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

October 1, 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 4, 2009. For your reference, these analyses have been assigned our service request number P0903139.

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 575 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: P0903139
Project: 16512

CASE NARRATIVE

The samples were received intact under chain of custody on September 4, 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: P0903139

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 #
P0903139-001.01	106308	6.0 L-Summa Canister Ambient	-0.2	-0.1	3.6				AC01496	**14340**		
P0903139-002.01	106309	6.0 L-Summa Canister Ambient		0.5	3.5				AC00759	**14340**		
P0903139-003.01	106310	6.0 L-Summa Canister Ambient		0.3	3.5				AC00812	**14340**		
P0903139-004.01	106311	6.0 L-Summa Canister Ambient		0.3	3.5				AC01223	**14340**		
P0903139-005.01	106312	6.0 L-Summa Canister Ambient		0.4	3.5				AC00606	**14340**		
P0903139-006.01	106313	6.0 L-Summa Canister Ambient	-28.4	-13.9	3.5				AC00882	**14340**		

Miscellaneous Items - received

AVG01110
FC00525
AVG01040
AVG00659
AVG00961
AVG01068
FC00310
FC00779
AVG00861
FC00644
FC00275
FC00492

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 09/03/09

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

P0903139

TO: Columbia Analytical Lab

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

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

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

For EH & E Data Coordinator - URGENT DATA ☐

SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER:Time/Date/Vol.
106308	AIR Summa cans	TO-15 Full List	09/03/09 120mins
106309	↓	↓	↓
106310	↓	↓	↓
106311	↓	↓	↓
106312	↓	↓	↓
106313	↓	↓	09/03/09 0min

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 fminegishi@eheinc.com

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 09/03/09

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

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

Received by: _____ of (company name) CAL Date: 09/04/09 100

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

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

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

Page ___ of ___ 4

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: P0903139

Project: Project # 16512 / 16512

Sample(s) received on: 9/4/09 Date opened: 9/4/09 by: ADAVID

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

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

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0903139-001.01	6.0 L Ambient Can					
P0903139-002.01	6.0 L Ambient Can					
P0903139-003.01	6.0 L Ambient Can					
P0903139-004.01	6.0 L Ambient Can					
P0903139-005.01	6.0 L Ambient Can					
P0903139-006.01	6.0 L Ambient Can					

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

Chain of Custody is missing time collected

5

*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: **106308**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-001

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: AC01496

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10 - 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.63	ND	0.36	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.5**	0.63	**0.51**	0.13	
74-87-3	**Chloromethane**	**0.68**	0.13	**0.33**	0.061	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.63	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.049	
106-99-0	**1,3-Butadiene**	**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	0.047	
64-17-5	**Ethanol**	**4,500**	6.3	**2,400**	3.3	**D**
75-05-8	**Acetonitrile**	**150**	0.63	**89**	0.37	**D**
107-02-8	**Acrolein**	**5.4**	0.63	**2.4**	0.27	
67-64-1	**Acetone**	**150**	6.3	**62**	2.6	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.13	**0.23**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**110**	0.63	**43**	0.25	
107-13-1	Acrylonitrile	ND	0.63	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.032	
75-09-2	Methylene Chloride	ND	0.63	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.040	
76-13-1	**Trichlorotrifluoroethane**	**0.57**	0.13	**0.075**	0.016	
75-15-0	**Carbon Disulfide**	**1.2**	0.63	**0.38**	0.20	
156-60-5	**trans-1,2-Dichloroethene**	**4.7**	0.13	**1.2**	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)**	**9.9**	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: RC Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106308**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-001

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: AC01496

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10 - 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	**cis-1,2-Dichloroethene**	**0.33**	0.13	**0.084**	0.032	
141-78-6	**Ethyl Acetate**	**10**	1.3	**2.9**	0.35	
110-54-3	**n-Hexane**	**17**	0.63	**4.9**	0.18	
67-66-3	**Chloroform**	**8.0**	0.13	**1.6**	0.026	
109-99-9	**Tetrahydrofuran (THF)**	**11**	0.63	**3.6**	0.21	
107-06-2	**1,2-Dichloroethane**	**0.19**	0.13	**0.047**	0.031	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.023	
71-43-2	**Benzene**	**15**	0.13	**4.5**	0.039	
56-23-5	**Carbon Tetrachloride**	**0.65**	0.13	**0.10**	0.020	
110-82-7	**Cyclohexane**	**1.5**	0.63	**0.44**	0.18	
78-87-5	1,2-Dichloropropane	ND	0.13	ND	0.027	
75-27-4	**Bromodichloromethane**	**1.8**	0.13	**0.27**	0.019	
79-01-6	**Trichloroethene**	**0.15**	0.13	**0.028**	0.023	
123-91-1	**1,4-Dioxane**	**0.80**	0.63	**0.22**	0.17	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.31	
142-82-5	**n-Heptane**	**8.5**	0.63	**2.1**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.63	ND	0.14	
108-10-1	**4-Methyl-2-pentanone**	**2.4**	0.63	**0.59**	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**	**120**	0.63	**31**	0.17	
591-78-6	**2-Hexanone**	**1.7**	0.63	**0.42**	0.15	
124-48-1	**Dibromochloromethane**	**0.16**	0.13	**0.019**	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.016	
123-86-4	**n-Butyl Acetate**	**5.3**	0.63	**1.1**	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: 9/24/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106308**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-001

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: AC01496

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10 - 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -0.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.2**	0.63	**0.46**	0.13	
127-18-4	**Tetrachloroethene**	**3.9**	0.13	**0.58**	0.018	
108-90-7	Chlorobenzene	ND	0.13	ND	0.027	
100-41-4	**Ethylbenzene**	**8.7**	0.63	**2.0**	0.14	
179601-23-1	**m,p-Xylenes**	**29**	0.63	**6.6**	0.14	
75-25-2	Bromoform	ND	0.63	ND	0.060	
100-42-5	**Styrene**	**4.0**	0.63	**0.93**	0.15	
95-47-6	**o-Xylene**	**9.1**	0.63	**2.1**	0.14	
111-84-2	**n-Nonane**	**1.5**	0.63	**0.29**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.018	
98-82-8	Cumene	ND	0.63	ND	0.13	
80-56-8	**alpha-Pinene**	**120**	0.63	**21**	0.11	**D**
103-65-1	**n-Propylbenzene**	**1.3**	0.63	**0.27**	0.13	
622-96-8	**4-Ethyltoluene**	**2.5**	0.63	**0.52**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**2.0**	0.63	**0.40**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**7.2**	0.63	**1.5**	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**	**0.57**	0.13	**0.094**	0.021	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.021	
5989-27-5	**d-Limonene**	**24**	0.63	**4.3**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.63	ND	0.065	
120-82-1	1,2,4-Trichlorobenzene	ND	0.63	ND	0.084	
91-20-3	**Naphthalene**	**1.2**	0.63	**0.23**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.63	ND	0.059	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
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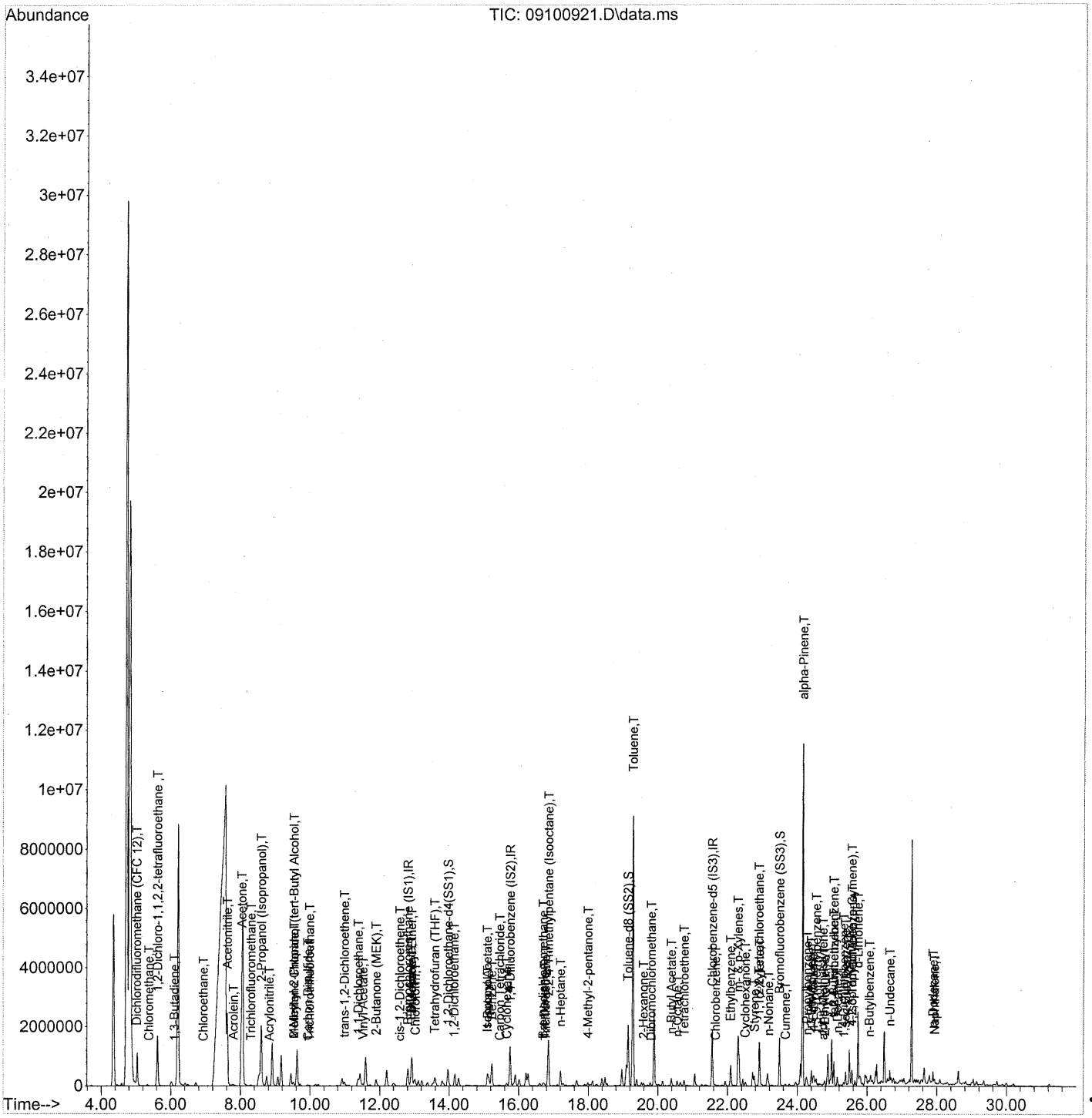
D = The reported result is from a dilution.

Verified By: Rv Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:24:45 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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)

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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)	12.81	130	310934	25.000 ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1568679	25.000 ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	771818	25.000 ng		0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.97	65	545011	24.790 ng		-0.02
Spiked Amount 25.000			Recovery =	99.16%		
57) Toluene-d8 (SS2)	19.15	98	1811006	24.682 ng		-0.01
Spiked Amount 25.000			Recovery =	98.72%		
73) Bromofluorobenzene (SS3)	23.49	174	590459	28.415 ng		0.00
Spiked Amount 25.000			Recovery =	113.68%		
Target Compounds						Qvalue
2) Propene	0.00	42	0	N.D. d		
3) Dichlorodifluoromethan...	5.02	85	78803	2.024 ng		99
4) Chloromethane	5.37	50	19843	0.547 ng		94
5) 1,2-Dichloro-1,1,2,2-t...	5.62	135	1136	0.055 ng	#	43
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.11	54	3751	0.148 ng		90
8) Bromomethane	6.60	94	712	N.D.		
9) Chloroethane	6.93	64	1167	0.066 ng	#	43
10) Ethanol	0.00	45	0	N.D. See Dil.		
11) Acetonitrile	7.62	41	6771868	162.184 ng See Dil		91
12) Acrolein	7.80	56	48536	4.350 ng		99
13) Acetone	8.04	58	2065535	118.637 ng	#	58
14) Trichlorofluoromethane	8.30	101	34944	1.050 ng		97
15) 2-Propanol (Isopropanol)	8.60	45	4063635	85.227 ng		94
16) Acrylonitrile	8.82	53	3258	0.129 ng		80
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.53	59	66788	1.380 ng	#	82
19) Methylene Chloride	9.54	84	5350	0.246 ng		90
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d		
21) Trichlorotrifluoroethane	9.98	151	6810	0.457 ng		96
22) Carbon Disulfide	9.94	76	72294	0.943 ng		97
23) trans-1,2-Dichloroethene	11.00	61	113855	3.797 ng		92
24) 1,1-Dichloroethane	11.39	63	2616	0.071 ng	#	1
25) Methyl tert-Butyl Ether	11.42	73	1934	N.D.		
26) Vinyl Acetate	11.53	86	12537m	3.325 ng		
27) 2-Butanone (MEK)	11.90	72	96546	7.954 ng	#	88
28) cis-1,2-Dichloroethene	12.58	61	7416	0.265 ng		95
29) Diisopropyl Ether	12.92	87	7644	0.444 ng	#	1
30) Ethyl Acetate	12.91	61	65628	8.338 ng		95
31) n-Hexane	12.93	57	531222	13.845 ng		96

EM 9/18/09

11

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
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Quant Time: Sep 17 10:24:45 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	206038	6.416 ng		100
34) Tetrahydrofuran (THF)	13.59	72	107266	8.500 ng	#	62
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	3750	0.153 ng	#	53
38) 1,1,1-Trichloroethane	14.54	97	691	N.D.		
39) Isopropyl Acetate	15.09	61	1143	0.089 ng	#	1
40) 1-Butanol	15.10	56	335537	16.506 ng		86
41) Benzene	15.23	78	980042	11.617 ng		98
42) Carbon Tetrachloride	15.46	117	12164	0.516 ng		99
43) Cyclohexane	15.66	84	39261	1.202 ng		91
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D. d		
46) Bromodichloromethane	16.70	83	36146	1.465 ng	#	69
47) Trichloroethene	16.78	130	2540	0.119 ng		100
48) 1,4-Dioxane	16.74	88	9581	0.639 ng		78
49) 2,2,4-Trimethylpentane...	16.86	57	1863137	19.190 ng		96
50) Methyl Methacrylate	17.03	100	355	N.D.		
51) n-Heptane	17.20	71	152617	6.796 ng		95
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	35130	1.927 ng		97
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.77	97	893	N.D.		
58) Toluene	19.28	91	8331718	93.671 ng		99
59) 2-Hexanone	19.59	43	64231	1.389 ng	#	69
60) Dibromochloromethane	19.82	129	2450	0.129 ng		89
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	213041	4.224 ng		97
63) n-Octane	20.56	57	34282	1.729 ng		89
64) Tetrachloroethene	20.75	166	69185	3.135 ng		100
65) Chlorobenzene	21.65	112	4504	0.082 ng	#	42
66) Ethylbenzene	22.09	91	664554	6.920 ng		100
67) m- & p-Xylenes	22.30	91	1749659	22.982 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	178858	3.178 ng		99
70) o-Xylene	22.92	91	558954	7.298 ng		100
71) n-Nonane	23.17	43	57019m	1.236 ng		
72) 1,1,2,2-Tetrachloroethane	22.90	83	2022	0.061 ng	#	1
74) Cumene	23.66	105	38868	0.391 ng		95
75) alpha-Pinene	24.15	93	5437749	10.988 ng See DIL		99
76) n-Propylbenzene	24.28	91	132261	1.078 ng	#	91
77) 3-Ethyltoluene	24.40	105	348027	3.741 ng		100
78) 4-Ethyltoluene	24.46	105	190148	2.033 ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	122695	1.587 ng		99

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:24:45 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

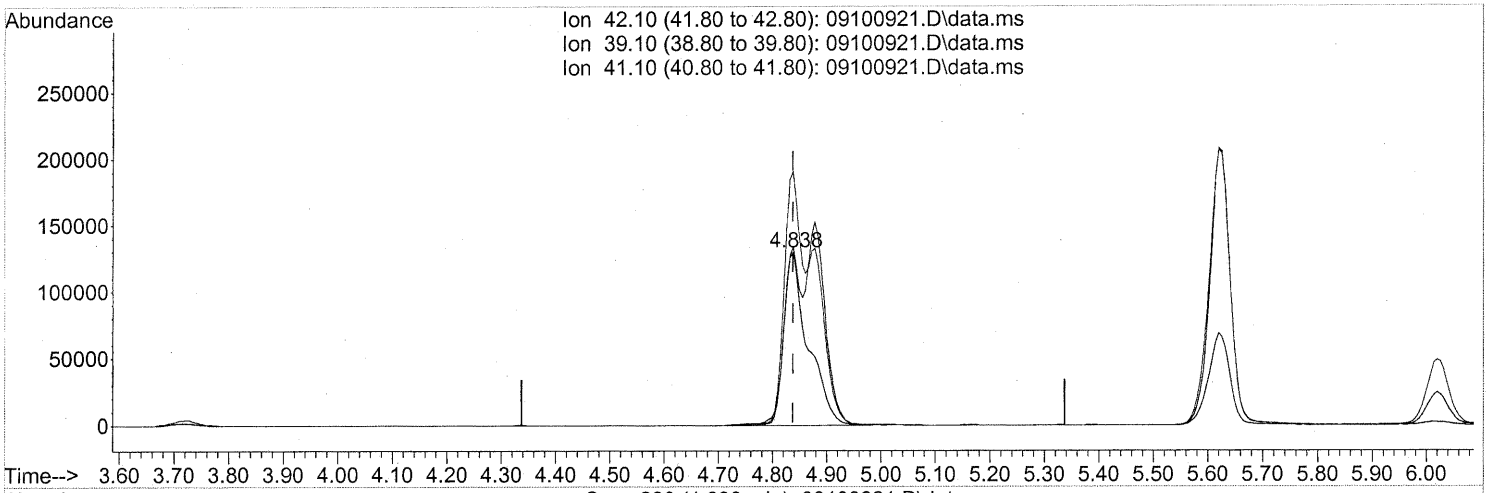
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	13868	0.331 ng	#	75
81) 2-Ethyltoluene	24.79	105	111716	1.163 ng		97
82) 1,2,4-Trimethylbenzene	25.05	105	475671	5.793 ng		90
83) n-Decane	25.15	57	107659	2.253 ng		98
84) Benzyl Chloride	25.23	91	3014	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D. d		
86) 1,4-Dichlorobenzene	25.33	146	20388	0.452 ng		100
87) sec-Butylbenzene	25.38	105	11773	0.109 ng		72
88) 4-Isopropyltoluene (p-...	25.56	119	188866	1.822 ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	114698	1.382 ng		94
90) 1,2-Dichlorobenzene	0.00	146	0	N.D. d		
91) d-Limonene	25.74	68	647833	19.285 ng		98
92) 1,2-Dibromo-3-Chloropr...	26.21	157	457	N.D.		
93) n-Undecane	26.65	57	220381	4.463 ng		84
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	104543	0.949 ng		95
96) n-Dodecane	27.89	57	144659	2.617 ng		97
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	63270	2.259 ng		97
99) tert-Butylbenzene	25.05	119	59734	0.734 ng	#	54
100) n-Butylbenzene	26.06	91	45055	0.523 ng	#	49

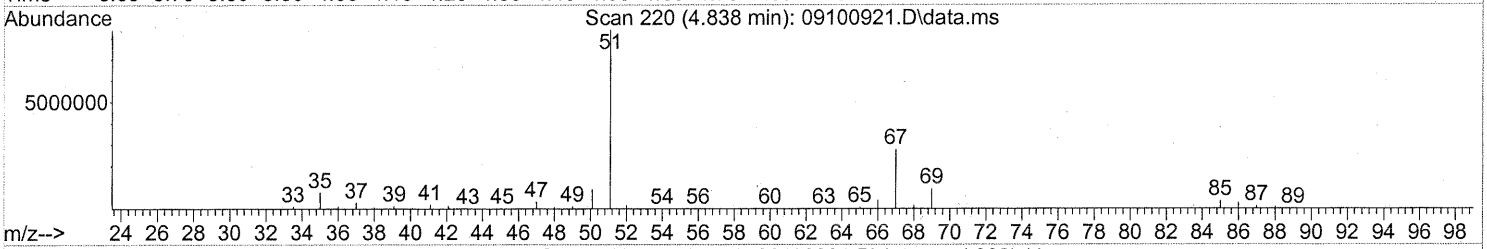
(#) = qualifier out of range (m) = manual integration (+) = signals summed

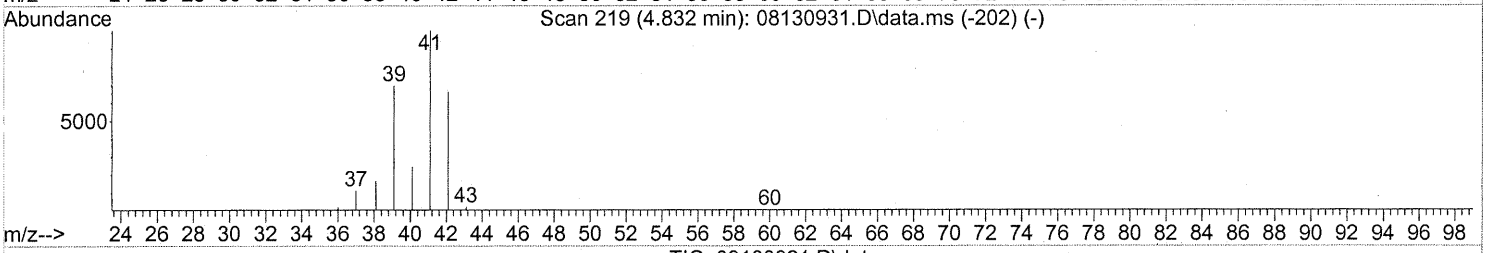
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(2) Propene (T)

4.838min (+0.000) 14.82ng

response 404271

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	78.15#
41.10	152.70	178.74#
0.00	0.00	0.00

FP Tom 9/18/09

9/21/09

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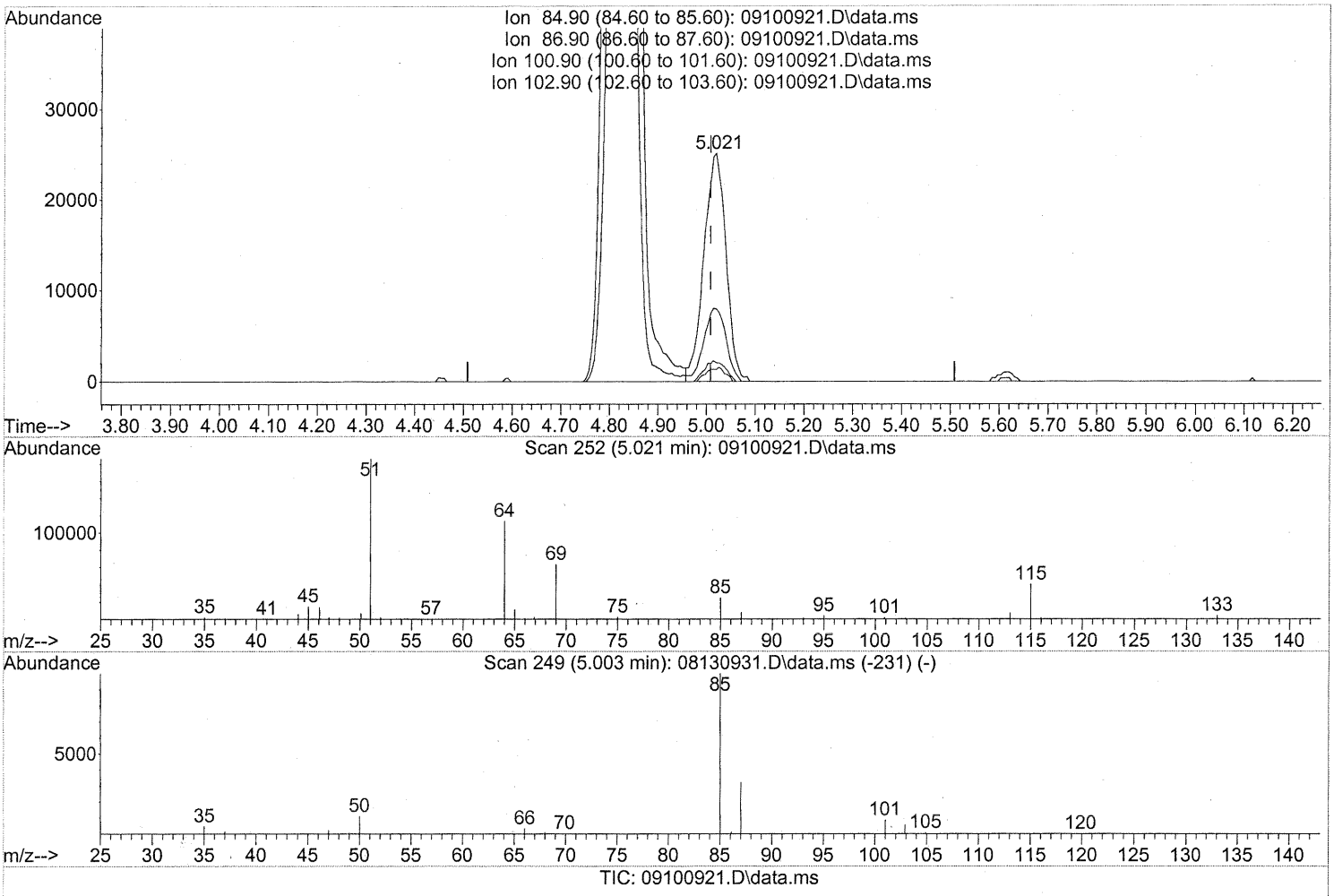
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.021min (+0.011) 2.02ng

response 78803

Before subtraction

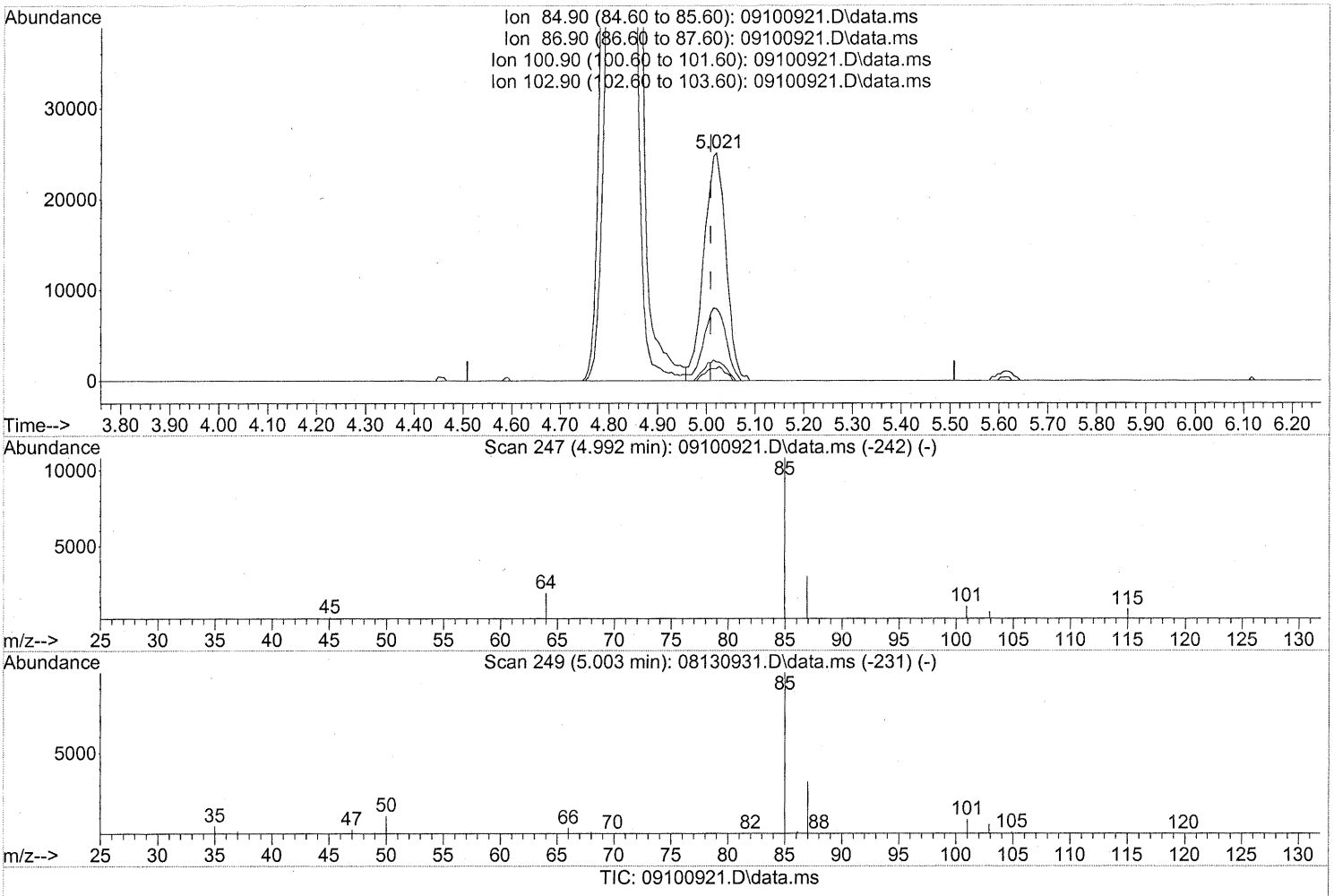
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.82
100.90	9.10	8.40
102.90	5.50	5.12

15

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.021min (+0.011) 2.02ng

After subtraction

response 78803

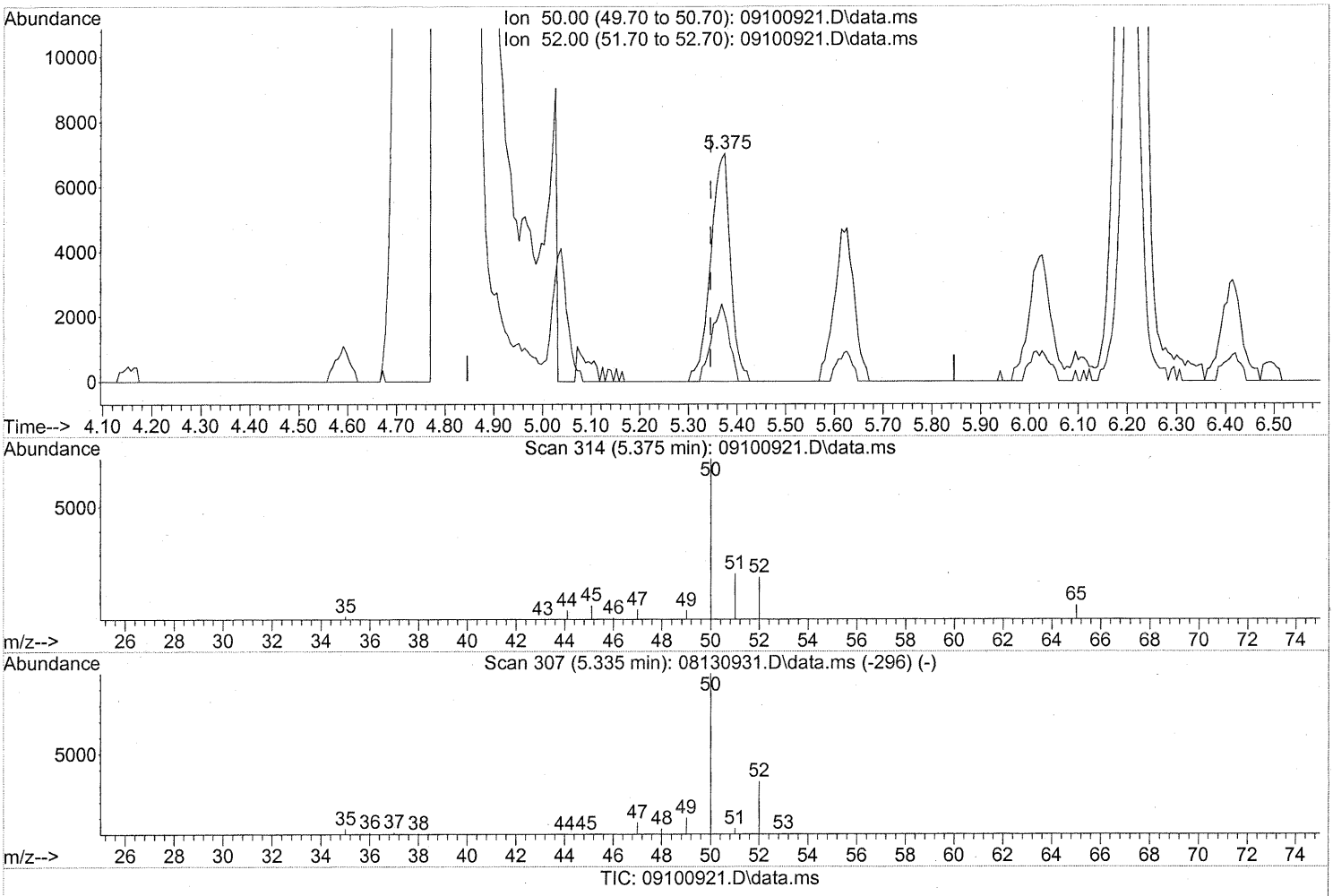
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.82
100.90	9.10	8.40
102.90	5.50	5.12

16

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.375min (+0.029) 0.55ng

response 19843

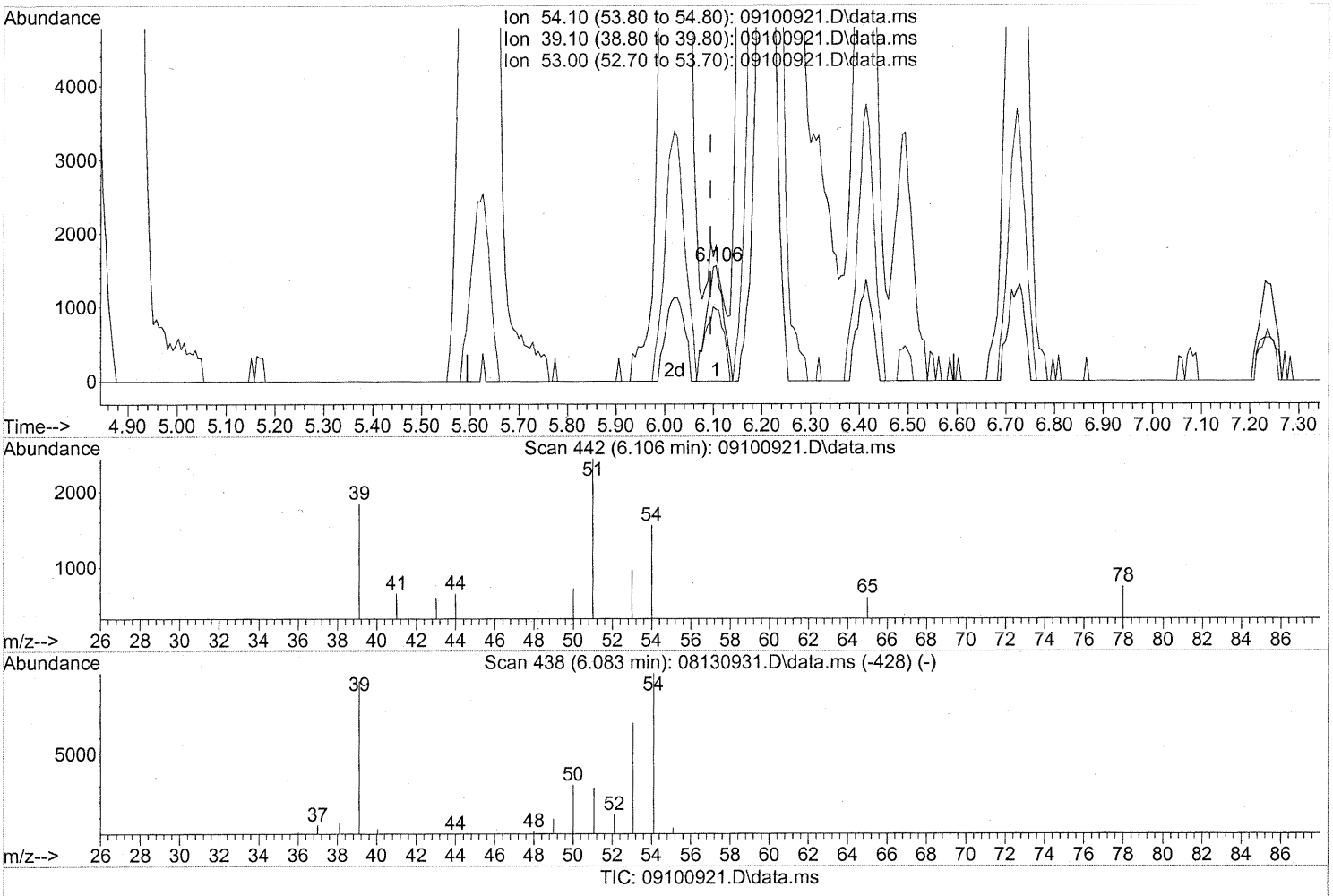
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	29.78
0.00	0.00	0.00
0.00	0.00	0.00

17

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(7) 1,3-Butadiene (T)

6.106min (+0.011) 0.15ng

response 3751

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	113.92
53.00	69.80	69.79
0.00	0.00	0.00

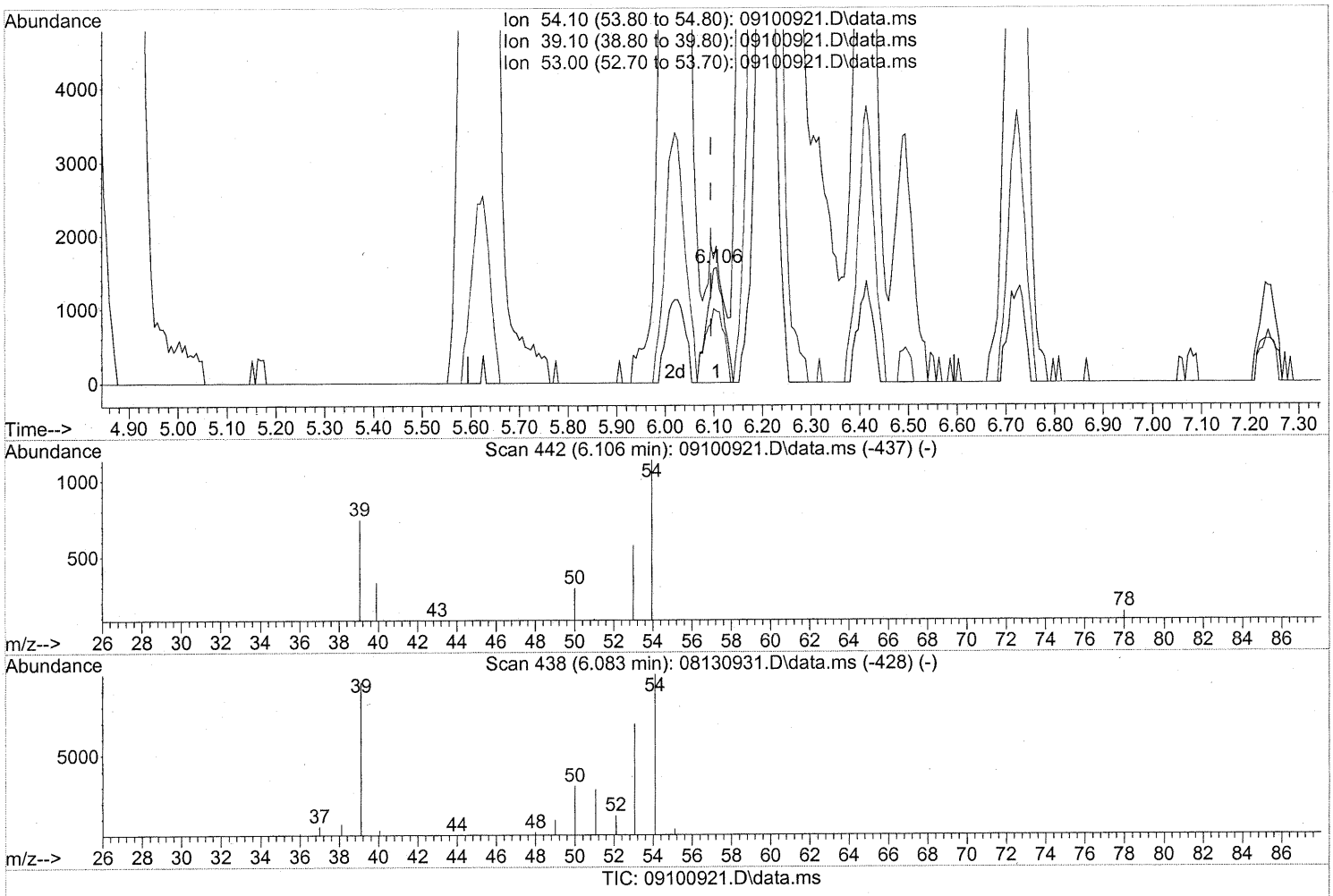
Before subtraction

18

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(7) 1,3-Butadiene (T)

6.106min (+0.011) 0.15ng

response 3751

After subtraction

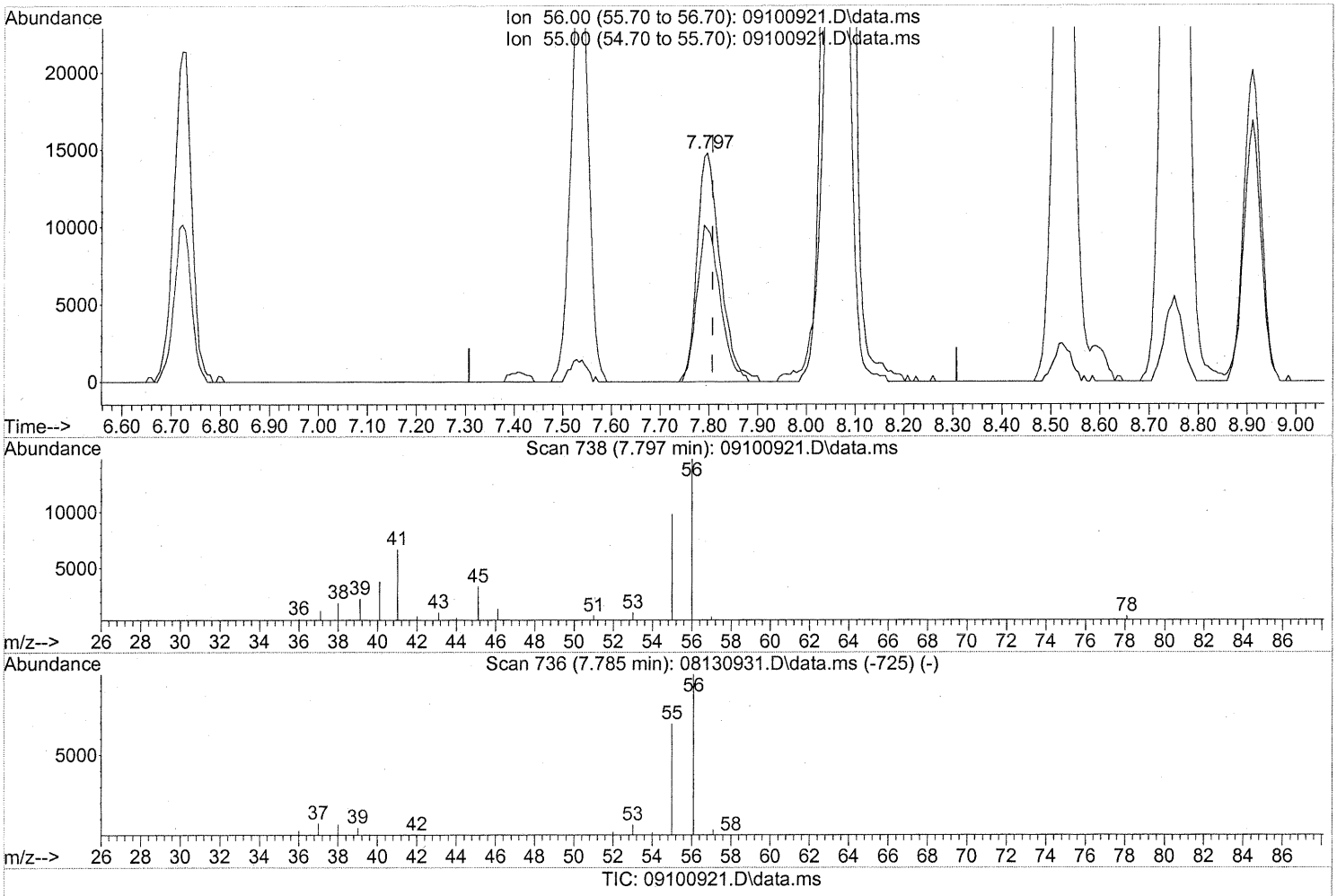
Ion	Exp%	Act%
54.10	100	100
39.10	96.60	113.92
53.00	69.80	69.79
0.00	0.00	0.00

19

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 4.35ng

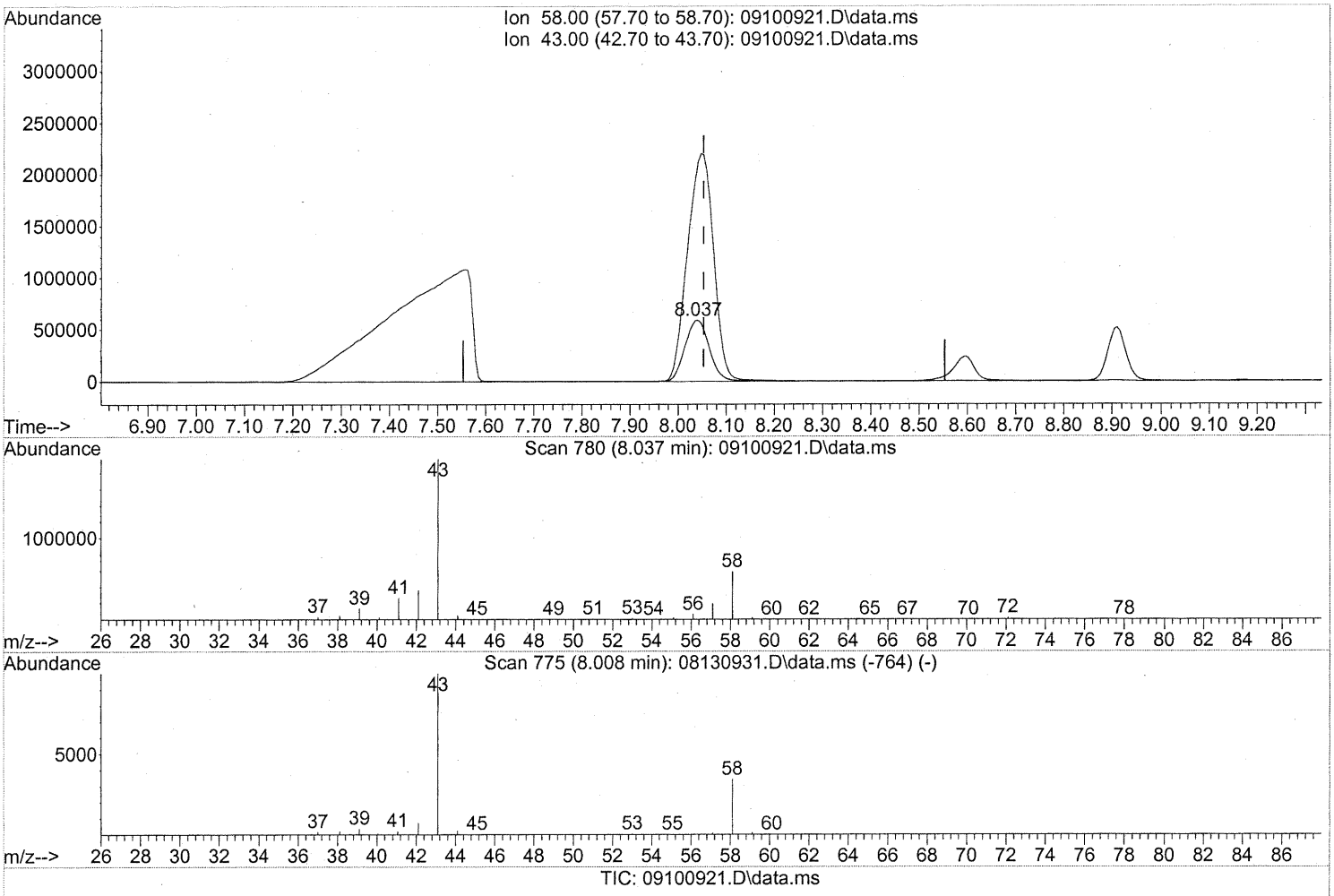
response 48536

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	68.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(13) Acetone (T)

8.037min (-0.017) 118.64ng

response 2065535

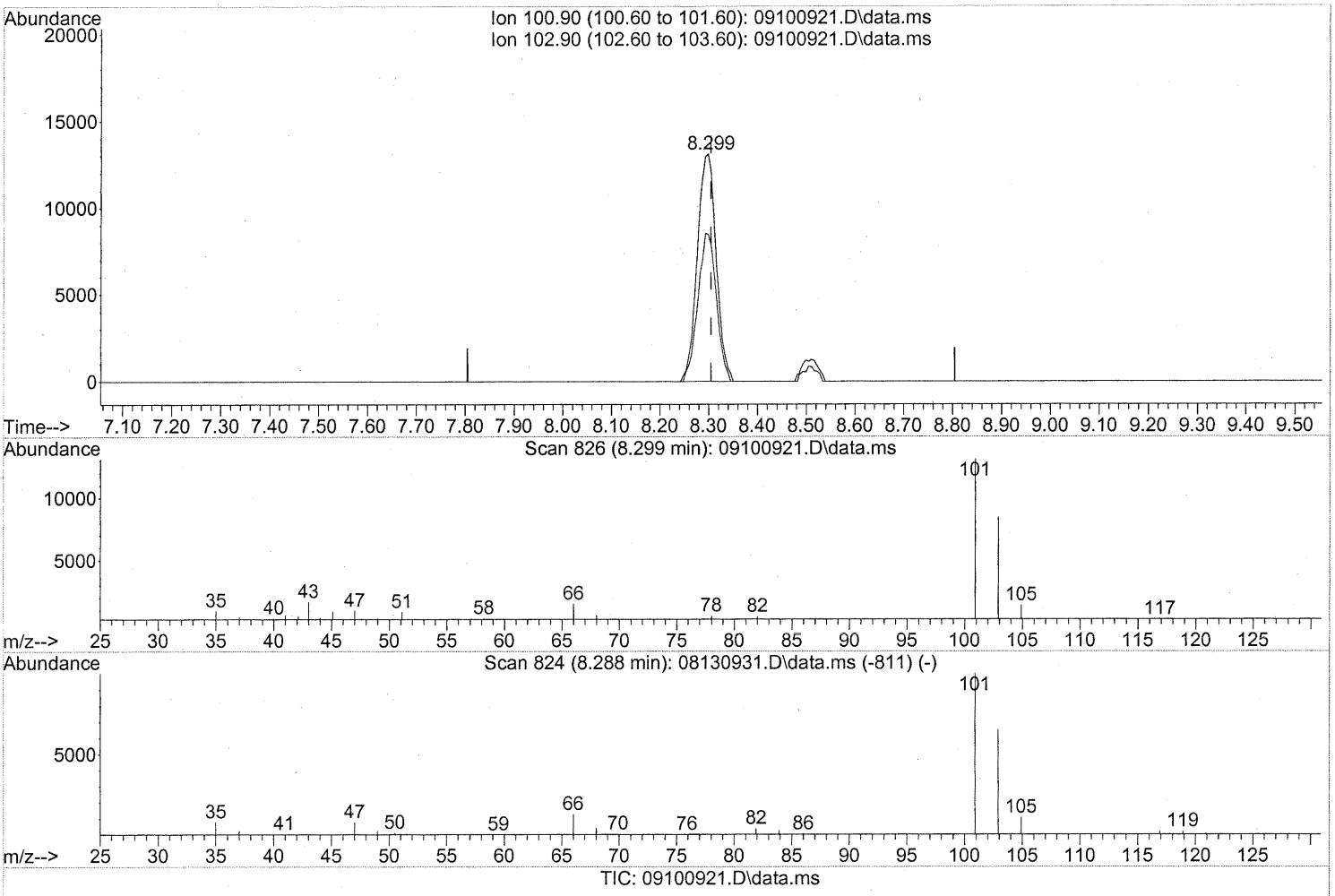
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	402.68#
0.00	0.00	0.00
0.00	0.00	0.00

21

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(14) Trichlorofluoromethane (T)

8.299min (-0.006) 1.05ng

response 34944

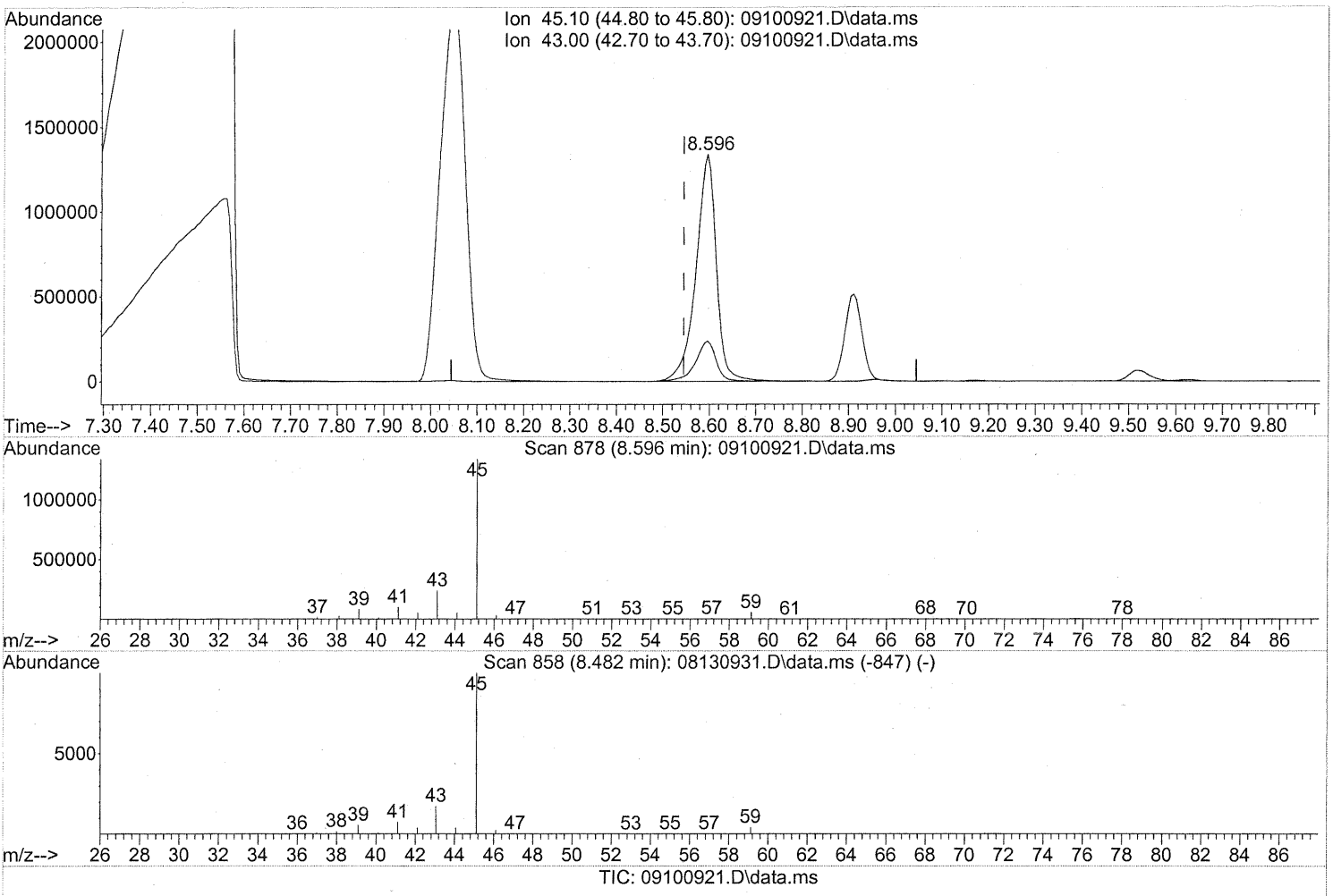
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.68
0.00	0.00	0.00
0.00	0.00	0.00

22

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

8.596min (+0.051) 85.23ng

response 4063635

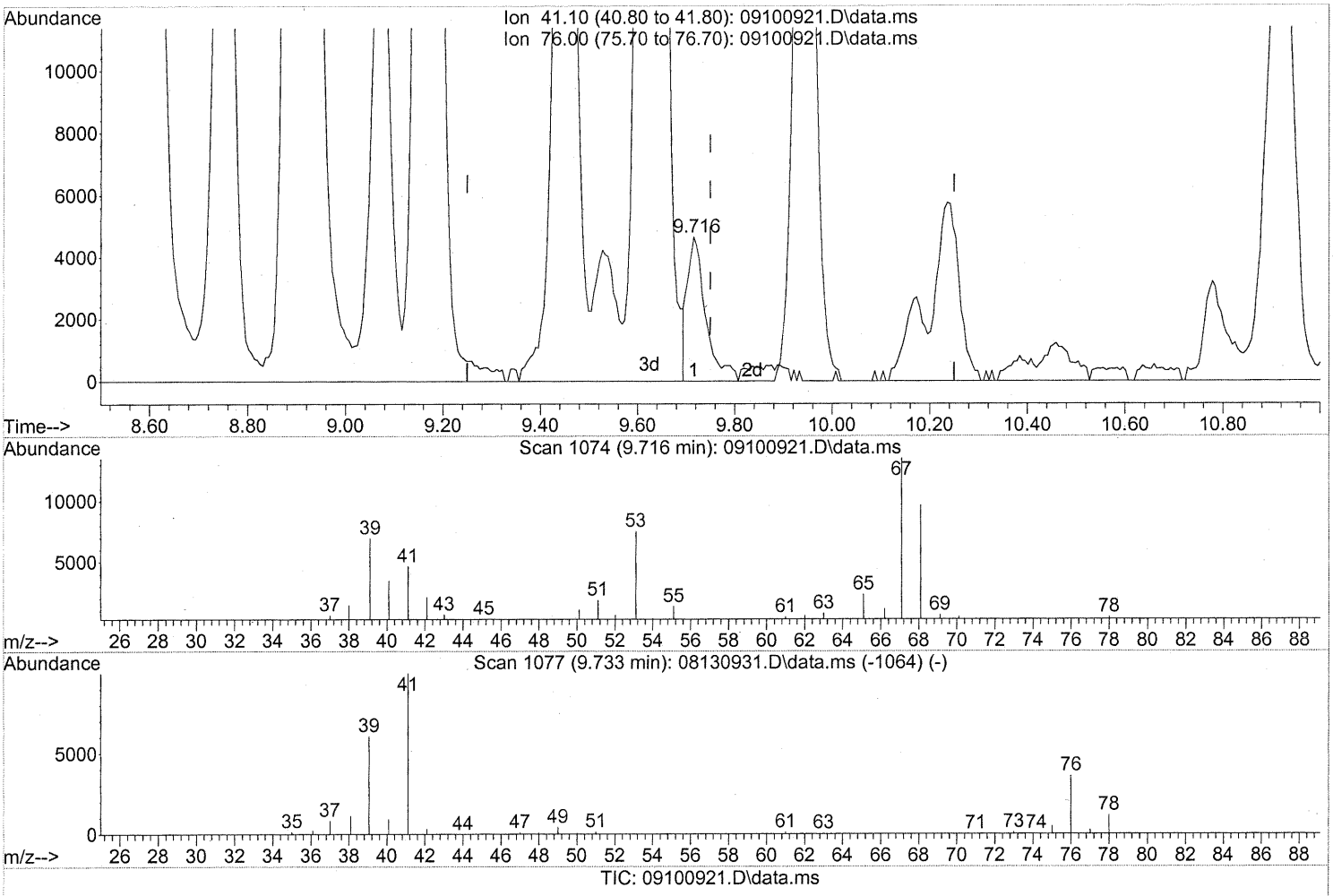
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.80
0.00	0.00	0.00
0.00	0.00	0.00

23

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

9.716min (-0.034) 0.42ng

response 12286

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

FP on 9/18/09

9/21/09

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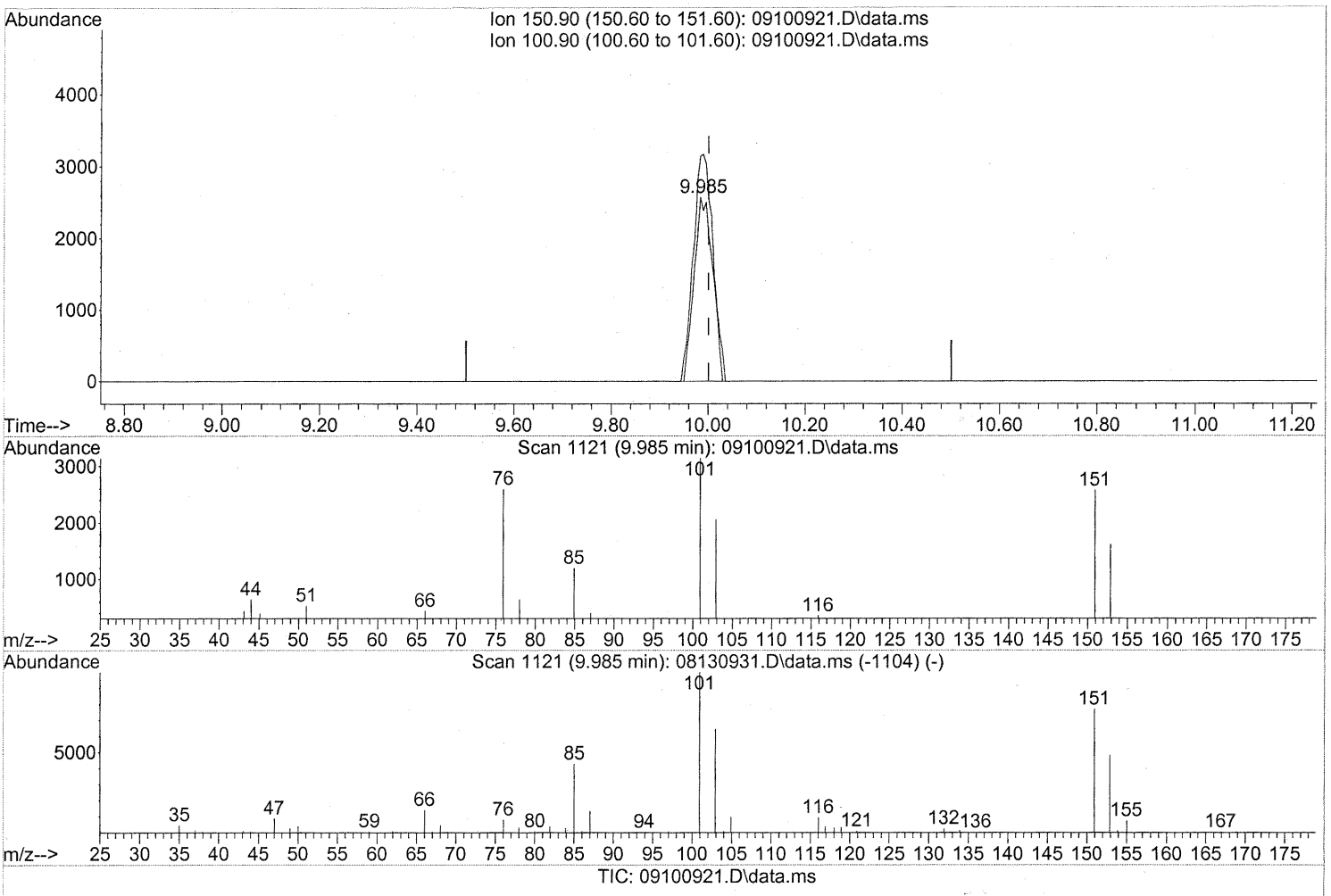
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.46ng

response 6810

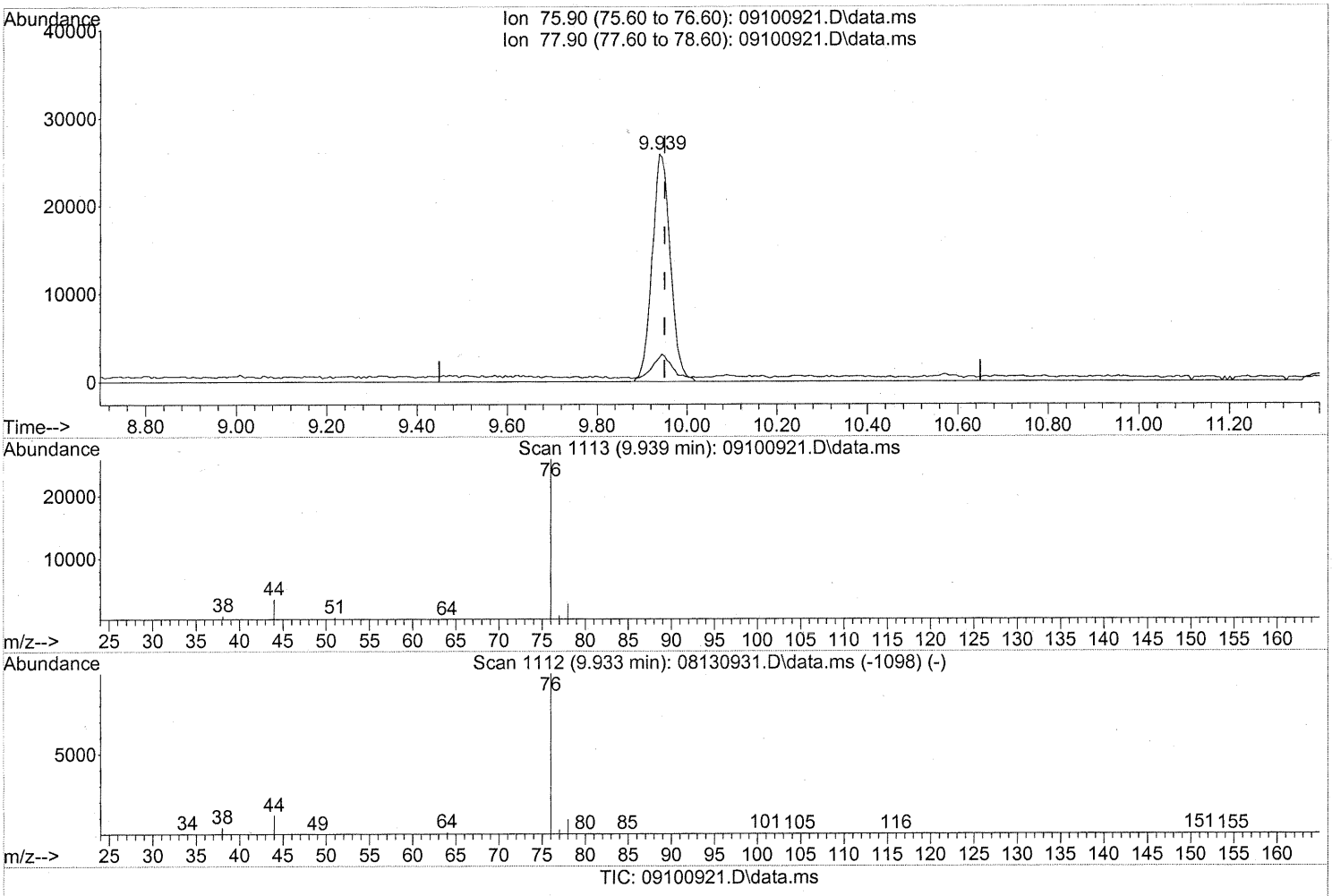
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	131.53
0.00	0.00	0.00
0.00	0.00	0.00

25

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(22) Carbon Disulfide (T)

9.939min (-0.011) 0.94ng

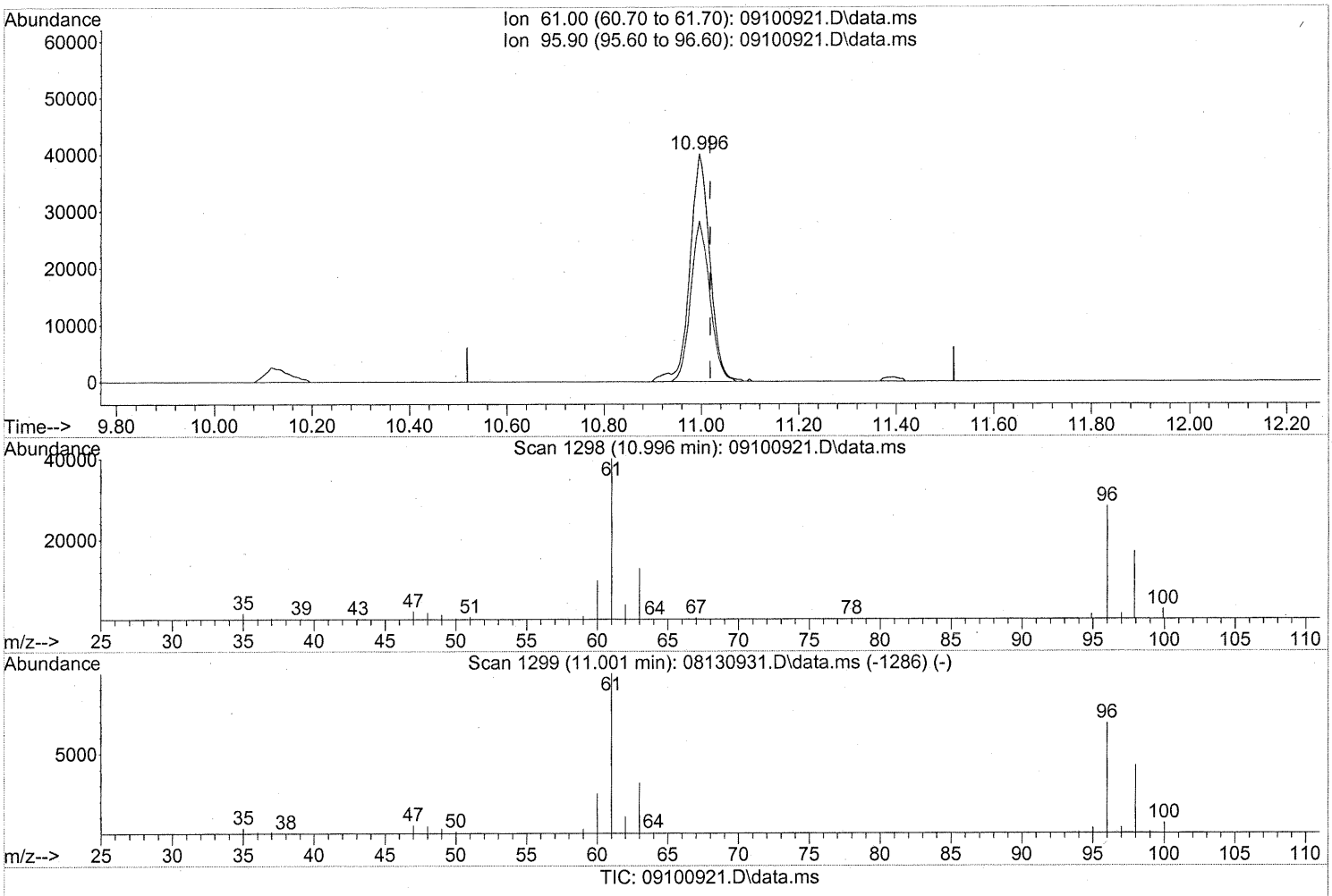
response 72294

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	10.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

10.996min (-0.023) 3.80ng

response 113855

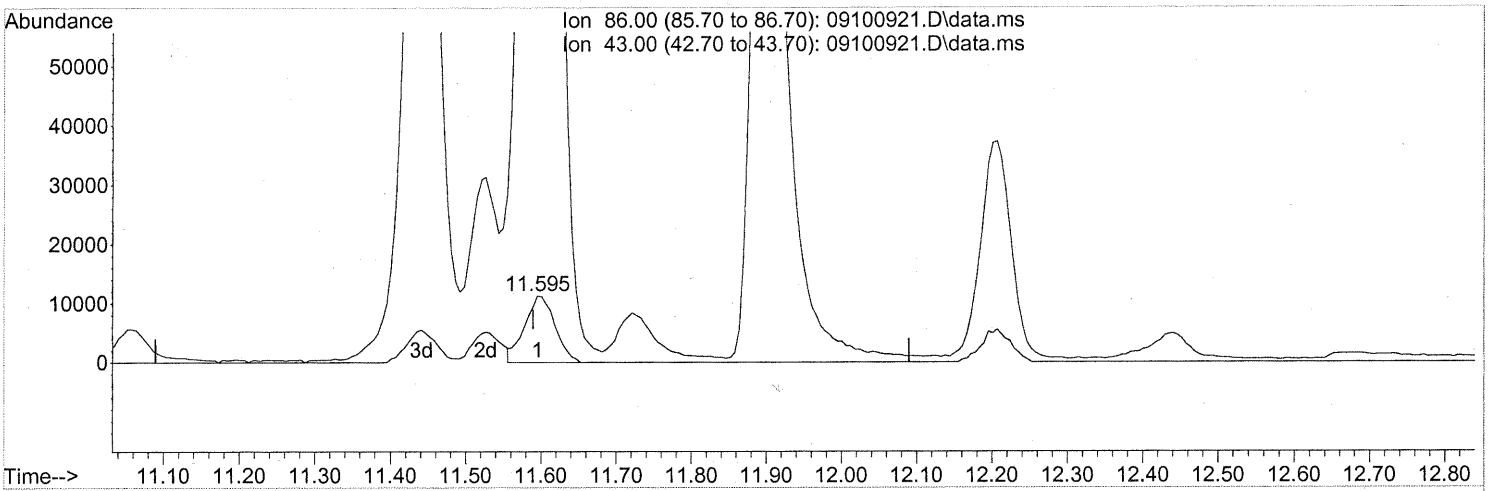
Ion	Exp%	Act%
61.00	100	100
95.90	74.10	67.50
0.00	0.00	0.00
0.00	0.00	0.00

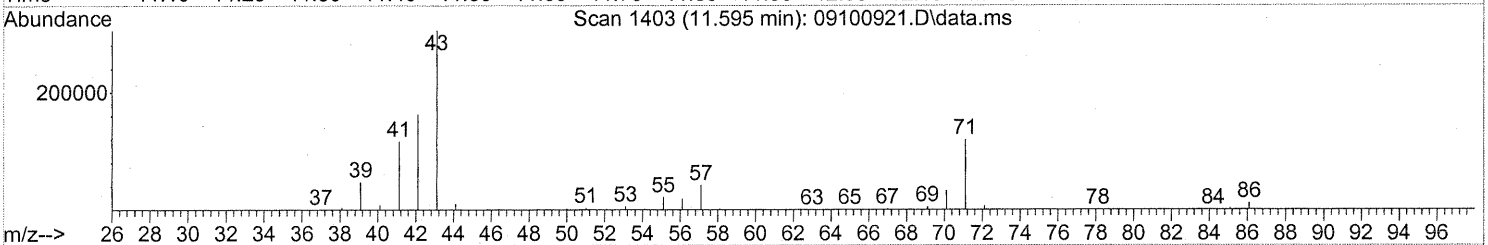
27

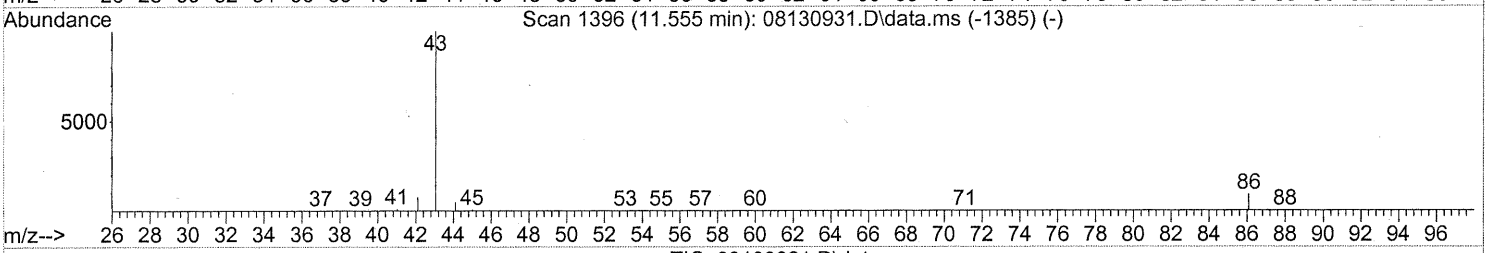
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(26) Vinyl Acetate (T)

11.595min (+0.005) 8.30ng

response 31284

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2741.29#
0.00	0.00	0.00
0.00	0.00	0.00

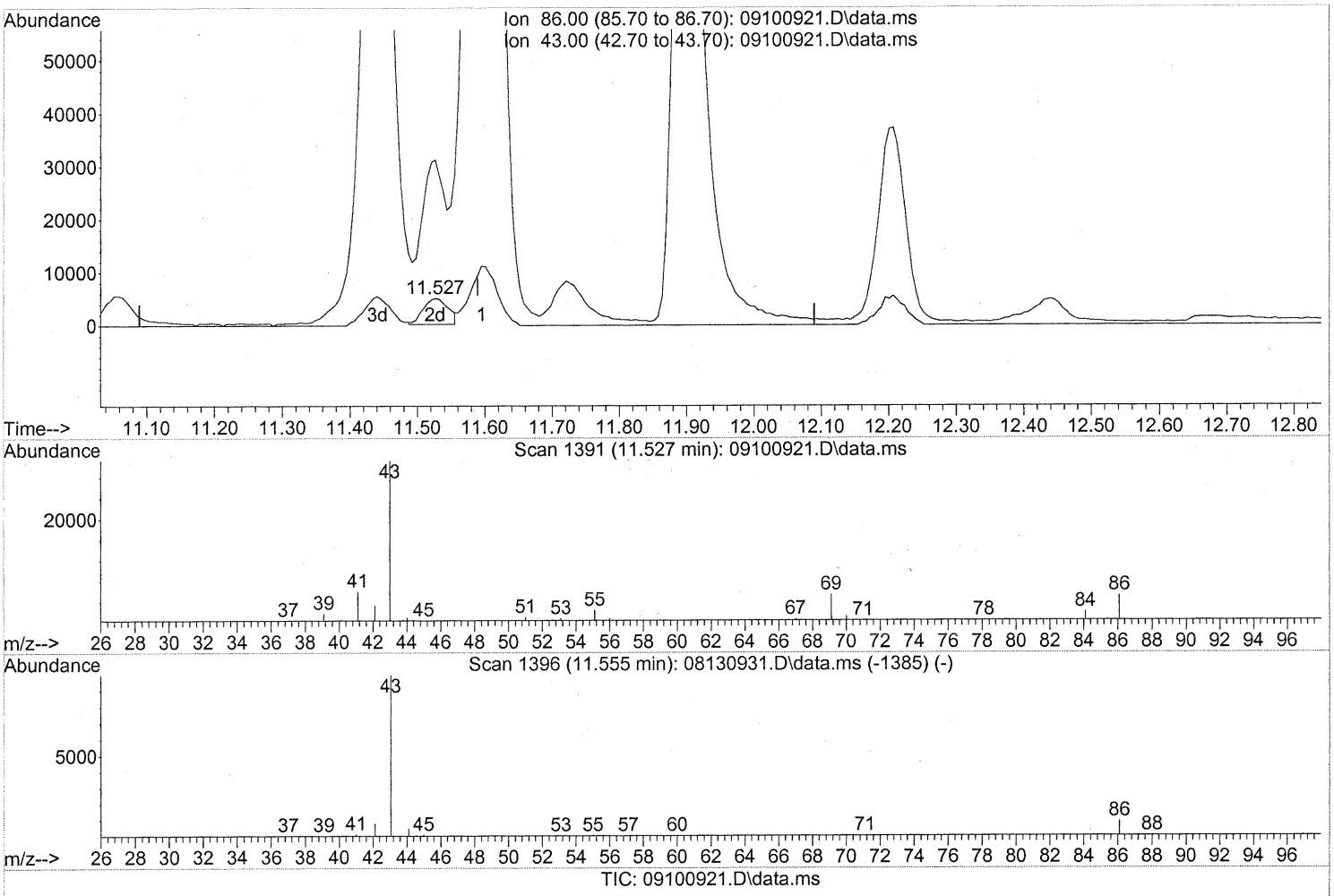
mp

28

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(26) Vinyl Acetate (T)

11.527min (-0.063) 3.32ng m

response 12537

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	6840.42#
0.00	0.00	0.00
0.00	0.00	0.00

CRL

mp → LC
em 9/18/09

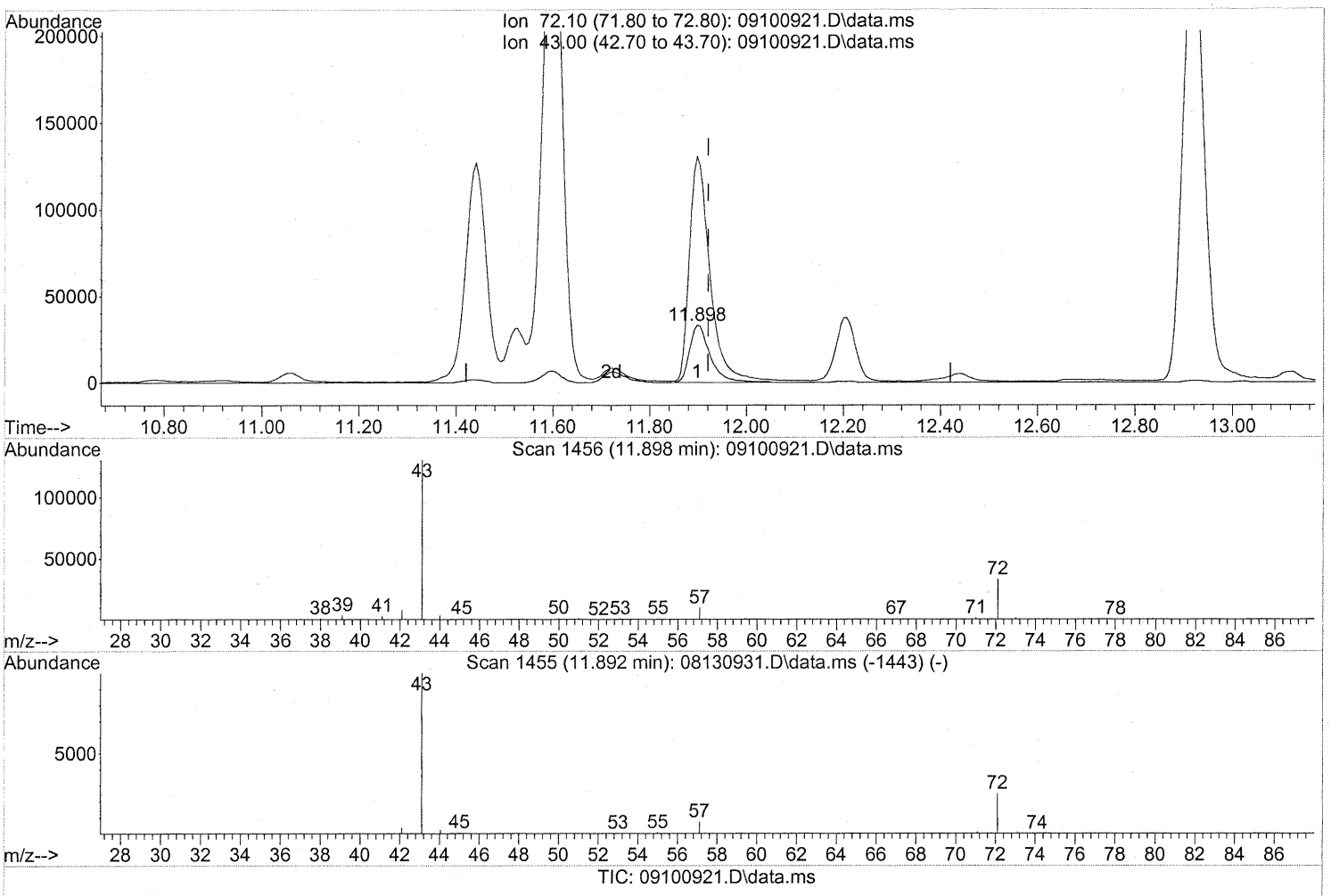
9/18/09

29

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

11.898min (-0.023) 7.95ng

response 96546

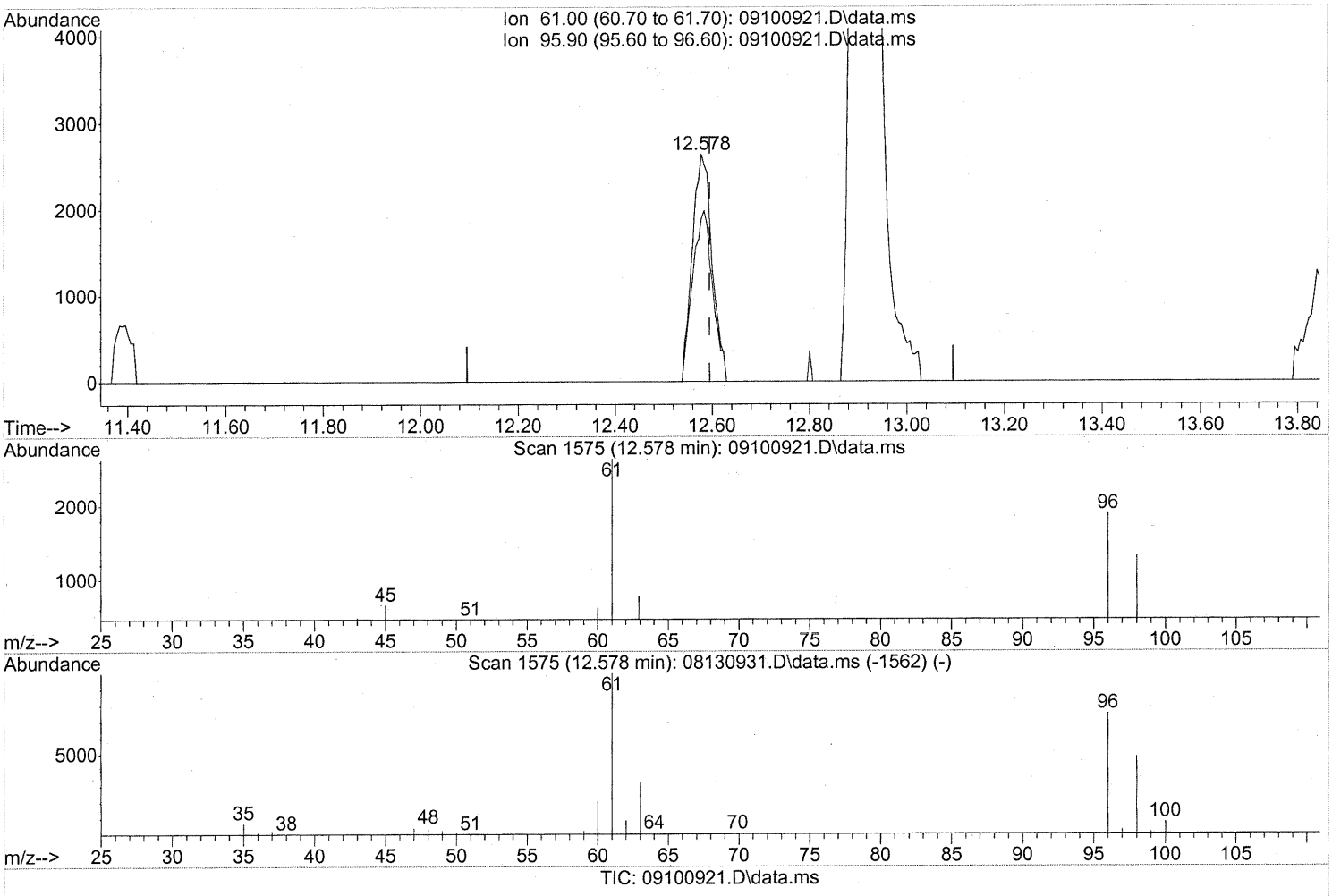
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	394.03#
0.00	0.00	0.00
0.00	0.00	0.00

30

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(28) cis-1,2-Dichloroethene (T)

12.578min (-0.017) 0.27ng

response 7416

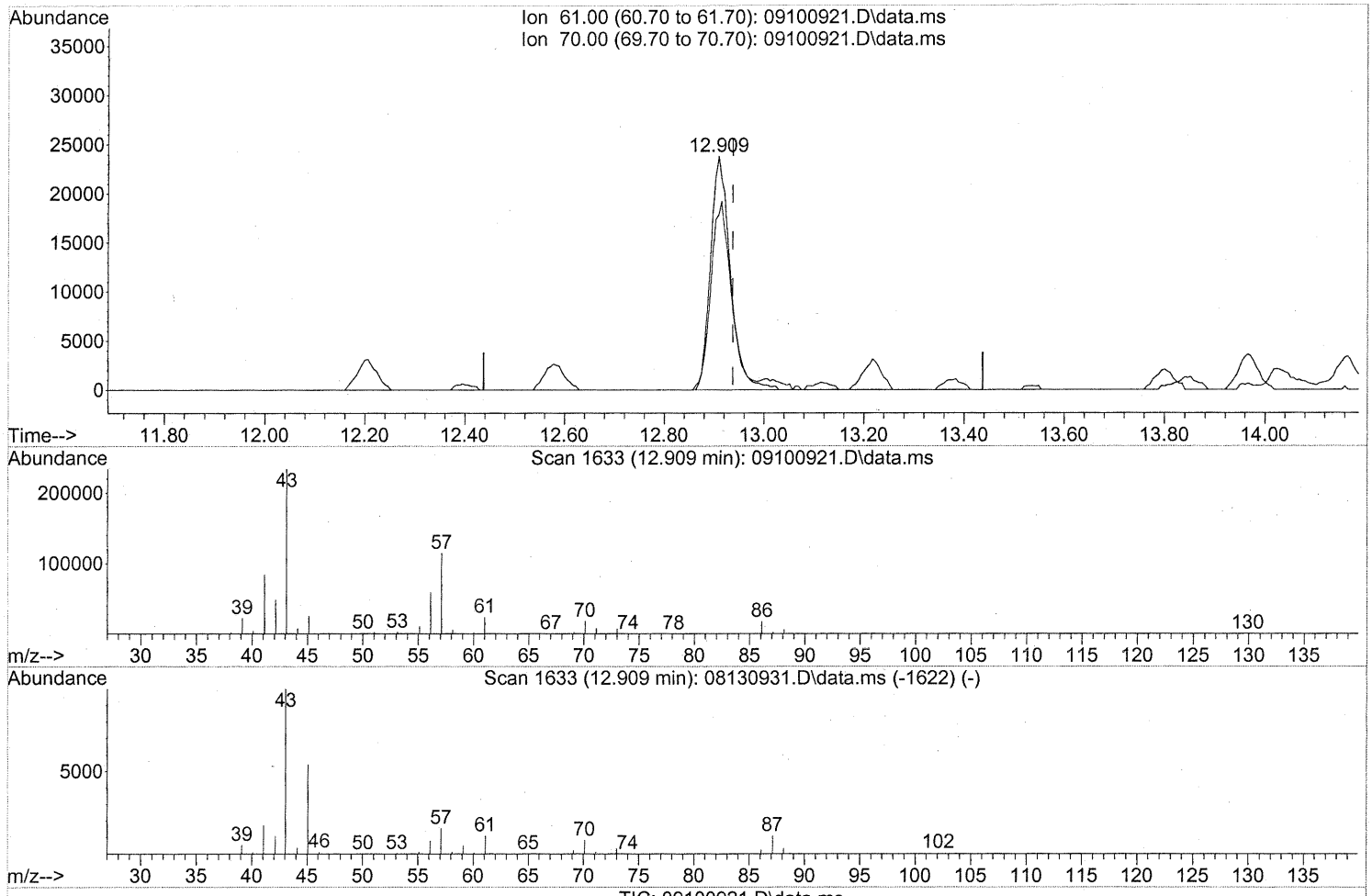
Ion	Exp%	Act%
61.00	100	100
95.90	80.90	76.56
0.00	0.00	0.00
0.00	0.00	0.00

31

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 8.34ng

response 65628

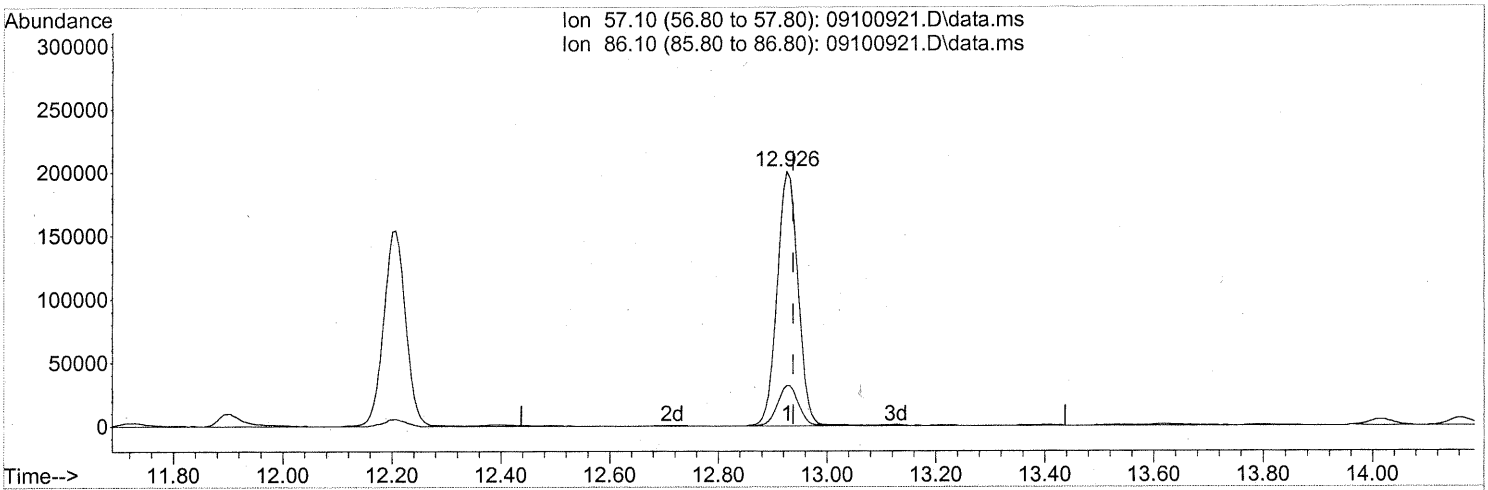
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	83.35
0.00	0.00	0.00
0.00	0.00	0.00

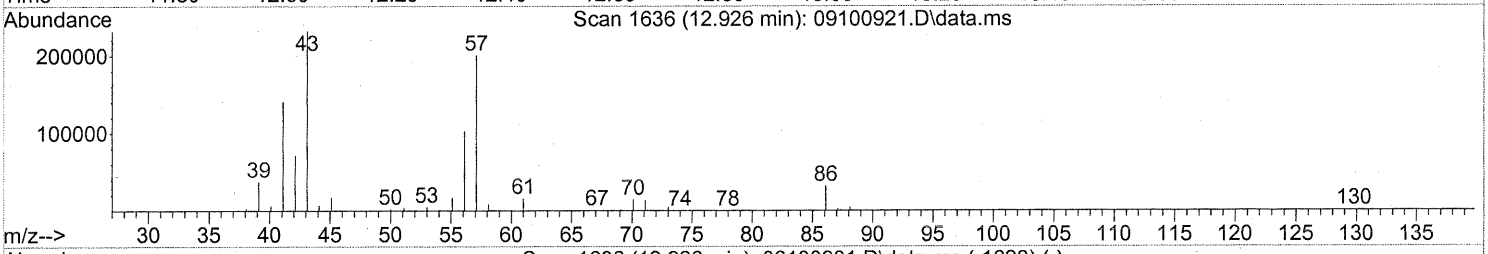
32

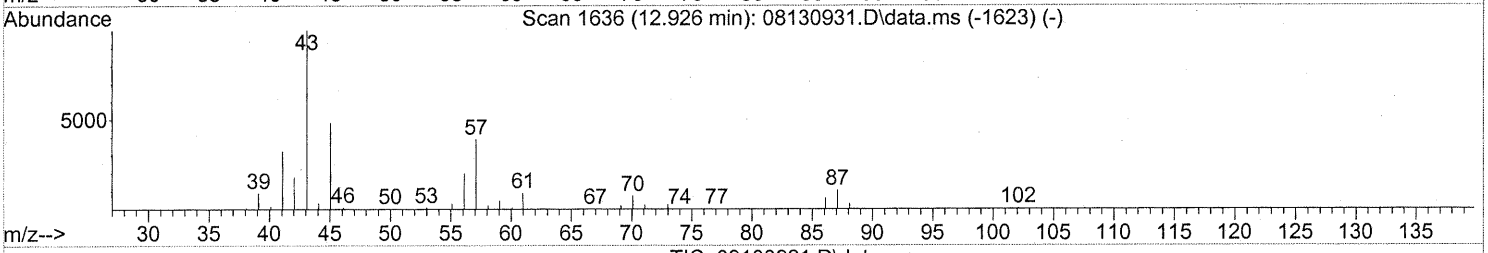
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(31) n-Hexane (T)

12.926min (-0.011) 13.85ng

response 531222

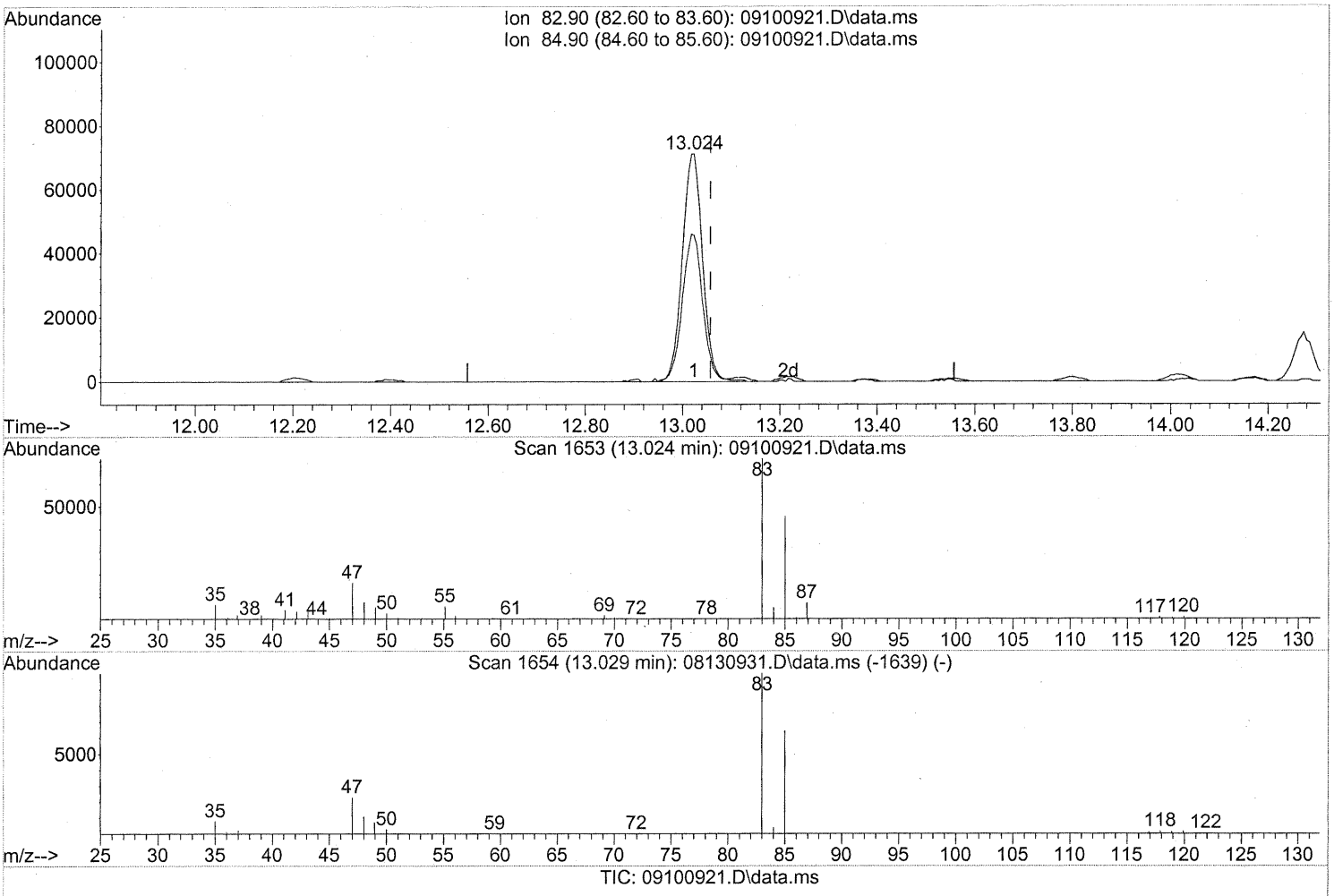
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.82
0.00	0.00	0.00
0.00	0.00	0.00

33

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(32) Chloroform (T)

13.024min (-0.034) 6.42ng

response 206038

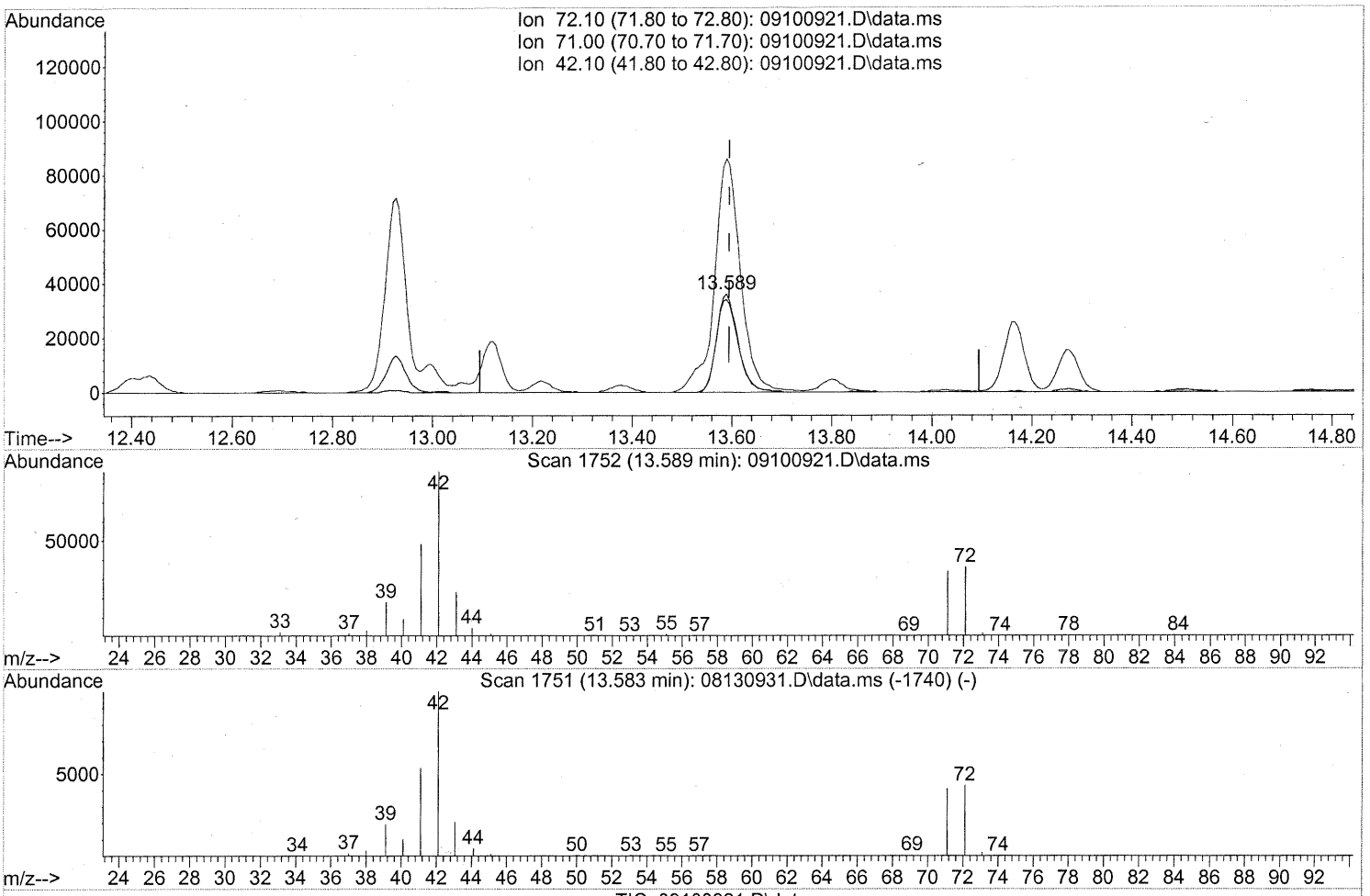
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	64.90
0.00	0.00	0.00
0.00	0.00	0.00

34

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.589min (-0.006) 8.50ng

response 107266

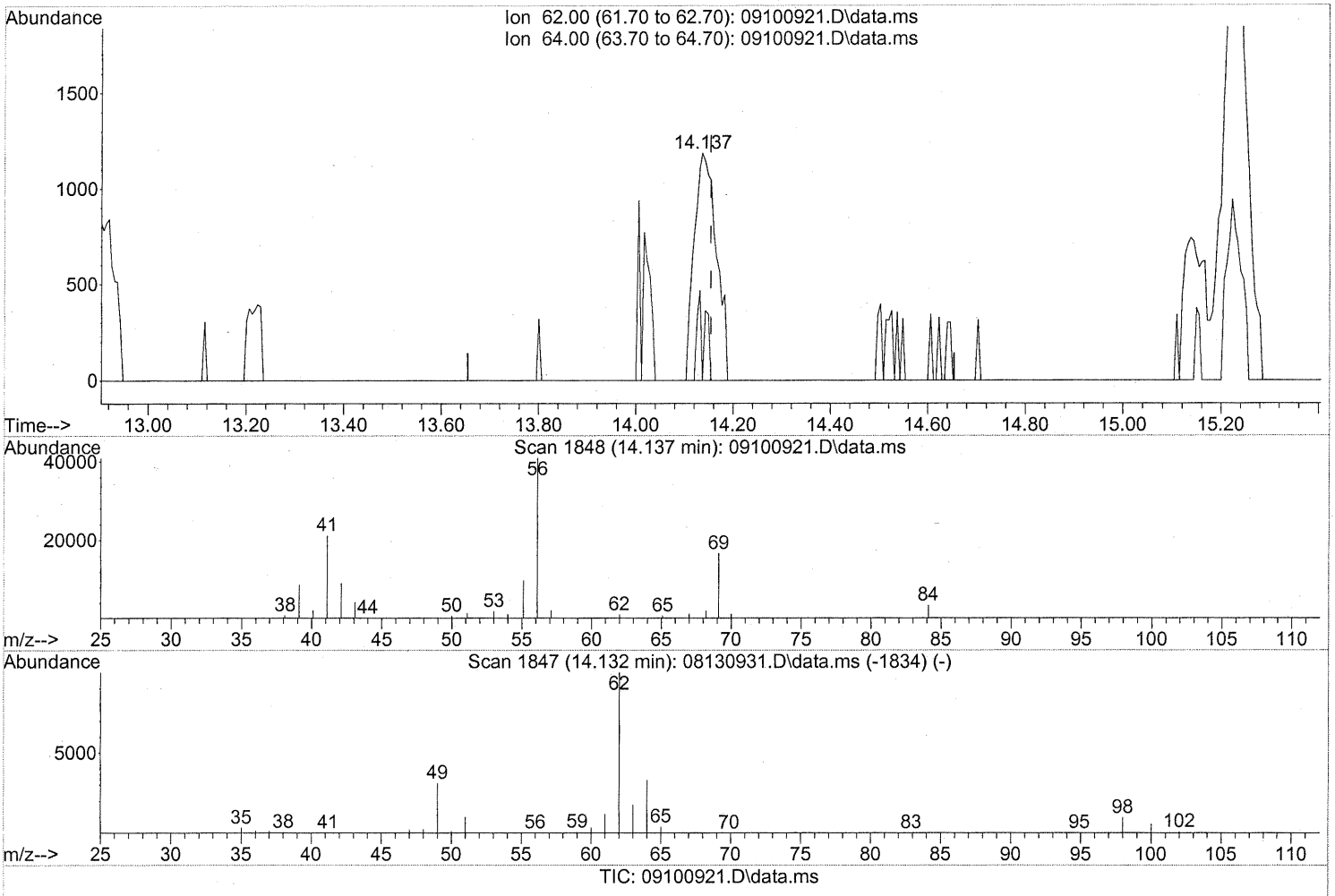
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	96.73
42.10	206.50	291.24#
0.00	0.00	0.00

35

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(36) 1,2-Dichloroethane (T)

14.137min (-0.017) 0.15ng

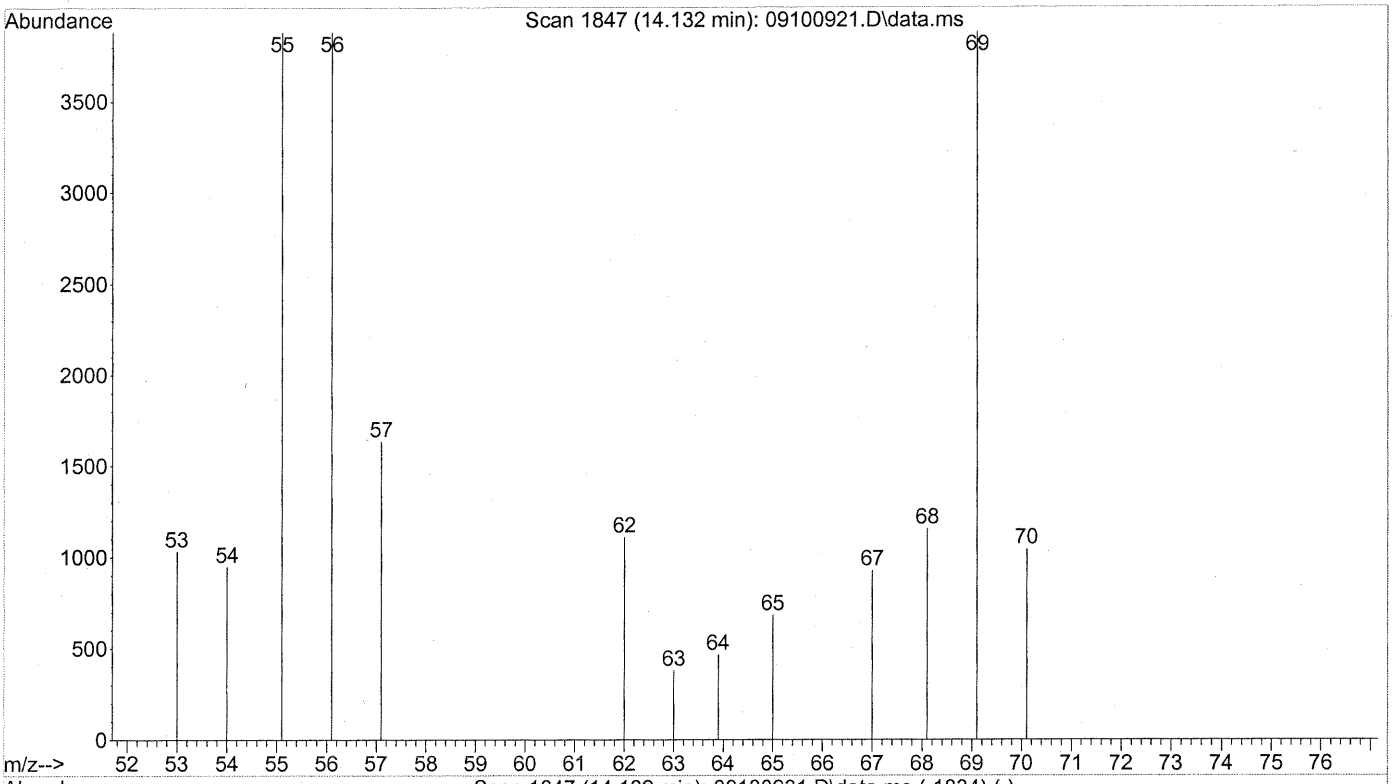
response 3750

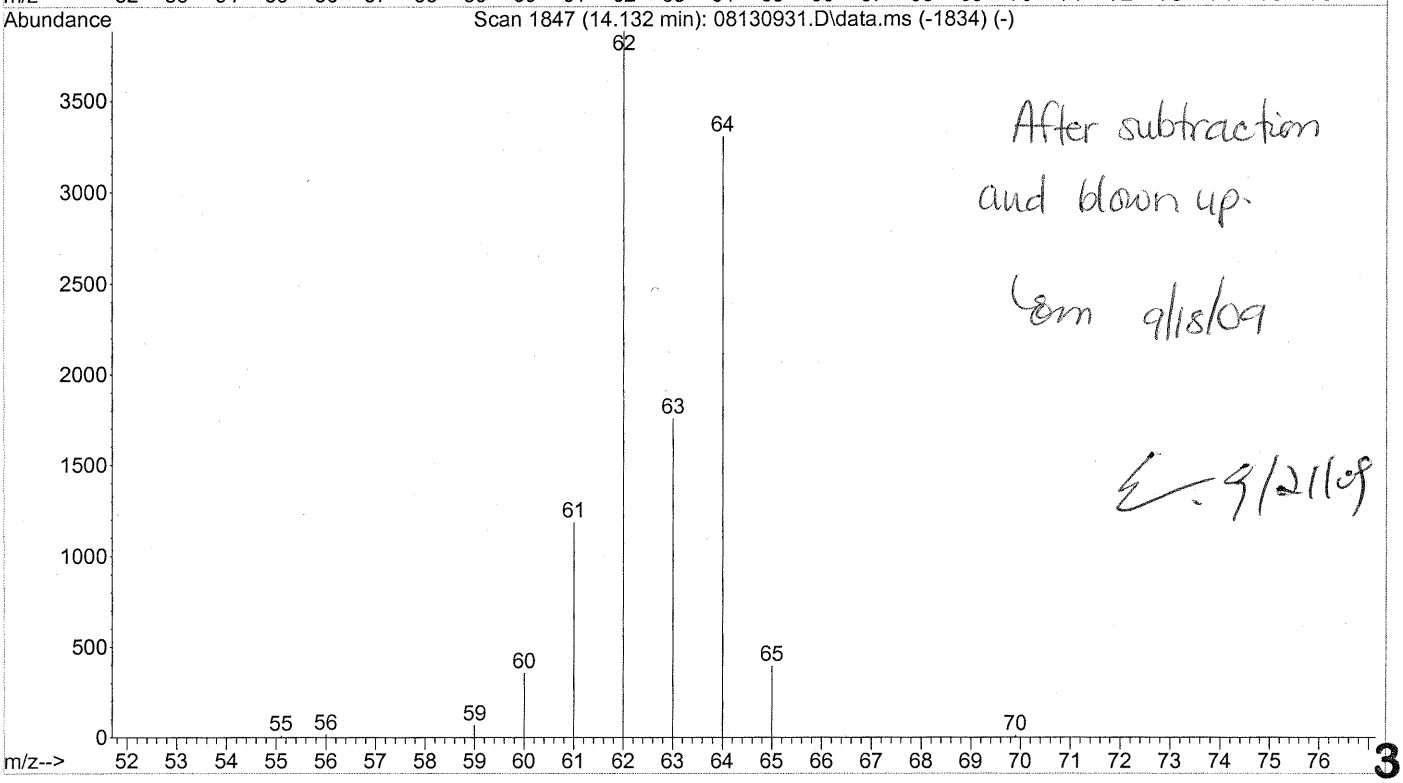
Ion	Exp%	Act%
62.00	100	100
64.00	32.70	6.45#
0.00	0.00	0.00
0.00	0.00	0.00

Before subtraction and blown up.

36

File :J:\MS09\Data\2009_09\10\09100921.D
Operator : EM
Acquired : 10 Sep 2009 22:03 using AcqMethod TO15LOW.M
Instrument : MS09
Sample Name: P0903139-001 (1000ml)
Misc Info : Environmental H &E 106308
Vial Number: 9





After subtraction and blown up.

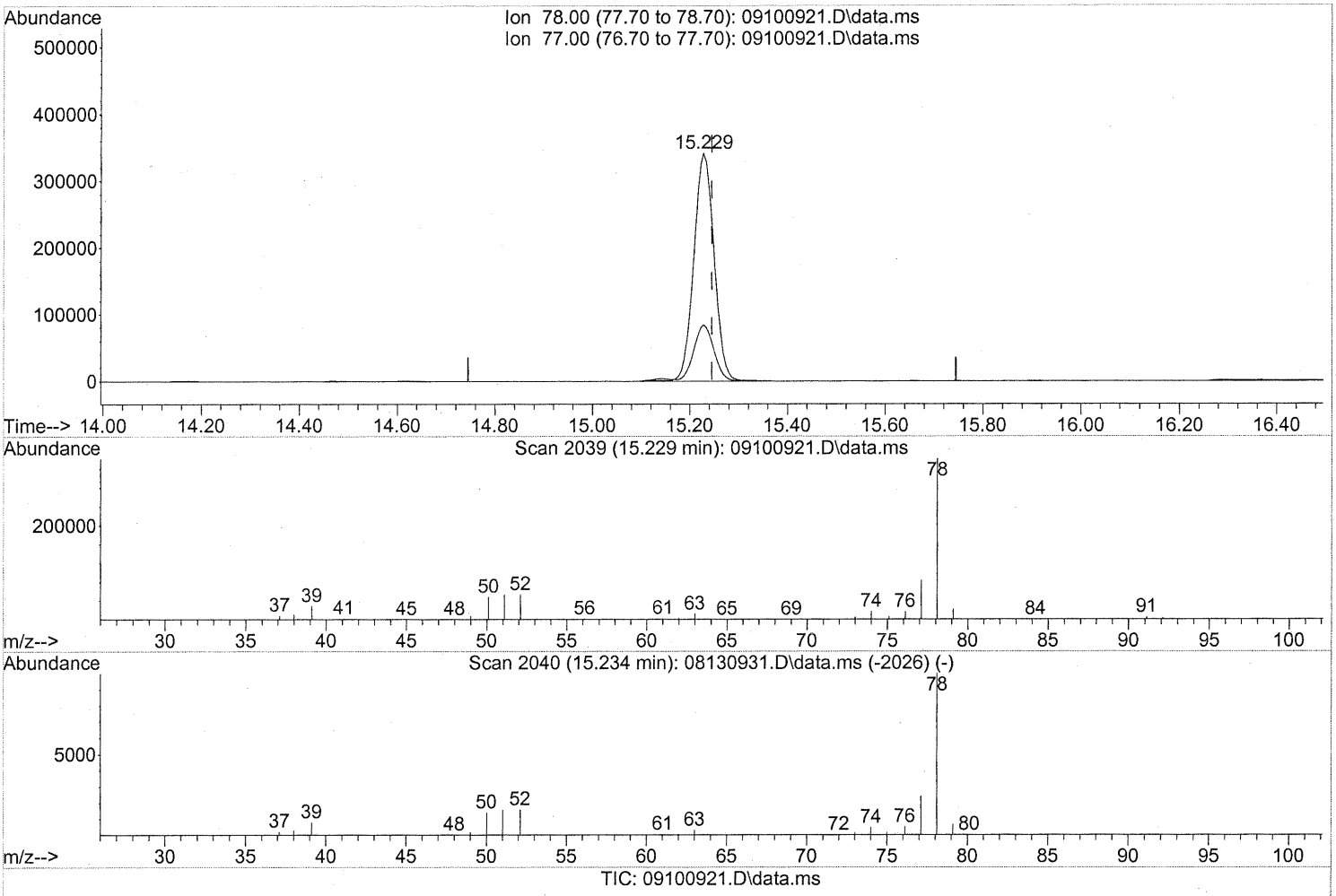
Lem 9/18/09

E. 9/21/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(41) Benzene (T)

15.229min (-0.017) 11.62ng

response 980042

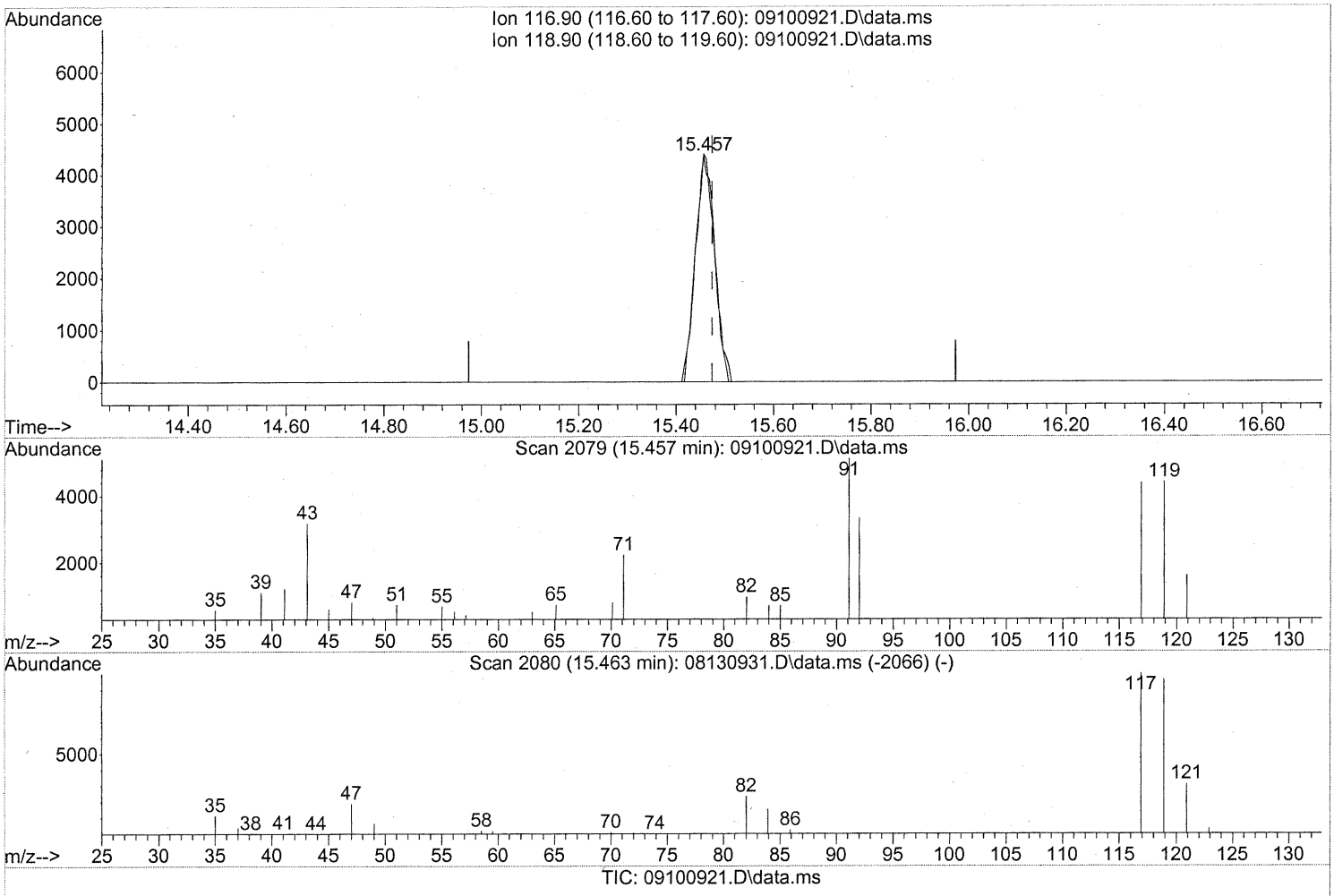
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.31
0.00	0.00	0.00
0.00	0.00	0.00

38

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.52ng

response 12164

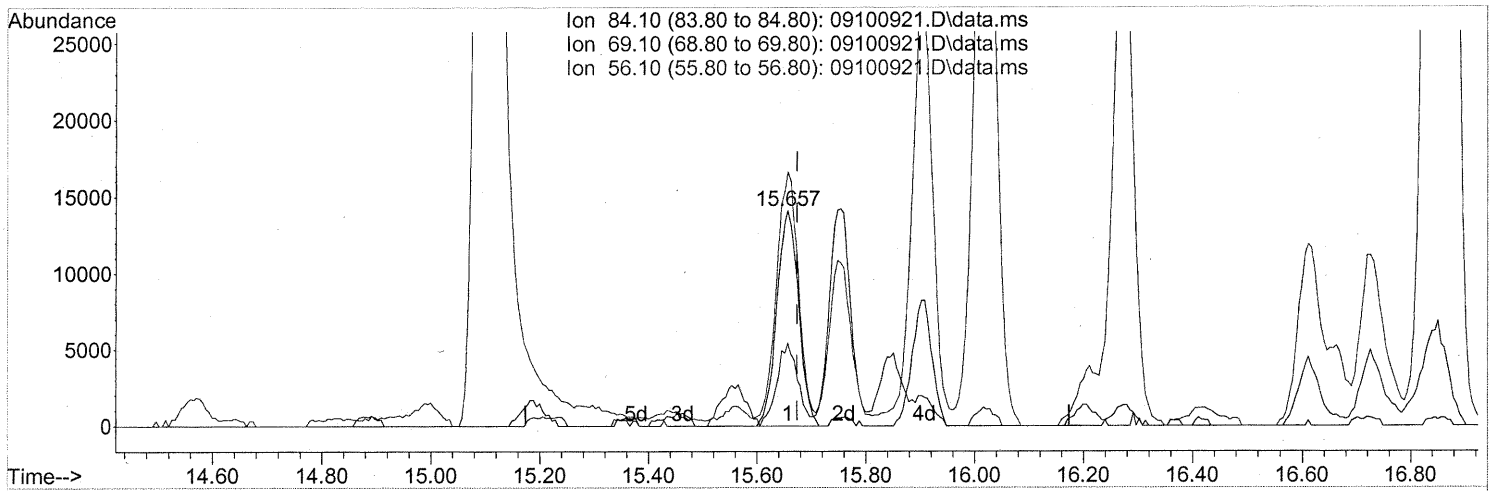
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	96.06
0.00	0.00	0.00
0.00	0.00	0.00

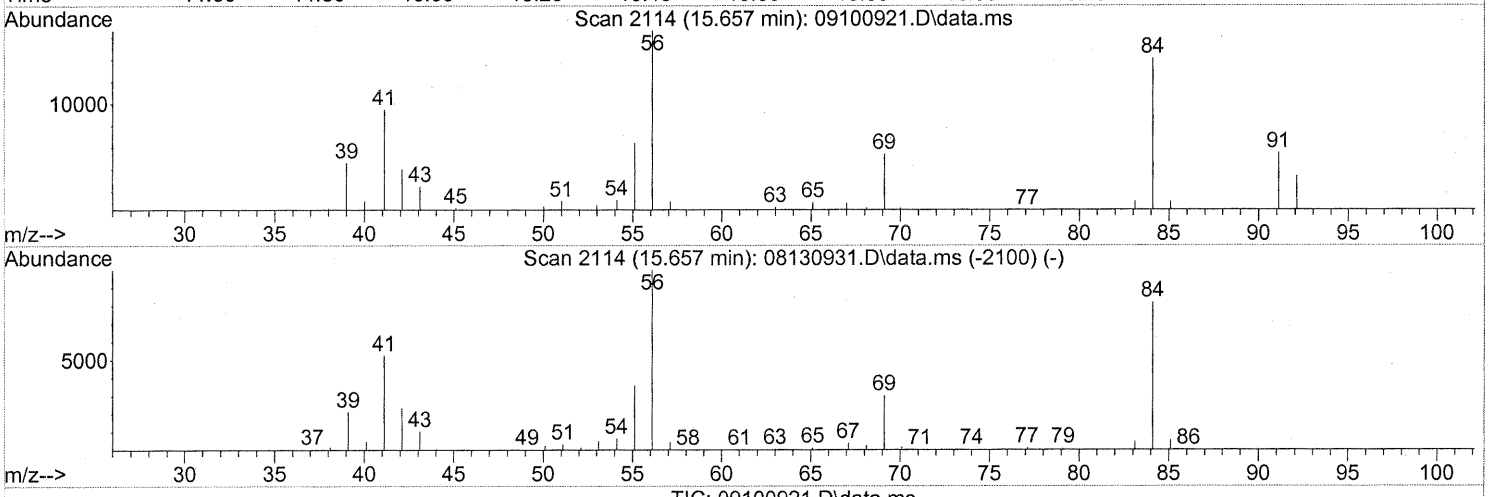
39

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration





TIC: 09100921.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 1.20ng

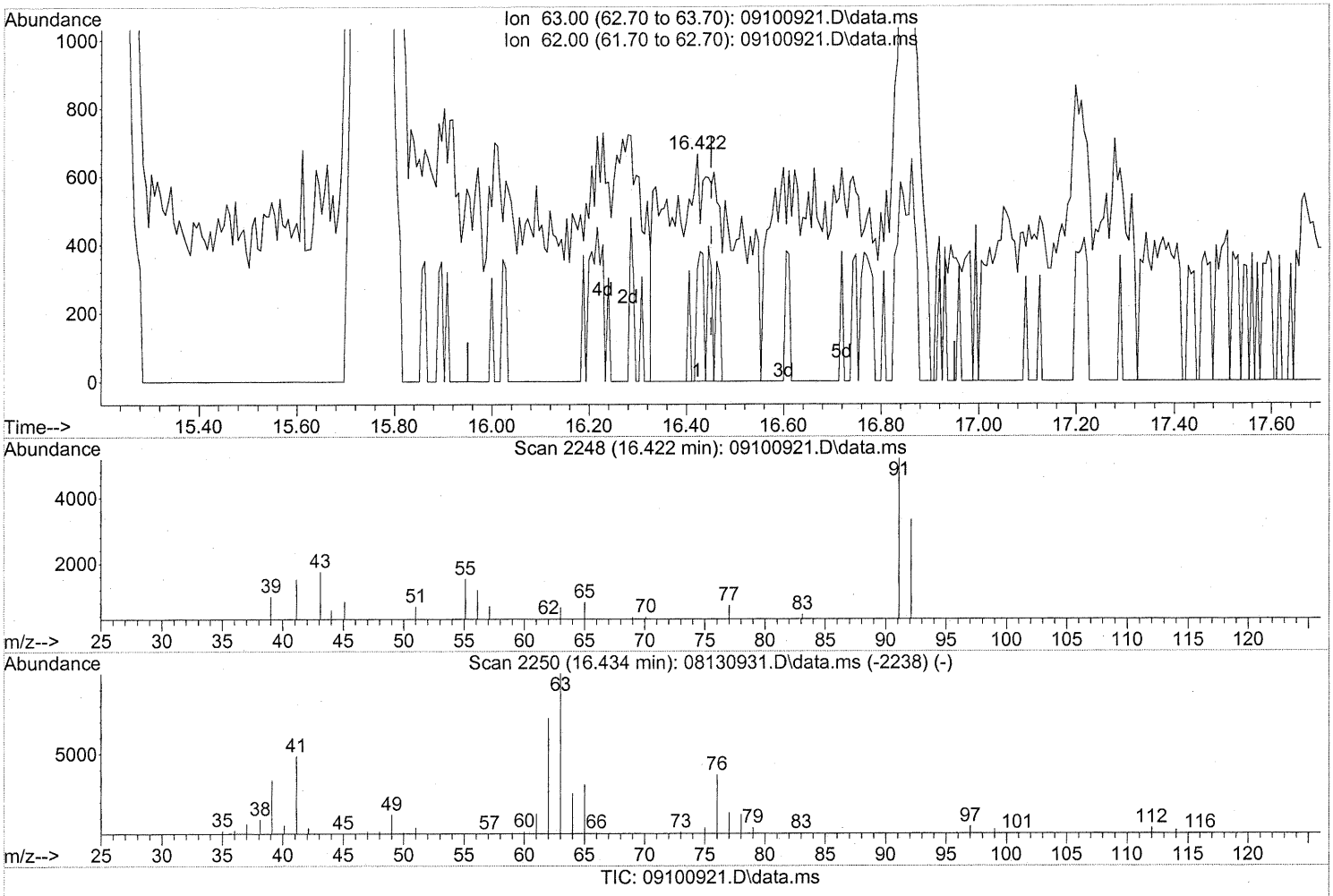
response 39261

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	37.22
56.10	107.30	118.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(45) 1,2-Dichloropropane (T)

16.422min (-0.029) 0.31ng

response 6492

Ion	Exp%	Act%
63.00	100	100
62.00	71.00	5.68#
0.00	0.00	0.00
0.00	0.00	0.00

FP tom 9/18/09

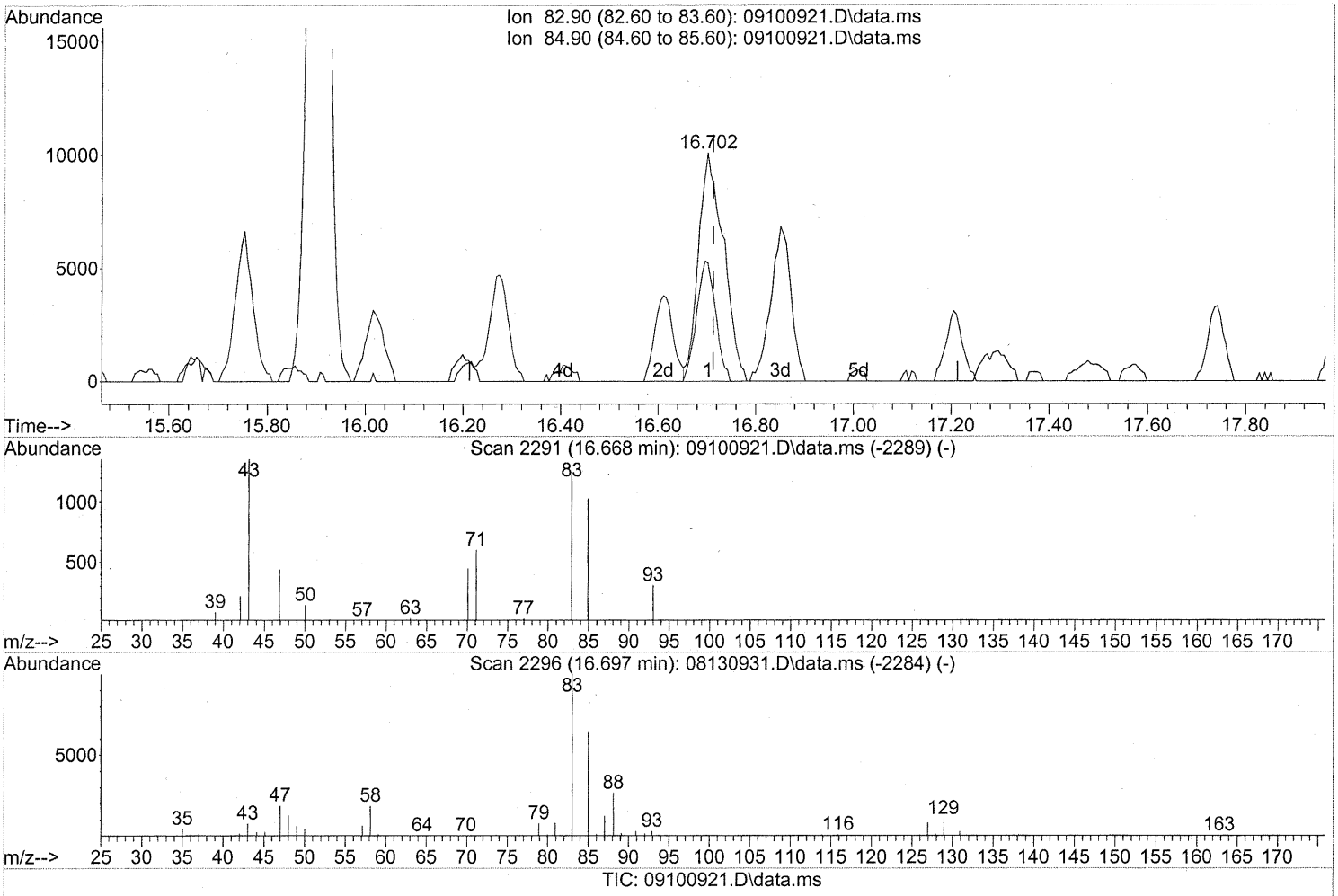
E. 9/21/09

41

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(46) Bromodichloromethane (T)

16.702min (-0.011) 1.46ng

response 36146

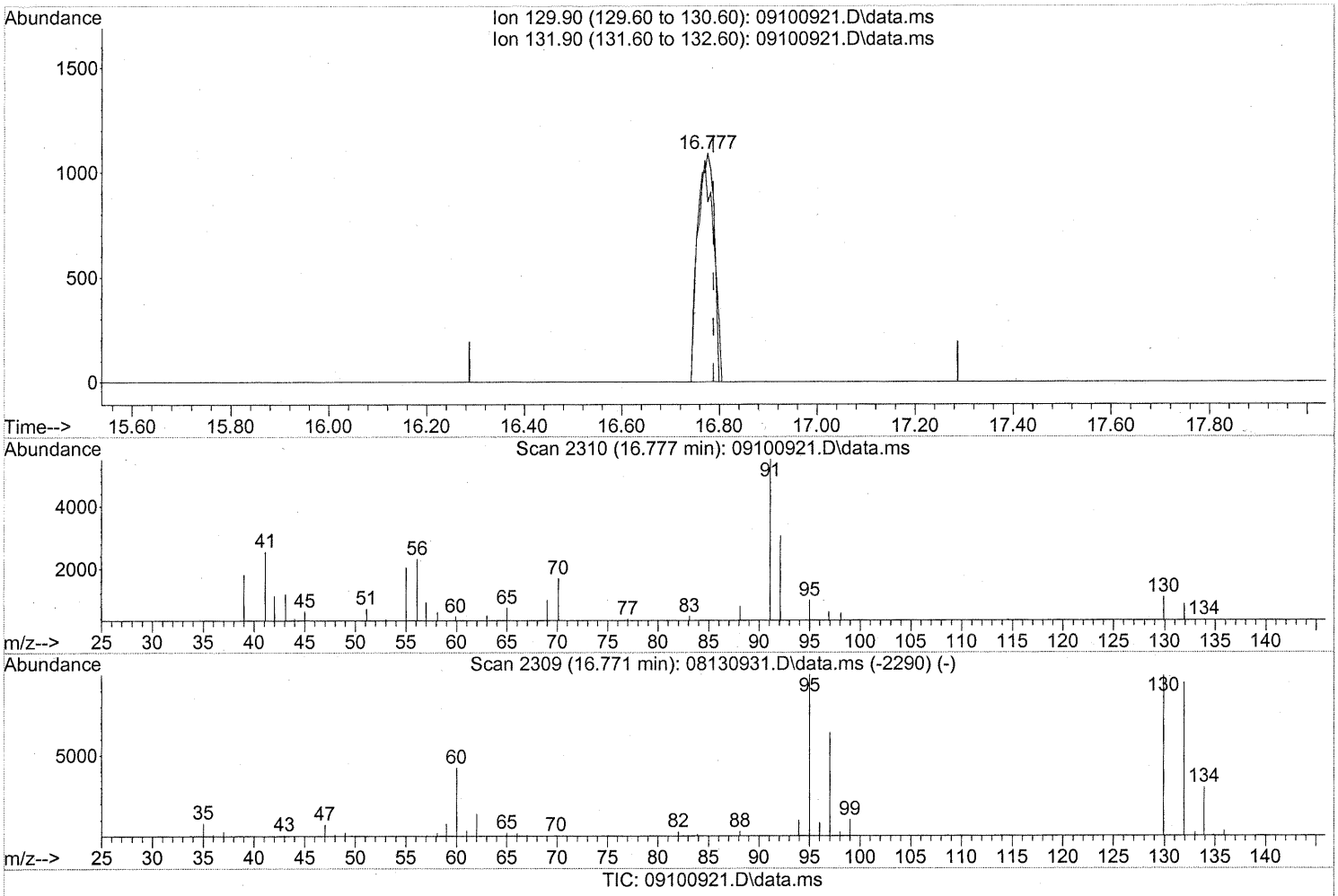
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	39.94#
0.00	0.00	0.00
0.00	0.00	0.00

42

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(47) Trichloroethene (T)

16.777min (-0.011) 0.12ng

response 2540

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	95.24
0.00	0.00	0.00
0.00	0.00	0.00

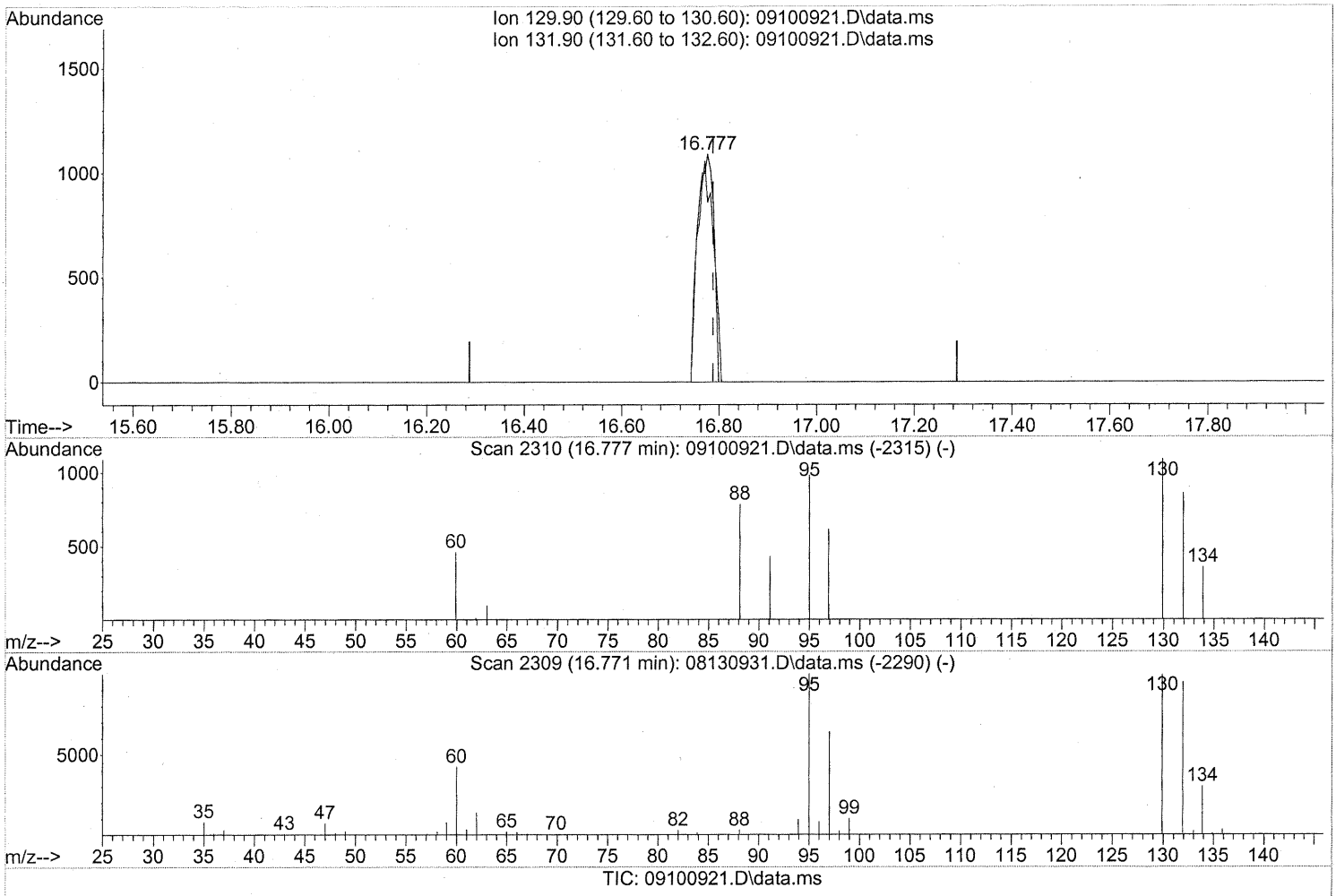
Before subtraction

43

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(47) Trichloroethene (T)

16.777min (-0.011) 0.12ng

response 2540

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	95.24
0.00	0.00	0.00
0.00	0.00	0.00

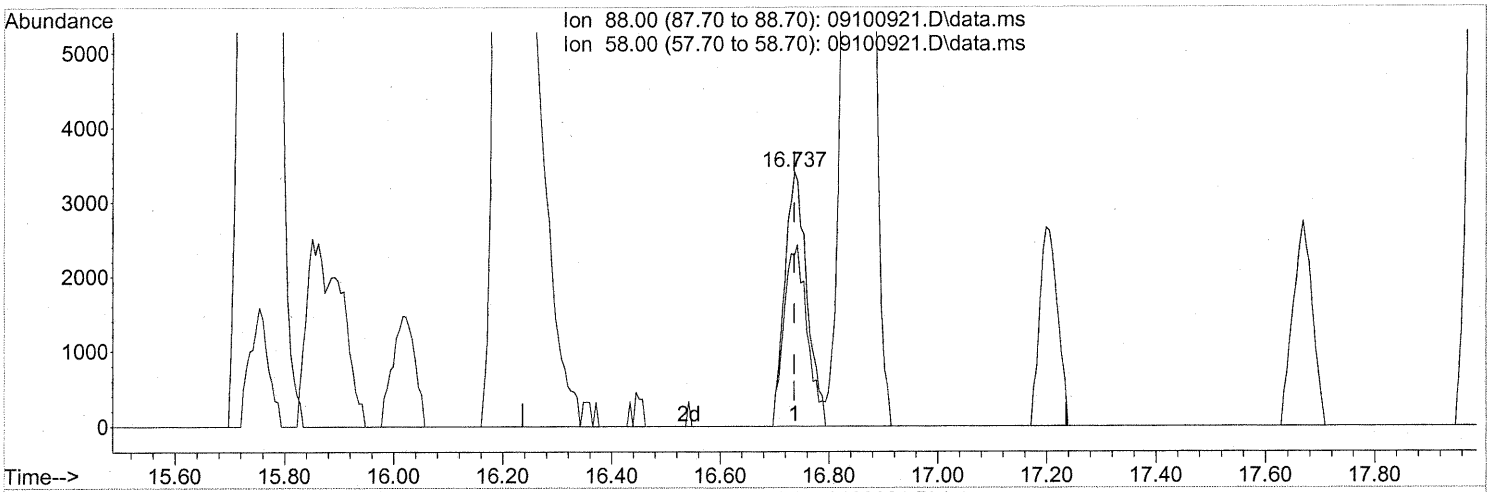
After subtraction

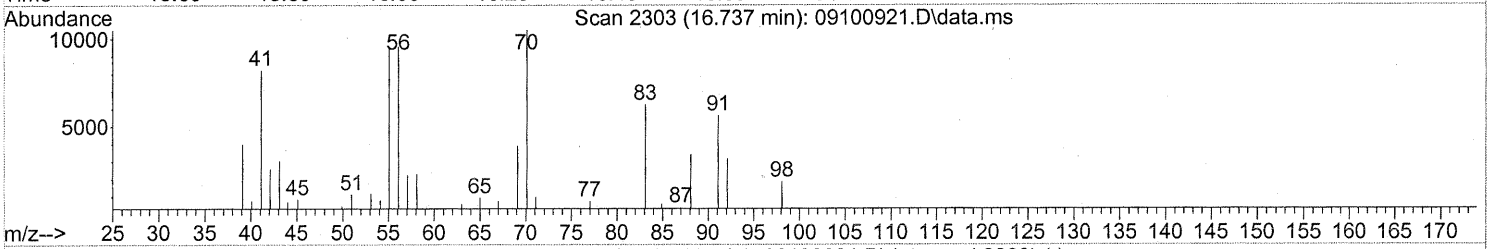
44

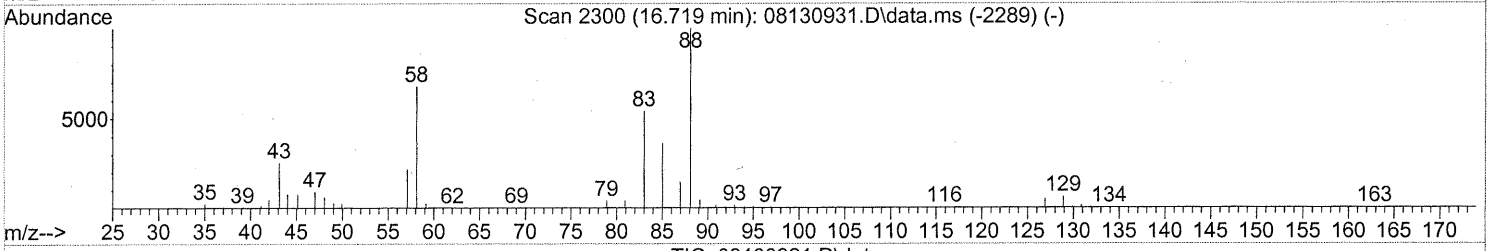
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(48) 1,4-Dioxane (T)

16.737min (+0.000) 0.64ng

response 9581

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	75.62
0.00	0.00	0.00
0.00	0.00	0.00

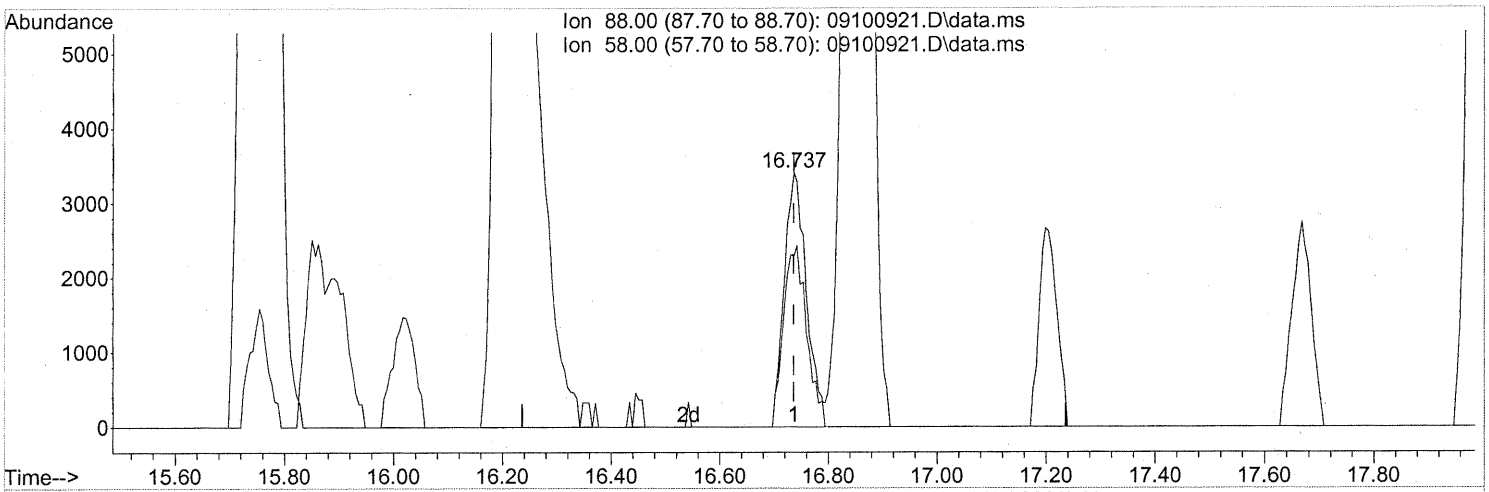
Before subtraction

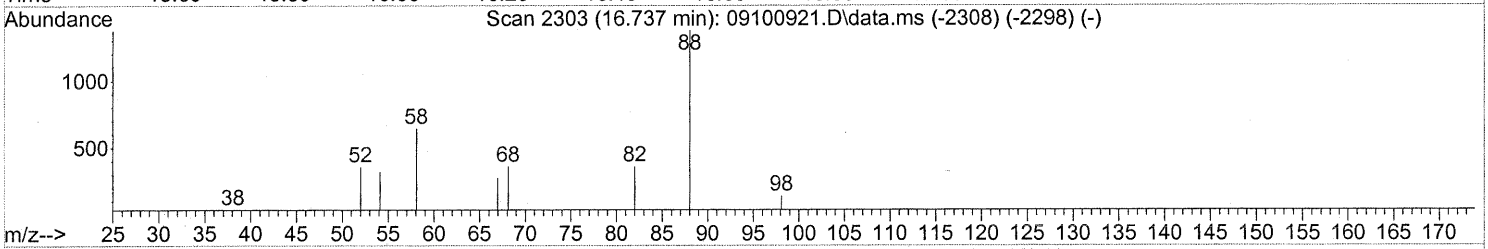
45

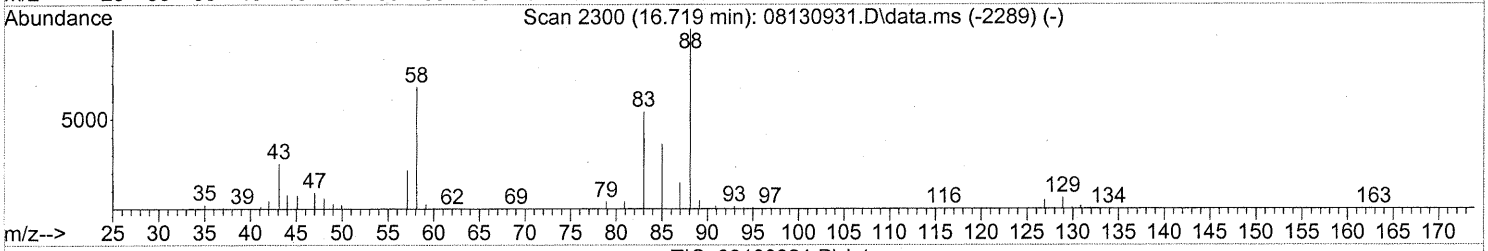
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(48) 1,4-Dioxane (T)

16.737min (+0.000) 0.64ng

response 9581

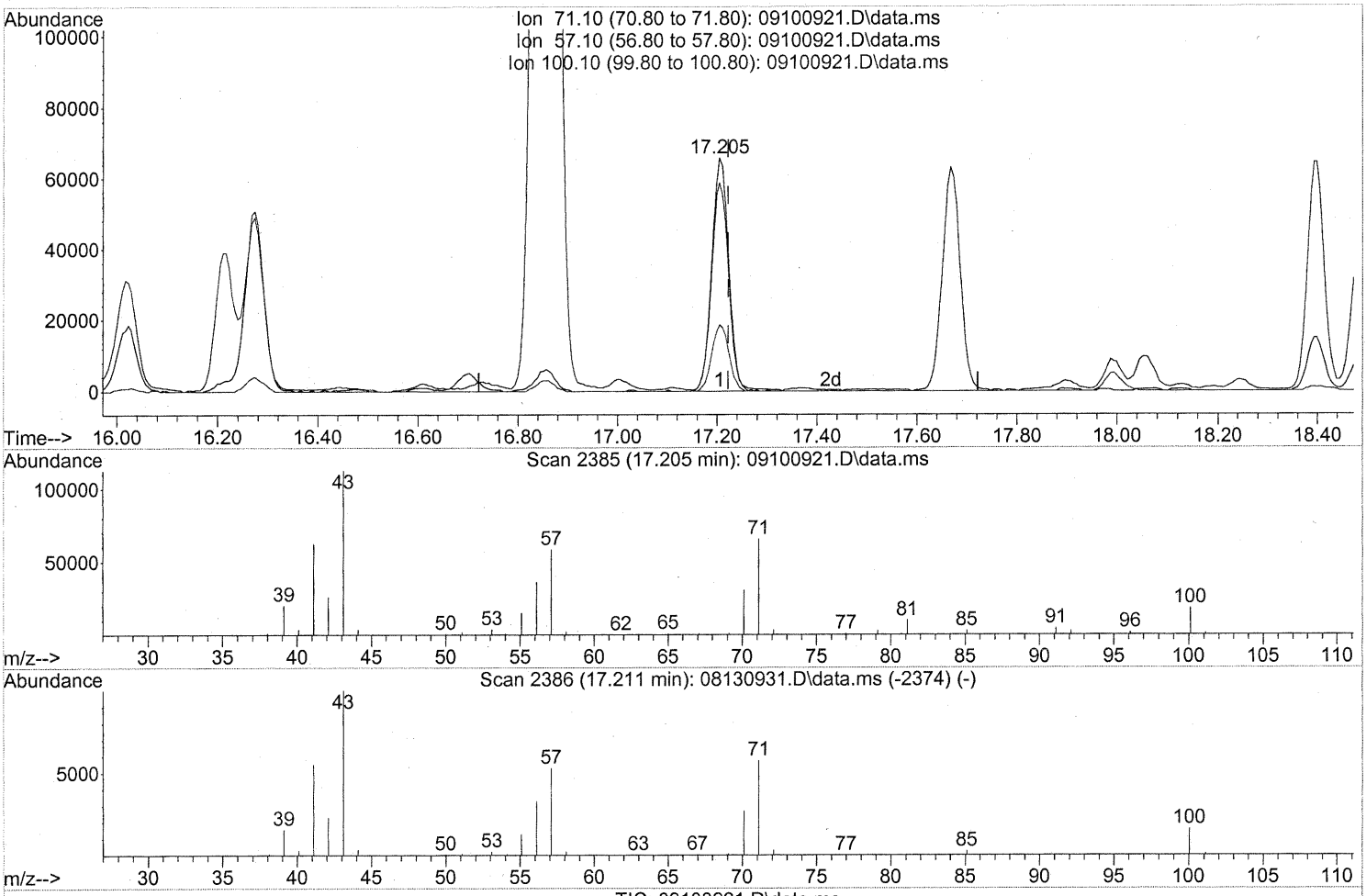
After subtraction

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	75.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(51) n-Heptane (T)

17.205min (-0.017) 6.80ng

response 152617

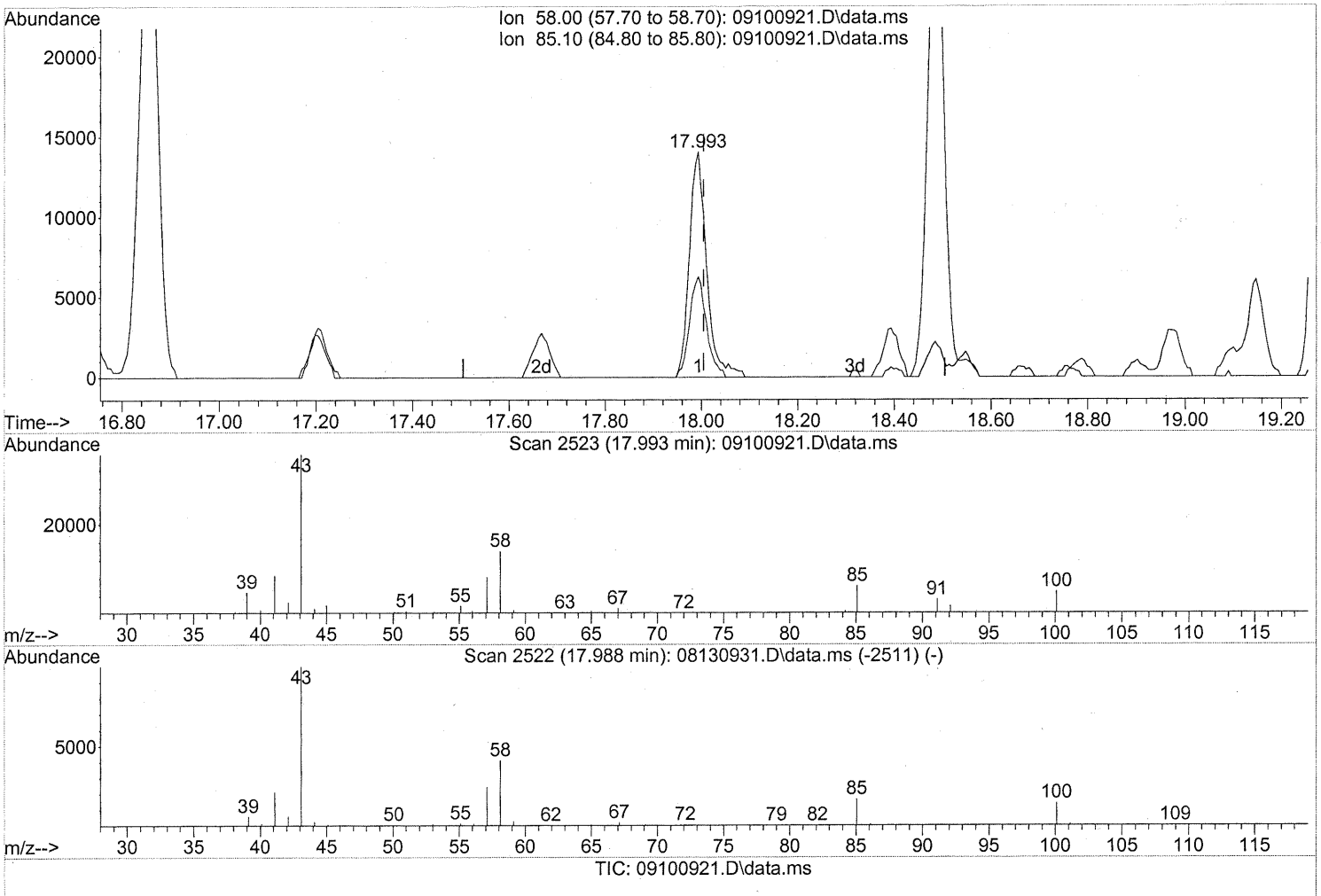
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	91.43
100.10	30.70	28.61
0.00	0.00	0.00

