09040928.D\data.ms

(10) Ethanol (T)

7.385min (+0.040) 1.64ng

response 32578

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.91
0.00	0.00	0.00
0.00	0.00	0.00

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Quantitation Report (Qedit)

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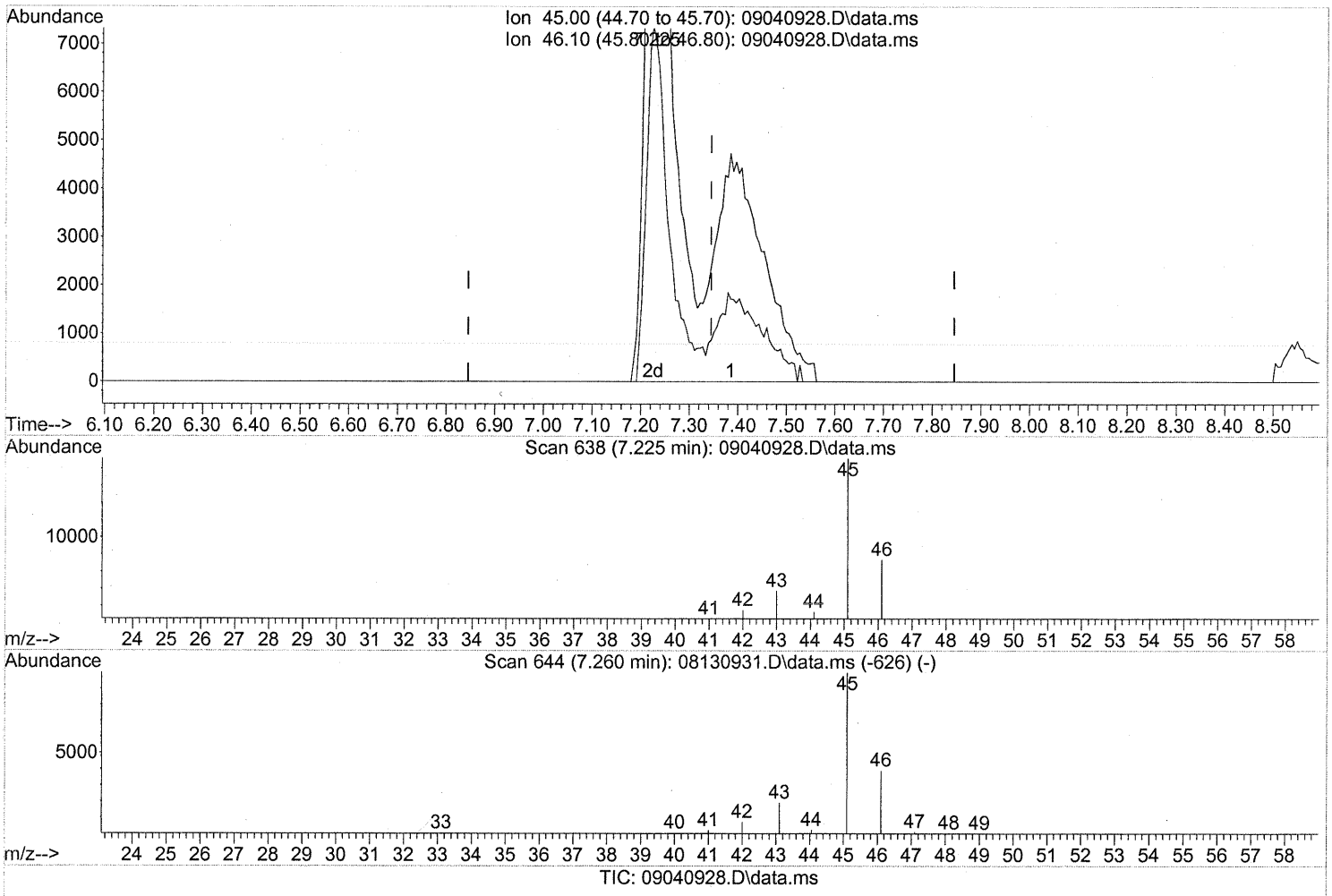

(10) Ethanol (T)

7.225min (-0.120) 4.72ng m

response 93768

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	12.82#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

9/15/09

9/16/09

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Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
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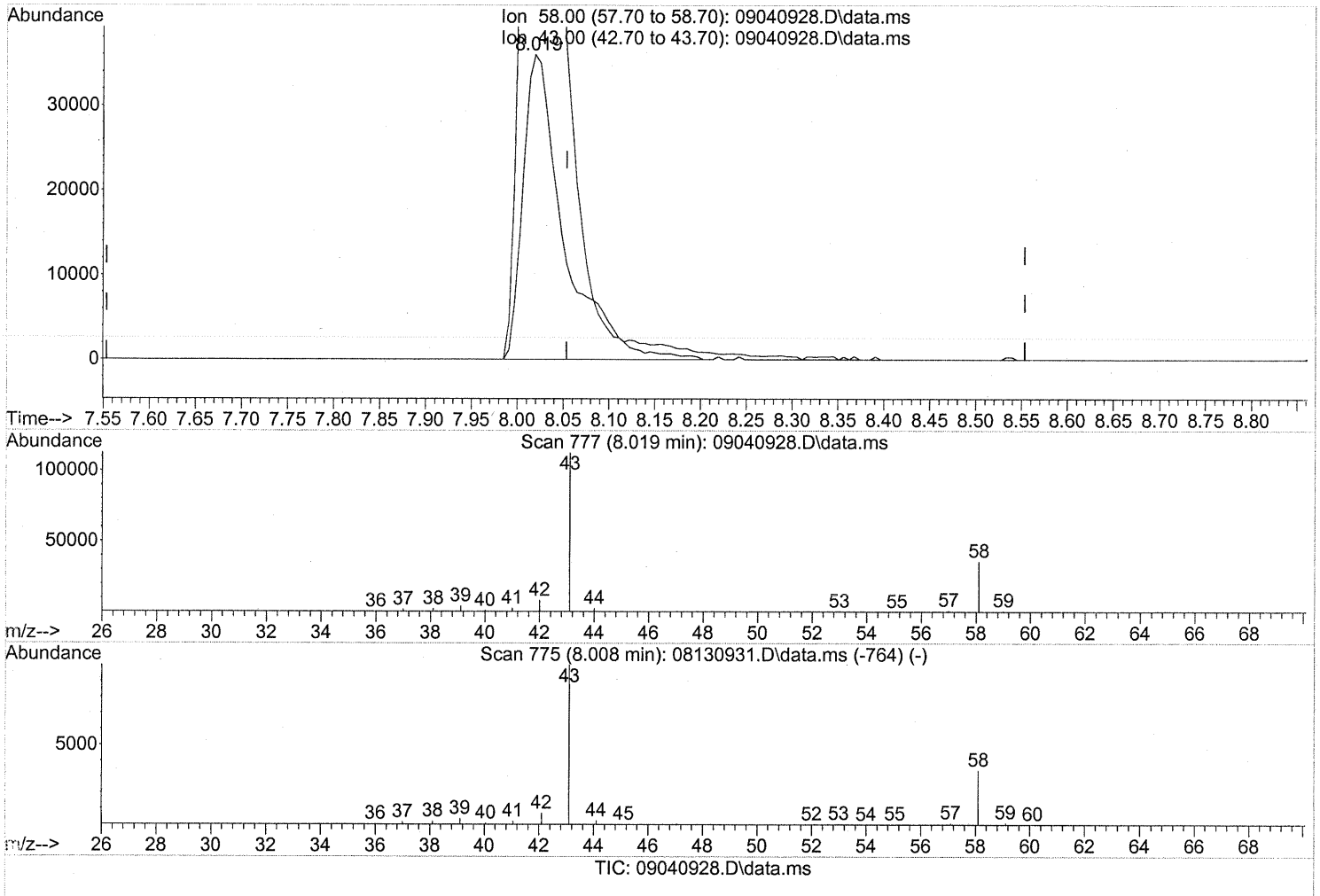

(13) Acetone (T)

8.019min (-0.034) 5.52ng

response 111618

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	285.92#
0.00	0.00	0.00
0.00	0.00	0.00

SH

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Quantitation Report (Qedit)

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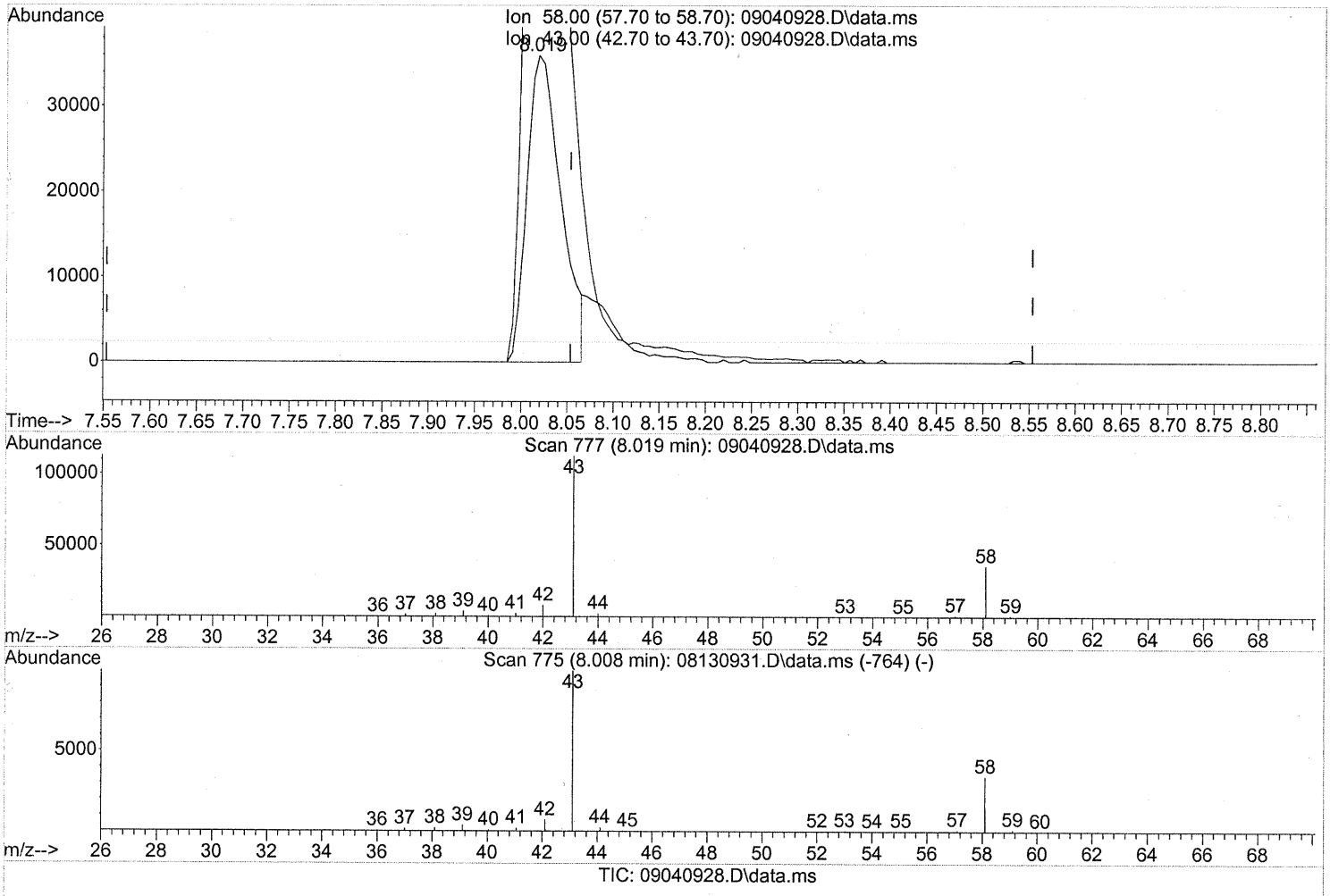

(13) Acetone (T)

8.019min (-0.034) 4.56ng m

response 92097

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	346.52
0.00	0.00	0.00
0.00	0.00	0.00

SM-7 IC

DM 9/15/09

9/16/09

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Quantitation Report (Qedit)

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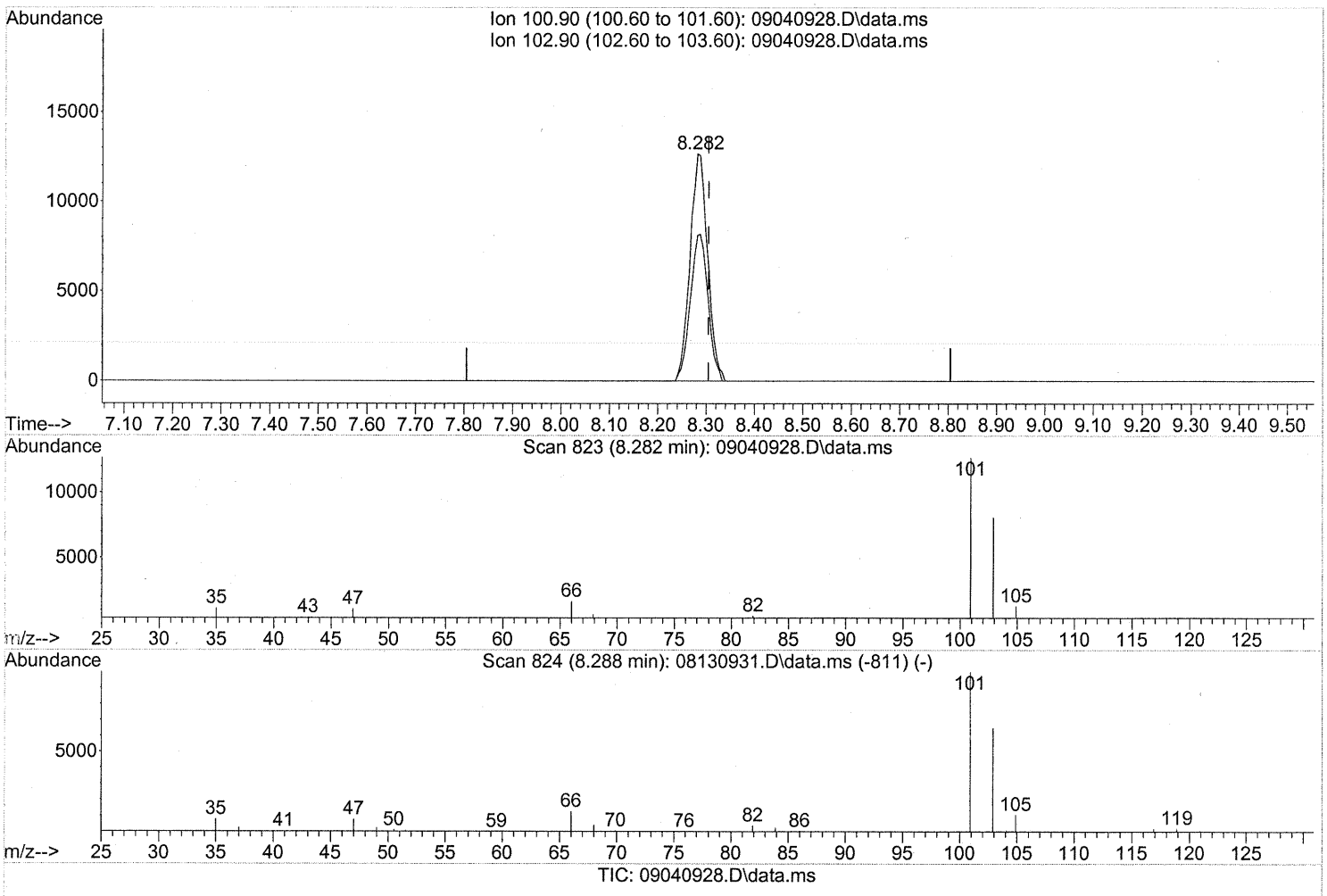
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040928.D\data.ms

(14) Trichlorofluoromethane (T)

8.282min (-0.023) 0.82ng

response 31775

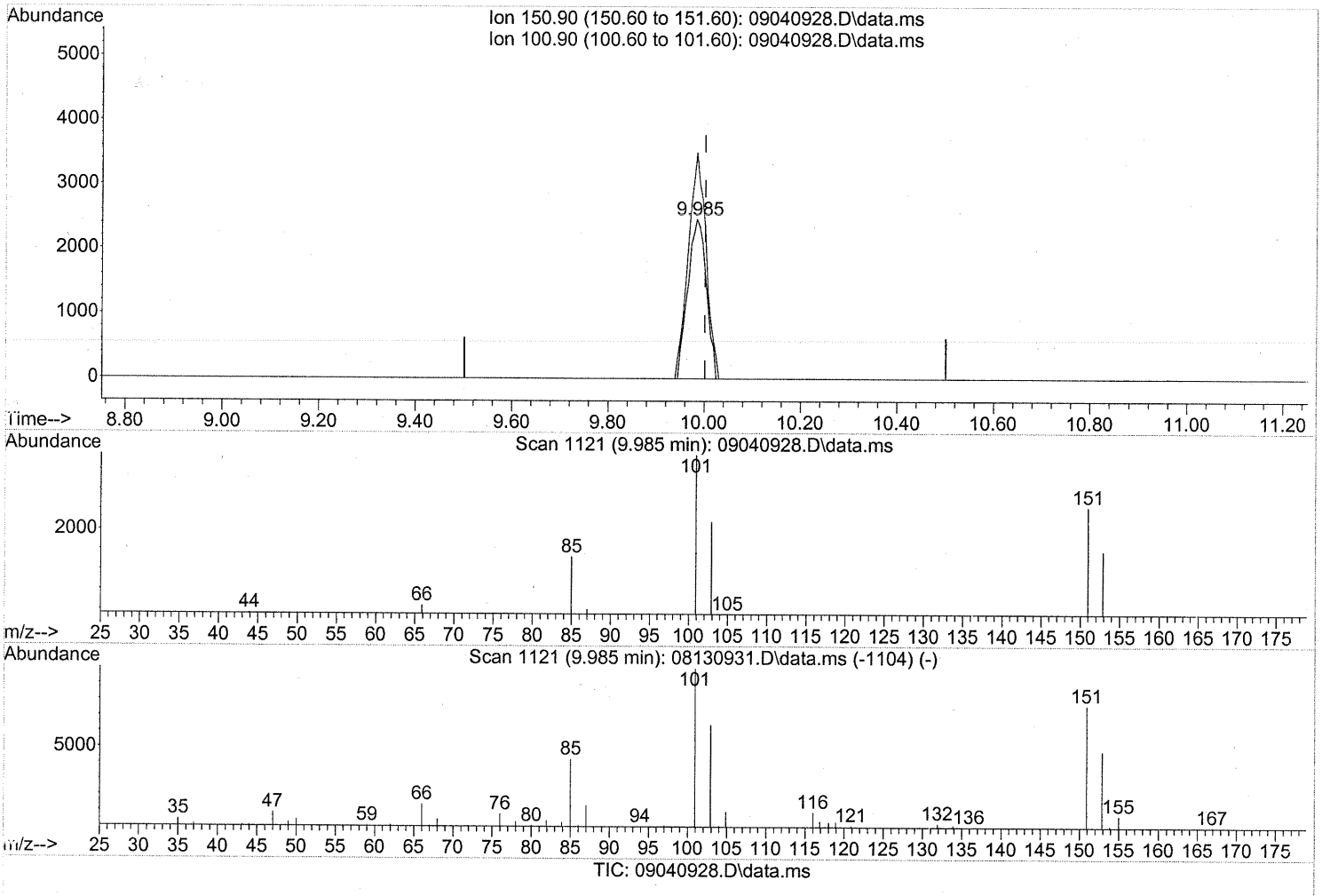
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.84
0.00	0.00	0.00
0.00	0.00	0.00

277

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.38ng

response 6540

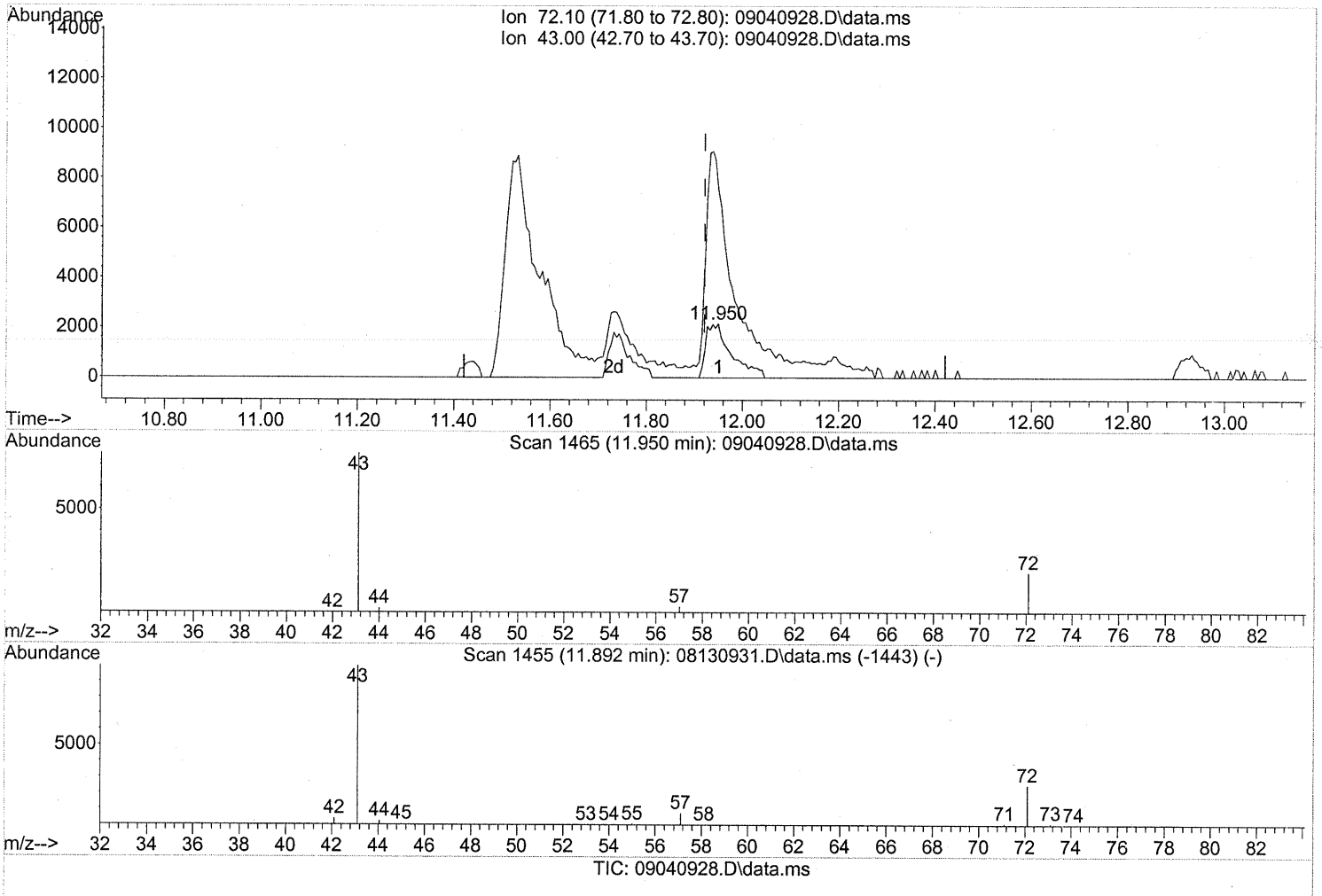
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	137.00
0.00	0.00	0.00
0.00	0.00	0.00

278

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040928.D\data.ms

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

11.950min (+0.029) 0.56ng

response 7951

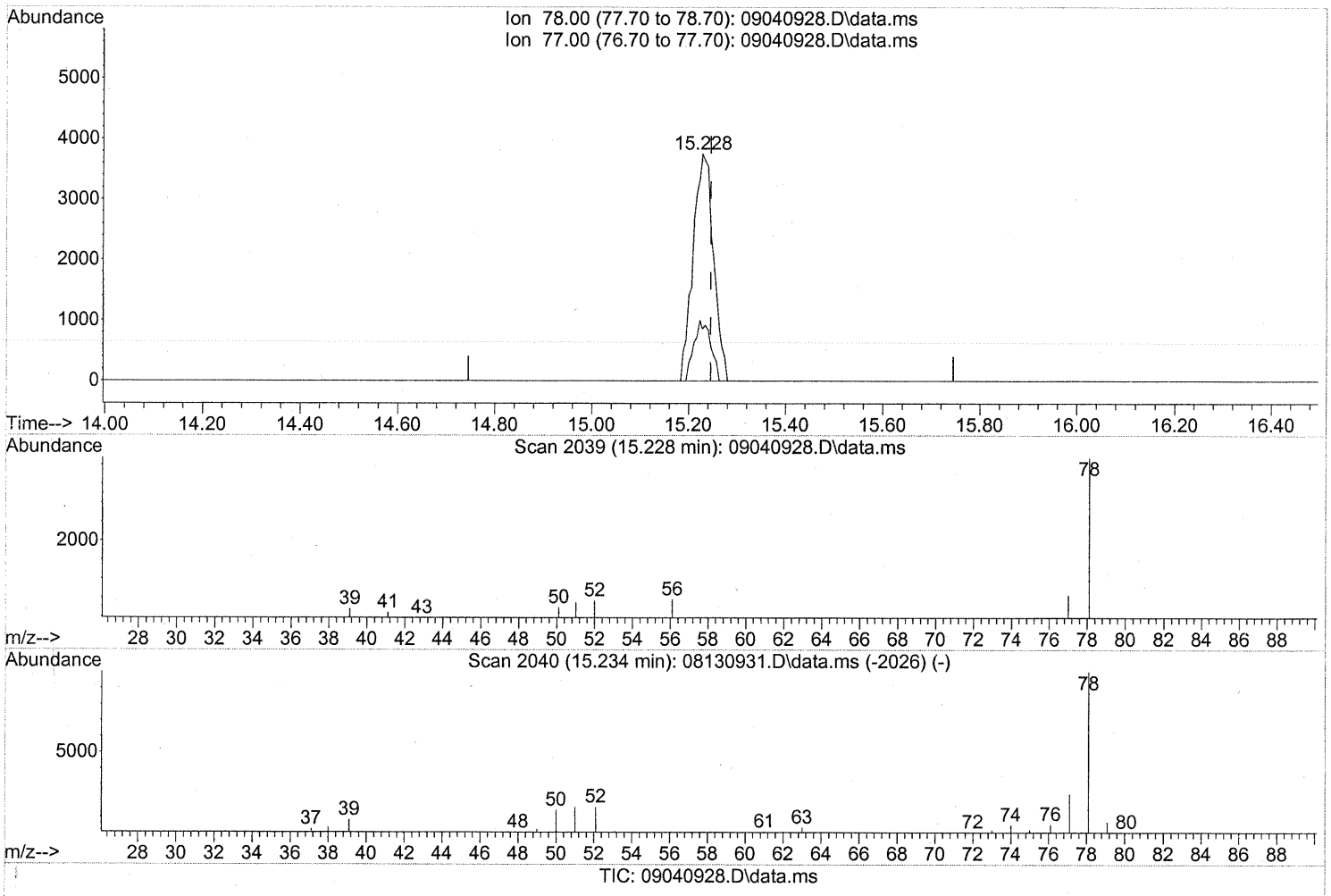
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	483.32#
0.00	0.00	0.00
0.00	0.00	0.00

279

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(41) Benzene (T)

15.228min (-0.017) 0.11ng

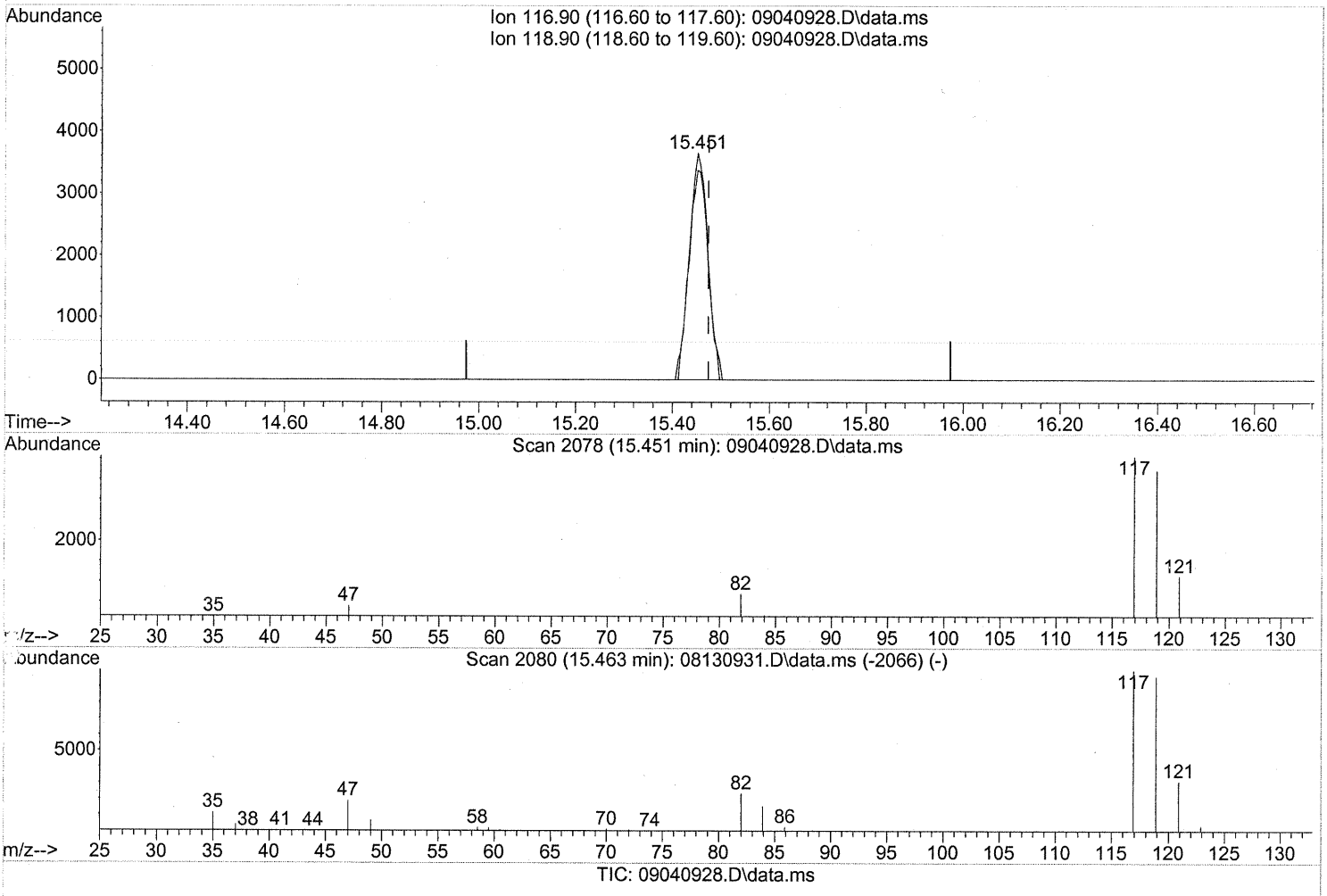
response 10899

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	21.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(42) Carbon Tetrachloride (T)

15.451min (-0.023) 0.35ng

response 9645

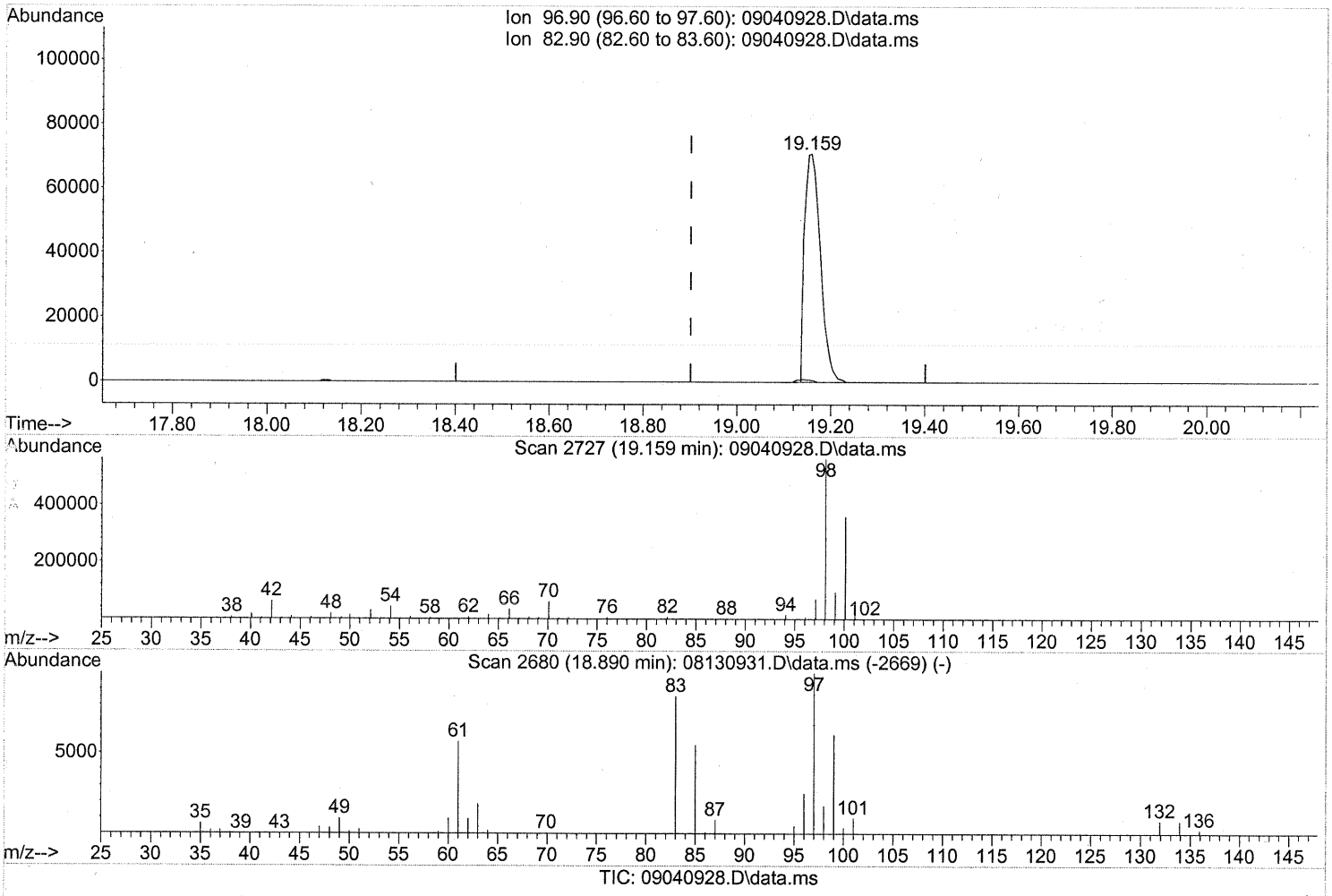
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	97.12
0.00	0.00	0.00
0.00	0.00	0.00

281

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040928.D\data.ms

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

19.159min (+0.257) 7.81ng

response 165705

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.03#
0.00	0.00	0.00
0.00	0.00	0.00

FP

DA 9/15/09

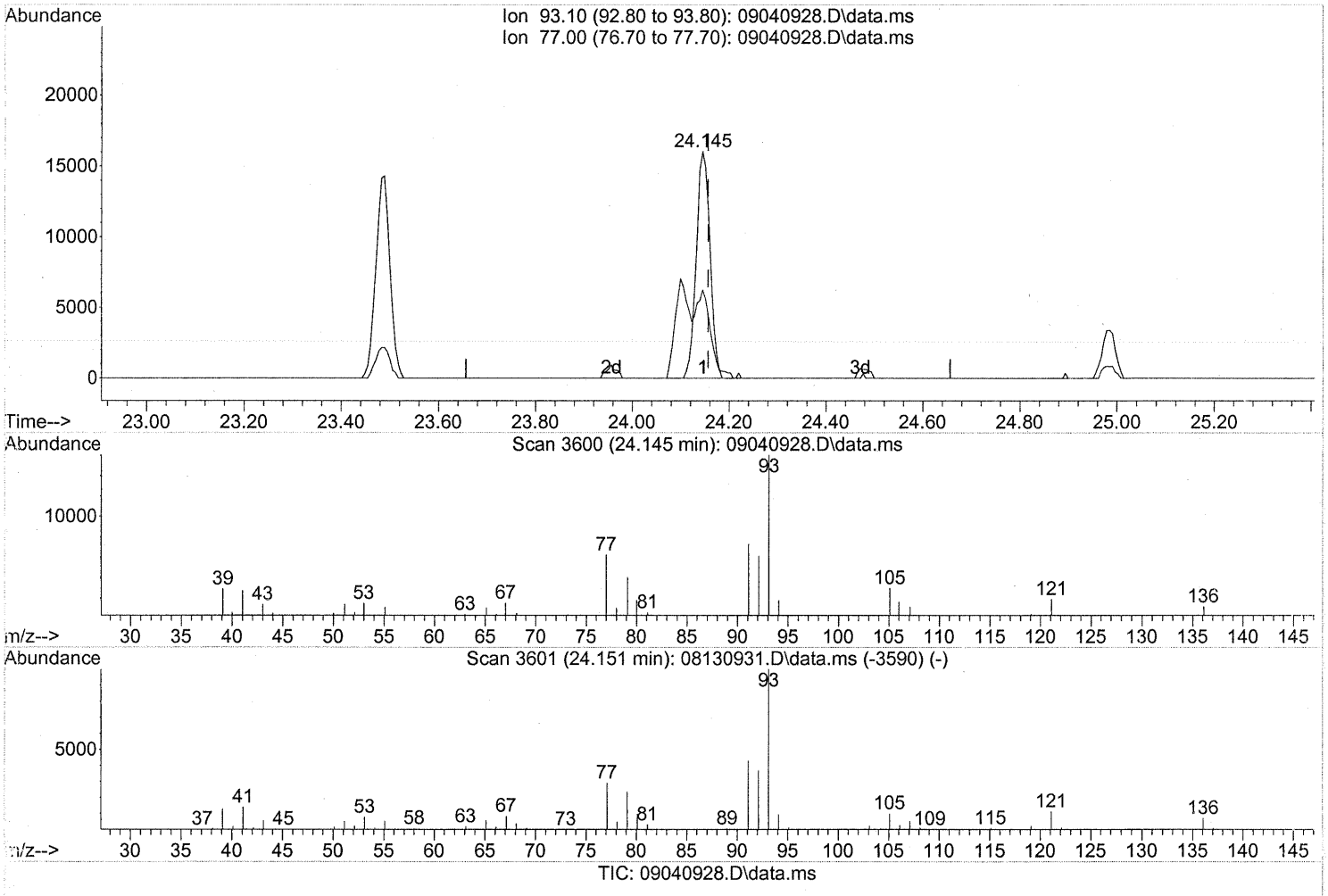
9/16/09

282

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040928.D
Acq On : 5 Sep 2009 3:10
Operator : EM
Sample : P0903080-005 (1000ml)
Misc : Environmental H&E 104838
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 07:37:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040928.D\data.ms

(75) alpha-Pinene (T)

24.145min (-0.011) 0.54ng

response 31585

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	38.45
0.00	0.00	0.00
0.00	0.00	0.00

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903080
CAS Sample ID: P090904-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/4/09
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: Re Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090904-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

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	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: Rc Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903080
CAS Sample ID: P090904-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/4/09
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	

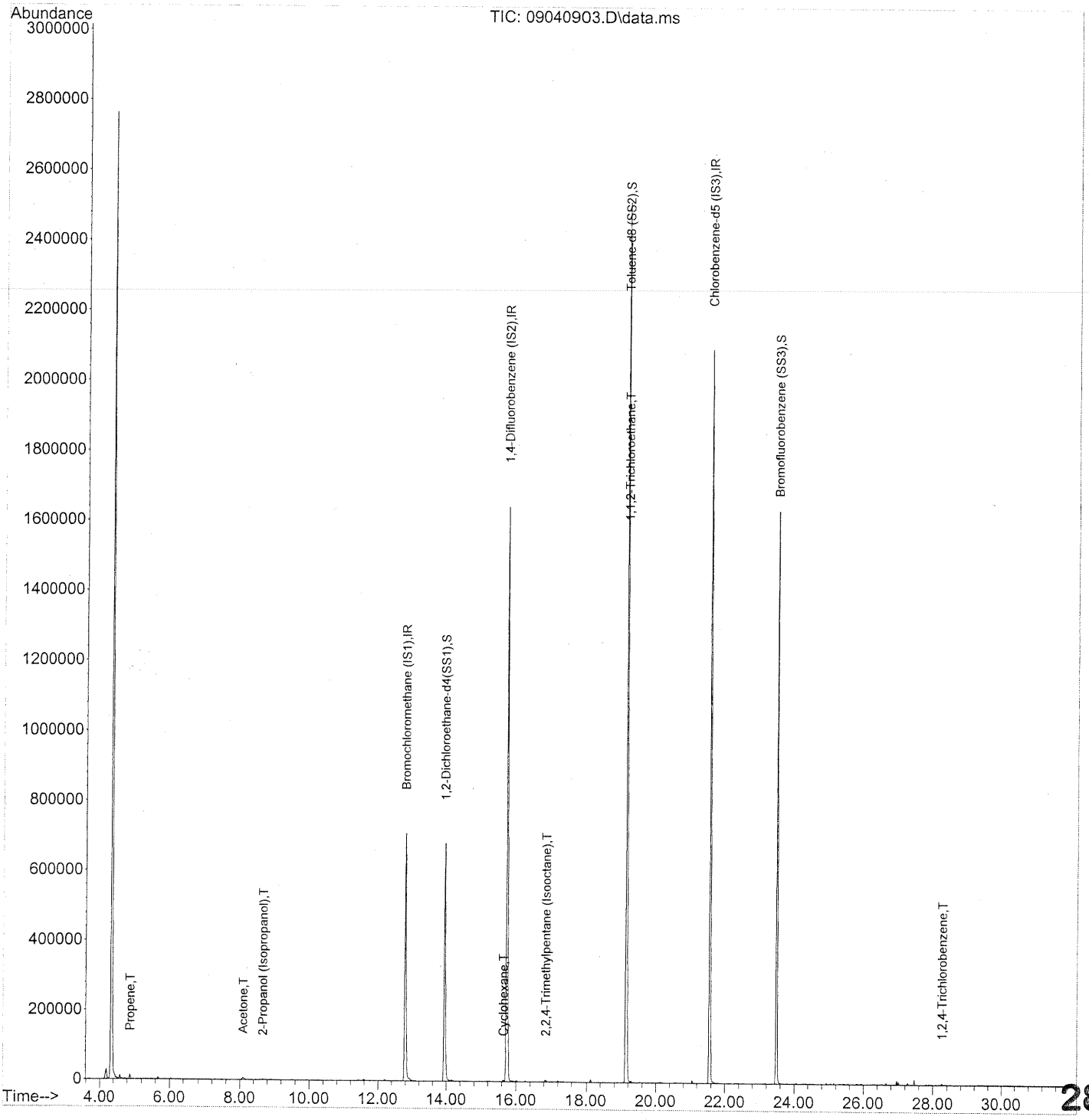
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
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Operator : EM
Sample : TO-15 Method Blank (1000ml)
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Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	362074	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1887946	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	898664	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	684867	26.751	ng		-0.04
Spiked Amount 25.000			Recovery =	107.00%			
57) Toluene-d8 (SS2)	19.14	98	2167379	25.369	ng		-0.02
Spiked Amount 25.000			Recovery =	101.48%			
73) Bromofluorobenzene (SS3)	23.49	174	560695	23.174	ng		0.00
Spiked Amount 25.000			Recovery =	92.68%			
Target Compounds							Qvalue
2) Propene	4.88	42	4763	0.150	ng		94
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	7.35	45	224	N.D.			
11) Acetonitrile	0.00	41	0	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.10	58	4684	0.231	ng	#	83
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.67	45	8777	0.158	ng		62
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	9.53	84	363	N.D.			
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.94	76	2244	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	12.93	57	1998	N.D.			

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
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ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	0.00	56	0	N.D.		
41) Benzene	15.24	78	3659	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	2030	0.052 ng	#	63
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	6399	0.055 ng		87
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.20	71	809	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	177747	~~8.194 ng~~ FP	#	8
58) Toluene	19.29	91	3934	N.D.		
59) 2-Hexanone	19.59	43	109	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.56	43	1346	N.D.		
63) n-Octane	20.55	57	104	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.11	91	622	N.D.		
67) m- & p-Xylenes	22.32	91	2308	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.93	91	2157	N.D.		
71) n-Nonane	23.17	43	1340	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.65	105	452	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.27	91	1983	N.D.		
77) 3-Ethyltoluene	24.41	105	1496	N.D.		
78) 4-Ethyltoluene	24.47	105	821	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	1561	N.D.		

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.	
81) 2-Ethyltoluene	24.80	105	673	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	2043	N.D.	
83) n-Decane	25.15	57	1550	N.D.	
84) Benzyl Chloride	0.00	91	0	N.D.	
85) 1,3-Dichlorobenzene	25.35	146	1444	N.D.	
86) 1,4-Dichlorobenzene	25.35	146	1444	N.D.	
87) sec-Butylbenzene	25.58	105	691	N.D.	
88) 4-Isopropyltoluene (p-...	25.57	119	350	N.D.	
89) 1,2,3-Trimethylbenzene	25.58	105	691	N.D.	
90) 1,2-Dichlorobenzene	25.35	146	1444	N.D.	
91) d-Limonene	25.74	68	110	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	1663	N.D.	
94) 1,2,4-Trichlorobenzene	28.26	180	1870	0.054 ng	# 92
95) Naphthalene	27.95	128	2328	N.D.	
96) n-Dodecane	27.89	57	901	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	0.00	55	0	N.D.	
99) tert-Butylbenzene	0.00	119	0	N.D.	
100) n-Butylbenzene	0.00	91	0	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: P0903080
CAS Sample ID: P090908-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/8/09
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: Ro Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090908-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/8/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

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	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: Rc Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903080
CAS Sample ID: P090908-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/8/09
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	

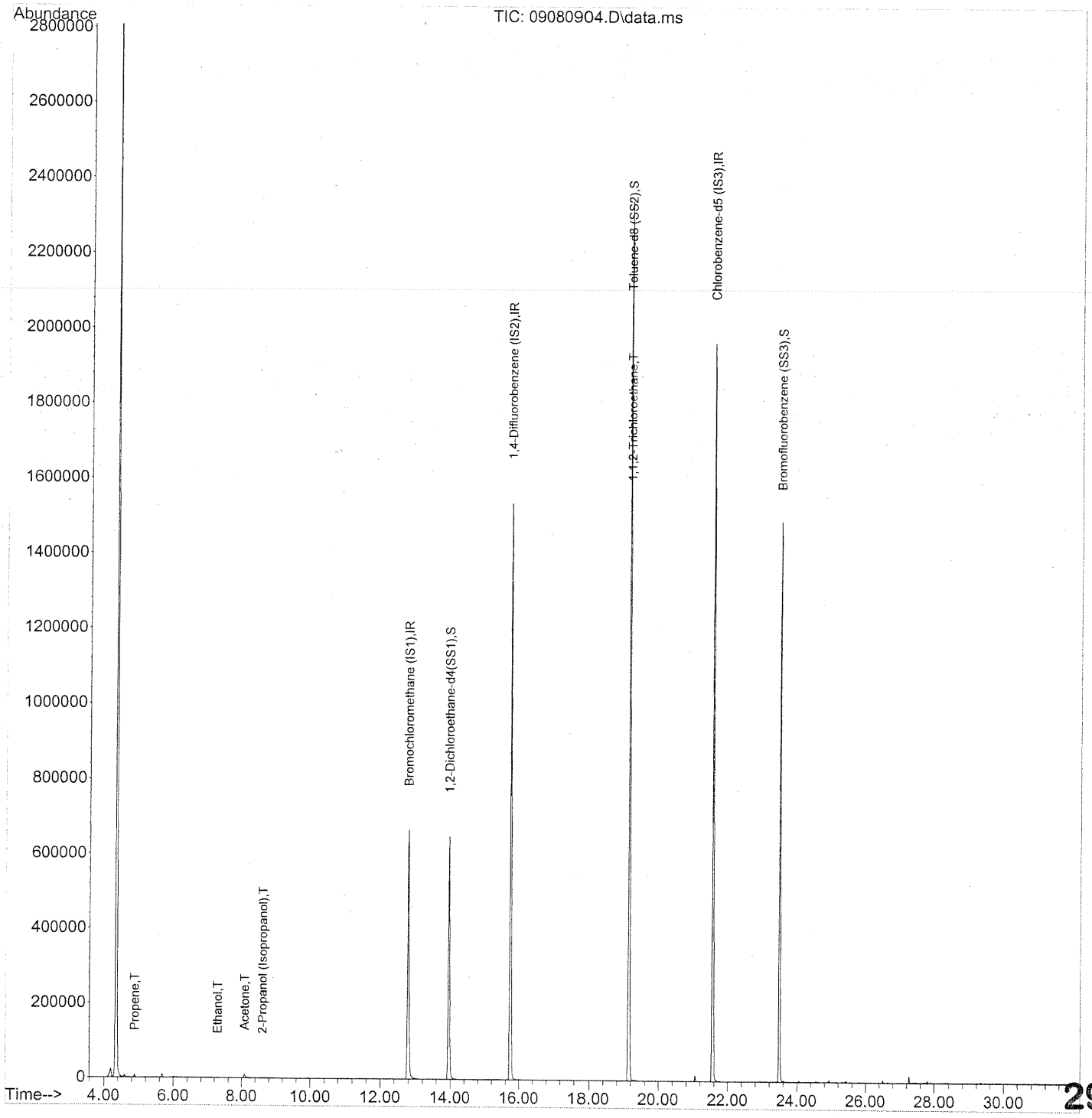
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080904.D
Acq On : 8 Sep 2009 9:53
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:37 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080904.D
Acq On : 8 Sep 2009 9:53
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:37 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	344379	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1773373	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	841610	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	646253	26.540	ng		-0.03
Spiked Amount 25.000			Recovery = 106.16%				
57) Toluene-d8 (SS2)	19.14	98	2049332	25.614	ng		-0.02
Spiked Amount 25.000			Recovery = 102.44%				
73) Bromofluorobenzene (SS3)	23.49	174	518098	22.865	ng		0.00
Spiked Amount 25.000			Recovery = 91.48%				
Target Compounds							Qvalue
2) Propene	4.88	42	2693	0.089	ng		92
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	7.29	45	1899	0.100	ng	#	36
11) Acetonitrile	7.63	41	129	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.09	58	7424	0.385	ng	#	85
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.61	45	5192	0.098	ng	#	56
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	9.53	84	326	N.D.			
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.94	76	2455	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.			

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080904.D
Acq On : 8 Sep 2009 9:53
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:37 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Chloroform	0.00	83	0	N.D.	
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.	
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	0.00	62	0	N.D.	
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
39) Isopropyl Acetate	0.00	61	0	N.D.	
40) 1-Butanol	0.00	56	0	N.D.	
41) Benzene	15.23	78	2310	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.74	84	578	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	0.00	130	0	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	16.86	57	120	N.D.	
50) Methyl Methacrylate	0.00	100	0	N.D.	
51) n-Heptane	0.00	71	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	19.16	97	168557	~~8.273~~ ng	# 7
58) Toluene	19.30	91	1049	N.D.	
59) 2-Hexanone	0.00	43	0	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	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	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	0.00	43	0	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.66	105	3121	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.26	91	1082	N.D.	
77) 3-Ethyltoluene	24.41	105	3898	N.D.	
78) 4-Ethyltoluene	24.52	105	628	N.D.	
79) 1,3,5-Trimethylbenzene	24.55	105	2448	N.D.	

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Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080904.D
Acq On : 8 Sep 2009 9:53
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:37 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.	
81) 2-Ethyltoluene	24.79	105	781	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	1453	N.D.	
83) n-Decane	25.16	57	534	N.D.	
84) Benzyl Chloride	25.57	91	104	N.D.	
85) 1,3-Dichlorobenzene	25.33	146	709	N.D.	
86) 1,4-Dichlorobenzene	25.33	146	709	N.D.	
87) sec-Butylbenzene	25.58	105	895	N.D.	
88) 4-Isopropyltoluene (p-...	25.56	119	778	N.D.	
89) 1,2,3-Trimethylbenzene	25.58	105	895	N.D.	
90) 1,2-Dichlorobenzene	25.33	146	709	N.D.	
91) d-Limonene	0.00	68	0	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	926	N.D.	
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.95	128	1881	N.D.	
96) n-Dodecane	27.89	57	1246	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.56	55	138	N.D.	
99) tert-Butylbenzene	25.07	119	112	N.D.	
100) n-Butylbenzene	0.00	91	0	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: P0903080
CAS Sample ID: P090909-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/9/09
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: Re Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903080
CAS Sample ID: P090909-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/9/09
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	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: Re Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903080
Client Sample ID: **Method Blank** CAS Sample ID: P090909-MB
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/9/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

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	

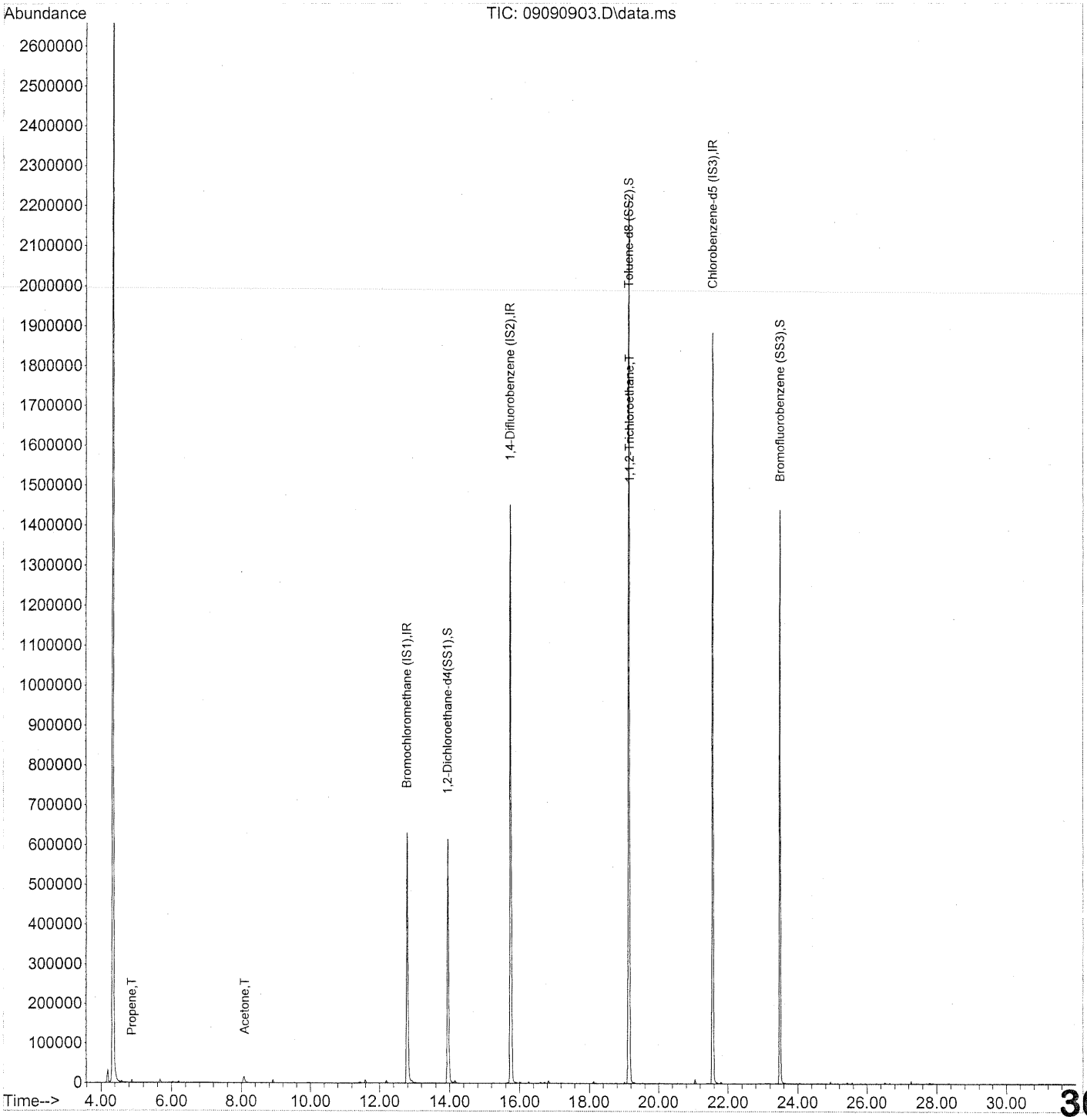
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090903.D
Acq On : 9 Sep 2009 9:20
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 11:26:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090903.D
Acq On : 9 Sep 2009 9:20
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	323653	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1677223	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	801034	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	615900	26.913	ng		-0.03
Spiked Amount 25.000			Recovery =	107.64%			
57) Toluene-d8 (SS2)	19.14	98	1940282	25.479	ng		-0.02
Spiked Amount 25.000			Recovery =	101.92%			
73) Bromofluorobenzene (SS3)	23.49	174	494223	22.917	ng		0.00
Spiked Amount 25.000			Recovery =	91.68%			
Target Compounds							Qvalue
2) Propene	4.88	42	2786	0.098	ng		92
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	7.34	45	109	N.D.			
11) Acetonitrile	7.64	41	917	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.09	58	6562	0.362	ng	#	55
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.68	45	355	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	9.53	84	345	N.D.			
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.94	76	2211	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	12.93	57	1429	N.D.			