47

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

17.993min (-0.012) 1.93ng

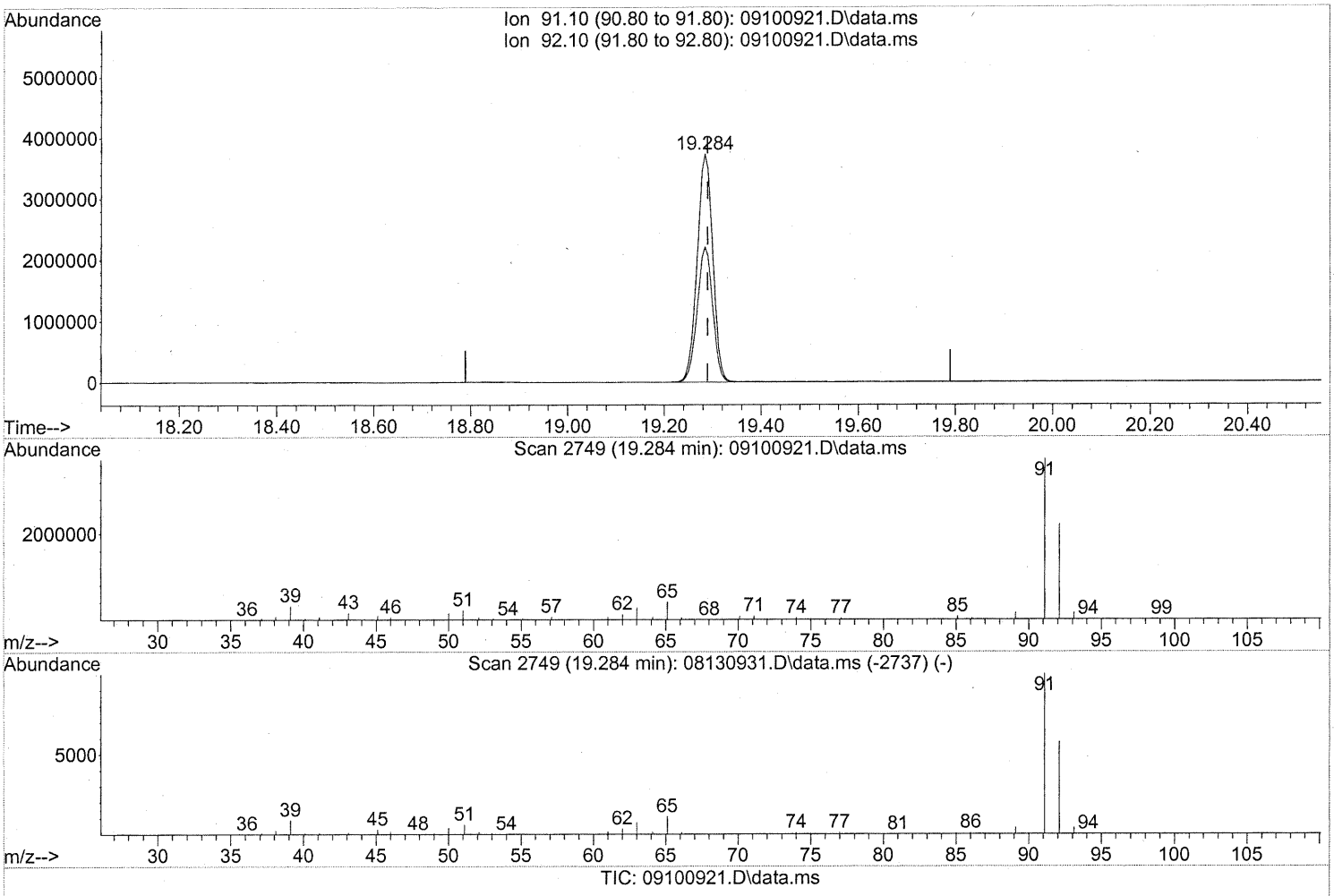
response 35130

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	43.72
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(58) Toluene (T)

19.284min (-0.006) 93.67ng

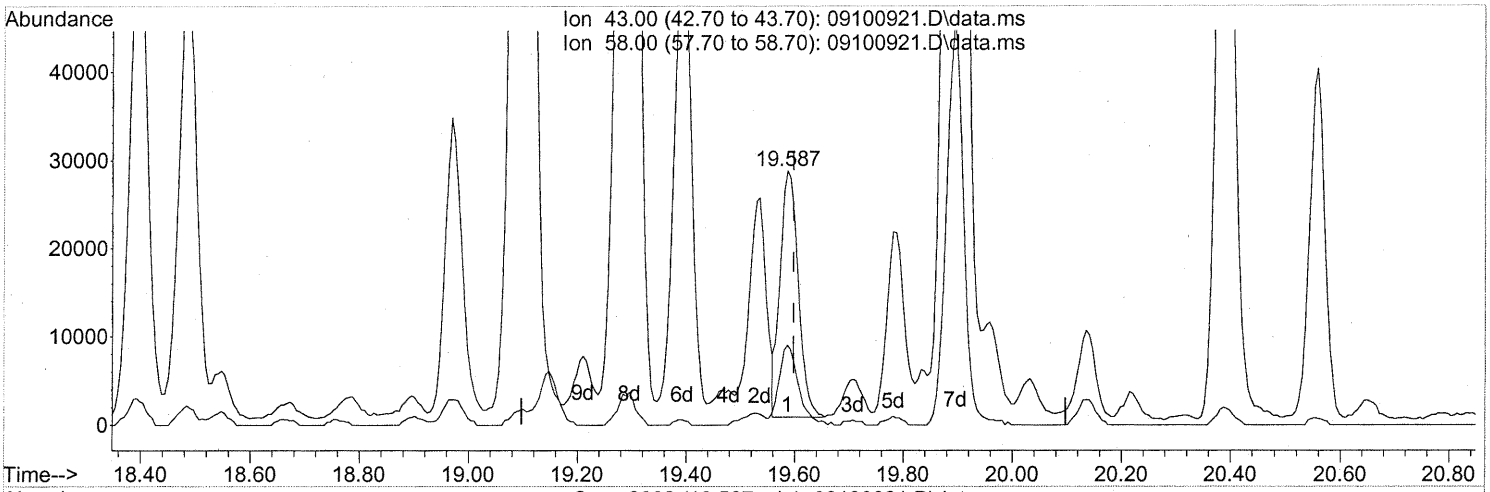
response 8331718

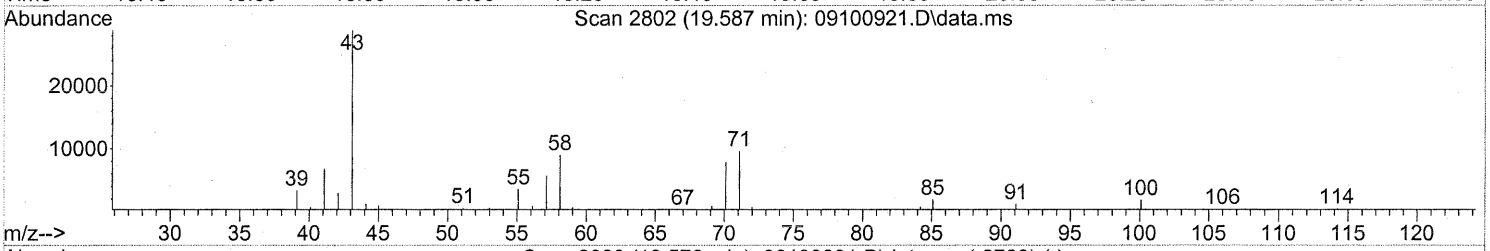
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	58.65
0.00	0.00	0.00
0.00	0.00	0.00

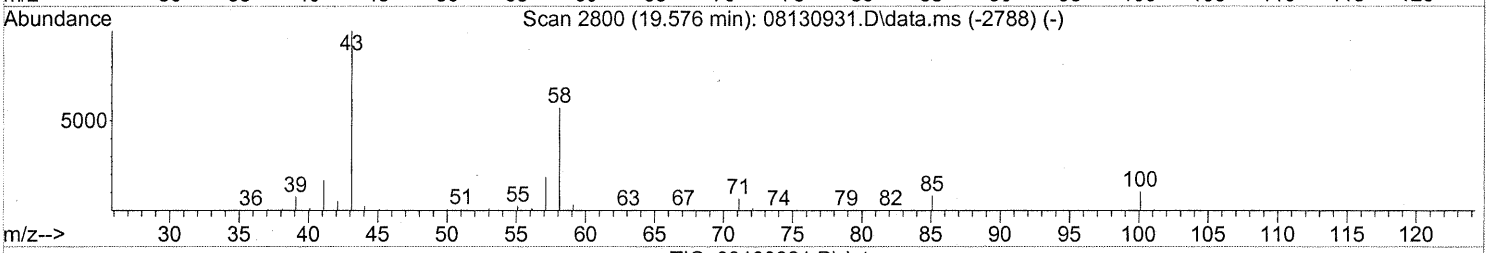
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100921.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 1.39ng

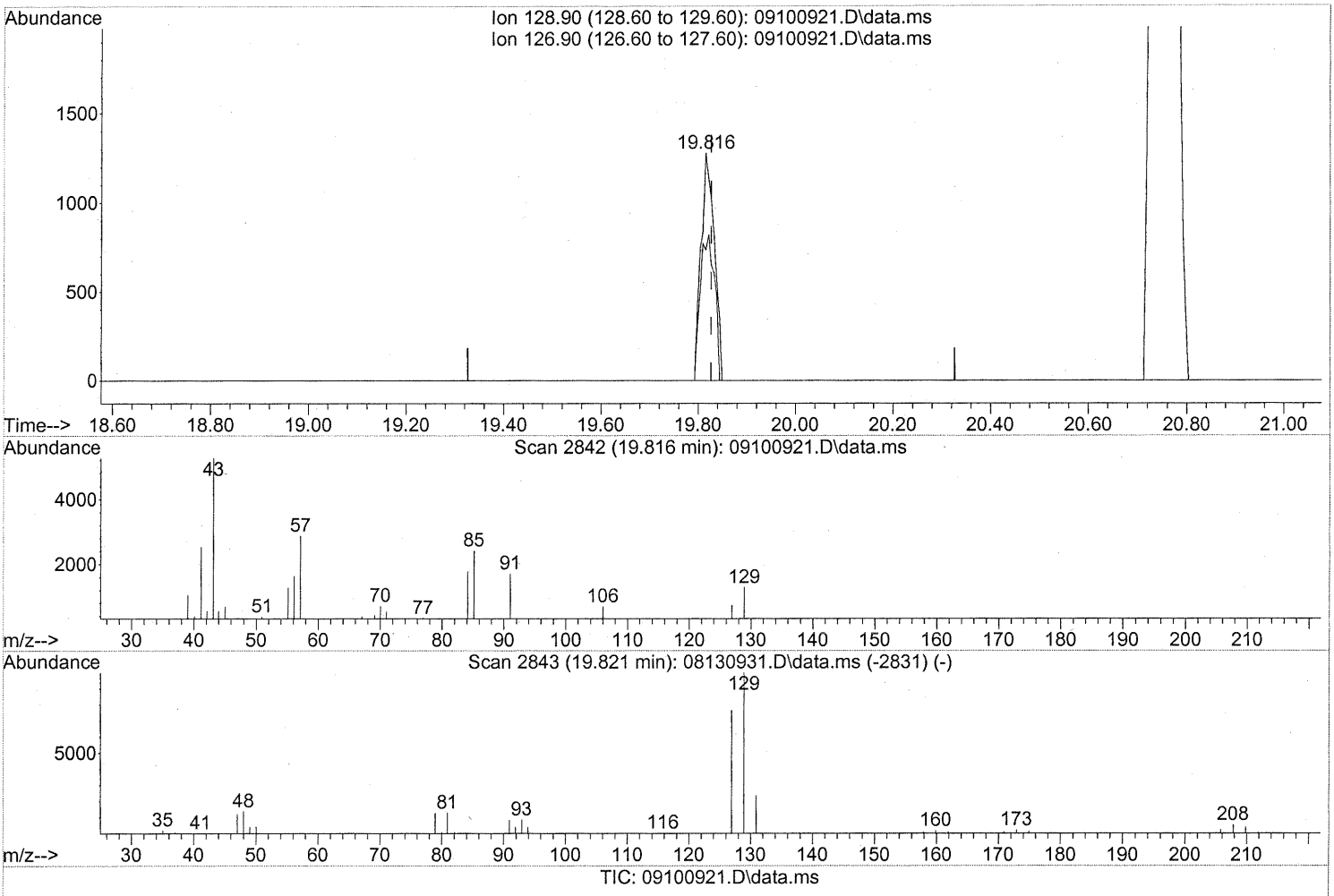
response 64231

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	34.70#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(60) Dibromochloromethane (T)

19.816min (-0.011) 0.13ng

response 2450

Ion	Exp%	Act%
128.90	100	100
126.90	77.60	68.04
0.00	0.00	0.00
0.00	0.00	0.00

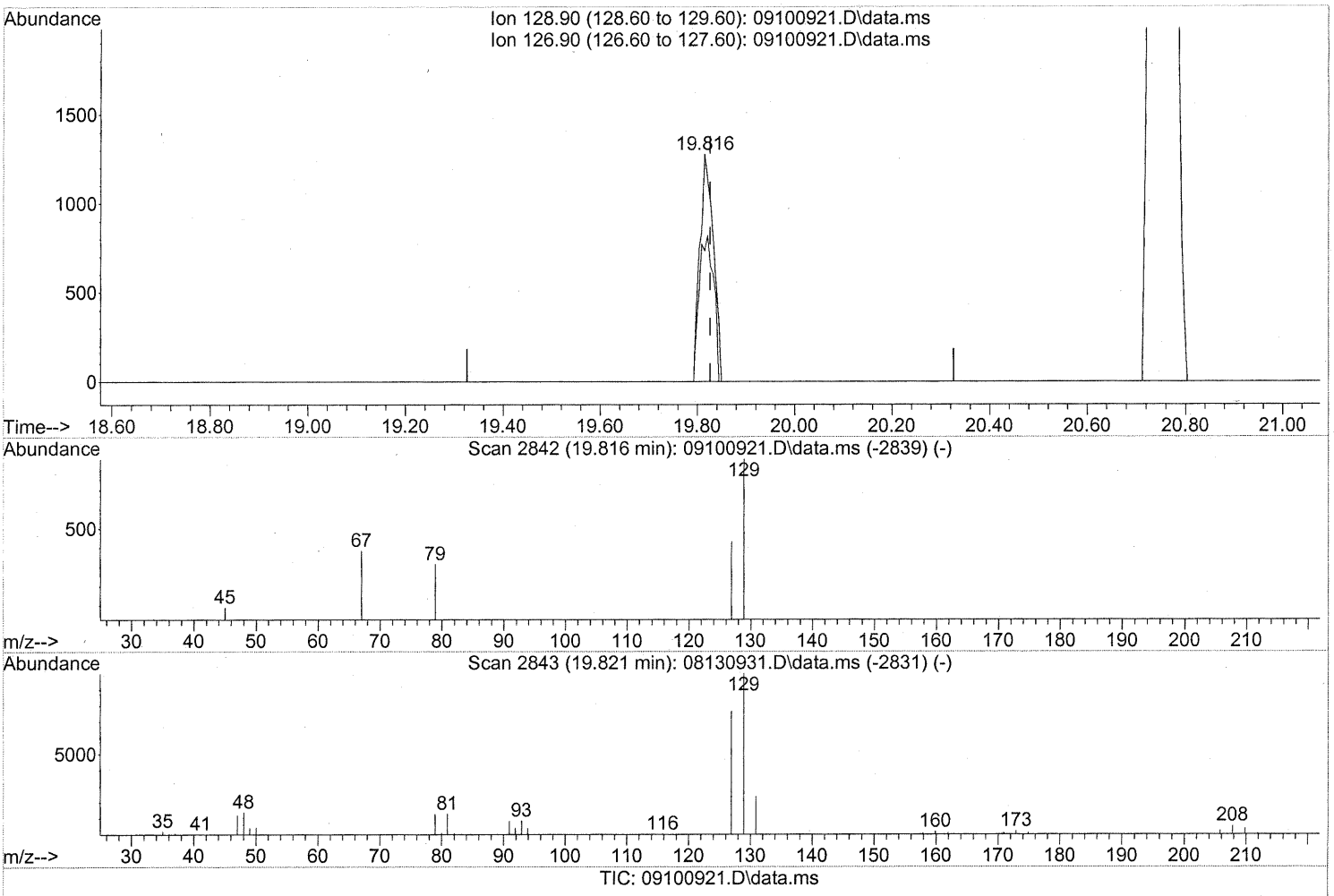
Before subtraction

51

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(60) Dibromochloromethane (T)

19.816min (-0.011) 0.13ng

response 2450

Ion	Exp%	Act%
128.90	100	100
126.90	77.60	68.04
0.00	0.00	0.00
0.00	0.00	0.00

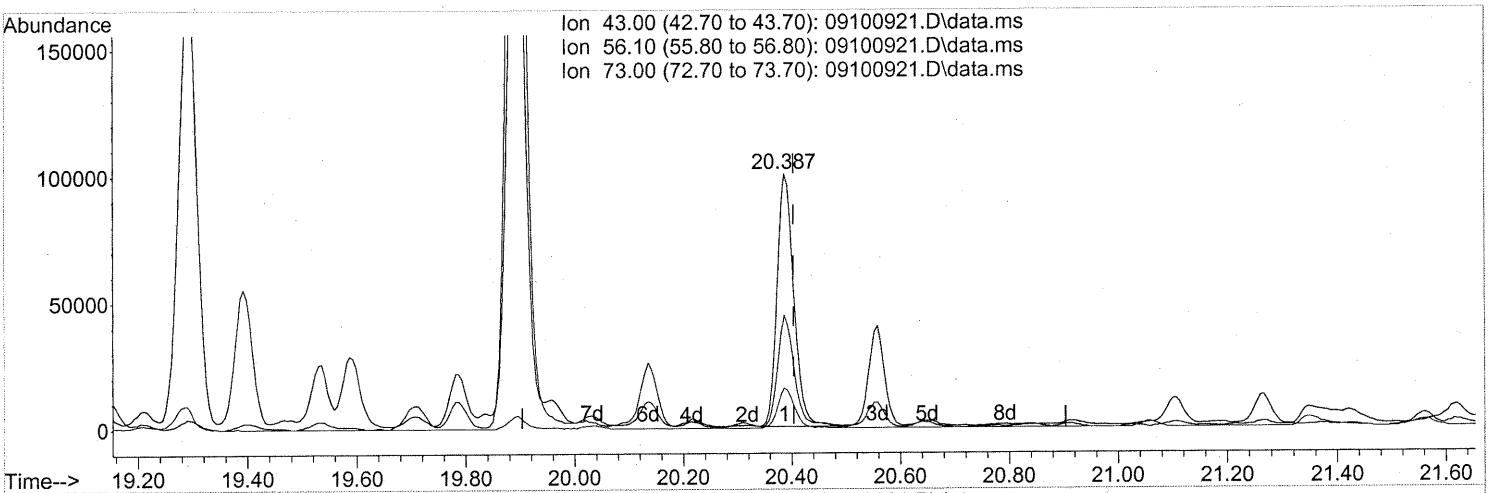
After subtraction

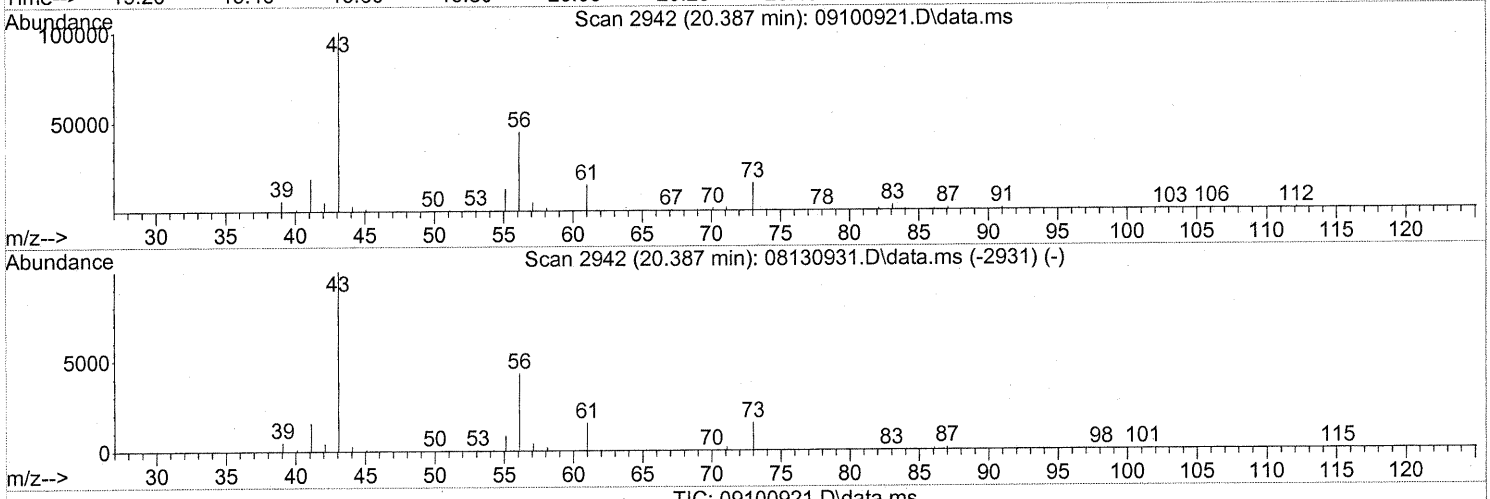
52

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration





TIC: 09100921.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 4.22ng

response 213041

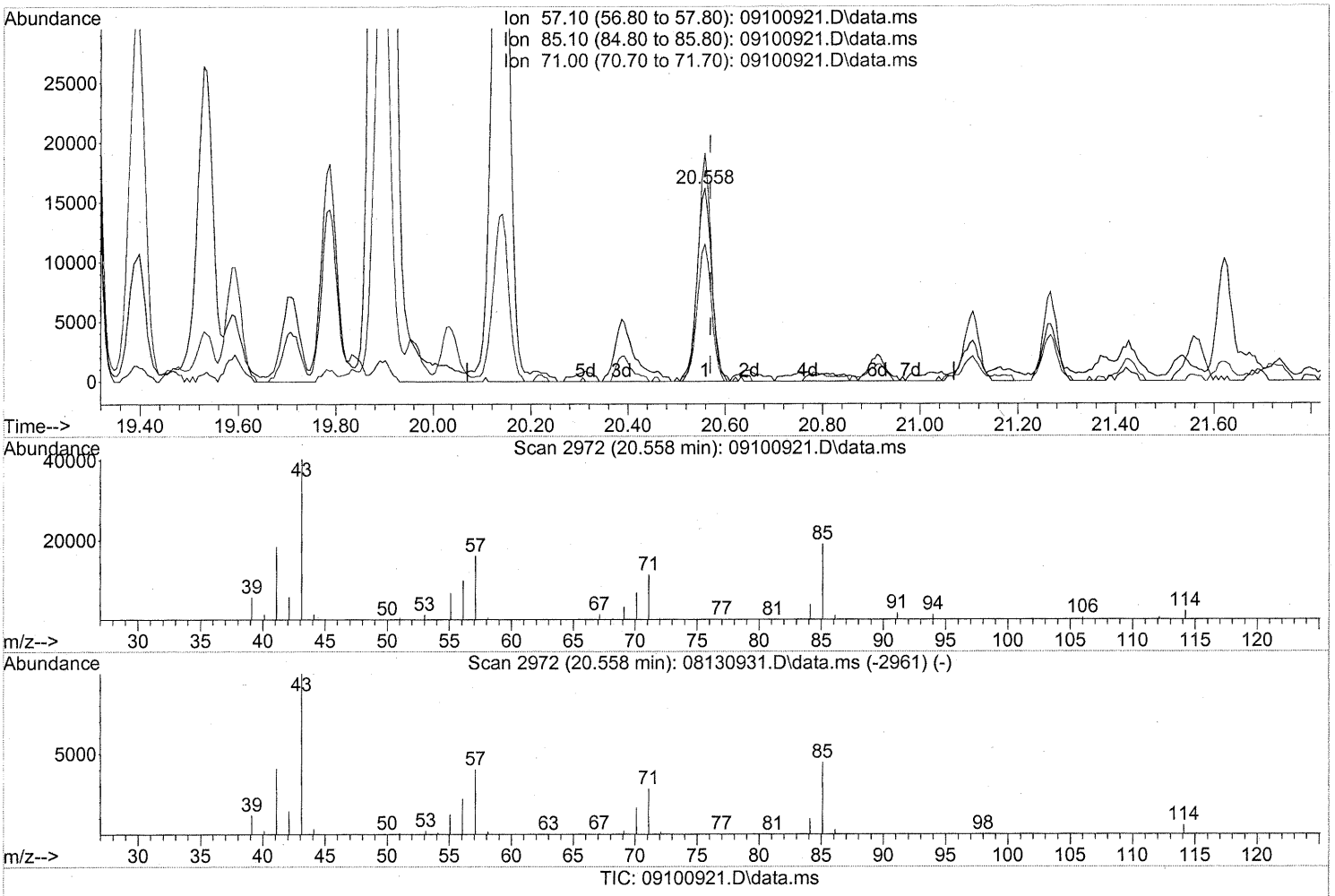
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	44.80
73.00	16.90	15.56
0.00	0.00	0.00

53

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.73ng

response 34282

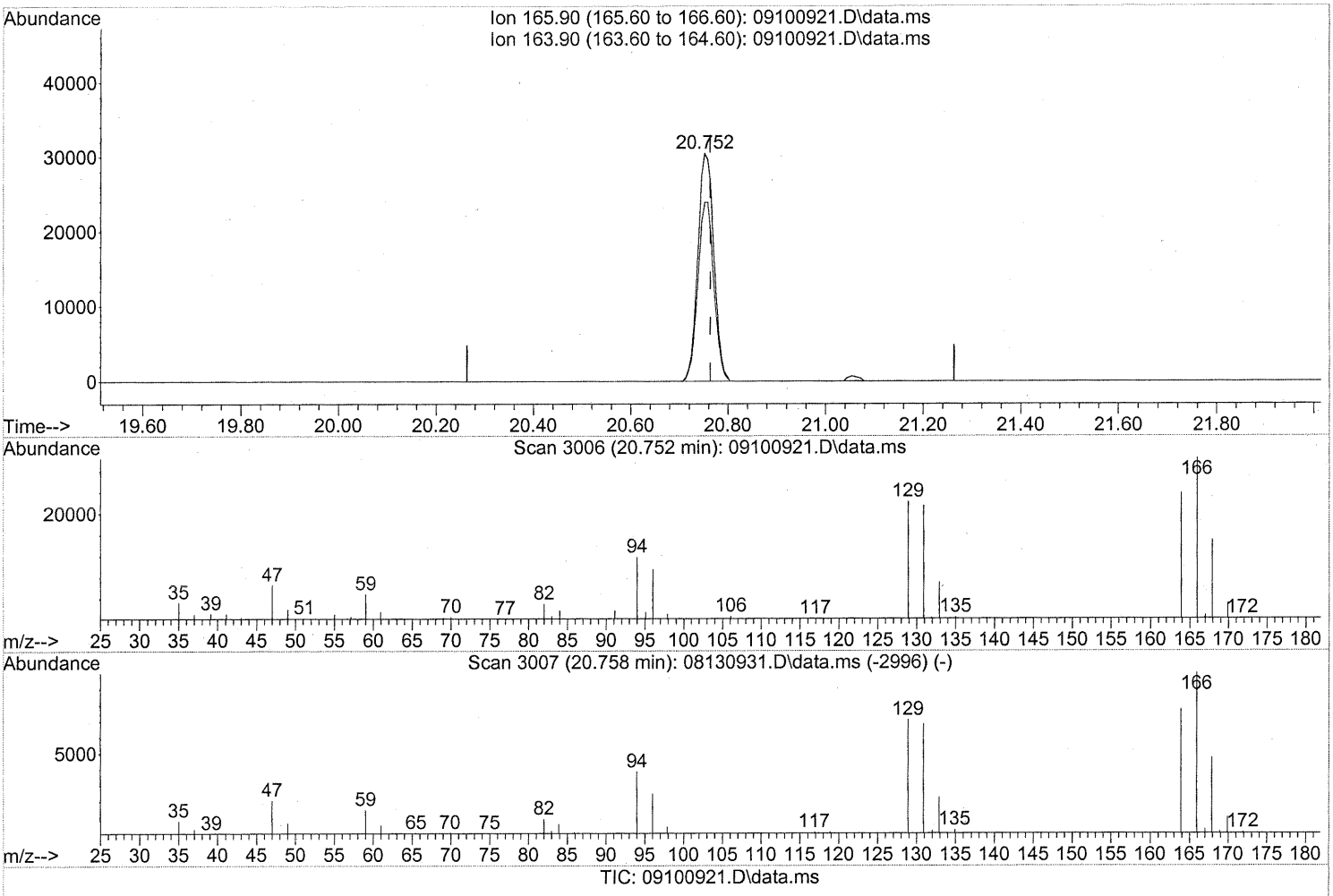
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	106.24
71.00	75.10	68.80
0.00	0.00	0.00

54

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 3.13ng

response 69185

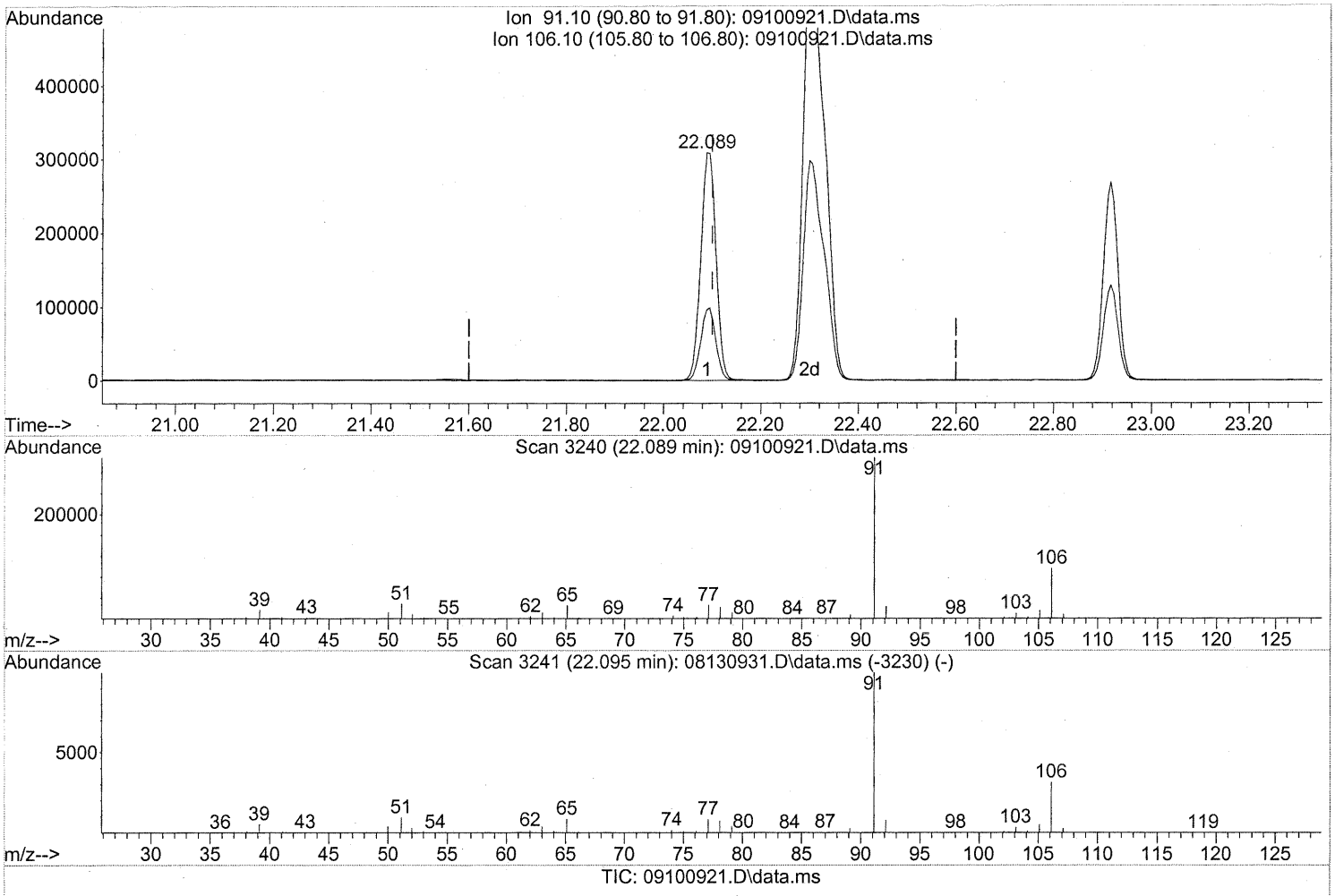
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	77.84
0.00	0.00	0.00
0.00	0.00	0.00

55

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 6.92ng

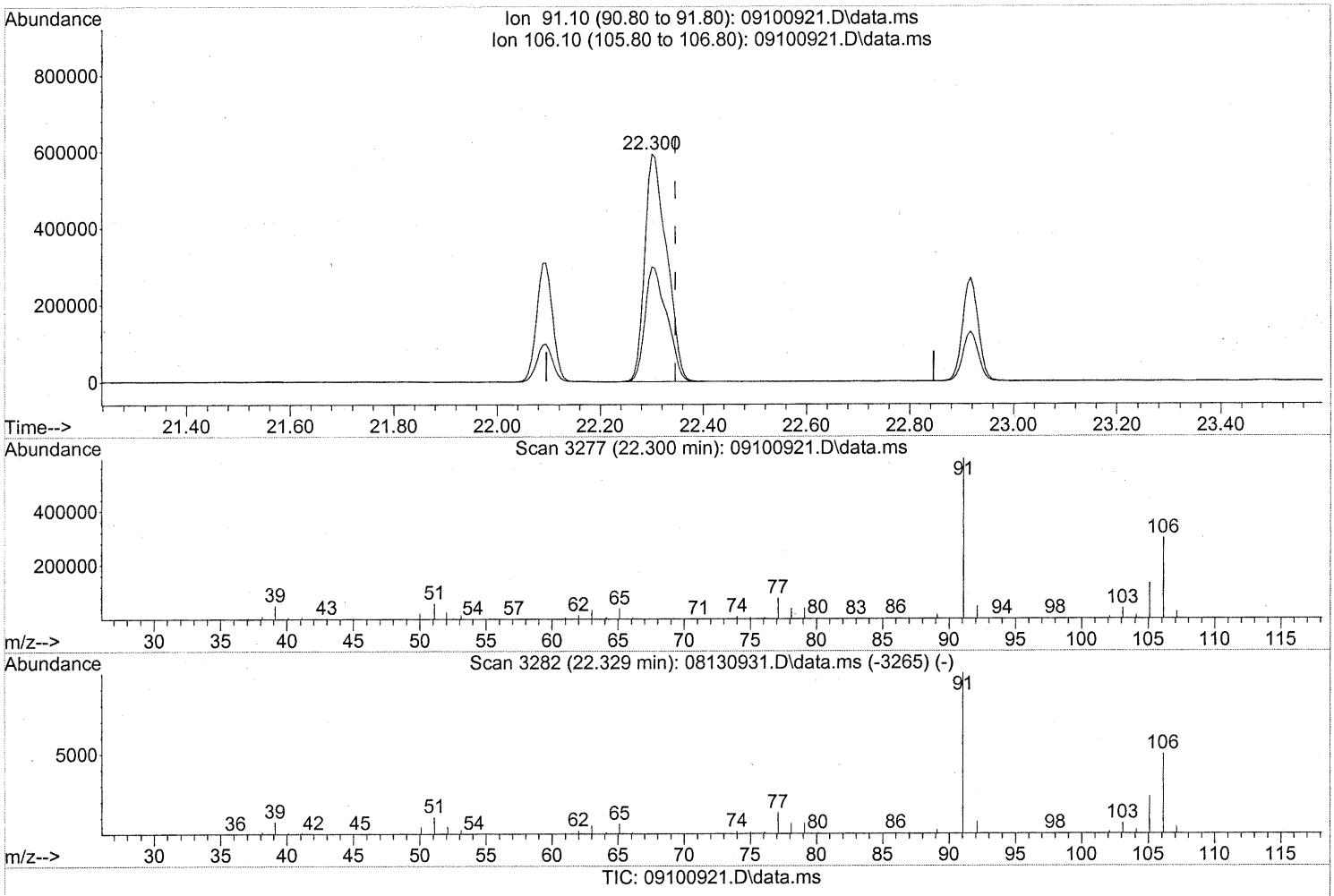
response 664554

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

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

22.300min (-0.046) 22.98ng

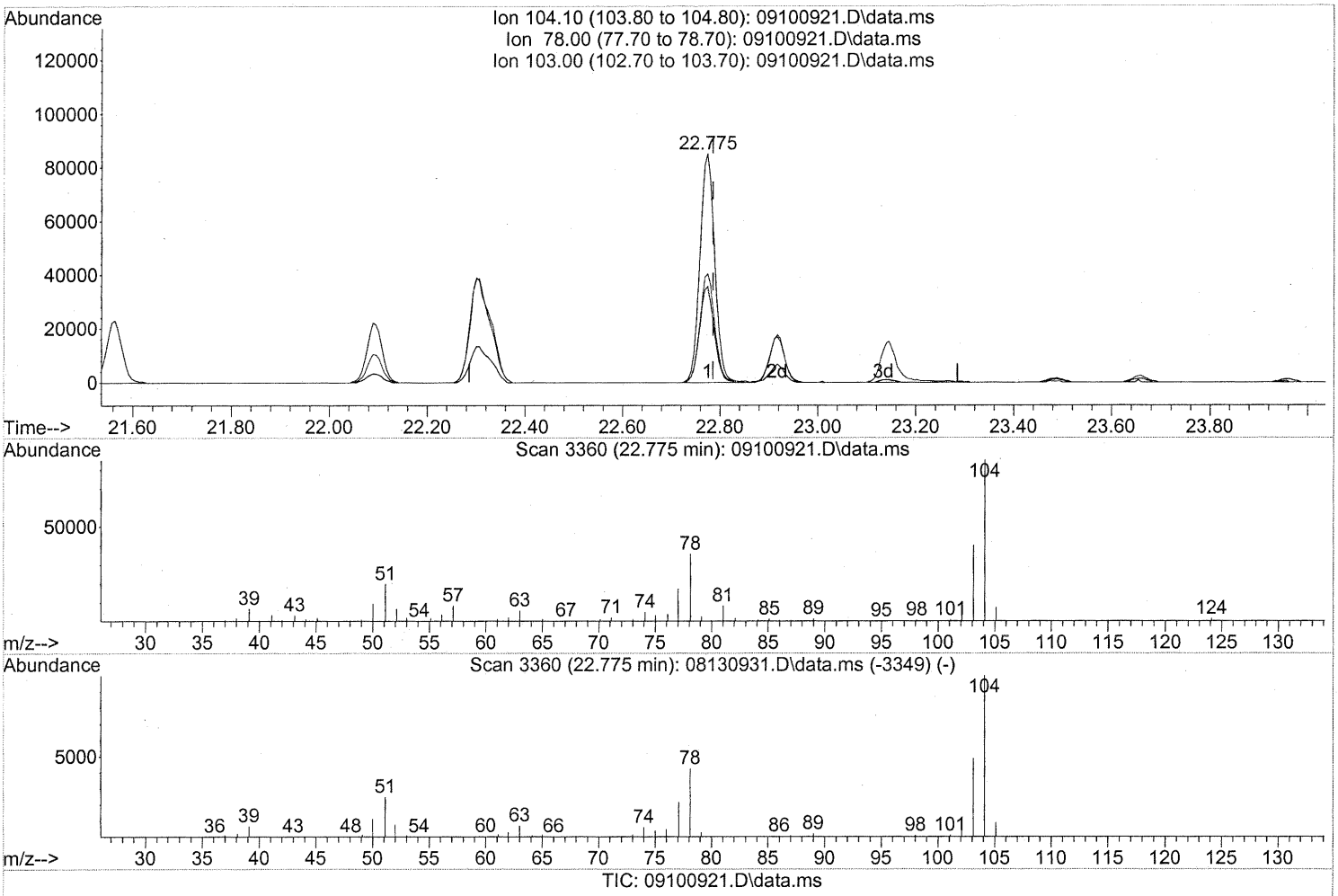
response 1749659

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	50.39
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 3.18ng

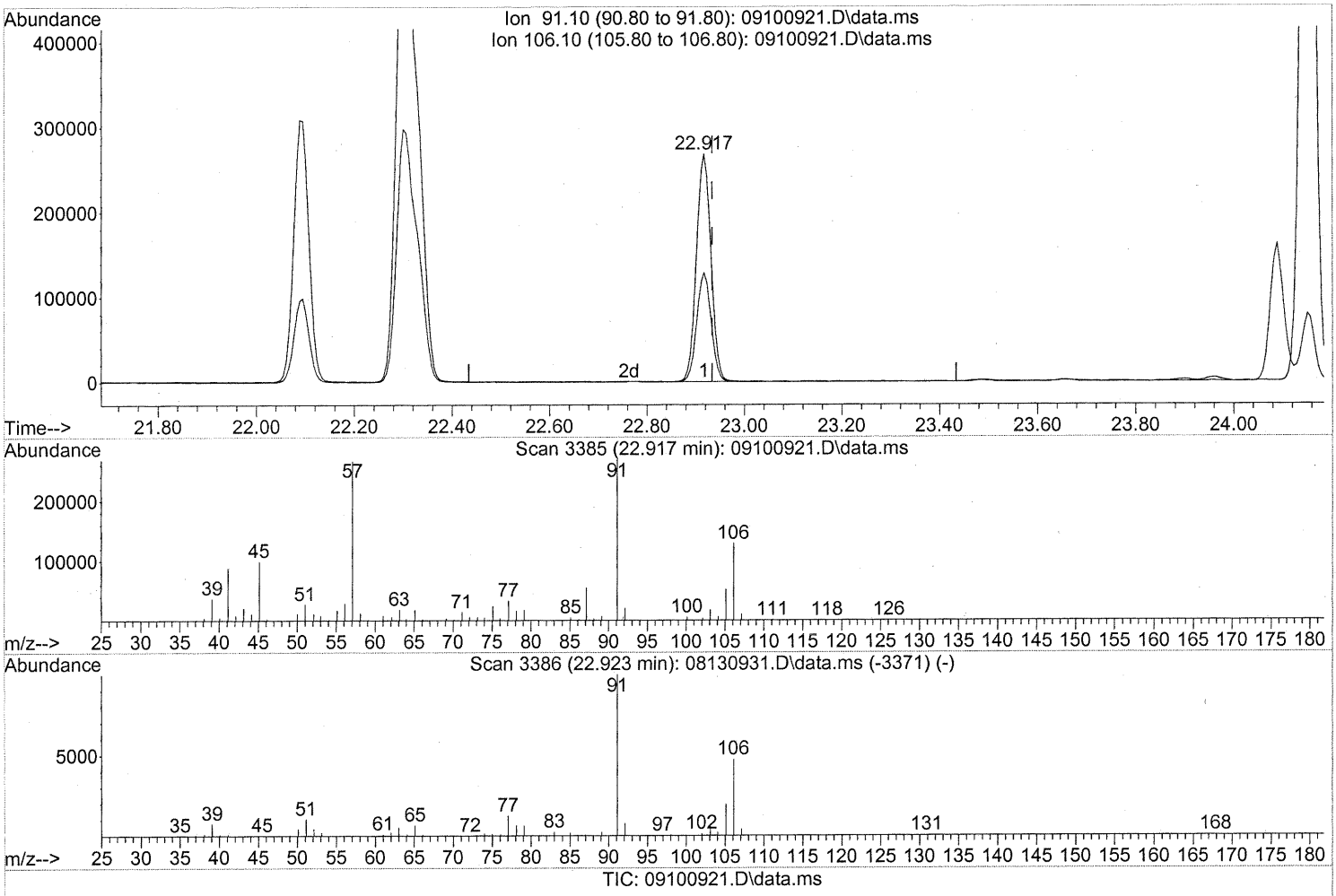
response 178858

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.51
103.00	48.70	48.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 08:05:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100921.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 7.30ng

response 558954

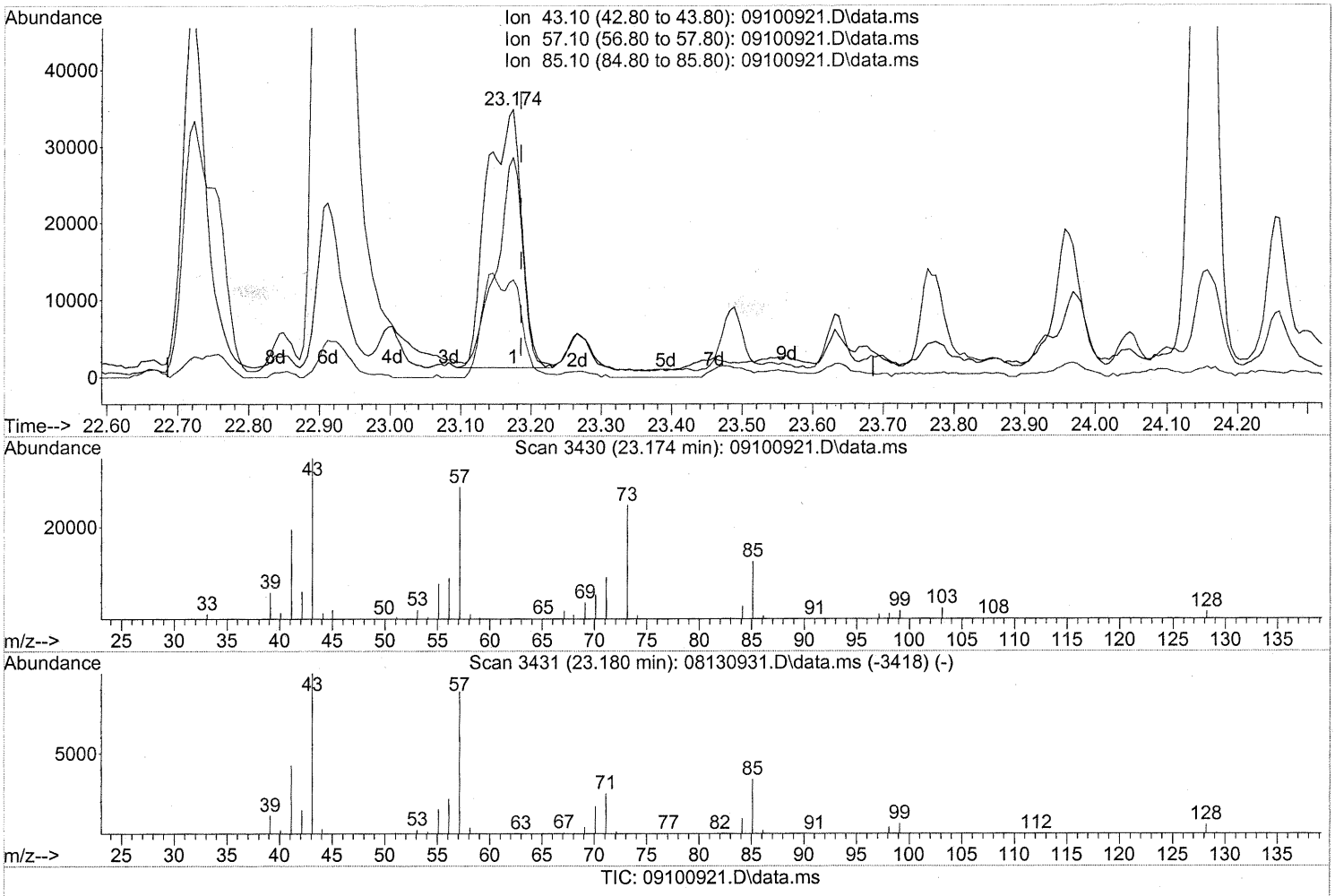
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	47.51
0.00	0.00	0.00
0.00	0.00	0.00

59

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 2.47ng

response 114002

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	65.76#
85.10	38.80	0.00#
0.00	0.00	0.00

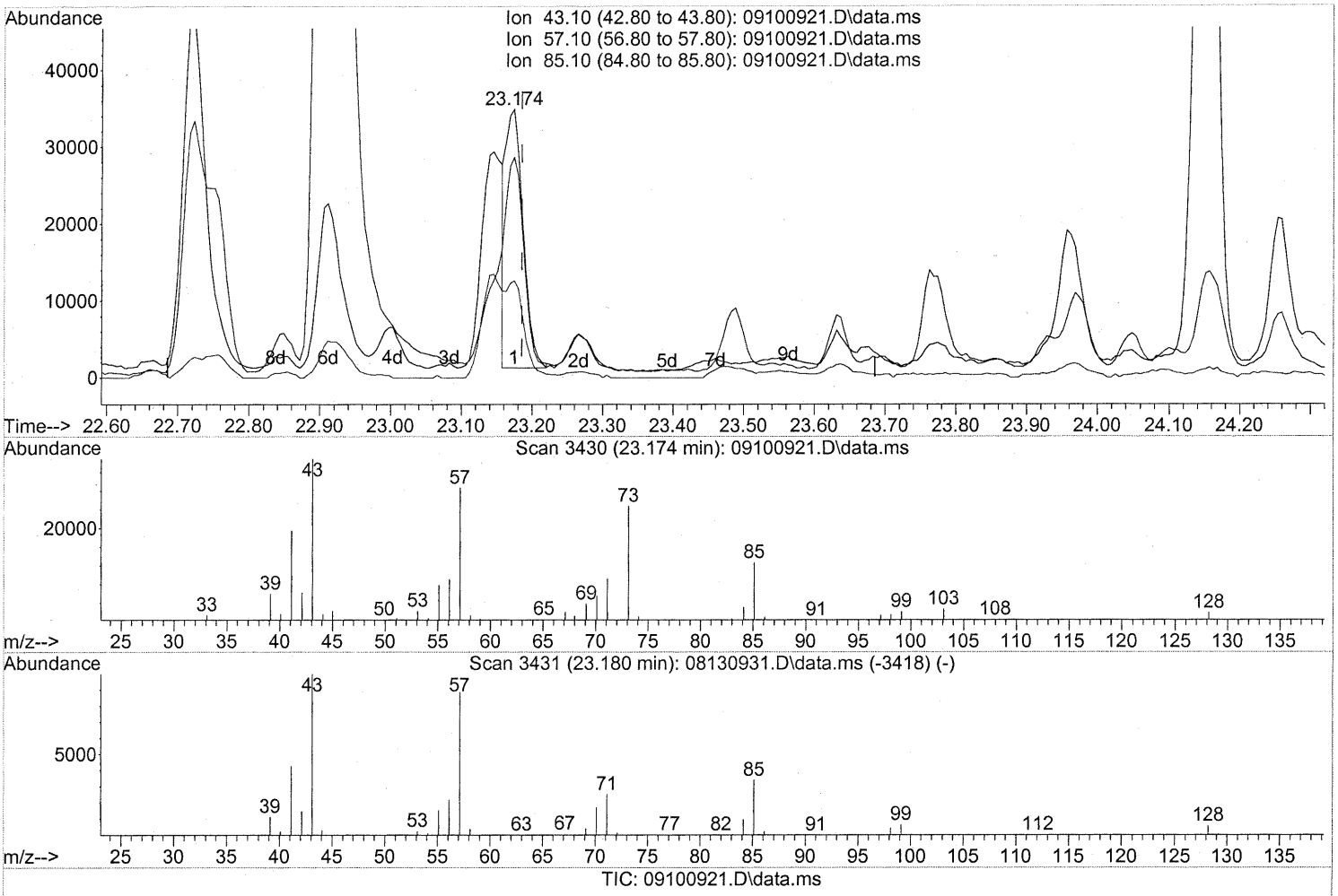
(P)

60

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 1.24ng m

response 57019

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	131.48#
85.10	38.80	0.00#
0.00	0.00	0.00

IPI → IC
Com 9/18/09

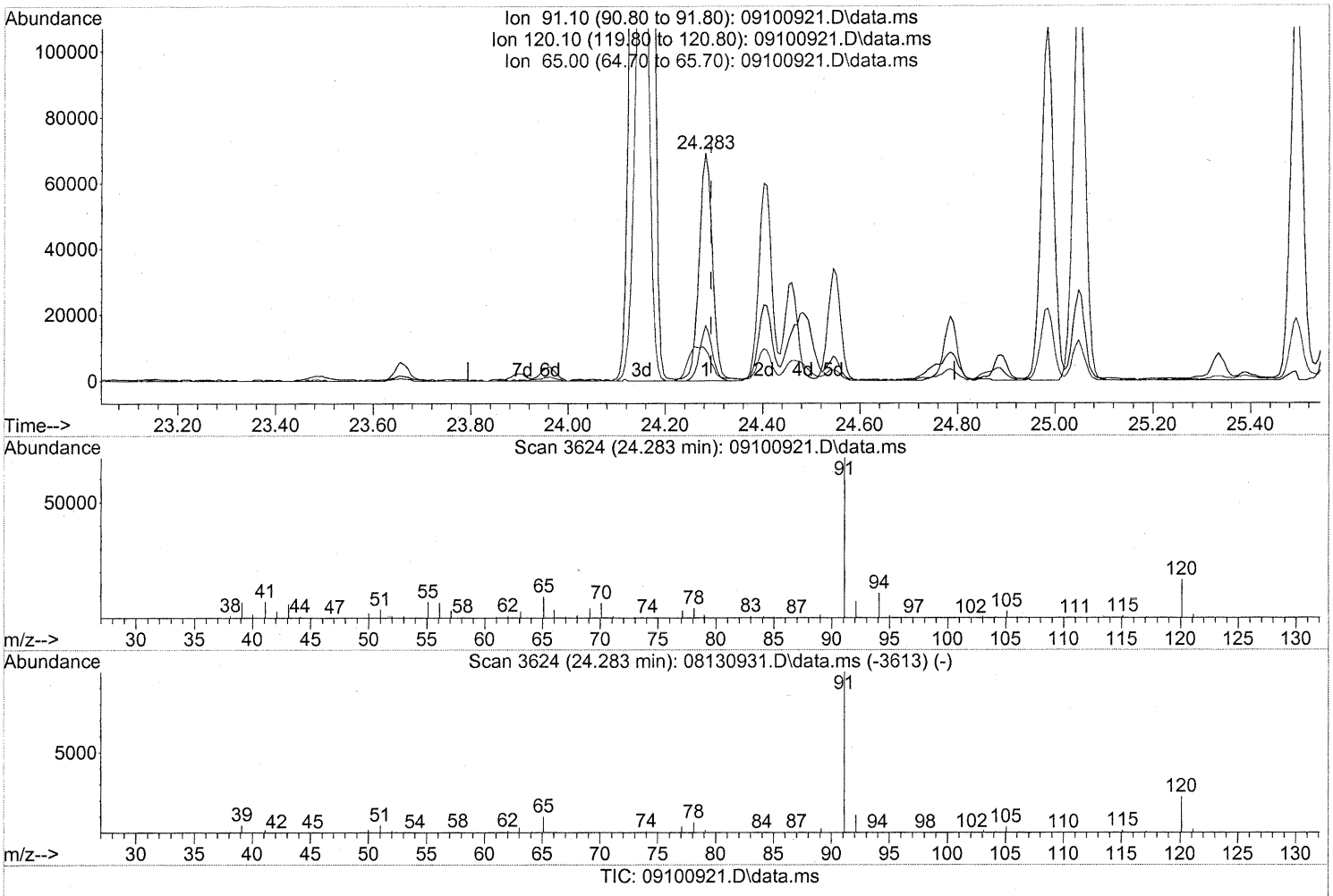
E: 9/21/09

61

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.08ng

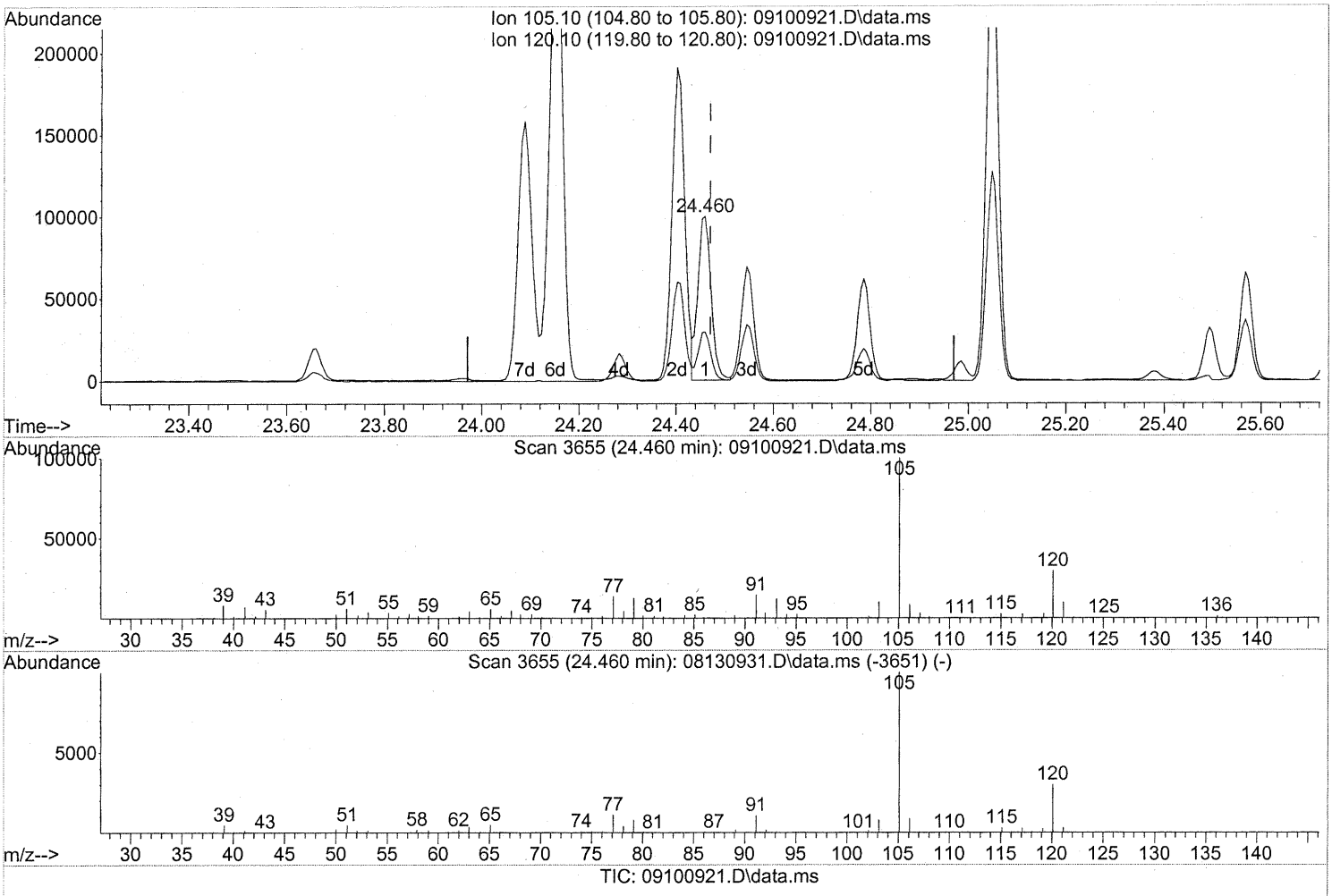
response 132261

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	22.36
65.00	10.20	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 2.03ng

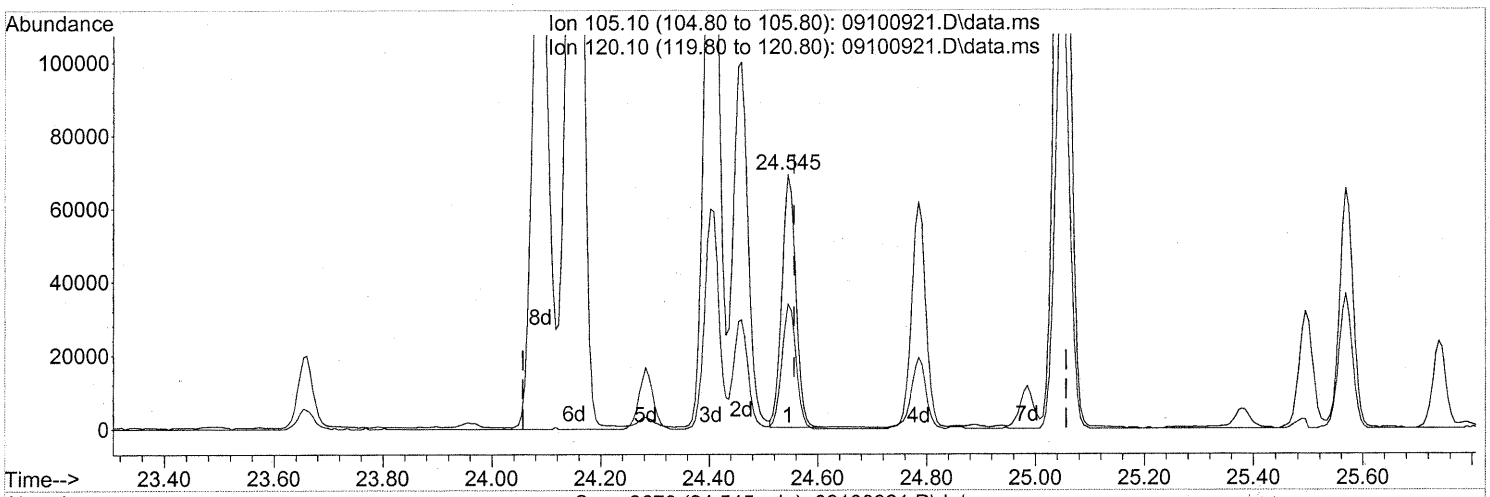
response 190148

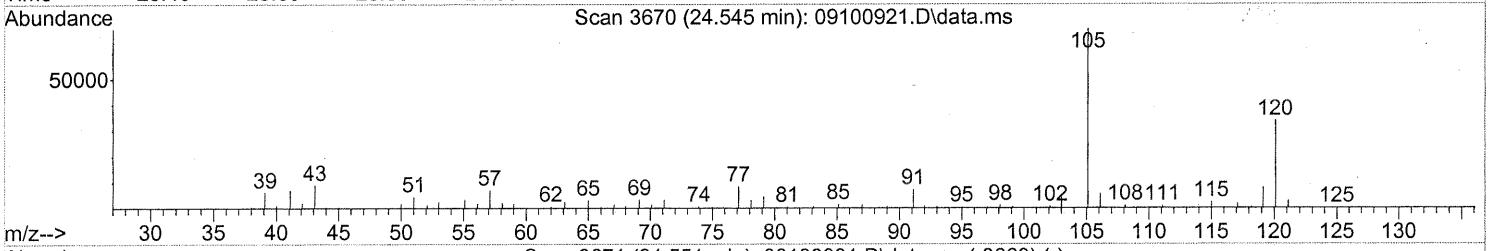
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	27.96
0.00	0.00	0.00
0.00	0.00	0.00

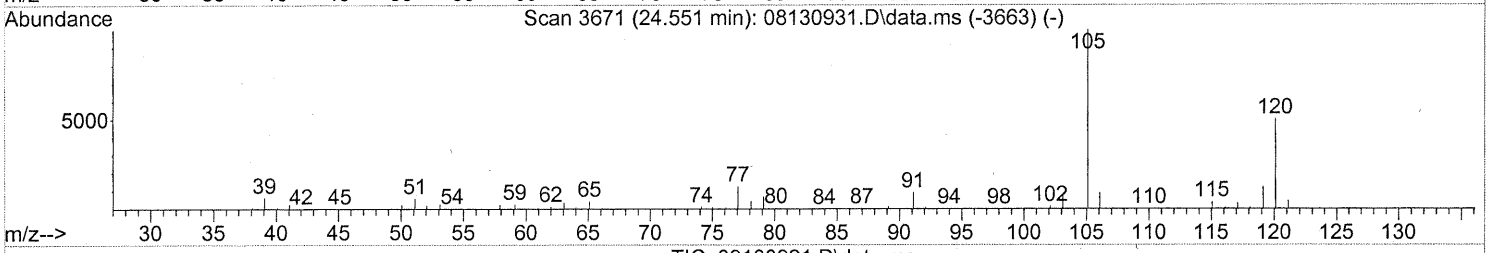
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

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

24.545min (-0.011) 1.59ng

response 122695

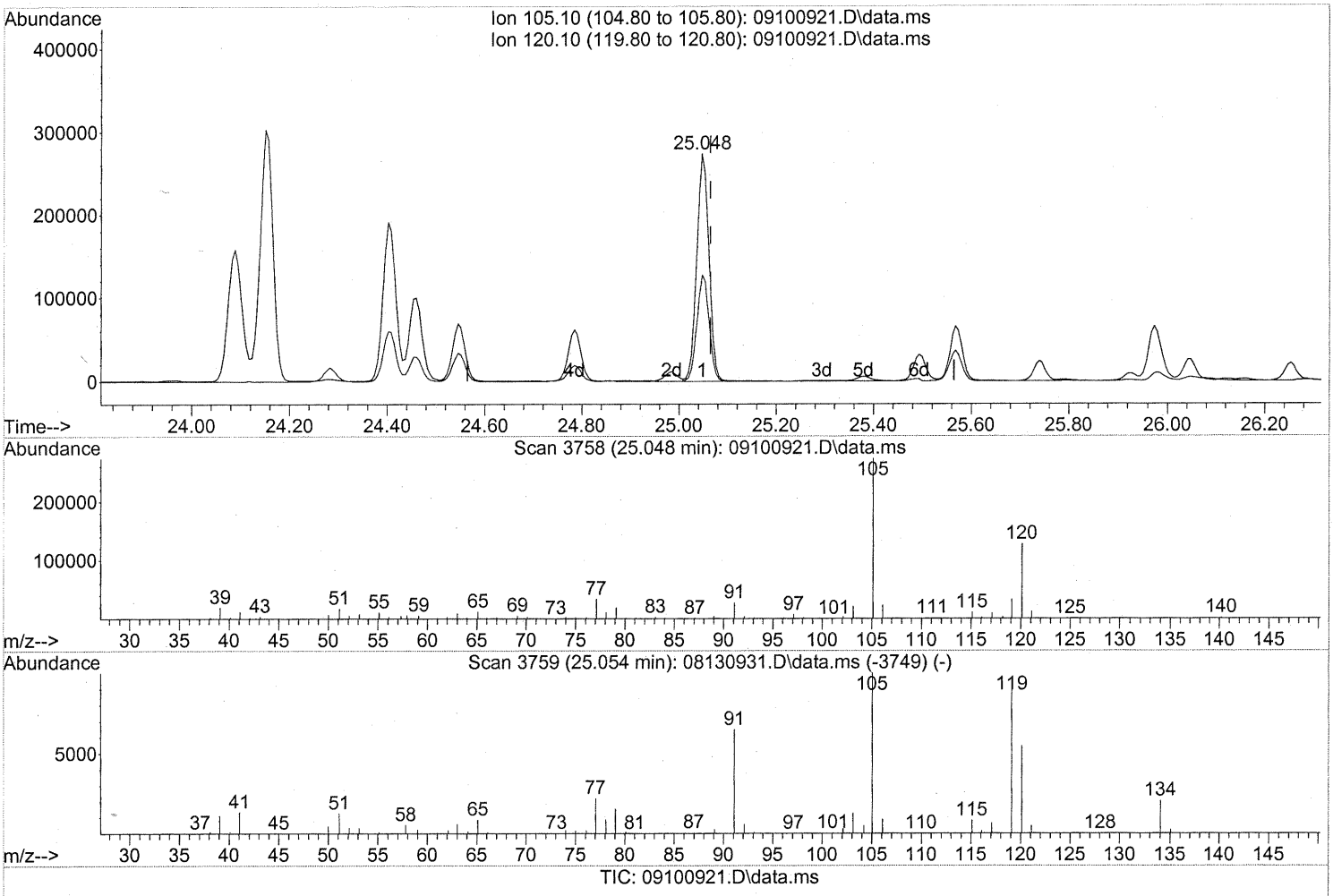
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	50.36
0.00	0.00	0.00
0.00	0.00	0.00

64

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

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

25.048min (-0.017) 5.79ng

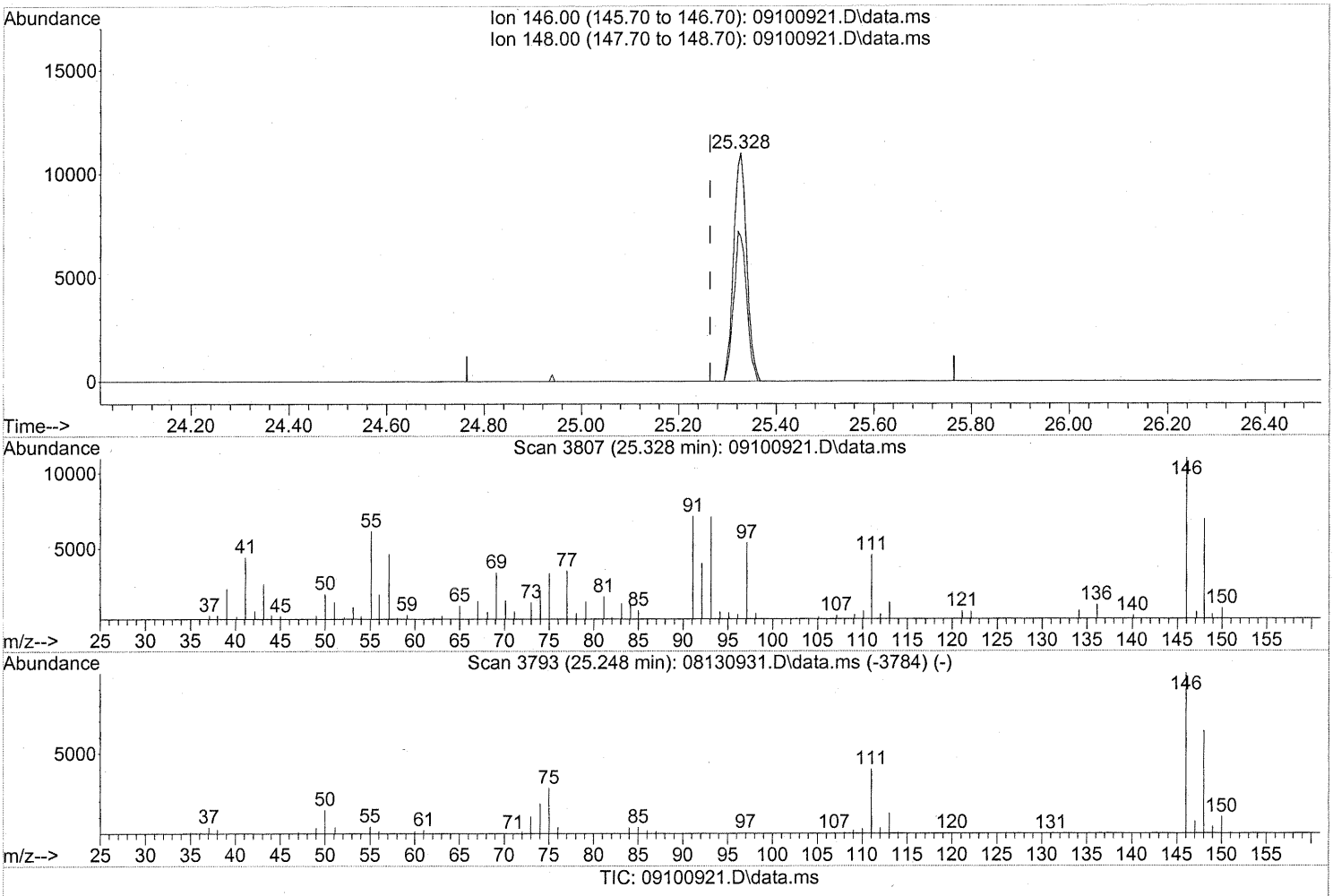
response 475671

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.48ng

response 20388

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.18
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/18/09

E 9/21/09

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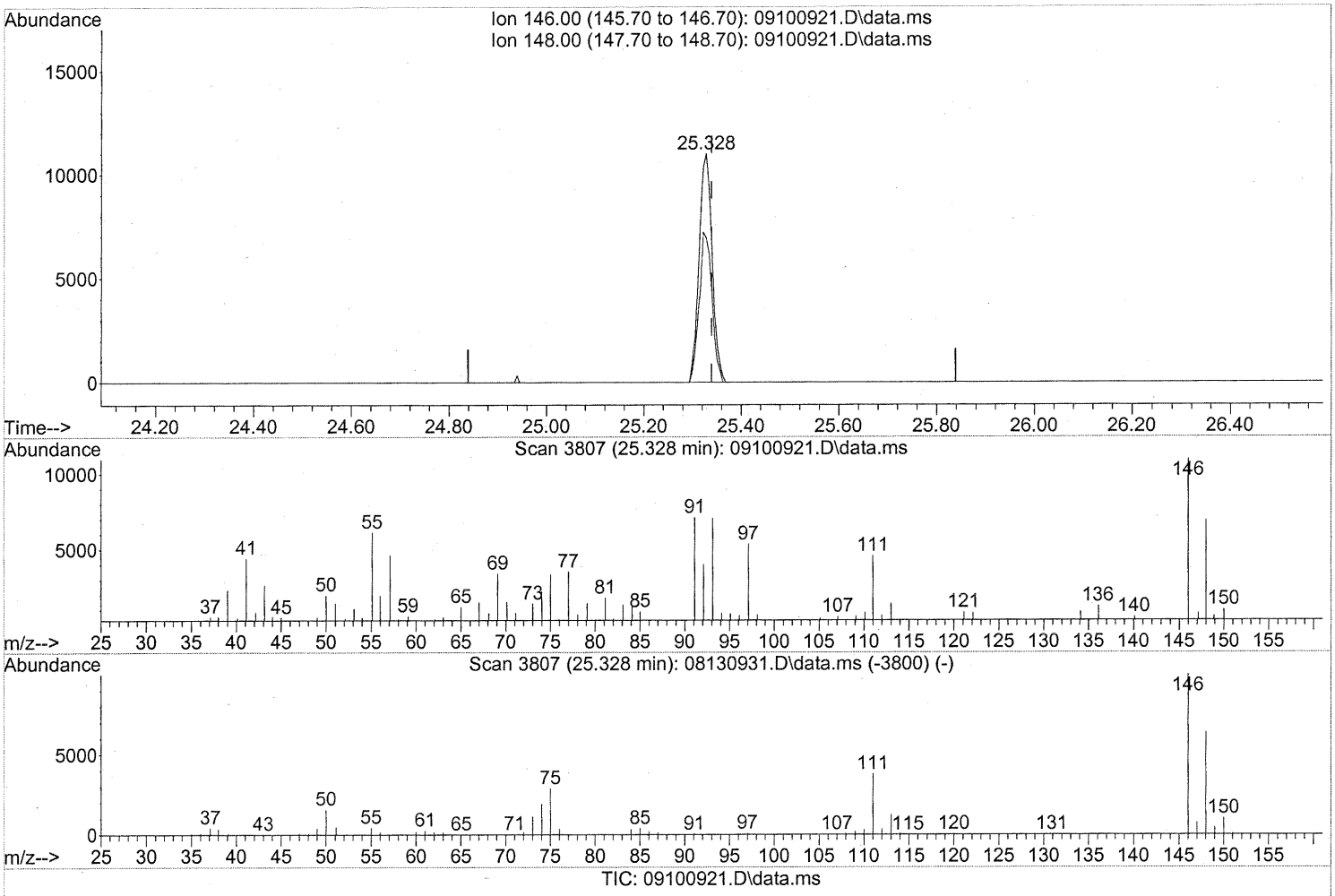
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.45ng

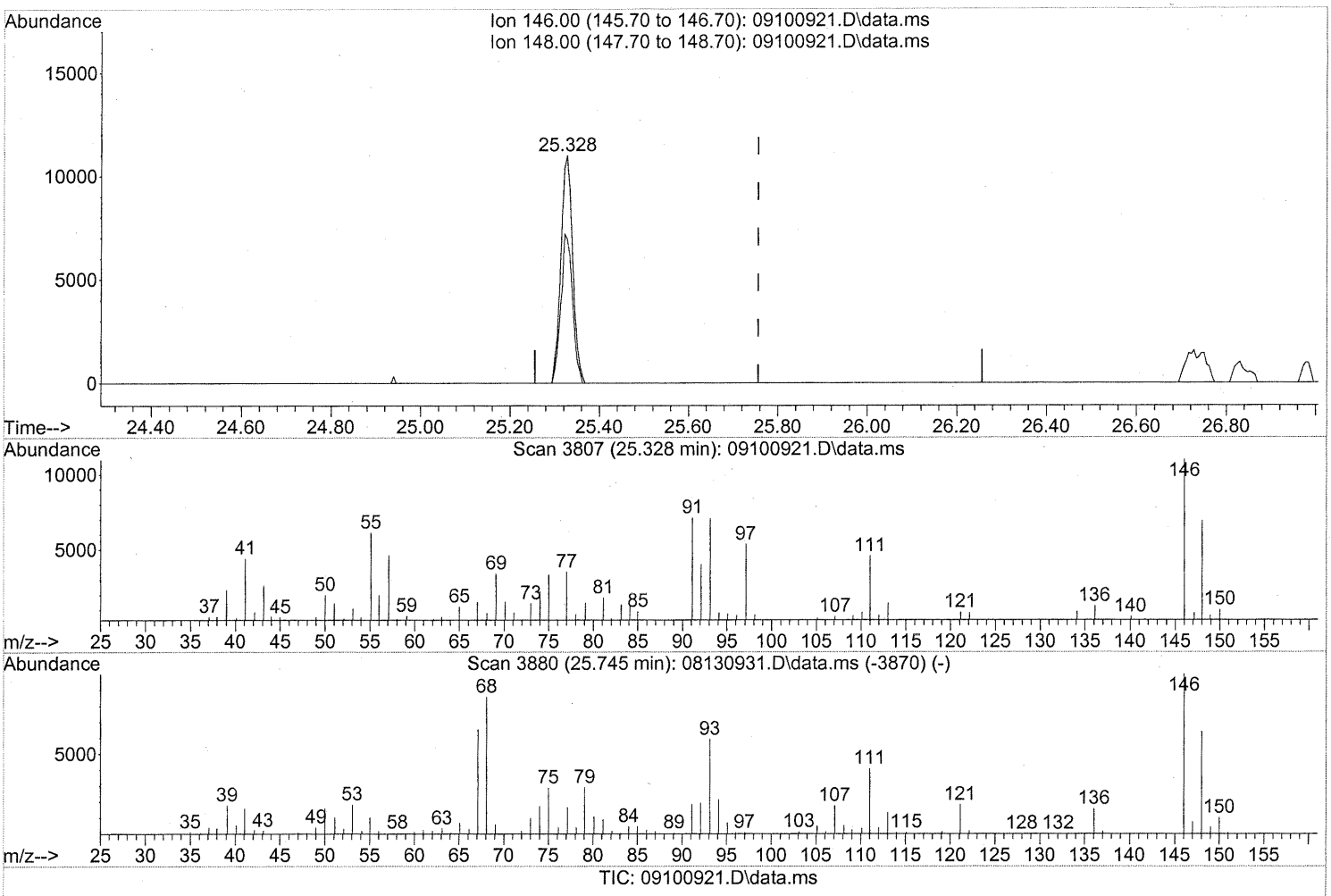
response 20388

Ion	Exp%	Act%
146.00	100	100
148.00	64.00	64.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.48ng

response 20388

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.18
0.00	0.00	0.00
0.00	0.00	0.00

FP Tom 9/18/09

E-9/21/09

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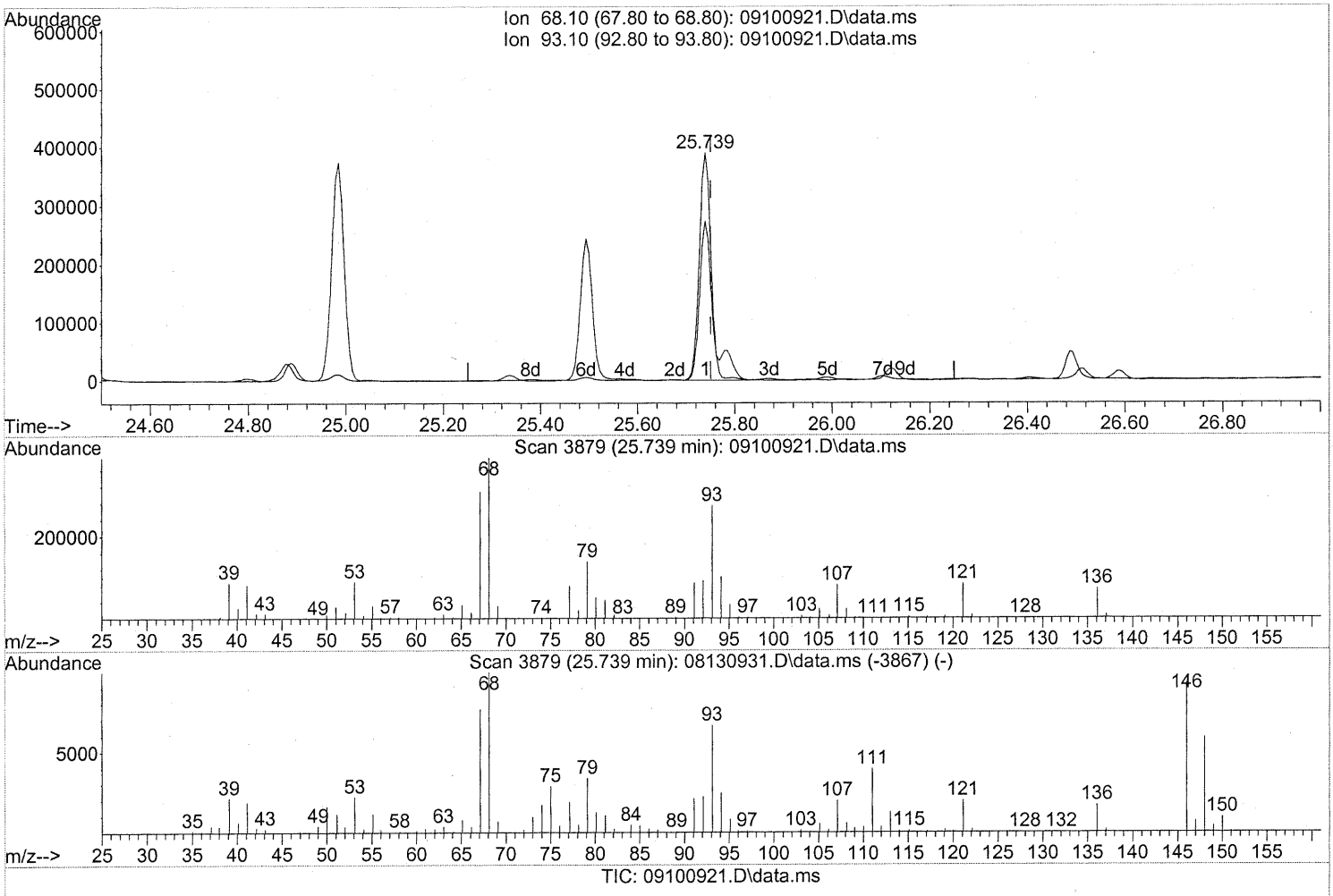
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 19.28ng

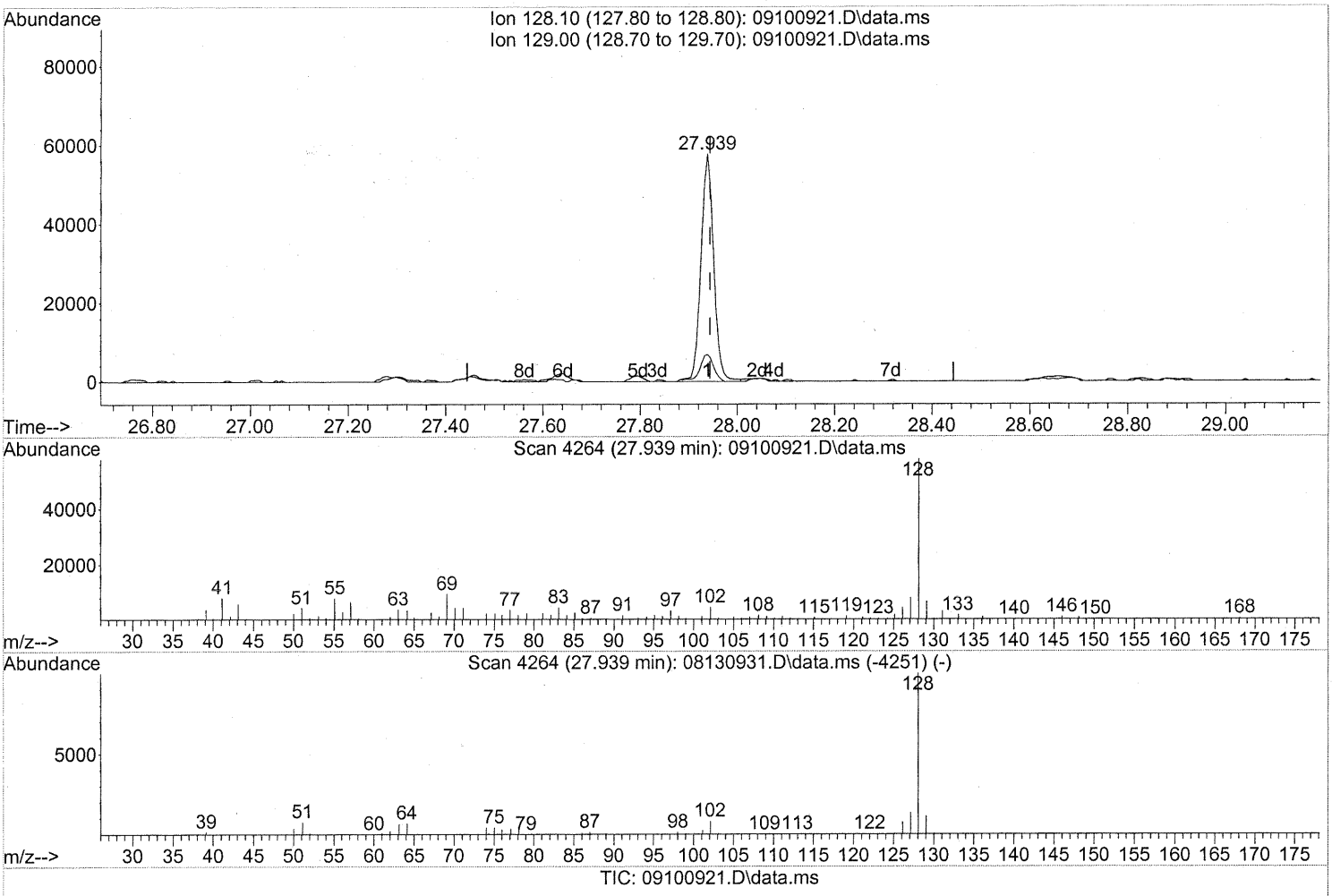
response 647833

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	70.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100921.D
Acq On : 10 Sep 2009 22:03
Operator : EM
Sample : P0903139-001 (1000ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:15:35 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: 09100921.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 0.95ng

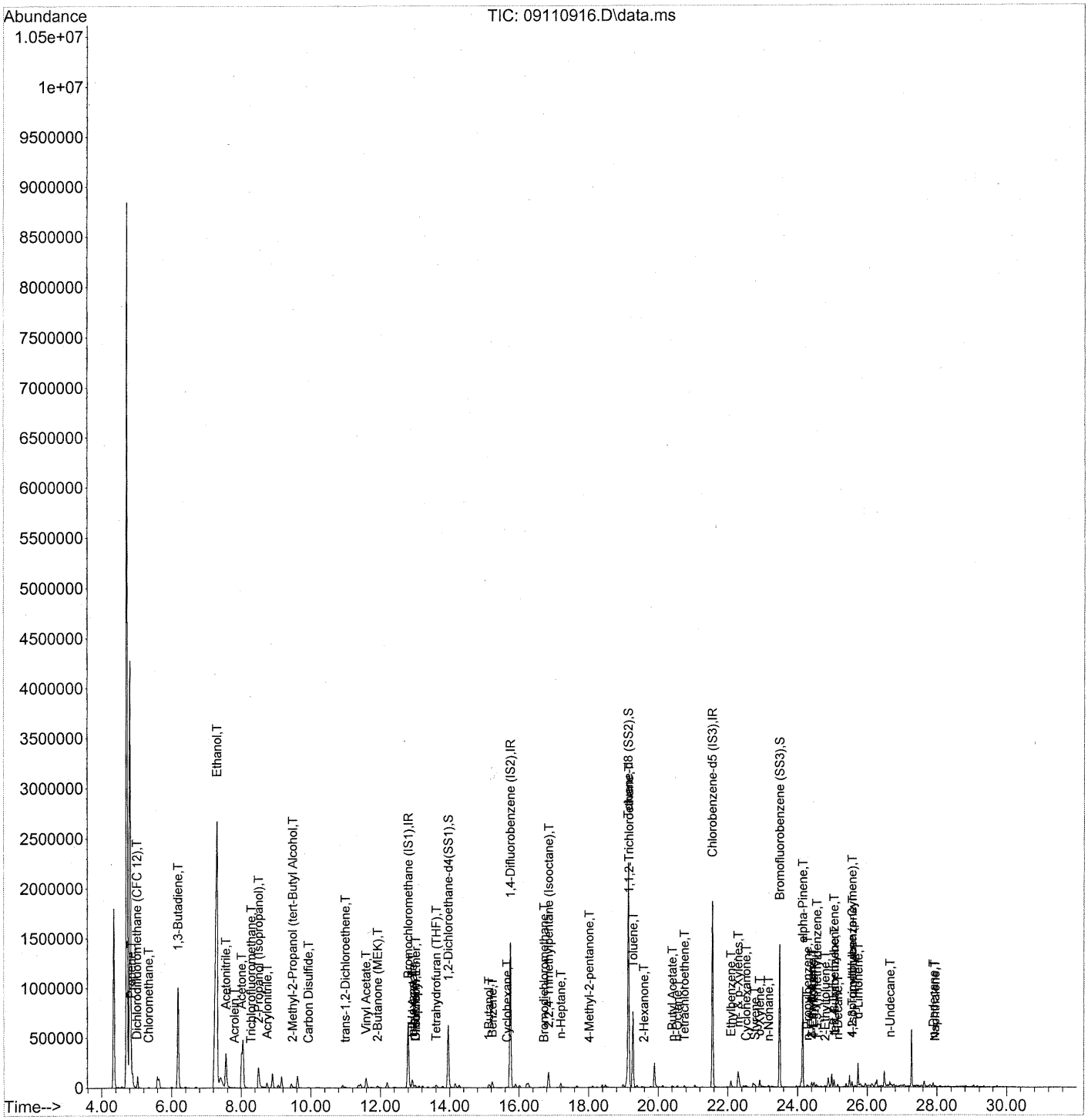
response 104543

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:25:50 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



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:25:50 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)
1) Bromochloromethane (IS1)	12.80	130	337271	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1717556	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	797552	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	623386	26.140	ng		-0.03
Spiked Amount 25.000			Recovery =	104.56%			
57) Toluene-d8 (SS2)	19.14	98	1984874	26.179	ng		-0.02
Spiked Amount 25.000			Recovery =	104.72%			
73) Bromofluorobenzene (SS3)	23.49	174	503474	23.447	ng		0.00
Spiked Amount 25.000			Recovery =	93.80%			
Target Compounds							Qvalue
2) Propene	4.85	42	38335	1.296	ng	#	76
3) Dichlorodifluoromethan...	5.01	85	7472	0.177	ng	#	92
4) Chloromethane	5.35	50	4291	0.109	ng		82
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	6.18	54	2368	0.086	ng	#	1
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.31	45	6650645m	358.362	ng		
11) Acetonitrile	7.56	41	539553	11.913	ng		100
12) Acrolein	7.81	56	3819	0.316	ng		98
13) Acetone	8.01	58	203887	10.796	ng	#	49
14) Trichlorofluoromethane	8.29	101	3228	0.089	ng		93
15) 2-Propanol (Isopropanol)	8.50	45	440031	8.508	ng		97
16) Acrylonitrile	8.75	53	5054	0.184	ng	#	9
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.48	59	18052	0.344	ng	#	76
19) Methylene Chloride	9.53	84	923	N.D.			
20) 3-Chloro-1-propene (Al...	9.72	41	379	N.D.			
21) Trichlorotrifluoroethane	9.97	151	211	N.D.			
22) Carbon Disulfide	9.93	76	7616	0.092	ng		79
23) trans-1,2-Dichloroethene	10.99	61	10968	0.337	ng		92
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.59	86	3699	0.904	ng	#	1
27) 2-Butanone (MEK)	11.92	72	10204	0.775	ng	#	73
28) cis-1,2-Dichloroethene	12.58	61	341	N.D.			
29) Diisopropyl Ether	13.02	87	1734	0.093	ng	#	1
30) Ethyl Acetate	12.94	61	2872	0.336	ng		88
31) n-Hexane	12.92	57	47473	1.141	ng		96

EM 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:25:50 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	20106	0.577 ng		100
34) Tetrahydrofuran (THF)	13.61	72	10788	0.788 ng	#	69
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	15.13	56	25169	1.131 ng		96
41) Benzene	15.23	78	73615	0.797 ng		98
42) Carbon Tetrachloride	15.46	117	387	N.D.		
43) Cyclohexane	15.66	84	3655	0.102 ng	#	69
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	16.71	83	3329	0.123 ng	#	56
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	187536	1.764 ng		97
50) Methyl Methacrylate	16.85	100	129	N.D.		
51) n-Heptane	17.21	71	13630	0.554 ng		93
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.02	58	2656	0.133 ng	#	60
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	154063	7.807 ng	#	8
58) Toluene	19.28	91	698696	7.602 ng		100
59) 2-Hexanone	19.59	43	3164	0.066 ng	#	22
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.41	43	19184	0.368 ng		93
63) n-Octane	20.56	57	3366	0.164 ng	#	77
64) Tetrachloroethene	20.75	166	5895	0.258 ng		98
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.09	91	62804	0.633 ng		97
67) m- & p-Xylenes	22.30	91	164301	2.089 ng		98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	14972	0.257 ng		96
70) o-Xylene	22.92	91	52624	0.665 ng		96
71) n-Nonane	23.17	43	6999	0.147 ng	#	75
72) 1,1,2,2-Tetrachloroethane	22.52	83	107	N.D.		
74) Cumene	23.66	105	4035	N.D.		
75) alpha-Pinene	24.15	93	469528	9.274 ng		96
76) n-Propylbenzene	24.28	91	12603	0.099 ng		97
77) 3-Ethyltoluene	24.41	105	32839	0.342 ng		98
78) 4-Ethyltoluene	24.46	105	18199	0.188 ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	11896	0.149 ng		98

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:25:50 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

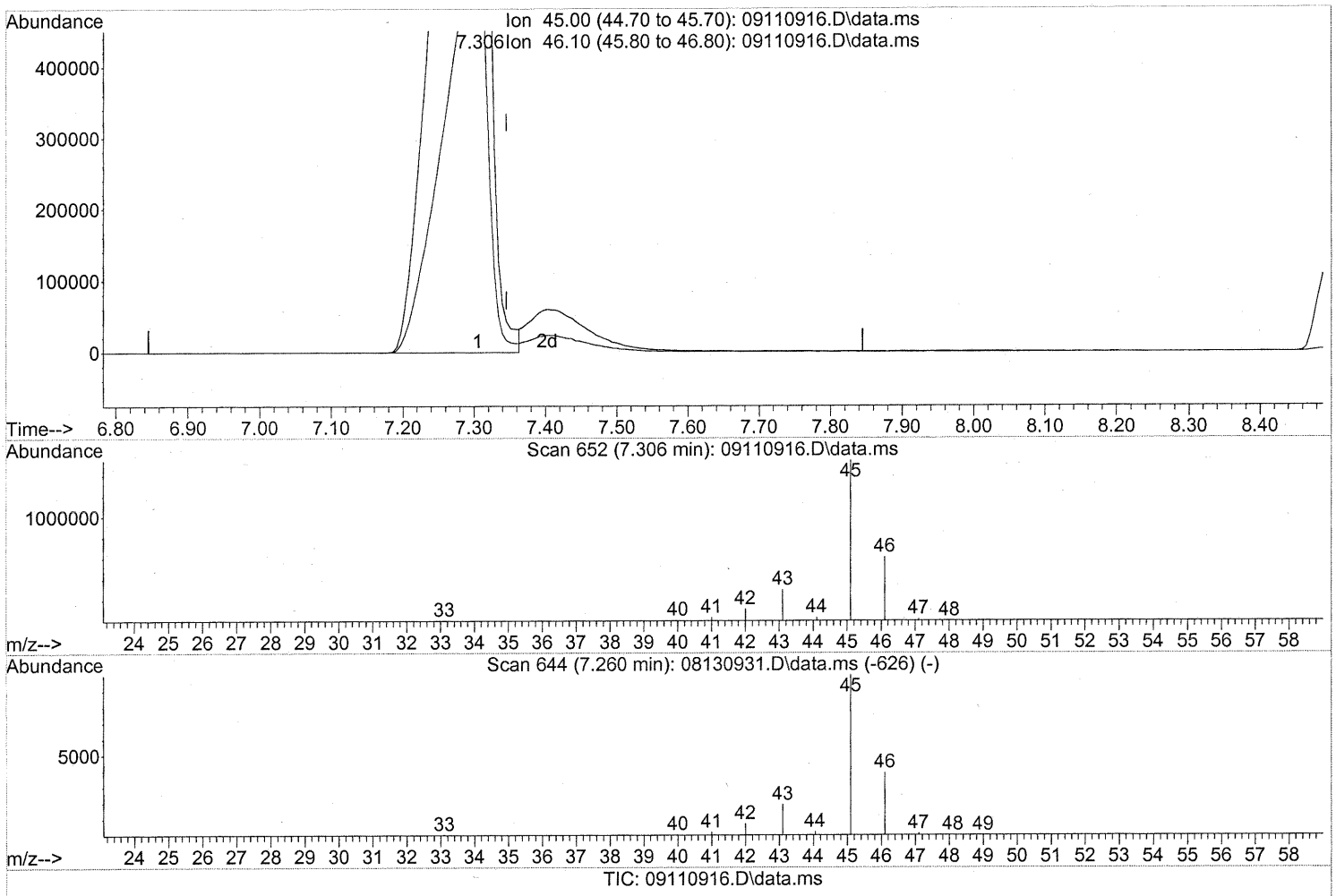
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	969	N.D.			
81) 2-Ethyltoluene	24.79	105	10340	0.104	ng		100
82) 1,2,4-Trimethylbenzene	25.05	105	44302	0.522	ng		90
83) n-Decane	25.15	57	12566	0.254	ng		88
84) Benzyl Chloride	25.34	91	1445	N.D.			
85) 1,3-Dichlorobenzene	25.33	146	1666	N.D.			
86) 1,4-Dichlorobenzene	25.33	146	1666	N.D.			
87) sec-Butylbenzene	25.38	105	704	N.D.			
88) 4-Isopropyltoluene (p-...	25.56	119	18171	0.170	ng		94
89) 1,2,3-Trimethylbenzene	25.57	105	10868	0.127	ng		95
90) 1,2-Dichlorobenzene	25.33	146	1666	N.D.			
91) d-Limonene	25.74	68	64030	1.845	ng		92
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	21512	0.422	ng		91
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.94	128	9403	0.083	ng		89
96) n-Dodecane	27.89	57	14312	0.251	ng		99
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.52	55	8573	0.296	ng		91
99) tert-Butylbenzene	25.05	119	5244	0.062	ng	#	54
100) n-Butylbenzene	26.07	91	4443	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:38:00 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



(10) Ethanol (T)

7.306min (-0.040) 339.22ng

response 6295452

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.33
0.00	0.00	0.00
0.00	0.00	0.00

PT

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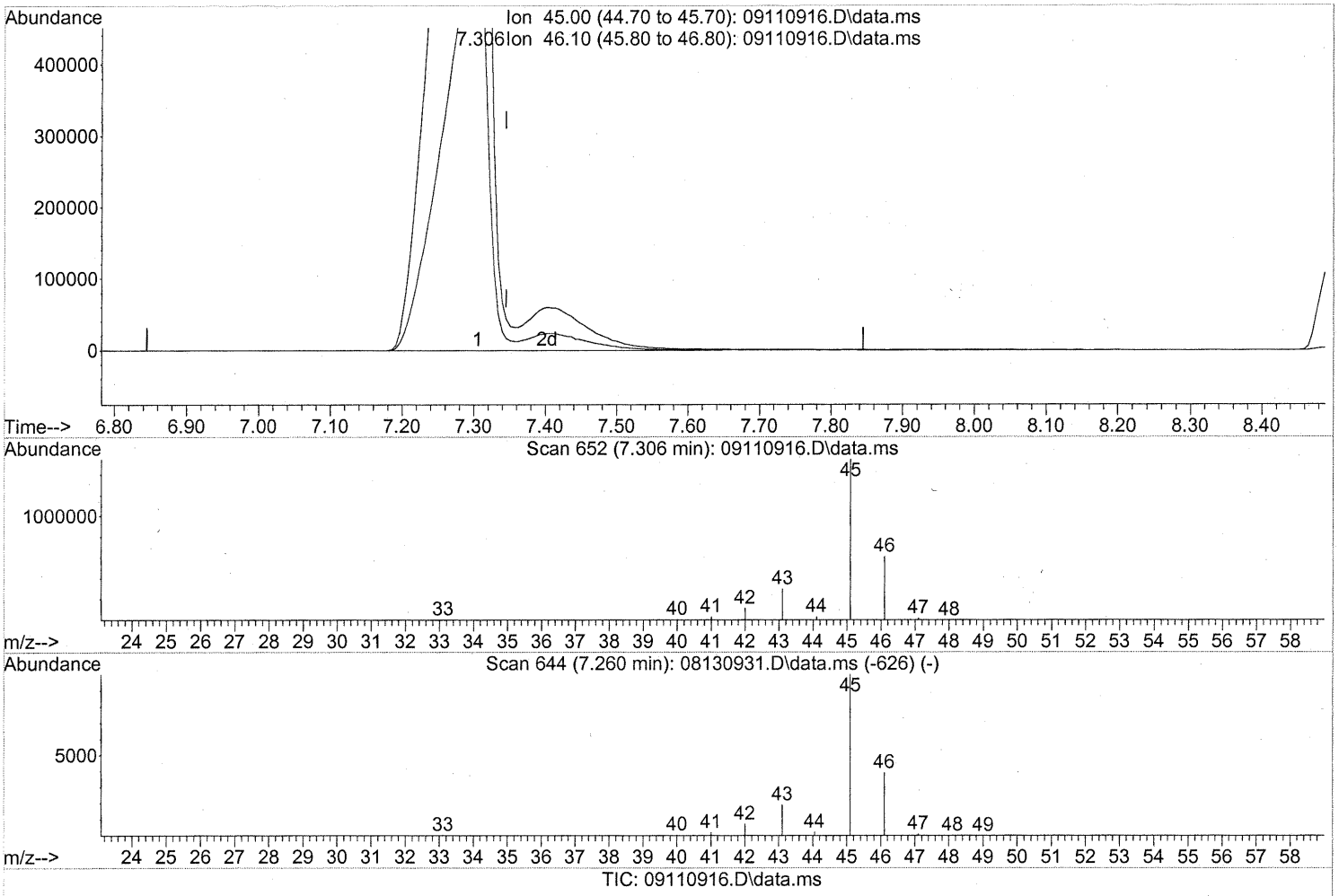
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:38:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09110916.D\data.ms

(10) Ethanol (T)

7.306min (-0.040) 358.36ng m

response 6650645

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 → LC
Em 9/18/09
E: 9/21/09

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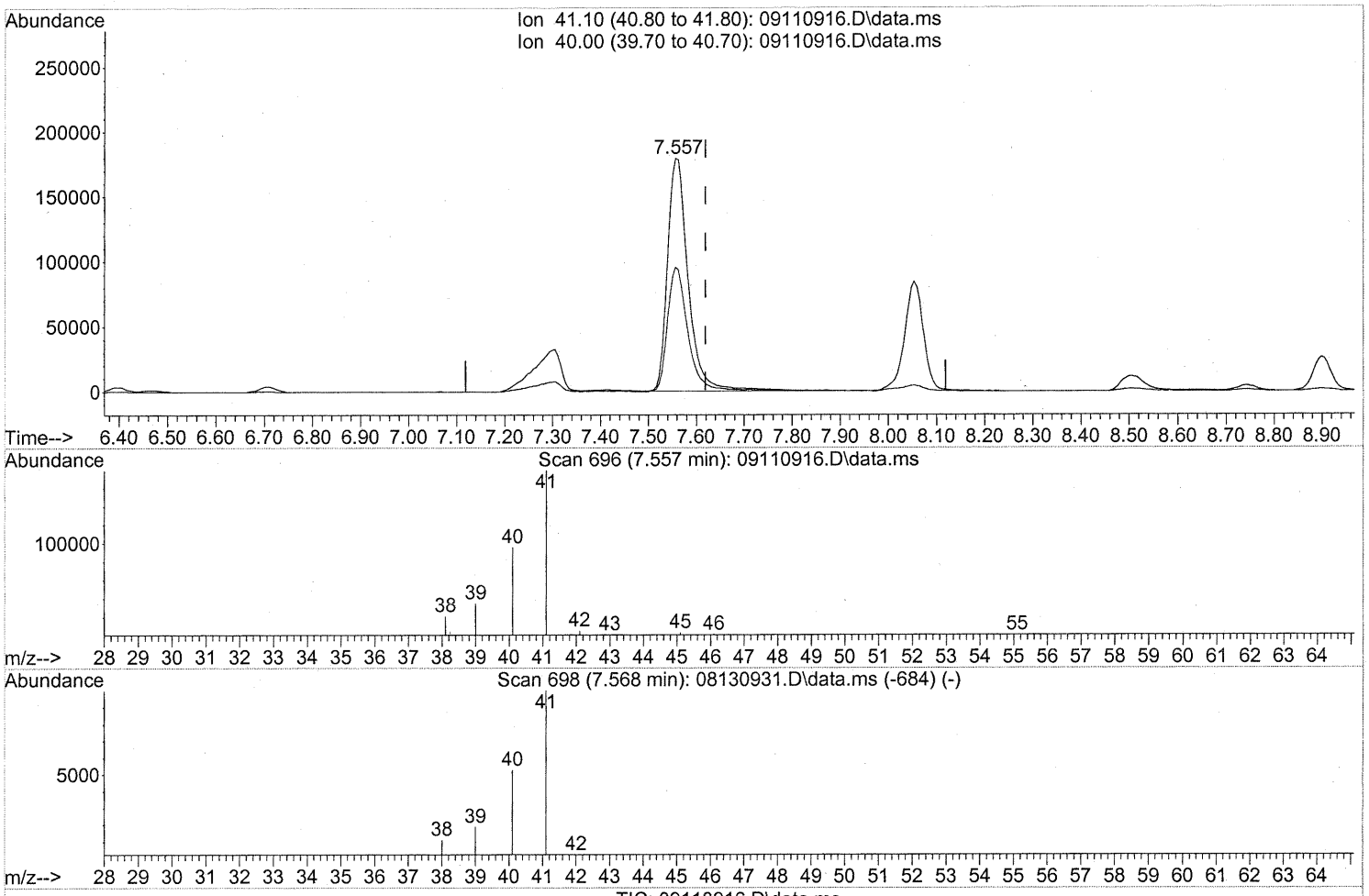
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 10:25:50 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: 09110916.D\data.ms

(11) Acetonitrile (T)

7.557min (-0.063) 11.91ng

response 539553

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.27
0.00	0.00	0.00
0.00	0.00	0.00

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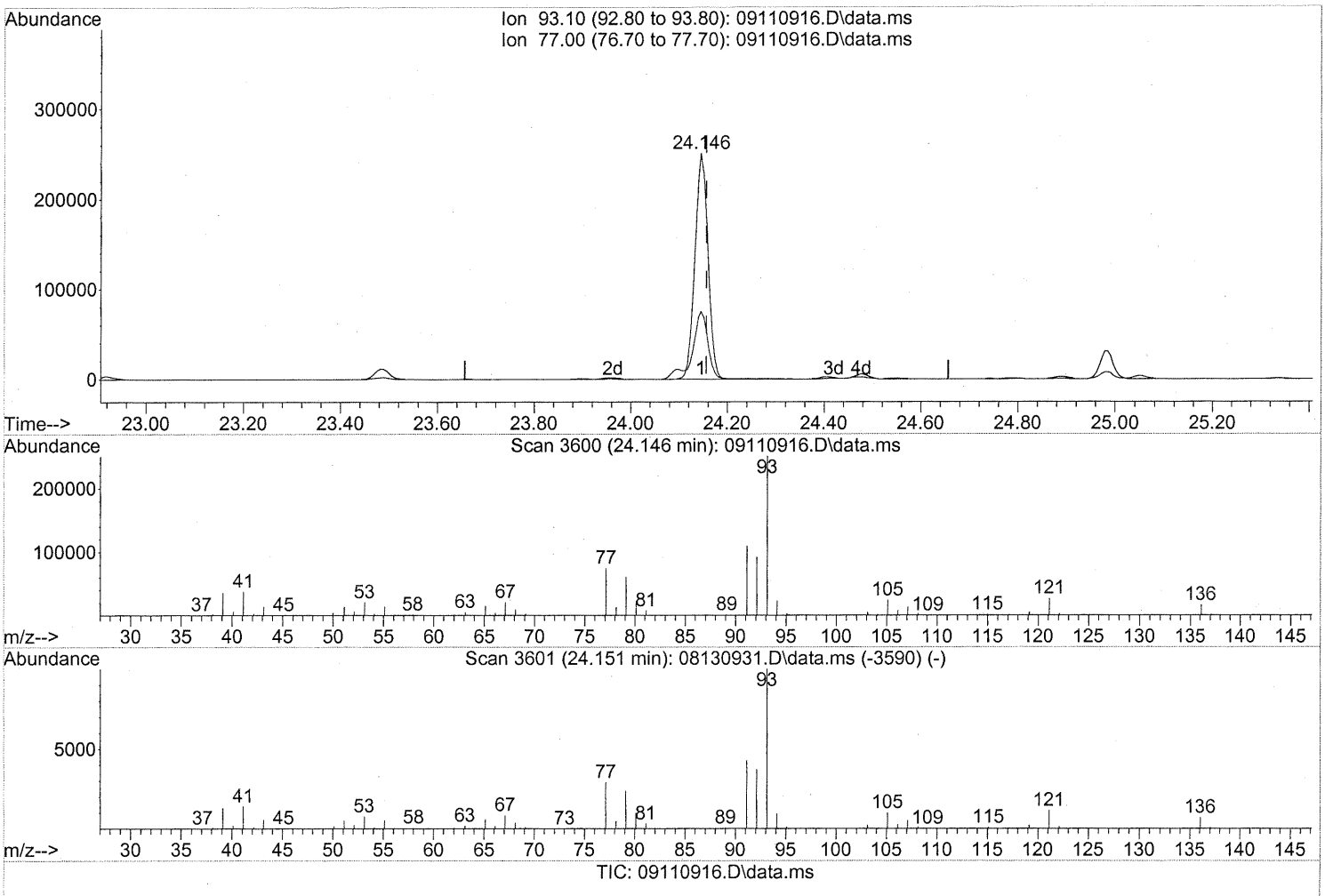
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110916.D
Acq On : 11 Sep 2009 19:22
Operator : EM
Sample : P0903139-001 dil (100ml)
Misc : Environmental H &E 106308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:38:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09110916.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 9.27ng

response 469528

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	31.46
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: **106309**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-002

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: AC00759

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10 - 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): 0.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.60	ND	0.35	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.6**	0.60	**0.54**	0.12	
74-87-3	**Chloromethane**	**0.70**	0.12	**0.34**	0.058	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.60	ND	0.086	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	**1,3-Butadiene**	**0.16**	0.12	**0.071**	0.054	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.045	
64-17-5	**Ethanol**	**5,700**	6.0	**3,000**	3.2	**D**
75-05-8	**Acetonitrile**	**110**	0.60	**64**	0.36	**D**
107-02-8	**Acrolein**	**5.6**	0.60	**2.4**	0.26	
67-64-1	**Acetone**	**160**	6.0	**69**	2.5	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.12	**0.24**	0.021	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**110**	0.60	**47**	0.24	
107-13-1	Acrylonitrile	ND	0.60	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.030	
75-09-2	Methylene Chloride	ND	0.60	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.038	
76-13-1	**Trichlorotrifluoroethane**	**0.61**	0.12	**0.079**	0.016	
75-15-0	**Carbon Disulfide**	**1.3**	0.60	**0.42**	0.19	
156-60-5	**trans-1,2-Dichloroethene**	**5.5**	0.12	**1.4**	0.030	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.033	
108-05-4	Vinyl Acetate	ND	6.0	ND	1.7	
78-93-3	**2-Butanone (MEK)**	**11**	0.60	**3.6**	0.20	

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: fe Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106309**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-002

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: AC00759

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10 - 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): 0.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.030	
141-78-6	**Ethyl Acetate**	**12**	1.2	**3.2**	0.33	
110-54-3	**n-Hexane**	**16**	0.60	**4.5**	0.17	
67-66-3	**Chloroform**	**9.4**	0.12	**1.9**	0.025	
109-99-9	**Tetrahydrofuran (THF)**	**12**	0.60	**4.0**	0.20	
107-06-2	**1,2-Dichloroethane**	**0.20**	0.12	**0.048**	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	**Benzene**	**11**	0.12	**3.6**	0.038	
56-23-5	**Carbon Tetrachloride**	**0.67**	0.12	**0.11**	0.019	
110-82-7	**Cyclohexane**	**1.4**	0.60	**0.41**	0.17	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	**Bromodichloromethane**	**2.0**	0.12	**0.29**	0.018	
79-01-6	**Trichloroethene**	**0.13**	0.12	**0.025**	0.022	
123-91-1	**1,4-Dioxane**	**0.86**	0.60	**0.24**	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.29	
142-82-5	**n-Heptane**	**7.2**	0.60	**1.8**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.60	ND	0.13	
108-10-1	**4-Methyl-2-pentanone**	**2.6**	0.60	**0.62**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.60	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	**Toluene**	**100**	0.60	**28**	0.16	
591-78-6	**2-Hexanone**	**1.6**	0.60	**0.38**	0.15	
124-48-1	**Dibromochloromethane**	**0.20**	0.12	**0.023**	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	**n-Butyl Acetate**	**4.7**	0.60	**1.0**	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: Ro Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903139
Client Sample ID: **106309** CAS Sample ID: P0903139-002
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 9/3/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/4/09
Analyst: Elsa Moctezuma Date Analyzed: 9/10 - 9/11/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC00759

Initial Pressure (psig): 0.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.9**	0.60	**0.41**	0.13	
127-18-4	**Tetrachloroethene**	**4.2**	0.12	**0.62**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	**Ethylbenzene**	**8.5**	0.60	**2.0**	0.14	
179601-23-1	**m,p-Xylenes**	**28**	0.60	**6.5**	0.14	
75-25-2	Bromoform	ND	0.60	ND	0.058	
100-42-5	**Styrene**	**4.1**	0.60	**0.95**	0.14	
95-47-6	**o-Xylene**	**8.8**	0.60	**2.0**	0.14	
111-84-2	**n-Nonane**	**1.7**	0.60	**0.32**	0.11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.017	
98-82-8	Cumene	ND	0.60	ND	0.12	
80-56-8	**alpha-Pinene**	**130**	0.60	**24**	0.11	**D**
103-65-1	**n-Propylbenzene**	**1.3**	0.60	**0.27**	0.12	
622-96-8	**4-Ethyltoluene**	**2.6**	0.60	**0.52**	0.12	
108-67-8	**1,3,5-Trimethylbenzene**	**2.0**	0.60	**0.41**	0.12	
95-63-6	**1,2,4-Trimethylbenzene**	**7.4**	0.60	**1.5**	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	**1,4-Dichlorobenzene**	**0.58**	0.12	**0.097**	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	**d-Limonene**	**27**	0.60	**4.8**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.60	ND	0.062	
120-82-1	1,2,4-Trichlorobenzene	ND	0.60	ND	0.081	
91-20-3	**Naphthalene**	**1.2**	0.60	**0.24**	0.11	
87-68-3	Hexachlorobutadiene	ND	0.60	ND	0.056	

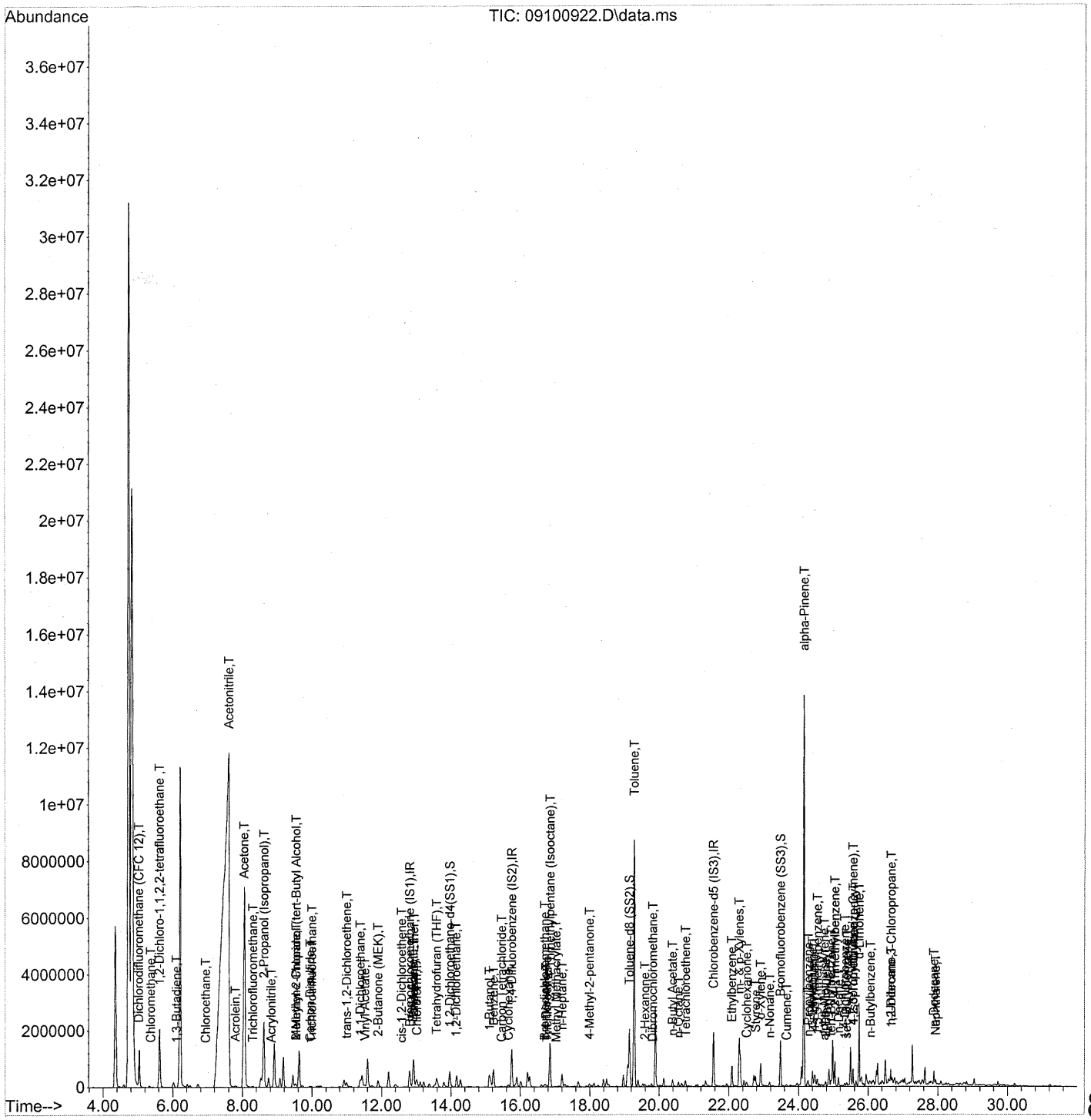
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By: RC Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:31:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:31:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	312701	25.000 ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1578002	25.000 ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	781645	25.000 ng		0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.97	65	548558	24.810 ng		-0.02
Spiked Amount 25.000			Recovery =	99.24%		
57) Toluene-d8 (SS2)	19.15	98	1820656	24.501 ng		-0.01
Spiked Amount 25.000			Recovery =	98.00%		
73) Bromofluorobenzene (SS3)	23.49	174	587174	27.902 ng		0.00
Spiked Amount 25.000			Recovery =	111.60%		
Target Compounds						Qvalue
2) Propene	0.00	42	0	N.D. d		
3) Dichlorodifluoromethan...	5.03	85	86332	2.205 ng		99
4) Chloromethane	5.37	50	21337	0.585 ng		95
5) 1,2-Dichloro-1,1,2,2-t...	5.63	135	1519	0.073 ng	#	43
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	6.11	54	3324	0.130 ng	#	41
8) Bromomethane	6.60	94	631	N.D.		
9) Chloroethane	6.95	64	1395	0.078 ng	#	43
10) Ethanol	0.00	45	0	~~N.D.~~ See DIL.		
11) Acetonitrile	7.61	41	5809099	~~138.339~~ ng See DIL		81
12) Acrolein	7.80	56	52446	4.674 ng		97
13) Acetone	8.05	58	2403318	137.258 ng	#	61
14) Trichlorofluoromethane	8.30	101	37337	1.115 ng		98
15) 2-Propanol (Isopropanol)	8.62	45	4593180	95.789 ng		94
16) Acrylonitrile	8.83	53	3371	0.133 ng		96
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	9.54	59	71345	1.466 ng	#	84
19) Methylene Chloride	9.54	84	5664	0.259 ng		84
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d		
21) Trichlorotrifluoroethane	10.00	151	7599	0.507 ng		96
22) Carbon Disulfide	9.94	76	84269	1.093 ng		100
23) trans-1,2-Dichloroethene	11.00	61	137690	4.566 ng		92
24) 1,1-Dichloroethane	11.39	63	2219	0.060 ng	#	1
25) Methyl tert-Butyl Ether	11.43	73	2287	N.D.		
26) Vinyl Acetate	11.52	86	15333m	4.043 ng		
27) 2-Butanone (MEK)	11.90	72	108753	8.909 ng	#	89
28) cis-1,2-Dichloroethene	12.58	61	1920	0.068 ng		89
29) Diisopropyl Ether	12.93	87	8245	0.476 ng	#	1
30) Ethyl Acetate	12.91	61	76870	9.711 ng		91
31) n-Hexane	12.93	57	512161	13.273 ng		96

Tom 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:31:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	253320	7.844 ng		99
34) Tetrahydrofuran (THF)	13.59	72	123287	9.715 ng	#	64
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	4018	0.163 ng		86
38) 1,1,1-Trichloroethane	14.54	97	838	N.D.		
39) Isopropyl Acetate	15.09	61	488	N.D.		
40) 1-Butanol	15.11	56	341469	16.699 ng		88
41) Benzene	15.23	78	804453	9.479 ng		99
42) Carbon Tetrachloride	15.46	117	13194	0.556 ng		99
43) Cyclohexane	15.66	84	38184	1.162 ng		87
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.43	63	440	N.D.		
46) Bromodichloromethane	16.70	83	40761	1.642 ng	#	72
47) Trichloroethene	16.77	130	2421	0.112 ng		97
48) 1,4-Dioxane	16.74	88	10782	0.714 ng		80
49) 2,2,4-Trimethylpentane...	16.86	57	1879656	19.245 ng		96
50) Methyl Methacrylate	17.03	100	578	~~0.068~~ ng	#	1
51) n-Heptane	17.21	71	135858	6.014 ng		95
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	39047	2.129 ng		92
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.76	97	655	N.D.		
58) Toluene	19.28	91	7848764	87.132 ng		99
59) 2-Hexanone	19.59	43	61470	1.313 ng	#	73
60) Dibromochloromethane	19.82	129	3132	0.163 ng		95
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	201446	3.944 ng		94
63) n-Octane	20.56	57	32166	1.602 ng		93
64) Tetrachloroethene	20.76	166	78021	3.490 ng		99
65) Chlorobenzene	21.64	112	2260	N.D.		
66) Ethylbenzene	22.09	91	687272	7.067 ng		99
67) m- & p-Xylenes	22.30	91	1805380	23.416 ng		100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	192899	3.385 ng		99
70) o-Xylene	22.92	91	568010	7.323 ng		99
71) n-Nonane	23.17	43	65465	1.402 ng		90
72) 1,1,2,2-Tetrachloroethane	22.92	83	795	N.D.		
74) Cumene	23.66	105	42044	~~0.418~~ ng		97
75) alpha-Pinene	24.15	93	6521775	~~131.440~~ ng See Dil		99
76) n-Propylbenzene	24.28	91	136756	1.100 ng		87
77) 3-Ethyltoluene	24.40	105	368608	3.912 ng		100
78) 4-Ethyltoluene	24.46	105	202066	2.133 ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	132981	1.698 ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:31:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

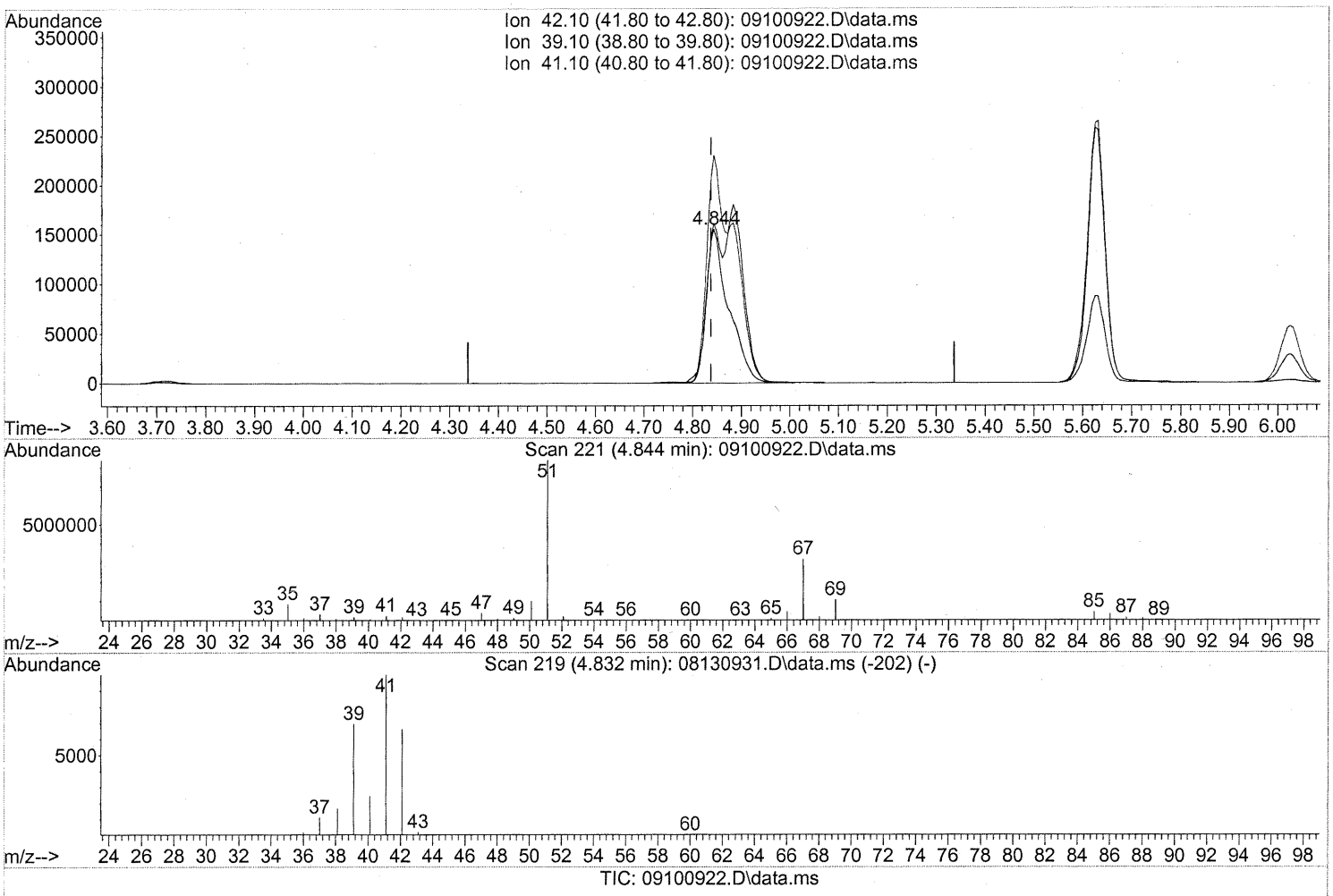
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	14398	0.339 ng	#	75
81) 2-Ethyltoluene	24.79	105	119202	1.225 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	512479	6.163 ng		90
83) n-Decane	25.15	57	115483	2.386 ng		98
84) Benzyl Chloride	25.26	91	1127	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D. d		
86) 1,4-Dichlorobenzene	25.33	146	22181	0.486 ng		98
87) sec-Butylbenzene	25.38	105	11496	0.105 ng		74
88) 4-Isopropyltoluene (p-...	25.56	119	222910	2.123 ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	126027	1.499 ng		92
90) 1,2-Dichlorobenzene	25.75	146	119	N.D.		
91) d-Limonene	25.74	68	763096	22.430 ng		93
92) 1,2-Dibromo-3-Chloropr...	26.66	157	890	0.068 ng	#	1
93) n-Undecane	26.65	57	254542	5.090 ng		87
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	115662	1.037 ng		98
96) n-Dodecane	27.89	57	169651	3.030 ng		96
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	76005	2.679 ng		99
99) tert-Butylbenzene	24.94	119	4289	0.052 ng		91
100) n-Butylbenzene	26.06	91	45350	0.520 ng	#	46

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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



(2) Propene (T)

4.844min (+0.006) 18.07ng

response 495684

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	76.92#
41.10	152.70	179.98#
0.00	0.00	0.00

FP on 9/18/09

C: 9/21/09

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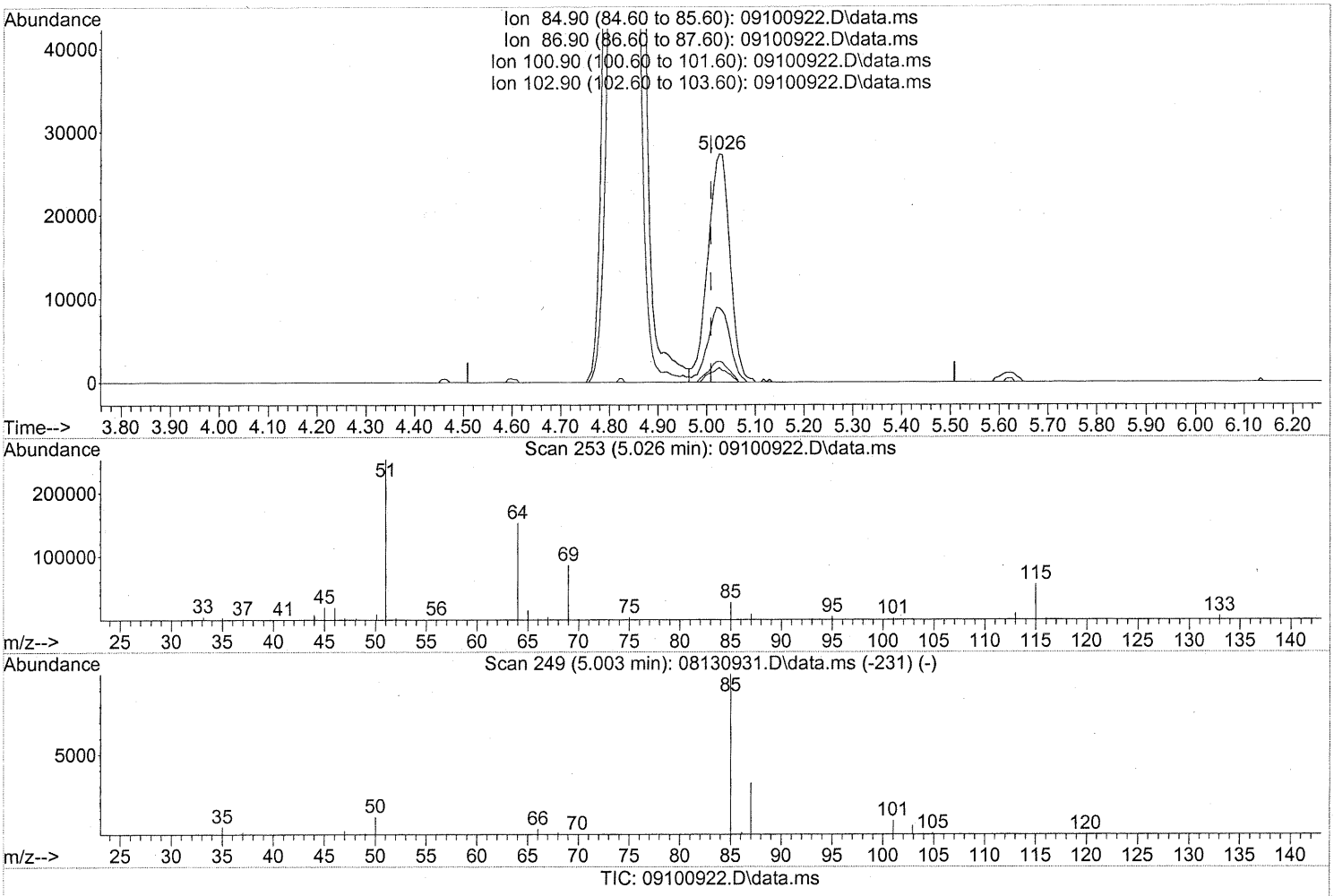
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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



(3) Dichlorodifluoromethane (CFC 12) (T)

5.026min (+0.017) 2.20ng

response 86332

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.43
100.90	9.10	8.14
102.90	5.50	5.16

Before subtraction

87

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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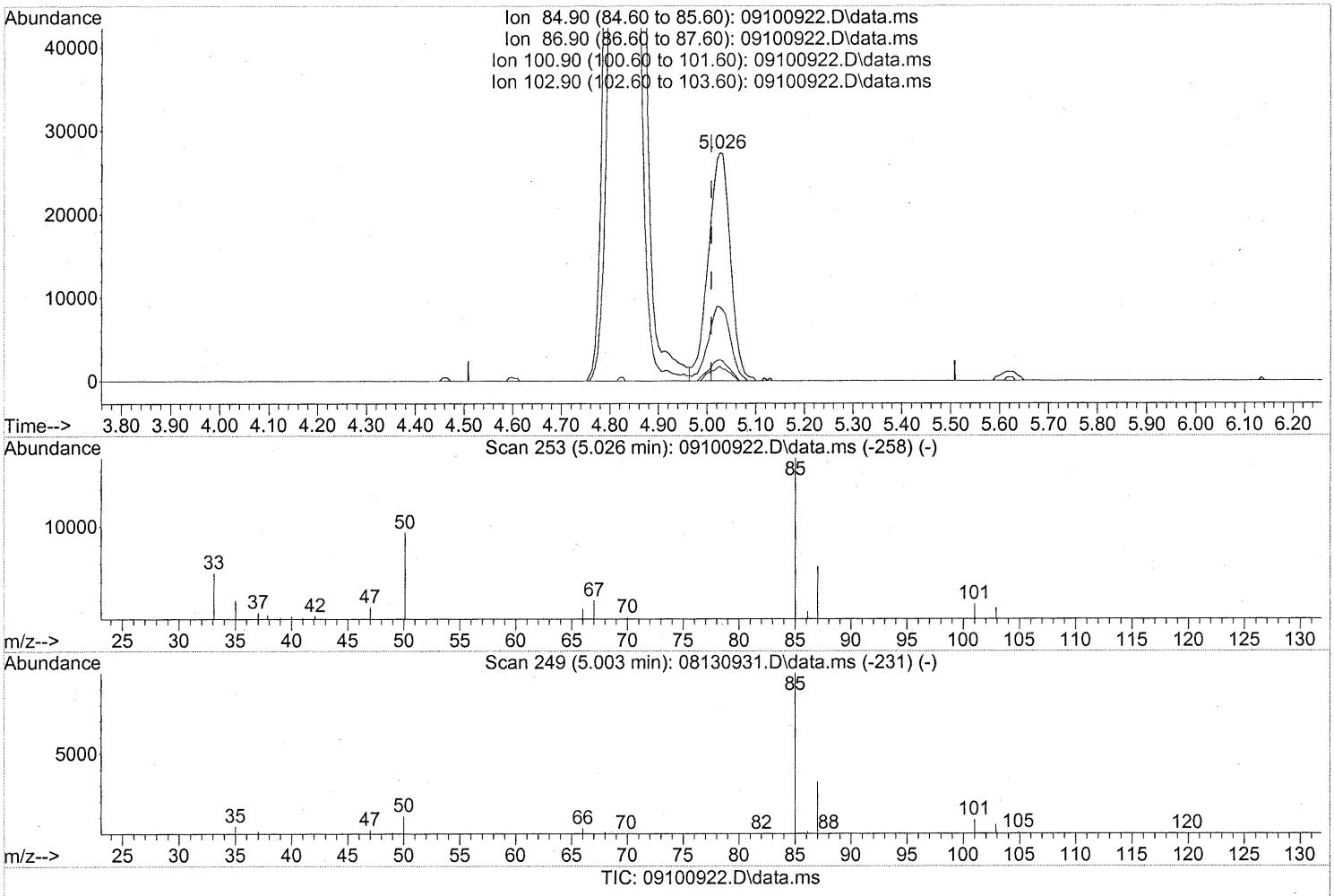
Response via : Initial Calibration



TIC: 09100922.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.026min (+0.017) 2.20ng

response 86332

After subtraction

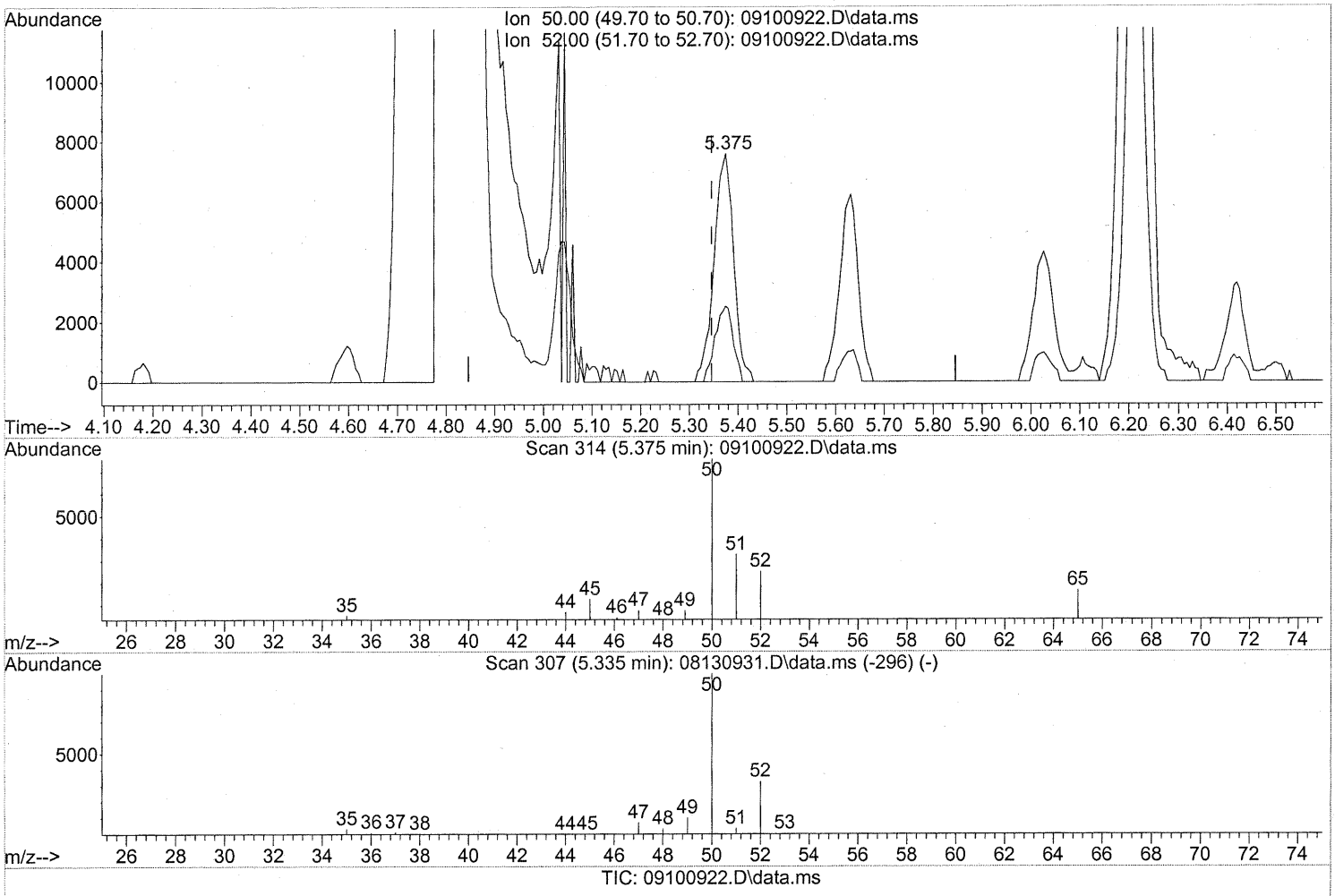
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.43
100.90	9.10	8.14
102.90	5.50	5.16

88

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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



(4) Chloromethane (T)

5.375min (+0.029) 0.58ng

response 21337

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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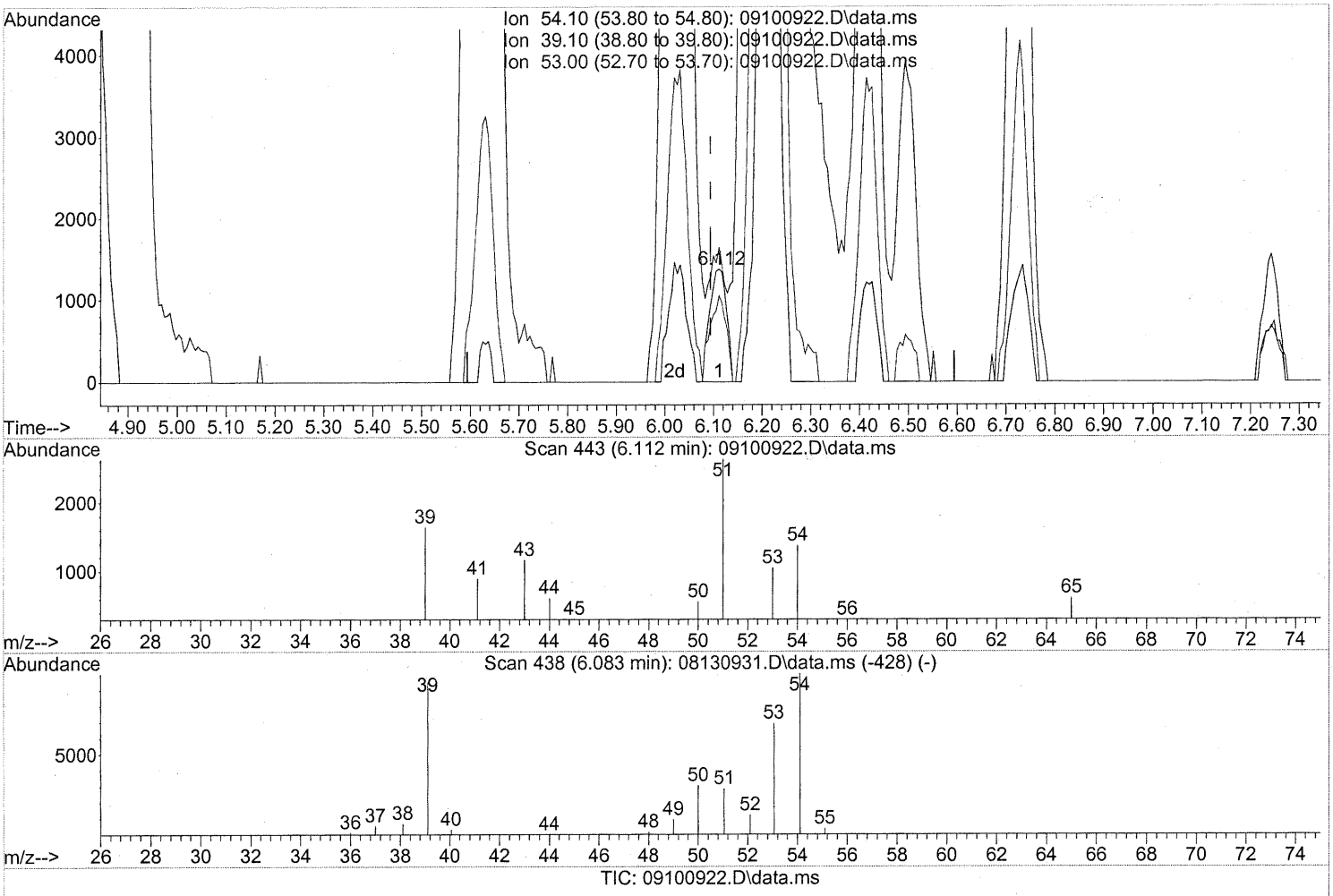
Response via : Initial Calibration



TIC: 09100922.D\data.ms

(7) 1,3-Butadiene (T)

6.112min (+0.017) 0.13ng

response 3324

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	0.00#
53.00	69.80	73.07
0.00	0.00	0.00

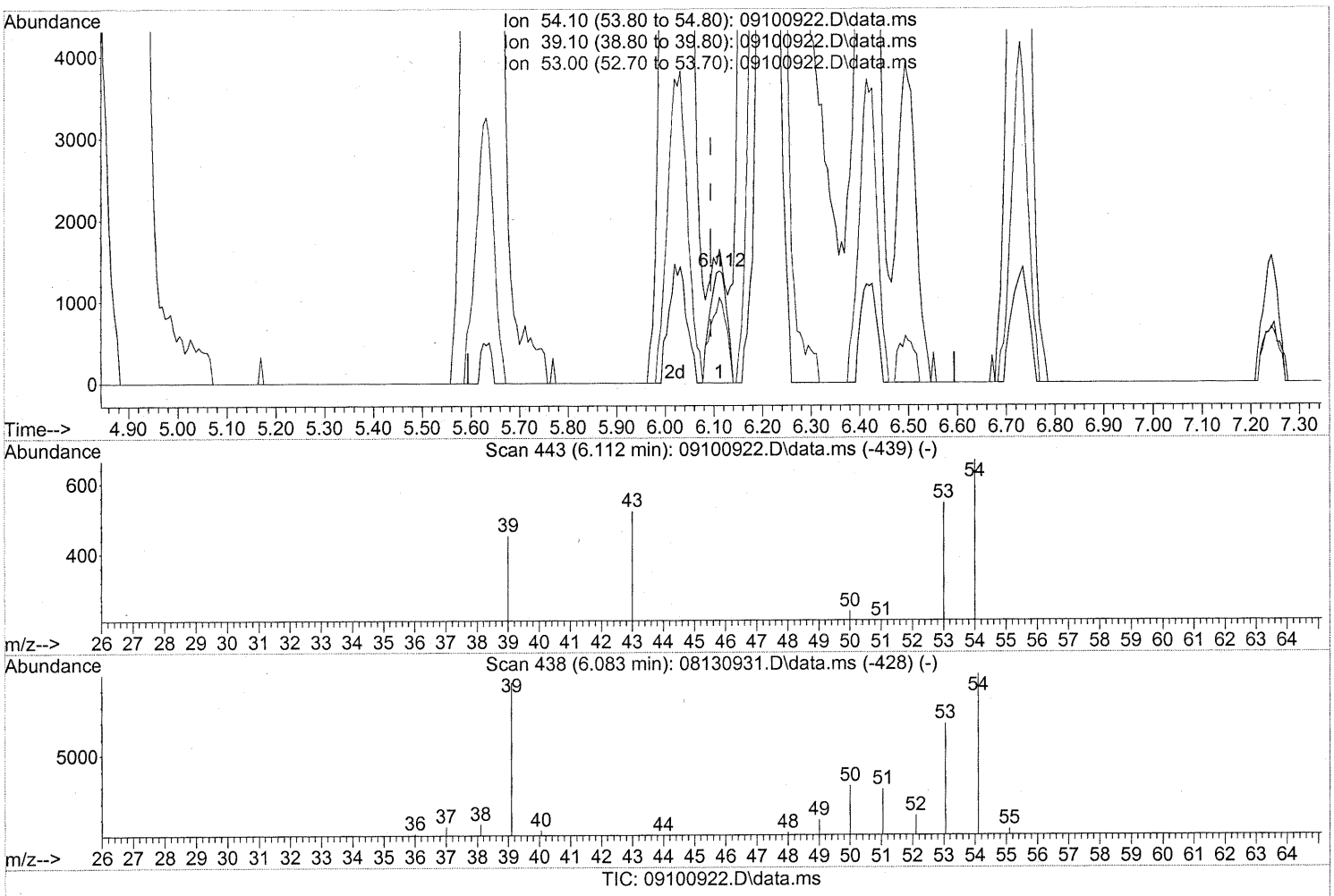
Before subtraction

90

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(7) 1,3-Butadiene (T)

6.112min (+0.017) 0.13ng

response 3324

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	0.00#
53.00	69.80	73.07
0.00	0.00	0.00

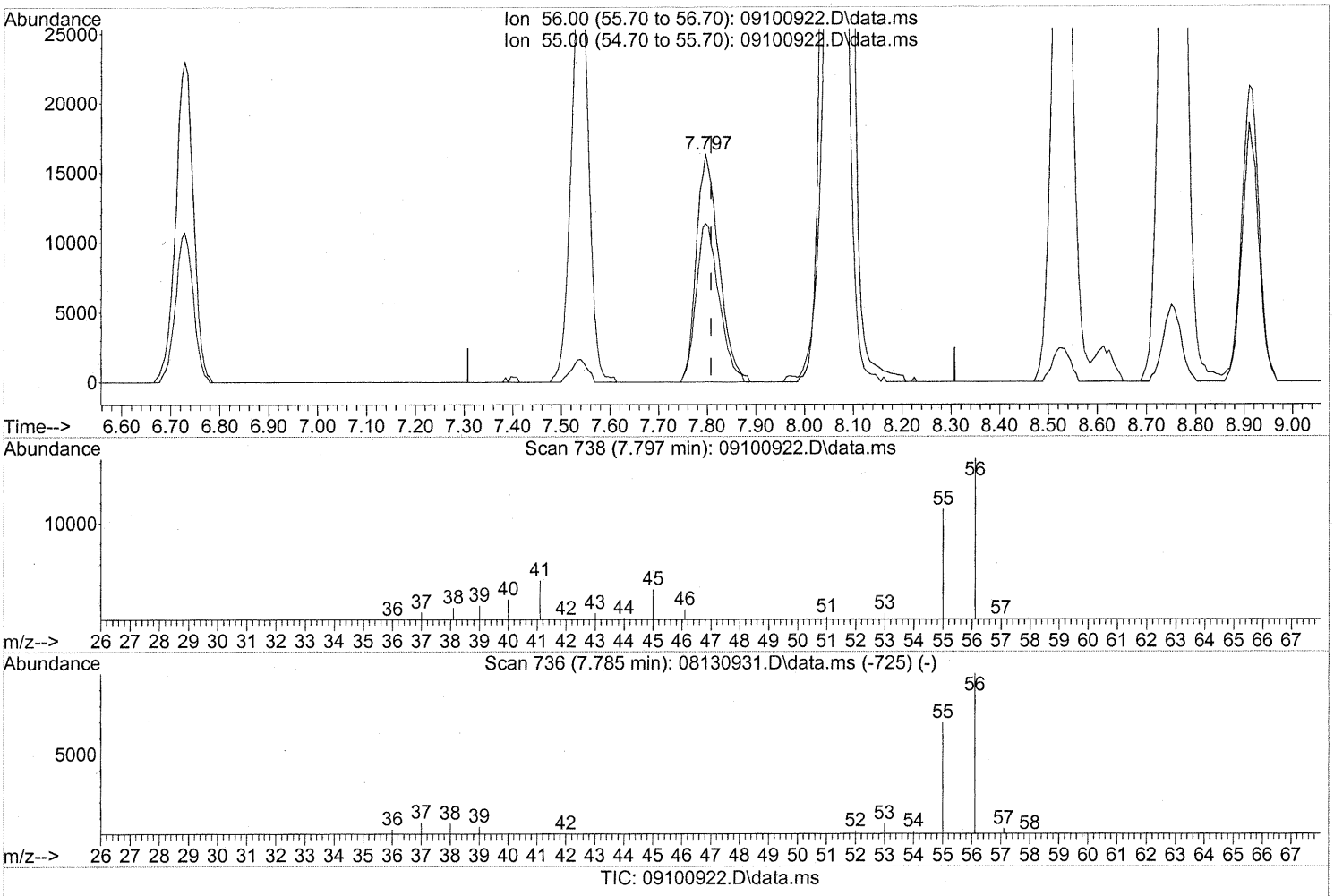
After subtraction

91

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 4.67ng

response 52446

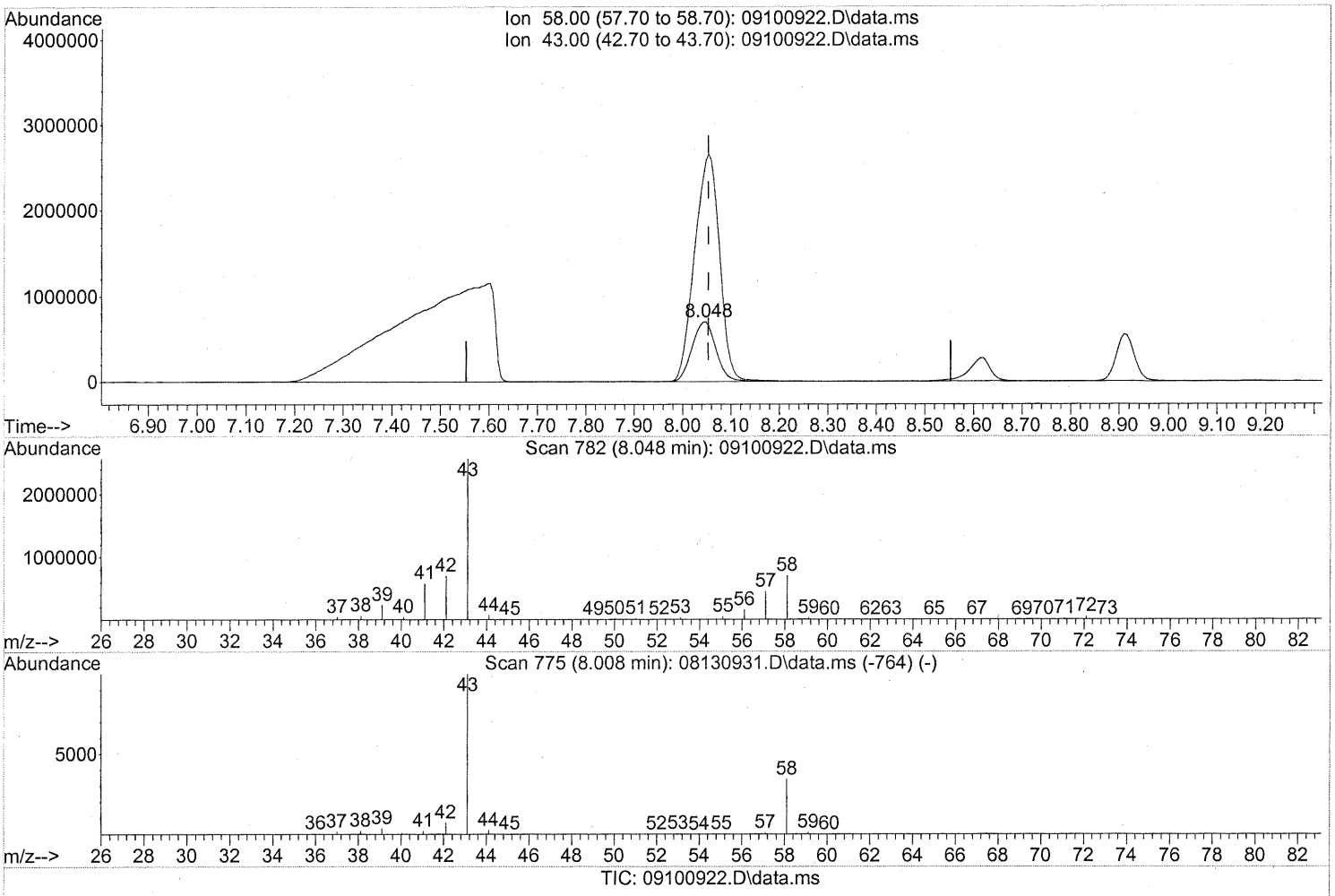
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.40
0.00	0.00	0.00
0.00	0.00	0.00

92

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(13) Acetone (T)

8.048min (-0.006) 137.26ng

response 2403318

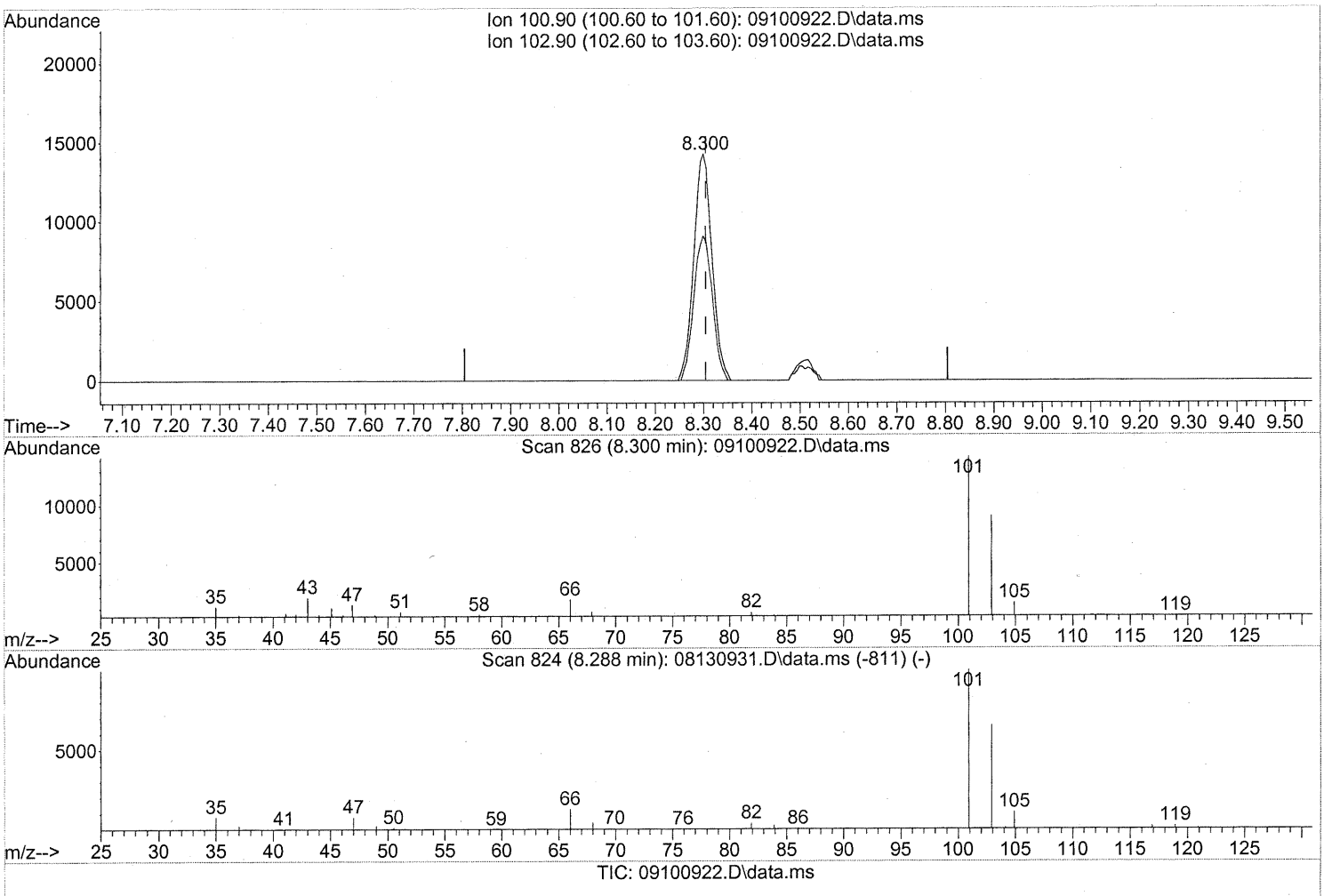
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	396.68#
0.00	0.00	0.00
0.00	0.00	0.00

93

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(14) Trichlorofluoromethane (T)