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EM 9/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090903.D
Acq On : 9 Sep 2009 9:20
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 11:26:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Chloroform	0.00	83	0	N.D.	
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.	
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	0.00	62	0	N.D.	
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
39) Isopropyl Acetate	0.00	61	0	N.D.	
40) 1-Butanol	0.00	56	0	N.D.	
41) Benzene	15.23	78	2025	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.66	84	1053	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	0.00	130	0	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	16.85	57	3003	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. FP	
55) 1,1,2-Trichloroethane	19.16	97	158816	~~8.241 ng~~	# 8
58) Toluene	19.30	91	995	N.D.	
59) 2-Hexanone	19.54	43	728	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	20.56	43	416	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	22.11	91	238	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	23.18	43	232	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.67	105	1724	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.26	91	1045	N.D.	
77) 3-Ethyltoluene	24.41	105	2207	N.D.	
78) 4-Ethyltoluene	24.47	105	750	N.D.	
79) 1,3,5-Trimethylbenzene	24.55	105	2730	N.D.	

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090903.D
Acq On : 9 Sep 2009 9:20
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 11:26:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.79	105	912	N.D.		
82) 1,2,4-Trimethylbenzene	25.07	105	1244	N.D.		
83) n-Decane	25.15	57	392	N.D.		
84) Benzyl Chloride	25.57	91	103	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	702	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	702	N.D.		
87) sec-Butylbenzene	25.59	105	1362	N.D.		
88) 4-Isopropyltoluene (p-...	25.57	119	715	N.D.		
89) 1,2,3-Trimethylbenzene	25.59	105	1362	N.D.		
90) 1,2-Dichlorobenzene	25.33	146	702	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.66	57	827	N.D.		
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.96	128	1817	N.D.		
96) n-Dodecane	27.89	57	1288	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.57	55	109	N.D.		
99) tert-Butylbenzene	24.97	119	116	N.D.		
100) n-Butylbenzene	0.00	91	0	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: P0903080

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 9/1/09
Analyst: Elsa Moctezuma Date(s) Received: 9/2/09
Sampling Media: 6.0 L Summa Canister(s) Date(s) Analyzed: 9/4 - 9/9/09
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 % Recovered	1,2-Dichloroethane-d4 Acceptance Limits	Toluene-d8 % Recovered	Toluene-d8 Acceptance Limits	Bromofluorobenzene % Recovered	Bromofluorobenzene Acceptance Limits	Data Qualifier
Method Blank	P090904-MB	**107**	70-130	**101**	70-130	**93**	70-130	
Method Blank	P090908-MB	**106**	70-130	**102**	70-130	**91**	70-130	
Method Blank	P090909-MB	**108**	70-130	**102**	70-130	**92**	70-130	
Lab Control Sample	P090904-LCS	**105**	70-130	**101**	70-130	**96**	70-130	
Lab Control Sample	P090908-LCS	**104**	70-130	**101**	70-130	**95**	70-130	
Lab Control Sample	P090909-LCS	**105**	70-130	**101**	70-130	**97**	70-130	
104834	P0903080-001	**106**	70-130	**99**	70-130	**99**	70-130	
104835	P0903080-002	**105**	70-130	**99**	70-130	**100**	70-130	
104836	P0903080-003	**104**	70-130	**99**	70-130	**101**	70-130	
104837	P0903080-004	**103**	70-130	**99**	70-130	**103**	70-130	
104838	P0903080-005	**104**	70-130	**99**	70-130	**98**	70-130	

Verified By: Rc Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090904-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/04/09
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	**28.8**	**110**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**23.4**	**90**	61-118	
74-87-3	Chloromethane	25.0	**23.8**	**95**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.9**	**84**	65-122	
75-01-4	Vinyl Chloride	25.3	**22.5**	**89**	57-132	
106-99-0	1,3-Butadiene	26.8	**26.1**	**97**	66-161	
74-83-9	Bromomethane	25.8	**23.5**	**91**	67-130	
75-00-3	Chloroethane	25.5	**23.2**	**91**	68-123	
64-17-5	Ethanol	130	**123**	**95**	50-155	
75-05-8	Acetonitrile	26.0	**24.5**	**94**	48-148	
107-02-8	Acrolein	26.3	**27.4**	**104**	67-138	
67-64-1	Acetone	132	**117**	**89**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**23.0**	**87**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**37.6**	**78**	54-126	
107-13-1	Acrylonitrile	25.8	**27.9**	**108**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**24.1**	**88**	70-123	
75-09-2	Methylene Chloride	26.8	**22.6**	**84**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**27.8**	**103**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**24.8**	**90**	69-126	
75-15-0	Carbon Disulfide	26.0	**23.5**	**90**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.4**	**96**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**24.7**	**93**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.4**	**93**	72-132	
108-05-4	Vinyl Acetate	126	**144**	**114**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**28.1**	**105**	68-126	

Verified By: Rec Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090904-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/04/09
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	**25.6**	**95**	69-124	
141-78-6	Ethyl Acetate	52.0	**51.7**	**99**	65-126	
110-54-3	n-Hexane	26.0	**24.2**	**93**	63-125	
67-66-3	Chloroform	27.5	**24.6**	**89**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**26.1**	**98**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**25.8**	**98**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.8**	**92**	69-127	
71-43-2	Benzene	25.8	**23.3**	**90**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**24.7**	**94**	68-137	
110-82-7	Cyclohexane	51.8	**47.3**	**91**	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	**22.5**	**87**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.7**	**103**	73-127	
80-62-6	Methyl Methacrylate	52.8	**49.4**	**94**	80-133	
142-82-5	n-Heptane	25.8	**23.8**	**92**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**24.9**	**102**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**27.9**	**104**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**28.8**	**107**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**25.0**	**96**	76-125	
108-88-3	Toluene	26.8	**24.0**	**90**	74-119	
591-78-6	2-Hexanone	27.0	**27.4**	**101**	64-118	
124-48-1	Dibromochloromethane	28.3	**26.9**	**95**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.6**	**97**	79-125	
123-86-4	n-Butyl Acetate	27.5	**29.8**	**108**	70-136	

Verified By: RC Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090904-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/04/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

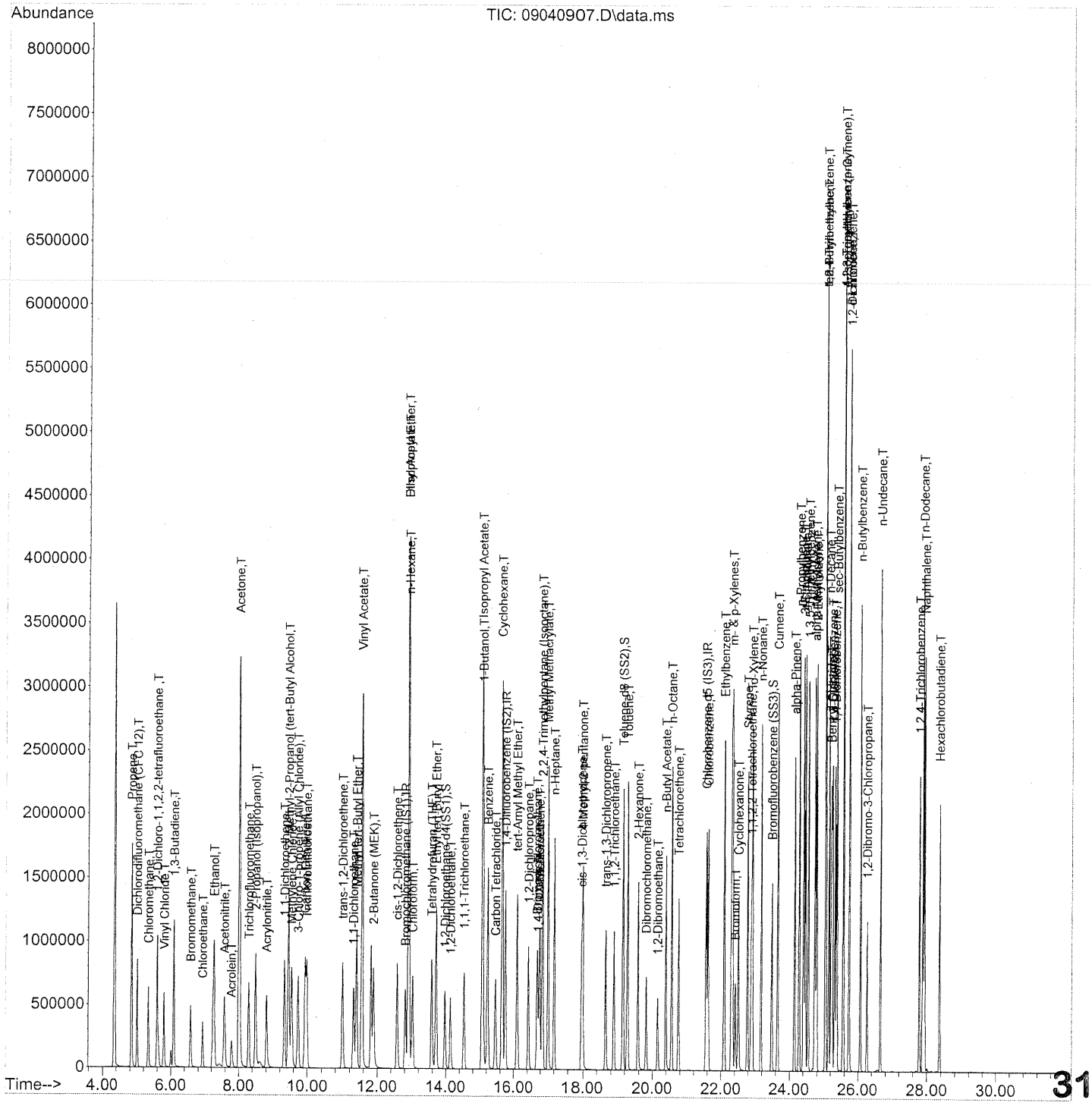
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**25.1**	**95**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.4**	**89**	72-125	
108-90-7	Chlorobenzene	26.5	**23.8**	**90**	74-121	
100-41-4	Ethylbenzene	26.3	**24.6**	**94**	76-120	
179601-23-1	m,p-Xylenes	51.5	**48.3**	**94**	75-120	
75-25-2	Bromoform	26.5	**24.8**	**94**	76-143	
100-42-5	Styrene	26.3	**25.7**	**98**	78-124	
95-47-6	o-Xylene	26.0	**24.7**	**95**	76-121	
111-84-2	n-Nonane	25.8	**25.6**	**99**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**26.4**	**98**	77-126	
98-82-8	Cumene	25.3	**23.5**	**93**	78-125	
80-56-8	alpha-Pinene	24.8	**23.2**	**94**	78-125	
103-65-1	n-Propylbenzene	25.3	**24.0**	**95**	80-127	
622-96-8	4-Ethyltoluene	26.3	**24.7**	**94**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**24.9**	**94**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**25.3**	**99**	76-123	
100-44-7	Benzyl Chloride	26.8	**27.3**	**102**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**24.9**	**96**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**23.9**	**91**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**24.4**	**95**	75-124	
5989-27-5	d-Limonene	26.5	**26.8**	**101**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**27.5**	**102**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**25.9**	**95**	70-139	
91-20-3	Naphthalene	25.0	**24.6**	**98**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**25.3**	**94**	68-138	

Verified By: Re Date: 9/16/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	324382	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1648562	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	793137	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	602004	26.247	ng		-0.02
Spiked Amount 25.000			Recovery = 105.00%				
57) Toluene-d8 (SS2)	19.15	98	1909222	25.321	ng		-0.01
Spiked Amount 25.000			Recovery = 101.28%				
73) Bromofluorobenzene (SS3)	23.49	174	510529	23.908	ng		0.00
Spiked Amount 25.000			Recovery = 95.64%				
Target Compounds							Qvalue
2) Propene	4.84	42	818316	28.758	ng		97
3) Dichlorodifluoromethan...	5.01	85	949094	23.366	ng		99
4) Chloromethane	5.34	50	901661	23.818	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	470793	21.934	ng		100
6) Vinyl Chloride	5.80	62	841133	22.525	ng		99
7) 1,3-Butadiene	6.09	54	692420	26.105	ng		96
8) Bromomethane	6.59	94	458879	23.500	ng		100
9) Chloroethane	6.93	64	430636	23.245	ng		100
10) Ethanol	7.27	45	2188902m	122.633	ng		
11) Acetonitrile	7.58	41	1068699	24.534	ng		99
12) Acrolein	7.79	56	318463	27.359	ng		98
13) Acetone	8.01	58	2127308	117.120	ng		95
14) Trichlorofluoromethane	8.29	101	798785	22.997	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1871111m	37.616	ng		
16) Acrylonitrile	8.81	53	736506	27.916	ng		99
17) 1,1-Dichloroethene	9.33	96	491013	24.089	ng		92
18) 2-Methyl-2-Propanol (t...	9.45	59	2582530	51.140	ng		96
19) Methylene Chloride	9.54	84	511784	22.583	ng		83
20) 3-Chloro-1-propene (Al...	9.73	41	843386	27.752	ng		87
21) Trichlorotrifluoroethane	9.99	151	386205	24.843	ng		93
22) Carbon Disulfide	9.94	76	1879078	23.496	ng		99
23) trans-1,2-Dichloroethene	11.01	61	762111	24.364	ng		90
24) 1,1-Dichloroethane	11.32	63	947444	24.732	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1514373	24.395	ng		95
26) Vinyl Acetate	11.56	86	567929	144.368	ng	#	56
27) 2-Butanone (MEK)	11.89	72	356204	28.130	ng	#	77
28) cis-1,2-Dichloroethene	12.58	61	746913	25.589	ng		91
29) Diisopropyl Ether	12.91	87	438704	24.403	ng	#	54
30) Ethyl Acetate	12.91	61	424199	51.659	ng		94
31) n-Hexane	12.93	57	967557	24.172	ng		9

EM 9/4/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	825177	24.631	ng		99
34) Tetrahydrofuran (THF)	13.58	72	343242	26.073	ng	#	82
35) Ethyl tert-Butyl Ether	13.71	87	598610	23.338	ng	#	83
36) 1,2-Dichloroethane	14.14	62	661858	25.818	ng		99
38) 1,1,1-Trichloroethane	14.54	97	714959	23.845	ng		98
39) Isopropyl Acetate	15.07	61	728771	54.166	ng	#	74
40) 1-Butanol	15.09	56	1241397	58.109	ng		83
41) Benzene	15.23	78	2063330	23.273	ng		99
42) Carbon Tetrachloride	15.46	117	612837	24.730	ng		98
43) Cyclohexane	15.66	84	1624469	47.313	ng		86
44) tert-Amyl Methyl Ether	16.10	73	1482665	23.794	ng		97
45) 1,2-Dichloropropane	16.44	63	540384	24.846	ng		98
46) Bromodichloromethane	16.70	83	656824	25.325	ng		99
47) Trichloroethene	16.77	130	507561	22.548	ng		100
48) 1,4-Dioxane	16.72	88	421695	26.743	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2408741	23.607	ng		95
50) Methyl Methacrylate	17.02	100	437201	49.351	ng	#	86
51) n-Heptane	17.21	71	561163	23.777	ng		93
52) cis-1,3-Dichloropropene	17.95	75	816524	24.916	ng		100
53) 4-Methyl-2-pentanone	17.99	58	534589	27.904	ng		93
54) trans-1,3-Dichloropropene	18.64	75	824737	28.768	ng		100
55) 1,1,2-Trichloroethane	18.89	97	473694	25.009	ng		97
58) Toluene	19.28	91	2196809	24.034	ng		100
59) 2-Hexanone	19.58	43	1300842	27.384	ng		97
60) Dibromochloromethane	19.82	129	525025	26.901	ng		99
61) 1,2-Dibromoethane	20.15	107	527586	25.647	ng		99
62) n-Butyl Acetate	20.39	43	1543126	29.771	ng		97
63) n-Octane	20.56	57	511990	25.129	ng		90
64) Tetrachloroethene	20.75	166	507589	22.379	ng		99
65) Chlorobenzene	21.62	112	1336308	23.807	ng		100
66) Ethylbenzene	22.09	91	2426377	24.588	ng		98
67) m- & p-Xylenes	22.33	91	3778125	48.293	ng		99
68) Bromoform	22.41	173	420168	24.802	ng		100
69) Styrene	22.77	104	1487661	25.726	ng		99
70) o-Xylene	22.92	91	1942597	24.683	ng		98
71) n-Nonane	23.17	43	1212835	25.589	ng		90
72) 1,1,2,2-Tetrachloroethane	22.89	83	892262	26.392	ng		100
74) Cumene	23.66	105	2396810	23.488	ng		99
75) alpha-Pinene	24.15	93	1170094	23.240	ng		99
76) n-Propylbenzene	24.28	91	3020663	23.950	ng		99
77) 3-Ethyltoluene	24.41	105	2380101	24.896	ng		98
78) 4-Ethyltoluene	24.46	105	2372992	24.691	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	1980529	24.923	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

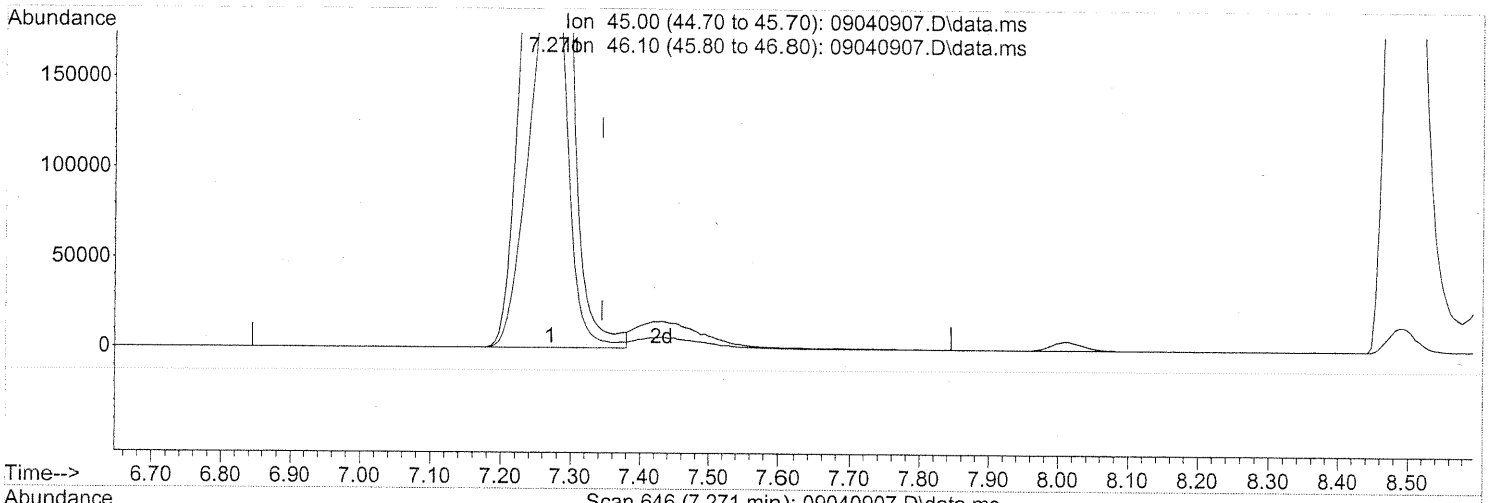
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1097970	25.464	ng	99
81) 2-Ethyltoluene	24.79	105	2356556	23.870	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2132144	25.270	ng	100
83) n-Decane	25.15	57	1236105	25.170	ng	94
84) Benzyl Chloride	25.22	91	1781792	27.296	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1086686	24.878	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1108025	23.907	ng	99
87) sec-Butylbenzene	25.38	105	2687814	24.174	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2573132	24.154	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2142857	25.126	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1068046	24.352	ng	100
91) d-Limonene	25.74	68	925345	26.806	ng	93
92) 1,2-Dibromo-3-Chloropr...	26.26	157	364805	27.542	ng	91
93) n-Undecane	26.65	57	1314736	25.908	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	792769	25.872	ng	99
95) Naphthalene	27.94	128	2784530	24.596	ng	100
96) n-Dodecane	27.89	57	1358517	23.916	ng	95
97) Hexachlorobutadiene	28.36	225	443345	25.338	ng	99
98) Cyclohexanone	22.51	55	756842	26.292	ng	95
99) tert-Butylbenzene	25.05	119	2058140	24.596	ng	99
100) n-Butylbenzene	26.06	91	2259820	25.537	ng	99

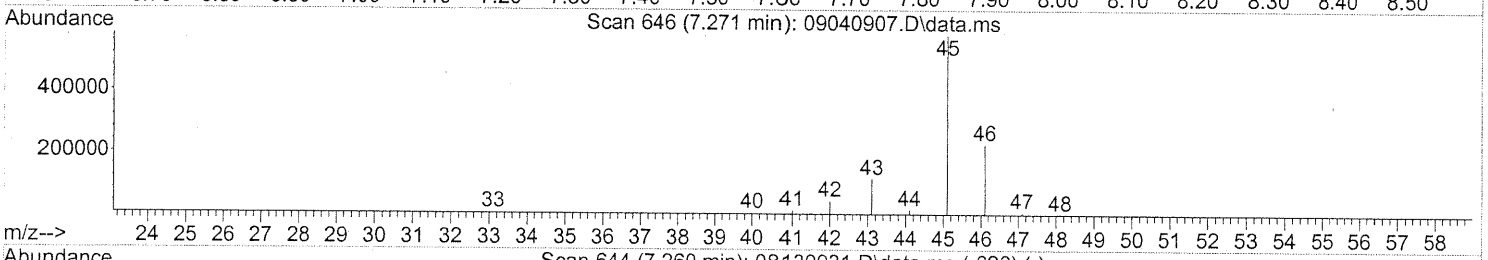
(#) = qualifier out of range (m) = manual integration (+) = signals summed

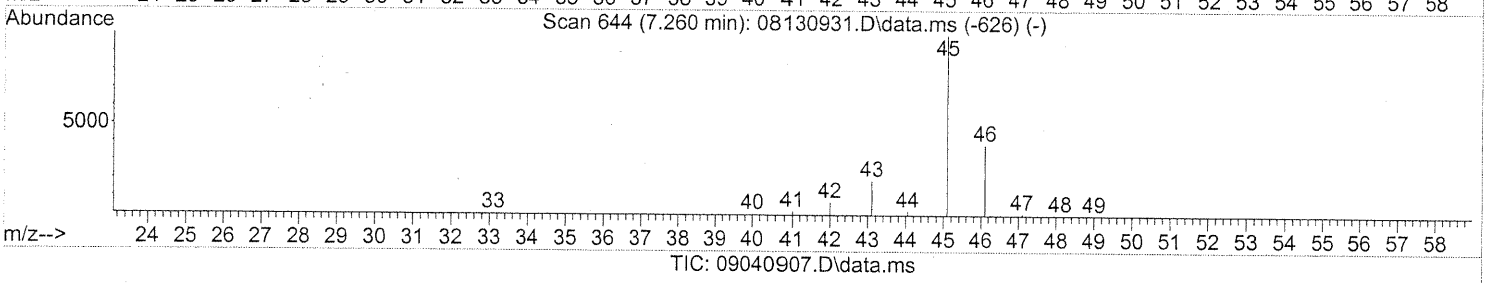
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040907.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 116.79ng

response 2084686

PT

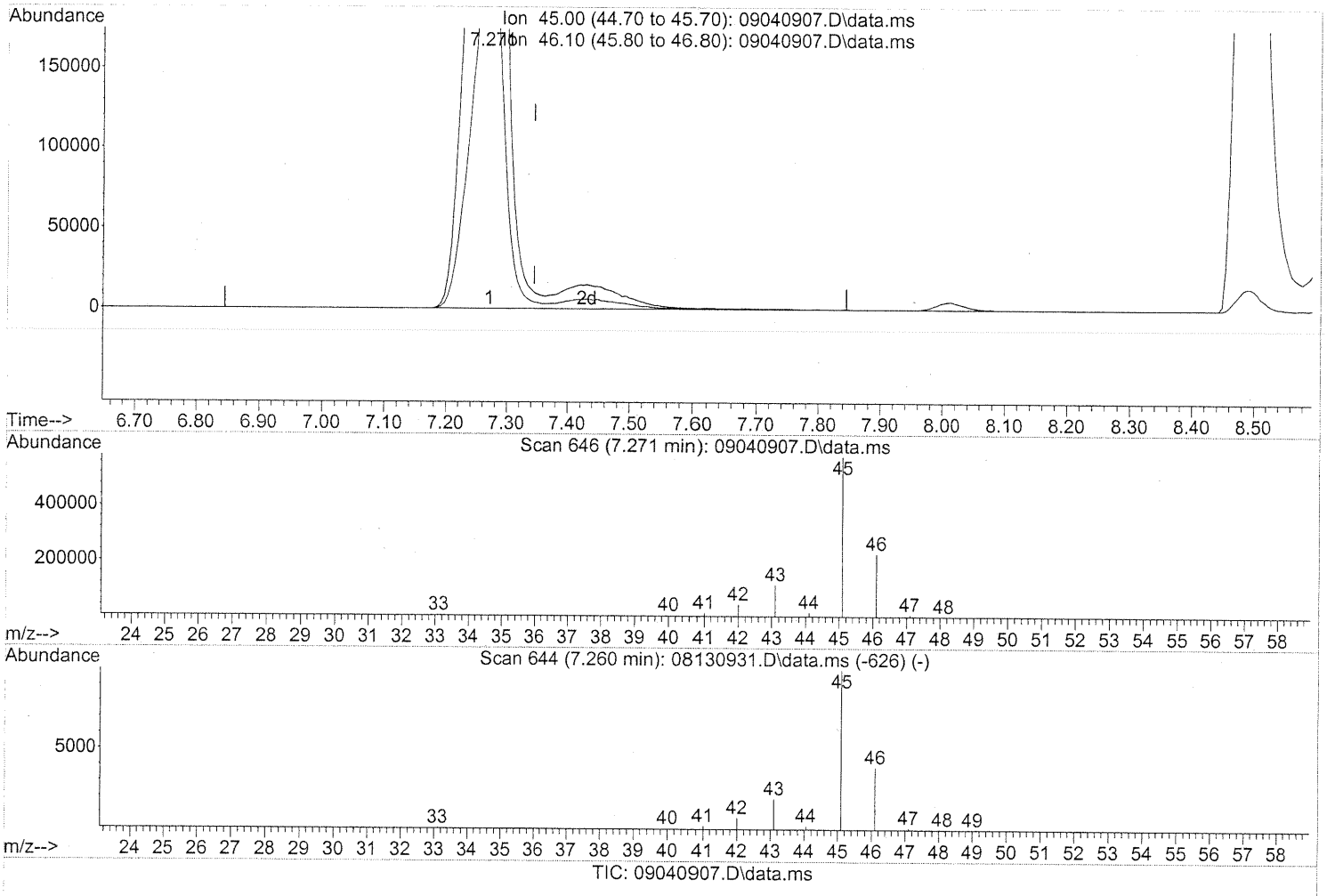
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.30
0.00	0.00	0.00
0.00	0.00	0.00

314

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.271min (-0.074) 122.63ng m

response 2188902

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.43
0.00	0.00	0.00
0.00	0.00	0.00

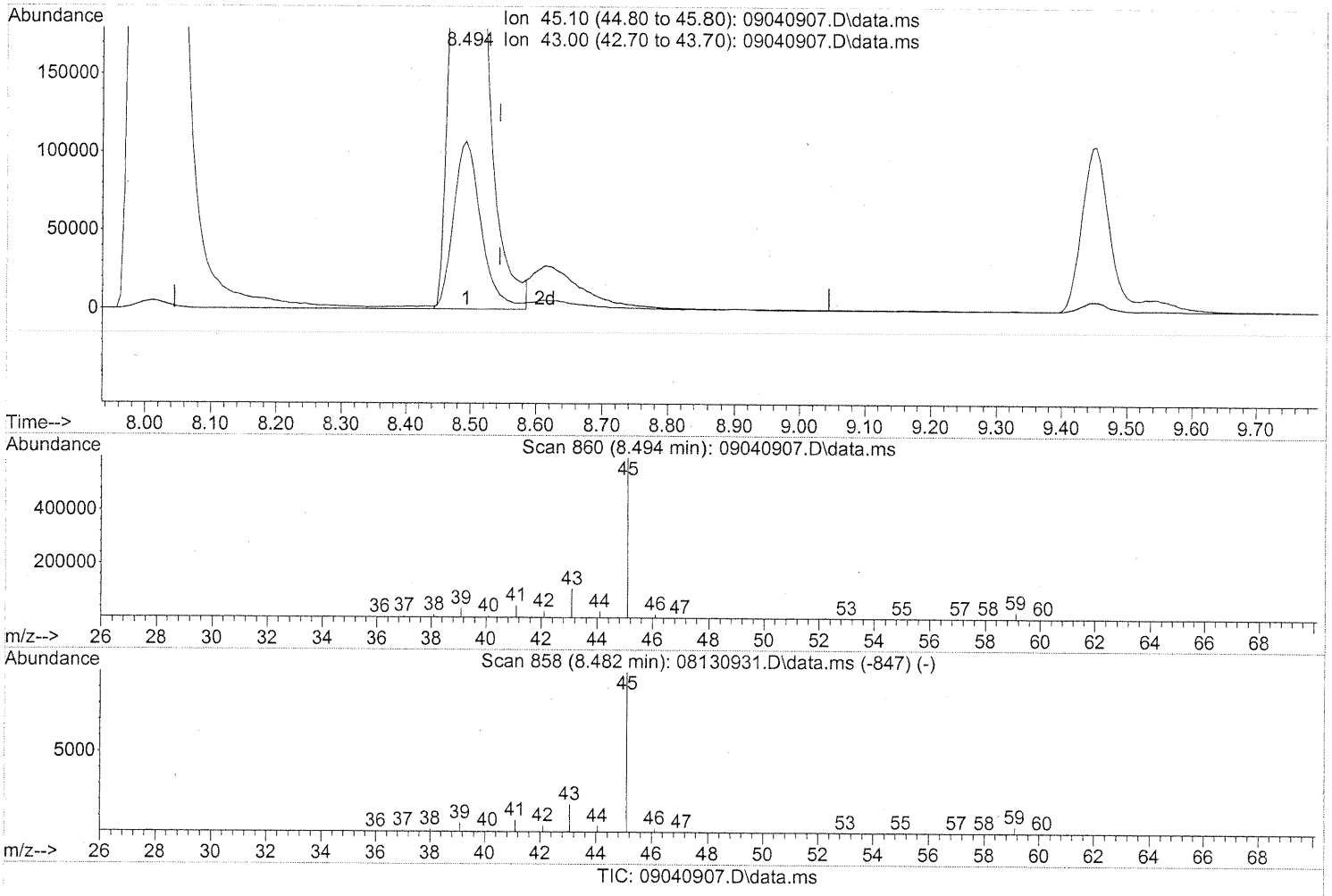
PT → LC
Om 9/4/09
R 9/8/09

315

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 34.63ng

response 1722495

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.76
0.00	0.00	0.00
0.00	0.00	0.00

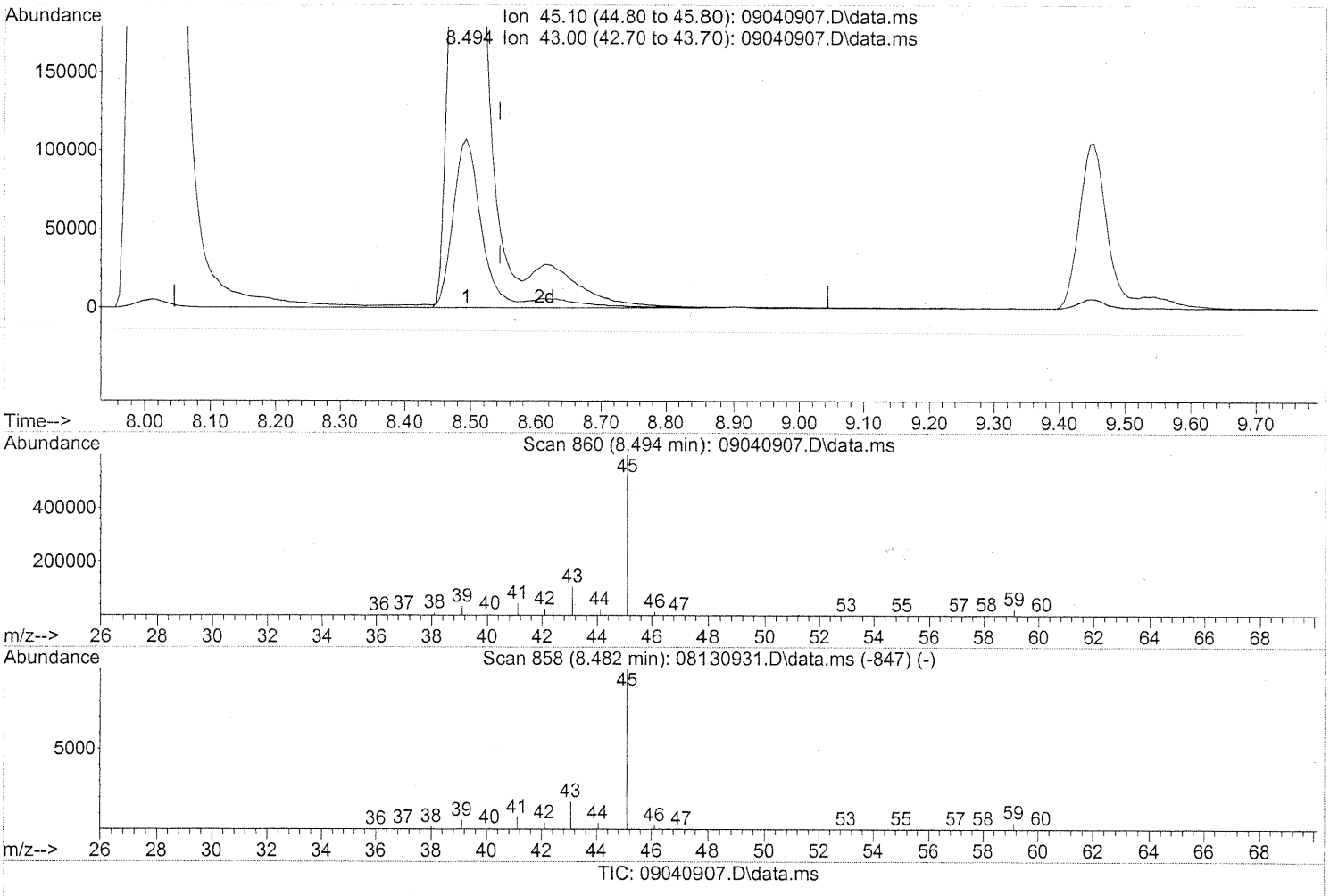
PT

316

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 37.62ng m

response 1871111

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.35
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
Em 9/4/09
R 9/8/09

317

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090908-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/08/09
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	**24.1**	**92**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**20.9**	**80**	61-118	
74-87-3	Chloromethane	25.0	**20.9**	**84**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.3**	**82**	65-122	
75-01-4	Vinyl Chloride	25.3	**20.4**	**81**	57-132	
106-99-0	1,3-Butadiene	26.8	**22.7**	**85**	66-161	
74-83-9	Bromomethane	25.8	**22.1**	**86**	67-130	
75-00-3	Chloroethane	25.5	**21.6**	**85**	68-123	
64-17-5	Ethanol	130	**111**	**85**	50-155	
75-05-8	Acetonitrile	26.0	**22.0**	**85**	48-148	
107-02-8	Acrolein	26.3	**24.8**	**94**	67-138	
67-64-1	Acetone	132	**106**	**80**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**21.6**	**82**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**35.3**	**74**	54-126	
107-13-1	Acrylonitrile	25.8	**25.3**	**98**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**22.6**	**82**	70-123	
75-09-2	Methylene Chloride	26.8	**21.0**	**78**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**25.2**	**93**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**23.8**	**87**	69-126	
75-15-0	Carbon Disulfide	26.0	**21.8**	**84**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**22.6**	**89**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**23.0**	**87**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**23.3**	**89**	72-132	
108-05-4	Vinyl Acetate	126	**130**	**103**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**26.0**	**97**	68-126	

Verified By: Rc Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090908-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/08/09
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	**23.9**	**89**	69-124	
141-78-6	Ethyl Acetate	52.0	**48.1**	**93**	65-126	
110-54-3	n-Hexane	26.0	**22.4**	**86**	63-125	
67-66-3	Chloroform	27.5	**23.4**	**85**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**24.4**	**92**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**24.3**	**92**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.1**	**89**	69-127	
71-43-2	Benzene	25.8	**21.9**	**85**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**23.7**	**90**	68-137	
110-82-7	Cyclohexane	51.8	**45.1**	**87**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**23.2**	**89**	69-128	
75-27-4	Bromodichloromethane	26.3	**24.0**	**91**	71-131	
79-01-6	Trichloroethene	25.8	**21.7**	**84**	72-122	
123-91-1	1,4-Dioxane	26.0	**25.4**	**98**	73-127	
80-62-6	Methyl Methacrylate	52.8	**47.6**	**90**	80-133	
142-82-5	n-Heptane	25.8	**22.4**	**87**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**23.6**	**96**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**26.3**	**98**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**27.3**	**101**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**23.9**	**92**	76-125	
108-88-3	Toluene	26.8	**23.0**	**86**	74-119	
591-78-6	2-Hexanone	27.0	**25.5**	**94**	64-118	
124-48-1	Dibromochloromethane	28.3	**25.7**	**91**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**24.6**	**94**	79-125	
123-86-4	n-Butyl Acetate	27.5	**27.8**	**101**	70-136	

Verified By: RC Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090908-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/08/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

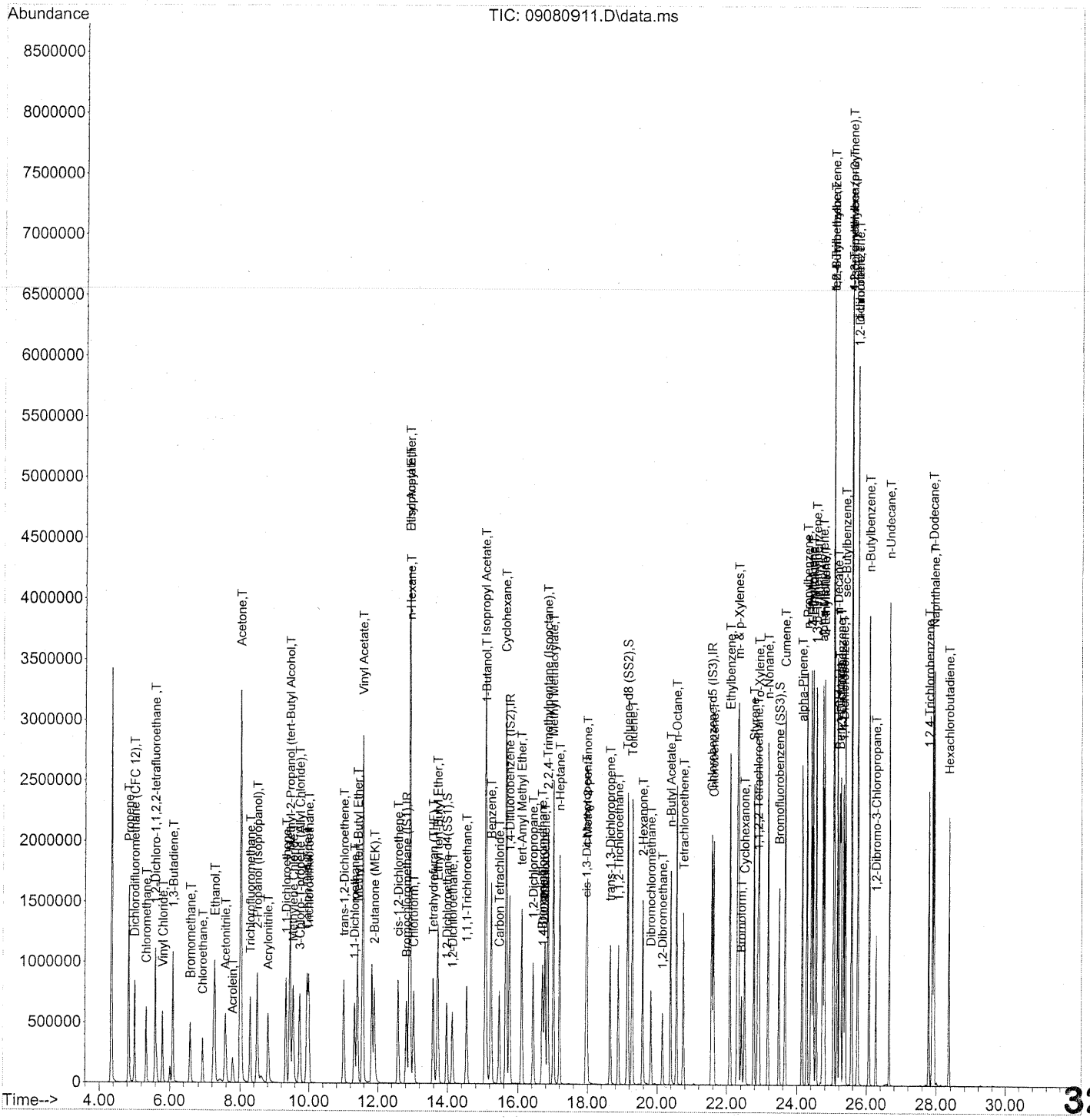
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**23.7**	**90**	75-126	
127-18-4	Tetrachloroethene	25.3	**21.6**	**85**	72-125	
108-90-7	Chlorobenzene	26.5	**22.9**	**86**	74-121	
100-41-4	Ethylbenzene	26.3	**23.4**	**89**	76-120	
179601-23-1	m,p-Xylenes	51.5	**46.0**	**89**	75-120	
75-25-2	Bromoform	26.5	**23.9**	**90**	76-143	
100-42-5	Styrene	26.3	**24.4**	**93**	78-124	
95-47-6	o-Xylene	26.0	**23.4**	**90**	76-121	
111-84-2	n-Nonane	25.8	**23.6**	**91**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**24.7**	**91**	77-126	
98-82-8	Cumene	25.3	**22.4**	**89**	78-125	
80-56-8	alpha-Pinene	24.8	**22.1**	**89**	78-125	
103-65-1	n-Propylbenzene	25.3	**22.7**	**90**	80-127	
622-96-8	4-Ethyltoluene	26.3	**23.4**	**89**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**23.7**	**89**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**24.0**	**94**	76-123	
100-44-7	Benzyl Chloride	26.8	**26.5**	**99**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**23.8**	**92**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**22.8**	**87**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**23.3**	**90**	75-124	
5989-27-5	d-Limonene	26.5	**24.9**	**94**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**26.6**	**99**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**24.8**	**91**	70-139	
91-20-3	Naphthalene	25.0	**23.7**	**95**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**24.4**	**91**	68-138	

Verified By: RC Date: 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:51 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
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Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	360065	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1835587	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	880386	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	663052	26.043	ng		-0.02
Spiked Amount 25.000			Recovery =	104.16%			
57) Toluene-d8 (SS2)	19.15	98	2121985	25.354	ng		-0.01
Spiked Amount 25.000			Recovery =	101.40%			
73) Bromofluorobenzene (SS3)	23.49	174	565816	23.872	ng		0.00
Spiked Amount 25.000			Recovery =	95.48%			
Target Compounds							Qvalue
2) Propene	4.84	42	762077	24.128	ng		97
3) Dichlorodifluoromethan...	5.00	85	943033	20.916	ng		99
4) Chloromethane	5.33	50	878858	20.915	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	508079	21.326	ng		100
6) Vinyl Chloride	5.80	62	846013	20.410	ng		98
7) 1,3-Butadiene	6.09	54	668495	22.705	ng		98
8) Bromomethane	6.59	94	478607	22.081	ng		99
9) Chloroethane	6.93	64	444189	21.600	ng		100
10) Ethanol	7.27	45	2207295m	111.408	ng		
11) Acetonitrile	7.58	41	1066080	22.048	ng		99
12) Acrolein	7.79	56	320076	24.772	ng		98
13) Acetone	8.01	58	2131857	105.739	ng		94
14) Trichlorofluoromethane	8.29	101	832302	21.588	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1949896m	35.315	ng		
16) Acrylonitrile	8.81	53	741619	25.324	ng		99
17) 1,1-Dichloroethene	9.33	96	512361	22.645	ng		95
18) 2-Methyl-2-Propanol (t...	9.45	59	2700832	48.182	ng		98
19) Methylene Chloride	9.54	84	527813	20.983	ng		86
20) 3-Chloro-1-propene (Al...	9.73	41	848400	25.151	ng		88
21) Trichlorotrifluoroethane	9.98	151	410124	23.767	ng		95
22) Carbon Disulfide	9.94	76	1936690	21.817	ng		98
23) trans-1,2-Dichloroethene	11.01	61	783407	22.563	ng		92
24) 1,1-Dichloroethane	11.32	63	979842	23.043	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1607721	23.332	ng		96
26) Vinyl Acetate	11.56	86	568463	130.183	ng	#	64
27) 2-Butanone (MEK)	11.89	72	364851	25.958	ng	#	80
28) cis-1,2-Dichloroethene	12.58	61	774583	23.907	ng		92
29) Diisopropyl Ether	12.91	87	463739	23.239	ng	#	63
30) Ethyl Acetate	12.91	61	438791	48.141	ng		95
31) n-Hexane	12.93	57	996281	22.423	ng		9

EM 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
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Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:51 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	870901	23.420	ng		99
34) Tetrahydrofuran (THF)	13.58	72	356059	24.366	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	638135	22.414	ng	#	86
36) 1,2-Dichloroethane	14.14	62	691845	24.313	ng		99
38) 1,1,1-Trichloroethane	14.54	97	769661	23.054	ng		99
39) Isopropyl Acetate	15.07	61	760276	50.750	ng	#	76
40) 1-Butanol	15.09	56	1300841	54.688	ng		85
41) Benzene	15.23	78	2159276	21.874	ng		99
42) Carbon Tetrachloride	15.46	117	654620	23.724	ng		99
43) Cyclohexane	15.66	84	1725215	45.128	ng		88
44) tert-Amyl Methyl Ether	16.10	73	1580991	22.787	ng		98
45) 1,2-Dichloropropane	16.43	63	561583	23.190	ng		99
46) Bromodichloromethane	16.70	83	694430	24.047	ng		99
47) Trichloroethene	16.78	130	542964	21.663	ng		100
48) 1,4-Dioxane	16.72	88	445292	25.362	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2510794	22.100	ng		95
50) Methyl Methacrylate	17.02	100	469176	47.565	ng		89
51) n-Heptane	17.21	71	588921	22.410	ng		94
52) cis-1,3-Dichloropropene	17.95	75	862062	23.625	ng		100
53) 4-Methyl-2-pentanone	17.99	58	560893	26.294	ng		94
54) trans-1,3-Dichloropropene	18.64	75	872041	27.318	ng		100
55) 1,1,2-Trichloroethane	18.89	97	504193	23.907	ng		98
58) Toluene	19.28	91	2330368	22.969	ng		100
59) 2-Hexanone	19.58	43	1345864	25.524	ng		98
60) Dibromochloromethane	19.82	129	557262	25.723	ng		100
61) 1,2-Dibromoethane	20.15	107	561947	24.610	ng		100
62) n-Butyl Acetate	20.39	43	1600199	27.813	ng		98
63) n-Octane	20.56	57	536190	23.709	ng		91
64) Tetrachloroethene	20.76	166	542788	21.559	ng		99
65) Chlorobenzene	21.62	112	1425373	22.877	ng		100
66) Ethylbenzene	22.09	91	2561602	23.385	ng		99
67) m- & p-Xylenes	22.33	91	3991156	45.960	ng		99
68) Bromoform	22.41	173	449764	23.918	ng		99
69) Styrene	22.77	104	1568265	24.432	ng		99
70) o-Xylene	22.92	91	2044017	23.397	ng		98
71) n-Nonane	23.17	43	1239237	23.555	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	927257	24.709	ng		100
74) Cumene	23.66	105	2536264	22.391	ng		99
75) alpha-Pinene	24.15	93	1234684	22.093	ng		99
76) n-Propylbenzene	24.28	91	3171178	22.652	ng		99
77) 3-Ethyltoluene	24.41	105	2514479	23.695	ng		98
78) 4-Ethyltoluene	24.46	105	2496524	23.402	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2094130	23.740	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:51 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

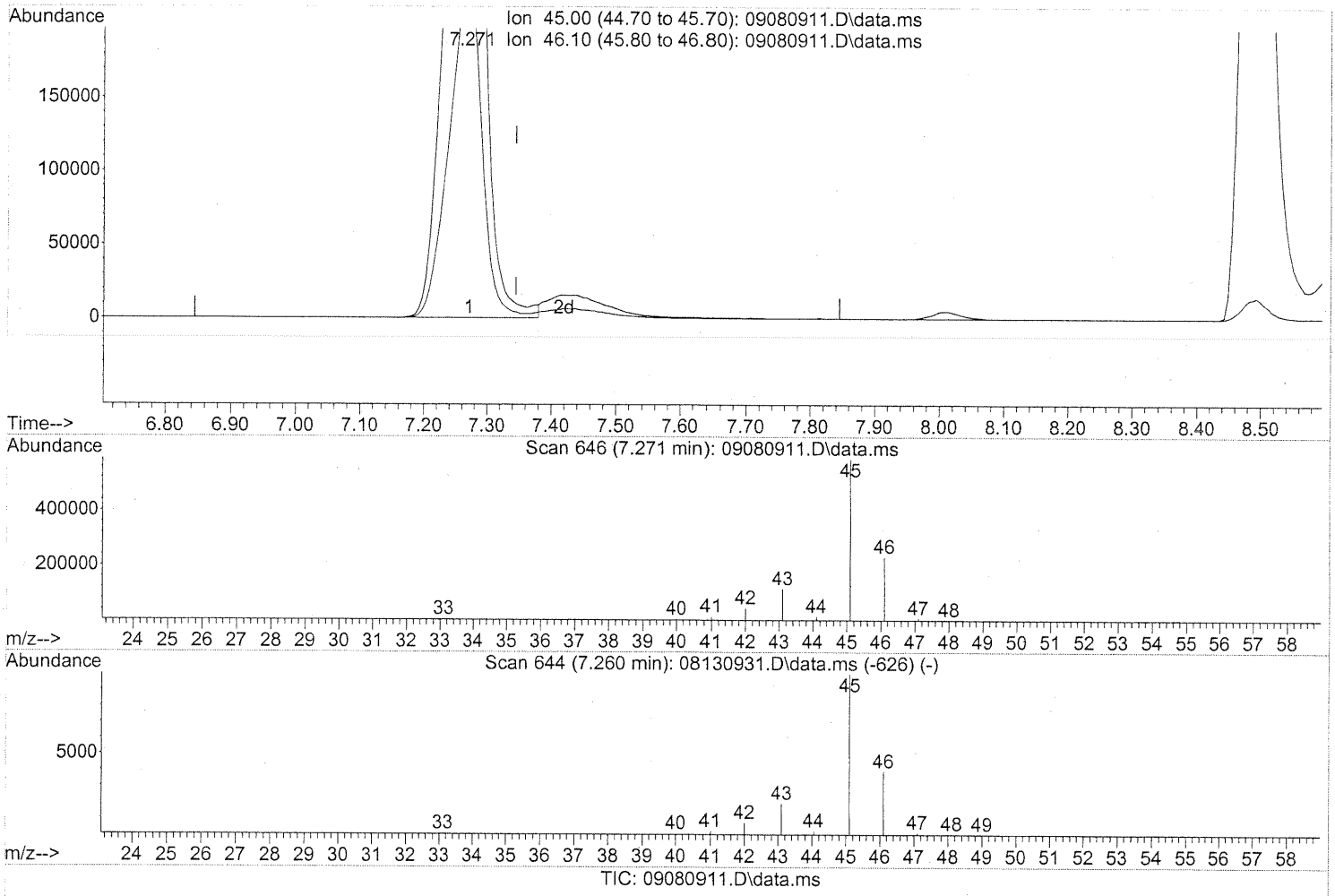
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1162422	24.287	ng	99
81) 2-Ethyltoluene	24.79	105	2486438	22.690	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2246962	23.992	ng	99
83) n-Decane	25.15	57	1275378	23.396	ng	95
84) Benzyl Chloride	25.22	91	1922703	26.535	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1153577	23.792	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1173405	22.809	ng	99
87) sec-Butylbenzene	25.38	105	2836810	22.986	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2731061	23.096	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2260307	23.877	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1133968	23.292	ng	100
91) d-Limonene	25.74	68	954188	24.902	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	390753	26.578	ng	93
93) n-Undecane	26.65	57	1357601	24.101	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	844765	24.837	ng	100
95) Naphthalene	27.94	128	2973196	23.660	ng	100
96) n-Dodecane	27.89	57	1395901	22.139	ng	96
97) Hexachlorobutadiene	28.36	225	473238	24.366	ng	99
98) Cyclohexanone	22.51	55	783481	24.520	ng	95
99) tert-Butylbenzene	25.05	119	2171826	23.382	ng	100
100) n-Butylbenzene	26.07	91	2365170	24.079	ng	100

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.271min (-0.074) 106.24ng

response 2104851

PT

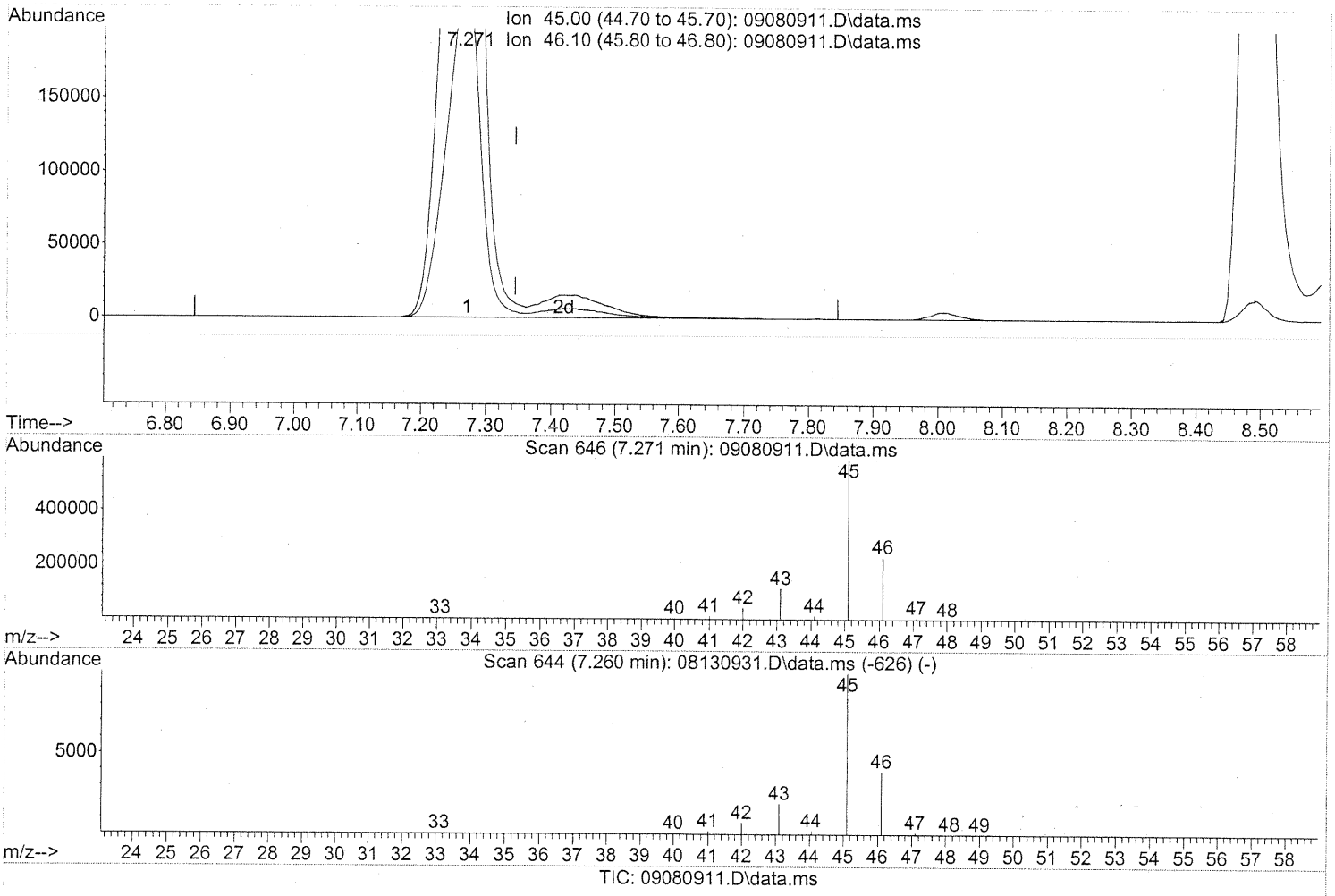
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.04
0.00	0.00	0.00
0.00	0.00	0.00

325

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080911.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 111.41ng m

response 2207295

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.23
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