8.300min (-0.006) 1.12ng

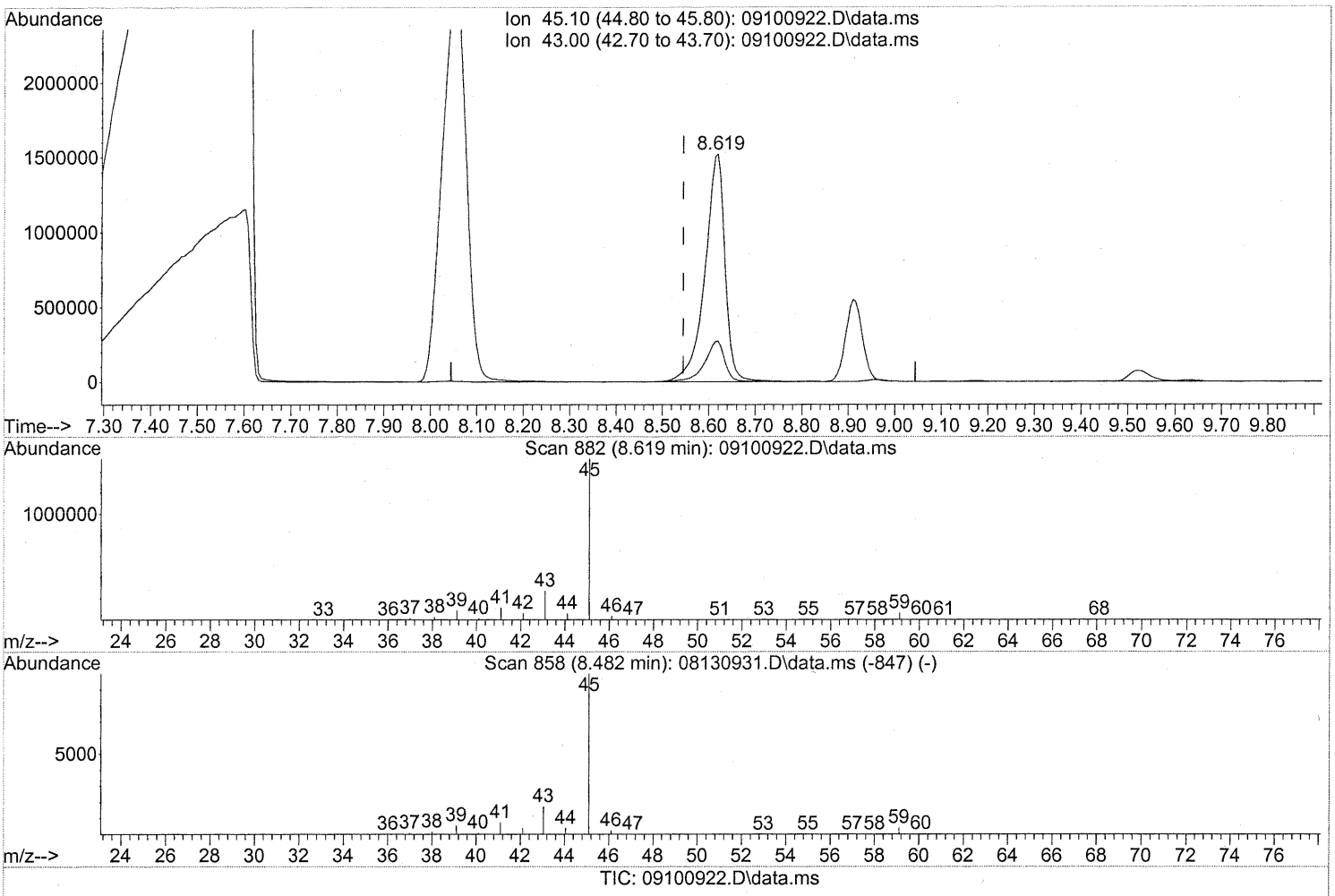
response 37337

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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



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

8.619min (+0.074) 95.79ng

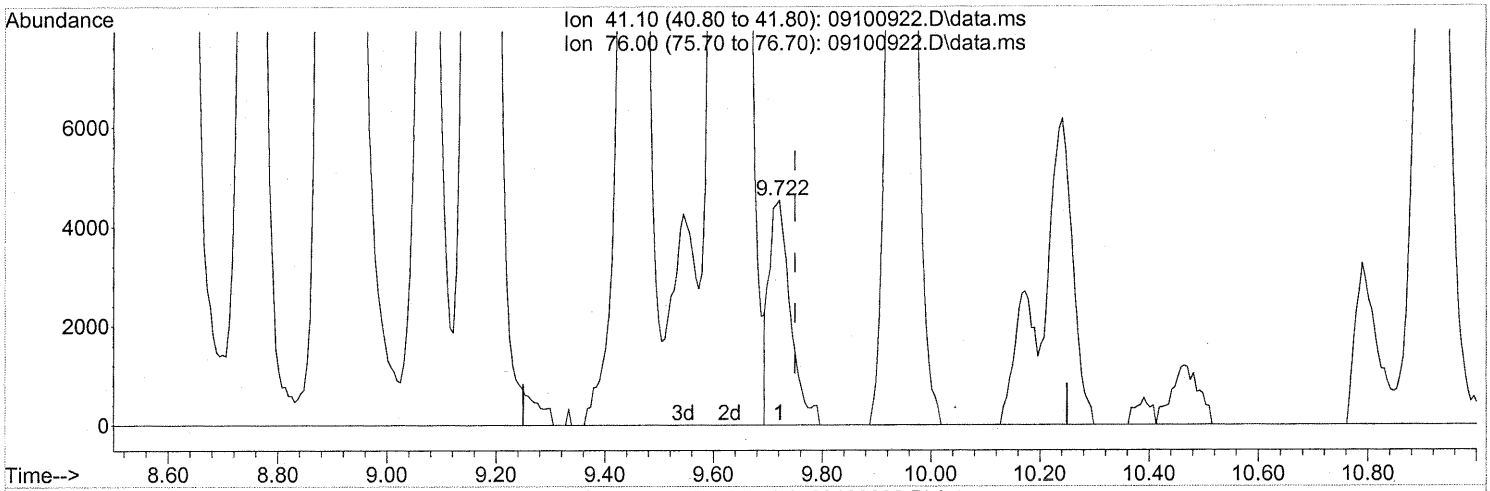
response 4593180

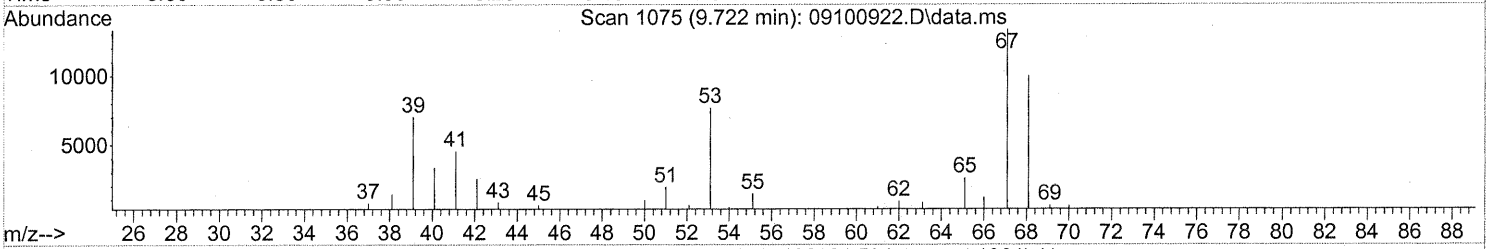
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.82
0.00	0.00	0.00
0.00	0.00	0.00

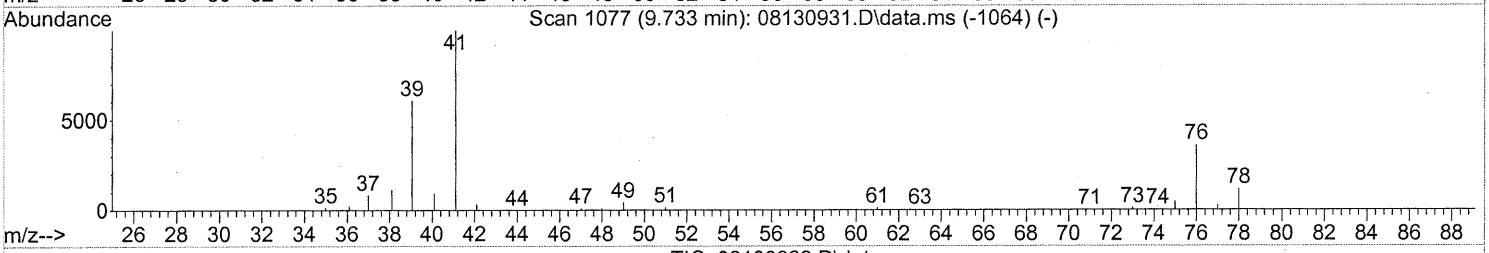
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

9.722min (-0.028) 0.42ng

response 12373

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

FP 9m 9/18/09

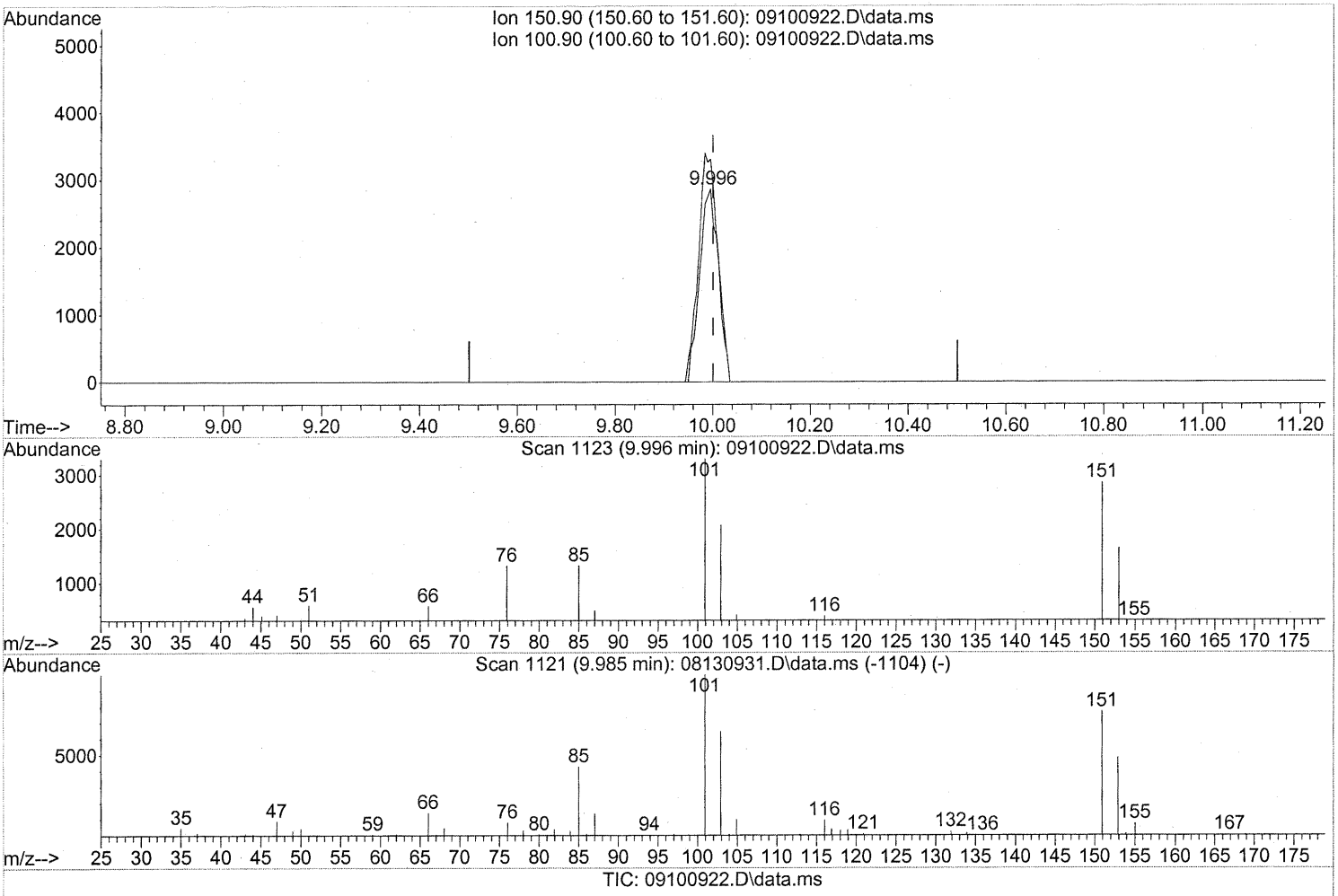
9/21/09

96

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.51ng

response 7599

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	123.00
0.00	0.00	0.00
0.00	0.00	0.00

97

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

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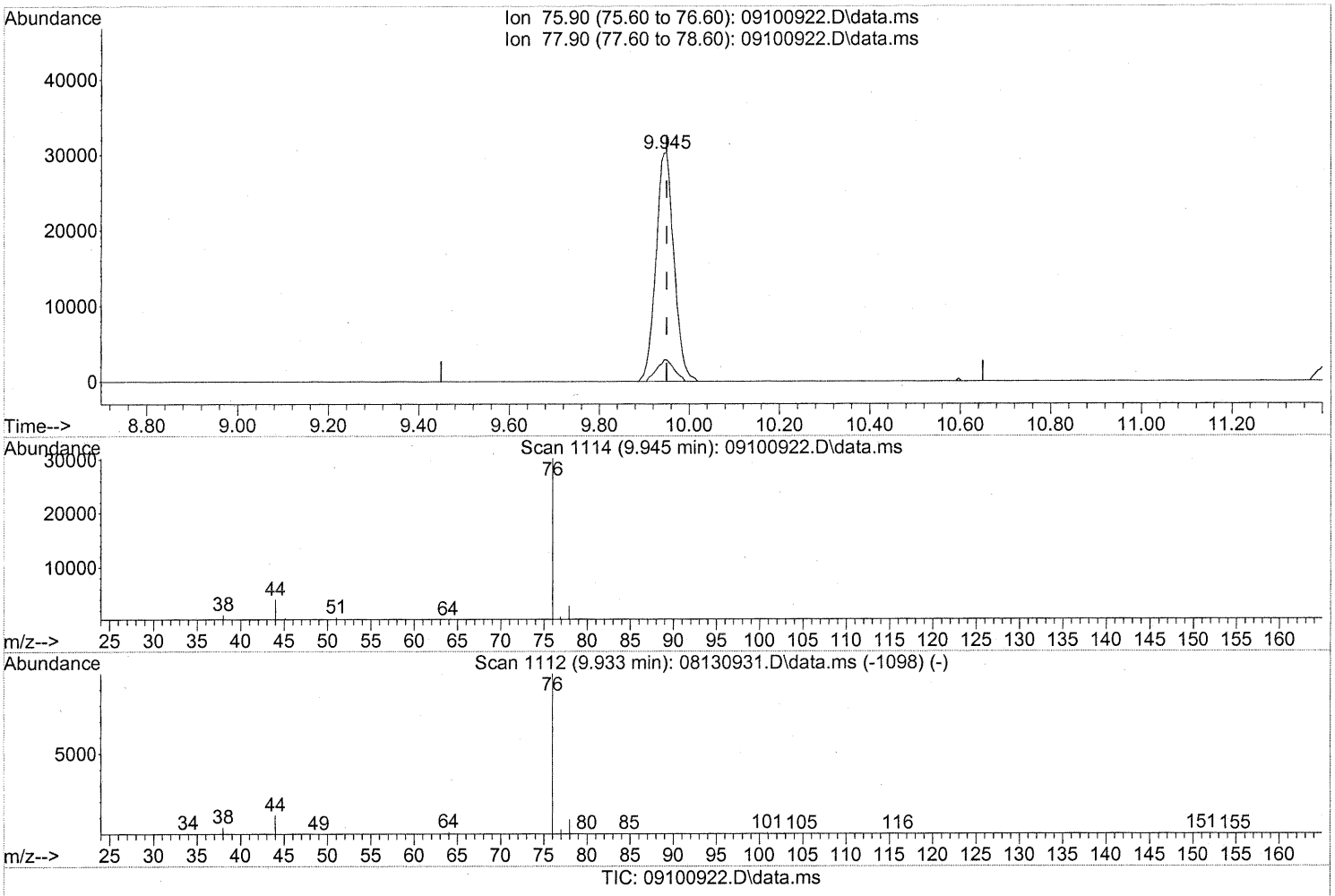
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100922.D\data.ms

(22) Carbon Disulfide (T)

9.945min (-0.006) 1.09ng

response 84269

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
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Operator : EM
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Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

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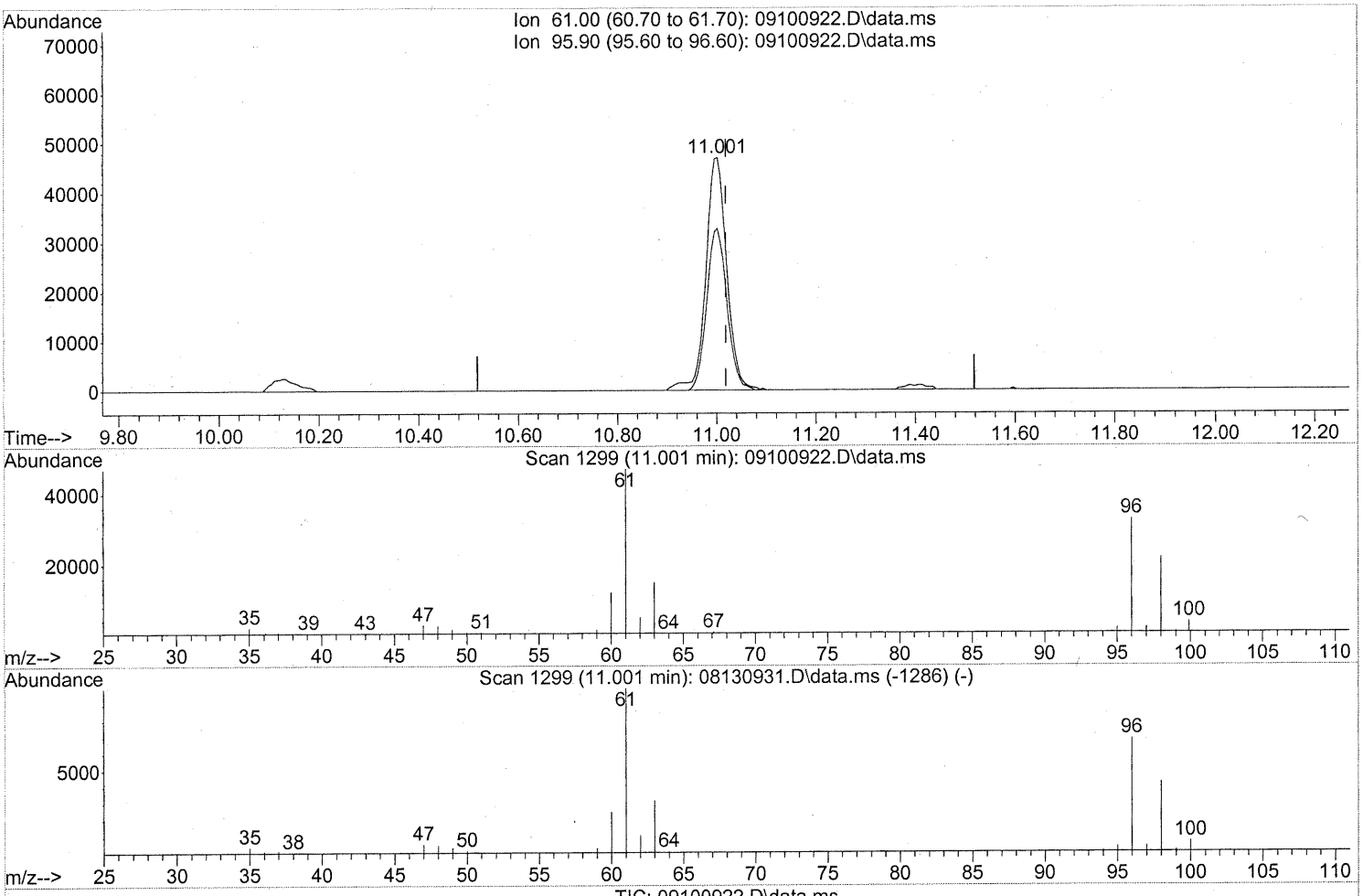
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100922.D\data.ms

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

11.001min (-0.017) 4.57ng

response 137690

Ion	Exp%	Act%
61.00	100	100
95.90	74.10	67.20
0.00	0.00	0.00
0.00	0.00	0.00

99

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

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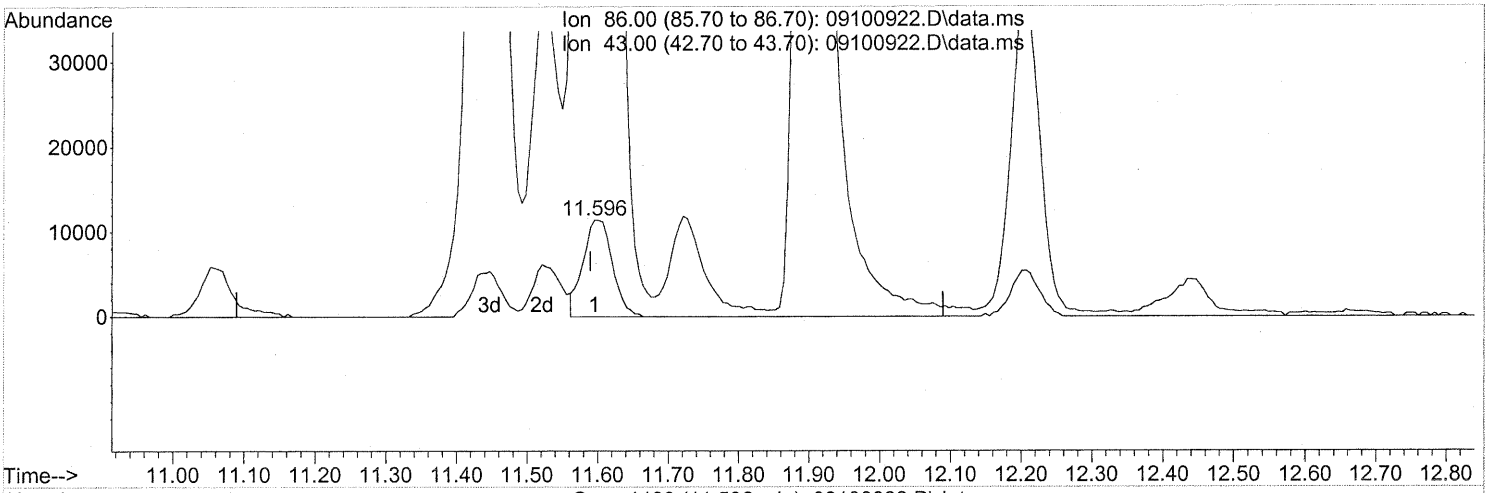
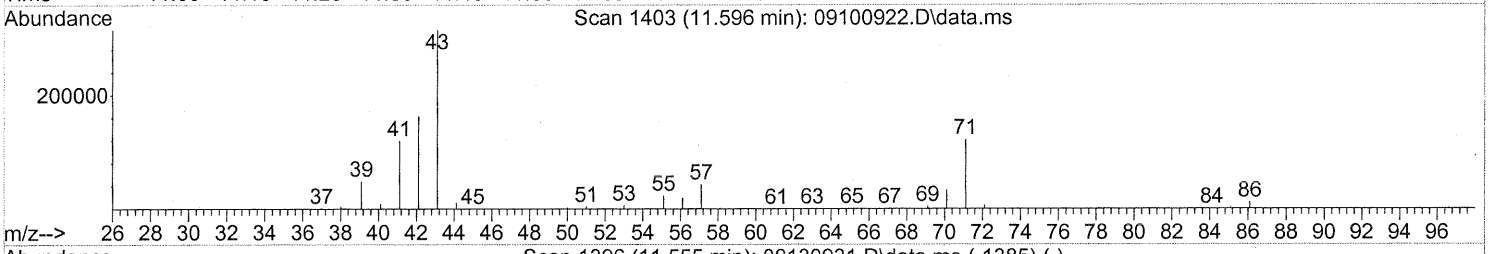
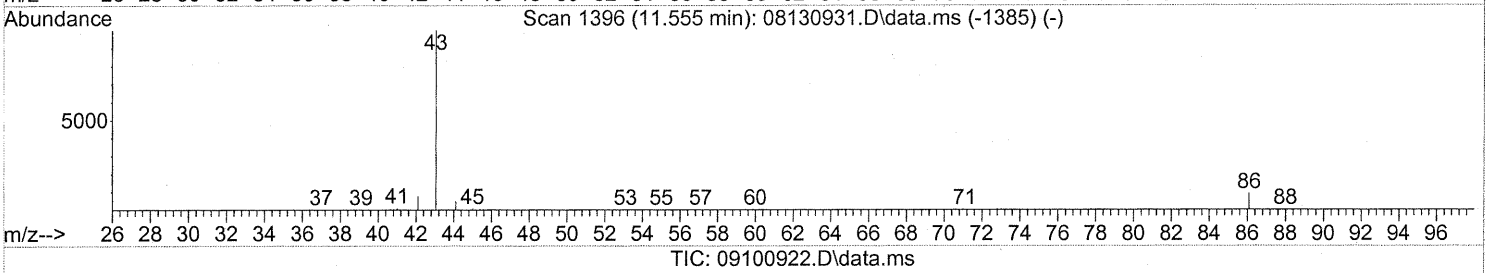
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100922.D\data.ms

(26) Vinyl Acetate (T)

11.596min (+0.006) 8.66ng

response 32841

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2677.15#
0.00	0.00	0.00
0.00	0.00	0.00

MP

100

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
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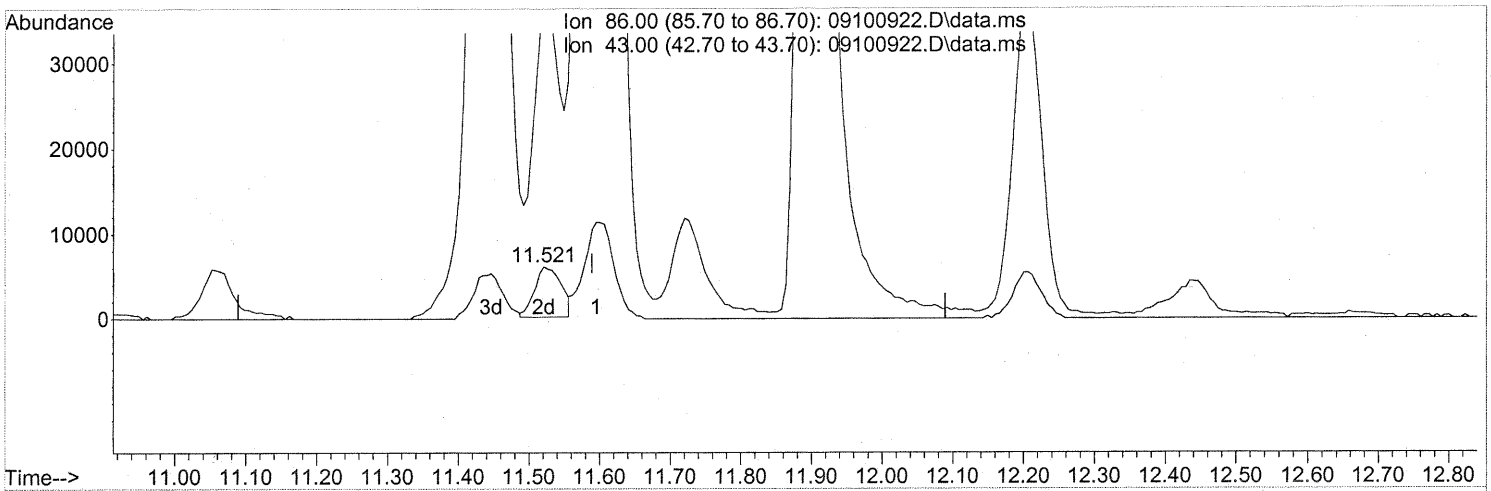
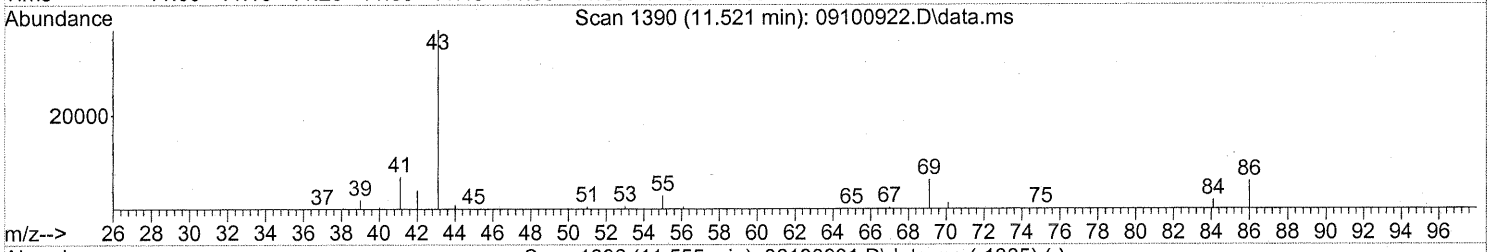
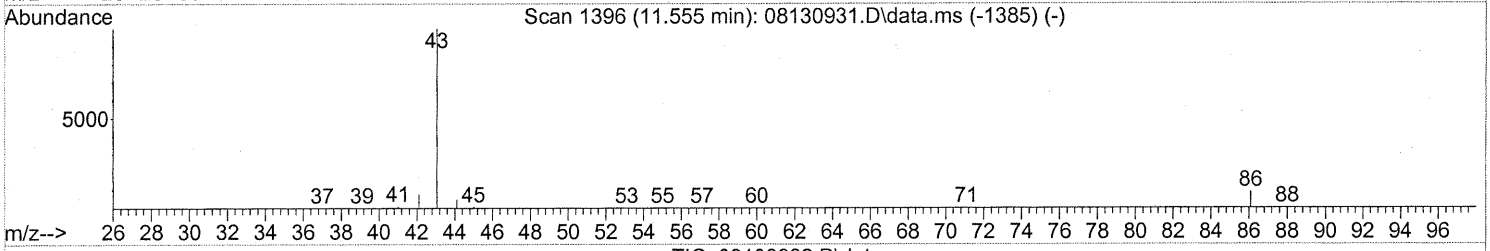
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(26) Vinyl Acetate (T)

11.521min (-0.069) 4.04ng m

response 15333

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	5734.06#
0.00	0.00	0.00
0.00	0.00	0.00

CRL

mp → IC

Tom 9/18/09

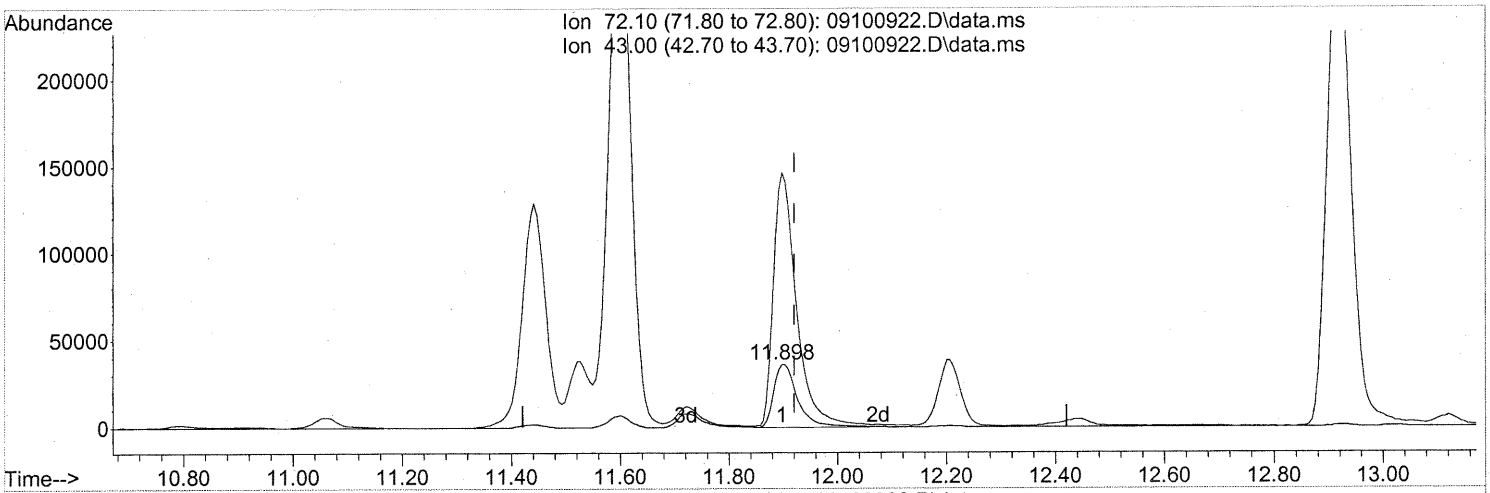
E - 9/21/09

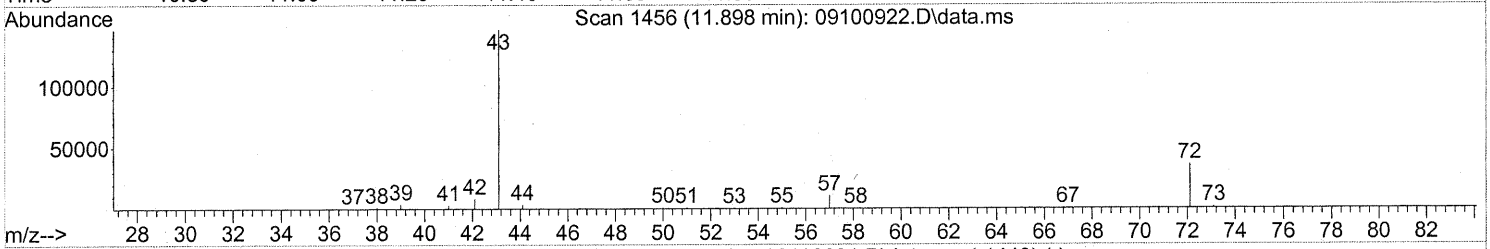
101

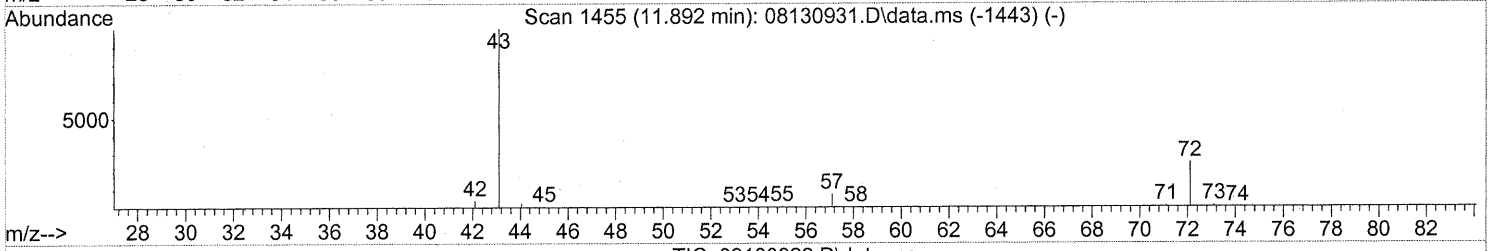
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

11.898min (-0.023) 8.91ng

response 108753

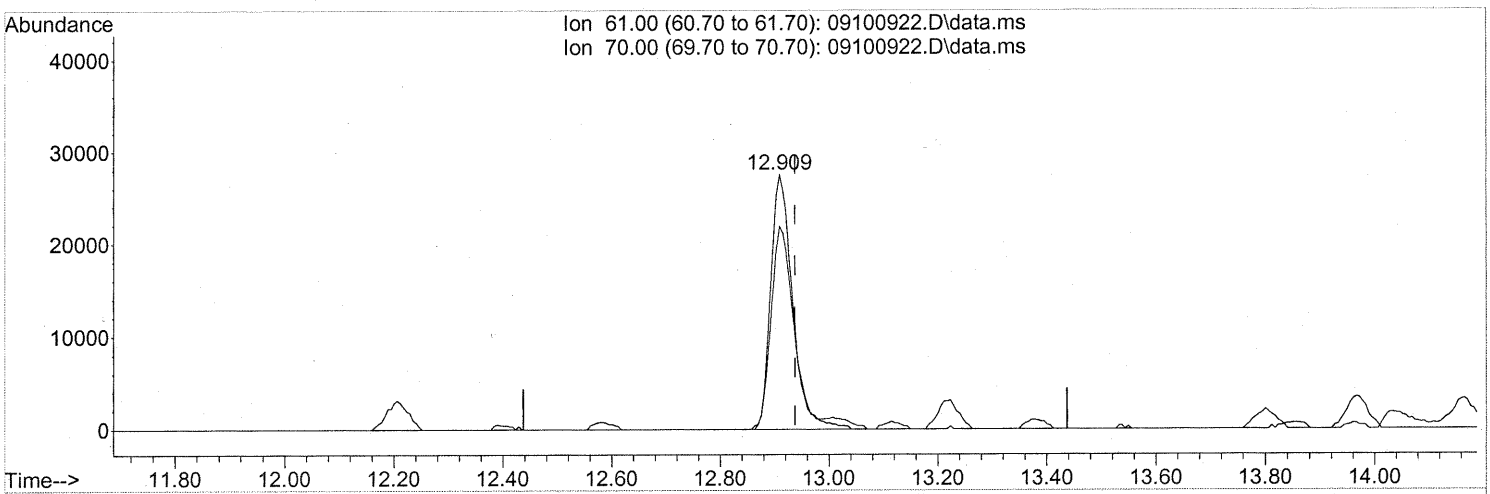
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	391.35#
0.00	0.00	0.00
0.00	0.00	0.00

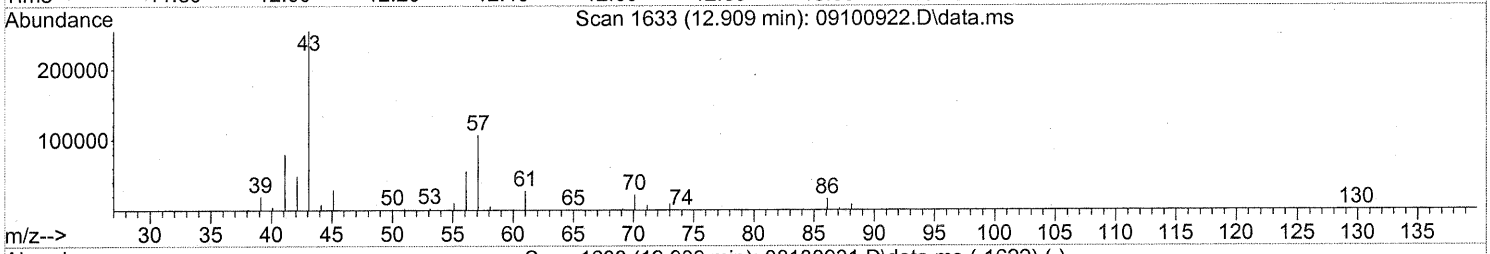
102

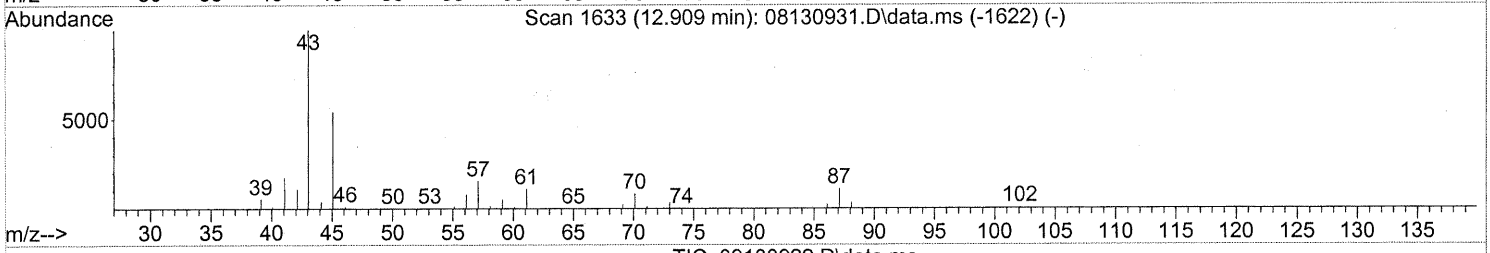
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 9.71ng

response 76870

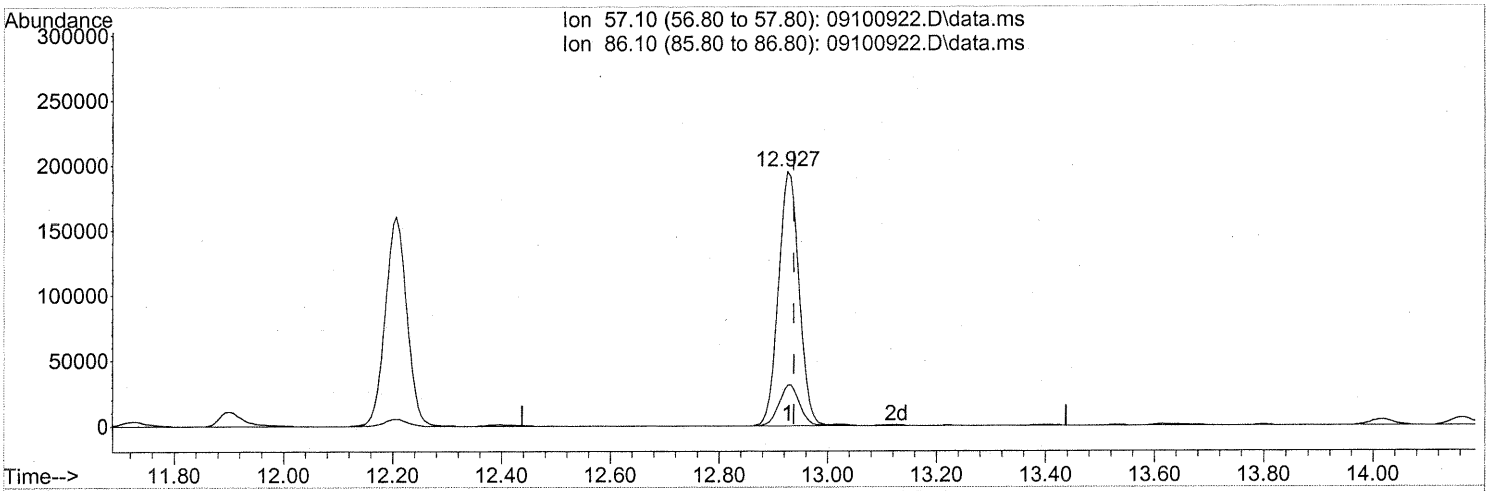
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	86.55
0.00	0.00	0.00
0.00	0.00	0.00

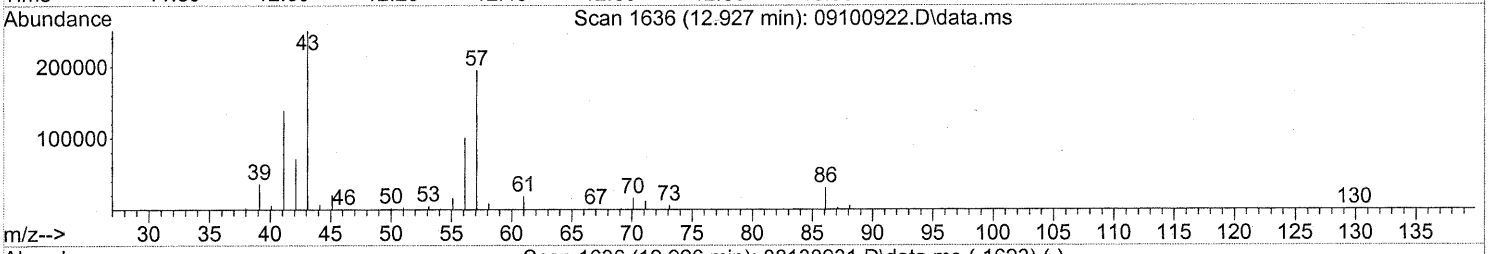
103

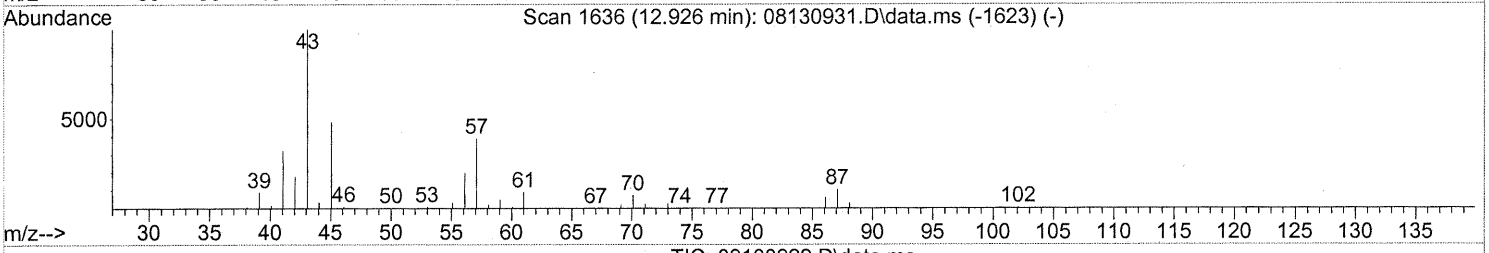
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(31) n-Hexane (T)

12.927min (-0.011) 13.27ng

response 512161

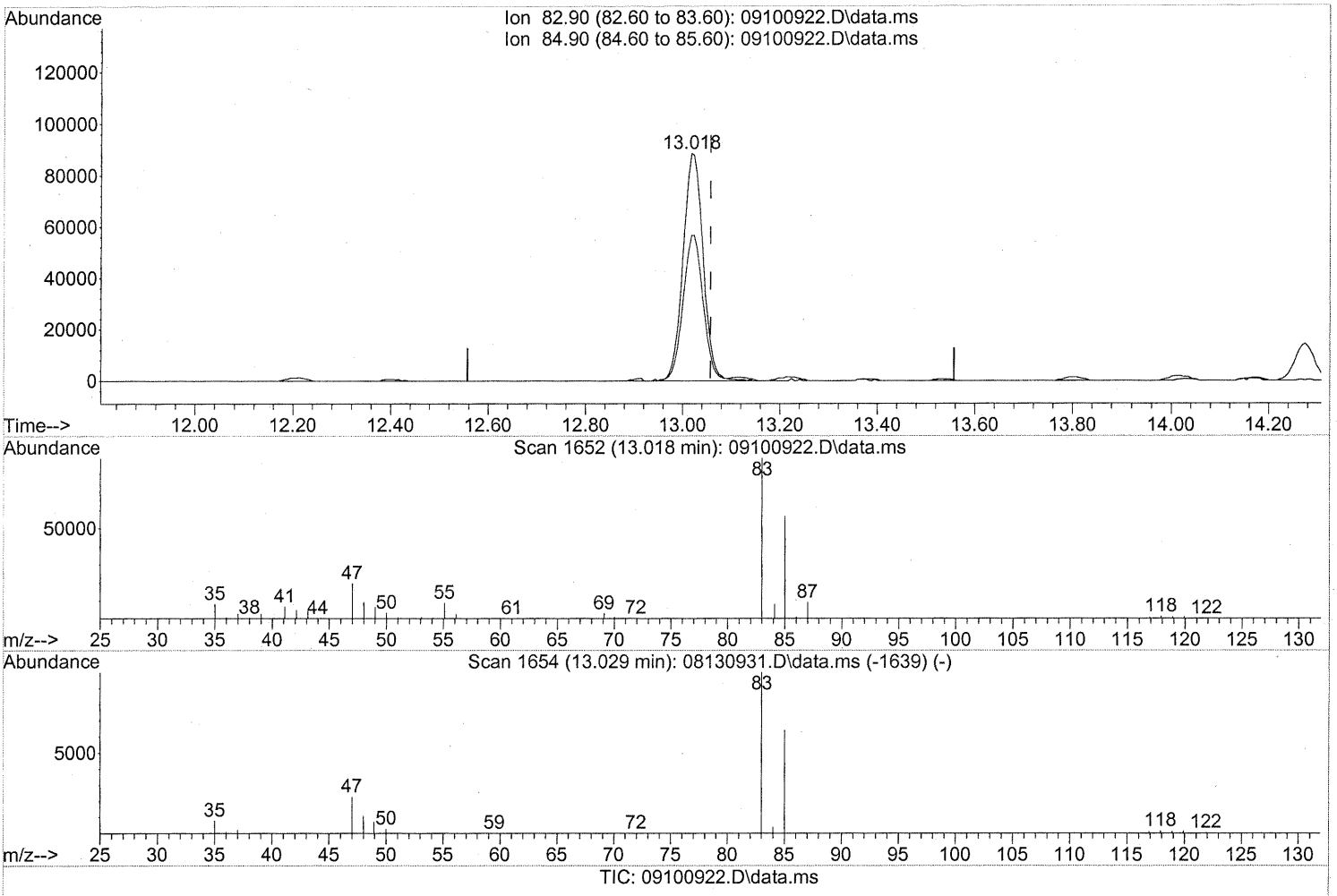
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.77
0.00	0.00	0.00
0.00	0.00	0.00

104

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 7.84ng

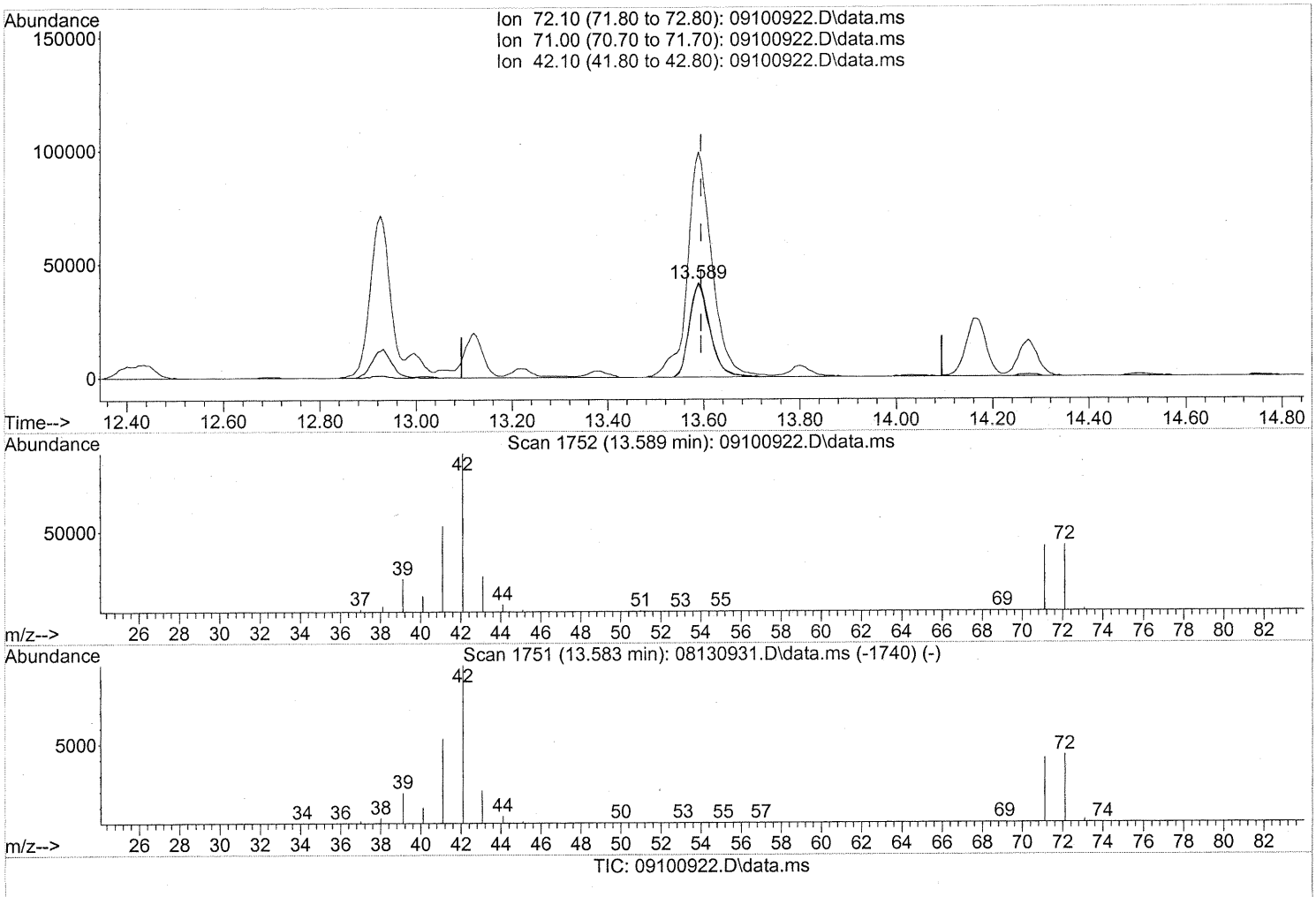
response 253320

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	64.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.589min (-0.006) 9.71ng

response 123287

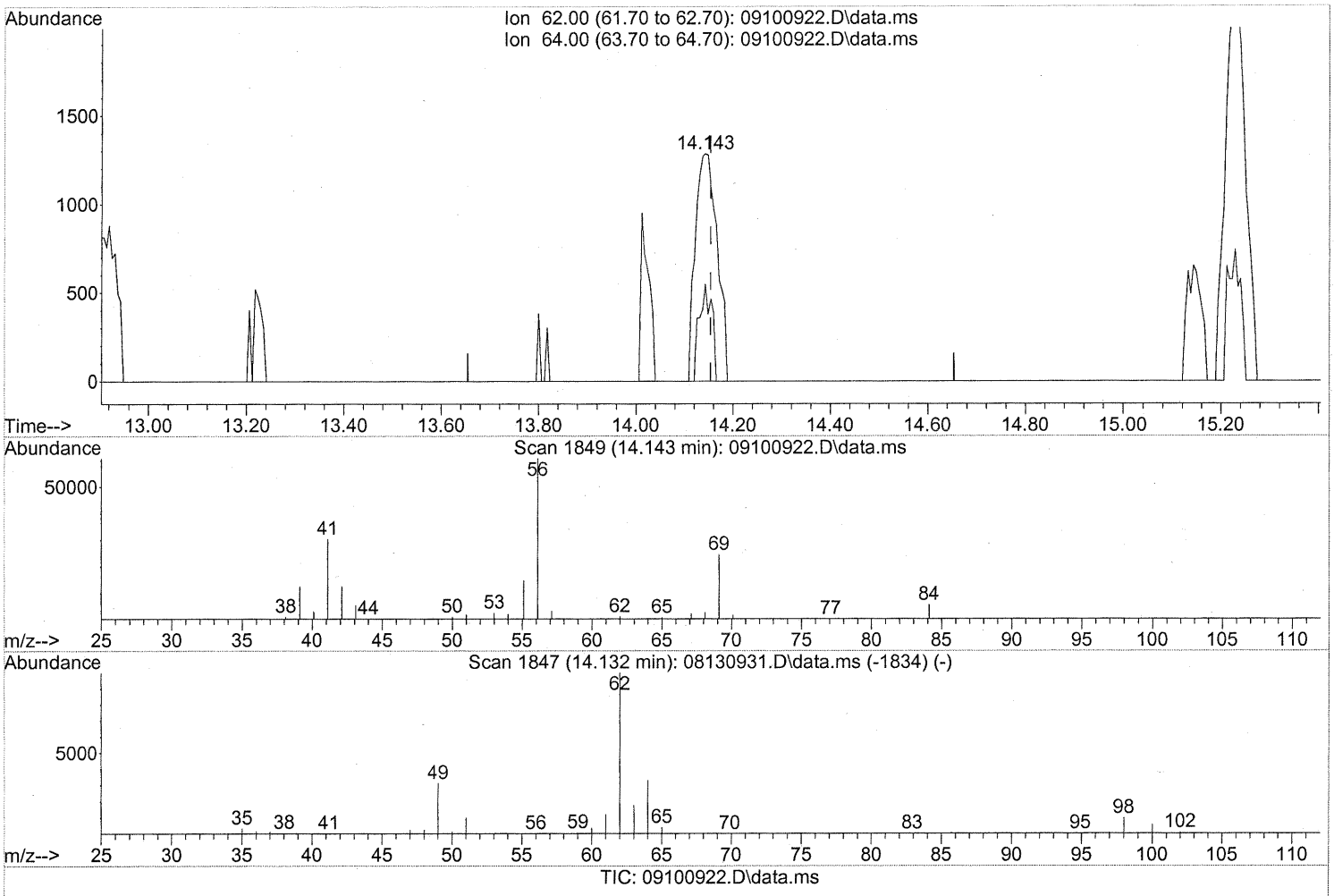
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	96.58
42.10	206.50	286.23#
0.00	0.00	0.00

106

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(36) 1,2-Dichloroethane (T)

14.143min (-0.011) 0.16ng

response 4018

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	24.69
0.00	0.00	0.00
0.00	0.00	0.00

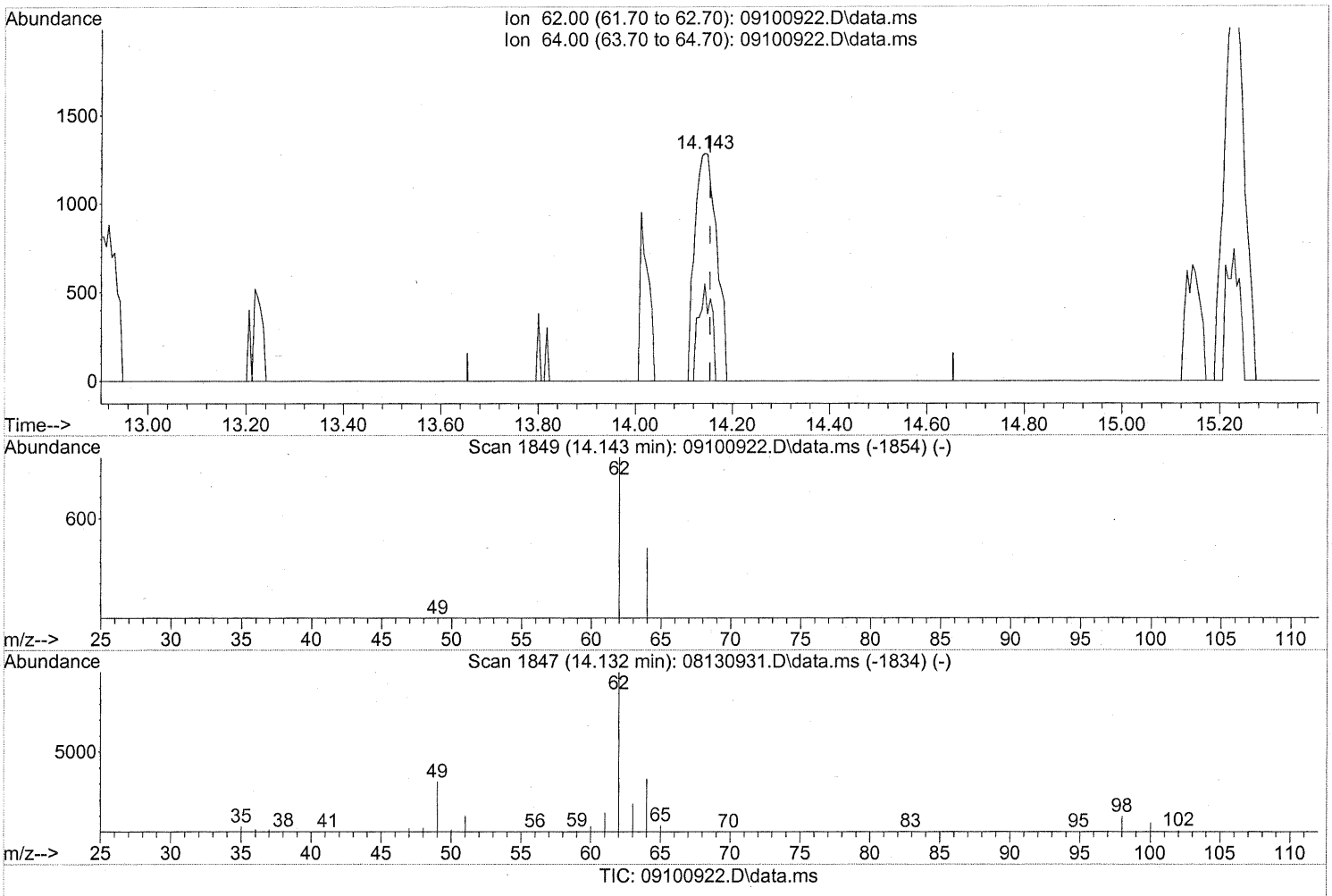
Before subtraction

107

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(36) 1,2-Dichloroethane (T)

14.143min (-0.011) 0.16ng

response 4018

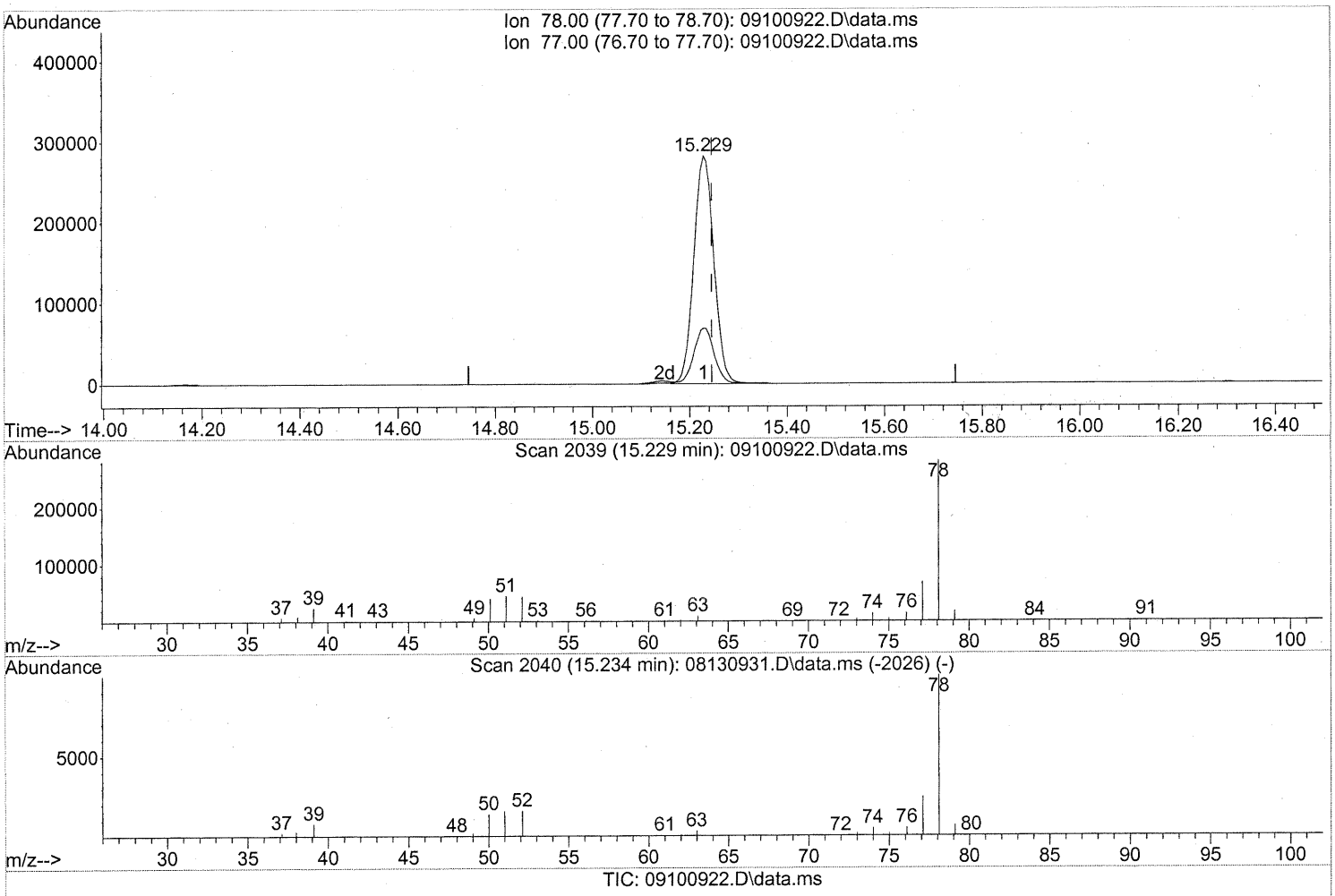
Ion	Exp%	Act%
62.00	100	100
64.00	32.70	24.69
0.00	0.00	0.00
0.00	0.00	0.00

After subtraction

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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



(41) Benzene (T)

15.229min (-0.017) 9.48ng

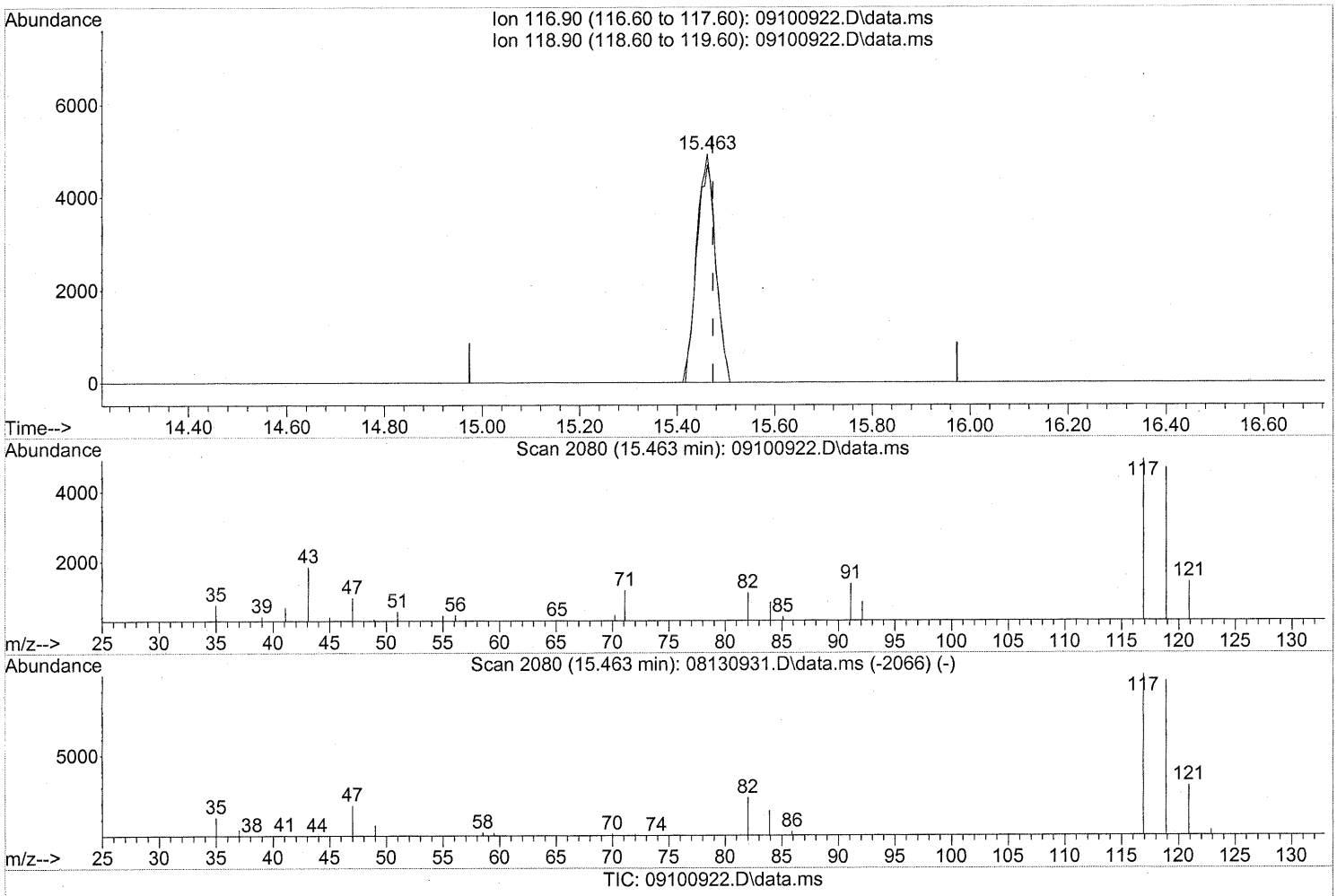
response 804453

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.42
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(42) Carbon Tetrachloride (T)

15.463min (-0.011) 0.56ng

response 13194

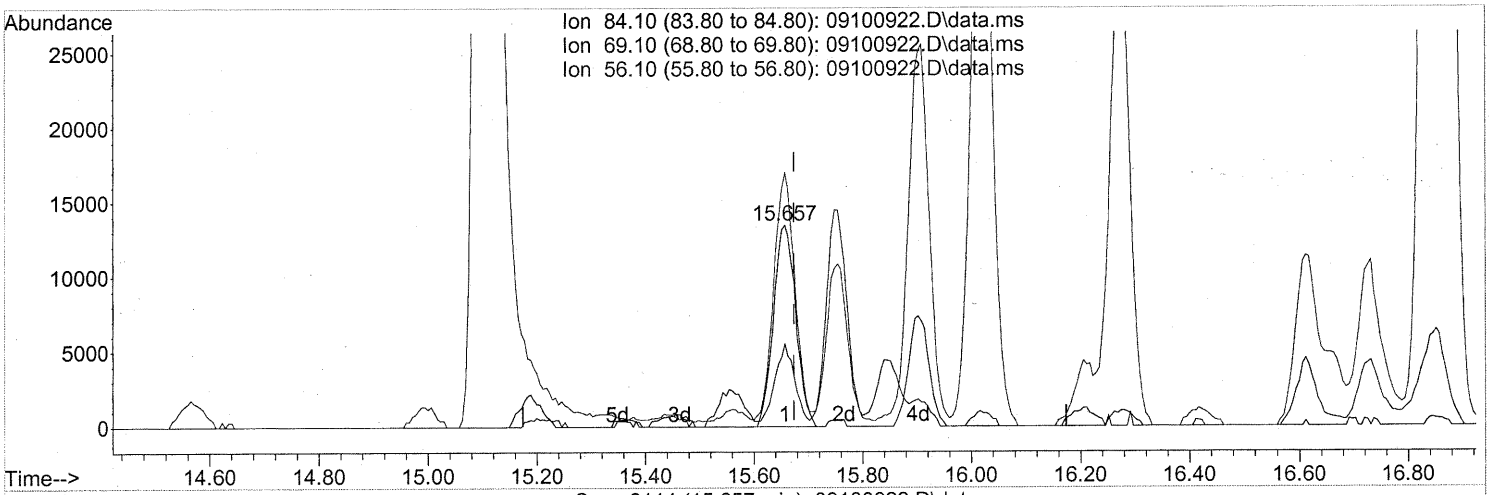
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	97.81
0.00	0.00	0.00
0.00	0.00	0.00

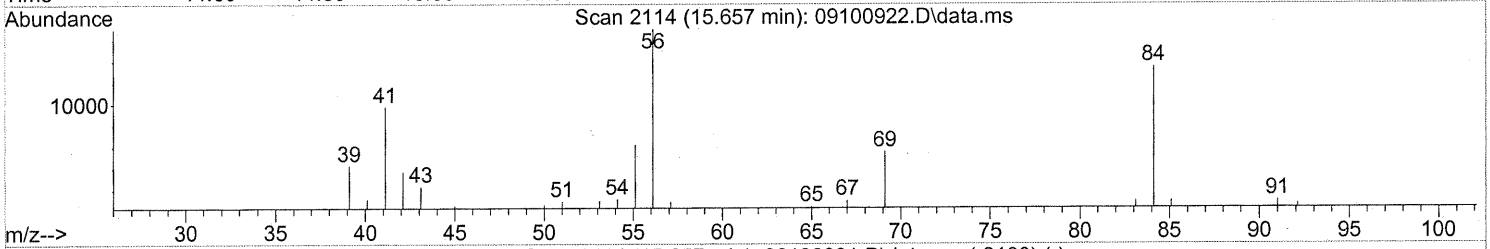
110

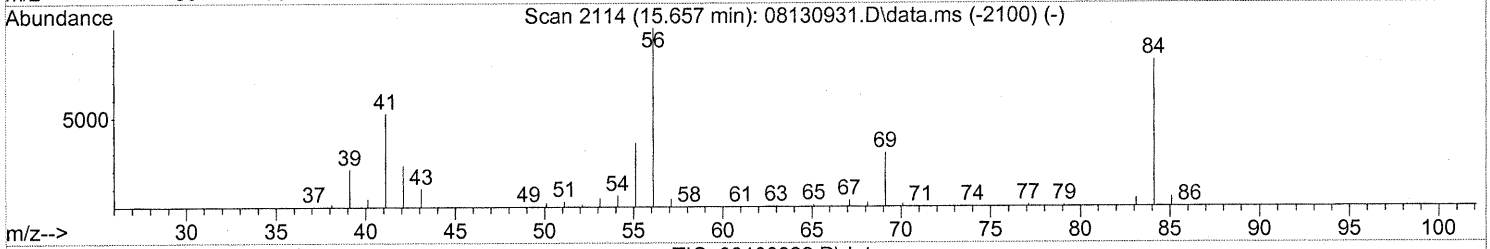
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 1.16ng

response 38184

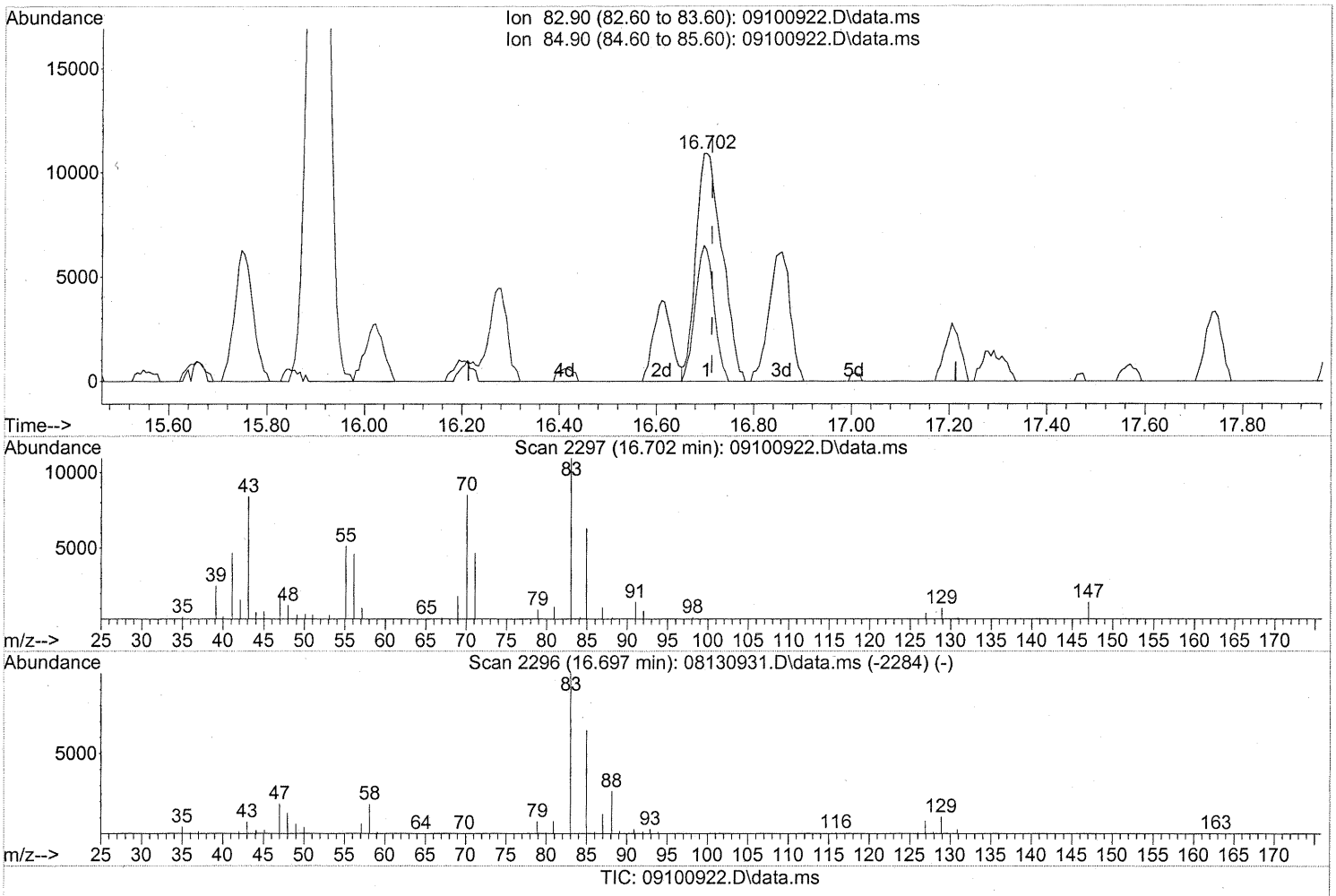
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	37.61
56.10	107.30	123.55
0.00	0.00	0.00

111

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(46) Bromodichloromethane (T)

16.702min (-0.011) 1.64ng

response 40761

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	42.40#
0.00	0.00	0.00
0.00	0.00	0.00

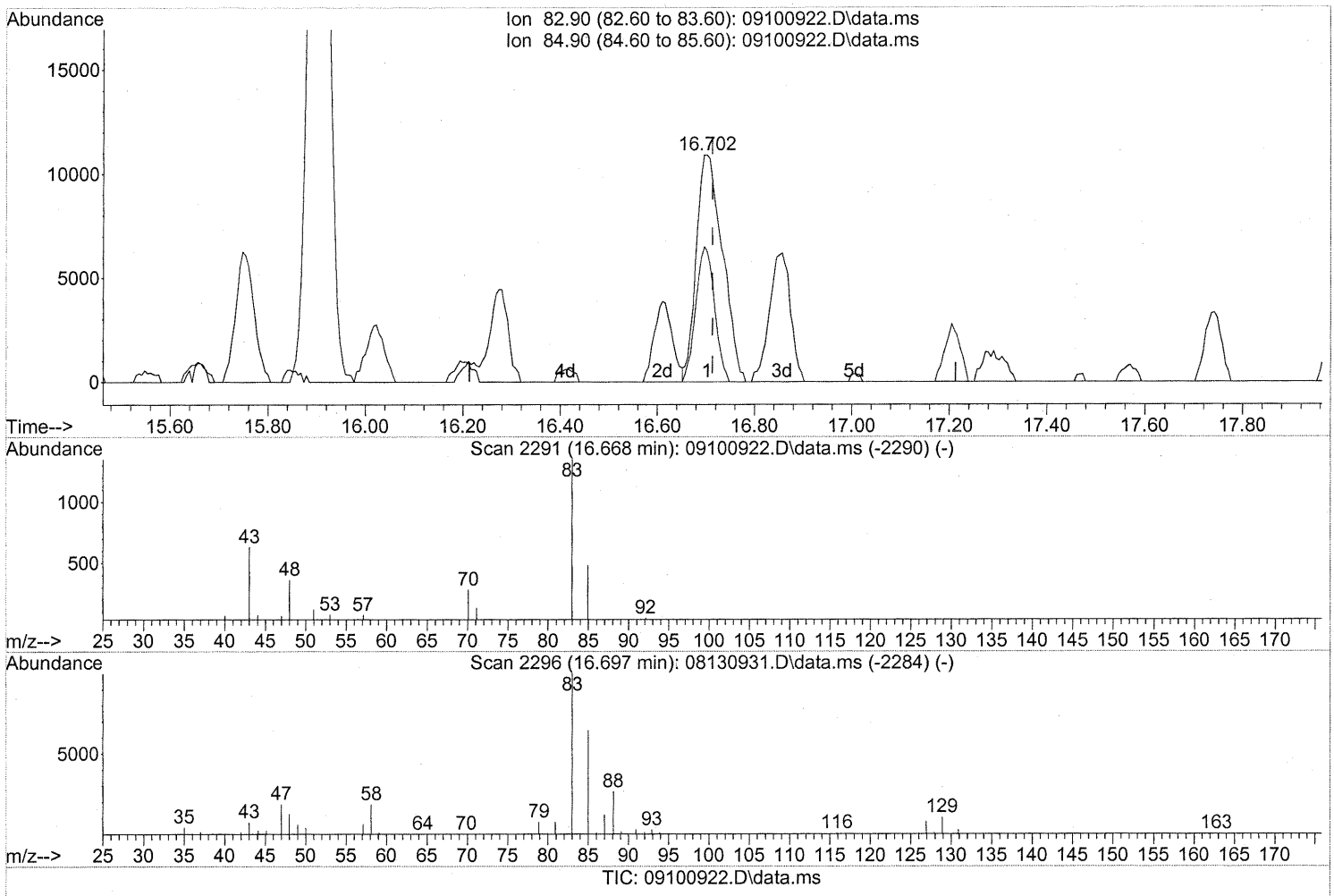
Before subtraction

112

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(46) Bromodichloromethane (T)

16.702min (-0.011) 1.64ng

response 40761

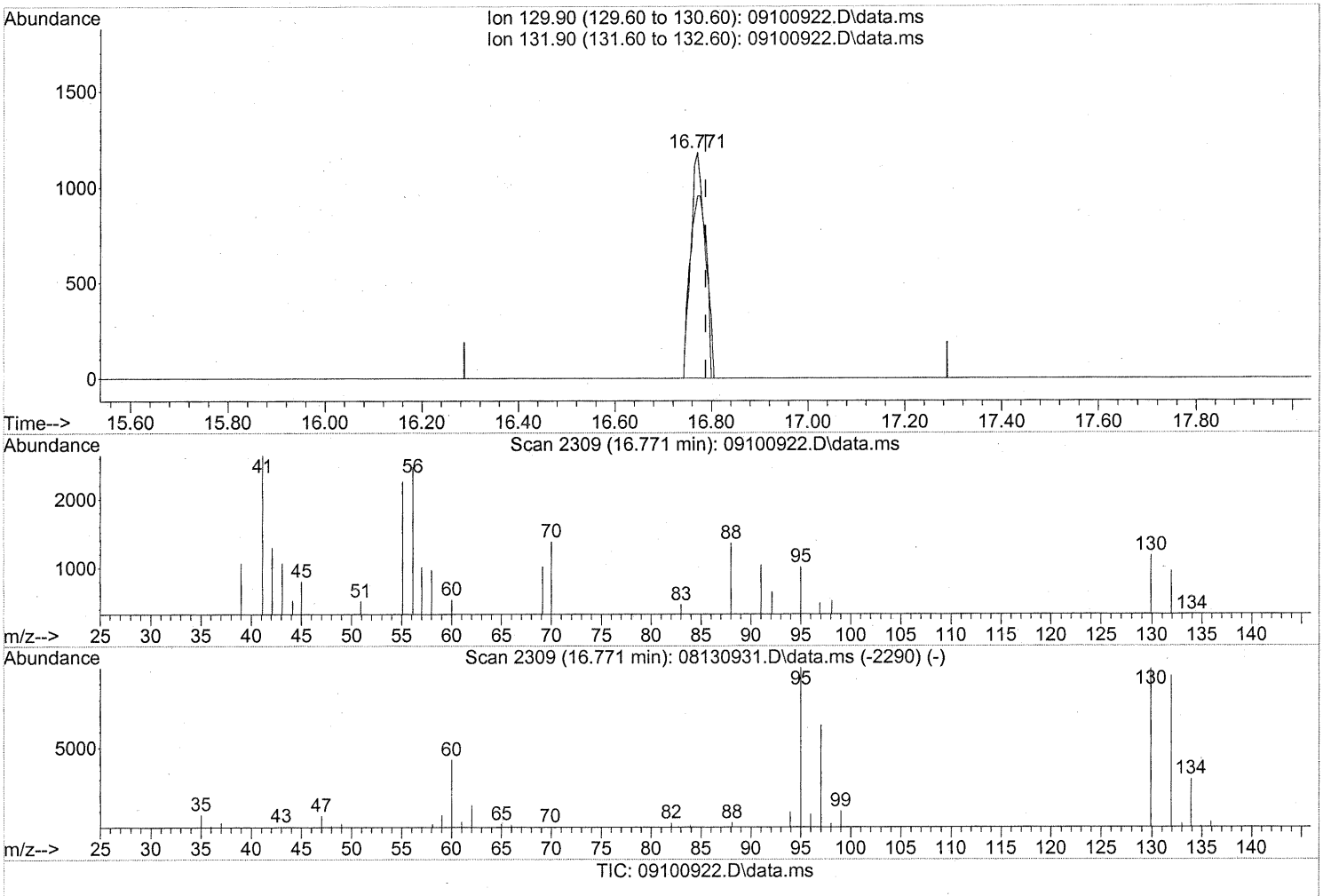
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	42.40#
0.00	0.00	0.00
0.00	0.00	0.00

After subtraction

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(47) Trichloroethene (T)

16.771min (-0.017) 0.11ng

response 2421

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	93.06
0.00	0.00	0.00
0.00	0.00	0.00

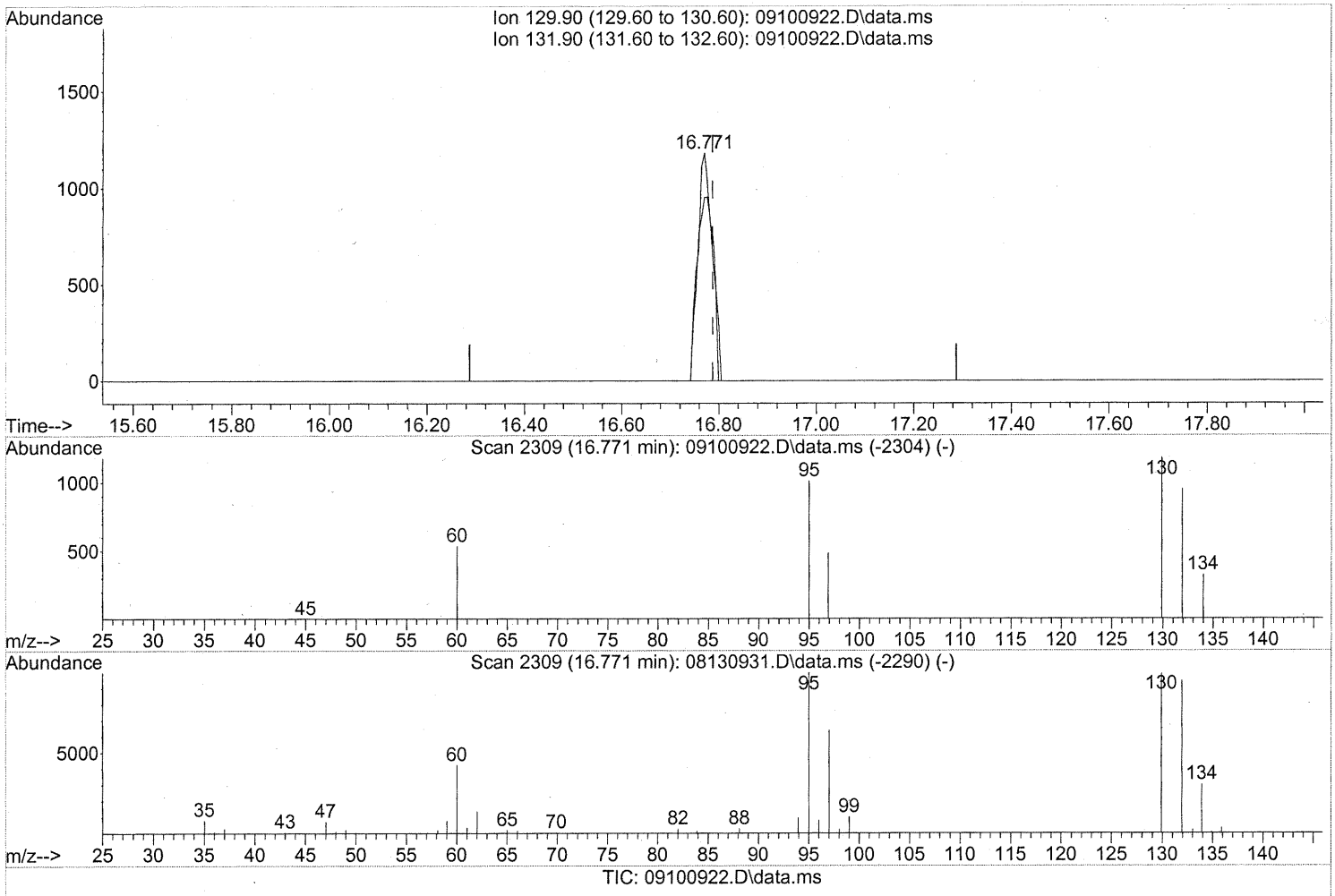
Before subtraction

114

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(47) Trichloroethene (T)

16.771min (-0.017) 0.11ng

response 2421

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	93.06
0.00	0.00	0.00
0.00	0.00	0.00

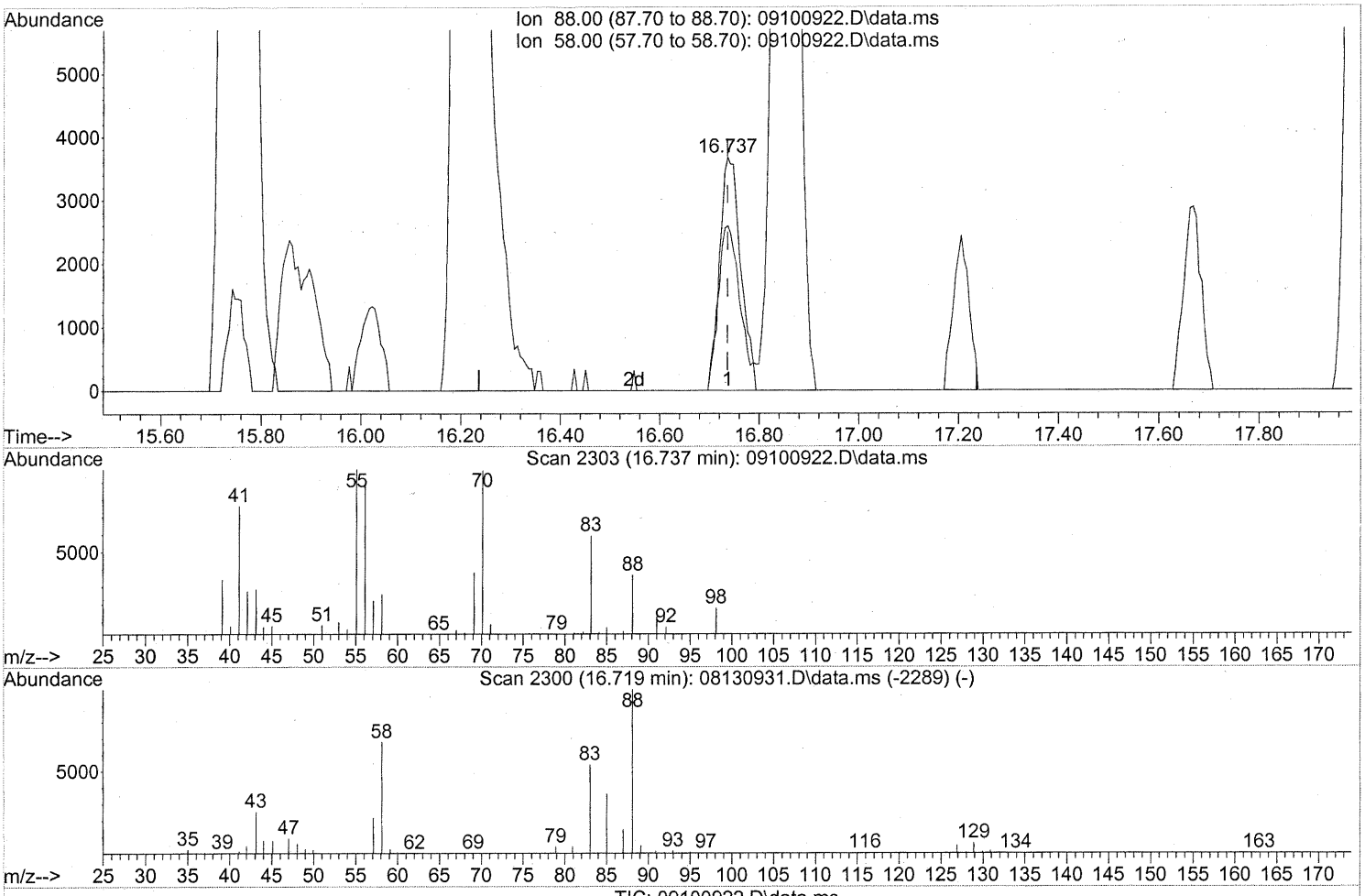
After subtraction

115

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(48) 1,4-Dioxane (T)

16.737min (+0.000) 0.71ng

response 10782

Before subtraction

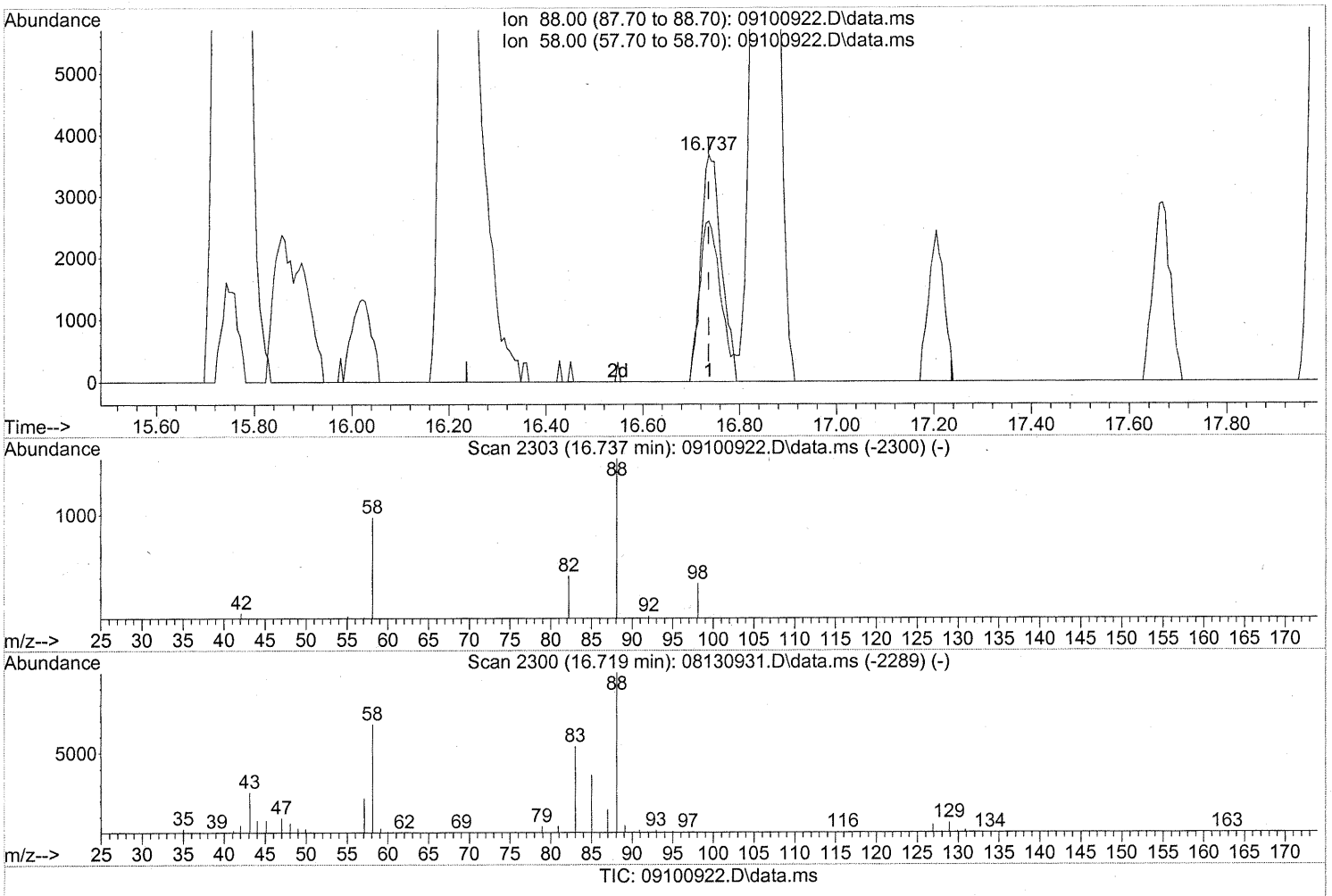
Ion	Exp%	Act%
88.00	100	100
58.00	59.00	74.27
0.00	0.00	0.00
0.00	0.00	0.00

116

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(48) 1,4-Dioxane (T)

16.737min (+0.000) 0.71ng

response 10782

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	74.27
0.00	0.00	0.00
0.00	0.00	0.00

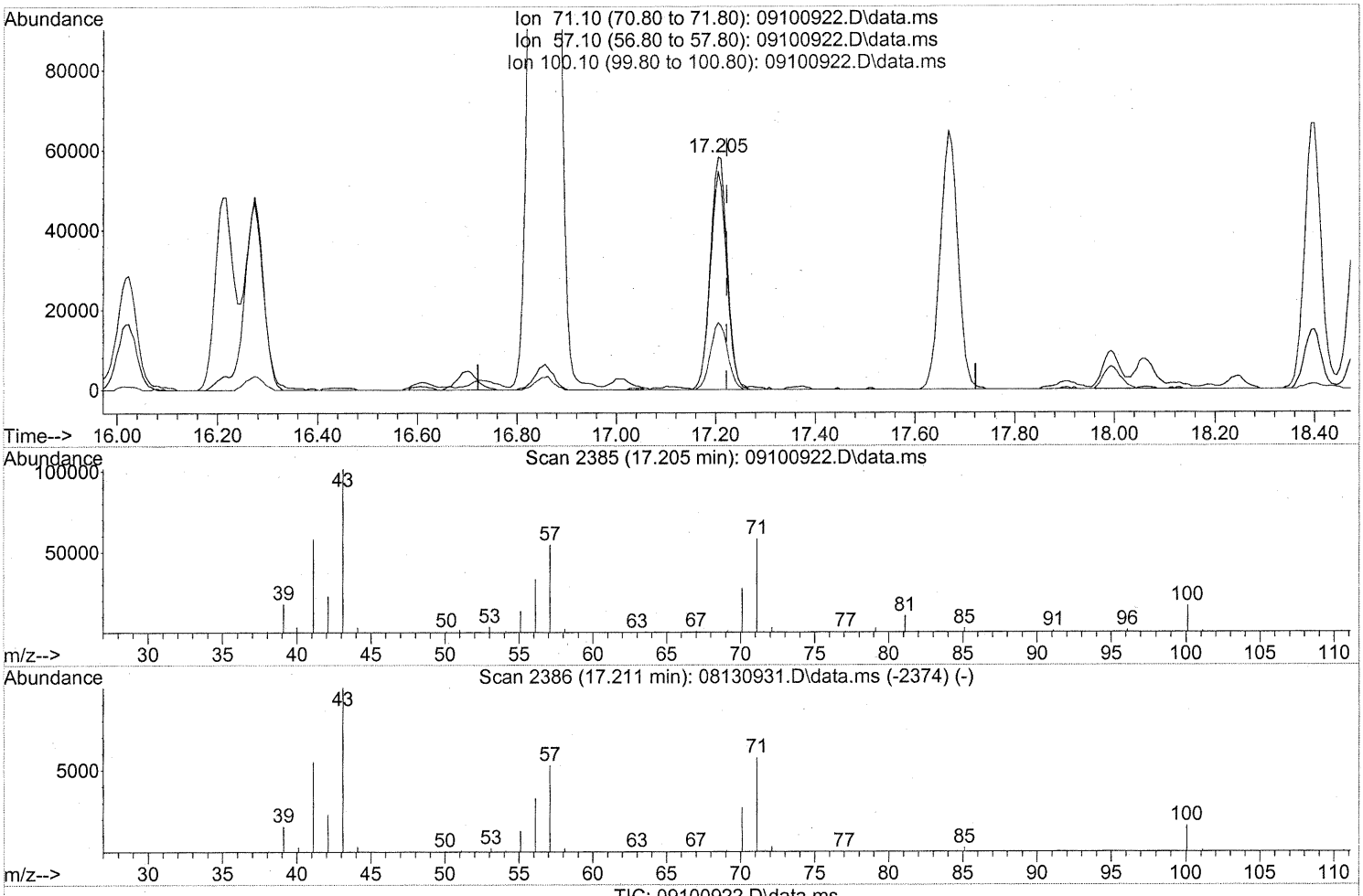
After subtraction

117

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(51) n-Heptane (T)

17.205min (-0.017) 6.01ng

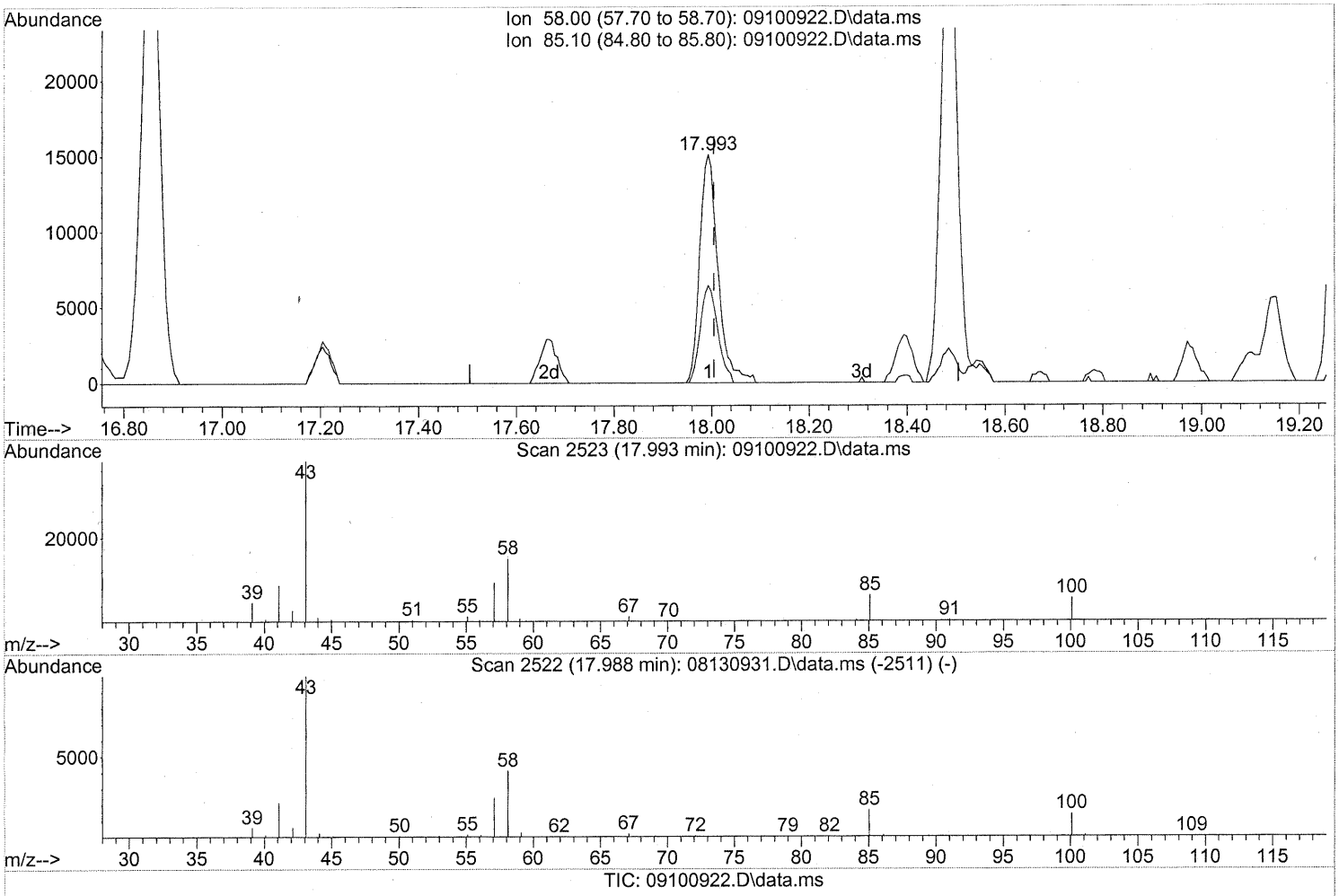
response 135858

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	92.05
100.10	30.70	28.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

17.993min (-0.012) 2.13ng

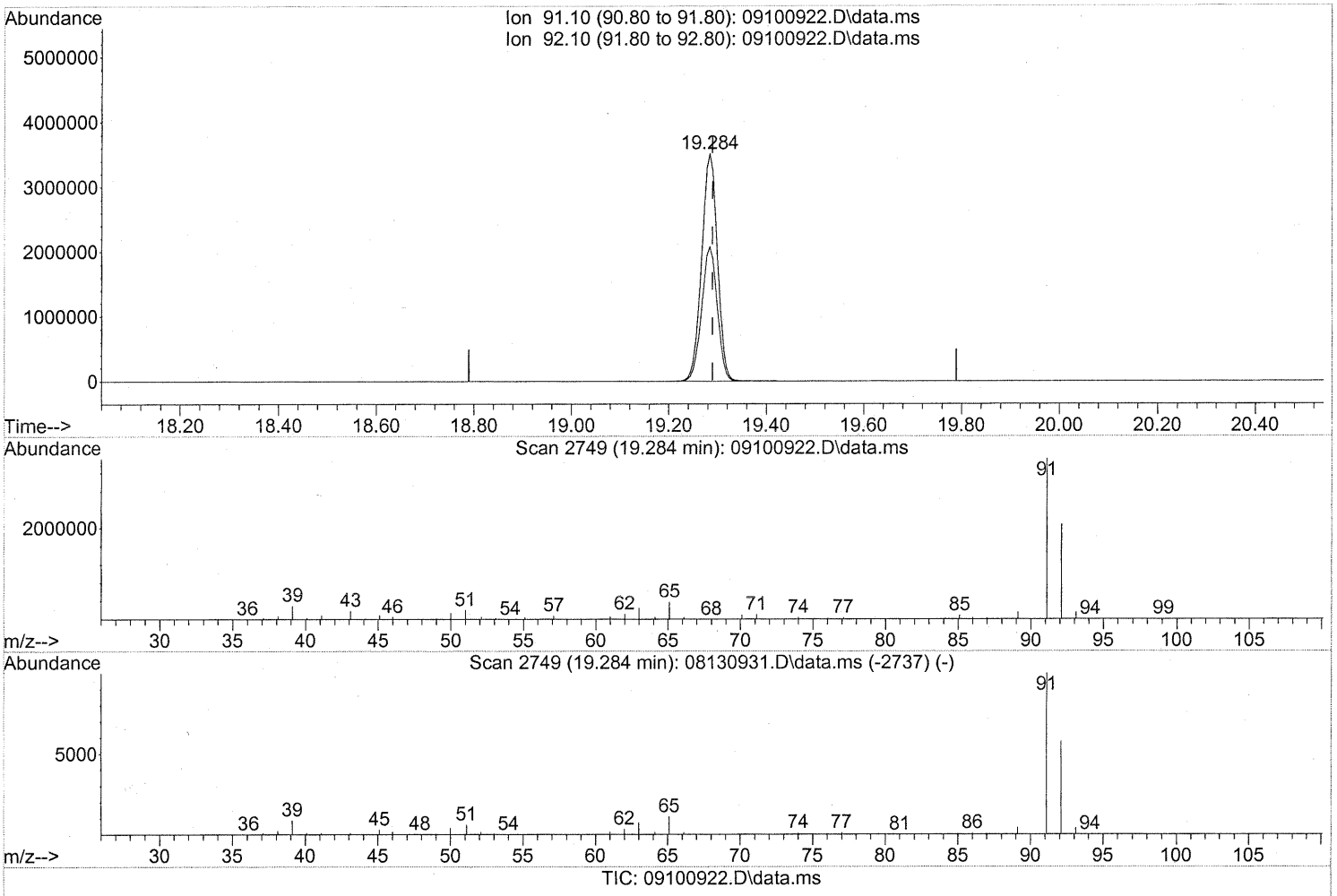
response 39047

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(58) Toluene (T)

19.284min (-0.006) 87.13ng

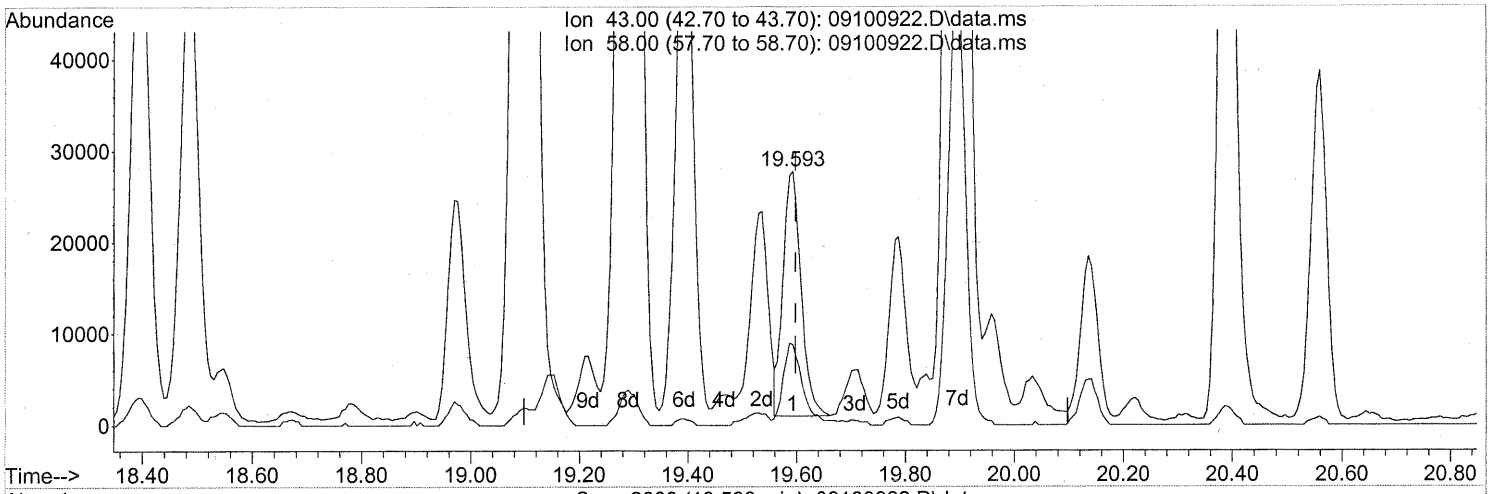
response 7848764

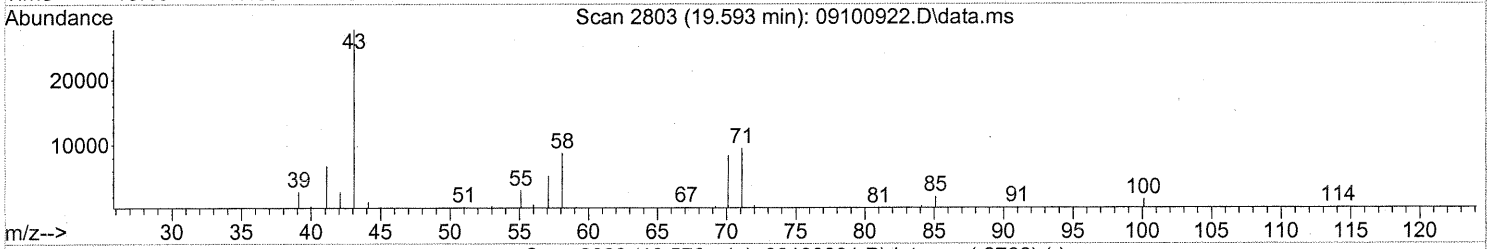
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	58.65
0.00	0.00	0.00
0.00	0.00	0.00

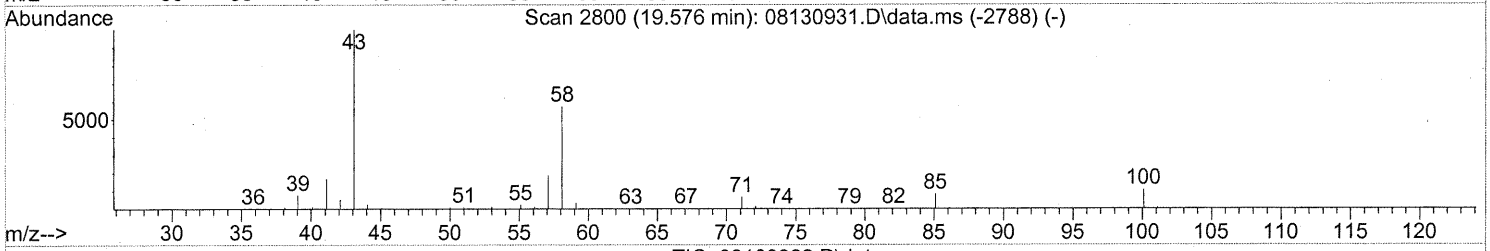
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 1.31ng

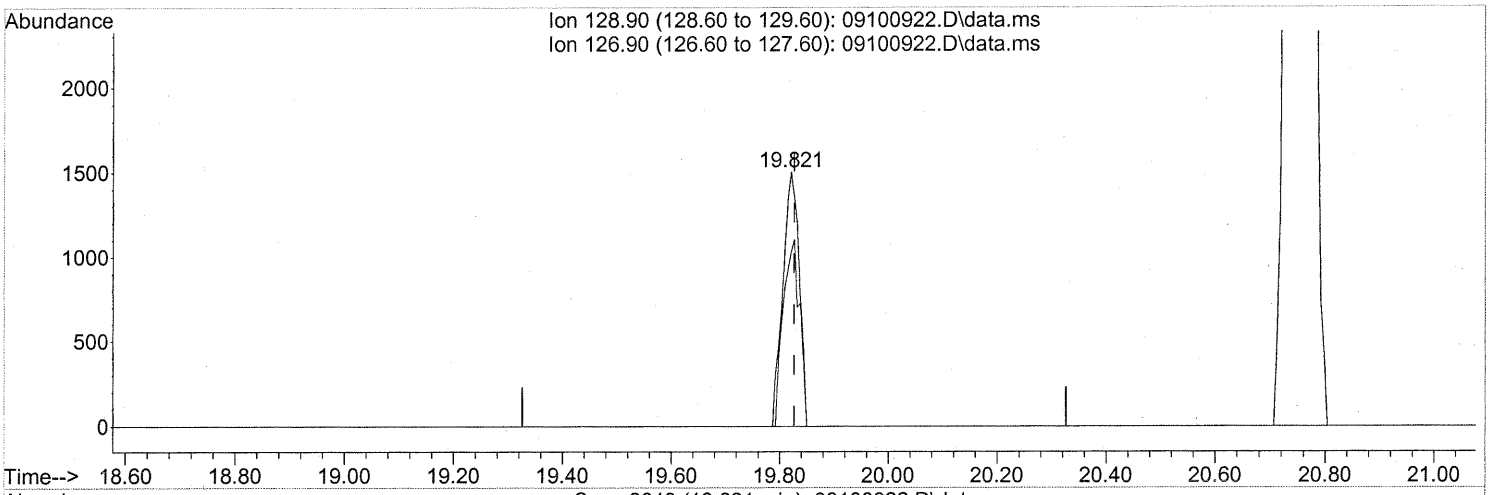
response 61470

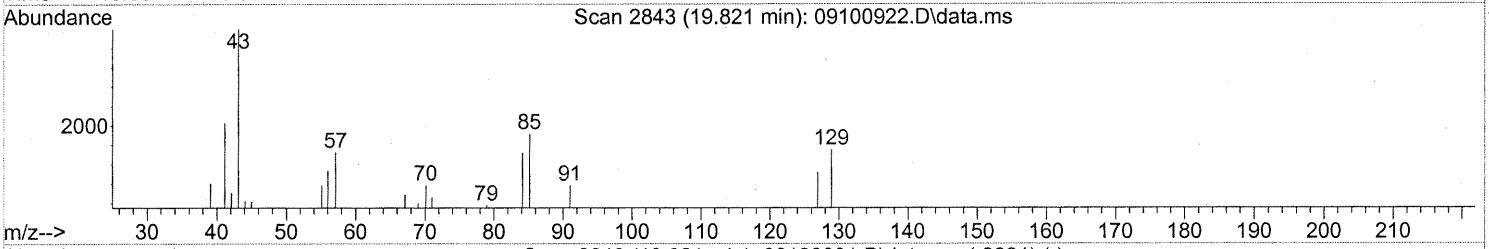
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	37.44#
0.00	0.00	0.00
0.00	0.00	0.00

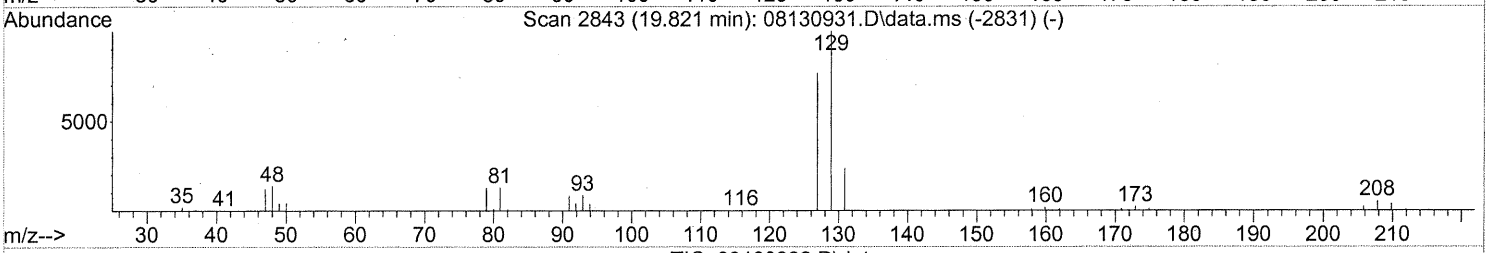
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(60) Dibromochloromethane (T)

19.821min (-0.006) 0.16ng

response 3132

Ion	Exp%	Act%
128.90	100	100
126.90	77.60	73.44
0.00	0.00	0.00
0.00	0.00	0.00

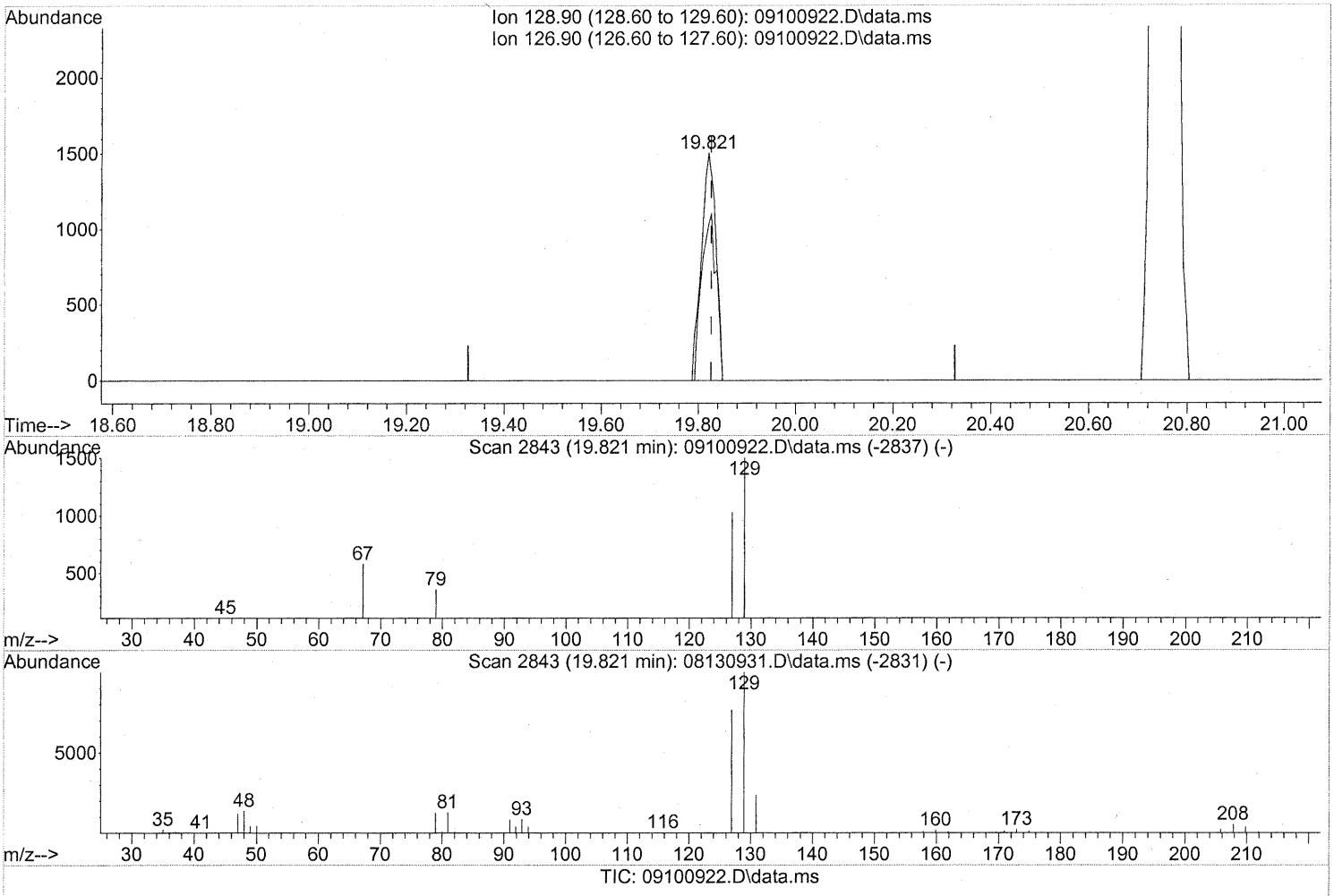
Before subtraction

122

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(60) Dibromochloromethane (T)

19.821min (-0.006) 0.16ng

response 3132

After subtraction

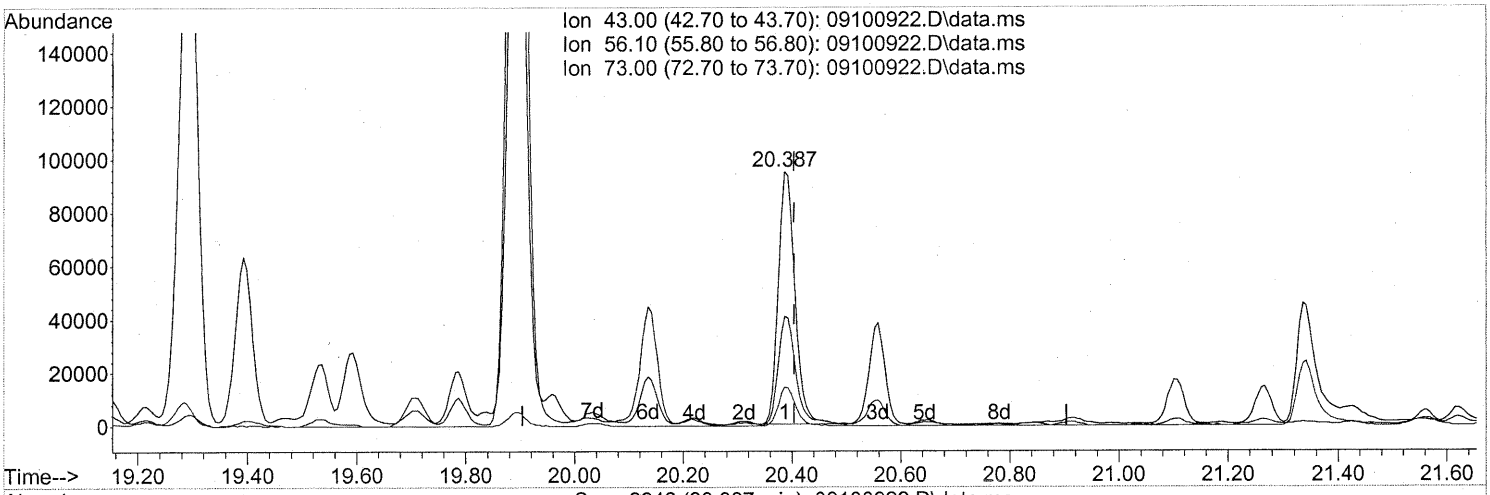
Ion	Exp%	Act%
128.90	100	100
126.90	77.60	73.44
0.00	0.00	0.00
0.00	0.00	0.00

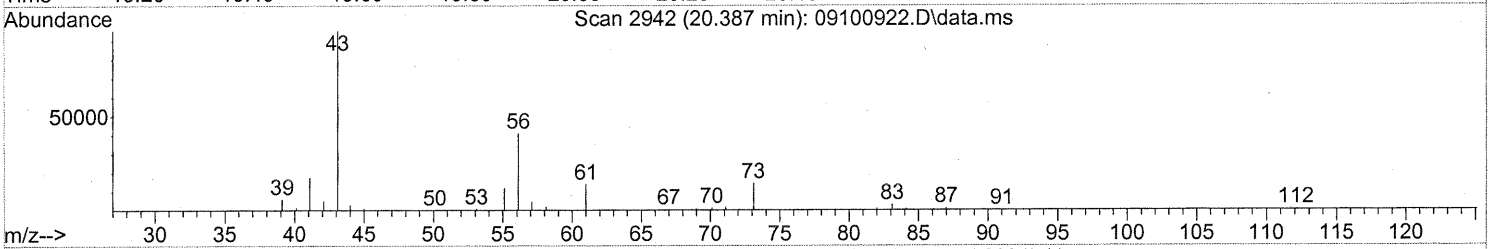
123

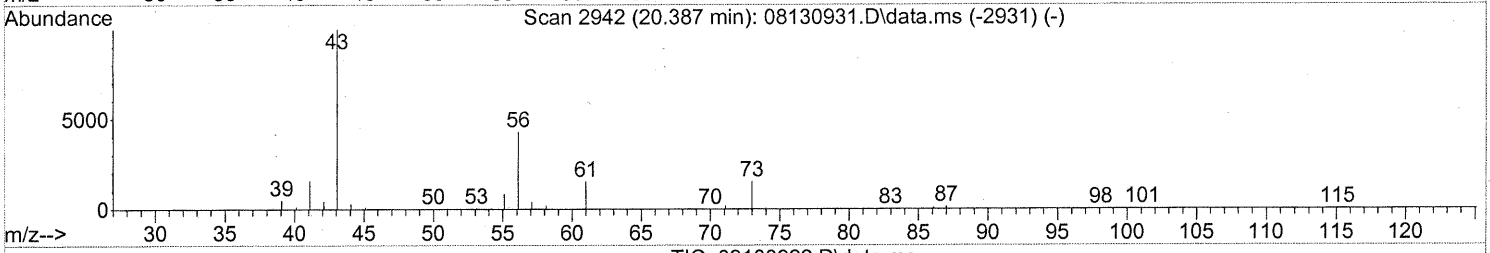
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(62) n-Butyl Acetate (T)

20.387min (-0.017) 3.94ng

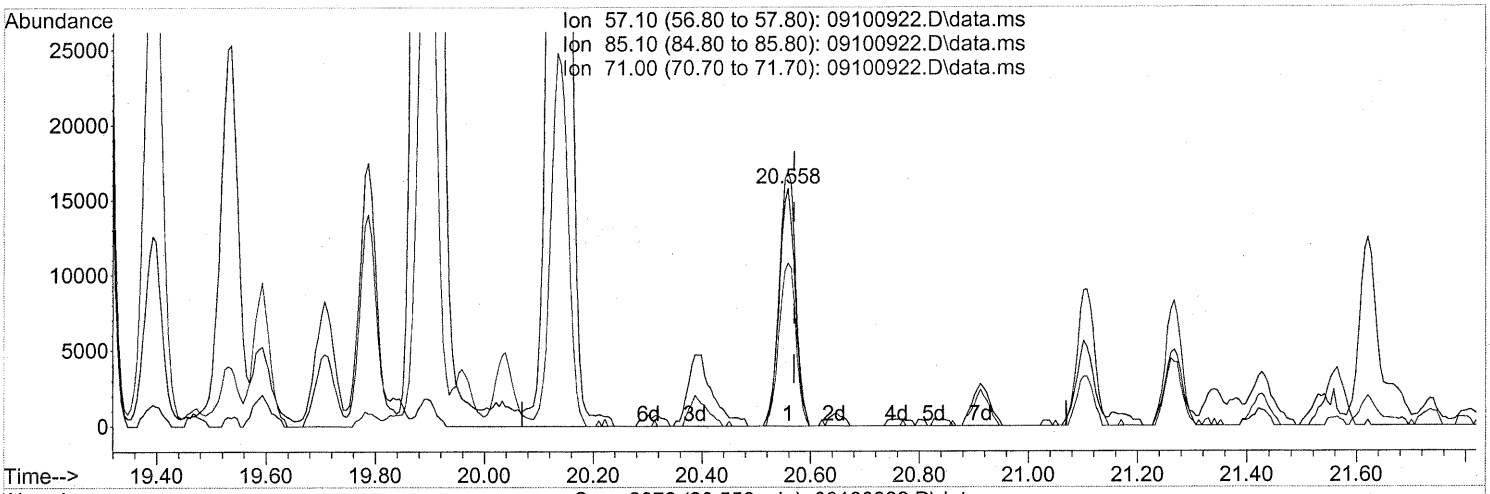
response 201446

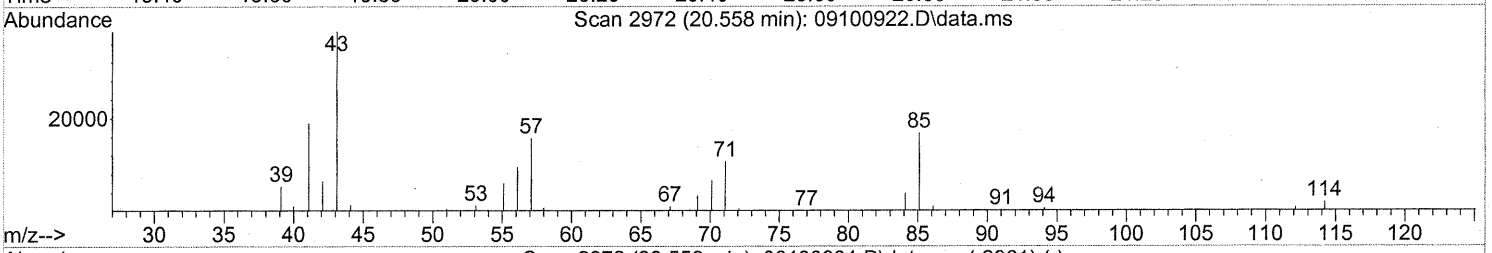
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	47.33
73.00	16.90	15.71
0.00	0.00	0.00

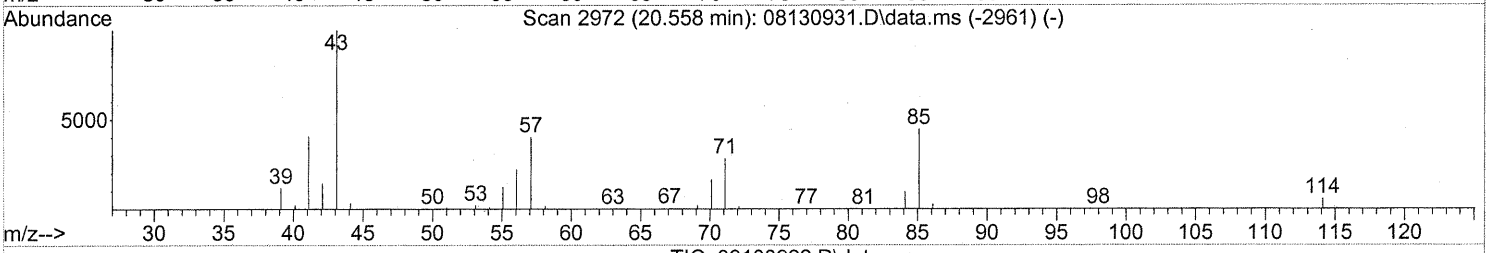
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.60ng

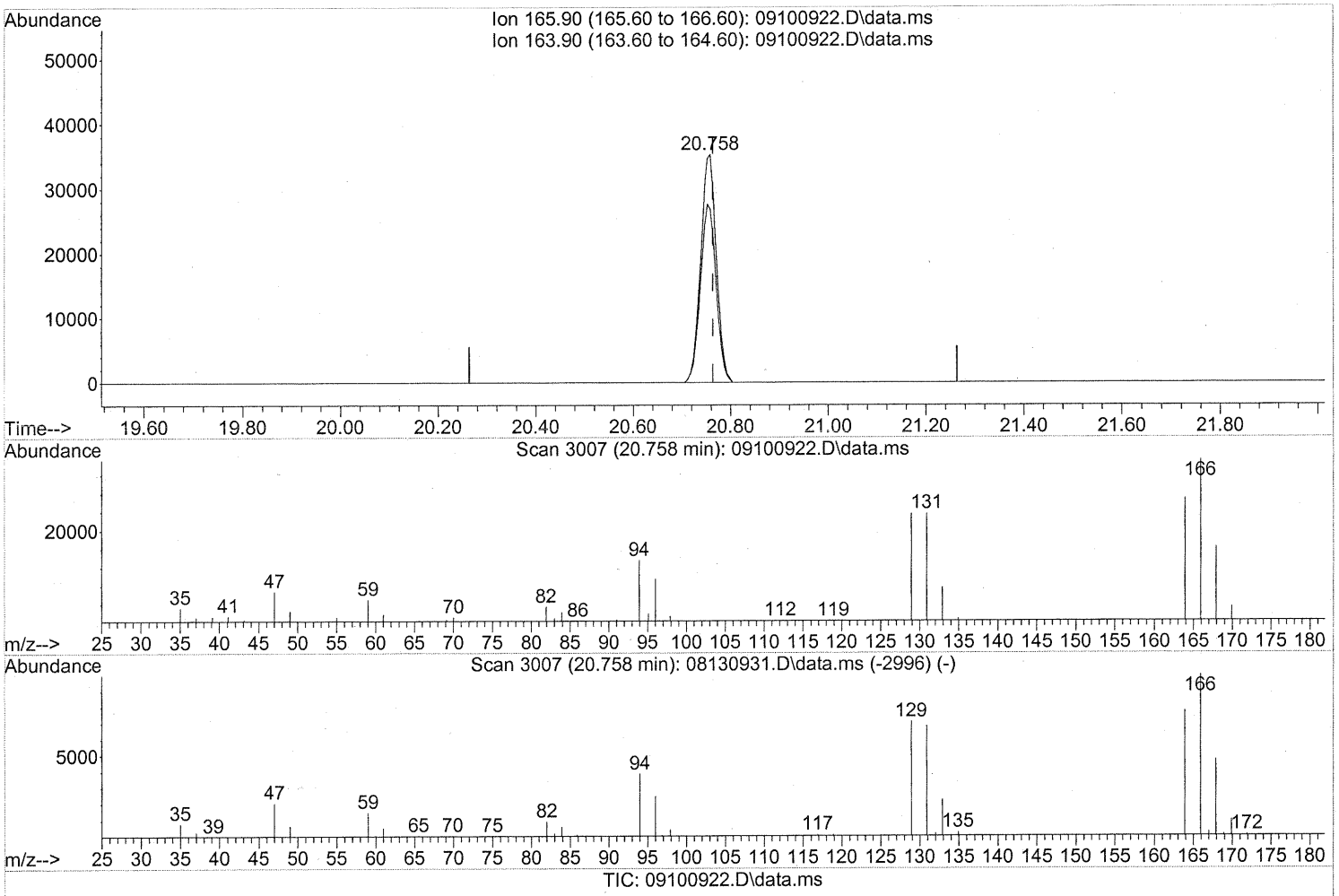
response 32166

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	110.38
71.00	75.10	72.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(64) Tetrachloroethene (T)

20.758min (-0.006) 3.49ng

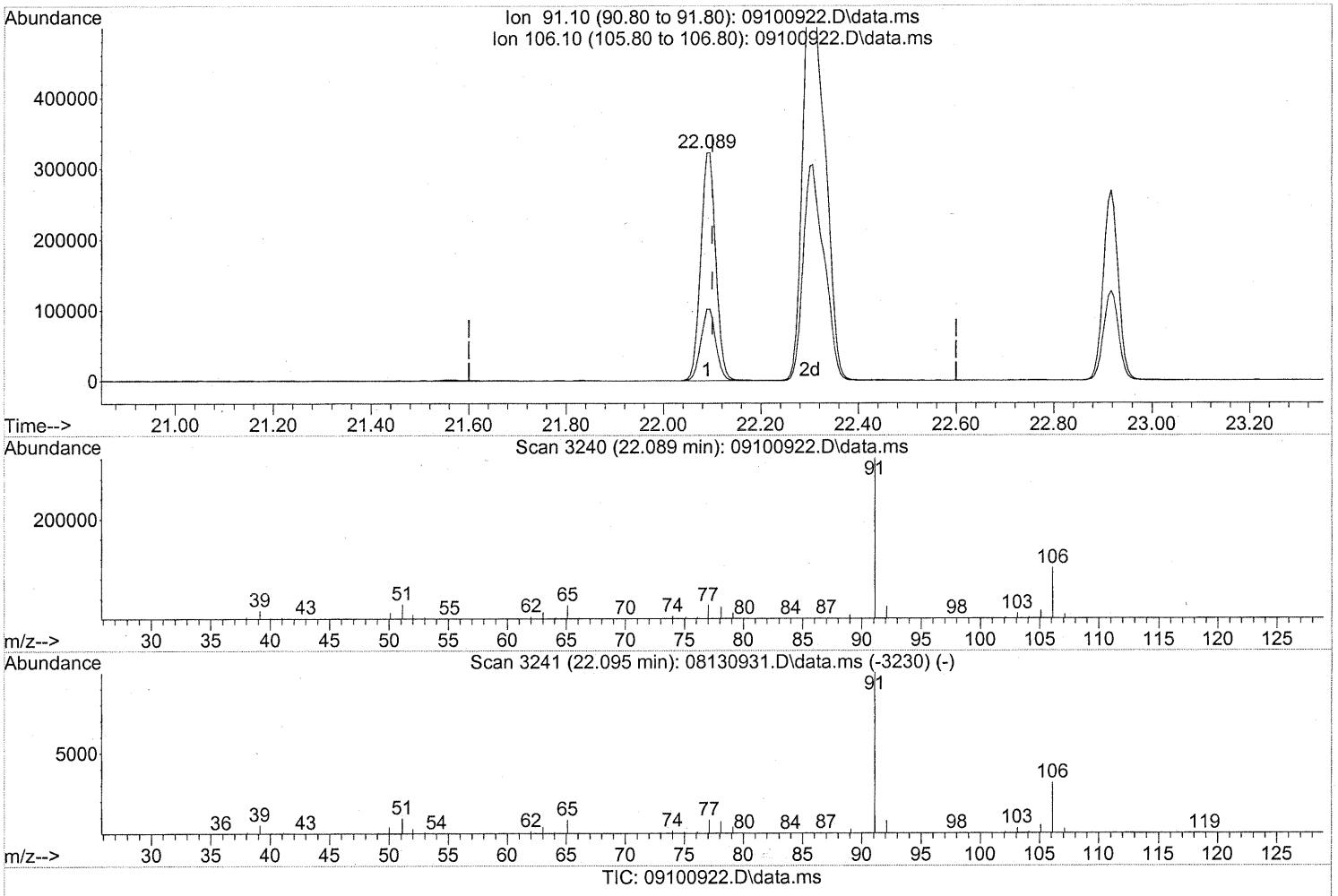
response 78021

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	78.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 7.07ng

response 687272

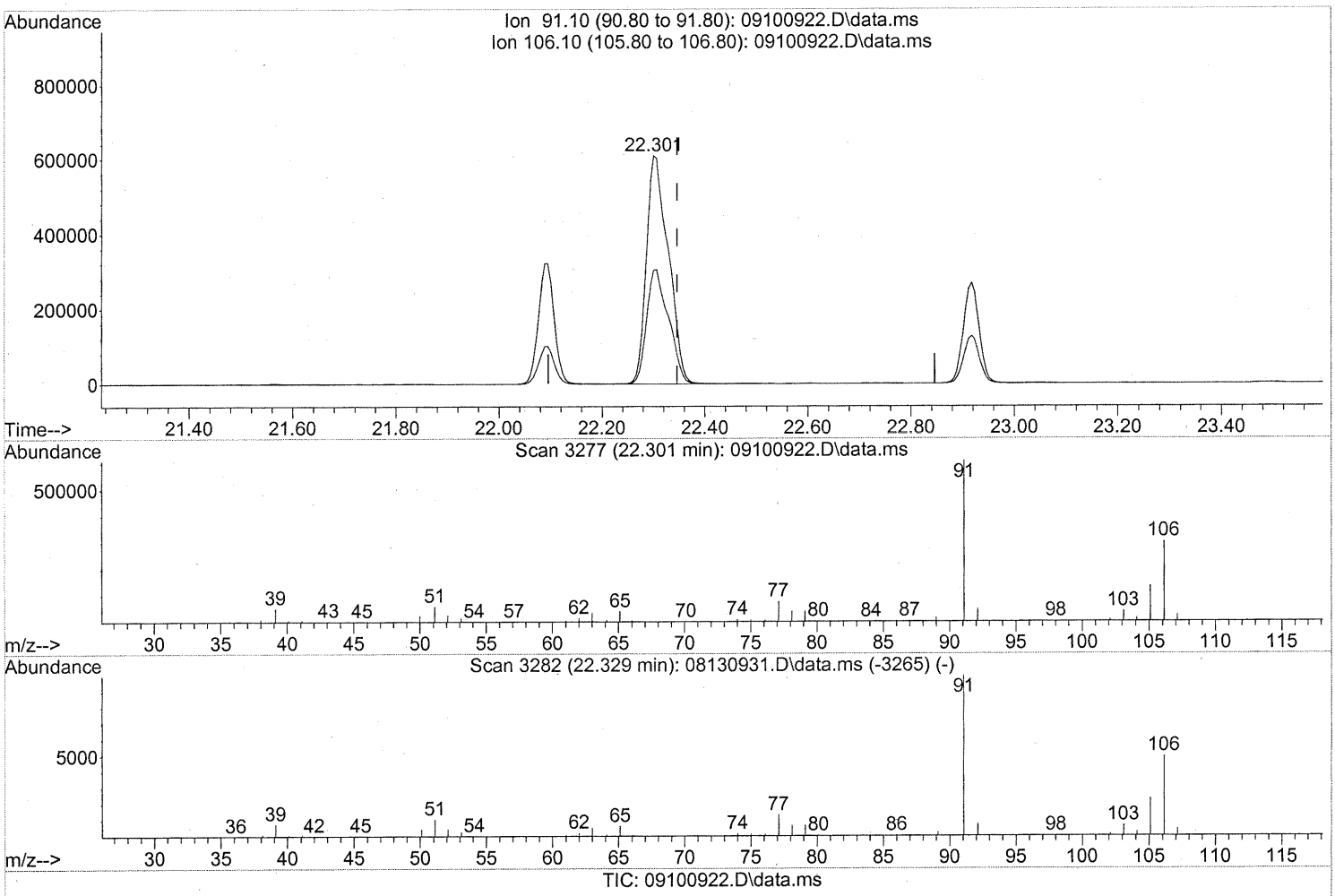
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.20
0.00	0.00	0.00
0.00	0.00	0.00

127

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

22.301min (-0.046) 23.42ng

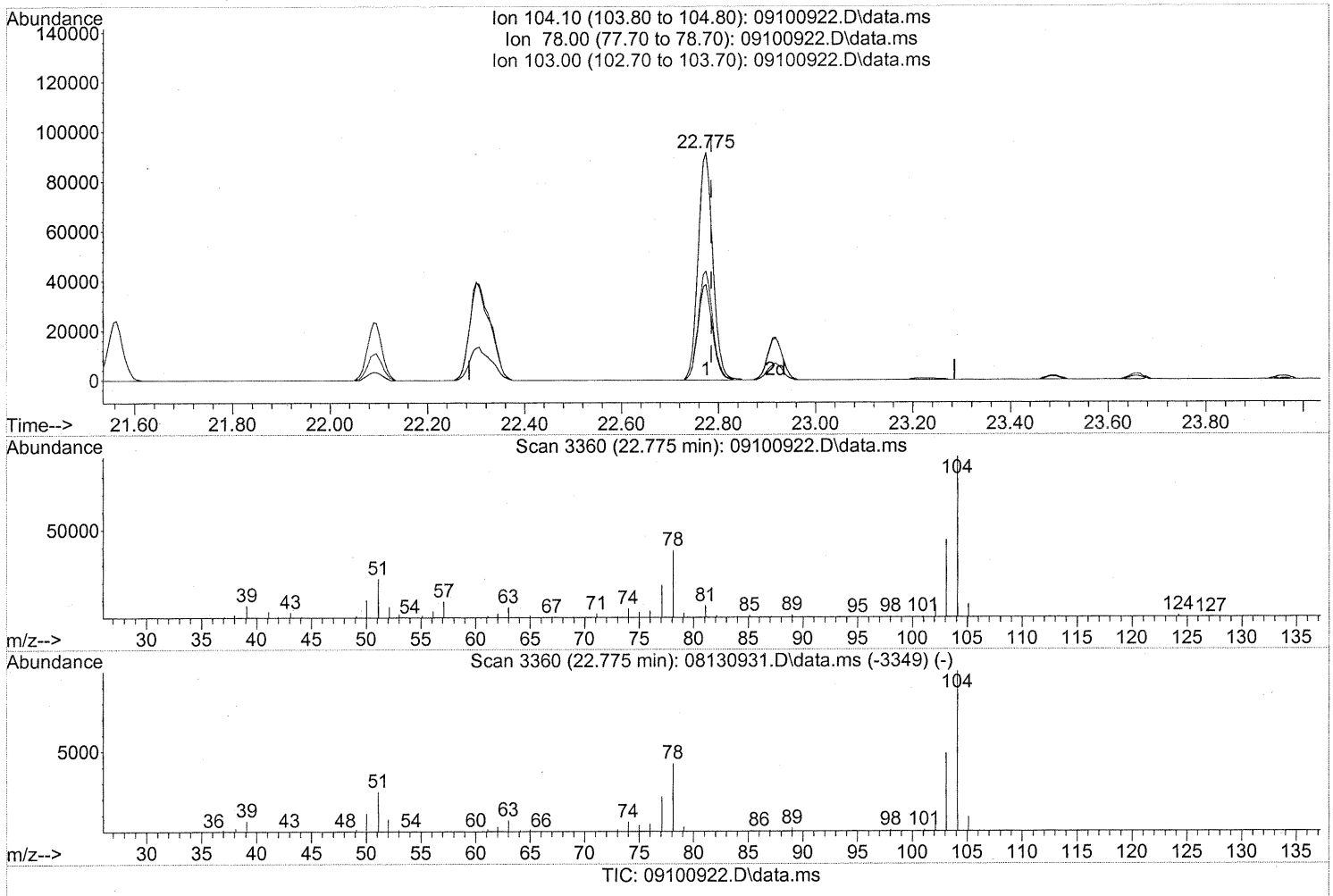
response 1805380

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	50.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 3.38ng

response 192899

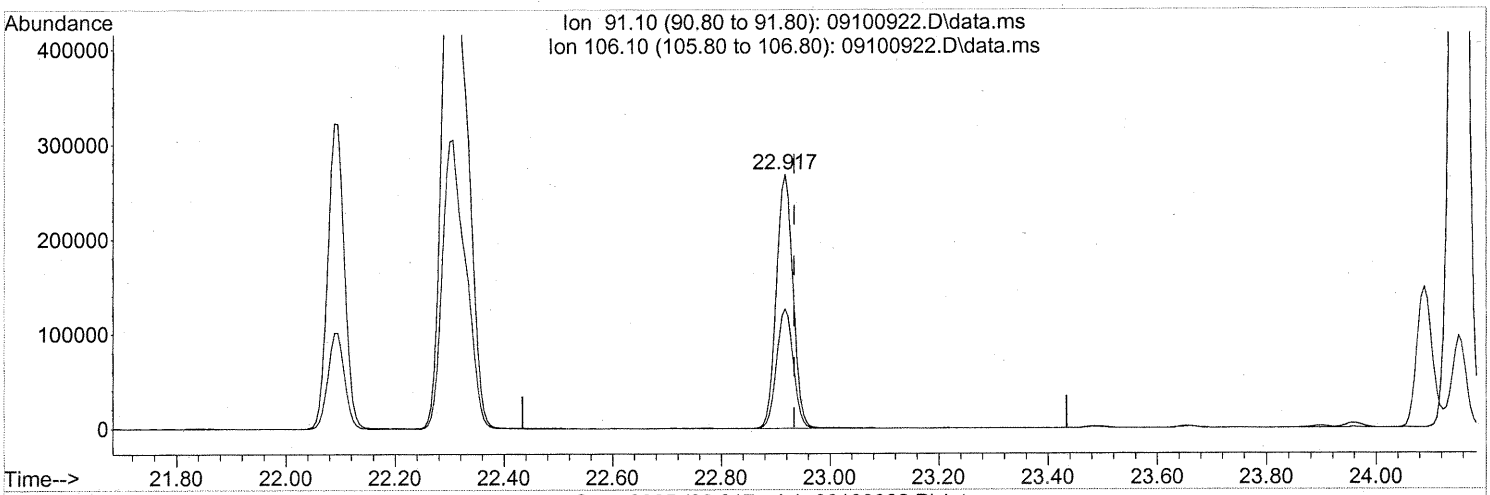
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.53
103.00	48.70	47.85
0.00	0.00	0.00

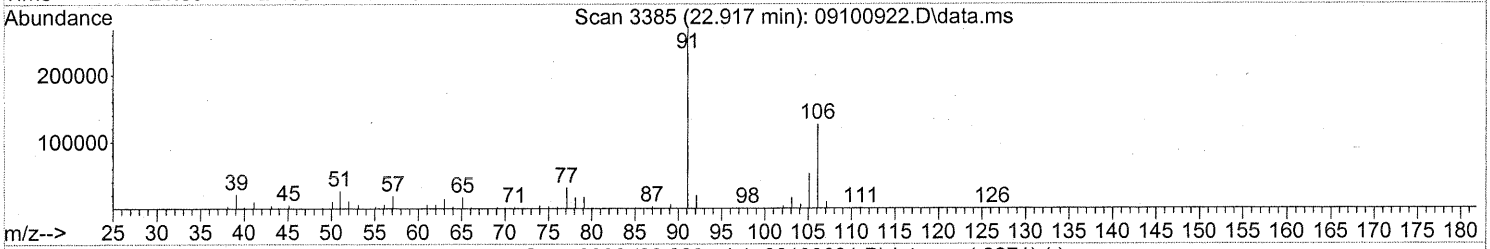
129

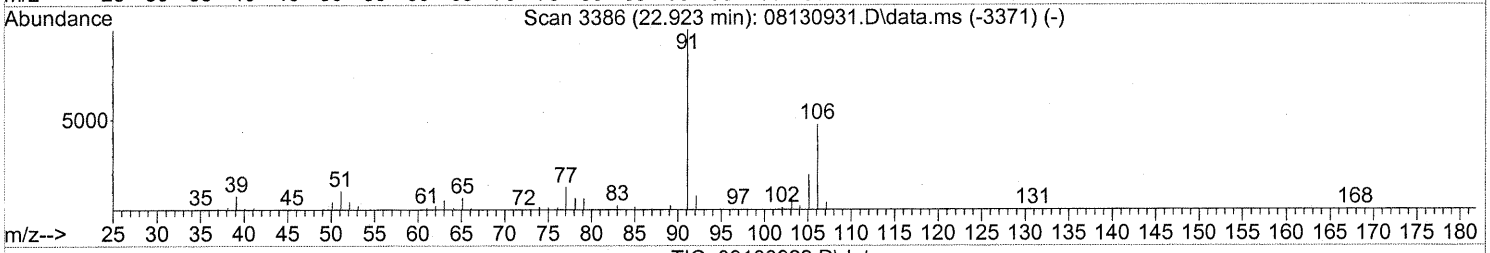
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 7.32ng

response 568010

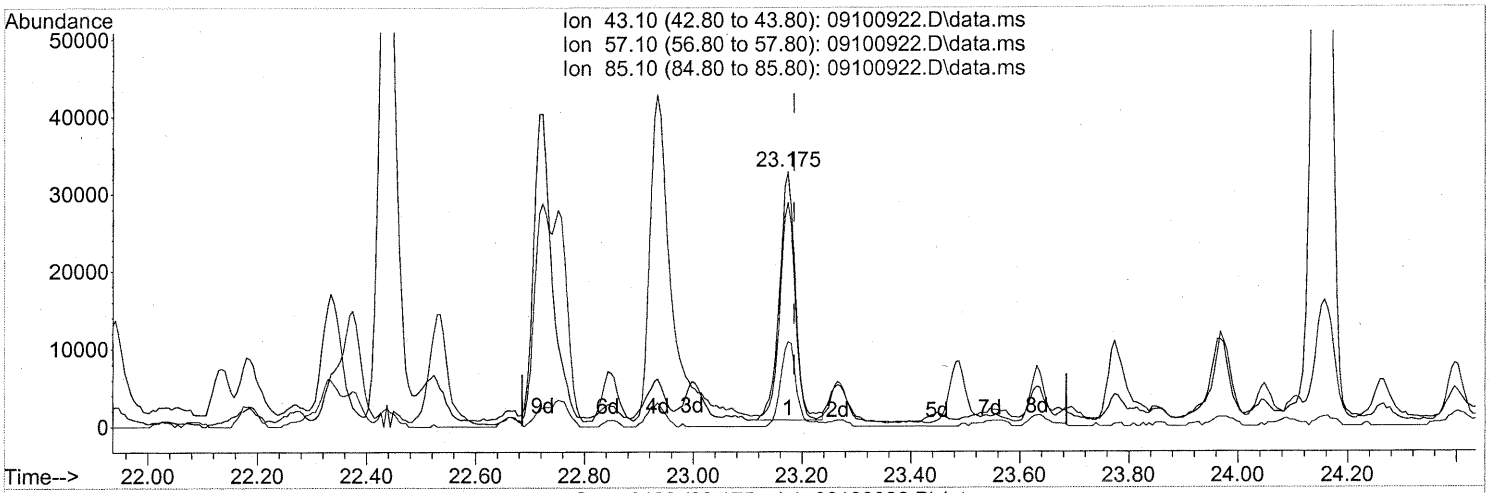
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.97
0.00	0.00	0.00
0.00	0.00	0.00

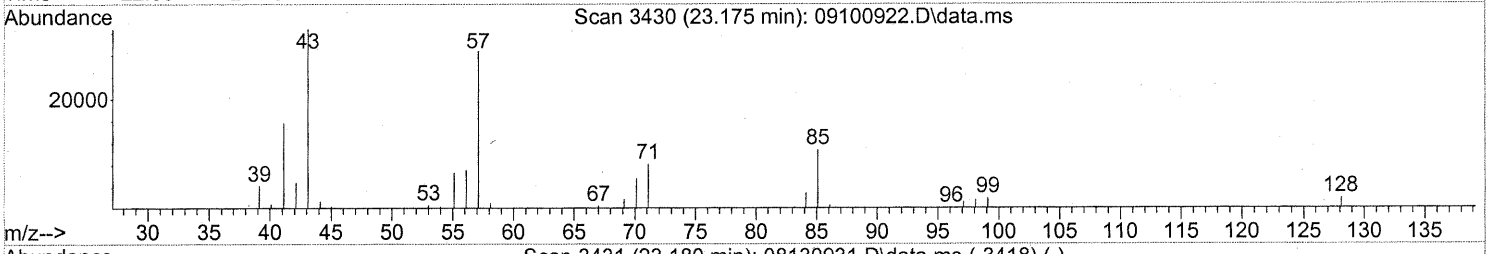
130

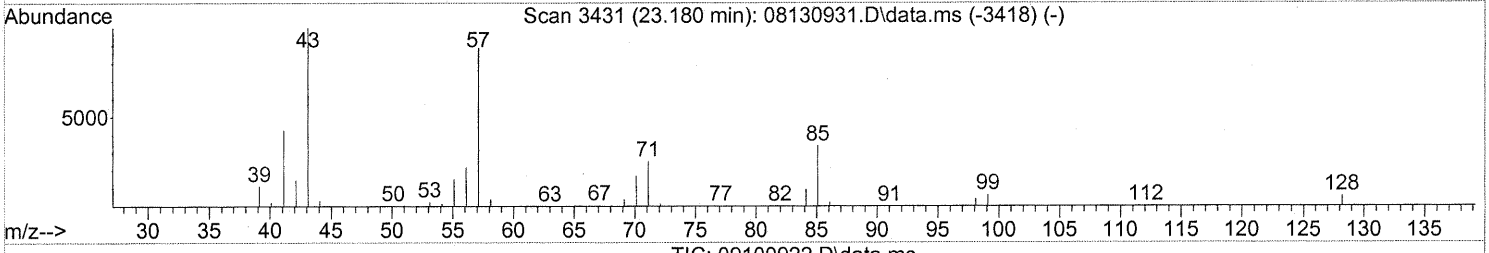
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(71) n-Nonane (T)

23.175min (-0.011) 1.40ng

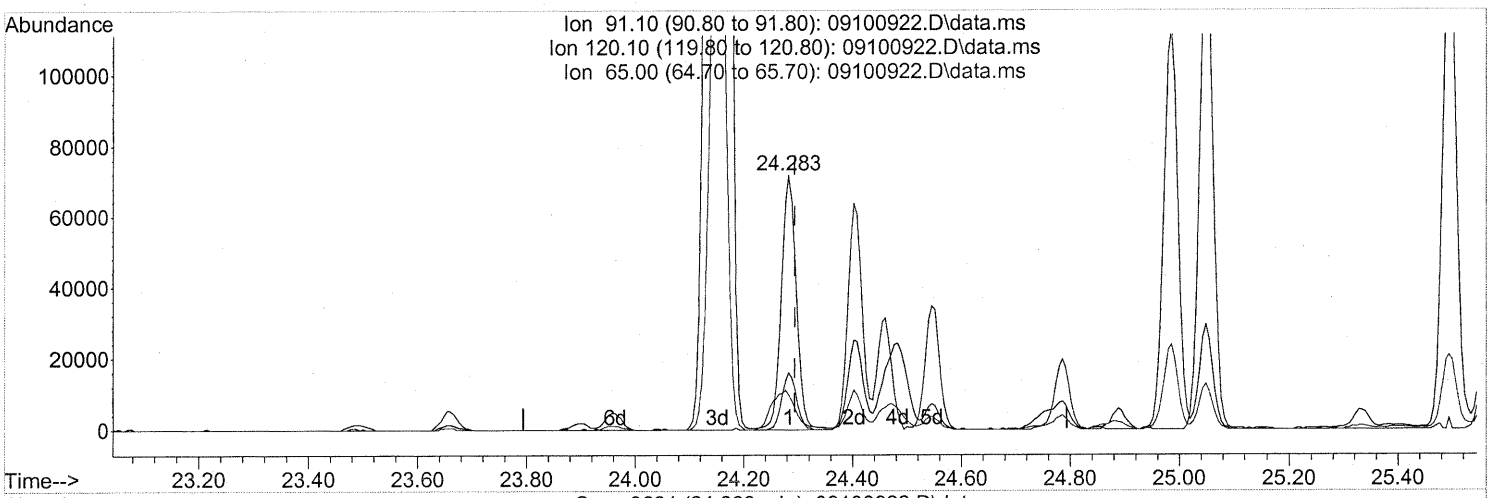
response 65465

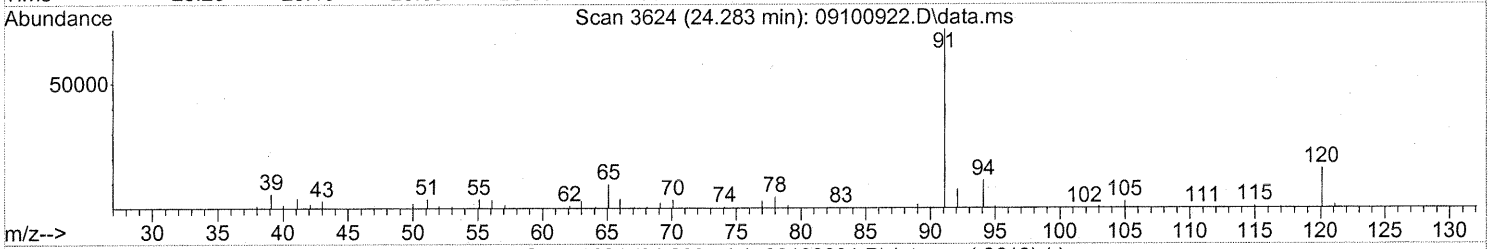
Ion	Exp%	Act%
43.10	100	100
57.10	94.00	82.89
85.10	38.80	33.89
0.00	0.00	0.00

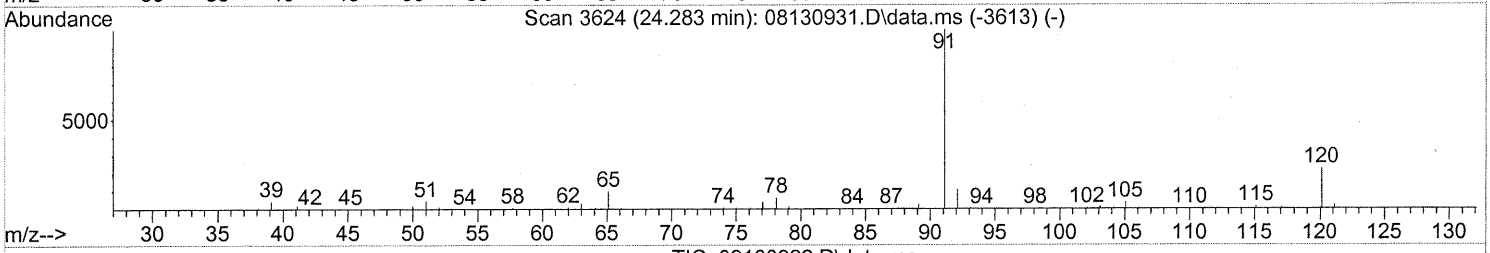
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.10ng

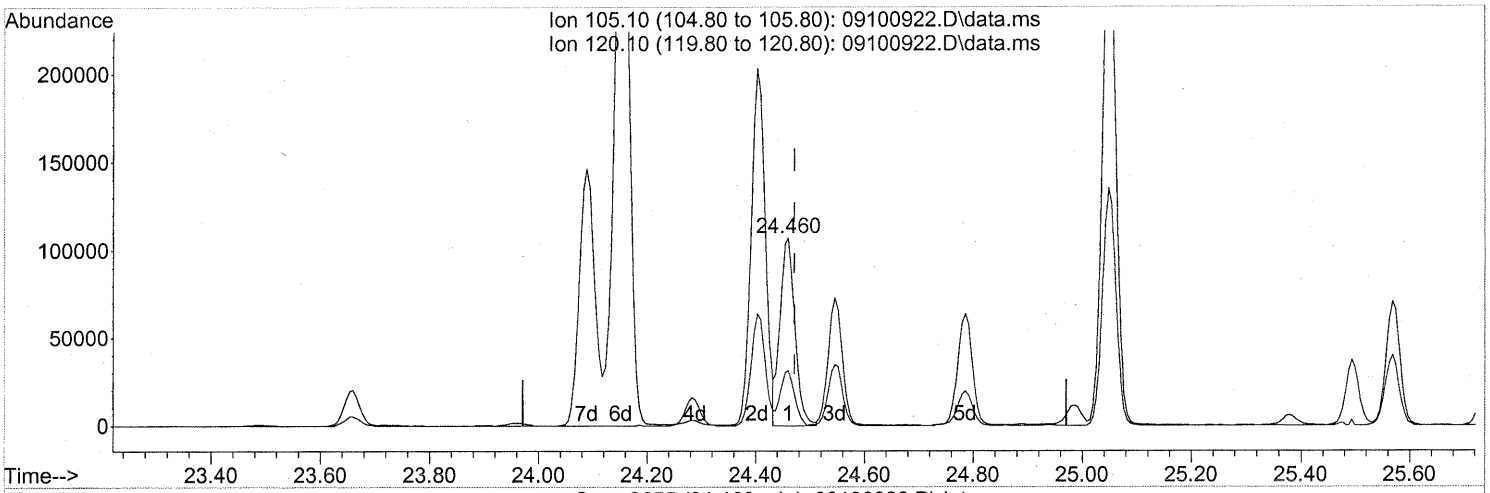
response 136756

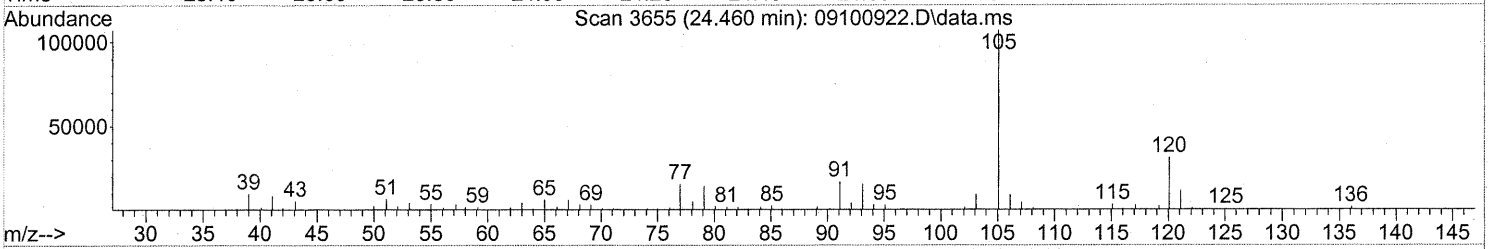
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.83
65.00	10.20	24.64
0.00	0.00	0.00

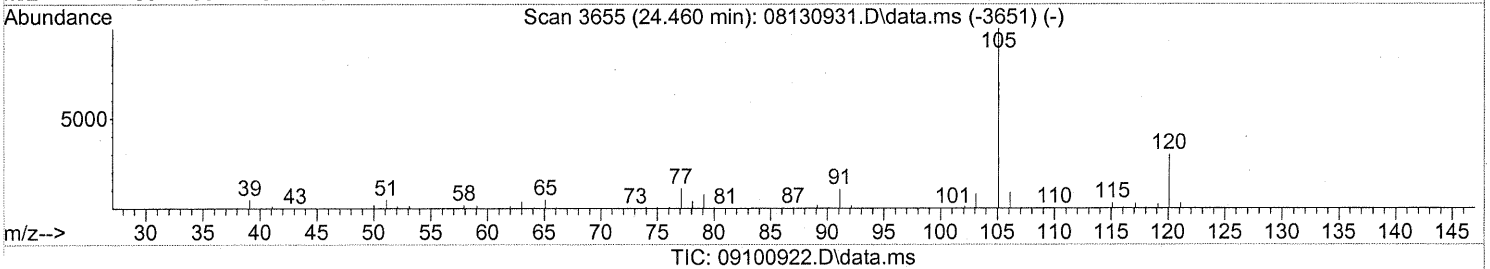
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 2.13ng

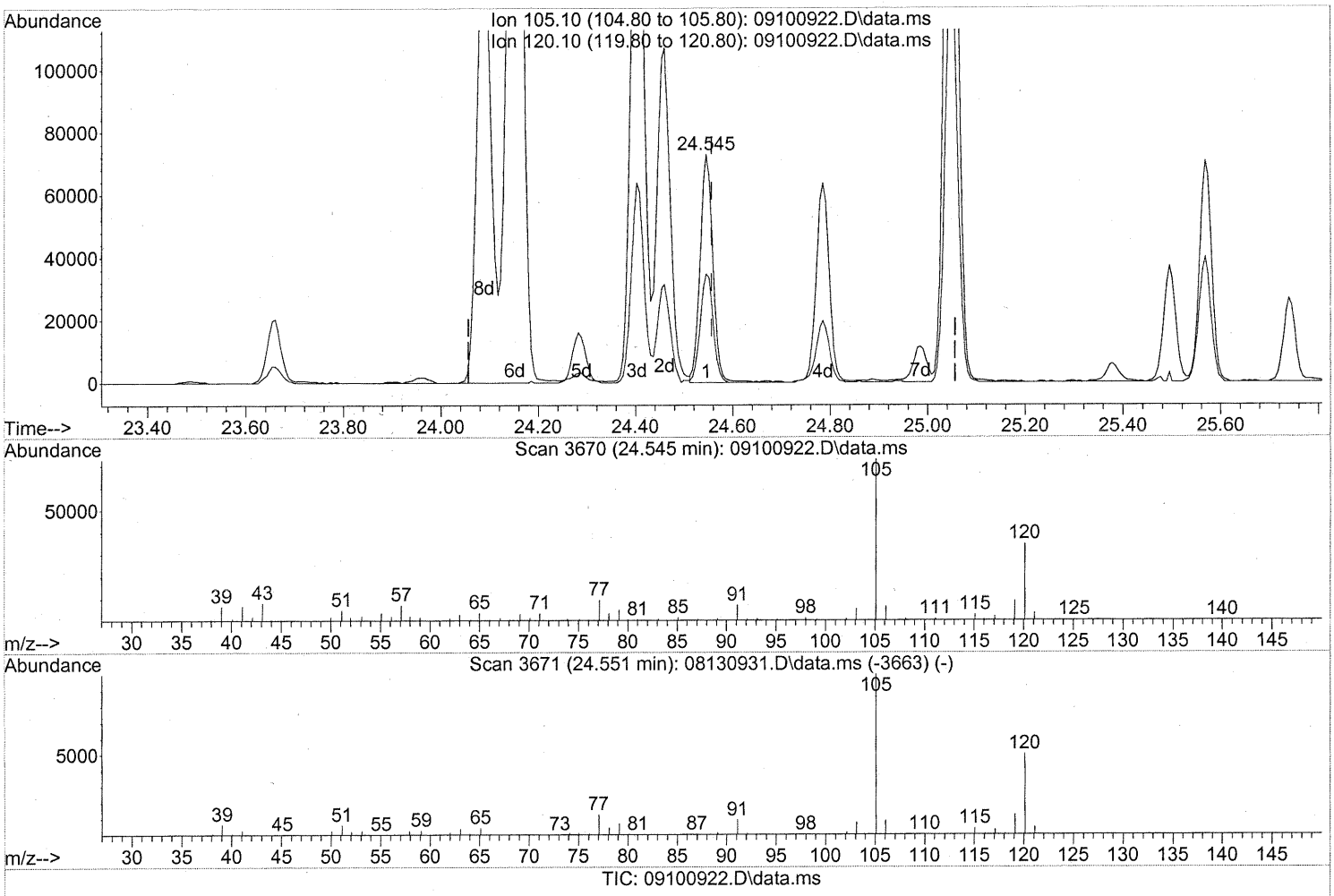
response 202066

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	27.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

24.545min (-0.011) 1.70ng

response 132981

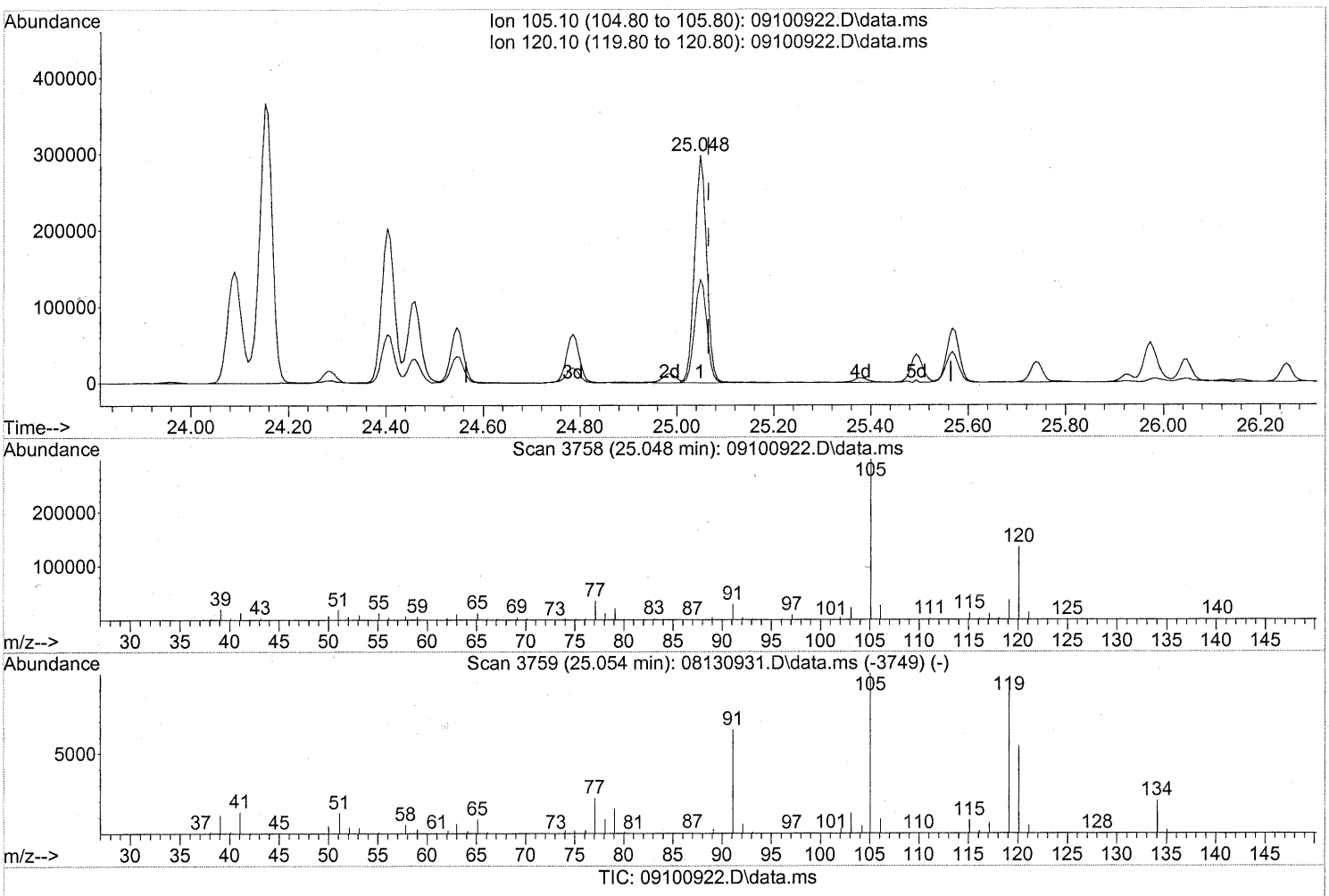
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.48
0.00	0.00	0.00
0.00	0.00	0.00

134

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

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

25.048min (-0.017) 6.16ng

response 512479

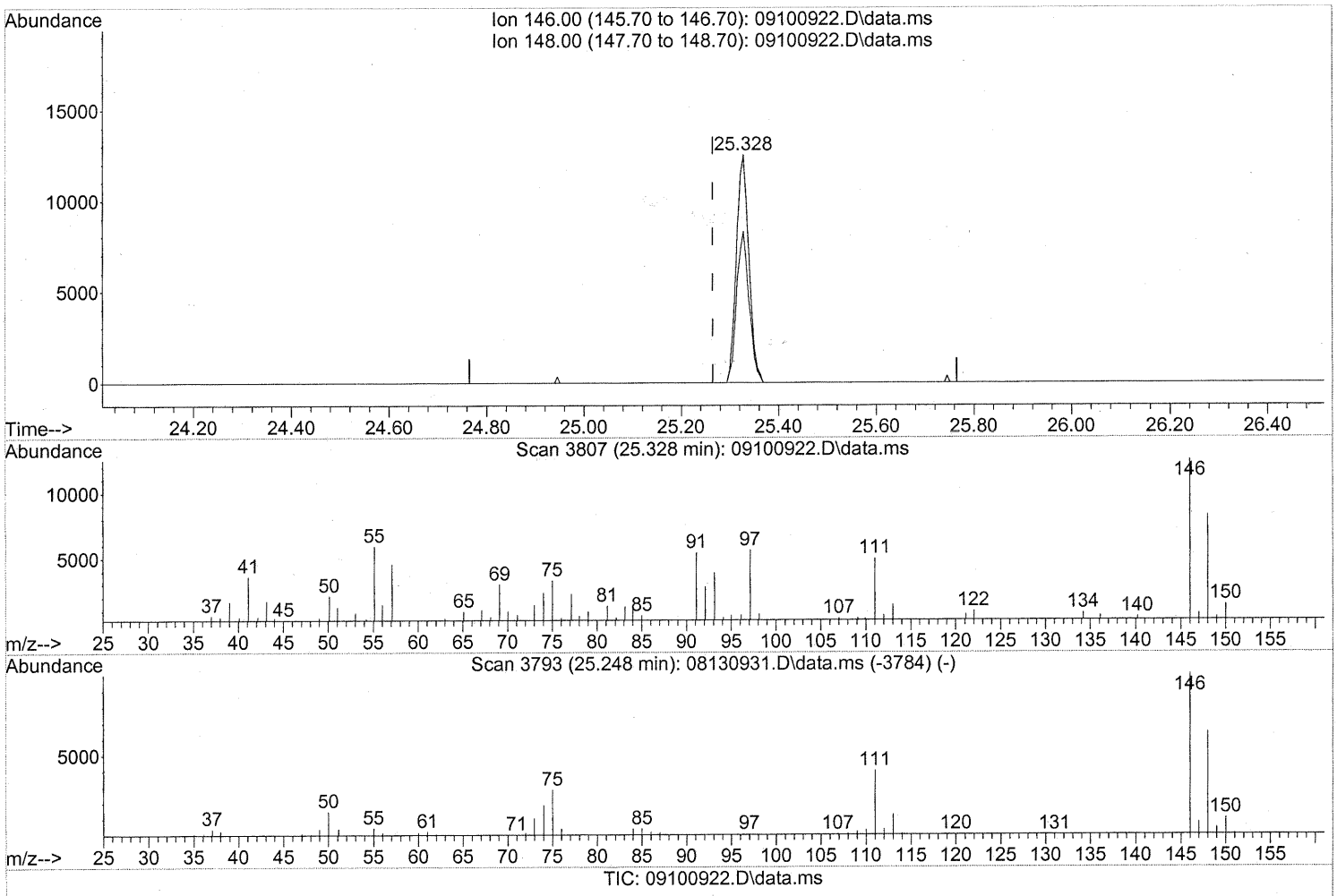
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	46.39
0.00	0.00	0.00
0.00	0.00	0.00

135

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.52ng

response 22181

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	65.86
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/18/09

9/21/09

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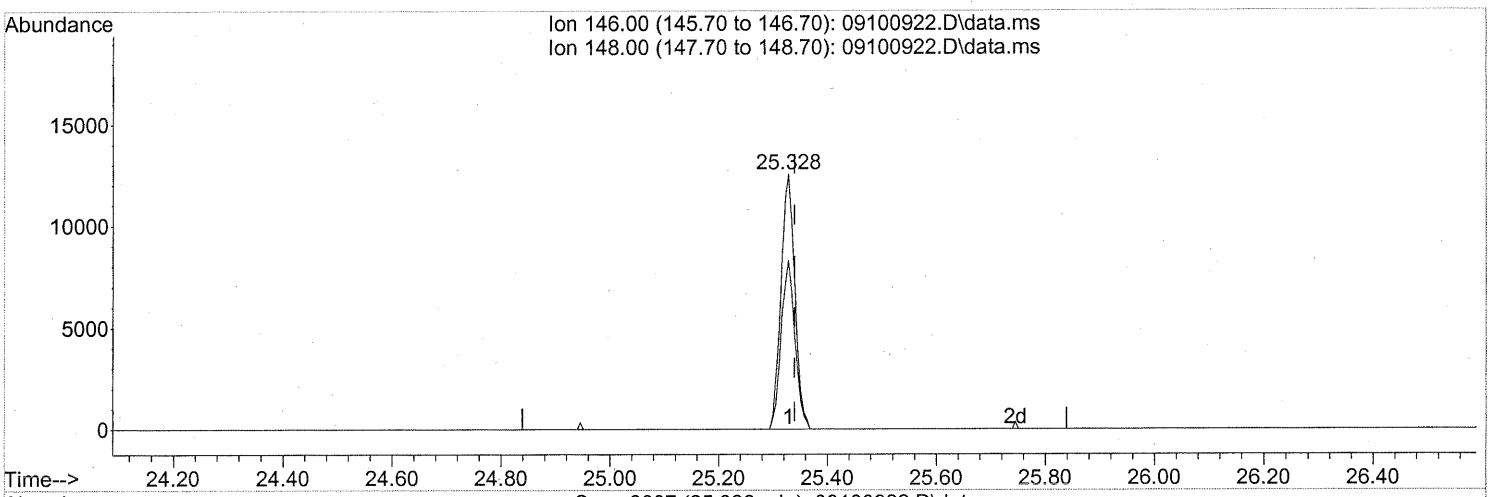
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.49ng

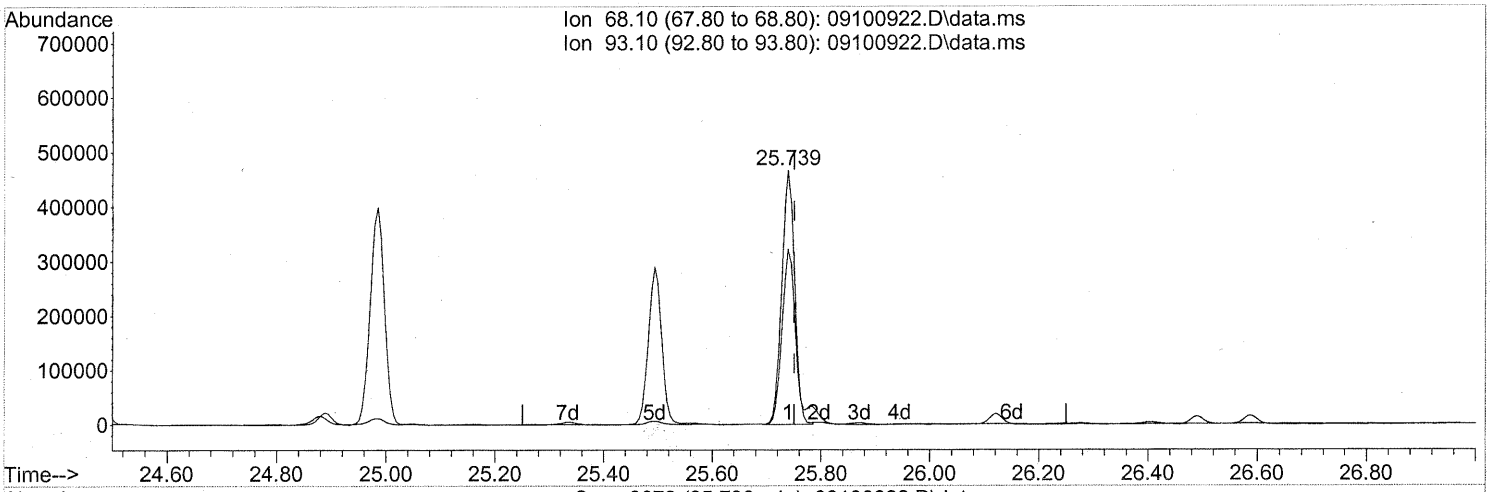
response 22181

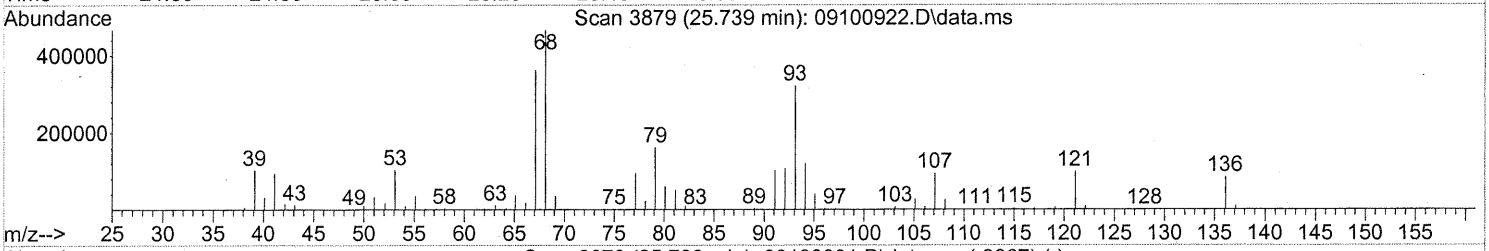
Ion	Exp%	Act%
146.00	100	100
148.00	64.00	65.86
0.00	0.00	0.00
0.00	0.00	0.00

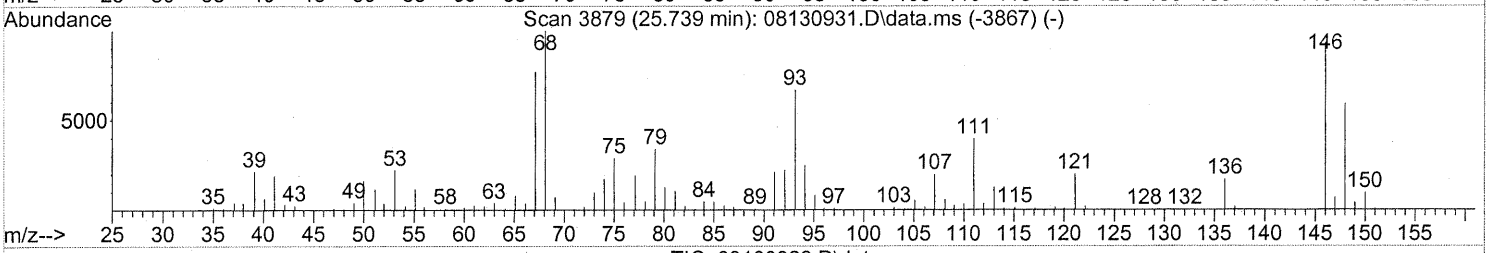
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 22.43ng

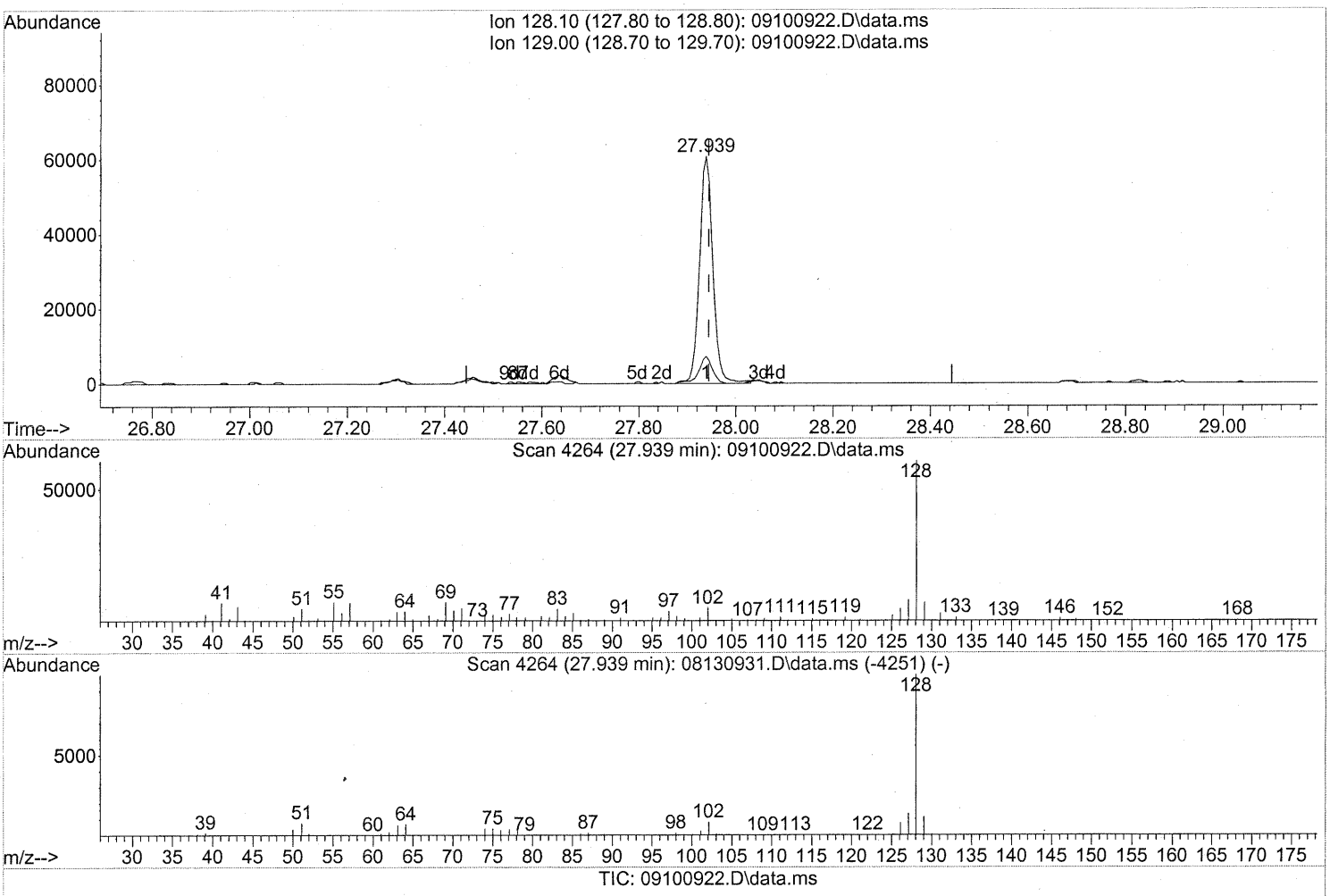
response 763096

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	77.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100922.D
Acq On : 10 Sep 2009 22:45
Operator : EM
Sample : P0903139-002 (1000ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 08:05:50 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: 09100922.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 1.04ng

response 115662

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	11.86
0.00	0.00	0.00
0.00	0.00	0.00

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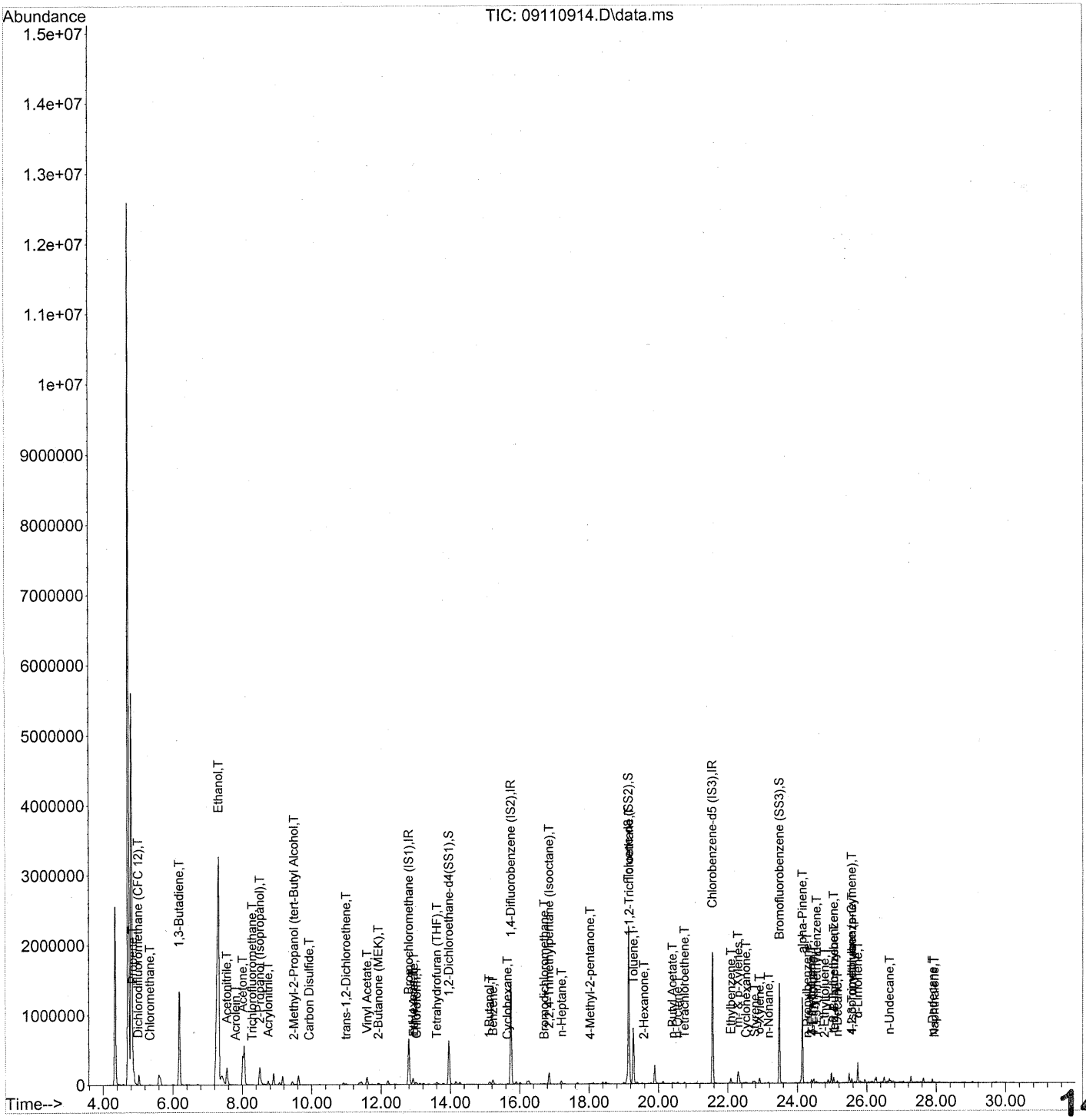
Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:36:20 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:36:20 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	331827	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1705897	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	799096	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	625698	26.668	ng		-0.03
Spiked Amount 25.000			Recovery =	106.68%			
57) Toluene-d8 (SS2)	19.14	98	1972431	25.964	ng		-0.02
Spiked Amount 25.000			Recovery =	103.84%			
73) Bromofluorobenzene (SS3)	23.49	174	491852	22.862	ng		0.00
Spiked Amount 25.000			Recovery =	91.44%			
Target Compounds							Qvalue
2) Propene	4.85	42	51871	1.782	ng	#	69
3) Dichlorodifluoromethan...	5.01	85	8293	0.200	ng	#	93
4) Chloromethane	5.35	50	5112	0.132	ng		88
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	3507	0.129	ng	#	1
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.32	45	8605145m	471.285	ng		
11) Acetonitrile	7.56	41	400662	8.992	ng		98
12) Acrolein	7.80	56	4694	0.394	ng		99
13) Acetone	8.01	58	244427	13.155	ng	#	49
14) Trichlorofluoromethane	8.29	101	3692	0.104	ng		89
15) 2-Propanol (Isopropanol)	8.51	45	513962	10.101	ng		97
16) Acrylonitrile	8.75	53	5227	0.194	ng	#	10
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	21472	0.416	ng	#	75
19) Methylene Chloride	9.53	84	1023	N.D.			
20) 3-Chloro-1-propene (Al...	9.72	41	219	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	9210	0.113	ng		85
23) trans-1,2-Dichloroethene	11.00	61	13256	0.414	ng		94
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.60	86	4092	1.017	ng	#	1
27) 2-Butanone (MEK)	11.92	72	11198	0.864	ng	#	58
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.93	87	103	N.D.			
30) Ethyl Acetate	12.94	61	3657	0.435	ng		96
31) n-Hexane	12.92	57	50013	1.221	ng		91

EM 9/18/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:36:20 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	25337	0.739	ng		99
34) Tetrahydrofuran (THF)	13.61	72	12430	0.923	ng	#	70
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	15.13	56	23400	1.059	ng		92
41) Benzene	15.23	78	76124	0.830	ng		98
42) Carbon Tetrachloride	15.45	117	932	N.D.			
43) Cyclohexane	15.65	84	3695	0.104	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	16.71	83	3602	0.134	ng	#	63
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	198338	1.878	ng		97
50) Methyl Methacrylate	16.85	100	236	N.D.			
51) n-Heptane	17.21	71	13352	0.547	ng		92
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	18.03	58	2416	0.122	ng	#	53
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	19.16	97	162620	8.297	ng	#	8
58) Toluene	19.28	91	728024	7.906	ng		100
59) 2-Hexanone	19.59	43	3510	0.073	ng	#	22
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) n-Butyl Acetate	20.41	43	17864	0.342	ng		91
63) n-Octane	20.56	57	3715	0.181	ng	#	78
64) Tetrachloroethene	20.75	166	6952	0.304	ng		98
65) Chlorobenzene	0.00	112	0	N.D.			
66) Ethylbenzene	22.09	91	67314	0.677	ng		98
67) m- & p-Xylenes	22.30	91	175542	2.227	ng		98
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.78	104	16869	0.290	ng		98
70) o-Xylene	22.92	91	54709	0.690	ng		99
71) n-Nonane	23.17	43	7599	0.159	ng		85
72) 1,1,2,2-Tetrachloroethane	22.52	83	256	N.D.			
74) Cumene	23.67	105	4810	N.D.			
75) alpha-Pinene	24.15	93	569096	11.219	ng		92
76) n-Propylbenzene	24.28	91	12879	0.101	ng		96
77) 3-Ethyltoluene	24.41	105	35375	0.367	ng		96
78) 4-Ethyltoluene	24.46	105	20560	0.212	ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	13166	0.164	ng		96

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:36:20 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.75	118	936	N.D.			
81) 2-Ethyltoluene	24.79	105	11335	0.114	ng		97
82) 1,2,4-Trimethylbenzene	25.05	105	48730	0.573	ng		89
83) n-Decane	25.15	57	12343	0.249	ng		91
84) Benzyl Chloride	25.33	91	899	N.D.			
85) 1,3-Dichlorobenzene	25.33	146	2015	N.D.			
86) 1,4-Dichlorobenzene	25.33	146	2015	N.D.			
87) sec-Butylbenzene	25.38	105	943	N.D.			
88) 4-Isopropyltoluene (p-...	25.56	119	21820	0.203	ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	12048	0.140	ng		96
90) 1,2-Dichlorobenzene	25.33	146	2015	N.D.			
91) d-Limonene	25.74	68	76768	2.207	ng		98
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	24141	0.472	ng		87
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.94	128	9769	0.086	ng		96
96) n-Dodecane	27.89	57	16924	0.296	ng		99
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.52	55	9951	0.343	ng	#	84
99) tert-Butylbenzene	25.05	119	5797	0.069	ng	#	54
100) n-Butylbenzene	26.06	91	4364	N.D.			

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

Quantitation Report (Qedit)

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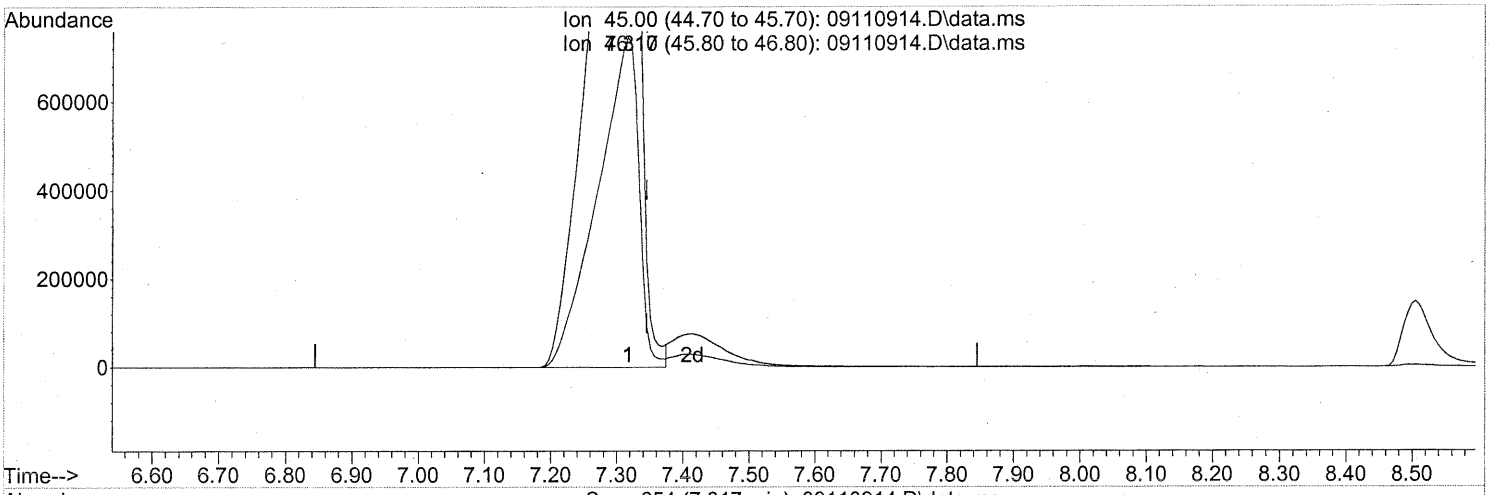

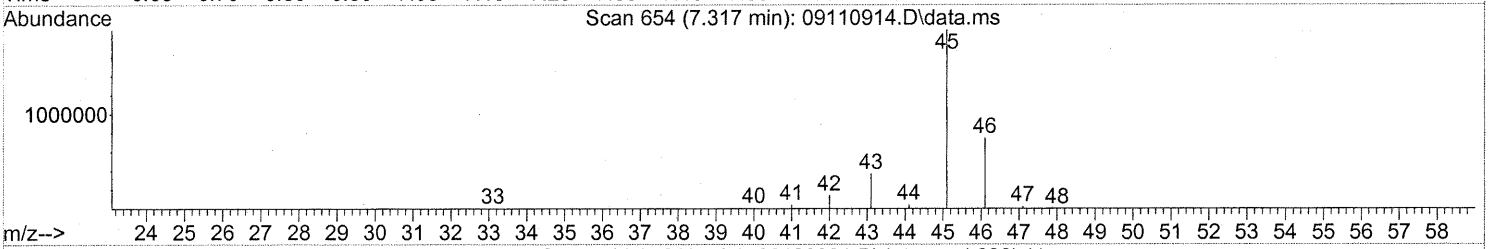

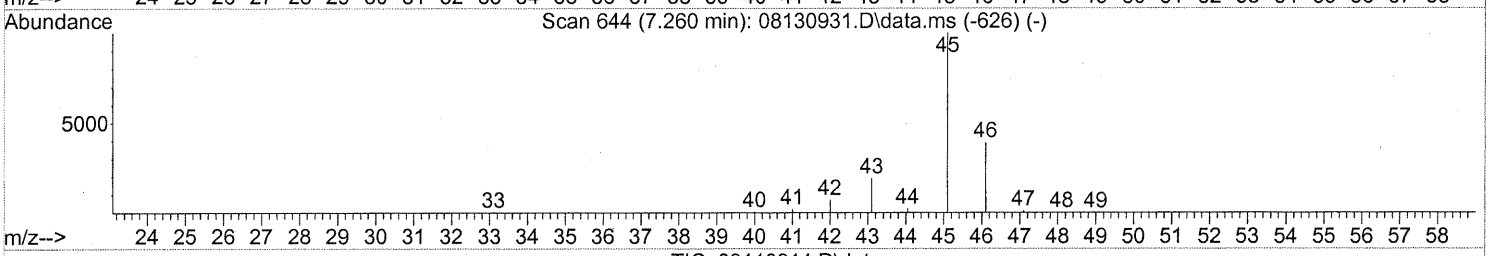

TIC: 09110914.D\data.ms

(10) Ethanol (T)

7.317min (-0.028) 447.66ng

response 8173786

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.43
0.00	0.00	0.00
0.00	0.00	0.00

PT

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Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:37:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
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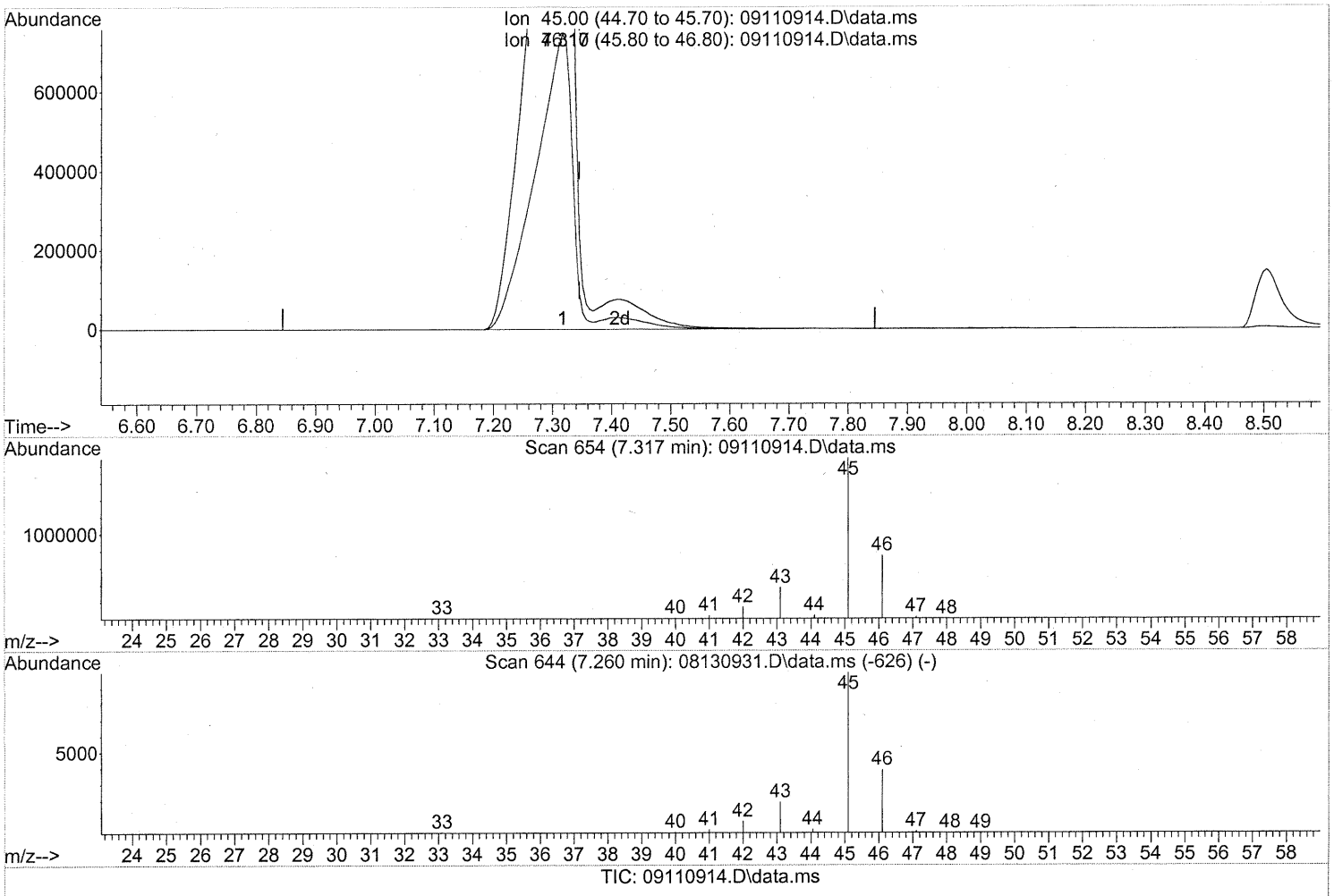
Response via : Initial Calibration



TIC: 09110914.D\data.ms

(10) Ethanol (T)

7.317min (-0.028) 471.29ng m

response 8605145

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.46
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
Sam 9/18/09

E: 9/21/09

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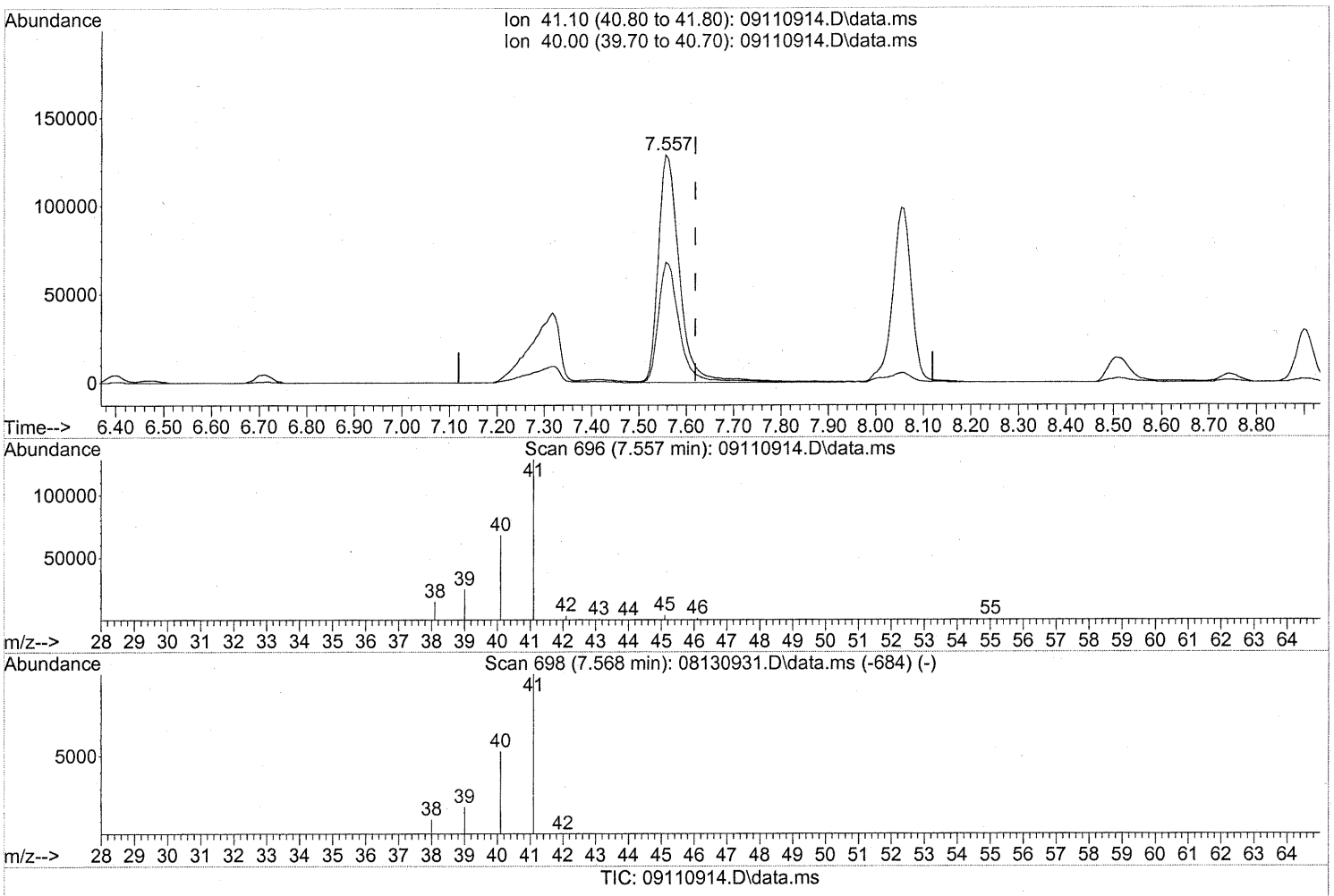
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
Operator : EM
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 10:36:20 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(11) Acetonitrile (T)

7.557min (-0.063) 8.99ng

response 400662

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	51.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110914.D
Acq On : 11 Sep 2009 17:58
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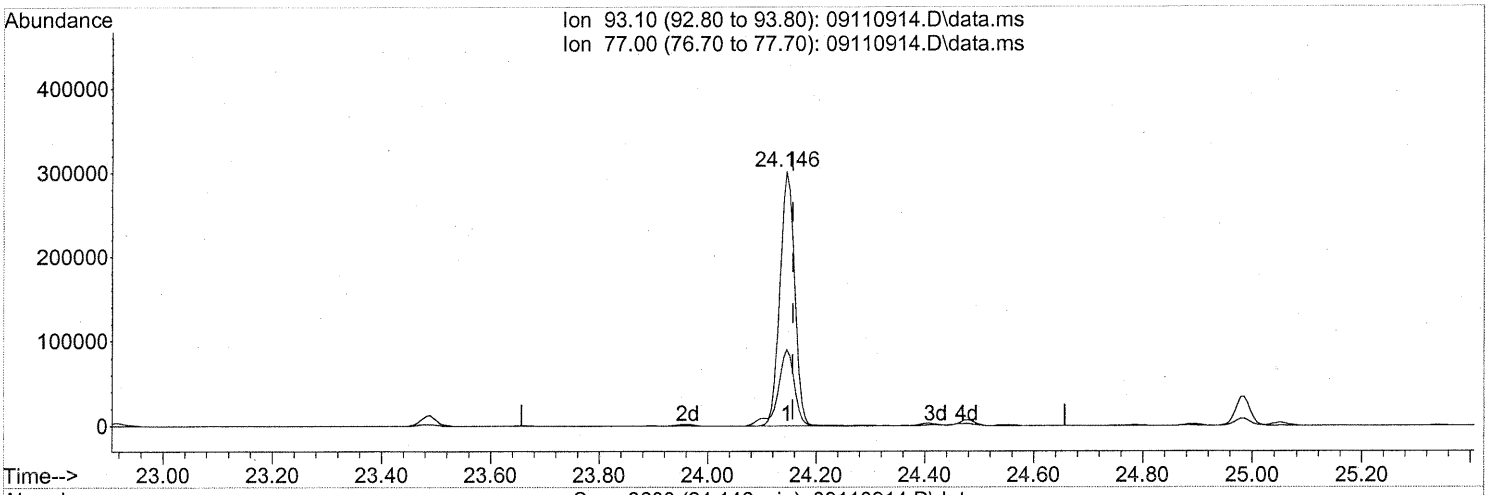
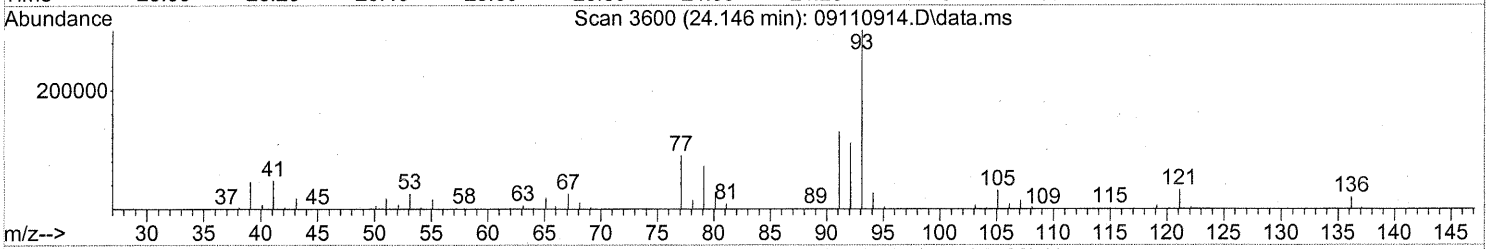
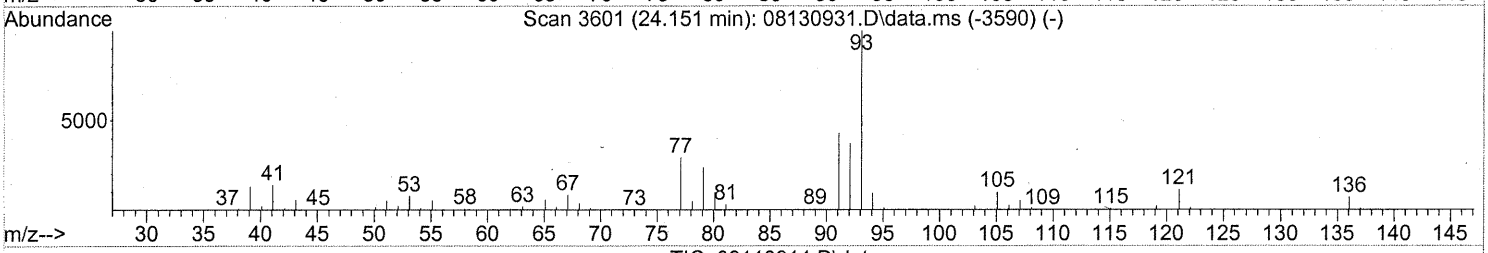
Sample : P0903139-002 dil (100ml)
Misc : Environmental H &E 106309
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:37:52 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







TIC: 09110914.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 11.22ng

response 569096

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	33.71
0.00	0.00	0.00
0.00	0.00	0.00

147

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106310**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-003

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: AC00812

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10/09 & 9/15/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	**Propene**	**16**	0.61	**9.0**	0.35	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.6**	0.61	**0.52**	0.12	
74-87-3	**Chloromethane**	**0.69**	0.12	**0.33**	0.059	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.055	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	**Ethanol**	**7,200**	6.1	**3,800**	3.2	**D**
75-05-8	**Acetonitrile**	**110**	0.61	**66**	0.36	**D**
107-02-8	**Acrolein**	**5.6**	0.61	**2.5**	0.26	
67-64-1	**Acetone**	**160**	6.1	**68**	2.5	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.12	**0.23**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**120**	0.61	**50**	0.25	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	**Trichlorotrifluoroethane**	**0.59**	0.12	**0.077**	0.016	
75-15-0	**Carbon Disulfide**	**1.1**	0.61	**0.36**	0.19	
156-60-5	**trans-1,2-Dichloroethene**	**9.8**	0.12	**2.5**	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	**2-Butanone (MEK)**	**8.2**	0.61	**2.8**	0.21	

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

Verified By: Re Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106310**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-003

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: AC00812

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10/09 & 9/15/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	**Ethyl Acetate**	**13**	1.2	**3.6**	0.34	
110-54-3	**n-Hexane**	**7.2**	0.61	**2.0**	0.17	
67-66-3	**Chloroform**	**12**	0.12	**2.4**	0.025	
109-99-9	**Tetrahydrofuran (THF)**	**6.4**	0.61	**2.2**	0.21	
107-06-2	**1,2-Dichloroethane**	**0.23**	0.12	**0.058**	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	**Benzene**	**5.6**	0.12	**1.8**	0.038	
56-23-5	**Carbon Tetrachloride**	**0.67**	0.12	**0.11**	0.019	
110-82-7	**Cyclohexane**	**0.73**	0.61	**0.21**	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	**Bromodichloromethane**	**2.0**	0.12	**0.31**	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	**1,4-Dioxane**	**0.81**	0.61	**0.22**	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	**n-Heptane**	**4.0**	0.61	**0.97**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	**4-Methyl-2-pentanone**	**2.2**	0.61	**0.55**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	**Toluene**	**54**	0.61	**14**	0.16	
591-78-6	**2-Hexanone**	**1.3**	0.61	**0.33**	0.15	
124-48-1	**Dibromochloromethane**	**0.26**	0.12	**0.031**	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	**n-Butyl Acetate**	**5.6**	0.61	**1.2**	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: Rc Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106310**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
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Test Notes:
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Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/10/09 & 9/15/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.2**	0.61	**0.26**	0.13	
127-18-4	**Tetrachloroethene**	**4.9**	0.12	**0.72**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	**Ethylbenzene**	**5.4**	0.61	**1.2**	0.14	
179601-23-1	**m,p-Xylenes**	**17**	0.61	**4.0**	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	**Styrene**	**3.5**	0.61	**0.82**	0.14	
95-47-6	**o-Xylene**	**5.7**	0.61	**1.3**	0.14	
111-84-2	**n-Nonane**	**1.6**	0.61	**0.30**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	**alpha-Pinene**	**110**	0.61	**20**	0.11	**D**
103-65-1	**n-Propylbenzene**	**0.92**	0.61	**0.19**	0.12	
622-96-8	**4-Ethyltoluene**	**1.8**	0.61	**0.36**	0.12	
108-67-8	**1,3,5-Trimethylbenzene**	**1.5**	0.61	**0.30**	0.12	
95-63-6	**1,2,4-Trimethylbenzene**	**5.3**	0.61	**1.1**	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	**1,4-Dichlorobenzene**	**0.69**	0.12	**0.12**	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	**d-Limonene**	**32**	0.61	**5.8**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	**Naphthalene**	**0.95**	0.61	**0.18**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

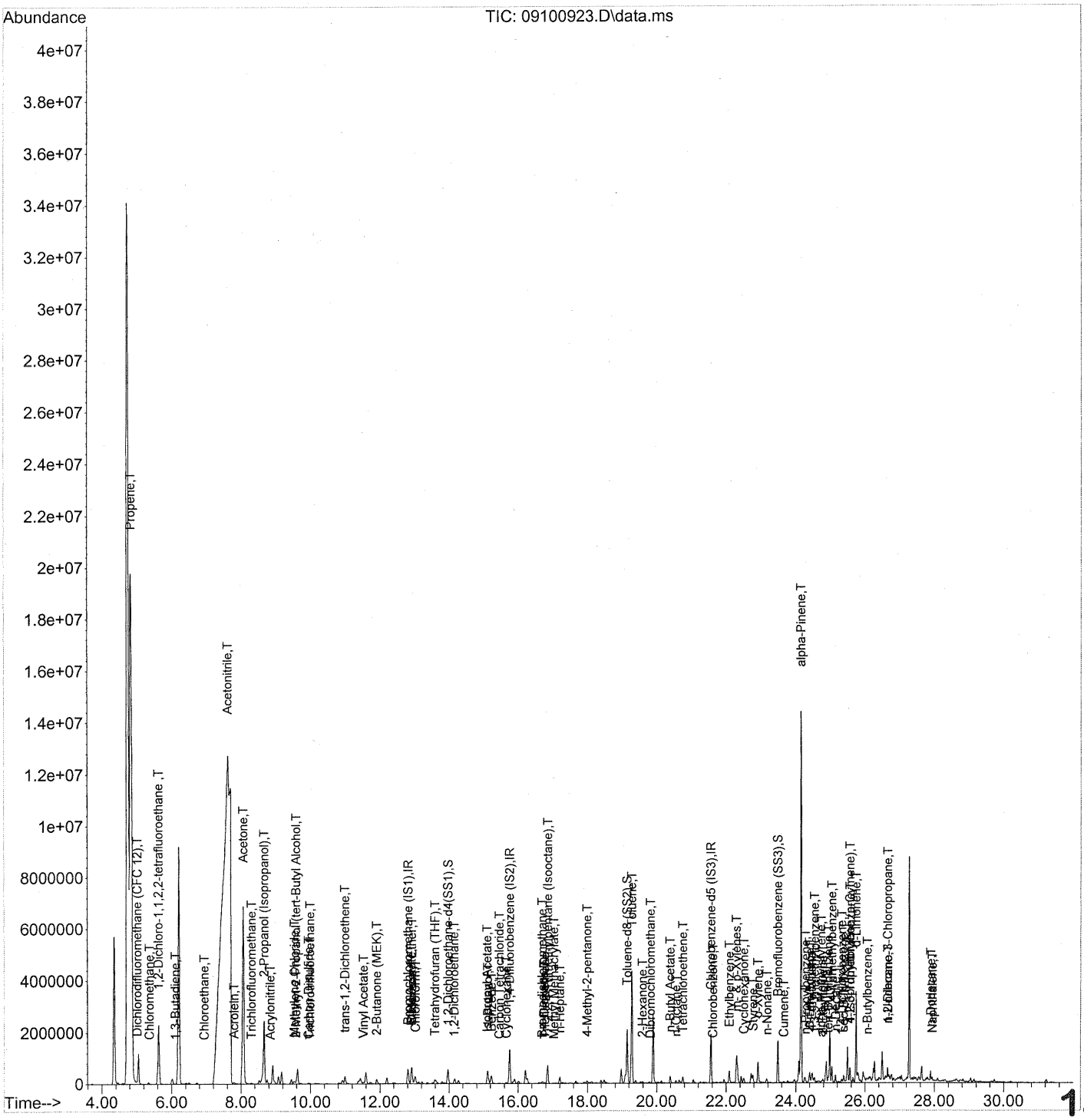
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By: _____ Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 17 10:43:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
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Sample : P0903139-003 (1000ml)
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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)	12.81	130	312587	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1576121	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	788638	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	550341	24.900	ng		-0.02
Spiked Amount 25.000			Recovery =	99.60%			
57) Toluene-d8 (SS2)	19.15	98	1826556	24.363	ng		-0.01
Spiked Amount 25.000			Recovery =	97.44%			
73) Bromofluorobenzene (SS3)	23.49	174	593798	27.967	ng		0.00
Spiked Amount 25.000			Recovery =	111.88%			
Target Compounds							Qvalue
2) Propene	4.83	42	351776m	12.829	ng		
3) Dichlorodifluoromethan...	5.01	85	83652	2.137	ng		99
4) Chloromethane	5.37	50	20810	0.570	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.62	135	1499	0.~~072~~	ng	#	43
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	1820	0.~~071~~	ng	#	37
8) Bromomethane	6.60	94	658	N.D.			
9) Chloroethane	6.94	64	1153	0.~~065~~	ng	#	43
10) Ethanol	0.00	45	0	~~N.D.~~	See Dil		
11) Acetonitrile	7.61	41	7689689	~~183.191~~	ng See Dil		85
12) Acrolein	7.80	56	52211	4.655	ng		97
13) Acetone	8.06	58	2347841	134.139	ng	#	70
14) Trichlorofluoromethane	8.30	101	35826	1.070	ng		99
15) 2-Propanol (Isopropanol)	8.66	45	4911490	102.464	ng		94
16) Acrylonitrile	8.84	53	2645	0.~~104~~	ng		99
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.58	59	106461	2.188	ng	#	68
19) Methylene Chloride	9.54	84	6749	0.~~309~~	ng		94
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d			
21) Trichlorotrifluoroethane	9.99	151	7301	0.487	ng		99
22) Carbon Disulfide	9.94	76	71695	0.930	ng		100
23) trans-1,2-Dichloroethene	11.00	61	243744	8.086	ng		94
24) 1,1-Dichloroethane	11.38	63	359	N.D.			
25) Methyl tert-Butyl Ether	11.43	73	1574	N.D.			
26) Vinyl Acetate	11.53	86	14895m	~~3.929~~	ng		
27) 2-Butanone (MEK)	11.90	72	82848	6.790	ng	#	89
28) cis-1,2-Dichloroethene	12.59	61	356	N.D.			
29) Diisopropyl Ether	12.92	87	4399	0.254	ng	#	1
30) Ethyl Acetate	12.91	61	84020	10.618	ng		96
31) n-Hexane	12.93	57	228163	5.915	ng		9

CBM 9/21/09

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 17 10:43:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	307524	9.526 ng		99
34) Tetrahydrofuran (THF)	13.59	72	66905	5.274 ng	#	64
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	4765	0.193 ng		84
38) 1,1,1-Trichloroethane	14.54	97	617	N.D.		
39) Isopropyl Acetate	15.10	61	686	0.053 ng	#	1
40) 1-Butanol	15.12	56	378637	18.538 ng		83
41) Benzene	15.23	78	392286	4.628 ng		98
42) Carbon Tetrachloride	15.46	117	13172	0.556 ng		98
43) Cyclohexane	15.66	84	19716	0.601 ng		87
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.45	63	631	N.D.		
46) Bromodichloromethane	16.70	83	42005	1.694 ng		86
47) Trichloroethene	16.77	130	2049	0.095 ng		90
48) 1,4-Dioxane	16.74	88	10035	0.666 ng		85
49) 2,2,4-Trimethylpentane...	16.86	57	847065	8.683 ng		96
50) Methyl Methacrylate	17.04	100	485	0.057 ng	#	1
51) n-Heptane	17.20	71	74334	3.294 ng		95
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	33816	1.846 ng		94
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	4052055	44.585 ng		99
59) 2-Hexanone	19.59	43	52297	1.107 ng		82
60) Dibromochloromethane	19.82	129	4174	0.215 ng		94
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	238862	4.635 ng		99
63) n-Octane	20.56	57	20186	0.996 ng		94
64) Tetrachloroethene	20.75	166	90480	4.012 ng		100
65) Chlorobenzene	21.62	112	3136	0.056 ng	#	42
66) Ethylbenzene	22.09	91	436553	4.449 ng		99
67) m- & p-Xylenes	22.30	91	1104833	14.203 ng		100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	165782	2.883 ng		98
70) o-Xylene	22.92	91	369456	4.721 ng		99
71) n-Nonane	23.17	43	60711	1.288 ng		87
72) 1,1,2,2-Tetrachloroethane	22.91	83	846	N.D.		
74) Cumene	23.66	105	34453	0.340 ng		98
75) alpha-Pinene	24.15	93	6846791	136.767 ng See Dil.		99
76) n-Propylbenzene	24.28	91	95196	0.759 ng	#	90
77) 3-Ethyltoluene	24.40	105	251542	2.646 ng		100
78) 4-Ethyltoluene	24.46	105	141179	1.477 ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	94761	1.199 ng		91

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 17 10:43:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

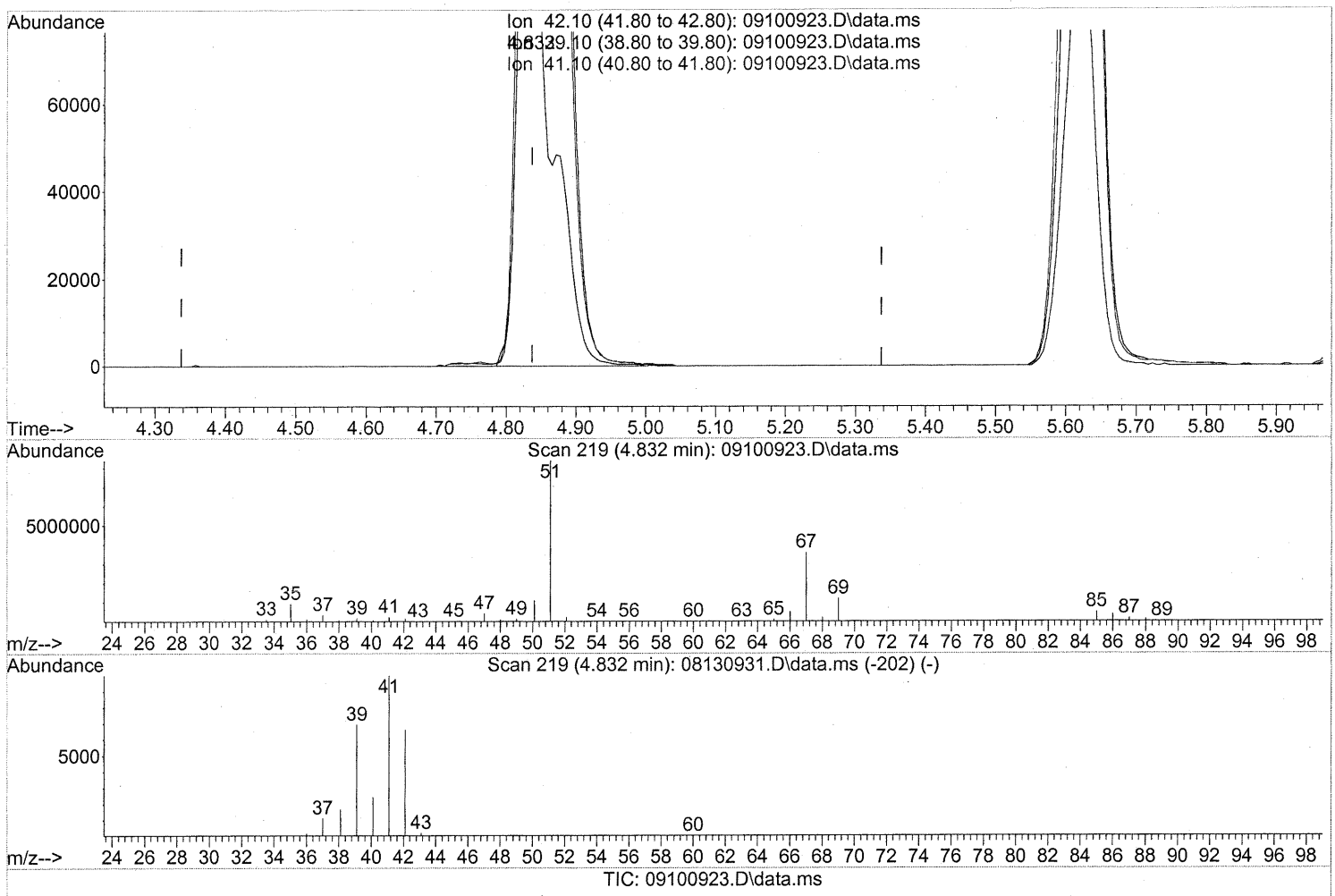
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	12978	0.303 ng	#	80
81) 2-Ethyltoluene	24.79	105	85586	0.872 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	364267	4.342 ng		89
83) n-Decane	25.15	57	107530	2.202 ng		98
84) Benzyl Chloride	25.24	91	1880	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D. d		
86) 1,4-Dichlorobenzene	25.33	146	26422	0.573 ng		100
87) sec-Butylbenzene	25.38	105	12363	0.112 ng	#	30
88) 4-Isopropyltoluene (p-...	25.56	119	222022	2.096 ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	101988	1.203 ng		88
90) 1,2-Dichlorobenzene	0.00	146	0	N.D. d		
91) d-Limonene	25.74	68	910128	26.515 ng		98
92) 1,2-Dibromo-3-Chloropr...	26.65	157	835	0.063 ng	#	1
93) n-Undecane	26.65	57	250932	4.973 ng		83
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	88579	0.787 ng		97
96) n-Dodecane	27.89	57	139930	2.477 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	95857	3.349 ng		96
99) tert-Butylbenzene	24.94	119	4360	0.052 ng		95
100) n-Butylbenzene	26.06	91	40431	0.459 ng	#	50

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(2) Propene (T)

4.832min (-0.006) 15.83ng

response 433991

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	76.85#
41.10	152.70	115.31#
0.00	0.00	0.00

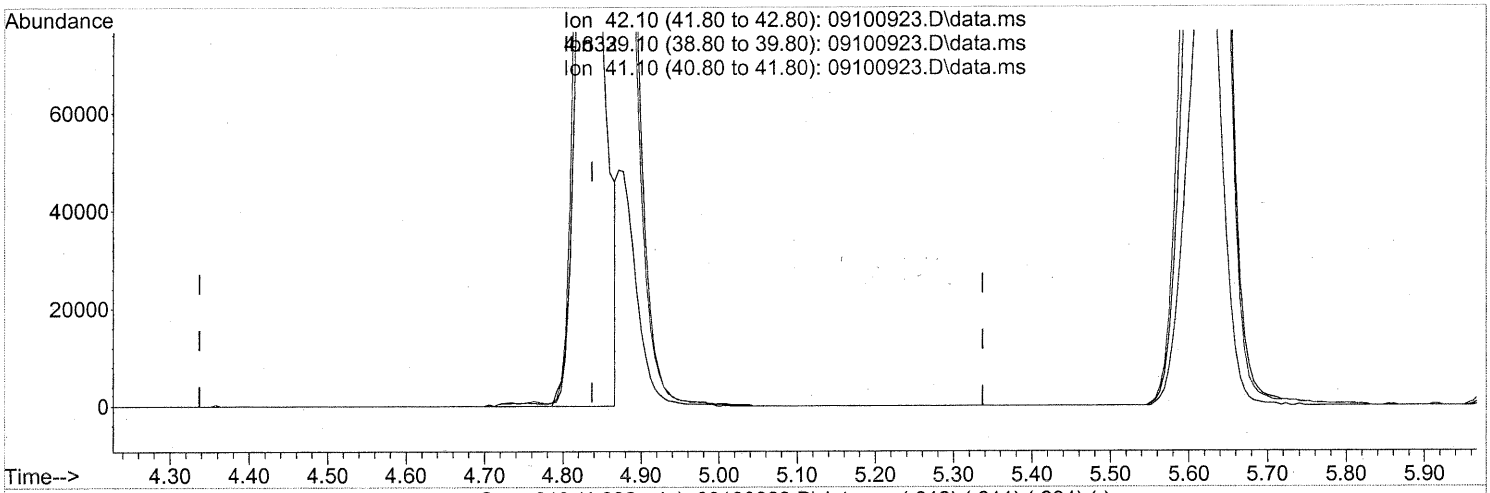
Shoulder 8H

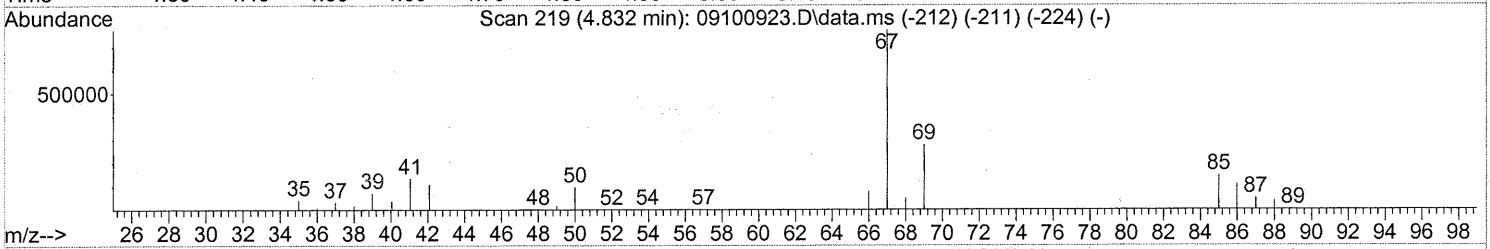
155

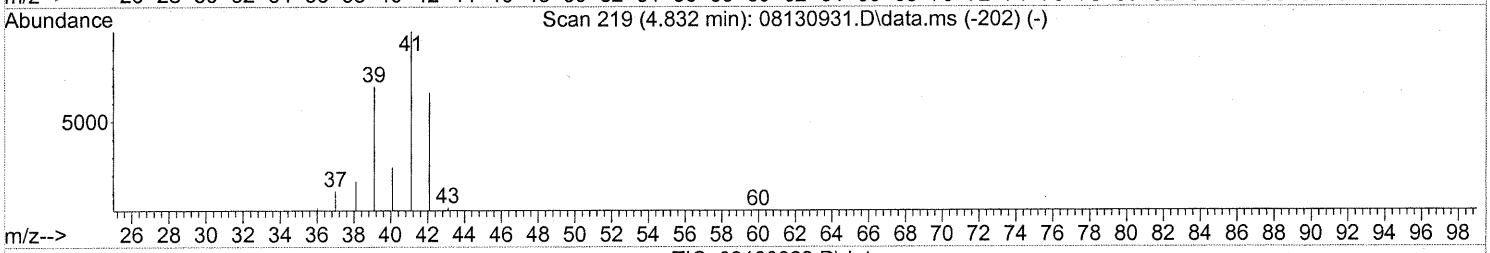
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

(2) Propene (T)

4.832min (-0.006) 12.83ng m

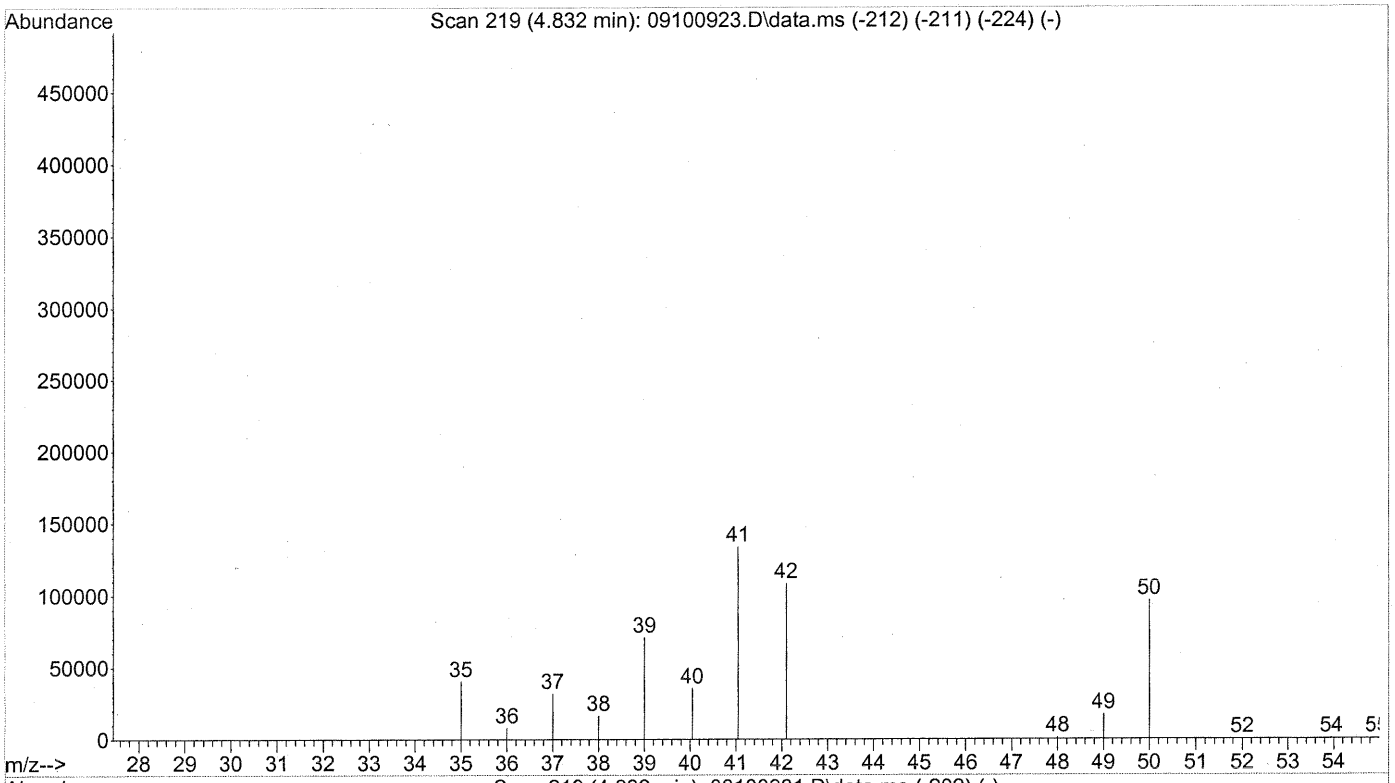
response 351776

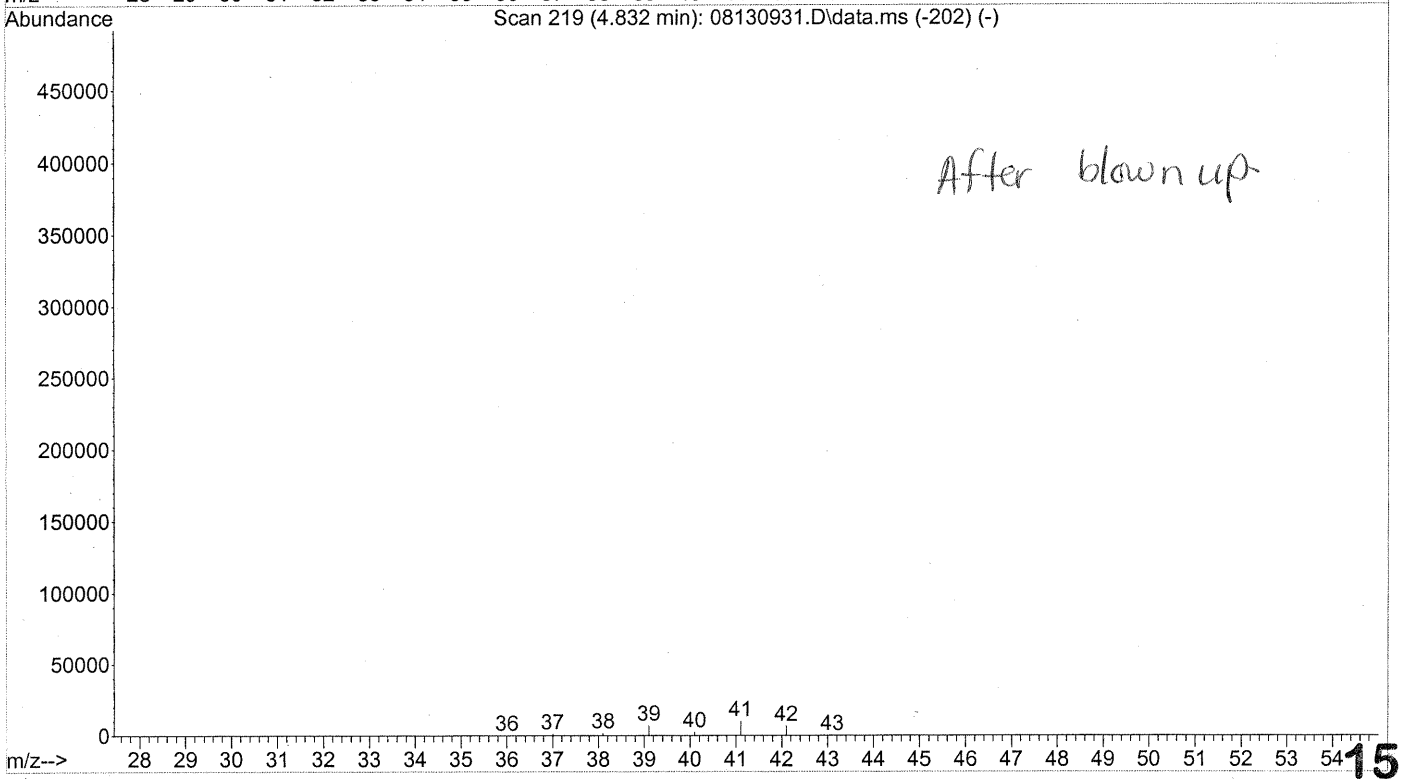
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	94.81#
41.10	152.70	142.26
0.00	0.00	0.00

SH → IC
Em 9/21/09
Before blown up
E 9/21/09

156

File :J:\MS09\Data\2009_09\10\09100923.D
Operator : EM
Acquired : 10 Sep 2009 23:27 using AcqMethod TO15LOW.M
Instrument : MS09
Sample Name: P0903139-003 (1000ml)
Misc Info : Environmental H &E 106310
Vial Number: 13



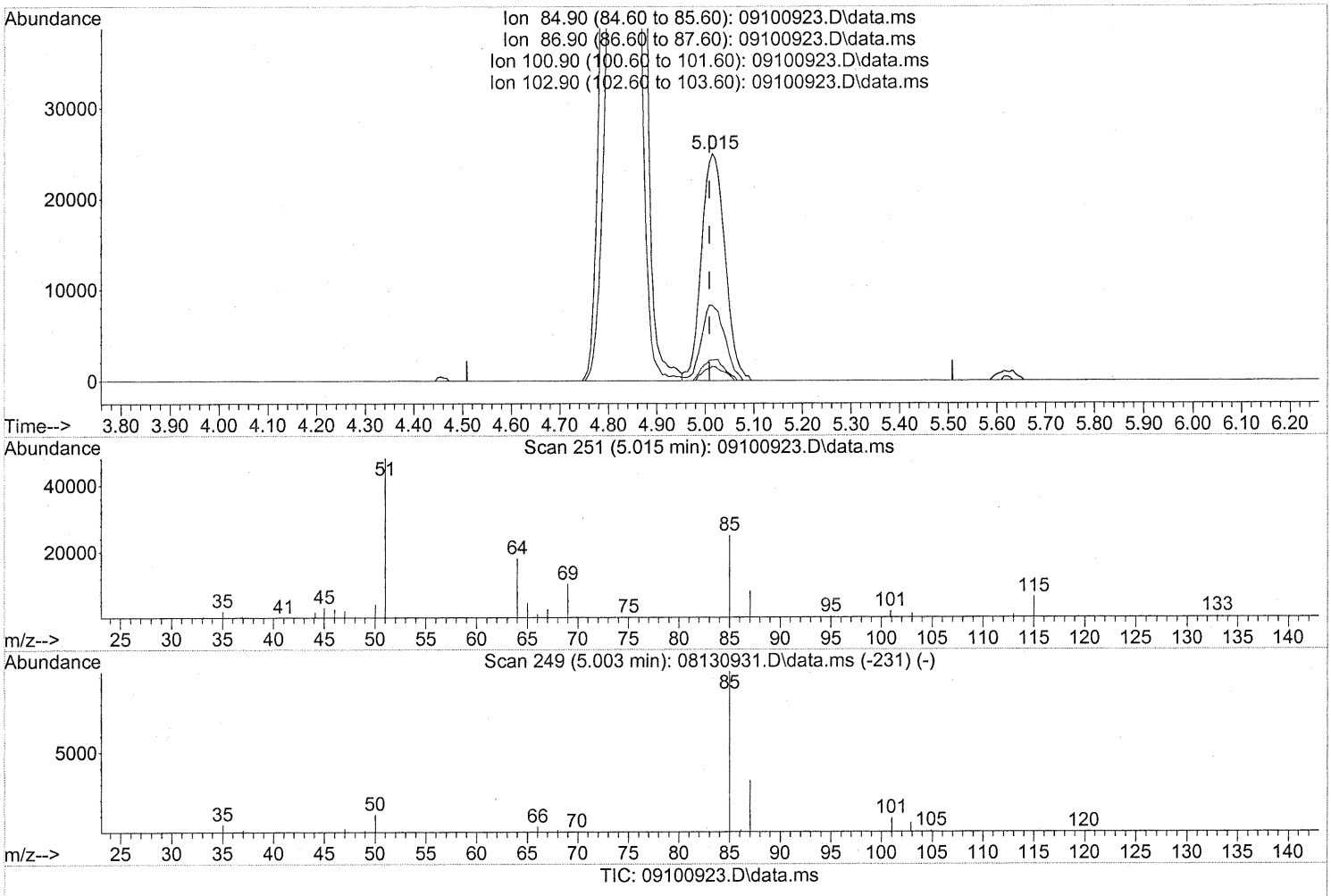


After blown up

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.015min (+0.006) 2.14ng

response 83652

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.59
100.90	9.10	8.49
102.90	5.50	5.25

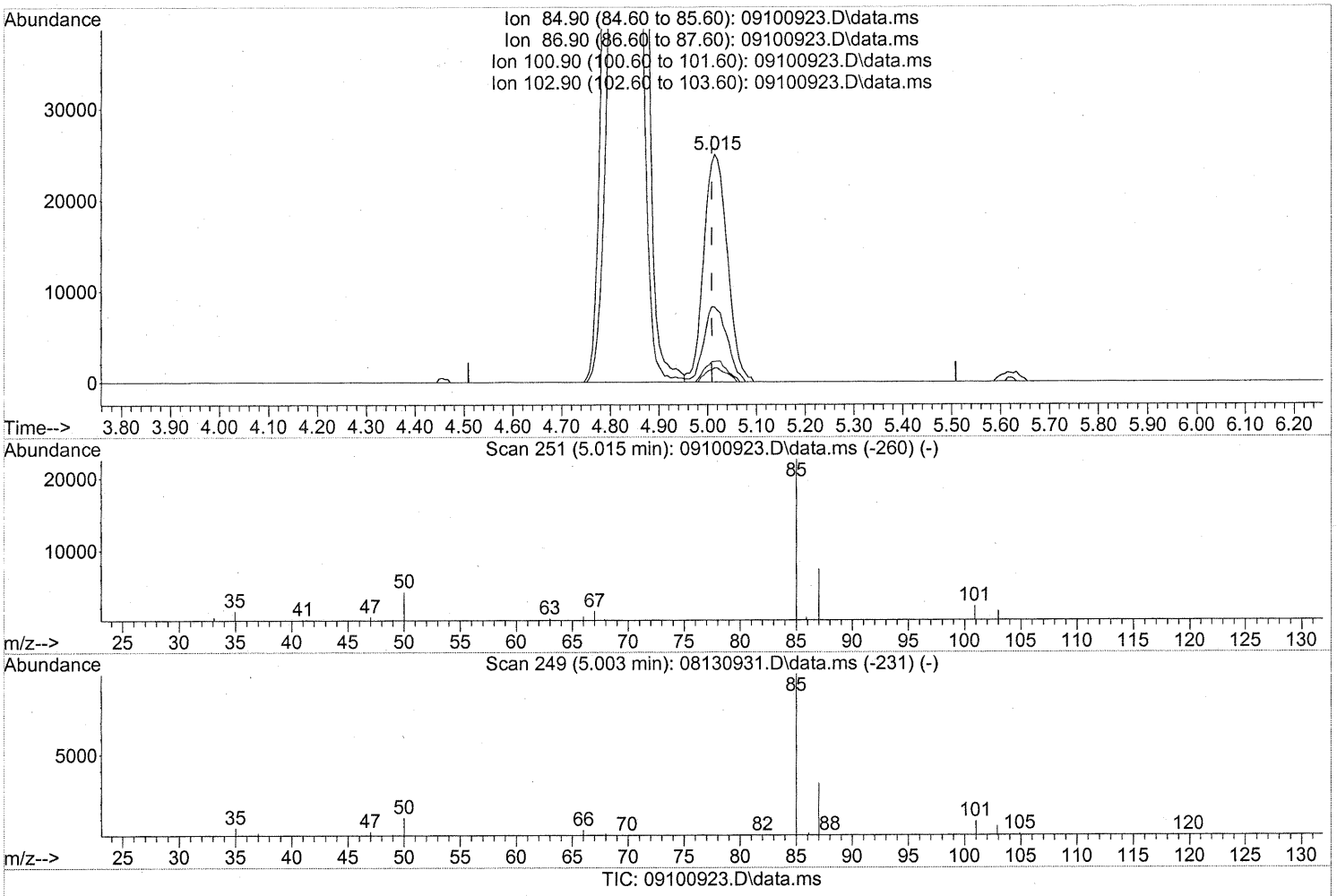
Before subtraction

158

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.015min (+0.006) 2.14ng

response 83652

After subtraction

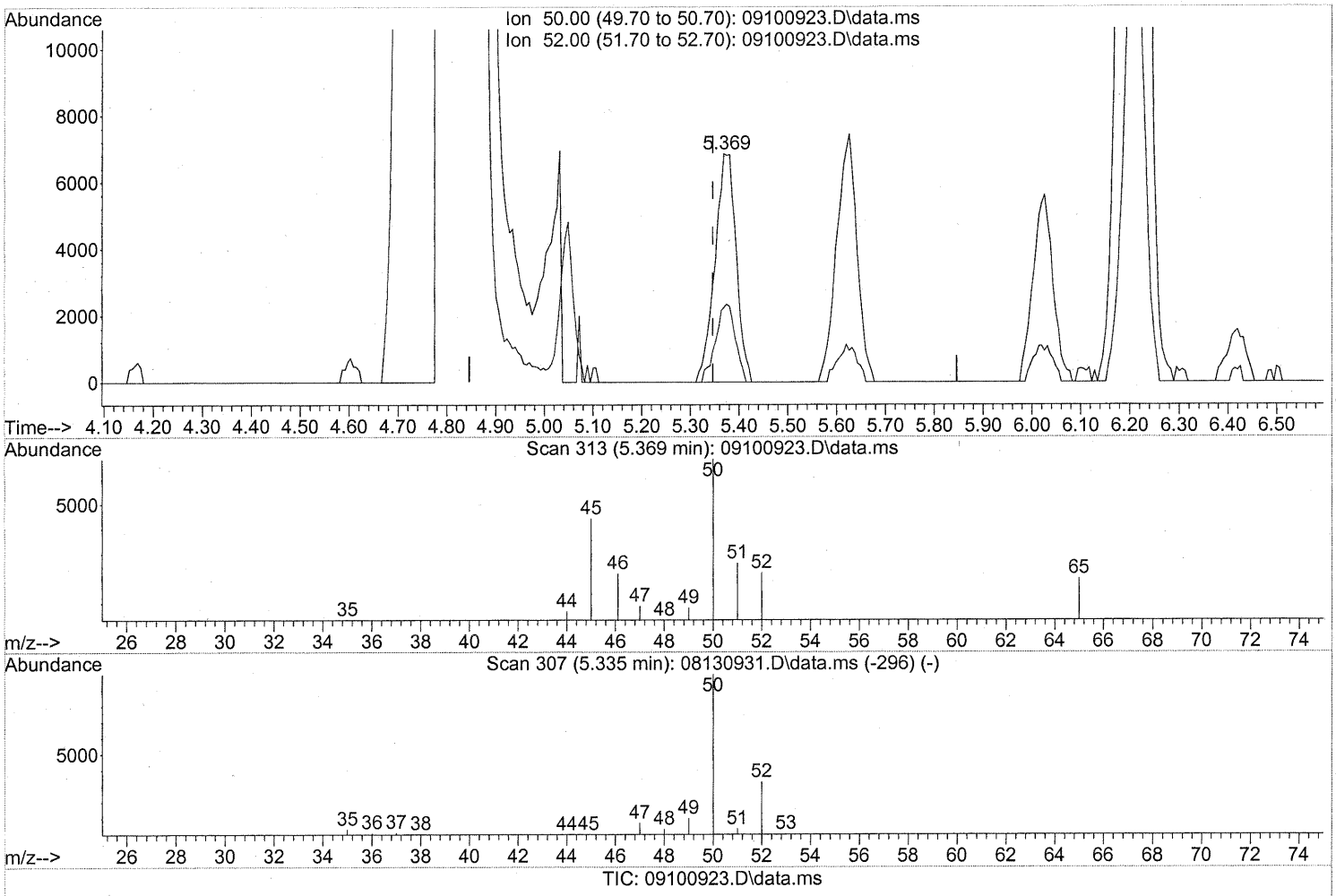
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.59
100.90	9.10	8.49
102.90	5.50	5.25

159

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(4) Chloromethane (T)

5.369min (+0.023) 0.57ng

response 20810

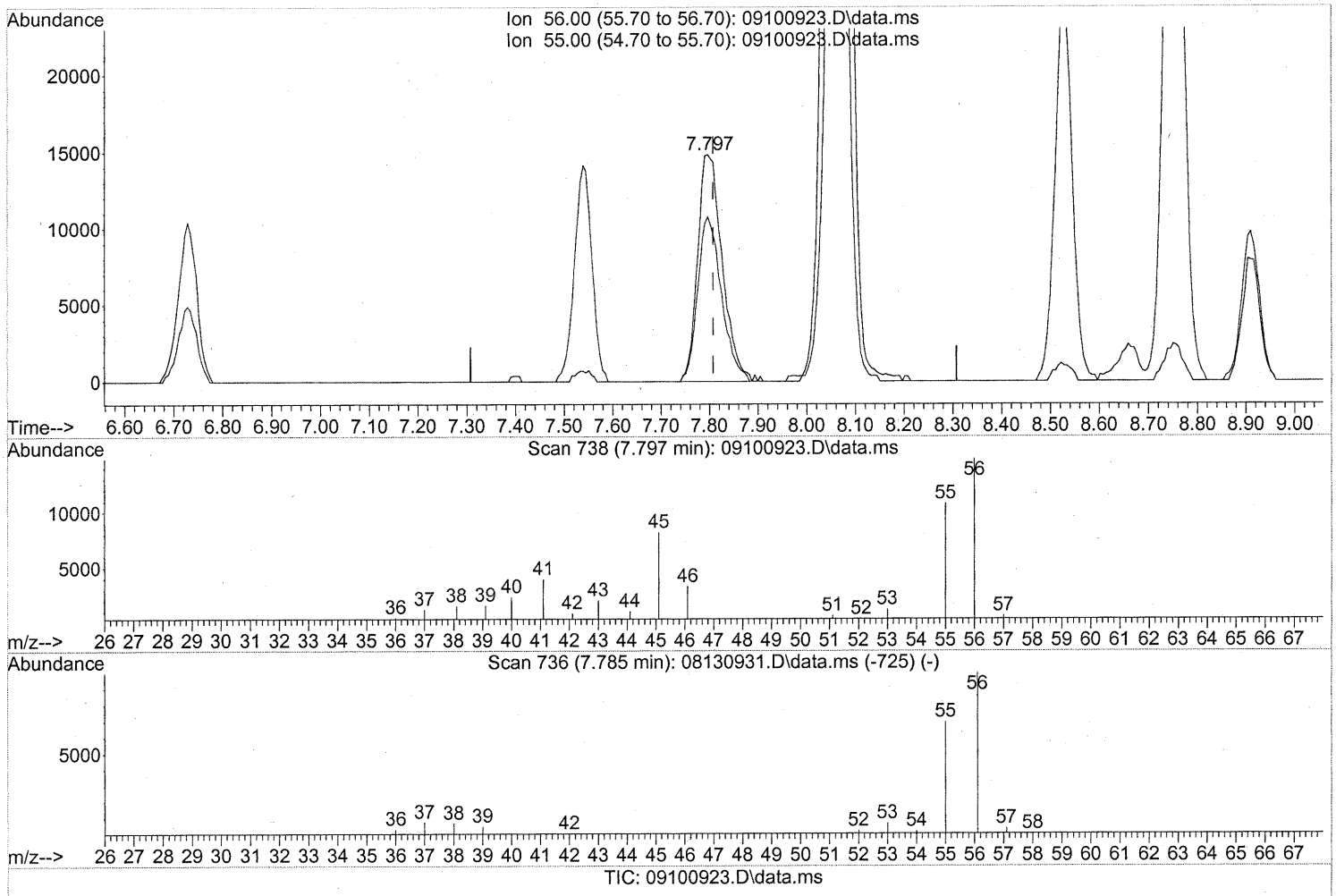
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	31.60
0.00	0.00	0.00
0.00	0.00	0.00

160

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 4.65ng

response 52211

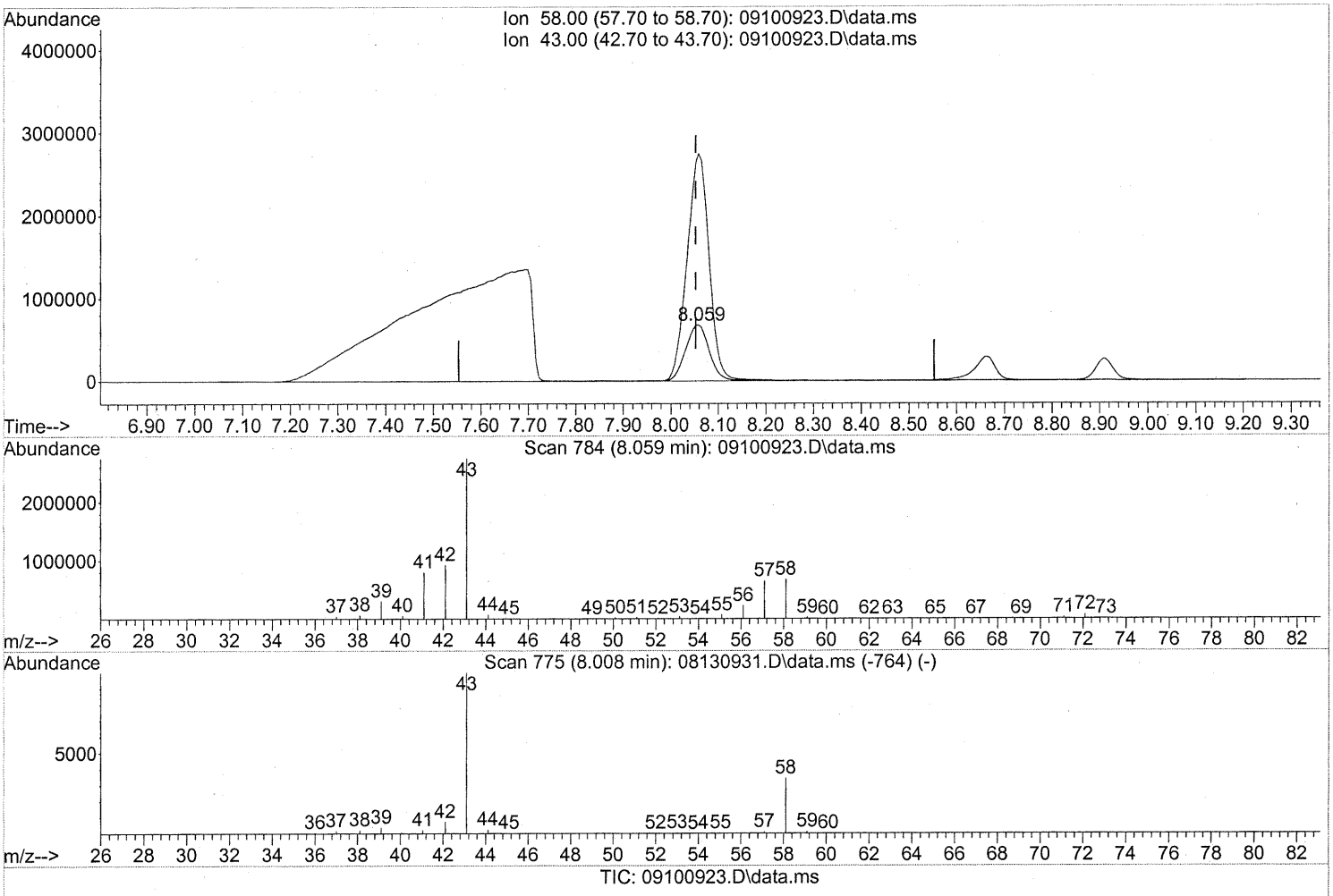
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.40
0.00	0.00	0.00
0.00	0.00	0.00

161

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(13) Acetone (T)

8.059min (+0.006) 134.14ng

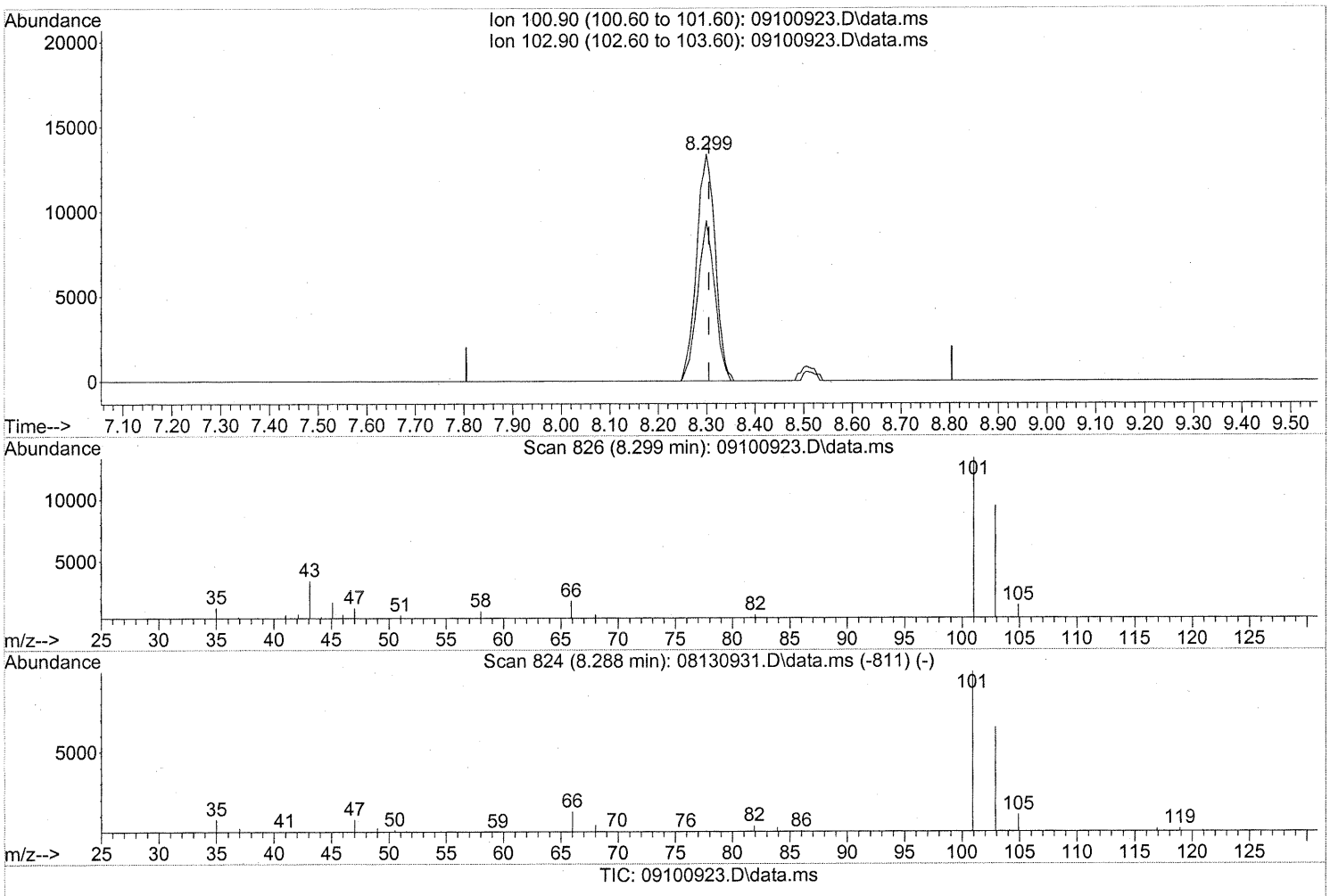
response 2347841

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	378.70#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(14) Trichlorofluoromethane (T)

8.299min (-0.006) 1.07ng

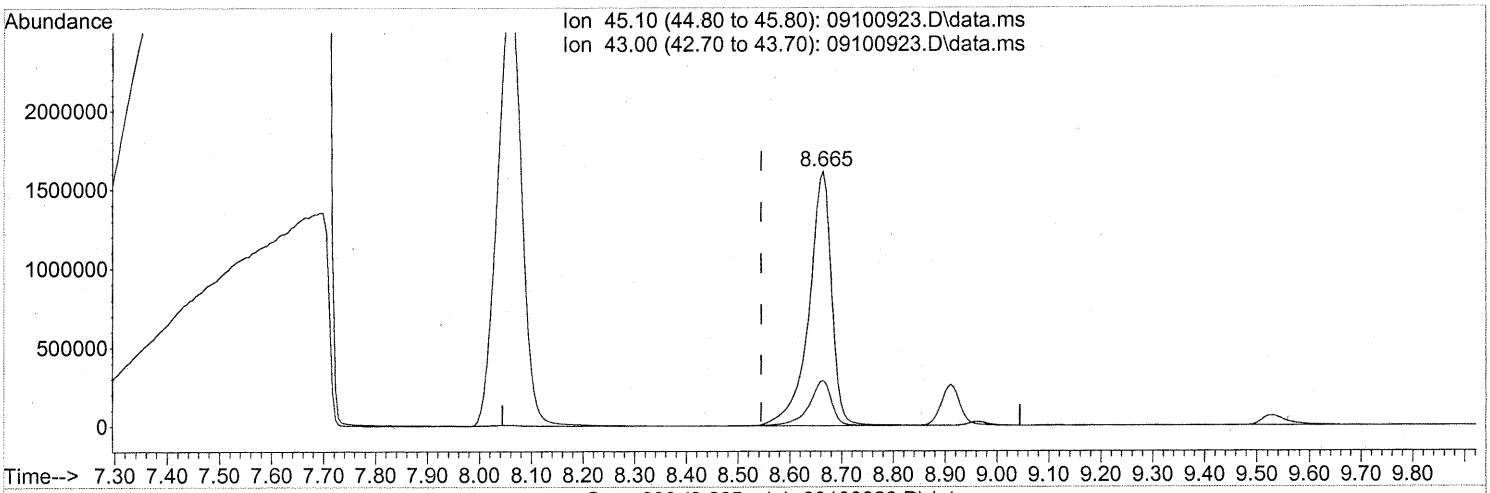
response 35826

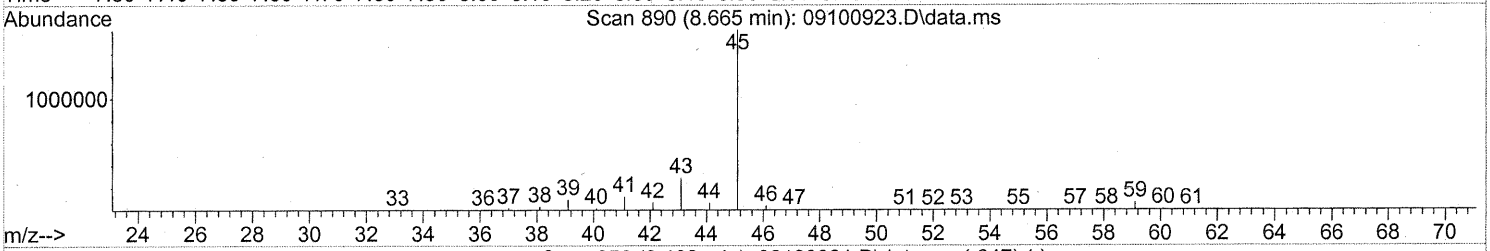
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	65.42
0.00	0.00	0.00
0.00	0.00	0.00

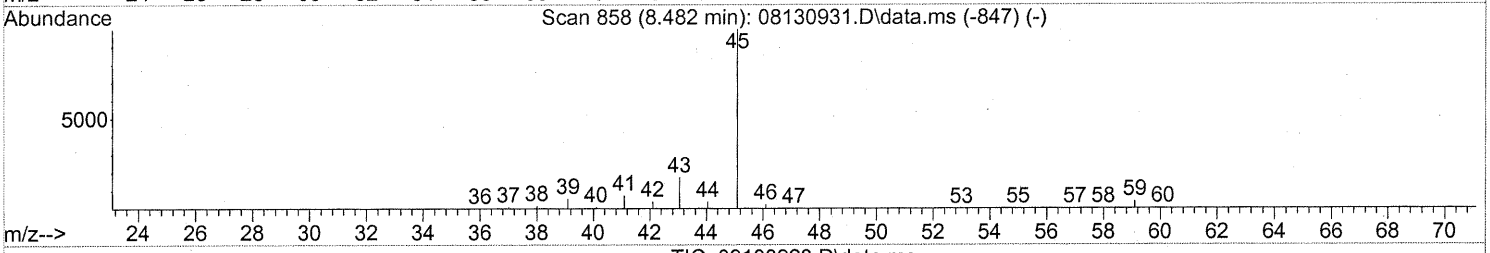
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

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

8.665min (+0.120) 102.46ng

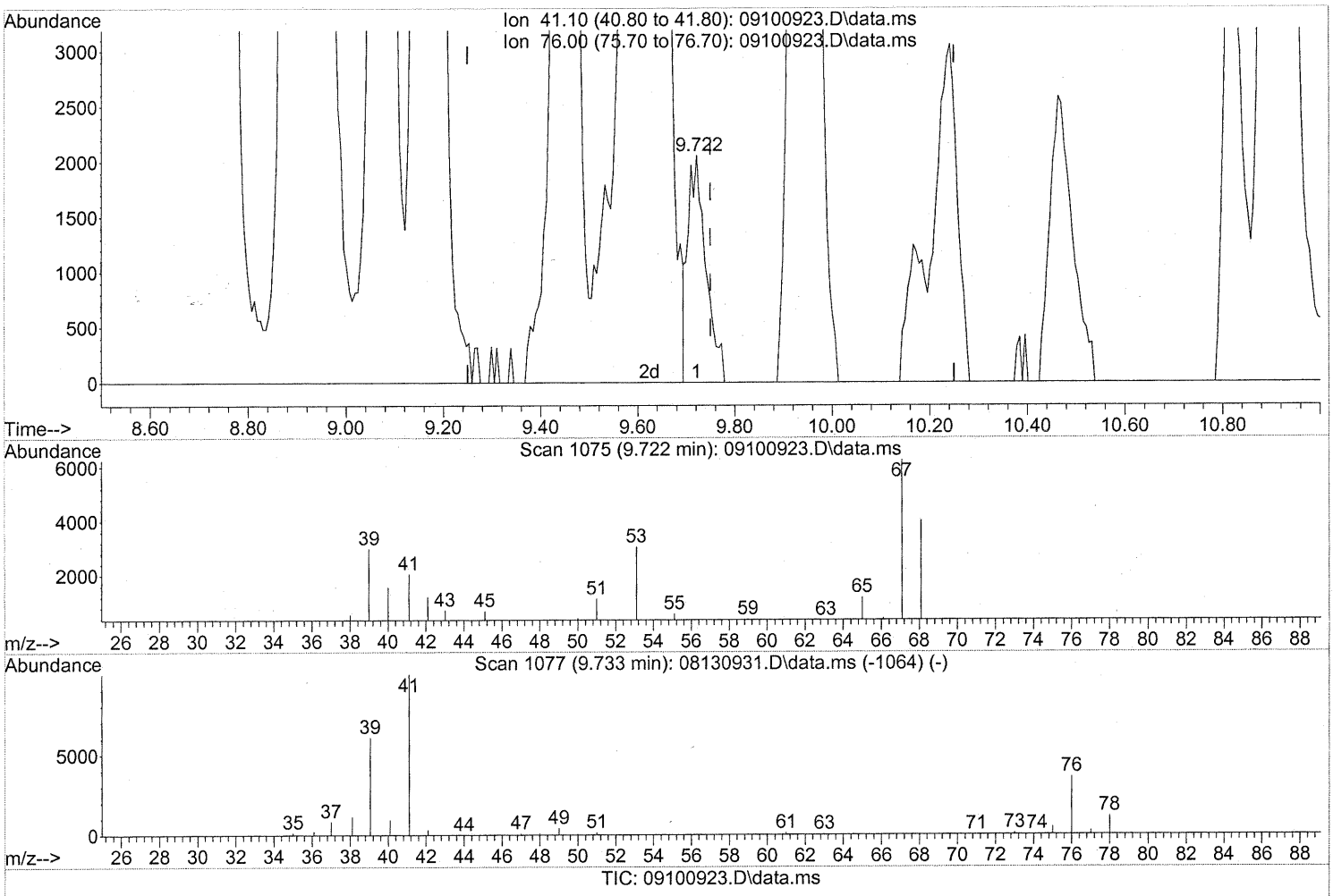
response 4911490

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

9.722min (-0.029) 0.18ng

response 5321

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

FP Com 9/21/09

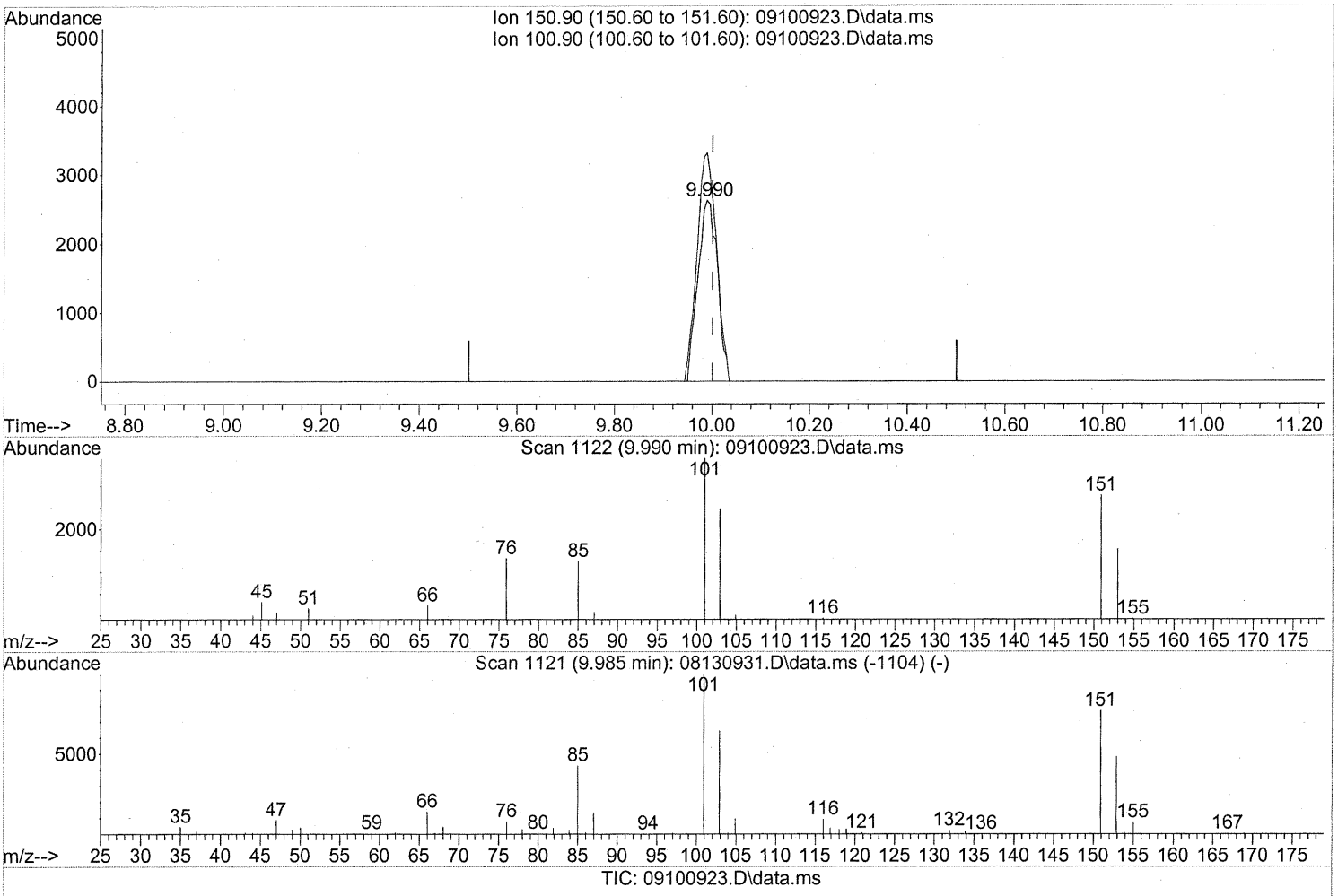
E. 9/21/09

165

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.990min (-0.011) 0.49ng

response 7301

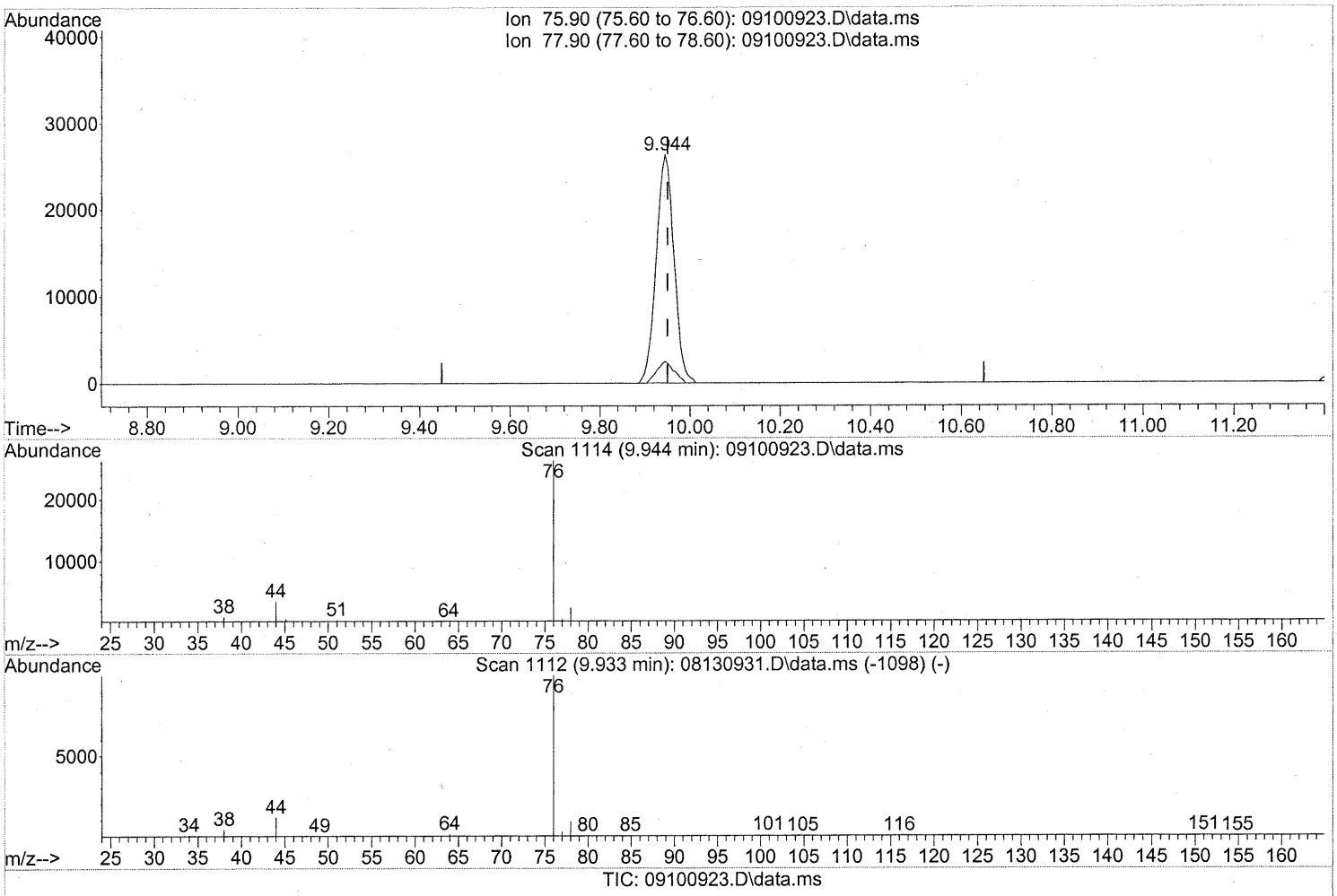
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	125.79
0.00	0.00	0.00
0.00	0.00	0.00

166

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(22) Carbon Disulfide (T)

9.944min (-0.006) 0.93ng

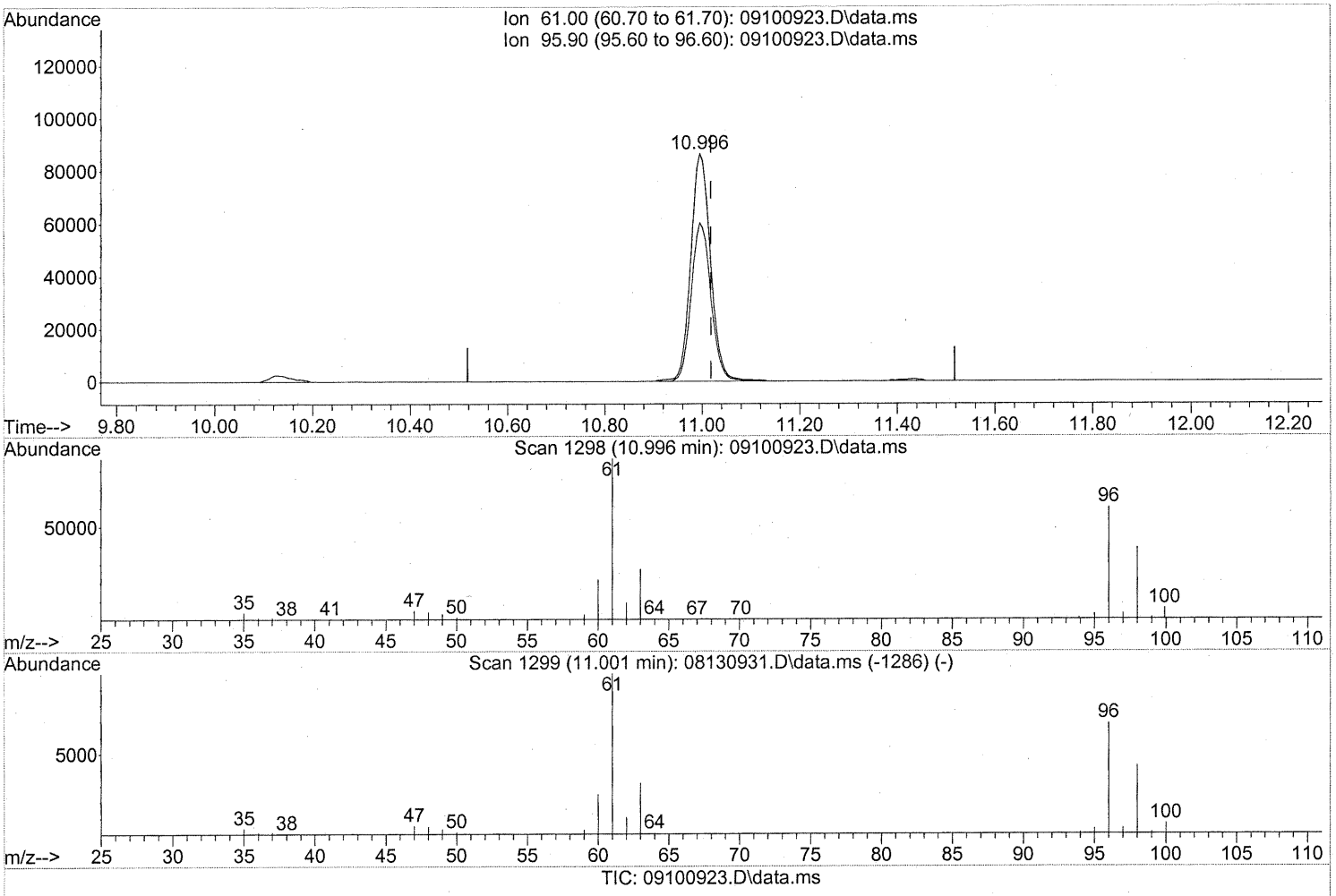
response 71695

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	9.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

10.996min (-0.023) 8.09ng

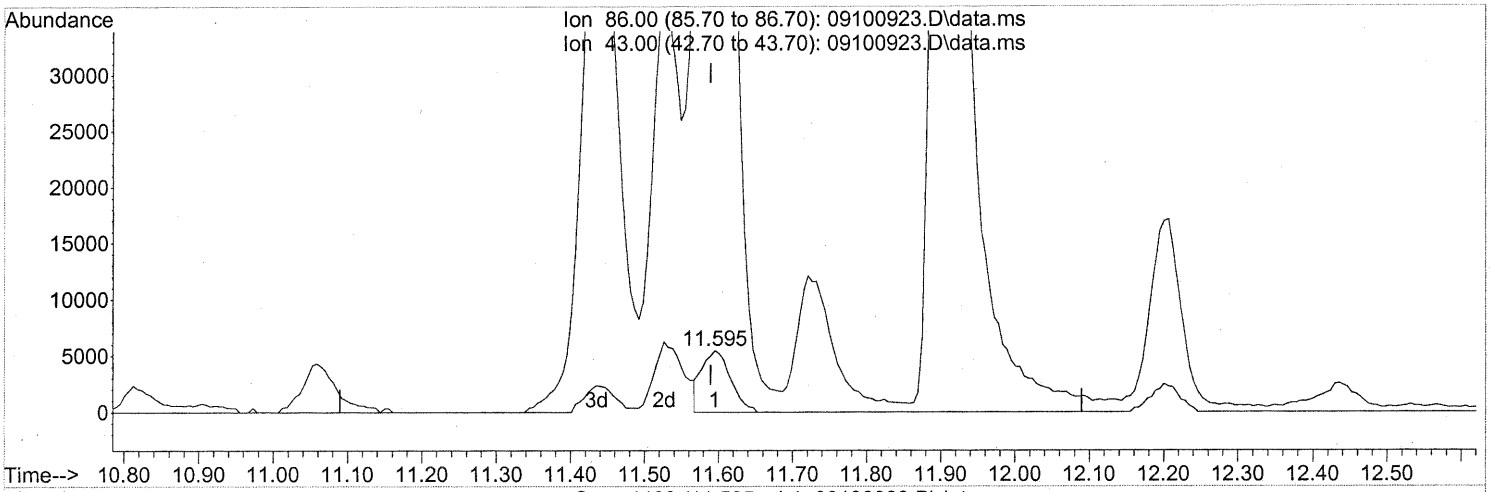
response 243744

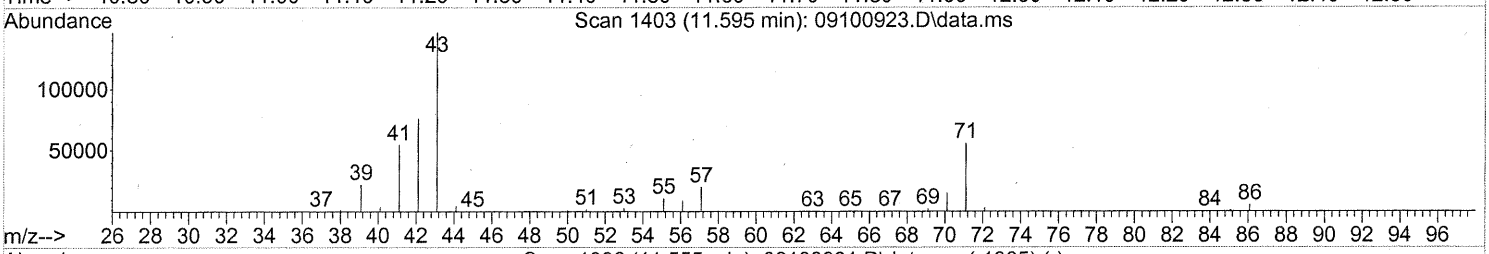
Ion	Exp%	Act%
61.00	100	100
95.90	74.10	69.34
0.00	0.00	0.00
0.00	0.00	0.00

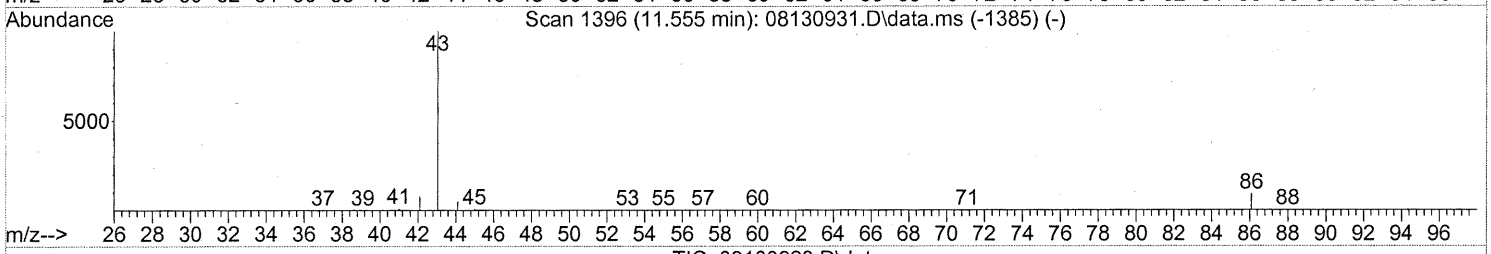
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

(26) Vinyl Acetate (T)

11.595min (+0.005) 3.90ng

response 14802

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2734.60#
0.00	0.00	0.00
0.00	0.00	0.00

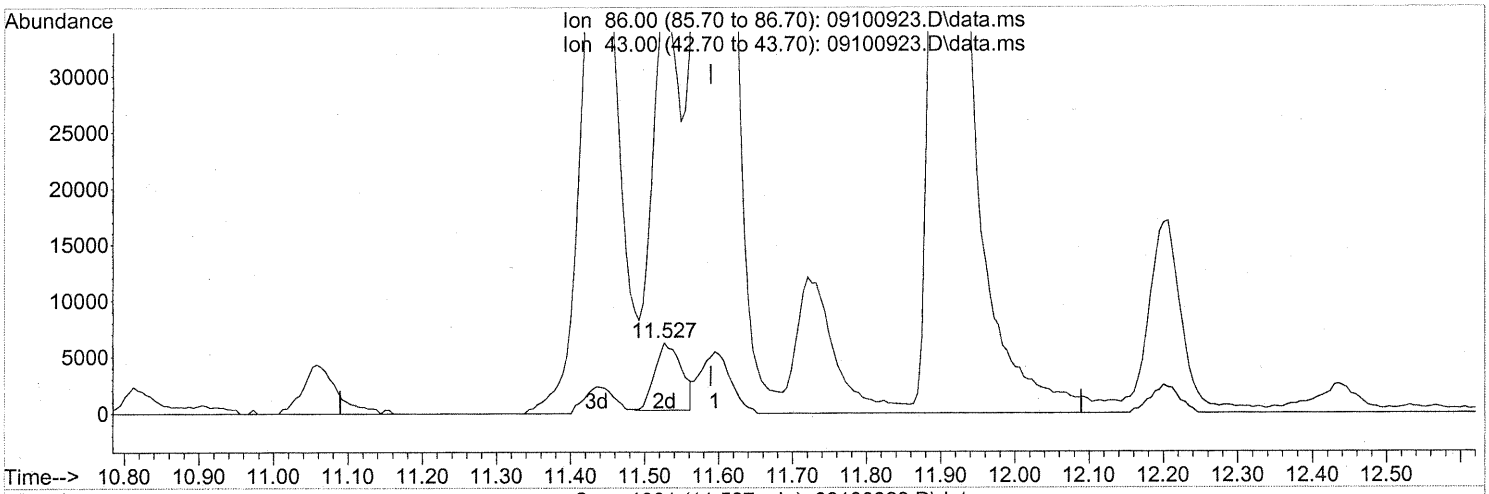
mp

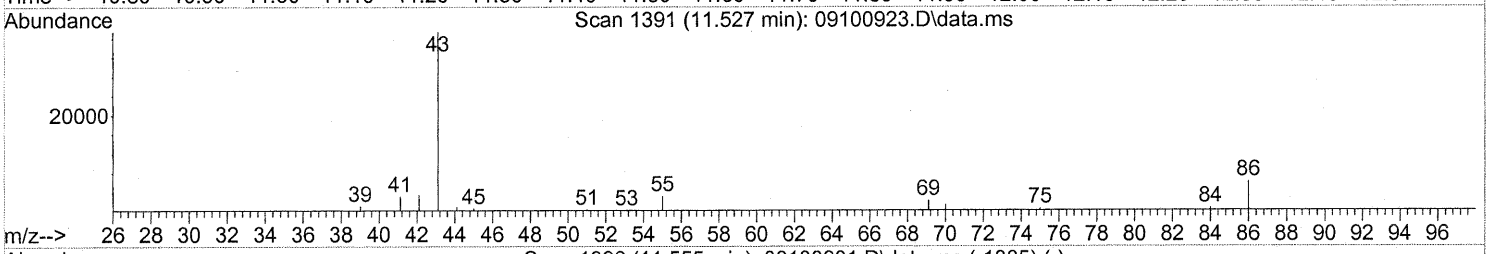
169

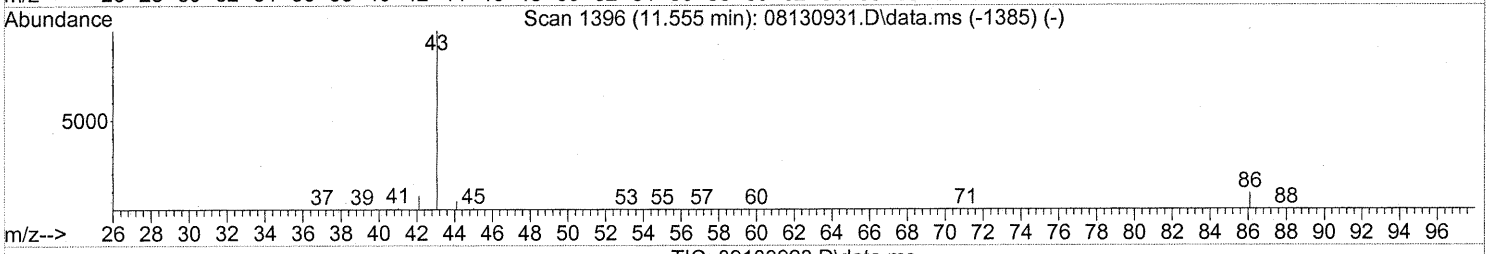
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

(26) Vinyl Acetate (T)

11.527min (-0.063) 3.93ng m

response 14895

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2717.53#
0.00	0.00	0.00
0.00	0.00	0.00

<RL

MP → IC

Com 9/21/09

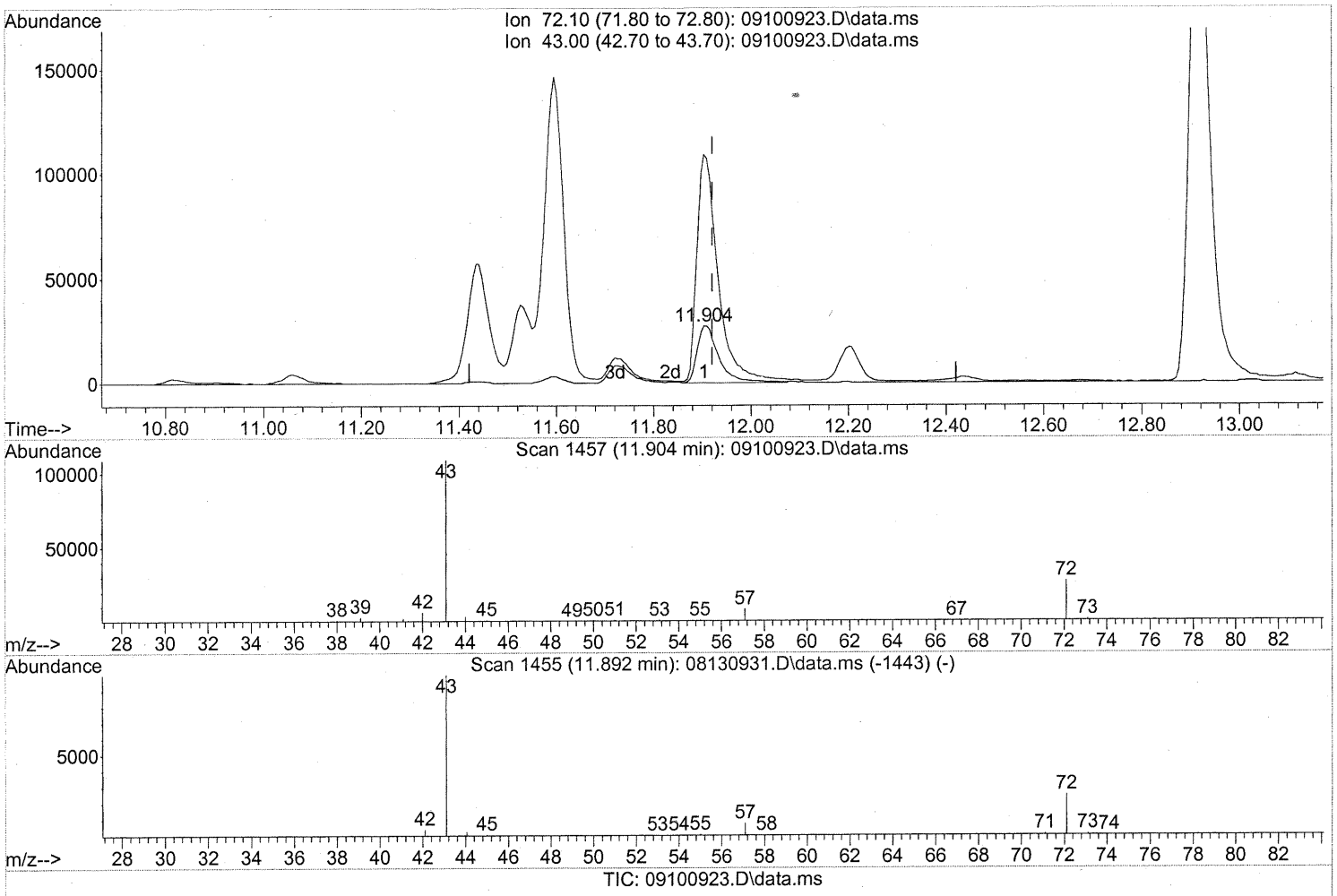
E 9/21/09

170

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

11.904min (-0.017) 6.79ng

response 82848

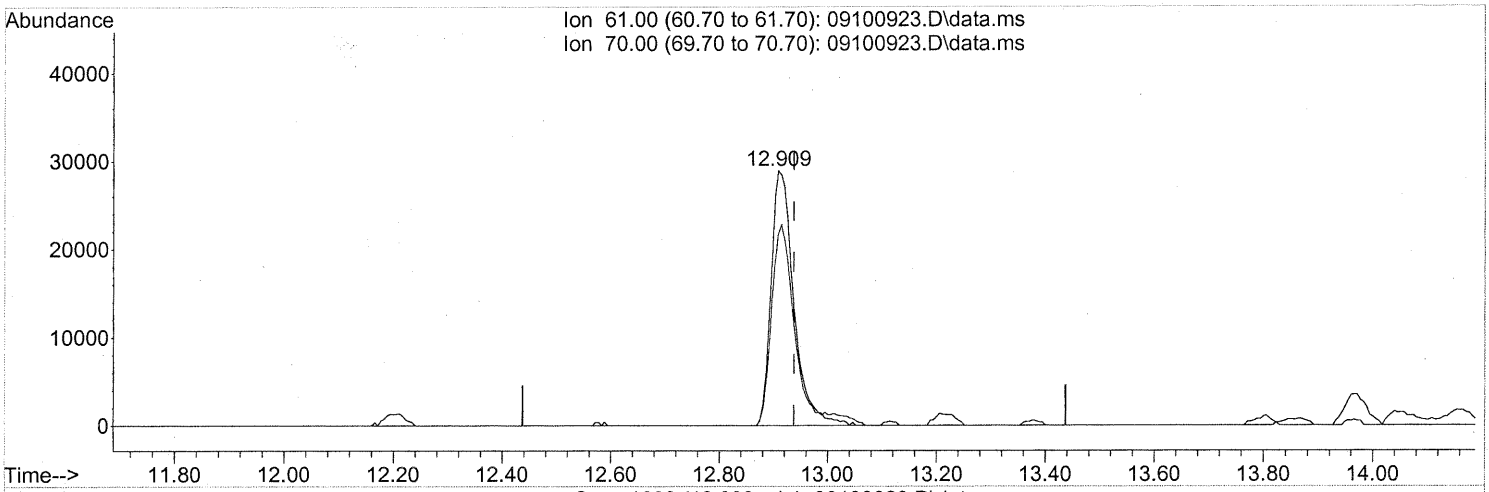
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	390.04#
0.00	0.00	0.00
0.00	0.00	0.00

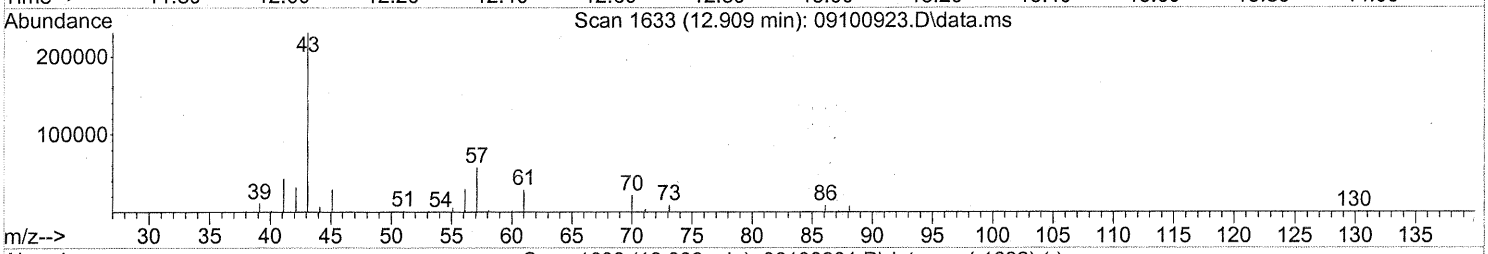
171

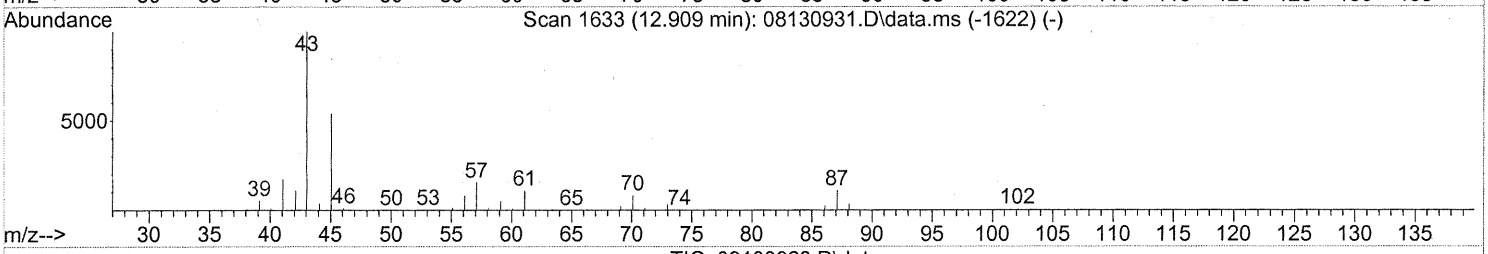
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 10.62ng

response 84020

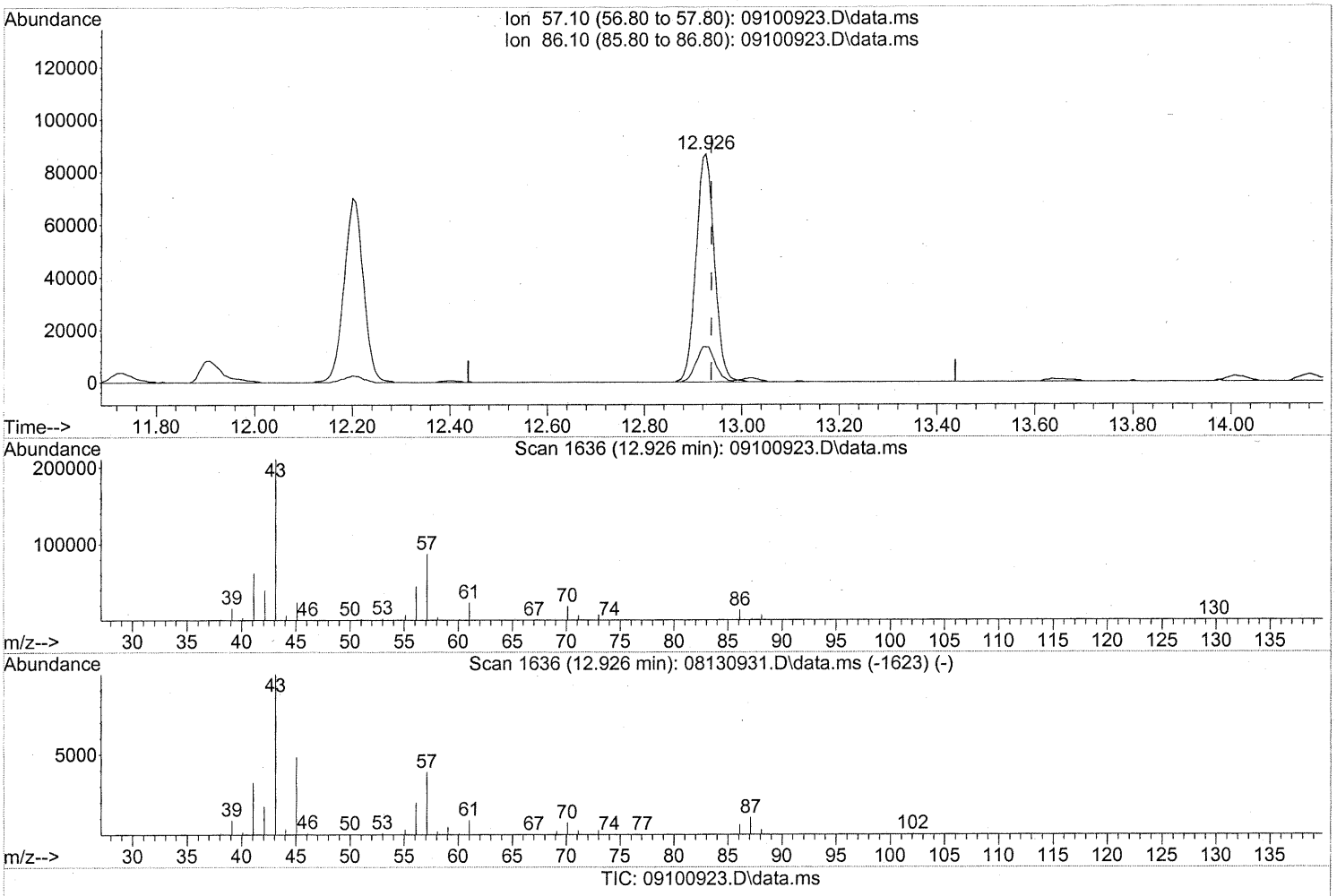
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	82.58
0.00	0.00	0.00
0.00	0.00	0.00

172

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(31) n-Hexane (T)

12.926min (-0.011) 5.92ng

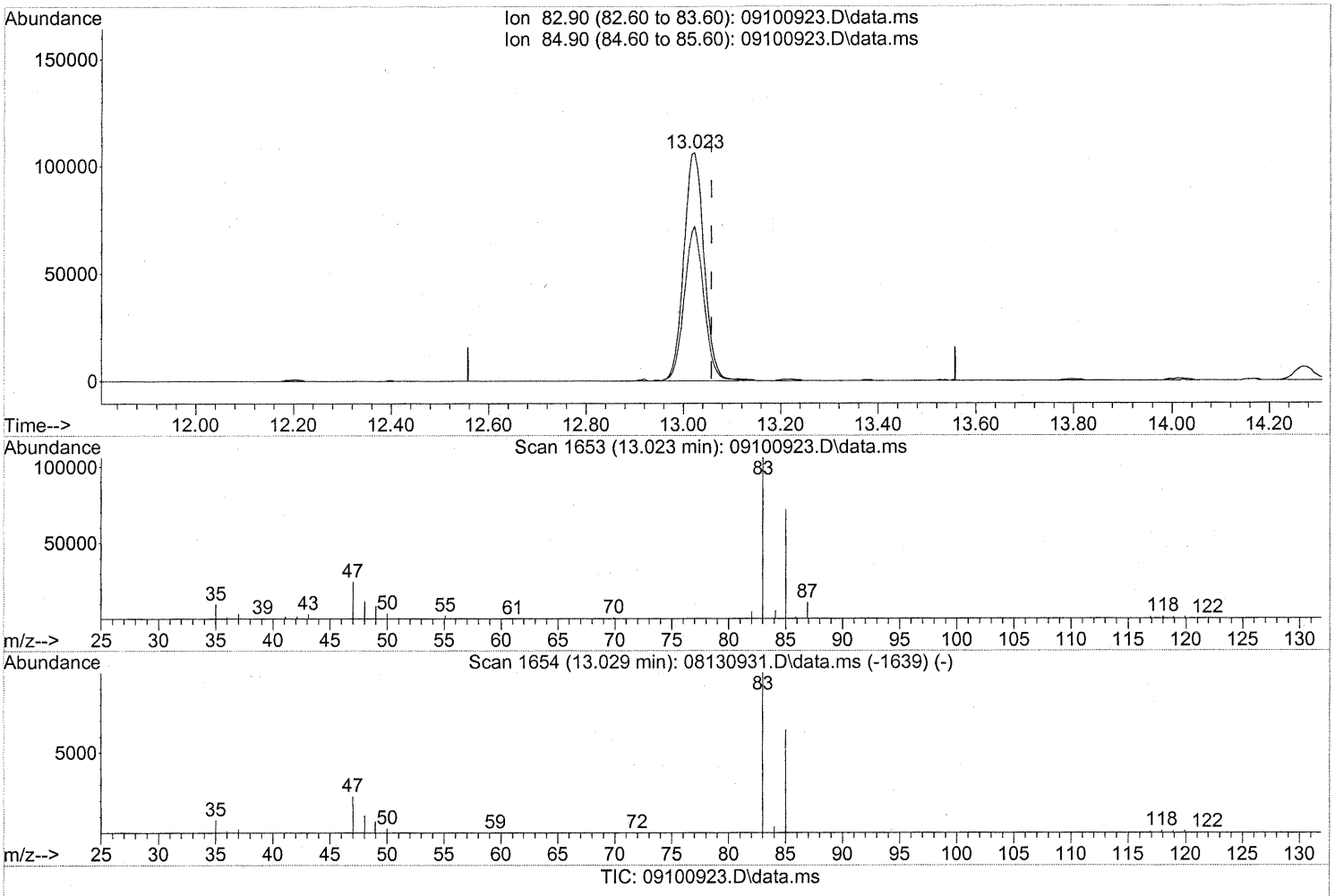
response 228163

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	16.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(32) Chloroform (T)

13.023min (-0.034) 9.53ng

response 307524

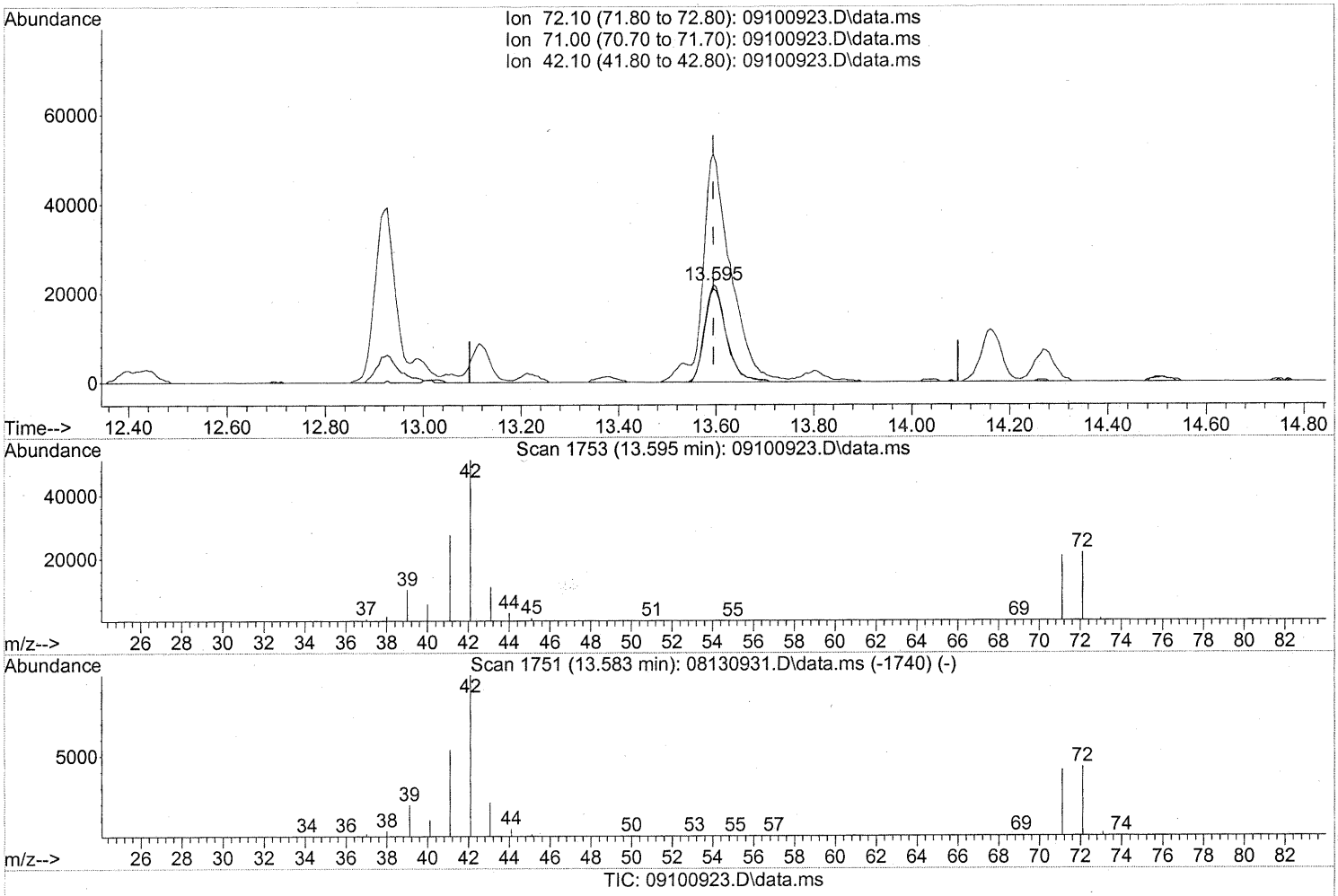
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	65.73
0.00	0.00	0.00
0.00	0.00	0.00

174

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.595min (-0.000) 5.27ng

response 66905

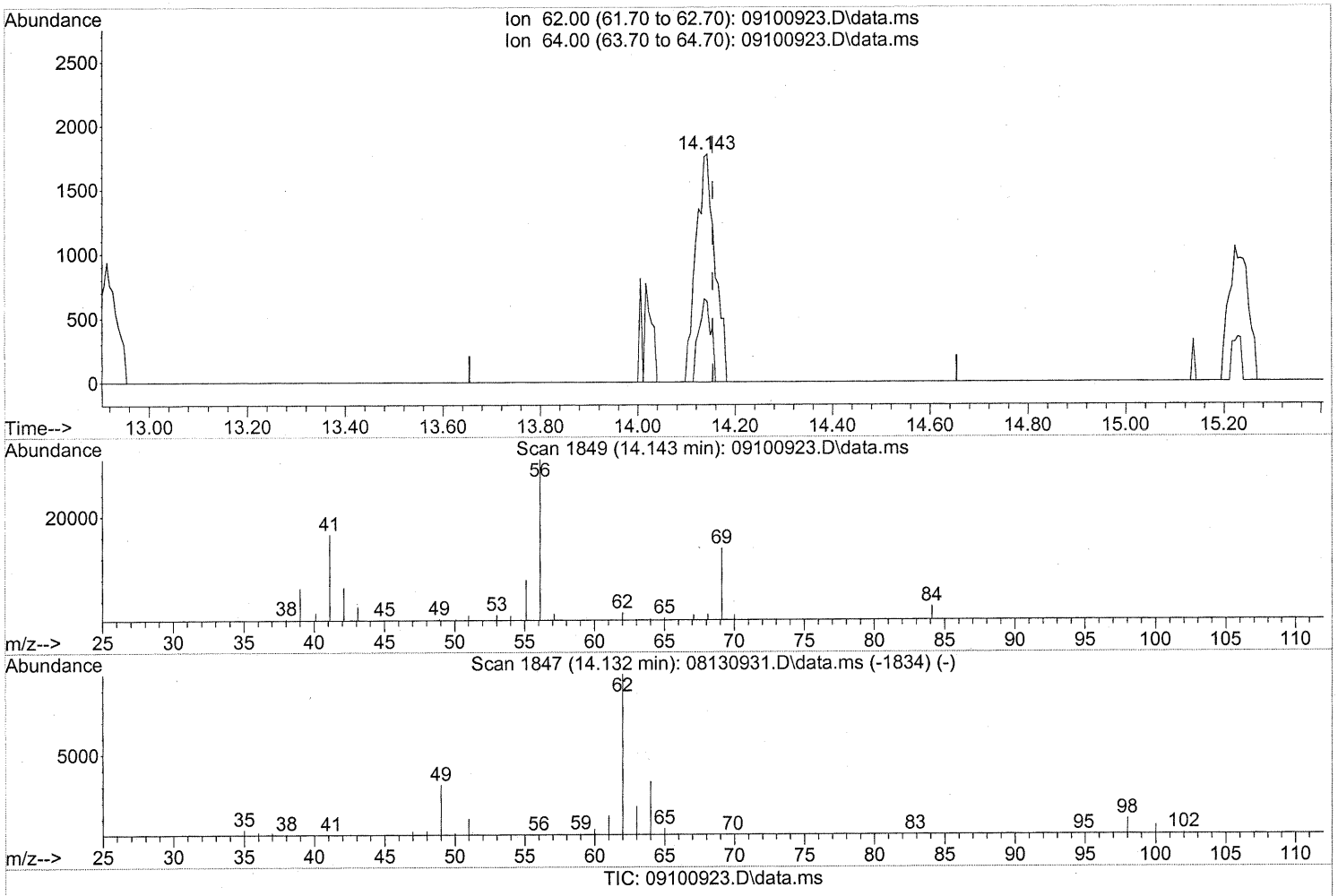
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	95.65
42.10	206.50	288.22#
0.00	0.00	0.00

175

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(36) 1,2-Dichloroethane (T)

14.143min (-0.011) 0.19ng

response 4765

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	23.55
0.00	0.00	0.00
0.00	0.00	0.00