9/8/09

9/8/09

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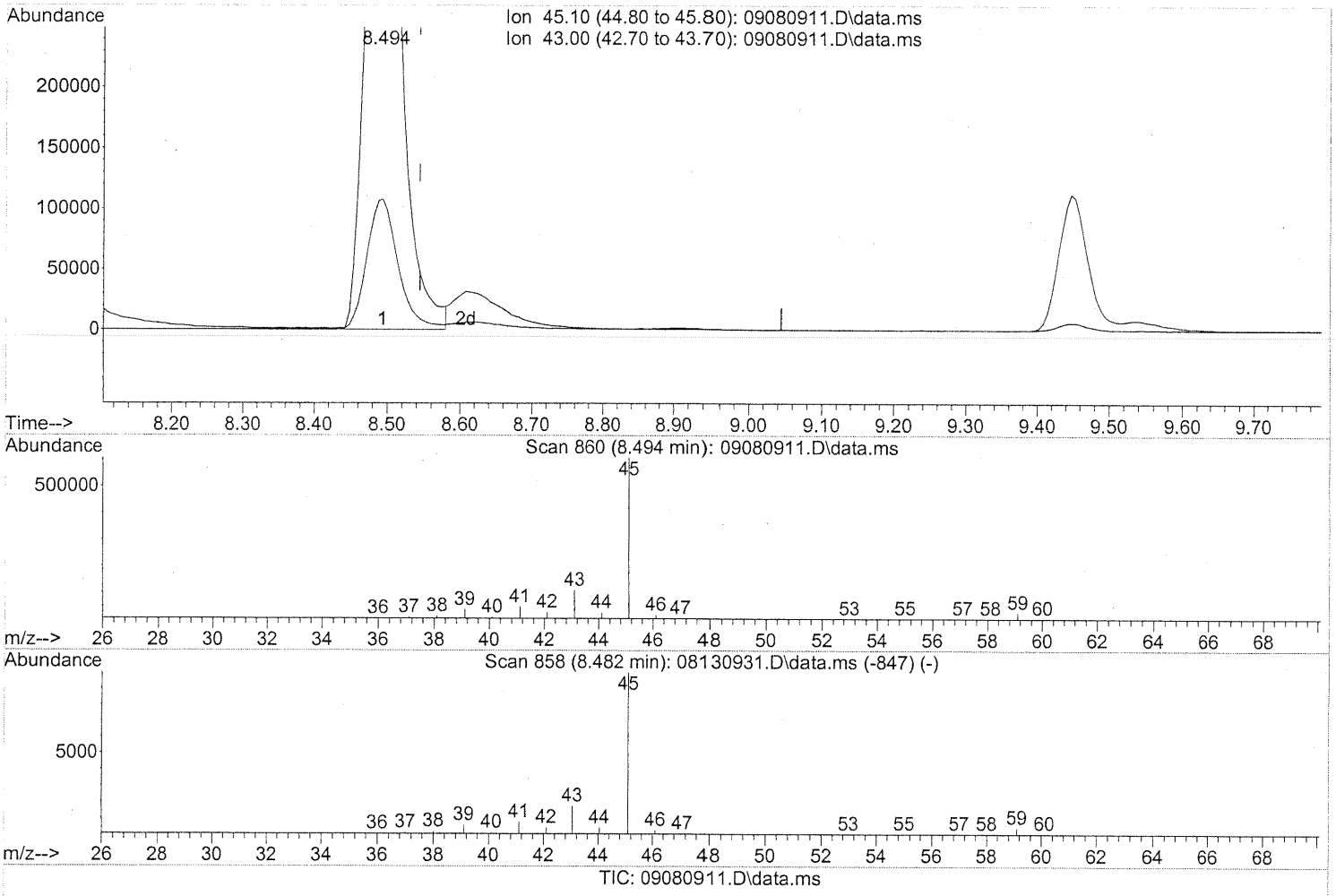
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080911.D\data.ms

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

8.494min (-0.051) 32.37ng

response 1787259

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.00
0.00	0.00	0.00
0.00	0.00	0.00

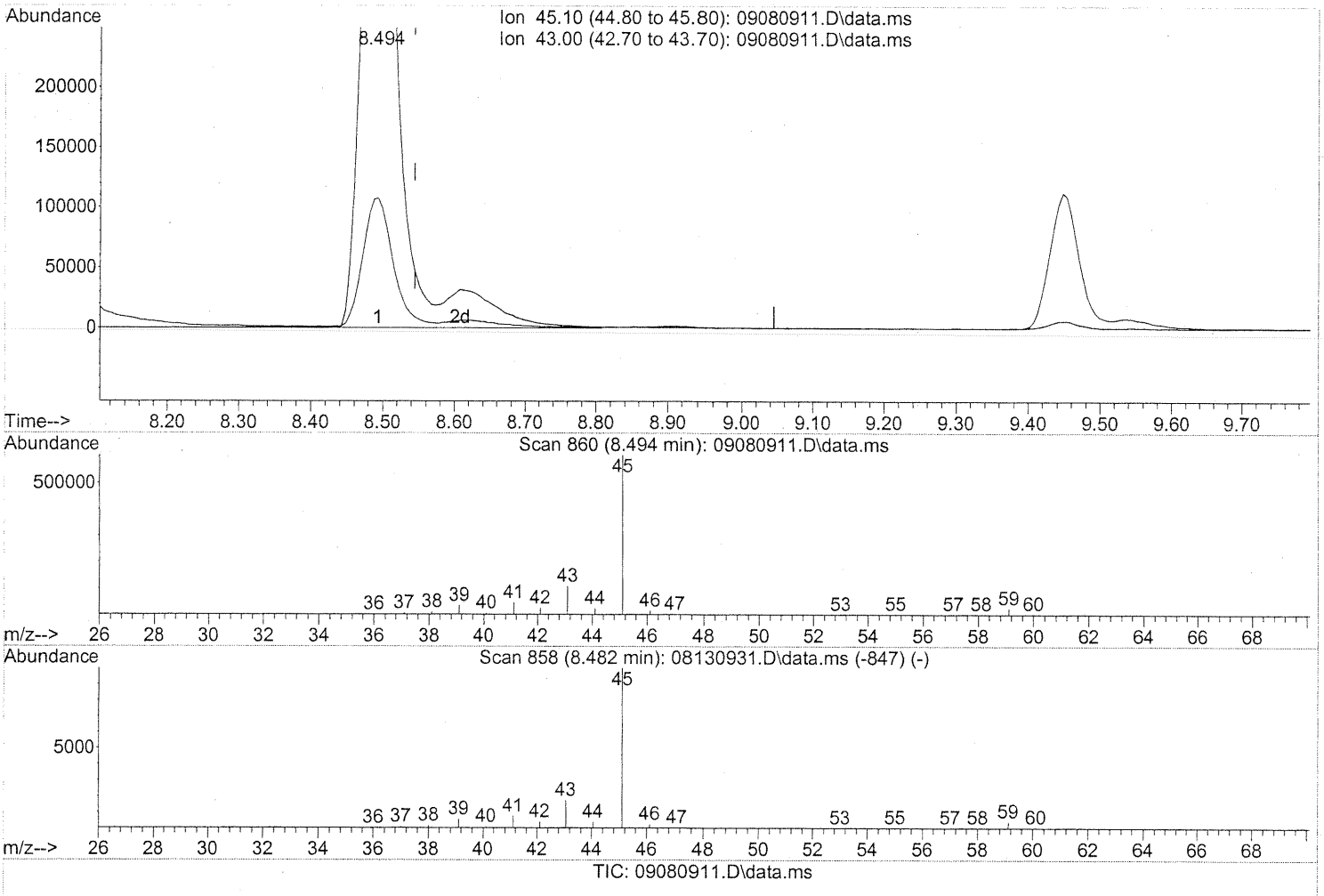
PT

327

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 15:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 16:29:04 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080911.D\data.ms

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

8.494min (-0.051) 35.32ng m

response 1949896

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.42
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

EM 9/8/09

MR 9/8/09

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COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090909-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/09/09
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	**26.0**	**99**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**22.1**	**85**	61-118	
74-87-3	Chloromethane	25.0	**21.3**	**85**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**22.4**	**86**	65-122	
75-01-4	Vinyl Chloride	25.3	**21.4**	**85**	57-132	
106-99-0	1,3-Butadiene	26.8	**24.8**	**93**	66-161	
74-83-9	Bromomethane	25.8	**23.8**	**92**	67-130	
75-00-3	Chloroethane	25.5	**22.4**	**88**	68-123	
64-17-5	Ethanol	130	**114**	**88**	50-155	
75-05-8	Acetonitrile	26.0	**22.3**	**86**	48-148	
107-02-8	Acrolein	26.3	**25.8**	**98**	67-138	
67-64-1	Acetone	132	**110**	**83**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**22.1**	**84**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**34.4**	**72**	54-126	
107-13-1	Acrylonitrile	25.8	**25.8**	**100**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**23.2**	**84**	70-123	
75-09-2	Methylene Chloride	26.8	**21.5**	**80**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**25.6**	**95**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**24.7**	**90**	69-126	
75-15-0	Carbon Disulfide	26.0	**22.4**	**86**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**23.2**	**91**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**23.5**	**89**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.0**	**91**	72-132	
108-05-4	Vinyl Acetate	126	**138**	**110**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**27.5**	**103**	68-126	

Verified By: Re Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090909-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/09/09
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	**24.5**	**91**	69-124	
141-78-6	Ethyl Acetate	52.0	**49.4**	**95**	65-126	
110-54-3	n-Hexane	26.0	**23.4**	**90**	63-125	
67-66-3	Chloroform	27.5	**24.1**	**88**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**25.6**	**97**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**25.2**	**96**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.4**	**90**	69-127	
71-43-2	Benzene	25.8	**22.4**	**87**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**24.2**	**92**	68-137	
110-82-7	Cyclohexane	51.8	**46.1**	**89**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**23.8**	**92**	69-128	
75-27-4	Bromodichloromethane	26.3	**24.7**	**94**	71-131	
79-01-6	Trichloroethene	25.8	**22.1**	**86**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.2**	**101**	73-127	
80-62-6	Methyl Methacrylate	52.8	**48.7**	**92**	80-133	
142-82-5	n-Heptane	25.8	**22.9**	**89**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**24.1**	**98**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**26.7**	**100**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**28.1**	**104**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**24.4**	**94**	76-125	
108-88-3	Toluene	26.8	**23.2**	**87**	74-119	
591-78-6	2-Hexanone	27.0	**25.8**	**96**	64-118	
124-48-1	Dibromochloromethane	28.3	**26.2**	**93**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.0**	**95**	79-125	
123-86-4	n-Butyl Acetate	27.5	**27.8**	**101**	70-136	

Verified By: Rv Date: 9/18/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903080
Client Project ID: **16512** CAS Sample ID: P090909-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Elsa Moctezuma Date Analyzed: 9/09/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

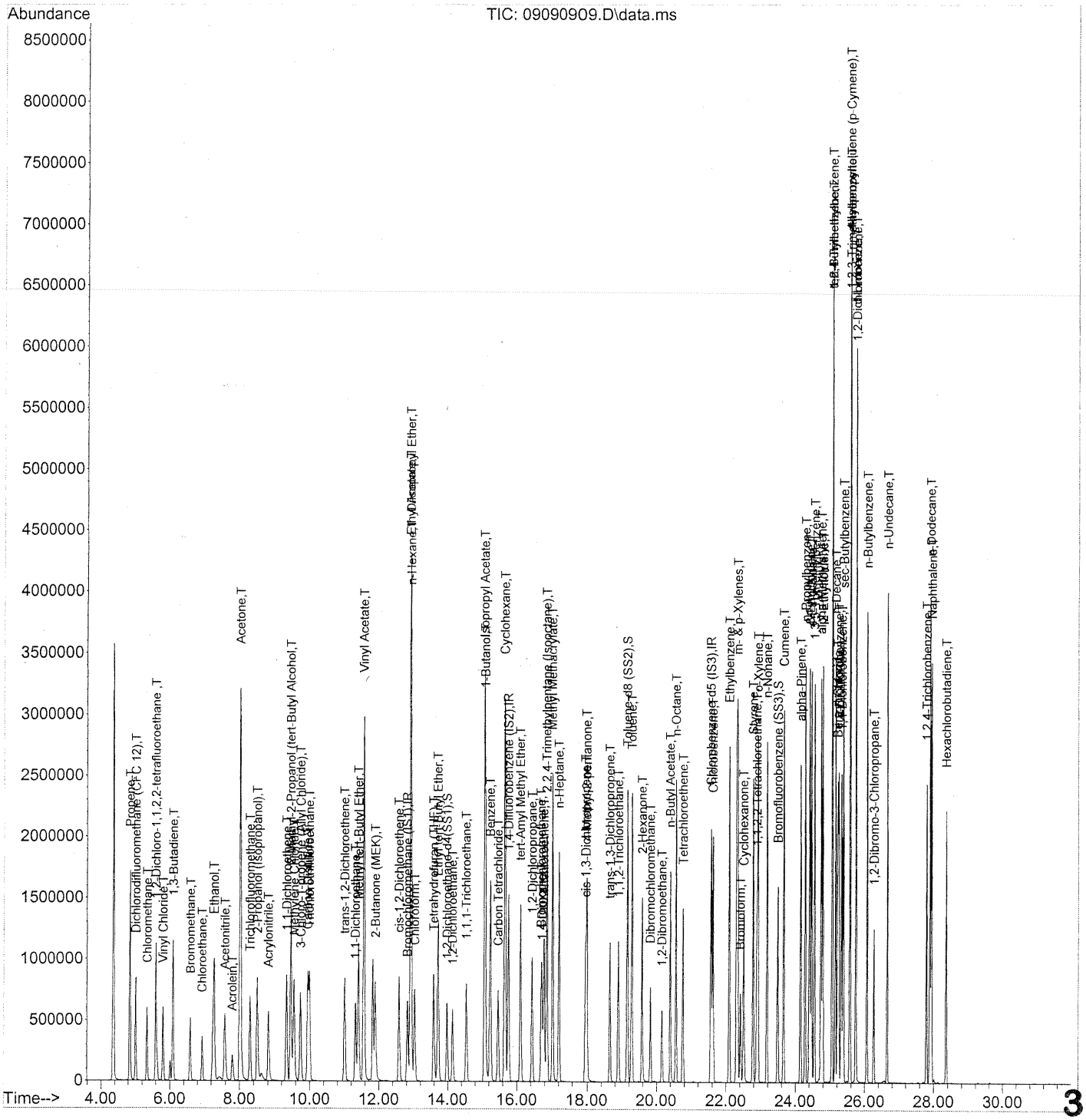
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**24.0**	**91**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.0**	**87**	72-125	
108-90-7	Chlorobenzene	26.5	**23.2**	**88**	74-121	
100-41-4	Ethylbenzene	26.3	**23.7**	**90**	76-120	
179601-23-1	m,p-Xylenes	51.5	**46.7**	**91**	75-120	
75-25-2	Bromoform	26.5	**24.2**	**91**	76-143	
100-42-5	Styrene	26.3	**24.9**	**95**	78-124	
95-47-6	o-Xylene	26.0	**23.7**	**91**	76-121	
111-84-2	n-Nonane	25.8	**23.8**	**92**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**25.2**	**93**	77-126	
98-82-8	Cumene	25.3	**22.7**	**90**	78-125	
80-56-8	alpha-Pinene	24.8	**22.5**	**91**	78-125	
103-65-1	n-Propylbenzene	25.3	**23.0**	**91**	80-127	
622-96-8	4-Ethyltoluene	26.3	**23.8**	**90**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**24.2**	**91**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**24.5**	**96**	76-123	
100-44-7	Benzyl Chloride	26.8	**27.1**	**101**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**24.4**	**94**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**23.2**	**88**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**23.8**	**92**	75-124	
5989-27-5	d-Limonene	26.5	**25.2**	**95**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**27.1**	**100**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**25.4**	**93**	70-139	
91-20-3	Naphthalene	25.0	**24.2**	**97**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**25.0**	**93**	68-138	

Verified By: Re Date: 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:01:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:01:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	348246	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1784483	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	864240	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.98	65	645575	26.218	ng		-0.01
Spiked Amount 25.000			Recovery =	104.88%			
57) Toluene-d8 (SS2)	19.15	98	2070842	25.205	ng		-0.01
Spiked Amount 25.000			Recovery =	100.80%			
73) Bromofluorobenzene (SS3)	23.49	174	563087	24.200	ng		0.00
Spiked Amount 25.000			Recovery =	96.80%			
Target Compounds							Qvalue
2) Propene	4.84	42	795385	26.037	ng		97
3) Dichlorodifluoromethan...	5.01	85	964996	22.130	ng		99
4) Chloromethane	5.35	50	865718	21.302	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	516814	22.428	ng		99
6) Vinyl Chloride	5.80	62	858655	21.418	ng		98
7) 1,3-Butadiene	6.09	54	706226	24.801	ng		98
8) Bromomethane	6.59	94	498972	23.802	ng		99
9) Chloroethane	6.93	64	445163	22.382	ng		100
10) Ethanol	7.28	45	2186226m	114.090	ng		
11) Acetonitrile	7.59	41	1043616	22.316	ng		99
12) Acrolein	7.79	56	322136	25.778	ng		98
13) Acetone	8.02	58	2143396	109.919	ng		94
14) Trichlorofluoromethane	8.29	101	824995	22.124	ng		98
15) 2-Propanol (Isopropanol)	8.50	45	1836698m	34.394	ng		
16) Acrylonitrile	8.81	53	730992	25.809	ng		99
17) 1,1-Dichloroethene	9.33	96	506619	23.151	ng		95
18) 2-Methyl-2-Propanol (t...	9.45	59	2656046	48.992	ng		97
19) Methylene Chloride	9.55	84	522447	21.474	ng		85
20) 3-Chloro-1-propene (Al...	9.74	41	834154	25.568	ng		88
21) Trichlorotrifluoroethane	9.99	151	412245	24.701	ng		96
22) Carbon Disulfide	9.94	76	1924748	22.418	ng		98
23) trans-1,2-Dichloroethene	11.01	61	779060	23.199	ng		91
24) 1,1-Dichloroethane	11.32	63	965082	23.466	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1601961	24.038	ng		96
26) Vinyl Acetate	11.56	86	584419	138.379	ng	#	64
27) 2-Butanone (MEK)	11.90	72	373383	27.466	ng	#	82
28) cis-1,2-Dichloroethene	12.58	61	766470	24.460	ng		92
29) Diisopropyl Ether	12.92	87	463510	24.016	ng	#	63
30) Ethyl Acetate	12.91	61	435593	49.412	ng		96
31) n-Hexane	12.93	57	1004622	23.378	ng		93

 DM 9/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:01:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.04	83	865301	24.059	ng		100
34) Tetrahydrofuran (THF)	13.59	72	361101	25.550	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	641717	23.304	ng	#	86
36) 1,2-Dichloroethane	14.14	62	693878	25.212	ng		99
38) 1,1,1-Trichloroethane	14.54	97	760784	23.441	ng		99
39) Isopropyl Acetate	15.07	61	761863	52.312	ng	#	77
40) 1-Butanol	15.09	56	1277371	55.239	ng		83
41) Benzene	15.23	78	2154093	22.446	ng		99
42) Carbon Tetrachloride	15.46	117	648031	24.158	ng		99
43) Cyclohexane	15.66	84	1711930	46.063	ng		88
44) tert-Amyl Methyl Ether	16.10	73	1580707	23.435	ng		98
45) 1,2-Dichloropropane	16.44	63	559982	23.786	ng		99
46) Bromodichloromethane	16.70	83	693519	24.703	ng		99
47) Trichloroethene	16.78	130	539306	22.133	ng		100
48) 1,4-Dioxane	16.72	88	446638	26.167	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	2475005	22.409	ng		96
50) Methyl Methacrylate	17.02	100	467356	48.737	ng		89
51) n-Heptane	17.21	71	585880	22.933	ng		95
52) cis-1,3-Dichloropropene	17.95	75	856307	24.140	ng		100
53) 4-Methyl-2-pentanone	17.99	58	554463	26.737	ng		94
54) trans-1,3-Dichloropropene	18.64	75	872932	28.129	ng		100
55) 1,1,2-Trichloroethane	18.89	97	500915	24.432	ng		98
58) Toluene	19.28	91	2313031	23.224	ng		100
59) 2-Hexanone	19.58	43	1336825	25.826	ng		97
60) Dibromochloromethane	19.82	129	557062	26.194	ng		100
61) 1,2-Dibromoethane	20.15	107	559753	24.972	ng		99
62) n-Butyl Acetate	20.39	43	1568886	27.778	ng		98
63) n-Octane	20.56	57	533535	24.032	ng		91
64) Tetrachloroethene	20.76	166	543943	22.009	ng		100
65) Chlorobenzene	21.62	112	1420030	23.217	ng		100
66) Ethylbenzene	22.09	91	2546785	23.684	ng		98
67) m- & p-Xylenes	22.33	91	3980848	46.698	ng		99
68) Bromoform	22.41	173	446730	24.200	ng		100
69) Styrene	22.77	104	1566879	24.866	ng		99
70) o-Xylene	22.92	91	2034250	23.721	ng		98
71) n-Nonane	23.17	43	1229574	23.808	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	927670	25.181	ng		100
74) Cumene	23.66	105	2522089	22.682	ng		98
75) alpha-Pinene	24.15	93	1232255	22.461	ng		100
76) n-Propylbenzene	24.28	91	3158814	22.985	ng		99
77) 3-Ethyltoluene	24.41	105	2514737	24.141	ng		98
78) 4-Ethyltoluene	24.46	105	2487769	23.756	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2094999	24.194	ng		100

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:01:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

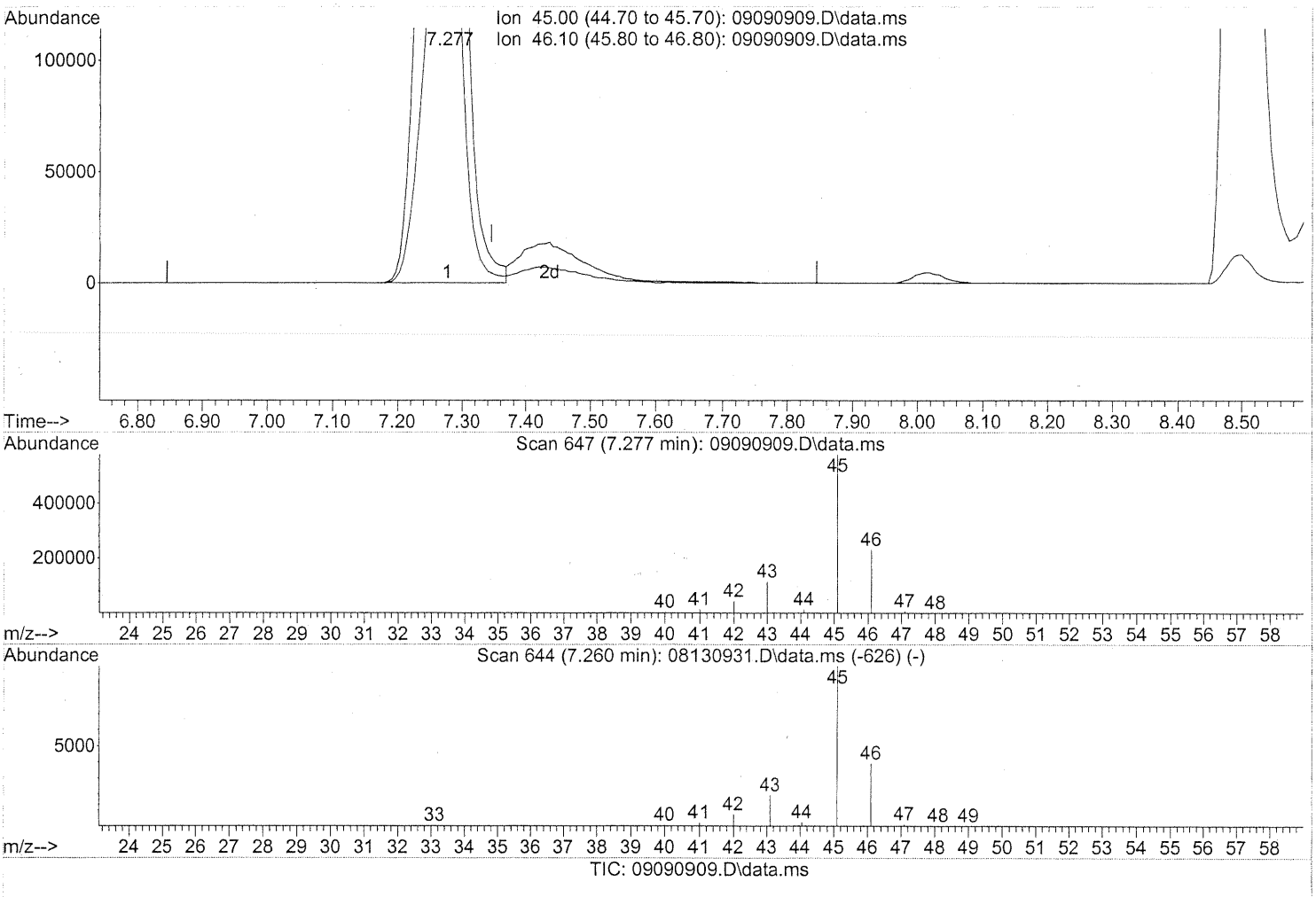
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1163123	24.755	ng	99
81) 2-Ethyltoluene	24.79	105	2488576	23.134	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2251170	24.486	ng	99
83) n-Decane	25.15	57	1269431	23.722	ng	95
84) Benzyl Chloride	25.22	91	1925863	27.076	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1159576	24.362	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1173366	23.234	ng	100
87) sec-Butylbenzene	25.38	105	2829725	23.357	ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	2738925	23.595	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2265453	24.378	ng	99
90) 1,2-Dichlorobenzene	25.75	146	1137210	23.795	ng	99
91) d-Limonene	25.74	68	946963	25.175	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.26	157	391490	27.125	ng	93
93) n-Undecane	26.65	57	1349354	24.402	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	849196	25.434	ng	100
95) Naphthalene	27.94	128	2981015	24.165	ng	100
96) n-Dodecane	27.89	57	1381659	22.322	ng	96
97) Hexachlorobutadiene	28.36	225	476431	24.988	ng	99
98) Cyclohexanone	22.51	55	775247	24.715	ng	96
99) tert-Butylbenzene	25.05	119	2179487	23.903	ng	99
100) n-Butylbenzene	26.07	91	2361771	24.493	ng	100

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:00:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.277min (-0.068) 107.54ng

response 2060756

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.12
0.00	0.00	0.00
0.00	0.00	0.00

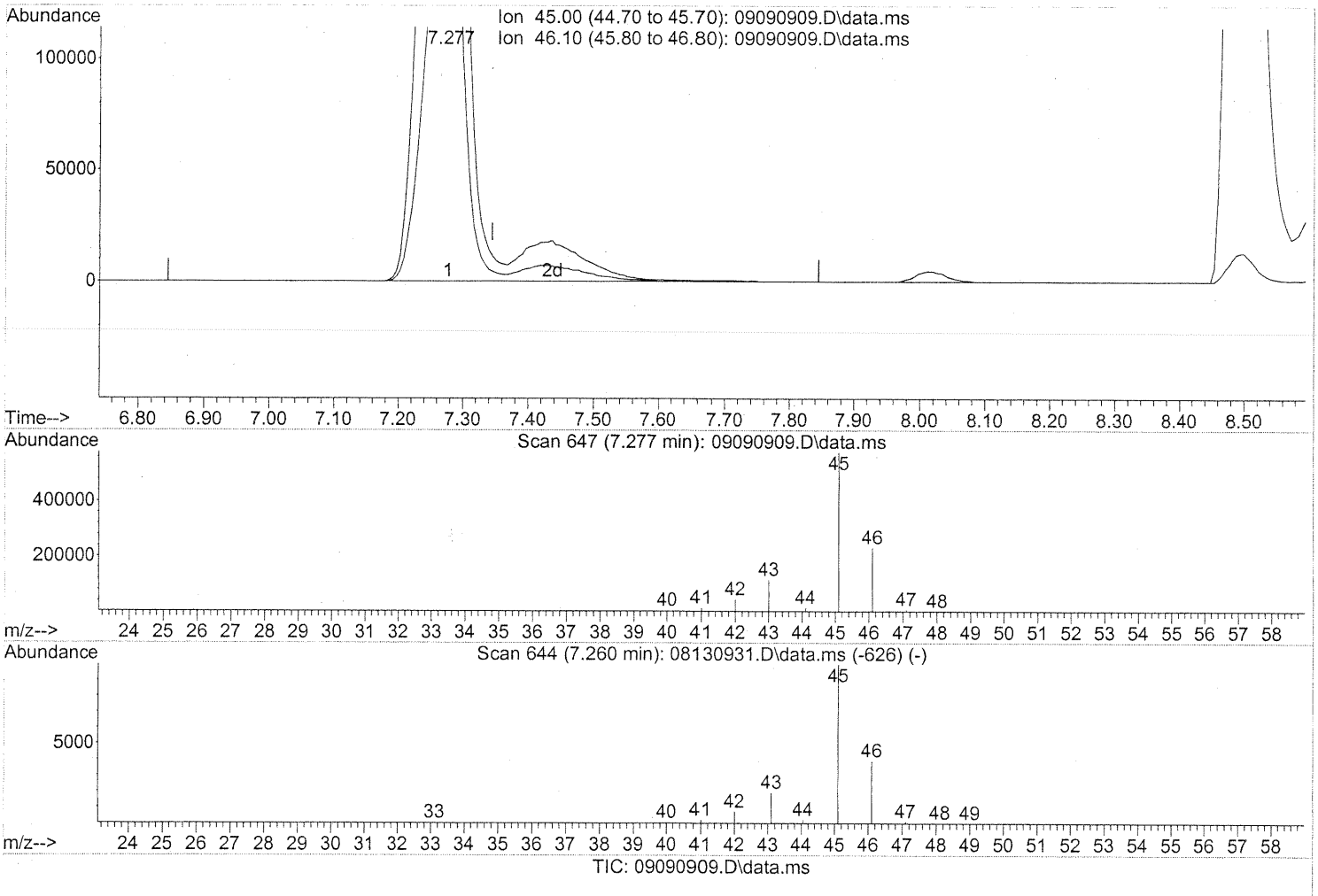
PT

336

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:00:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.277min (-0.068) 114.09ng m

response 2186226

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.88
0.00	0.00	0.00
0.00	0.00	0.00

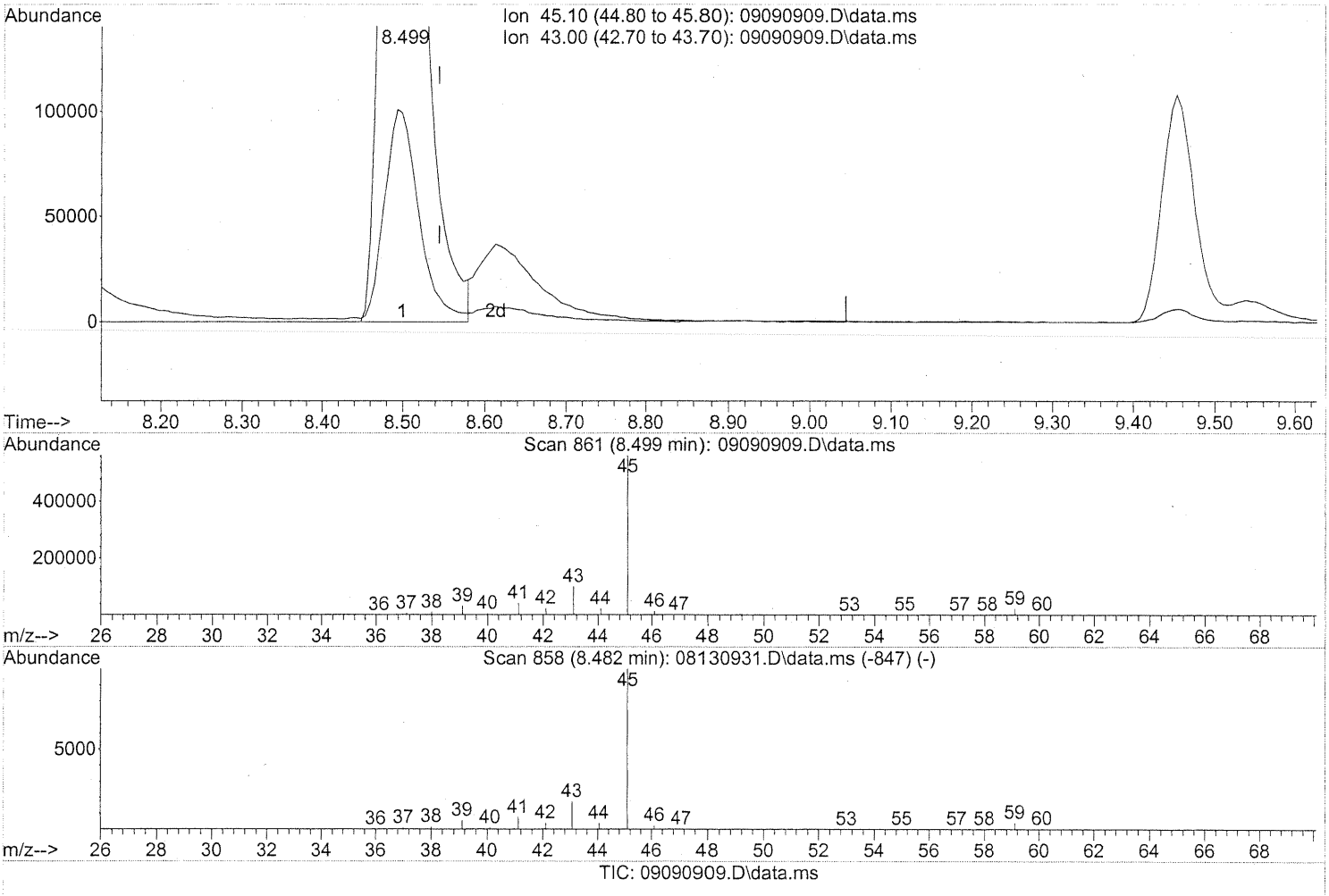
PT → IC
Em 9/9/09
LH 9/10/09

337

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:00:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.499min (-0.046) 30.79ng

response 1644503

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.72
0.00	0.00	0.00
0.00	0.00	0.00

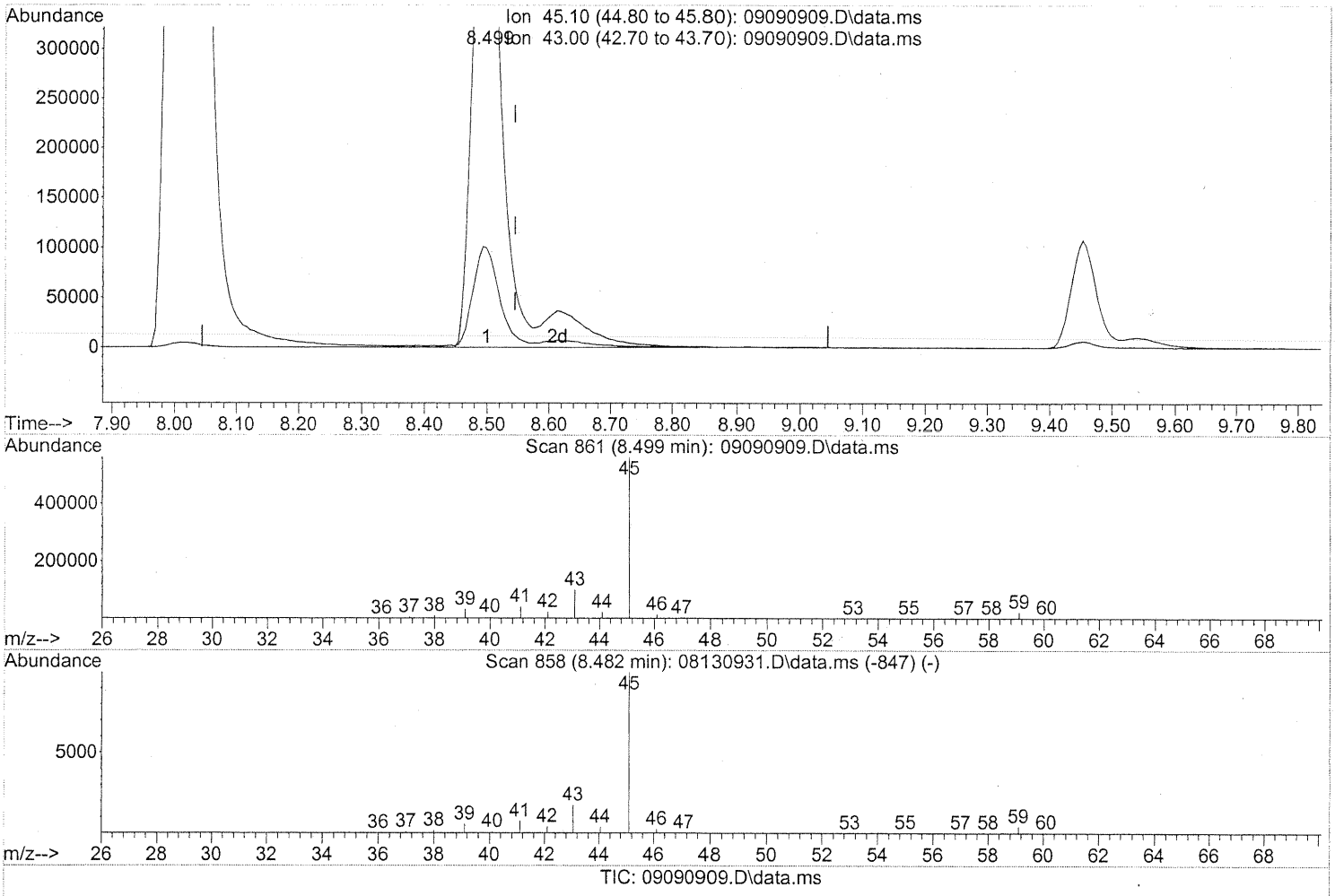
PT

338

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090909.D
Acq On : 9 Sep 2009 13:55
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 15:01:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.499min (-0.046) 34.39ng m

response 1836698

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.87
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

9/9/09

9/10/09

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INITIAL CALIBRATION STANDARDS

Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:31:29 2009
Response Via : Initial Calibration

Calibration Files
0.1 =08130926.D 0.2 =08130927.D 0.5 =08130928.D 1.0 =08130929.D 5.0 =08130930.D 25 =08130931.D
50 =08130932.D 100 =08130933.D

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR	Bromochloromethane...	----------ISTD----------									
2)	T	Propene	2.174	2.059	2.094	1.808	2.232	2.290	2.446	2.441	2.193	9.63
3)	T	Dichlorodifluo...	3.035	3.114	3.770	3.266	3.072	2.931	2.923	2.931	3.130	9.06
4)	T	Chloromethane	2.821	2.880	3.586	3.105	2.875	2.912	2.723	2.438	2.918	11.31
5)	T	1,2-Dichloro-1...	1.540	1.594	1.974	1.722	1.584	1.592	1.618	1.608	1.654	8.41
6)	T	Vinyl Chloride	2.832	2.792	3.468	3.004	2.799	2.744	2.731	2.654	2.878	8.99
7)	T	1,3-Butadiene	1.798	1.830	2.433	2.110	2.037	2.073	2.052	2.021	2.044	9.50
8)	T	Bromomethane	1.454	1.354	1.828	1.539	1.457	1.488	1.450	1.470	1.505	9.32
9)	T	Chloroethane	1.288	1.353	1.704	1.532	1.407	1.388	1.372	1.378	1.428	9.16
10)	T	Ethanol	1.327	1.340	1.502	1.355	1.359	1.397	1.382	1.343	1.376	4.08
11)	T	Acetonitrile	3.225	3.235	3.880	3.469	3.312	3.308	3.278	3.151	3.357	6.86
12)	T	Acrolein	0.587	0.838	1.022	0.925	0.938	0.968	0.960	0.938	0.897	15.10
13)	T	Acetone	1.737	1.573	1.514	1.326	1.242	1.261	1.272	1.274	1.400	13.19
14)	T	Trichlorofluor...	2.460	2.470	3.217	2.781	2.602	2.632	2.617	2.637	2.677	8.99
15)	T	2-Propanol (Is...	3.909	4.076	5.169	4.663	3.537	3.561	2.938	2.816	3.834	21.00
16)	T	Acrylonitrile	1.184	1.544	2.296	2.130	2.248	2.314	2.290	2.261	2.033	21.03
17)	T	1,1-Dichloroet...	1.628	1.534	1.819	1.557	1.481	1.503	1.505	1.541	1.571	6.98
18)	T	2-Methyl-2-Pro...	3.719	3.691	4.575	4.109	4.026	4.261	2.863		3.892	14.06
19)	T	Methylene Chlo...	2.075	1.791	2.042	1.702	1.591	1.591	1.590	1.589	1.747	11.79
20)	T	3-Chloro-1-pro...	1.881	1.974	2.644	2.375	2.386	2.488	2.495	2.494	2.342	11.52
21)	T	Trichlorotrifl...	1.029	1.052	1.425	1.232	1.189	1.220	1.226	1.212	1.198	10.17
22)	T	Carbon Disulfide	6.127	5.864	7.192	6.199	5.928	5.960	5.995	6.042	6.163	6.96
23)	T	trans-1,2-Dich...	2.076	2.186	2.809	2.490	2.391	2.447	2.447	2.439	2.411	9.02
24)	T	1,1-Dichloroet...	2.858	2.714	3.451	2.979	2.870	2.922	2.925	2.901	2.952	7.32
25)	T	Methyl tert-Bu...	4.501	4.369	5.328	4.761	4.707	4.811	4.903	4.894	4.784	6.03
26)	T	Vinyl Acetate			0.219	0.227	0.282	0.357	0.377	0.356	0.303	23.05
27)	T	2-Butanone (MEK)			0.903	0.913	1.059	1.121	1.122	0.739	0.976	15.54
28)	T	cis-1,2-Dichlo...	2.018	2.033	2.703	2.314	2.205	2.250	2.252	2.222	2.250	9.40
29)	T	Diisopropyl Ether	1.155	1.224	1.532	1.408	1.329	1.407	1.482	1.548	1.386	10.24
30)	T	Ethyl Acetate			0.547	0.527	0.598	0.673	0.712	0.741	0.633	14.01
31)		n-Hexane	2.858	2.878	3.605	3.054	2.887	2.950	3.149	3.298	3.085	8.42

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Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

32)	T	Chloroform	2.288	2.357	3.101	2.678	2.528	2.559	2.566	2.581	2.582	9.48
33)	S	1,2-Dichloroet...	1.783	1.785	1.775	1.777	1.772	1.756	1.748	1.745	1.768	0.87
34)	T	Tetrahydrofura...	0.777	0.944	1.132	1.091	1.068	1.060	1.025	1.021	1.015	10.94
35)	T	Ethyl tert-But...	1.774	1.706	2.202	2.019	1.944	2.017	2.064	2.089	1.977	8.34
36)	T	1,2-Dichloroet...	1.727	1.673	2.296	2.056	1.996	2.029	2.021	2.008	1.976	9.92
37)	IR	1,4-Difluorobenzen...	----------	----------	ISTD	----------	----------	----------	----------	----------	----------	
38)	T	1,1,1-Trichlor...	0.444	0.420	0.523	0.463	0.437	0.451	0.456	0.445	0.455	6.67
39)	T	Isopropyl Acetate	0.140	0.170	0.218	0.205	0.205	0.228	0.231	0.236	0.204	16.31
40)	T	1-Butanol		0.193	0.296	0.289	0.324	0.388	0.392	0.385	0.324	22.49
41)	T	Benzene	1.392	1.274	1.620	1.363	1.255	1.281	1.288	1.283	1.344	9.01
42)	T	Carbon Tetrach...	0.325	0.355	0.434	0.386	0.359	0.378	0.384	0.386	0.376	8.32
43)	T	Cyclohexane	0.487	0.473	0.597	0.520	0.494	0.516	0.530	0.548	0.521	7.54
44)	T	tert-Amyl Meth...	0.885	0.846	1.058	0.930	0.920	0.958	0.977	0.986	0.945	6.91
45)	T	1,2-Dichloropr...	0.287	0.294	0.386	0.342	0.323	0.336	0.336	0.335	0.330	9.28
46)	T	Bromodichlorom...	0.310	0.343	0.460	0.400	0.392	0.412	0.417	0.413	0.393	11.87
47)	T	Trichloroethene	0.350	0.332	0.393	0.342	0.315	0.328	0.331	0.341	0.341	6.80
48)	T	1,4-Dioxane	0.149	0.181	0.262	0.247	0.250	0.272	0.277	0.275	0.239	19.91
49)	T	2,2,4-Trimethy...	1.490	1.428	1.805	1.593	1.481	1.519	1.540	1.522	1.547	7.41
50)	T	Methyl Methacr...			0.126	0.120	0.127	0.140	0.144	0.149	0.134	8.76
51)	T	n-Heptane	0.318	0.311	0.430	0.377	0.344	0.357	0.362	0.363	0.358	10.30
52)	T	cis-1,3-Dichlo...	0.369	0.393	0.562	0.496	0.513	0.543	0.550	0.550	0.497	15.11
53)	T	4-Methyl-2-pen...		0.183	0.286	0.279	0.295	0.328	0.332	0.330	0.291	18.02
54)	T	trans-1,3-Dich...	0.279	0.328	0.475	0.439	0.461	0.496	0.501	0.498	0.435	19.49
55)	T	1,1,2-Trichlor...	0.220	0.242	0.336	0.299	0.290	0.302	0.303	0.305	0.287	13.09
56)	IR	Chlorobenzene-d5 (...	----------	----------	ISTD	----------	----------	----------	----------	----------	----------	
57)	S	Toluene-d8 (SS2)	2.389	2.355	2.357	2.374	2.368	2.378	2.373	2.420	2.377	0.87
58)	T	Toluene	2.992	2.615	3.218	2.870	2.713	2.825	2.847	2.969	2.881	6.39
59)	T	2-Hexanone			1.374	1.315	1.424	1.609	1.622	1.640	1.497	9.52
60)	T	Dibromochlorom...	0.498	0.484	0.692	0.611	0.611	0.658	0.666	0.701	0.615	13.57
61)	T	1,2-Dibromoethane	0.480	0.540	0.721	0.653	0.655	0.697	0.706	0.736	0.648	14.14
62)	T	n-Butyl Acetate		0.946	1.471	1.454	1.644	1.883	1.948	2.090	1.634	23.73
63)	T	n-Octane	0.573	0.534	0.733	0.656	0.631	0.651	0.665	0.695	0.642	9.96
64)	T	Tetrachloroethene	0.653	0.633	0.813	0.718	0.674	0.715	0.728	0.785	0.715	8.69
65)	T	Chlorobenzene	1.711	1.658	1.998	1.775	1.674	1.736	1.755	1.847	1.769	6.22
66)	T	Ethylbenzene	2.866	2.701	3.479	3.120	3.007	3.146	3.209	3.355	3.111	8.11
67)	T	m- & p-Xylenes	2.202	2.207	2.735	2.430	2.352	2.488	2.570	2.744	2.466	8.56
68)	T	Bromoform	0.379	0.408	0.568	0.518	0.530	0.592	0.616	0.661	0.534	18.39
69)	T	Styrene	1.461	1.519	1.980	1.784	1.806	1.936	1.981	2.115	1.823	12.67
70)		o-Xylene	2.290	2.120	2.774	2.457	2.356	2.507	2.579	2.763	2.481	9.13

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Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

71)	T	n-Nonane	1.391	1.313	1.710	1.525	1.444	1.512	1.522	1.535	1.494	7.85
72)	T	1,1,2,2-Tetrac...	0.879	0.869	1.168	1.042	1.050	1.120	1.157	1.240	1.066	12.60
73)	S	Bromofluoroben...	0.673	0.671	0.674	0.671	0.671	0.677	0.676	0.671	0.673	0.39
74)	T	Cumene	2.984	2.848	3.575	3.168	3.066	3.250	3.329	3.513	3.217	7.84
75)	T	alpha-Pinene	1.402	1.392	1.723	1.533	1.537	1.629	1.680	1.799	1.587	9.28
76)	T	n-Propylbenzene	3.674	3.502	4.445	3.969	3.822	4.041	4.126	4.224	3.975	7.65
77)	T	3-Ethyltoluene	2.729	2.641	3.288	2.935	2.885	3.119	3.151	3.357	3.013	8.56
78)	T	4-Ethyltoluene	2.922	2.595	3.364	2.976	2.853	2.991	3.174	3.361	3.029	8.63
79)	T	1,3,5-Trimethy...	2.363	2.252	2.746	2.471	2.345	2.495	2.579	2.787	2.505	7.61
80)	T	alpha-Methylst...	1.104	1.096	1.433	1.304	1.329	1.447	1.506	1.655	1.359	14.20
81)	T	2-Ethyltoluene	2.902	2.717	3.467	3.084	2.953	3.115	3.211	3.445	3.112	8.35
82)	T	1,2,4-Trimethy...	2.333	2.241	2.782	2.509	2.448	2.756	2.954	3.253	2.660	12.81
83)	T	n-Decane	1.406	1.408	1.725	1.551	1.487	1.557	1.583	1.667	1.548	7.34
84)	T	Benzyl Chloride	1.491	1.511	2.028	1.926	2.036	2.350	2.447	2.671	2.058	20.55
85)	T	1,3-Dichlorobe...	1.210	1.172	1.550	1.346	1.295	1.384	1.445	1.613	1.377	11.26
86)	T	1,4-Dichlorobe...	1.347	1.288	1.627	1.448	1.360	1.452	1.505	1.660	1.461	9.06
87)	T	sec-Butylbenzene	3.353	3.011	3.930	3.477	3.335	3.526	3.611	3.794	3.505	8.16
88)	T	4-Isopropyltol...	2.950	2.839	3.579	3.210	3.135	3.474	3.717	3.960	3.358	11.59
89)	T	1,2,3-Trimethy...	2.386	2.250	2.845	2.562	2.467	2.766	2.966	3.263	2.688	12.46
90)	T	1,2-Dichlorobe...	1.220	1.146	1.485	1.306	1.278	1.394	1.496	1.734	1.382	13.57
91)	T	d-Limonene	0.937	0.883	1.147	1.025	1.046	1.162	1.214	1.291	1.088	12.84
92)	T	1,2-Dibromo-3-...	0.295	0.296	0.441	0.401	0.429	0.466	0.485	0.526	0.417	20.10
93)	T	n-Undecane	1.416	1.402	1.777	1.589	1.558	1.633	1.676	1.747	1.600	8.68
94)	T	1,2,4-Trichlor...	0.808	0.826	1.050	0.940	0.928	0.973	1.039	1.161	0.966	12.19
95)	T	Naphthalene	3.242	3.022	3.838	3.521	3.475	3.603	3.831	4.017	3.568	9.23
96)	T	n-Dodecane	1.632	1.515	1.880	1.777	1.765	1.836	1.917	2.002	1.790	8.78
97)	T	Hexachlorobuta...	0.472	0.478	0.593	0.532	0.519	0.556	0.594	0.670	0.552	12.05
98)	T	Cyclohexanone	0.755	0.834	0.846	0.808	0.815	1.045	1.063	1.092	0.907	14.91
99)	T	tert-Butylbenzene	2.347	2.275	2.769	2.506	2.410	2.702	2.885	3.206	2.638	11.91
100)	T	n-Butylbenzene	2.446	2.495	3.071	2.751	2.686	2.854	2.924	3.088	2.789	8.64

(#) = Out of Range

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Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: [redacted]
20ng/L Std. ID: [redacted]
200ng/L Std. ID: [redacted]

Dilution Factors:		5	50	250	Working STD Conc.(ng/L):	[redacted]				20	200	200	200
	Source Std.	Primary Working Standards			Injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
Compounds	mg/m^3	200ng/L	20ng/L	4ng/L	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

Gem 8/14/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240912
20ng/L Std. ID: S20-08100904
200ng/L Std. ID: S20-08100902

Dilution Factors:		5	50	250
	Source Std.	Primary Working Standards		
Compounds	mg/m³	200ng/L	20ng/L	4ng/L
Bromoform	1.03	206	20.6	4.12
Styrene	1.07	214	21.4	4.28
o-Xylene	1.06	212	21.2	4.24
n-Nonane	1.06	212	21.2	4.24
1,1,2,2-Tetrachloroethane	1.07	214	21.4	4.28
Cumene	1.03	206	20.6	4.12
alpha-Pinene	1.01	202	20.2	4.04
n-Propylbenzene	1.03	206	20.6	4.12
3-Ethyltoluene	1.09	218	21.8	4.36
4-Ethyltoluene	1.09	218	21.8	4.36
1,3,5-Trimethylbenzene	1.09	218	21.8	4.36
alpha-Methylstyrene	1.07	214	21.4	4.28
2-Ethyltoluene	1.05	210	21.0	4.20
1,2,4-Trimethylbenzene	1.06	212	21.2	4.24
n-Decane	1.08	216	21.6	4.32
Benzyl Chloride	1.10	220	22.0	4.40
1,3-Dichlorobenzene	1.09	218	21.8	4.36
1,4-Dichlorobenzene	1.06	212	21.2	4.24
sec-Butylbenzene	1.06	212	21.2	4.24
p-Isopropyltoluene	1.03	206	20.6	4.12
1,2,3-Trimethylbenzene	1.07	214	21.4	4.28
1,2-Dichlorobenzene	1.06	212	21.2	4.24
d-Limonene	1.09	218	21.8	4.36
chloropropane	1.10	220	22.0	4.40
n-Undecane	1.09	218	21.8	4.36
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48
Naphthalene	1.06	212	21.2	4.24
n-Dodecane	0.99	198	19.8	3.96
Hexachloro-1,3-butadiene	1.10	220	22.0	4.40
Methacrylonitrile	1.06	212	21.2	4.24
Cyclohexanone	0.98	196	19.6	3.92
tert-Butylbenzene	1.06	212	21.2	4.24
n-Butylbenzene	1.09	218	21.8	4.36

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
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.112	0.224	0.560	1.12	5.60	28.0	56.0	112
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.098	0.196	0.490	0.980	4.90	24.5	49.0	98.0
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109

*Enter information in the Solid Shaded Areas ONLY.

Tam 8/14/09

Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:31:29 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS09\Data\2009_08\13\O8130926.D
2	0.2	0	25	J:\MS09\Data\2009_08\13\O8130927.D
3	0.5	1	25	J:\MS09\Data\2009_08\13\O8130928.D
4	1.0	1	25	J:\MS09\Data\2009_08\13\O8130929.D
5	5.0	5	25	J:\MS09\Data\2009_08\13\O8130930.D
6	25	27	25	J:\MS09\Data\2009_08\13\O8130931.D
7	50	54	25	J:\MS09\Data\2009_08\13\O8130932.D
8	100	107	25	J:\MS09\Data\2009_08\13\O8130933.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Aug 14 07:29 2009	Aug 14 07:05 2009	14 Aug 2009 1:56
2	0.2	Aug 14 07:30 2009	Aug 14 07:14 2009	14 Aug 2009 2:38
3	0.5	Aug 14 07:30 2009	Aug 14 07:20 2009	14 Aug 2009 3:19
4	1.0	Aug 14 07:30 2009	Aug 14 07:21 2009	14 Aug 2009 4:01
5	5.0	Aug 14 07:30 2009	Aug 14 07:23 2009	14 Aug 2009 4:43
6	25	Aug 14 07:31 2009	Aug 14 07:26 2009	14 Aug 2009 5:24
7	50	Aug 14 07:31 2009	Aug 14 07:27 2009	14 Aug 2009 6:06
8	100	Aug 14 07:31 2009	Aug 14 07:28 2009	14 Aug 2009 6:47

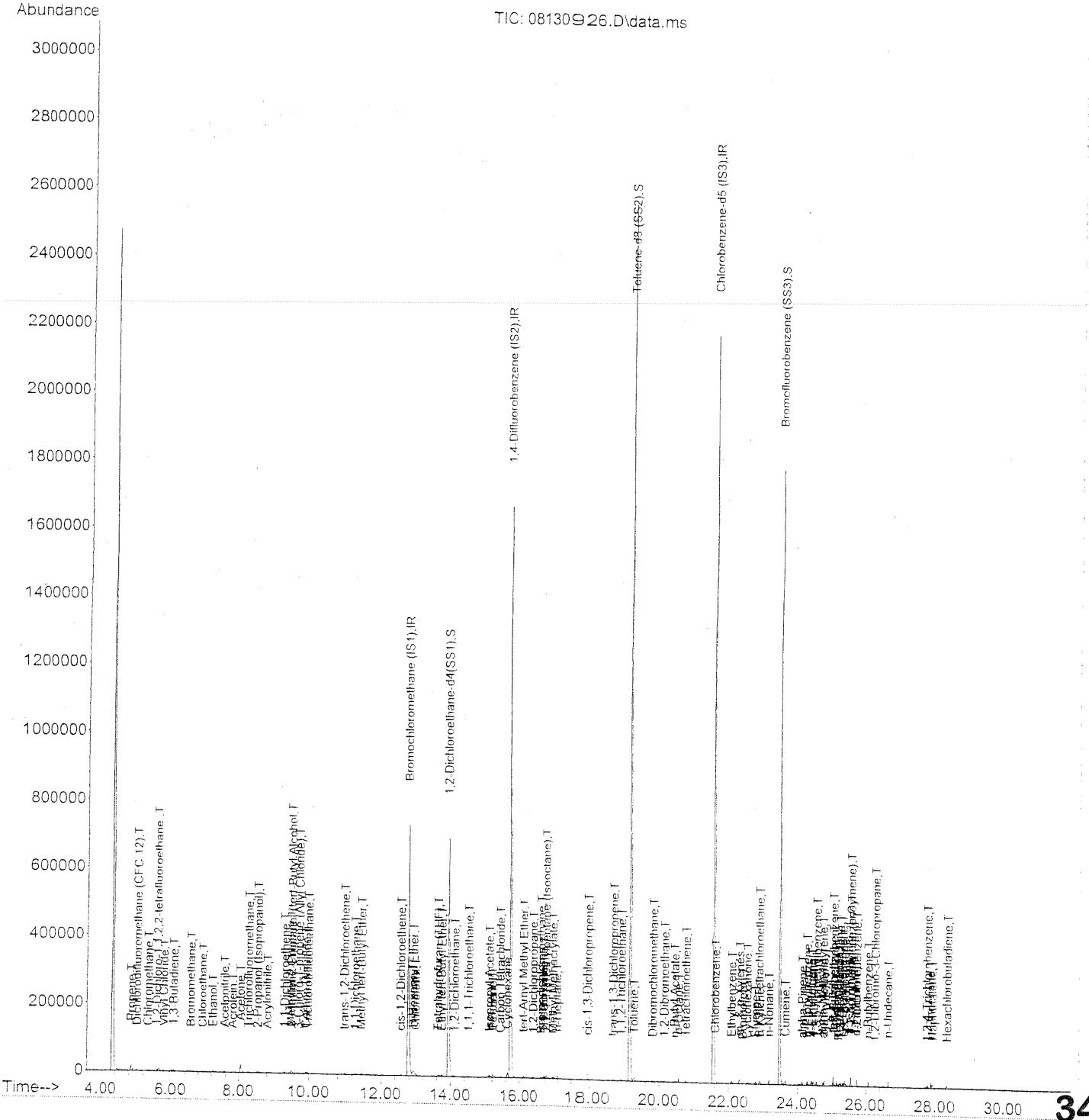
R9081309.M Fri Aug 14 07:48:55 2009

EM 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



R9081309.M Fri Aug 14 07:12:43 2009

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	388910	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1986864	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	961494	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	693371	25.200	ng		-0.04
Spiked Amount 25.000			Recovery =	100.80%			
57) Toluene-d8 (SS2)	19.14	98	2296672	24.144	ng		-0.02
Spiked Amount 25.000			Recovery =	96.56%			
73) Bromofluorobenzene (SS3)	23.49	174	646809	22.617	ng		0.00
Spiked Amount 25.000			Recovery =	90.48%			
Target Compounds							Qvalue
2) Propene	4.87	42	3618	0.147	ng		98
3) Dichlorodifluoromethan...	5.03	85	4958	0.101	ng	#	88
4) Chloromethane	5.36	50	4388	0.120	ng		94
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	2540	0.092	ng		85
6) Vinyl Chloride	5.81	62	4449	0.114	ng		88
7) 1,3-Butadiene	6.11	54	3356	0.119	ng		97
8) Bromomethane	6.60	94	2307	0.100	ng		99
9) Chloroethane	6.94	64	2024	0.103	ng	#	53
10) Ethanol	7.25	45	10733m	0.659	ng		
11) Acetonitrile	7.59	41	5267	0.143	ng		82
12) Acrolein	7.83	56	986	0.083	ng		87
13) Acetone	8.06	58	14865	0.803	ng		89
14) Trichlorofluoromethane	8.29	101	4018	0.094	ng		99
15) 2-Propanol (Isopropanol)	8.56	45	11494	0.236	ng		77
16) Acrylonitrile	8.84	53	1953	0.079	ng		89
17) 1,1-Dichloroethene	9.33	96	2785	0.128	ng		91
18) 2-Methyl-2-Propanol (t...	9.53	59	11686	0.213	ng	#	84
19) Methylene Chloride	9.53	84	3454	0.141	ng		90
20) 3-Chloro-1-propene (Al...	9.73	41	3161	0.119	ng		68
21) Trichlorotrifluoroethane	9.98	151	1761	0.091	ng	#	81
22) Carbon Disulfide	9.93	76	10199	0.122	ng		81
23) trans-1,2-Dichloroethene	10.99	61	3423	0.107	ng		87
24) 1,1-Dichloroethane	11.29	63	4712	0.121	ng		83
25) Methyl tert-Butyl Ether	11.46	73	7632	0.111	ng		94
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	0.00	72	0	N.D.			
28) cis-1,2-Dichloroethene	12.57	61	3421	0.111	ng		88
29) Diisopropyl Ether	12.94	87	1922	0.088	ng	#	89
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	12.93	57	4846	0.113	ng		

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	3808	0.098	ng		92
34) Tetrahydrofuran (THF)	13.65	72	1329	0.100	ng	#	49
35) Ethyl tert-Butyl Ether	13.75	87	2842	0.097	ng	#	88
36) 1,2-Dichloroethane	14.14	62	2848	0.091	ng	#	63
38) 1,1,1-Trichloroethane	14.53	97	3702	0.102	ng		86
39) Isopropyl Acetate	15.13	61	2323	0.161	ng	#	40
40) 1-Butanol	15.23	56	2885	0.117	ng	#	48
41) Benzene	15.23	78	11726	0.111	ng		95
42) Carbon Tetrachloride	15.45	117	2792	0.090	ng		94
43) Cyclohexane	15.65	84	8323	0.210	ng	#	85
44) tert-Amyl Methyl Ether	16.14	73	7312	0.104	ng		95
45) 1,2-Dichloropropane	16.45	63	2391	0.107	ng		92
46) Bromodichloromethane	16.69	83	2661	0.087	ng		93
47) Trichloroethene	16.77	130	2951	0.109	ng		96
48) 1,4-Dioxane	16.78	88	1271	0.071	ng	#	58
49) 2,2,4-Trimethylpentane...	16.85	57	12314	0.120	ng		92
50) Methyl Methacrylate	17.07	100	553	0.056	ng	#	1
51) n-Heptane	17.21	71	2682	0.105	ng		93
52) cis-1,3-Dichloropropene	17.97	75	2905	0.078	ng	#	57
53) 4-Methyl-2-pentanone	18.04	58	915	N.D.			
54) trans-1,3-Dichloropropene	18.67	75	2439	0.075	ng	#	60
55) 1,1,2-Trichloroethane	18.90	97	1838	0.083	ng		99
58) Toluene	19.28	91	12428	0.107	ng		98
59) 2-Hexanone	19.68	43	1480	N.D.			
60) Dibromochloromethane	19.83	129	2204	0.084	ng		85
61) 1,2-Dibromoethane	20.15	107	1955	0.072	ng		94
62) n-Butyl Acetate	20.44	43	2958	0.053	ng	#	49
63) n-Octane	20.56	57	2356	0.104	ng		88
64) Tetrachloroethene	20.76	166	2562	0.083	ng		98
65) Chlorobenzene	21.62	112	7106	0.097	ng		98
66) Ethylbenzene	22.09	91	11683	0.092	ng		94
67) m- & p-Xylenes	22.32	91	17613	0.169	ng		99
68) Bromoform	22.42	173	1501	0.064	ng	#	65
69) Styrene	22.79	104	6011	0.078	ng		94
70) o-Xylene	22.92	91	9337	0.090	ng		95
71) n-Nonane	23.17	43	5669	0.112	ng		87
72) 1,1,2,2-Tetrachloroethane	22.89	83	3618	0.084	ng		92
74) Cumene	23.66	105	11820	0.086	ng		93
75) alpha-Pinene	24.15	93	5445	0.082	ng		99
76) n-Propylbenzene	24.28	91	14553	0.087	ng		93
77) 3-Ethyltoluene	24.41	105	11442	0.087	ng		100
78) 4-Ethyltoluene	24.46	105	12248	0.093	ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	9904	0.091	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	4543	0.074	ng		98
81) 2-Ethyltoluene	24.79	105	11719	0.085	ng		95
82) 1,2,4-Trimethylbenzene	25.05	105	9509	0.078	ng		100
83) n-Decane	25.15	57	5840	0.099	ng		89
84) Benzyl Chloride	25.22	91	6309	0.072	ng		92
85) 1,3-Dichlorobenzene	25.25	146	5071	0.079	ng		100
86) 1,4-Dichlorobenzene	25.33	146	5490	0.082	ng		97
87) sec-Butylbenzene	25.38	105	13671	0.089	ng		96
88) 4-Isopropyltoluene (p-...	25.56	119	11685	0.076	ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	9819	0.079	ng		99
90) 1,2-Dichlorobenzene	25.75	146	4975	0.075	ng		99
91) d-Limonene	25.74	68	3927	0.081	ng		84
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1250	0.067	ng	#	78
93) n-Undecane	26.65	57	5934	0.098	ng		93
94) 1,2,4-Trichlorobenzene	27.79	180	3482	0.081	ng	#	95
95) Naphthalene	27.94	128	13216	0.088	ng		98
96) n-Dodecane	27.89	57	6214	0.096	ng		91
97) Hexachlorobutadiene	28.36	225	1995	0.081	ng		96
98) Cyclohexanone	22.55	55	2844	0.081	ng	#	82
99) tert-Butylbenzene	25.05	119	9567	0.077	ng		93
100) n-Butylbenzene	26.07	91	10255	0.084	ng		99

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

Tom 8/14/09

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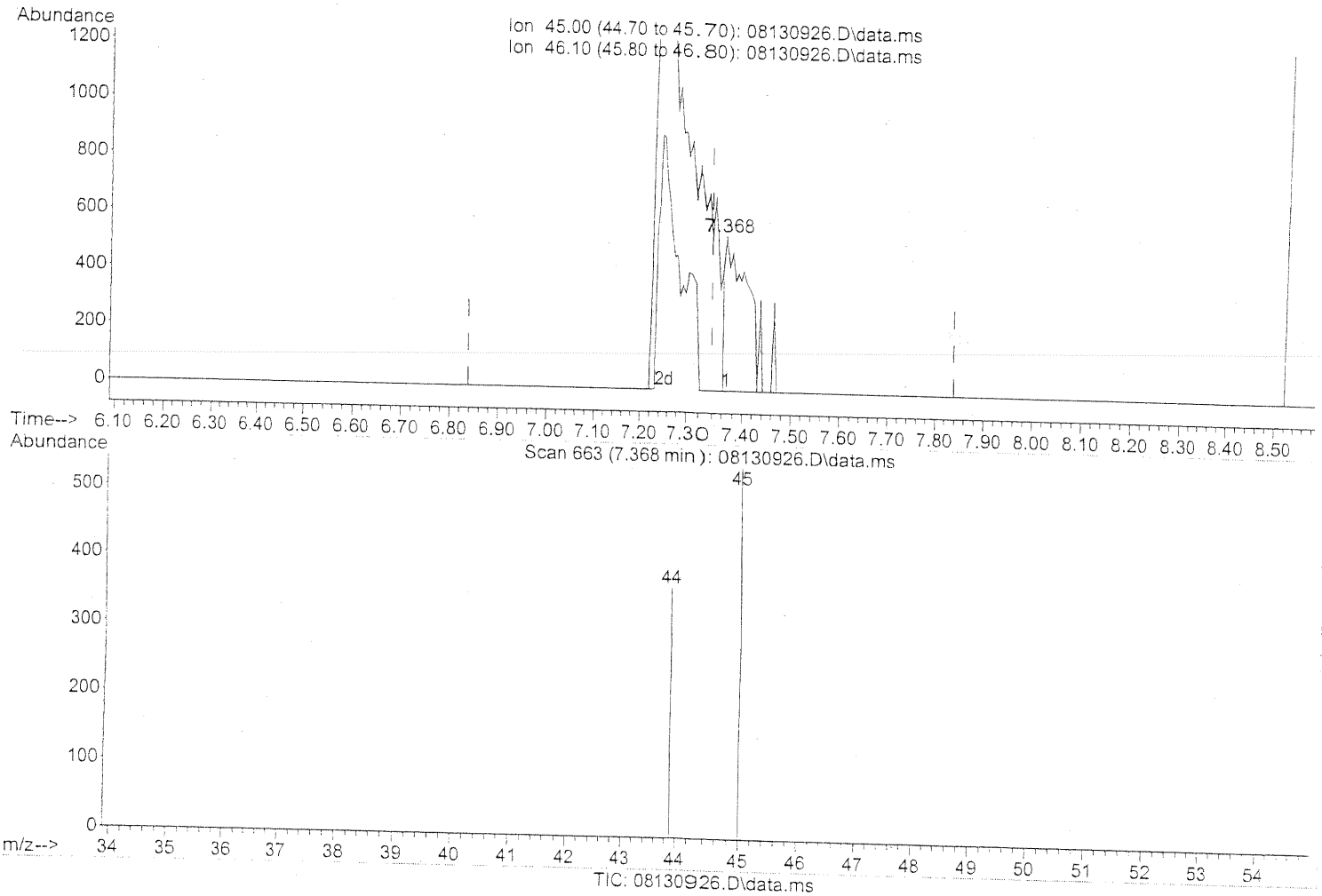
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.368min (+0.029) 0.10ng

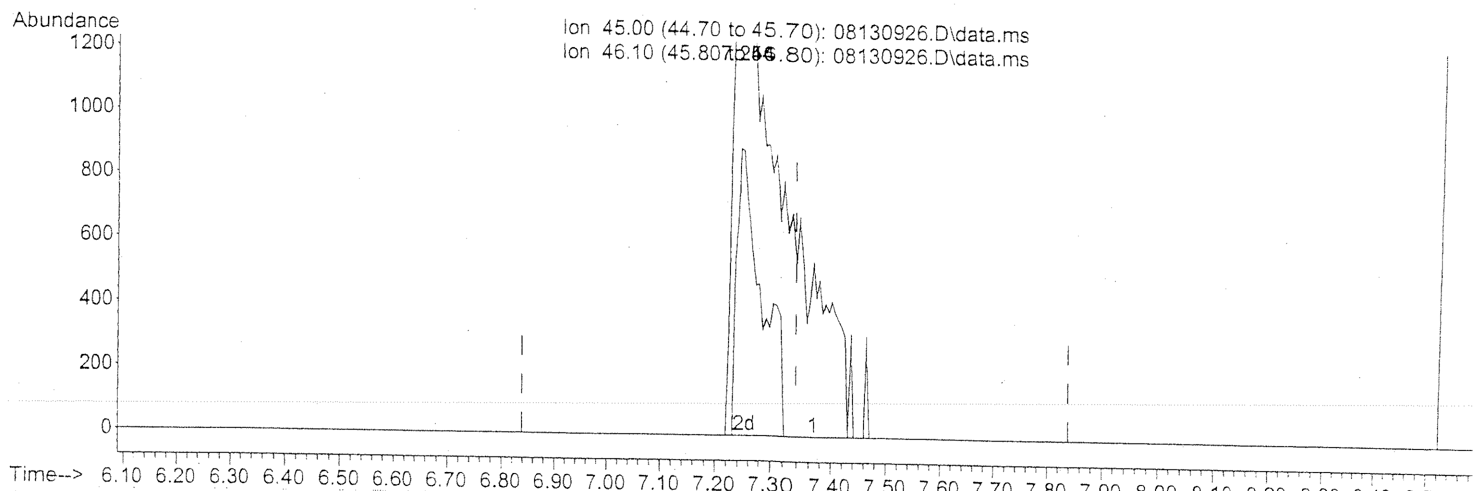
response 1639

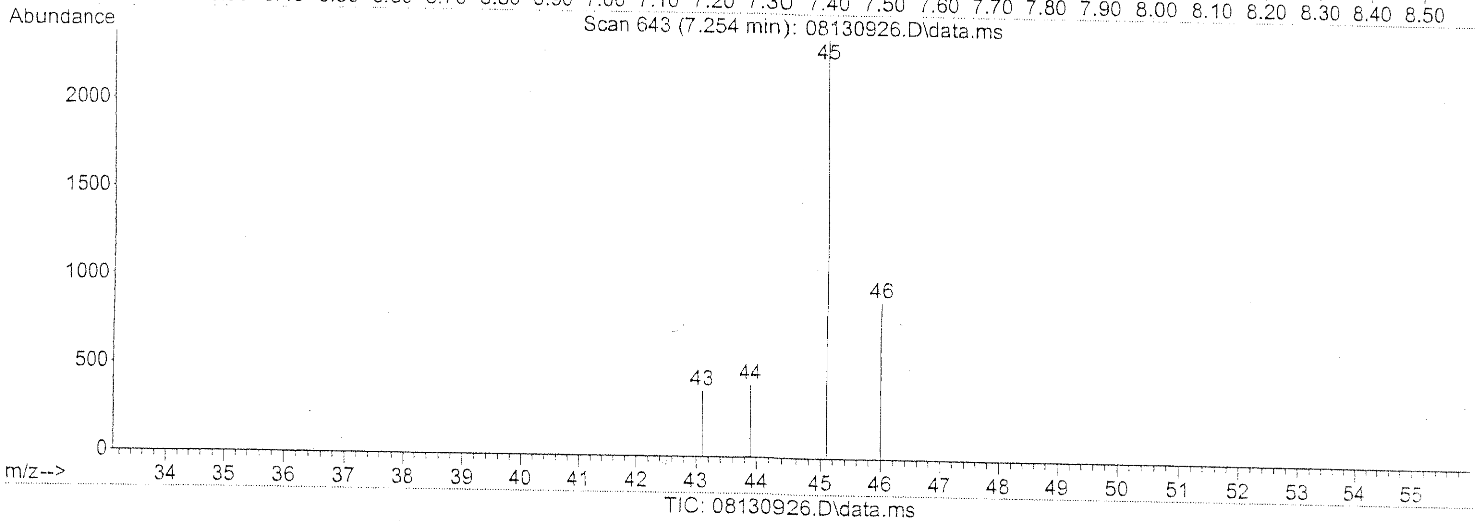
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SP

```
Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On    : 14 Aug 2009   1:56
Operator  : EM
Sample    : 0.1ng TO-15 ICAL STD
Misc      : S20-08130905/S20-07240912
ALS Vial  : 8   Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title  : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration
```





(10) Ethanol (T)

7.254min (-0.086) 0.66ng m

response 10733

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

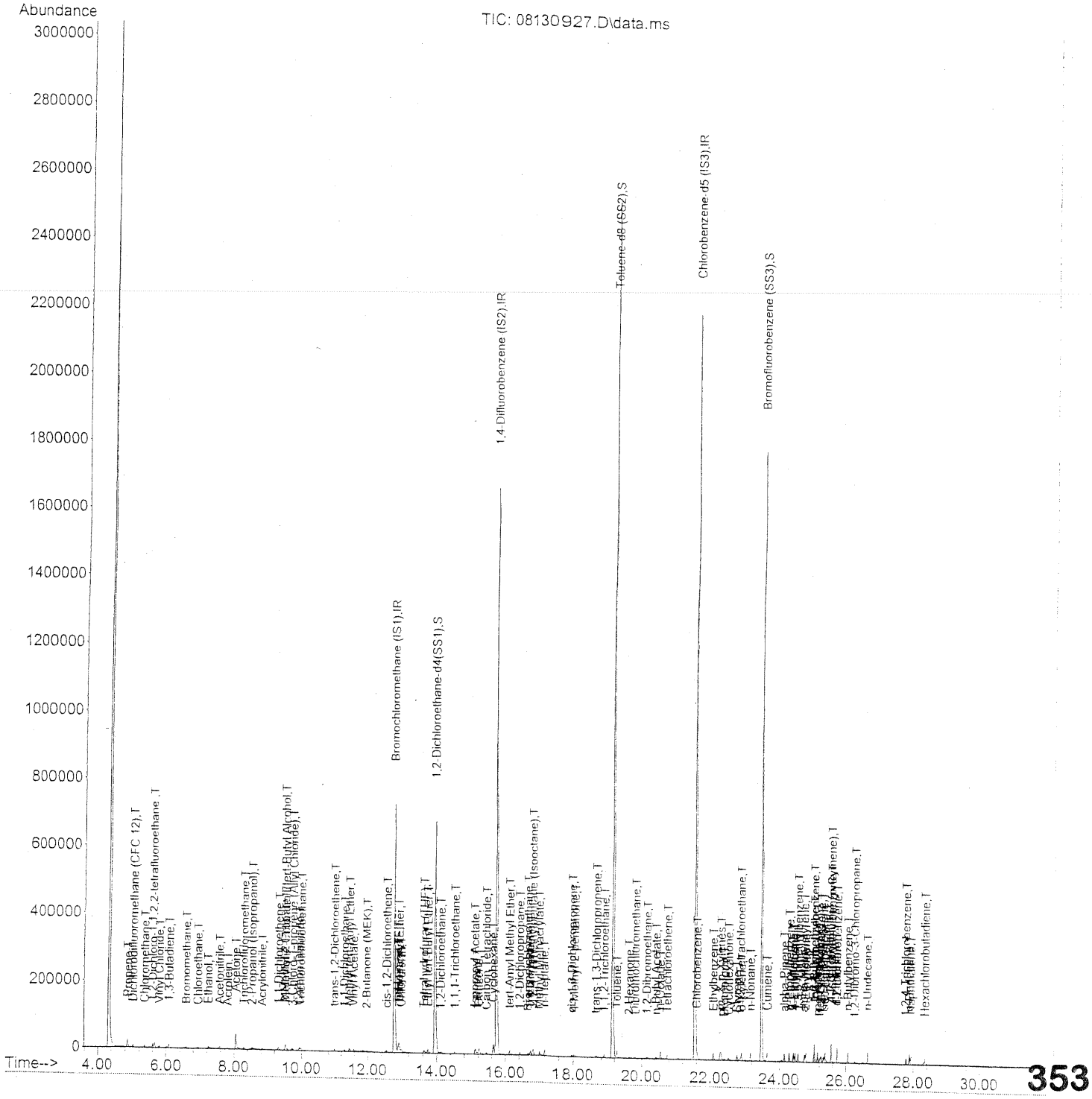
SP → IC
Em 8/14/09

DA 8/15/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



R9081309.M Fri Aug 14 07:20:23 2009

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	387904	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1988065	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	969971	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	692264	25.225	ng		-0.03
Spiked Amount 25.000			Recovery =	100.92%			
57) Toluene-d8 (SS2)	19.14	98	2284146	23.803	ng		-0.02
Spiked Amount 25.000			Recovery =	95.20%			
73) Bromofluorobenzene (SS3)	23.49	174	650502	22.548	ng		0.00
Spiked Amount 25.000			Recovery =	90.20%			
Target Compounds							Qvalue
2) Propene	4.87	42	6837	0.279	ng		97
3) Dichlorodifluoromethan...	5.02	85	10147	0.208	ng		95
4) Chloromethane	5.36	50	8936	0.244	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	5244	0.191	ng		89
6) Vinyl Chloride	5.81	62	8752	0.224	ng		91
7) 1,3-Butadiene	6.10	54	6814	0.243	ng		94
8) Bromomethane	6.60	94	4286	0.186	ng		92
9) Chloroethane	6.94	64	4242	0.217	ng		84
10) Ethanol	7.24	45	21624	1.332	ng		85
11) Acetonitrile	7.58	41	10541	0.287	ng		86
12) Acrolein	7.82	56	2810	0.237	ng		96
13) Acetone	8.05	58	26843	1.453	ng		93
14) Trichlorofluoromethane	8.29	101	8048	0.189	ng		100
15) 2-Propanol (Isopropanol)	8.53	45	23904	0.492	ng		96
16) Acrylonitrile	8.83	53	5080	0.205	ng		92
17) 1,1-Dichloroethene	9.32	96	5237	0.242	ng		94
18) 2-Methyl-2-Propanol (t...	9.52	59	23137	0.423	ng		93
19) Methylene Chloride	9.52	84	5947	0.243	ng		88
20) 3-Chloro-1-propene (Al...	9.73	41	6616	0.251	ng		84
21) Trichlorotrifluoroethane	9.98	151	3591	0.186	ng		91
22) Carbon Disulfide	9.93	76	19471	0.234	ng		95
23) trans-1,2-Dichloroethene	10.99	61	7192	0.226	ng		85
24) 1,1-Dichloroethane	11.30	63	8927	0.230	ng		93
25) Methyl tert-Butyl Ether	11.45	73	14779	0.216	ng		96
26) Vinyl Acetate	11.58	86	1274	0.289	ng	#	1
27) 2-Butanone (MEK)	11.97	72	1592	0.113	ng	#	1
28) cis-1,2-Dichloroethene	12.57	61	6876	0.224	ng		90
29) Diisopropyl Ether	12.94	87	4063	0.186	ng	#	86
30) Ethyl Acetate	12.95	61	1611	0.175	ng		96
31) n-Hexane	12.93	57	9734	0.228	ng		8

R9081309.M Fri Aug 14 07:20:23 2009 Emm 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.00	83	7826	0.202	ng		98
34) Tetrahydrofuran (THF)	13.64	72	3221	0.243	ng	#	69
35) Ethyl tert-Butyl Ether	13.75	87	5452	0.186	ng	#	80
36) 1,2-Dichloroethane	14.13	62	5503	0.177	ng		92
38) 1,1,1-Trichloroethane	14.53	97	7018	0.192	ng		98
39) Isopropyl Acetate	15.10	61	5649	0.390	ng	#	69
40) 1-Butanol	15.17	56	6339	0.257	ng		89
41) Benzene	15.22	78	21485	0.203	ng		96
42) Carbon Tetrachloride	15.45	117	6103	0.196	ng		91
43) Cyclohexane	15.65	84	16172	0.408	ng		86
44) tert-Amyl Methyl Ether	16.14	73	13999	0.200	ng		94
45) 1,2-Dichloropropane	16.43	63	4918	0.220	ng		99
46) Bromodichloromethane	16.69	83	5890	0.192	ng		95
47) Trichloroethene	16.77	130	5590	0.206	ng		98
48) 1,4-Dioxane	16.77	88	3080	0.173	ng		100
49) 2,2,4-Trimethylpentane...	16.85	57	23620	0.230	ng		93
50) Methyl Methacrylate	17.05	100	2700	0.272	ng	#	80
51) n-Heptane	17.20	71	5246	0.204	ng		91
52) cis-1,3-Dichloropropene	17.96	75	6183	0.166	ng		93
53) 4-Methyl-2-pentanone	18.03	58	3201	0.159	ng		70
54) trans-1,3-Dichloropropene	18.66	75	5739	0.175	ng		84
55) 1,1,2-Trichloroethane	18.90	97	4035	0.181	ng		90
58) Toluene	19.28	91	21913	0.187	ng		99
59) 2-Hexanone	19.64	43	6660	0.132	ng		82
60) Dibromochloromethane	19.82	129	4315	0.163	ng		96
61) 1,2-Dibromoethane	20.15	107	4442	0.163	ng		99
62) n-Butyl Acetate	20.43	43	8074	0.144	ng		86
63) n-Octane	20.55	57	4432	0.193	ng		95
64) Tetrachloroethene	20.75	166	5009	0.161	ng		96
65) Chlorobenzene	21.62	112	13897	0.188	ng		94
66) Ethylbenzene	22.09	91	22216	0.174	ng		99
67) m- & p-Xylenes	22.32	91	35625	0.338	ng		96
68) Bromoform	22.42	173	3262	0.139	ng		90
69) Styrene	22.78	104	12611	0.162	ng		95
70) o-Xylene	22.92	91	17434	0.166	ng		97
71) n-Nonane	23.17	43	10801	0.211	ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	7219	0.165	ng		100
74) Cumene	23.66	105	22760	0.163	ng		98
75) alpha-Pinene	24.15	93	10911	0.164	ng		97
76) n-Propylbenzene	24.29	91	27992	0.167	ng		100
77) 3-Ethyltoluene	24.41	105	22341	0.169	ng		99
78) 4-Ethyltoluene	24.46	105	21950	0.166	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	19048	0.173	ng		99

Tam 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	9096	0.148	ng		94
81) 2-Ethyltoluene	24.79	105	22138	0.160	ng		100
82) 1,2,4-Trimethylbenzene	25.05	105	18432	0.150	ng		99
83) n-Decane	25.15	57	11801	0.198	ng		93
84) Benzyl Chloride	25.22	91	12901	0.146	ng		92
85) 1,3-Dichlorobenzene	25.25	146	9910	0.153	ng		99
86) 1,4-Dichlorobenzene	25.33	146	10593	0.157	ng		99
87) sec-Butylbenzene	25.38	105	24768	0.161	ng		98
88) 4-Isopropyltoluene (p-...	25.56	119	22687	0.146	ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	18683	0.149	ng		99
90) 1,2-Dichlorobenzene	25.74	146	9423	0.140	ng		99
91) d-Limonene	25.74	68	7469	0.153	ng		97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	2528	0.134	ng		79
93) n-Undecane	26.65	57	11857	0.194	ng		93
94) 1,2,4-Trichlorobenzene	27.79	180	7181	0.165	ng		94
95) Naphthalene	27.94	128	24854	0.164	ng		98
96) n-Dodecane	27.89	57	11636	0.179	ng		92
97) Hexachlorobutadiene	28.36	225	4076	0.164	ng		100
98) Cyclohexanone	22.54	55	6345	0.179	ng	#	80
99) tert-Butylbenzene	25.05	119	18711	0.150	ng		97
100) n-Butylbenzene	26.07	91	21106	0.172	ng		97

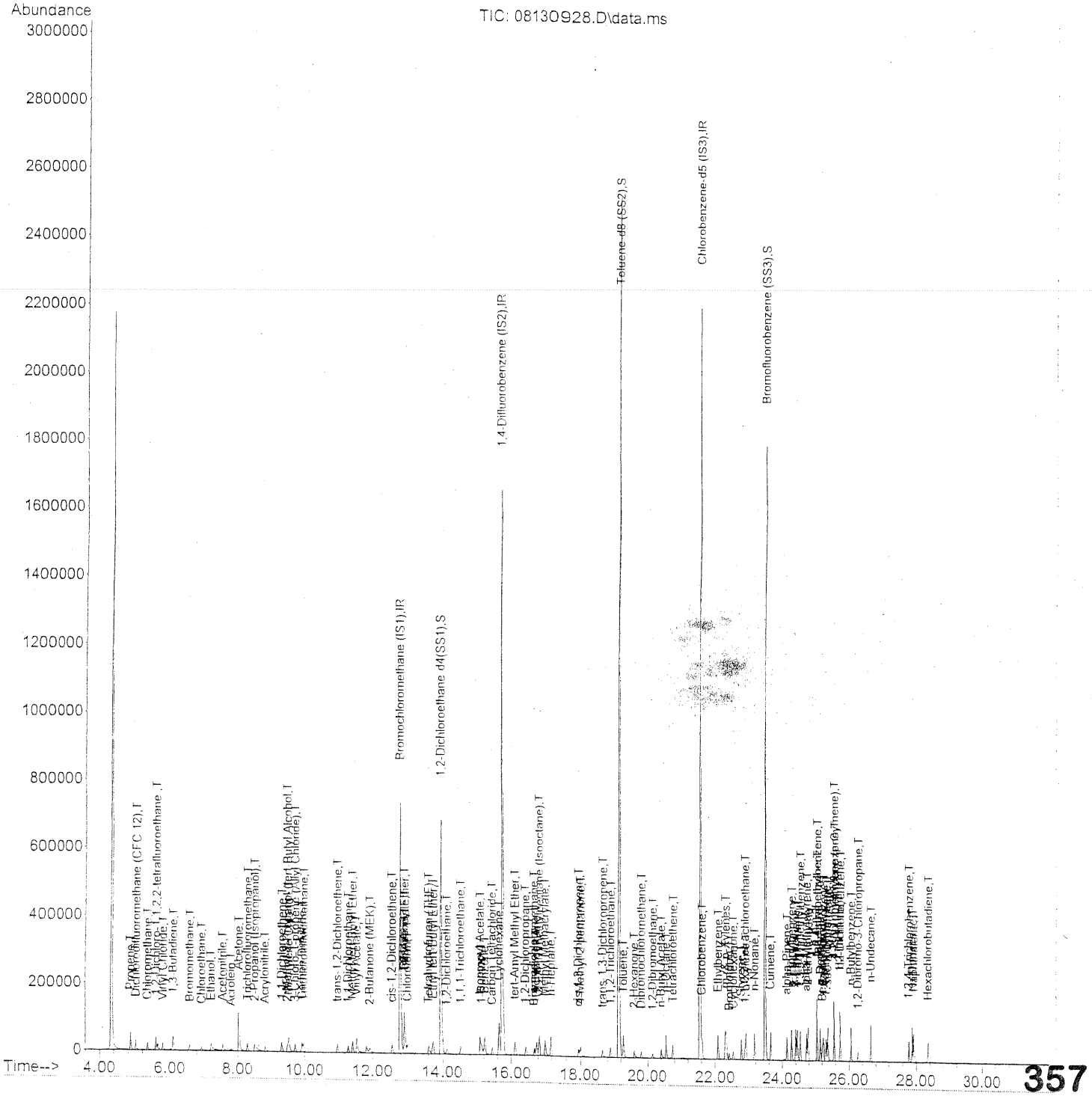
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sam 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	387943	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1964748	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	963338	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	688763	25.095	ng		-0.03
Spiked Amount 25.000			Recovery =	100.40%			
57) Toluene-d8 (SS2)	19.14	98	2270133	23.819	ng		-0.02
Spiked Amount 25.000			Recovery =	95.28%			
73) Bromofluorobenzene (SS3)	23.49	174	649766	22.677	ng		0.00
Spiked Amount 25.000			Recovery =	90.72%			
Target Compounds							Qvalue
2) Propene	4.86	42	17385	0.710	ng		95
3) Dichlorodifluoromethan...	5.01	85	30715	0.629	ng		99
4) Chloromethane	5.35	50	27825	0.761	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	16234	0.590	ng		100
6) Vinyl Chloride	5.80	62	27174	0.697	ng		98
7) 1,3-Butadiene	6.09	54	22656	0.808	ng		97
8) Bromomethane	6.59	94	14465	0.629	ng		99
9) Chloroethane	6.94	64	13353	0.684	ng		98
10) Ethanol	7.23	45	60616	3.733	ng		99
11) Acetonitrile	7.56	41	31606	0.861	ng		97
12) Acrolein	7.80	56	8567	0.724	ng		99
13) Acetone	8.03	58	64613	3.498	ng		95
14) Trichlorofluoromethane	8.29	101	26206	0.616	ng		99
15) 2-Propanol (Isopropanol)	8.50	45	75804	1.560	ng		98
16) Acrylonitrile	8.80	53	18881	0.762	ng		99
17) 1,1-Dichloroethene	9.32	96	15523	0.716	ng		96
18) 2-Methyl-2-Propanol (t...	9.48	59	71705	1.310	ng	#	68
19) Methylene Chloride	9.52	84	16956	0.693	ng		88
20) 3-Chloro-1-propene (Al...	9.72	41	22154	0.839	ng		86
21) Trichlorotrifluoroethane	9.98	151	12159	0.630	ng		94
22) Carbon Disulfide	9.93	76	59708	0.717	ng		99
23) trans-1,2-Dichloroethene	10.98	61	23100	0.727	ng		91
24) 1,1-Dichloroethane	11.30	63	28384	0.733	ng		98
25) Methyl tert-Butyl Ether	11.42	73	45062	0.660	ng		96
26) Vinyl Acetate	11.56	86	8549	1.941	ng	#	31
27) 2-Butanone (MEK)	11.93	72	7703	0.547	ng	#	14
28) cis-1,2-Dichloroethene	12.56	61	22859	0.746	ng		91
29) Diisopropyl Ether	12.92	87	12722	0.581	ng	#	75
30) Ethyl Acetate	12.93	61	9081	0.984	ng		98
31) n-Hexane	12.92	57	30486	0.714	ng		9

R9081309.M Fri Aug 14 07:21:36 2009 EM 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	25741	0.664	ng		99
34) Tetrahydrofuran (THF)	13.61	72	9662	0.728	ng	#	69
35) Ethyl tert-Butyl Ether	13.73	87	17600	0.600	ng	#	86
36) 1,2-Dichloroethane	14.13	62	18883	0.608	ng		98
38) 1,1,1-Trichloroethane	14.53	97	21567	0.598	ng		99
39) Isopropyl Acetate	15.09	61	18003	1.258	ng	#	76
40) 1-Butanol	15.14	56	24186	0.991	ng	#	5
41) Benzene	15.23	78	67490	0.644	ng		97
42) Carbon Tetrachloride	15.45	117	18399	0.598	ng		99
43) Cyclohexane	15.65	84	50652	1.293	ng		87
44) tert-Amyl Methyl Ether	16.12	73	43234	0.624	ng		98
45) 1,2-Dichloropropane	16.43	63	15929	0.721	ng		99
46) Bromodichloromethane	16.69	83	19513	0.644	ng		99
47) Trichloroethene	16.77	130	16351	0.611	ng		99
48) 1,4-Dioxane	16.75	88	11029	0.625	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	73776	0.727	ng		94
50) Methyl Methacrylate	17.03	100	10559	1.075	ng		90
51) n-Heptane	17.21	71	17902	0.706	ng		96
52) cis-1,3-Dichloropropene	17.95	75	21881	0.596	ng		96
53) 4-Methyl-2-pentanone	18.00	58	12377	0.624	ng		89
54) trans-1,3-Dichloropropene	18.66	75	20538	0.635	ng		94
55) 1,1,2-Trichloroethane	18.89	97	13863	0.630	ng		98
58) Toluene	19.28	91	66952	0.574	ng		99
59) 2-Hexanone	19.60	43	29124	0.580	ng		87
60) Dibromochloromethane	19.82	129	15336	0.585	ng		96
61) 1,2-Dibromoethane	20.15	107	14720	0.545	ng		97
62) n-Butyl Acetate	20.40	43	31166	0.559	ng		97
63) n-Octane	20.56	57	15118	0.663	ng		92
64) Tetrachloroethene	20.76	166	15982	0.518	ng		98
65) Chlorobenzene	21.62	112	41581	0.567	ng		100
66) Ethylbenzene	22.09	91	71057	0.560	ng		96
67) m- & p-Xylenes	22.31	91	109600	1.048	ng		99
68) Bromoform	22.42	173	11272	0.482	ng		99
69) Styrene	22.77	104	40825	0.529	ng		99
70) o-Xylene	22.92	91	56661	0.544	ng		99
71) n-Nonane	23.17	43	34926	0.686	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	24083	0.556	ng		98
74) Cumene	23.65	105	70945	0.513	ng		98
75) alpha-Pinene	24.15	93	33531	0.507	ng		99
76) n-Propylbenzene	24.28	91	88210	0.529	ng		99
77) 3-Ethyltoluene	24.40	105	69045	0.526	ng		98
78) 4-Ethyltoluene	24.46	105	70642	0.537	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	57676	0.527	ng		1

Tom 8/14/09

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Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	29532	0.482	ng	96
81) 2-Ethyltoluene	24.79	105	70128	0.510	ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	56820	0.464	ng	97
83) n-Decane	25.15	57	35901	0.607	ng	95
84) Benzyl Chloride	25.22	91	42984	0.490	ng	98
85) 1,3-Dichlorobenzene	25.25	146	32555	0.507	ng	99
86) 1,4-Dichlorobenzene	25.33	146	33227	0.496	ng	100
87) sec-Butylbenzene	25.38	105	80257	0.524	ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	71025	0.460	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	58655	0.470	ng	99
90) 1,2-Dichlorobenzene	25.75	146	30332	0.454	ng	100
91) d-Limonene	25.74	68	24087	0.495	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.27	157	9351	0.498	ng	89
93) n-Undecane	26.65	57	37313	0.616	ng	95
94) 1,2,4-Trichlorobenzene	27.79	180	22652	0.526	ng	99
95) Naphthalene	27.94	128	78387	0.522	ng	100
96) n-Dodecane	27.89	57	35864	0.554	ng	97
97) Hexachlorobutadiene	28.36	225	12566	0.510	ng	97
98) Cyclohexanone	22.53	55	15980	0.454	ng	92
99) tert-Butylbenzene	25.05	119	56558	0.457	ng	100
100) n-Butylbenzene	26.07	91	64485	0.529	ng	98

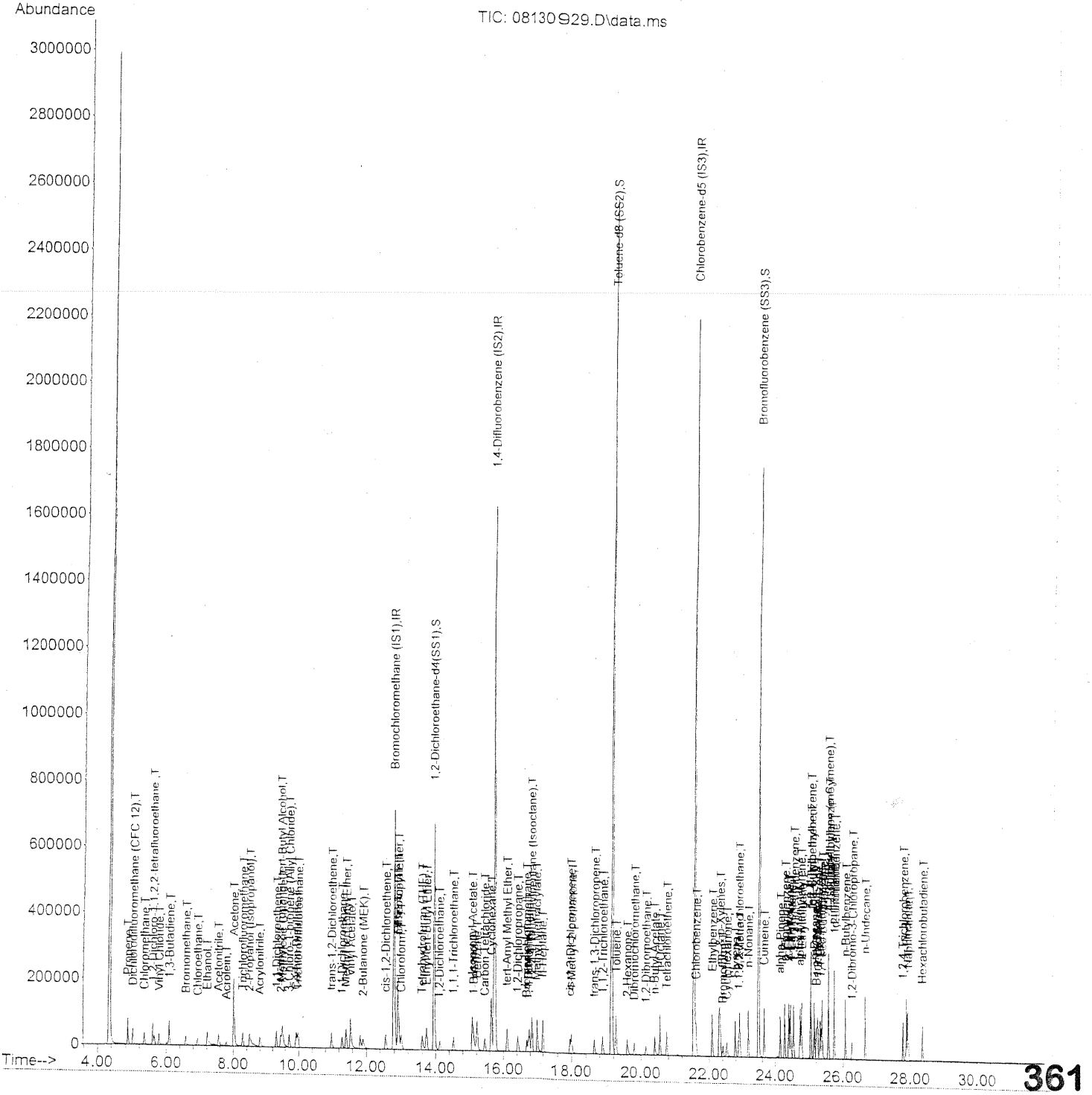
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	385393	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1968754	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	961740	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	684680	25.111	ng		-0.03
Spiked Amount 25.000			Recovery =	100.44%			
57) Toluene-d8 (SS2)	19.14	98	2283397	23.998	ng		-0.02
Spiked Amount 25.000			Recovery =	96.00%			
73) Bromofluorobenzene (SS3)	23.49	174	645460	22.564	ng		0.00
Spiked Amount 25.000			Recovery =	90.24%			
Target Compounds							Qvalue
2) Propene	4.86	42	29829	1.227	ng		97
3) Dichlorodifluoromethan...	5.01	85	52865	1.090	ng		99
4) Chloromethane	5.35	50	47868	1.317	ng		100
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	28143	1.030	ng		98
6) Vinyl Chloride	5.80	62	46770	1.207	ng		98
7) 1,3-Butadiene	6.09	54	39034	1.402	ng		96
8) Bromomethane	6.59	94	24199	1.059	ng		99
9) Chloroethane	6.94	64	23852	1.231	ng		99
10) Ethanol	7.22	45	108628	6.734	ng		100
11) Acetonitrile	7.56	41	56154	1.539	ng		98
12) Acrolein	7.80	56	15400	1.309	ng		97
13) Acetone	8.01	58	112407	6.126	ng		94
14) Trichlorofluoromethane	8.29	101	45022	1.065	ng		99
15) 2-Propanol (Isopropanol)	8.48	45	135858	2.814	ng		99
16) Acrylonitrile	8.80	53	34799	1.414	ng		99
17) 1,1-Dichloroethene	9.32	96	26402	1.227	ng		95
18) 2-Methyl-2-Propanol (t...	9.46	59	127946	2.353	ng		95
19) Methylene Chloride	9.52	84	28073	1.155	ng		86
20) 3-Chloro-1-propene (Al...	9.72	41	39535	1.508	ng		89
21) Trichlorotrifluoroethane	9.98	151	20891	1.090	ng		95
22) Carbon Disulfide	9.93	76	102252	1.236	ng		98
23) trans-1,2-Dichloroethene	10.99	61	40695	1.289	ng		93
24) 1,1-Dichloroethane	11.30	63	48687	1.265	ng		98
25) Methyl tert-Butyl Ether	11.42	73	79993	1.179	ng		96
26) Vinyl Acetate	11.56	86	17582	4.017	ng	#	44
27) 2-Butanone (MEK)	11.91	72	15476	1.106	ng	#	70
28) cis-1,2-Dichloroethene	12.57	61	38880	1.276	ng		94
29) Diisopropyl Ether	12.91	87	23217	1.067	ng	#	79
30) Ethyl Acetate	12.91	61	17295	1.887	ng		98
31) n-Hexane	12.92	57	51322	1.211	ng		98

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	44169	1.147	ng		99
34) Tetrahydrofuran (THF)	13.61	72	18493	1.402	ng	#	78
35) Ethyl tert-Butyl Ether	13.73	87	32059	1.099	ng	#	88
36) 1,2-Dichloroethane	14.13	62	33602	1.089	ng		100
38) 1,1,1-Trichloroethane	14.53	97	38262	1.060	ng		99
39) Isopropyl Acetate	15.09	61	33761	2.355	ng	#	85
40) 1-Butanol	15.13	56	47102	1.925	ng	#	74
41) Benzene	15.23	78	113746	1.083	ng		99
42) Carbon Tetrachloride	15.46	117	32803	1.064	ng		98
43) Cyclohexane	15.65	84	88044	2.243	ng		87
44) tert-Amyl Methyl Ether	16.11	73	76135	1.097	ng		97
45) 1,2-Dichloropropane	16.43	63	28251	1.276	ng		100
46) Bromodichloromethane	16.69	83	33986	1.120	ng		99
47) Trichloroethene	16.77	130	28512	1.063	ng		100
48) 1,4-Dioxane	16.74	88	20845	1.180	ng		92
49) 2,2,4-Trimethylpentane...	16.85	57	130464	1.282	ng		93
50) Methyl Methacrylate	17.02	100	20121	2.044	ng	#	88
51) n-Heptane	17.20	71	31494	1.239	ng		96
52) cis-1,3-Dichloropropene	17.95	75	38638	1.049	ng		99
53) 4-Methyl-2-pentanone	18.00	58	24206	1.218	ng		89
54) trans-1,3-Dichloropropene	18.65	75	38043	1.174	ng		99
55) 1,1,2-Trichloroethane	18.89	97	24731	1.121	ng		97
58) Toluene	19.28	91	119238	1.024	ng		99
59) 2-Hexanone	19.60	43	55664	1.111	ng		92
60) Dibromochloromethane	19.82	129	27040	1.032	ng		99
61) 1,2-Dibromoethane	20.15	107	26630	0.987	ng		99
62) n-Butyl Acetate	20.40	43	61529	1.105	ng		98
63) n-Octane	20.56	57	26993	1.186	ng		92
64) Tetrachloroethene	20.75	166	28187	0.915	ng		99
65) Chlorobenzene	21.62	112	73763	1.007	ng		100
66) Ethylbenzene	22.09	91	127246	1.005	ng		97
67) m- & p-Xylenes	22.32	91	194401	1.861	ng		99
68) Bromoform	22.41	173	20518	0.879	ng		99
69) Styrene	22.77	104	73446	0.954	ng		100
70) o-Xylene	22.92	91	100172	0.963	ng		98
71) n-Nonane	23.17	43	62203	1.225	ng		92
72)! 1,1,2,2-Tetrachloroethane	22.89	83	42899	0.991	ng		100
74) Cumene	23.65	105	125520	0.908	ng		97
75) alpha-Pinene	24.15	93	59580	0.902	ng		99
76) n-Propylbenzene	24.28	91	157275	0.945	ng		98
77) 3-Ethyltoluene	24.40	105	123089	0.940	ng		99
78) 4-Ethyltoluene	24.46	105	124771	0.950	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	103623	0.948	ng		99

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	53658	0.878	ng	96
81) 2-Ethyltoluene	24.79	105	124584	0.908	ng	97
82) 1,2,4-Trimethylbenzene	25.05	105	102293	0.837	ng	100
83) n-Decane	25.15	57	64455	1.092	ng	94
84) Benzyl Chloride	25.21	91	81497	0.930	ng	98
85) 1,3-Dichlorobenzene	25.25	146	56441	0.880	ng	100
86) 1,4-Dichlorobenzene	25.33	146	59032	0.883	ng	98
87) sec-Butylbenzene	25.38	105	141772	0.928	ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	127195	0.826	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	105475	0.847	ng	99
90) 1,2-Dichlorobenzene	25.74	146	53268	0.799	ng	100
91) d-Limonene	25.74	68	42966	0.885	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.27	157	16960	0.906	ng	91
93) n-Undecane	26.65	57	66615	1.102	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	40513	0.942	ng	100
95) Naphthalene	27.94	128	143580	0.957	ng	99
96) n-Dodecane	27.89	57	67663	1.047	ng	94
97) Hexachlorobutadiene	28.36	225	22500	0.914	ng	97
98) Cyclohexanone	22.52	55	30464	0.867	ng	93
99) tert-Butylbenzene	25.05	119	102193	0.827	ng	100
100) n-Butylbenzene	26.06	91	115342	0.948	ng	99

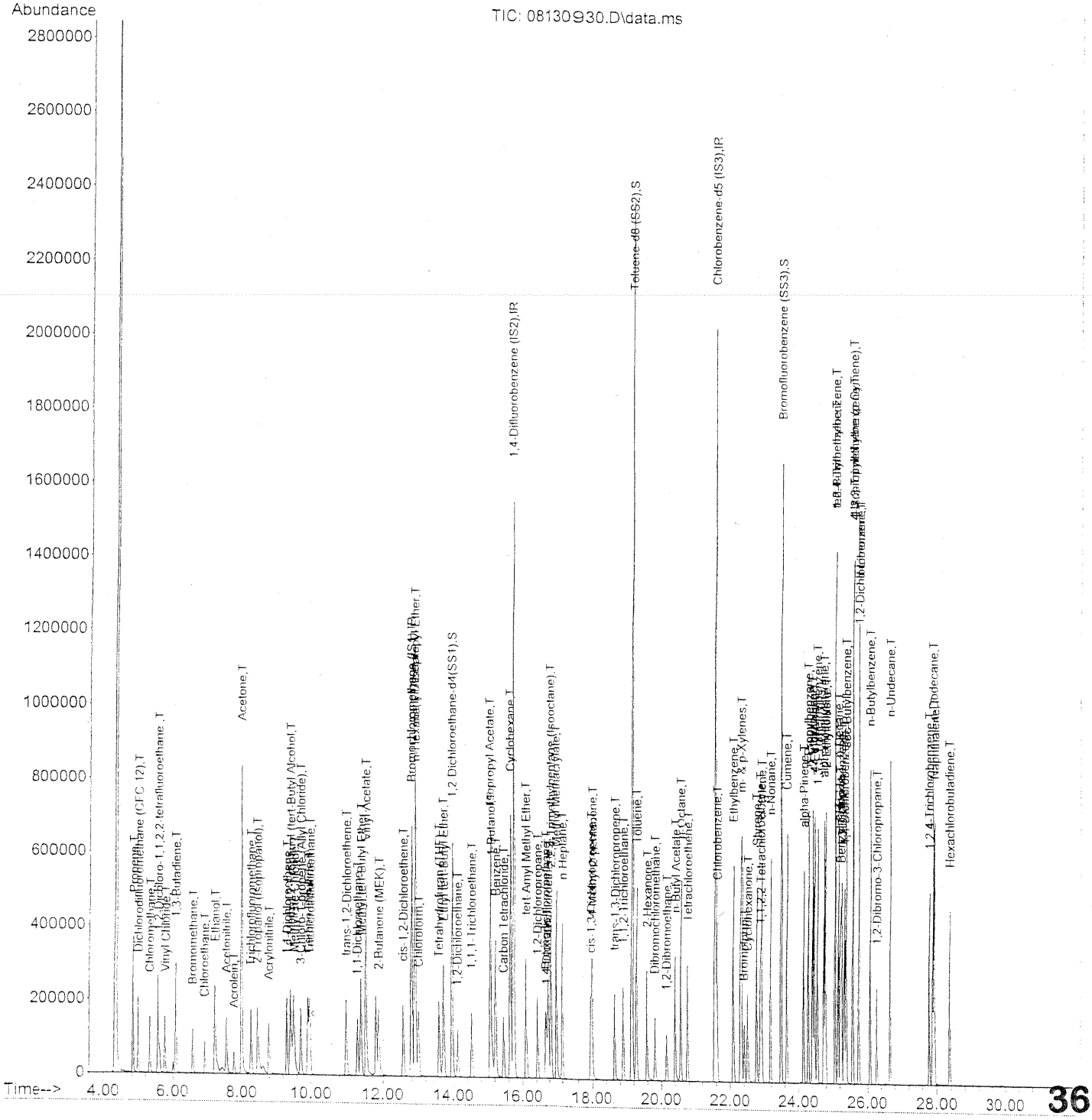
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EM 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	356661	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1839686	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	890260	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.96	65	631936	25.044	ng		-0.03
Spiked Amount 25.000			Recovery =	100.16%			
57) Toluene-d8 (SS2)	19.15	98	2108383	23.938	ng		-0.01
Spiked Amount 25.000			Recovery =	95.76%			
73) Bromofluorobenzene (SS3)	23.49	174	597126	22.551	ng		0.00
Spiked Amount 25.000			Recovery =	90.20%			
Target Compounds							Qvalue
2) Propene	4.84	42	170359	7.571	ng		96
3) Dichlorodifluoromethan...	5.00	85	230084	5.124	ng		99
4) Chloromethane	5.33	50	205078	6.099	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	119794	4.737	ng		99
6) Vinyl Chloride	5.79	62	201673	5.626	ng		98
7) 1,3-Butadiene	6.08	54	174352	6.764	ng		98
8) Bromomethane	6.57	94	105980	5.012	ng		99
9) Chloroethane	6.92	64	101343	5.650	ng		100
10) Ethanol	7.22	45	503955m	33.755	ng		
11) Acetonitrile	7.55	41	248065	7.348	ng		100
12) Acrolein	7.78	56	72285	6.641	ng		98
13) Acetone	8.00	58	487378	28.701	ng		91
14) Trichlorofluoromethane	8.28	101	194921	4.983	ng		99
15) 2-Propanol (Isopropanol)	8.46	45	476882m	10.673	ng		
16) Acrylonitrile	8.79	53	169954	7.460	ng		97
17) 1,1-Dichloroethene	9.32	96	116215	5.835	ng		97
18) 2-Methyl-2-Propanol (t...	9.43	59	580085	11.527	ng		96
19) Methylene Chloride	9.53	84	121460	5.402	ng		88
20) 3-Chloro-1-propene (Al...	9.72	41	183785	7.574	ng		88
21) Trichlorotrifluoroethane	9.98	151	93260	5.256	ng		96
22) Carbon Disulfide	9.93	76	452470	5.908	ng		98
23) trans-1,2-Dichloroethene	10.99	61	180824	6.190	ng		92
24) 1,1-Dichloroethane	11.30	63	216980	6.093	ng		99
25) Methyl tert-Butyl Ether	11.40	73	365953	5.827	ng		96
26) Vinyl Acetate	11.54	86	100963	24.928	ng	#	65
27) 2-Butanone (MEK)	11.89	72	83061	6.413	ng	#	77
28) cis-1,2-Dichloroethene	12.57	61	171418	6.081	ng		93
29) Diisopropyl Ether	12.90	87	101448	5.039	ng	#	66
30) Ethyl Acetate	12.90	61	91320	10.764	ng		99
31) n-Hexane	12.92	57	224482	5.722	ng		96

R9081309.M Fri Aug 14 07:25:02 2009 EM 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	192914	5.415	ng		99
34) Tetrahydrofuran (THF)	13.58	72	83814	6.867	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	142829	5.293	ng	#	86
36) 1,2-Dichloroethane	14.13	62	150902	5.284	ng		99
38) 1,1,1-Trichloroethane	14.53	97	168717	5.000	ng		99
39) Isopropyl Acetate	15.06	61	158534	11.834	ng	#	79
40) 1-Butanol	15.09	56	248323	10.863	ng		81
41) Benzene	15.23	78	489432	4.989	ng		98
42) Carbon Tetrachloride	15.46	117	142799	4.955	ng		100
43) Cyclohexane	15.65	84	392518	10.699	ng		89
44) tert-Amyl Methyl Ether	16.10	73	352122	5.430	ng		98
45) 1,2-Dichloropropane	16.43	63	124973	6.043	ng		98
46) Bromodichloromethane	16.69	83	155746	5.492	ng		98
47) Trichloroethene	16.77	130	122841	4.899	ng		99
48) 1,4-Dioxane	16.72	88	98401	5.959	ng		91
49) 2,2,4-Trimethylpentane...	16.85	57	566857	5.963	ng		93
50) Methyl Methacrylate	17.02	100	99872	10.855	ng		90
51) n-Heptane	17.21	71	134268	5.652	ng		95
52) cis-1,3-Dichloropropene	17.95	75	186847	5.431	ng		98
53) 4-Methyl-2-pentanone	17.99	58	119233	6.420	ng		95
54) trans-1,3-Dichloropropene	18.64	75	186516	6.159	ng		98
55) 1,1,2-Trichloroethane	18.88	97	112218	5.445	ng		99
58) Toluene	19.28	91	521746	4.839	ng		100
59) 2-Hexanone	19.58	43	278990	6.017	ng		99
60) Dibromochloromethane	19.82	129	125108	5.160	ng		99
61) 1,2-Dibromoethane	20.15	107	123637	4.951	ng		100
62) n-Butyl Acetate	20.39	43	322004	6.246	ng		98
63) n-Octane	20.56	57	120268	5.709	ng		91
64) Tetrachloroethene	20.75	166	122324	4.291	ng		100
65) Chlorobenzene	21.62	112	321850	4.745	ng		99
66) Ethylbenzene	22.09	91	567585	4.841	ng		98
67) m- & p-Xylenes	22.32	91	871075	9.010	ng		100
68) Bromoform	22.41	173	97277	4.503	ng		100
69) Styrene	22.77	104	344065	4.826	ng		99
70) o-Xylene	22.92	91	444727	4.618	ng		99
71) n-Nonane	23.17	43	272588	5.797	ng		93
72) 1,1,2,2-Tetrachloroethane	22.88	83	199967	4.992	ng		100
74) Cumene	23.65	105	562278	4.396	ng		98
75) alpha-Pinene	24.15	93	276329	4.521	ng		99
76) n-Propylbenzene	24.28	91	700875	4.549	ng		99
77) 3-Ethyltoluene	24.40	105	559902	4.619	ng		98
78) 4-Ethyltoluene	24.46	105	553680	4.552	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	455198	4.500	ng		98