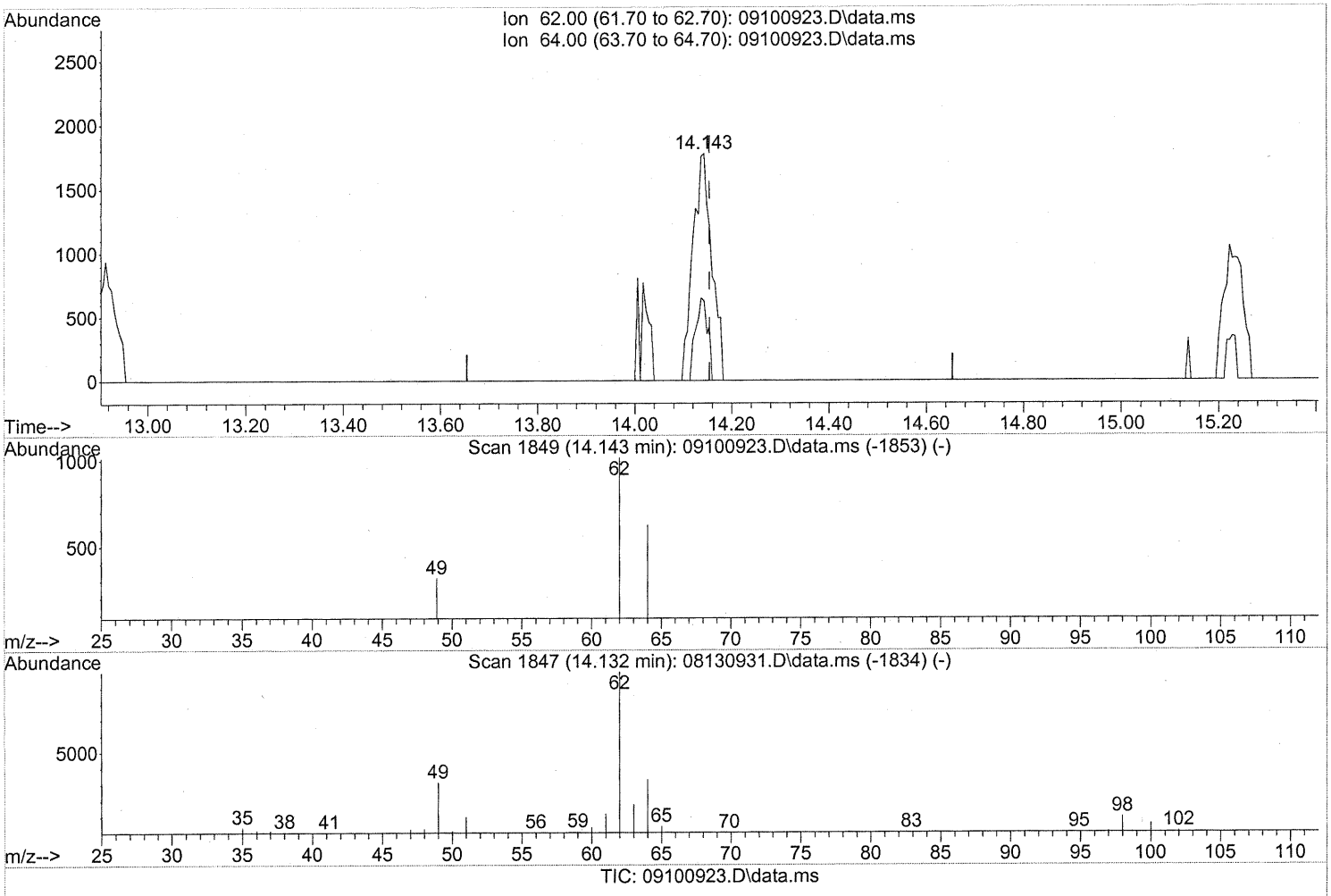
Before subtraction

176

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(36) 1,2-Dichloroethane (T)

14.143min (-0.011) 0.19ng

response 4765

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	23.55
0.00	0.00	0.00
0.00	0.00	0.00

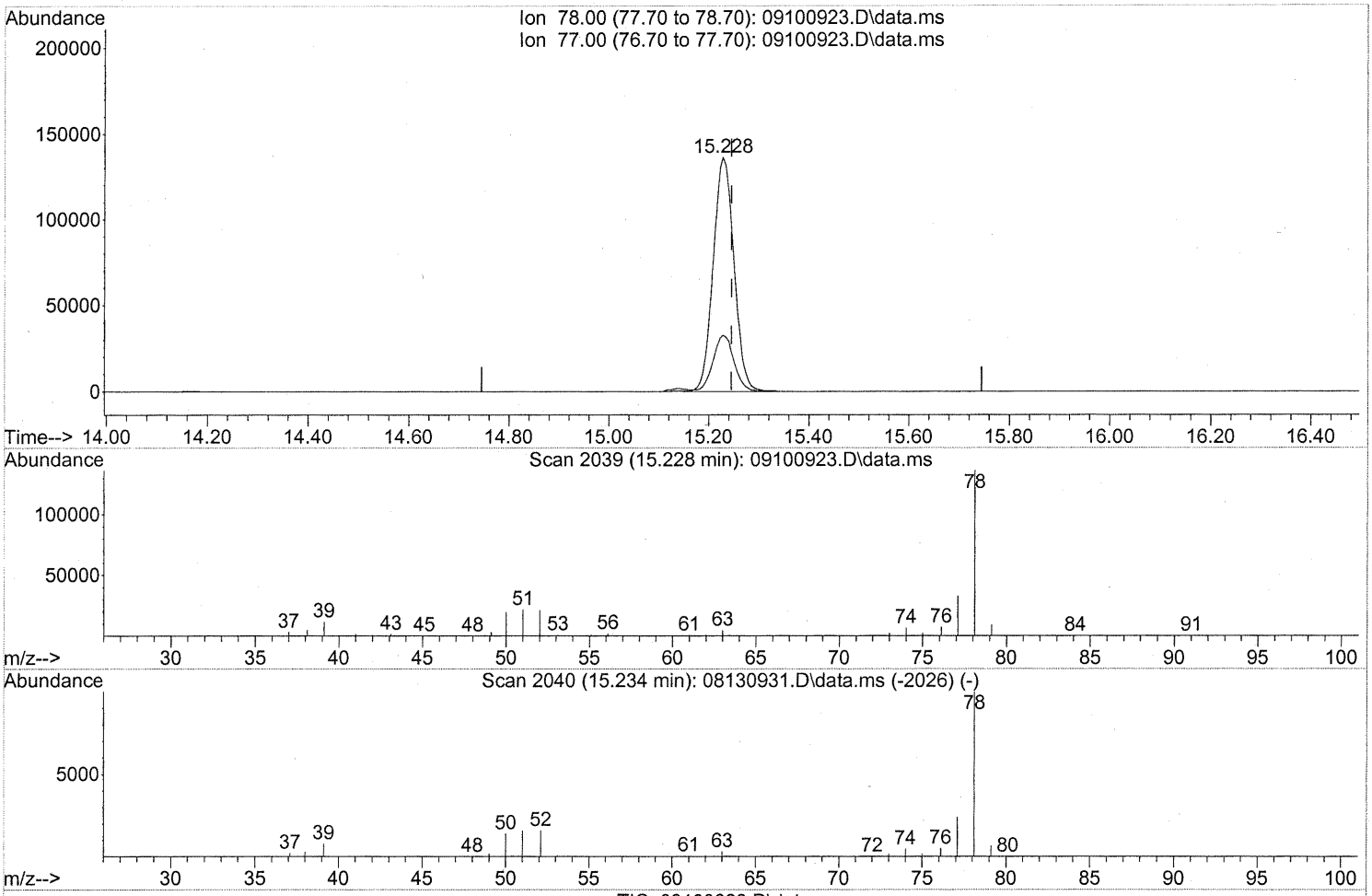
After subtraction

177

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(41) Benzene (T)

15.228min (-0.017) 4.63ng

response 392286

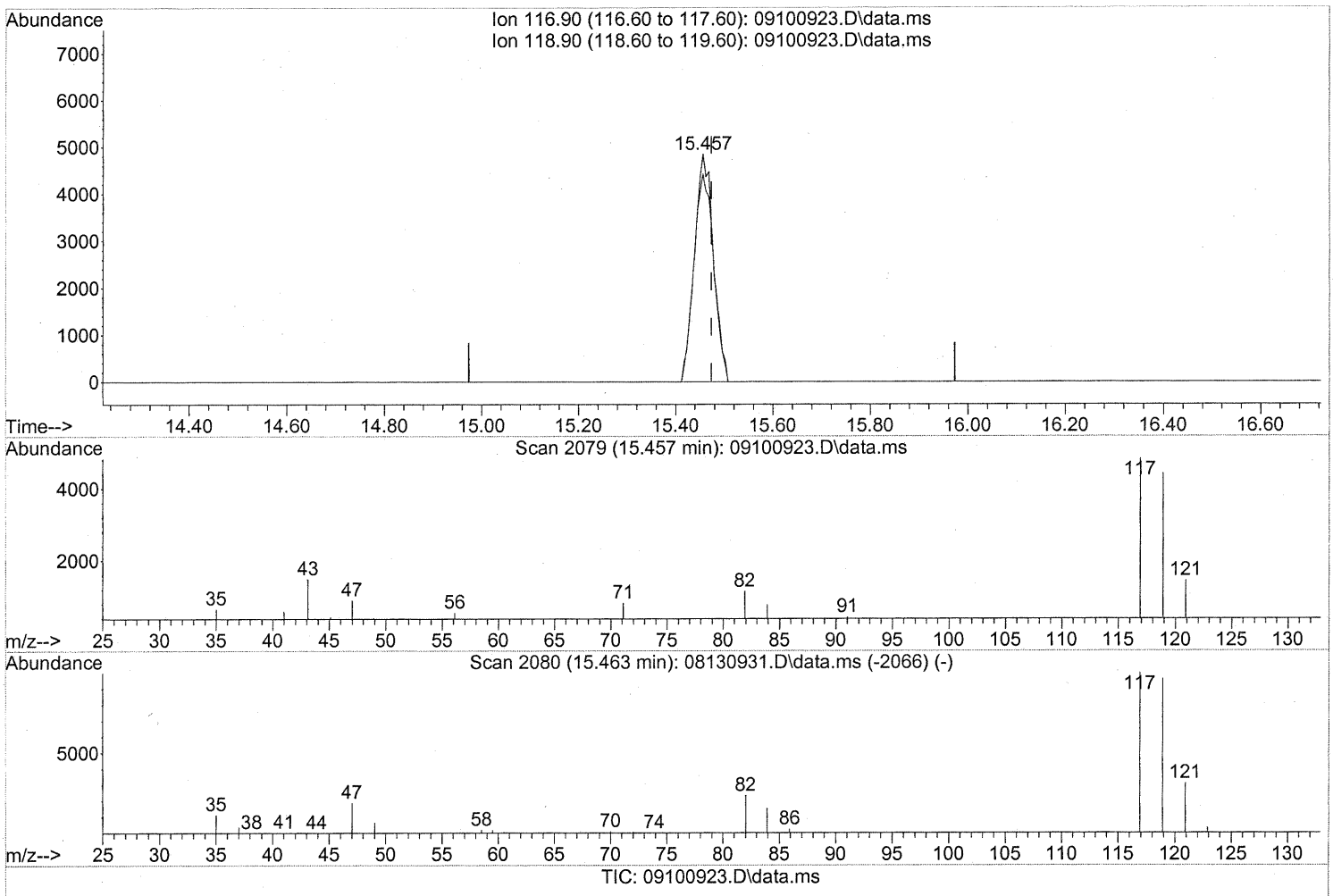
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.01
0.00	0.00	0.00
0.00	0.00	0.00

178

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.56ng

response 13172

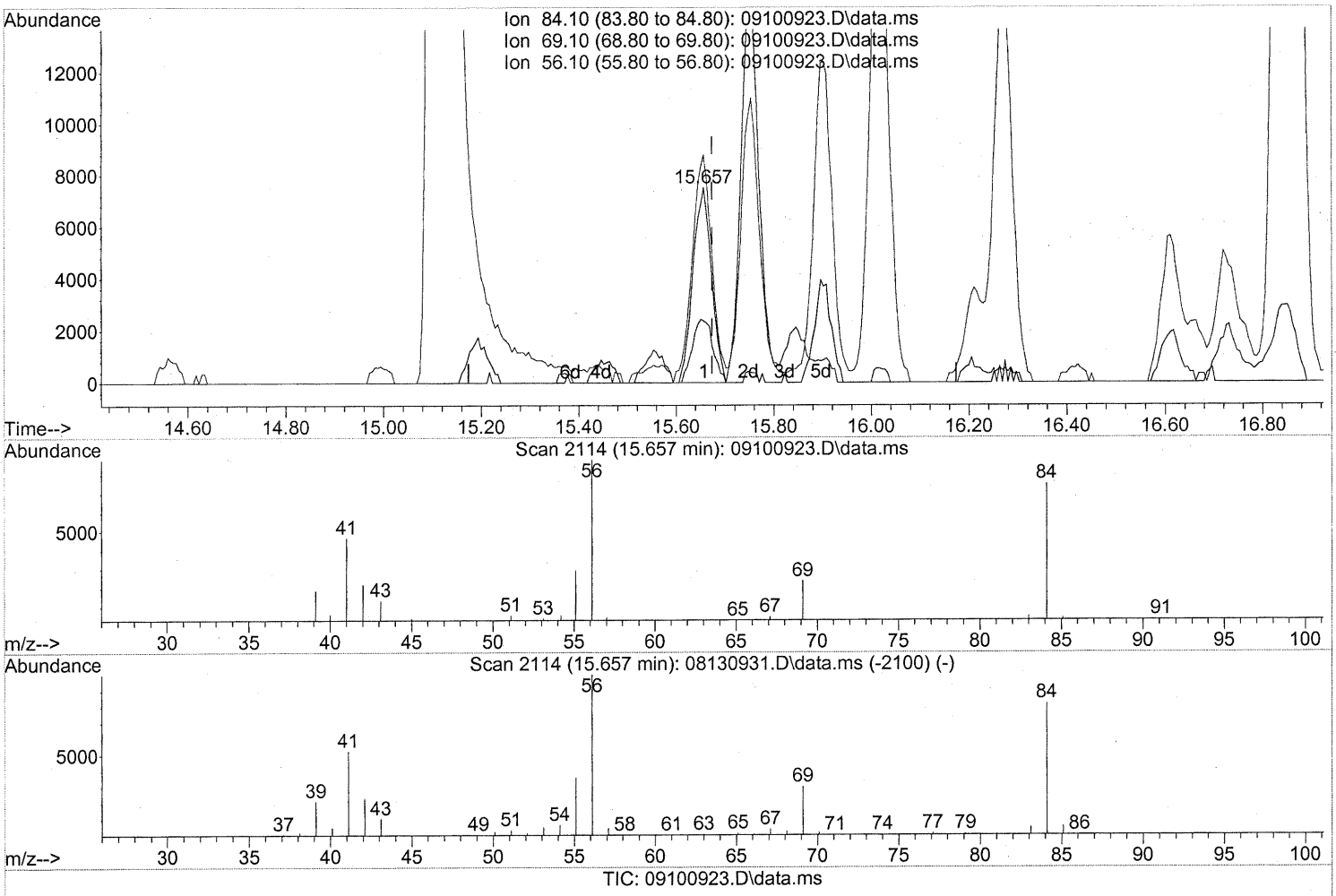
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	95.10
0.00	0.00	0.00
0.00	0.00	0.00

179

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 0.60ng

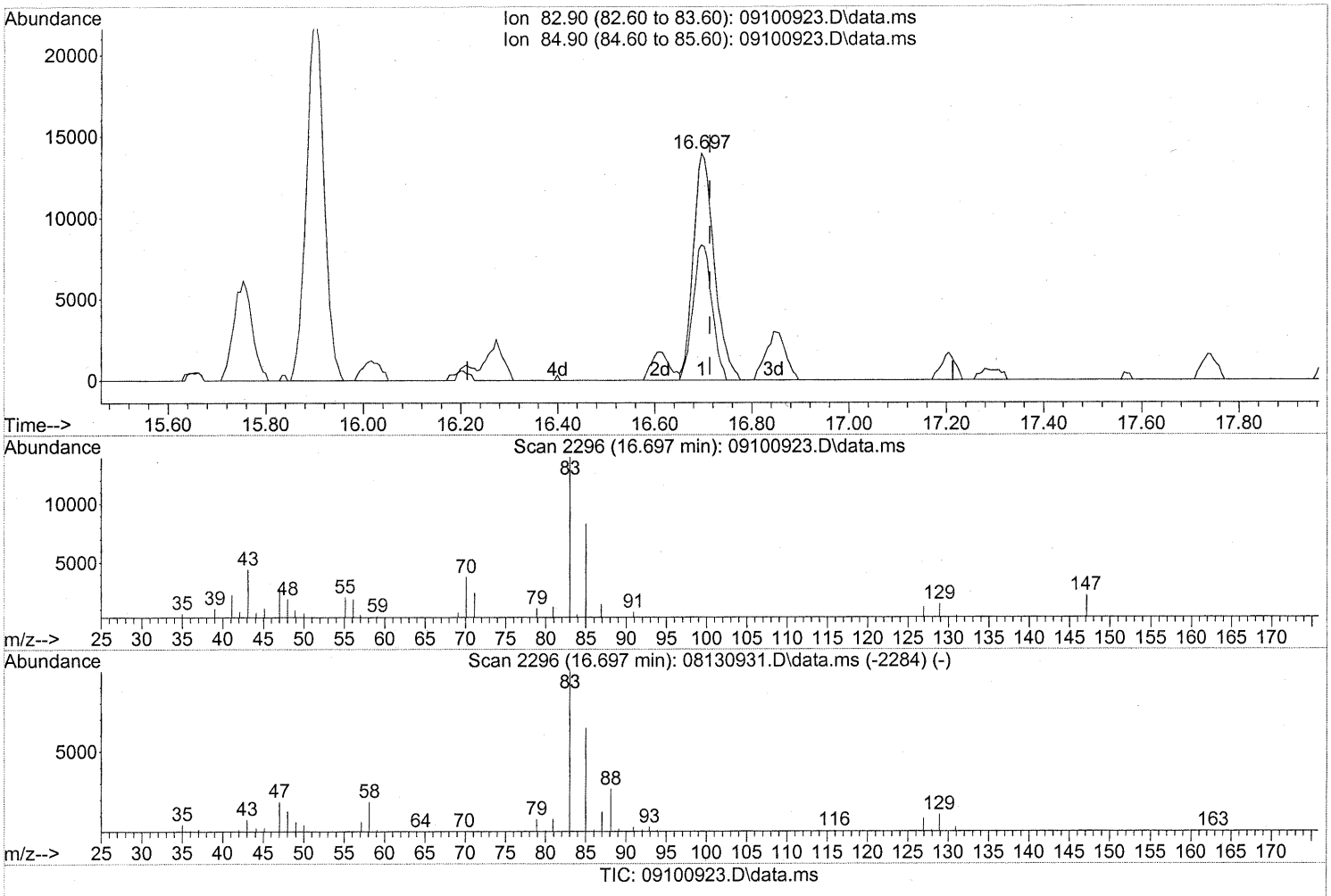
response 19716

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	35.66
56.10	107.30	124.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(46) Bromodichloromethane (T)

16.697min (-0.017) 1.69ng

response 42005

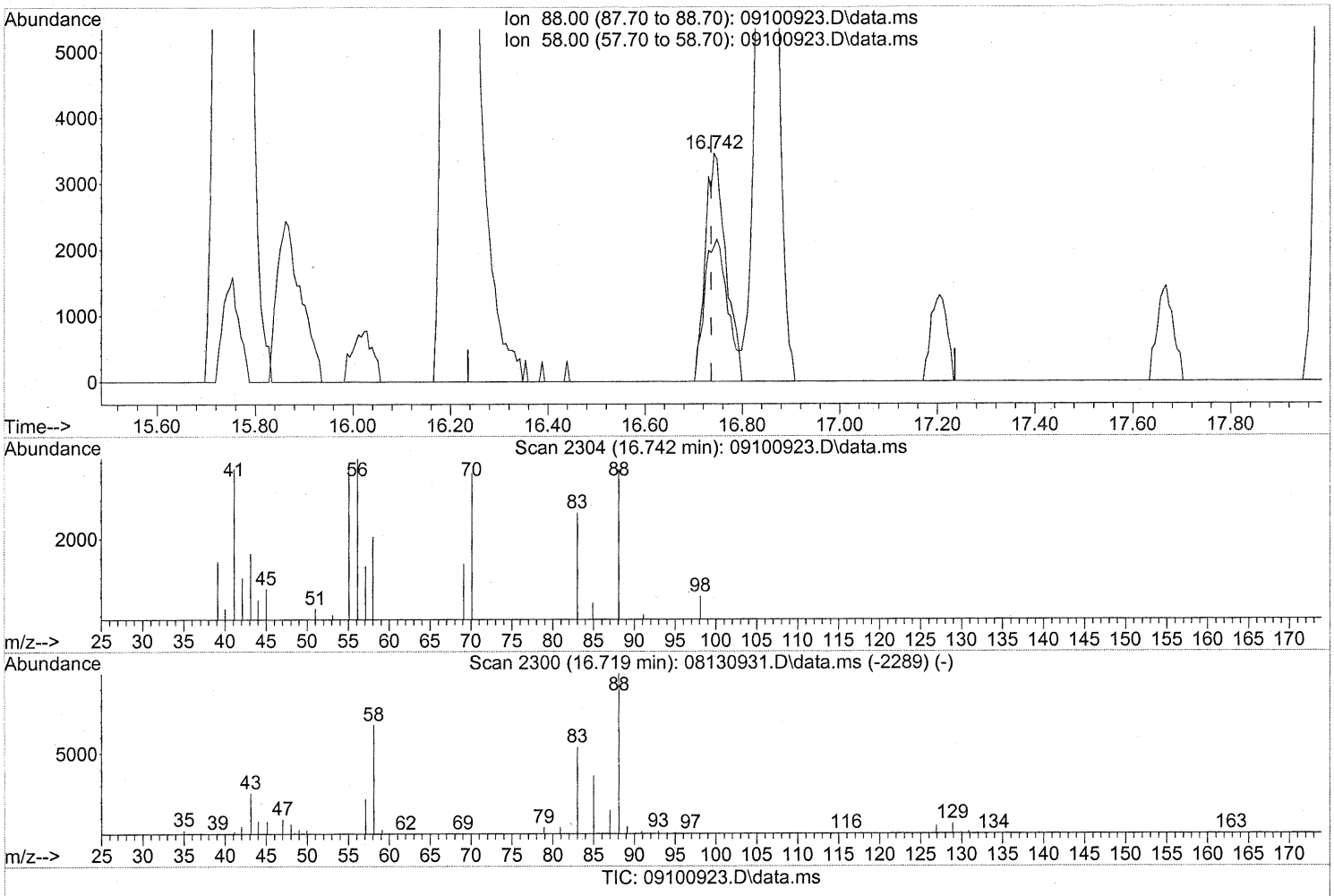
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	54.01
0.00	0.00	0.00
0.00	0.00	0.00

181

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(48) 1,4-Dioxane (T)

16.742min (+0.006) 0.67ng

response 10035

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	70.28
0.00	0.00	0.00
0.00	0.00	0.00

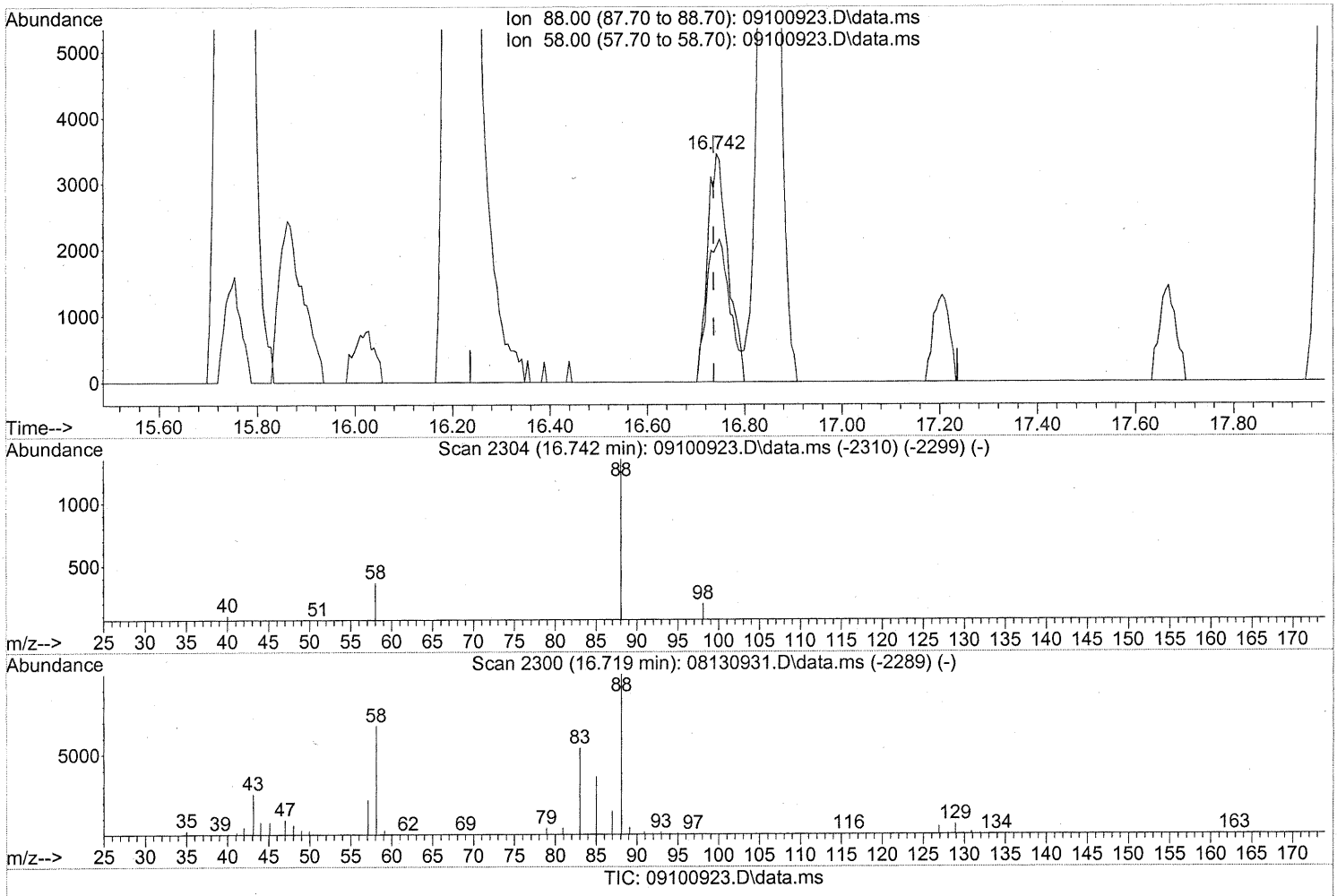
Before subtraction

182

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(48) 1,4-Dioxane (T)

16.742min (+0.006) 0.67ng

response 10035

After subtraction

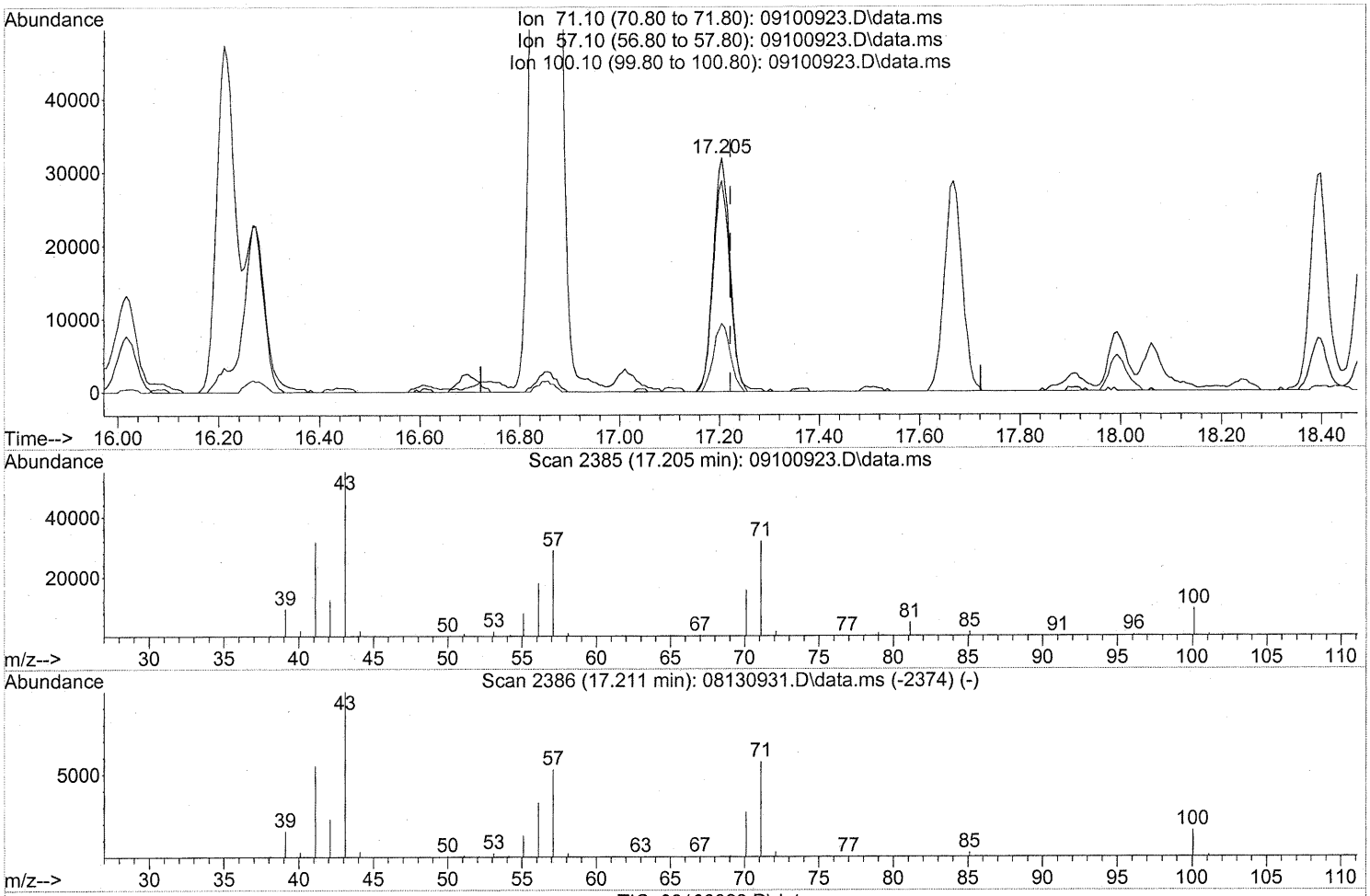
Ion	Exp%	Act%
88.00	100	100
58.00	59.00	70.28
0.00	0.00	0.00
0.00	0.00	0.00

183

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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) 3.29ng

response 74334

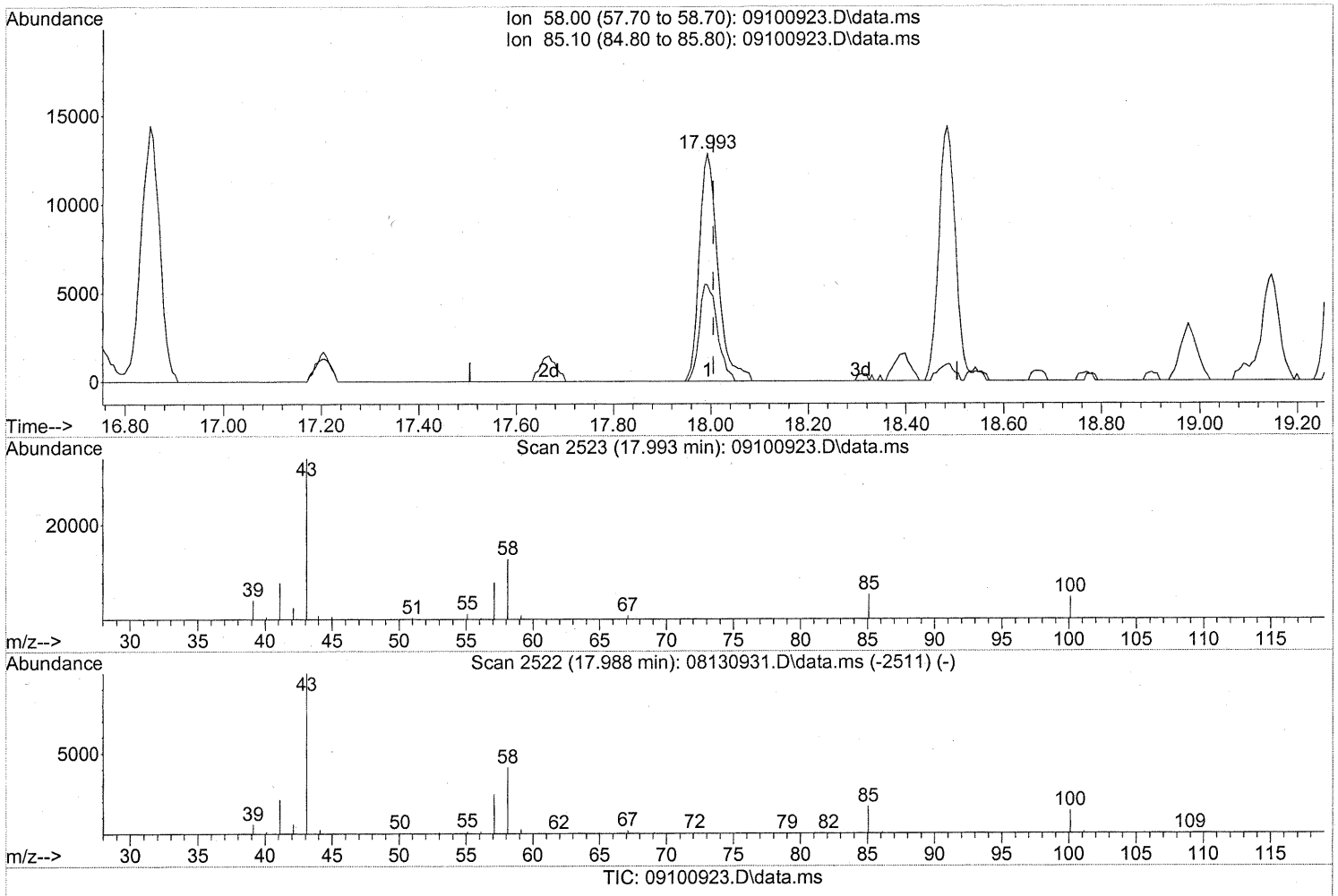
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	91.93
100.10	30.70	29.01
0.00	0.00	0.00

184

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

17.993min (-0.012) 1.85ng

response 33816

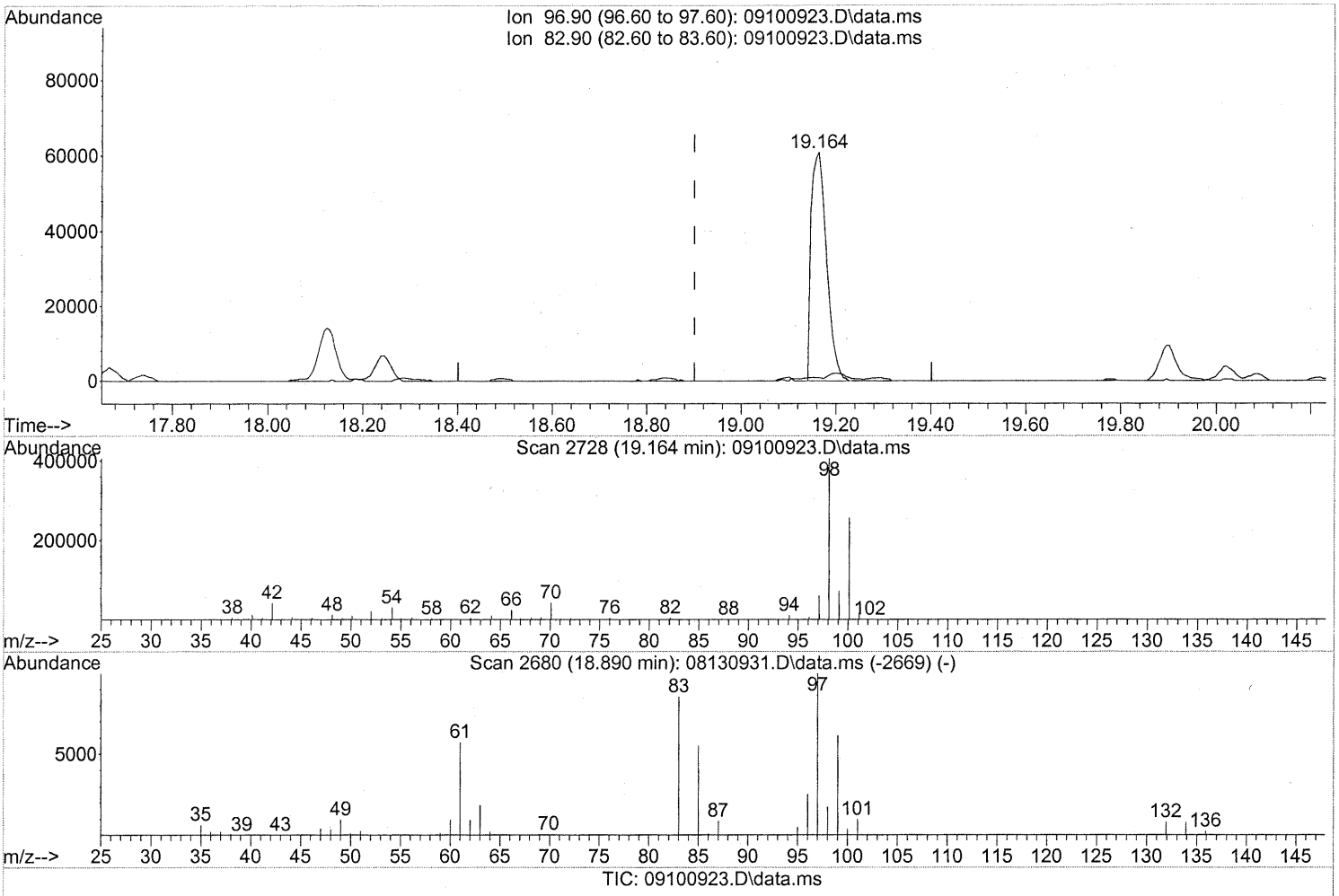
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	41.29
0.00	0.00	0.00
0.00	0.00	0.00

185

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

19.164min (+0.263) 7.50ng

response 135746

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.69#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

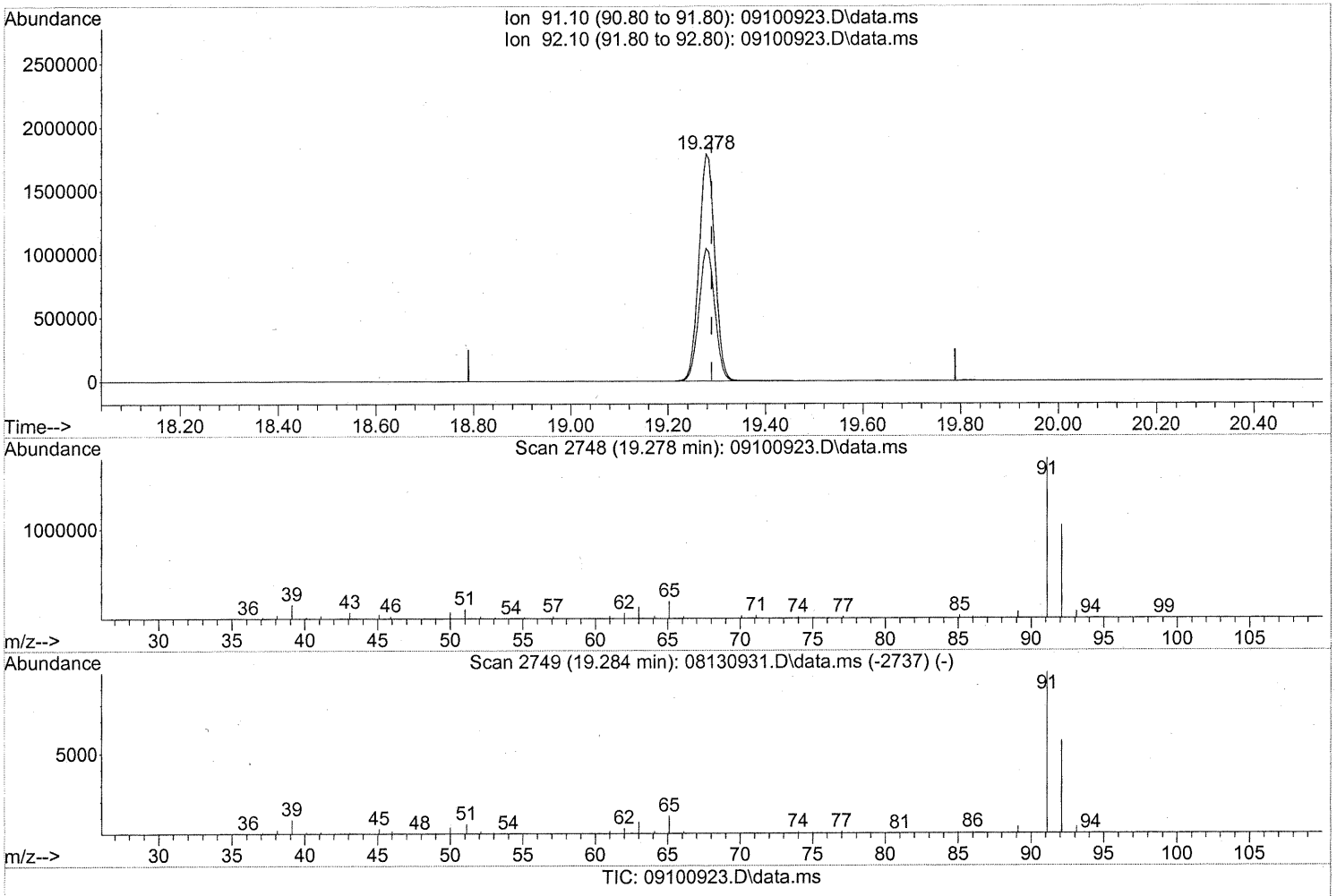
9/21/09

186

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(58) Toluene (T)

19.278min (-0.011) 44.58ng

response 4052055

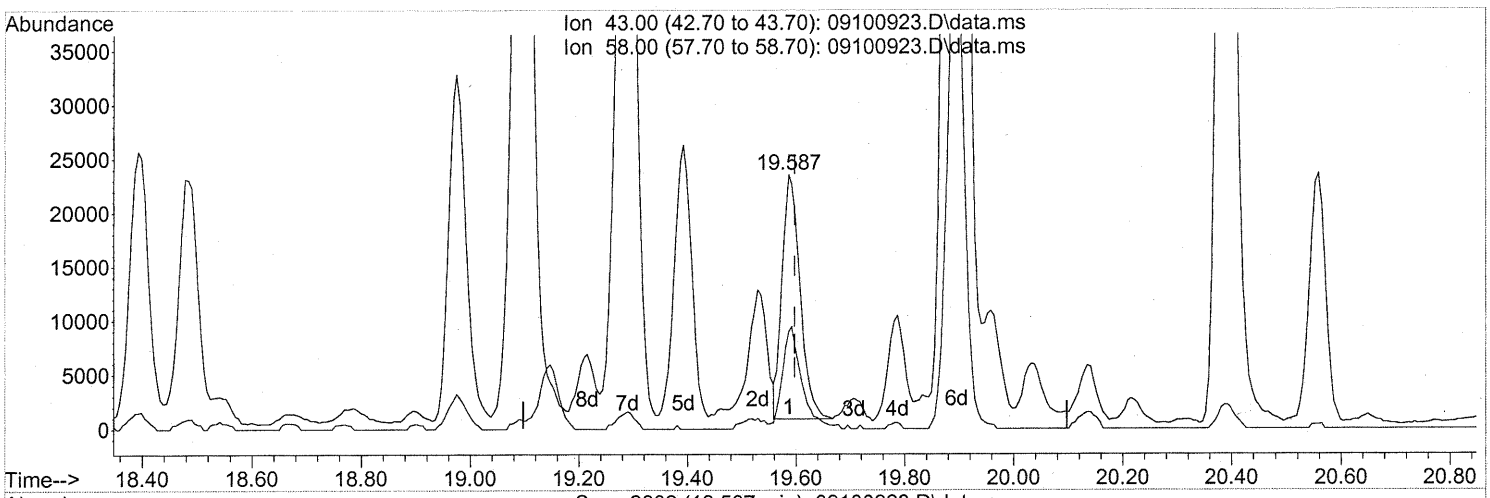
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	58.09
0.00	0.00	0.00
0.00	0.00	0.00

187

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 1.11ng

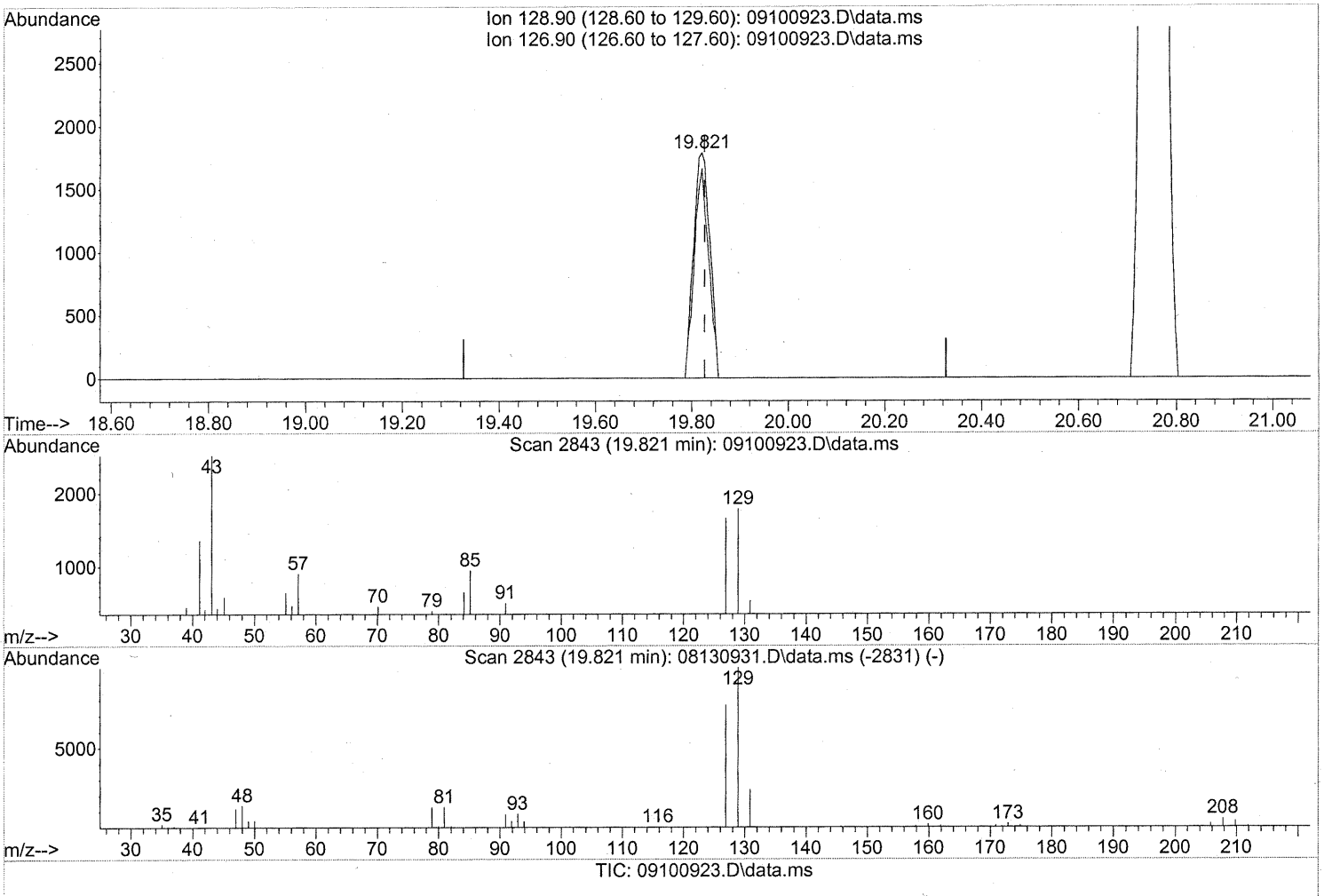
response 52297

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	44.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(60) Dibromochloromethane (T)

19.821min (-0.006) 0.22ng

response 4174

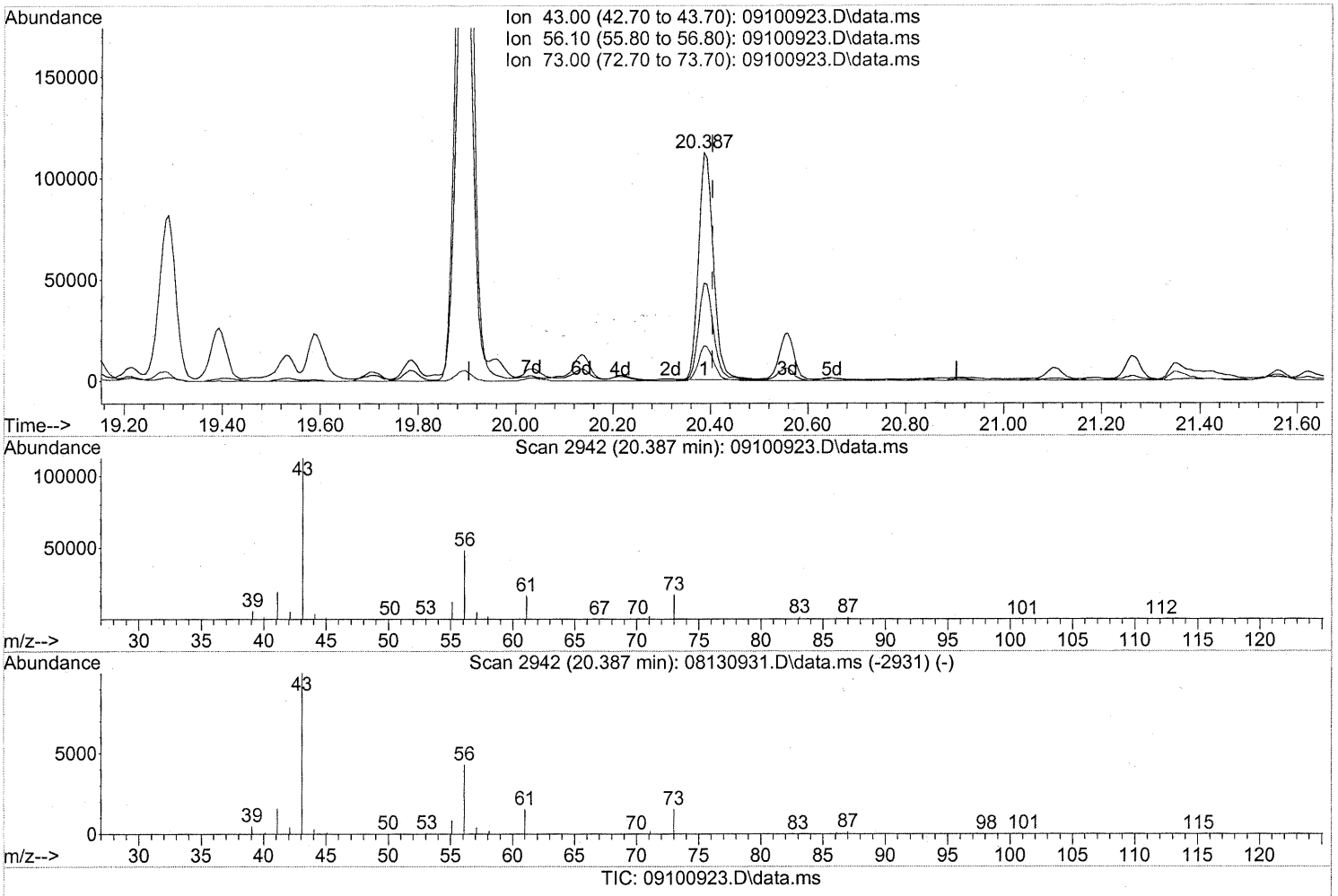
Ion	Exp%	Act%
128.90	100	100
126.90	77.60	82.56
0.00	0.00	0.00
0.00	0.00	0.00

189

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(62) n-Butyl Acetate (T)

20.387min (-0.017) 4.63ng

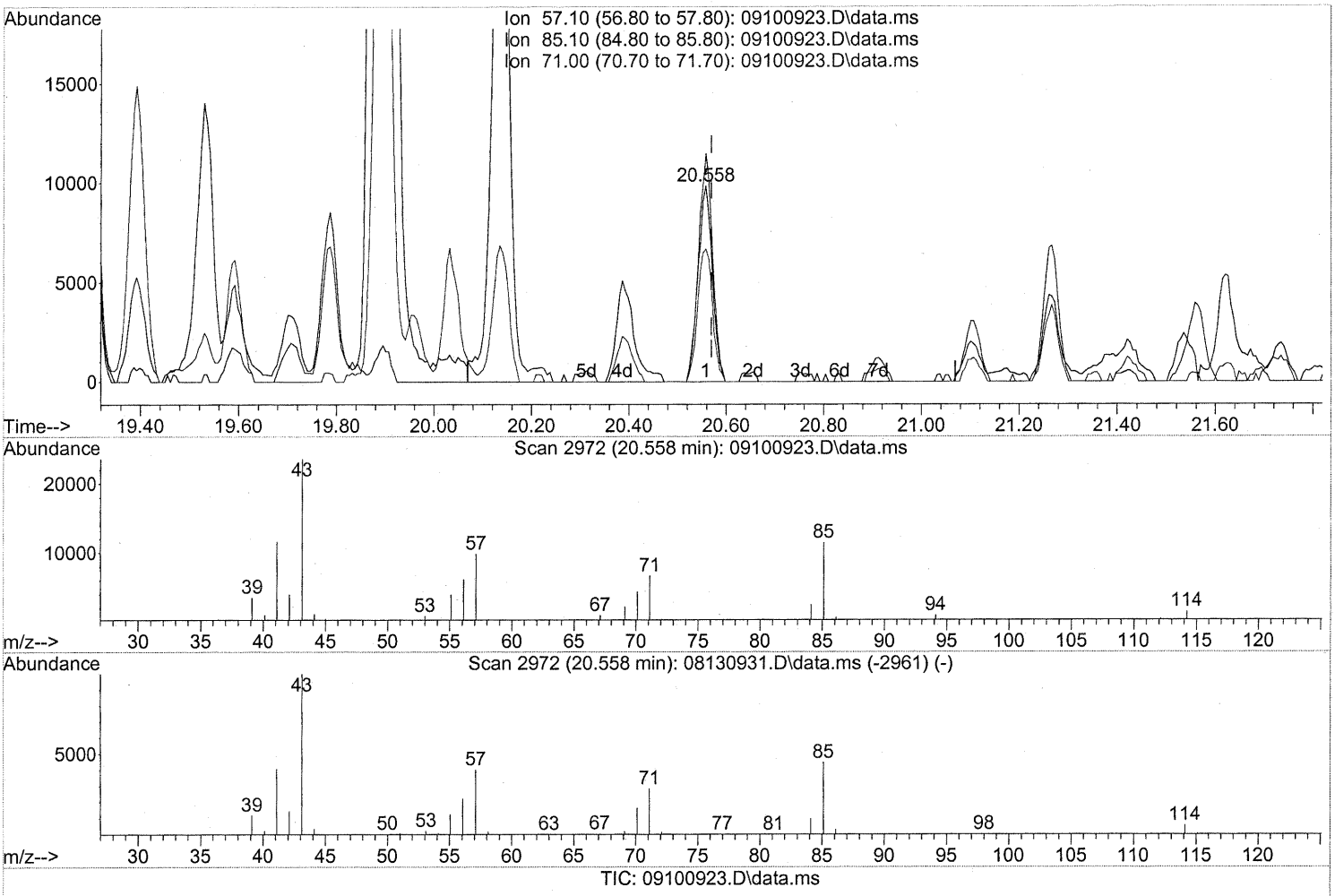
response 238862

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	43.50
73.00	16.90	15.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.00ng

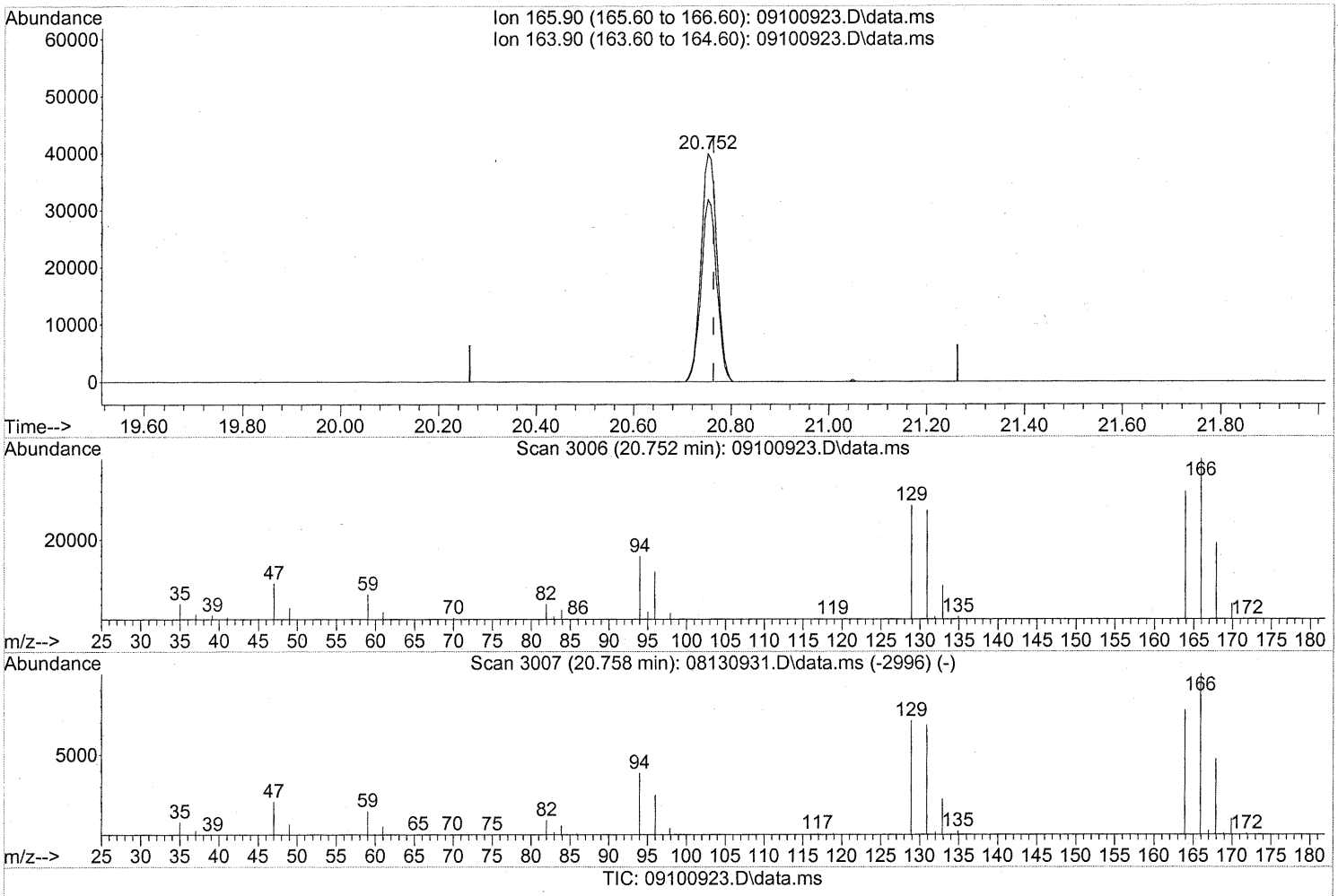
response 20186

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	113.50
71.00	75.10	69.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 4.01ng

response 90480

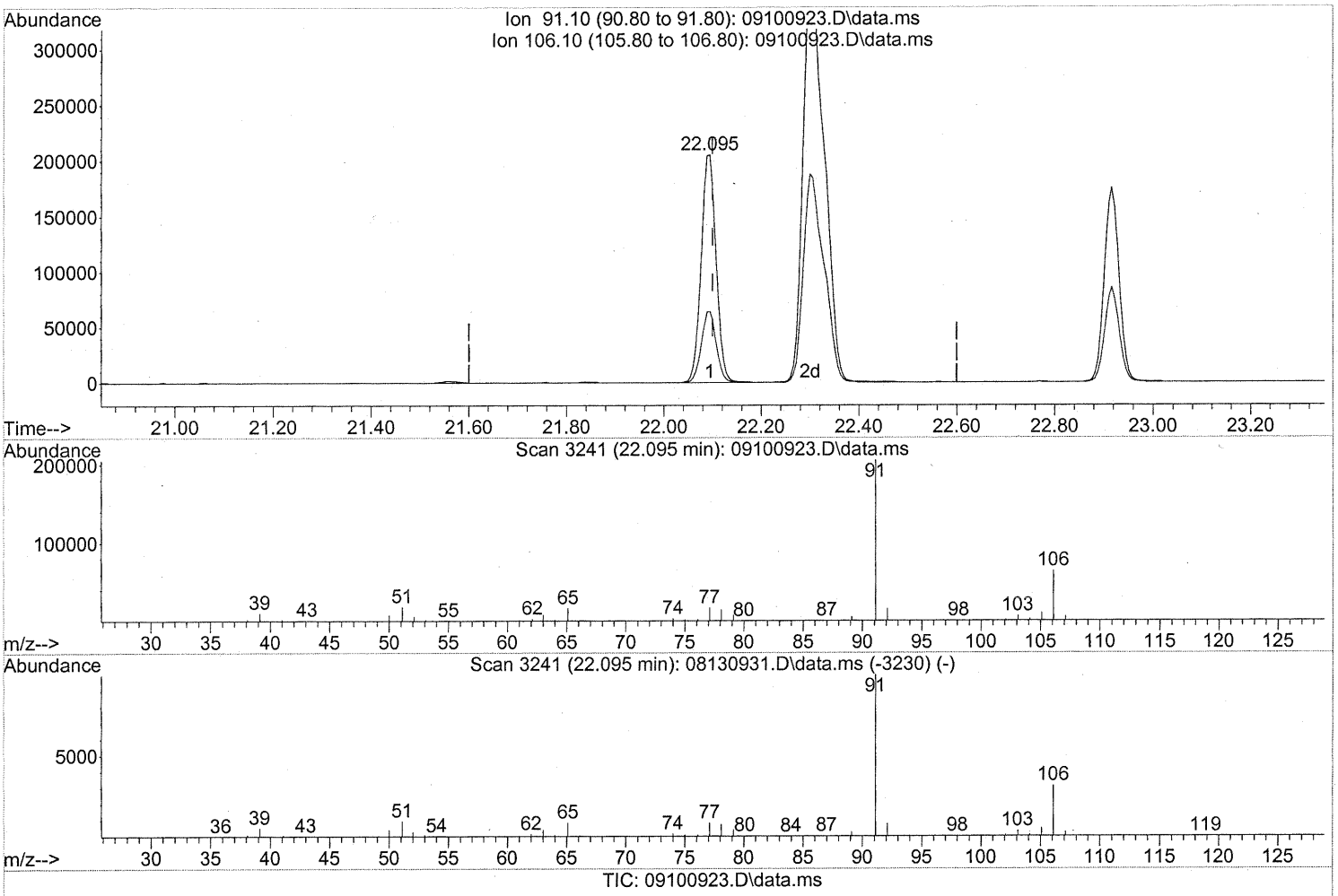
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	77.83
0.00	0.00	0.00
0.00	0.00	0.00

192

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(66) Ethylbenzene (T)

22.095min (-0.006) 4.45ng

response 436553

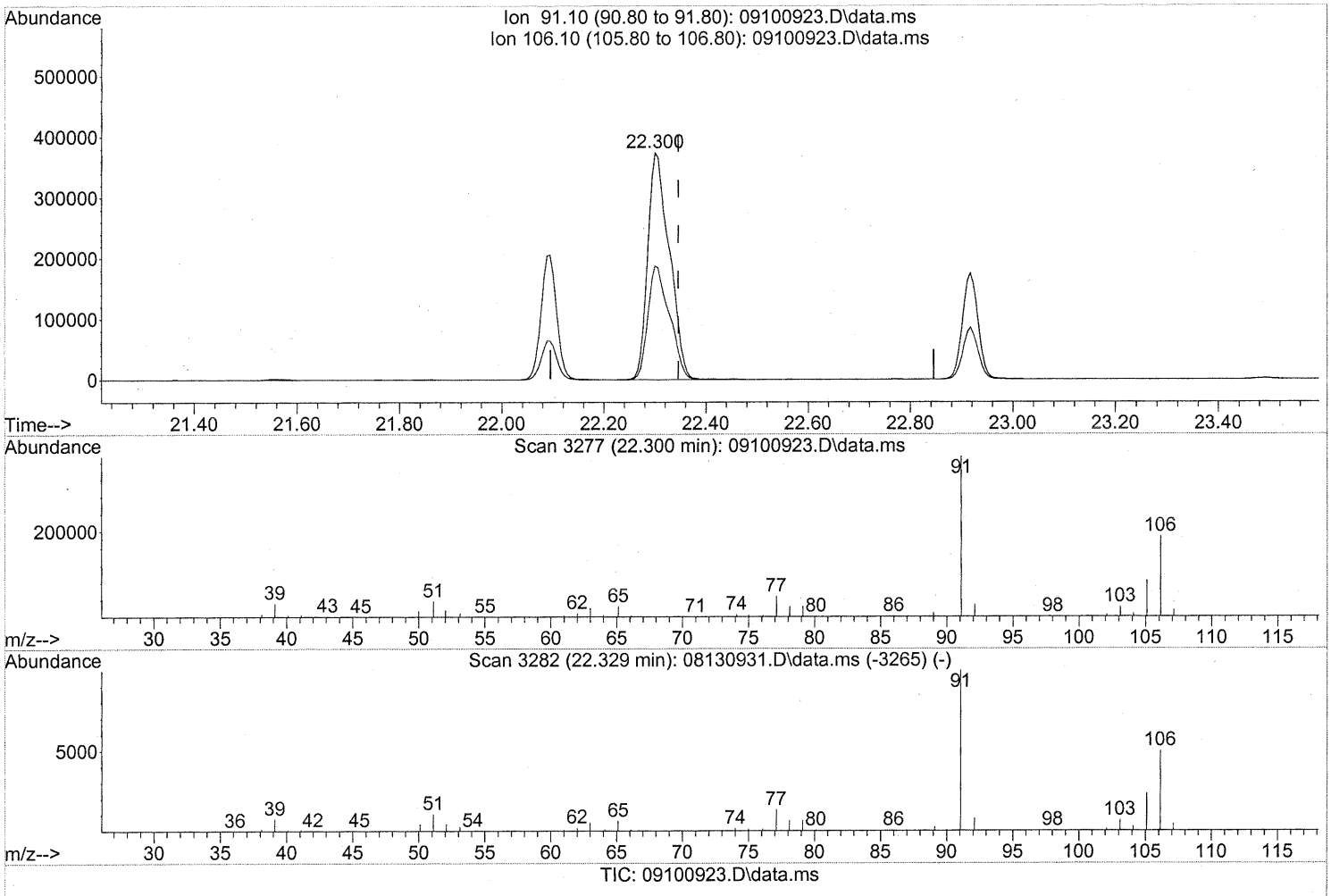
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.09
0.00	0.00	0.00
0.00	0.00	0.00

193

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

22.300min (-0.046) 14.20ng

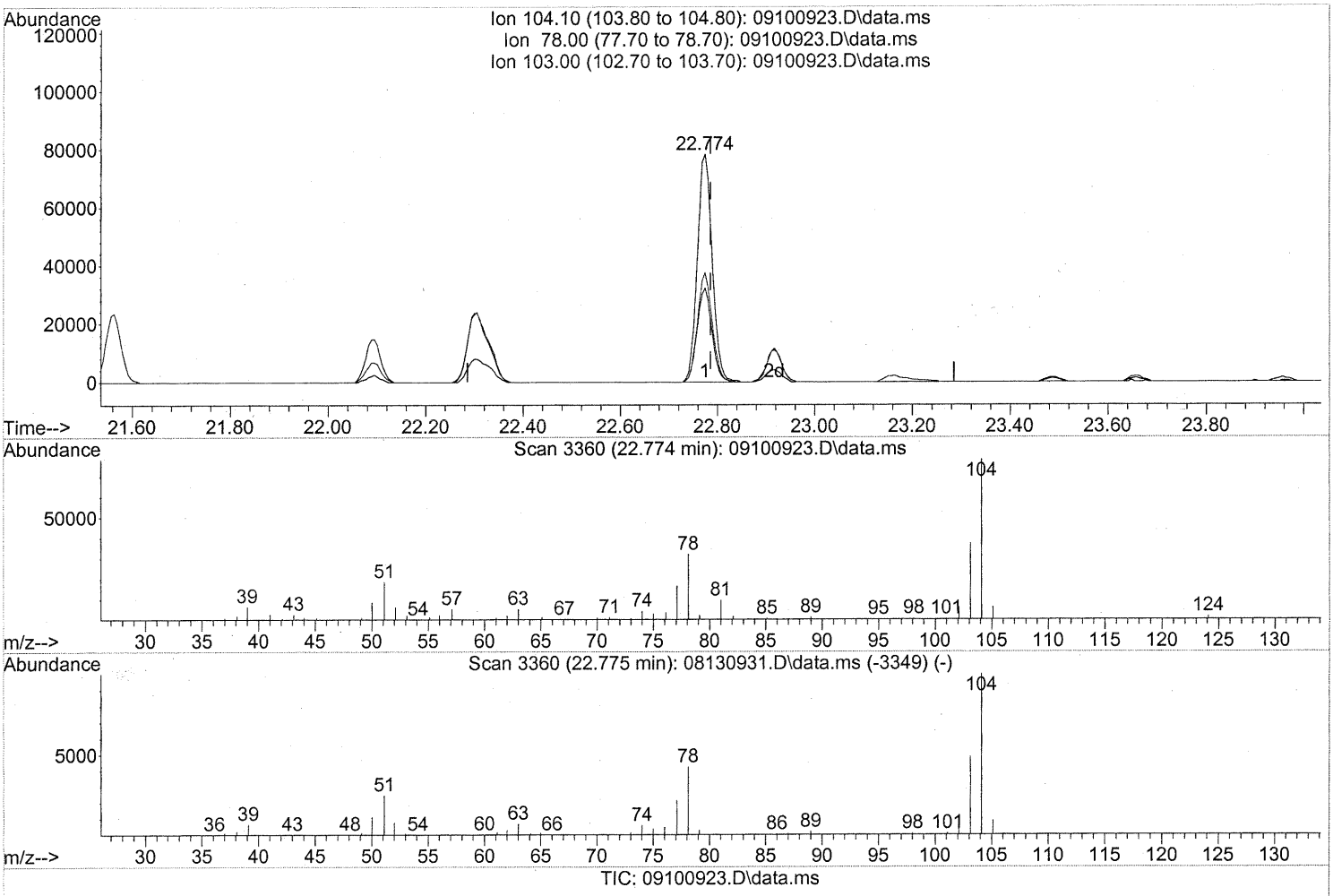
response 1104833

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(69) Styrene (T)

22.774min (-0.011) 2.88ng

response 165782

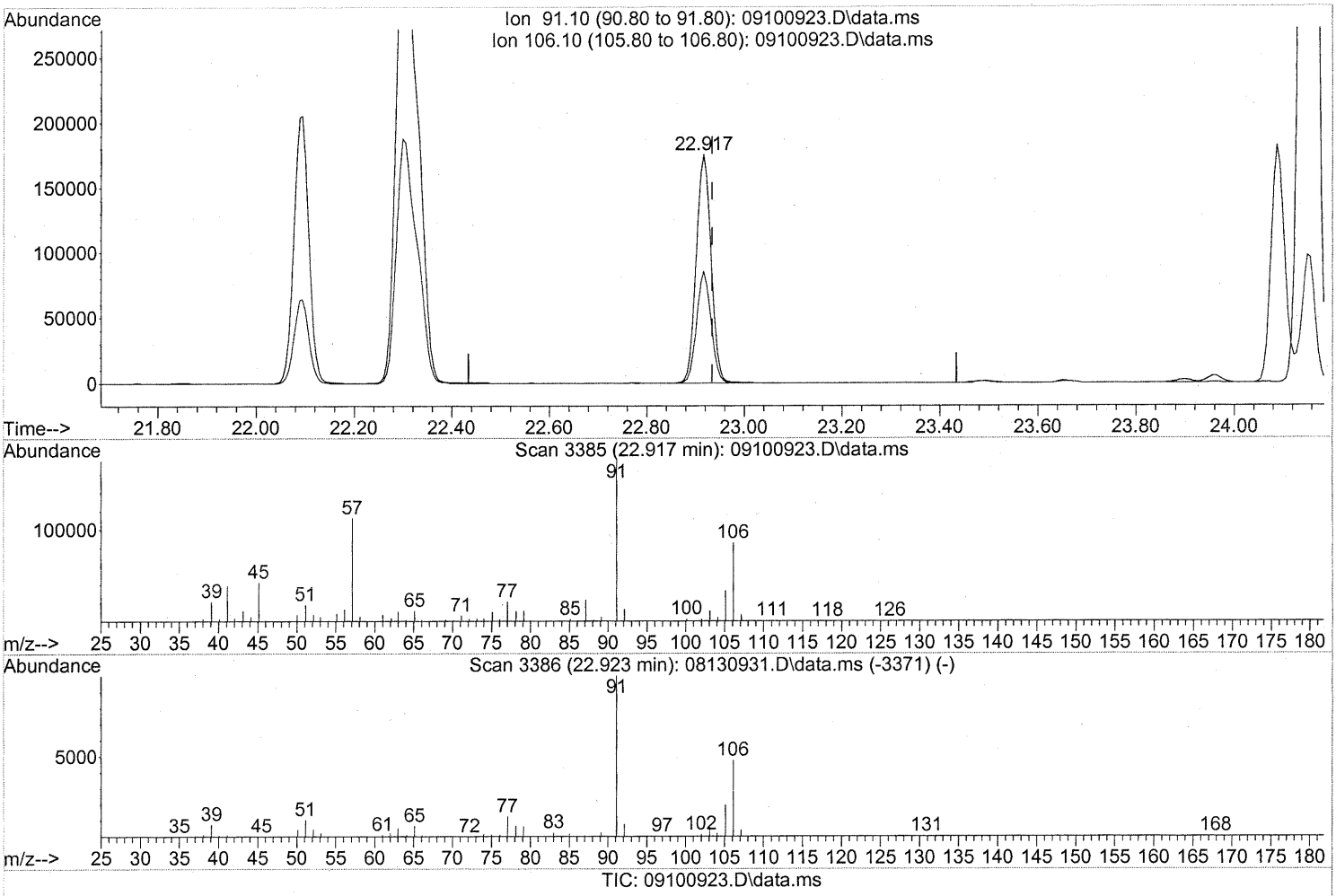
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.02
103.00	48.70	47.34
0.00	0.00	0.00

195

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 4.72ng

response 369456

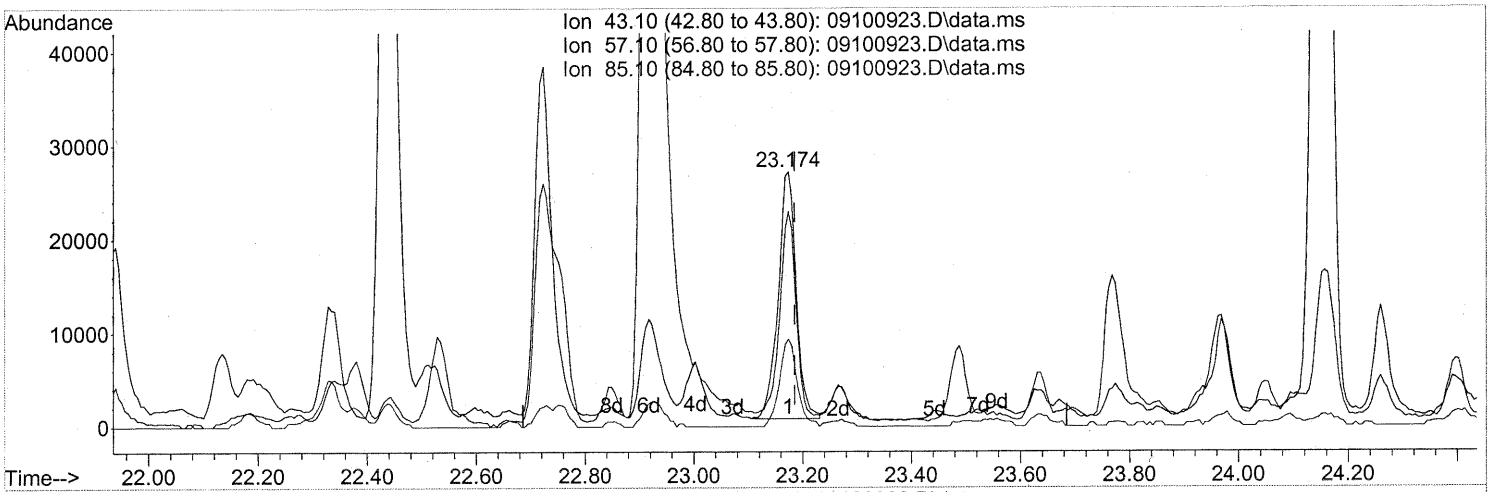
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	47.29
0.00	0.00	0.00
0.00	0.00	0.00

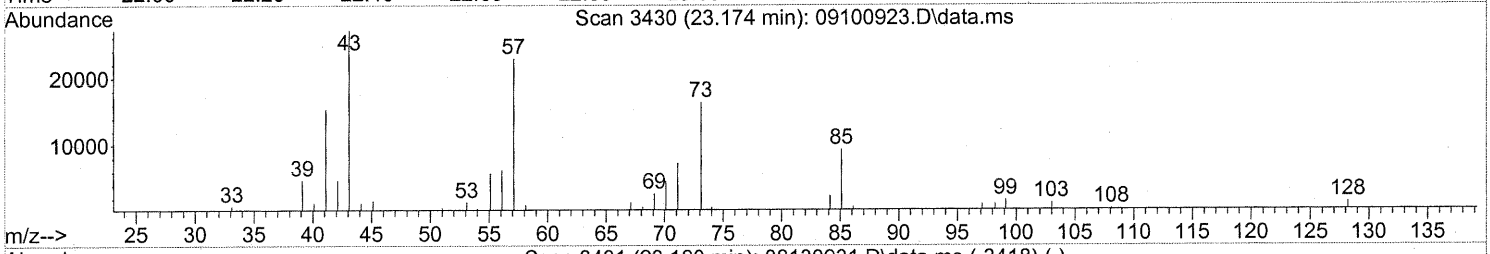
196

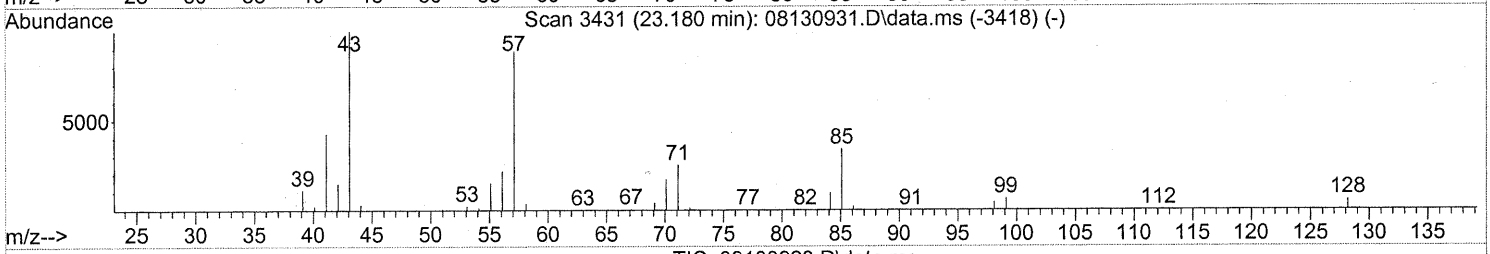
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100923.D\data.ms

(71) n-Nonane (T)

23.174min (-0.012) 1.29ng

response 60711

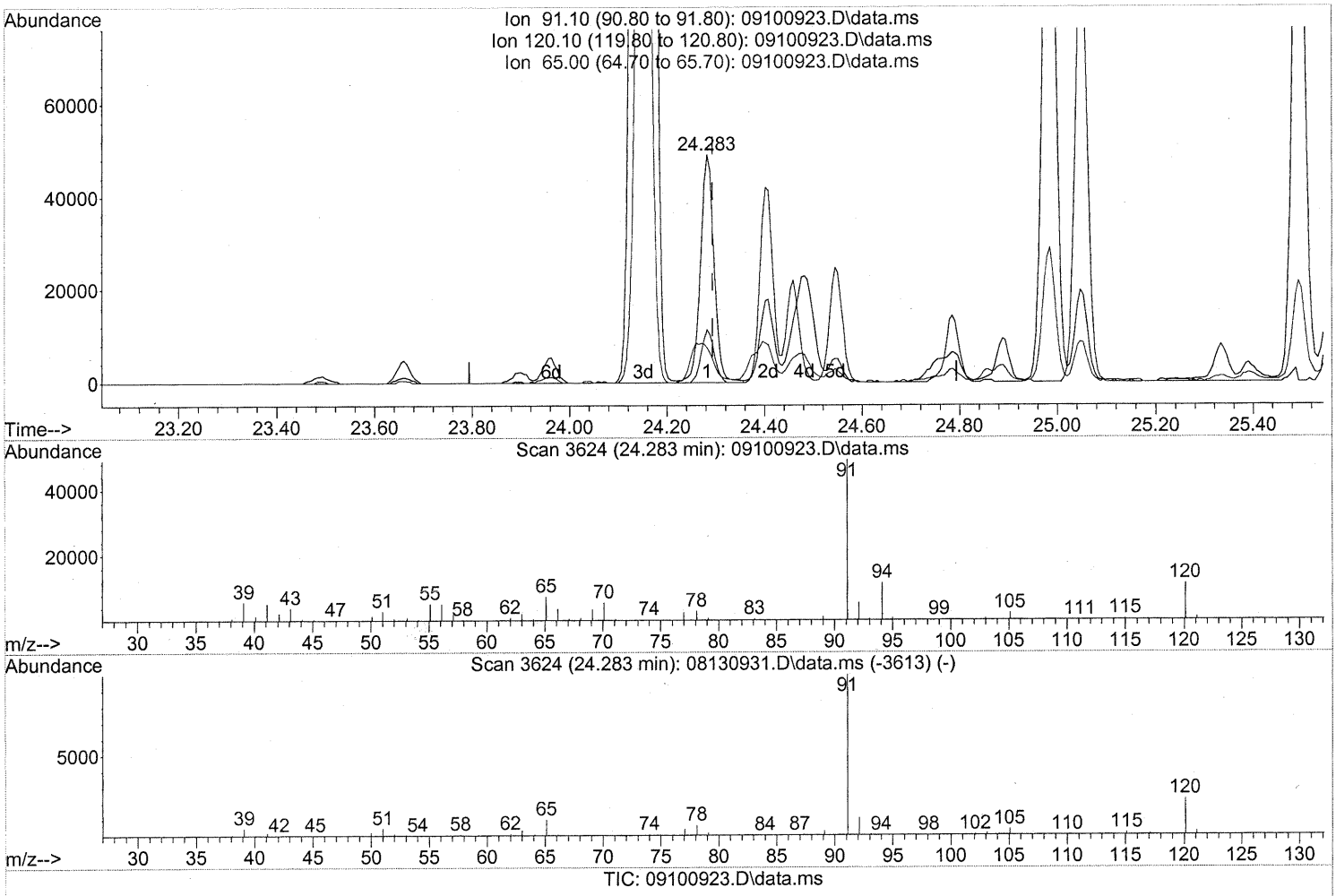
Ion	Exp%	Act%
43.10	100	100
57.10	94.00	79.53
85.10	38.80	34.60
0.00	0.00	0.00

197

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.012) 0.76ng

response 95196

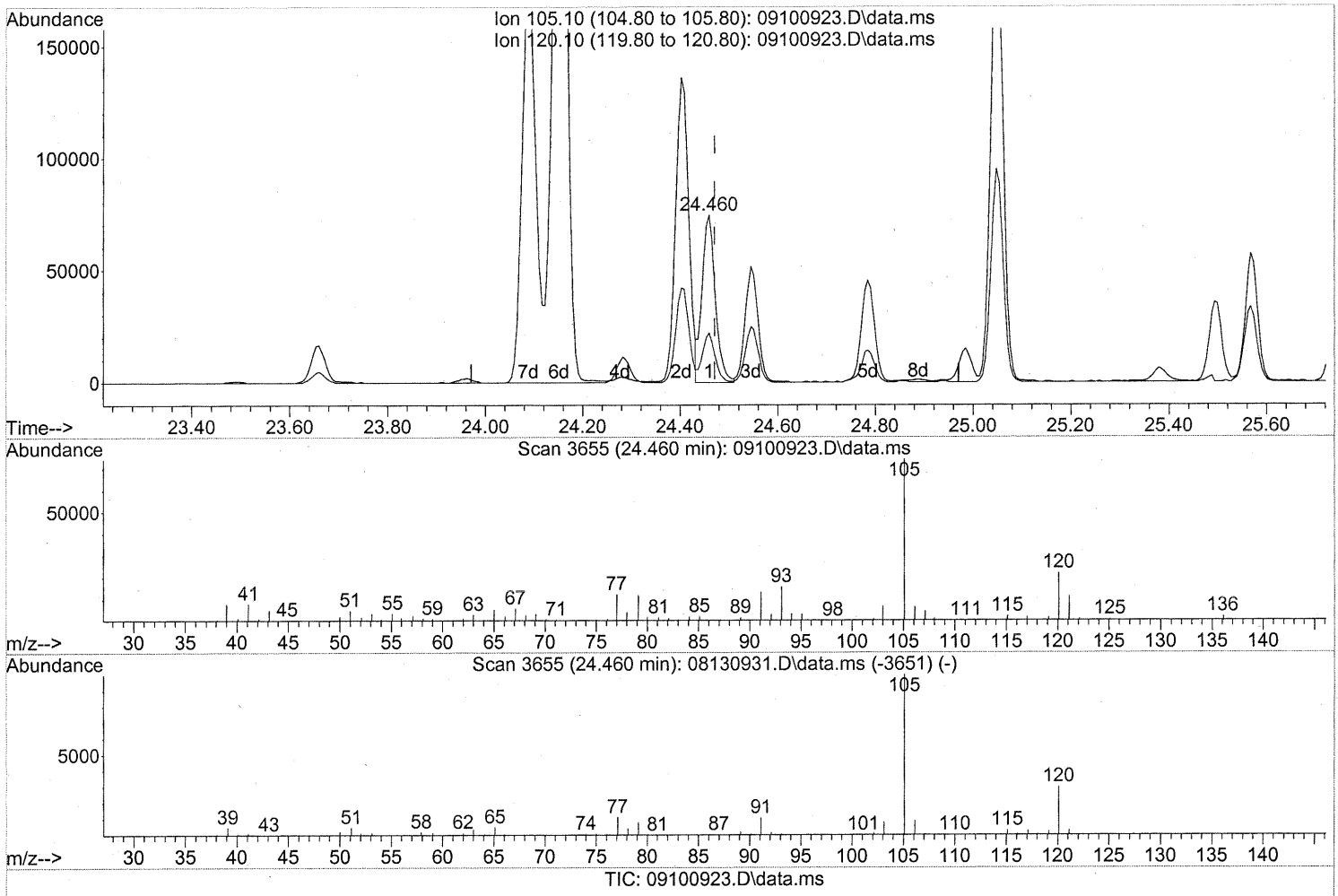
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.88
65.00	10.20	0.00
0.00	0.00	0.00

198

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.012) 1.48ng

response 141179

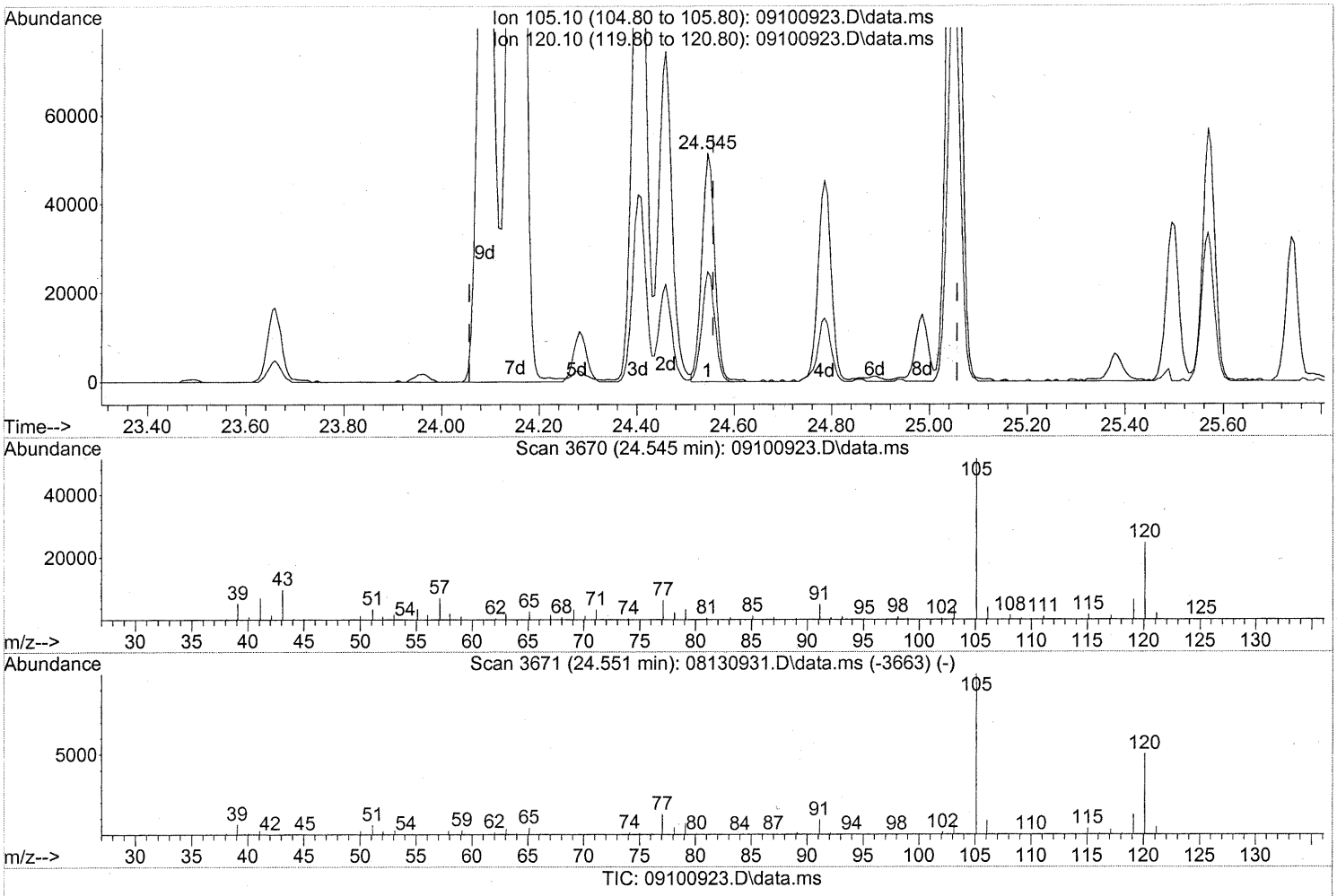
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	27.12
0.00	0.00	0.00
0.00	0.00	0.00

199

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

24.545min (-0.011) 1.20ng

response 94761

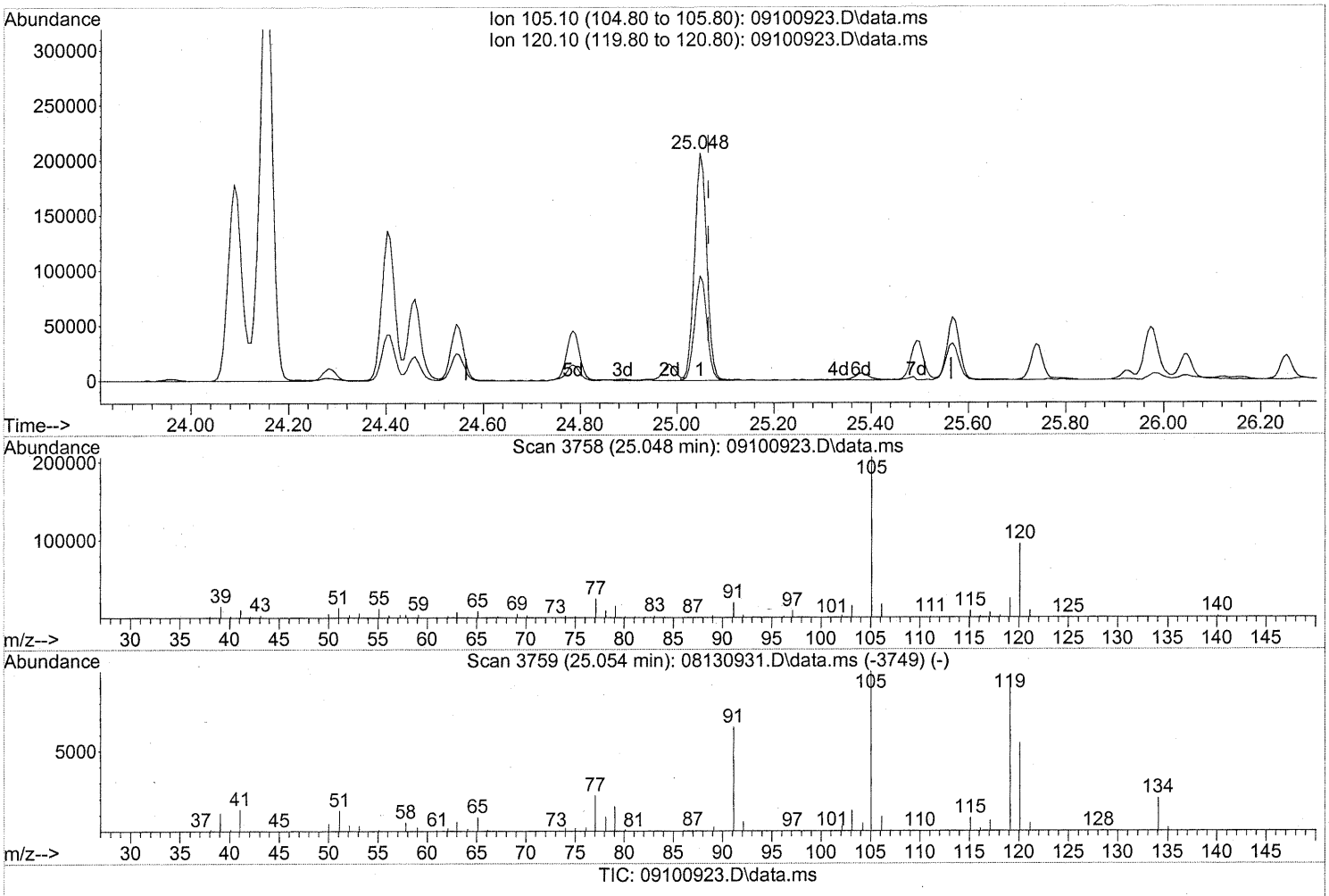
Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.14
0.00	0.00	0.00
0.00	0.00	0.00

200

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

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

25.048min (-0.017) 4.34ng

response 364267

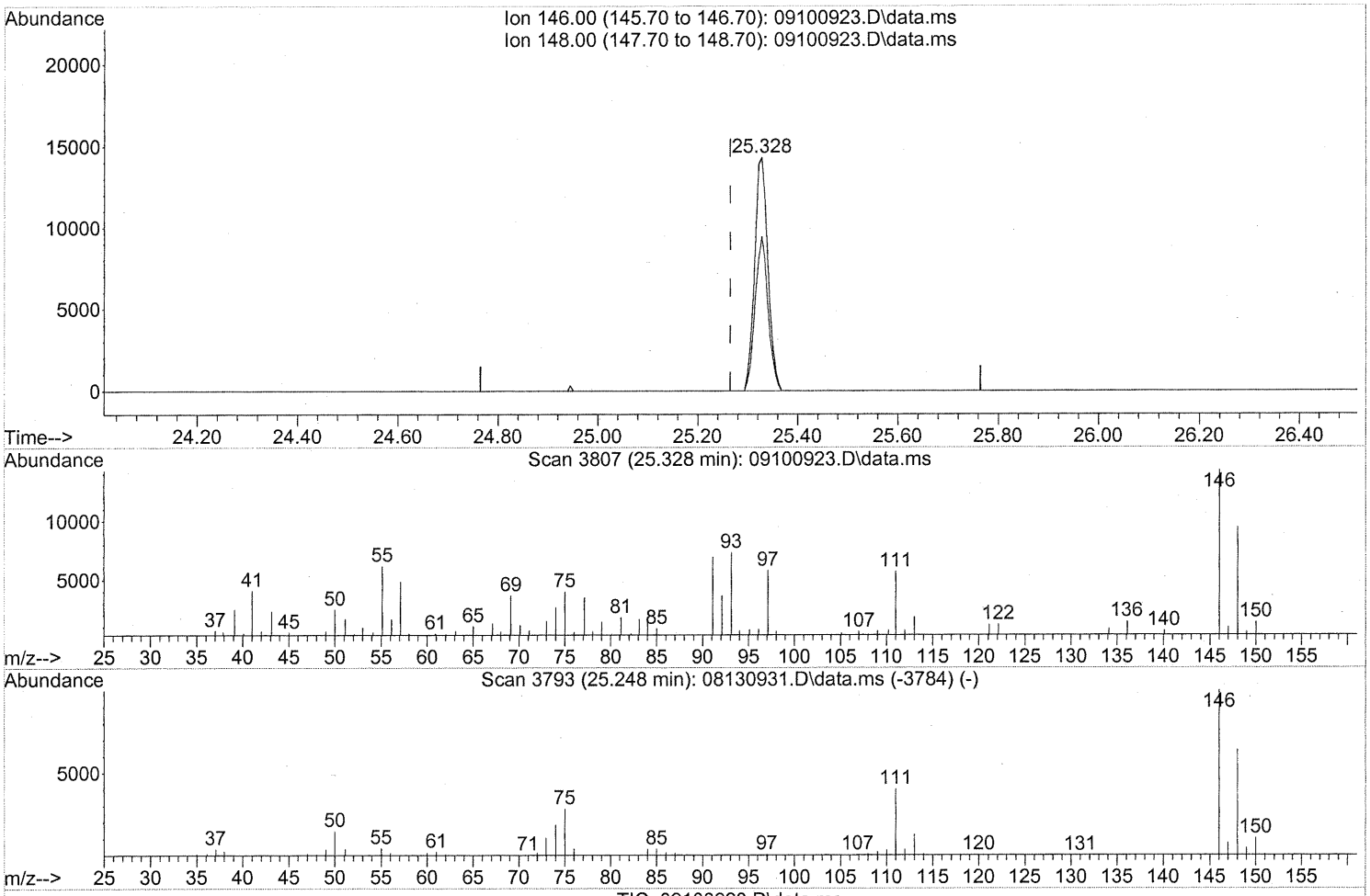
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.84
0.00	0.00	0.00
0.00	0.00	0.00

201

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.61ng

response 26422

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.27
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

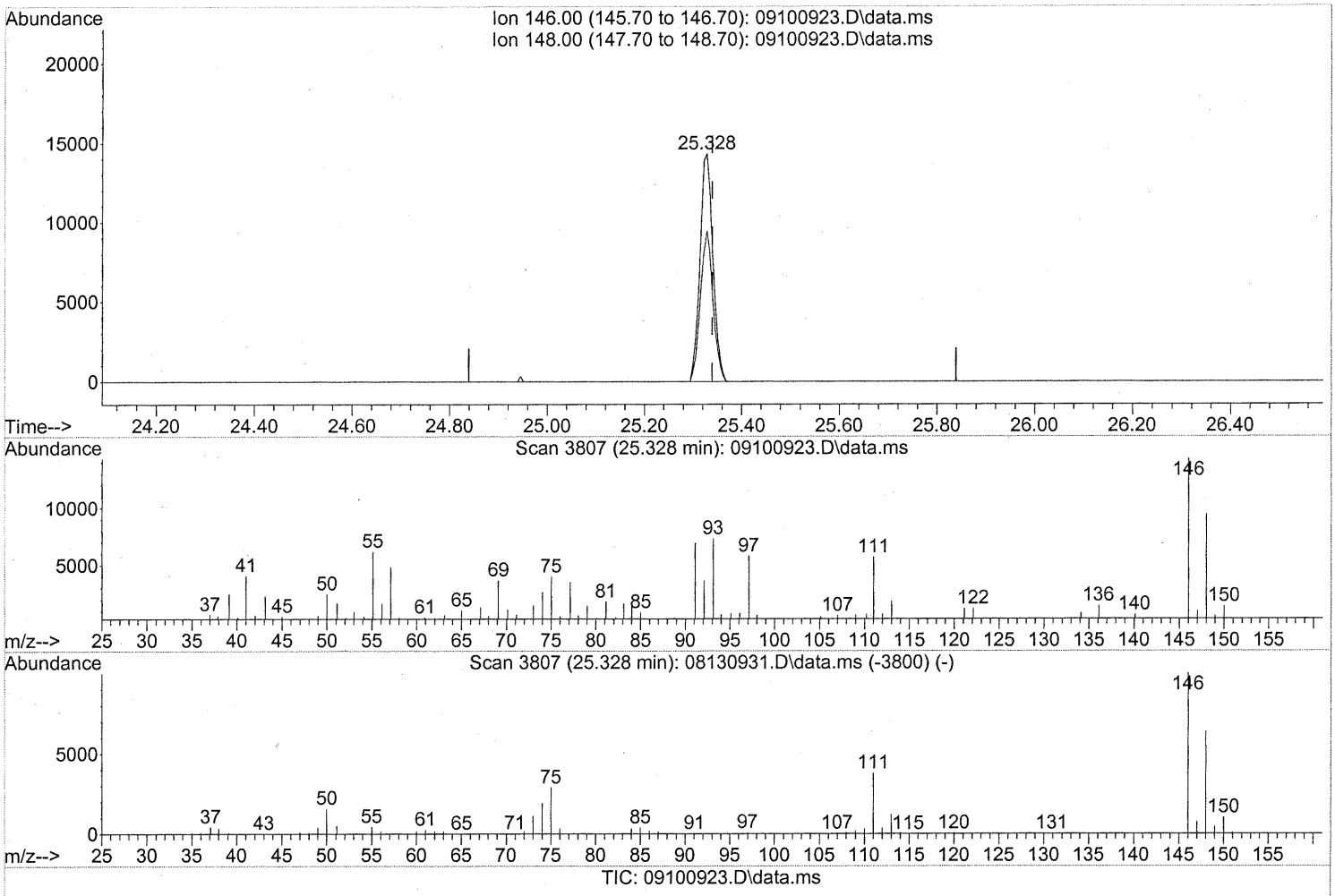
9/21/09

202

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.57ng

response 26422

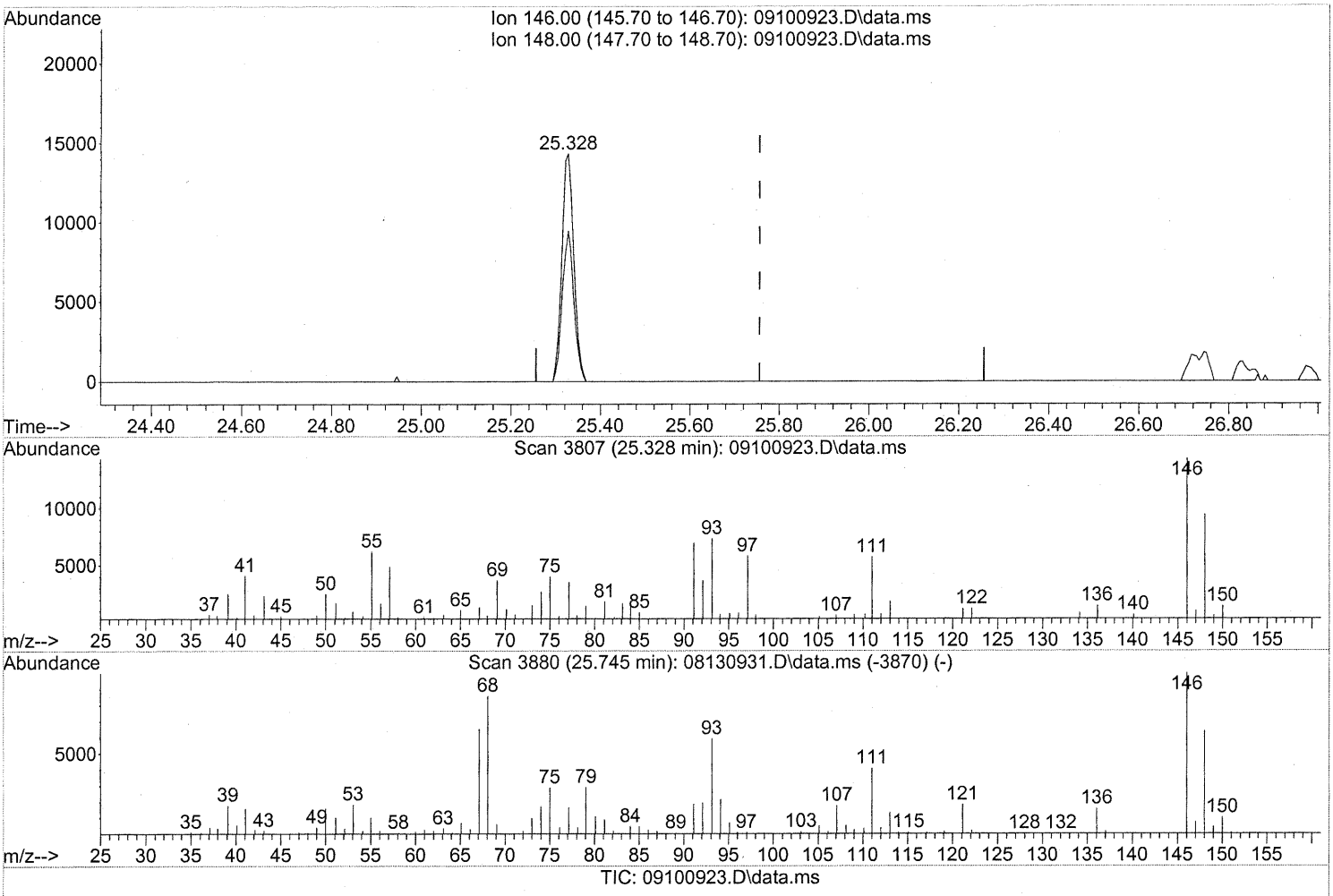
Ion	Exp%	Act%
146.00	100	100
148.00	64.00	64.27
0.00	0.00	0.00
0.00	0.00	0.00

203

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.61ng

response 26422

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	64.27
0.00	0.00	0.00
0.00	0.00	0.00

FP EM 9/21/09

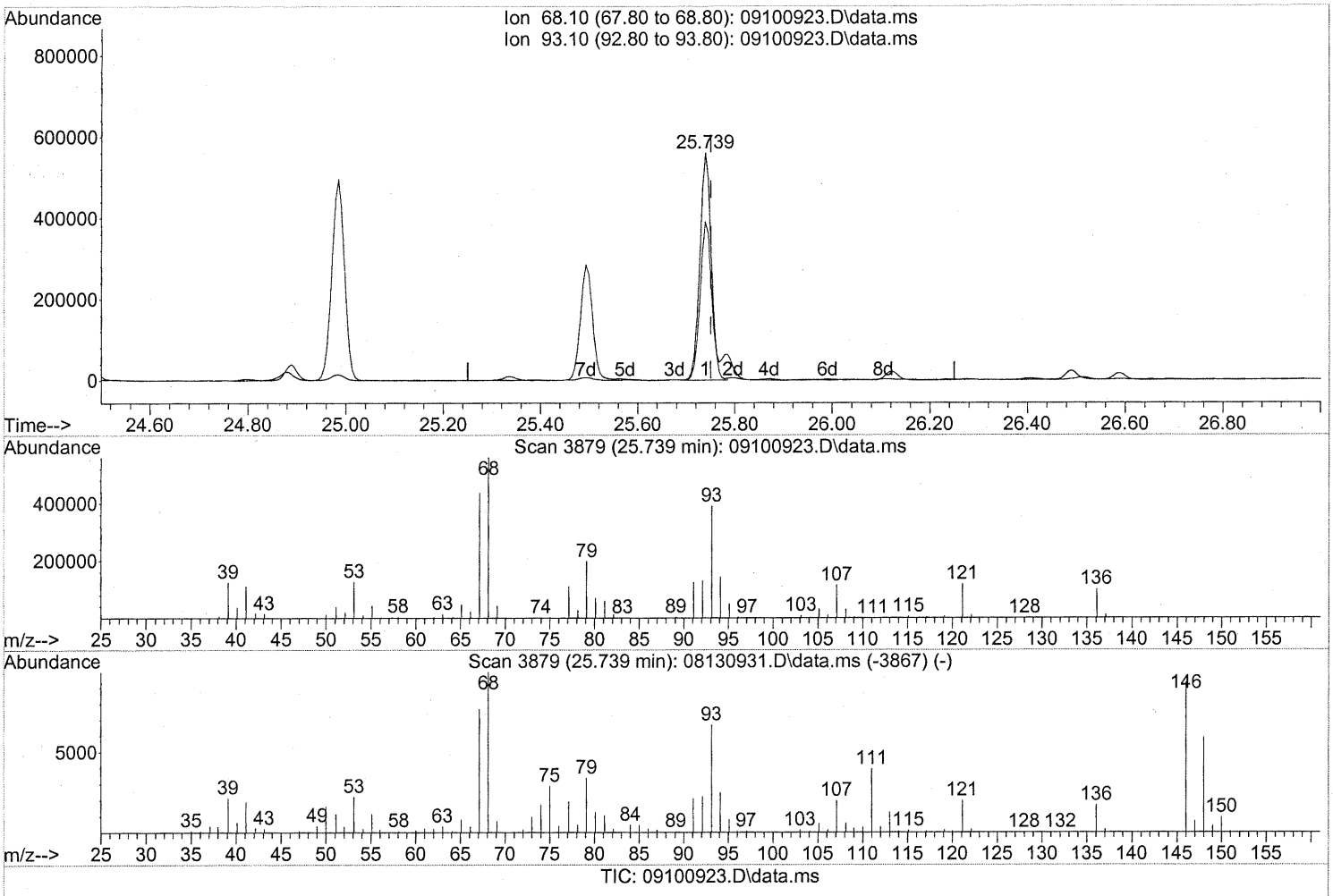
9/21/09

204

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(91) d-Limonene (T)

25.739min (-0.012) 26.52ng

response 910128

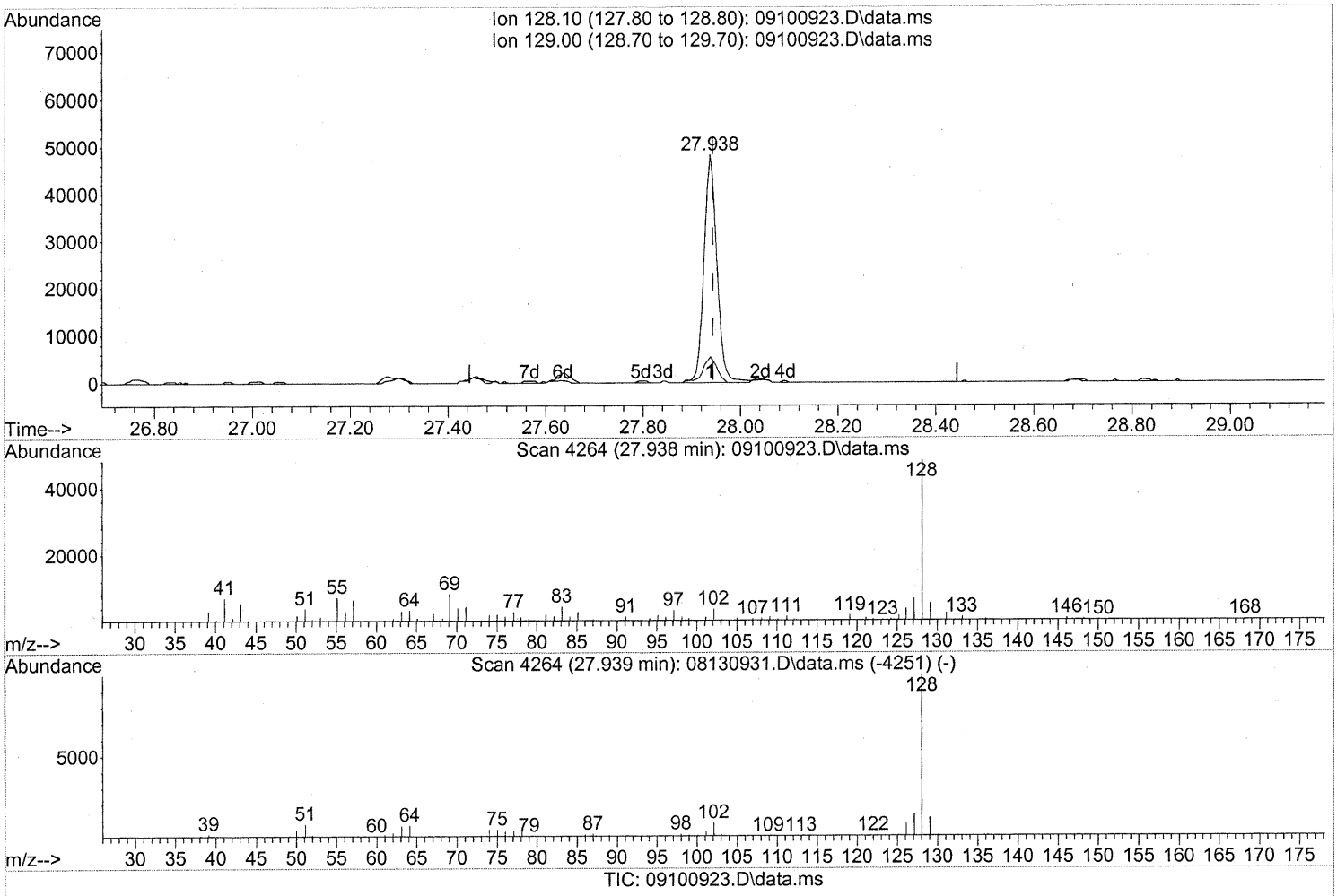
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	73.51
0.00	0.00	0.00
0.00	0.00	0.00

205

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100923.D
Acq On : 10 Sep 2009 23:27
Operator : EM
Sample : P0903139-003 (1000ml)
Misc : Environmental H &E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 08:05:54 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100923.D\data.ms

(95) Naphthalene (T)

27.938min (-0.006) 0.79ng

response 88579

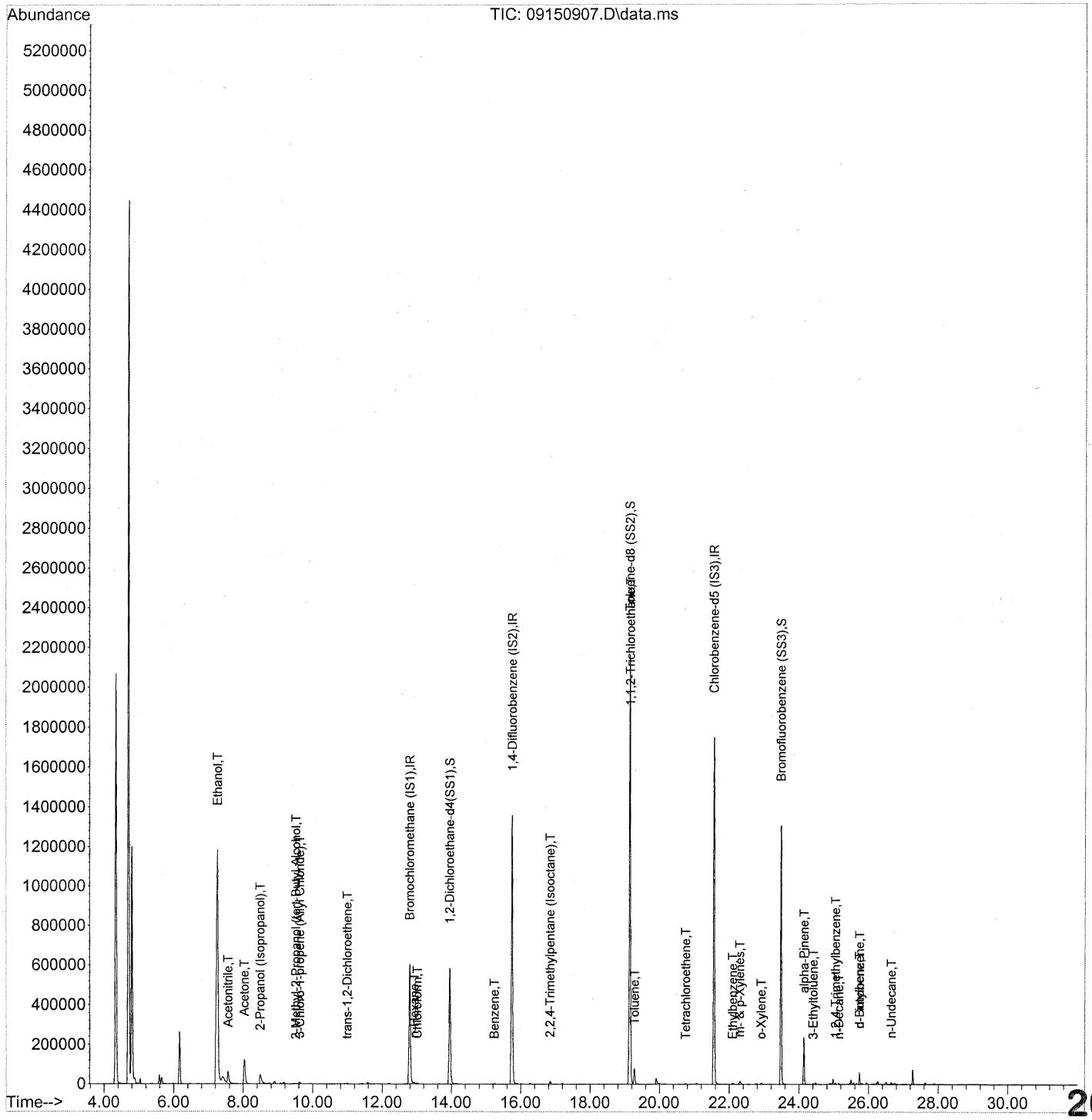
Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.05
0.00	0.00	0.00
0.00	0.00	0.00

206

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : 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	306605	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1549356	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	746088	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	586304	27.044	ng		-0.04
Spiked Amount 25.000			Recovery =	108.16%			
57) Toluene-d8 (SS2)	19.14	98	1846081	26.028	ng		-0.02
Spiked Amount 25.000			Recovery =	104.12%			
73) Bromofluorobenzene (SS3)	23.48	174	439620	21.886	ng		-0.01
Spiked Amount 25.000			Recovery =	87.56%			
Target Compounds							Qvalue
2) Propene	4.80	42	888	N.D.			
3) Dichlorodifluoromethan...	5.00	85	1625	N.D.			
4) Chloromethane	5.33	50	733	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	6.17	54	359	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.26	45	2504514m	148.451	ng		
11) Acetonitrile	7.56	41	94749	2.301	ng		100
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.03	58	43841	2.554	ng	#	51
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.49	45	117942	2.509	ng		98
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.51	59	4660	0.098	ng	#	65
19) Methylene Chloride	9.52	84	238	N.D.			
20) 3-Chloro-1-propene (Al...	9.62	41	2660	0.093	ng	#	34
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	2284	N.D.			
23) trans-1,2-Dichloroethene	11.00	61	3990	0.135	ng		83
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	4264	0.113	ng	#	62

EM 9/21/09

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : 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	5411	0.171	ng		98
34) Tetrahydrofuran (THF)	13.65	72	112	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	7481	0.090	ng		87
42) Carbon Tetrachloride	0.00	117	0	N.D.			
43) Cyclohexane	15.74	84	771	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	17049	0.178	ng		99
50) Methyl Methacrylate	0.00	100	0	N.D.			
51) n-Heptane	17.21	71	942	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	148105	8.320	ng	#	8
58) Toluene	19.28	91	73171	0.851	ng		100
59) 2-Hexanone	19.53	43	225	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	1828	N.D.			
63) n-Octane	0.00	57	0	N.D.			
64) Tetrachloroethene	20.75	166	1406	0.066	ng	#	72
65) Chlorobenzene	0.00	112	0	N.D.			
66) Ethylbenzene	22.10	91	7452	0.080	ng		90
67) m- & p-Xylenes	22.31	91	18794	0.255	ng		96
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	22.79	104	1894	N.D.			
70) o-Xylene	22.92	91	6495	0.088	ng		91
71) n-Nonane	23.18	43	755	N.D.			
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.			
74) Cumene	23.67	105	498	N.D.			
75) alpha-Pinene	24.15	93	107464	2.269	ng		95
76) n-Propylbenzene	24.29	91	1574	N.D.			
77) 3-Ethyltoluene	24.41	105	4909	0.055	ng		76
78) 4-Ethyltoluene	24.47	105	2921	N.D.			
79) 1,3,5-Trimethylbenzene	24.55	105	1807	N.D.			

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

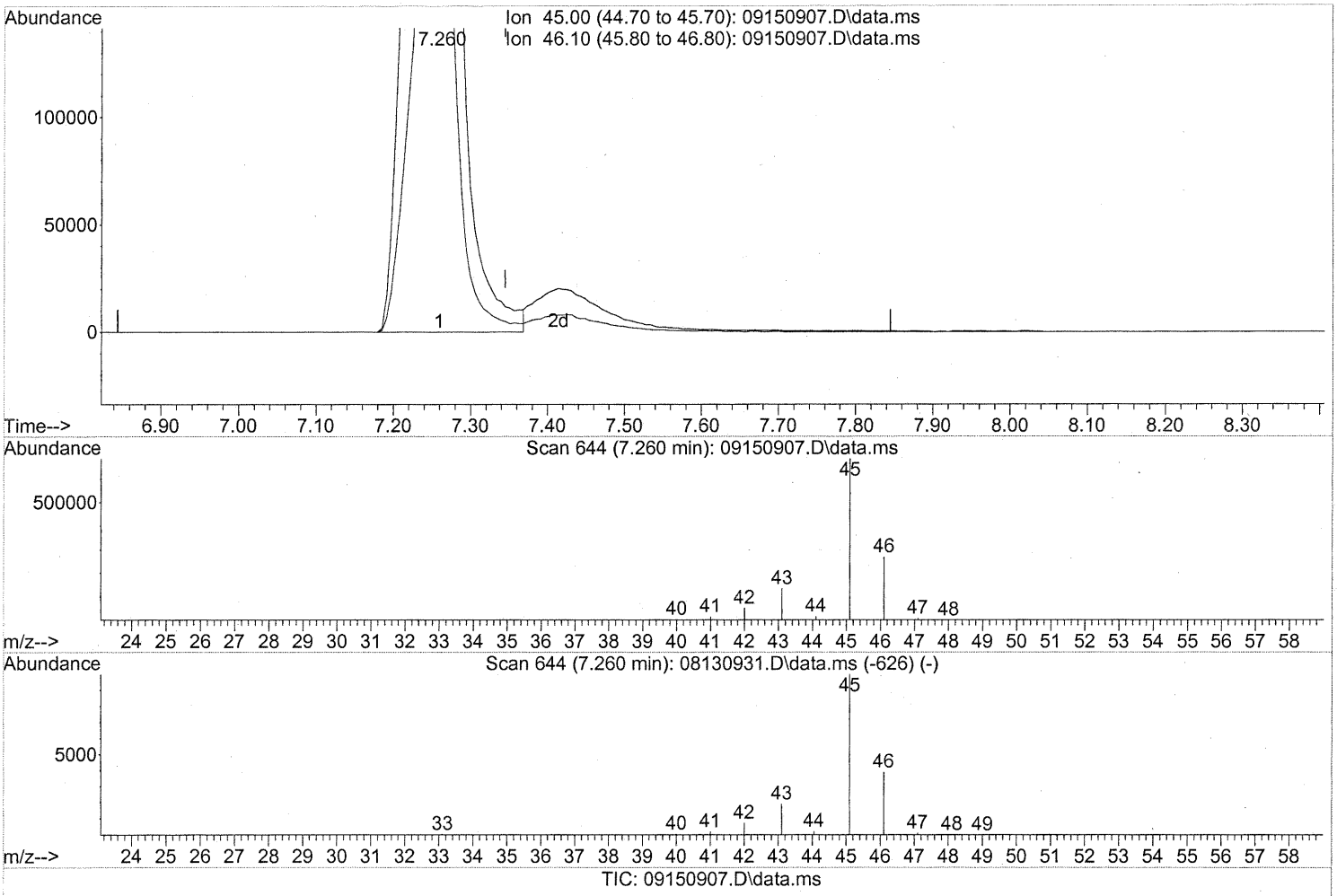
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.			
81) 2-Ethyltoluene	24.79	105	1373	N.D.			
82) 1,2,4-Trimethylbenzene	25.05	105	6186	0.078	ng		85
83) n-Decane	25.15	57	2495	0.054	ng	#	67
84) Benzyl Chloride	25.05	91	445	N.D.			
85) 1,3-Dichlorobenzene	25.35	146	106	N.D.			
86) 1,4-Dichlorobenzene	25.35	146	106	N.D.			
87) sec-Butylbenzene	25.49	105	994	N.D.			
88) 4-Isopropyltoluene (p-...	25.57	119	3716	N.D.			
89) 1,2,3-Trimethylbenzene	25.57	105	1545	N.D.			
90) 1,2-Dichlorobenzene	25.35	146	106	N.D.			
91) d-Limonene	25.74	68	15371	0.473	ng		96
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	4417	0.093	ng		88
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.96	128	1497	N.D.			
96) n-Dodecane	27.89	57	2501	N.D.			
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.57	55	1345	N.D.			
99) tert-Butylbenzene	25.06	119	382	N.D.			
100) n-Butylbenzene	25.74	91	4182	0.050	ng	#	62

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:15 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: 09150907.D\data.ms

(10) Ethanol (T)

7.260min (-0.086) 140.74ng

response 2374496

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.19
0.00	0.00	0.00
0.00	0.00	0.00

PT

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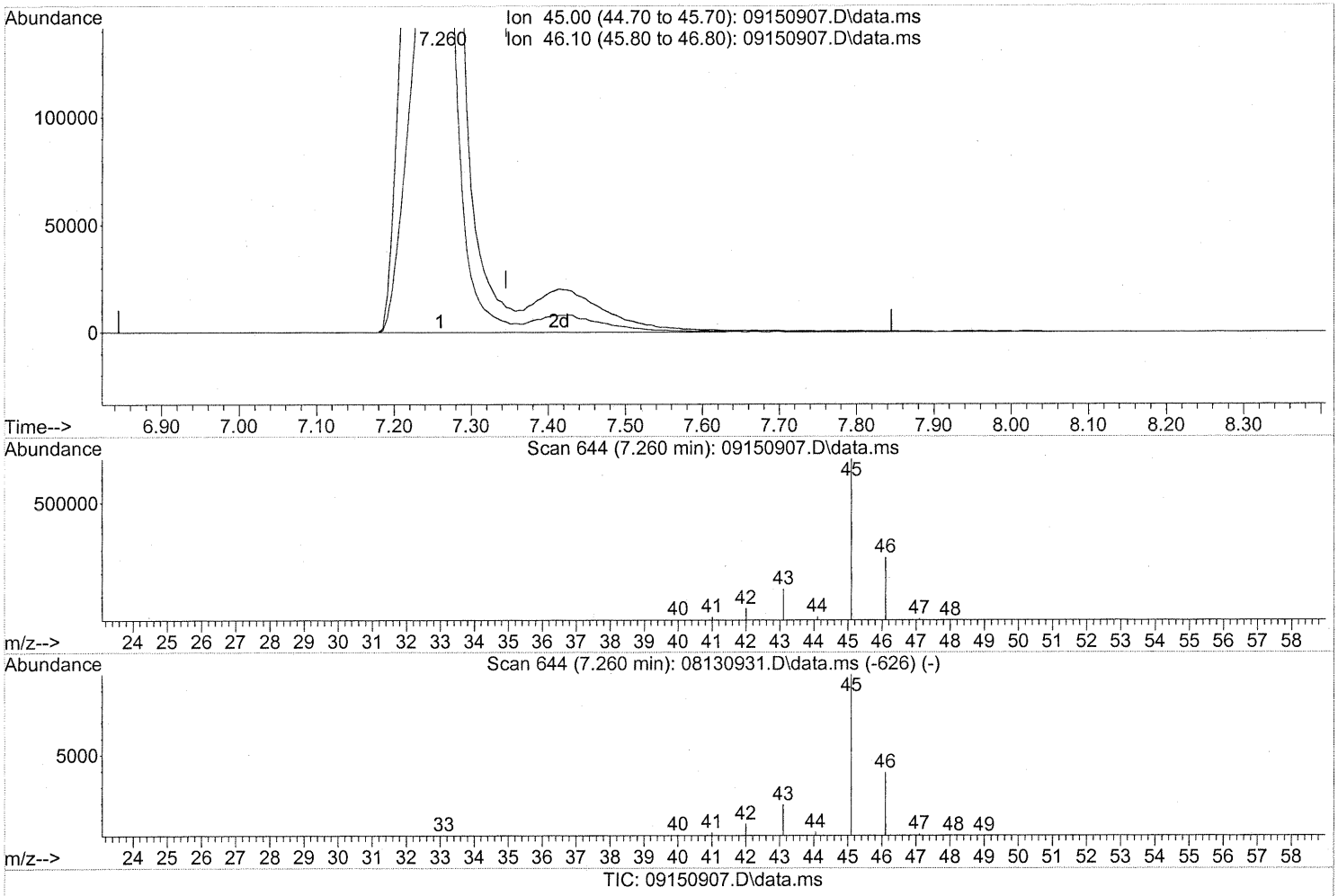
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:15 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)

7.260min (-0.086) 148.45ng m

response 2504514

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.15
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
9/15/09
9/21/09

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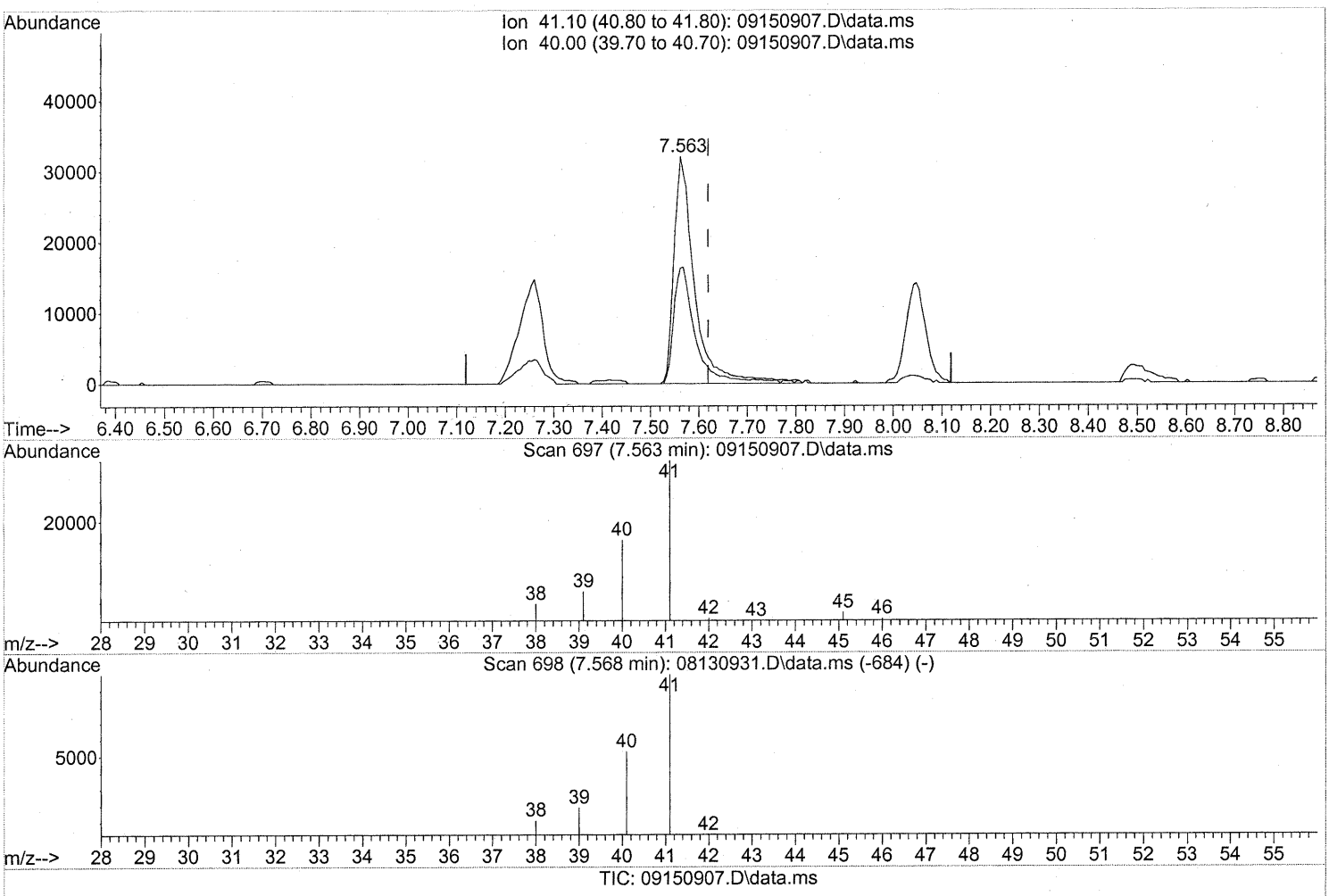
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09150907.D\data.ms

(11) Acetonitrile (T)

7.563min (-0.057) 2.30ng

response 94749

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.50
0.00	0.00	0.00
0.00	0.00	0.00

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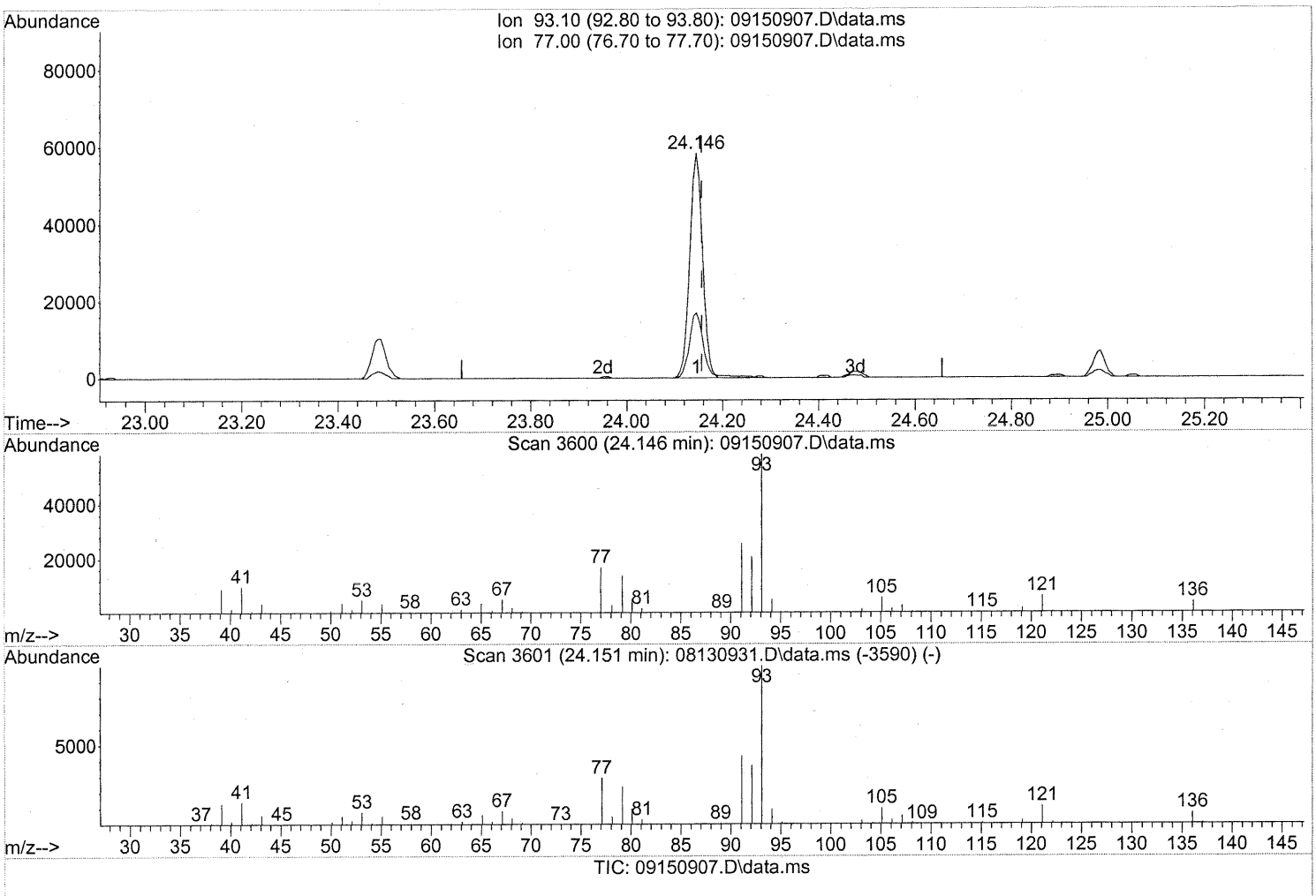
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150907.D
Acq On : 15 Sep 2009 10:45
Operator : EM
Sample : P0903139-003 dil (25ml)
Misc : Environmental H & E 106310
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 11:43:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09150907.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 2.27ng

response 107464

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	32.38
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: **106311** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P0903139-004

Test Code: EPA TO-15 Date Collected: 9/3/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/4/09
Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Analyzed: 9/11/09 & 9/18/09
Analyst: Lusine Hakobyan/Elsa Moctezuma Volume(s) Analyzed: 1.00 Liter(s)
Sampling Media: 6.0 L Summa Canister 0.025 Liter(s)
Test Notes:
Container ID: AC01223

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.7**	0.61	**0.54**	0.12	
74-87-3	**Chloromethane**	**0.64**	0.12	**0.31**	0.059	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	**1,3-Butadiene**	**0.16**	0.12	**0.072**	0.055	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	**Ethanol**	**2,900**	6.1	**1,500**	3.2	**D**
75-05-8	**Acetonitrile**	**130**	0.61	**79**	0.36	**D**
107-02-8	**Acrolein**	**5.0**	0.61	**2.2**	0.26	
67-64-1	**Acetone**	**150**	6.1	**62**	2.5	
75-69-4	**Trichlorofluoromethane**	**1.4**	0.12	**0.25**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**95**	0.61	**39**	0.25	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	**Trichlorotrifluoroethane**	**0.60**	0.12	**0.078**	0.016	
75-15-0	**Carbon Disulfide**	**4.6**	0.61	**1.5**	0.19	
156-60-5	**trans-1,2-Dichloroethene**	**4.0**	0.12	**1.0**	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	**2-Butanone (MEK)**	**14**	0.61	**4.6**	0.21	

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

Verified By: RG Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106311** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P0903139-004

Test Code: EPA TO-15 Date Collected: 9/3/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/4/09
Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Analyzed: 9/11/09 & 9/18/09
Analyst: Lusine Hakobyan/Elsa Moctezuma Volume(s) Analyzed: 1.00 Liter(s)
Sampling Media: 6.0 L Summa Canister 0.025 Liter(s)
Test Notes:
Container ID: AC01223

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	**Ethyl Acetate**	**9.1**	1.2	**2.5**	0.34	
110-54-3	**n-Hexane**	**17**	0.61	**4.7**	0.17	
67-66-3	**Chloroform**	**7.0**	0.12	**1.4**	0.025	
109-99-9	**Tetrahydrofuran (THF)**	**11**	0.61	**3.8**	0.21	
107-06-2	**1,2-Dichloroethane**	**0.17**	0.12	**0.043**	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	**Benzene**	**11**	0.12	**3.5**	0.038	
56-23-5	**Carbon Tetrachloride**	**0.67**	0.12	**0.11**	0.019	
110-82-7	**Cyclohexane**	**1.5**	0.61	**0.43**	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	**Bromodichloromethane**	**1.6**	0.12	**0.24**	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	**1,4-Dioxane**	**0.73**	0.61	**0.20**	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	**n-Heptane**	**7.5**	0.61	**1.8**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	**4-Methyl-2-pentanone**	**2.2**	0.61	**0.53**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	**Toluene**	**100**	0.61	**27**	0.16	
591-78-6	**2-Hexanone**	**2.5**	0.61	**0.61**	0.15	
124-48-1	**Dibromochloromethane**	**0.14**	0.12	**0.016**	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	**n-Butyl Acetate**	**4.6**	0.61	**0.97**	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: Rc Date: 9/16/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106311**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan/Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01223

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09 & 9/18/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.0**	0.61	**0.43**	0.13	
127-18-4	**Tetrachloroethene**	**3.4**	0.12	**0.50**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	**Ethylbenzene**	**8.1**	0.61	**1.9**	0.14	
179601-23-1	**m,p-Xylenes**	**27**	0.61	**6.2**	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	**Styrene**	**2.8**	0.61	**0.66**	0.14	
95-47-6	**o-Xylene**	**8.5**	0.61	**1.9**	0.14	
111-84-2	**n-Nonane**	**1.8**	0.61	**0.34**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	**alpha-Pinene**	**110**	0.61	**19**	0.11	
103-65-1	**n-Propylbenzene**	**1.2**	0.61	**0.25**	0.12	
622-96-8	**4-Ethyltoluene**	**2.5**	0.61	**0.51**	0.12	
108-67-8	**1,3,5-Trimethylbenzene**	**1.9**	0.61	**0.39**	0.12	
95-63-6	**1,2,4-Trimethylbenzene**	**7.0**	0.61	**1.4**	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	**1,4-Dichlorobenzene**	**0.43**	0.12	**0.071**	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	**d-Limonene**	**21**	0.61	**3.7**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	**Naphthalene**	**1.2**	0.61	**0.22**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

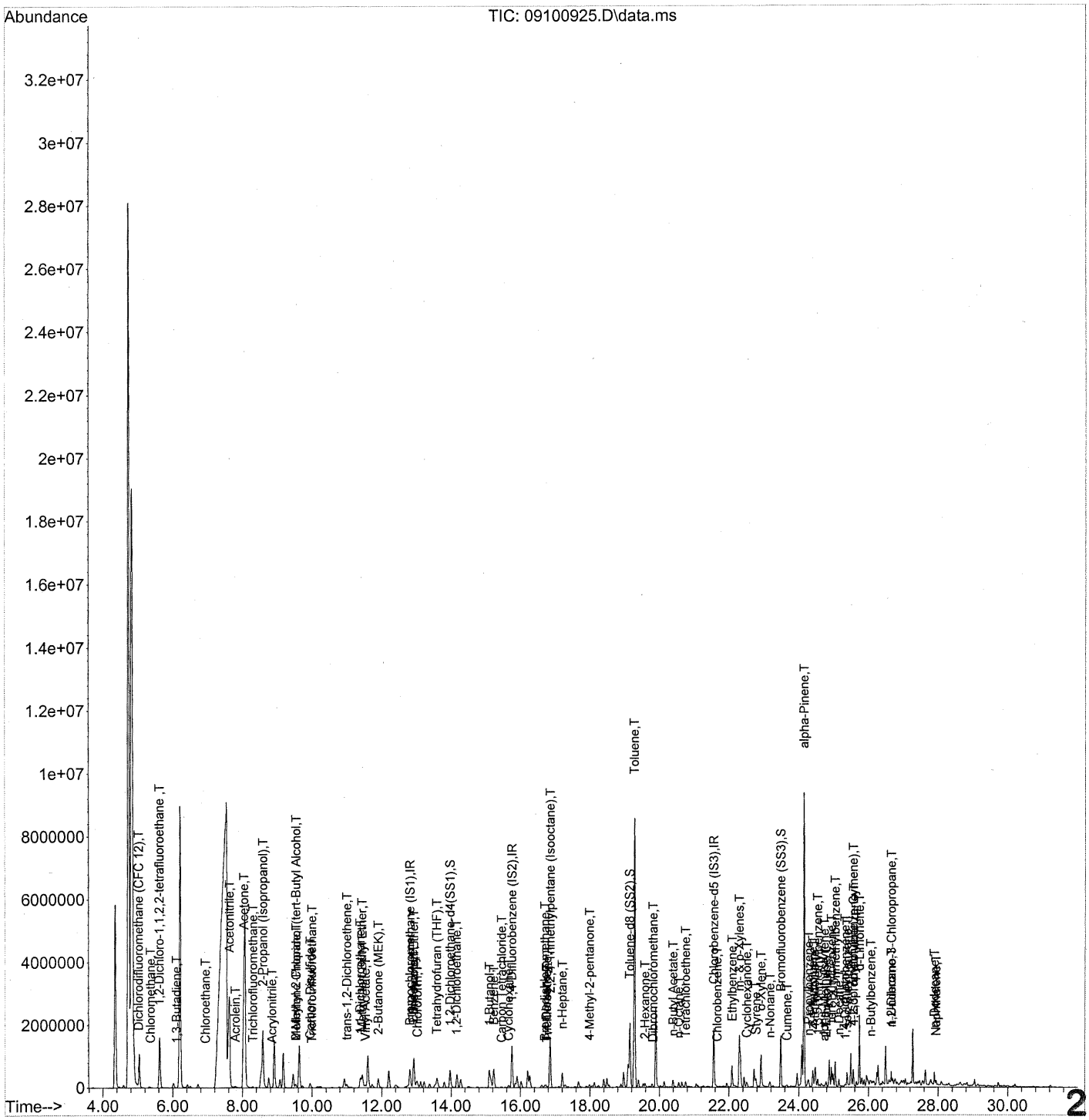
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 17 11:59:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 17 11:59:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	308095	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1567555	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	783743	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	552891	25.380	ng		-0.02
Spiked Amount 25.000			Recovery = 101.52%				
57) Toluene-d8 (SS2)	19.15	98	1815588	24.368	ng		-0.01
Spiked Amount 25.000			Recovery = 97.48%				
73) Bromofluorobenzene (SS3)	23.49	174	583374	27.647	ng		0.00
Spiked Amount 25.000			Recovery = 110.60%				
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D. d			
3) Dichlorodifluoromethan...	5.02	85	84836	2.199 ng			99
4) Chloromethane	5.37	50	19098	0.531 ng			96
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1491	0.073 ng		#	43
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	3310	0.131 ng			98
8) Bromomethane	6.59	94	520	N.D.			
9) Chloroethane	6.94	64	1329	0.076 ng		#	43
10) Ethanol	0.00	45	0	~~N.D.~~ See Dil.			
11) Acetonitrile	7.63	41	7437896	~~179.776~~ ng See Dil			92
12) Acrolein	7.80	56	45301	4.097 ng			96
13) Acetone	8.04	58	2092455	121.291 ng		#	59
14) Trichlorofluoromethane	8.30	101	37729	1.144 ng			98
15) 2-Propanol (Isopropanol)	8.59	45	3701265	78.342 ng			94
16) Acrylonitrile	8.85	53	2305	0.~~092~~ ng			88
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.53	59	53238	1.110 ng		#	1
19) Methylene Chloride	9.54	84	5812	0.~~270~~ ng			85
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D. d			
21) Trichlorotrifluoroethane	10.00	151	7283	0.493 ng			99
22) Carbon Disulfide	9.94	76	291064	3.832 ng			100
23) trans-1,2-Dichloroethene	11.00	61	99091	3.335 ng			90
24) 1,1-Dichloroethane	11.38	63	2695	0.~~074~~ ng		#	1
25) Methyl tert-Butyl Ether	11.43	73	3080	0.~~052~~ ng		#	1
26) Vinyl Acetate	11.53	86	18512m	~~4.955~~ ng			
27) 2-Butanone (MEK)	11.90	72	135173	11.239 ng			91
28) cis-1,2-Dichloroethene	12.74	61	574	N.D.			
29) Diisopropyl Ether	12.92	87	7664	0.449 ng		#	1
30) Ethyl Acetate	12.91	61	58472	7.497 ng			90
31) n-Hexane	12.93	57	523239	13.763 ng			9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 17 11:59:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.02	83	182849	5.746 ng		99
34) Tetrahydrofuran (THF)	13.59	72	116831	9.344 ng	#	65
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.15	62	3485	0.143 ng		73
38) 1,1,1-Trichloroethane	14.54	97	524	N.D.		
39) Isopropyl Acetate	15.09	61	369	N.D.		
40) 1-Butanol	15.10	56	468650	23.071 ng		86
41) Benzene	15.23	78	777445	9.222 ng		99
42) Carbon Tetrachloride	15.46	117	12973	0.551 ng		97
43) Cyclohexane	15.66	84	39933	1.223 ng		90
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.27	63	233	N.D.		
46) Bromodichloromethane	16.70	83	33417	1.355 ng	#	63
47) Trichloroethene	16.77	130	1403	0.066 ng		89
48) 1,4-Dioxane	16.74	88	9060	0.604 ng		76
49) 2,2,4-Trimethylpentane...	16.86	57	1926862	19.860 ng		96
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	17.21	71	138996	6.194 ng		95
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.99	58	32858	1.804 ng		98
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.77	97	862	N.D.		
58) Toluene	19.28	91	7699634	85.248 ng		99
59) 2-Hexanone	19.59	43	97402	2.075 ng		82
60) Dibromochloromethane	19.82	129	2238	0.116 ng		87
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	194520	3.798 ng		96
63) n-Octane	20.56	57	33061	1.642 ng		88
64) Tetrachloroethene	20.75	166	63218	2.821 ng		99
65) Chlorobenzene	21.66	112	3944	0.071 ng	#	42
66) Ethylbenzene	22.09	91	655280	6.720 ng		99
67) m- & p-Xylenes	22.30	91	1724583	22.308 ng		100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	133168	2.330 ng		99
70) o-Xylene	22.92	91	544080	6.996 ng		99
71) n-Nonane	23.17	43	68209	1.456 ng		87
72) 1,1,2,2-Tetrachloroethane	22.91	83	1316	N.D.		
74) Cumene	23.66	105	36596	0.363 ng		98
75) alpha-Pinene	24.15	93	4355164	87.539 ng		99
76) n-Propylbenzene	24.28	91	128474	1.031 ng		89
77) 3-Ethyltoluene	24.40	105	344743	3.649 ng		100
78) 4-Ethyltoluene	24.46	105	196655	2.071 ng		94
79) 1,3,5-Trimethylbenzene	24.55	105	123842	1.577 ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 17 11:59:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

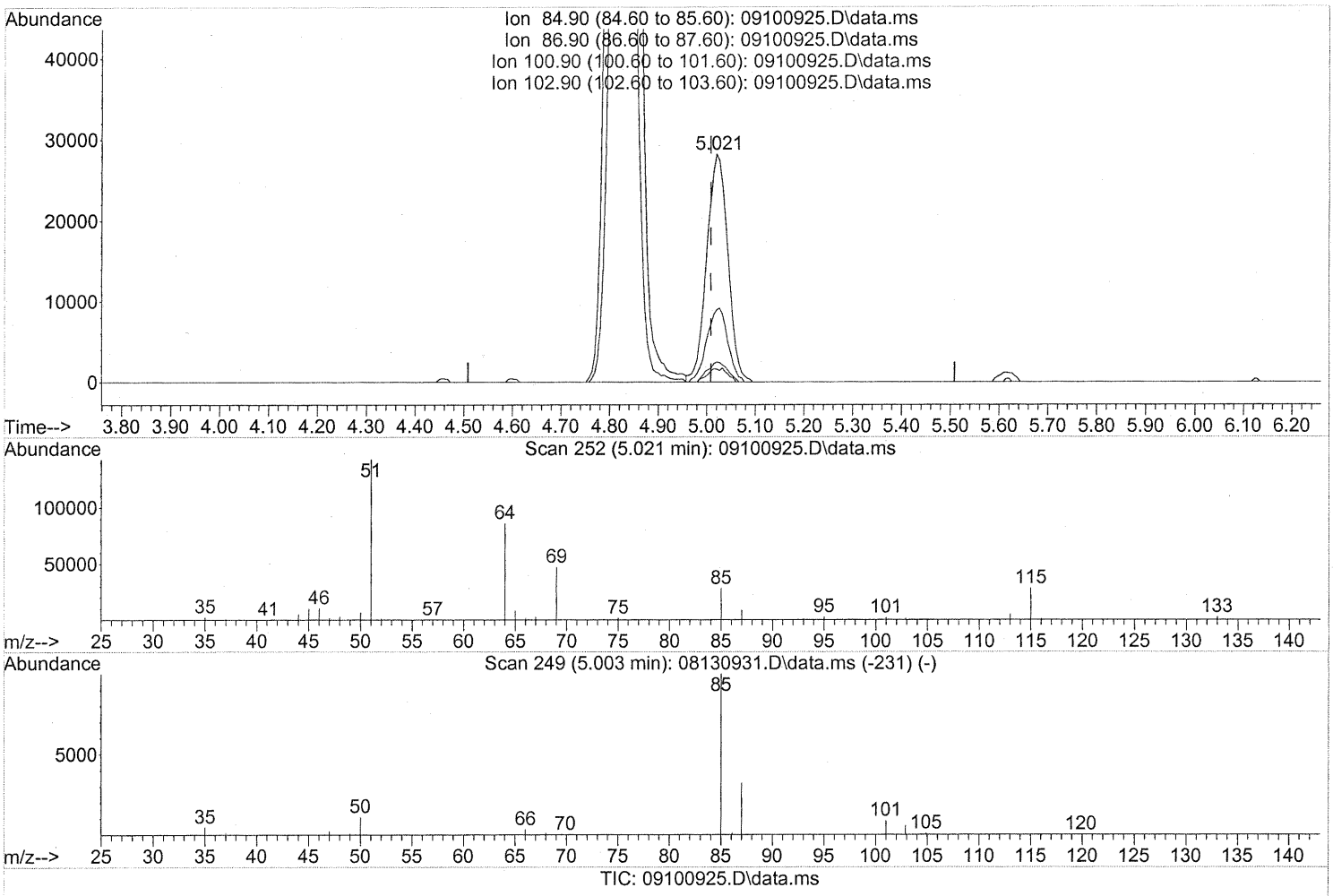
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	10950	0.257 ng		88
81) 2-Ethyltoluene	24.79	105	109950	1.127 ng		100
82) 1,2,4-Trimethylbenzene	25.05	105	479194	5.747 ng		89
83) n-Decane	25.15	57	90962	1.874 ng		98
84) Benzyl Chloride	25.23	91	1303	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D. d		
86) 1,4-Dichlorobenzene	25.33	146	16145	0.353 ng		99
87) sec-Butylbenzene	25.39	105	14604	0.133 ng	#	1
88) 4-Isopropyltoluene (p-...	25.56	119	201184	1.911 ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	116326	1.380 ng		94
90) 1,2-Dichlorobenzene	0.00	146	0	N.D. d		
91) d-Limonene	25.74	68	582207	17.068 ng		97
92) 1,2-Dibromo-3-Chloropr...	26.65	157	665	0.051 ng	#	1
93) n-Undecane	26.65	57	200677	4.002 ng		89
94) 1,2,4-Trichlorobenzene	27.79	180	764	N.D.		
95) Naphthalene	27.94	128	107028	0.957 ng		97
96) n-Dodecane	27.89	57	146072	2.602 ng		96
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	78903	2.774 ng		96
99) tert-Butylbenzene	24.94	119	13755	0.166 ng		96
100) n-Butylbenzene	26.06	91	80076	0.916 ng	#	59

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.021min (+0.012) 2.20ng

response 84836

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.11
100.90	9.10	8.15
102.90	5.50	5.38

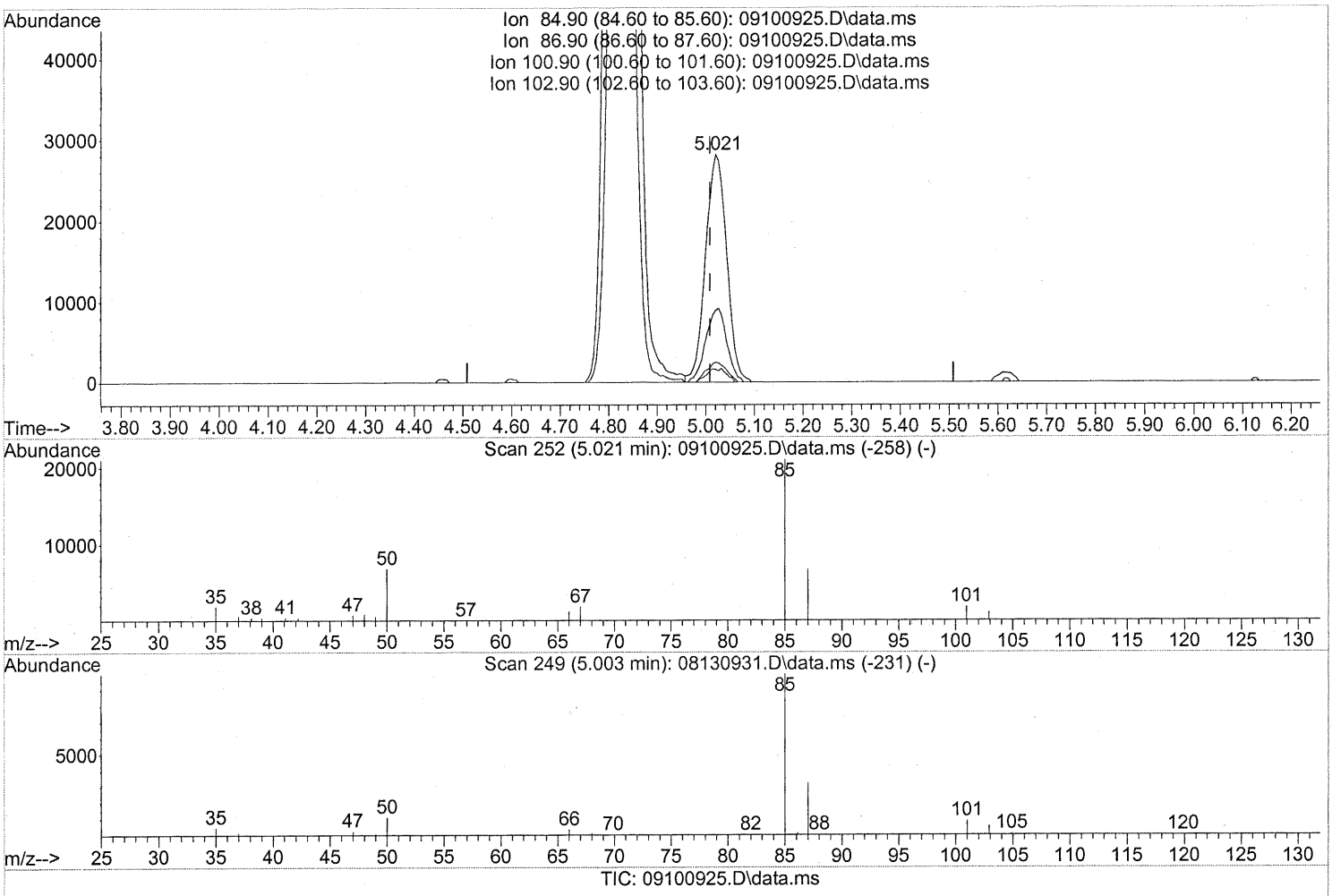
Before subtraction

222

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.021min (+0.012) 2.20ng

response 84836

After subtraction

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.11
100.90	9.10	8.15
102.90	5.50	5.38

223

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
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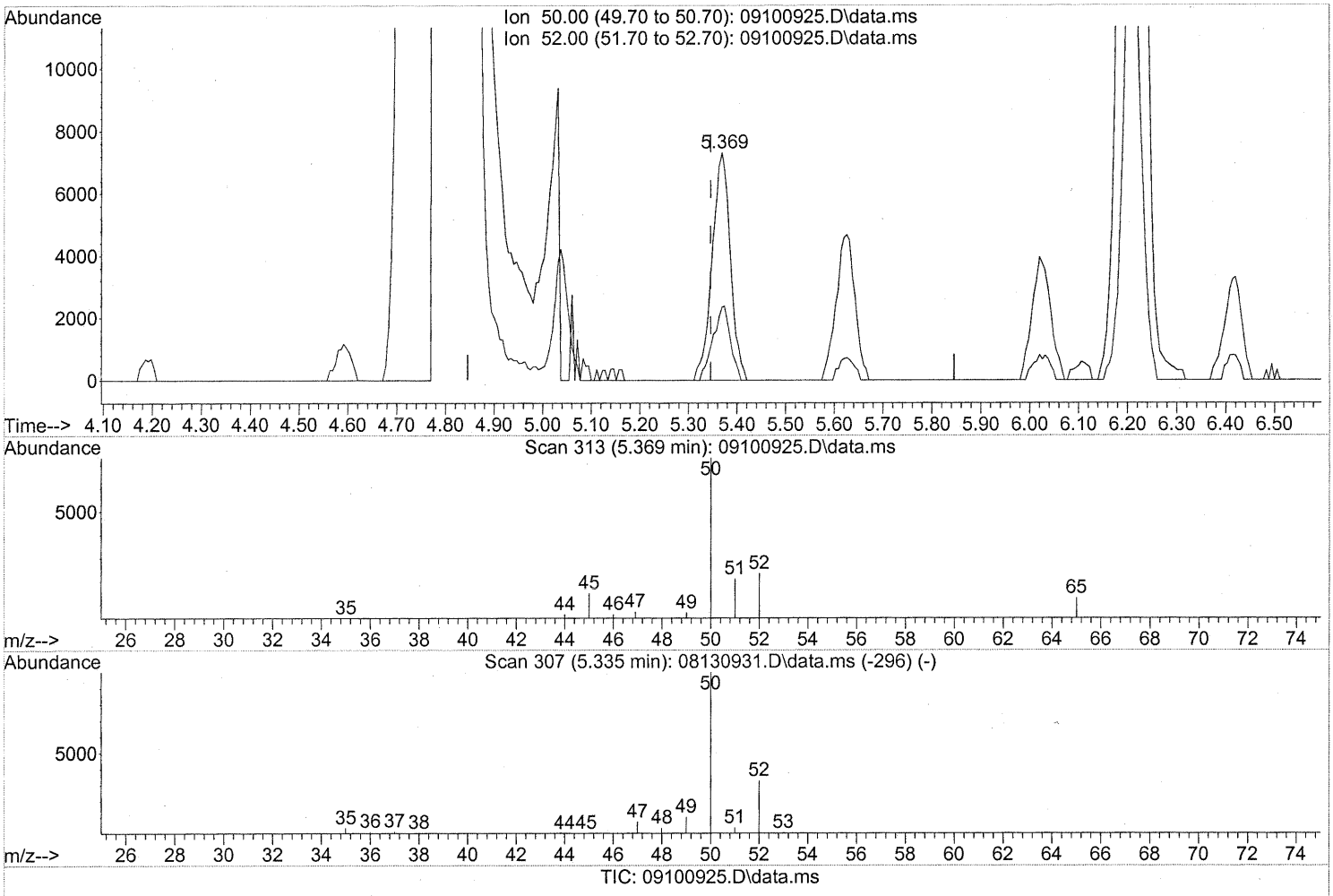
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(4) Chloromethane (T)

5.369min (+0.023) 0.53ng

response 19098

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.95
0.00	0.00	0.00
0.00	0.00	0.00

224

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
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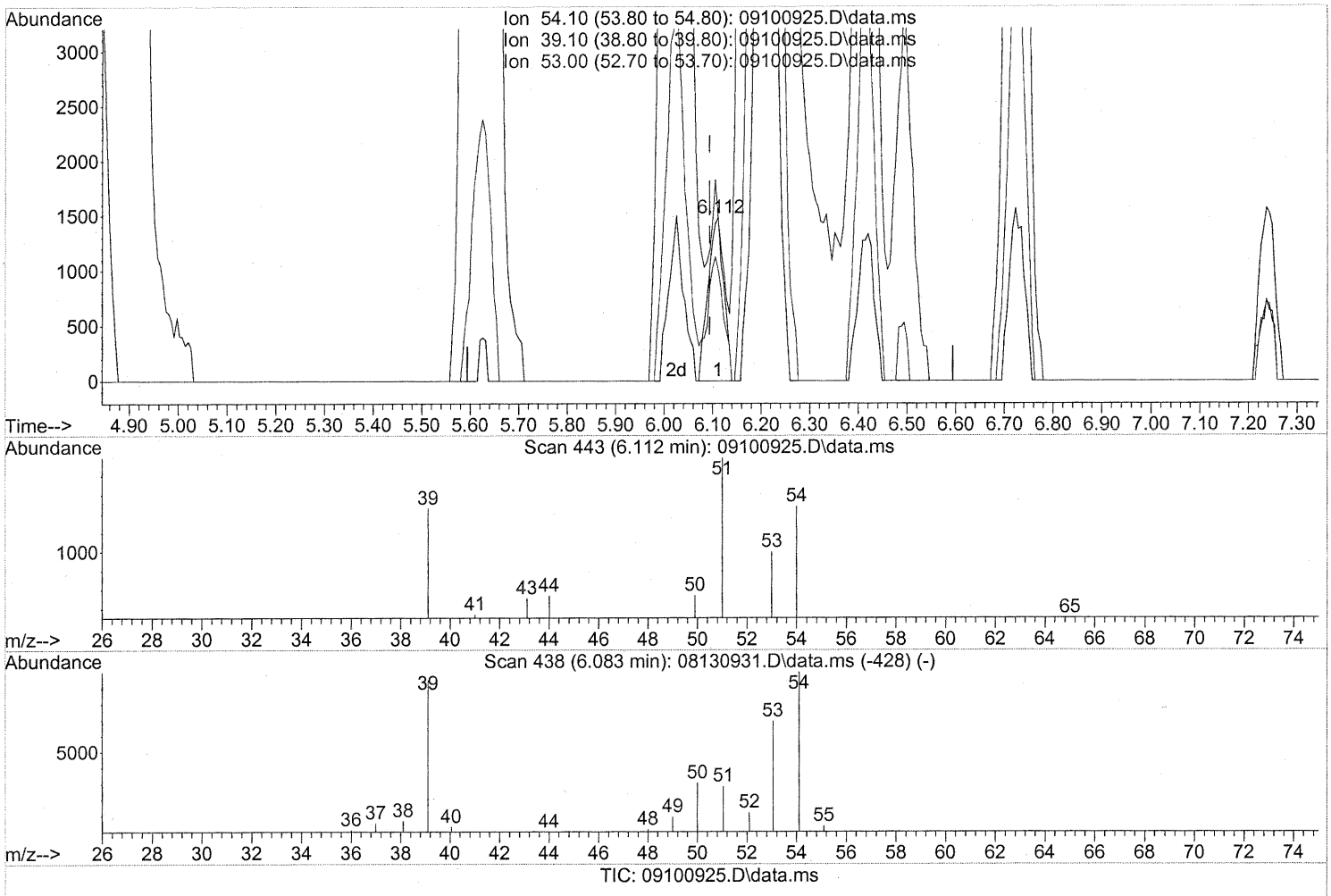
Quant Time: Sep 11 08:05:58 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100925.D\data.ms

(7) 1,3-Butadiene (T)

6.112min (+0.017) 0.13ng

response 3310

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	97.79
53.00	69.80	72.84
0.00	0.00	0.00

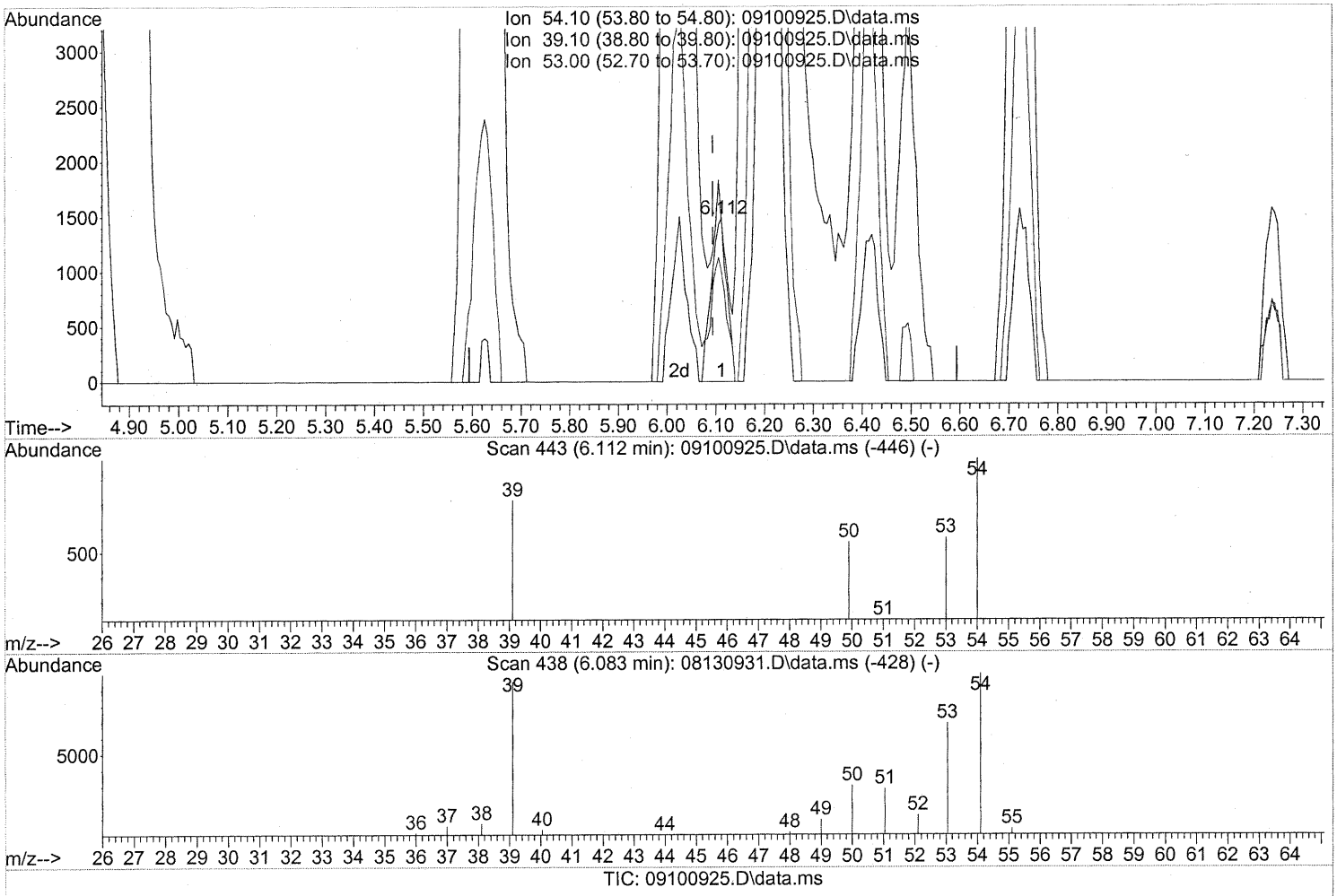
Before subtraction

225

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(7) 1,3-Butadiene (T)

6.112min (+0.017) 0.13ng

response 3310

Ion	Exp%	Act%
54.10	100	100
39.10	96.60	97.79
53.00	69.80	72.84
0.00	0.00	0.00

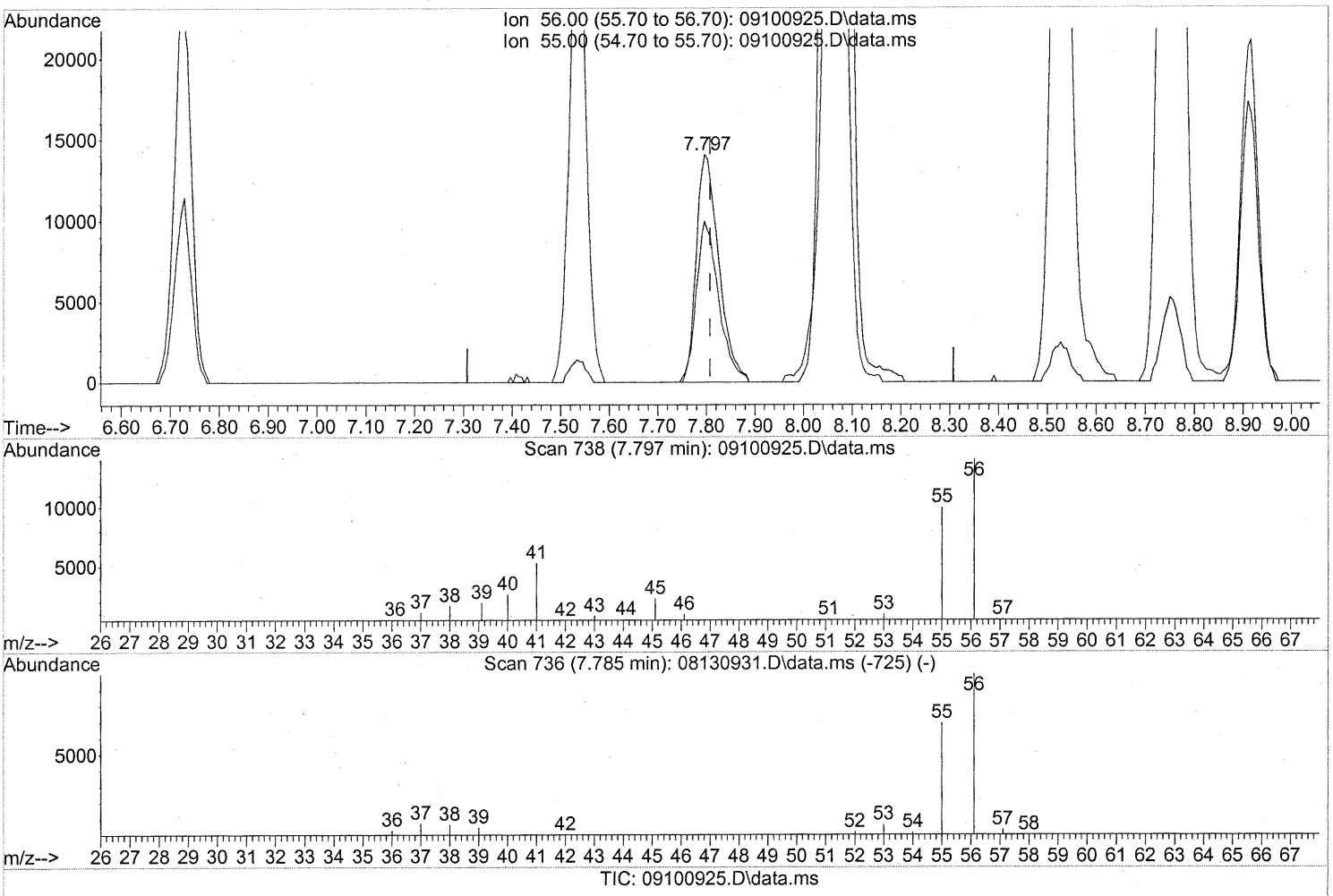
After subtraction

226

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 4.10ng

response 45301

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.55
0.00	0.00	0.00
0.00	0.00	0.00

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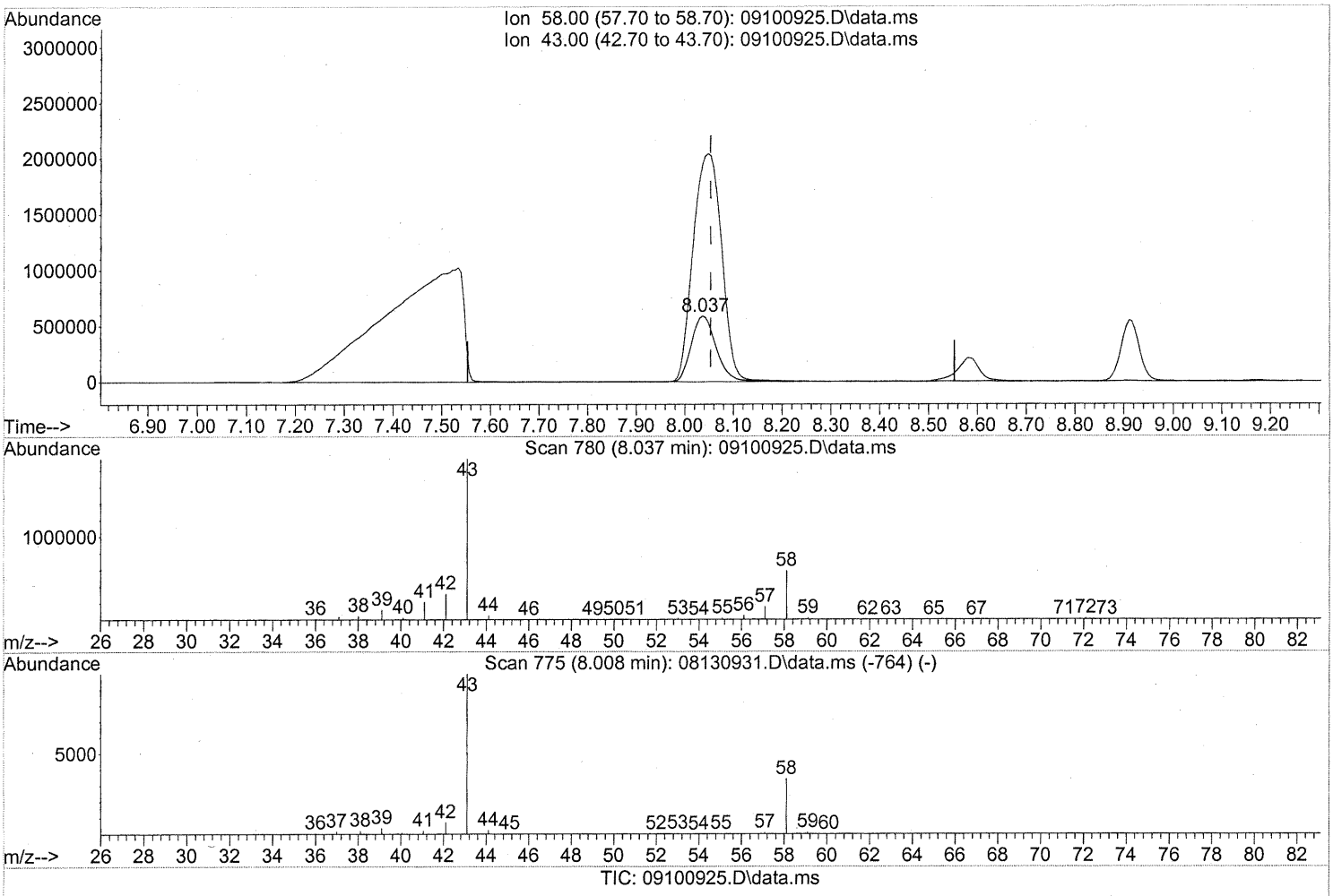
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(13) Acetone (T)

8.037min (-0.017) 121.29ng

response 2092455

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	400.29#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
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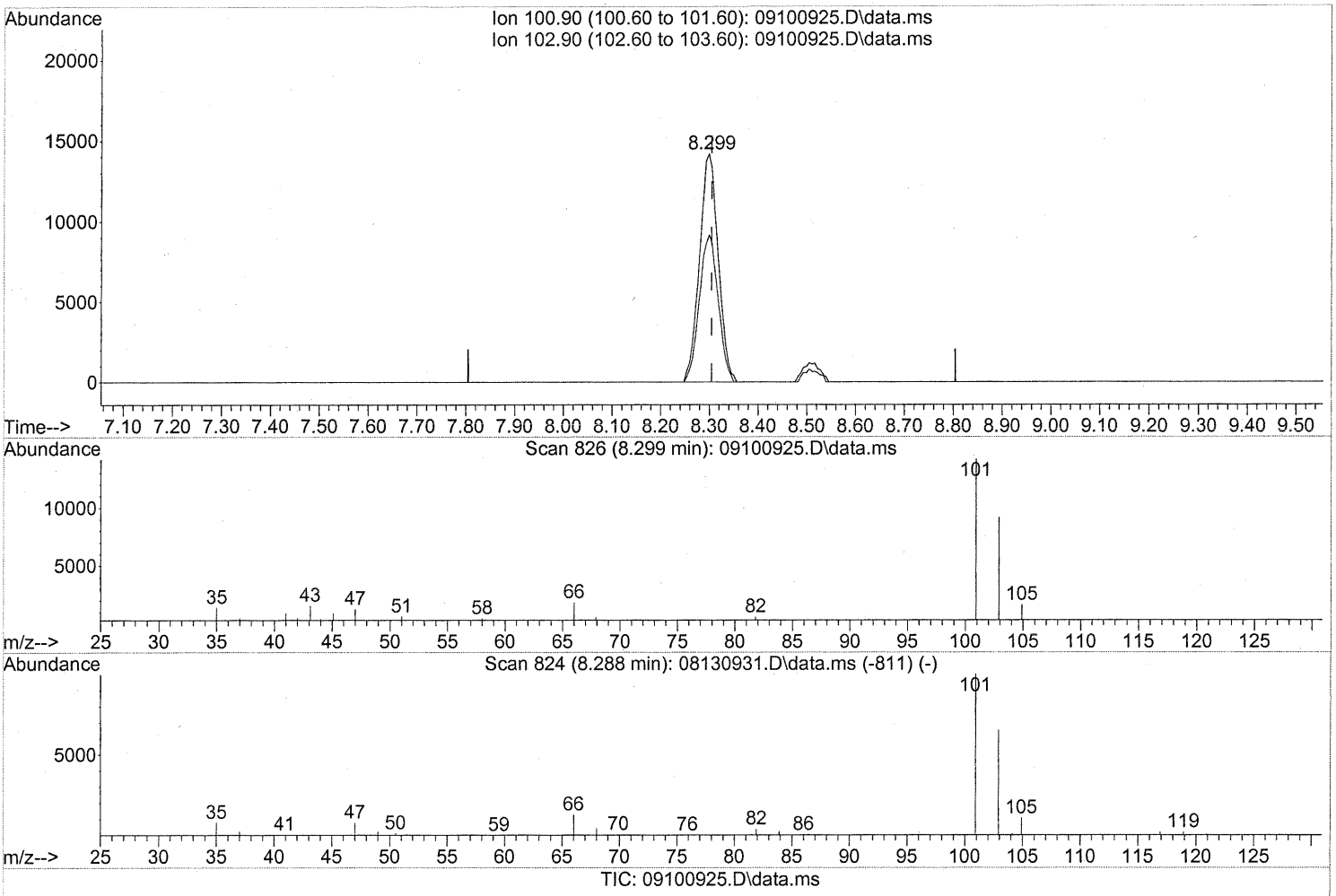
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100925.D\data.ms

(14) Trichlorofluoromethane (T)

8.299min (-0.006) 1.14ng

response 37729

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.70
0.00	0.00	0.00
0.00	0.00	0.00

229

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
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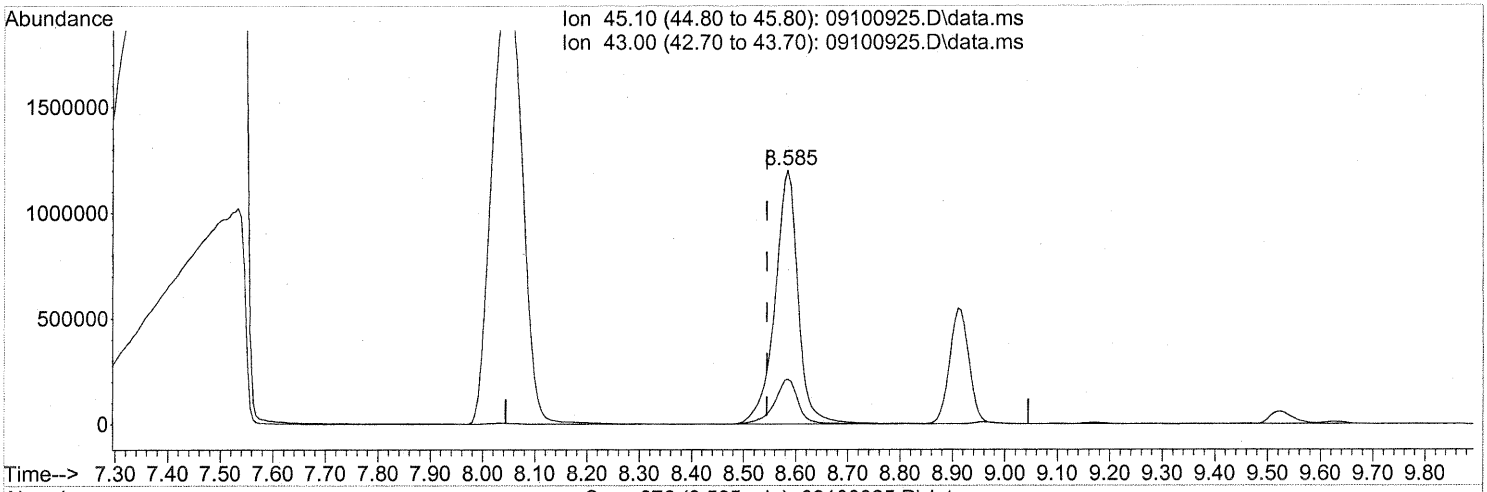
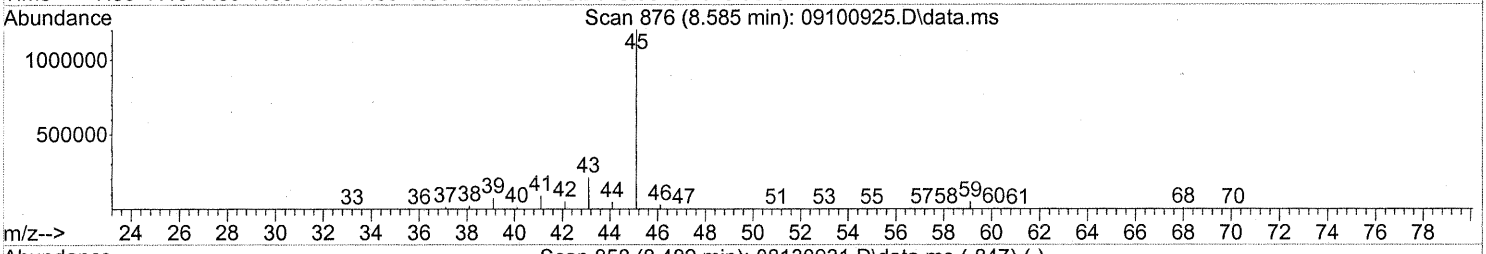
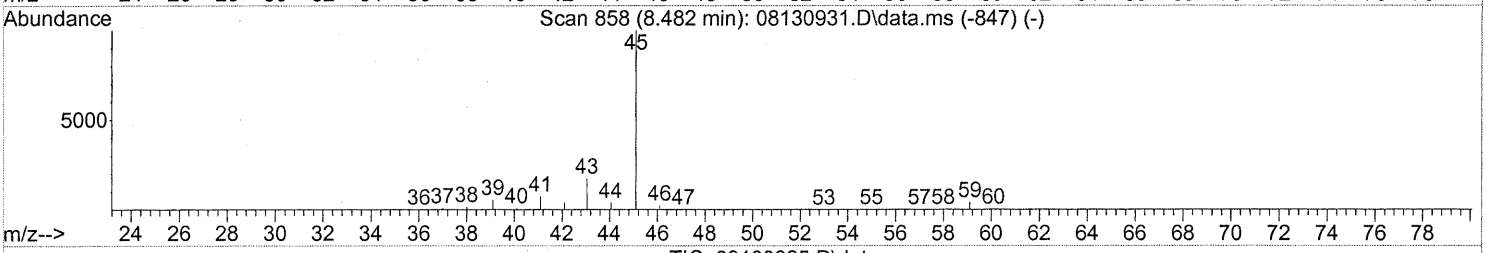
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09100925.D\data.ms

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

8.585min (+0.040) 78.34ng

response 3701265

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.82
0.00	0.00	0.00
0.00	0.00	0.00

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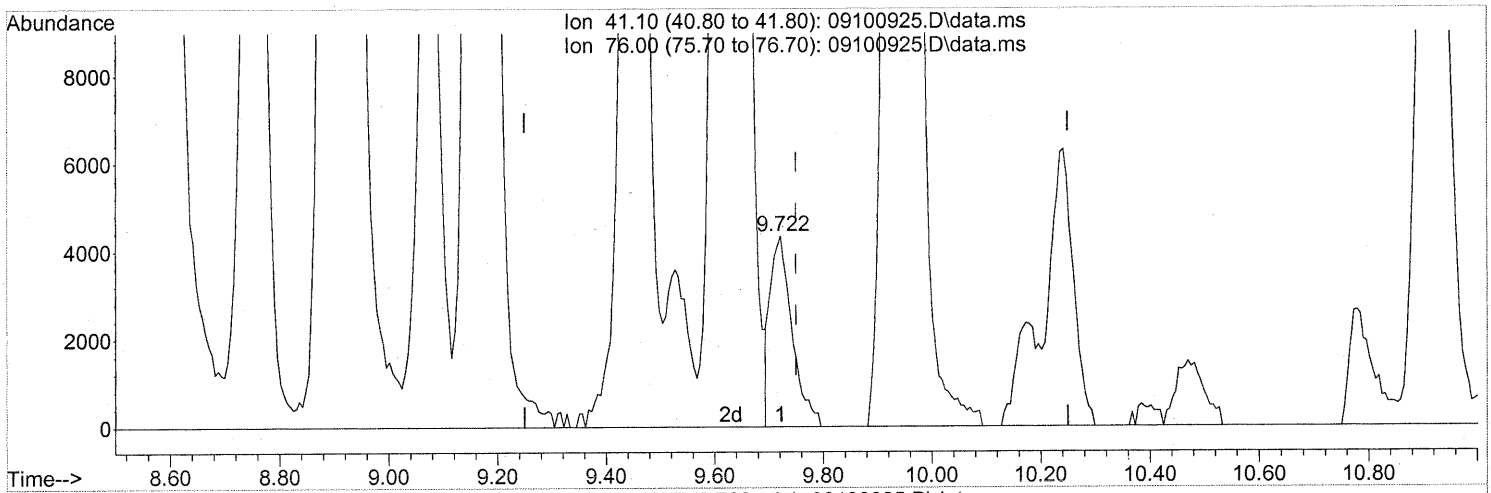
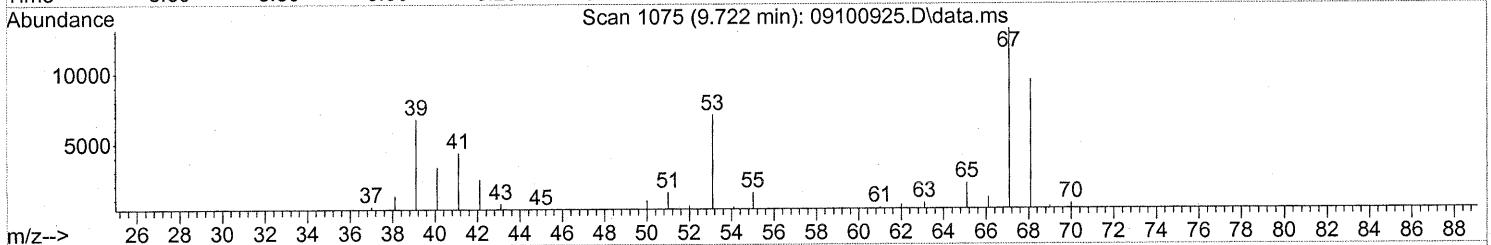
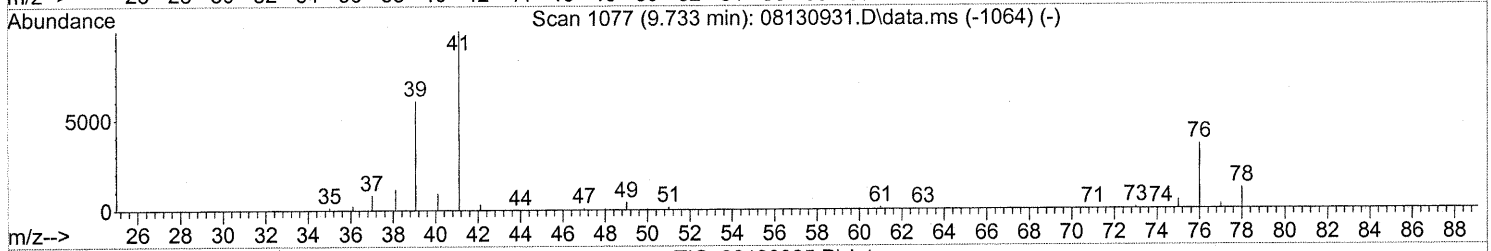
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

9.722min (-0.028) 0.42ng

response 12137

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

FP 9/21/09

9/21/09

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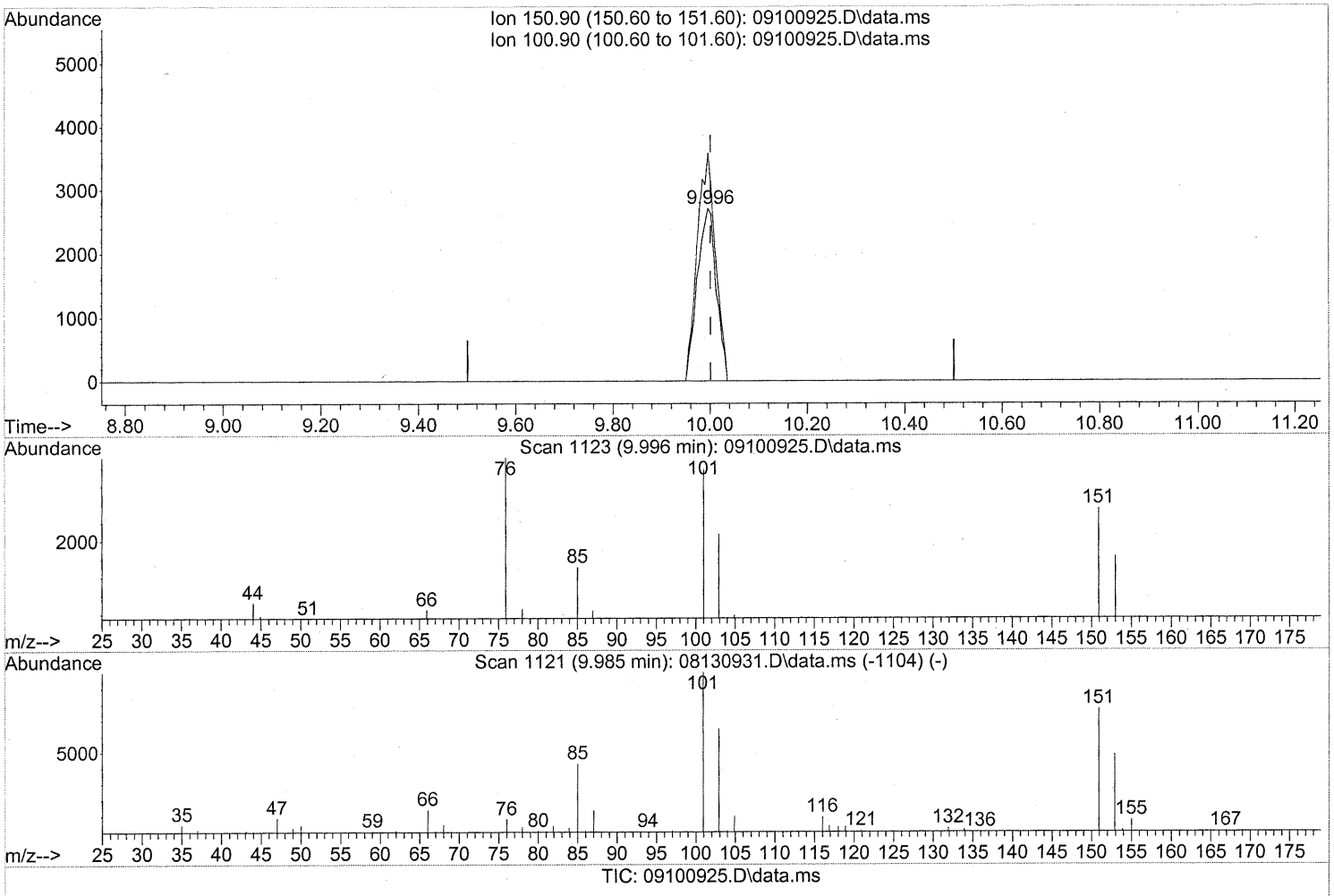
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.996min (-0.006) 0.49ng

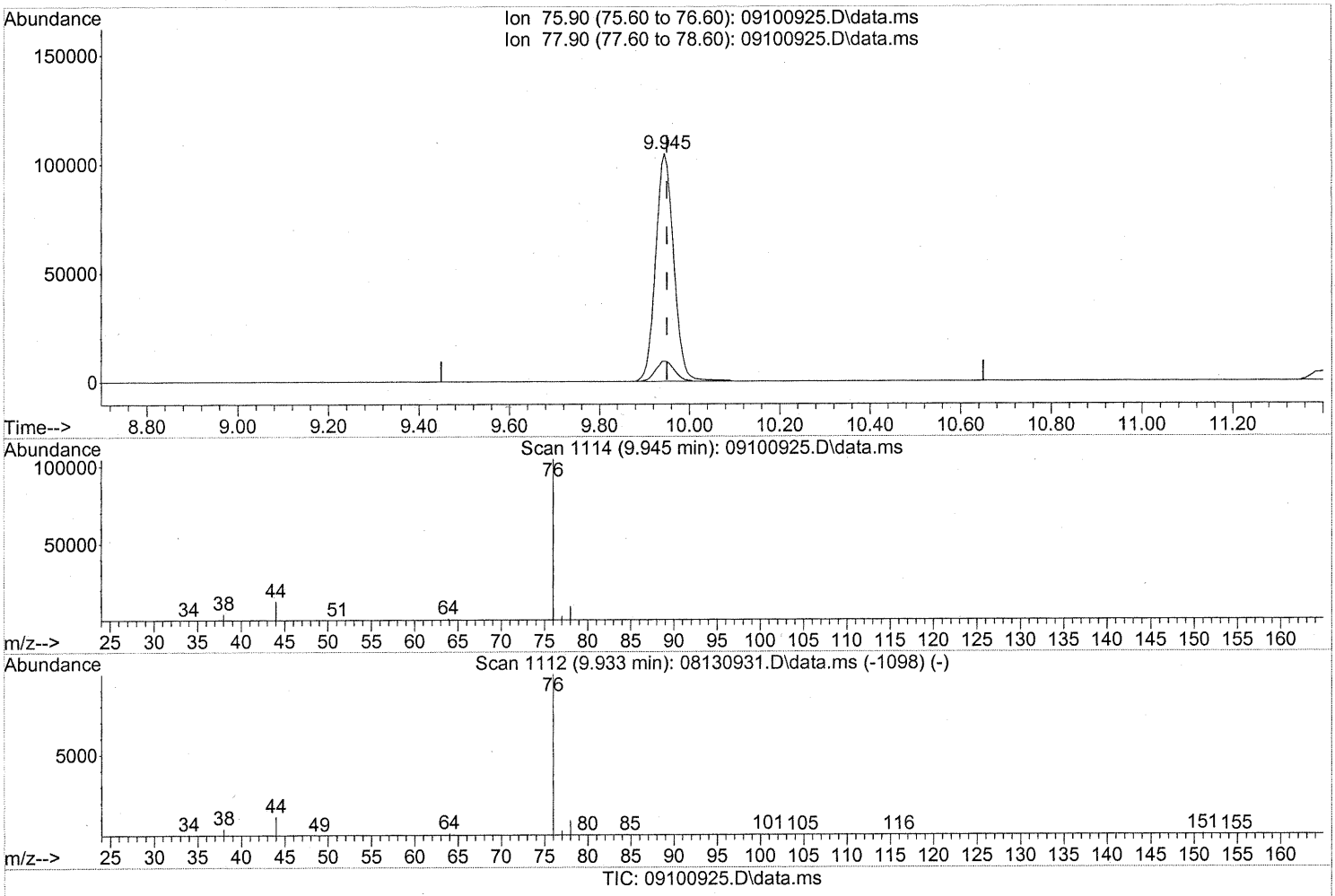
response 7283

Ion	Exp%	Act%
150.90	100	100
100.90	127.40	128.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(22) Carbon Disulfide (T)

9.945min (-0.006) 3.83ng

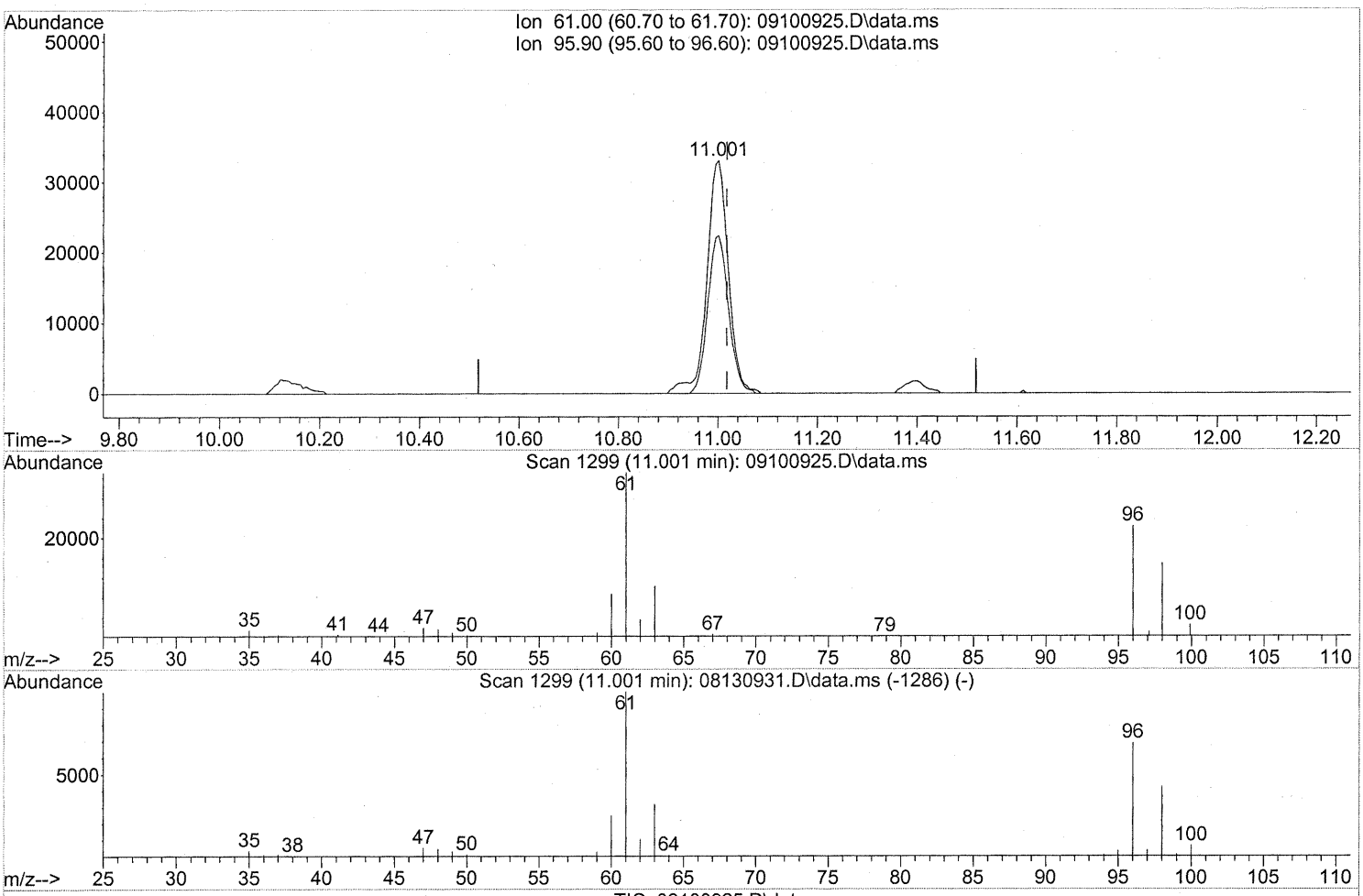
response 291064

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	9.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

11.001min (-0.017) 3.34ng

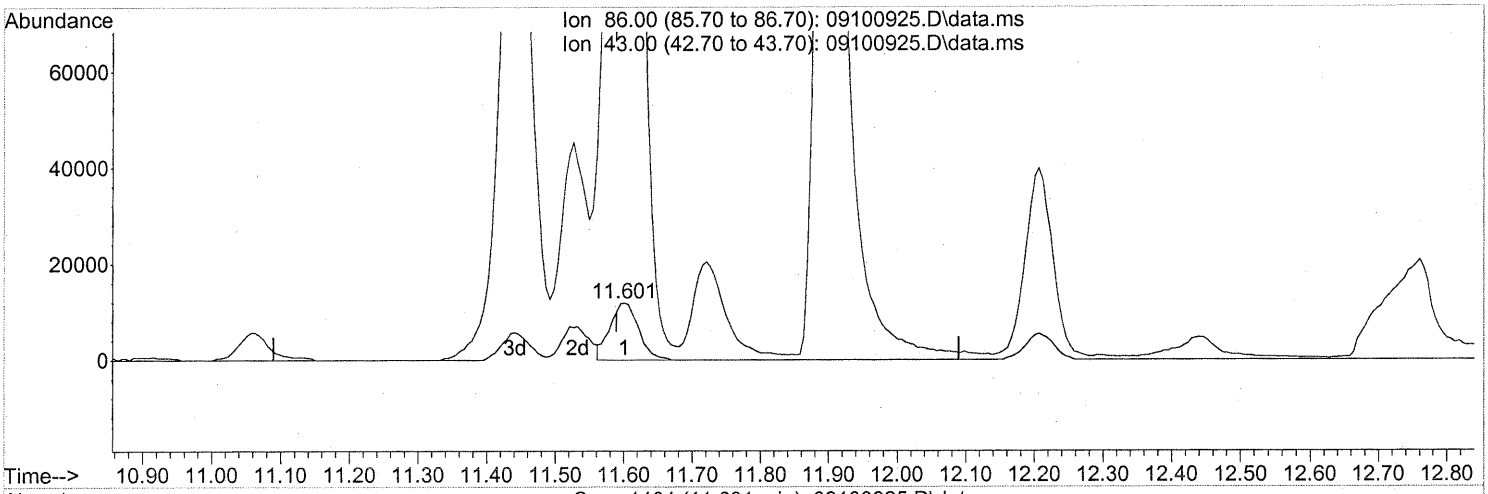
response 99091

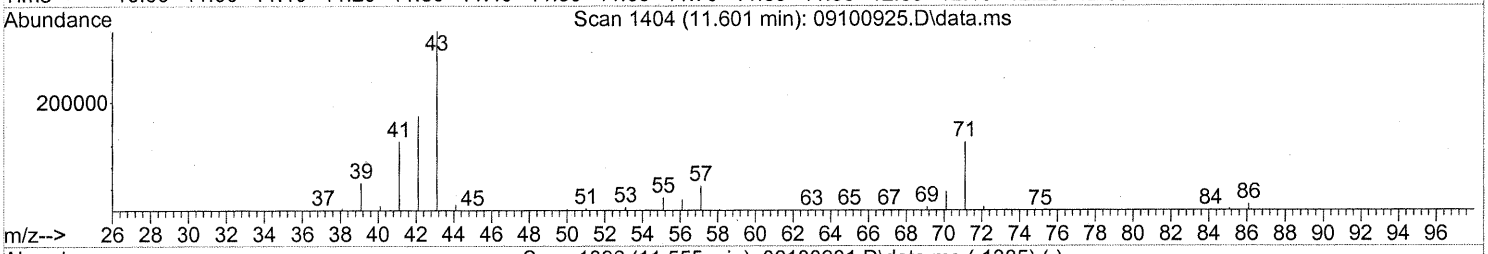
Ion	Exp%	Act%
61.00	100	100
95.90	74.10	65.60
0.00	0.00	0.00
0.00	0.00	0.00

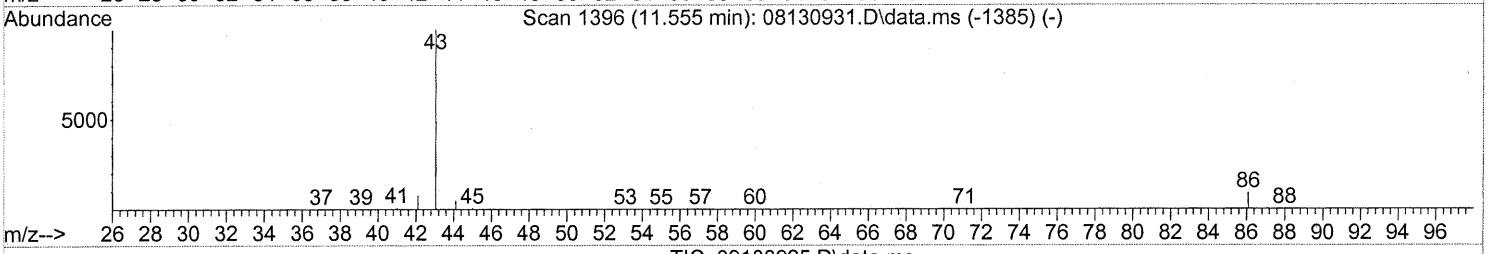
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(26) Vinyl Acetate (T)

11.601min (+0.011) 9.19ng

response 34322

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2659.95#
0.00	0.00	0.00
0.00	0.00	0.00

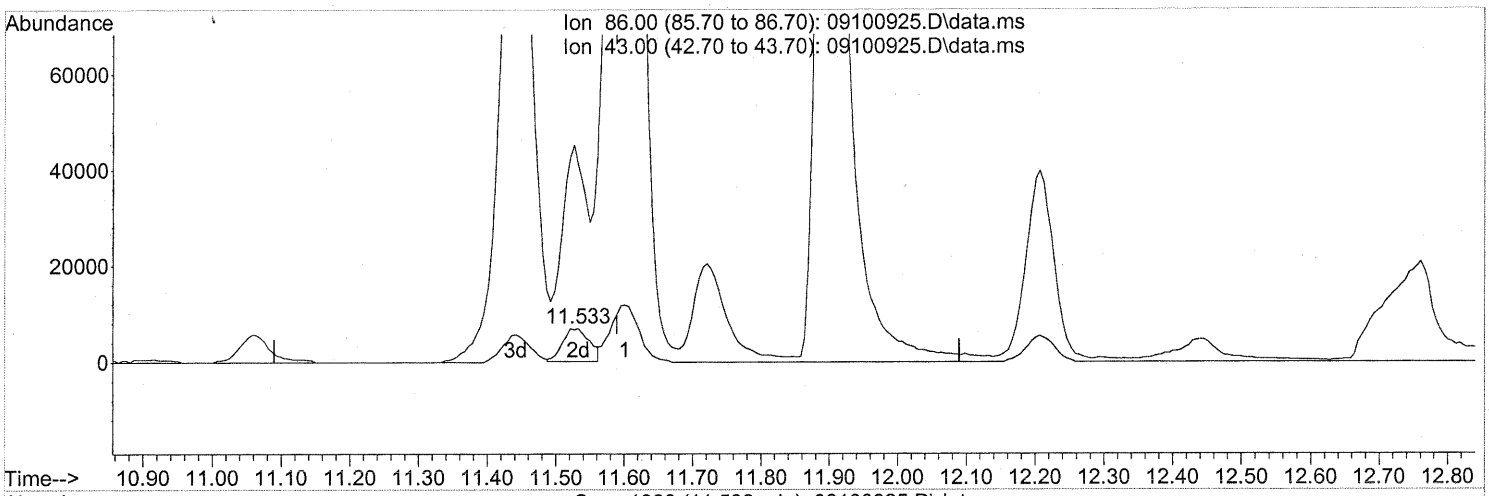
mp

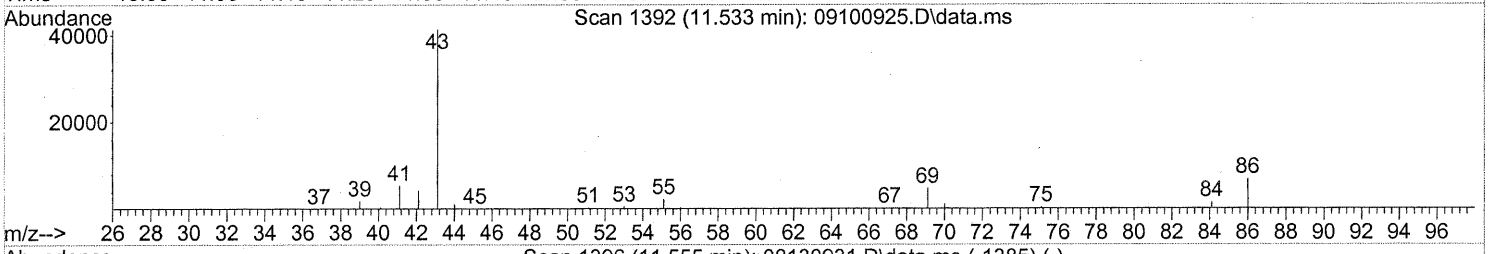
235

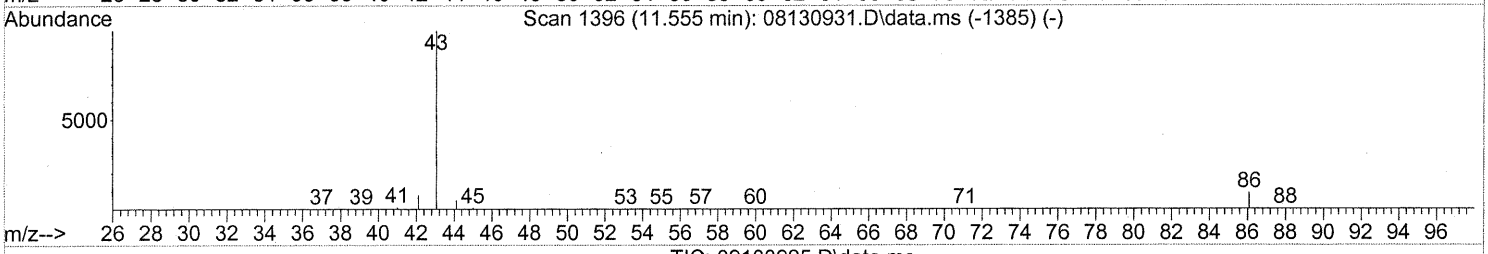
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(26) Vinyl Acetate (T)

11.533min (-0.057) 4.95ng m

response 18512

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	4931.65#
0.00	0.00	0.00
0.00	0.00	0.00

<RL

mp → IC

9/21/09

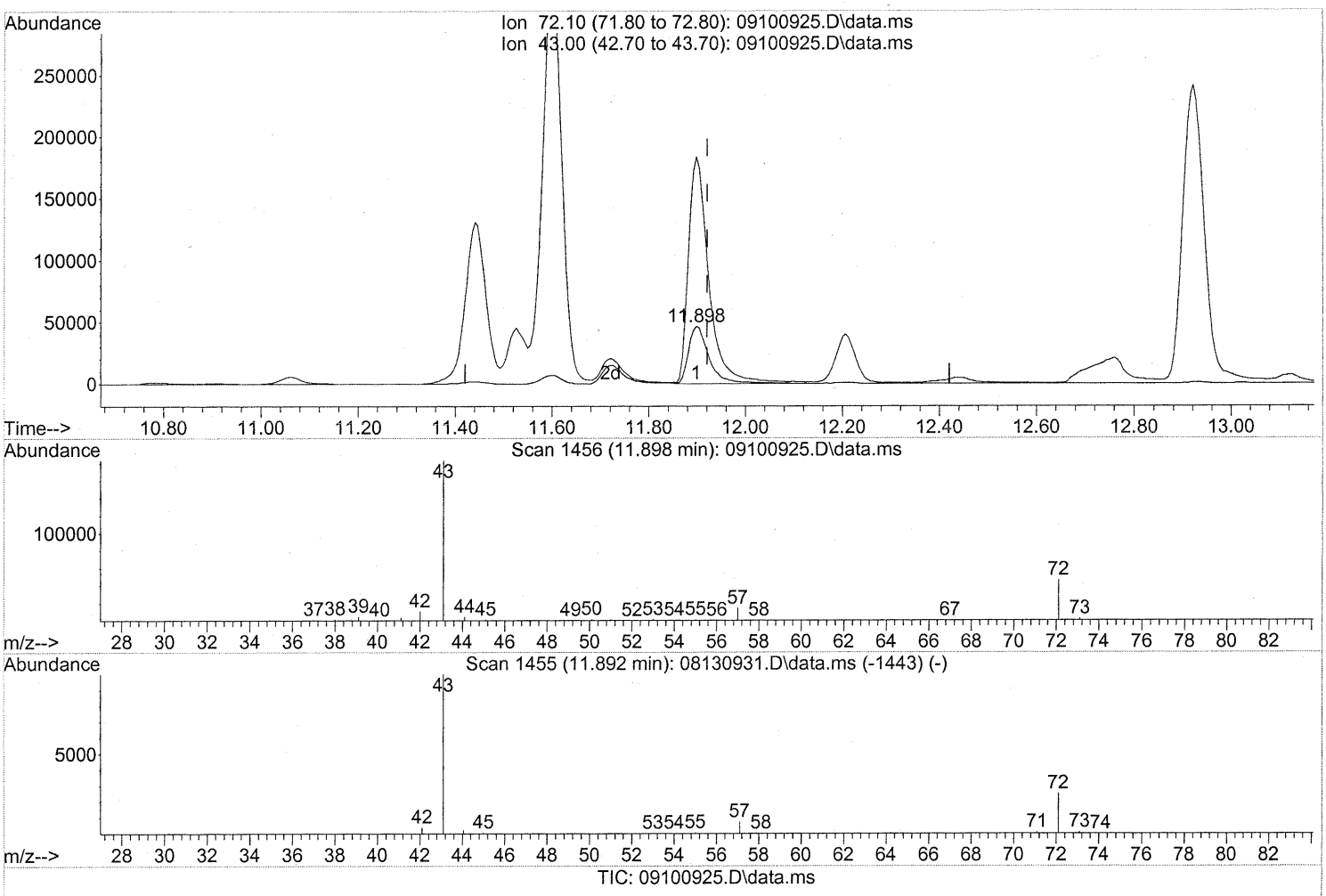
9/21/09

236

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

11.898min (-0.023) 11.24ng

response 135173

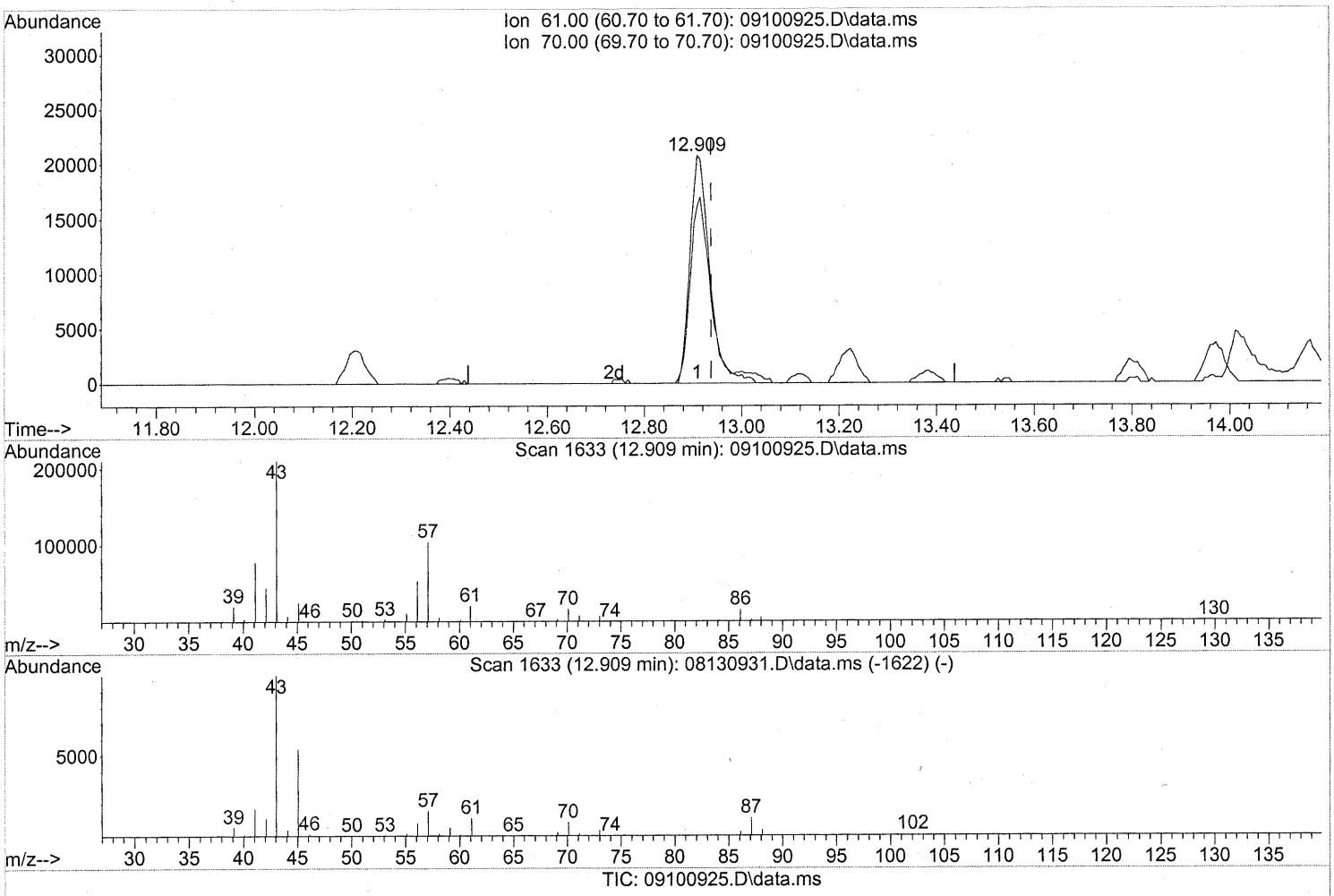
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	385.59
0.00	0.00	0.00
0.00	0.00	0.00

237

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 7.50ng

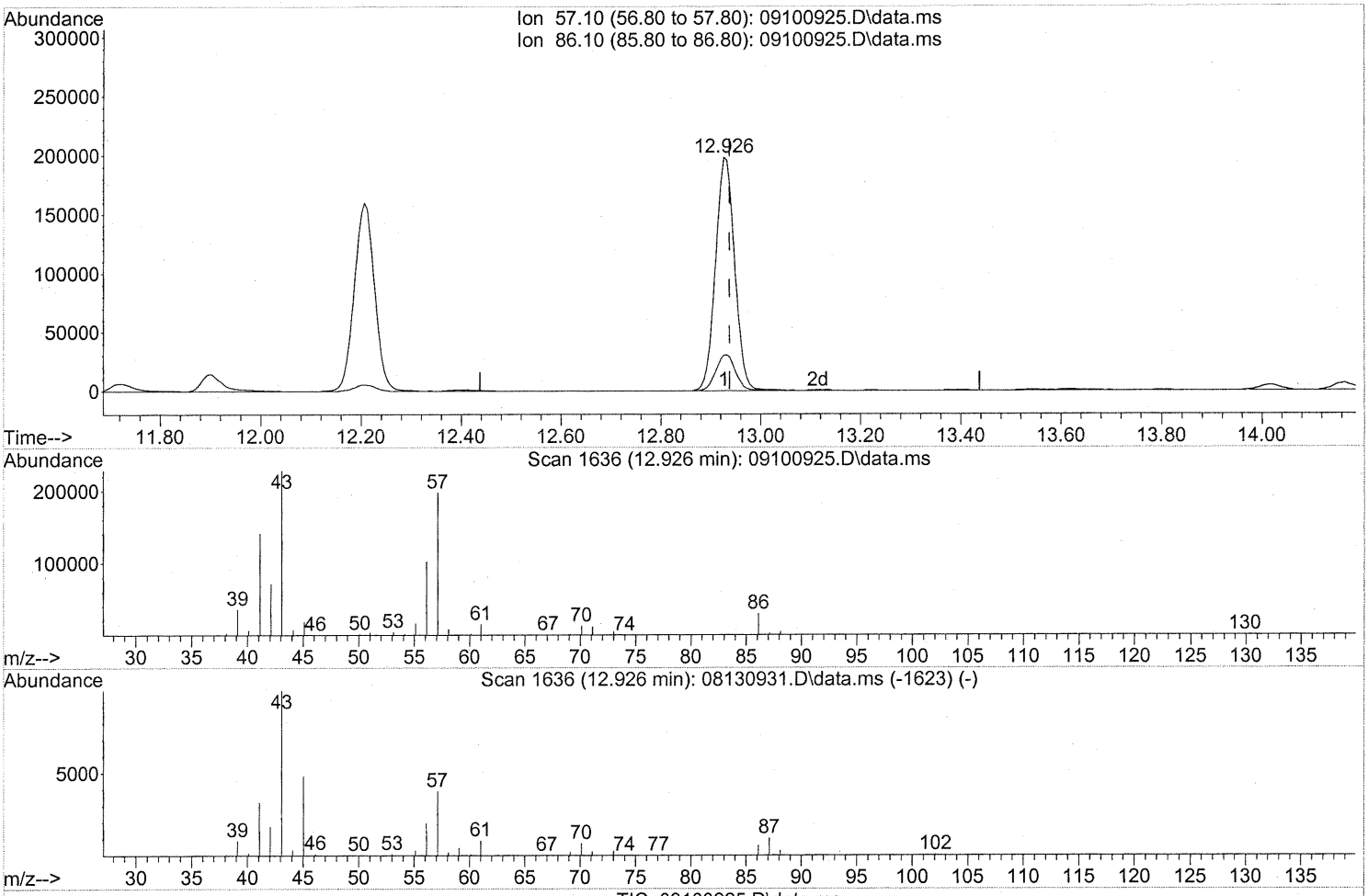
response 58472

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	87.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(31) n-Hexane (T)

12.926min (-0.011) 13.76ng

response 523239

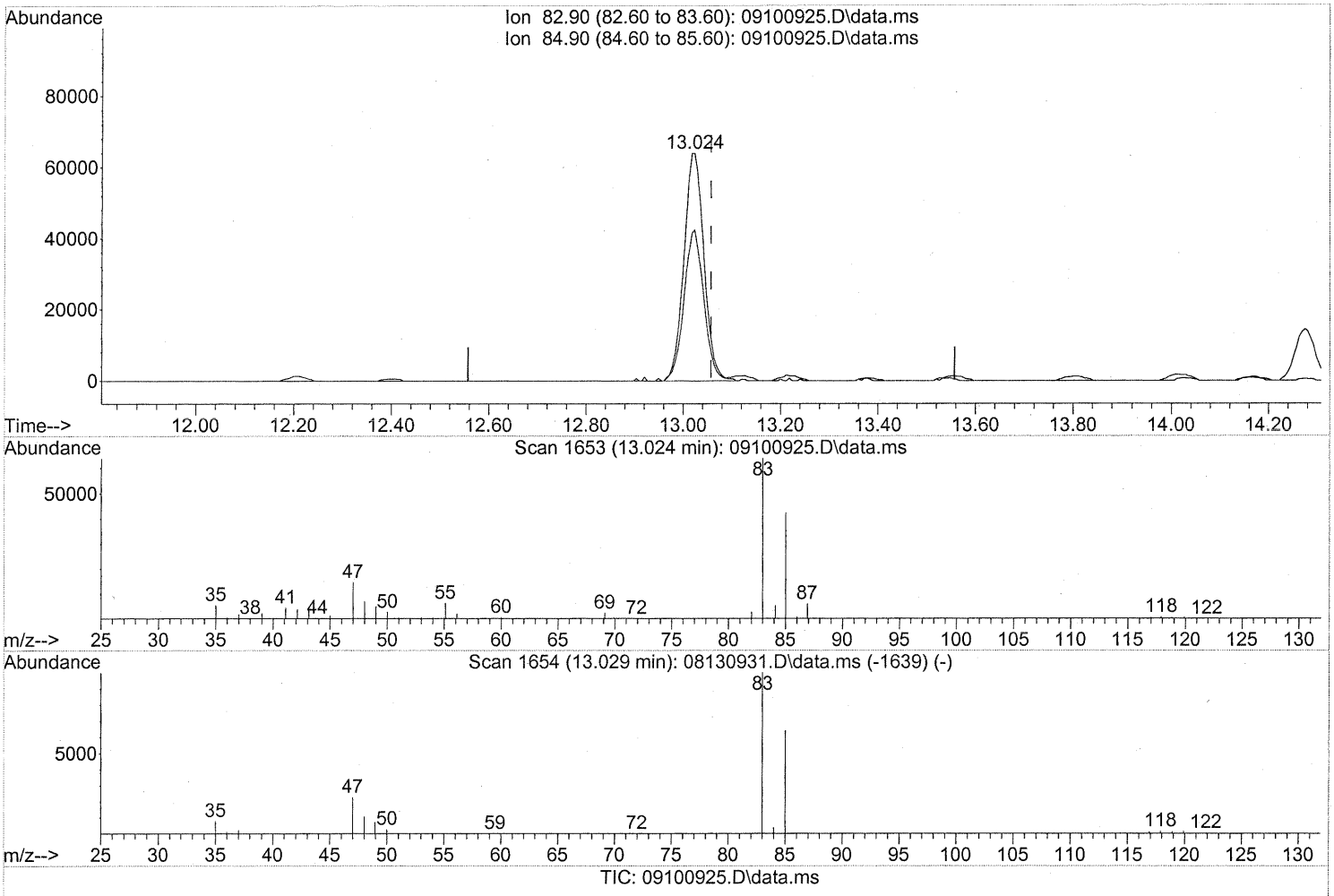
Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.56
0.00	0.00	0.00
0.00	0.00	0.00

239

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(32) Chloroform (T)

13.024min (-0.034) 5.75ng

response 182849

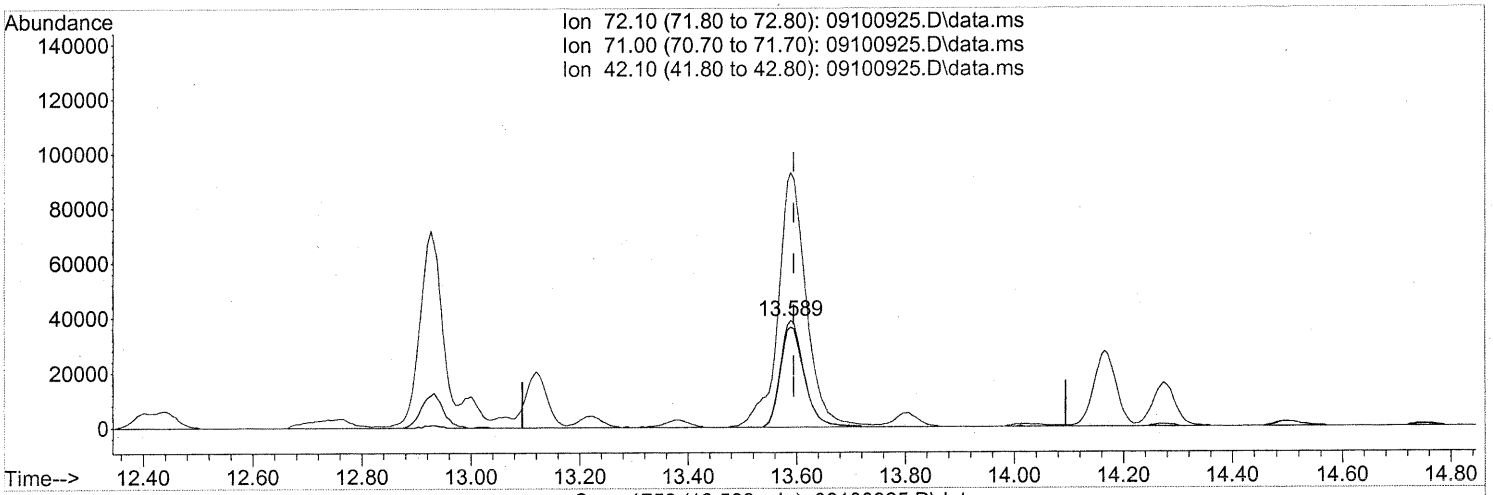
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	65.38
0.00	0.00	0.00
0.00	0.00	0.00

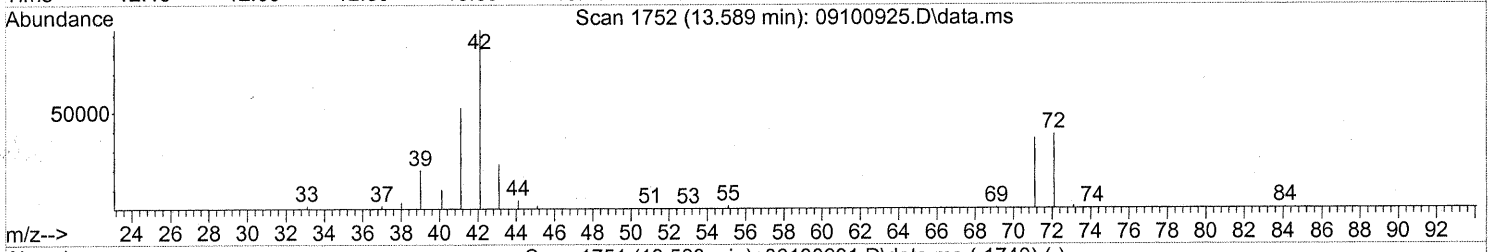
240

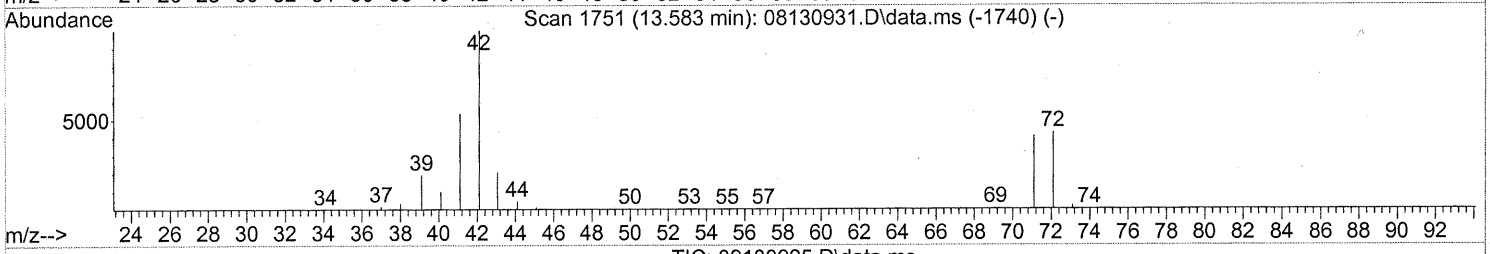
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(34) Tetrahydrofuran (THF) (T)

13.589min (-0.006) 9.34ng

response 116831

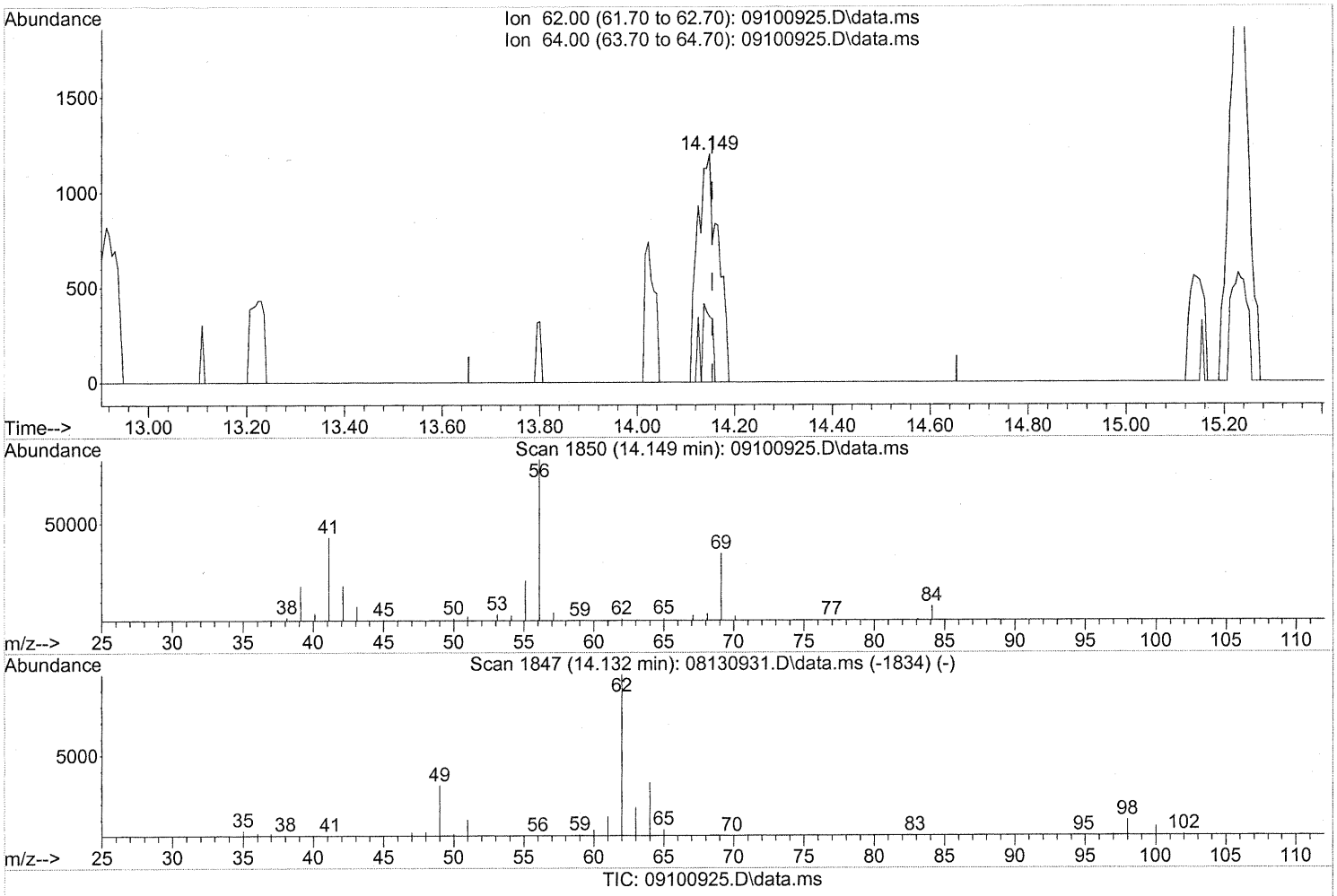
Ion	Exp%	Act%
72.10	100	100
71.00	95.20	95.02
42.10	206.50	284.55#
0.00	0.00	0.00

241

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(36) 1,2-Dichloroethane (T)

14.149min (-0.006) 0.14ng

response 3485

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	17.68
0.00	0.00	0.00
0.00	0.00	0.00

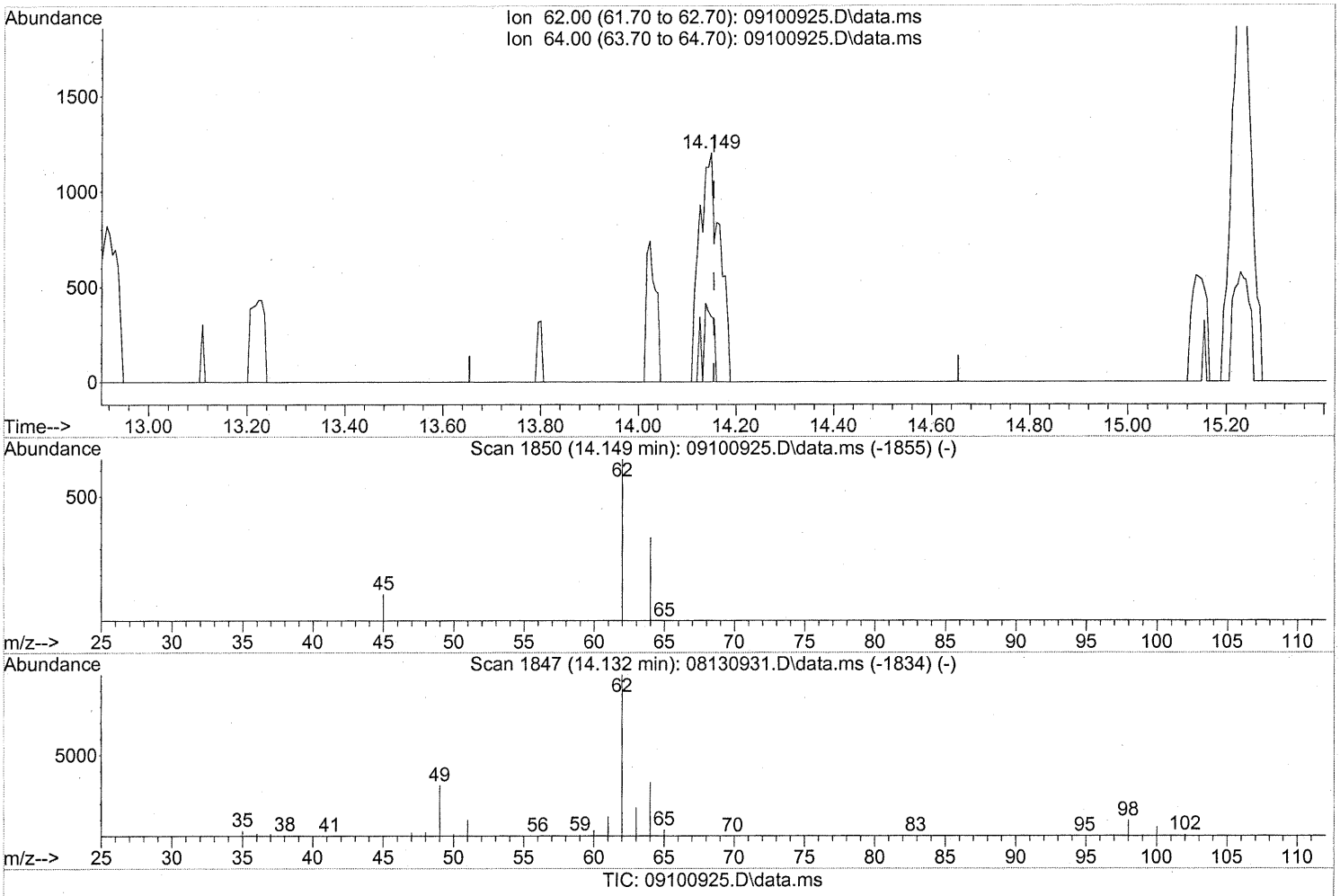
Before subtraction

242

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(36) 1,2-Dichloroethane (T)

14.149min (-0.006) 0.14ng

response 3485

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	17.68
0.00	0.00	0.00
0.00	0.00	0.00

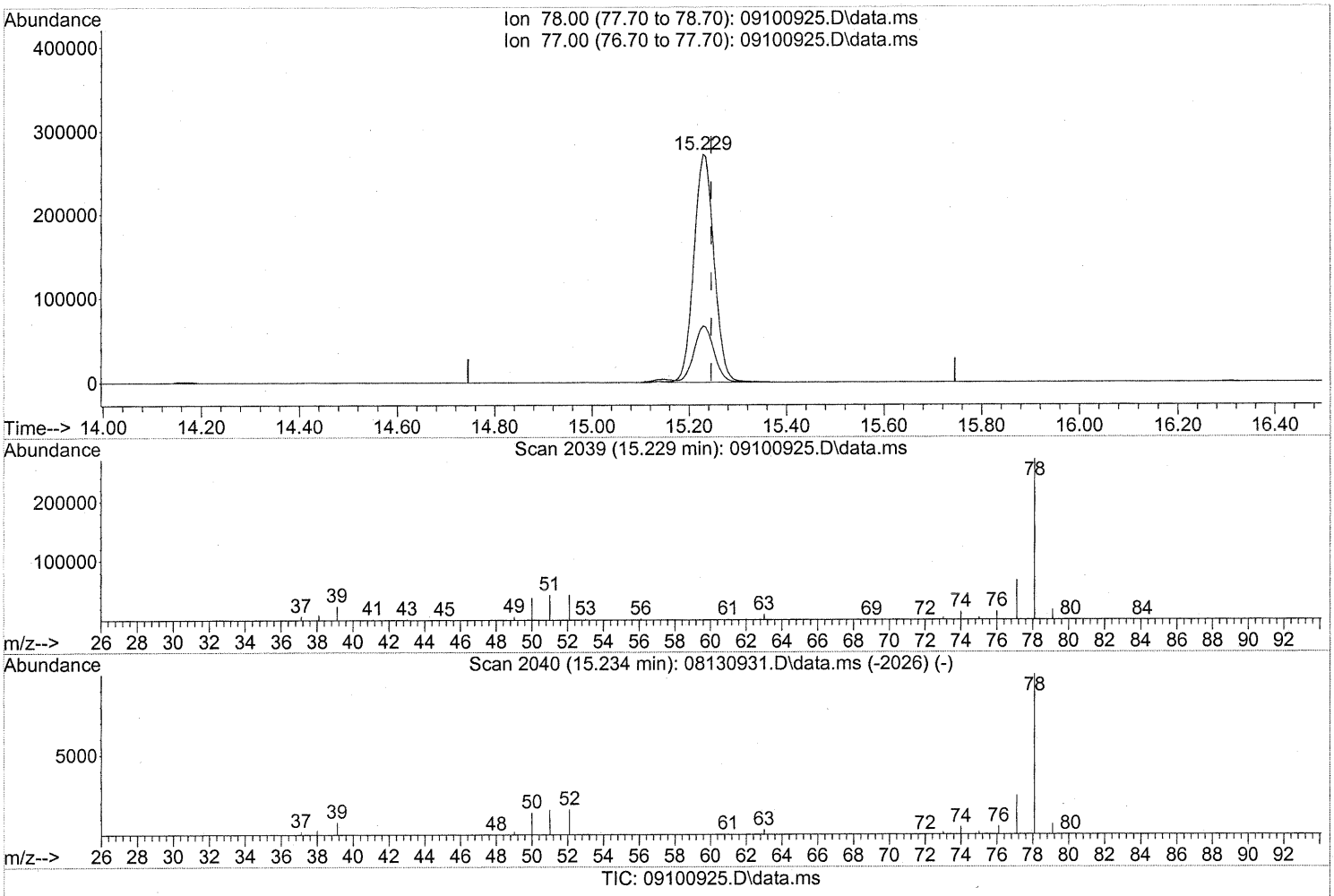
After subtraction

243

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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



(41) Benzene (T)

15.229min (-0.017) 9.22ng

response 777445

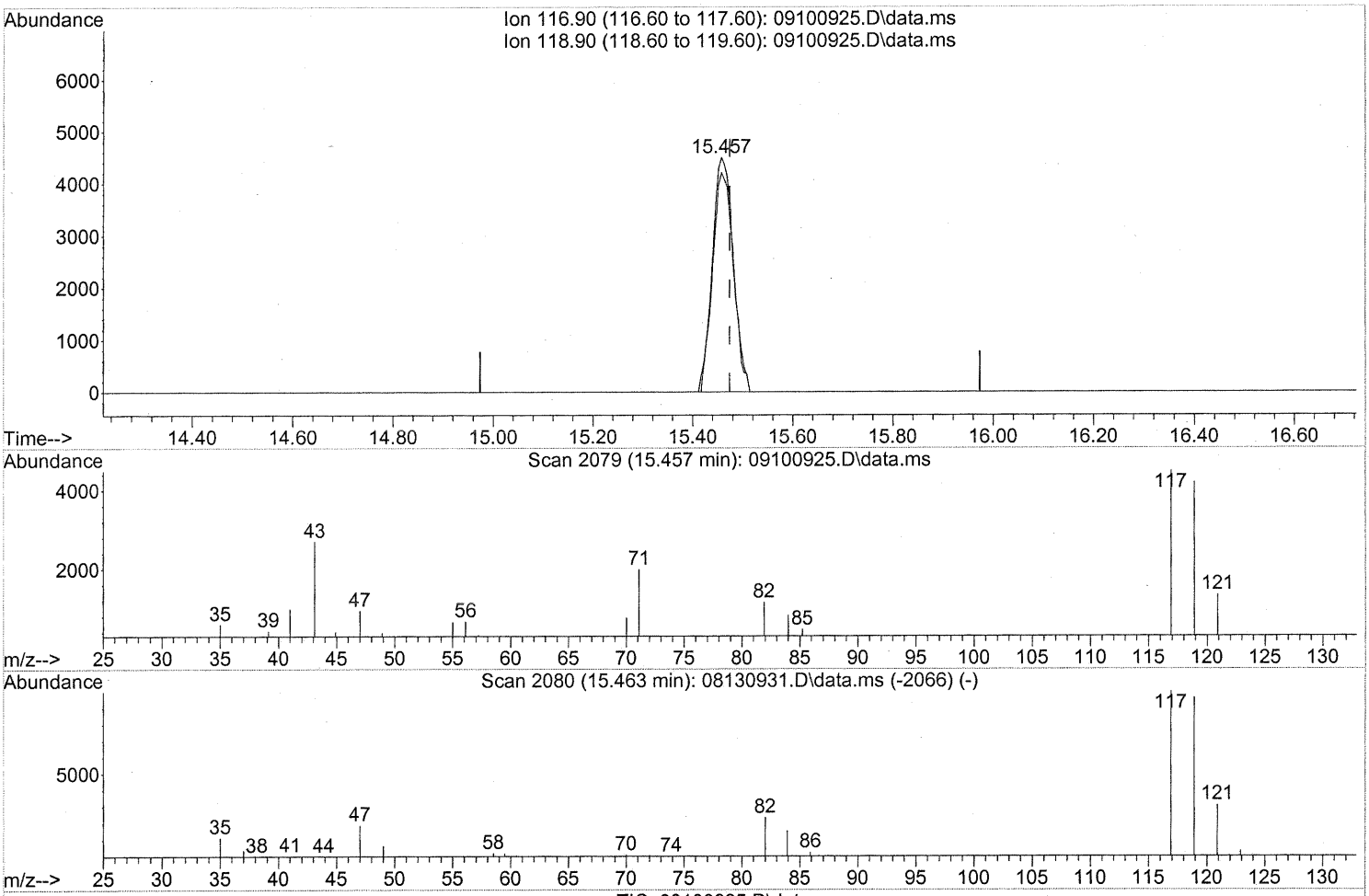
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.40
0.00	0.00	0.00
0.00	0.00	0.00

244

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.55ng

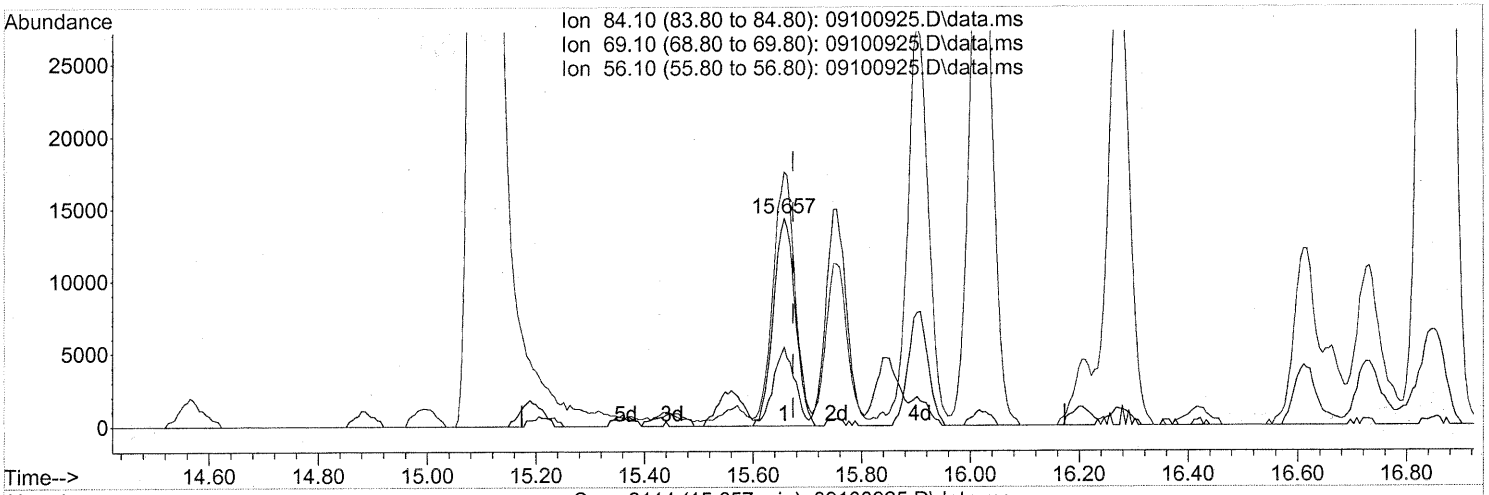
response 12973

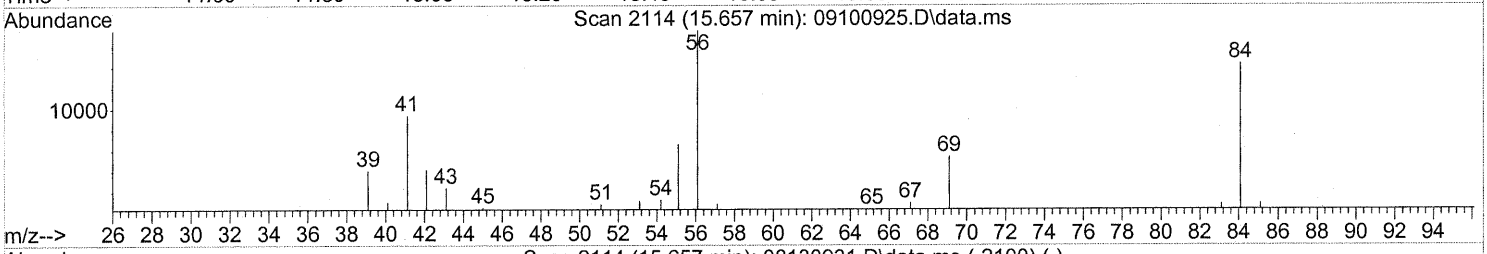
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	94.53
0.00	0.00	0.00
0.00	0.00	0.00

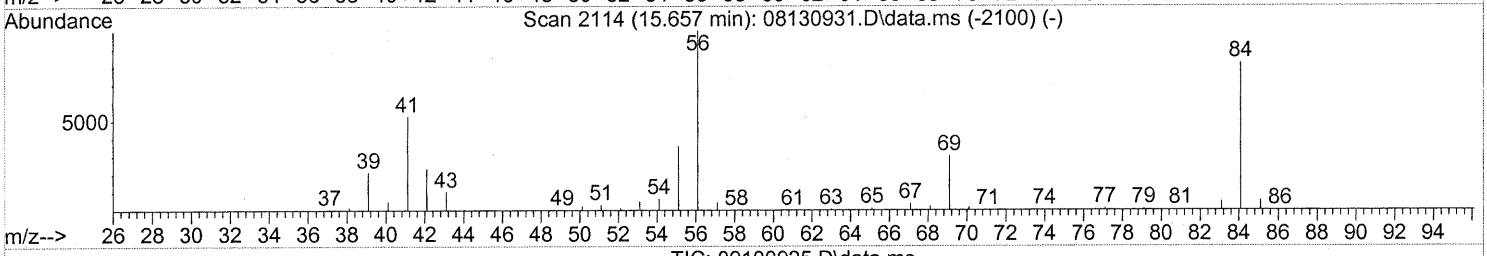
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(43) Cyclohexane (T)

15.657min (-0.017) 1.22ng

response 39933

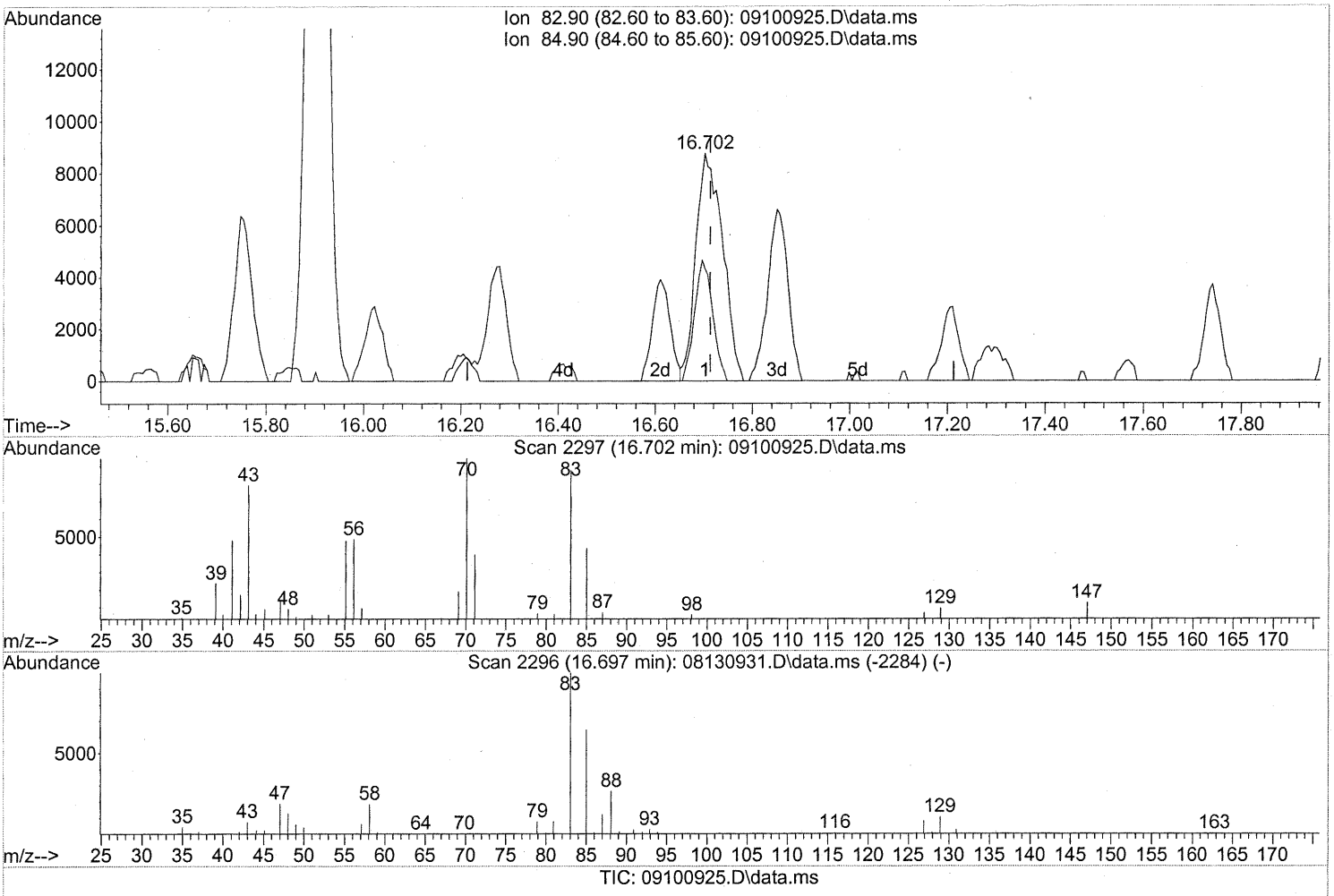
Ion	Exp%	Act%
84.10	100	100
69.10	34.80	36.64
56.10	107.30	119.86
0.00	0.00	0.00

246

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(46) Bromodichloromethane (T)

16.702min (-0.011) 1.36ng

response 33417

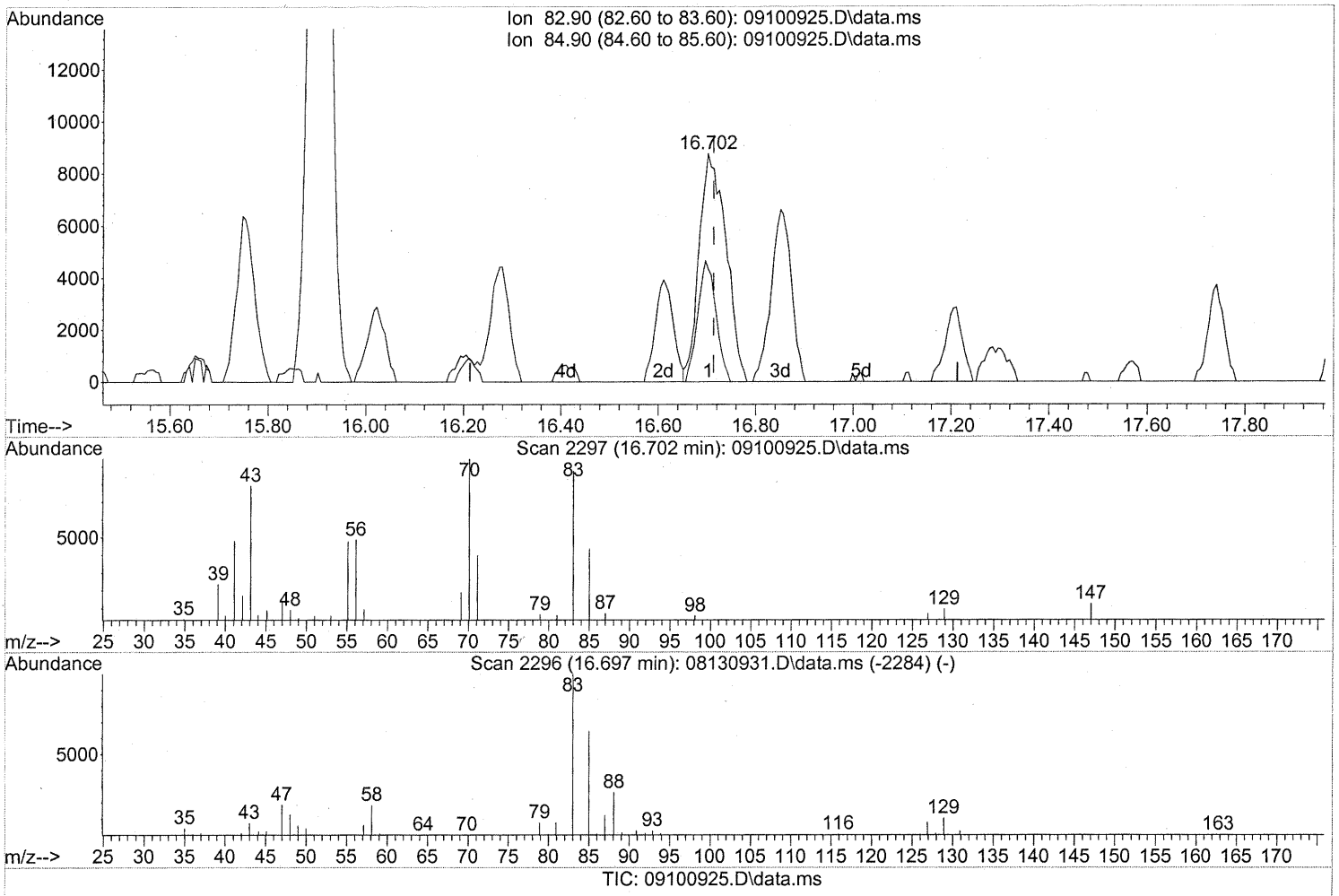
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	35.92#
0.00	0.00	0.00
0.00	0.00	0.00

247

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(46) Bromodichloromethane (T)

16.702min (-0.011) 1.36ng

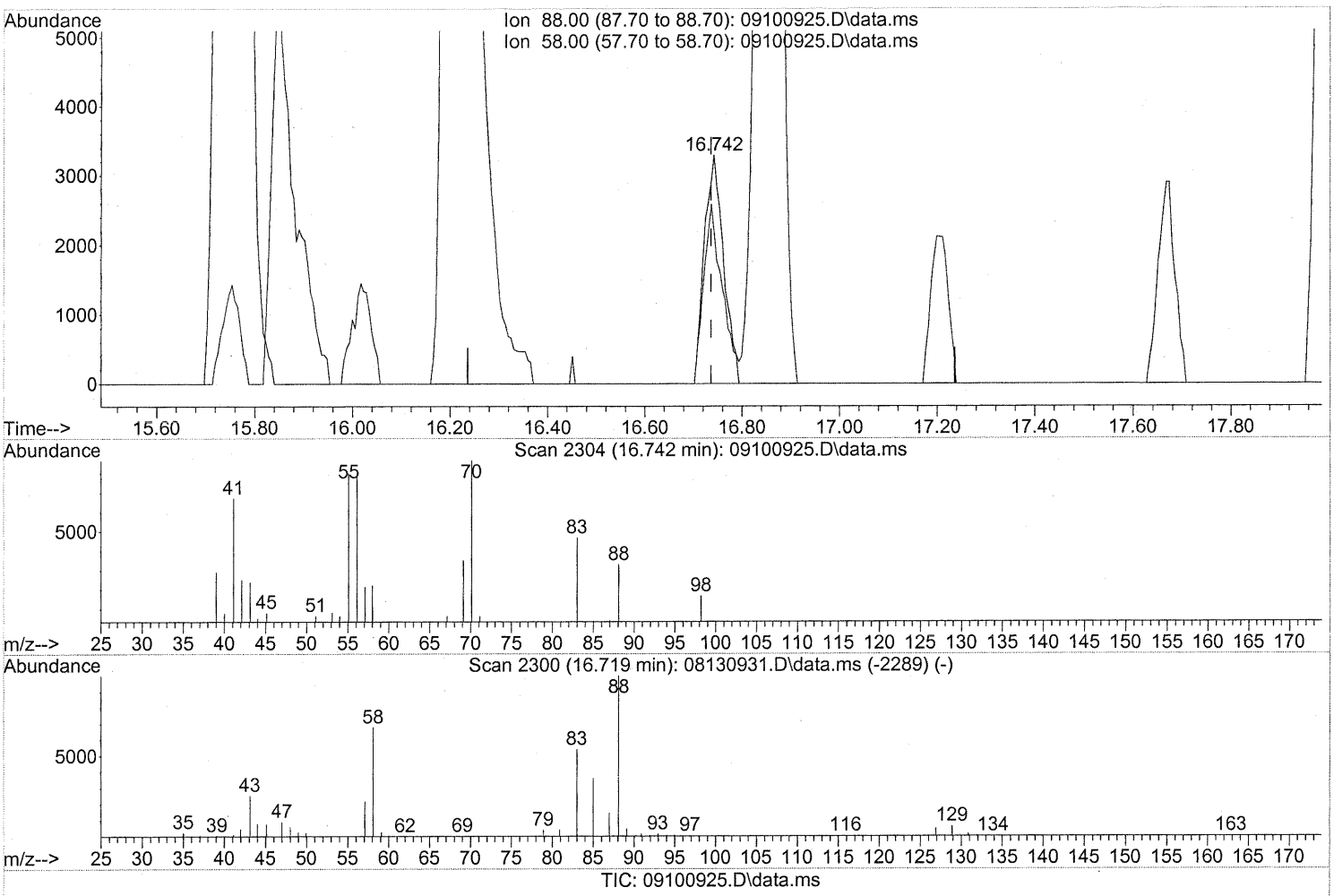
response 33417

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	35.92#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(48) 1,4-Dioxane (T)

16.742min (+0.006) 0.60ng

response 9060

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	76.74
0.00	0.00	0.00
0.00	0.00	0.00

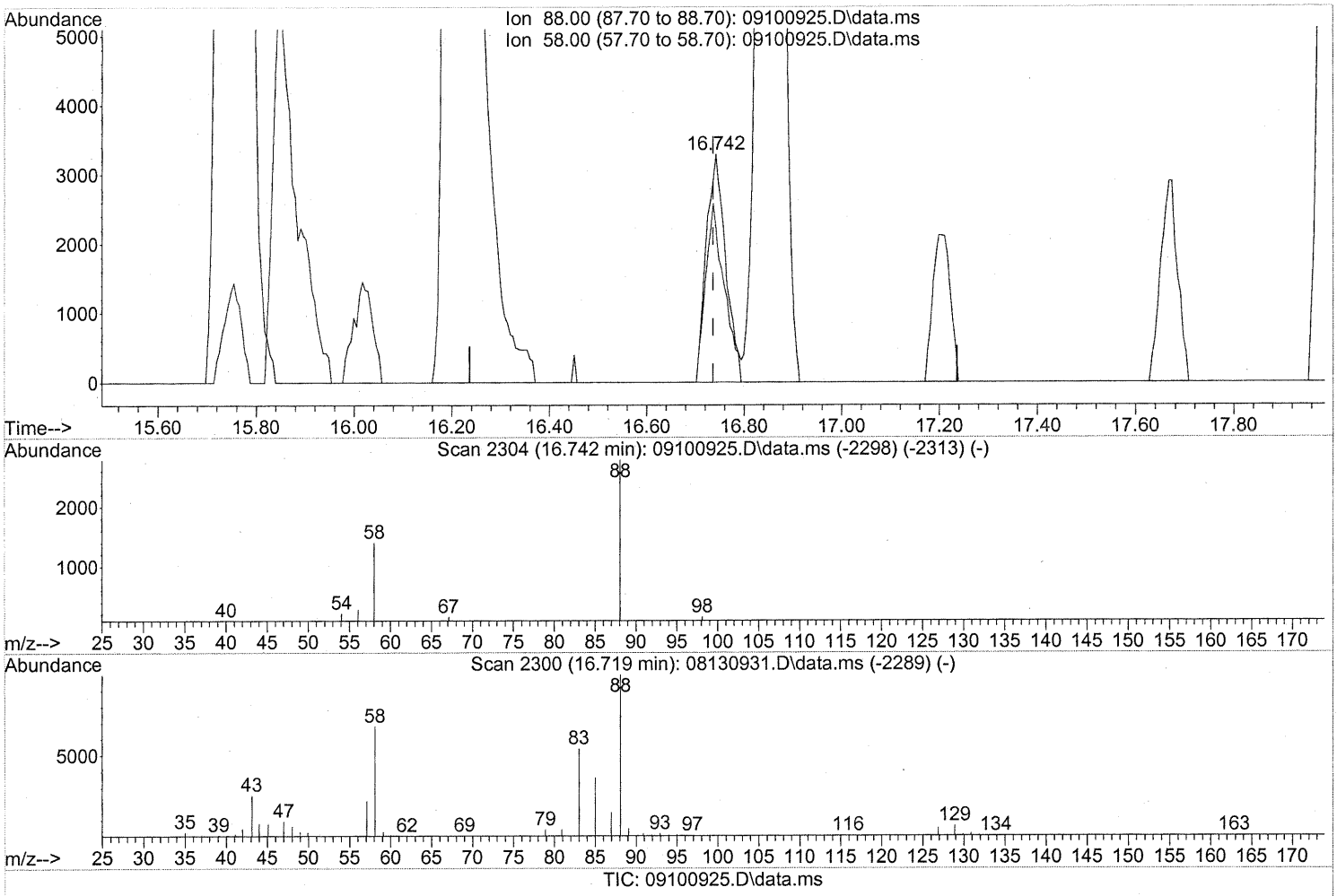
Before subtraction

249

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(48) 1,4-Dioxane (T)

16.742min (+0.006) 0.60ng

response 9060

Ion	Exp%	Act%
88.00	100	100
58.00	59.00	76.74
0.00	0.00	0.00
0.00	0.00	0.00

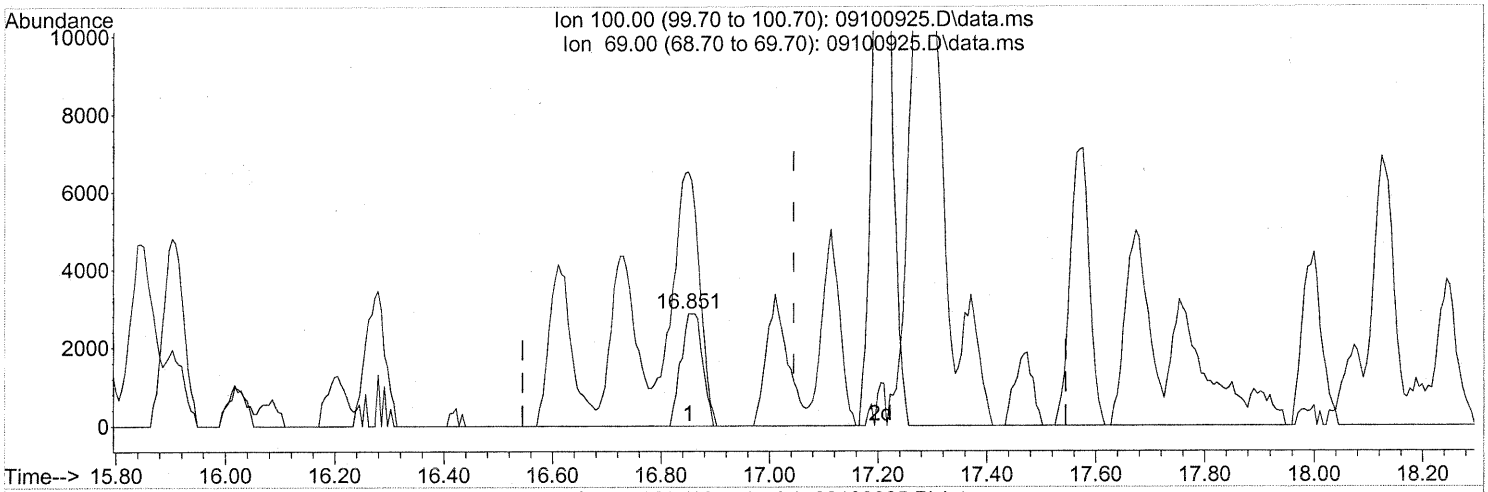
After subtraction

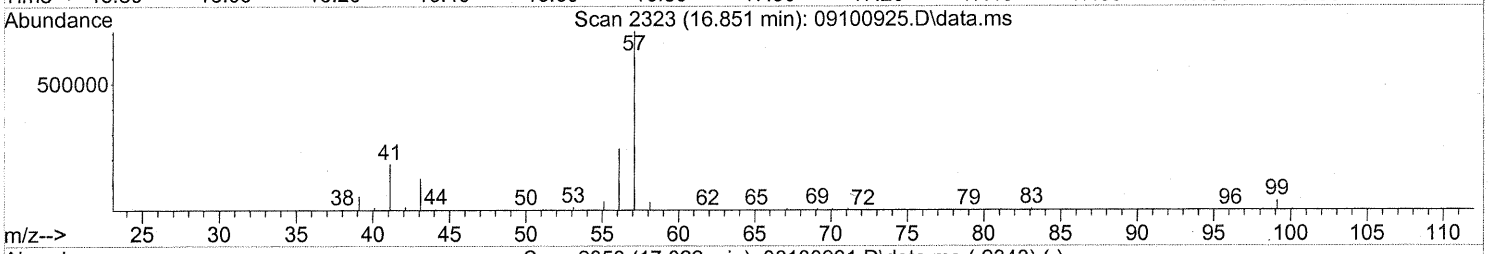
250

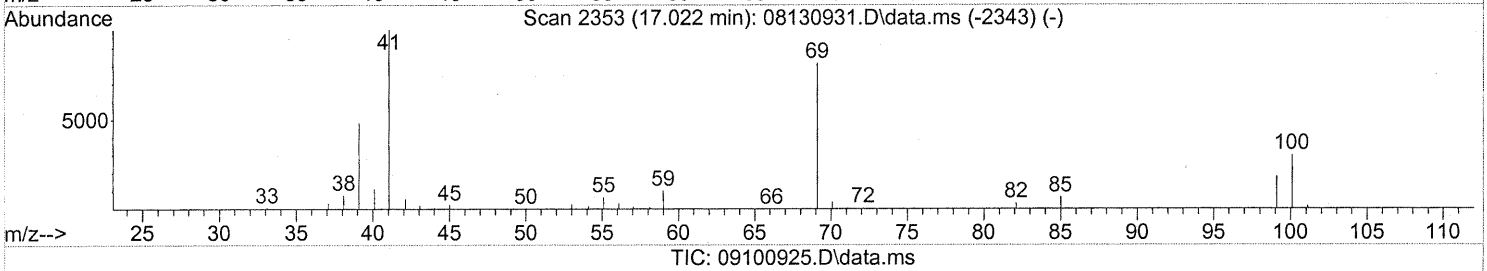
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(50) Methyl Methacrylate (T)

16.851min (-0.194) 0.93ng

response 7837

Ion	Exp%	Act%
100.00	100	100
69.00	261.10	290.83#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

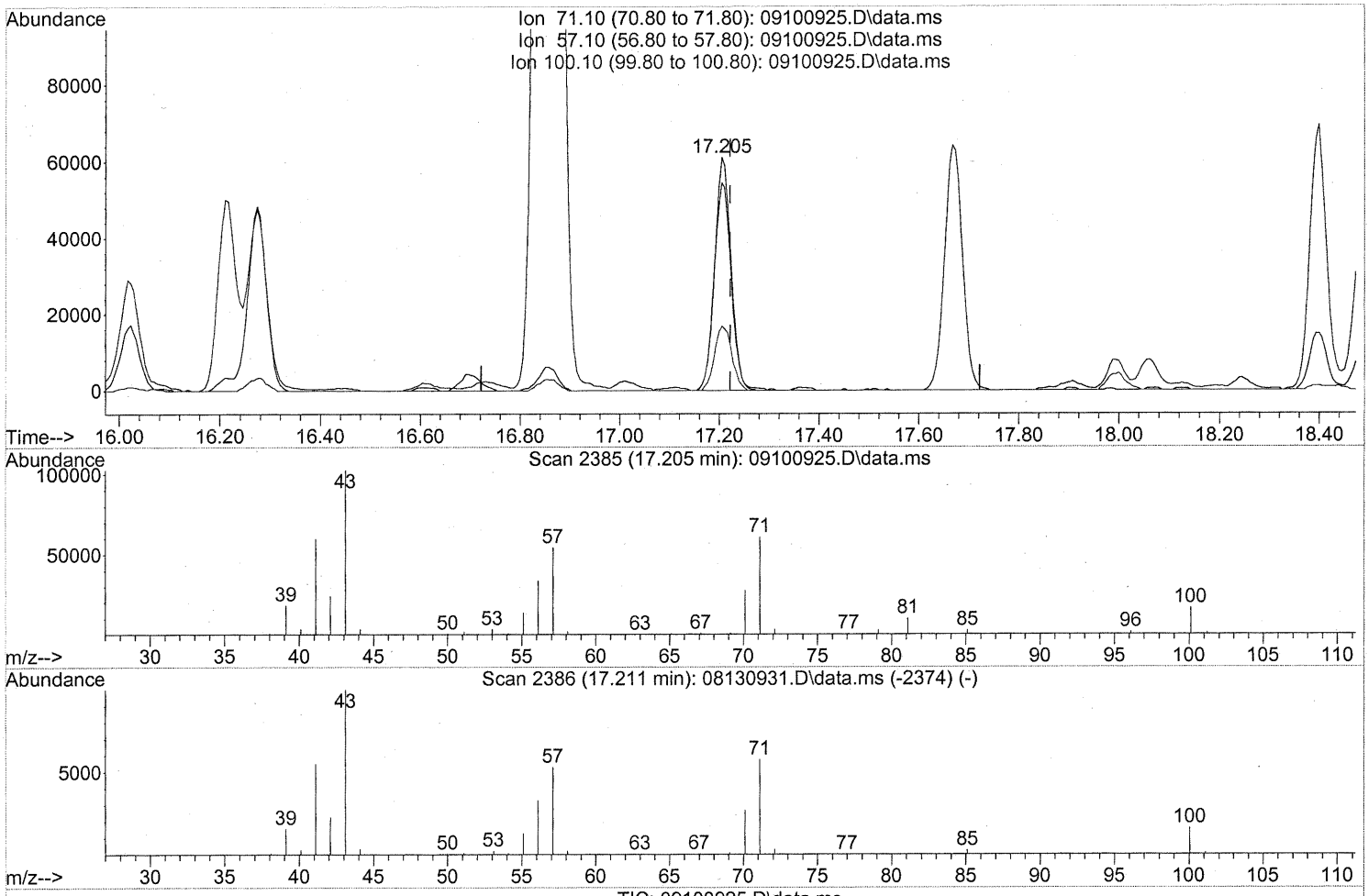
9/21/09

251

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(51) n-Heptane (T)

17.205min (-0.017) 6.19ng

response 138996

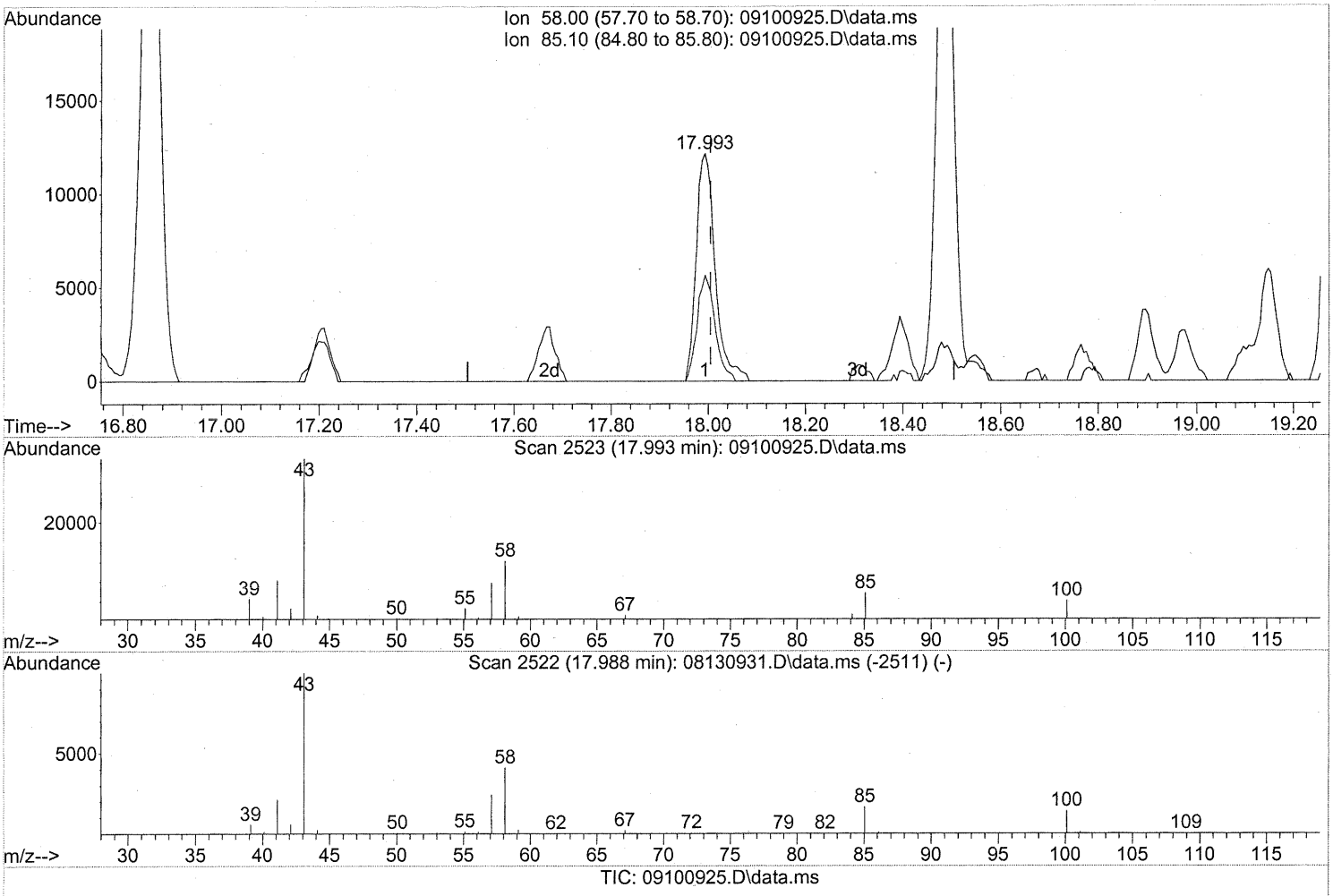
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	92.49
100.10	30.70	28.90
0.00	0.00	0.00

252

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

17.993min (-0.012) 1.80ng

response 32858

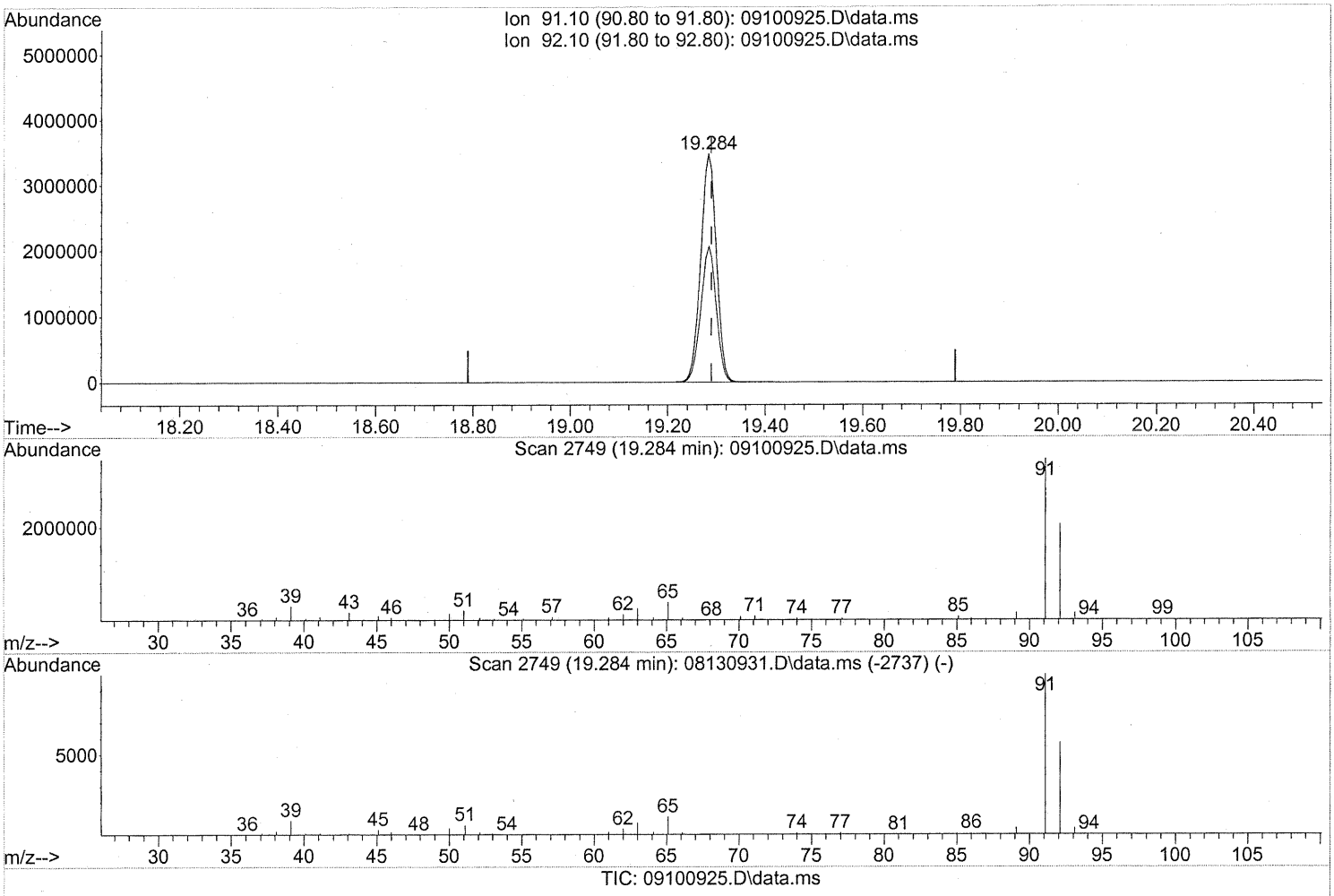
Ion	Exp%	Act%
58.00	100	100
85.10	45.40	43.76
0.00	0.00	0.00
0.00	0.00	0.00

253

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(58) Toluene (T)

19.284min (-0.006) 85.25ng

response 7699634

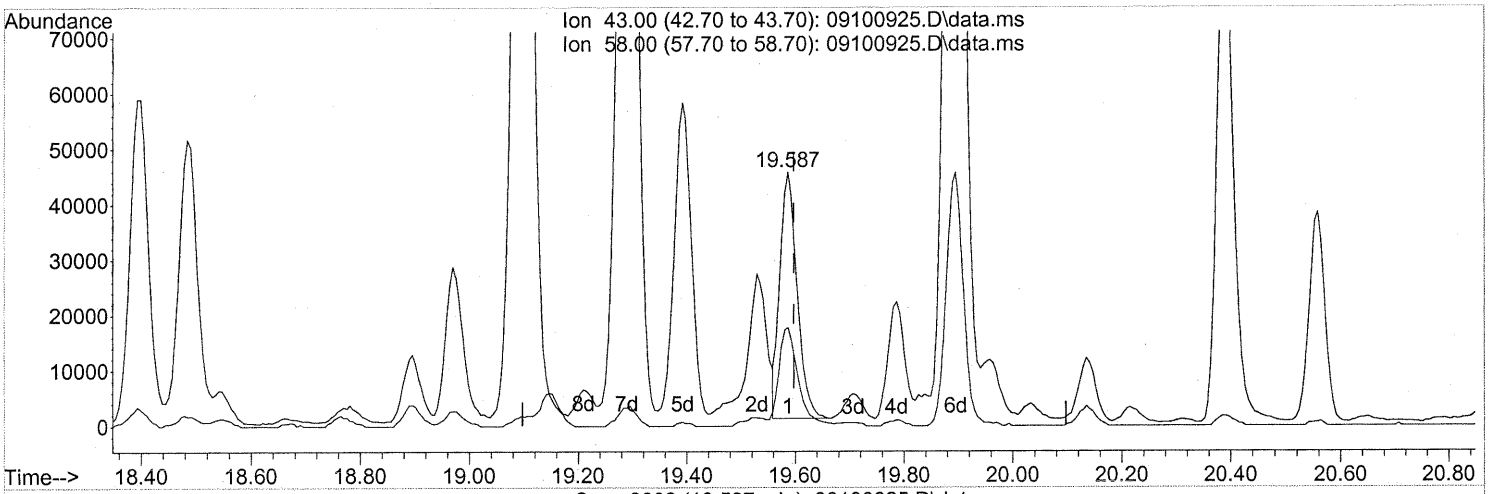
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	58.55
0.00	0.00	0.00
0.00	0.00	0.00

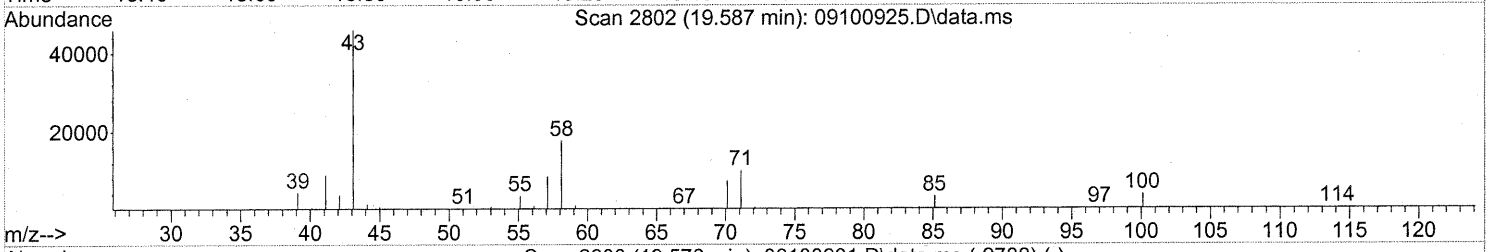
254

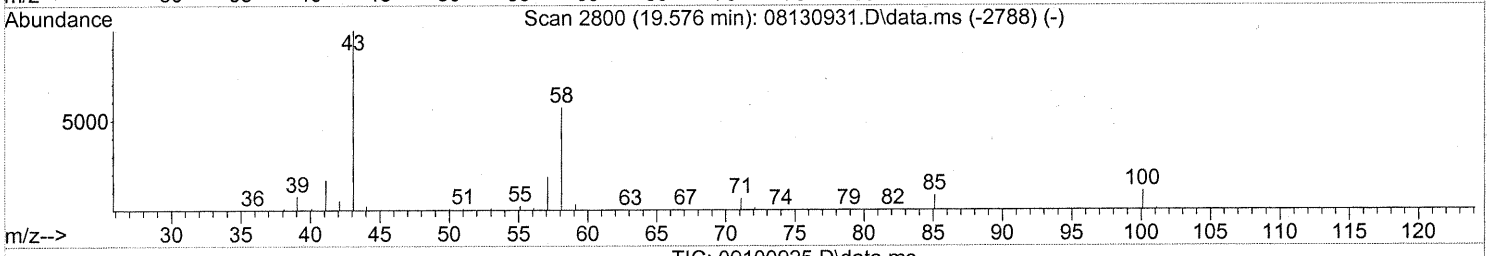
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(59) 2-Hexanone (T)

19.587min (-0.011) 2.07ng

response 97402

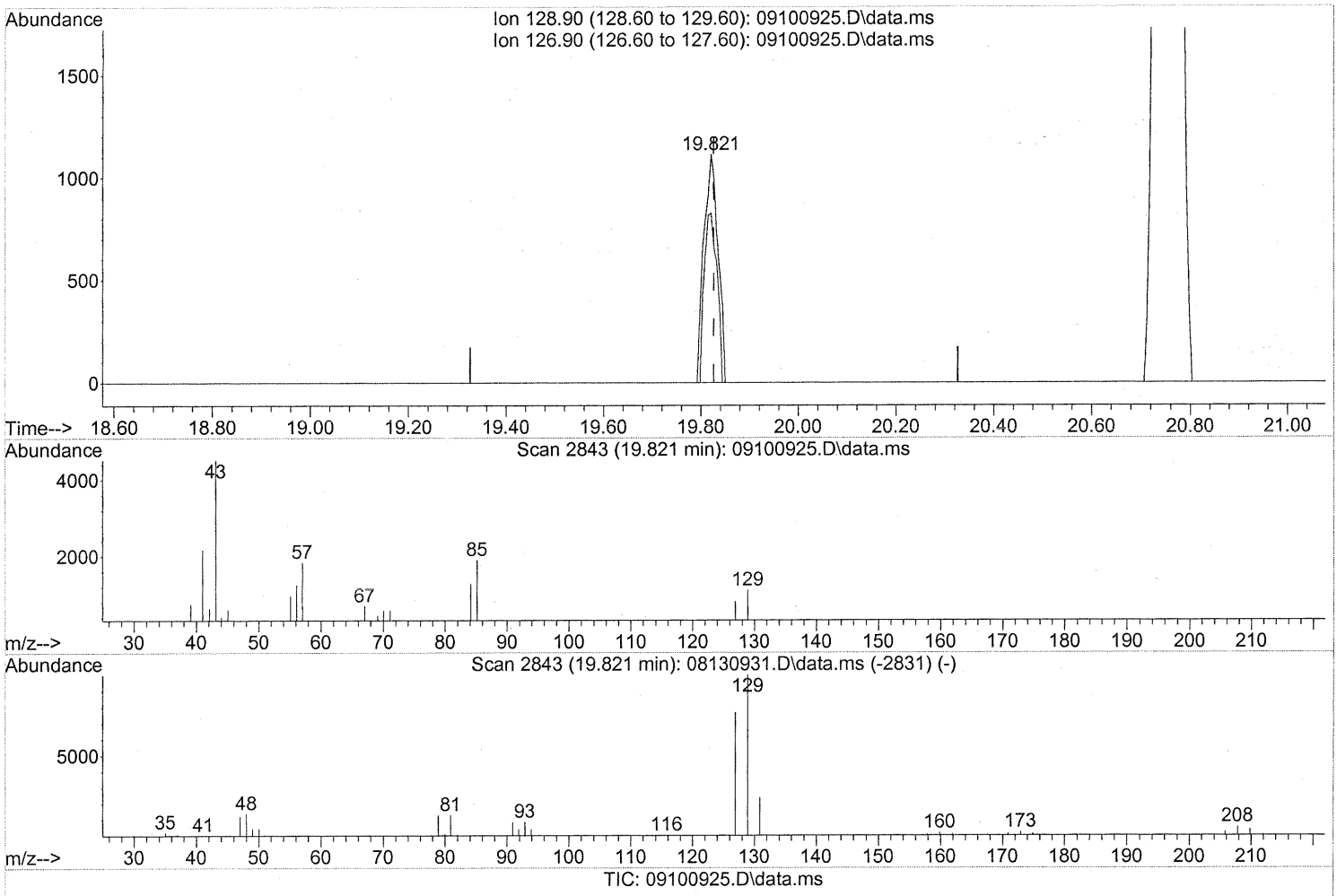
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	44.61
0.00	0.00	0.00
0.00	0.00	0.00

255

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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



(60) Dibromochloromethane (T)

19.821min (-0.006) 0.12ng

response 2238

Ion	Exp%	Act%
128.90	100	100
126.90	77.60	66.53
0.00	0.00	0.00
0.00	0.00	0.00

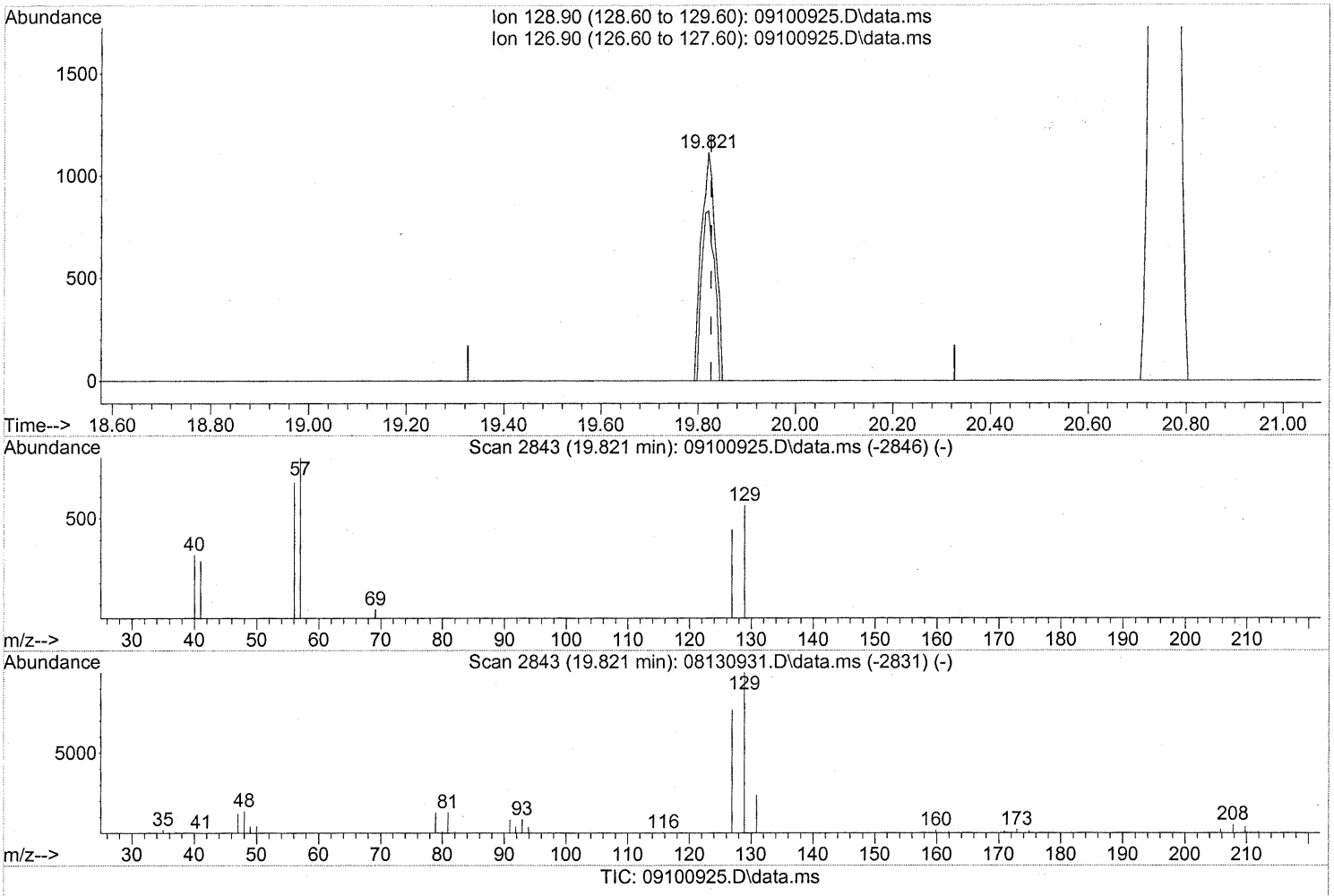
Before subtraction

256

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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



(60) Dibromochloromethane (T)

19.821min (-0.006) 0.12ng

response 2238

Ion	Exp%	Act%
128.90	100	100
126.90	77.60	66.53
0.00	0.00	0.00
0.00	0.00	0.00

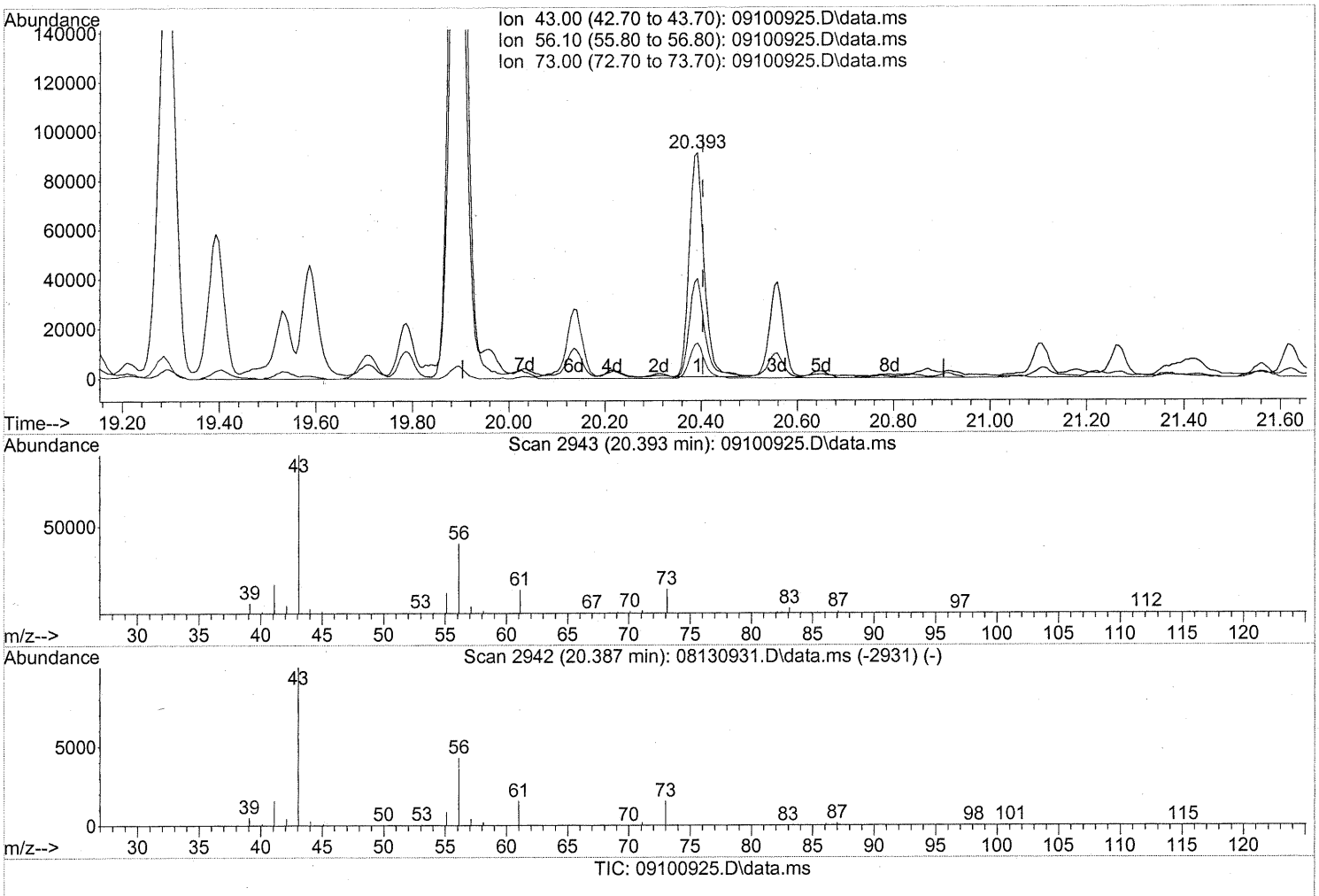
After subtraction

257

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(62) n-Butyl Acetate (T)

20.393min (-0.011) 3.80ng

response 194520

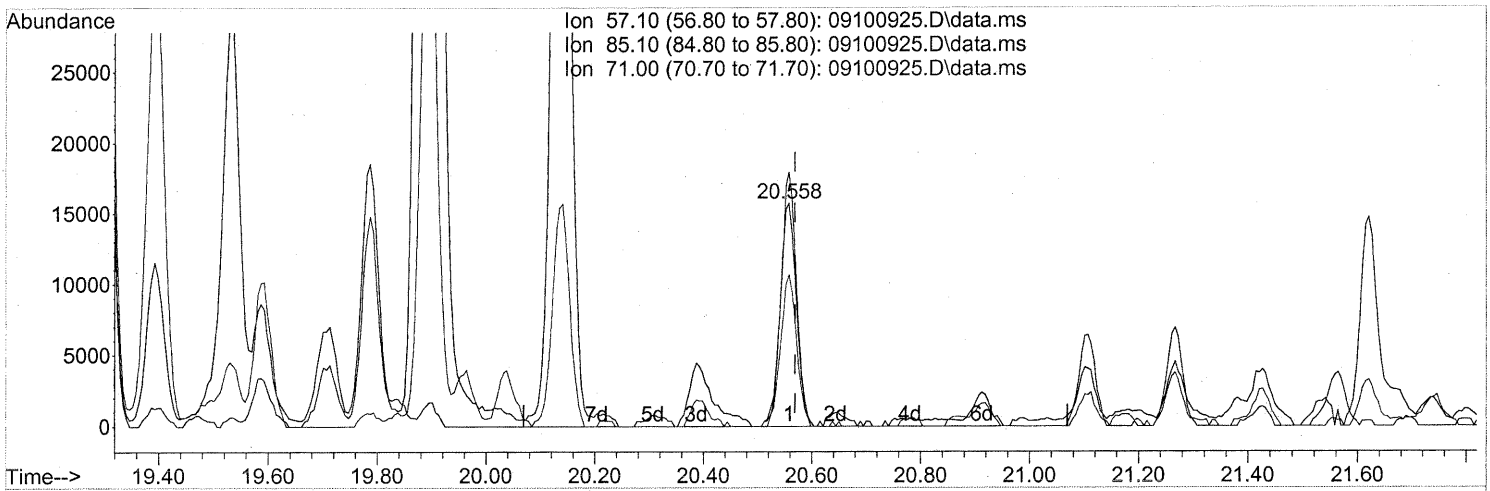
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	45.91
73.00	16.90	15.46
0.00	0.00	0.00

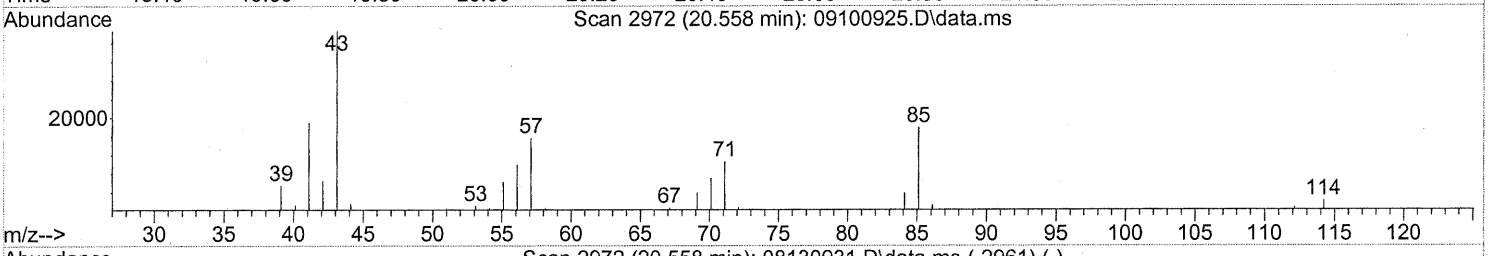
258

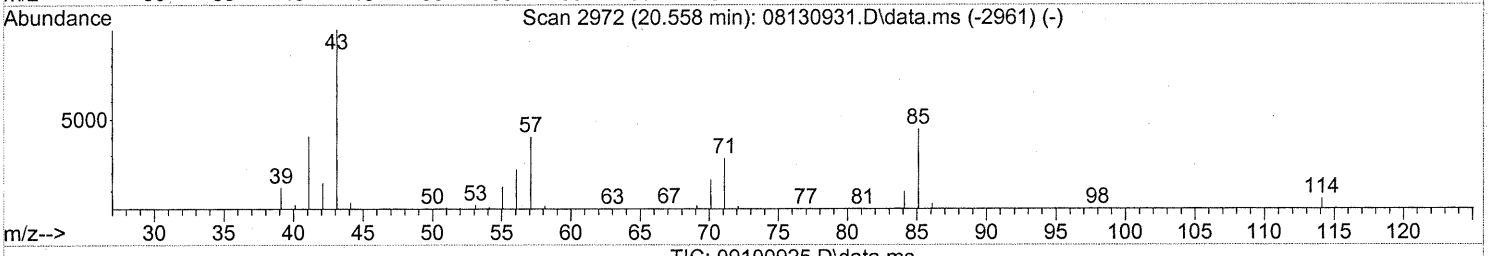
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.64ng

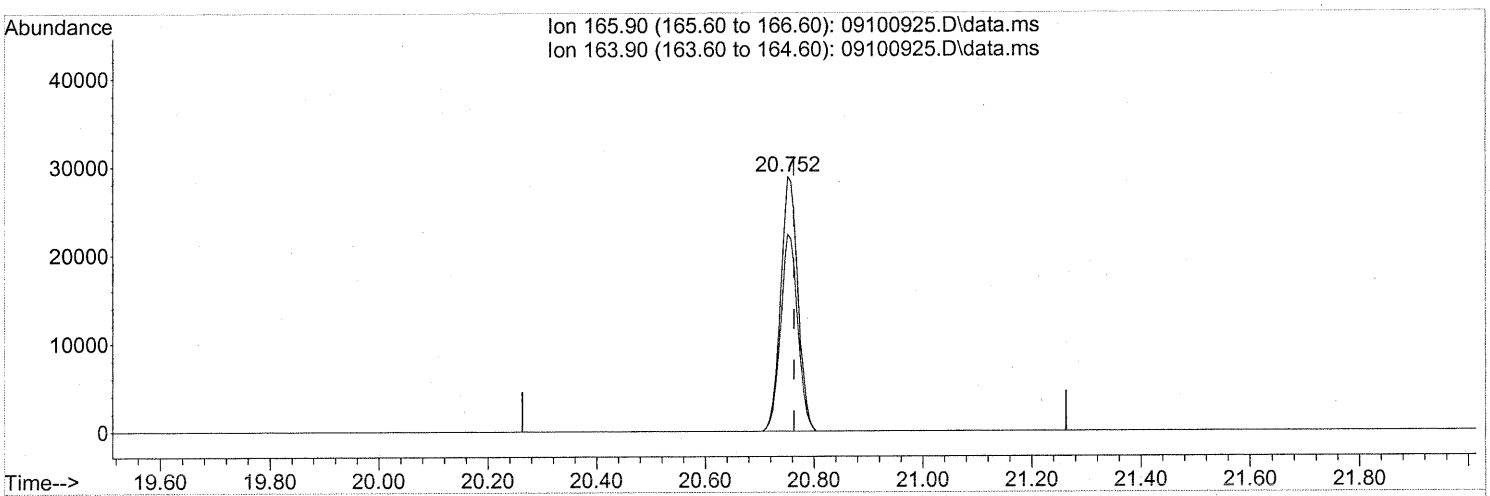
response 33061

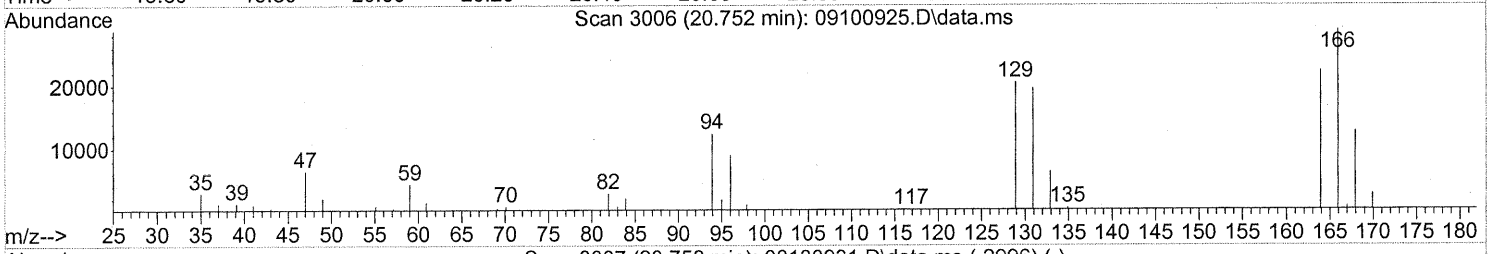
Ion	Exp%	Act%
57.10	100	100
85.10	120.60	106.32
71.00	75.10	66.80
0.00	0.00	0.00

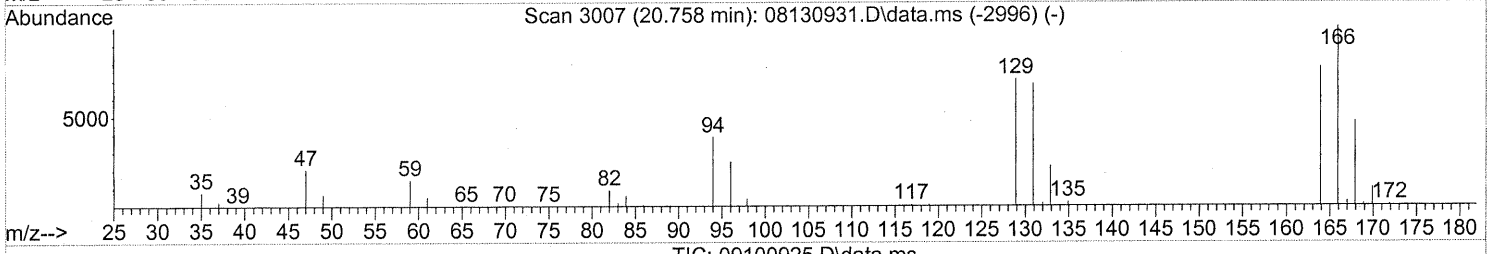
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 2.82ng

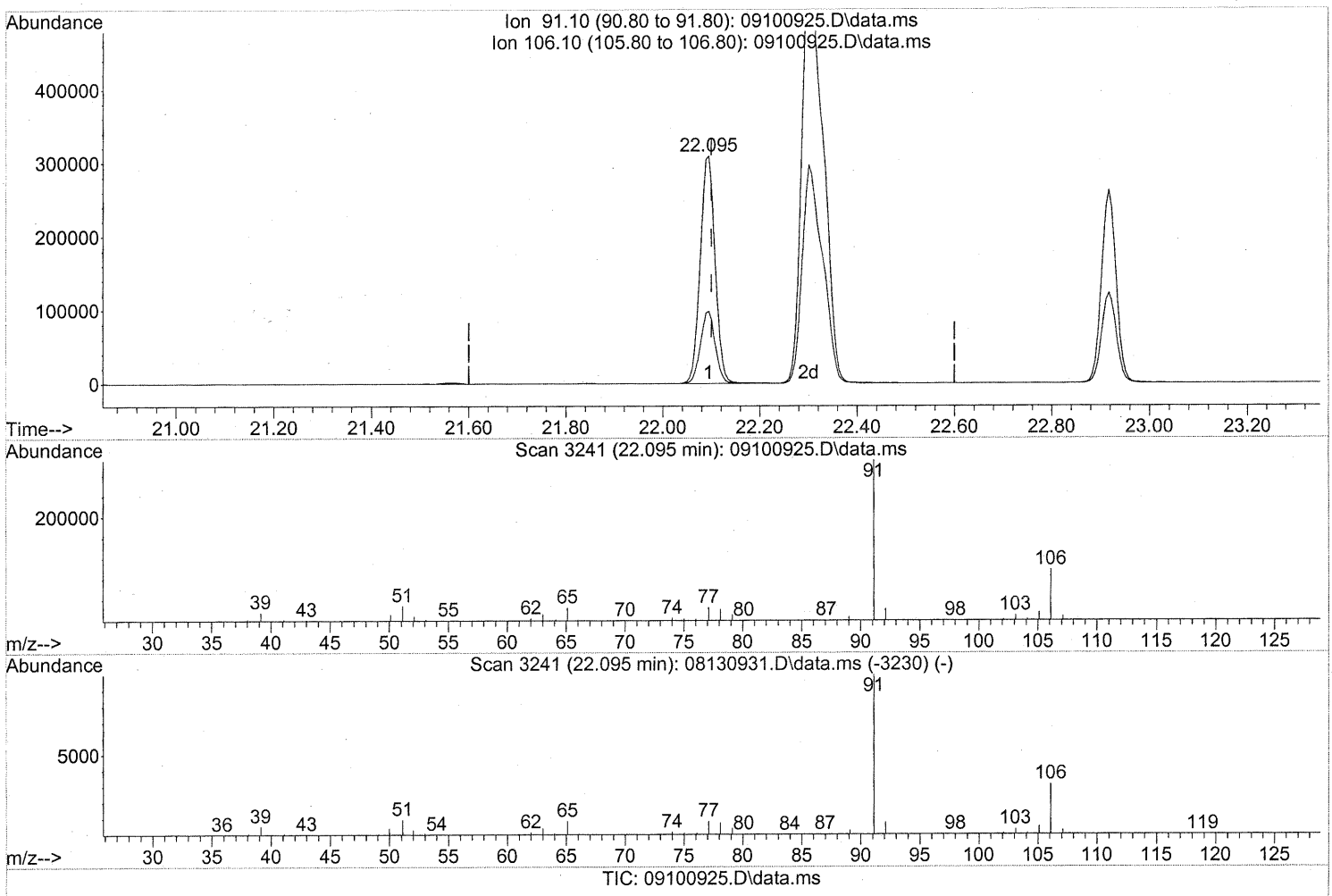
response 63218

Ion	Exp%	Act%
165.90	100	100
163.90	77.80	76.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(66) Ethylbenzene (T)

22.095min (-0.006) 6.72ng

response 655280

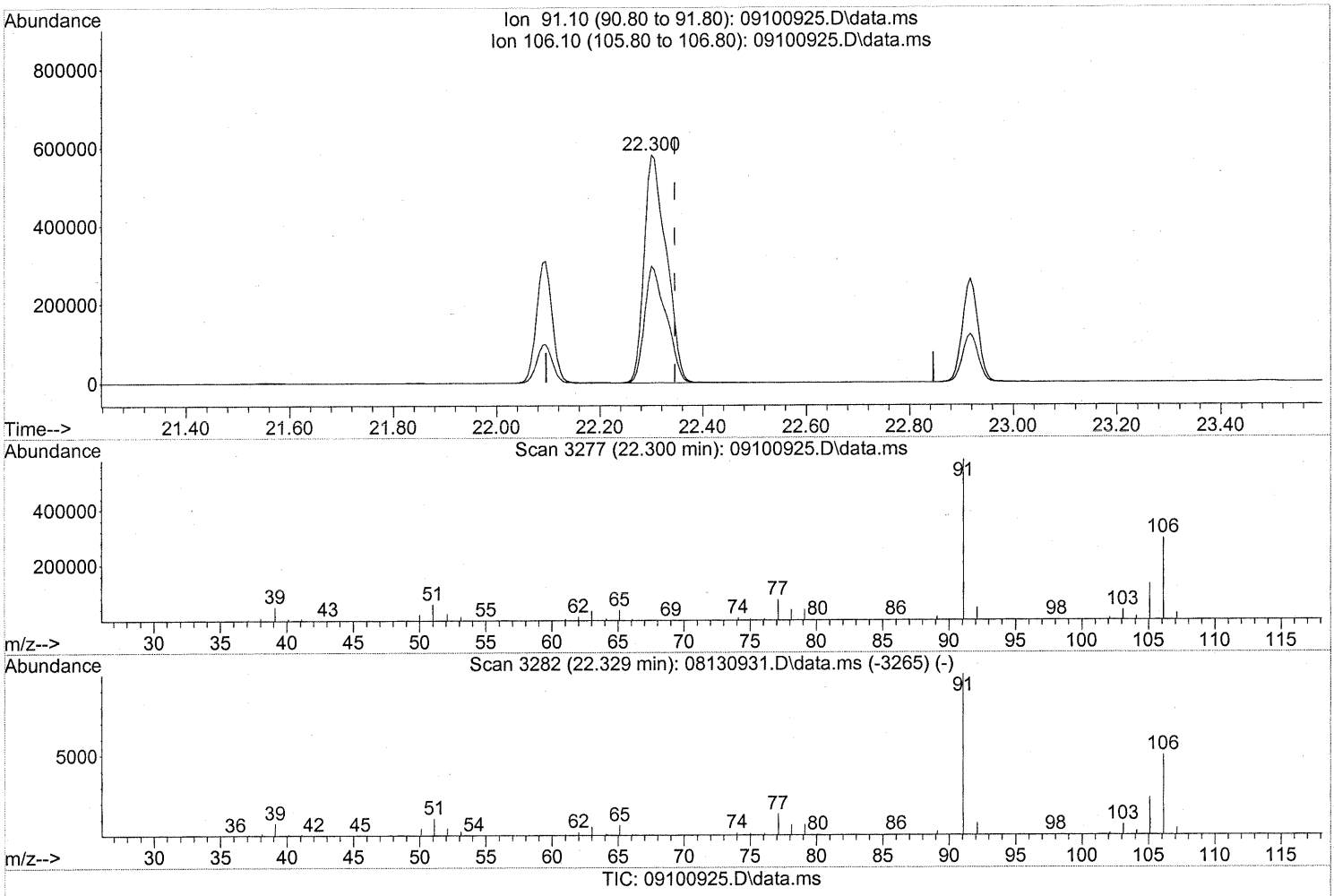
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	31.36
0.00	0.00	0.00
0.00	0.00	0.00