Sam 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	253262	4.476 ng	99
81) 2-Ethyltoluene	24.79	105	552087	4.348 ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	462116	4.084 ng	99
83) n-Decane	25.15	57	285891	5.231 ng	94
84) Benzyl Chloride	25.21	91	398762	4.917 ng	98
85) 1,3-Dichlorobenzene	25.25	146	251311	4.232 ng	100
86) 1,4-Dichlorobenzene	25.32	146	256766	4.150 ng	100
87) sec-Butylbenzene	25.38	105	629377	4.449 ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	574902	4.031 ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	470067	4.080 ng	98
90) 1,2-Dichlorobenzene	25.75	146	241180	3.907 ng	100
91) d-Limonene	25.74	68	203082	4.518 ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	84105	4.852 ng	96
93) n-Undecane	26.65	57	302353	5.403 ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	185058	4.646 ng	99
95) Naphthalene	27.94	128	655899	4.724 ng	99
96) n-Dodecane	27.89	57	311207	5.204 ng	96
97) Hexachlorobutadiene	28.36	225	101578	4.458 ng	98
98) Cyclohexanone	22.51	55	142237	4.374 ng	94
99) tert-Butylbenzene	25.05	119	454889	3.978 ng	99
100) n-Butylbenzene	26.06	91	521247	4.628 ng	99

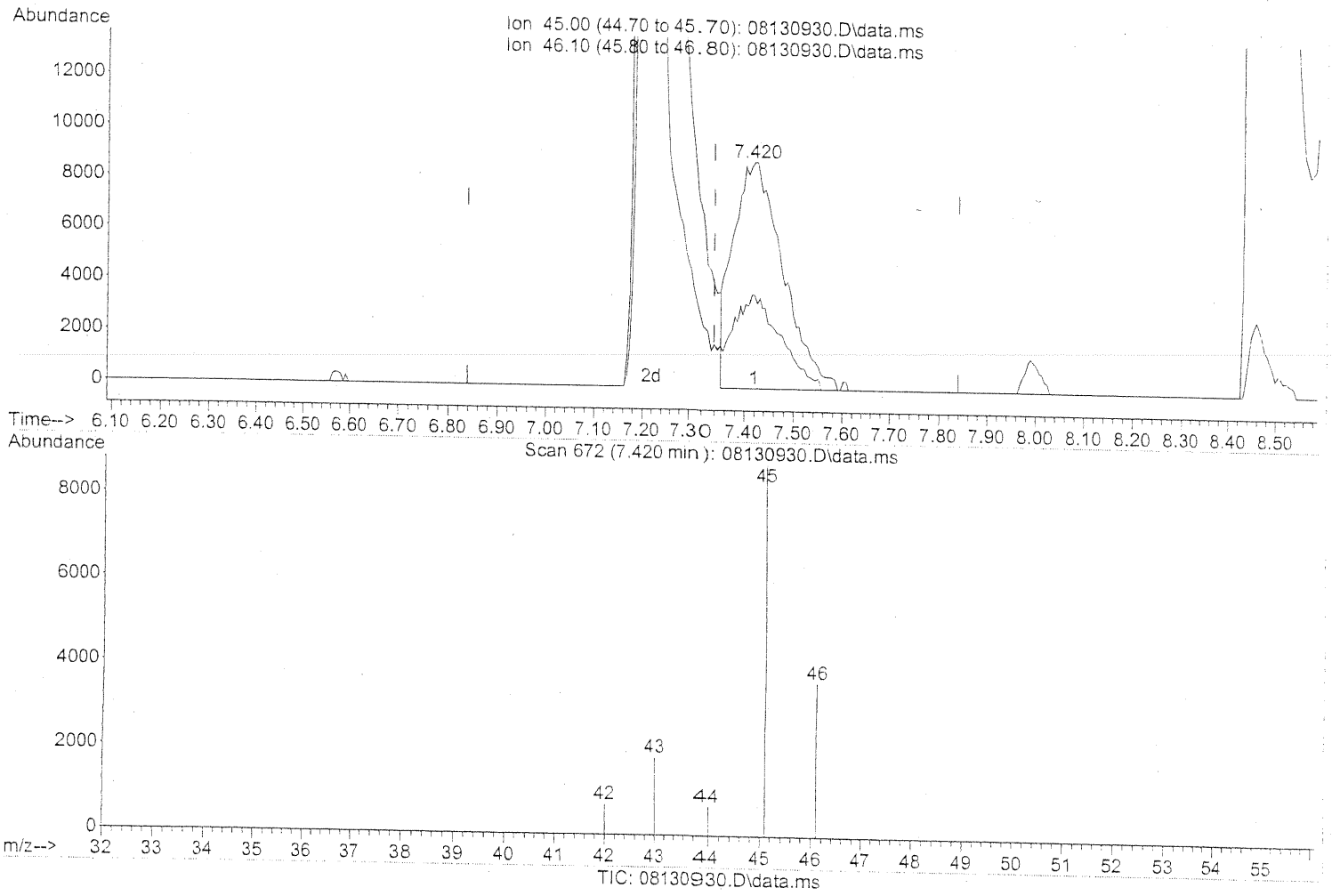
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tom 8/14/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.420min (+0.080) 4.20ng

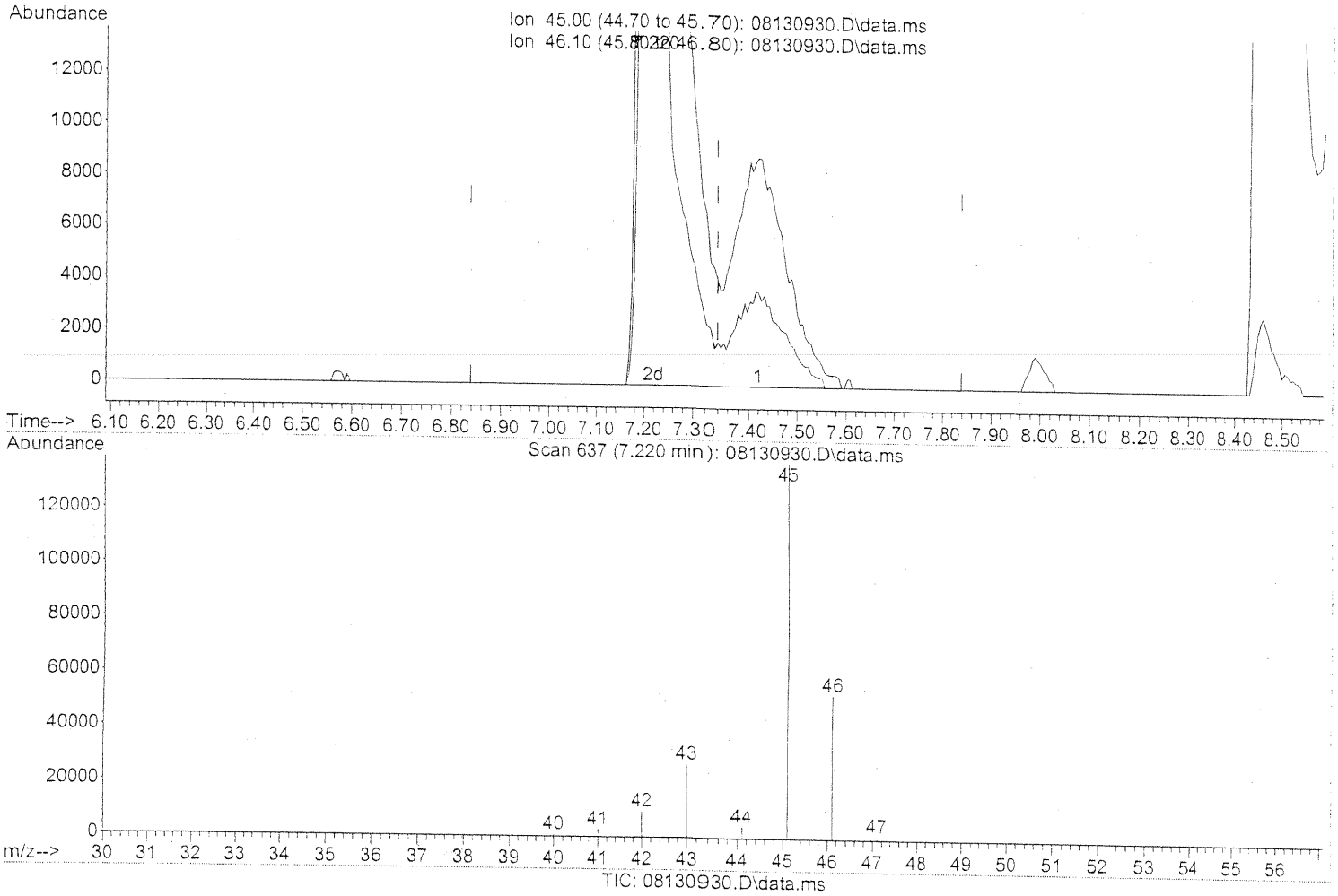
response 62719

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.29
0.00	0.00	0.00
0.00	0.00	0.00

SP

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.220min (-0.120) 33.76ng m

response 503955

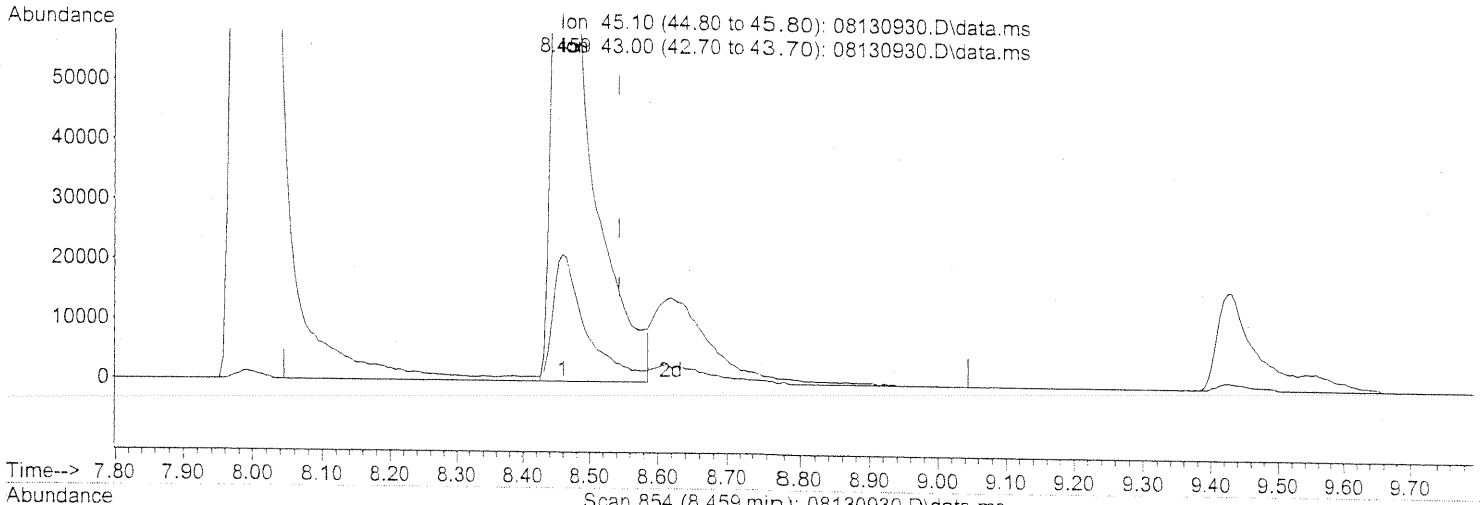
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	4.77#
0.00	0.00	0.00
0.00	0.00	0.00

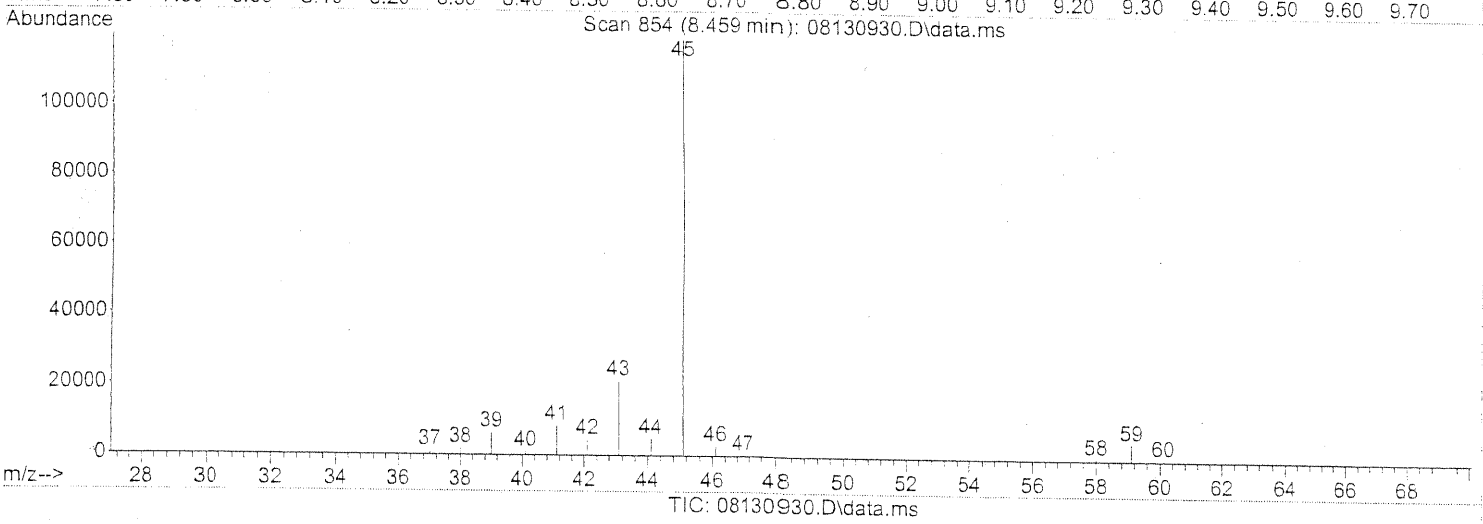
SP → IC
EM 8/14/09

ASH 8/15/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration





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

8.459min (-0.086) 8.88ng

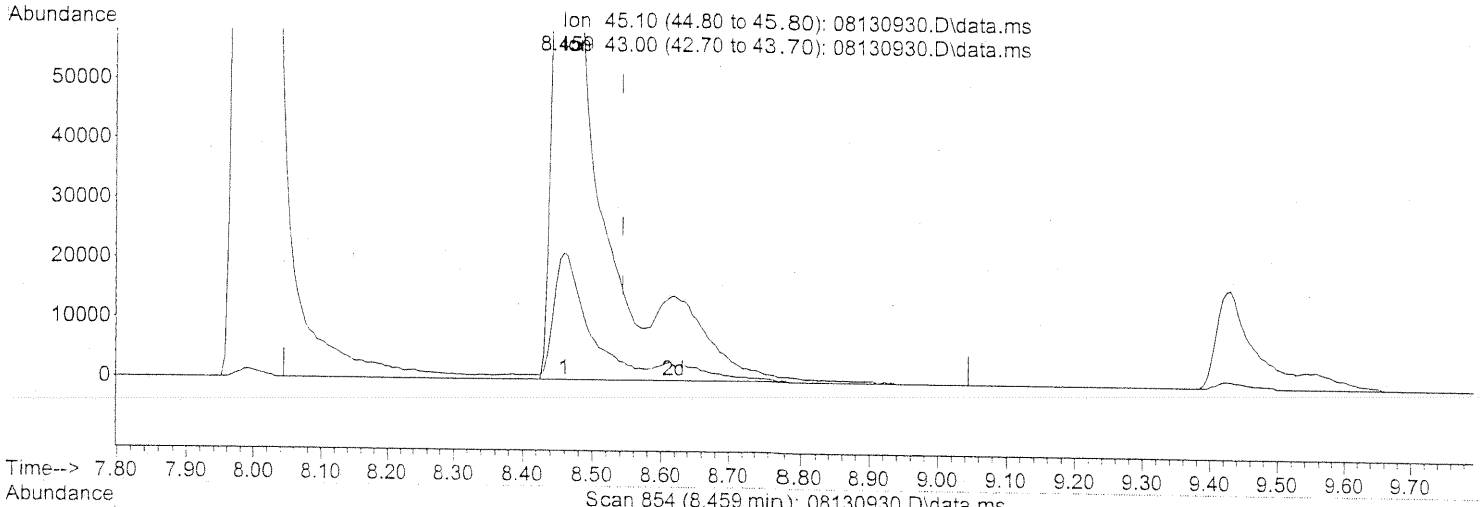
response 396677

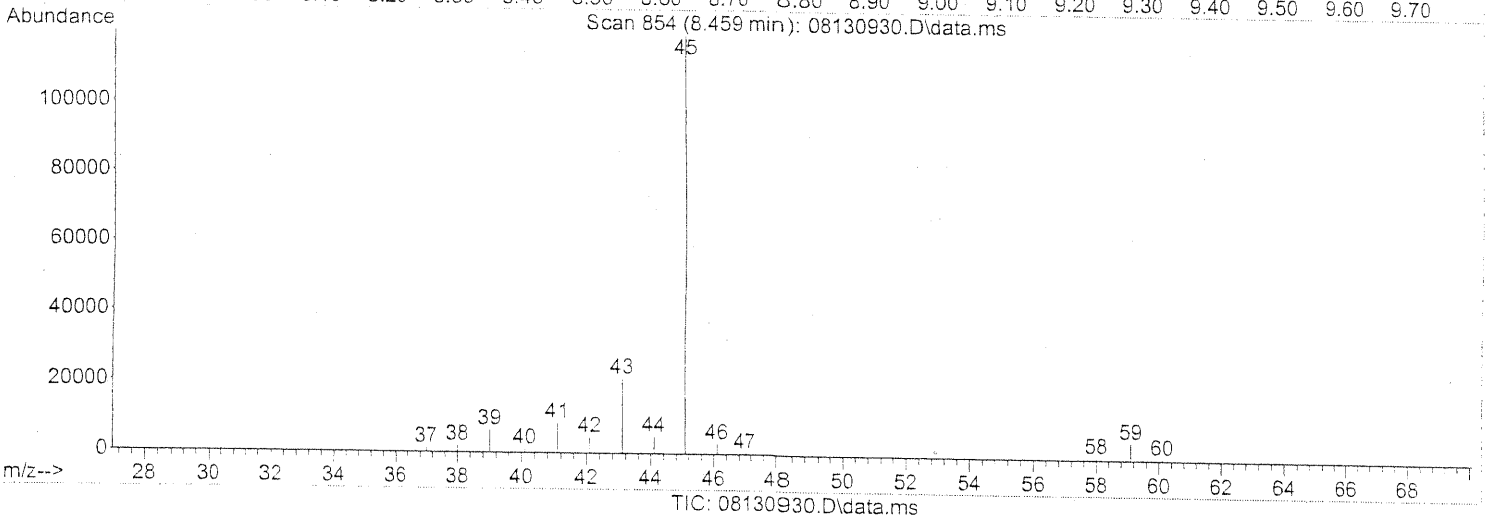
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.32
0.00	0.00	0.00
0.00	0.00	0.00

PT

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration





TIC: 08130930.D\data.ms

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

8.459min (-0.086) 10.67ng m

response 476882

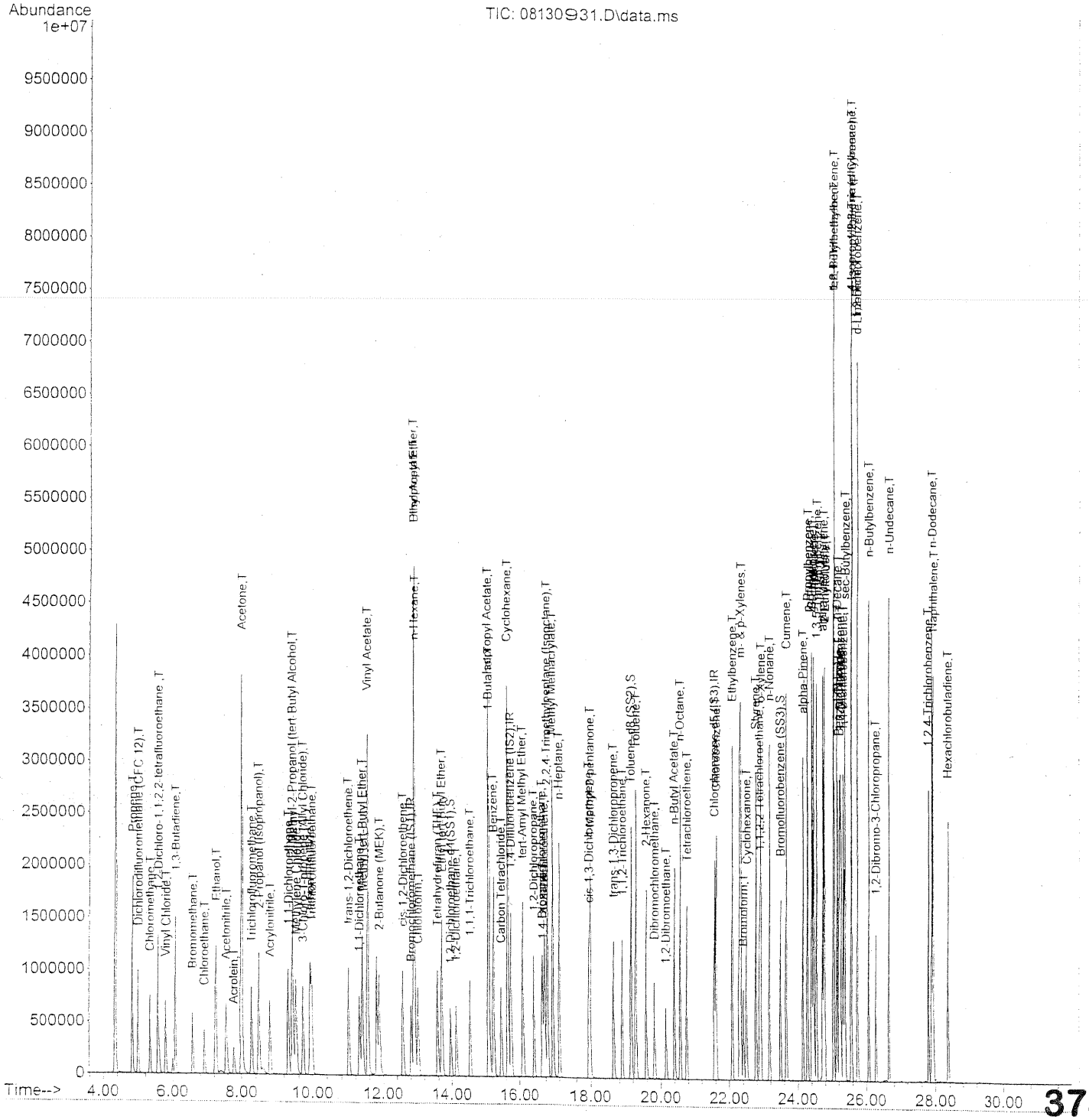
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	14.41
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
Tam 8/14/09

8/15/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	364116	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1865895	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	897905	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	639555	24.827	ng		-0.02
Spiked Amount 25.000			Recovery =	99.32%			
57) Toluene-d8 (SS2)	19.15	98	2134862	24.032	ng		-0.01
Spiked Amount 25.000			Recovery =	96.12%			
73) Bromofluorobenzene (SS3)	23.49	174	608116	22.770	ng		0.00
Spiked Amount 25.000			Recovery =	91.08%			
Target Compounds							Qvalue
2) Propene	4.83	42	893813	38.911	ng		96
3) Dichlorodifluoromethan...	5.00	85	1122799	24.492	ng		99
4) Chloromethane	5.33	50	1060306	30.886	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	614382	23.795	ng		100
6) Vinyl Chloride	5.80	62	1011049	27.626	ng		99
7) 1,3-Butadiene	6.08	54	905992	34.431	ng		99
8) Bromomethane	6.58	94	552570	25.596	ng		100
9) Chloroethane	6.93	64	511522	27.936	ng		100
10) Ethanol	7.26	45	2645495m	173.570	ng		
11) Acetonitrile	7.57	41	1267304	36.772	ng		98
12) Acrolein	7.79	56	380570	34.250	ng		98
13) Acetone	8.01	58	2533900	146.162	ng		88
14) Trichlorofluoromethane	8.29	101	1008004	25.243	ng		98
15) 2-Propanol (Isopropanol)	8.48	45	2453135m	53.777	ng		
16) Acrylonitrile	8.80	53	893242	38.407	ng		98
17) 1,1-Dichloroethene	9.33	96	601910	29.600	ng		97
18) 2-Methyl-2-Propanol (t...	9.44	59	3134377	61.010	ng		97
19) Methylene Chloride	9.54	84	621124	27.058	ng		89
20) 3-Chloro-1-propene (Al...	9.73	41	978578	39.503	ng		90
21) Trichlorotrifluoroethane	9.98	151	488676	26.977	ng		97
22) Carbon Disulfide	9.93	76	2326514	29.756	ng		99
23) trans-1,2-Dichloroethene	11.00	61	944327	31.664	ng		92
24) 1,1-Dichloroethane	11.31	63	1127620	31.017	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1913053	29.838	ng		96
26) Vinyl Acetate	11.56	86	656008	158.651	ng	#	71
27) 2-Butanone (MEK)	11.89	72	449156	33.967	ng	#	85
28) cis-1,2-Dichloroethene	12.58	61	894671	31.087	ng		93
29) Diisopropyl Ether	12.91	87	549290	26.727	ng	#	69
30) Ethyl Acetate	12.91	61	522358	60.309	ng		97
31) n-Hexane	12.93	57	1172996	29.289	ng		97

R9081309.M Fri Aug 14 07:27:05 2009 EM 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	998779	27.462	ng		100
34) Tetrahydrofuran (THF)	13.58	72	424555	34.073	ng	#	88
35) Ethyl tert-Butyl Ether	13.71	87	757840	27.508	ng	#	88
36) 1,2-Dichloroethane	14.13	62	783128	26.860	ng		99
38) 1,1,1-Trichloroethane	14.54	97	885515	25.875	ng		99
39) Isopropyl Acetate	15.07	61	888654	65.401	ng	#	83
40) 1-Butanol	15.09	56	1501433	64.760	ng		88
41) Benzene	15.23	78	2534149	25.468	ng		98
42) Carbon Tetrachloride	15.46	117	761579	26.057	ng		99
43) Cyclohexane	15.66	84	2072518	55.700	ng		89
44) tert-Amyl Methyl Ether	16.10	73	1859147	28.269	ng		99
45) 1,2-Dichloropropane	16.43	63	658884	31.411	ng		99
46) Bromodichloromethane	16.70	83	830347	28.871	ng		99
47) Trichloroethene	16.77	130	648588	25.505	ng		100
48) 1,4-Dioxane	16.72	88	543245	32.435	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	2947745	30.571	ng		93
50) Methyl Methacrylate	17.02	100	558743	59.877	ng		92
51) n-Heptane	17.21	71	706671	29.331	ng		94
52) cis-1,3-Dichloropropene	17.95	75	1004919	28.799	ng		100
53) 4-Methyl-2-pentanone	17.99	58	673431	35.750	ng		95
54) trans-1,3-Dichloropropene	18.64	75	1018443	33.158	ng		100
55) 1,1,2-Trichloroethane	18.89	97	592726	28.354	ng		99
58) Toluene	19.28	91	2739340	25.191	ng		100
59) 2-Hexanone	19.58	43	1588763	33.971	ng		99
60) Dibromochloromethane	19.82	129	680507	27.831	ng		99
61) 1,2-Dibromoethane	20.15	107	663705	26.350	ng		99
62) n-Butyl Acetate	20.39	43	1860228	35.779	ng		99
63) n-Octane	20.56	57	626246	29.472	ng		92
64) Tetrachloroethene	20.76	166	654987	22.781	ng		99
65) Chlorobenzene	21.62	112	1683217	24.606	ng		100
66) Ethylbenzene	22.09	91	2994707	25.325	ng		99
67) m- & p-Xylenes	22.33	91	4647270	47.659	ng		100
68) Bromoform	22.42	173	548438	25.169	ng		100
69) Styrene	22.77	104	1863220	25.911	ng		100
70) o-Xylene	22.92	91	2385962	24.562	ng		99
71) n-Nonane	23.18	43	1438625	30.334	ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	1078529	26.696	ng		100
74) Cumene	23.66	105	3011318	23.343	ng		99
75) alpha-Pinene	24.15	93	1480597	24.016	ng		99
76) n-Propylbenzene	24.28	91	3744994	24.101	ng		99
77) 3-Ethyltoluene	24.41	105	3058348	25.017	ng		99
78) 4-Ethyltoluene	24.46	105	2932516	23.903	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2446240	23.977	ng		100

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1393210	24.411	ng	99
81) 2-Ethyltoluene	24.79	105	2942387	22.975	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2623418	22.990	ng	99
83) n-Decane	25.16	57	1509811	27.388	ng	95
84) Benzyl Chloride	25.22	91	2320976	28.376	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1356990	22.655	ng	99
86) 1,4-Dichlorobenzene	25.33	146	1381988	22.145	ng	100
87) sec-Butylbenzene	25.38	105	3356026	23.524	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3219478	22.384	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2662217	22.911	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1327033	21.315	ng	100
91) d-Limonene	25.74	68	1139413	25.133	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.27	157	460372	26.331	ng	95
93) n-Undecane	26.65	57	1601142	28.367	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	978833	24.366	ng	99
95) Naphthalene	27.94	128	3428876	24.487	ng	100
96) n-Dodecane	27.89	57	1635236	27.111	ng	96
97) Hexachlorobutadiene	28.36	225	549265	23.899	ng	99
98) Cyclohexanone	22.51	55	919787	28.042	ng	94
99) tert-Butylbenzene	25.05	119	2572033	22.302	ng	100
100) n-Butylbenzene	26.07	91	2798242	24.631	ng	100

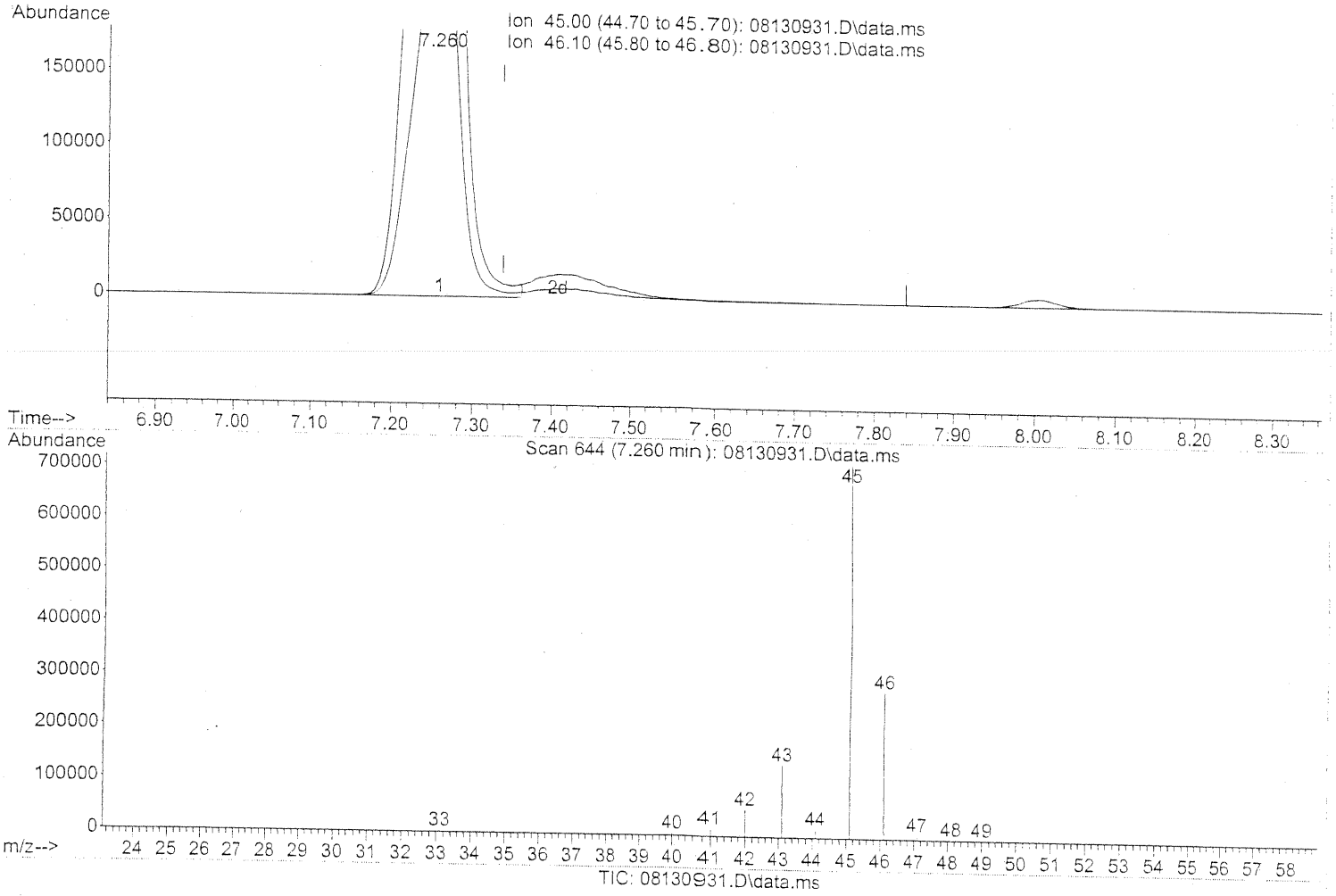
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Em 8/14/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.260min (-0.080) 166.43ng

response 2536739

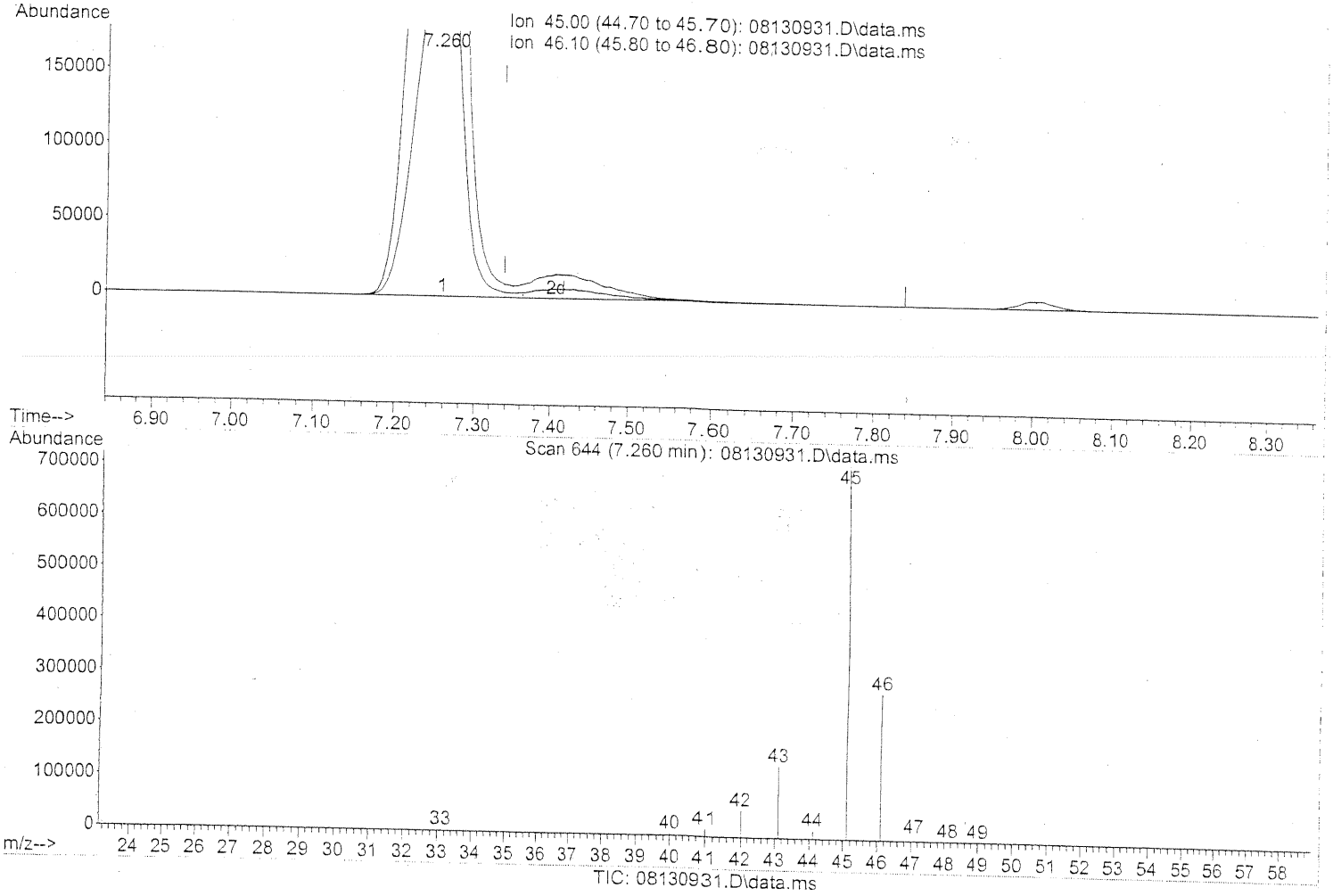
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.10
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.260min (-0.080) 173.57ng m

response 2645495

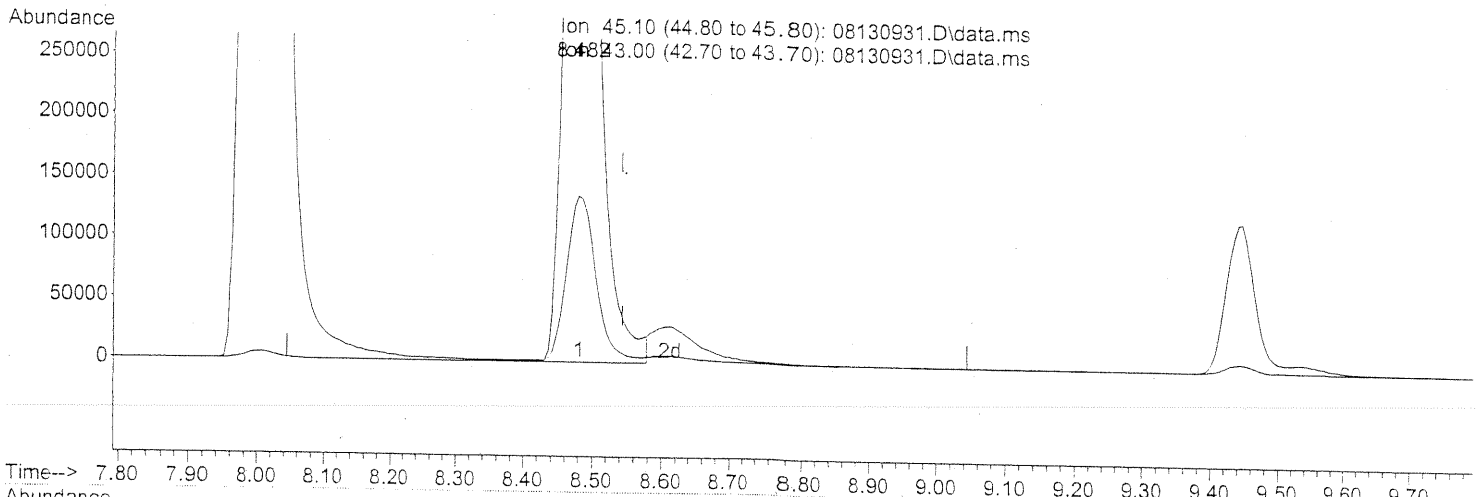
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.49
0.00	0.00	0.00
0.00	0.00	0.00

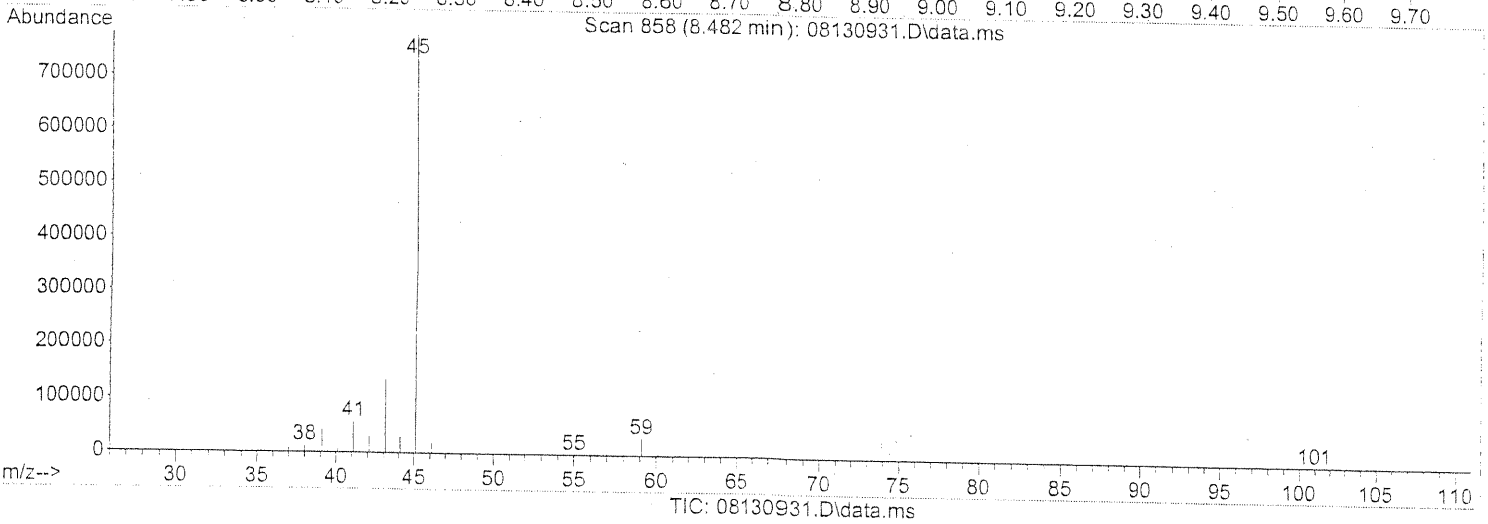
PT → LC
8/14/09

8/15/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration





TIC: 08130931.D\data.ms

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

8.482min (-0.063) 50.45ng

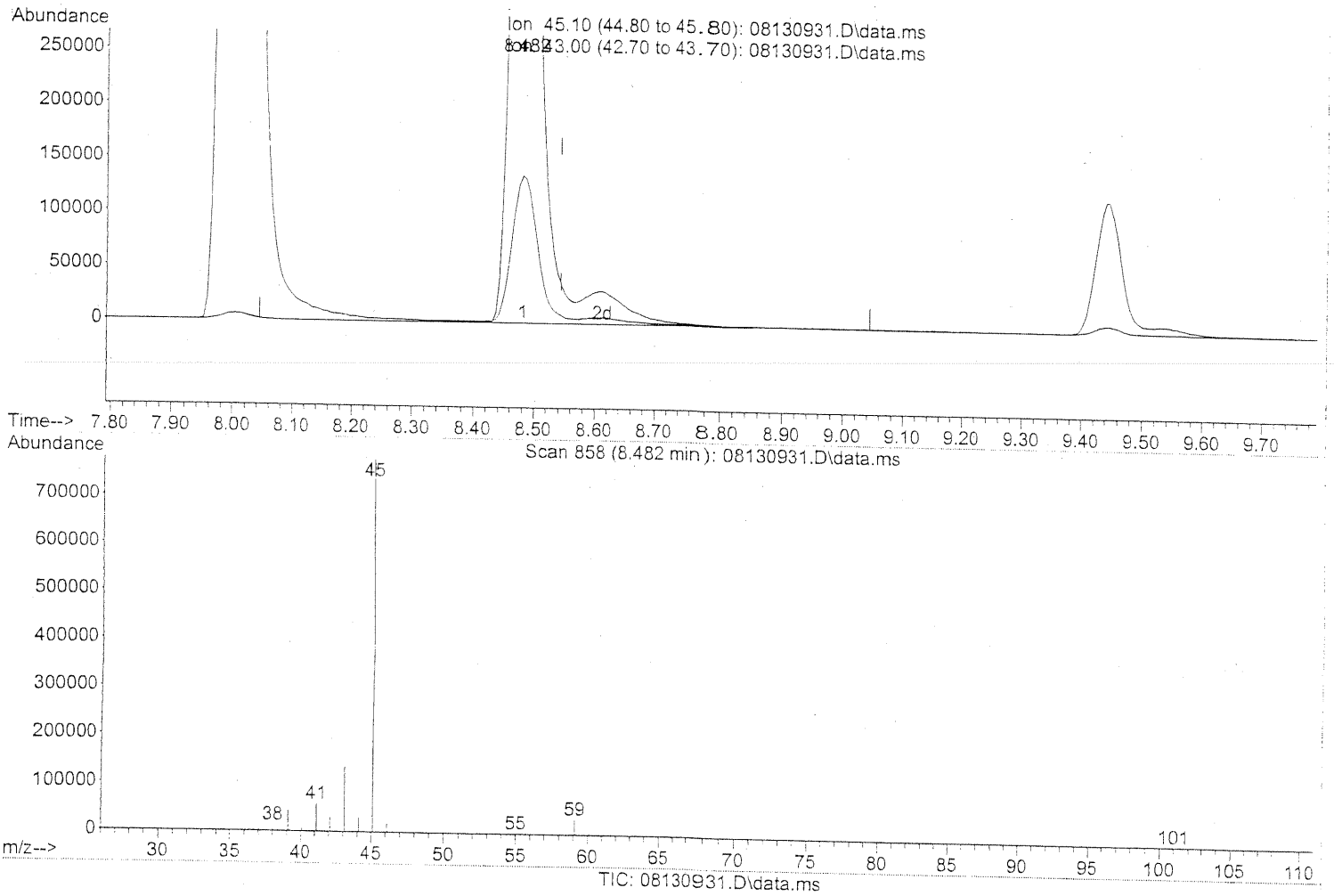
response 2301319

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.19
0.00	0.00	0.00
0.00	0.00	0.00

FT

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(15) 2-Propanol (isopropanol) (T)

8.482min (-0.063) 53.78ng m

response 2453135

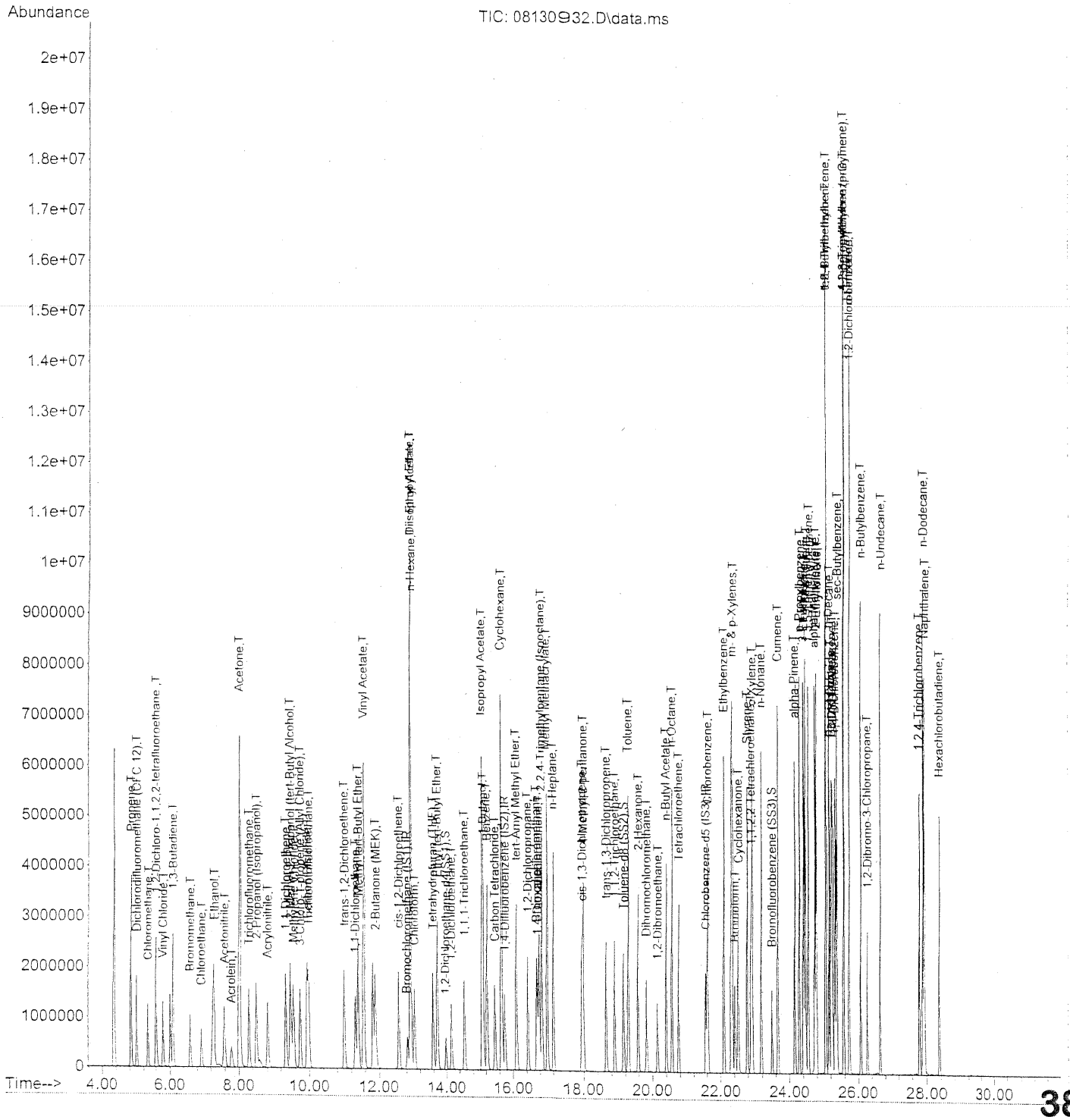
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.00
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Tom 8/14/09

JM 8/15/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	350547	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.77	114	1802547	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	865291	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.98	65	612890	24.713	ng		-0.01
Spiked Amount 25.000			Recovery =	98.84%			
57) Toluene-d8 (SS2)	19.15	98	2053608	23.989	ng		0.00
Spiked Amount 25.000			Recovery =	95.96%			
73) Bromofluorobenzene (SS3)	23.49	174	585162	22.737	ng		0.00
Spiked Amount 25.000			Recovery =	90.96%			
Target Compounds							Qvalue
2) Propene	4.84	42	1835063	82.979	ng		96
3) Dichlorodifluoromethan...	5.01	85	2152098	48.762	ng		99
4) Chloromethane	5.34	50	1909302	57.769	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1202790	48.388	ng		100
6) Vinyl Chloride	5.80	62	1933734	54.883	ng		99
7) 1,3-Butadiene	6.09	54	1726352	68.147	ng		99
8) Bromomethane	6.59	94	1036817	49.887	ng		100
9) Chloroethane	6.93	64	971424	55.107	ng		100
10) Ethanol	7.30	45	5039053	343.407	ng		100
11) Acetonitrile	7.59	41	2412776	72.719	ng		99
12) Acrolein	7.79	56	727129	67.972	ng		98
13) Acetone	8.03	58	4904508	293.855	ng		87
14) Trichlorofluoromethane	8.29	101	1926285	50.107	ng		98
15) 2-Propanol (Isopropanol)	8.51	45	3892928	88.644	ng		94
16) Acrylonitrile	8.82	53	1701577	75.996	ng		99
17) 1,1-Dichloroethene	9.33	96	1160521	59.280	ng		98
18) 2-Methyl-2-Propanol (t...	9.46	59	4054207	81.969	ng		97
19) Methylene Chloride	9.56	84	1192968	53.981	ng		89
20) 3-Chloro-1-propene (Al...	9.74	41	1889044	79.209	ng		90
21) Trichlorotrifluoroethane	9.99	151	945670	54.226	ng		97
22) Carbon Disulfide	9.94	76	4497151	59.746	ng		98
23) trans-1,2-Dichloroethene	11.01	61	1818529	63.338	ng		93
24) 1,1-Dichloroethane	11.32	63	2174072	62.117	ng		100
25) Methyl tert-Butyl Ether	11.40	73	3746603	60.699	ng		96
26) Vinyl Acetate	11.57	86	1327059	333.362	ng	#	78
27) 2-Butanone (MEK)	11.90	72	865059	67.951	ng	#	86
28) cis-1,2-Dichloroethene	12.58	61	1721120	62.119	ng		94
29) Diisopropyl Ether	12.92	87	1111656	56.184	ng	#	74
30) Ethyl Acetate	12.92	61	1067973	128.075	ng		97
31) n-Hexane	12.93	57	2406714	62.420	ng		95

R9081309.M Fri Aug 14 07:28:13 2009 EM 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.04	83	1924717	54.970	ng		100
34) Tetrahydrofuran (THF)	13.59	72	790606	65.907	ng	#	87
35) Ethyl tert-Butyl Ether	13.72	87	1490436	56.193	ng	#	88
36) 1,2-Dichloroethane	14.14	62	1501599	53.495	ng		99
38) 1,1,1-Trichloroethane	14.54	97	1725003	52.176	ng		100
39) Isopropyl Acetate	15.08	61	1746401	133.045	ng	#	85
40) 1-Butanol	15.11	56	2940898	131.304	ng		88
41) Benzene	15.24	78	4920242	51.185	ng		99
42) Carbon Tetrachloride	15.47	117	1493939	52.911	ng		99
43) Cyclohexane	15.66	84	4129214	114.874	ng		88
44) tert-Amyl Methyl Ether	16.11	73	3664090	57.672	ng		99
45) 1,2-Dichloropropane	16.44	63	1271414	62.743	ng		98
46) Bromodichloromethane	16.70	83	1623042	58.416	ng		99
47) Trichloroethene	16.78	130	1266559	51.557	ng		100
48) 1,4-Dioxane	16.73	88	1067524	65.978	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	5774283	61.989	ng		93
50) Methyl Methacrylate	17.03	100	1111183	123.264	ng		93
51) n-Heptane	17.22	71	1384269	59.475	ng		95
52) cis-1,3-Dichloropropene	17.95	75	1961714	58.194	ng		100
53) 4-Methyl-2-pentanone	17.99	58	1317291	72.388	ng		95
54) trans-1,3-Dichloropropene	18.65	75	1988137	67.004	ng		100
55) 1,1,2-Trichloroethane	18.90	97	1148732	56.882	ng		98
58) Toluene	19.28	91	5320486	50.772	ng		100
59) 2-Hexanone	19.59	43	3087649	68.509	ng		100
60) Dibromochloromethane	19.82	129	1325208	56.240	ng		100
61) 1,2-Dibromoethane	20.15	107	1295084	53.355	ng		100
62) n-Butyl Acetate	20.39	43	3708971	74.026	ng		99
63) n-Octane	20.56	57	1231350	60.134	ng		92
64) Tetrachloroethene	20.76	166	1285349	46.390	ng		99
65) Chlorobenzene	21.63	112	3279777	49.753	ng		100
66) Ethylbenzene	22.09	91	5886739	51.658	ng		99
67) m- & p-Xylenes	22.33	91	9252004	98.458	ng		100
68) Bromoform	22.42	173	1097931	52.286	ng		100
69) Styrene	22.78	104	3668340	52.938	ng		100
70) o-Xylene	22.92	91	4731058	50.539	ng		99
71) n-Nonane	23.18	43	2791725	61.083	ng		94
72) 1,1,2,2-Tetrachloroethane	22.89	83	2141569	55.006	ng		100
74) Cumene	23.66	105	5934180	47.735	ng		99
75) alpha-Pinene	24.15	93	2936785	49.431	ng		100
76) n-Propylbenzene	24.29	91	7354011	49.110	ng		100
77) 3-Ethyltoluene	24.41	105	5944493	50.459	ng		99
78) 4-Ethyltoluene	24.47	105	5986526	50.636	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	4865603	49.487	ng		