261

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

22.300min (-0.046) 22.31ng

response 1724583

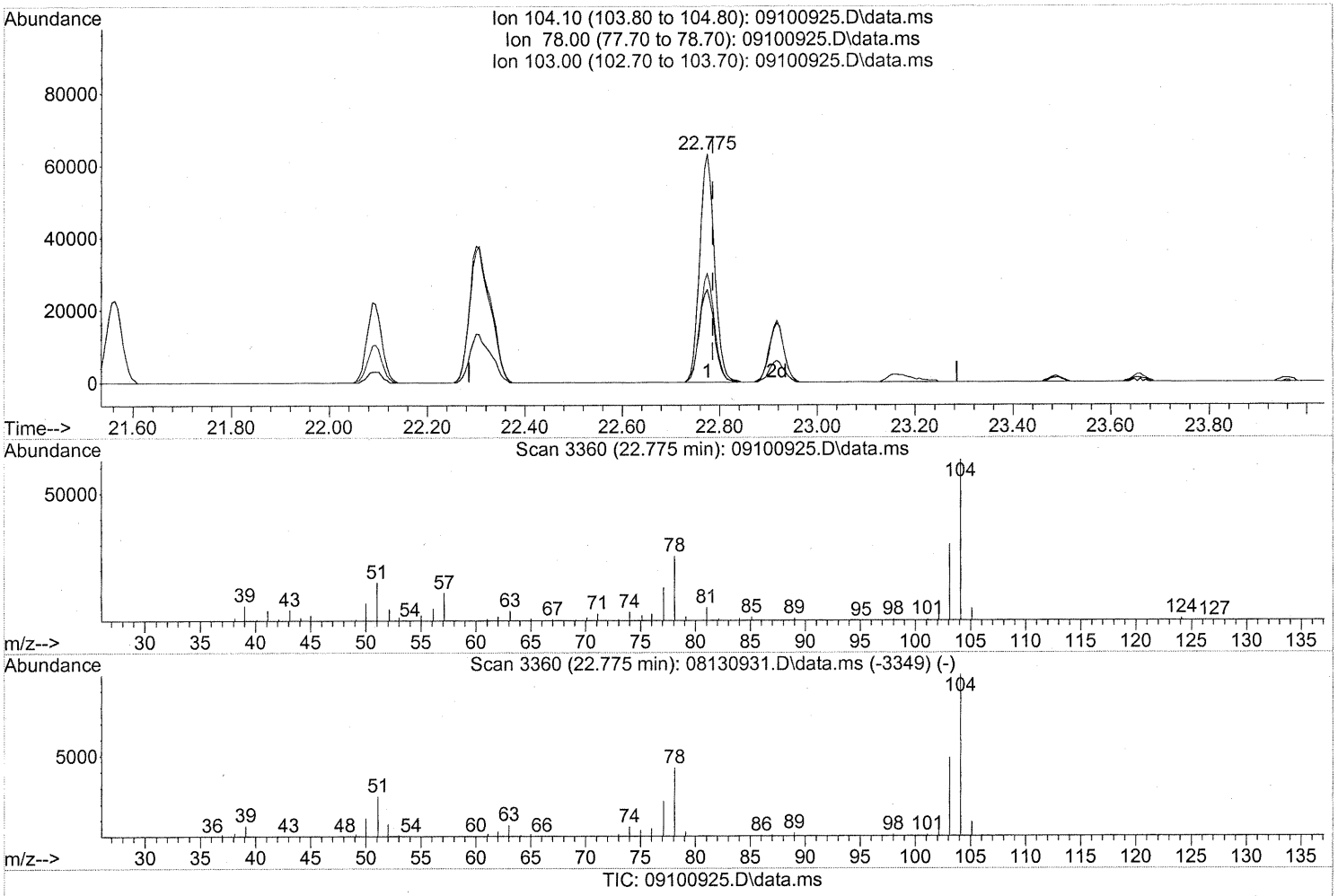
Ion	Exp%	Act%
91.10	100	100
106.10	49.90	50.06
0.00	0.00	0.00
0.00	0.00	0.00

262

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 2.33ng

response 133168

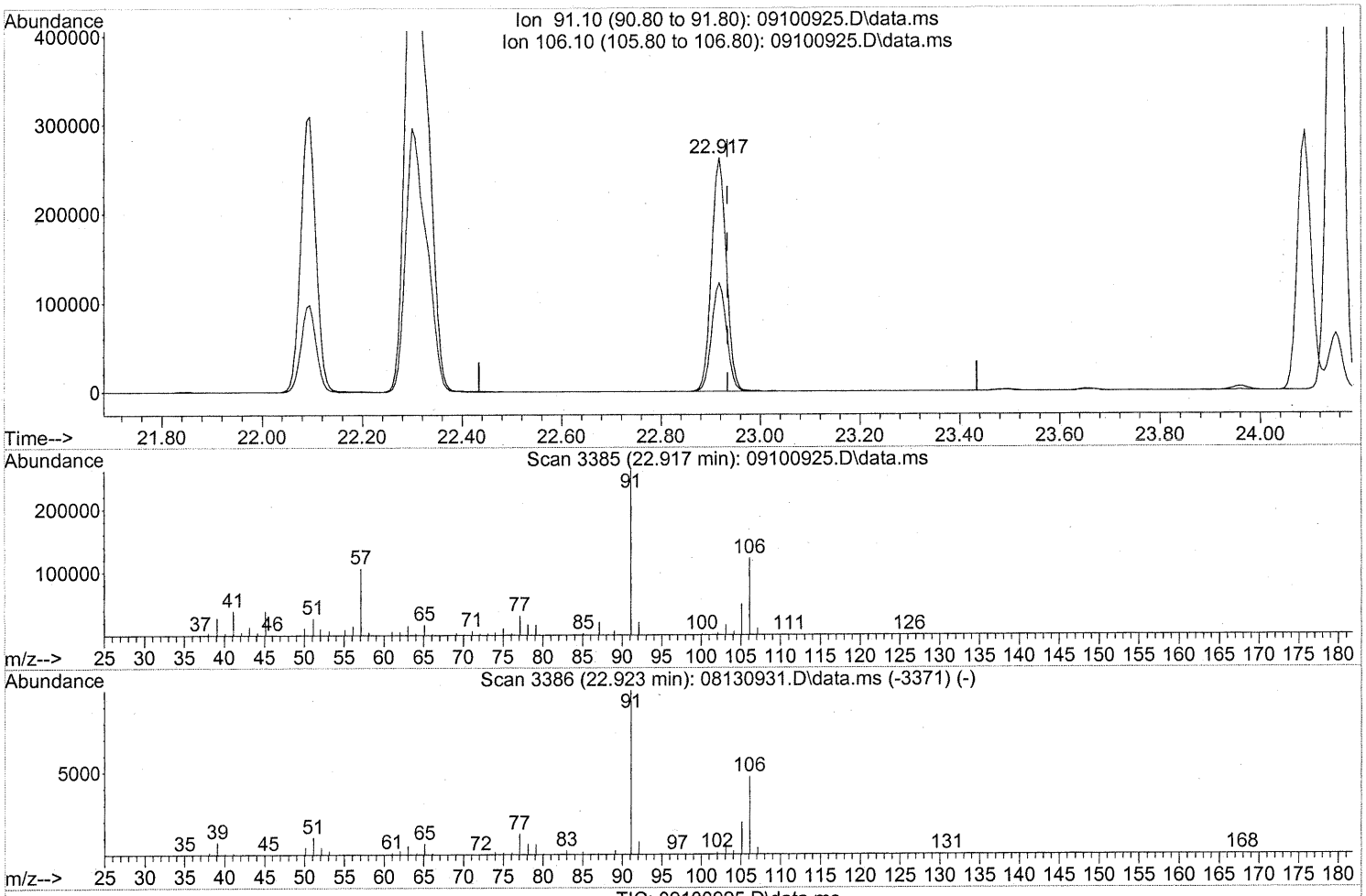
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	41.67
103.00	48.70	47.89
0.00	0.00	0.00

263

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 7.00ng

response 544080

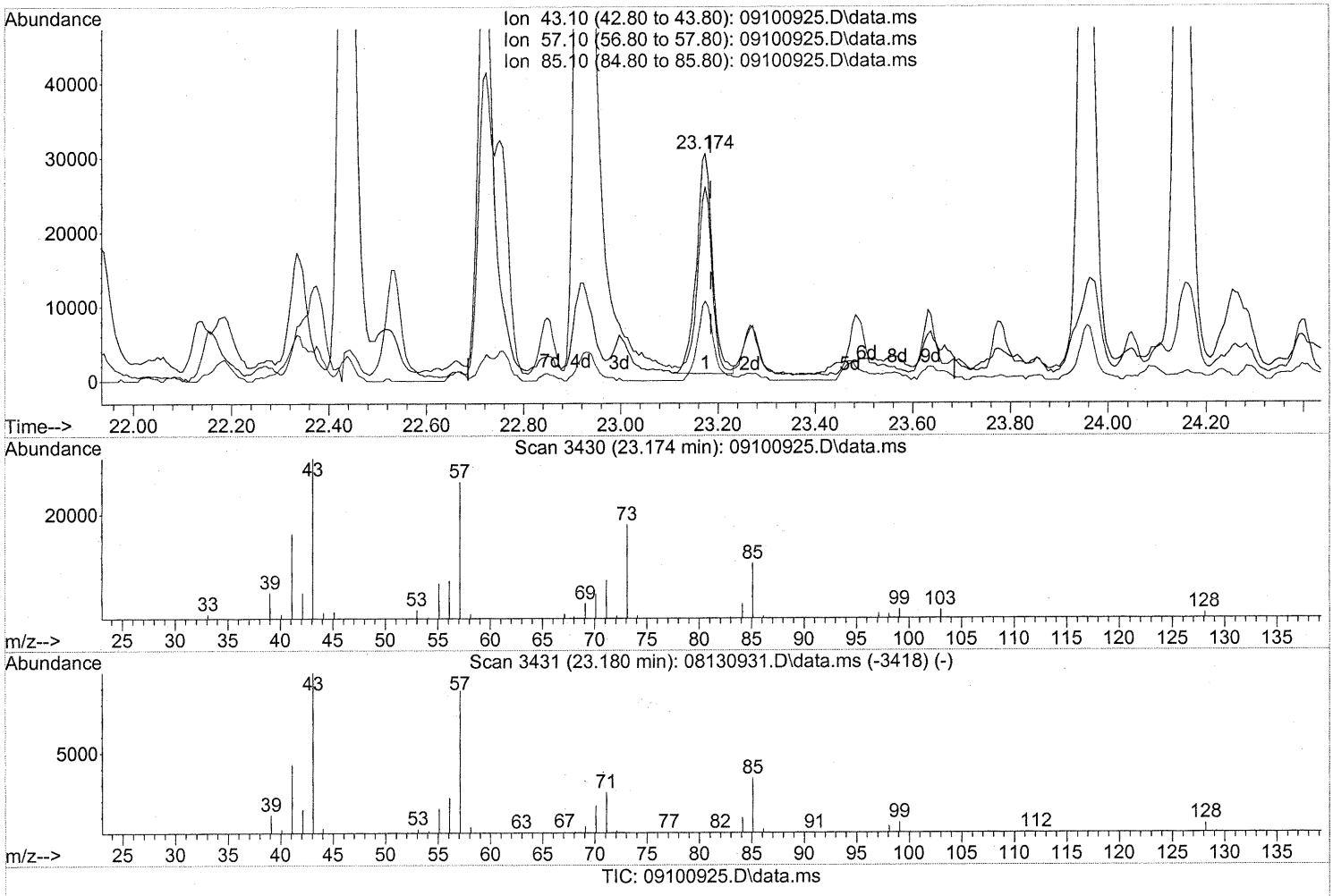
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.89
0.00	0.00	0.00
0.00	0.00	0.00

264

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 1.46ng

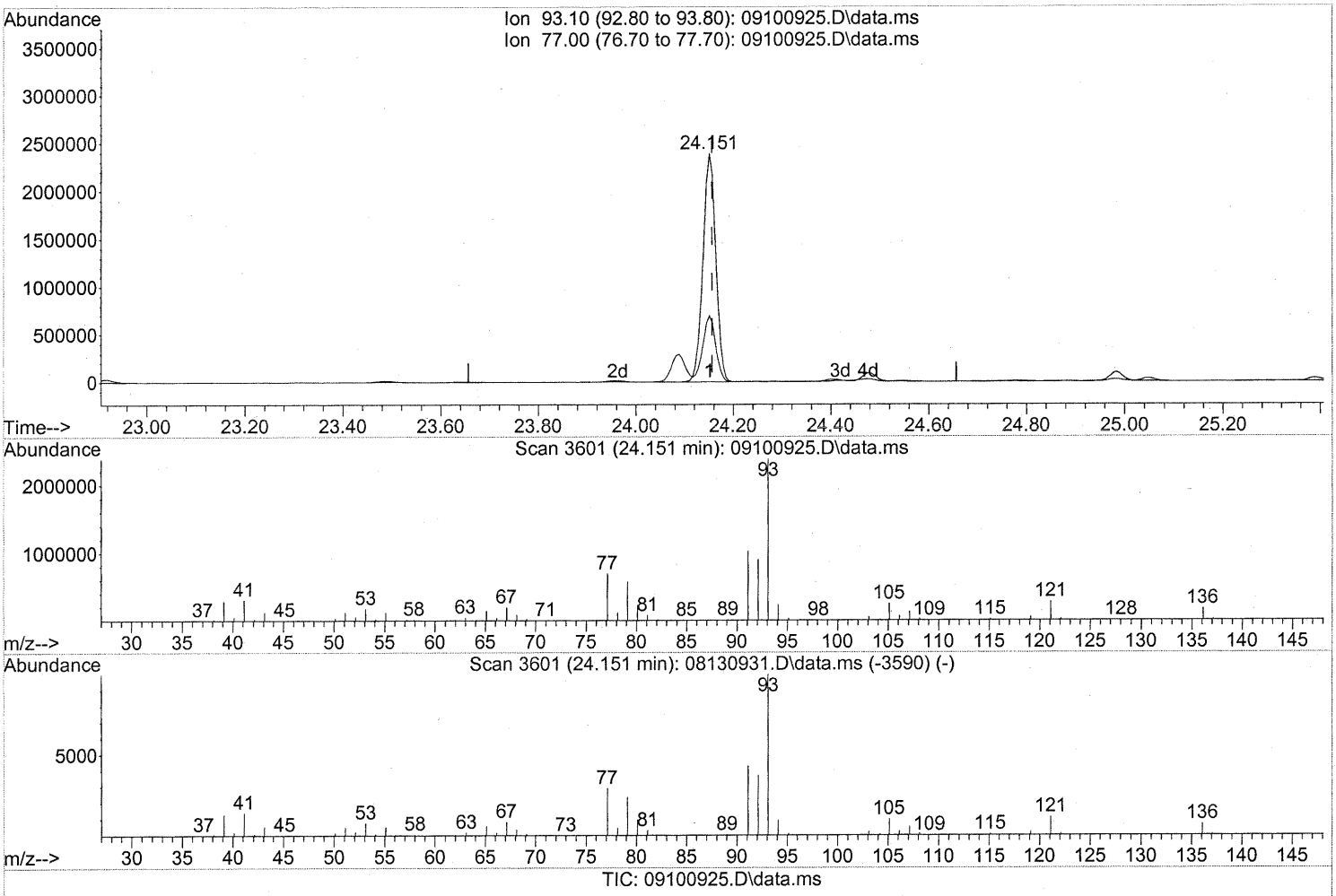
response 68209

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	78.48
85.10	38.80	35.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(75) alpha-Pinene (T)

24.151min (-0.006) 87.54ng

response 4355164

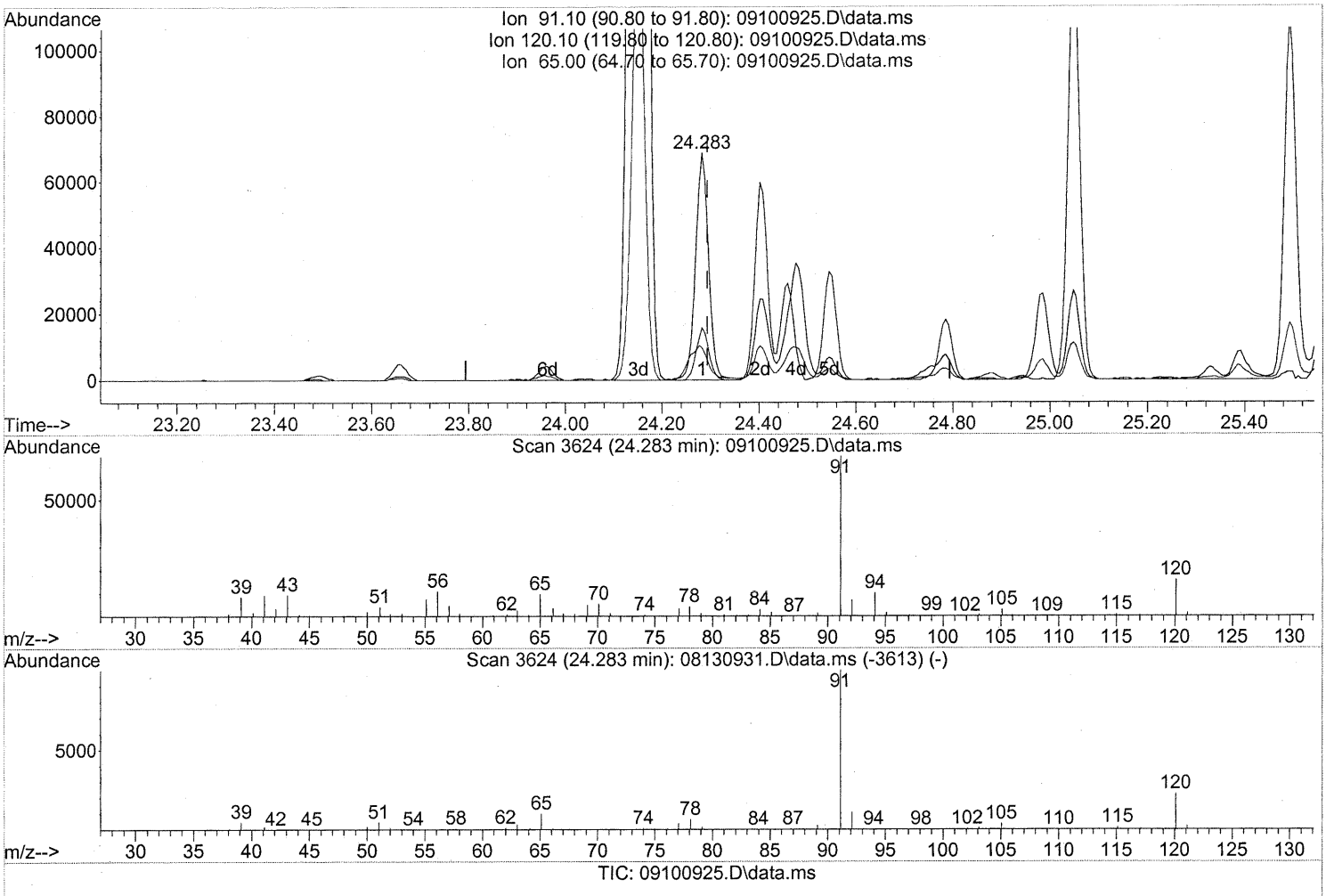
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	29.22
0.00	0.00	0.00
0.00	0.00	0.00

266

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.03ng

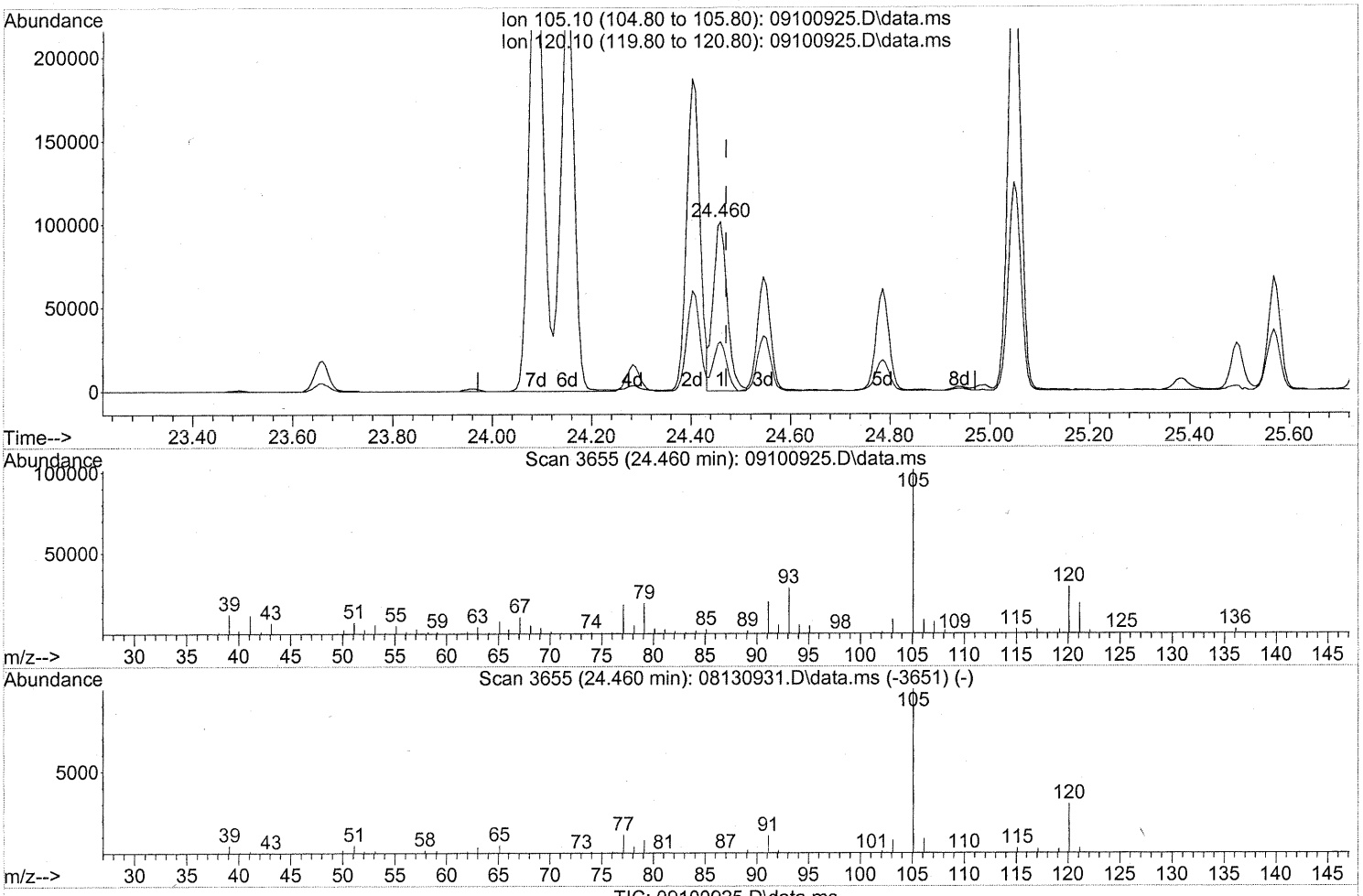
response 128474

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	22.13
65.00	10.20	22.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 2.07ng

response 196655

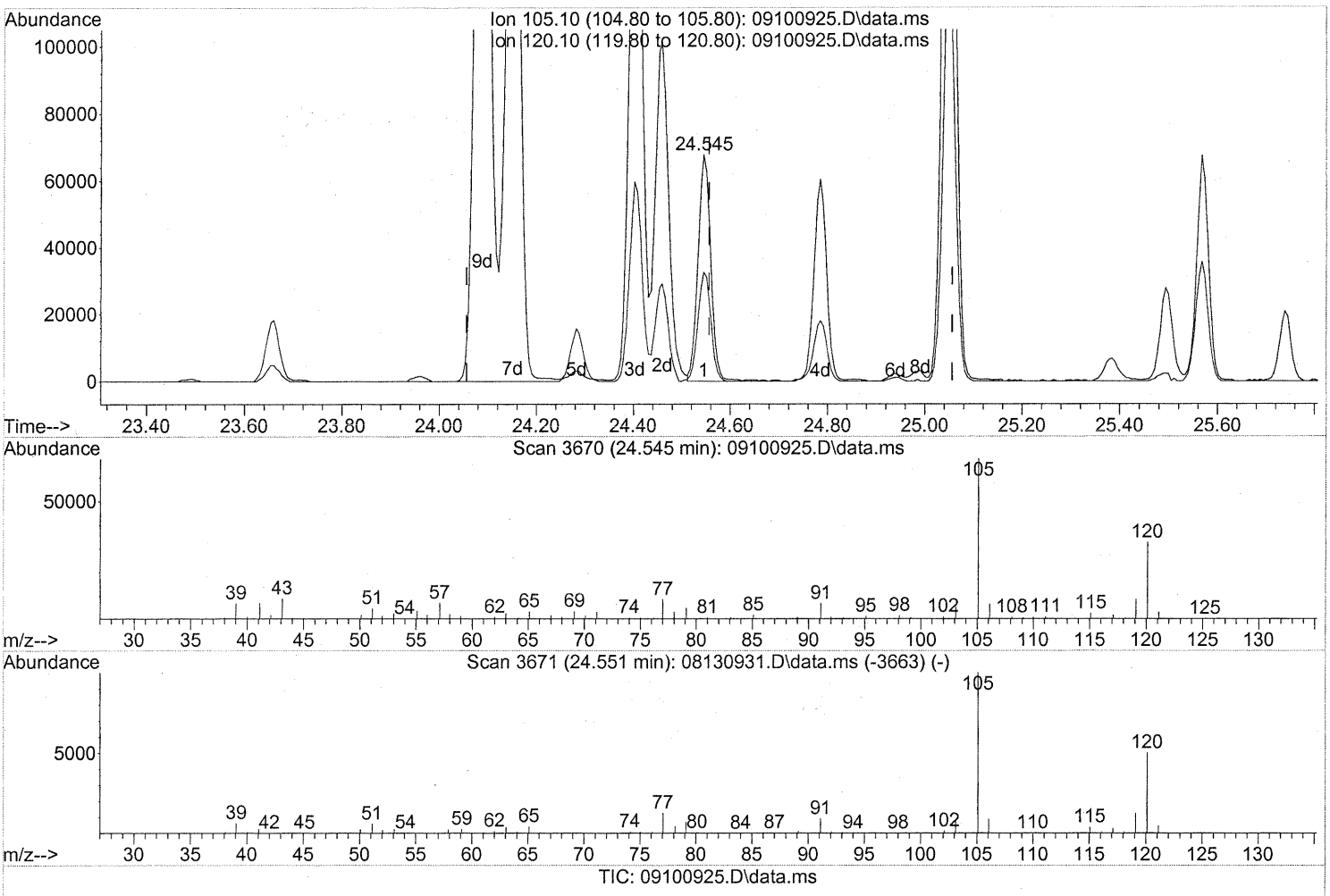
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	26.42
0.00	0.00	0.00
0.00	0.00	0.00

268

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

24.545min (-0.011) 1.58ng

response 123842

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.93
0.00	0.00	0.00
0.00	0.00	0.00

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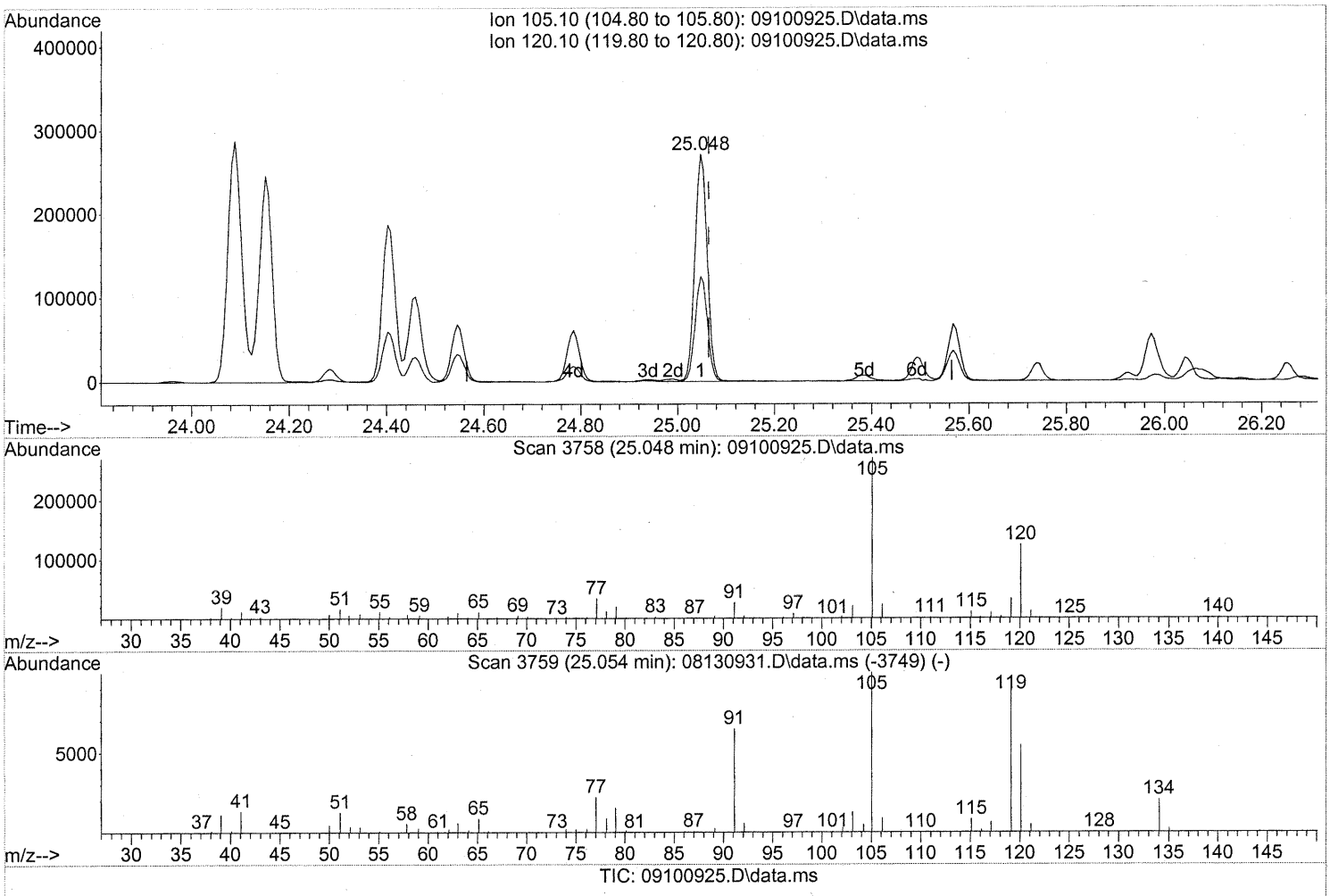
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

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

25.048min (-0.017) 5.75ng

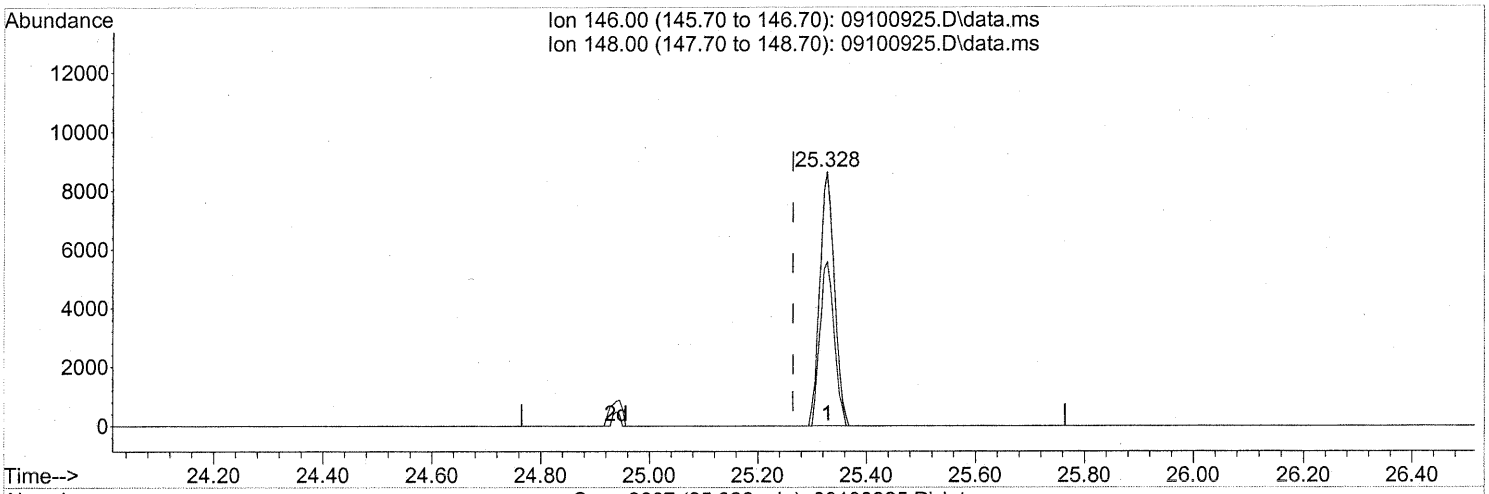
response 479194

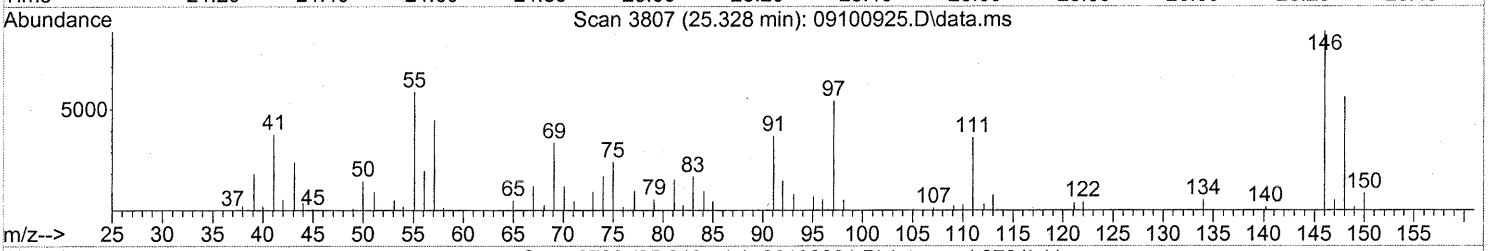
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.97
0.00	0.00	0.00
0.00	0.00	0.00

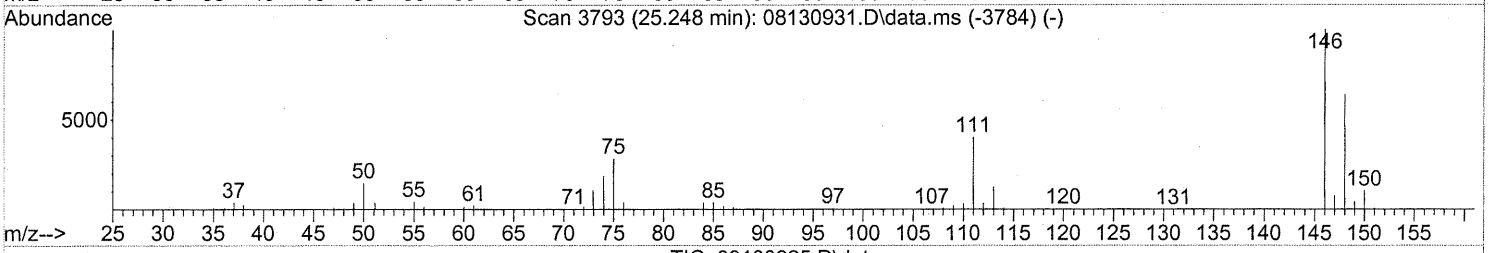
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(85) 1,3-Dichlorobenzene (T)

25.328min (+0.063) 0.37ng

response 16145

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	63.00
0.00	0.00	0.00
0.00	0.00	0.00

FP EM 9/21/09

E-9/21/09

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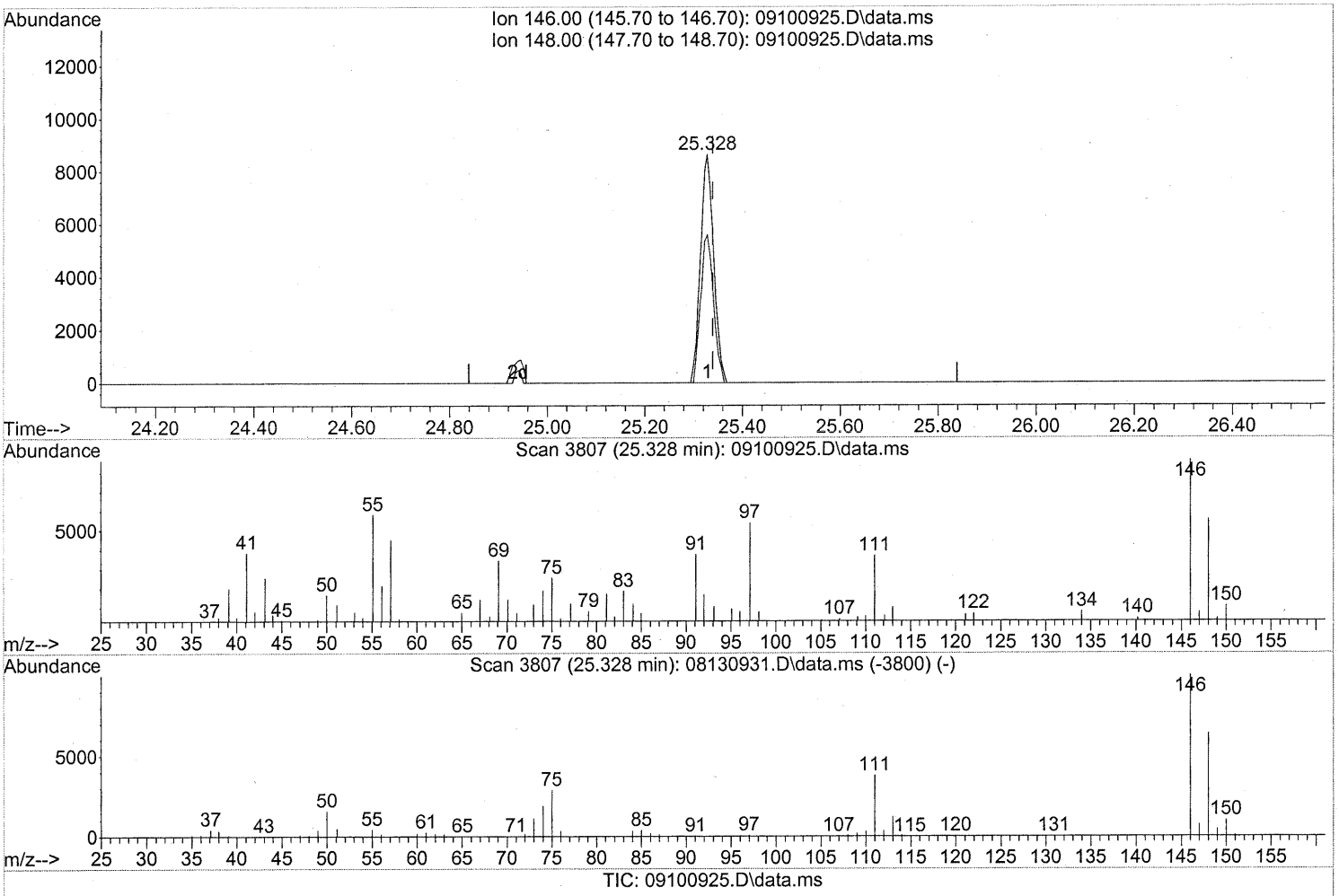
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(86) 1,4-Dichlorobenzene (T)

25.328min (-0.011) 0.35ng

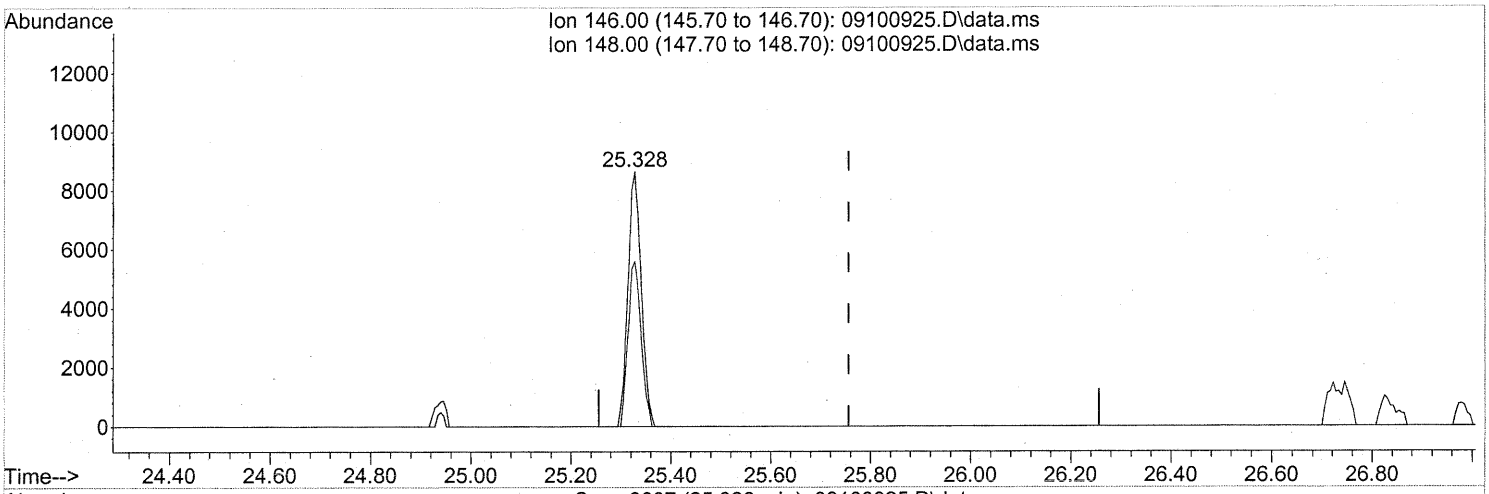
response 16145

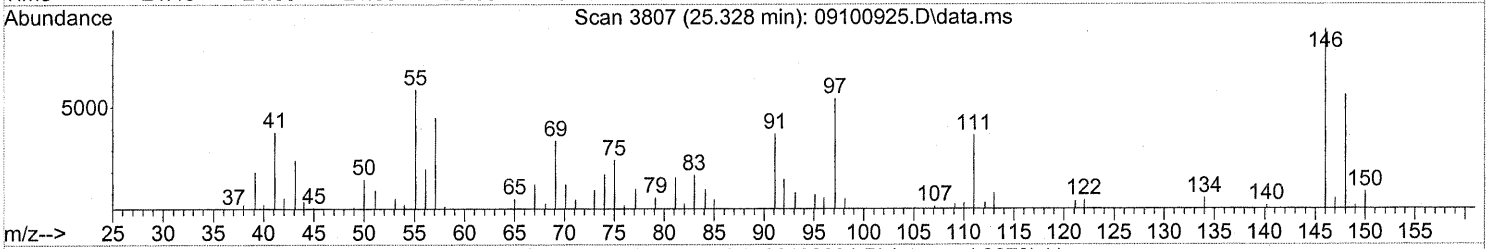
Ion	Exp%	Act%
146.00	100	100
148.00	64.00	63.00
0.00	0.00	0.00
0.00	0.00	0.00

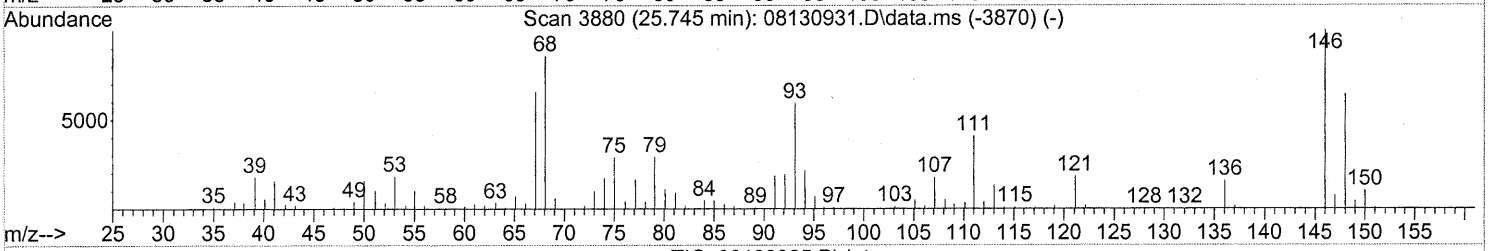
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(90) 1,2-Dichlorobenzene (T)

25.328min (-0.428) 0.37ng

response 16145

Ion	Exp%	Act%
146.00	100	100
148.00	63.60	63.00
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

9/21/09

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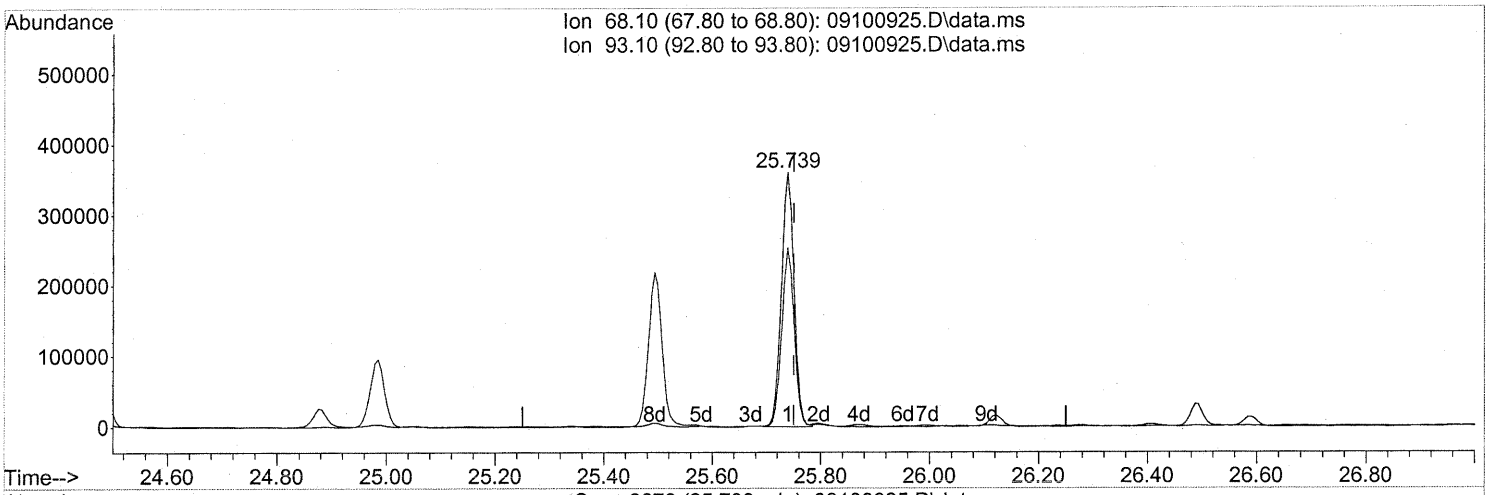
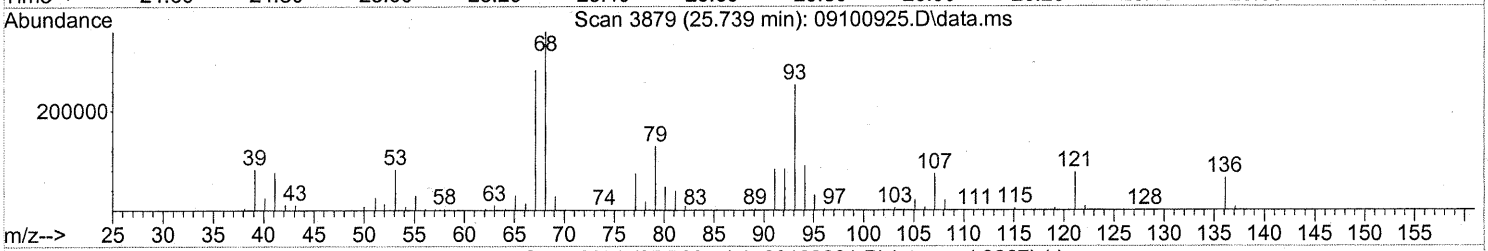
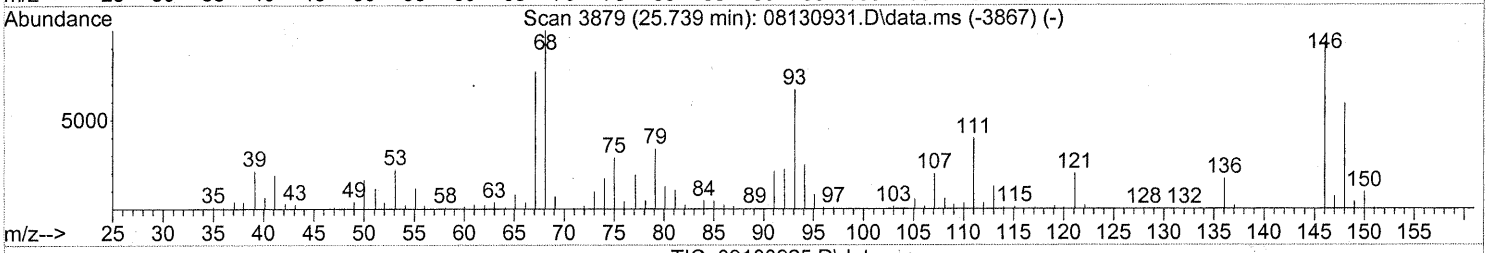
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 17.07ng

response 582207

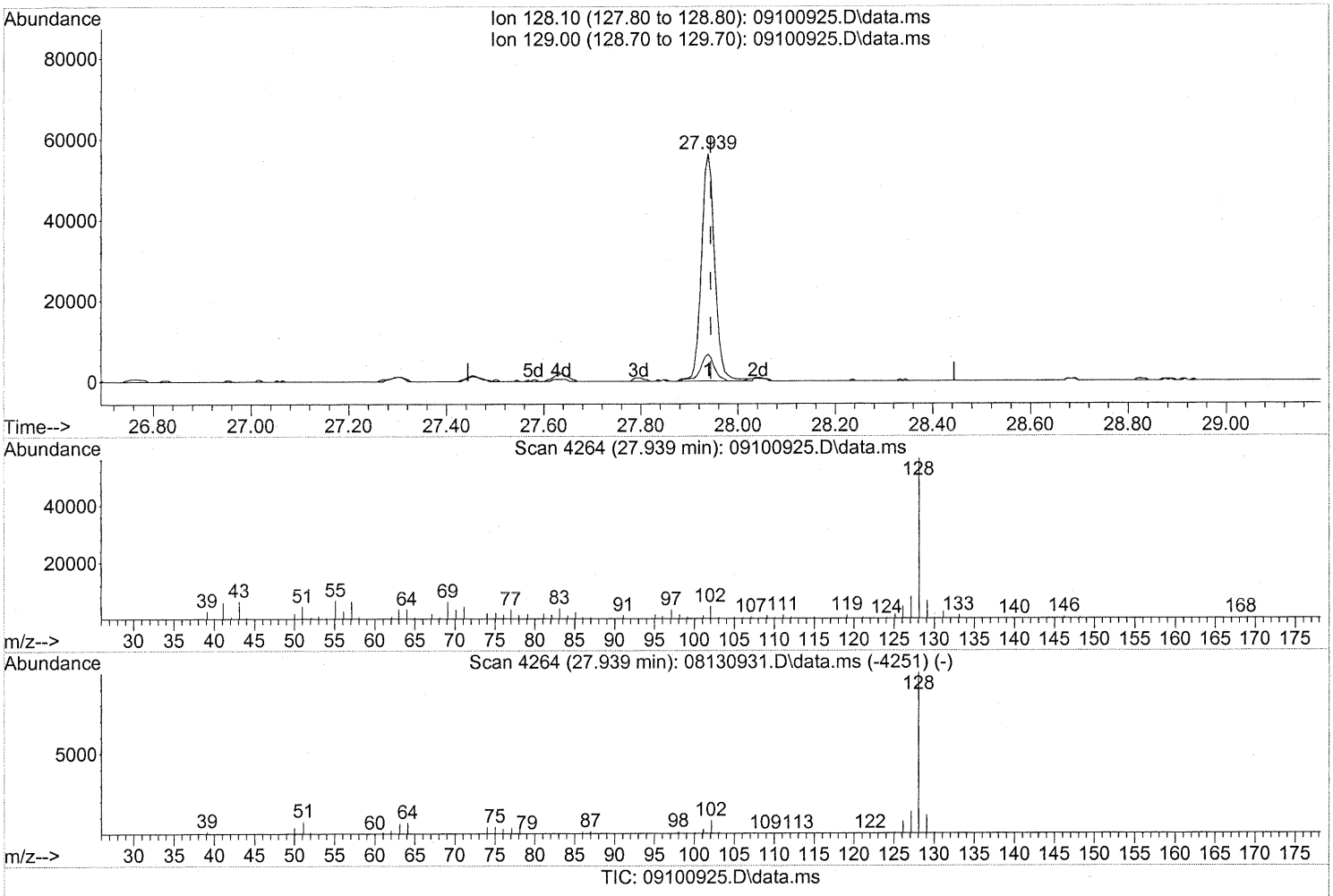
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	69.47
0.00	0.00	0.00
0.00	0.00	0.00

274

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100925.D
Acq On : 11 Sep 2009 00:51
Operator : EM
Sample : P0903139-004 (1000ml)
Misc : Environmental H &E 106311
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 08:05:58 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: 09100925.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 0.96ng

response 107028

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.02
0.00	0.00	0.00
0.00	0.00	0.00

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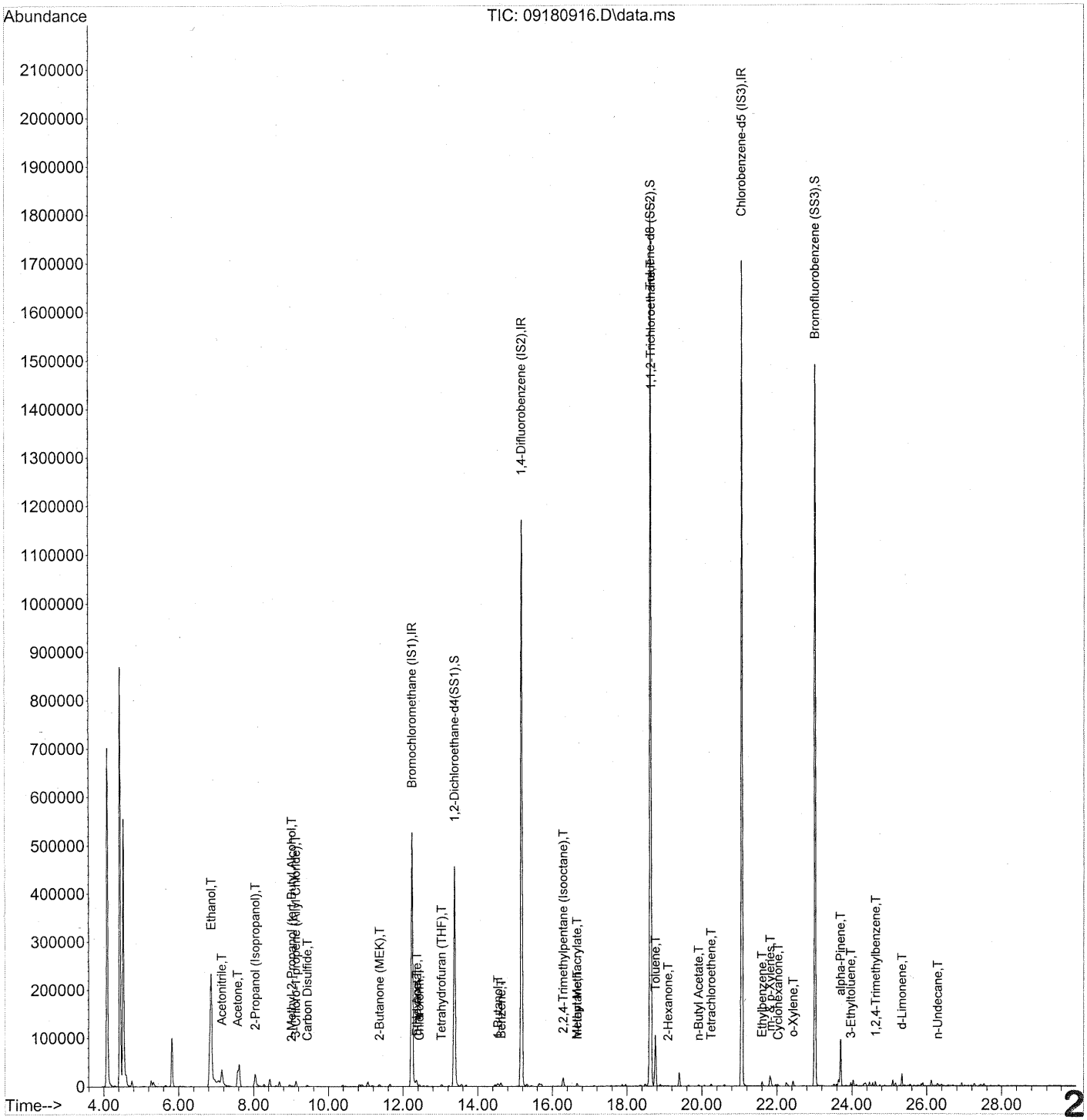
Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	337111	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.17	114	1566576	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.06	82	704610	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	457724	24.638	ng		-0.04
Spiked Amount 25.000			Recovery =	98.56%			
57) Toluene-d8 (SS2)	18.63	98	1708102	24.218	ng		-0.01
Spiked Amount 25.000			Recovery =	96.88%			
73) Bromofluorobenzene (SS3)	23.02	174	661235	26.162	ng		0.00
Spiked Amount 25.000			Recovery =	104.64%			
Target Compounds							Qvalue
2) Propene	4.53	42	329	N.D.			
3) Dichlorodifluoromethan...	4.72	85	1289	N.D.			
4) Chloromethane	5.05	50	241	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	5.82	54	59	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	6.86	45	594962	59.784	ng		99
11) Acetonitrile	7.15	41	68939	2.739	ng		97
12) Acrolein	7.37	56	357	N.D.			
13) Acetone	7.57	58	22953	2.289	ng	#	76
14) Trichlorofluoromethane	7.85	101	463	N.D.			
15) 2-Propanol (Isopropanol)	8.04	45	58676	1.699	ng		98
16) Acrylonitrile	8.28	53	270	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.01	59	2442	0.068	ng	#	64
19) Methylene Chloride	9.04	84	546	N.D.			
20) 3-Chloro-1-propene (Al...	9.12	41	2850	0.159	ng	#	40
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.43	76	6193	0.117	ng		87
23) trans-1,2-Dichloroethene	10.48	61	939	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	11.06	86	54	N.D.			
27) 2-Butanone (MEK)	11.37	72	1754	0.182	ng	#	89
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.37	61	260	0.053	ng	#	63
31) n-Hexane	12.36	57	5735	0.296	ng		9

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Tom 9/21/09

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	12.44	83	2563	0.108 ng		98
34) Tetrahydrofuran (THF)	13.03	72	1368	0.153 ng	#	89
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	14.54	56	5137	0.363 ng		88
41) Benzene	14.63	78	10712	0.192 ng		93
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.04	84	304	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...	16.29	57	23022	0.409 ng		99
50) Methyl Methacrylate	16.66	100	567	0.088 ng	#	1
51) n-Heptane	16.66	71	1844	0.129 ng		85
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	17.47	58	130	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.64	97	144168	10.258 ng	#	6
58) Toluene	18.76	91	99899	1.517 ng		100
59) 2-Hexanone	19.09	43	1602	0.050 ng	#	64
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	19.91	43	2231	0.061 ng		95
63) n-Octane	20.07	57	402	N.D.		
64) Tetrachloroethene	20.25	166	1627	0.080 ng		96
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.60	91	9142	0.126 ng		98
67) m- & p-Xylenes	21.82	91	23755	0.420 ng		96
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.29	104	1731	N.D.		
70) o-Xylene	22.44	91	7984	0.138 ng		100
71) n-Nonane	22.71	43	664	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.20	105	535	N.D.		
75) alpha-Pinene	23.70	93	50058	1.348 ng		99
76) n-Propylbenzene	23.85	91	1819	N.D.		
77) 3-Ethyltoluene	23.97	105	5270	0.071 ng		95
78) 4-Ethyltoluene	24.03	105	3063	N.D.		
79) 1,3,5-Trimethylbenzene	24.12	105	1893	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

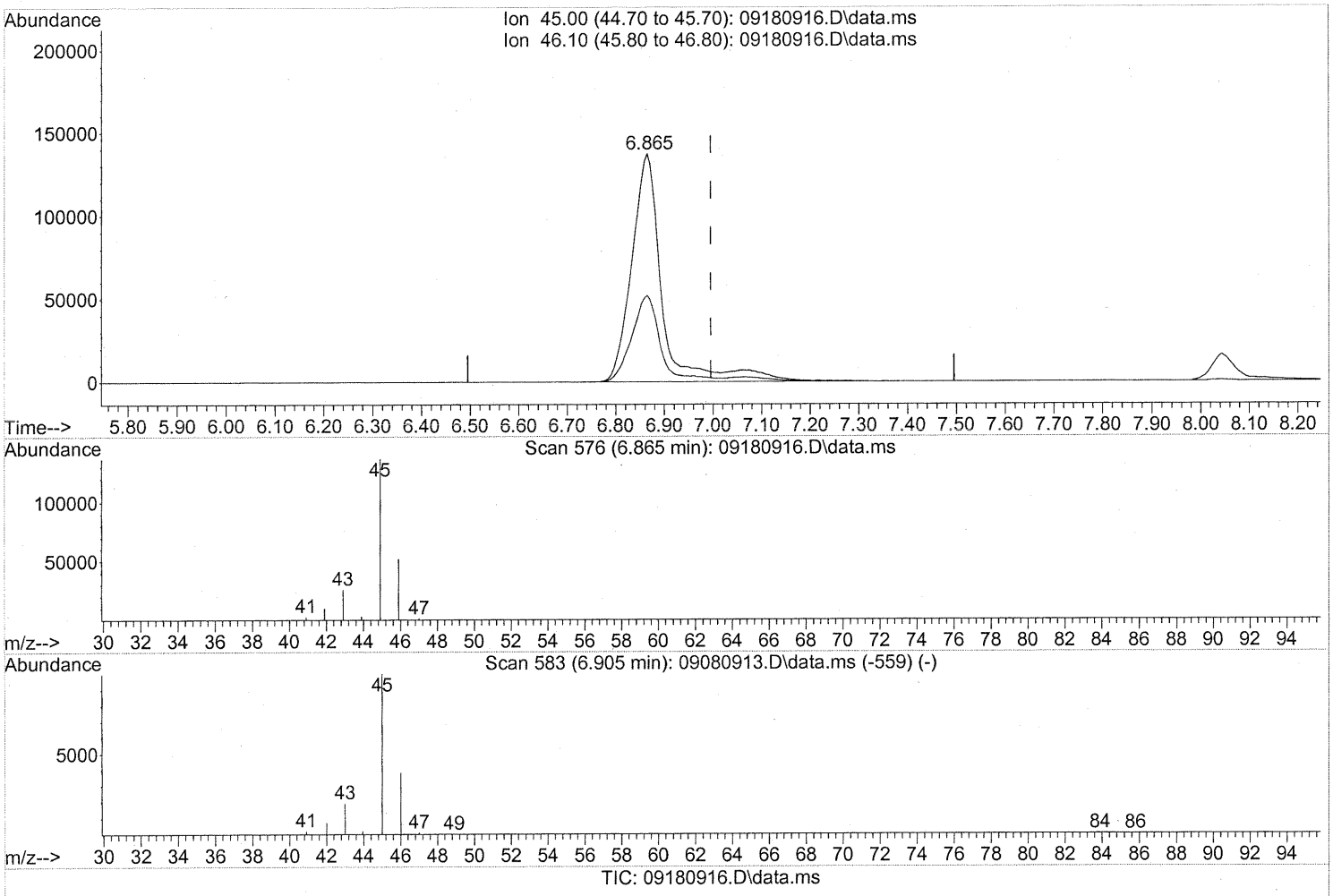
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.34	118	52	N.D.		
81) 2-Ethyltoluene	24.36	105	2278	N.D.		
82) 1,2,4-Trimethylbenzene	24.64	105	6967	0.106 ng		89
83) n-Decane	24.75	57	1194	N.D.		
84) Benzyl Chloride	24.63	91	608	N.D.		
85) 1,3-Dichlorobenzene	24.90	146	53	N.D.		
86) 1,4-Dichlorobenzene	24.90	146	53	N.D.		
87) sec-Butylbenzene	25.08	105	651	N.D.		
88) 4-Isopropyltoluene (p-...	25.16	119	3179	N.D.		
89) 1,2,3-Trimethylbenzene	25.17	105	1623	N.D.		
90) 1,2-Dichlorobenzene	24.90	146	53	N.D.		
91) d-Limonene	25.34	68	7225	0.307 ng		95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.29	57	2862	0.072 ng		79
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.55	128	1365	N.D.		
96) n-Dodecane	27.53	57	1813	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.03	55	1962	0.081 ng	#	89
99) tert-Butylbenzene	24.64	119	546	N.D.		
100) n-Butylbenzene	25.67	91	586	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



TIC: 09180916.D\data.ms

(10) Ethanol (T)

6.865min (-0.131) 59.78ng

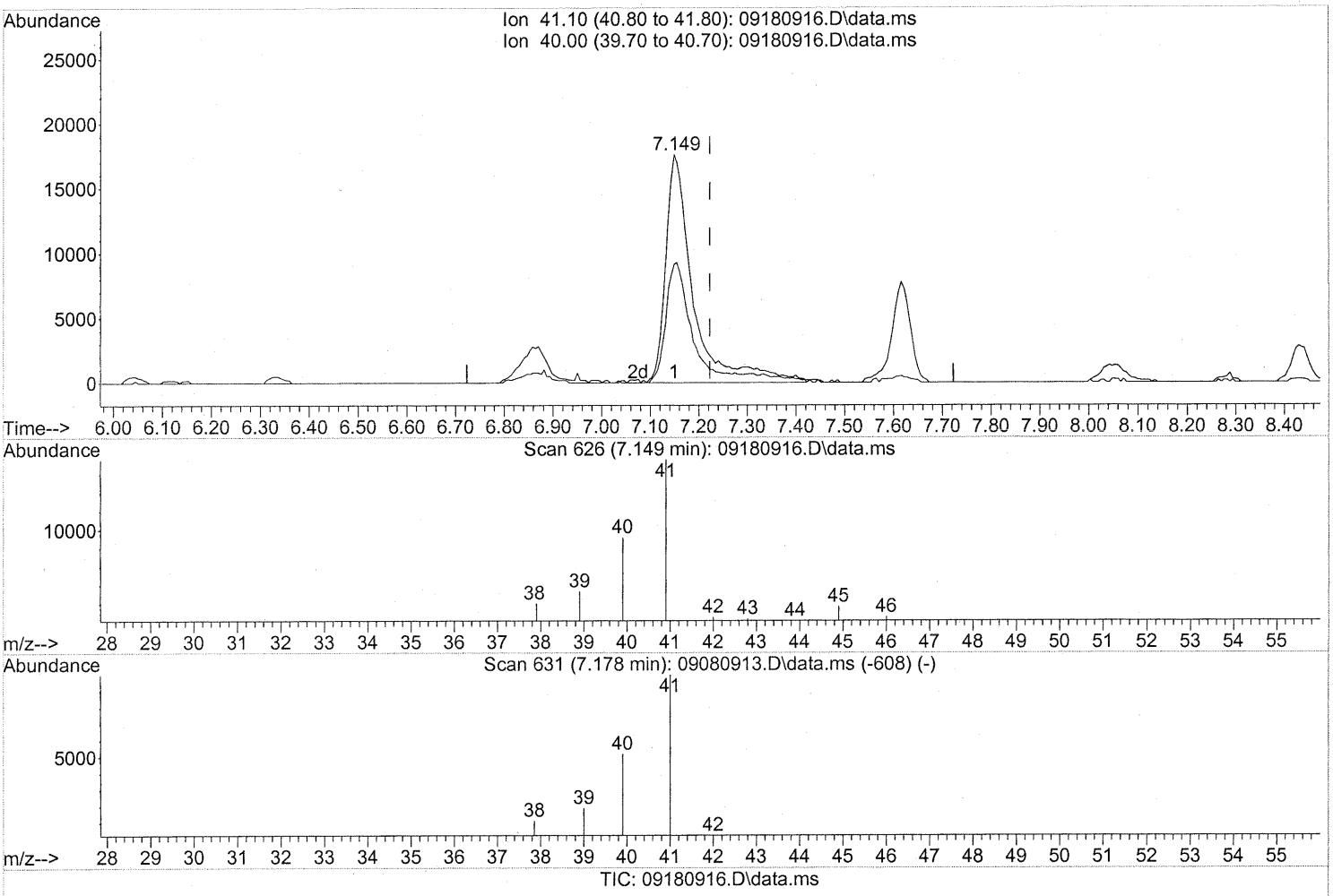
response 594962

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	38.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180916.D
Acq On : 18 Sep 2009 18:03
Operator : LH
Sample : P0903139-004 dil (25mL)
Misc : Environmental H & E 106311
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 08:42:31 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



TIC: 09180916.D\data.ms

(11) Acetonitrile (T)

7.149min (-0.074) 2.74ng

response 68939

Ion	Exp%	Act%
41.10	100	100
40.00	52.40	54.38
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: **106312**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-005

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: AC00606

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.4**	0.61	**0.49**	0.12	
74-87-3	**Chloromethane**	**0.39**	0.12	**0.19**	0.059	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.12	ND	0.055	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	**Ethanol**	**23**	6.1	**12**	3.2	
75-05-8	**Acetonitrile**	**2.0**	0.61	**1.2**	0.36	
107-02-8	**Acrolein**	**0.73**	0.61	**0.32**	0.26	
67-64-1	**Acetone**	**7.4**	6.1	**3.1**	2.5	
75-69-4	**Trichlorofluoromethane**	**1.3**	0.12	**0.23**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**0.82**	0.61	**0.33**	0.25	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	**Trichlorotrifluoroethane**	**0.62**	0.12	**0.080**	0.016	
75-15-0	**Carbon Disulfide**	**2.9**	0.61	**0.94**	0.19	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	**2-Butanone (MEK)**	**1.1**	0.61	**0.37**	0.21	

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

Verified By: Re Date: 9/24/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106312**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-005

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: AC00606

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09
Volume(s) Analyzed: 1.00 Liter(s)

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	ND	1.2	ND	0.34	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	**Benzene**	**0.33**	0.12	**0.10**	0.038	
56-23-5	**Carbon Tetrachloride**	**0.55**	0.12	**0.087**	0.019	
110-82-7	Cyclohexane	ND	0.61	ND	0.18	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	**Toluene**	**0.73**	0.61	**0.19**	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

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

Verified By: Re Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903139
Client Sample ID: **106312** CAS Sample ID: P0903139-005
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 9/3/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/4/09
Analyst: Elsa Moctezuma Date Analyzed: 9/11/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00606

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

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.12	ND	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.12	ND	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	Naphthalene	ND	0.61	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

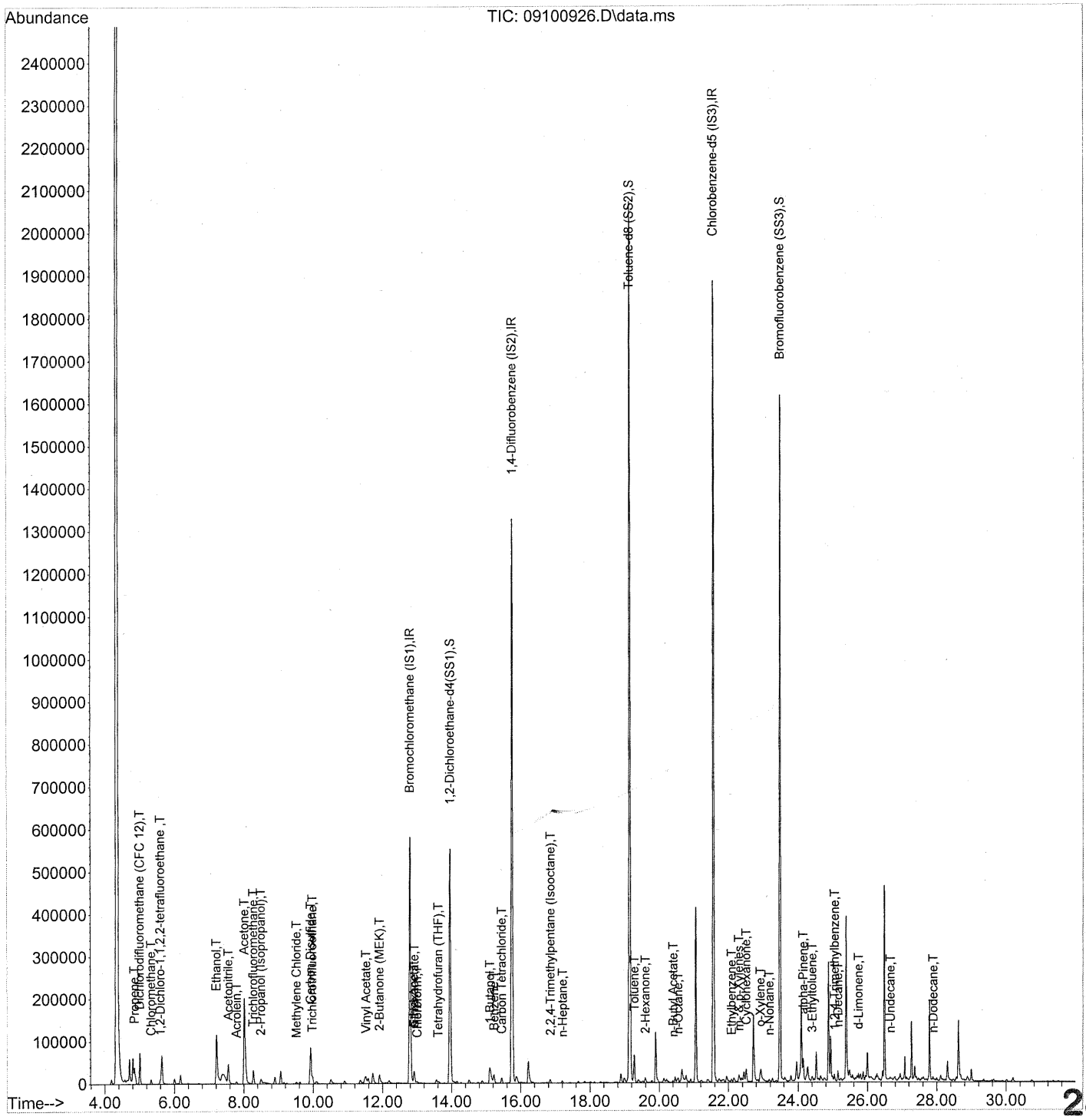
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rv Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 12:09:05 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 12:09:05 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	307061	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1576821	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	804356	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	558530	25.725	ng		-0.03
Spiked Amount 25.000			Recovery =	102.88%			
57) Toluene-d8 (SS2)	19.14	98	1840725	24.072	ng		-0.02
Spiked Amount 25.000			Recovery =	96.28%			
73) Bromofluorobenzene (SS3)	23.49	174	577742	26.679	ng		0.00
Spiked Amount 25.000			Recovery =	106.72%			
Target Compounds							Qvalue
2) Propene	4.85	42	11820	0.439	ng	#	86
3) Dichlorodifluoromethan...	5.00	85	77525	2.016	ng		99
4) Chloromethane	5.33	50	11487	0.321	ng		96
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1540	0.076	ng	#	43
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.09	54	115	N.D.			
8) Bromomethane	6.57	94	120	N.D.			
9) Chloroethane	6.93	64	631	N.D.			
10) Ethanol	7.21	45	326205m	19.306	ng		
11) Acetonitrile	7.56	41	68038	1.650	ng		99
12) Acrolein	7.79	56	6682	0.606	ng		97
13) Acetone	8.01	58	104937m	6.103	ng		
14) Trichlorofluoromethane	8.28	101	34713	1.056	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	31730m	0.674	ng		
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.52	84	2618	0.122	ng		81
20) 3-Chloro-1-propene (Al...	9.62	41	1073	N.D.			
21) Trichlorotrifluoroethane	9.97	151	7483	0.509	ng		99
22) Carbon Disulfide	9.92	76	183659	2.426	ng		100
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	11.52	86	4641	1.246	ng	#	81
27) 2-Butanone (MEK)	11.92	72	10669	0.890	ng	#	68
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.92	61	3744	0.482	ng		84
31) n-Hexane	12.92	57	7511	0.198	ng		82

EM 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 12:09:05 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	3034	0.096 ng		98
34) Tetrahydrofuran (THF)	13.62	72	1188	0.095 ng	#	6
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	528	N.D.		
38) 1,1,1-Trichloroethane	14.52	97	626	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.11	56	49631	2.429 ng		82
41) Benzene	15.23	78	23009	0.271 ng		99
42) Carbon Tetrachloride	15.45	117	10730	0.453 ng		97
43) Cyclohexane	15.64	84	352	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	10196	0.104 ng		92
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.21	71	1535	0.068 ng	#	77
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.01	58	901	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	56235	0.607 ng		99
59) 2-Hexanone	19.60	43	14467	0.300 ng		79
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	6343	0.121 ng	#	68
63) n-Octane	20.55	57	1745	0.084 ng	#	69
64) Tetrachloroethene	21.06	166	110	N.D.		
65) Chlorobenzene	21.63	112	334	N.D.		
66) Ethylbenzene	22.09	91	7491	0.075 ng		94
67) m- & p-Xylenes	22.31	91	18051	0.228 ng		97
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	2525	N.D.		
70) o-Xylene	22.92	91	7392	0.093 ng		98
71) n-Nonane	23.17	43	3165	0.066 ng	#	75
72) 1,1,2,2-Tetrachloroethane	22.92	83	560	N.D.		
74) Cumene	23.66	105	1070	N.D.		
75) alpha-Pinene	24.15	93	23409	0.458 ng	#	45
76) n-Propylbenzene	24.28	91	3584	N.D.		
77) 3-Ethyltoluene	24.41	105	6149	0.063 ng		89
78) 4-Ethyltoluene	24.45	105	2997	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	2560	N.D.		

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 12:09:05 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

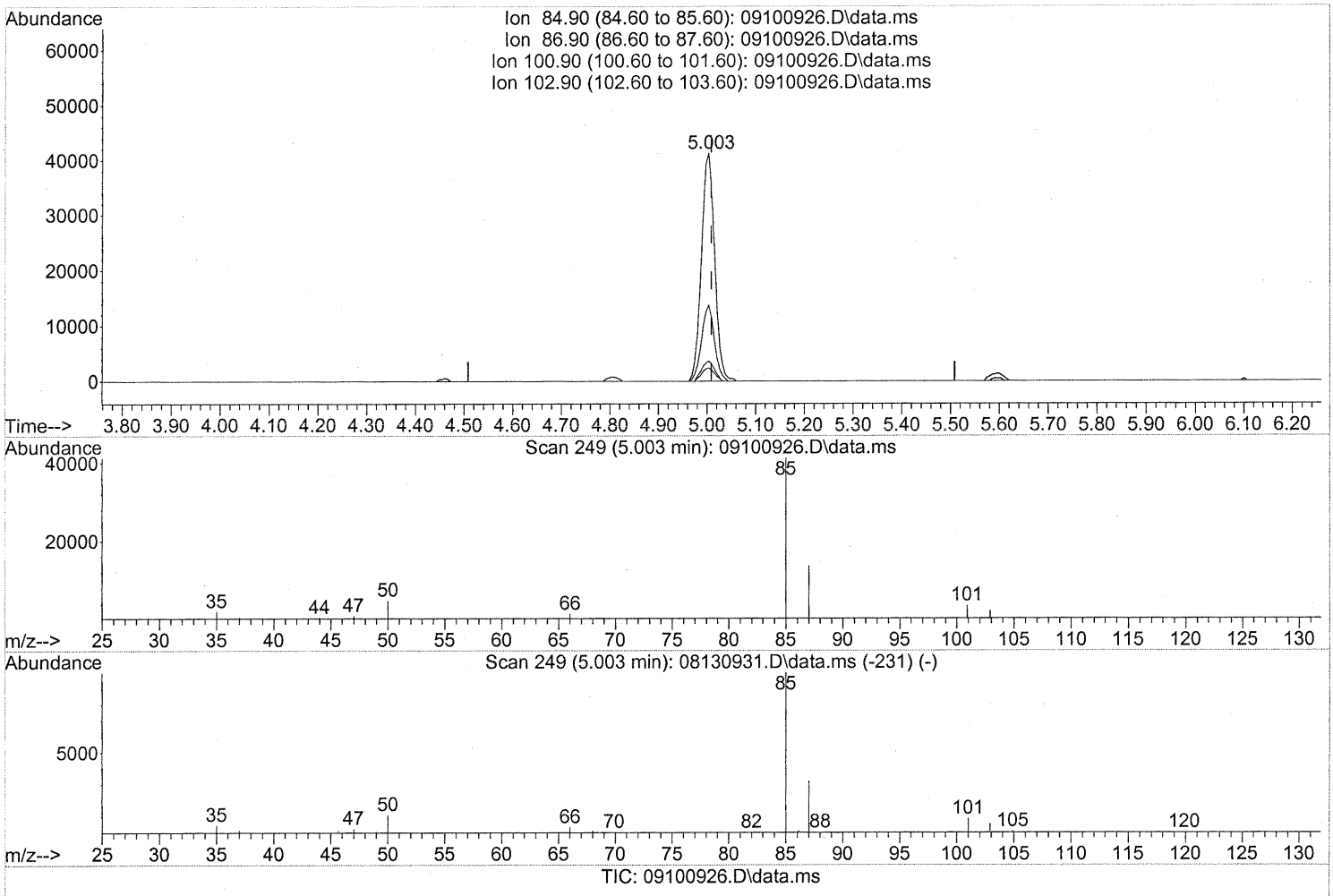
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	103	N.D.	
81) 2-Ethyltoluene	24.79	105	2272	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	6648	0.078 ng	89
83) n-Decane	25.15	57	8565	0.172 ng	93
84) Benzyl Chloride	25.22	91	242	N.D.	
85) 1,3-Dichlorobenzene	25.33	146	352	N.D.	
86) 1,4-Dichlorobenzene	25.33	146	352	N.D.	
87) sec-Butylbenzene	25.40	105	902	N.D.	
88) 4-Isopropyltoluene (p-...	25.57	119	2143	N.D.	
89) 1,2,3-Trimethylbenzene	25.57	105	2048	N.D.	
90) 1,2-Dichlorobenzene	25.33	146	352	N.D.	
91) d-Limonene	25.74	68	4434	0.127 ng	94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.66	57	2732	0.053 ng	85
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.94	128	3558	N.D.	
96) n-Dodecane	27.89	57	5133	0.089 ng	87
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.51	55	18404	0.630 ng	94
99) tert-Butylbenzene	24.94	119	2188	N.D.	
100) n-Butylbenzene	26.08	91	4401	N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.003min (-0.006) 2.02ng

response 77525

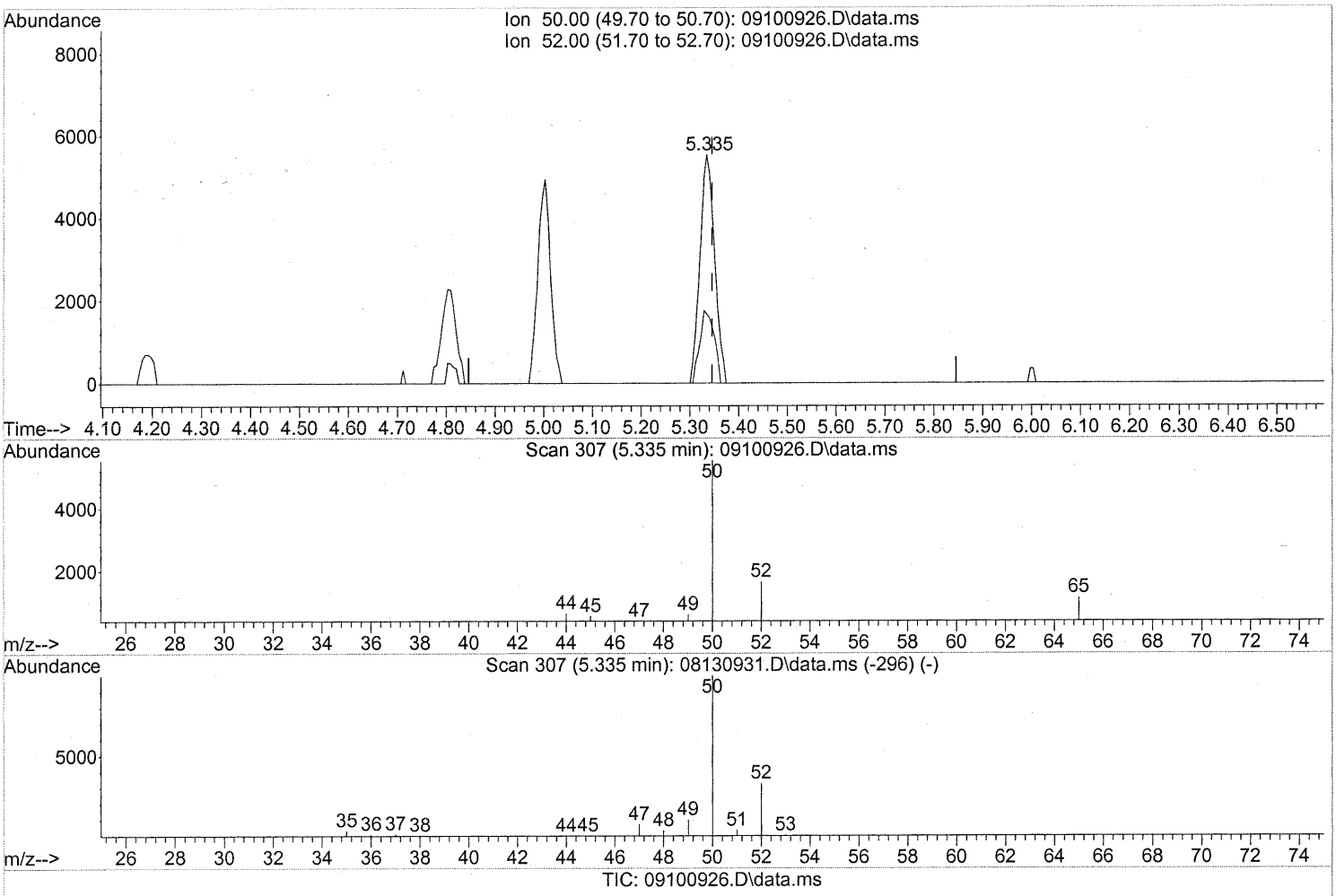
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.30
100.90	9.10	8.51
102.90	5.50	5.50

289

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



(4) Chloromethane (T)

5.335min (-0.011) 0.32ng

response 11487

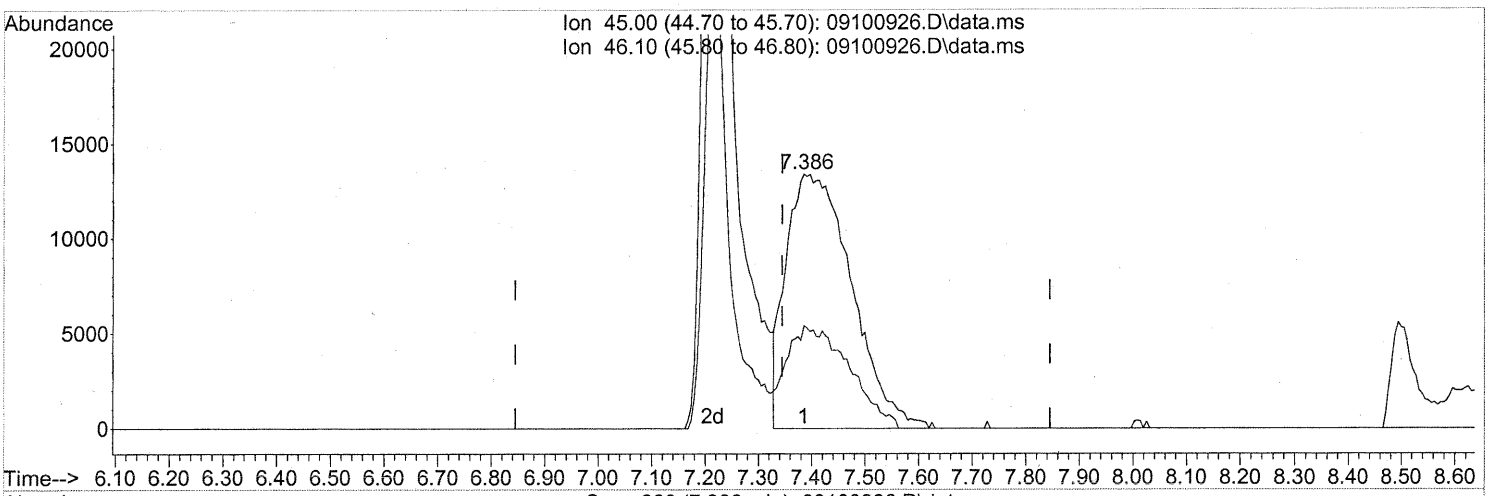
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.97
0.00	0.00	0.00
0.00	0.00	0.00

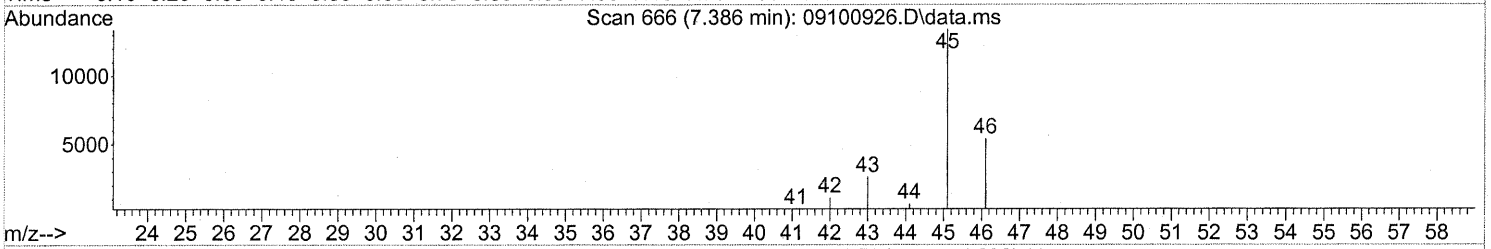
290

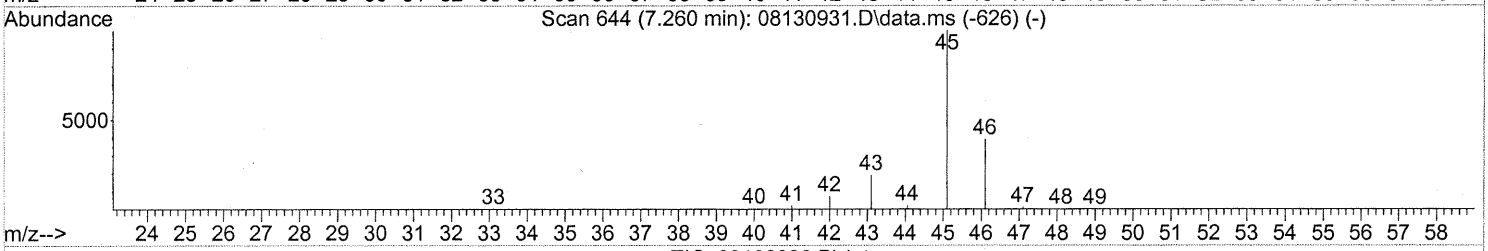
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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







TIC: 09100926.D\data.ms

(10) Ethanol (T)

7.386min (+0.040) 6.75ng

response 113995

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

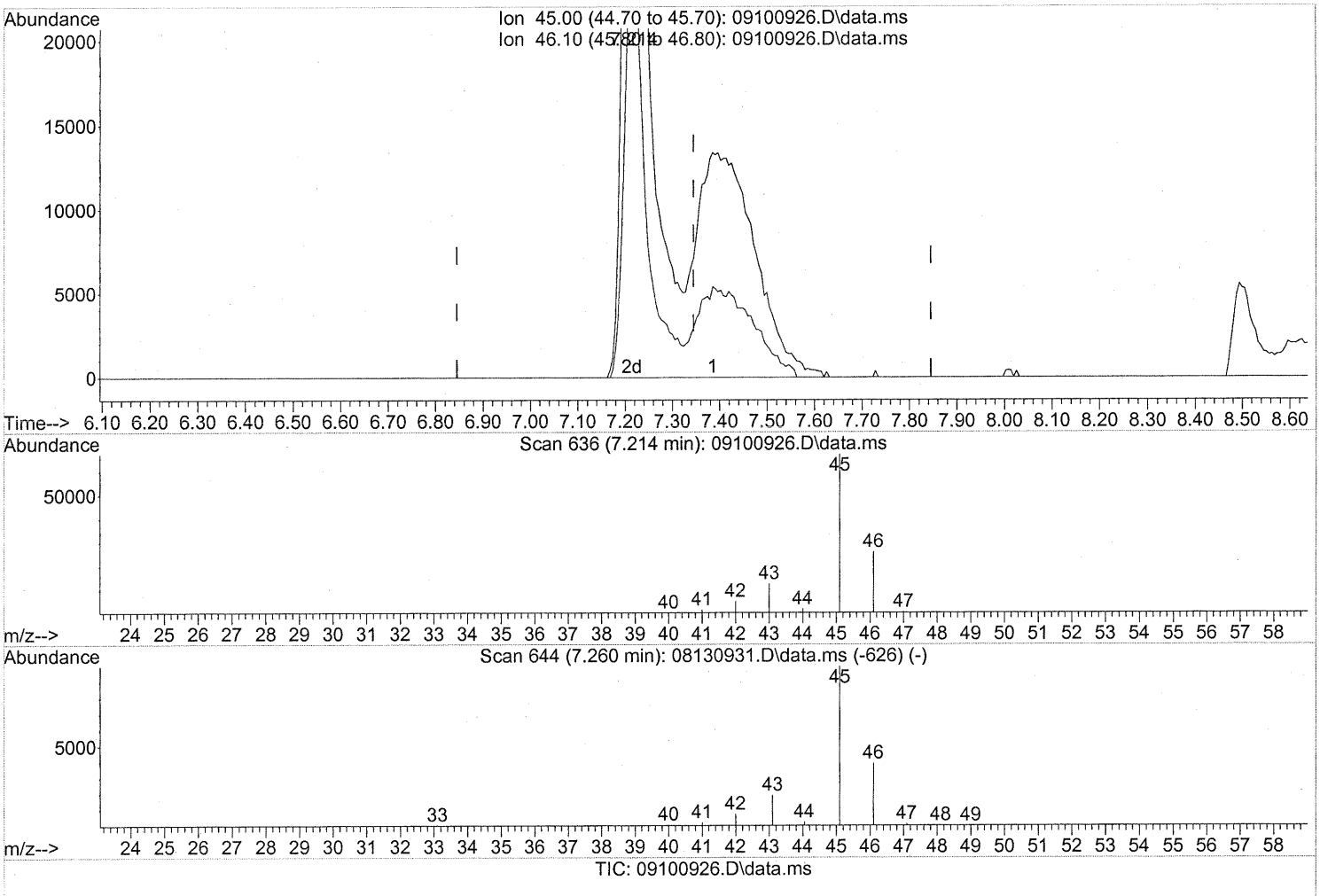
SP

291

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(10) Ethanol (T)

7.214min (-0.131) 19.31ng m

response 326205

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	13.38#
0.00	0.00	0.00
0.00	0.00	0.00

SP → LC

9/21/09

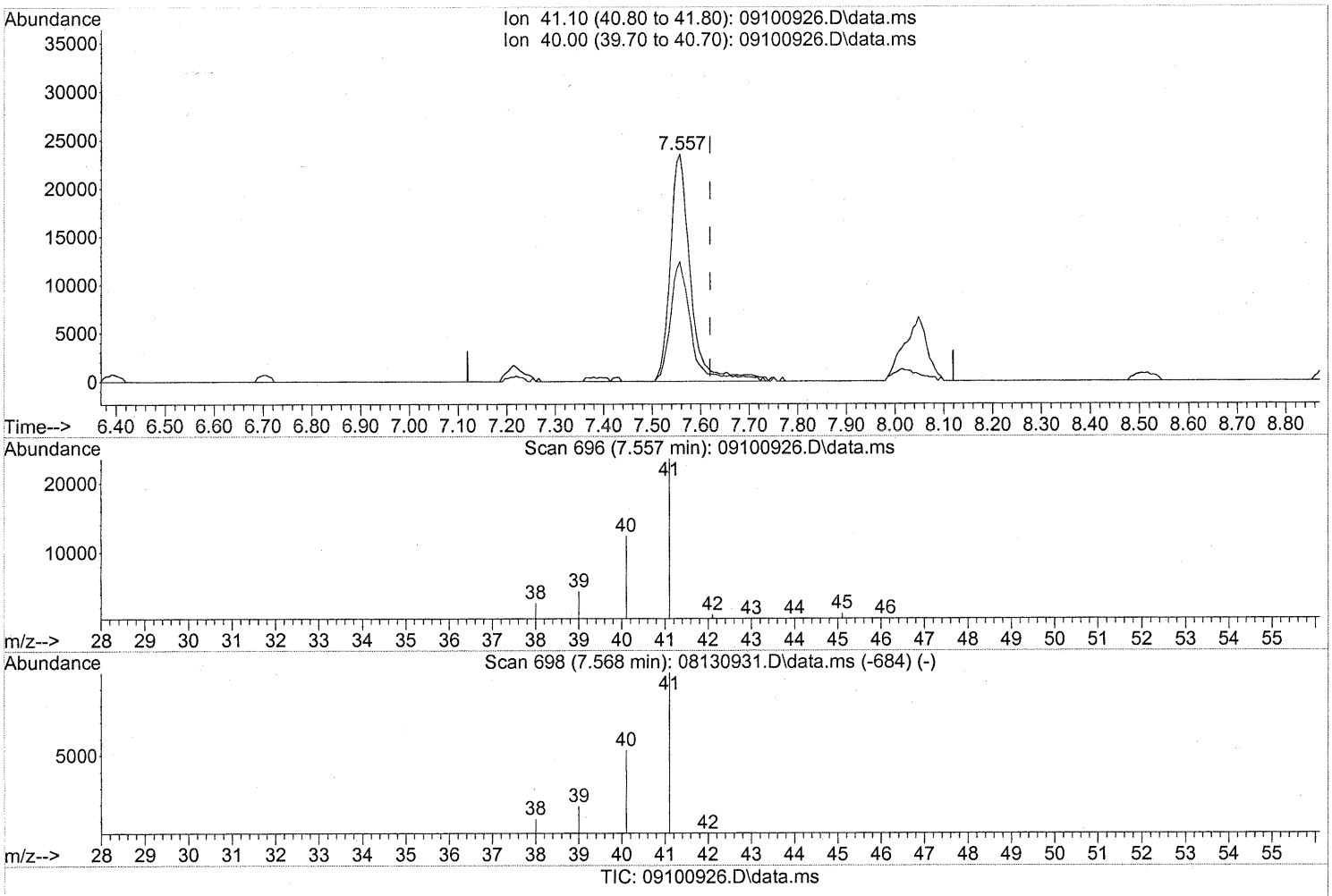
9/21/09

292

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(11) Acetonitrile (T)

7.557min (-0.063) 1.65ng

response 68038

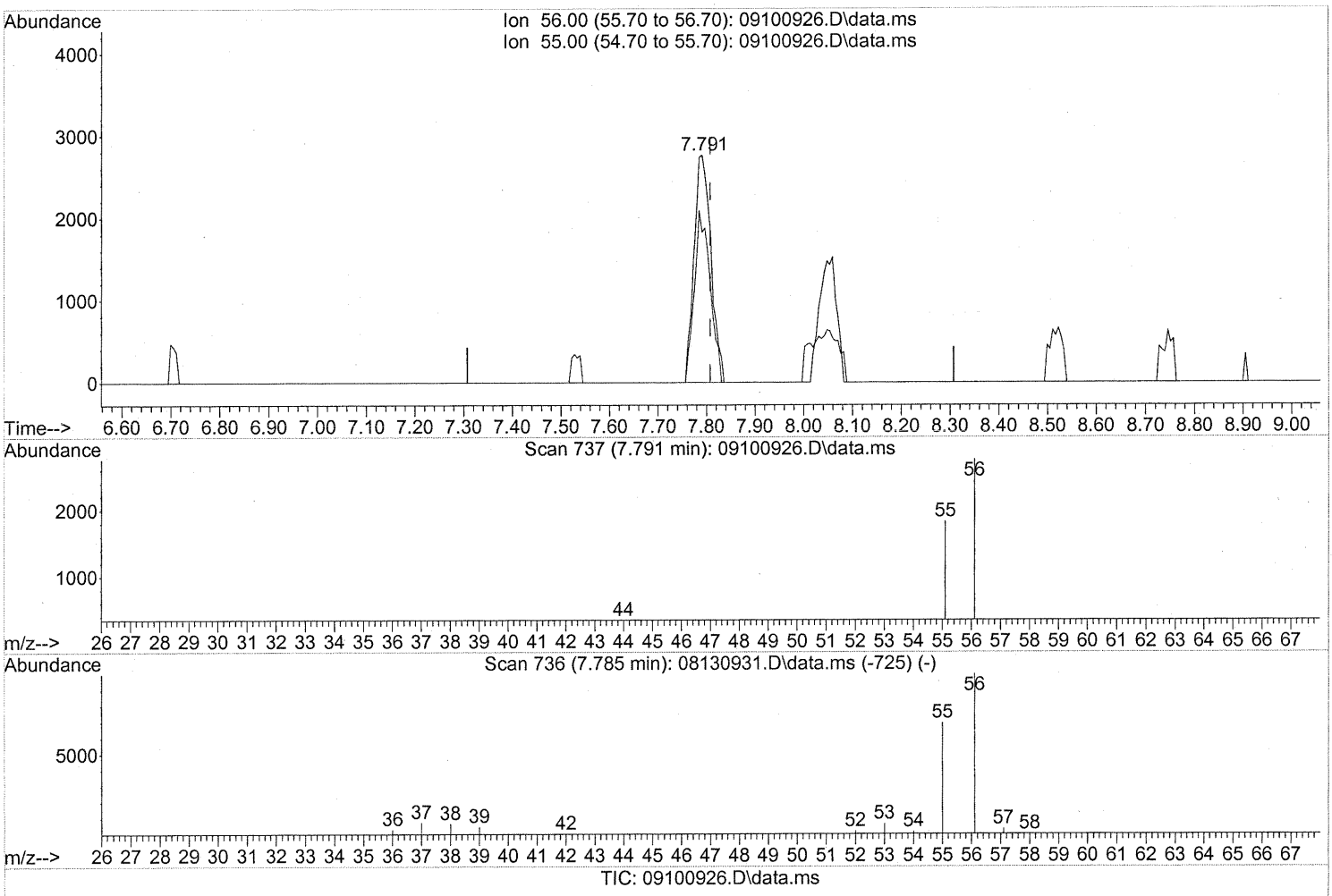
Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.77
0.00	0.00	0.00
0.00	0.00	0.00

293

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(12) Acrolein (T)

7.791min (-0.017) 0.61ng

response 6682

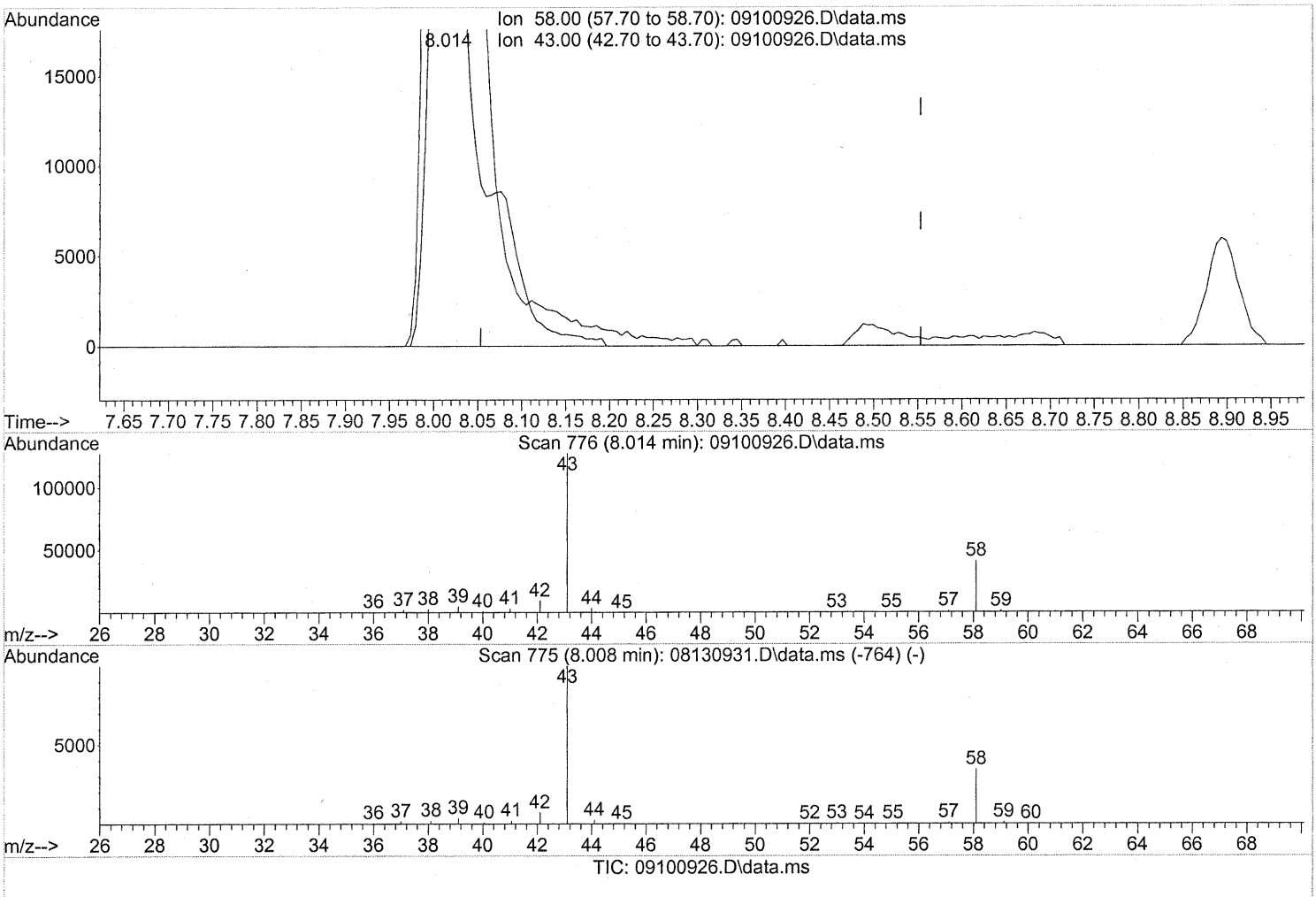
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.35
0.00	0.00	0.00
0.00	0.00	0.00

294

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



(13) Acetone (T)

8.014min (-0.040) 7.37ng

response 126744

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	280.90#
0.00	0.00	0.00
0.00	0.00	0.00

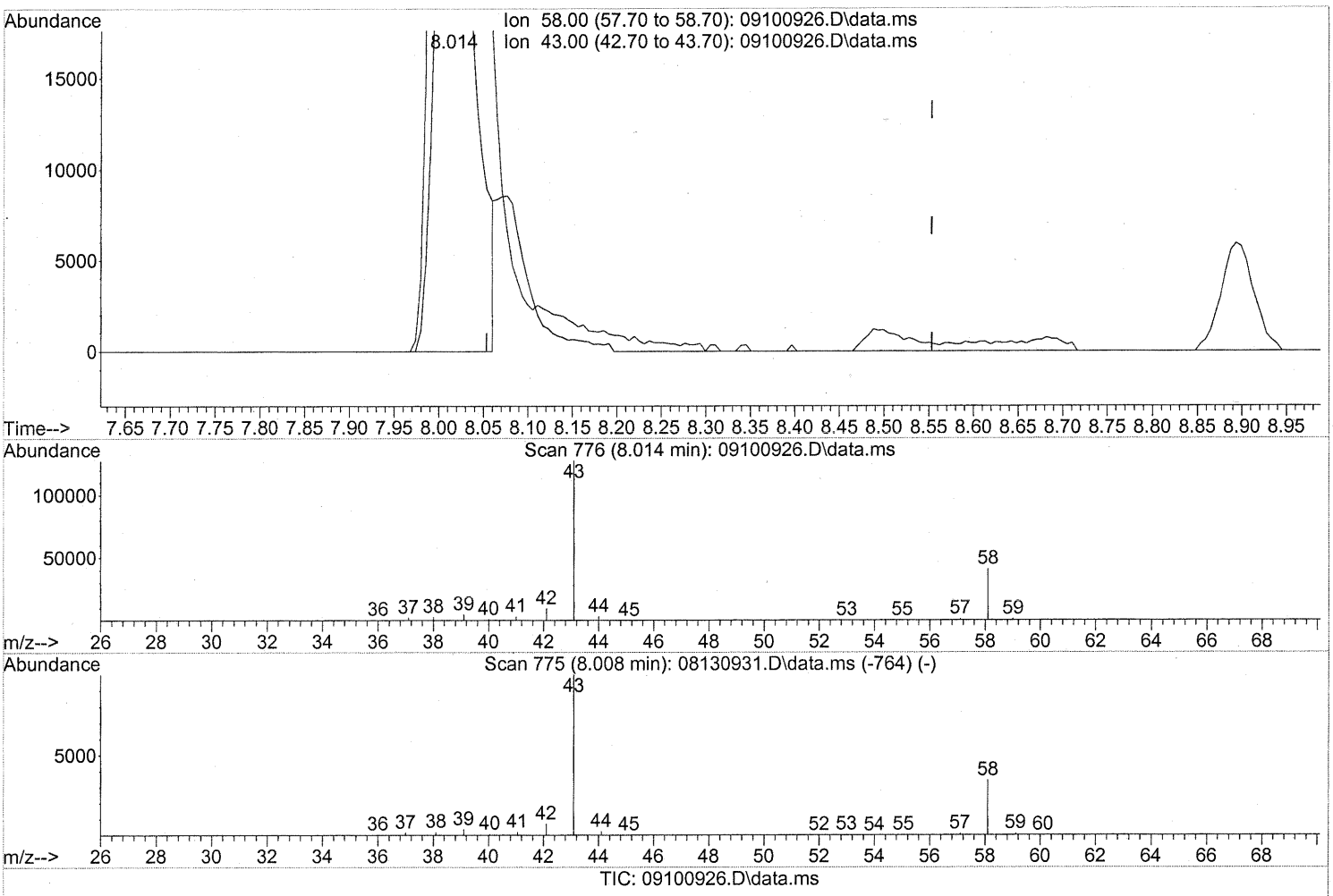
SH

295

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(13) Acetone (T)

8.014min (-0.040) 6.10ng m

response 104937

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	339.27
0.00	0.00	0.00
0.00	0.00	0.00

SH → IC

9/21/09

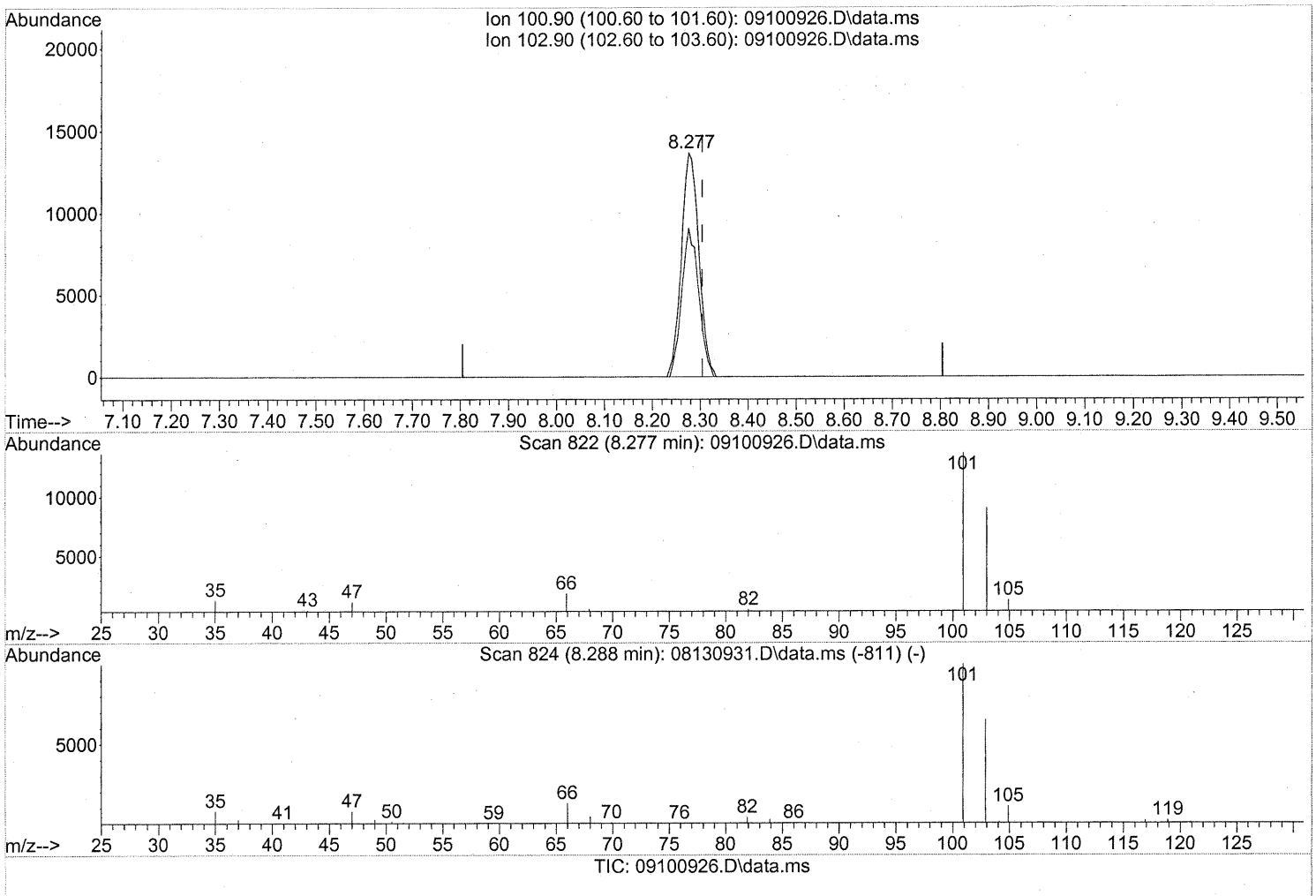
9/21/09

296

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(14) Trichlorofluoromethane (T)

8.277min (-0.028) 1.06ng

response 34713

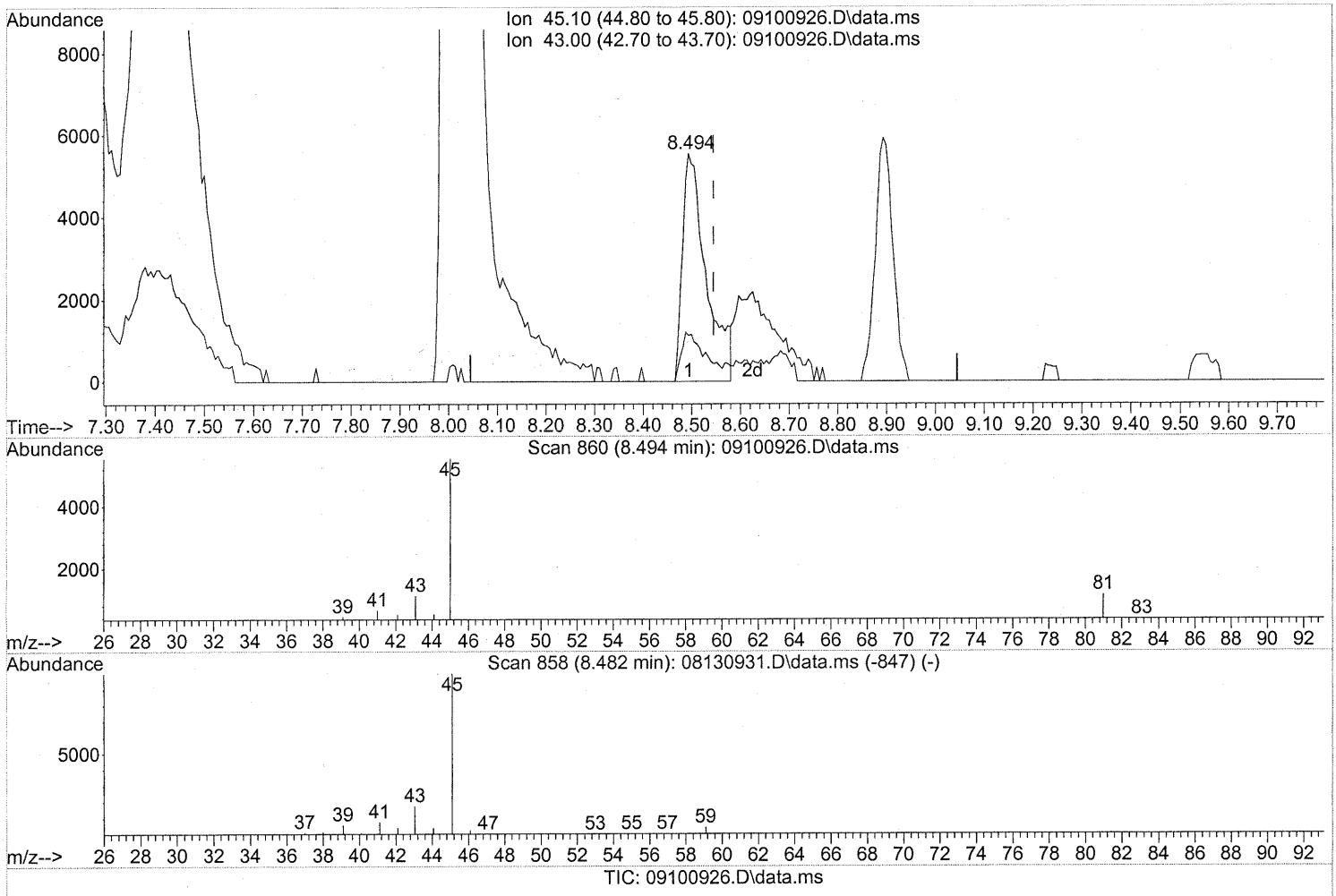
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.11
0.00	0.00	0.00
0.00	0.00	0.00

297

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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)

8.494min (-0.051) 0.40ng

response 18742

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	21.68
0.00	0.00	0.00
0.00	0.00	0.00

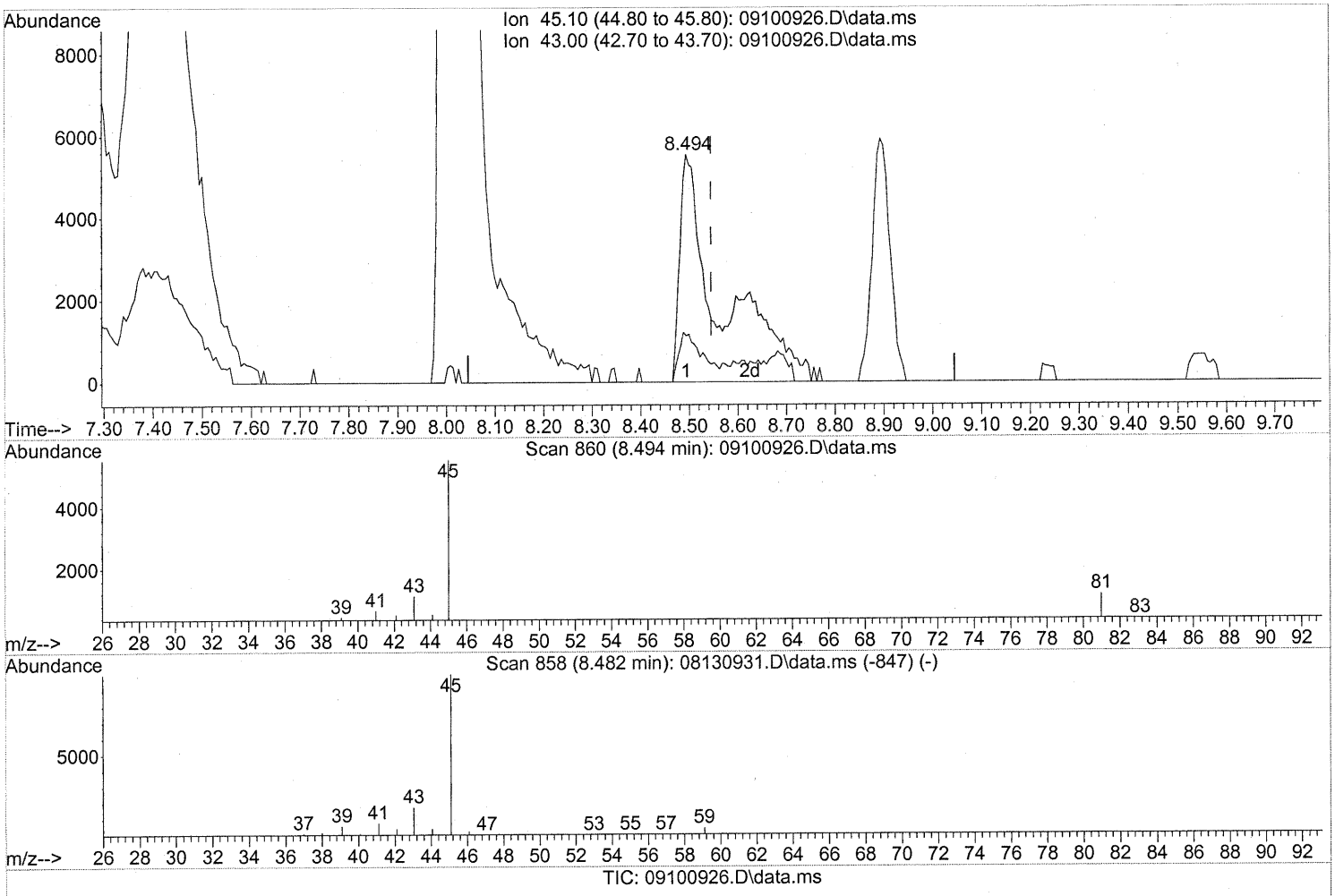
PT

298

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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)

8.494min (-0.051) 0.67ng m

response 31730

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	12.80
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Tom 9/21/09

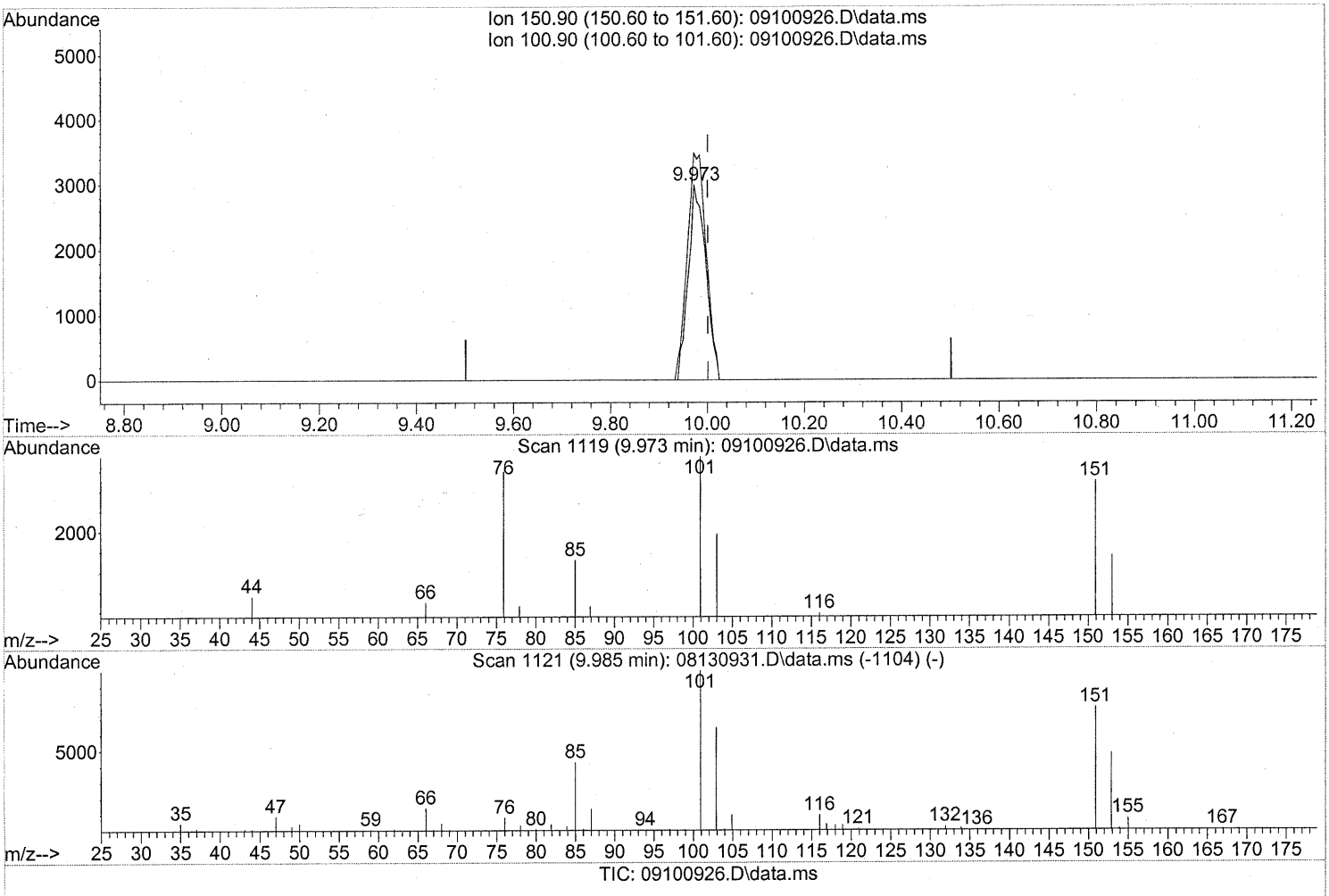
E-9/21/09

299

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.973min (-0.028) 0.51ng

response 7483

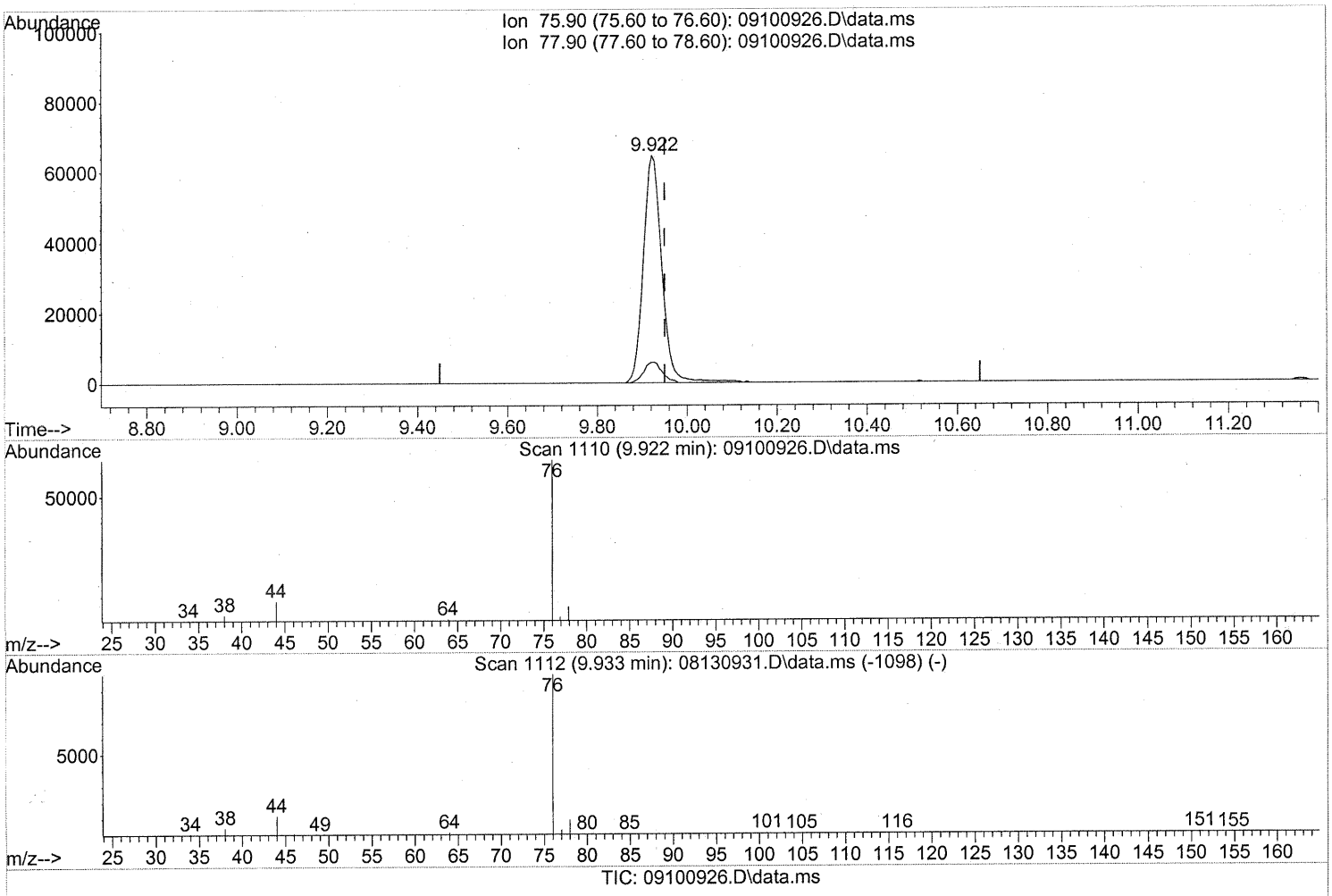
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	126.61
0.00	0.00	0.00
0.00	0.00	0.00

300

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(22) Carbon Disulfide (T)

9.922min (-0.028) 2.43ng

response 183659

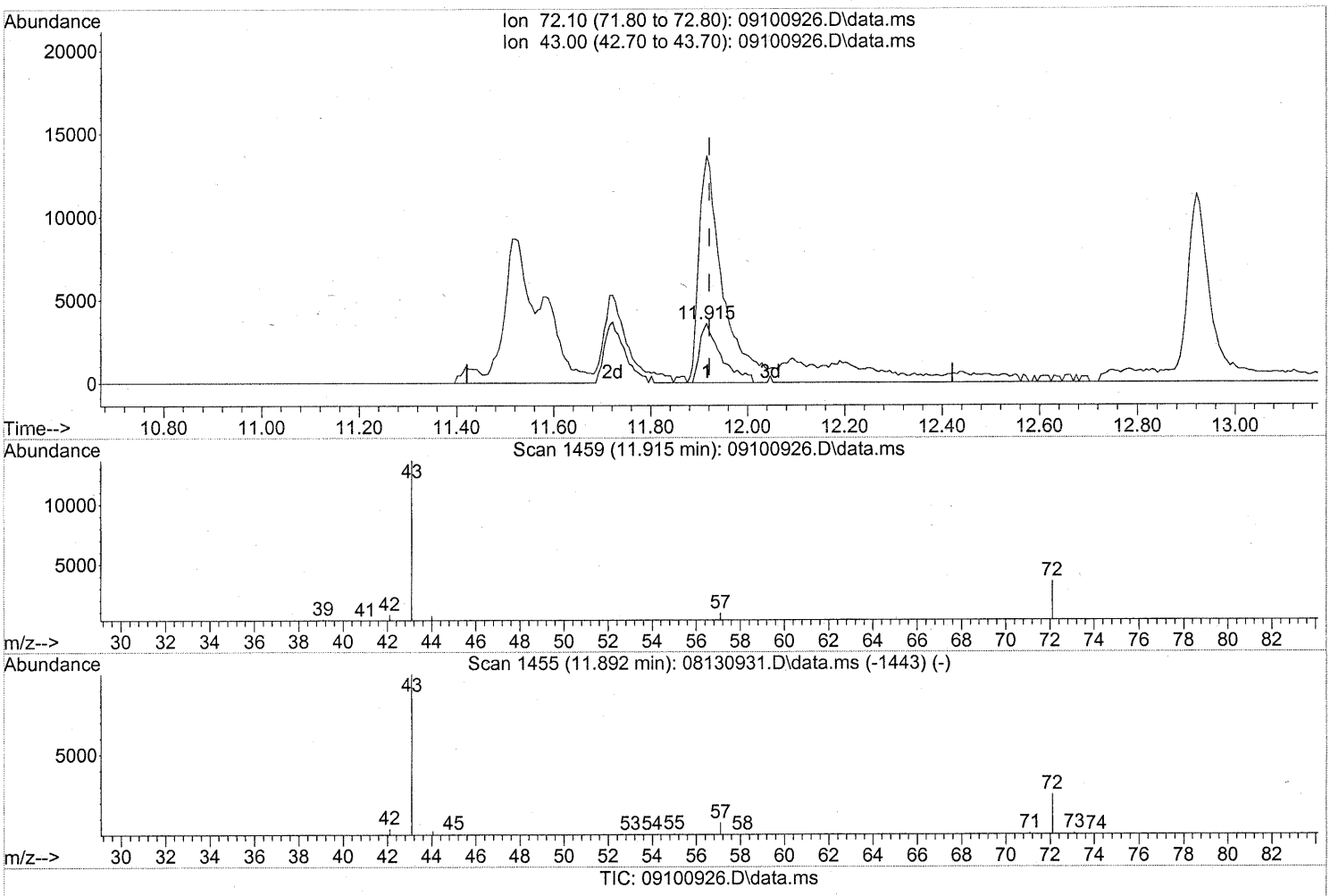
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.88
0.00	0.00	0.00
0.00	0.00	0.00

301

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

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

11.915min (-0.006) 0.89ng

response 10669

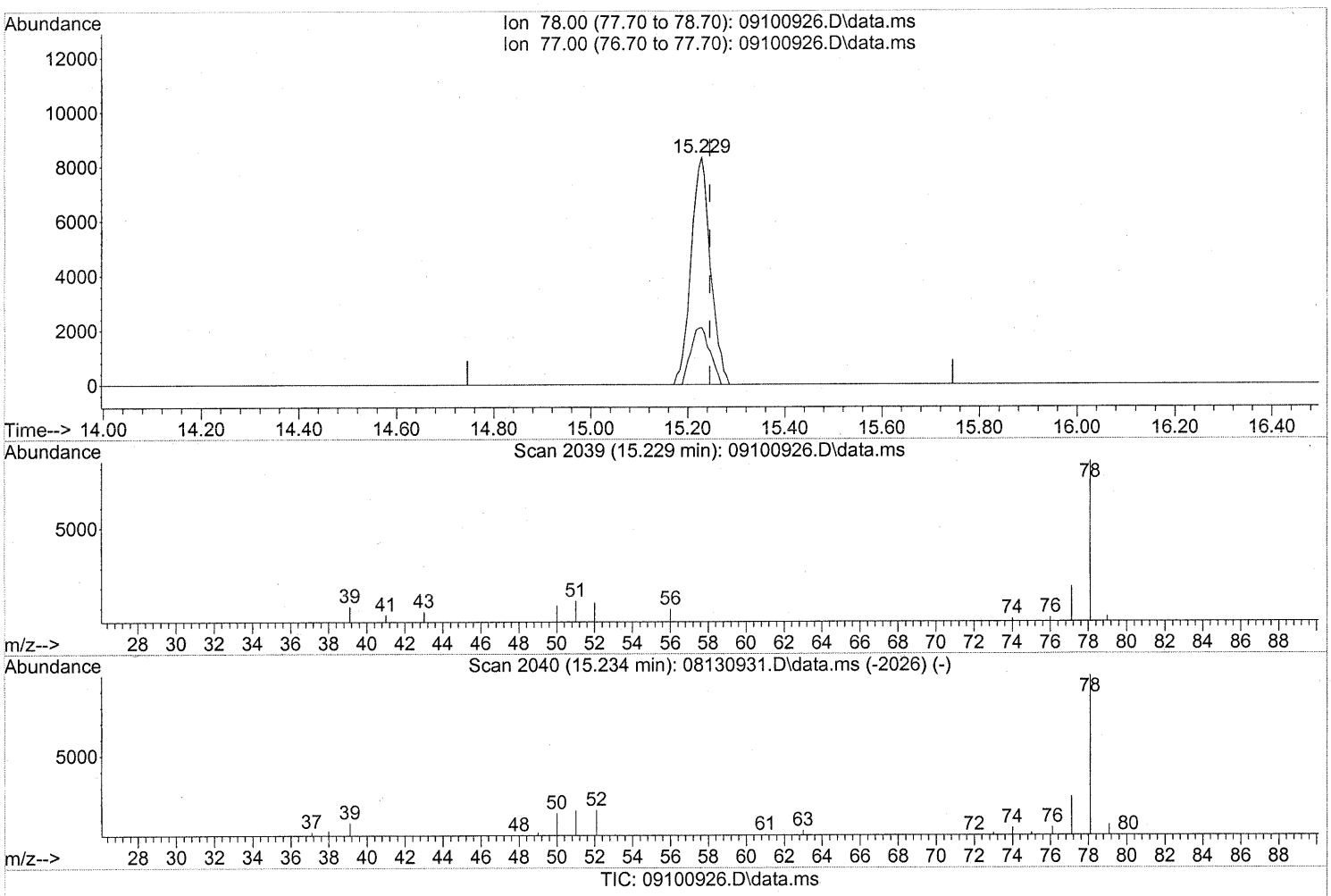
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	437.59#
0.00	0.00	0.00
0.00	0.00	0.00

302

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(41) Benzene (T)

15.229min (-0.017) 0.27ng

response 23009

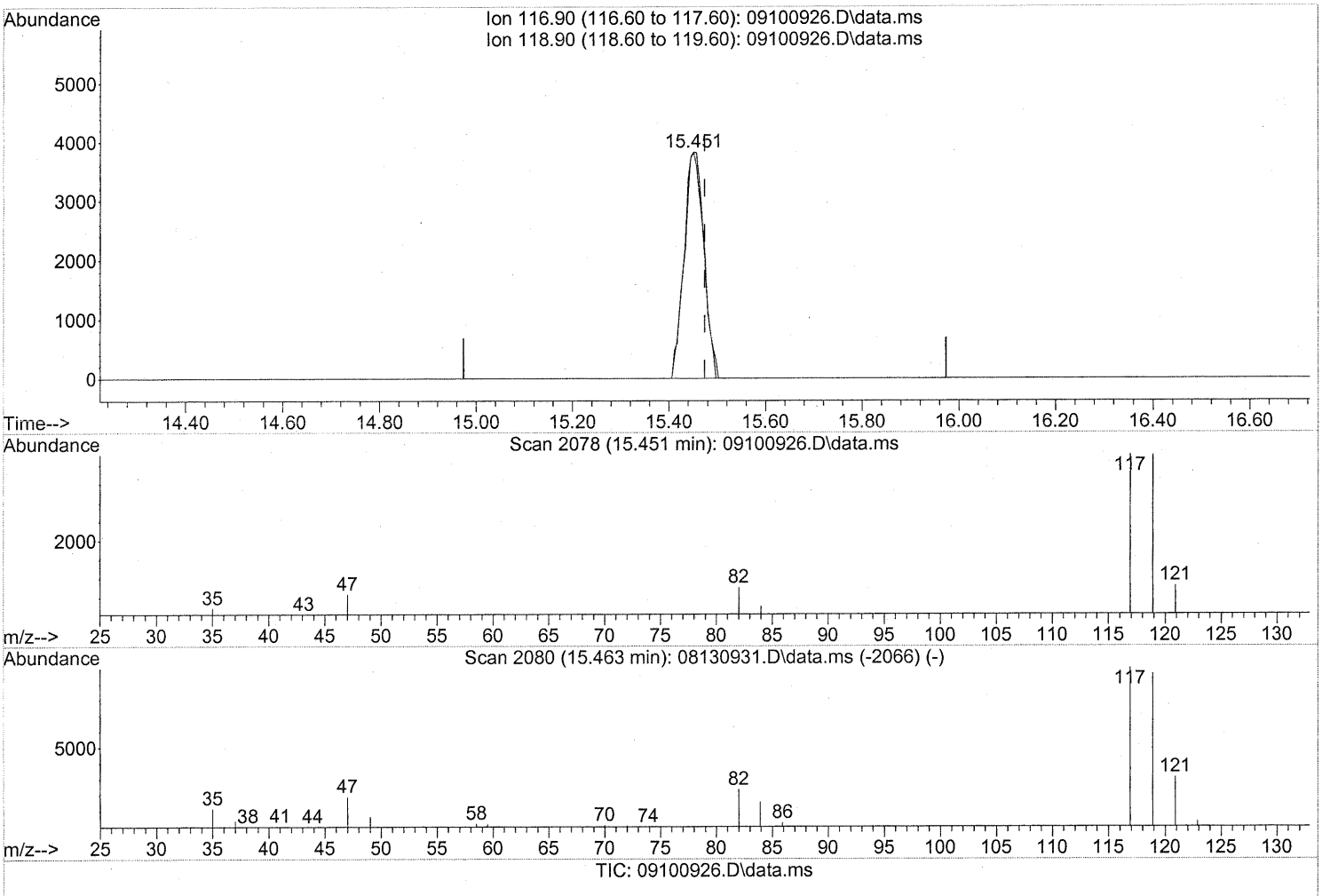
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.45
0.00	0.00	0.00
0.00	0.00	0.00

303

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(42) Carbon Tetrachloride (T)

15.451min (-0.023) 0.45ng

response 10730

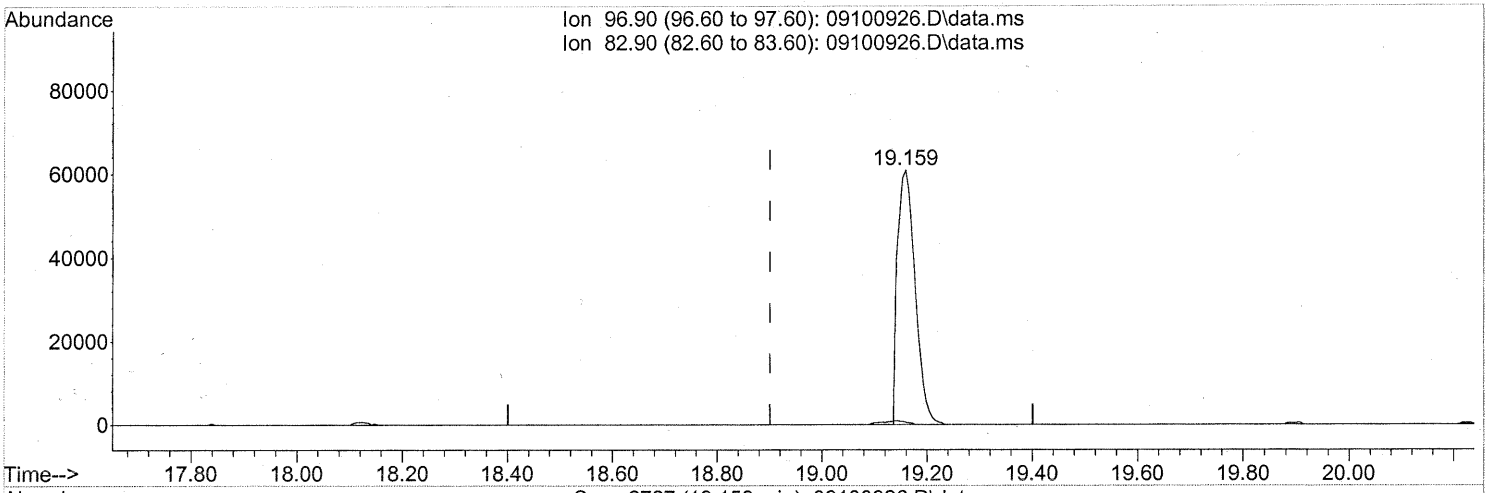
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	99.76
0.00	0.00	0.00
0.00	0.00	0.00

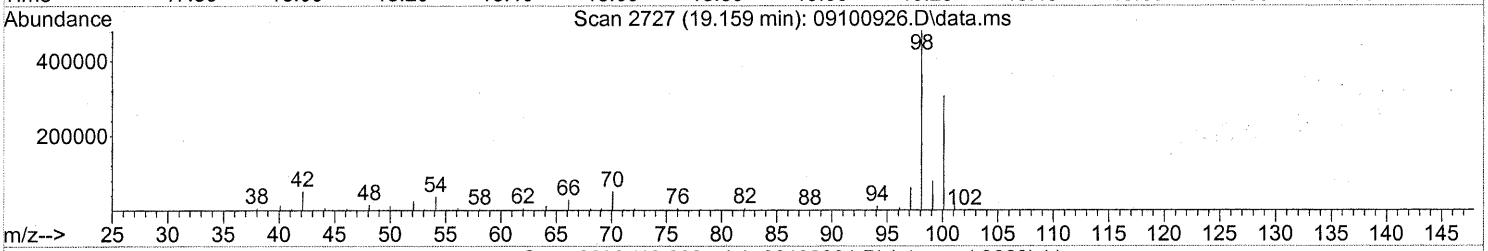
304

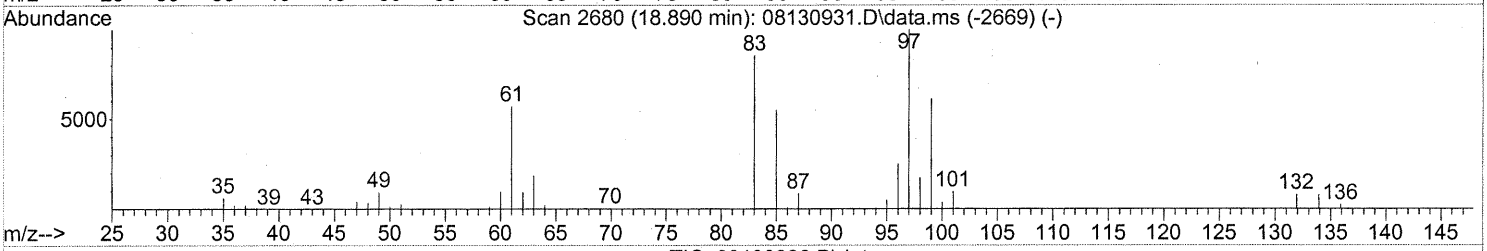
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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







TIC: 09100926.D\data.ms

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

19.159min (+0.257) 7.82ng

response 141631

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.87#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

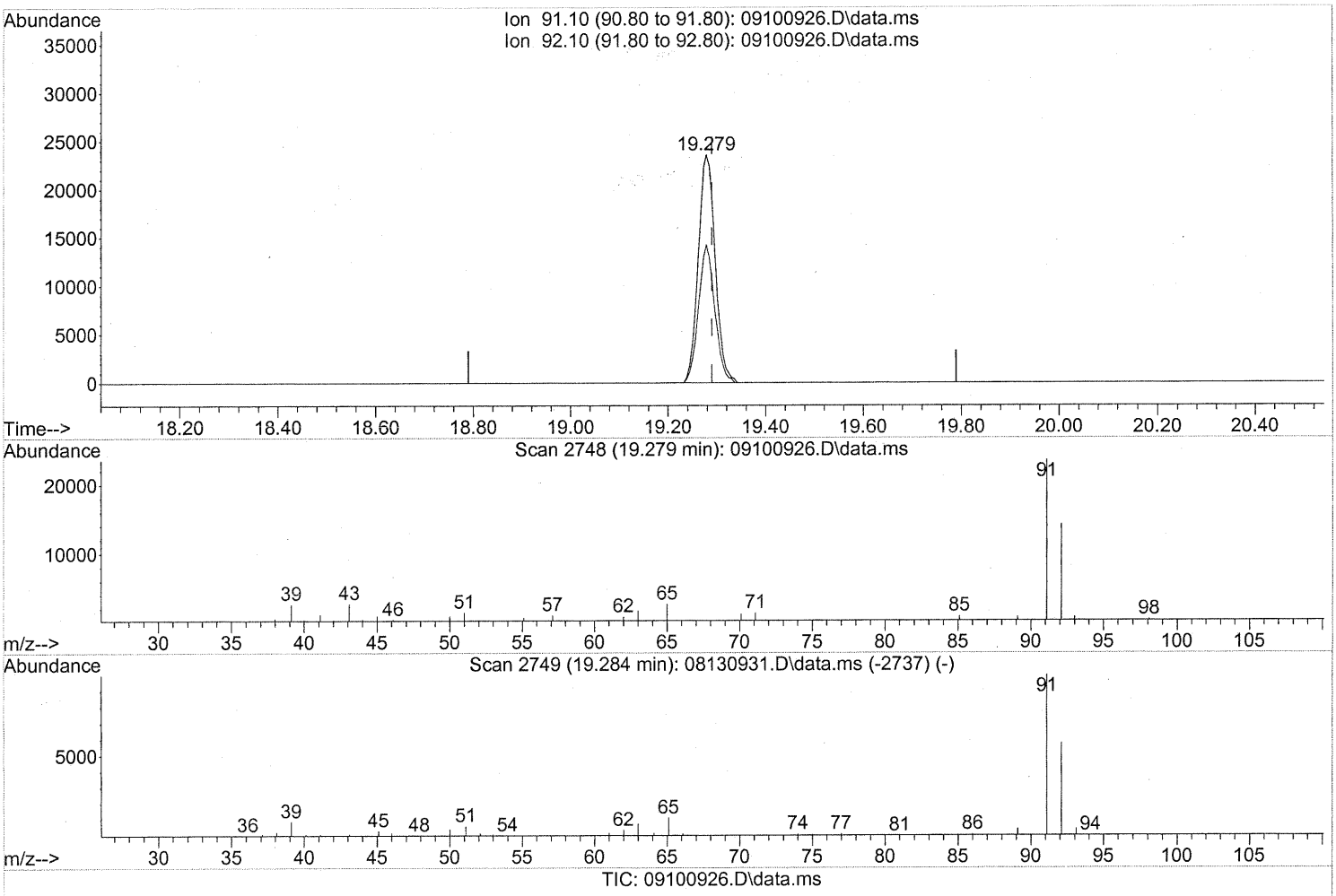
9/21/09

305

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100926.D
Acq On : 11 Sep 2009 1:33
Operator : EM
Sample : P0903139-005 (1000ml)
Misc : Environmental H &E 106312
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 08:06:02 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



TIC: 09100926.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 0.61ng

response 56235

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	58.06
0.00	0.00	0.00
0.00	0.00	0.00

306

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106313**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00882

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09
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)**	**0.61**	0.50	**0.21**	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: 9/11/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106313**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00882

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **106313**
Client Project ID: **16512**

CAS Project ID: P0903139
CAS Sample ID: P0903139-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00882

Date Collected: 9/3/09
Date Received: 9/4/09
Date Analyzed: 9/11/09
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	

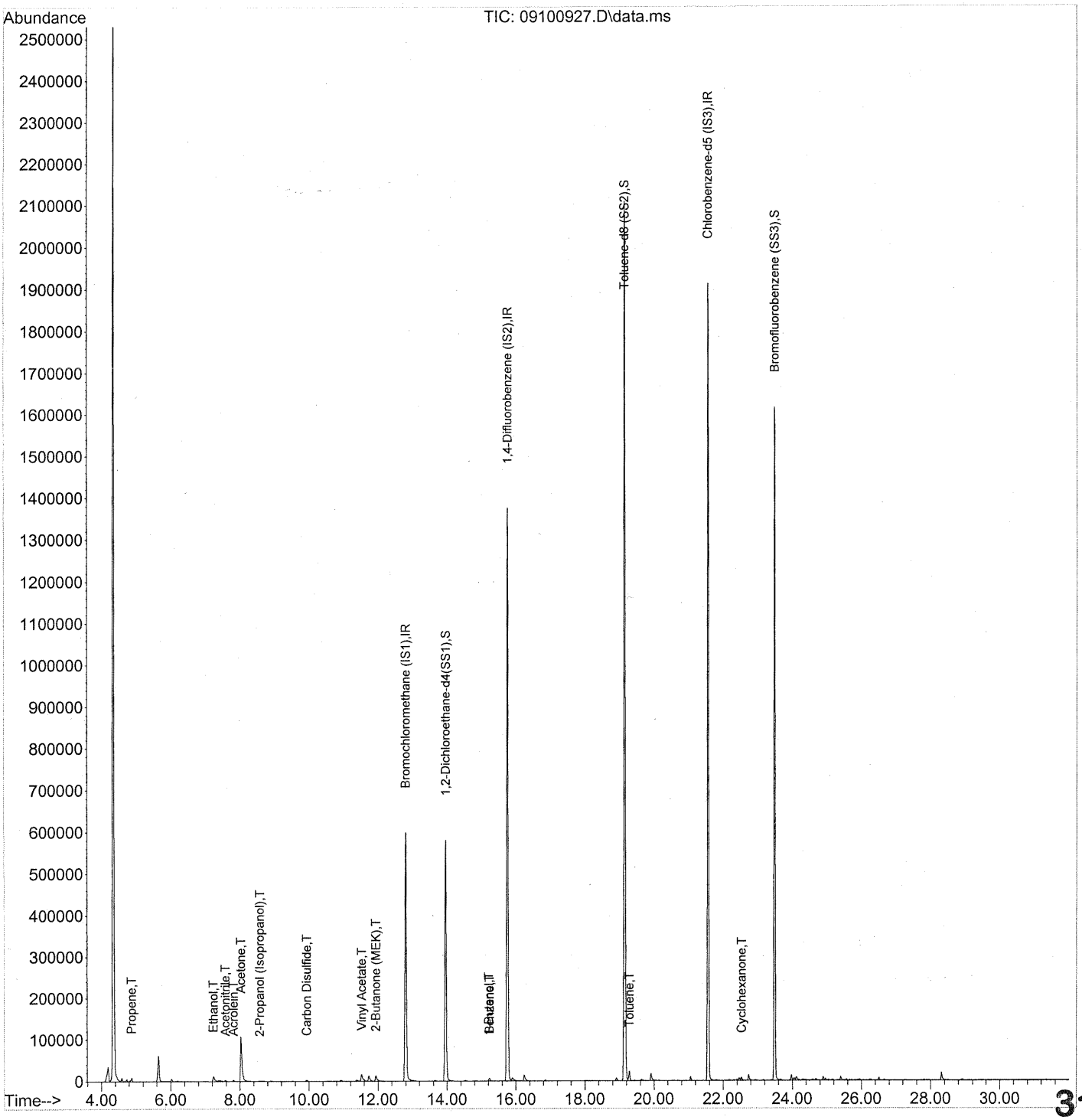
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 12:11:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
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Quant Time: Sep 17 12:11:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	313346	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1605896	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	822513	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	579274	26.145	ng		-0.03
Spiked Amount 25.000			Recovery = 104.60%				
57) Toluene-d8 (SS2)	19.14	98	1875474	23.985	ng		-0.02
Spiked Amount 25.000			Recovery = 95.96%				
73) Bromofluorobenzene (SS3)	23.49	174	567532	25.629	ng		0.00
Spiked Amount 25.000			Recovery = 102.52%				
Target Compounds							Qvalue
2) Propene	4.87	42	3179	0.~~116~~	ng		95
3) Dichlorodifluoromethan...	5.02	85	245	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	24472	~~1.419~~	ng		97
11) Acetonitrile	7.58	41	4342	0.~~103~~	ng		75
12) Acrolein	7.81	56	4055	0.~~361~~	ng		97
13) Acetone	8.03	58	77231	~~4.402~~	ng	#	70
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.57	45	4869	0.~~101~~	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	9.52	84	678	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	9.93	76	7004	0.~~091~~	ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.53	86	5336	~~1.404~~	ng	#	55
27) 2-Butanone (MEK)	11.93	72	7423	0.607	ng	#	23
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	896	N.D.			