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

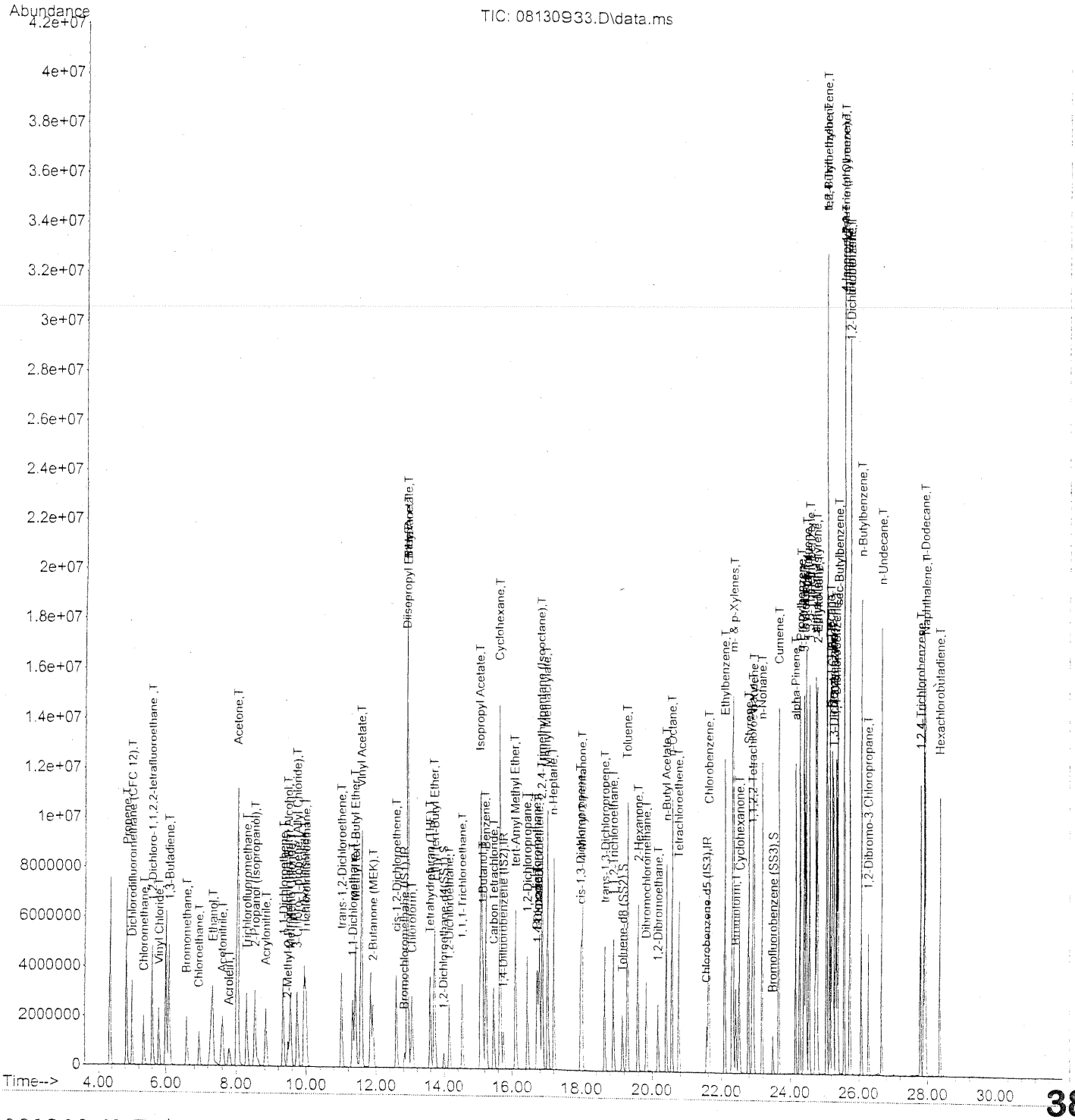
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	2788713	50.704	ng	98
81) 2-Ethyltoluene	24.79	105	5835415	47.282	ng	100
82) 1,2,4-Trimethylbenzene	25.06	105	5419555	49.283	ng	98
83) n-Decane	25.16	57	2958484	55.690	ng	96
84) Benzyl Chloride	25.23	91	4657935	59.094	ng	100
85) 1,3-Dichlorobenzene	25.25	146	2725906	47.225	ng	100
86) 1,4-Dichlorobenzene	25.33	146	2761502	45.918	ng	100
87) sec-Butylbenzene	25.39	105	6623319	48.176	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	6624766	47.796	ng	100
89) 1,2,3-Trimethylbenzene	25.57	105	5491766	49.043	ng	97
90) 1,2-Dichlorobenzene	25.75	146	2744516	45.744	ng	100
91) d-Limonene	25.75	68	2289426	52.402	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	922457	54.748	ng	95
93) n-Undecane	26.66	57	3160860	58.111	ng	98
94) 1,2,4-Trichlorobenzene	27.80	180	2014621	52.040	ng	99
95) Naphthalene	27.94	128	7027186	52.076	ng	100
96) n-Dodecane	27.89	57	3283767	56.494	ng	97
97) Hexachlorobutadiene	28.36	225	1130021	51.021	ng	99
98) Cyclohexanone	22.52	55	1802415	57.022	ng	95
99) tert-Butylbenzene	25.06	119	5291689	47.613	ng	100
100) n-Butylbenzene	26.07	91	5516279	50.386	ng	99

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

8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130933.D
Acq On : 14 Aug 2009 6:47
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130933.D
Acq On : 14 Aug 2009 6:47
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.84	130	348166	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.77	114	1791529	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.57	82	827819	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.99	65	607715	24.672	ng		0.00
Spiked Amount 25.000			Recovery =	98.68%			
57) Toluene-d8 (SS2)	19.16	98	2003126	24.459	ng		0.00
Spiked Amount 25.000			Recovery =	97.84%			
73) Bromofluorobenzene (SS3)	23.49	174	555754	22.571	ng		0.00
Spiked Amount 25.000			Recovery =	90.28%			
Target Compounds							Qvalue
2) Propene	4.84	42	3637379	165.601	ng		96
3) Dichlorodifluoromethan...	5.01	85	4285891	97.773	ng		99
4) Chloromethane	5.35	50	3395552	103.441	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	2374269	96.170	ng		100
6) Vinyl Chloride	5.81	62	3733511	106.688	ng		99
7) 1,3-Butadiene	6.09	54	3376996	134.217	ng		100
8) Bromomethane	6.60	94	2088575	101.180	ng		99
9) Chloroethane	6.94	64	1938501	110.719	ng		100
10) Ethanol	7.35	45	9723278	667.164	ng		100
11) Acetonitrile	7.62	41	4607769	139.823	ng		99
12) Acrolein	7.81	56	1410648	132.769	ng		98
13) Acetone	8.05	58	9758235	588.667	ng	#	81
14) Trichlorofluoromethane	8.31	101	3855506	100.976	ng		98
15) 2-Propanol (Isopropanol)	8.54	45	7411494	169.917	ng		94
16) Acrylonitrile	8.84	53	3337367	150.073	ng		98
17) 1,1-Dichloroethene	9.34	96	2361373	121.445	ng		99
18) 2-Methyl-2-Propanol (t...	9.49	59	1930576	39.300	ng		94
19) Methylene Chloride	9.56	84	2367946	107.882	ng		91
20) 3-Chloro-1-propene (Al...	9.75	41	3751505	158.379	ng		90
21) Trichlorotrifluoroethane	10.00	151	1857232	107.225	ng		98
22) Carbon Disulfide	9.95	76	9003969	120.438	ng		98
23) trans-1,2-Dichloroethene	11.02	61	3600834	126.271	ng		94
24) 1,1-Dichloroethane	11.33	63	4282531	123.196	ng		100
25) Methyl tert-Butyl Ether	11.41	73	7429243	121.184	ng		96
26) Vinyl Acetate	11.59	86	2488460	629.386	ng	#	93
27) 2-Butanone (MEK)	11.92	72	1131449	89.484	ng	#	88
28) cis-1,2-Dichloroethene	12.60	61	3373649	122.596	ng		95
29) Diisopropyl Ether	12.92	87	2306270	117.357	ng	#	89
30) Ethyl Acetate	12.94	61	2196811	265.252	ng		98
31) n-Hexane	12.94	57	5006652	130.739	ng		

R9081309.M Fri Aug 14 07:29:42 2009 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130933.D
Acq On : 14 Aug 2009 6:47
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.06	83	3845350	110.575	ng		100
34) Tetrahydrofuran (THF)	13.59	72	1563630	131.239	ng	#	88
35) Ethyl tert-Butyl Ether	13.73	87	2996398	113.745	ng		90
36) 1,2-Dichloroethane	14.15	62	2964635	106.339	ng		100
38) 1,1,1-Trichloroethane	14.55	97	3345979	101.827	ng		99
39) Isopropyl Acetate	15.10	61	3529470	270.537	ng	#	92
40) 1-Butanol	15.15	56	5716126	256.782	ng	#	5
41) Benzene	15.25	78	9743540	101.985	ng		99
42) Carbon Tetrachloride	15.47	117	2984668	106.359	ng		99
43) Cyclohexane	15.67	84	8447133	236.444	ng		90
44) tert-Amyl Methyl Ether	16.11	73	7344919	116.318	ng		99
45) 1,2-Dichloropropane	16.45	63	2518901	125.070	ng		98
46) Bromodichloromethane	16.71	83	3199002	115.846	ng		99
47) Trichloroethene	16.79	130	2587187	105.962	ng		100
48) 1,4-Dioxane	16.74	88	2105550	130.933	ng		89
49) 2,2,4-Trimethylpentane...	16.87	57	11343752	122.528	ng		93
50) Methyl Methacrylate	17.05	100	2277585	254.207	ng		95
51) n-Heptane	17.22	71	2756301	119.152	ng		95
52) cis-1,3-Dichloropropene	17.96	75	3903750	116.517	ng		99
53) 4-Methyl-2-pentanone	18.00	58	2601880	143.858	ng		96
54) trans-1,3-Dichloropropene	18.66	75	3928268	133.204	ng		100
55) 1,1,2-Trichloroethane	18.90	97	2295248	114.353	ng		99
58) Toluene	19.29	91	10619232	105.924	ng		98
59) 2-Hexanone	19.60	43	5972025	138.505	ng		99
60) Dibromochloromethane	19.83	129	2671138	118.490	ng		99
61) 1,2-Dibromoethane	20.16	107	2581710	111.177	ng		100
62) n-Butyl Acetate	20.40	43	7613756	158.839	ng		98
63) n-Octane	20.57	57	2463694	125.762	ng		94
64) Tetrachloroethene	20.76	166	2651443	100.026	ng		98
65) Chlorobenzene	21.63	112	6606674	104.758	ng		99
66) Ethylbenzene	22.10	91	11775803	108.015	ng		99
67) m- & p-Xylenes	22.35	91	18896858	210.199	ng		98
68) Bromoform	22.43	173	2253843	112.193	ng		100
69) Styrene	22.79	104	7494579	113.049	ng		100
70) o-Xylene	22.93	91	9698083	108.288	ng		100
71) n-Nonane	23.19	43	5386497	123.192	ng		98
72) 1,1,2,2-Tetrachloroethane	22.91	83	4392172	117.919	ng		99
74) Cumene	23.67	105	11982041	100.747	ng		99
75) alpha-Pinene	24.16	93	6016933	105.858	ng		99
76) n-Propylbenzene	24.29	91	14406754	100.564	ng		98
77) 3-Ethyltoluene	24.41	105	12117897	107.517	ng		99
78) 4-Ethyltoluene	24.47	105	12131828	107.260	ng		97
79) 1,3,5-Trimethylbenzene	24.56	105	10058671	106.936	ng		99

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130933.D
Acq On : 14 Aug 2009 6:47
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

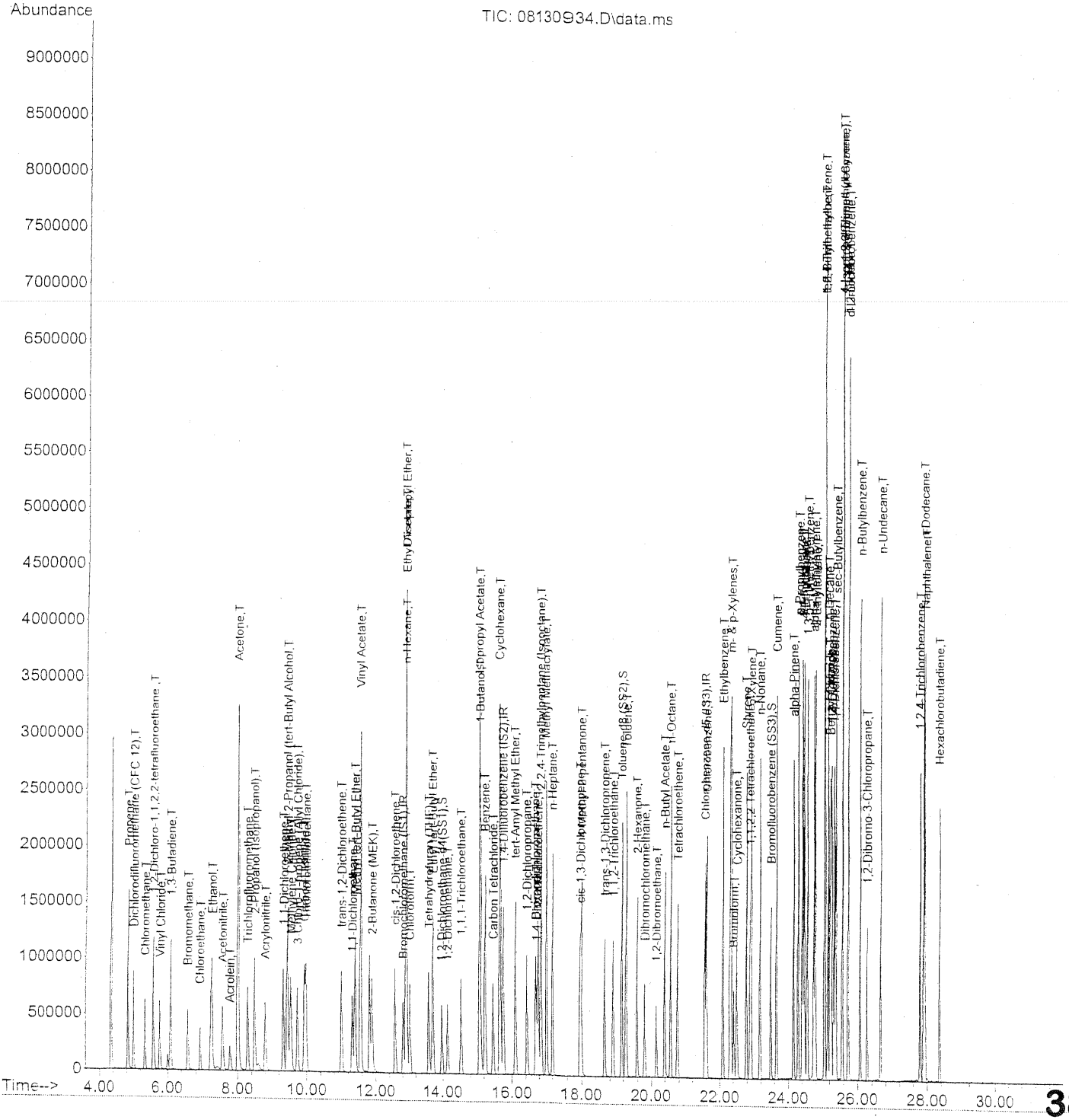
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	5862974	111.426	ng	98
81) 2-Ethyltoluene	24.80	105	11978631	101.452	ng	98
82) 1,2,4-Trimethylbenzene	25.07	105	11417406	108.524	ng	95
83) n-Decane	25.17	57	5959851	117.266	ng	97
84) Benzyl Chloride	25.24	91	9728914	129.016	ng	99
85) 1,3-Dichlorobenzene	25.27	146	5822861	105.443	ng	100
86) 1,4-Dichlorobenzene	25.34	146	5826479	101.267	ng	100
87) sec-Butylbenzene	25.39	105	13318015	101.255	ng	98
88) 4-Isopropyltoluene (p-...	25.58	119	13504368	101.840	ng	96
89) 1,2,3-Trimethylbenzene	25.59	105	11559732	107.903	ng	95
90) 1,2-Dichlorobenzene	25.76	146	6086420	106.037	ng	99
91) d-Limonene	25.75	68	4660560	111.503	ng	99
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1916720	118.907	ng	94
93) n-Undecane	26.66	57	6305897	121.179	ng	100
94) 1,2,4-Trichlorobenzene	27.80	180	4306788	116.286	ng	100
95) Naphthalene	27.94	128	14097900	109.204	ng	98
96) n-Dodecane	27.90	57	6564038	118.039	ng	100
97) Hexachlorobutadiene	28.36	225	2440971	115.199	ng	99
98) Cyclohexanone	22.53	55	3544648	117.216	ng	95
99) tert-Butylbenzene	25.07	119	11254211	105.845	ng	98
100) n-Butylbenzene	26.08	91	11144477	106.402	ng	96

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

Tam 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	347390	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1780684	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	815195	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	604640	24.616	ng		-0.02
Spiked Amount 25.000			Recovery =	98.48%			
57) Toluene-d8 (SS2)	19.15	98	2007417	25.903	ng		-0.01
Spiked Amount 25.000			Recovery =	103.60%			
73) Bromofluorobenzene (SS3)	23.49	174	549810	25.051	ng		0.00
Spiked Amount 25.000			Recovery =	100.20%			
Target Compounds							Qvalue
2) Propene	4.83	42	755258	24.784	ng		97
3) Dichlorodifluoromethan...	5.00	85	1005106	23.107	ng		99
4) Chloromethane	5.33	50	889752	21.947	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	564338	24.551	ng		100
6) Vinyl Chloride	5.79	62	876778	21.924	ng		99
7) 1,3-Butadiene	6.08	54	701163	24.684	ng		99
8) Bromomethane	6.58	94	517466	24.745	ng		100
9) Chloroethane	6.93	64	453736	22.870	ng		100
10) Ethanol	7.27	45	2232593m	116.796	ng		
11) Acetonitrile	7.57	41	1091608	23.400	ng		98
12) Acrolein	7.79	56	337125	27.044	ng		99
13) Acetone	8.01	58	2192988	112.739	ng		90
14) Trichlorofluoromethane	8.29	101	901533	24.237	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	2159425m	40.537	ng		
16) Acrylonitrile	8.81	53	785326	27.795	ng		99
17) 1,1-Dichloroethene	9.33	96	557081	25.520	ng		100
18) 2-Methyl-2-Propanol (t...	9.45	59	2821970	52.180	ng		97
19) Methylene Chloride	9.54	84	567231	23.372	ng		92
20) 3-Chloro-1-propene (Al...	9.73	41	863616	26.536	ng		90
21) Trichlorotrifluoroethane	9.98	151	460905	27.684	ng		100
22) Carbon Disulfide	9.93	76	2066628	24.130	ng		98
23) trans-1,2-Dichloroethene	11.00	61	828040	24.719	ng		94
24) 1,1-Dichloroethane	11.31	63	1028210	25.062	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1722756	25.914	ng		97
26) Vinyl Acetate	11.56	86	625023	148.358	ng	#	78
27) 2-Butanone (MEK)	11.89	72	401170	29.583	ng	#	87
28) cis-1,2-Dichloroethene	12.58	61	818774	26.193	ng		94
29) Diisopropyl Ether	12.91	87	504111	26.184	ng	#	78
30) Ethyl Acetate	12.90	61	457829	52.062	ng		99
31) n-Hexane	12.93	57	1031014	24.051	ng		96

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	925757	25.803	ng		100
34) Tetrahydrofuran (THF)	13.58	72	383882	27.228	ng	#	90
35) Ethyl tert-Butyl Ether	13.71	87	697007	25.375	ng		90
36) 1,2-Dichloroethane	14.13	62	726093	26.447	ng		100
38) 1,1,1-Trichloroethane	14.54	97	832543	25.706	ng		100
39) Isopropyl Acetate	15.07	61	799888	55.041	ng	#	83
40) 1-Butanol	15.09	56	1373581	59.526	ng		88
41) Benzene	15.23	78	2340548	24.441	ng		98
42) Carbon Tetrachloride	15.46	117	716257	26.758	ng		99
43) Cyclohexane	15.66	84	1852146	49.942	ng		90
44) tert-Amyl Methyl Ether	16.10	73	1708871	25.389	ng		99
45) 1,2-Dichloropropane	16.43	63	596499	25.392	ng		98
46) Bromodichloromethane	16.70	83	745141	26.598	ng		99
47) Trichloroethene	16.77	130	608704	25.035	ng		100
48) 1,4-Dioxane	16.72	88	489317	28.729	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	2653373	24.075	ng		94
50) Methyl Methacrylate	17.02	100	520131	54.356	ng		94
51) n-Heptane	17.21	71	631643	24.777	ng		96
52) cis-1,3-Dichloropropene	17.95	75	924165	26.108	ng		100
53) 4-Methyl-2-pentanone	17.98	58	595650	28.784	ng		96
54) trans-1,3-Dichloropropene	18.64	75	942904	30.449	ng		100
55) 1,1,2-Trichloroethane	18.89	97	547475	26.759	ng		99
58) Toluene	19.28	91	2532381	26.956	ng		99
59) 2-Hexanone	19.58	43	1400765	28.689	ng		100
60) Dibromochloromethane	19.82	129	613012	30.559	ng		100
61) 1,2-Dibromoethane	20.15	107	619801	29.314	ng		99
62) n-Butyl Acetate	20.39	43	1666866	31.288	ng		99
63) n-Octane	20.56	57	565014	26.981	ng		94
64) Tetrachloroethene	20.76	166	616353	26.439	ng		100
65) Chlorobenzene	21.62	112	1574474	27.291	ng		99
66) Ethylbenzene	22.09	91	2787656	27.484	ng		99
67) m- & p-Xylenes	22.33	91	4338755	53.958	ng		100
68) Bromoform	22.42	173	508656	29.212	ng		100
69) Styrene	22.77	104	1750906	29.458	ng		99
70) o-Xylene	22.92	91	2234503	27.623	ng		99
71) n-Nonane	23.17	43	1287447	26.429	ng		94
72) 1,1,2,2-Tetrachloroethane	22.89	83	1004176	28.898	ng		99
74) Cumene	23.66	105	2788818	26.590	ng		99
75) alpha-Pinene	24.15	93	1368269	26.441	ng		99
76) n-Propylbenzene	24.28	91	3462821	26.713	ng		100
77) 3-Ethyltoluene	24.41	105	2770931	28.200	ng		99
78) 4-Ethyltoluene	24.46	105	2777194	28.115	ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	2322017	28.429	ng		100

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

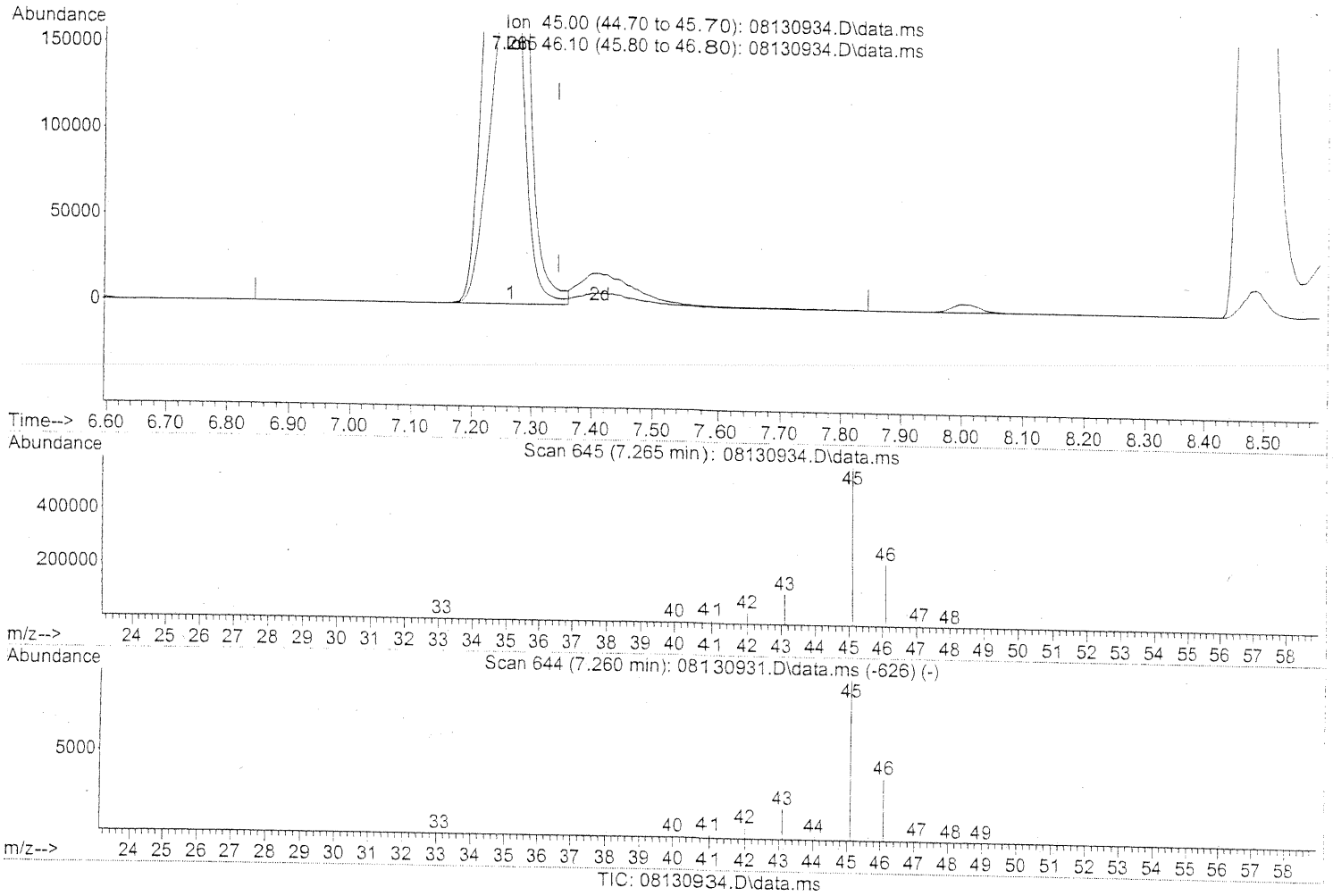
Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1304171	29.427	ng	99
81) 2-Ethyltoluene	24.79	105	2766681	27.266	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2490909	28.723	ng	99
83) n-Decane	25.15	57	1378346	27.307	ng	96
84) Benzyl Chloride	25.22	91	2140806	31.908	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1296940	28.888	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1331268	27.947	ng	100
87) sec-Butylbenzene	25.38	105	3145430	27.525	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3016689	27.552	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2500322	28.525	ng	98
90) 1,2-Dichlorobenzene	25.74	146	1277785	28.345	ng	100
91) d-Limonene	25.74	68	1049611	29.583	ng	96
92) 1,2-Dibromo-3-Chloropr...	26.26	157	440710	32.373	ng	95
93) n-Undecane	26.65	57	1469089	28.166	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	966603	30.692	ng	99
95) Naphthalene	27.94	128	3356047	28.842	ng	100
96) n-Dodecane	27.89	57	1529739	26.201	ng	97
97) Hexachlorobutadiene	28.36	225	537772	29.903	ng	99
98) Cyclohexanone	22.51	55	852691	28.820	ng	95
99) tert-Butylbenzene	25.05	119	2409546	28.016	ng	100
100) n-Butylbenzene	26.07	91	2612795	28.727	ng	99

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

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 110.49ng

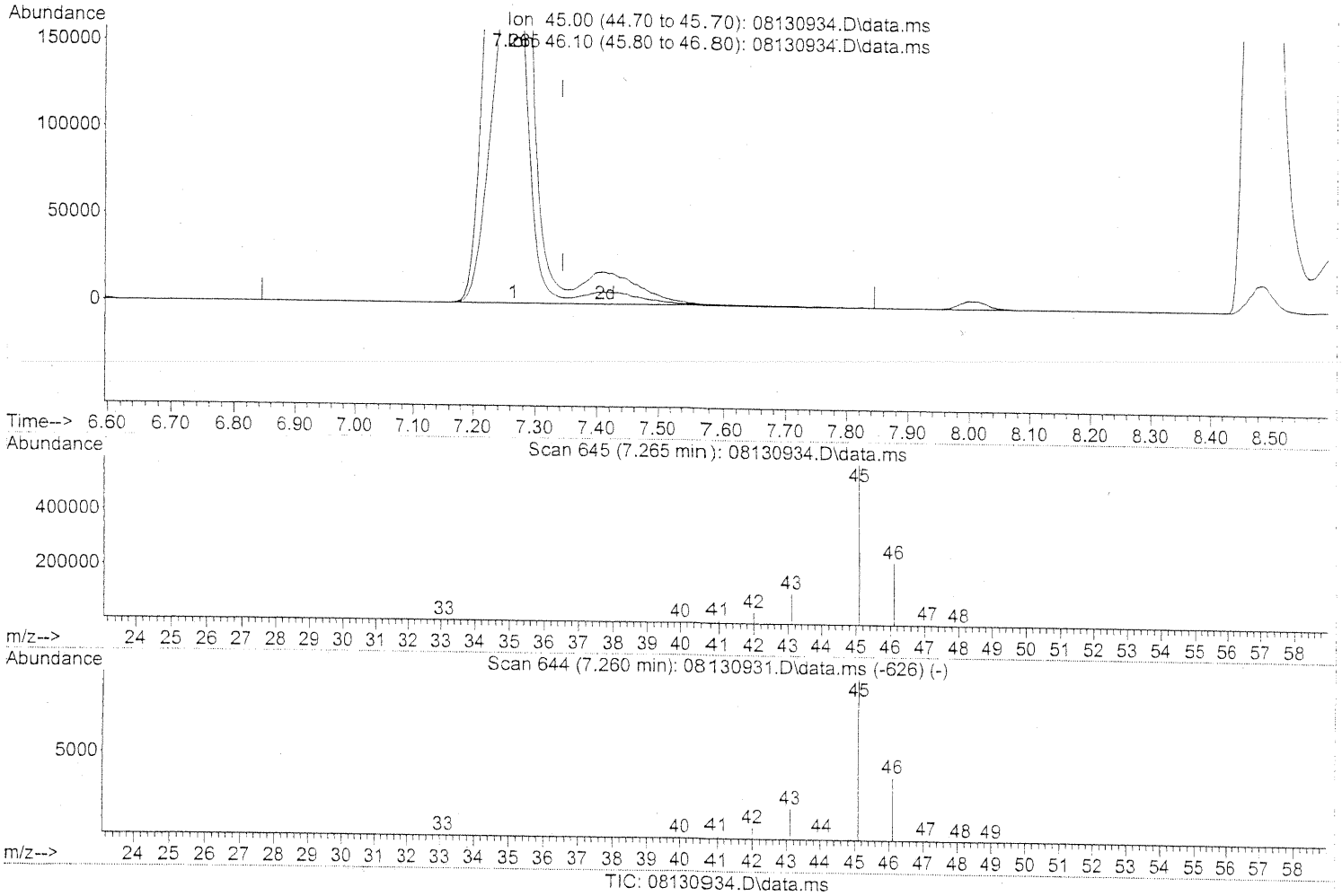
response 2112003

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.87
0.00	0.00	0.00
0.00	0.00	0.00

PT

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 116.80ng m

response 2232593

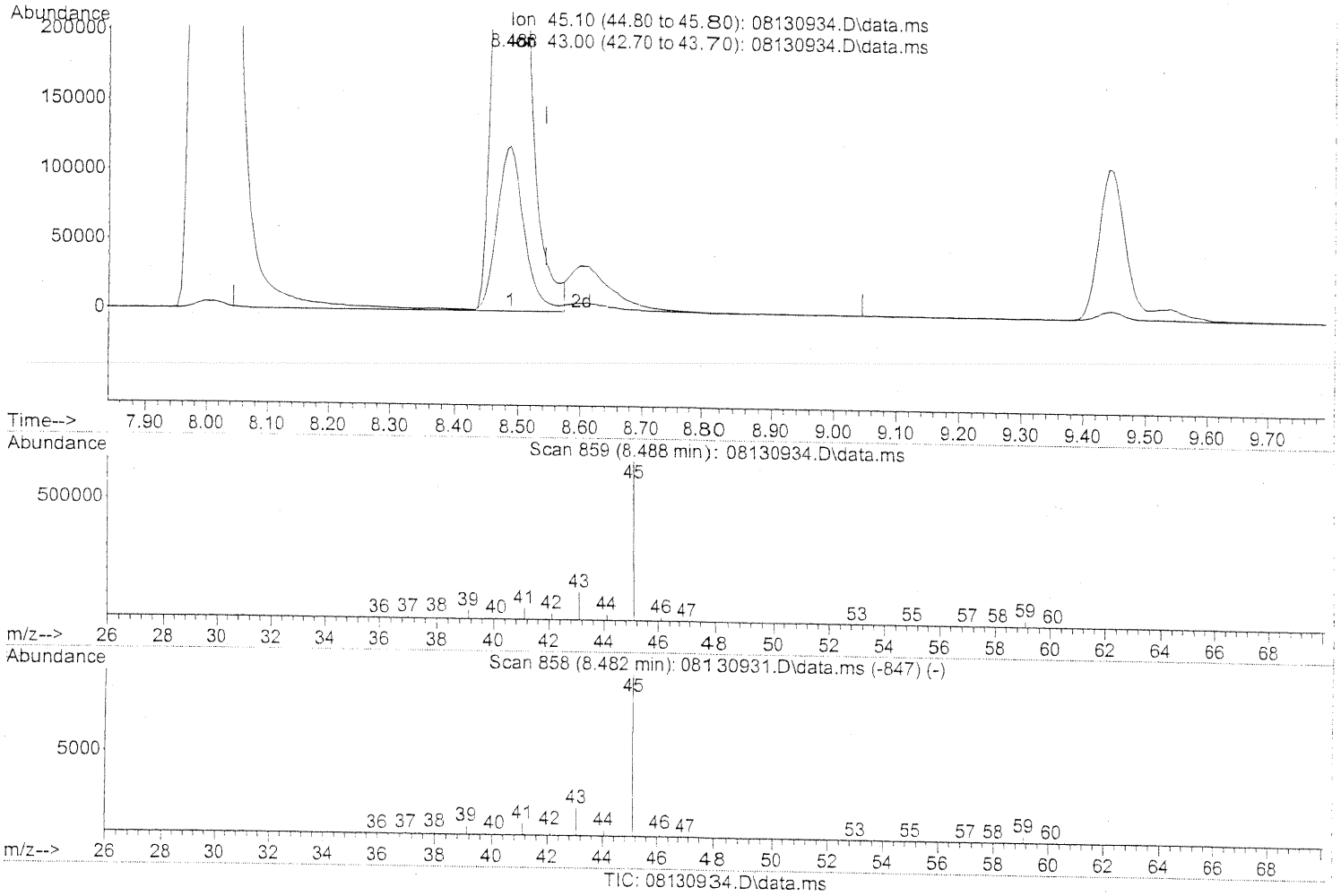
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.77
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
EM 8/13/09
14

DA 8/13/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.488min (-0.057) 37.42ng

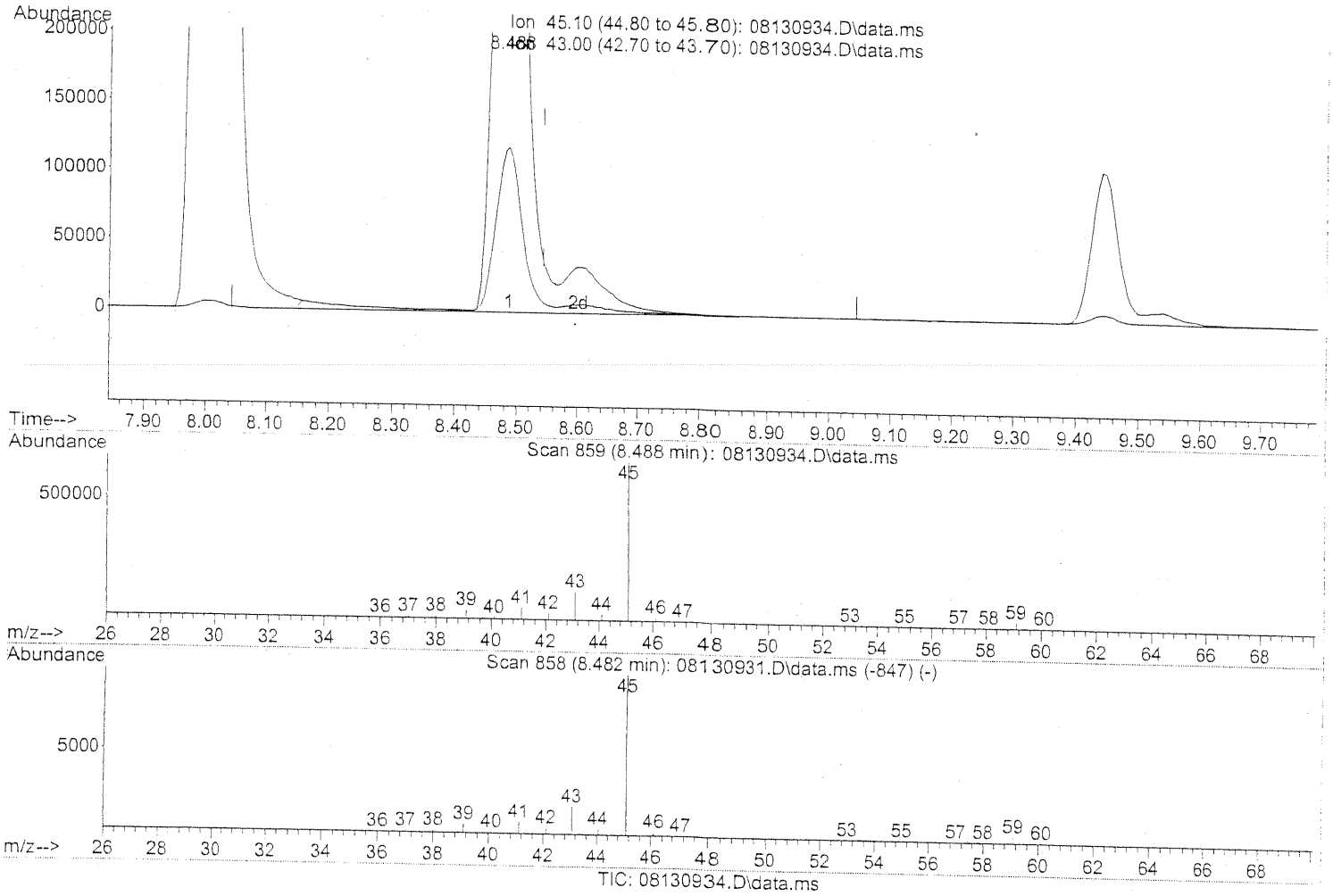
response 1993602

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.46
0.00	0.00	0.00
0.00	0.00	0.00

PT

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.488min (-0.057) 40.54ng m

response 2159425

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.12
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Cam 5/13/09
14

DA 8/15/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08130934.D
Data File Path: J:\MS09\Data\2009_08\13\
Operator: EM
Date Acquired: 8/14/09 7:29

Acq. Method File: TO15LOW.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-08130905/S20-08070903
Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.83	24.8	26.3	94.3	70	130	*
3)	Dichlorodifluoromethane (CFC	5.00	23.1	26.0	88.8	70	130	*
4)	Chloromethane	5.33	21.9	25.0	87.6	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro(	5.59	24.6	26.0	94.6	70	130	*
6)	Vinyl Chloride	5.79	21.9	25.3	86.6	70	130	*
7)	1,3-Butadiene	6.08	24.7	26.8	92.2	70	130	*
8)	Bromomethane	6.58	24.7	25.8	95.7	70	130	*
9)	Chloroethane	6.93	22.9	25.5	89.8	70	130	*
10)	Ethanol	7.27	116.8	130.0	89.8	70	130	*
11)	Acetonitrile	7.57	23.4	26.0	90.0	70	130	*
12)	Acrolein	7.79	27.0	26.3	102.7	70	130	*
13)	Acetone	8.01	112.7	132.0	85.4	70	130	*
14)	Trichlorofluoromethane	8.29	24.2	26.3	92.0	70	130	*
15)	2-Propanol (Isopropanol)	8.49	40.5	48.0	84.4	70	130	*
16)	Acrylonitrile	8.81	27.8	25.8	107.8	70	130	*
17)	1,1-Dichloroethene	9.33	25.5	27.5	92.7	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	9.45	52.2	50.0	104.4	70	130	*
19)	Methylene Chloride	9.54	23.4	26.8	87.3	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.73	26.5	27.0	98.1	70	130	*
21)	Trichlorotrifluoroethane	9.98	27.7	27.5	100.7	70	130	*
22)	Carbon Disulfide	9.93	24.1	26.0	92.7	70	130	*
23)	trans-1,2-Dichloroethene	11.00	24.7	25.5	96.9	70	130	*
24)	1,1-Dichloroethane	11.31	25.1	26.5	94.7	70	130	*
25)	Methyl tert-Butyl Ether	11.40	25.9	26.3	98.5	70	130	*
26)	Vinyl Acetate	11.56	148.4	126.0	117.8	70	130	*
27)	2-Butanone (MEK)	11.89	29.6	26.8	110.4	70	130	*
28)	cis-1,2-Dichloroethene	12.58	26.2	27.0	97.0	70	130	*
29)	Diisopropyl Ether	12.91	26.2	26.5	98.9	70	130	*
30)	Ethyl Acetate	12.90	52.1	52.0	100.2	70	130	*
31)	n-Hexane	12.93	24.1	26.0	92.7	70	130	*
32)	Chloroform	13.03	25.8	27.5	93.8	70	130	*
34)	Tetrahydrofuran (THF)	13.58	27.2	26.5	102.6	70	130	*
35)	Ethyl tert-Butyl Ether	13.71	25.4	25.5	99.6	70	130	*
36)	1,2-Dichloroethane	14.13	26.4	26.3	100.4	70	130	*
38)	1,1,1-Trichloroethane	14.54	25.7	26.0	98.8	70	130	*
39)	Isopropyl Acetate	15.07	55.0	52.3	105.2	70	130	*
40)	1-Butanol	15.09	59.5	52.8	112.7	70	130	*
41)	Benzene	15.23	24.4	25.8	94.6	70	130	*
42)	Carbon Tetrachloride	15.46	26.8	26.3	101.9	70	130	*
43)	Cyclohexane	15.66	49.9	51.8	96.3	70	130	*
44)	tert-Amyl Methyl Ether	16.10	25.4	25.5	99.6	70	130	*
45)	1,2-Dichloropropane	16.43	25.4	26.0	97.7	70	130	*
46)	Bromodichloromethane	16.70	26.6	26.3	101.1	70	130	*
47)	Trichloroethene	16.77	25.0	25.8	96.9	70	130	*
48)	1,4-Dioxane	16.72	28.7	26.0	110.4	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.86	24.1	25.8	93.4	70	130	*
50)	Methyl Methacrylate	17.02	54.4	52.8	103.0	70	130	*

EM 8/14/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 08130934.D
Data File Path: J:\MS09\Data\2009_08\13\
Operator: EM
Date Acquired: 8/14/09 7:29

Acq. Method File: TO15LOW.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-08130905/S20-08070903
Instrument Name: MS09

#	Compound	Ret. Time	Amt. (ng)	Spike Amt. (ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	17.21	24.8	25.8	96.1	70	130	*
52)	cis-1,3-Dichloropropene	17.95	26.1	24.5	106.5	70	130	*
53)	4-Methyl-2-pentanone	17.98	28.8	26.8	107.5	70	130	*
54)	trans-1,3-Dichloropropene	18.64	30.4	27.0	112.6	70	130	*
55)	1,1,2-Trichloroethane	18.89	26.8	26.0	103.1	70	130	*
58)	Toluene	19.28	27.0	26.8	100.7	70	130	*
59)	2-Hexanone	19.58	28.7	27.0	106.3	70	130	*
60)	Dibromochloromethane	19.82	30.6	28.3	108.1	70	130	*
61)	1,2-Dibromoethane	20.15	29.3	26.3	111.4	70	130	*
62)	n-Butyl Acetate	20.39	31.3	27.5	113.8	70	130	*
63)	n-Octane	20.56	27.0	26.3	102.7	70	130	*
64)	Tetrachloroethene	20.76	26.4	25.3	104.3	70	130	*
65)	Chlorobenzene	21.62	27.3	26.5	103.0	70	130	*
66)	Ethylbenzene	22.09	27.5	26.3	104.6	70	130	*
67)	m- & p-Xylenes	22.33	54.0	51.5	104.9	70	130	*
68)	Bromoform	22.42	29.2	26.5	110.2	70	130	*
69)	Styrene	22.77	29.5	26.3	112.2	70	130	*
70)	o-Xylene	22.92	27.6	26.0	106.2	70	130	*
71)	n-Nonane	23.17	26.4	25.8	102.3	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.89	28.9	27.0	107.0	70	130	*
74)	Cumene	23.66	26.6	25.3	105.1	70	130	*
75)	alpha-Pinene	24.15	26.4	24.8	106.5	70	130	*
76)	n-Propylbenzene	24.28	26.7	25.3	105.5	70	130	*
77)	3-Ethyltoluene	24.41	28.2	26.3	107.2	70	130	*
78)	4-Ethyltoluene	24.46	28.1	26.3	106.8	70	130	*
79)	1,3,5-Trimethylbenzene	24.55	28.4	26.5	107.2	70	130	*
80)	alpha-Methylstyrene	24.74	29.4	26.0	113.1	70	130	*
81)	2-Ethyltoluene	24.79	27.3	26.0	105.0	70	130	*
82)	1,2,4-Trimethylbenzene	25.05	28.7	25.5	112.5	70	130	*
83)	n-Decane	25.15	27.3	26.3	103.8	70	130	*
84)	Benzyl Chloride	25.22	31.9	26.8	119.0	70	130	*
85)	1,3-Dichlorobenzene	25.25	28.9	26.0	111.2	70	130	*
86)	1,4-Dichlorobenzene	25.33	27.9	26.3	106.1	70	130	*
87)	sec-Butylbenzene	25.38	27.5	25.8	106.6	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.57	27.6	25.0	110.4	70	130	*
89)	1,2,3-Trimethylbenzene	25.57	28.5	26.0	109.6	70	130	*
90)	1,2-Dichlorobenzene	25.74	28.3	25.8	109.7	70	130	*
91)	d-Limonene	25.74	29.6	26.5	111.7	70	130	*
92)	1,2-Dibromo-3-Chloropropane	26.26	32.4	27.0	120.0	70	130	*
93)	n-Undecane	26.65	28.2	26.3	107.2	70	130	*
94)	1,2,4-Trichlorobenzene	27.79	30.7	27.3	112.5	70	130	*
95)	Naphthalene	27.94	28.8	25.0	115.2	70	130	*
96)	n-Dodecane	27.89	26.2	24.3	107.8	70	130	*
97)	Hexachlorobutadiene	28.36	29.9	26.8	111.6	70	130	*
98)	Cyclohexanone	22.51	28.8	24.8	116.1	70	130	*
99)	tert-Butylbenzene	25.05	28.0	26.5	105.7	70	130	*
100)	n-Butylbenzene	26.07	28.7	26.5	108.3	70	130	*

EM 8/14/09

* Denotes Passing Criterion

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	102	-0.02
2	T	Propene	2.193	2.167	1.2	96	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.730	12.8	95	0.00
4	T	Chloromethane	2.918	2.714	7.0	95	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.419	14.2	91	-0.01
6	T	Vinyl Chloride	2.878	2.594	9.9	96	-0.01
7	T	1,3-Butadiene	2.044	2.064	-1.0	101	-0.01
8	T	Bromomethane	1.505	1.377	8.5	94	-0.02
9	T	Chloroethane	1.428	1.300	9.0	95	-0.01
10	T	Ethanol	1.376	1.294	6.0	94	-0.08
11	T	Acetonitrile	3.357	3.136	6.6	96	-0.05
12	T	Acrolein	0.897	0.942	-5.0	99	-0.02
13	T	Acetone	1.400	1.206	13.9	97	-0.05
14	T	Trichlorofluoromethane	2.677	2.387	10.8	92	-0.02
15	T	2-Propanol (Isopropanol)	3.834	3.287	14.3	94	-0.06
16	T	Acrylonitrile	2.033	2.143	-5.4	94	-0.03
17	T	1,1-Dichloroethene	1.571	1.344	14.4	91	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	3.840	1.3	92	-0.04
19	T	Methylene Chloride	1.747	1.445	17.3	92	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.377	-1.5	97	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.068	10.9	89	-0.02
22	T	Carbon Disulfide	6.163	5.388	12.6	92	-0.02
23	T	trans-1,2-Dichloroethene	2.411	2.249	6.7	93	-0.02
24	T	1,1-Dichloroethane	2.952	2.705	8.4	94	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.337	9.3	92	-0.01
26	T	Vinyl Acetate	0.303	0.347	-14.5	99	-0.03
27	T	2-Butanone (MEK)	0.976	1.008	-3.3	91	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.054	8.7	93	-0.02
29	T	Diisopropyl Ether	1.386	1.263	8.9	91	-0.02
30	T	Ethyl Acetate	0.633	0.617	2.5	93	-0.03
31	T	n-Hexane	3.085	2.764	10.4	95	-0.02
32	T	Chloroform	2.582	2.317	10.3	92	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.843	-4.2	107	-0.02
34	T	Tetrahydrofuran (THF)	1.015	0.968	4.6	93	-0.02
35	T	Ethyl tert-Butyl Ether	1.977	1.780	10.0	90	-0.02
36	T	1,2-Dichloroethane	1.976	1.866	5.6	93	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	102	-0.02
38	T	1,1,1-Trichloroethane	0.455	0.402	11.6	91	-0.02

R9081309.M Fri Sep 04 13:14:52 2009 EM 9/4/09 Page: 1

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.204	0.205	-0.5	92	-0.03
40	T	1-Butanol	0.324	0.351	-8.3	92	-0.06
41	T	Benzene	1.344	1.141	15.1	91	-0.02
42	T	Carbon Tetrachloride	0.376	0.338	10.1	91	-0.02
43	T	Cyclohexane	0.521	0.462	11.3	91	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.852	9.8	90	-0.02
45	T	1,2-Dichloropropane	0.330	0.299	9.4	91	-0.02
46	T	Bromodichloromethane	0.393	0.367	6.6	91	-0.02
47	T	Trichloroethene	0.341	0.285	16.4	88	-0.02
48	T	1,4-Dioxane	0.239	0.236	1.3	88	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.376	11.1	92	-0.02
50	T	Methyl Methacrylate	0.134	0.121	9.7	88	-0.03
51	T	n-Heptane	0.358	0.321	10.3	91	-0.02
52	T	cis-1,3-Dichloropropene	0.497	0.480	3.4	90	-0.01
53	T	4-Methyl-2-pentanone	0.291	0.293	-0.7	91	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.436	-0.2	89	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.263	8.4	88	-0.02
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	100	0.00
57	S	Toluene-d8 (SS2)	2.377	2.405	-1.2	101	-0.01
58	T	Toluene	2.881	2.504	13.1	89	-0.01
59	T	2-Hexanone	1.497	1.483	0.9	92	-0.02
60	T	Dibromochloromethane	0.615	0.575	6.5	87	-0.01
61	T	1,2-Dibromoethane	0.648	0.613	5.4	88	-0.01
62	T	n-Butyl Acetate	1.634	1.731	-5.9	92	-0.02
63	T	n-Octane	0.642	0.592	7.8	91	-0.01
64	T	Tetrachloroethene	0.715	0.616	13.8	86	-0.01
65	T	Chlorobenzene	1.769	1.519	14.1	88	-0.01
66	T	Ethylbenzene	3.111	2.786	10.4	89	0.00
67	T	m- & p-Xylenes	2.466	2.202	10.7	89	-0.02
68	T	Bromoform	0.534	0.508	4.9	86	-0.01
69	T	Styrene	1.823	1.670	8.4	86	-0.01
70	T	o-Xylene	2.481	2.205	11.1	88	-0.02
71	T	n-Nonane	1.494	1.397	6.5	92	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	0.963	9.7	86	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.634	5.8	94	0.00
74	T	Cumene	3.217	2.829	12.1	87	0.00
75	T	alpha-Pinene	1.587	1.423	10.3	87	-0.01
76	T	n-Propylbenzene	3.975	3.521	11.4	87	-0.01

EM 9/4/09

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Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.013	2.626	12.8	84	0.00
78	T	4-Ethyltoluene	3.029	2.645	12.7	88	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.137	14.7	86	-0.01
80	T	alpha-Methylstyrene	1.359	1.221	10.2	84	-0.02
81	T	2-Ethyltoluene	3.112	2.674	14.1	86	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.357	11.4	86	-0.01
83	T	n-Decane	1.548	1.365	11.8	88	-0.02
84	T	Benzyl Chloride	2.058	1.878	8.7	80	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.151	16.4	83	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.199	17.9	83	-0.01
87	T	sec-Butylbenzene	3.505	3.032	13.5	86	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	2.950	12.2	85	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.340	12.9	85	-0.02
90	T	1,2-Dichlorobenzene	1.382	1.145	17.1	82	-0.01
91	T	d-Limonene	1.088	0.996	8.5	86	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.358	14.1	77	-0.01
93	T	n-Undecane	1.600	1.375	14.1	84	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.736	23.8	76	-0.01
95	T	Naphthalene	3.568	2.676	25.0	74	0.00
96	T	n-Dodecane	1.790	1.482	17.2	81	0.00
97	T	Hexachlorobutadiene	0.552	0.430	22.1	77	0.00
98	T	Cyclohexanone	0.907	0.927	-2.2	89	-0.02
99	T	tert-Butylbenzene	2.638	2.327	11.8	86	-0.01
100	T	n-Butylbenzene	2.789	2.378	14.7	83	0.00

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

Em 9/4/09

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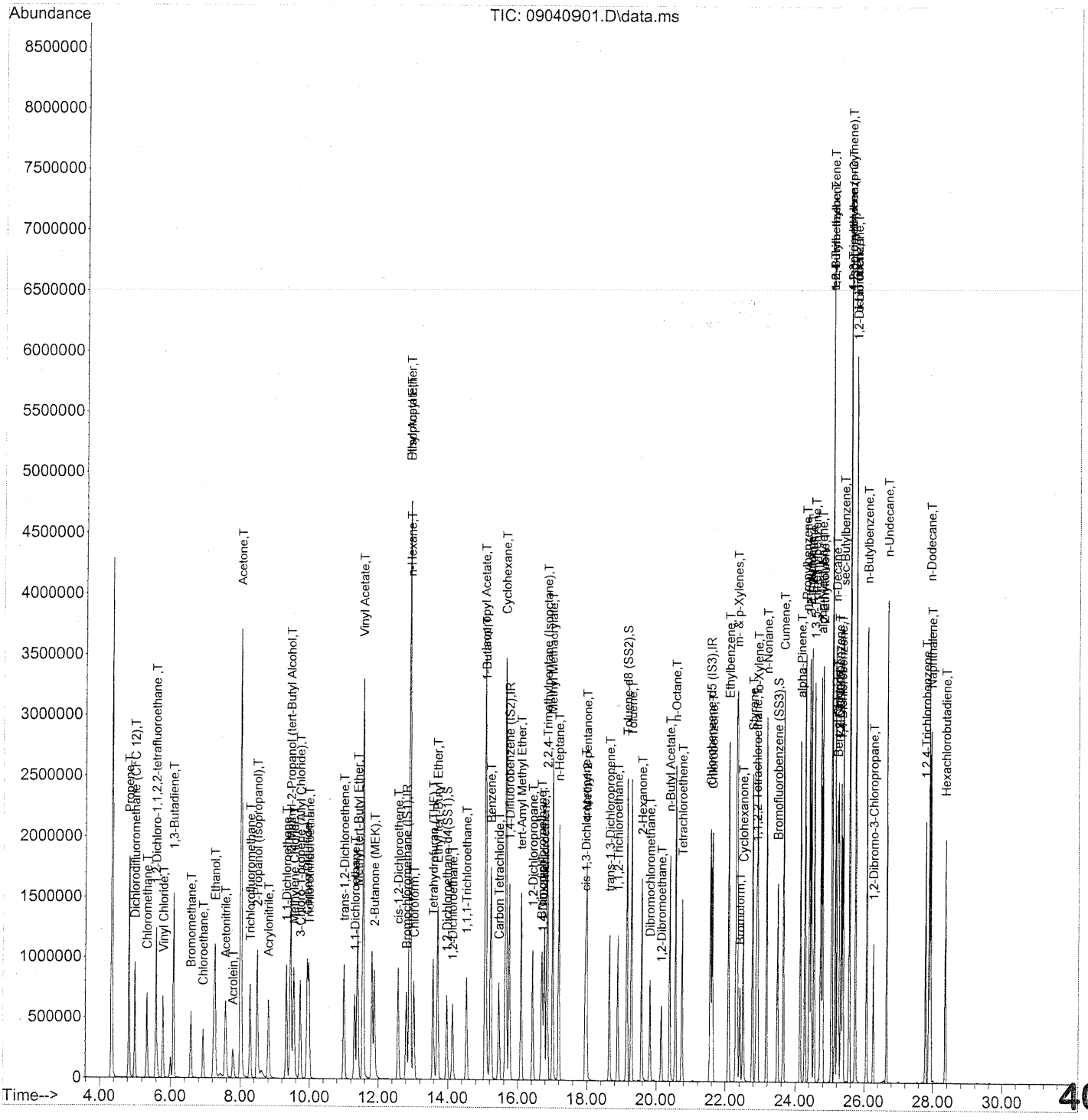
Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	370038	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1897040	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	898337	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	682003	26.066	ng		-0.02
Spiked Amount 25.000			Recovery =	104.28%			
57) Toluene-d8 (SS2)	19.15	98	2160469	25.298	ng		-0.01
Spiked Amount 25.000			Recovery =	101.20%			
73) Bromofluorobenzene (SS3)	23.49	174	569942	23.565	ng		0.00
Spiked Amount 25.000			Recovery =	94.28%			
Target Compounds							Qvalue
2) Propene	4.83	42	859723	26.486	ng		97
3) Dichlorodifluoromethan...	5.00	85	1062803	22.938	ng		100
4) Chloromethane	5.33	50	1004162	23.253	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	556581	22.732	ng		100
6) Vinyl Chloride	5.80	62	971569	22.808	ng		98
7) 1,3-Butadiene	6.08	54	916412	30.287	ng		97
8) Bromomethane	6.58	94	519720	23.332	ng		99
9) Chloroethane	6.93	64	486966	23.042	ng		100
10) Ethanol	7.27	45	2489451m	122.263	ng		
11) Acetonitrile	7.57	41	1220712	24.566	ng		99
12) Acrolein	7.79	56	376376	28.344	ng		98
13) Acetone	8.01	58	2464319	118.934	ng		95
14) Trichlorofluoromethane	8.28	101	929085	23.449	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	2301433m	40.559	ng		
16) Acrylonitrile	8.81	53	840556	27.929	ng		99
17) 1,1-Dichloroethene	9.32	96	546956	23.523	ng		92
18) 2-Methyl-2-Propanol (t...	9.45	59	2870180	49.824	ng		98
19) Methylene Chloride	9.54	84	573207	22.173	ng		83
20) 3-Chloro-1-propene (Al...	9.73	41	949856	27.399	ng		87
21) Trichlorotrifluoroethane	9.98	151	434824	24.519	ng		94
22) Carbon Disulfide	9.93	76	2137187	23.427	ng		98
23) trans-1,2-Dichloroethene	11.00	61	882039	24.719	ng		90
24) 1,1-Dichloroethane	11.31	63	1061097	24.281	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1752404	24.747	ng		95
26) Vinyl Acetate	11.56	86	647508	144.288	ng	#	59
27) 2-Butanone (MEK)	11.89	72	410442	28.414	ng	#	78
28) cis-1,2-Dichloroethene	12.57	61	829934	24.925	ng		91
29) Diisopropyl Ether	12.90	87	501015	24.430	ng	#	55
30) Ethyl Acetate	12.90	61	487108	52.001	ng		94
31) n-Hexane	12.92	57	1116729	24.457	ng		94

EM 9/4/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	919306	24.055	ng		100
34) Tetrahydrofuran (THF)	13.58	72	394133	26.244	ng	#	82
35) Ethyl tert-Butyl Ether	13.71	87	679647	23.228	ng	#	84
36) 1,2-Dichloroethane	14.13	62	732091	25.034	ng		99
38) 1,1,1-Trichloroethane	14.53	97	803179	23.279	ng		98
39) Isopropyl Acetate	15.06	61	813941	52.572	ng	#	76
40) 1-Butanol	15.09	56	1379604	56.120	ng		84
41) Benzene	15.23	78	2293893	22.485	ng		99
42) Carbon Tetrachloride	15.46	117	691989	24.266	ng		99
43) Cyclohexane	15.65	84	1884924	47.708	ng		86
44) tert-Amyl Methyl Ether	16.10	73	1680427	23.436	ng		98
45) 1,2-Dichloropropane	16.43	63	597188	23.862	ng		98
46) Bromodichloromethane	16.69	83	751806	25.190	ng		98
47) Trichloroethene	16.77	130	573732	22.149	ng		100
48) 1,4-Dioxane	16.71	88	479745	26.439	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2715504	23.128	ng		95
50) Methyl Methacrylate	17.02	100	490379	48.104	ng	#	88
51) n-Heptane	17.20	71	645009	23.750	ng		94
52) cis-1,3-Dichloropropene	17.95	75	903251	23.952	ng		100
53) 4-Methyl-2-pentanone	17.98	58	611200	27.724	ng		93
54) trans-1,3-Dichloropropene	18.64	75	910307	27.593	ng		100
55) 1,1,2-Trichloroethane	18.88	97	524336	24.057	ng		98
58) Toluene	19.28	91	2428970	23.462	ng		100
59) 2-Hexanone	19.58	43	1465132	27.230	ng		97
60) Dibromochloromethane	19.82	129	594653	26.901	ng		100
61) 1,2-Dibromoethane	20.15	107	583281	25.034	ng		100
62) n-Butyl Acetate	20.39	43	1710919	29.143	ng		97
63) n-Octane	20.56	57	570056	24.703	ng		90
64) Tetrachloroethene	20.75	166	564109	21.958	ng		99
65) Chlorobenzene	21.62	112	1474090	23.186	ng		100
66) Ethylbenzene	22.09	91	2652782	23.734	ng		99
67) m- & p-Xylenes	22.33	91	4114526	46.434	ng		99
68) Bromoform	22.41	173	470995	24.546	ng		99
69) Styrene	22.77	104	1607858	24.548	ng		100
70) o-Xylene	22.92	91	2099617	23.554	ng		98
71) n-Nonane	23.17	43	1330723	24.789	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	927605	24.224	ng		100
74) Cumene	23.66	105	2623101	22.695	ng		98
75) alpha-Pinene	24.15	93	1293871	22.689	ng		100
76) n-Propylbenzene	24.28	91	3263987	22.849	ng		99
77) 3-Ethyltoluene	24.41	105	2576089	23.791	ng		98
78) 4-Ethyltoluene	24.46	105	2594969	23.839	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2096823	23.296	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

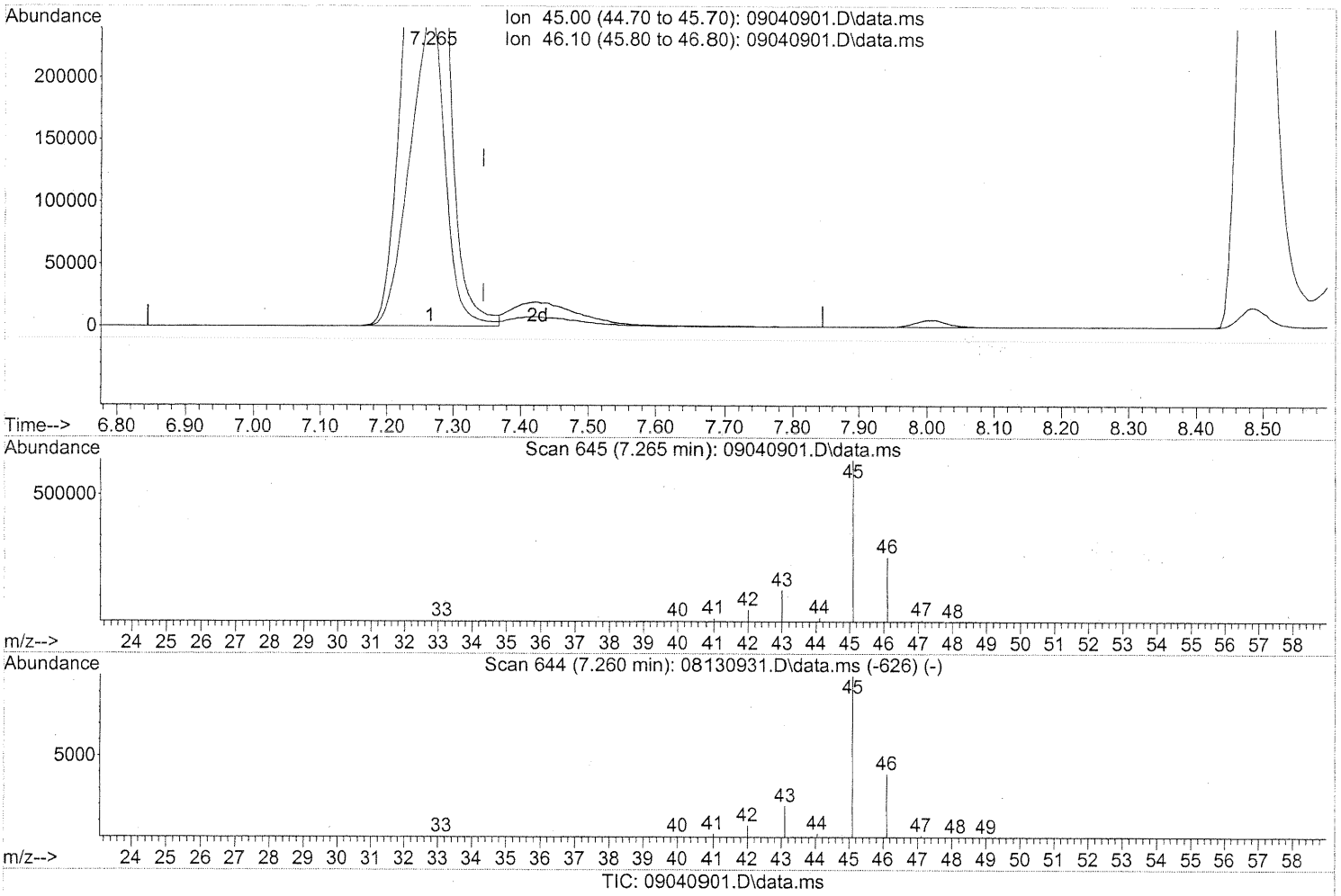
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1175630	24.072	ng	98
81) 2-Ethyltoluene	24.79	105	2526843	22.598	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2244420	23.486	ng	99
83) n-Decane	25.15	57	1324331	23.808	ng	95
84) Benzyl Chloride	25.22	91	1855446	25.096	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1129280	22.825	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1142036	21.755	ng	100
87) sec-Butylbenzene	25.38	105	2887354	22.928	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2735307	22.670	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2253531	23.330	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1090587	21.954	ng	100
91) d-Limonene	25.74	68	976681	24.979	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	353944	23.593	ng	92
93) n-Undecane	26.65	57	1348521	23.462	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	740916	21.349	ng	99
95) Naphthalene	27.94	128	2548377	19.874	ng	100
96) n-Dodecane	27.89	57	1320499	20.524	ng	95
97) Hexachlorobutadiene	28.36	225	424588	21.424	ng	99
98) Cyclohexanone	22.51	55	815710	25.018	ng	95
99) tert-Butylbenzene	25.05	119	2215403	23.375	ng	99
100) n-Butylbenzene	26.07	91	2333015	23.277	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 115.56ng

response 2353065

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.30
0.00	0.00	0.00
0.00	0.00	0.00

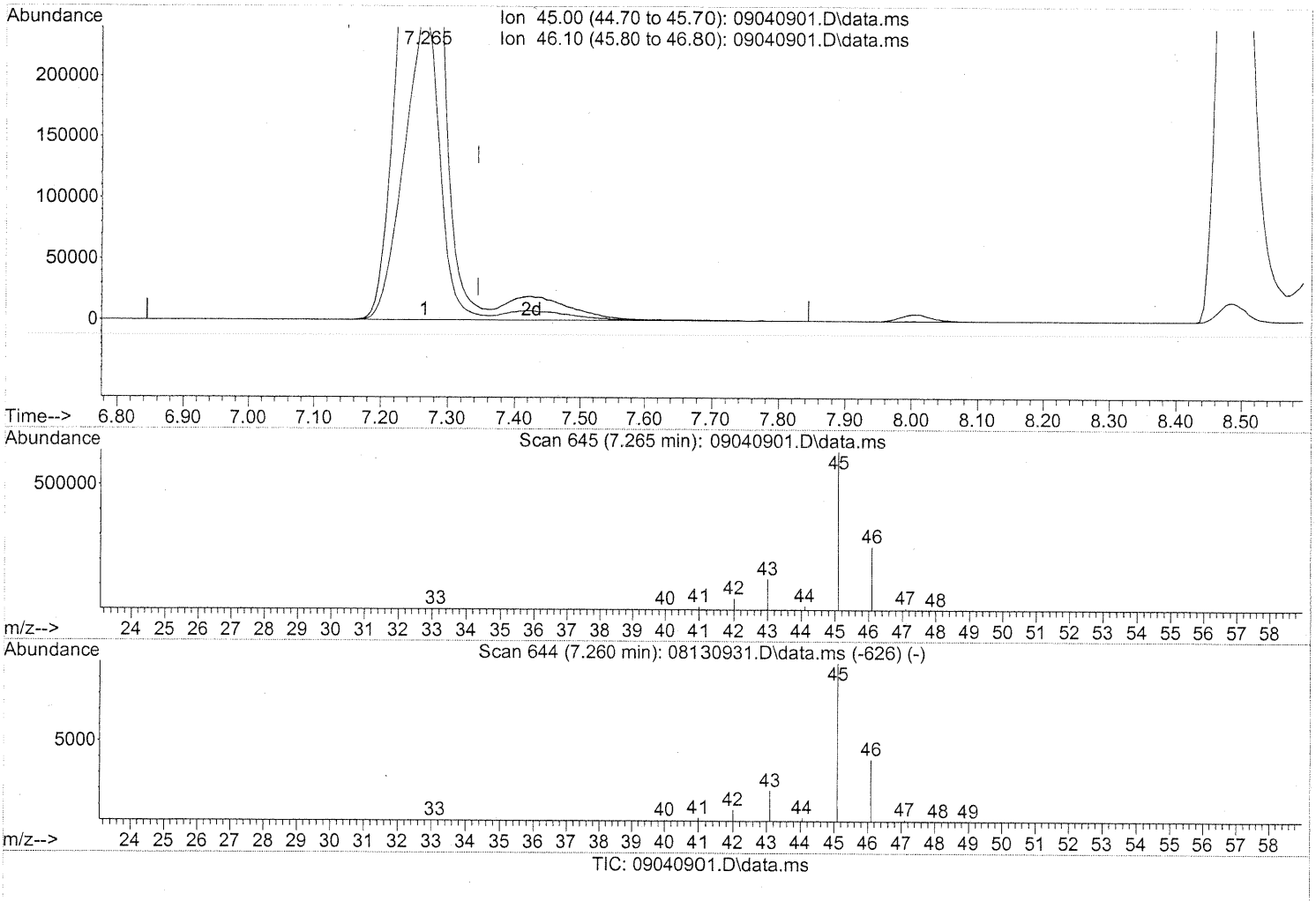
PT

407

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 122.26ng m

response 2489451

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.14
0.00	0.00	0.00
0.00	0.00	0.00

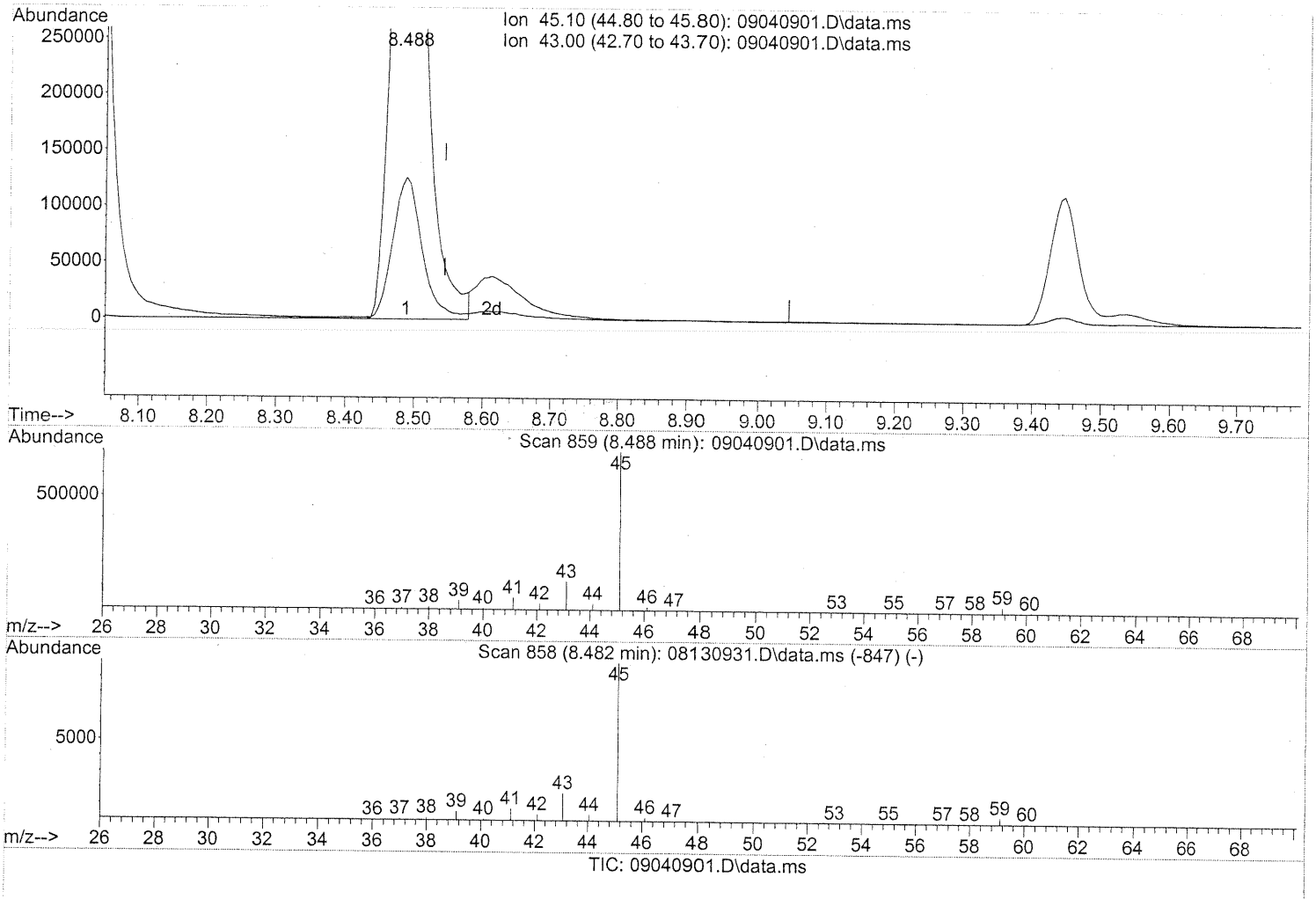
PT → CC
Cam 9/4/09
R 9/8/09

408

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

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

8.488min (-0.057) 37.09ng

response 2104654

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.62
0.00	0.00	0.00
0.00	0.00	0.00

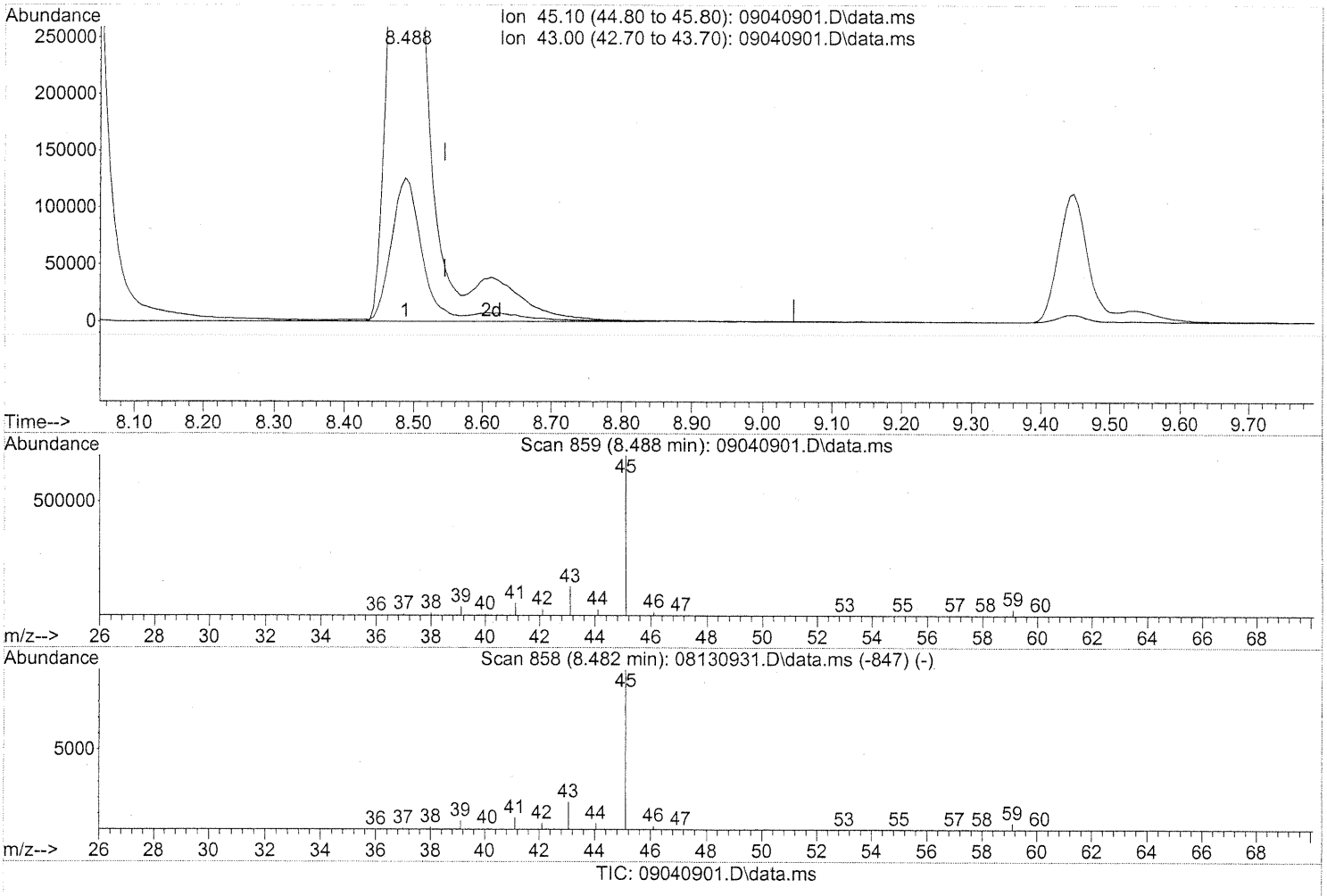
PT

409

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

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

8.488min (-0.057) 40.56ng m

response 2301433

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.11
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
EM 9/4/09
9/18/09

410

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	92	-0.02
2	T	Propene	2.193	2.431	-10.9	98	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.879	8.0	91	0.00
4	T	Chloromethane	2.918	2.843	2.6	90	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.529	7.6	89	-0.01
6	T	Vinyl Chloride	2.878	2.666	7.4	90	-0.01
7	T	1,3-Butadiene	2.044	2.157	-5.5	96	-0.01
8	T	Bromomethane	1.505	1.481	1.6	92	-0.02
9	T	Chloroethane	1.428	1.379	3.4	92	-0.01
10	T	Ethanol	1.376	1.357	1.4	90	-0.07
11	T	Acetonitrile	3.357	3.296	1.8	92	-0.04
12	T	Acrolein	0.897	0.979	-9.1	93	-0.02
13	T	Acetone	1.400	1.304	6.9	95	-0.04
14	T	Trichlorofluoromethane	2.677	2.600	2.9	91	-0.02
15	T	2-Propanol (Isopropanol)	3.834	3.098	19.2	80	-0.05
16	T	Acrylonitrile	2.033	2.289	-12.6	91	-0.03
17	T	1,1-Dichloroethene	1.571	1.468	6.6	90	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	4.259	-9.4	92	-0.03
19	T	Methylene Chloride	1.747	1.565	10.4	91	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.535	-8.2	94	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.173	2.1	89	-0.02
22	T	Carbon Disulfide	6.163	5.881	4.6	91	-0.01
23	T	trans-1,2-Dichloroethene	2.411	2.425	-0.6	91	-0.02
24	T	1,1-Dichloroethane	2.952	2.934	0.6	93	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.814	-0.6	92	0.00
26	T	Vinyl Acetate	0.303	0.381	-25.7	98	-0.03
27	T	2-Butanone (MEK)	0.976	1.105	-13.2	91	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.241	0.4	92	-0.02
29	T	Diisopropyl Ether	1.386	1.393	-0.5	91	-0.01
30	T	Ethyl Acetate	0.633	0.679	-7.3	93	-0.03
31	T	n-Hexane	3.085	2.998	2.8	94	-0.01
32	T	Chloroform	2.582	2.556	1.0	92	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.844	-4.3	97	-0.02
34	T	Tetrahydrofuran (THF)	1.015	1.049	-3.3	91	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	1.979	-0.1	90	-0.01
36	T	1,2-Dichloroethane	1.976	2.057	-4.1	93	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	93	-0.01
38	T	1,1,1-Trichloroethane	0.455	0.446	2.0	92	-0.01

EM 9/8/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.204	0.224	-9.8	91	-0.03
40	T	1-Butanol	0.324	0.392	-21.0	93	-0.06
41	T	Benzene	1.344	1.258	6.4	91	-0.01
42	T	Carbon Tetrachloride	0.376	0.372	1.1	91	-0.01
43	T	Cyclohexane	0.521	0.509	2.3	91	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.949	-0.4	92	-0.01
45	T	1,2-Dichloropropane	0.330	0.328	0.6	91	-0.02
46	T	Bromodichloromethane	0.393	0.406	-3.3	91	-0.02
47	T	Trichloroethene	0.341	0.313	8.2	88	-0.02
48	T	1,4-Dioxane	0.239	0.263	-10.0	90	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.498	3.2	91	-0.02
50	T	Methyl Methacrylate	0.134	0.135	-0.7	89	-0.02
51	T	n-Heptane	0.358	0.352	1.7	91	-0.01
52	T	cis-1,3-Dichloropropene	0.497	0.533	-7.2	91	0.00
53	T	4-Methyl-2-pentanone	0.291	0.323	-11.0	91	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.487	-12.0	91	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.292	-1.7	90	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	89	0.00
57	S	Toluene-d8 (SS2)	2.377	2.463	-3.6	92	-0.01
58	T	Toluene	2.881	2.855	0.9	90	-0.01
59	T	2-Hexanone	1.497	1.686	-12.6	94	-0.02
60	T	Dibromochloromethane	0.615	0.656	-6.7	89	-0.01
61	T	1,2-Dibromoethane	0.648	0.703	-8.5	90	-0.01
62	T	n-Butyl Acetate	1.634	1.979	-21.1	94	-0.02
63	T	n-Octane	0.642	0.672	-4.7	92	-0.01
64	T	Tetrachloroethene	0.715	0.702	1.8	88	-0.01
65	T	Chlorobenzene	1.769	1.737	1.8	89	-0.01
66	T	Ethylbenzene	3.111	3.214	-3.3	91	0.00
67	T	m- & p-Xylenes	2.466	2.540	-3.0	91	-0.02
68	T	Bromoform	0.534	0.594	-11.2	90	-0.01
69	T	Styrene	1.823	1.949	-6.9	90	-0.01
70	T	o-Xylene	2.481	2.555	-3.0	91	-0.02
71	T	n-Nonane	1.494	1.579	-5.7	93	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.150	-7.9	92	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.642	4.6	85	0.00
74	T	Cumene	3.217	3.298	-2.5	91	0.00
75	T	alpha-Pinene	1.587	1.641	-3.4	90	-0.01
76	T	n-Propylbenzene	3.975	4.132	-3.9	91	-0.01

9/8/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.013	3.090	-2.6	88	0.00
78	T	4-Ethyltoluene	3.029	3.132	-3.4	93	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.535	-1.2	91	-0.01
80	T	alpha-Methylstyrene	1.359	1.449	-6.6	89	-0.02
81	T	2-Ethyltoluene	3.112	3.167	-1.8	91	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.816	-5.9	91	-0.01
83	T	n-Decane	1.548	1.598	-3.2	92	-0.02
84	T	Benzyl Chloride	2.058	2.412	-17.2	92	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.396	-1.4	90	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.460	0.1	90	-0.01
87	T	sec-Butylbenzene	3.505	3.576	-2.0	91	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.557	-5.9	91	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.832	-5.4	91	-0.02
90	T	1,2-Dichlorobenzene	1.382	1.410	-2.0	90	-0.01
91	T	d-Limonene	1.088	1.182	-8.6	91	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.463	-11.0	89	-0.01
93	T	n-Undecane	1.600	1.674	-4.6	92	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.959	0.7	88	-0.01
95	T	Naphthalene	3.568	3.586	-0.5	89	0.00
96	T	n-Dodecane	1.790	1.879	-5.0	91	0.00
97	T	Hexachlorobutadiene	0.552	0.550	0.4	88	0.00
98	T	Cyclohexanone	0.907	1.078	-18.9	92	-0.02
99	T	tert-Butylbenzene	2.638	2.767	-4.9	91	-0.01
100	T	n-Butylbenzene	2.789	2.896	-3.8	91	0.00

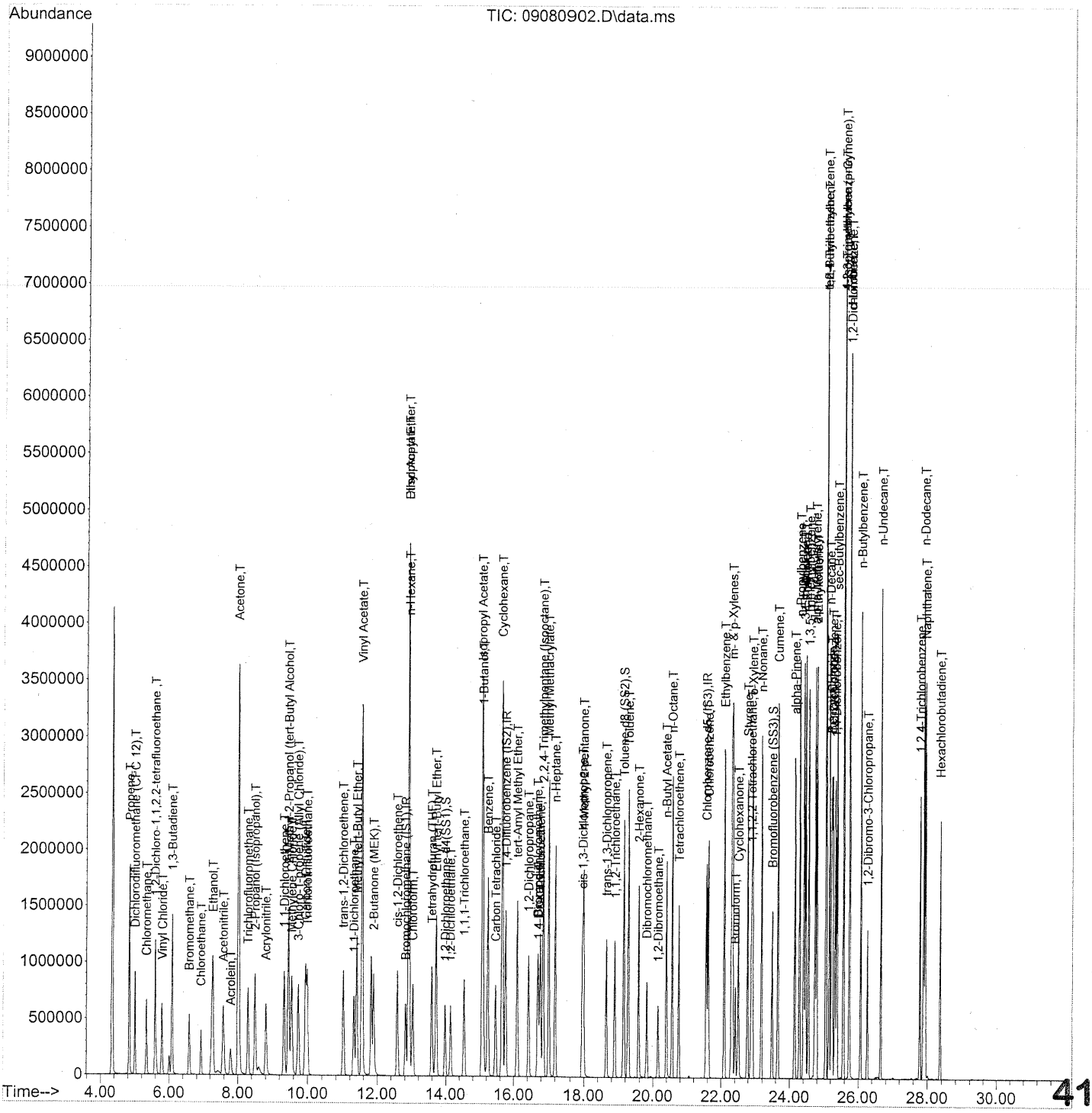
(#) = Out of Range SPCC's out = 0 CCC's out = 0

EM 9/8/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	335598	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1728800	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	801437	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	618713	26.074	ng		-0.02
Spiked Amount 25.000			Recovery = 104.28%				
57) Toluene-d8 (SS2)	19.15	98	1974170	25.911	ng		-0.01
Spiked Amount 25.000			Recovery = 103.64%				
73) Bromofluorobenzene (SS3)	23.49	174	514650	23.852	ng		0.00
Spiked Amount 25.000			Recovery = 95.40%				
Target Compounds							Qvalue
2) Propene	4.84	42	874514	29.706	ng		97
3) Dichlorodifluoromethan...	5.00	85	1016333	24.186	ng		99
4) Chloromethane	5.33	50	953955	24.358	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	543841	24.491	ng		99
6) Vinyl Chloride	5.80	62	905401	23.436	ng		99
7) 1,3-Butadiene	6.08	54	868488	31.648	ng		97
8) Bromomethane	6.58	94	506949	25.094	ng		99
9) Chloroethane	6.93	64	468348	24.436	ng		100
10) Ethanol	7.27	45	2368174m	128.242	ng		
11) Acetonitrile	7.58	41	1163530	25.818	ng		99
12) Acrolein	7.79	56	354883	29.469	ng		97
13) Acetone	8.01	58	2416449	128.592	ng		94
14) Trichlorofluoromethane	8.29	101	917774	25.540	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1967213m	38.226	ng		
16) Acrylonitrile	8.81	53	814149	29.828	ng		99
17) 1,1-Dichloroethene	9.33	96	542098	25.706	ng		93
18) 2-Methyl-2-Propanol (t...	9.45	59	2887091	55.260	ng		98
19) Methylene Chloride	9.54	84	562970	24.012	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	918873	29.226	ng		88
21) Trichlorotrifluoroethane	9.98	151	433196	26.934	ng		95
22) Carbon Disulfide	9.94	76	2115739	25.571	ng		98
23) trans-1,2-Dichloroethene	11.00	61	862727	26.659	ng		91
24) 1,1-Dichloroethane	11.32	63	1043587	26.331	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1764240	27.471	ng		95
26) Vinyl Acetate	11.56	86	644962	158.470	ng	#	61
27) 2-Butanone (MEK)	11.89	72	408037	31.147	ng	#	79
28) cis-1,2-Dichloroethene	12.58	61	821374	27.200	ng		92
29) Diisopropyl Ether	12.91	87	501272	26.951	ng	#	58
30) Ethyl Acetate	12.91	61	485876	57.193	ng		96
31) n-Hexane	12.93	57	1098863	26.535	ng		9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	919418	26.527	ng		100
34) Tetrahydrofuran (THF)	13.58	72	387185	28.428	ng	#	83
35) Ethyl tert-Butyl Ether	13.71	87	685491	25.832	ng	#	85
36) 1,2-Dichloroethane	14.13	62	731758	27.590	ng		99
38) 1,1,1-Trichloroethane	14.54	97	811301	25.802	ng		99
39) Isopropyl Acetate	15.07	61	811891	57.543	ng	#	75
40) 1-Butanol	15.09	56	1402988	62.625	ng		85
41) Benzene	15.23	78	2305139	24.794	ng		99
42) Carbon Tetrachloride	15.46	117	693682	26.693	ng		99
43) Cyclohexane	15.66	84	1893116	52.579	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1705554	26.101	ng		98
45) 1,2-Dichloropropane	16.43	63	597324	26.190	ng		99
46) Bromodichloromethane	16.70	83	757992	27.869	ng		99
47) Trichloroethene	16.77	130	573716	24.304	ng		100
48) 1,4-Dioxane	16.72	88	487896	29.505	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	2693035	25.168	ng		95
50) Methyl Methacrylate	17.02	100	496744	53.470	ng	#	89
51) n-Heptane	17.21	71	644155	26.026	ng		94
52) cis-1,3-Dichloropropene	17.95	75	914670	26.615	ng		100
53) 4-Methyl-2-pentanone	17.98	58	614421	30.582	ng		94
54) trans-1,3-Dichloropropene	18.64	75	925496	30.784	ng		100
55) 1,1,2-Trichloroethane	18.89	97	531778	26.772	ng		98
58) Toluene	19.28	91	2470763	26.752	ng		100
59) 2-Hexanone	19.58	43	1486334	30.964	ng		98
60) Dibromochloromethane	19.82	129	605694	30.713	ng		100
61) 1,2-Dibromoethane	20.15	107	597191	28.730	ng		99
62) n-Butyl Acetate	20.39	43	1744216	33.302	ng		98
63) n-Octane	20.56	57	577007	28.027	ng		90
64) Tetrachloroethene	20.75	166	573602	25.028	ng		99
65) Chlorobenzene	21.62	112	1503145	26.501	ng		100
66) Ethylbenzene	22.09	91	2730318	27.381	ng		98
67) m- & p-Xylenes	22.32	91	4233851	53.558	ng		99
68) Bromoform	22.41	173	491556	28.715	ng		100
69) Styrene	22.77	104	1674454	28.656	ng		100
70) o-Xylene	22.92	91	2170951	27.298	ng		98
71) n-Nonane	23.17	43	1341669	28.014	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	988284	28.929	ng		100
74) Cumene	23.66	105	2727790	26.454	ng		98
75) alpha-Pinene	24.15	93	1330736	26.157	ng		99
76) n-Propylbenzene	24.28	91	3417631	26.817	ng		99
77) 3-Ethyltoluene	24.41	105	2704241	27.994	ng		98
78) 4-Ethyltoluene	24.46	105	2741117	28.226	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2218580	27.629	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:03:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

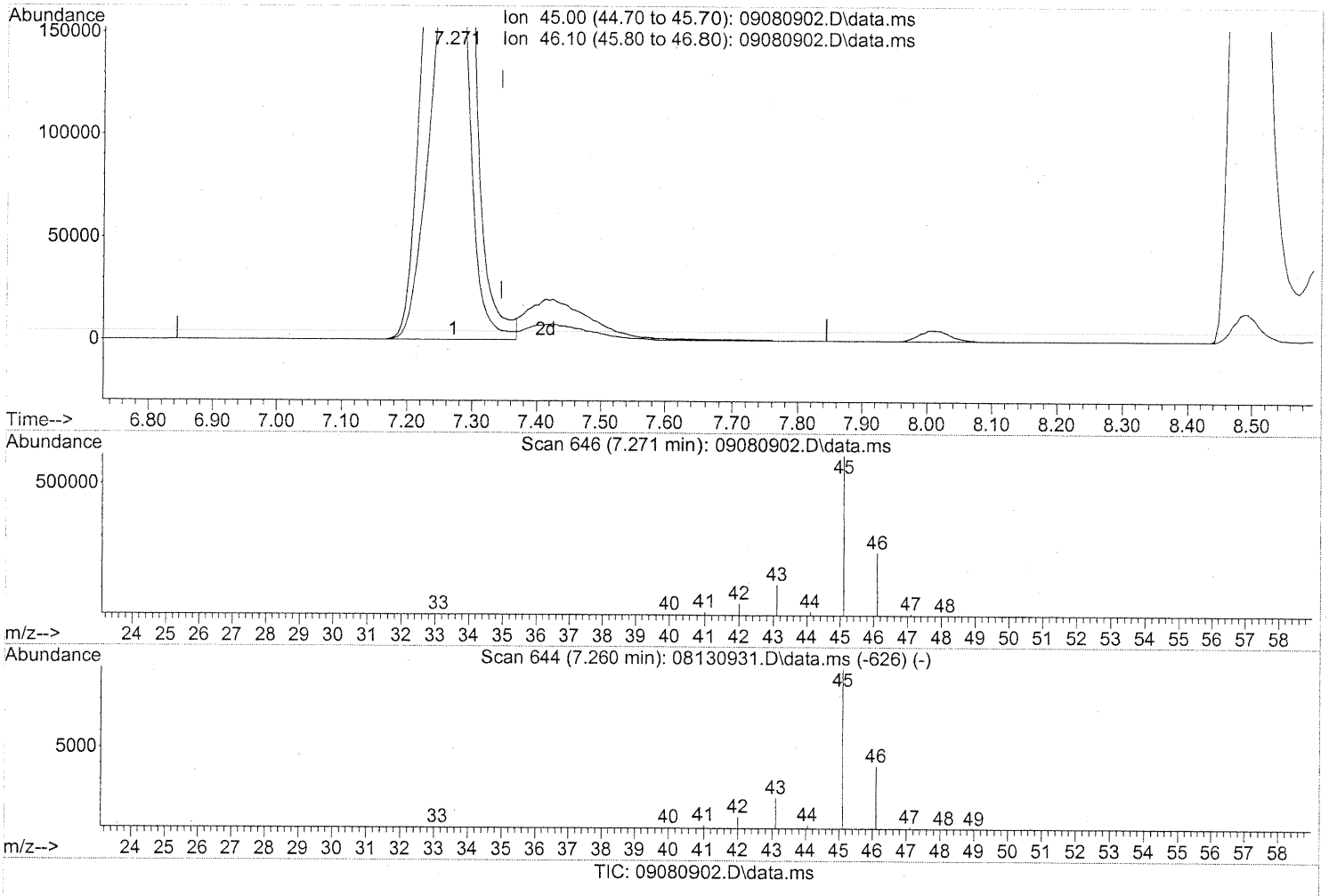
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1245138	28.578	ng	98
81) 2-Ethyltoluene	24.79	105	2669748	26.763	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2392409	28.061	ng	99
83) n-Decane	25.15	57	1383198	27.873	ng	95
84) Benzyl Chloride	25.22	91	2126348	32.237	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1221467	27.674	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1240672	26.492	ng	99
87) sec-Butylbenzene	25.38	105	3038234	27.043	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2941623	27.327	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2433304	28.237	ng	99
90) 1,2-Dichlorobenzene	25.75	146	1197902	27.029	ng	100
91) d-Limonene	25.74	68	1034594	29.660	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	408481	30.520	ng	92
93) n-Undecane	26.65	57	1465056	28.571	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	860604	27.795	ng	99
95) Naphthalene	27.94	128	3046103	26.628	ng	100
96) n-Dodecane	27.89	57	1493490	26.020	ng	96
97) Hexachlorobutadiene	28.36	225	484918	27.427	ng	99
98) Cyclohexanone	22.51	55	846406	29.099	ng	95
99) tert-Butylbenzene	25.05	119	2350936	27.804	ng	99
100) n-Butylbenzene	26.07	91	2534747	28.347	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 12:32:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080902.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 120.86ng

response 2231861

PT

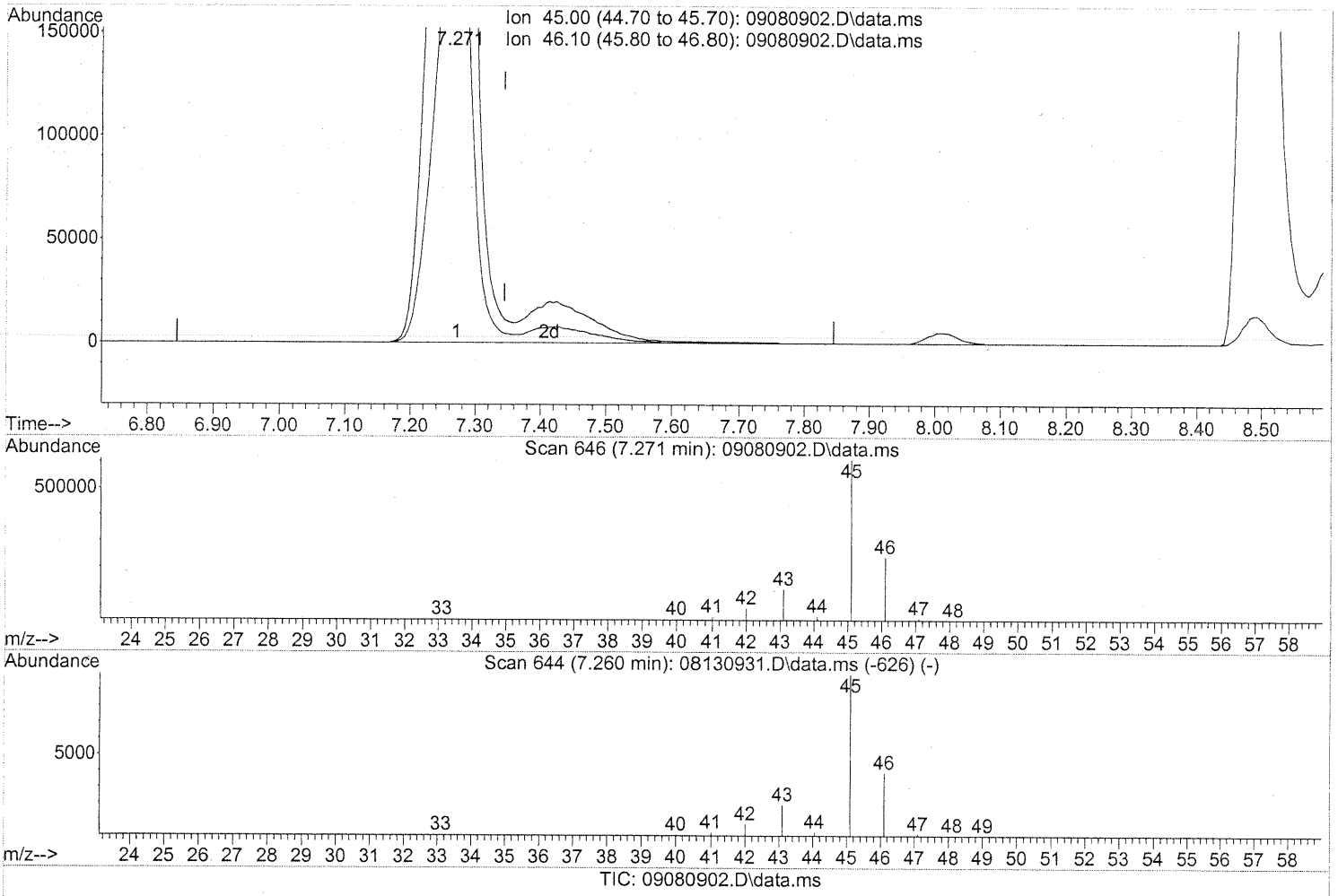
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.26
0.00	0.00	0.00
0.00	0.00	0.00

418

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 12:32:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080902.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 128.24ng m

response 2368174

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.00
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC

9/8/09

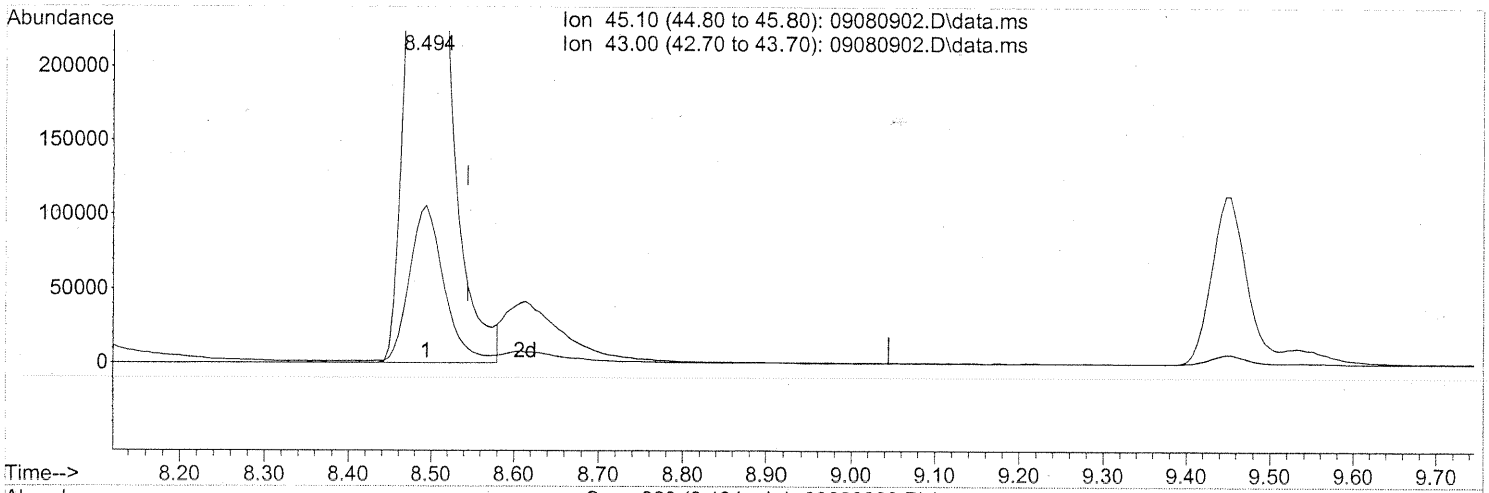
9/8/09

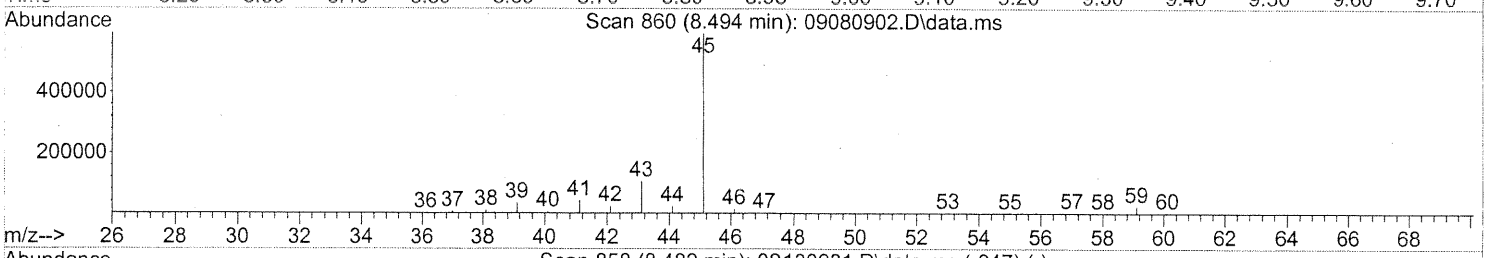
419

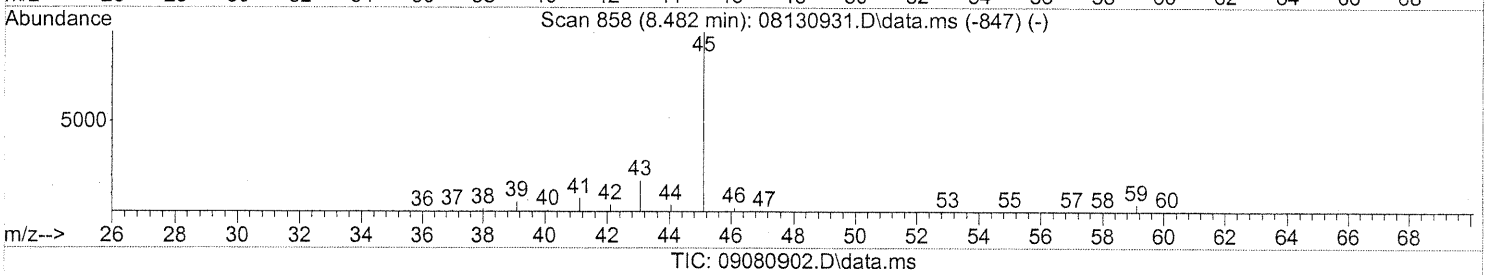
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 12:32:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09080902.D\data.ms

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

8.494min (-0.051) 34.24ng

response 1762262

PT

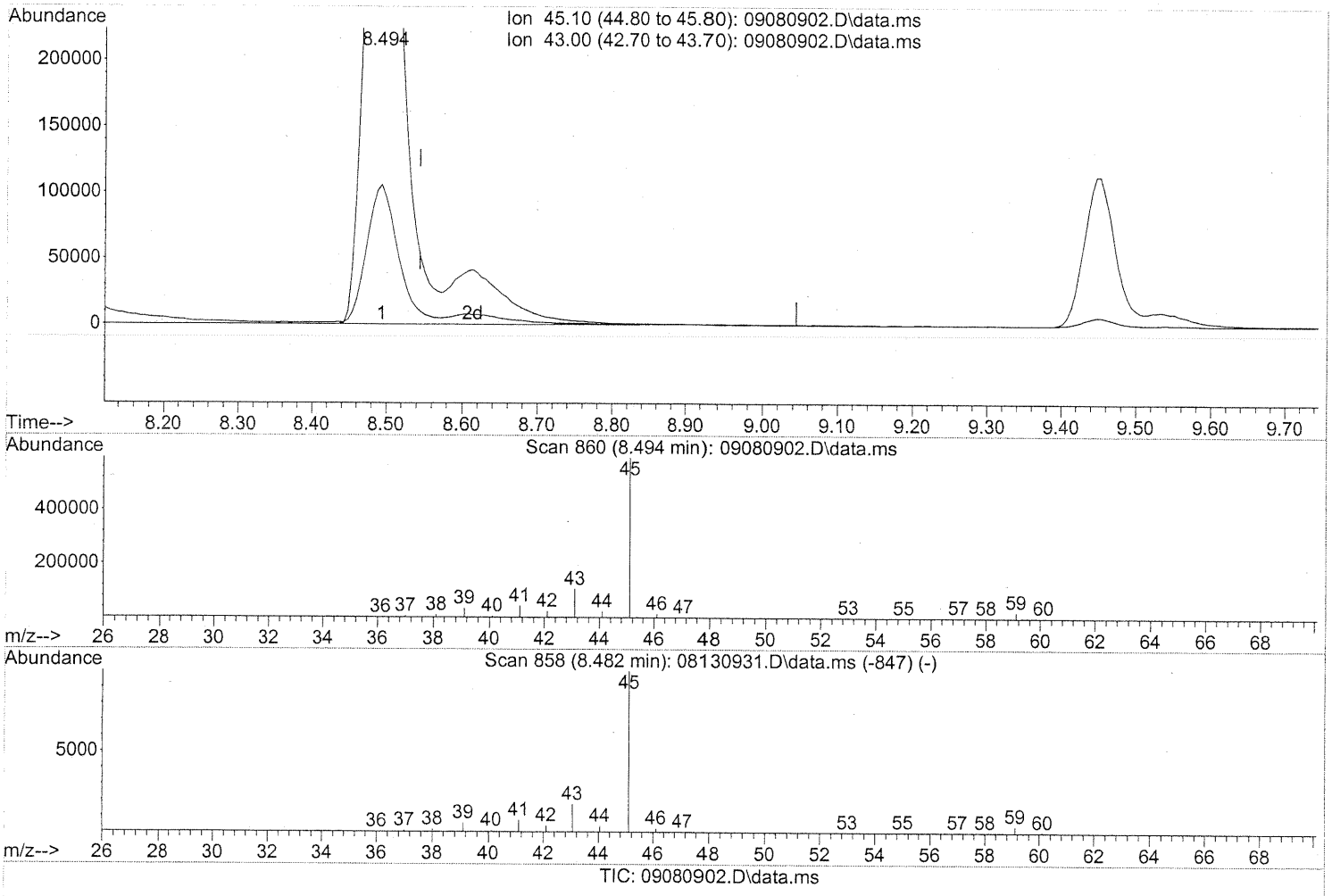
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.40
0.00	0.00	0.00
0.00	0.00	0.00

420

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 12:32:35 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09080902.D\data.ms

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

8.494min (-0.051) 38.23ng m

response 1967213

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.58
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Cam 9/8/09

LH 9/8/09

421

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	102	-0.02
2	T	Propene	2.193	2.251	-2.6	101	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.796	10.7	98	0.00
4	T	Chloromethane	2.918	2.737	6.2	96	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.434	13.3	92	0.00
6	T	Vinyl Chloride	2.878	2.619	9.0	98	0.00
7	T	1,3-Butadiene	2.044	2.118	-3.6	105	0.00
8	T	Bromomethane	1.505	1.425	5.3	98	-0.01
9	T	Chloroethane	1.428	1.330	6.9	98	0.00
10	T	Ethanol	1.376	1.337	2.8	98	-0.07
11	T	Acetonitrile	3.357	3.080	8.3	95	-0.04
12	T	Acrolein	0.897	0.944	-5.2	100	-0.02
13	T	Acetone	1.400	1.226	12.4	100	-0.04
14	T	Trichlorofluoromethane	2.677	2.451	8.4	95	-0.02
15	T	2-Propanol (Isopropanol)	3.834	3.225	15.9	93	-0.05
16	T	Acrylonitrile	2.033	2.142	-5.4	95	-0.03
17	T	1,1-Dichloroethene	1.571	1.366	13.0	93	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	4.067	-4.5	98	-0.04
19	T	Methylene Chloride	1.747	1.456	16.7	94	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.358	-0.7	97	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.076	10.2	90	-0.02
22	T	Carbon Disulfide	6.163	5.468	11.3	94	-0.02
23	T	trans-1,2-Dichloroethene	2.411	2.246	6.8	94	-0.02
24	T	1,1-Dichloroethane	2.952	2.707	8.3	95	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.441	7.2	95	-0.01
26	T	Vinyl Acetate	0.303	0.352	-16.2	101	-0.03
27	T	2-Butanone (MEK)	0.976	1.024	-4.9	93	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.072	7.9	94	-0.02
29	T	Diisopropyl Ether	1.386	1.289	7.0	94	-0.02
30	T	Ethyl Acetate	0.633	0.628	0.8	96	-0.03
31	T	n-Hexane	3.085	2.802	9.2	97	-0.02
32	T	Chloroform	2.582	2.347	9.1	94	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.857	-5.0	108	-0.02
34	T	Tetrahydrofuran (THF)	1.015	0.998	1.7	96	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	1.818	8.0	92	-0.01
36	T	1,2-Dichloroethane	1.976	1.905	3.6	96	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	102	-0.02
38	T	1,1,1-Trichloroethane	0.455	0.411	9.7	93	-0.02

 em 9/9/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.204	0.210	-2.9	94	-0.03
40	T	1-Butanol	0.324	0.365	-12.7	96	-0.06
41	T	Benzene	1.344	1.162	13.5	92	-0.02
42	T	Carbon Tetrachloride	0.376	0.342	9.0	92	-0.01
43	T	Cyclohexane	0.521	0.469	10.0	93	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.876	7.3	93	-0.01
45	T	1,2-Dichloropropane	0.330	0.304	7.9	92	-0.02
46	T	Bromodichloromethane	0.393	0.375	4.6	93	-0.02
47	T	Trichloroethene	0.341	0.288	15.5	90	-0.02
48	T	1,4-Dioxane	0.239	0.241	-0.8	90	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.384	10.5	93	-0.02
50	T	Methyl Methacrylate	0.134	0.124	7.5	90	-0.03
51	T	n-Heptane	0.358	0.325	9.2	93	-0.02
52	T	cis-1,3-Dichloropropene	0.497	0.492	1.0	92	-0.01
53	T	4-Methyl-2-pentanone	0.291	0.299	-2.7	93	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.452	-3.9	93	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.271	5.6	91	-0.02
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	101	0.00
57	S	Toluene-d8 (SS2)	2.377	2.412	-1.5	103	-0.01
58	T	Toluene	2.881	2.547	11.6	91	-0.01
59	T	2-Hexanone	1.497	1.515	-1.2	95	-0.02
60	T	Dibromochloromethane	0.615	0.589	4.2	91	-0.01
61	T	1,2-Dibromoethane	0.648	0.625	3.5	91	-0.01
62	T	n-Butyl Acetate	1.634	1.769	-8.3	95	-0.02
63	T	n-Octane	0.642	0.599	6.7	93	-0.01
64	T	Tetrachloroethene	0.715	0.623	12.9	88	-0.01
65	T	Chlorobenzene	1.769	1.554	12.2	91	-0.01
66	T	Ethylbenzene	3.111	2.856	8.2	92	0.00
67	T	m- & p-Xylenes	2.466	2.276	7.7	93	-0.02
68	T	Bromoform	0.534	0.525	1.7	90	-0.01
69	T	Styrene	1.823	1.731	5.0	91	-0.01
70	T	o-Xylene	2.481	2.284	7.9	92	-0.02
71	T	n-Nonane	1.494	1.417	5.2	95	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.022	4.1	92	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.637	5.3	95	0.00
74	T	Cumene	3.217	2.930	8.9	91	0.00
75	T	alpha-Pinene	1.587	1.466	7.6	91	-0.01
76	T	n-Propylbenzene	3.975	3.686	7.3	92	-0.01

Tom 9/9/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

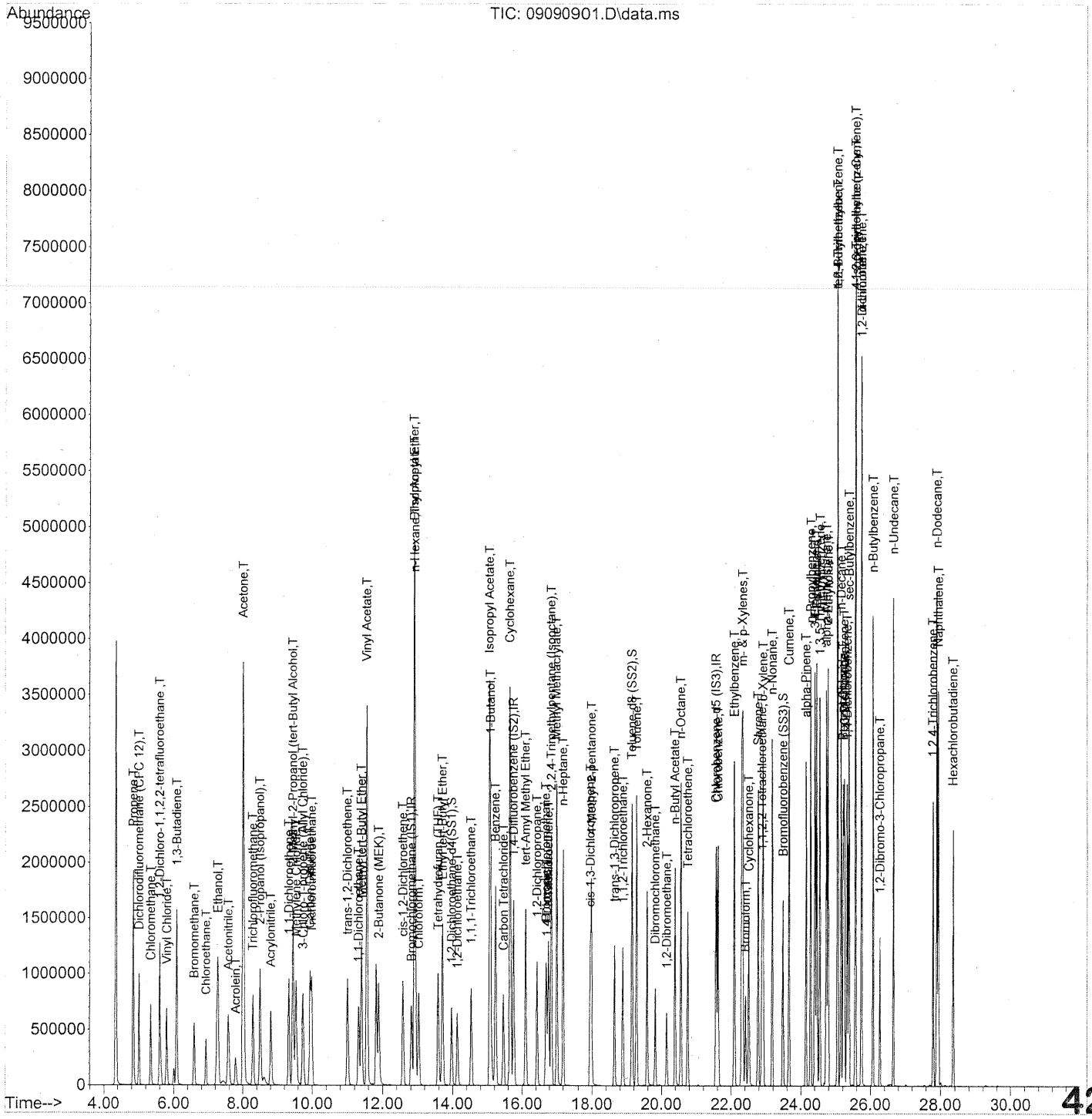
		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.013	2.751	8.7	89	0.00
78	T	4-Ethyltoluene	3.029	2.789	7.9	94	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.255	10.0	91	0.00
80	T	alpha-Methylstyrene	1.359	1.299	4.4	91	-0.02
81	T	2-Ethyltoluene	3.112	2.827	9.2	92	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.534	4.7	93	-0.01
83	T	n-Decane	1.548	1.433	7.4	93	-0.02
84	T	Benzyl Chloride	2.058	2.159	-4.9	93	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.243	9.7	91	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.296	11.3	90	-0.01
87	T	sec-Butylbenzene	3.505	3.196	8.8	92	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.172	5.5	92	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.534	5.7	93	-0.01
90	T	1,2-Dichlorobenzene	1.382	1.260	8.8	91	-0.01
91	T	d-Limonene	1.088	1.061	2.5	92	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.411	1.4	89	-0.01
93	T	n-Undecane	1.600	1.492	6.8	93	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.853	11.7	89	-0.01
95	T	Naphthalene	3.568	3.211	10.0	90	0.00
96	T	n-Dodecane	1.790	1.692	5.5	93	0.00
97	T	Hexachlorobutadiene	0.552	0.489	11.4	89	0.00
98	T	Cyclohexanone	0.907	0.962	-6.1	93	-0.02
99	T	tert-Butylbenzene	2.638	2.466	6.5	92	-0.01
100	T	n-Butylbenzene	2.789	2.583	7.4	92	0.00

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



425

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	372970	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1902446	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	908839	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	692602	26.263	ng		-0.02
Spiked Amount 25.000			Recovery = 105.04%				
57) Toluene-d8 (SS2)	19.15	98	2192501	25.376	ng		-0.01
Spiked Amount 25.000			Recovery = 101.52%				
73) Bromofluorobenzene (SS3)	23.49	174	579291	23.675	ng		0.00
Spiked Amount 25.000			Recovery = 94.68%				
Target Compounds							Qvalue
2) Propene	4.84	42	900144	27.513	ng		97
3) Dichlorodifluoromethan...	5.01	85	1096857	23.486	ng		100
4) Chloromethane	5.34	50	1020646	23.449	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	566786	22.967	ng		99
6) Vinyl Chloride	5.80	62	988440	23.021	ng		98
7) 1,3-Butadiene	6.09	54	948026	31.085	ng		97
8) Bromomethane	6.59	94	542242	24.152	ng		100
9) Chloroethane	6.93	64	501961	23.565	ng		100
10) Ethanol	7.27	45	2593663m	126.380	ng		
11) Acetonitrile	7.58	41	1208612	24.131	ng		99
12) Acrolein	7.79	56	380288	28.414	ng		98
13) Acetone	8.01	58	2523118	120.815	ng		96
14) Trichlorofluoromethane	8.29	101	961779	24.083	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	2275974m	39.795	ng		
16) Acrylonitrile	8.81	53	847028	27.923	ng		99
17) 1,1-Dichloroethene	9.33	96	560549	23.918	ng		93
18) 2-Methyl-2-Propanol (t...	9.45	59	3063848	52.767	ng		97
19) Methylene Chloride	9.54	84	582045	22.338	ng		84
20) 3-Chloro-1-propene (Al...	9.73	41	949933	27.186	ng		88
21) Trichlorotrifluoroethane	9.98	151	441327	24.690	ng		93
22) Carbon Disulfide	9.93	76	2186390	23.778	ng		98
23) trans-1,2-Dichloroethene	11.00	61	888091	24.693	ng		90
24) 1,1-Dichloroethane	11.32	63	1070241	24.298	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1808555	25.339	ng		96
26) Vinyl Acetate	11.56	86	660873	146.109	ng	#	61
27) 2-Butanone (MEK)	11.89	72	419918	28.842	ng	#	78
28) cis-1,2-Dichloroethene	12.58	61	843864	25.144	ng		91
29) Diisopropyl Ether	12.90	87	515234	24.926	ng	#	57
30) Ethyl Acetate	12.90	61	499448	52.899	ng		95
31) n-Hexane	12.92	57	1141282	24.798	ng		94

 em 9/9/09

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	938259	24.358	ng		100
34) Tetrahydrofuran (THF)	13.58	72	409598	27.060	ng	#	85
35) Ethyl tert-Butyl Ether	13.71	87	699852	23.731	ng	#	85
36) 1,2-Dichloroethane	14.13	62	752993	25.546	ng		99
38) 1,1,1-Trichloroethane	14.53	97	821952	23.755	ng		99
39) Isopropyl Acetate	15.07	61	836155	53.854	ng	#	75
40) 1-Butanol	15.09	56	1436949	58.287	ng		84
41) Benzene	15.23	78	2342840	22.899	ng		99
42) Carbon Tetrachloride	15.46	117	703156	24.588	ng		100
43) Cyclohexane	15.66	84	1919526	48.446	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1732574	24.094	ng		97
45) 1,2-Dichloropropane	16.43	63	607772	24.216	ng		99
46) Bromodichloromethane	16.70	83	770088	25.729	ng		99
47) Trichloroethene	16.77	130	581563	22.388	ng		100
48) 1,4-Dioxane	16.71	88	491226	26.995	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2738928	23.261	ng		96
50) Methyl Methacrylate	17.02	100	503345	49.235	ng	#	87
51) n-Heptane	17.21	71	656240	24.094	ng		94
52) cis-1,3-Dichloropropene	17.95	75	927946	24.537	ng		100
53) 4-Methyl-2-pentanone	17.98	58	626500	28.337	ng		93
54) trans-1,3-Dichloropropene	18.64	75	944858	28.559	ng		100
55) 1,1,2-Trichloroethane	18.88	97	541487	24.773	ng		98
58) Toluene	19.28	91	2500002	23.869	ng		100
59) 2-Hexanone	19.58	43	1514349	27.820	ng		97
60) Dibromochloromethane	19.82	129	616737	27.577	ng		100
61) 1,2-Dibromoethane	20.15	107	601862	25.533	ng		99
62) n-Butyl Acetate	20.39	43	1768395	29.774	ng		98
63) n-Octane	20.56	57	583579	24.997	ng		91
64) Tetrachloroethene	20.75	166	577647	22.226	ng		99
65) Chlorobenzene	21.62	112	1525664	23.720	ng		99
66) Ethylbenzene	22.09	91	2750996	24.328	ng		98
67) m- & p-Xylenes	22.33	91	4302678	47.996	ng		99
68) Bromoform	22.41	173	492672	25.379	ng		100
69) Styrene	22.77	104	1686226	25.447	ng		99
70) o-Xylene	22.92	91	2200240	24.397	ng		98
71) n-Nonane	23.17	43	1364992	25.133	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	995478	25.696	ng		100
74) Cumene	23.66	105	2747852	23.499	ng		98
75) alpha-Pinene	24.15	93	1348683	23.377	ng		99
76) n-Propylbenzene	24.28	91	3456995	23.921	ng		99
77) 3-Ethyltoluene	24.41	105	2729850	24.920	ng		98
78) 4-Ethyltoluene	24.46	105	2768161	25.136	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2238223	24.580	ng		100

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:28:07 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

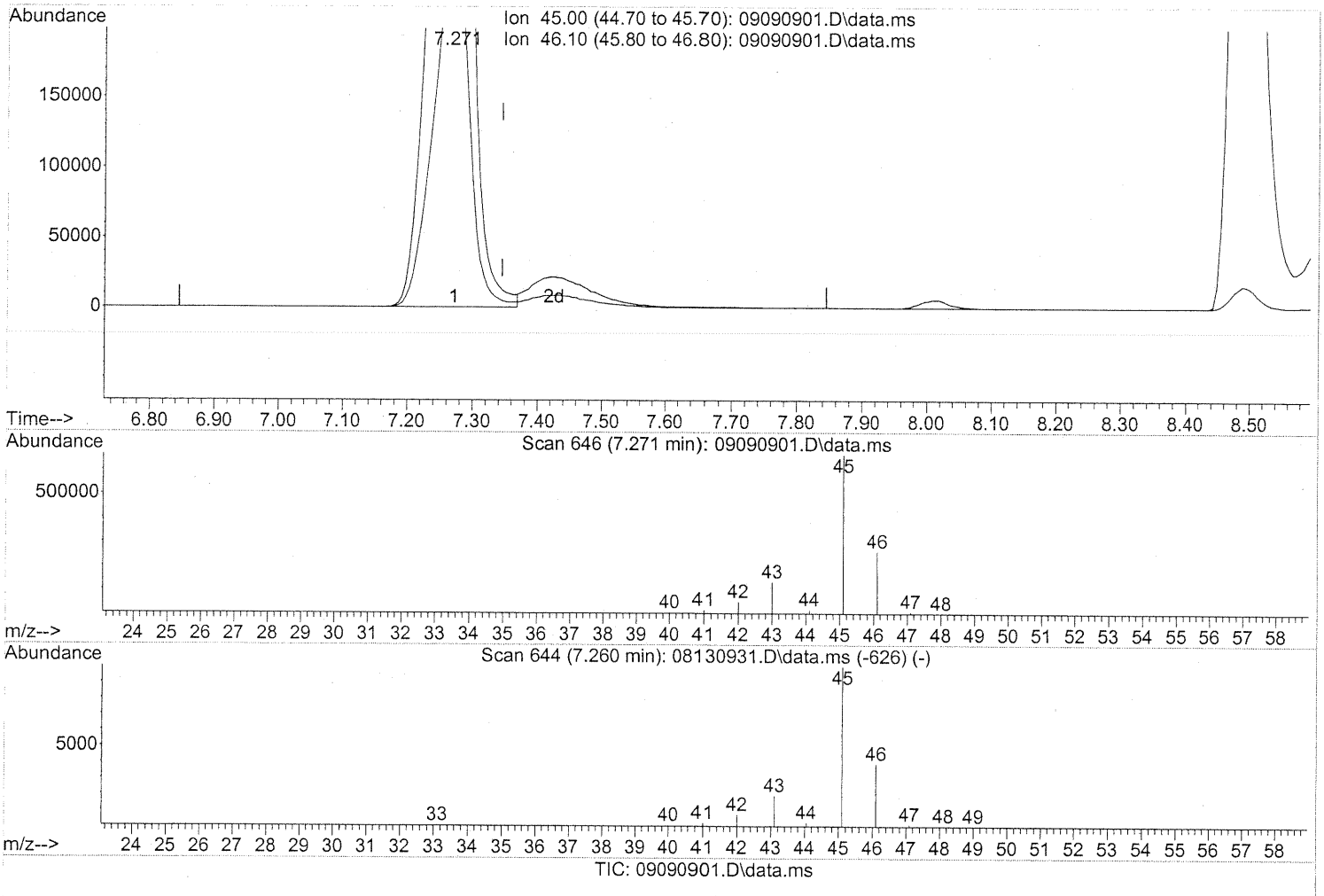
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1265870	25.620	ng	99
81) 2-Ethyltoluene	24.79	105	2702925	23.893	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2440720	25.245	ng	100
83) n-Decane	25.15	57	1406872	25.000	ng	94
84) Benzyl Chloride	25.22	91	2158736	28.860	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1233885	24.651	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1248758	23.514	ng	100
87) sec-Butylbenzene	25.38	105	3078591	24.164	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2974864	24.370	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2468328	25.258	ng	99
90) 1,2-Dichlorobenzene	25.75	146	1213971	24.155	ng	100
91) d-Limonene	25.74	68	1053403	26.630	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	411076	27.085	ng	92
93) n-Undecane	26.65	57	1481168	25.472	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	868625	24.739	ng	99
95) Naphthalene	27.94	128	3093517	23.846	ng	100
96) n-Dodecane	27.89	57	1525164	23.431	ng	96
97) Hexachlorobutadiene	28.36	225	488874	24.383	ng	99
98) Cyclohexanone	22.51	55	856909	25.978	ng	95
99) tert-Butylbenzene	25.05	119	2375455	24.774	ng	99
100) n-Butylbenzene	26.07	91	2563112	25.277	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:27:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.271min (-0.074) 119.16ng

response 2445495

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.18
0.00	0.00	0.00
0.00	0.00	0.00

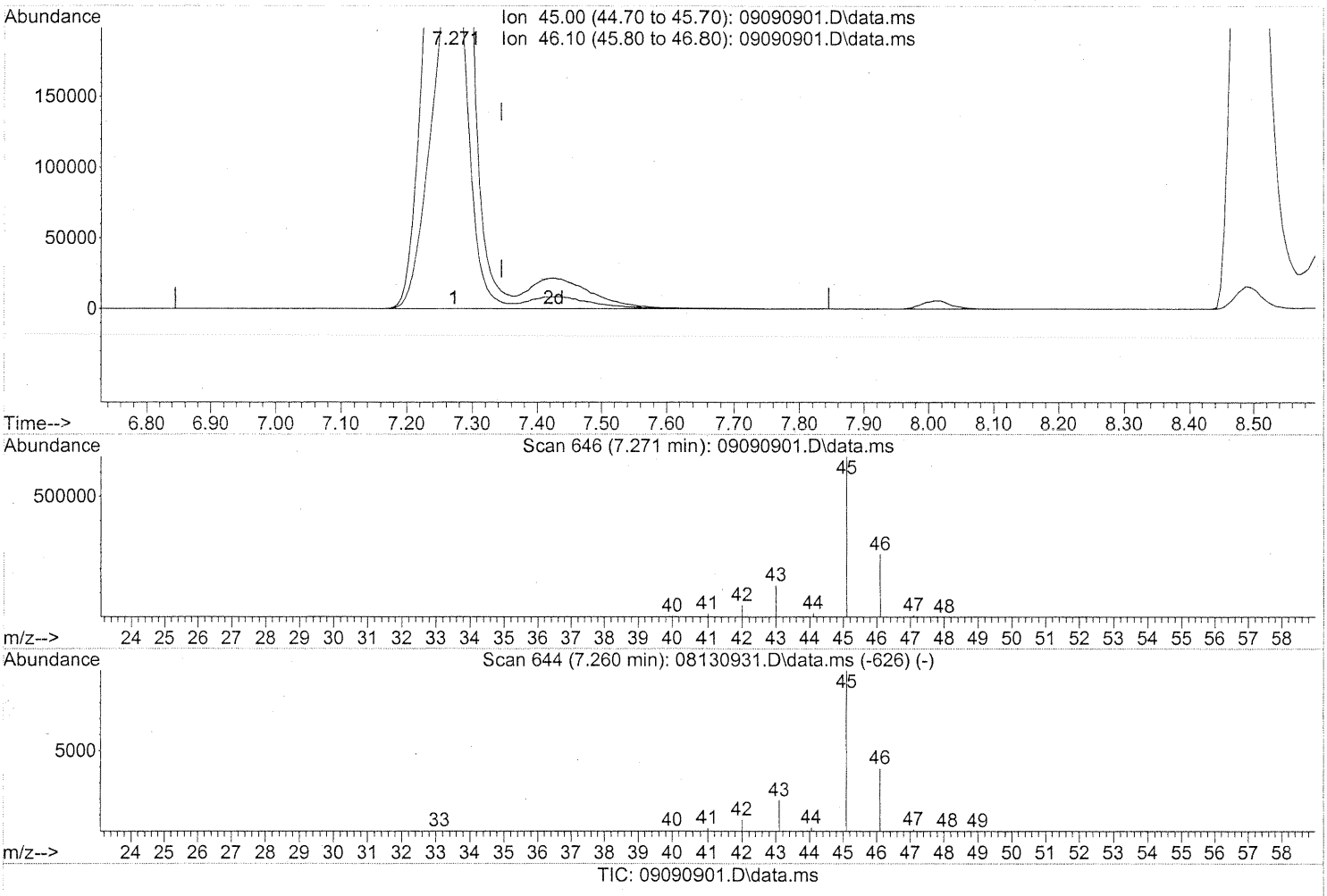
PT

429

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:27:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09090901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 126.38ng m

response 2593663

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.95
0.00	0.00	0.00
0.00	0.00	0.00

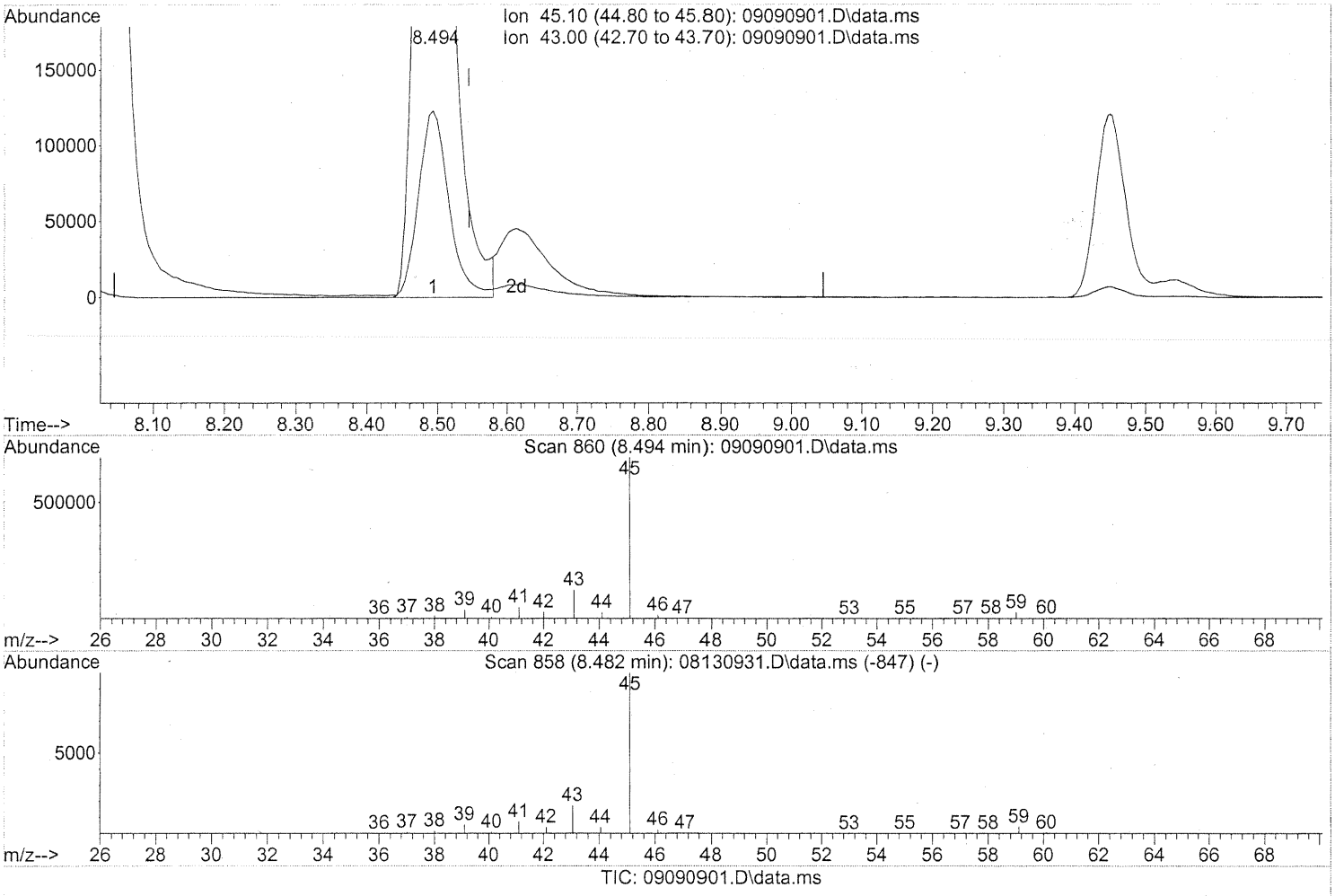
PT → IC
Cam 9/9/09
LH 9/10/09

430

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:27:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 35.80ng

response 2047355

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.58
0.00	0.00	0.00
0.00	0.00	0.00

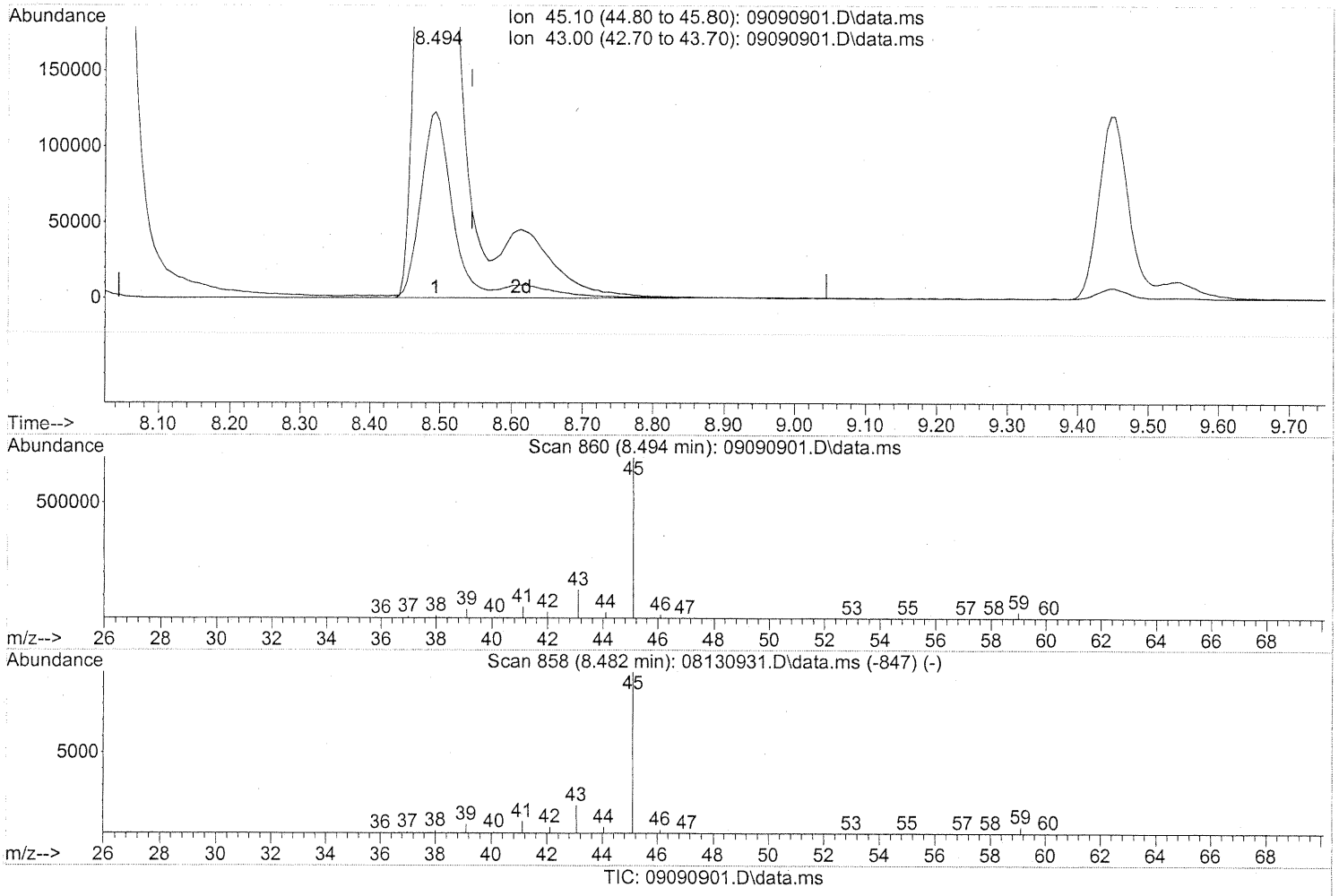
PT

431

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 09:27:27 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 39.79ng m

response 2275974

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.81
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Om 9/9/09

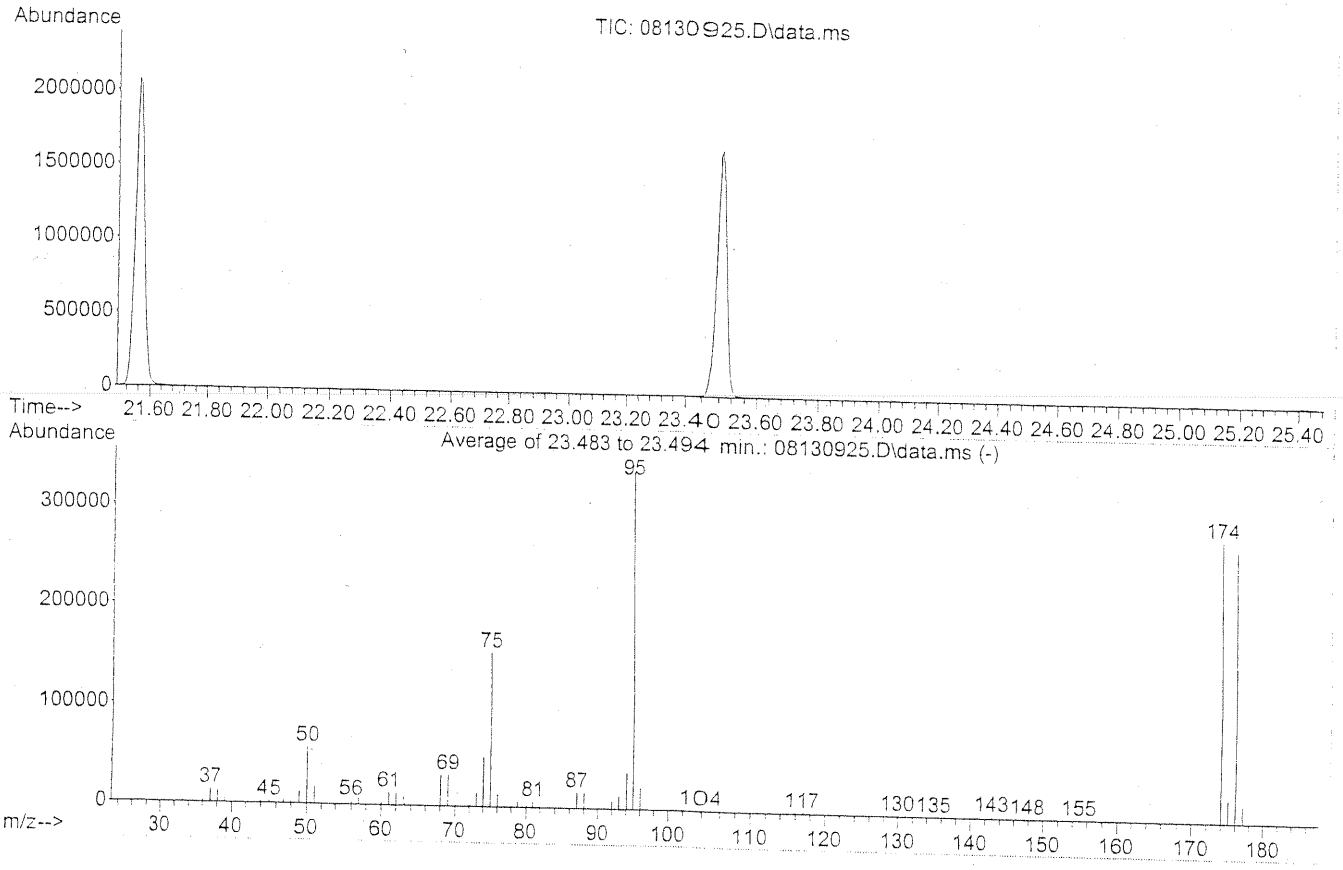
LH 9/10/09

BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130925.D
Acq On : 14 Aug 2009 1:14
Operator : EM
Sample : TO-15 BFB Standard (200ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 09:38:25 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

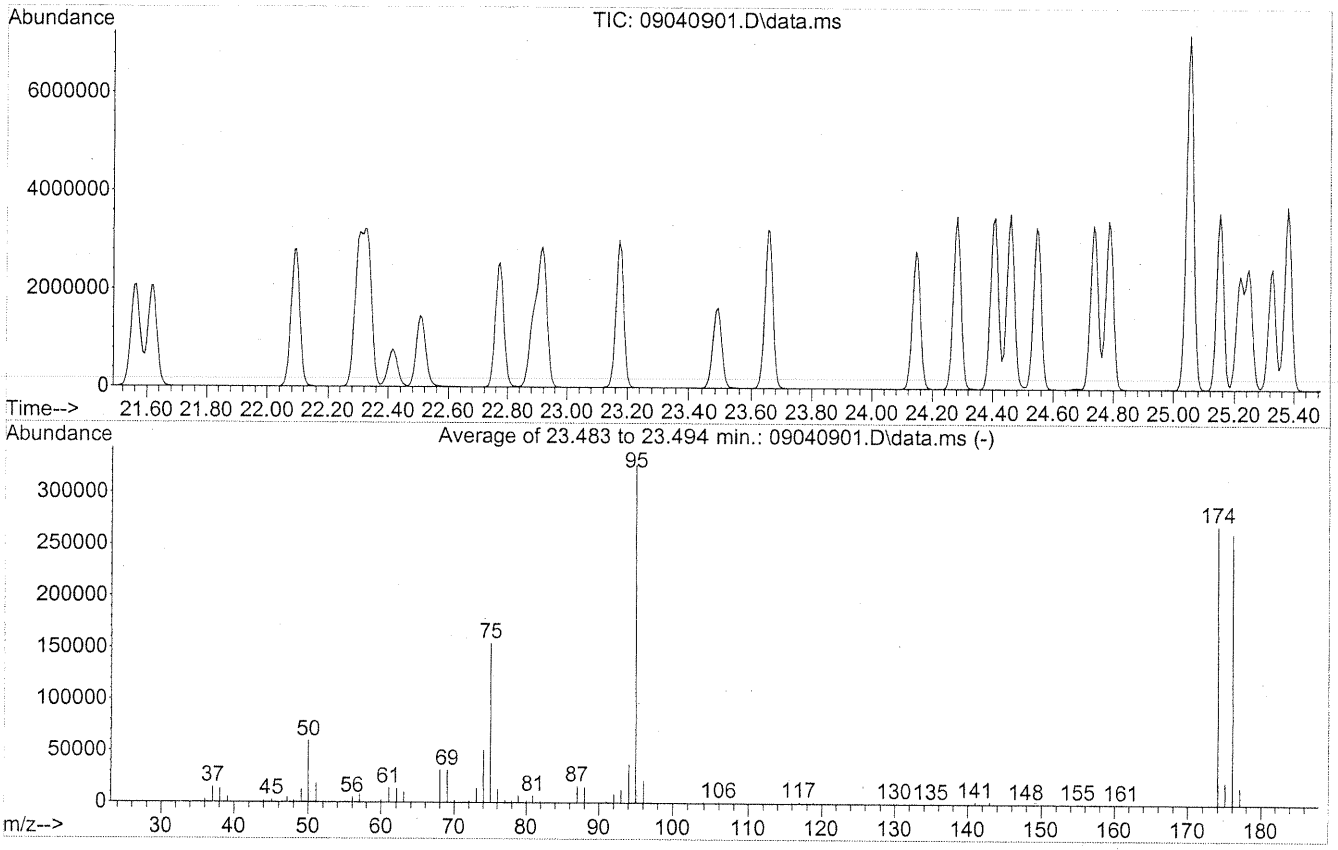
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.9	57432	PASS
75	95	30	66	45.6	154987	PASS
95	95	100	100	100.0	339563	PASS
96	95	5	9	6.4	21896	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.2	282475	PASS
175	174	4	9	8.1	22795	PASS
176	174	93	101	96.4	272171	PASS
177	176	5	9	6.4	17522	PASS

EM1 8/14/09

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:39:36 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

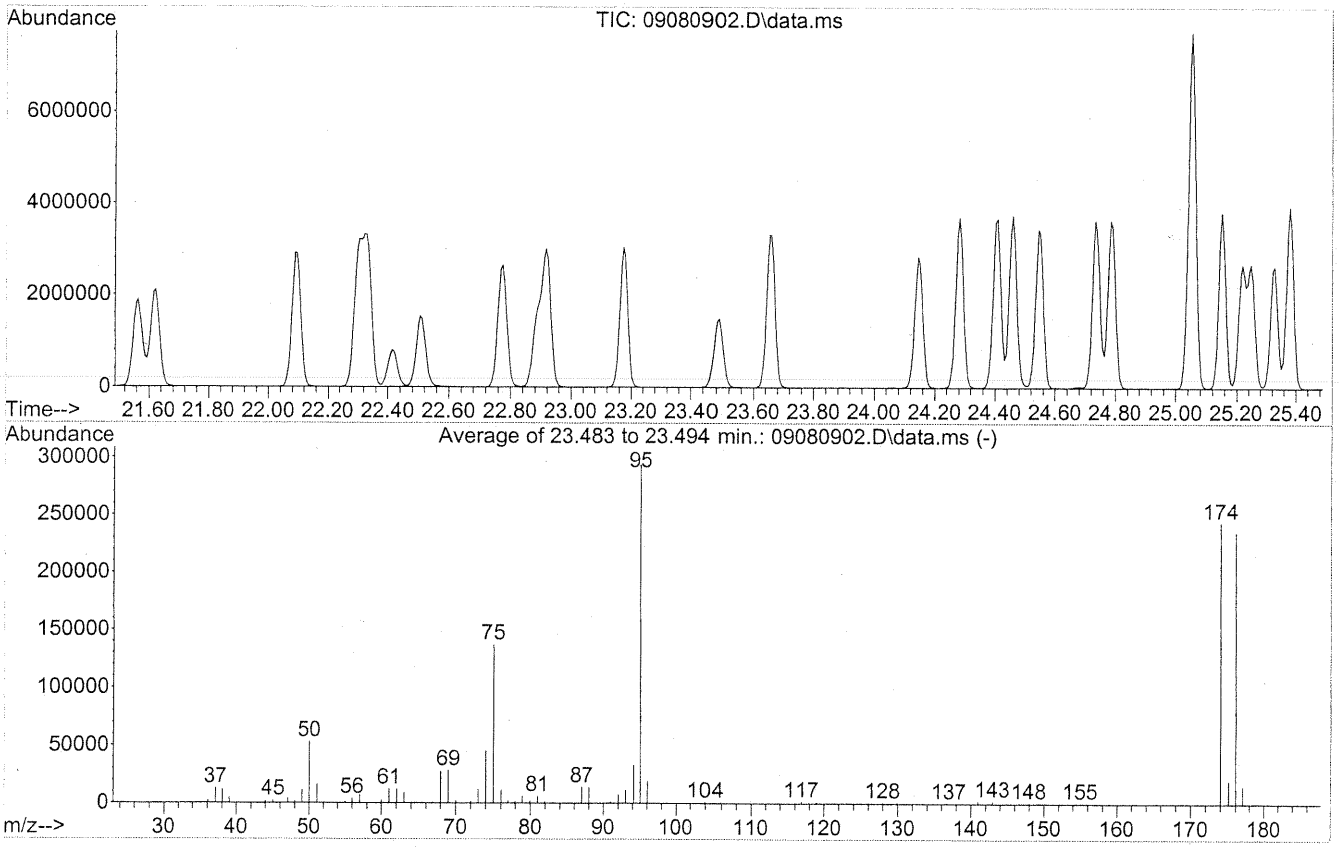
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	59253	PASS
75	95	30	66	47.2	154325	PASS
95	95	100	100	100.0	326891	PASS
96	95	5	9	6.5	21251	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.5	269696	PASS
175	174	4	9	8.0	21501	PASS
176	174	93	101	97.1	261909	PASS
177	176	5	9	6.2	16271	PASS

Em 9/4/09

Data Path : J:\MS09\Data\2009_09\08\
Data File : 09080902.D
Acq On : 8 Sep 2009 8:31
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:39:36 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

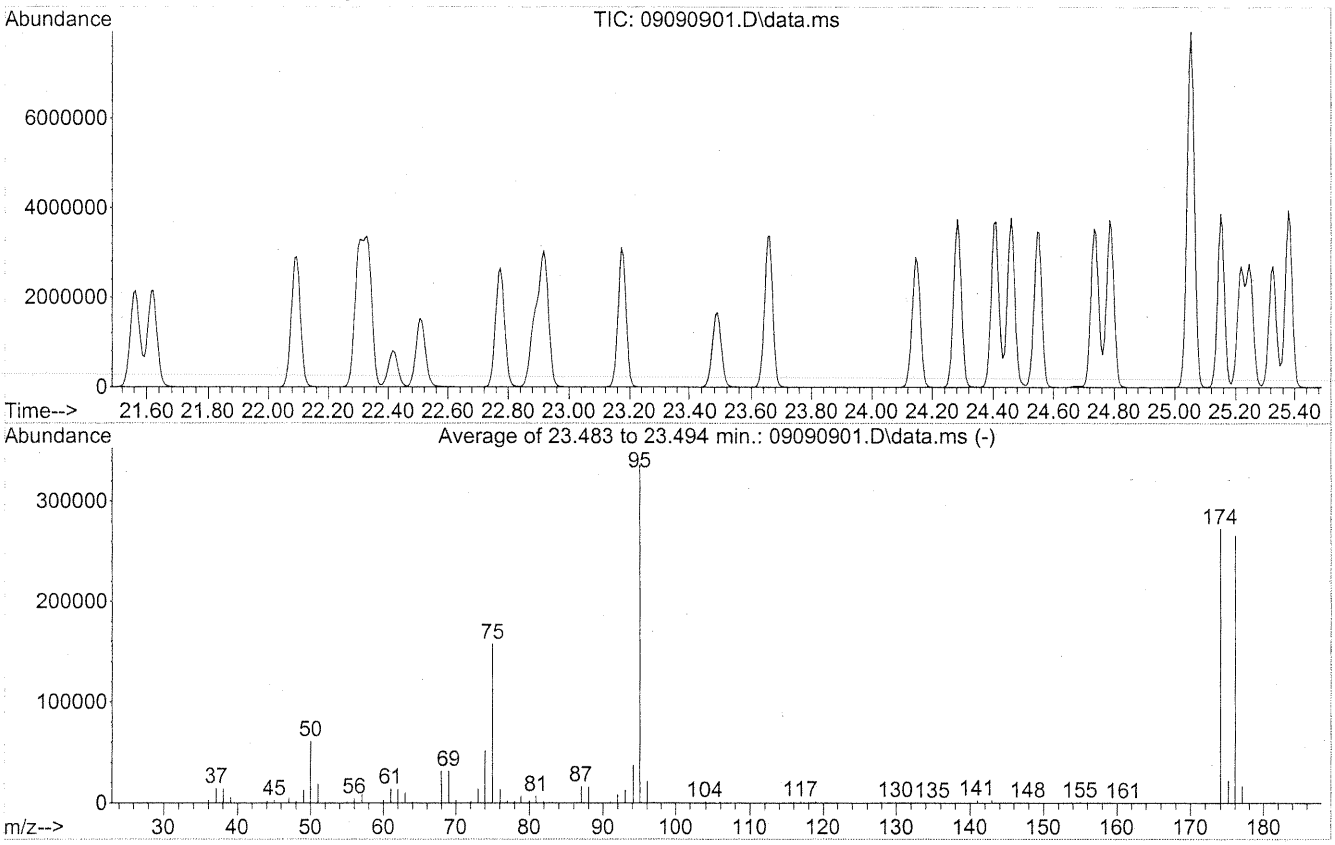
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	52992	PASS
75	95	30	66	46.7	136957	PASS
95	95	100	100	100.0	293483	PASS
96	95	5	9	6.4	18680	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.1	243947	PASS
175	174	4	9	8.0	19608	PASS
176	174	93	101	96.5	235499	PASS
177	176	5	9	6.3	14939	PASS

tom 9/8/09

Data Path : J:\MS09\Data\2009_09\09\
Data File : 09090901.D
Acq On : 9 Sep 2009 7:57
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:39:36 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	61083	PASS
75	95	30	66	47.0	157717	PASS
95	95	100	100	100.0	335552	PASS
96	95	5	9	6.3	21235	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.2	272576	PASS
175	174	4	9	8.1	22115	PASS
176	174	93	101	97.5	265728	PASS
177	176	5	9	6.2	16580	PASS

EM 9/9/09

RUN LOGS

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/13/09 6:23	08130901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass
2	08/13/09 7:04	08130902.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220902	EM	16	Pass
3	08/13/09 8:54	08130903.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Pass as MB
4	08/13/09 10:01	08130904.D	P0902767-001 (5ml)	[redacted]	EM	1	Case File
5	08/13/09 10:43	08130905.D	P0902767-002 (0.5ml)	[redacted]	EM	1	↓
6	08/13/09 11:34	08130906.D	P0902780-001 (0.5ml)	[redacted]	EM	1	Case File
7	08/13/09 12:15	08130907.D	P0902678-013 (30ml)	[redacted]	EM	5	
8	08/13/09 12:57	08130908.D	25ng TO-15 LCS STD	S20-07200901/S20-08070903	EM	2	Pass Acrylonitrile
9	08/13/09 13:52	08130909.D	P0902780-002 (0.5ml)	[redacted]	EM	1	
10	08/13/09 14:33	08130910.D	P0902780-001 (1ml)	[redacted]	EM	1	
11	08/13/09 15:15	08130911.D	P0902780-001 dup (1ml)	[redacted]	EM	1	Pass as Lab Dup.
12	08/13/09 16:15	08130912.D	P0902780-002 dil (0.1ml)	[redacted]	EM	1	
13	08/13/09 16:56	08130913.D	25ng std check	S20-08130905/S20-08070903	EM	2	
14	08/13/09 17:37	08130914.D	P0902678-013 dil (15ml)	[redacted]	EM	5	
15	08/13/09 18:19	08130915.D	P0902678-005 dil (100ml)	[redacted]	EM	9	
16	08/13/09 19:00	08130916.D	P0902678-011 dil (100ml)	[redacted]	EM	14	
17	08/13/09 19:41	08130917.D	P0902678-012 dil (100ml)	[redacted]	EM	15	
18	08/13/09 20:23	08130918.D	P0902678-014 (1000ml)	[redacted]	EM	6	
19	08/13/09 21:04	08130919.D	P0902678-014 dil (100ml)	[redacted]	EM	6	
20	08/13/09 21:46	08130920.D	P0902678-015 (1000ml)	[redacted]	EM	7	
21	08/13/09 22:28	08130921.D	P0902678-015 dil (100ml)	[redacted]	EM	7	
22	08/13/09 23:09	08130922.D	5ng std check	S20-08130905/S20-08100904	EM	1	
23	08/13/09 23:51	08130923.D	25ng std check	S20-08130905/S20-08100902	EM	1	
24	08/14/09 0:33	08130924.D	System Check		EM	4	
25	08/14/09 1:14	08130925.D	TO-15 BFB Standard (200ml)	S20-08130905	EM	1	Pass
26	08/14/09 1:56	08130926.D	0.1ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	ICAL
27	08/14/09 2:38	08130927.D	0.2ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	
28	08/14/09 3:19	08130928.D	0.5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	R9081309.M
29	08/14/09 4:01	08130929.D	1.0ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
30	08/14/09 4:43	08130930.D	5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
31	08/14/09 5:24	08130931.D	25ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
32	08/14/09 6:06	08130932.D	50ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
33	08/14/09 6:47	08130933.D	100ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
34	08/14/09 7:29	08130934.D	25ng TO-15 ICV STD	S20-08130905/S20-08070903	EM	2	Pass
35	08/14/09 8:26	08130935.D	25ng TO-15 ICV STD	S20-08130905/S20-07270906	EM	10	Case File Extra

ICAL R9081309.M: 0.2ng-100ng: 1-Butanol, n-Butyl Acetate, 4-Methyl-2-pentanone

0.5ng-100ng: Vinyl Acetate, 2-Butanone, Ethyl Acetate
Methyl Methacrylate, 2-Hexanone

0.1ng-50ng: TBA

0.1ng-100ng: Rest of compounds.

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/03/09 5:53	09030901.D	25ng TO-15 CCV STD	S20-08130905/S20-08100902	EM	1	Pass
2	09/03/09 6:34	09030902.D	25ng TO-15 ACF STD	S20-08130905/S20-08270902	EM	3	Pass
3	09/03/09 7:16	09030903.D	25ng TO-15 Freons STD	S20-08130905/S20-07220902	EM	2	Pass
4	09/03/09 7:57	09030904.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
5	09/03/09 9:02	09030905.D	P0902911-006 (200ml)	[redacted]	EM	10	
6	09/03/09 9:43	09030906.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
7	09/03/09 10:25	09030907.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Pass
8	09/03/09 11:08	09030908.D	P0902897-001 dil (15ml)	[redacted]	EM	5	
9	09/03/09 11:50	09030909.D	P0902897-002 dil (15ml)	[redacted]	EM	6	
10	09/03/09 12:31	09030910.D	P0902897-001 (60ml)	[redacted]	EM	5	
11	09/03/09 13:13	09030911.D	P0902897-002 (60ml)	[redacted]	EM	6	
12	09/03/09 13:55	09030912.D	P0903109-001 dil (0.1ml)	[redacted]	EM	1	
13	09/03/09 14:36	09030913.D	P0903109-001 (0.4ml)	[redacted]	EM	1	
14	09/03/09 15:24	09030914.D	P0902959-001 dil (0.050ml)	[redacted]	EM	1	
15	09/03/09 16:05	09030915.D	P0902897-002 dup (60ml)	[redacted]	EM	6	Pass as Lab Dup.
16	09/03/09 17:13	09030916.D	P0903013-001 dil (25ml)	[redacted]	EM	12	
17	09/03/09 17:55	09030917.D	P0902972-001 dil (25ml)	[redacted]	EM	7	
18	09/03/09 18:36	09030918.D	P0902897-002 dup dil (15ml)	[redacted]	EM	6	
19	09/03/09 19:18	09030919.D	P0902911-007 dil (50ml)	[redacted]	EM	11	
20	09/03/09 20:00	09030920.D	P0902971-006 (400ml)	[redacted]	EM	15	
21	09/03/09 20:41	09030921.D	P0902972-002 (1000ml)	[redacted]	EM	8	
22	09/03/09 21:23	09030922.D	P0902972-003 (1000ml)	[redacted]	EM	9	
23	09/03/09 22:05	09030923.D	P0902972-004 dil (25ml)	[redacted]	EM	13	
24	09/03/09 22:47	09030924.D	P0902972-005 (1000ml)	[redacted]	EM	14	
25	09/03/09 23:29	09030925.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/04/09 7:29	09040901.D	25ng TO-15 CCV STD	S20-08130905/S20-09030903	EM	1	Pass
2	09/04/09 8:11	09040902.D	25ng TO-15 ACF STD	S20-08130905/S20-08270902	EM	3	
3	09/04/09 8:55	09040903.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
4	09/04/09 9:48	09040904.D	CAS CAN QC C3S 3729L	1SC00183 (400ml)	EM	5	Pass 75 @ 0.1 ug/m^3
5	09/04/09 10:30	09040905.D	CAS CAN QC C3S 3729I	1SC00479 (400ml)	EM	6	↓
6	09/04/09 11:18	09040906.D	CAS CAN QC C3S 3729B	1SC00535 (400ml)	EM	5	
7	09/04/09 12:00	09040907.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
8	09/04/09 12:41	09040908.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Pass
9	09/04/09 13:24	09040909.D	P0903130-001 (0.0015ml)	[redacted]	EM	5	
10	09/04/09 14:15	09040910.D	P0903130-001 dup (0.0015ml)	[redacted]	EM	5	Case, File Std cont.
11	09/04/09 14:57	09040911.D	J0904403-001 (1.2ml)	[redacted]	EM	1	
12	09/04/09 15:39	09040912.D	J0904405-001 (2.5ml)	[redacted]	EM	1	
13	09/04/09 16:21	09040913.D	J0904404-001 (30ml)	[redacted]	EM	6	
14	09/04/09 17:26	09040914.D	Blank (200ml)	S20-08130905	EM	1	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
15	09/04/09 18:07	09040915.D	P0902972-002 dil (100ml)	[redacted]	EM	8	
16	09/04/09 18:49	09040916.D	P0903130-001 dup (0.0015ml)	[redacted]	EM	5	Pass as Lab Dup.
17	09/04/09 19:30	09040917.D	P0902972-001 (1000ml)	[redacted]	EM	7	
18	09/04/09 20:12	09040918.D	P0902972-004 (1000ml)	[redacted]	EM	13	
19	09/04/09 20:54	09040919.D	P0903080-001 (1000ml)	Environmental H&E 104834	EM	9	
20	09/04/09 21:35	09040920.D	P0903080-001 dil (100ml)	Environmental H&E 104834	EM	9	
21	09/04/09 22:17	09040921.D	P0903080-002 (1000ml)	Environmental H&E 104835	EM	10	
22	09/04/09 22:59	09040922.D	System Check		EM	4	
23	09/04/09 23:41	09040923.D	P0903080-002 dil (100ml)	Environmental H&E 104835	EM	10	
24	09/05/09 0:23	09040924.D	P0903080-003 (1000ml)	Environmental H&E 104836	EM	11	
25	09/05/09 1:05	09040925.D	P0903080-003 dup (1000ml)	Environmental H&E 104836	EM	11	Case, File Extra
26	09/05/09 1:46	09040926.D	P0903080-004 (1000ml)	Environmental H&E 104837	EM	12	
27	09/05/09 2:28	09040927.D	P0903080-004 dil (100ml)	Environmental H&E 104837	EM	12	
28	09/05/09 3:10	09040928.D	P0903080-005 (1000ml)	Environmental H&E 104838	EM	14	
29	09/05/09 3:52	09040929.D	P0903080-005 dil (100ml)	Environmental H&E 104838	EM	14	Case, File
30	09/05/09 4:34	09040930.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/08/09 7:49	09080901.D	System Check		EM	4	
2	09/08/09 8:31	09080902.D	25ng TO-15 CCV STD	S20-08130905/S20-09030903	EM	1	Pass
3	09/08/09 9:12	09080903.D	25ng TO-15 MAPH STD	S20-08130905/S20-08210904	EM	5	
4	09/08/09 9:53	09080904.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
5	09/08/09 10:56	09080905.D	P0902944-001 (0.1ml)	[redacted]	EM	1	
6	09/08/09 11:38	09080906.D	P0902944-001 dup (0.1ml)	[redacted]	EM	1	Pass as Lab Dup.
7	09/08/09 12:19	09080907.D	CAS CAN QC No Batch#	SC00191	EM	6	Pass 75 @ 0.5ug/m3
8	09/08/09 13:22	09080908.D	P0903155-001 (400ml)	[redacted]	EM	7	
9	09/08/09 14:03	09080909.D	P0903155-003 (400ml)	[redacted]	EM	8	
10	09/08/09 14:45	09080910.D	P0902944-002 (0.5ml)	[redacted]	EM	1	
11	09/08/09 15:26	09080911.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
12	09/08/09 16:08	09080912.D	P0903080-003 dil (100ml)	Environmental H & E 104836	EM	11	
13	09/08/09 18:15	09080913.D	P0902944-003 (0.150ml)	[redacted]	EM	1	
14	09/08/09 18:57	09080914.D	P0903155-002 (25ml)	[redacted]	EM	7	
15	09/08/09 19:38	09080915.D	P0903155-004 (400ml)	[redacted]	EM	8	
16	09/08/09 20:20	09080916.D	P0903155-005 (400ml)	[redacted]	EM	9	
17	09/08/09 21:02	09080917.D	P0903155-006 (400ml)	[redacted]	EM	10	
18	09/08/09 21:43	09080918.D	P0903023-001 (1000ml)	[redacted]	EM	11	
19	09/08/09 22:25	09080919.D	P0903023-001 dil (100ml)	[redacted]	EM	11	Case, File
20	09/08/09 23:07	09080920.D	P0903023-002 (1000ml)	[redacted]	EM	12	
21	09/08/09 23:49	09080921.D	P0903023-002 dil (100ml)	[redacted]	EM	12	Case, File
22	09/09/09 0:31	09080922.D	K0907780-001 (15ml)	[redacted]	EM	6	
23	09/09/09 1:13	09080923.D	CAS CAN QC C1S 3736	1SC00212 (400ml)	EM	14	Failed.
24	09/09/09 1:55	09080924.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/09/09 7:57	09090901.D	25ng TO-15 CCV STD	S20-08130905/S20-09030903	EM	1	Pass
2	09/09/09 8:38	09090902.D	25ng TO-15 MAPH STD	S20-08130905/S20-08210904	EM	5	Pass
3	09/09/09 9:20	09090903.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
4	09/09/09 10:04	09090904.D	P0902944-004 (0.1ml)	[redacted]	EM	1	
5	09/09/09 10:52	09090905.D	K0907780-005 (1ml)	[redacted]	EM	1	
6	09/09/09 11:50	09090906.D	Lab Air (30ml)	S20-08130905	EM	11	
7	09/09/09 12:31	09090907.D	K0907780-001 (15ml)	[redacted]	EM	6	
8	09/09/09 13:13	09090908.D	K0907780-001 dup (15ml)	[redacted]	EM	6	Pass as Lab Dup.
9	09/09/09 13:55	09090909.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
10	09/09/09 14:36	09090910.D	P0902971-019 (400ml)	[redacted]	EM	9	
11	09/09/09 16:22	09090911.D	P0903080-003 dil (30ml)	Environmental H & E 104836	EM	11	
12	09/09/09 17:03	09090912.D	P0902944-005 (400ml)	[redacted]	EM	7	
13	09/09/09 17:44	09090913.D	P0903060-001 (400ml)	[redacted]	EM	6	
14	09/09/09 18:26	09090914.D	P0903060-002 (400ml)	[redacted]	EM	8	
15	09/09/09 19:07	09090915.D	P0903060-003 (400ml)	[redacted]	EM	9	
16	09/09/09 19:49	09090916.D	P0903060-004 (400ml)	[redacted]	EM	10	
17	09/09/09 20:31	09090917.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Case File Extra
18	09/09/09 21:12	09090918.D	K0907780-002 (15ml)	[redacted]	EM	13	
19	09/09/09 21:55	09090919.D	K0907780-003 (15ml)	[redacted]	EM	14	
20	09/09/09 22:37	09090920.D	K0907780-004 (15ml)	[redacted]	EM	15	
21	09/09/09 23:19	09090921.D	K0907780-006 (25ml)	[redacted]	EM	16	
22	09/10/09 0:02	09090922.D	Blank (200ml)		EM	1	
23	09/10/09 4:04	09090923.D	Blank (200ml)		EM	1	
24	09/10/09 4:42	09090924.D	System Check		EM	4	