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9/21/09

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 12:11:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	13.65	72	236	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	15.21	56	2005	0.096 ng	#	40
41) Benzene	15.23	78	7759	0.090 ng		91
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.66	84	117	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	2513	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D. d		
58) Toluene	19.28	91	22734	0.240 ng		98
59) 2-Hexanone	19.58	43	209	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.55	43	684	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.10	91	1518	N.D.		
67) m- & p-Xylenes	22.31	91	3484	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.79	104	231	N.D.		
70) o-Xylene	22.92	91	1131	N.D.		
71) n-Nonane	23.18	43	1060	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.67	105	2835	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.29	91	668	N.D.		
77) 3-Ethyltoluene	24.41	105	1347	N.D.		
78) 4-Ethyltoluene	24.46	105	774	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	947	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 12:11:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

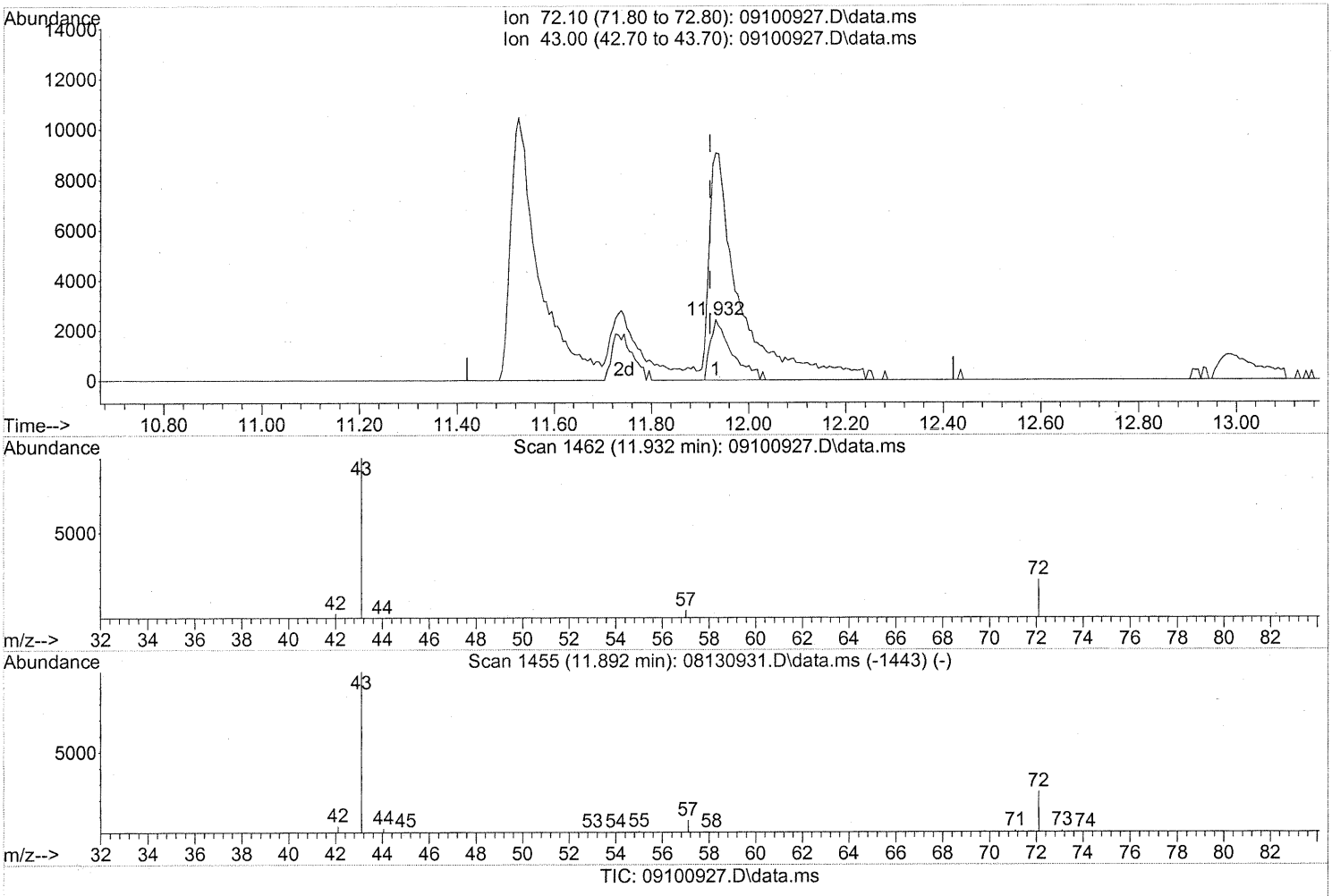
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.	
81) 2-Ethyltoluene	24.79	105	785	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	1669	N.D.	
83) n-Decane	25.15	57	1053	N.D.	
84) Benzyl Chloride	0.00	91	0	N.D.	
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.	
87) sec-Butylbenzene	25.39	105	245	N.D.	
88) 4-Isopropyltoluene (p-...	25.57	119	776	N.D.	
89) 1,2,3-Trimethylbenzene	25.57	105	1119	N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
91) d-Limonene	0.00	68	0	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	830	N.D.	
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.96	128	1243	N.D.	
96) n-Dodecane	27.89	57	513	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.53	55	3740	0.125 ng	# 85
99) tert-Butylbenzene	25.05	119	244	N.D.	
100) n-Butylbenzene	26.07	91	115	N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 11 08:06:06 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



TIC: 09100927.D\data.ms

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

11.932min (+0.011) 0.61ng

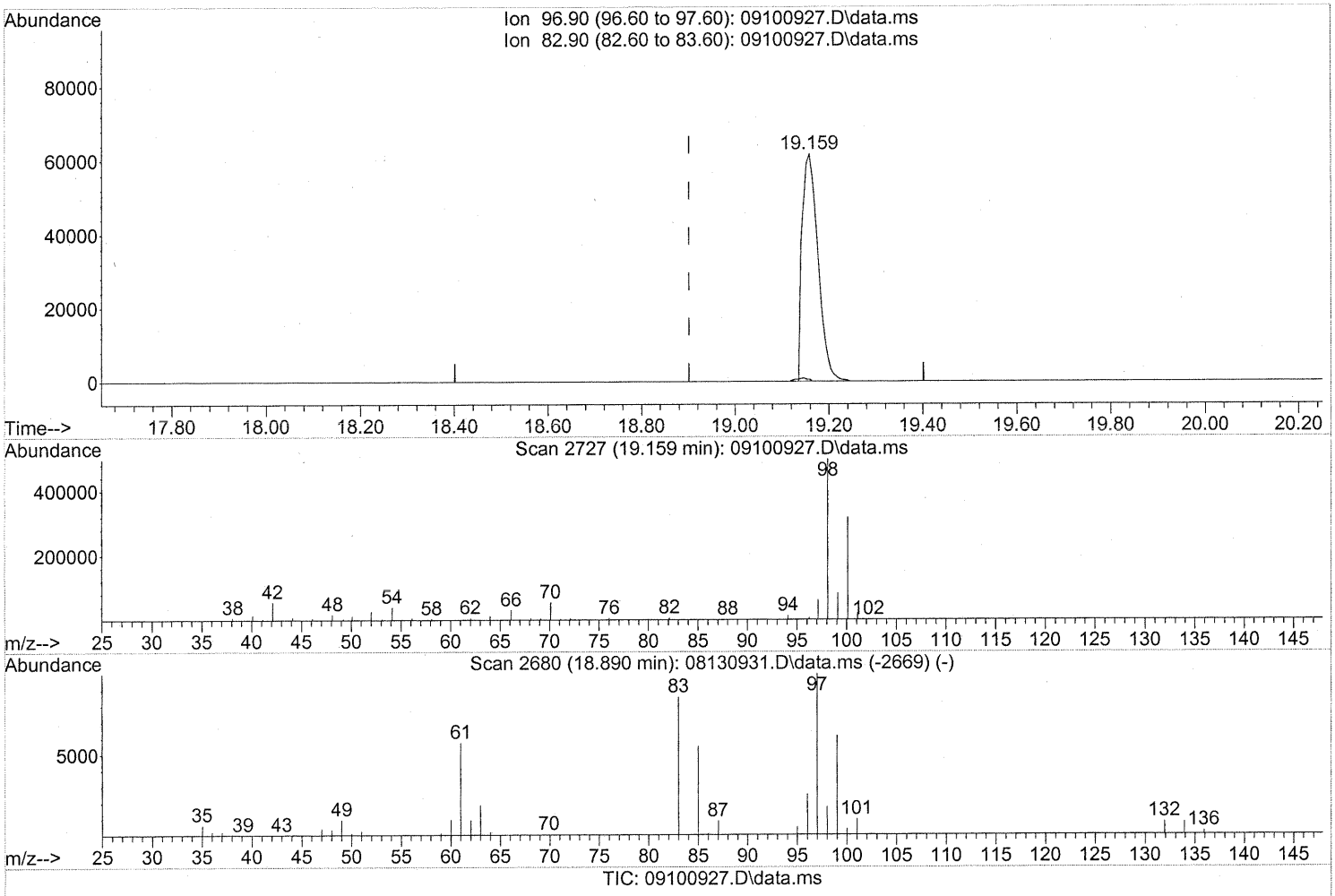
response 7423

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	537.81#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100927.D
Acq On : 11 Sep 2009 2:15
Operator : EM
Sample : P0903139-006 (1000ml)
Misc : Environmental H &E 106313
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 11 08:06:06 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



TIC: 09100927.D\data.ms

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

19.159min (+0.257) 7.76ng

response 143161

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.95#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/21/09

9/21/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090910-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: 9/10/09
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
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090910-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: 9/10/09
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090910-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: 9/10/09
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	

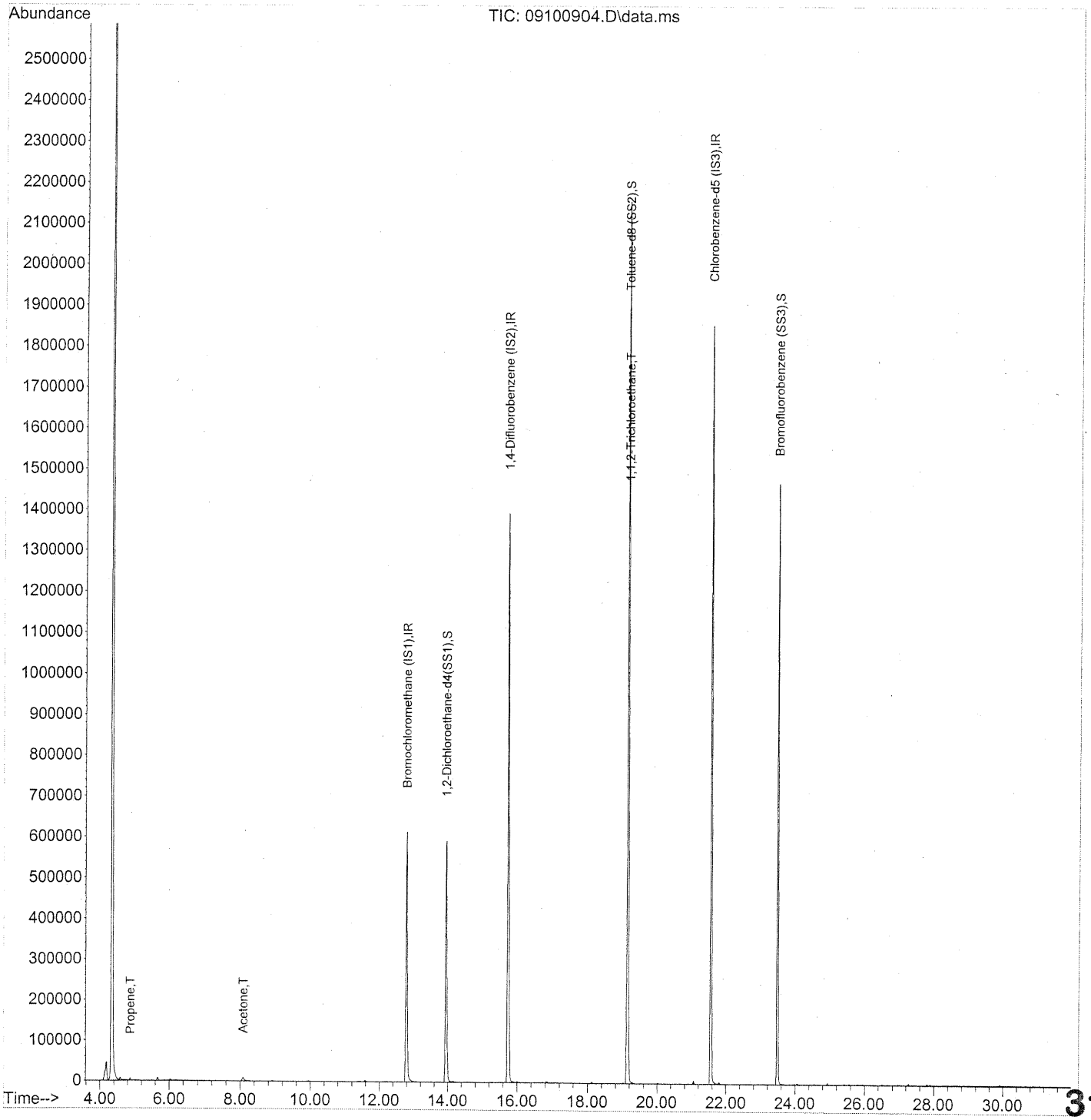
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100904.D
Acq On : 10 Sep 2009 7:28
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:29:38 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100904.D
Acq On : 10 Sep 2009 7:28
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:29:38 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	314097	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1612977	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	798997	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	599615	26.999	ng		-0.03
Spiked Amount 25.000			Recovery =	108.00%			
57) Toluene-d8 (SS2)	19.14	98	1888221	24.859	ng		-0.02
Spiked Amount 25.000			Recovery =	99.44%			
73) Bromofluorobenzene (SS3)	23.49	174	508030	23.617	ng		0.00
Spiked Amount 25.000			Recovery =	94.48%			
Target Compounds							Qvalue
2) Propene	4.88	42	1956	0.071	ng		96
3) Dichlorodifluoromethan...	0.00	85	0	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	0.00	45	0	N.D.			
11) Acetonitrile	7.65	41	114	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.09	58	5424	0.308	ng	#	70
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	0.00	45	0	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	108	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	1949	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	216	N.D.			

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EM 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100904.D
Acq On : 10 Sep 2009 7:28
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:29:38 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	15.25	78	1564	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.65	84	232	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	2484	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	155476	~~8.389 ng~~ #	8
58) Toluene	19.28	91	719	N.D.	
59) 2-Hexanone	19.53	43	718	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	122	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	21.85	91	105	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	23.17	43	118	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.68	105	1349	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.26	91	1442	N.D.	
77) 3-Ethyltoluene	24.42	105	1879	N.D.	
78) 4-Ethyltoluene	24.47	105	752	N.D.	
79) 1,3,5-Trimethylbenzene	24.55	105	2064	N.D.	

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100904.D
Acq On : 10 Sep 2009 7:28
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:29:38 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	240	N.D.		
82) 1,2,4-Trimethylbenzene	25.07	105	1086	N.D.		
83) n-Decane	25.15	57	372	N.D.		
84) Benzyl Chloride	0.00	91	0	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	25.58	105	1029	N.D.		
88) 4-Isopropyltoluene (p-...	25.57	119	772	N.D.		
89) 1,2,3-Trimethylbenzene	25.58	105	1029	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	725	N.D.		
94) 1,2,4-Trichlorobenzene	28.26	180	236	N.D.		
95) Naphthalene	27.96	128	1097	N.D.		
96) n-Dodecane	27.89	57	1173	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	0.00	55	0	N.D.		
99) tert-Butylbenzene	25.05	119	123	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: P0903139
CAS Sample ID: P090911-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: 9/11/09
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090911-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: 9/11/09
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0903139
Client Sample ID: **Method Blank** CAS Sample ID: P090911-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: 9/11/09
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	

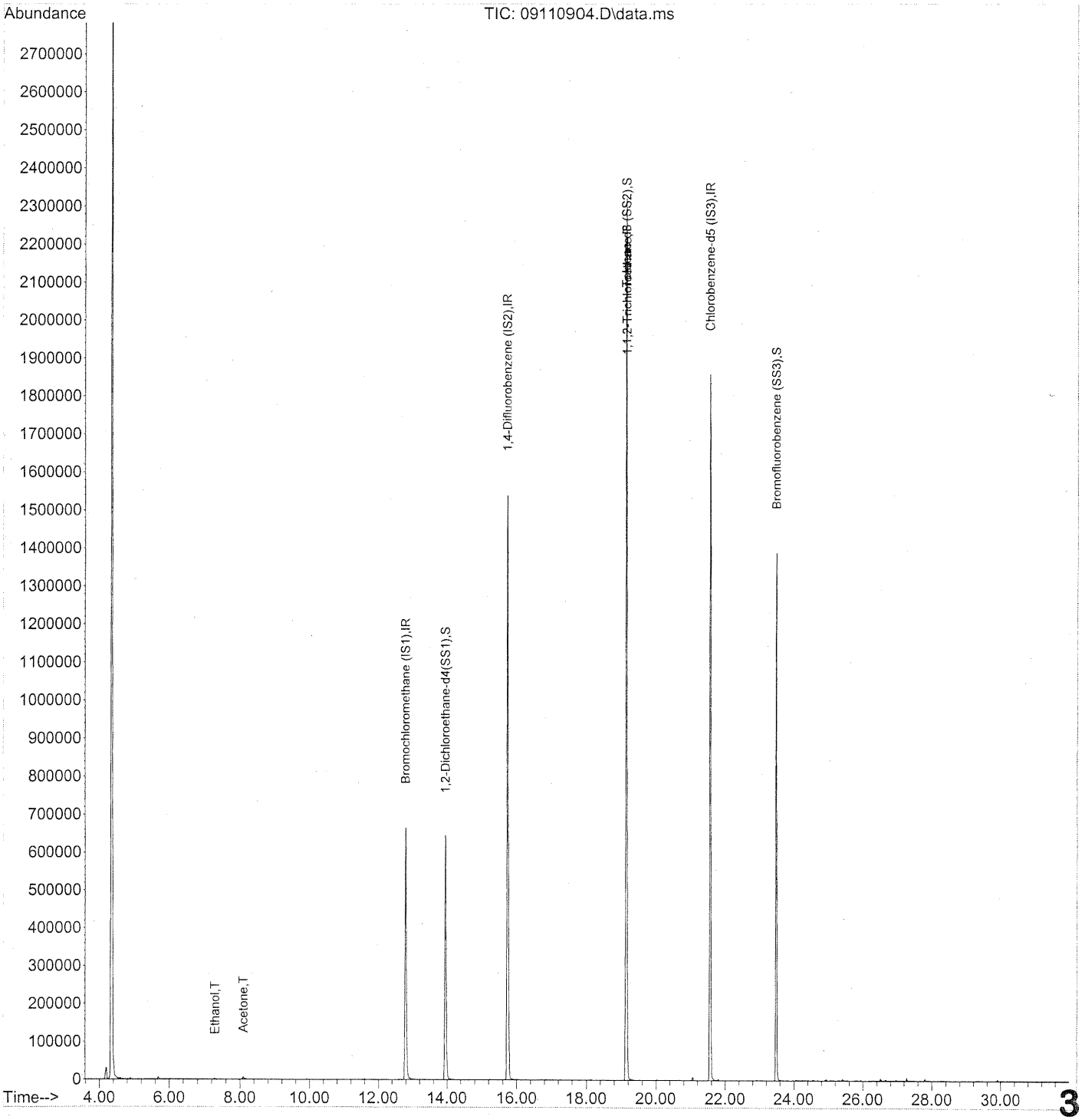
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110904.D
Acq On : 11 Sep 2009 10:31
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 11:03:49 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



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110904.D
Acq On : 11 Sep 2009 10:31
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 11:03:49 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)
1) Bromochloromethane (IS1)	12.80	130	344661	25.000	ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1778203	25.000	ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	794032	25.000	ng	-0.01
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	13.95	65	648142	26.596	ng	-0.03
Spiked Amount 25.000			Recovery = 106.40%			
57) Toluene-d8 (SS2)	19.14	98	1998587	26.476	ng	-0.02
Spiked Amount 25.000			Recovery = 105.92%			
73) Bromofluorobenzene (SS3)	23.48	174	481472	22.522	ng	-0.01
Spiked Amount 25.000			Recovery = 90.08%			
Target Compounds						Qvalue
2) Propene	4.89	42	1339	N.D.		
3) Dichlorodifluoromethan...	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	7.29	45	3656	0.193	ng #	62
11) Acetonitrile	7.63	41	784	N.D.		
12) Acrolein	0.00	56	0	N.D.		
13) Acetone	8.09	58	4520	0.234	ng	95
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) 2-Propanol (Isopropanol)	0.00	45	0	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	357	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	1075	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.		

tom 9/11/09

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110904.D
Acq On : 11 Sep 2009 10:31
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 11:03:49 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	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	1786	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.75	84	714	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	0.00	130	0	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	16.85	57	835	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	19.15	97	161807	~~7.920 ng~~	# 8
58) Toluene	19.29	91	3036	N.D.	
59) 2-Hexanone	19.54	43	362	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	370	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	22.32	91	544	N.D.	
67) m- & p-Xylenes	22.34	91	340	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	0.00	104	0	N.D.	
70) o-Xylene	22.93	91	1398	N.D.	
71) n-Nonane	23.17	43	371	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	23.67	105	108	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.29	91	233	N.D.	
77) 3-Ethyltoluene	24.41	105	815	N.D.	
78) 4-Ethyltoluene	24.48	105	236	N.D.	
79) 1,3,5-Trimethylbenzene	24.56	105	508	N.D.	

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Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110904.D
Acq On : 11 Sep 2009 10:31
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 11:03:49 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	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.56	105	508	N.D.		
82) 1,2,4-Trimethylbenzene	25.06	105	813	N.D.		
83) n-Decane	25.16	57	576	N.D.		
84) Benzyl Chloride	0.00	91	0	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	25.57	105	131	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	25.57	105	131	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	778	N.D.		
94) 1,2,4-Trichlorobenzene	28.26	180	1030	N.D.		
95) Naphthalene	27.96	128	1212	N.D.		
96) n-Dodecane	27.89	57	650	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: P0903139
CAS Sample ID: P090915-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: 9/15/09
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: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090915-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: 9/15/09
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: R. Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090915-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: 9/15/09
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	

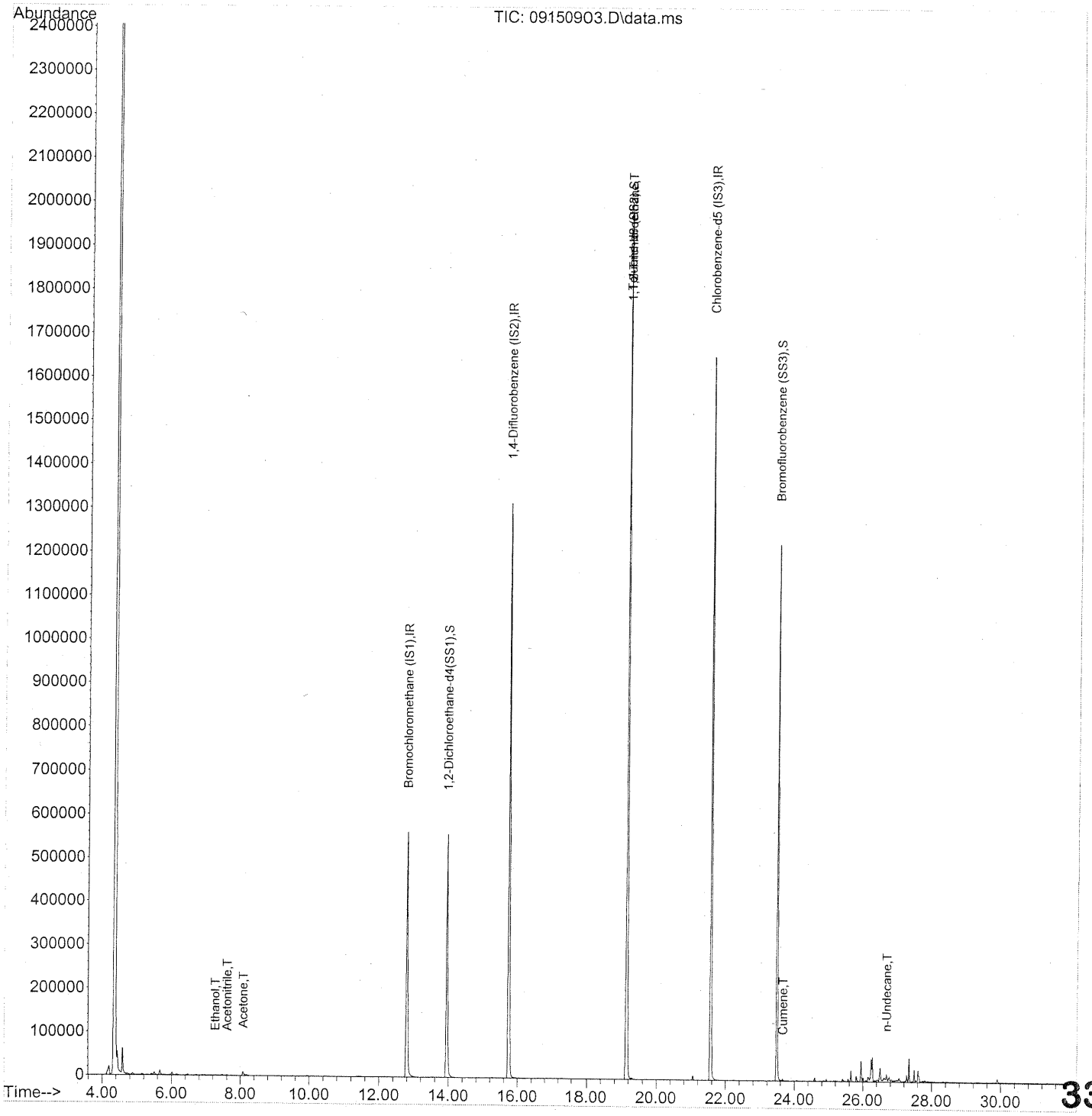
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Rc Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150903.D
Acq On : 15 Sep 2009 7:06
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:17:37 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\15\
Data File : 09150903.D
Acq On : 15 Sep 2009 7:06
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:17:37 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	287677	25.000 ng	-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1507025	25.000 ng	-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	703907	25.000 ng	-0.01
System Monitoring Compounds					
33) 1,2-Dichloroethane-d4(...	13.95	65	558688	27.466 ng	-0.03
Spiked Amount 25.000			Recovery =	109.88%	
57) Toluene-d8 (SS2)	19.14	98	1742900	26.045 ng	-0.02
Spiked Amount 25.000			Recovery =	104.20%	
73) Bromofluorobenzene (SS3)	23.49	174	422457	22.292 ng	0.00
Spiked Amount 25.000			Recovery =	89.16%	
Target Compounds					Qvalue
2) Propene	4.88	42	778	N.D.	
3) Dichlorodifluoromethan...	0.00	85	0	N.D.	
4) Chloromethane	0.00	50	0	N.D.	
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.	
6) Vinyl Chloride	0.00	62	0	N.D.	
7) 1,3-Butadiene	0.00	54	0	N.D.	
8) Bromomethane	0.00	94	0	N.D.	
9) Chloroethane	0.00	64	0	N.D.	
10) Ethanol	7.27	45	3281	0.207 ng #	57
11) Acetonitrile	7.61	41	1957	0.051 ng	95
12) Acrolein	0.00	56	0	N.D.	
13) Acetone	8.08	58	5674	0.352 ng	91
14) Trichlorofluoromethane	0.00	101	0	N.D.	
15) 2-Propanol (Isopropanol)	0.00	45	0	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	215	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	2153	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\15\
Data File : 09150903.D
Acq On : 15 Sep 2009 7:06
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:17:37 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	1245	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	723	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	364	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	19.15	97	142986	8.258 ng	#	8
58) Toluene	19.30	91	2574	N.D.		
59) 2-Hexanone	19.29	43	535	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	22.34	91	121	N.D.		
67) m- & p-Xylenes	22.34	91	121	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.93	91	105	N.D.		
71) n-Nonane	0.00	43	0	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.67	105	5365	0.059 ng		90
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.41	105	506	N.D.		
78) 4-Ethyltoluene	24.47	105	569	N.D.		
79) 1,3,5-Trimethylbenzene	24.56	105	579	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150903.D
Acq On : 15 Sep 2009 7:06
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-09110901
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:17:37 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	109	N.D.	
82) 1,2,4-Trimethylbenzene	25.06	105	1119	N.D.	
83) n-Decane	25.15	57	675	N.D.	
84) Benzyl Chloride	0.00	91	0	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	25.57	105	105	N.D.	
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.	
89) 1,2,3-Trimethylbenzene	25.57	105	105	N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
91) d-Limonene	0.00	68	0	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.69	57	3318	0.074 ng	# 1
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.96	128	2184	N.D.	
96) n-Dodecane	27.89	57	1119	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: P0903139
CAS Sample ID: P090918-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/18/09
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: Rc Date: 9/26/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090918-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/18/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: Re Date: 9/24/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0903139
CAS Sample ID: P090918-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/18/09
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	

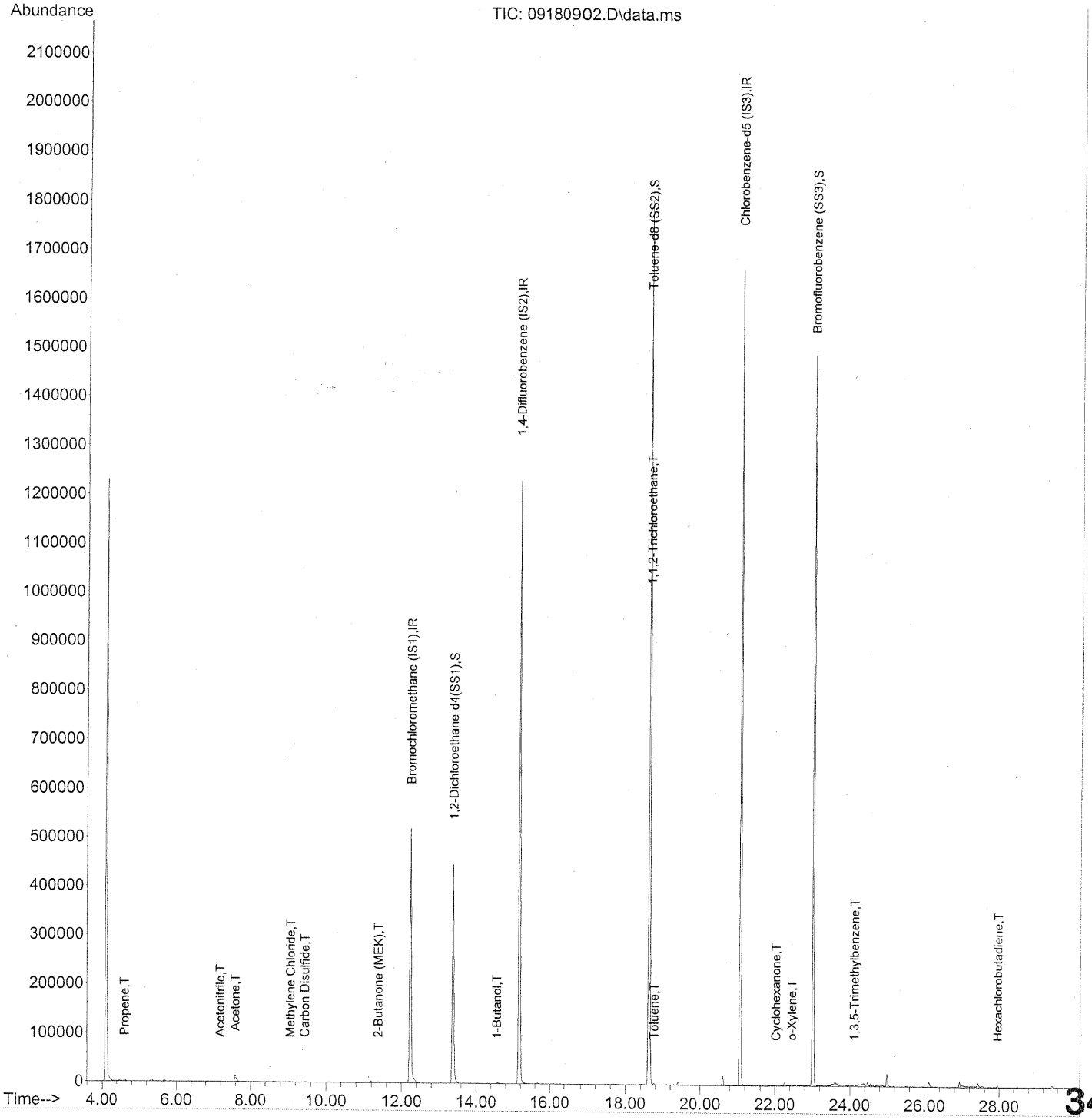
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180902.D
Acq On : 18 Sep 2009 8:48
Operator : LH
Sample : CAS QC CAN C1 3675A AS METHOD BLANK
Misc : SC00434 (1000mL)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 09:24:14 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180902.D
Acq On : 18 Sep 2009 8:48
Operator : LH
Sample : CAS QC CAN C1 3675A AS METHOD BLANK
Misc : SC00434 (1000mL)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 09:24:14 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

UH 9/21/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	337338	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	15.17	114	1644687	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.06	82	692947	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	456631	24.563	ng		-0.04
Spiked Amount 25.000			Recovery =	98.24%			
57) Toluene-d8 (SS2)	18.63	98	1707724	24.620	ng		-0.01
Spiked Amount 25.000			Recovery =	98.48%			
73) Bromofluorobenzene (SS3)	23.02	174	653862	26.306	ng		0.00
Spiked Amount 25.000			Recovery =	105.24%			
Target Compounds							Qvalue
2) Propene	4.61	42	974	0.071	ng	#	57
3) Dichlorodifluoromethan...	4.75	85	633	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	5.67	54	75	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	6.97	45	115	N.D.			
11) Acetonitrile	7.18	41	1469	0.058	ng	#	64
12) Acrolein	7.37	56	181	N.D.			
13) Acetone	7.59	58	10836	1.080	ng	#	63
14) Trichlorofluoromethane	7.84	101	121	N.D.			
15) 2-Propanol (Isopropanol)	8.08	45	384	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	9.06	84	992	0.065	ng	#	63
20) 3-Chloro-1-propene (Al...	9.23	41	170	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.44	76	3710	0.070	ng		79
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	11.38	72	1230	0.128	ng	#	88
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	12.36	57	249	N.D.			

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180902.D
Acq On : 18 Sep 2009 8:48
Operator : LH
Sample : CAS QC CAN C1 3675A AS METHOD BLANK
Misc : SC00434 (1000mL)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 09:24:14 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 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	14.55	56	2147	0.~~145~~ ng		82
41) Benzene	14.63	78	999	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.18	84	691	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	15.85	63	120	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...	16.29	57	1056	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.65	97	144303	~~9.780~~ ng	# FP	5
58) Toluene	18.76	91	3771	0.~~058~~ ng		98
59) 2-Hexanone	19.08	43	1476	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	19.92	43	359	N.D.		
63) n-Octane	0.00	57	0	N.D.		
64) Tetrachloroethene	20.26	166	52	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	21.61	91	818	N.D.		
67) m- & p-Xylenes	21.85	91	247	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.29	104	380	N.D.		
70) o-Xylene	22.45	91	2927	0.~~052~~ ng	#	45
71) n-Nonane	22.72	43	110	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.18	105	352	N.D.		
75) alpha-Pinene	23.57	93	398	N.D.		
76) n-Propylbenzene	23.86	91	1383	N.D.		
77) 3-Ethyltoluene	24.01	105	2837	N.D.		
78) 4-Ethyltoluene	24.01	105	2766	N.D.		
79) 1,3,5-Trimethylbenzene	24.12	105	3178	0.~~053~~ ng	#	4

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180902.D
Acq On : 18 Sep 2009 8:48
Operator : LH
Sample : CAS QC CAN C1 3675A AS METHOD BLANK
Misc : SC00434 (1000mL)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 09:24:14 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.24	118	119	N.D.	
81) 2-Ethyltoluene	24.42	105	1726	N.D.	
82) 1,2,4-Trimethylbenzene	24.64	105	2044	N.D.	
83) n-Decane	24.75	57	334	N.D.	
84) Benzyl Chloride	24.95	91	1217	N.D.	
85) 1,3-Dichlorobenzene	24.83	146	231	N.D.	
86) 1,4-Dichlorobenzene	24.92	146	478	N.D.	
87) sec-Butylbenzene	24.98	105	842	N.D.	
88) 4-Isopropyltoluene (p-...	25.17	119	536	N.D.	
89) 1,2,3-Trimethylbenzene	25.17	105	331	N.D.	
90) 1,2-Dichlorobenzene	24.92	146	478	N.D.	
91) d-Limonene	25.34	68	63	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.28	57	649	N.D.	
94) 1,2,4-Trichlorobenzene	27.40	180	230	N.D.	
95) Naphthalene	27.55	128	4049	N.D.	
96) n-Dodecane	27.52	57	948	N.D.	
97) Hexachlorobutadiene	27.96	225	1432	0.080 ng	78
98) Cyclohexanone	22.03	55	1383	0.058 ng	96
99) tert-Butylbenzene	24.55	119	1313	N.D.	
100) n-Butylbenzene	25.67	91	248	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: P0903139

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan/Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 9/3/09
Date(s) Received: 9/4/09
Date(s) Analyzed: 9/10 - 9/18/09

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	P090910-MB	**108**	70-130	**99**	70-130	**94**	70-130	
Method Blank	P090911-MB	**106**	70-130	**106**	70-130	**90**	70-130	
Method Blank	P090915-MB	**110**	70-130	**104**	70-130	**89**	70-130	
Method Blank	P090918-MB	**98**	70-130	**98**	70-130	**105**	70-130	
Lab Control Sample	P090910-LCS	**106**	70-130	**100**	70-130	**97**	70-130	
Lab Control Sample	P090911-LCS	**104**	70-130	**104**	70-130	**93**	70-130	
Lab Control Sample	P090915-LCS	**106**	70-130	**103**	70-130	**91**	70-130	
Lab Control Sample	P090918-LCS	**98**	70-130	**98**	70-130	**108**	70-130	
106308	P0903139-001	**99**	70-130	**99**	70-130	**114**	70-130	
106309	P0903139-002	**99**	70-130	**98**	70-130	**112**	70-130	
106310	P0903139-003	**100**	70-130	**97**	70-130	**112**	70-130	
106311	P0903139-004	**102**	70-130	**97**	70-130	**111**	70-130	
106312	P0903139-005	**103**	70-130	**96**	70-130	**107**	70-130	
106313	P0903139-006	**105**	70-130	**96**	70-130	**103**	70-130	

Verified By: RC Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090910-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: 9/10/09
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	**29.6**	**113**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**24.3**	**93**	61-118	
74-87-3	Chloromethane	25.0	**24.4**	**98**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**24.2**	**93**	65-122	
75-01-4	Vinyl Chloride	25.3	**24.1**	**95**	57-132	
106-99-0	1,3-Butadiene	26.8	**27.6**	**103**	66-161	
74-83-9	Bromomethane	25.8	**25.3**	**98**	67-130	
75-00-3	Chloroethane	25.5	**24.5**	**96**	68-123	
64-17-5	Ethanol	130	**125**	**96**	50-155	
75-05-8	Acetonitrile	26.0	**24.6**	**95**	48-148	
107-02-8	Acrolein	26.3	**28.1**	**107**	67-138	
67-64-1	Acetone	132	**121**	**92**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**24.1**	**92**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**36.4**	**76**	54-126	
107-13-1	Acrylonitrile	25.8	**28.4**	**110**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**24.9**	**91**	70-123	
75-09-2	Methylene Chloride	26.8	**23.5**	**88**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**28.3**	**105**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**26.0**	**95**	69-126	
75-15-0	Carbon Disulfide	26.0	**24.3**	**93**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**25.1**	**98**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**25.4**	**96**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**25.9**	**98**	72-132	
108-05-4	Vinyl Acetate	126	**147**	**117**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**29.2**	**109**	68-126	

Verified By: RC Date: 9/24/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090910-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: 9/10/09
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	**26.4**	**98**	69-124	
141-78-6	Ethyl Acetate	52.0	**53.4**	**103**	65-126	
110-54-3	n-Hexane	26.0	**25.5**	**98**	63-125	
67-66-3	Chloroform	27.5	**25.7**	**93**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**27.1**	**102**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**27.0**	**103**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**24.8**	**95**	69-127	
71-43-2	Benzene	25.8	**23.9**	**93**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**25.7**	**98**	68-137	
110-82-7	Cyclohexane	51.8	**49.3**	**95**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**25.3**	**97**	69-128	
75-27-4	Bromodichloromethane	26.3	**26.2**	**100**	71-131	
79-01-6	Trichloroethene	25.8	**23.2**	**90**	72-122	
123-91-1	1,4-Dioxane	26.0	**27.6**	**106**	73-127	
80-62-6	Methyl Methacrylate	52.8	**51.6**	**98**	80-133	
142-82-5	n-Heptane	25.8	**24.3**	**94**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**25.8**	**105**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**28.6**	**107**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**29.9**	**111**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**26.0**	**100**	76-125	
108-88-3	Toluene	26.8	**24.3**	**91**	74-119	
591-78-6	2-Hexanone	27.0	**27.0**	**100**	64-118	
124-48-1	Dibromochloromethane	28.3	**27.2**	**96**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.9**	**98**	79-125	
123-86-4	n-Butyl Acetate	27.5	**29.2**	**106**	70-136	

Verified By: Re Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090910-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: 9/10/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

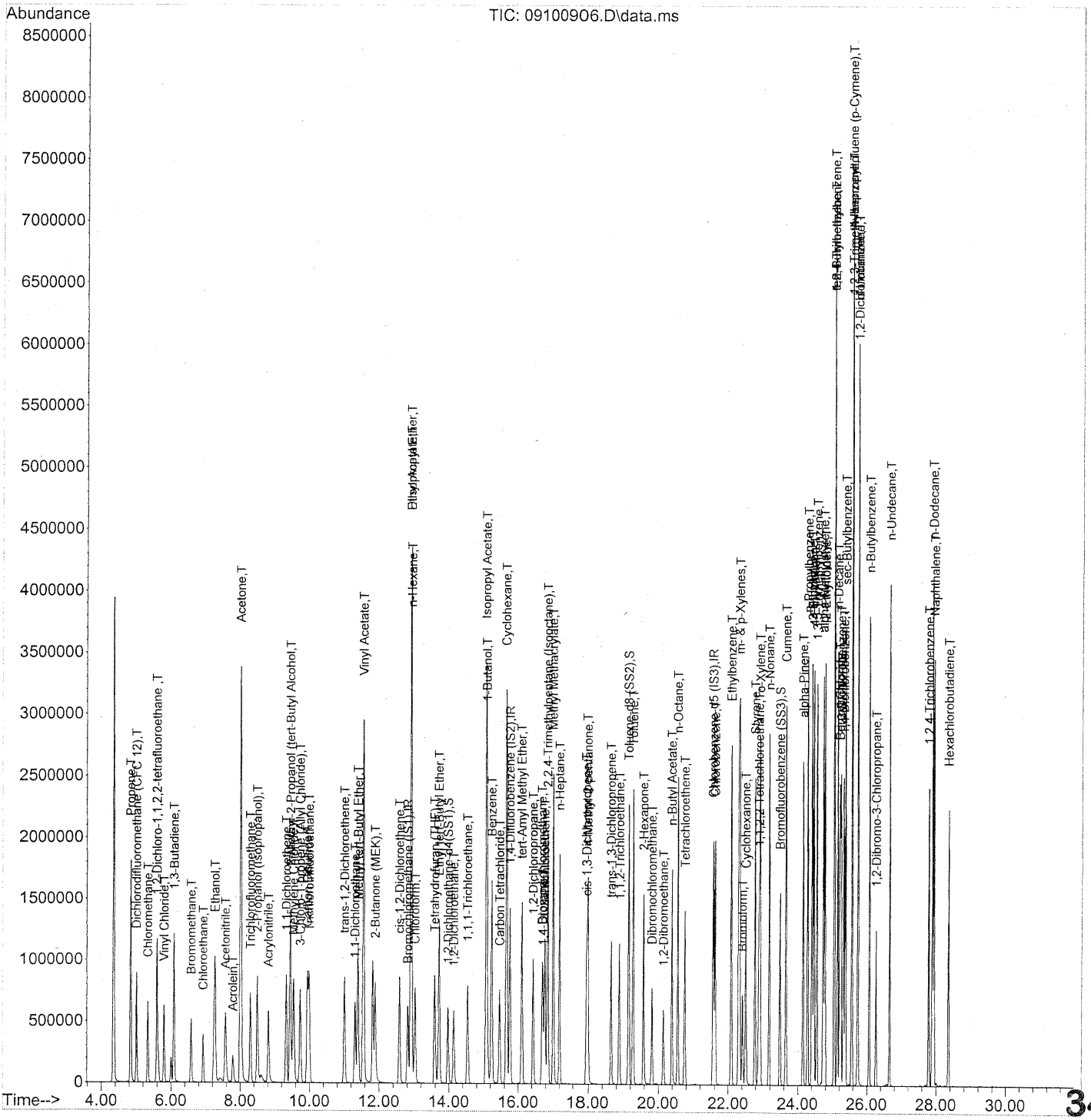
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**25.2**	**96**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.7**	**90**	72-125	
108-90-7	Chlorobenzene	26.5	**24.1**	**91**	74-121	
100-41-4	Ethylbenzene	26.3	**24.9**	**95**	76-120	
179601-23-1	m,p-Xylenes	51.5	**48.9**	**95**	75-120	
75-25-2	Bromoform	26.5	**25.1**	**95**	76-143	
100-42-5	Styrene	26.3	**25.9**	**98**	78-124	
95-47-6	o-Xylene	26.0	**24.8**	**95**	76-121	
111-84-2	n-Nonane	25.8	**25.2**	**98**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**26.3**	**97**	77-126	
98-82-8	Cumene	25.3	**23.7**	**94**	78-125	
80-56-8	alpha-Pinene	24.8	**23.4**	**94**	78-125	
103-65-1	n-Propylbenzene	25.3	**24.0**	**95**	80-127	
622-96-8	4-Ethyltoluene	26.3	**24.8**	**94**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**25.2**	**95**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**25.6**	**100**	76-123	
100-44-7	Benzyl Chloride	26.8	**28.4**	**106**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**25.3**	**97**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**24.3**	**92**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**24.8**	**96**	75-124	
5989-27-5	d-Limonene	26.5	**26.6**	**100**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**28.1**	**104**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**26.2**	**96**	70-139	
91-20-3	Naphthalene	25.0	**25.1**	**100**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**25.6**	**96**	68-138	

Verified By: Rev Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:15:32 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\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:15:32 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)	12.82	130	326851	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1681851	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	830450	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	613478	26.545	ng		-0.02
Spiked Amount 25.000			Recovery = 106.16%				
57) Toluene-d8 (SS2)	19.15	98	1964790	24.887	ng		-0.01
Spiked Amount 25.000			Recovery = 99.56%				
73) Bromofluorobenzene (SS3)	23.49	174	541500	24.219	ng		0.00
Spiked Amount 25.000			Recovery = 96.88%				
Target Compounds							Qvalue
2) Propene	4.84	42	848564	29.596	ng		97
3) Dichlorodifluoromethan...	5.01	85	996393	24.346	ng		99
4) Chloromethane	5.34	50	929085	24.358	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	522763	24.172	ng		99
6) Vinyl Chloride	5.80	62	906306	24.087	ng		99
7) 1,3-Butadiene	6.09	54	736564	27.559	ng		97
8) Bromomethane	6.59	94	498527	25.338	ng		99
9) Chloroethane	6.93	64	457710	24.520	ng		100
10) Ethanol	7.27	45	2244139m	124.778	ng		
11) Acetonitrile	7.58	41	1079054	24.584	ng		99
12) Acrolein	7.79	56	330022	28.138	ng		98
13) Acetone	8.01	58	2213666	120.954	ng		95
14) Trichlorofluoromethane	8.29	101	843111	24.090	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1826154m	36.435	ng		
16) Acrylonitrile	8.81	53	754390	28.378	ng		99
17) 1,1-Dichloroethene	9.33	96	512129	24.935	ng		93
18) 2-Methyl-2-Propanol (t...	9.45	59	2682108	52.711	ng		97
19) Methylene Chloride	9.54	84	535853	23.467	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	867392	28.327	ng		88
21) Trichlorotrifluoroethane	9.99	151	407457	26.012	ng		94
22) Carbon Disulfide	9.94	76	1957356	24.290	ng		98
23) trans-1,2-Dichloroethene	11.01	61	792181	25.134	ng		91
24) 1,1-Dichloroethane	11.32	63	980187	25.393	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1618917	25.882	ng		96
26) Vinyl Acetate	11.56	86	582989	147.076	ng	#	61
27) 2-Butanone (MEK)	11.89	72	372627	29.205	ng	#	79
28) cis-1,2-Dichloroethene	12.58	61	776192	26.391	ng		91
29) Diisopropyl Ether	12.91	87	469622	25.925	ng	#	62
30) Ethyl Acetate	12.91	61	442050	53.426	ng		95
31) n-Hexane	12.93	57	1028693	25.505	ng		9

EM 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:15:32 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	13.03	83	868519	25.729	ng		99
34) Tetrahydrofuran (THF)	13.58	72	359800	27.124	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	641303	24.814	ng	#	85
36) 1,2-Dichloroethane	14.14	62	697016	26.984	ng		99
38) 1,1,1-Trichloroethane	14.54	97	759330	24.824	ng		98
39) Isopropyl Acetate	15.07	61	768702	56.003	ng	#	76
40) 1-Butanol	15.09	56	1290774	59.225	ng		83
41) Benzene	15.23	78	2165405	23.941	ng		99
42) Carbon Tetrachloride	15.46	117	649504	25.690	ng		99
43) Cyclohexane	15.66	84	1726692	49.295	ng		88
44) tert-Amyl Methyl Ether	16.10	73	1591723	25.039	ng		98
45) 1,2-Dichloropropane	16.43	63	560326	25.253	ng		98
46) Bromodichloromethane	16.70	83	692235	26.162	ng		99
47) Trichloroethene	16.77	130	532585	23.191	ng		99
48) 1,4-Dioxane	16.72	88	444410	27.625	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	2489460	23.915	ng		96
50) Methyl Methacrylate	17.02	100	466737	51.643	ng	#	88
51) n-Heptane	17.21	71	583969	24.253	ng		94
52) cis-1,3-Dichloropropene	17.95	75	862990	25.813	ng		100
53) 4-Methyl-2-pentanone	17.99	58	559242	28.613	ng		94
54) trans-1,3-Dichloropropene	18.64	75	873185	29.855	ng		100
55) 1,1,2-Trichloroethane	18.89	97	502181	25.988	ng		98
58) Toluene	19.28	91	2330146	24.348	ng		100
59) 2-Hexanone	19.58	43	1344654	27.034	ng		98
60) Dibromochloromethane	19.82	129	555536	27.185	ng		100
61) 1,2-Dibromoethane	20.15	107	558541	25.931	ng		99
62) n-Butyl Acetate	20.39	43	1586790	29.238	ng		98
63) n-Octane	20.56	57	537705	25.206	ng		91
64) Tetrachloroethene	20.76	166	539331	22.710	ng		99
65) Chlorobenzene	21.62	112	1416171	24.096	ng		100
66) Ethylbenzene	22.09	91	2568162	24.855	ng		98
67) m- & p-Xylenes	22.33	91	4001857	48.854	ng		99
68) Bromoform	22.41	173	444991	25.087	ng		99
69) Styrene	22.77	104	1569719	25.925	ng		99
70) o-Xylene	22.92	91	2045600	24.823	ng		98
71) n-Nonane	23.17	43	1251188	25.212	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	931619	26.318	ng		100
74) Cumene	23.66	105	2529484	23.674	ng		98
75) alpha-Pinene	24.15	93	1235690	23.441	ng		99
76) n-Propylbenzene	24.28	91	3174899	24.042	ng		99
77) 3-Ethyltoluene	24.41	105	2516837	25.144	ng		98
78) 4-Ethyltoluene	24.46	105	2500259	24.846	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2097019	25.203	ng		99

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:15:32 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

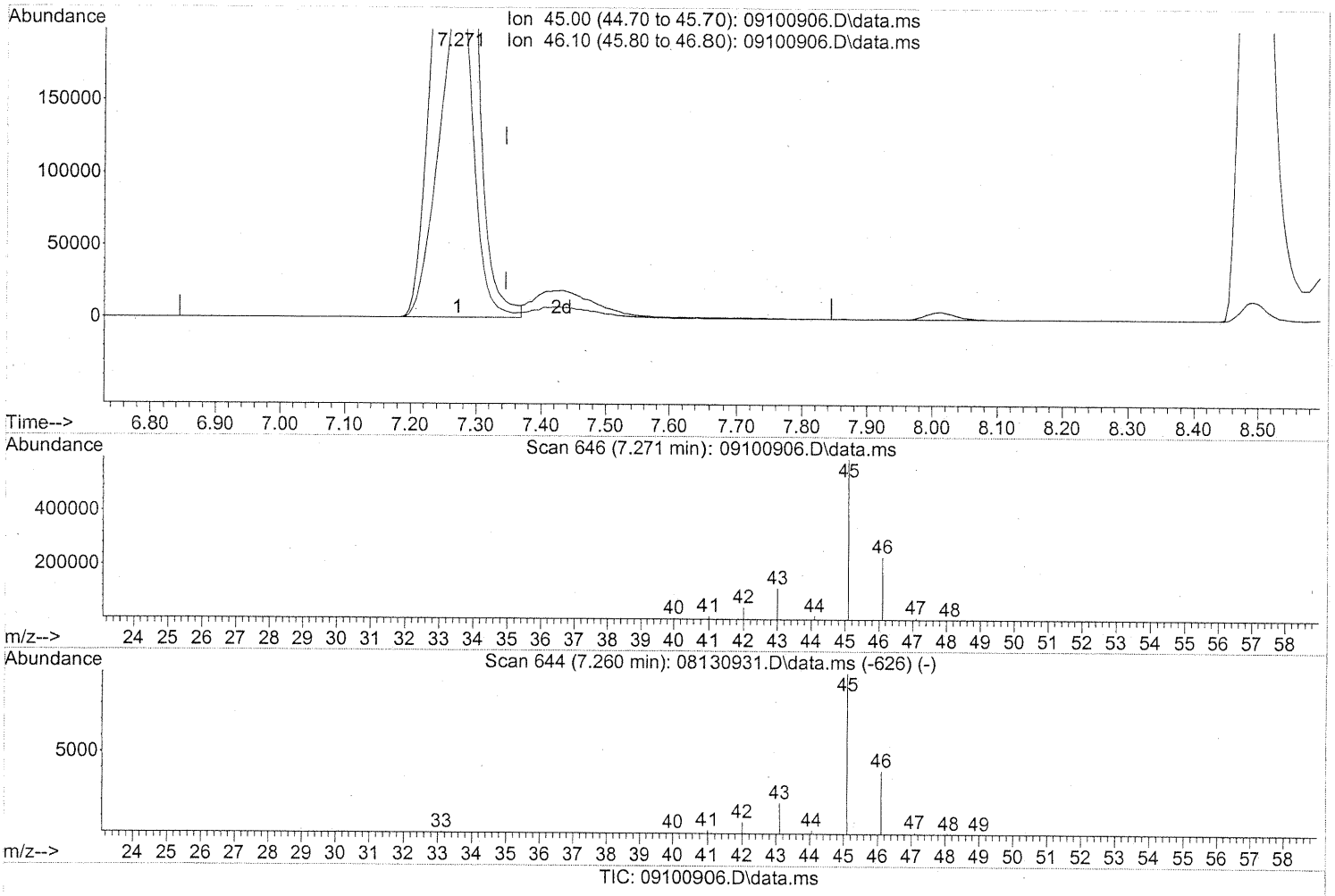
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1165808	25.822	ng	99
81) 2-Ethyltoluene	24.79	105	2494158	24.129	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2259002	25.571	ng	99
83) n-Decane	25.15	57	1288091	25.050	ng	95
84) Benzyl Chloride	25.22	91	1938957	28.369	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1158467	25.329	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1176831	24.251	ng	99
87) sec-Butylbenzene	25.38	105	2841301	24.407	ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	2738464	24.551	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2275147	25.479	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1137480	24.769	ng	100
91) d-Limonene	25.74	68	959630	26.550	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	389871	28.112	ng	92
93) n-Undecane	26.65	57	1360745	25.610	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	839608	26.170	ng	99
95) Naphthalene	27.94	128	2976665	25.112	ng	100
96) n-Dodecane	27.89	57	1402812	23.586	ng	96
97) Hexachlorobutadiene	28.36	225	468834	25.590	ng	99
98) Cyclohexanone	22.51	55	789962	26.209	ng	95
99) tert-Butylbenzene	25.05	119	2184975	24.938	ng	99
100) n-Butylbenzene	26.06	91	2367550	25.552	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:14:30 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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) 117.52ng

response 2113537

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.17
0.00	0.00	0.00
0.00	0.00	0.00

PT

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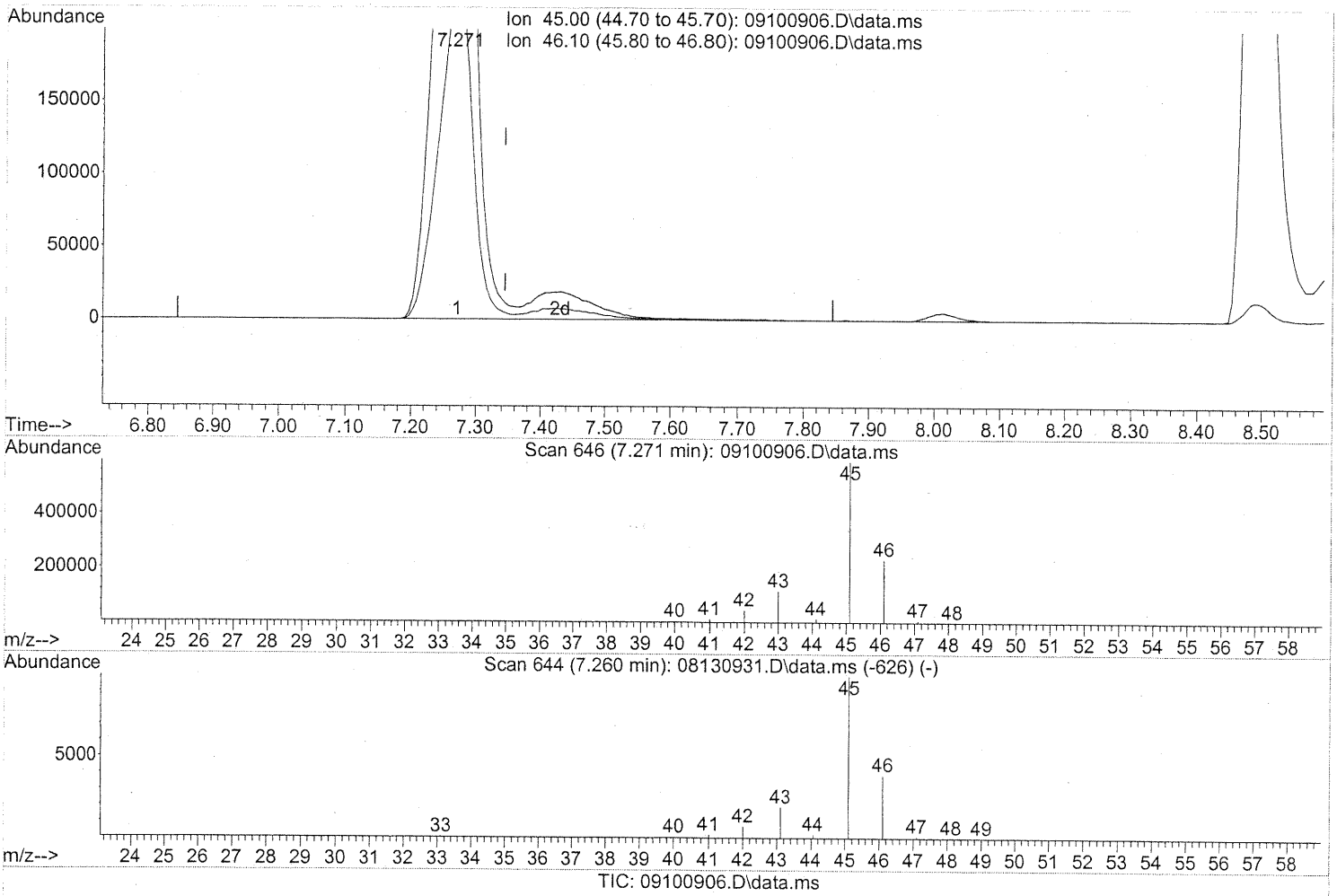
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:14:30 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100906.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 124.78ng m

response 2244139

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.90
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Em 9/10/09

MI 9/10/09

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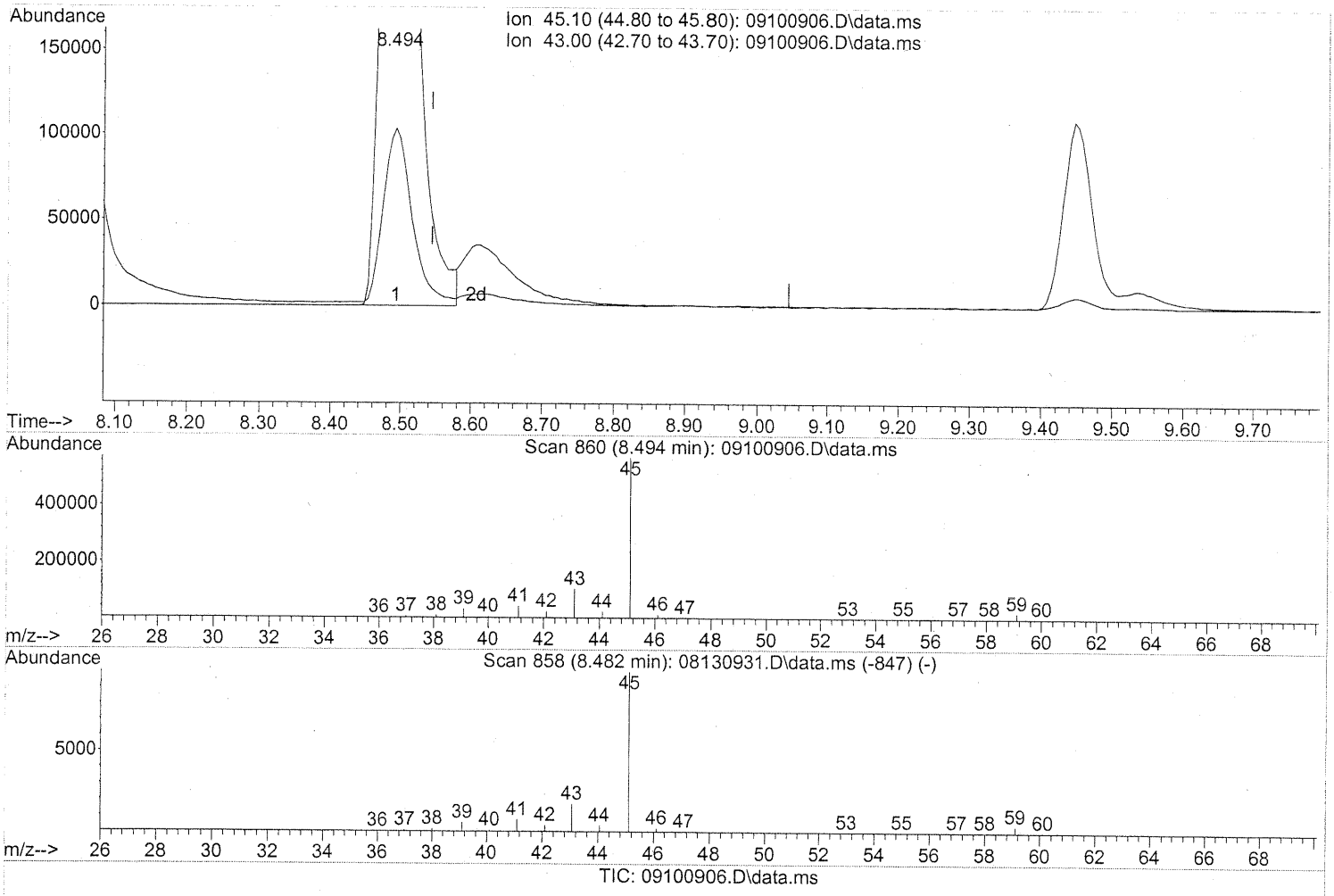
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:14:30 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100906.D\data.ms

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

8.494min (-0.051) 32.70ng

response 1638784

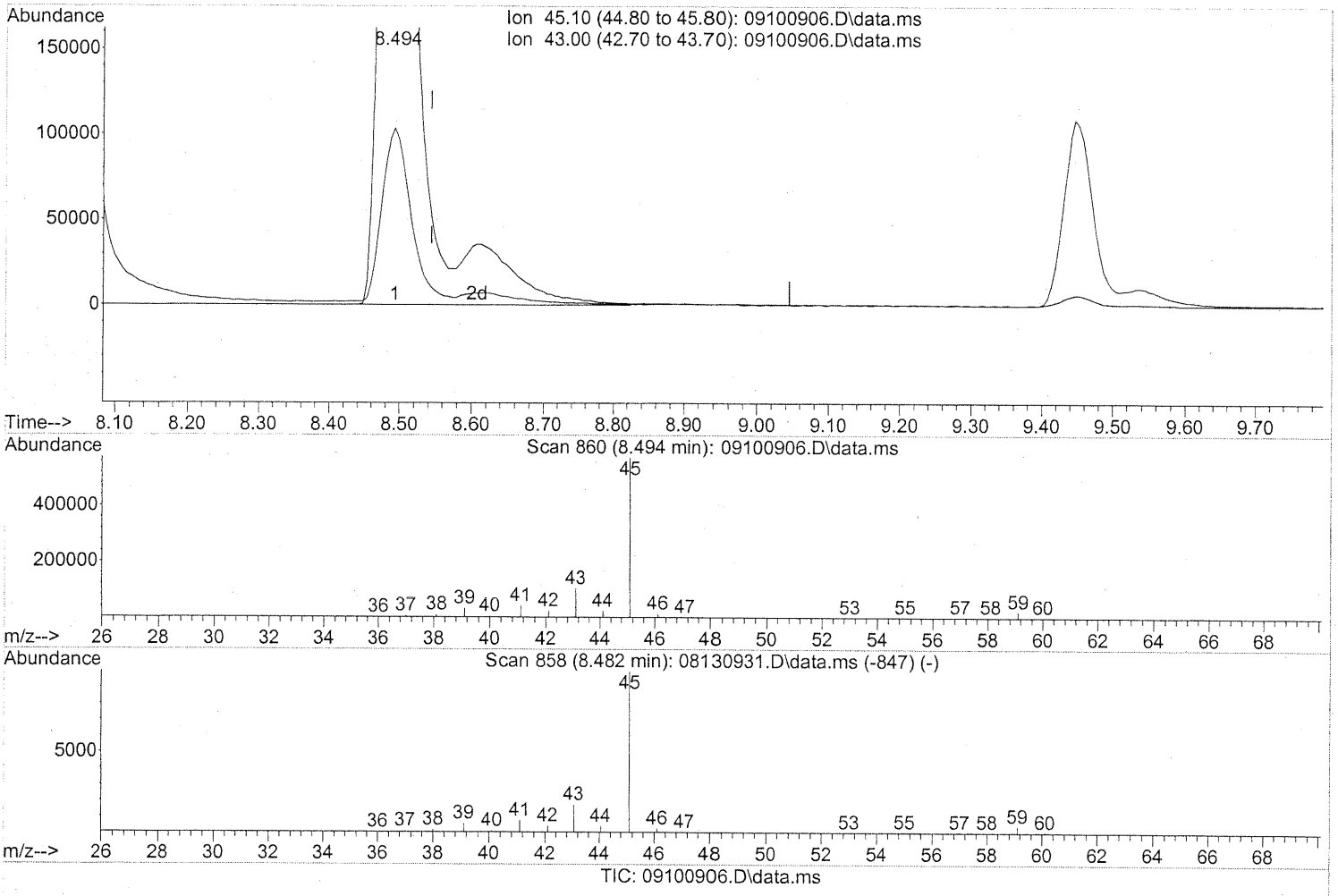
PT

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100906.D
Acq On : 10 Sep 2009 9:54
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 13:14:30 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100906.D\data.ms

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

8.494min (-0.051) 36.43ng m

response 1826154

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.70
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
cm 9/10/09
M 9/10/09

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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: P0903139
Client Project ID: **16512** CAS Sample ID: P090911-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: 9/11/09
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	**28.7**	**109**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**23.9**	**92**	61-118	
74-87-3	Chloromethane	25.0	**23.8**	**95**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**23.2**	**89**	65-122	
75-01-4	Vinyl Chloride	25.3	**23.1**	**91**	57-132	
106-99-0	1,3-Butadiene	26.8	**26.1**	**97**	66-161	
74-83-9	Bromomethane	25.8	**24.4**	**95**	67-130	
75-00-3	Chloroethane	25.5	**23.9**	**94**	68-123	
64-17-5	Ethanol	130	**120**	**92**	50-155	
75-05-8	Acetonitrile	26.0	**23.8**	**92**	48-148	
107-02-8	Acrolein	26.3	**27.3**	**104**	67-138	
67-64-1	Acetone	132	**117**	**89**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**23.5**	**89**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**35.8**	**75**	54-126	
107-13-1	Acrylonitrile	25.8	**27.7**	**107**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**24.4**	**89**	70-123	
75-09-2	Methylene Chloride	26.8	**22.9**	**85**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**27.3**	**101**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**25.6**	**93**	69-126	
75-15-0	Carbon Disulfide	26.0	**23.6**	**91**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.3**	**95**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**24.7**	**93**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**25.4**	**97**	72-132	
108-05-4	Vinyl Acetate	126	**144**	**114**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**28.0**	**104**	68-126	

Verified By: Rev Date: 9/12/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090911-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: 9/11/09
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	**51.6**	**99**	65-126	
110-54-3	n-Hexane	26.0	**24.3**	**93**	63-125	
67-66-3	Chloroform	27.5	**25.1**	**91**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**26.1**	**98**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**26.2**	**100**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**24.6**	**95**	69-127	
71-43-2	Benzene	25.8	**23.6**	**91**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**25.3**	**96**	68-137	
110-82-7	Cyclohexane	51.8	**48.4**	**93**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**24.7**	**95**	69-128	
75-27-4	Bromodichloromethane	26.3	**25.7**	**98**	71-131	
79-01-6	Trichloroethene	25.8	**23.1**	**90**	72-122	
123-91-1	1,4-Dioxane	26.0	**27.3**	**105**	73-127	
80-62-6	Methyl Methacrylate	52.8	**50.9**	**96**	80-133	
142-82-5	n-Heptane	25.8	**23.8**	**92**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**25.3**	**103**	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	**29.4**	**109**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**25.3**	**97**	76-125	
108-88-3	Toluene	26.8	**25.6**	**96**	74-119	
591-78-6	2-Hexanone	27.0	**28.5**	**106**	64-118	
124-48-1	Dibromochloromethane	28.3	**29.0**	**102**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**27.6**	**105**	79-125	
123-86-4	n-Butyl Acetate	27.5	**30.9**	**112**	70-136	

Verified By: Rev Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090911-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: 9/11/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

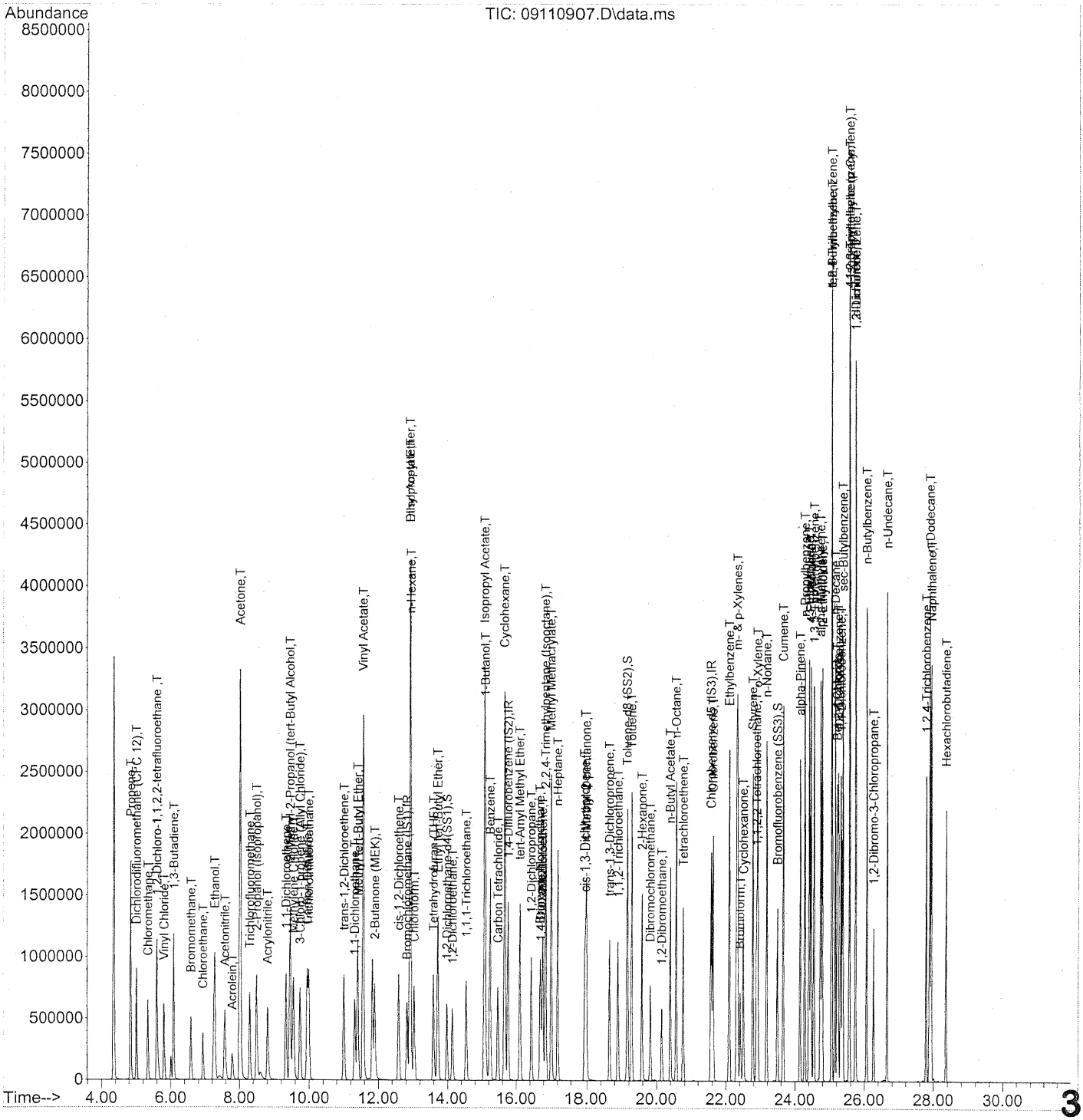
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**26.3**	**100**	75-126	
127-18-4	Tetrachloroethene	25.3	**24.2**	**96**	72-125	
108-90-7	Chlorobenzene	26.5	**25.5**	**96**	74-121	
100-41-4	Ethylbenzene	26.3	**26.2**	**100**	76-120	
179601-23-1	m,p-Xylenes	51.5	**51.7**	**100**	75-120	
75-25-2	Bromoform	26.5	**27.0**	**102**	76-143	
100-42-5	Styrene	26.3	**27.6**	**105**	78-124	
95-47-6	o-Xylene	26.0	**26.3**	**101**	76-121	
111-84-2	n-Nonane	25.8	**26.1**	**101**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**27.9**	**103**	77-126	
98-82-8	Cumene	25.3	**25.1**	**99**	78-125	
80-56-8	alpha-Pinene	24.8	**24.9**	**100**	78-125	
103-65-1	n-Propylbenzene	25.3	**25.4**	**100**	80-127	
622-96-8	4-Ethyltoluene	26.3	**26.3**	**100**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**26.6**	**100**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**27.0**	**106**	76-123	
100-44-7	Benzyl Chloride	26.8	**30.2**	**113**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**26.9**	**103**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**25.8**	**98**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**26.3**	**102**	75-124	
5989-27-5	d-Limonene	26.5	**27.6**	**104**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**29.9**	**111**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**28.0**	**103**	70-139	
91-20-3	Naphthalene	25.0	**26.7**	**107**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**27.3**	**102**	68-138	

Verified By: Re Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:06:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:06:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	333112	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1700029	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	778261	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	612101	25.987	ng		-0.02
Spiked Amount 25.000			Recovery = 103.96%				
57) Toluene-d8 (SS2)	19.15	98	1932459	26.119	ng		-0.01
Spiked Amount 25.000			Recovery = 104.48%				
73) Bromofluorobenzene (SS3)	23.49	174	488518	23.315	ng		0.00
Spiked Amount 25.000			Recovery = 93.24%				
Target Compounds							Qvalue
2) Propene	4.84	42	837451	28.659	ng		97
3) Dichlorodifluoromethan...	5.01	85	997327	23.910	ng		100
4) Chloromethane	5.34	50	923372	23.753	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	510598	23.165	ng		99
6) Vinyl Chloride	5.80	62	887247	23.137	ng		99
7) 1,3-Butadiene	6.09	54	711289	26.113	ng		97
8) Bromomethane	6.59	94	488487	24.361	ng		99
9) Chloroethane	6.93	64	453992	23.863	ng		99
10) Ethanol	7.27	45	2204710m	120.281	ng		
11) Acetonitrile	7.58	41	1063928	23.784	ng		99
12) Acrolein	7.79	56	326906	27.348	ng		98
13) Acetone	8.01	58	2176752	116.701	ng		95
14) Trichlorofluoromethane	8.29	101	839308	23.531	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1826458m	35.756	ng		
16) Acrylonitrile	8.81	53	749805	27.675	ng		99
17) 1,1-Dichloroethene	9.33	96	510966	24.411	ng		94
18) 2-Methyl-2-Propanol (t...	9.45	59	2664416	51.379	ng		97
19) Methylene Chloride	9.54	84	532878	22.898	ng		86
20) 3-Chloro-1-propene (Al...	9.73	41	850553	27.255	ng		89
21) Trichlorotrifluoroethane	9.99	151	408103	25.564	ng		94
22) Carbon Disulfide	9.94	76	1940165	23.624	ng		98
23) trans-1,2-Dichloroethene	11.01	61	781560	24.331	ng		92
24) 1,1-Dichloroethane	11.32	63	973505	24.746	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1618795	25.394	ng		96
26) Vinyl Acetate	11.56	86	582635	144.224	ng	#	65
27) 2-Butanone (MEK)	11.89	72	364438	28.026	ng	#	82
28) cis-1,2-Dichloroethene	12.58	61	766683	25.578	ng		92
29) Diisopropyl Ether	12.91	87	467511	25.324	ng	#	66
30) Ethyl Acetate	12.91	61	435034	51.590	ng		96
31) n-Hexane	12.93	57	1000595	24.342	ng		9

EM 9/11/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:06:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	864161	25.119	ng		100
34) Tetrahydrofuran (THF)	13.58	72	353059	26.115	ng	#	87
35) Ethyl tert-Butyl Ether	13.71	87	641969	24.373	ng	#	86
36) 1,2-Dichloroethane	14.14	62	689944	26.208	ng		99
38) 1,1,1-Trichloroethane	14.54	97	759726	24.571	ng		99
39) Isopropyl Acetate	15.07	61	758900	54.698	ng	#	77
40) 1-Butanol	15.09	56	1283651	58.268	ng		85
41) Benzene	15.23	78	2154769	23.569	ng		99
42) Carbon Tetrachloride	15.46	117	646544	25.300	ng		99
43) Cyclohexane	15.66	84	1715271	48.445	ng		88
44) tert-Amyl Methyl Ether	16.10	73	1585357	24.672	ng		98
45) 1,2-Dichloropropane	16.43	63	553706	24.688	ng		99
46) Bromodichloromethane	16.70	83	687425	25.702	ng		98
47) Trichloroethene	16.78	130	535392	23.064	ng		100
48) 1,4-Dioxane	16.72	88	443157	27.253	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	2462958	23.408	ng		95
50) Methyl Methacrylate	17.02	100	465033	50.904	ng		90
51) n-Heptane	17.21	71	580360	23.846	ng		94
52) cis-1,3-Dichloropropene	17.95	75	854573	25.287	ng		100
53) 4-Methyl-2-pentanone	17.99	58	551611	27.921	ng		95
54) trans-1,3-Dichloropropene	18.64	75	868836	29.388	ng		100
55) 1,1,2-Trichloroethane	18.89	97	494580	25.321	ng		98
58) Toluene	19.28	91	2297849	25.620	ng		100
59) 2-Hexanone	19.58	43	1326476	28.457	ng		98
60) Dibromochloromethane	19.82	129	555493	29.006	ng		100
61) 1,2-Dibromoethane	20.15	107	556357	27.562	ng		100
62) n-Butyl Acetate	20.39	43	1572552	30.919	ng		98
63) n-Octane	20.56	57	525636	26.292	ng		92
64) Tetrachloroethene	20.76	166	538609	24.201	ng		99
65) Chlorobenzene	21.62	112	1407120	25.547	ng		100
66) Ethylbenzene	22.09	91	2541404	26.245	ng		98
67) m- & p-Xylenes	22.33	91	3965438	51.656	ng		99
68) Bromoform	22.41	173	449279	27.027	ng		99
69) Styrene	22.77	104	1568005	27.633	ng		100
70) o-Xylene	22.92	91	2028819	26.271	ng		99
71) n-Nonane	23.17	43	1215316	26.132	ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	924304	27.862	ng		100
74) Cumene	23.66	105	2512282	25.090	ng		99
75) alpha-Pinene	24.15	93	1231934	24.936	ng		100
76) n-Propylbenzene	24.28	91	3143073	25.397	ng		99
77) 3-Ethyltoluene	24.41	105	2500819	26.659	ng		98
78) 4-Ethyltoluene	24.46	105	2483221	26.332	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2077419	26.641	ng		100

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:06:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

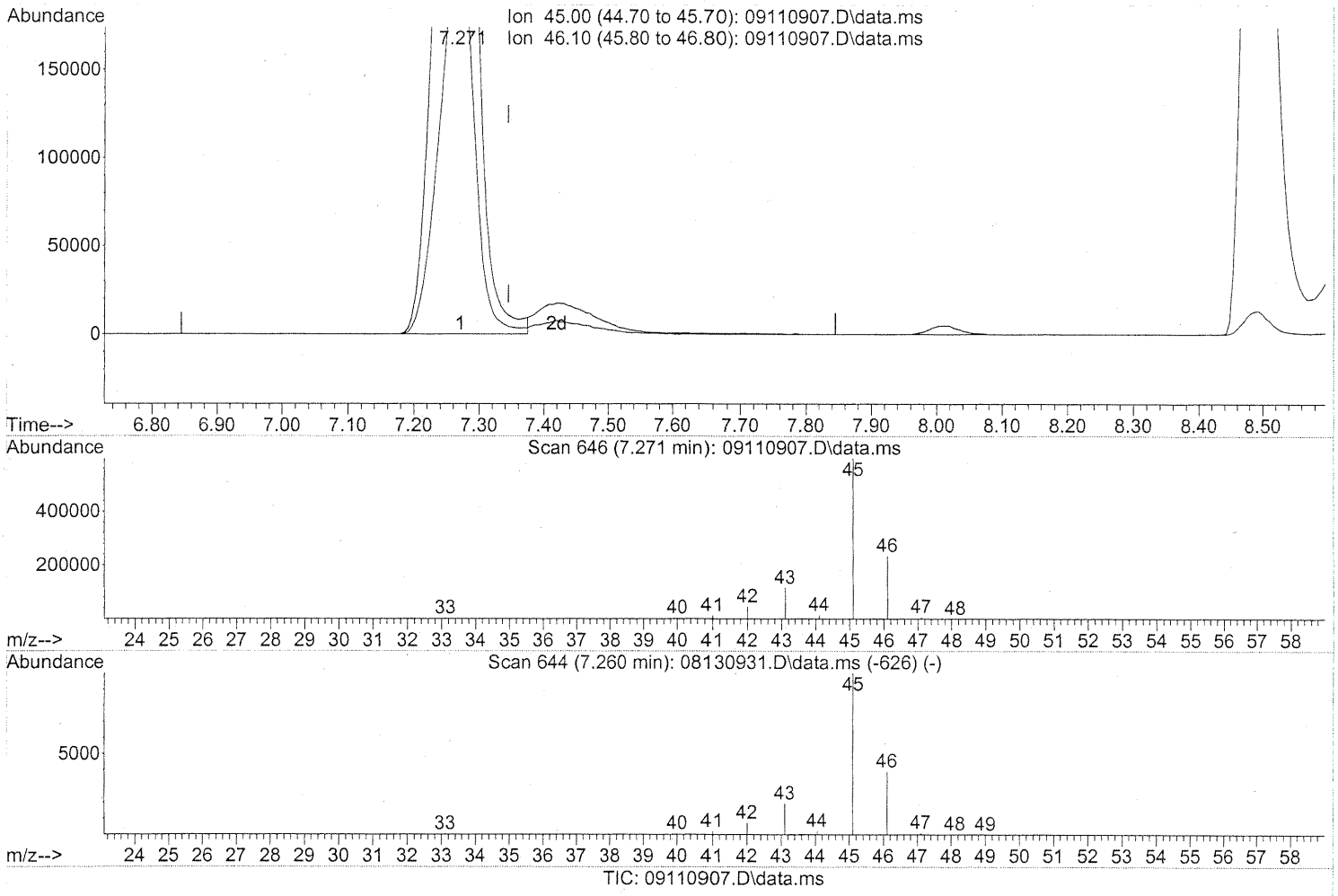
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1159999	27.416 ng	99
81) 2-Ethyltoluene	24.79	105	2471433	25.512 ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2236934	27.019 ng	99
83) n-Decane	25.15	57	1255493	26.053 ng	95
84) Benzyl Chloride	25.22	91	1936288	30.230 ng	99
85) 1,3-Dichlorobenzene	25.25	146	1154597	26.938 ng	100
86) 1,4-Dichlorobenzene	25.33	146	1172366	25.779 ng	100
87) sec-Butylbenzene	25.38	105	2808308	25.741 ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2718253	26.004 ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2246415	26.844 ng	98
90) 1,2-Dichlorobenzene	25.74	146	1130446	26.267 ng	100
91) d-Limonene	25.74	68	936052	27.634 ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	389057	29.935 ng	93
93) n-Undecane	26.65	57	1331354	26.737 ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	840536	27.956 ng	99
95) Naphthalene	27.94	128	2965244	26.693 ng	100
96) n-Dodecane	27.89	57	1378562	24.732 ng	96
97) Hexachlorobutadiene	28.36	225	468486	27.286 ng	99
98) Cyclohexanone	22.51	55	732386	25.928 ng	95
99) tert-Butylbenzene	25.05	119	2171724	26.449 ng	99
100) n-Butylbenzene	26.07	91	2335215	26.893 ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:05:33 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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) 114.01ng

response 2089810

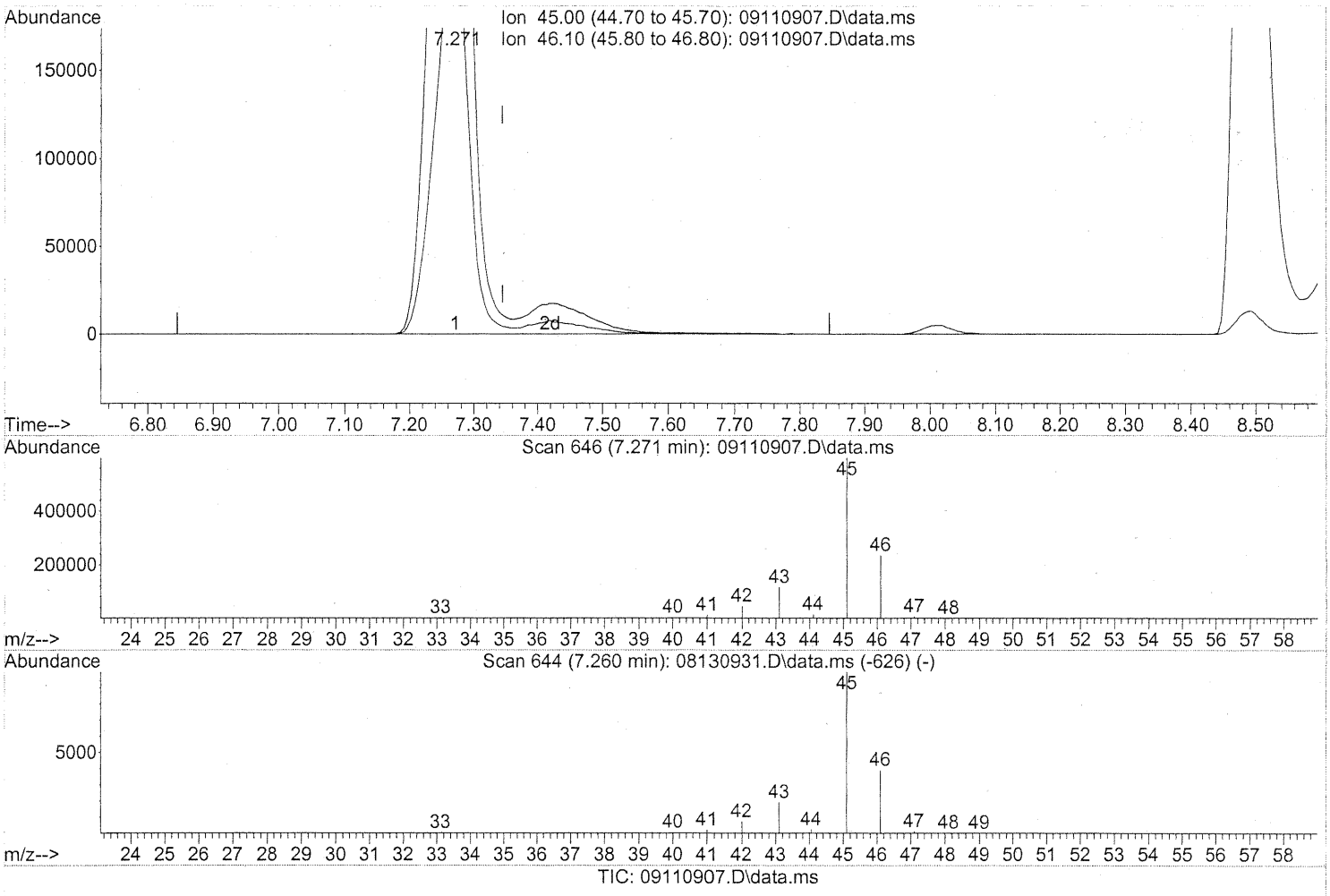
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.20
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:05:33 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09110907.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 120.28ng m

response 2204710

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.16
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

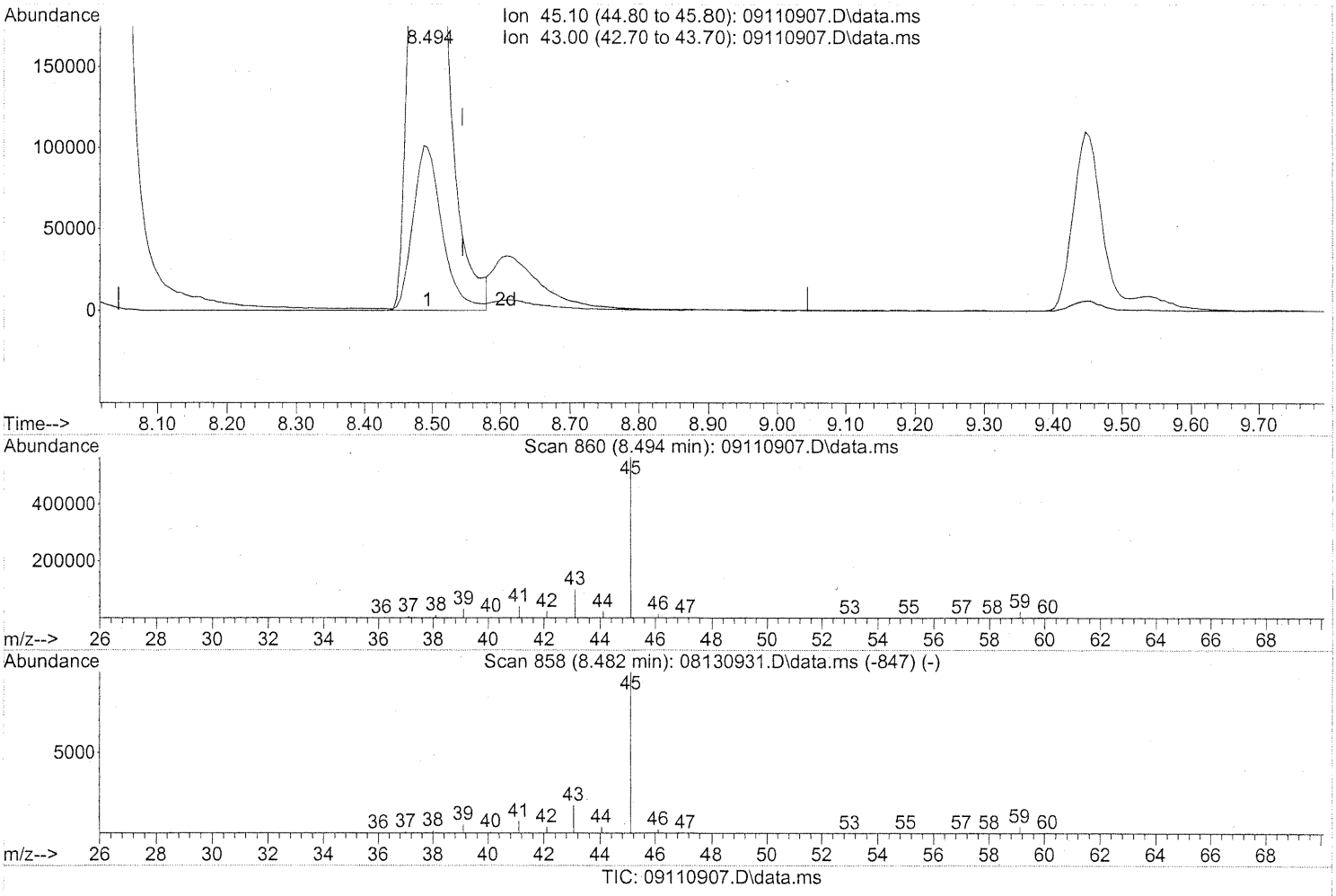
Cam 9/11/09

LH 9/14/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:05:33 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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) 32.49ng

response 1659661

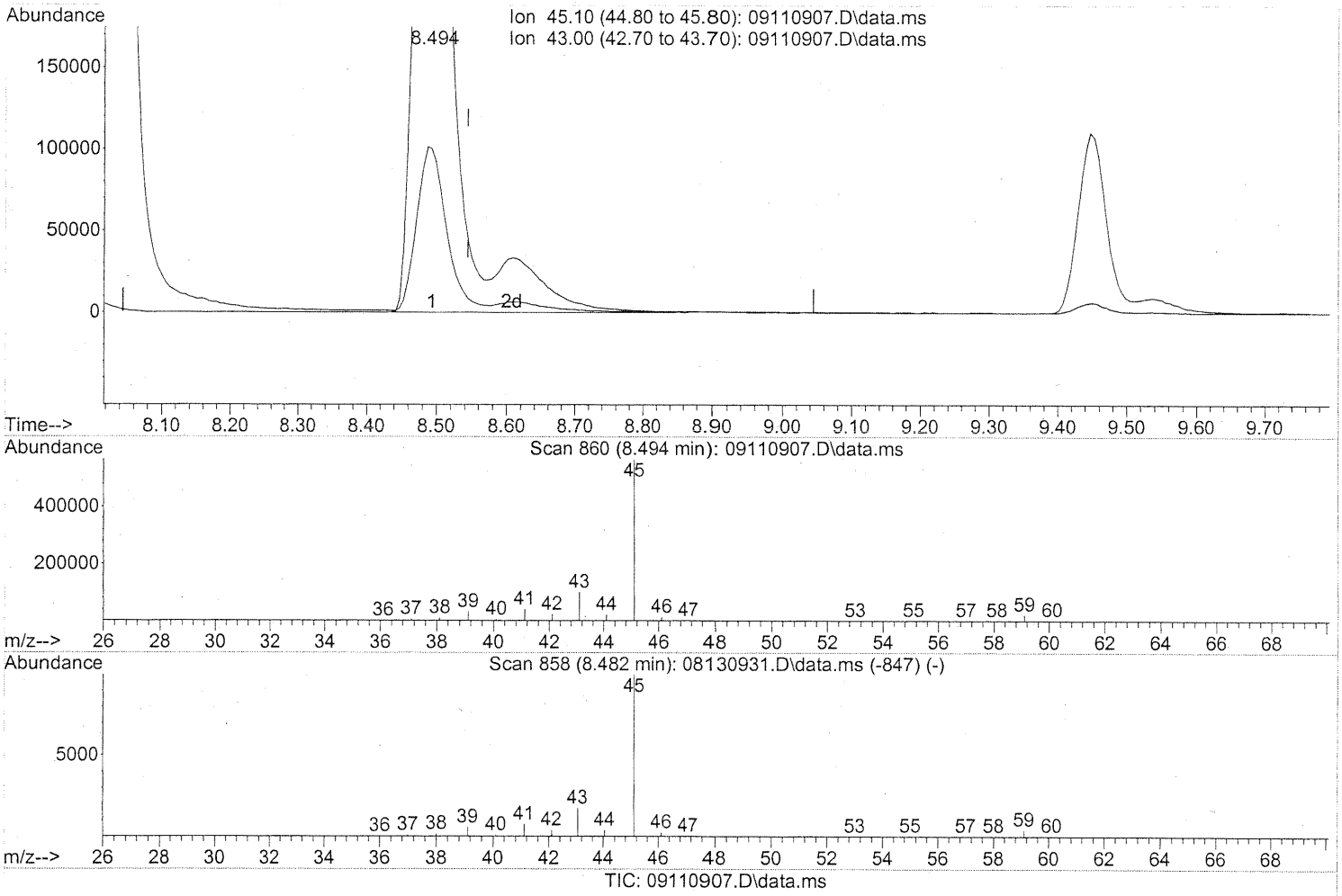
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.65
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110907.D
Acq On : 11 Sep 2009 12:37
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 15:05:33 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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) 35.76ng m

response 1826458

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.04
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

EM 9/14/09

LH 9/14/09

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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: P0903139
Client Project ID: **16512** CAS Sample ID: P090915-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: 9/15/09
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	**31.4**	**119**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**26.6**	**102**	61-118	
74-87-3	Chloromethane	25.0	**27.0**	**108**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**25.6**	**98**	65-122	
75-01-4	Vinyl Chloride	25.3	**26.3**	**104**	57-132	
106-99-0	1,3-Butadiene	26.8	**30.2**	**113**	66-161	
74-83-9	Bromomethane	25.8	**26.5**	**103**	67-130	
75-00-3	Chloroethane	25.5	**26.5**	**104**	68-123	
64-17-5	Ethanol	130	**135**	**104**	50-155	
75-05-8	Acetonitrile	26.0	**26.5**	**102**	48-148	
107-02-8	Acrolein	26.3	**30.5**	**116**	67-138	
67-64-1	Acetone	132	**133**	**101**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**26.0**	**99**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**43.8**	**91**	54-126	
107-13-1	Acrylonitrile	25.8	**31.4**	**122**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**27.1**	**99**	70-123	
75-09-2	Methylene Chloride	26.8	**25.5**	**95**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**31.1**	**115**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**28.2**	**103**	69-126	
75-15-0	Carbon Disulfide	26.0	**26.5**	**102**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**27.2**	**107**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**27.8**	**105**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**27.6**	**105**	72-132	
108-05-4	Vinyl Acetate	126	**159**	**126**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**32.2**	**120**	68-126	

Verified By: Rev Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090915-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: 9/15/09
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	**29.0**	**107**	69-124	
141-78-6	Ethyl Acetate	52.0	**59.8**	**115**	65-126	
110-54-3	n-Hexane	26.0	**28.1**	**108**	63-125	
67-66-3	Chloroform	27.5	**28.2**	**103**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**29.6**	**112**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**29.6**	**113**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**27.1**	**104**	69-127	
71-43-2	Benzene	25.8	**26.7**	**103**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**28.0**	**106**	68-137	
110-82-7	Cyclohexane	51.8	**54.0**	**104**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**28.0**	**108**	69-128	
75-27-4	Bromodichloromethane	26.3	**28.9**	**110**	71-131	
79-01-6	Trichloroethene	25.8	**25.4**	**98**	72-122	
123-91-1	1,4-Dioxane	26.0	**30.2**	**116**	73-127	
80-62-6	Methyl Methacrylate	52.8	**57.1**	**108**	80-133	
142-82-5	n-Heptane	25.8	**27.2**	**105**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**28.4**	**116**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**31.9**	**119**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**32.9**	**122**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**28.7**	**110**	76-125	
108-88-3	Toluene	26.8	**28.0**	**104**	74-119	
591-78-6	2-Hexanone	27.0	**31.8**	**118**	64-118	
124-48-1	Dibromochloromethane	28.3	**31.0**	**110**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**29.7**	**113**	79-125	
123-86-4	n-Butyl Acetate	27.5	**34.4**	**125**	70-136	

Verified By: Re Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090915-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: 9/15/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

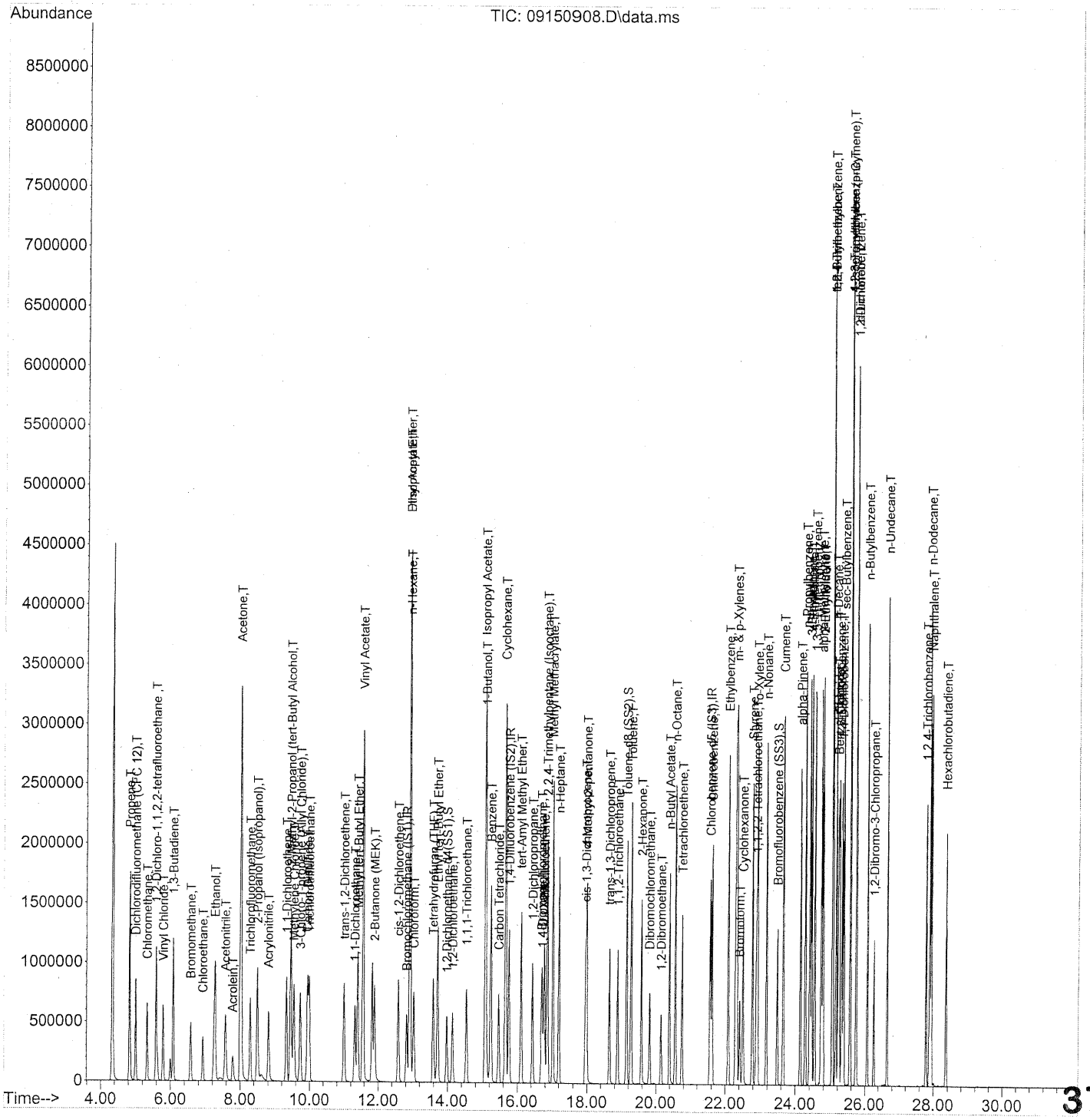
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**29.2**	**111**	75-126	
127-18-4	Tetrachloroethene	25.3	**25.9**	**102**	72-125	
108-90-7	Chlorobenzene	26.5	**27.6**	**104**	74-121	
100-41-4	Ethylbenzene	26.3	**28.7**	**109**	76-120	
179601-23-1	m,p-Xylenes	51.5	**56.7**	**110**	75-120	
75-25-2	Bromoform	26.5	**28.5**	**108**	76-143	
100-42-5	Styrene	26.3	**30.0**	**114**	78-124	
95-47-6	o-Xylene	26.0	**28.8**	**111**	76-121	
111-84-2	n-Nonane	25.8	**29.8**	**116**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**30.4**	**113**	77-126	
98-82-8	Cumene	25.3	**27.3**	**108**	78-125	
80-56-8	alpha-Pinene	24.8	**27.1**	**109**	78-125	
103-65-1	n-Propylbenzene	25.3	**28.0**	**111**	80-127	
622-96-8	4-Ethyltoluene	26.3	**28.9**	**110**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**29.3**	**111**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**30.1**	**118**	76-123	
100-44-7	Benzyl Chloride	26.8	**32.5**	**121**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**29.3**	**113**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**27.9**	**106**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**28.9**	**112**	75-124	
5989-27-5	d-Limonene	26.5	**31.2**	**118**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**31.5**	**117**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**28.9**	**106**	70-139	
91-20-3	Naphthalene	25.0	**27.7**	**111**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**28.5**	**106**	68-138	

Verified By: Rev Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 14:21:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 14:21:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	294027	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1498751	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	716094	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	553206	26.609	ng		-0.02
Spiked Amount 25.000			Recovery = 106.44%				
57) Toluene-d8 (SS2)	19.15	98	1750267	25.710	ng		-0.01
Spiked Amount 25.000			Recovery = 102.84%				
73) Bromofluorobenzene (SS3)	23.49	174	439963	22.820	ng		0.00
Spiked Amount 25.000			Recovery = 91.28%				
Target Compounds							Qvalue
2) Propene	4.83	42	809212	31.374	ng		98
3) Dichlorodifluoromethan...	5.00	85	980420	26.630	ng		100
4) Chloromethane	5.33	50	927472	27.030	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	498534	25.625	ng		100
6) Vinyl Chloride	5.79	62	888931	26.263	ng		98
7) 1,3-Butadiene	6.08	54	725529	30.177	ng		96
8) Bromomethane	6.58	94	469906	26.549	ng		99
9) Chloroethane	6.93	64	444492	26.470	ng		100
10) Ethanol	7.27	45	2185107m	135.059	ng		
11) Acetonitrile	7.58	41	1046098	26.494	ng		100
12) Acrolein	7.79	56	321755	30.495	ng		98
13) Acetone	8.01	58	2182253	132.548	ng		97
14) Trichlorofluoromethane	8.29	101	819598	26.033	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1976890m	43.846	ng		
16) Acrylonitrile	8.81	53	750791	31.396	ng		99
17) 1,1-Dichloroethene	9.33	96	501550	27.146	ng		92
18) 2-Methyl-2-Propanol (t...	9.45	59	2655185	58.007	ng		99
19) Methylene Chloride	9.54	84	523033	25.463	ng		83
20) 3-Chloro-1-propene (Al...	9.73	41	856932	31.109	ng		87
21) Trichlorotrifluoroethane	9.98	151	396963	28.171	ng		93
22) Carbon Disulfide	9.93	76	1923071	26.529	ng		98
23) trans-1,2-Dichloroethene	11.01	61	771949	27.227	ng		90
24) 1,1-Dichloroethane	11.32	63	964618	27.779	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1555080	27.637	ng		95
26) Vinyl Acetate	11.56	86	566548	158.885	ng	#	56
27) 2-Butanone (MEK)	11.89	72	369273	32.173	ng	#	77
28) cis-1,2-Dichloroethene	12.58	61	767240	28.999	ng		90
29) Diisopropyl Ether	12.91	87	463436	28.440	ng	#	56
30) Ethyl Acetate	12.91	61	444853	59.767	ng		94
31) n-Hexane	12.93	57	1020332	28.122	ng		9[illegible]

R9081309.M Tue Sep 15 14:21:49 2009 9/15/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 14:21:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	856993	28.222	ng		99
34) Tetrahydrofuran (THF)	13.58	72	353553	29.628	ng	#	85
35) Ethyl tert-Butyl Ether	13.71	87	624360	26.855	ng	#	85
36) 1,2-Dichloroethane	14.14	62	687586	29.590	ng		99
38) 1,1,1-Trichloroethane	14.54	97	738925	27.108	ng		98
39) Isopropyl Acetate	15.07	61	768094	62.795	ng	#	74
40) 1-Butanol	15.09	56	1274169	65.605	ng		82
41) Benzene	15.23	78	2152400	26.705	ng		99
42) Carbon Tetrachloride	15.46	117	629955	27.961	ng		99
43) Cyclohexane	15.66	84	1686000	54.014	ng		86
44) tert-Amyl Methyl Ether	16.10	73	1549543	27.353	ng		97
45) 1,2-Dichloropropane	16.44	63	553433	27.990	ng		98
46) Bromodichloromethane	16.70	83	681495	28.902	ng		99
47) Trichloroethene	16.77	130	520779	25.448	ng		100
48) 1,4-Dioxane	16.72	88	433311	30.226	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2454493	26.460	ng		96
50) Methyl Methacrylate	17.02	100	460231	57.144	ng	#	86
51) n-Heptane	17.21	71	583309	27.185	ng		93
52) cis-1,3-Dichloropropene	17.95	75	847413	28.443	ng		100
53) 4-Methyl-2-pentanone	17.99	58	556445	31.948	ng		93
54) trans-1,3-Dichloropropene	18.64	75	857497	32.900	ng		100
55) 1,1,2-Trichloroethane	18.89	97	494937	28.742	ng		98
58) Toluene	19.28	91	2309012	27.980	ng		100
59) 2-Hexanone	19.58	43	1363440	31.789	ng		97
60) Dibromochloromethane	19.82	129	545496	30.957	ng		100
61) 1,2-Dibromoethane	20.15	107	550763	29.654	ng		99
62) n-Butyl Acetate	20.39	43	1608677	34.375	ng		97
63) n-Octane	20.56	57	538039	29.249	ng		90
64) Tetrachloroethene	20.76	166	529390	25.851	ng		99
65) Chlorobenzene	21.62	112	1398345	27.592	ng		100
66) Ethylbenzene	22.09	91	2556252	28.691	ng		98
67) m- & p-Xylenes	22.33	91	4003104	56.674	ng		99
68) Bromoform	22.41	173	436118	28.513	ng		100
69) Styrene	22.77	104	1567578	30.024	ng		99
70) o-Xylene	22.92	91	2046250	28.797	ng		98
71) n-Nonane	23.17	43	1273757	29.766	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	927216	30.376	ng		99
74) Cumene	23.66	105	2517380	27.323	ng		99
75) alpha-Pinene	24.15	93	1233467	27.135	ng		99
76) n-Propylbenzene	24.28	91	3183916	27.961	ng		99
77) 3-Ethyltoluene	24.41	105	2510270	29.083	ng		98
78) 4-Ethyltoluene	24.46	105	2503385	28.850	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2103310	29.315	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 14:21:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

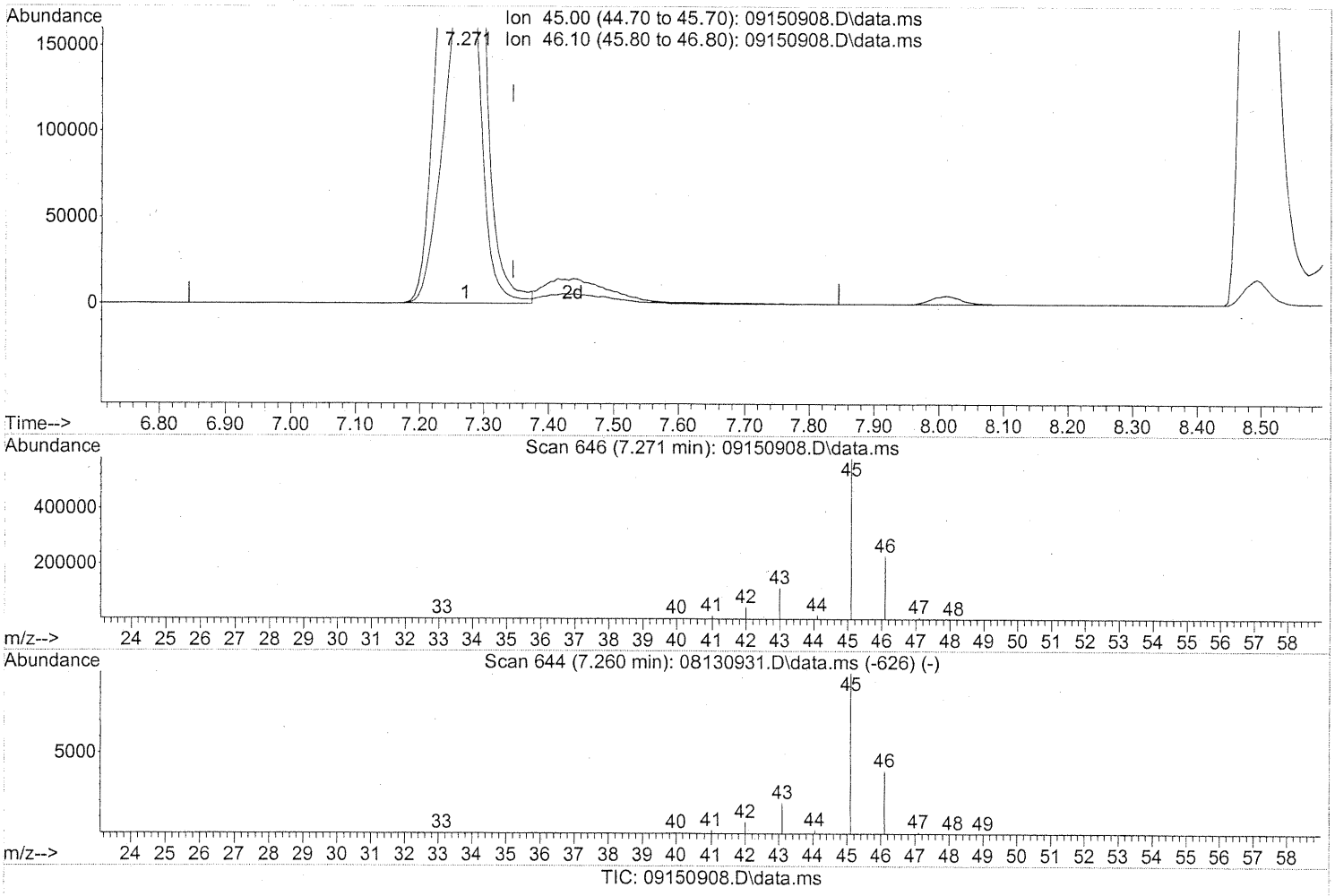
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1166384	29.960	ng	98
81) 2-Ethyltoluene	24.79	105	2506360	28.119	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2291996	30.087	ng	100
83) n-Decane	25.15	57	1305921	29.452	ng	94
84) Benzyl Chloride	25.22	91	1913129	32.461	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1156903	29.335	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1169182	27.941	ng	99
87) sec-Butylbenzene	25.38	105	2848175	28.373	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2772348	28.824	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2301088	29.885	ng	99
90) 1,2-Dichlorobenzene	25.75	146	1145907	28.938	ng	100
91) d-Limonene	25.74	68	972754	31.211	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	376549	31.488	ng	91
93) n-Undecane	26.65	57	1373130	29.970	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	800230	28.926	ng	100
95) Naphthalene	27.94	128	2827344	27.661	ng	100
96) n-Dodecane	27.89	57	1382851	26.963	ng	95
97) Hexachlorobutadiene	28.36	225	449451	28.450	ng	99
98) Cyclohexanone	22.51	55	792509	30.493	ng	95
99) tert-Butylbenzene	25.05	119	2205683	29.195	ng	99
100) n-Butylbenzene	26.07	91	2391085	29.927	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 13:01:41 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



TIC: 09150908.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 128.64ng

response 2081307

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.29
0.00	0.00	0.00
0.00	0.00	0.00

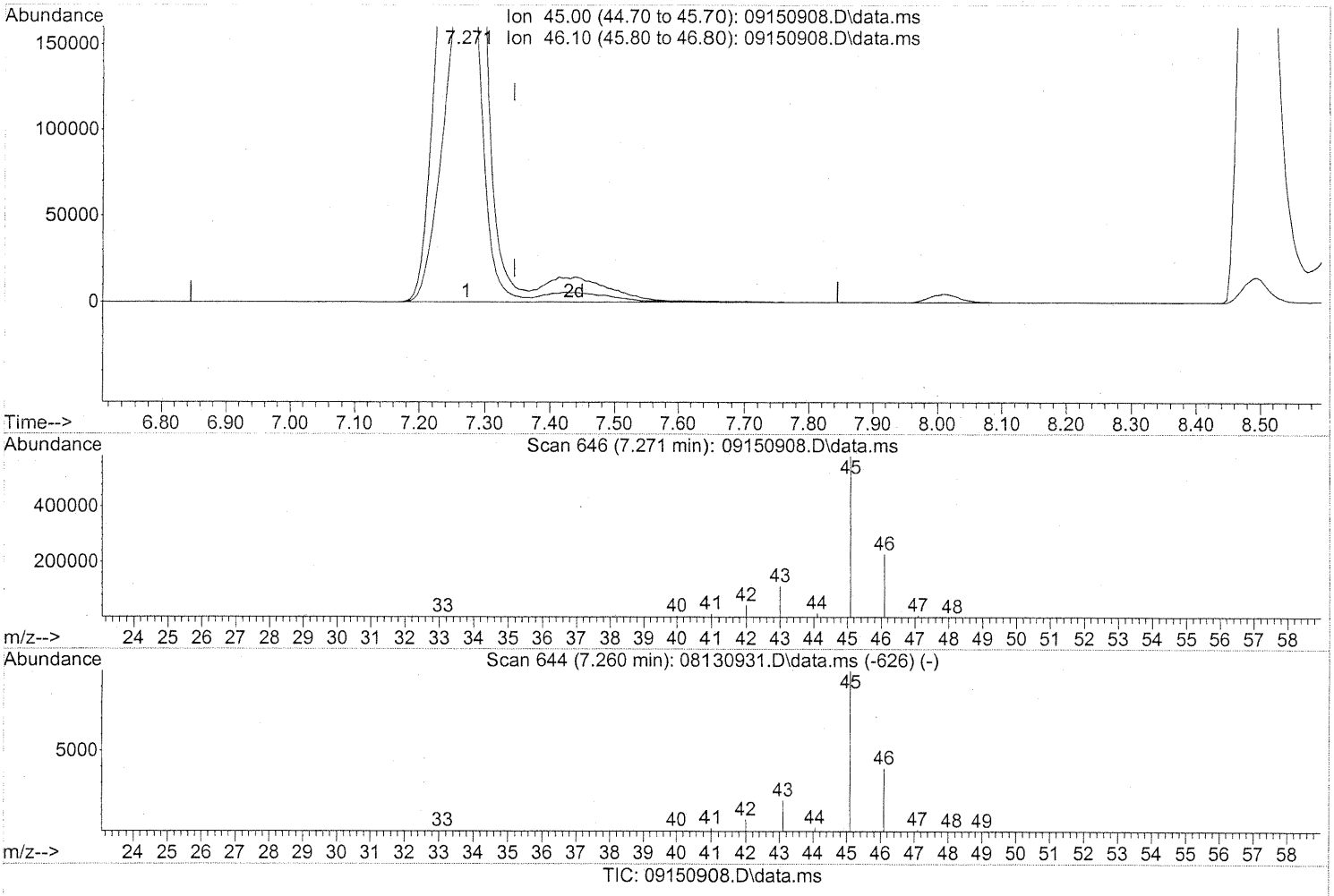
PT

375

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 13:01:41 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



TIC: 09150908.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 135.06ng m

response 2185107

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.42
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
9/15/09
9/16/09

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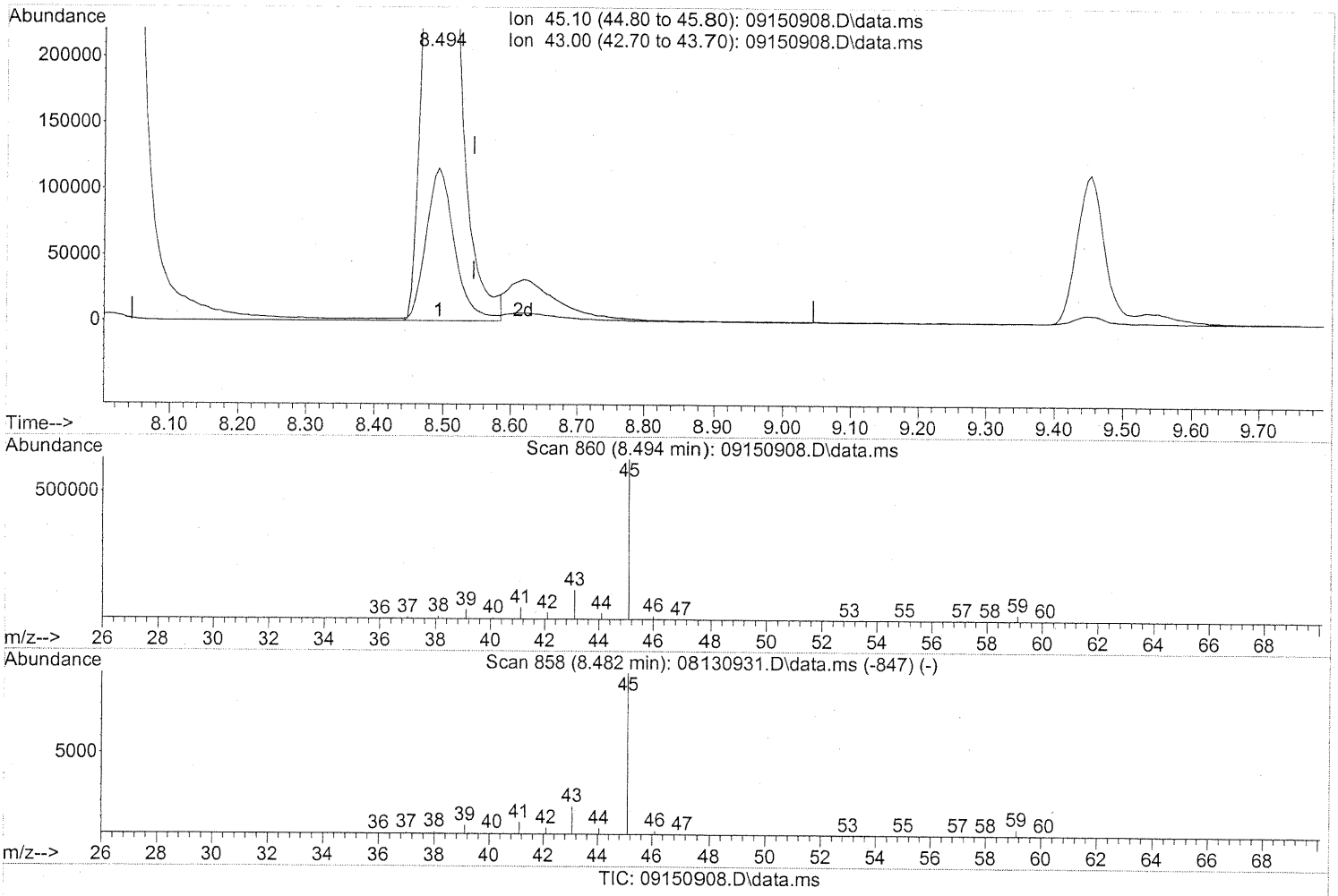
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 13:01:41 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



TIC: 09150908.D\data.ms

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

8.494min (-0.051) 40.01ng

response 1804053

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.88
0.00	0.00	0.00
0.00	0.00	0.00

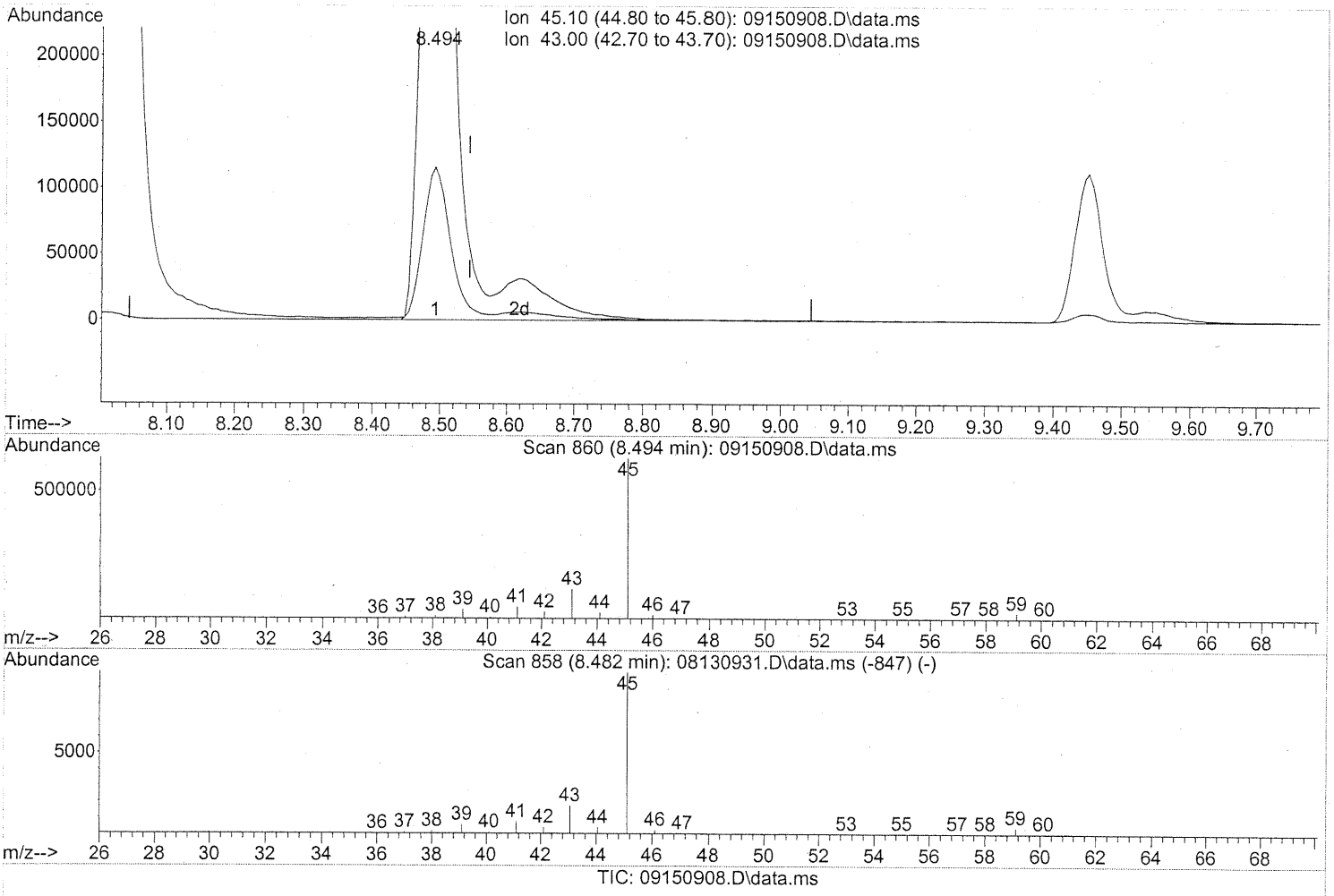
PT

377

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150908.D
Acq On : 15 Sep 2009 11:26
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-09110901/S20-09030912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 15 13:01:41 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



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

8.494min (-0.051) 43.85ng m

response 1976890

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.31
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
Tom 9/15/09
9/16/09

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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: P0903139
Client Project ID: **16512** CAS Sample ID: P090918-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 9/18/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**20.9**	**79**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**20.6**	**79**	61-118	
74-87-3	Chloromethane	25.0	**20.4**	**82**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.2**	**82**	65-122	
75-01-4	Vinyl Chloride	25.3	**20.5**	**81**	57-132	
106-99-0	1,3-Butadiene	26.8	**21.2**	**79**	66-161	
74-83-9	Bromomethane	25.8	**22.4**	**87**	67-130	
75-00-3	Chloroethane	25.5	**20.5**	**80**	68-123	
64-17-5	Ethanol	130	**93.3**	**72**	50-155	
75-05-8	Acetonitrile	26.0	**19.0**	**73**	48-148	
107-02-8	Acrolein	26.3	**22.0**	**84**	67-138	
67-64-1	Acetone	132	**103**	**78**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**21.3**	**81**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**35.1**	**73**	54-126	
107-13-1	Acrylonitrile	25.8	**19.9**	**77**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**22.9**	**83**	70-123	
75-09-2	Methylene Chloride	26.8	**20.6**	**77**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**22.6**	**84**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**24.8**	**90**	69-126	
75-15-0	Carbon Disulfide	26.0	**21.1**	**81**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**22.1**	**87**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**21.5**	**81**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**21.8**	**83**	72-132	
108-05-4	Vinyl Acetate	126	**110**	**87**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**21.7**	**81**	68-126	

Verified By: RC Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090918-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 9/18/09
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	**22.5**	**83**	69-124	
141-78-6	Ethyl Acetate	52.0	**44.4**	**85**	65-126	
110-54-3	n-Hexane	26.0	**20.3**	**78**	63-125	
67-66-3	Chloroform	27.5	**22.3**	**81**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**22.9**	**86**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**22.4**	**85**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**22.8**	**88**	69-127	
71-43-2	Benzene	25.8	**21.4**	**83**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**24.9**	**95**	68-137	
110-82-7	Cyclohexane	51.8	**44.3**	**86**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**22.1**	**85**	69-128	
75-27-4	Bromodichloromethane	26.3	**22.8**	**87**	71-131	
79-01-6	Trichloroethene	25.8	**22.1**	**86**	72-122	
123-91-1	1,4-Dioxane	26.0	**21.5**	**83**	73-127	
80-62-6	Methyl Methacrylate	52.8	**45.9**	**87**	80-133	
142-82-5	n-Heptane	25.8	**21.1**	**82**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**21.4**	**87**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**21.6**	**81**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**24.3**	**90**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**21.6**	**83**	76-125	
108-88-3	Toluene	26.8	**21.7**	**81**	74-119	
591-78-6	2-Hexanone	27.0	**20.4**	**76**	64-118	
124-48-1	Dibromochloromethane	28.3	**24.8**	**88**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**23.0**	**87**	79-125	
123-86-4	n-Butyl Acetate	27.5	**20.8**	**76**	70-136	

Verified By: RC Date: 9/21/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0903139
Client Project ID: **16512** CAS Sample ID: P090918-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 9/18/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

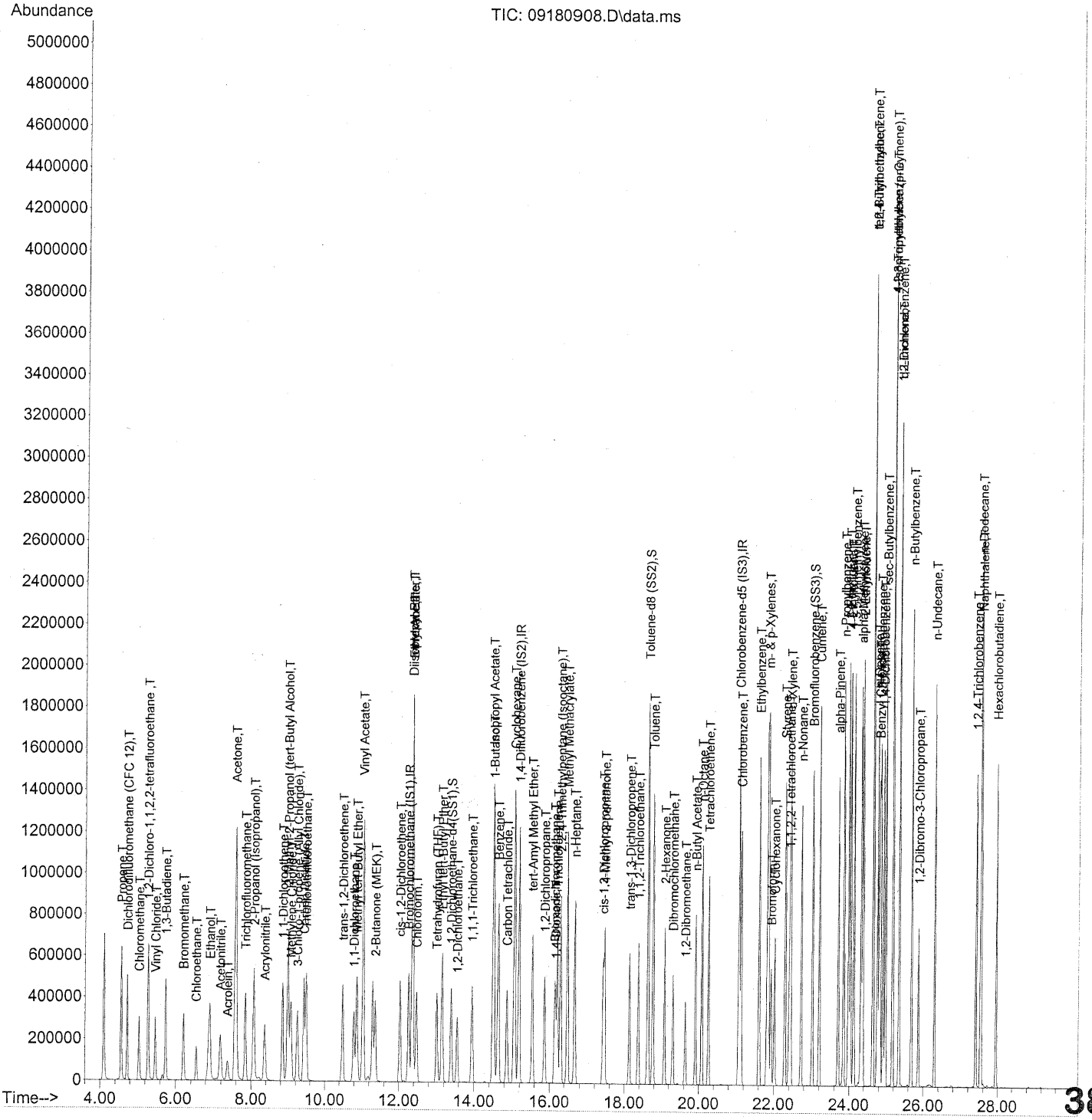
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**21.3**	**81**	75-126	
127-18-4	Tetrachloroethene	25.3	**21.8**	**86**	72-125	
108-90-7	Chlorobenzene	26.5	**22.1**	**83**	74-121	
100-41-4	Ethylbenzene	26.3	**21.7**	**83**	76-120	
179601-23-1	m,p-Xylenes	51.5	**42.7**	**83**	75-120	
75-25-2	Bromoform	26.5	**23.1**	**87**	76-143	
100-42-5	Styrene	26.3	**22.2**	**84**	78-124	
95-47-6	o-Xylene	26.0	**21.4**	**82**	76-121	
111-84-2	n-Nonane	25.8	**20.1**	**78**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**22.8**	**84**	77-126	
98-82-8	Cumene	25.3	**20.5**	**81**	78-125	
80-56-8	alpha-Pinene	24.8	**20.7**	**83**	78-125	
103-65-1	n-Propylbenzene	25.3	**20.7**	**82**	80-127	
622-96-8	4-Ethyltoluene	26.3	**21.2**	**81**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**21.9**	**83**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**20.8**	**82**	76-123	
100-44-7	Benzyl Chloride	26.8	**23.1**	**86**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**22.5**	**87**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**22.0**	**84**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**22.2**	**86**	75-124	
5989-27-5	d-Limonene	26.5	**21.2**	**80**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**22.4**	**83**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**21.2**	**78**	70-139	
91-20-3	Naphthalene	25.0	**18.7**	**75**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**21.4**	**80**	68-138	

Verified By: Res Date: 9/21/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:38 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:38 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

MH 9/21/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.26	130	344724	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.19	114	1653128	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.07	82	698397	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.39	65	463748	24.411	ng		-0.02
Spiked Amount 25.000			Recovery =	97.64%			
57) Toluene-d8 (SS2)	18.63	98	1713015	24.504	ng		0.00
Spiked Amount 25.000			Recovery =	98.00%			
73) Bromofluorobenzene (SS3)	23.02	174	674485	26.924	ng		0.00
Spiked Amount 25.000			Recovery =	107.68%			
Target Compounds							Qvalue
2) Propene	4.56	42	293850	20.933	ng		99
3) Dichlorodifluoromethan...	4.72	85	553988	20.643	ng		99
4) Chloromethane	5.03	50	448978	20.426	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.27	135	340679	21.164	ng		100
6) Vinyl Chloride	5.46	62	431660	20.461	ng		99
7) 1,3-Butadiene	5.74	54	310820	21.156	ng		96
8) Bromomethane	6.20	94	311369	22.374	ng		99
9) Chloroethane	6.53	64	212252	20.496	ng		98
10) Ethanol	6.90	45	949802	93.333	ng		97
11) Acetonitrile	7.18	41	488760	18.990	ng		99
12) Acrolein	7.37	56	166441	21.983	ng		99
13) Acetone	7.59	58	1051050	102.520	ng		88
14) Trichlorofluoromethane	7.84	101	529779	21.311	ng		99
15) 2-Propanol (Isopropanol)	8.07	45	1238681m	35.080	ng		
16) Acrylonitrile	8.36	53	395788	19.909	ng		98
17) 1,1-Dichloroethene	8.85	96	327203	22.874	ng	#	78
18) 2-Methyl-2-Propanol (t...	8.99	59	1458212	39.954	ng		98
19) Methylene Chloride	9.07	84	321872	20.588	ng		80
20) 3-Chloro-1-propene (Al...	9.24	41	414706	22.623	ng		88
21) Trichlorotrifluoroethane	9.49	151	304277	24.844	ng		83
22) Carbon Disulfide	9.43	76	1146258	21.139	ng		99
23) trans-1,2-Dichloroethene	10.48	61	430094	22.053	ng		83
24) 1,1-Dichloroethane	10.79	63	531154	21.528	ng		100
25) Methyl tert-Butyl Ether	10.87	73	860985	21.849	ng		96
26) Vinyl Acetate	11.04	86	338317	109.581	ng	#	50
27) 2-Butanone (MEK)	11.36	72	213481	21.677	ng	#	74
28) cis-1,2-Dichloroethene	12.03	61	424309	22.483	ng		82
29) Diisopropyl Ether	12.36	87	246195	21.574	ng	#	51
30) Ethyl Acetate	12.37	61	221778	44.359	ng		93
31) n-Hexane	12.37	57	401823	20.290	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:38 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.47	83	541589	22.292	ng		100
34) Tetrahydrofuran (THF)	13.01	72	208653	22.894	ng	#	82
35) Ethyl tert-Butyl Ether	13.15	87	366759	21.097	ng	#	79
36) 1,2-Dichloroethane	13.56	62	375514	22.410	ng		99
38) 1,1,1-Trichloroethane	13.94	97	474372	22.844	ng		96
39) Isopropyl Acetate	14.50	61	390346	42.630	ng	#	92
40) 1-Butanol	14.52	56	576244	38.637	ng		84
41) Benzene	14.63	78	1259018	21.354	ng		99
42) Carbon Tetrachloride	14.87	117	441513	24.910	ng		99
43) Cyclohexane	15.07	84	952259	44.264	ng		87
44) tert-Amyl Methyl Ether	15.54	73	872354	21.189	ng		94
45) 1,2-Dichloropropane	15.87	63	303429	22.084	ng		99
46) Bromodichloromethane	16.14	83	416830	22.838	ng		100
47) Trichloroethene	16.22	130	391479	22.067	ng		99
48) 1,4-Dioxane	16.16	88	270817	21.542	ng		88
49) 2,2,4-Trimethylpentane...	16.31	57	1213274	20.427	ng		97
50) Methyl Methacrylate	16.49	100	311058	45.927	ng	#	74
51) n-Heptane	16.67	71	317607	21.110	ng		92
52) cis-1,3-Dichloropropene	17.42	75	493887	21.437	ng		99
53) 4-Methyl-2-pentanone	17.46	58	283730	21.583	ng		85
54) trans-1,3-Dichloropropene	18.13	75	502018	24.334	ng		99
55) 1,1,2-Trichloroethane	18.37	97	319780	21.563	ng		94
58) Toluene	18.76	91	1418424	21.734	ng		99
59) 2-Hexanone	19.08	43	643310	20.442	ng		93
60) Dibromochloromethane	19.31	129	403574	24.778	ng		99
61) 1,2-Dibromoethane	19.64	107	379047	22.951	ng		100
62) n-Butyl Acetate	19.91	43	748331	20.774	ng		95
63) n-Octane	20.08	57	260424	21.259	ng		86
64) Tetrachloroethene	20.26	166	439715	21.828	ng		98
65) Chlorobenzene	21.13	112	956186	22.113	ng		98
66) Ethylbenzene	21.61	91	1551697	21.654	ng		97
67) m- & p-Xylenes	21.85	91	2392022	42.707	ng		95
68) Bromoform	21.92	173	381383	23.096	ng		100
69) Styrene	22.29	104	1019323	22.155	ng		96
70) o-Xylene	22.44	91	1226881	21.438	ng		95
71) n-Nonane	22.72	43	559385	20.139	ng		89
72) 1,1,2,2-Tetrachloroethane	22.41	83	563631	22.757	ng		98
74) Cumene	23.20	105	1608875	20.538	ng		98
75) alpha-Pinene	23.70	93	762540	20.715	ng		97
76) n-Propylbenzene	23.85	91	1898933	20.738	ng		95
77) 3-Ethyltoluene	23.98	105	1631556	22.040	ng		98
78) 4-Ethyltoluene	24.03	105	1552318	21.236	ng		97
79) 1,3,5-Trimethylbenzene	24.13	105	1334513	21.933	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:38 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

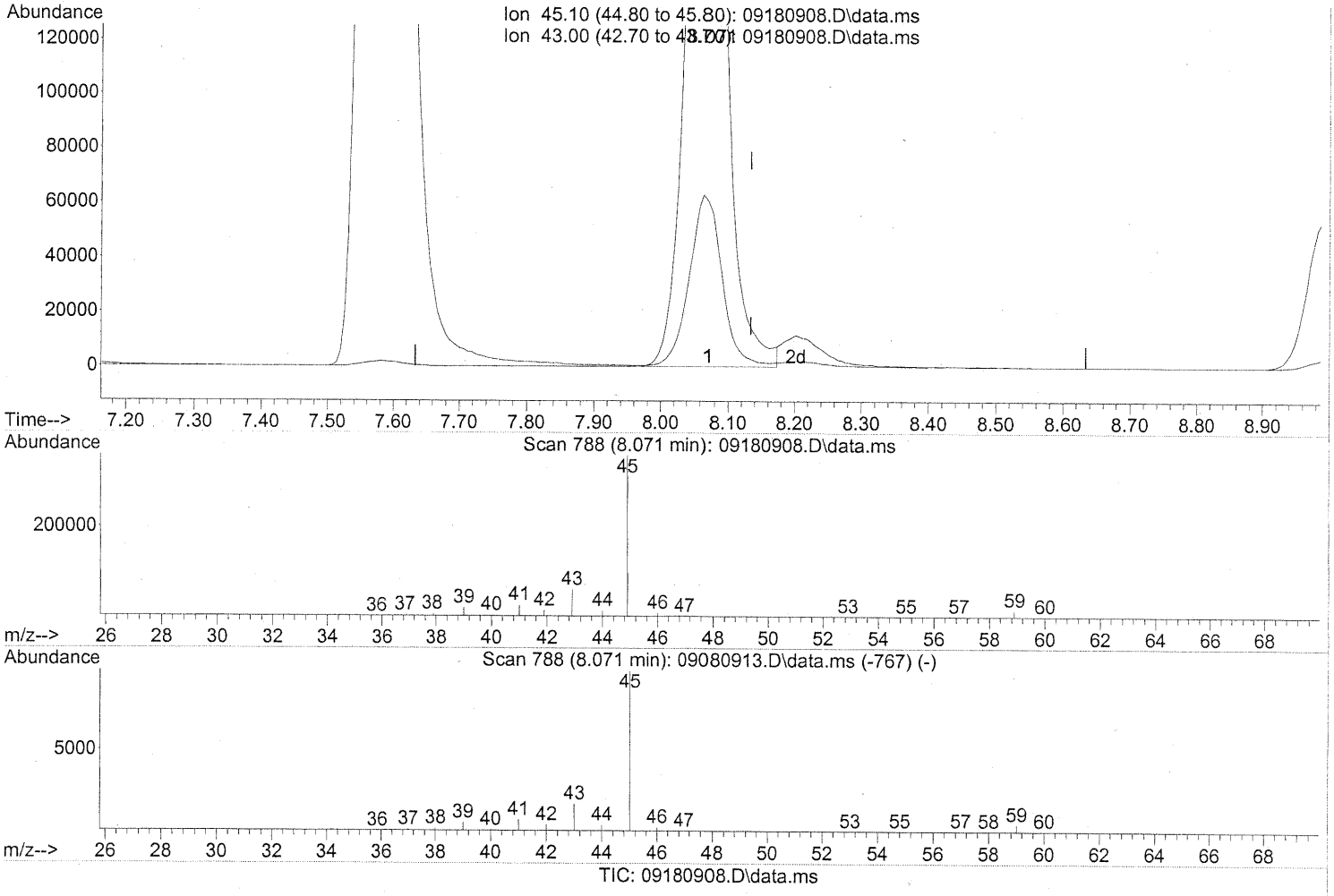
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.32	118	771759	21.982	ng		97
81) 2-Ethyltoluene	24.36	105	1590452	20.485	ng		97
82) 1,2,4-Trimethylbenzene	24.64	105	1352388	20.839	ng		96
83) n-Decane	24.76	57	650708	19.155	ng		93
84) Benzyl Chloride	24.80	91	1173904	23.106	ng		94
85) 1,3-Dichlorobenzene	24.83	146	851310	22.531	ng		100
86) 1,4-Dichlorobenzene	24.91	146	867122	22.022	ng		100
87) sec-Butylbenzene	24.97	105	1793240	21.109	ng		96
88) 4-Isopropyltoluene (p-...	25.17	119	1715536	20.836	ng		96
89) 1,2,3-Trimethylbenzene	25.17	105	1353684	21.303	ng		96
90) 1,2-Dichlorobenzene	25.34	146	805985	22.174	ng		100
91) d-Limonene	25.34	68	494685	21.222	ng		89
92) 1,2-Dibromo-3-Chloropr...	25.87	157	293095	22.394	ng		79
93) n-Undecane	26.29	57	673692	17.195	ng		93
94) 1,2,4-Trichlorobenzene	27.40	180	604527	21.186	ng		100
95) Naphthalene	27.54	128	1767241	18.749	ng		100
96) n-Dodecane	27.52	57	661989	17.146	ng		92
97) Hexachlorobutadiene	27.96	225	384650	21.354	ng		98
98) Cyclohexanone	22.02	55	388803	16.103	ng	#	89
99) tert-Butylbenzene	24.64	119	1370601	21.448	ng		98
100) n-Butylbenzene	25.68	91	1404487	21.552	ng		97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:18 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



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

8.071min (-0.063) 33.71ng

response 1190359

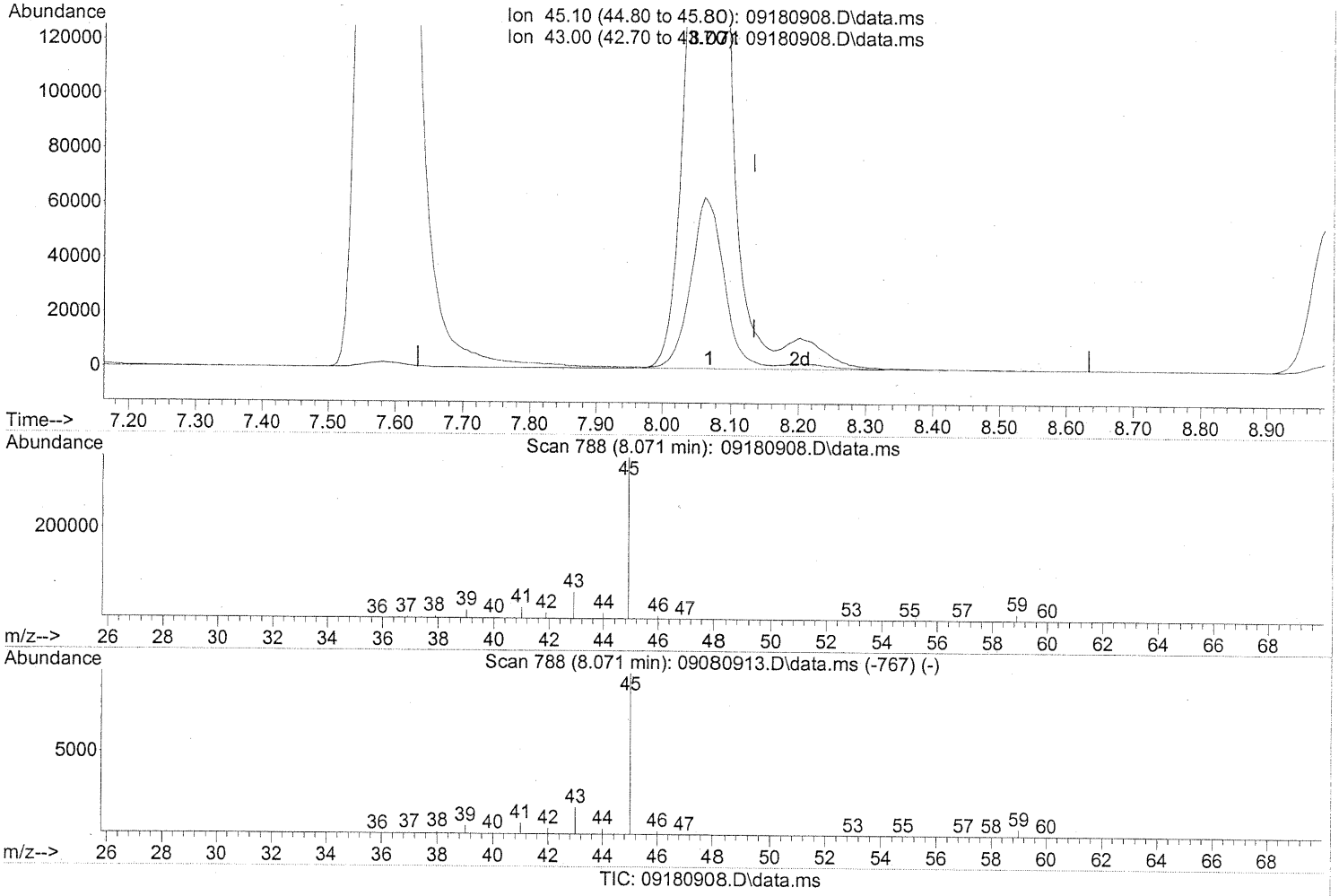
PT

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	18.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180908.D
Acq On : 18 Sep 2009 12:41
Operator : LH
Sample : 25ng TO-15 LCS STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 14:33:18 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



TIC: 09180908.D\data.ms

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

8.071min (-0.063) 35.08ng m

response 1238681

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	17.59
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
m 9/21/09

Qm 9/21/09

387

INITIAL CALIBRATION STANDARDS

Response Factor Report MS09

Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:31:29 2009
Response Via : Initial Calibration

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

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

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L
Propene	1.07	214	21.4	4.28
Dichlorodifluoromethane	1.05	210	21.0	4.20
Chloromethane	1.00	200	20.0	4.00
Freon-114	1.06	212	21.2	4.24
Vinyl Chloride	1.01	202	20.2	4.04
1,3-Butadiene	1.20	240	24.0	4.80
Bromomethane	1.02	204	20.4	4.08
Chloroethane	1.01	202	20.2	4.04
Ethanol	5.20	1040	104	20.8
Acetonitrile	1.05	210	21.0	4.20
Acrolein	1.08	216	21.6	4.32
Acetone	5.50	1100	110	22.0
Trichlorofluoromethane	1.05	210	21.0	4.20
Isopropanol	1.89	378	37.8	7.56
Acrylonitrile	1.06	212	21.2	4.24
1,1-Dichloroethene	1.10	220	22.0	4.40
tert-Butanol	2.02	404	40.4	8.08
Methylene Chloride	1.07	214	21.4	4.28
Allyl Chloride	1.08	216	21.6	4.32
Trichlorotrifluoroethane	1.10	220	22.0	4.40
Carbon Disulfide	1.07	214	21.4	4.28
trans-1,2-Dichloroethene	1.06	212	21.2	4.24
1,1-Dichloroethane	1.06	212	21.2	4.24
Methyl tert-Butyl Ether	1.09	218	21.8	4.36
Vinyl Acetate	5.02	1004	100	20.1
2-Butanone	1.10	220	22.0	4.40
cis-1,2-Dichloroethene	1.09	218	21.8	4.36
Diisopropyl Ether	1.07	214	21.4	4.28
Ethyl Acetate	2.13	426	42.6	8.52
n-Hexane	1.09	218	21.8	4.36
Chloroform	1.07	214	21.4	4.28
Tetrahydrofuran	1.10	220	22.0	4.40
Ethyl tert-Butyl Ether	1.03	206	20.6	4.12
1,2-Dichloroethane	1.06	212	21.2	4.24
1,1,1-Trichloroethane	1.05	210	21.0	4.20
Isopropyl Acetate	2.09	418	41.8	8.36
1-Butanol	2.07	414	41.4	8.28
Benzene	1.06	212	21.2	4.24
Carbon Tetrachloride	1.08	216	21.6	4.32
Cyclohexane	2.15	430	43.0	8.60
tert-Amyl Methyl Ether	1.04	208	20.8	4.16
1,2-Dichloropropane	1.05	210	21.0	4.20
Bromodichloromethane	1.08	216	21.6	4.32
Trichloroethene	1.06	212	21.2	4.24
1,4-Dioxane	1.07	214	21.4	4.28
Isooctane	1.04	208	20.8	4.16
Methyl Methacrylate	2.13	426	42.6	8.52
n-Heptane	1.06	212	21.2	4.24
cis-1,3-Dichloropropene	0.99	198	19.8	3.96
4-Methyl-2-pentanone	1.10	220	22.0	4.40
trans-1,3-Dichloropropene	1.10	220	22.0	4.40
1,1,2-Trichloroethane	1.05	210	21.0	4.20
Toluene	1.08	216	21.6	4.32
2-Hexanone	1.10	220	22.0	4.40
Dibromochloromethane	1.15	230	23.0	4.60
1,2-Dibromoethane	1.06	212	21.2	4.24
n-Butyl Acetate	1.10	220	22.0	4.40
n-Octane	1.07	214	21.4	4.28
Tetrachloroethene	1.02	204	20.4	4.08
Chlorobenzene	1.08	216	21.6	4.32
Ethylbenzene	1.06	212	21.2	4.24
m-&p-Xylene	2.08	416	41.6	8.32

Working STD Conc.(ng/L):	[redacted]	[redacted]	[redacted]	[redacted]	20	200	200	200
injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
	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
	0.100	0.200	0.500	1.00	5.00	25.0	50.0	100
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.120	0.240	0.600	1.20	6.00	30.0	60.0	120
	0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.520	1.040	2.60	5.20	26.0	130	260	520
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.550	1.100	2.75	5.50	27.5	138	275	550
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.189	0.378	0.945	1.89	9.45	47.3	94.5	189
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.202	0.404	1.01	2.02	10.1	50.5	101	202
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	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
	0.107	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
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.502	1.004	2.51	5.02	25.1	126	251	502
	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
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.213	0.426	1.07	2.13	10.7	53.3	107	213
	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
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.209	0.418	1.05	2.09	10.5	52.3	105	209
	0.207	0.414	1.04	2.07	10.4	51.8	104	207
	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
	0.215	0.430	1.08	2.15	10.8	53.8	108	215
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	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
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.213	0.426	1.07	2.13	10.7	53.3	107	213
	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
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	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
	0.115	0.230	0.575	1.15	5.75	28.8	57.5	115
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.208	0.416	1.04	2.08	10.4	52.0	104	208

Tom 8/14/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-07240912
20ng/L Std. ID: S20-08100904

200ng/L Std. ID: S20-08100902
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 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.

Cem 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

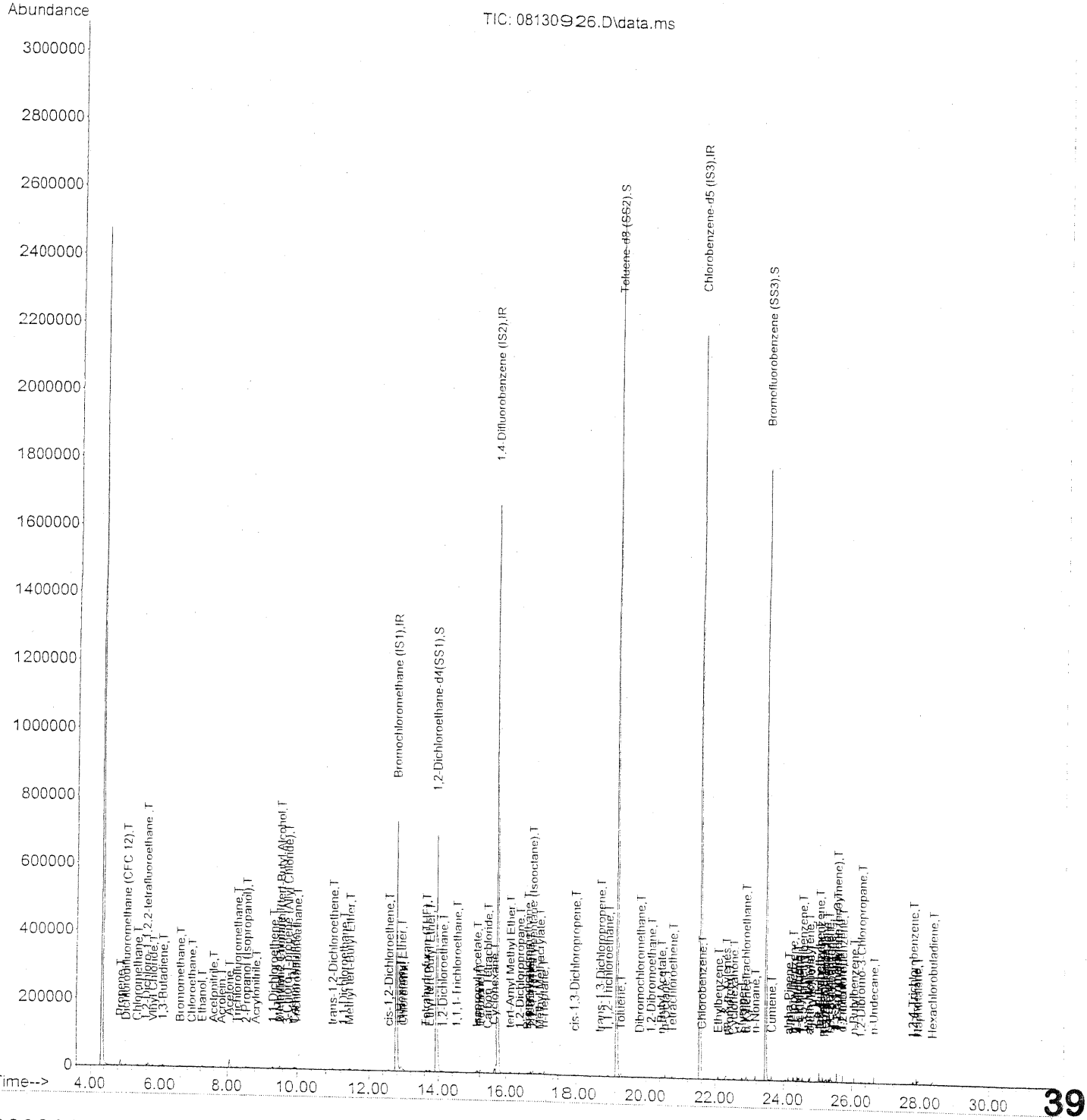
R9081309.M Fri Aug 14 07:48:55 2009

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



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)
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		

R9081309.M Fri Aug 14 07:12:42 2009 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
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		97

Emm 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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	4543	0.074	ng		98
81) 2-Ethyltoluene	24.79	105	11719	0.085	ng		95
82) 1,2,4-Trimethylbenzene	25.05	105	9509	0.078	ng		100
83) n-Decane	25.15	57	5840	0.099	ng		89
84) Benzyl Chloride	25.22	91	6309	0.072	ng		92
85) 1,3-Dichlorobenzene	25.25	146	5071	0.079	ng		100
86) 1,4-Dichlorobenzene	25.33	146	5490	0.082	ng		97
87) sec-Butylbenzene	25.38	105	13671	0.089	ng		96
88) 4-Isopropyltoluene (p-...	25.56	119	11685	0.076	ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	9819	0.079	ng		99
90) 1,2-Dichlorobenzene	25.75	146	4975	0.075	ng		99
91) d-Limonene	25.74	68	3927	0.081	ng		84
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1250	0.067	ng	#	78
93) n-Undecane	26.65	57	5934	0.098	ng		93
94) 1,2,4-Trichlorobenzene	27.79	180	3482	0.081	ng	#	95
95) Naphthalene	27.94	128	13216	0.088	ng		98
96) n-Dodecane	27.89	57	6214	0.096	ng		91
97) Hexachlorobutadiene	28.36	225	1995	0.081	ng		96
98) Cyclohexanone	22.55	55	2844	0.081	ng	#	82
99) tert-Butylbenzene	25.05	119	9567	0.077	ng		93
100) n-Butylbenzene	26.07	91	10255	0.084	ng		99

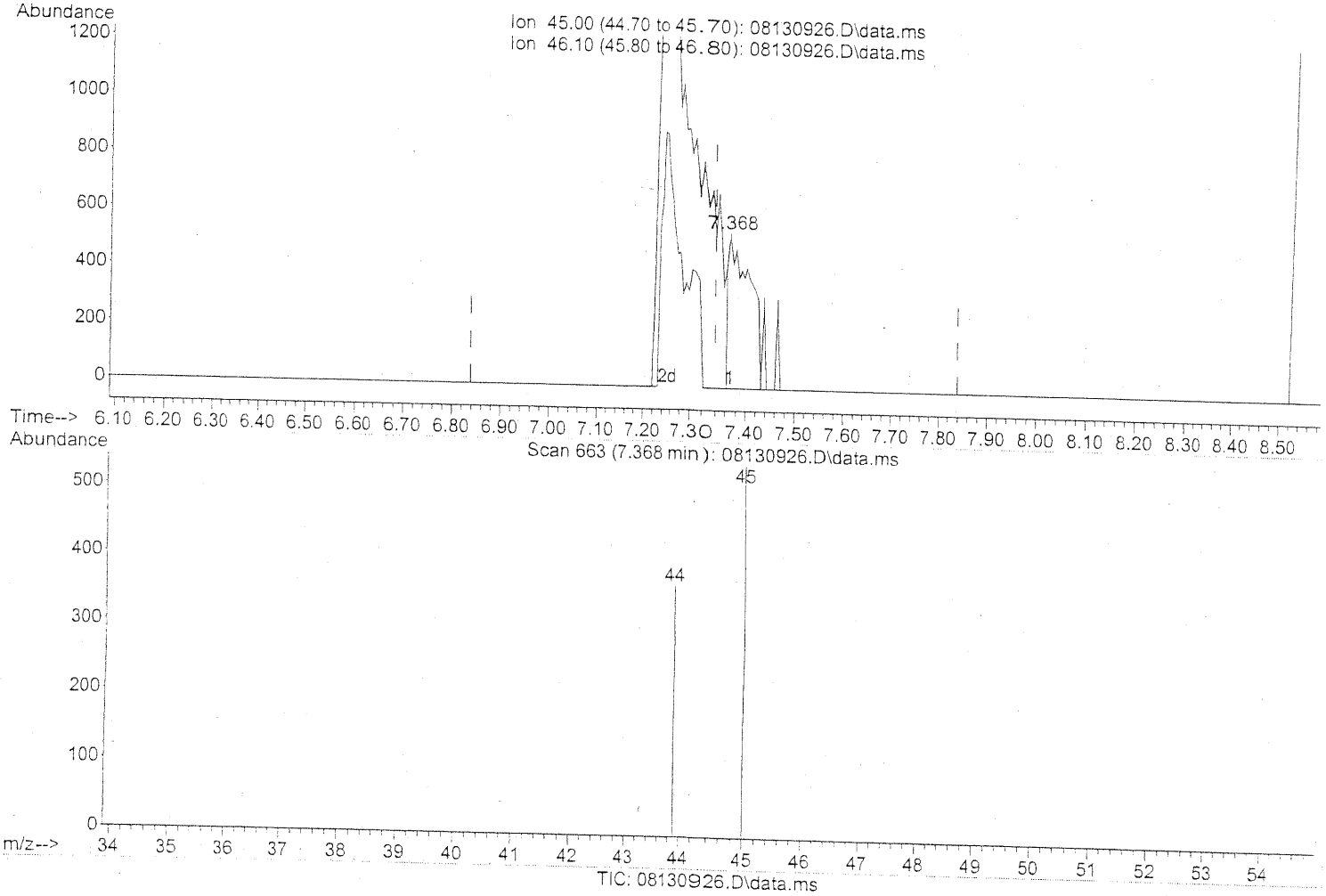
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EM 8/14/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.368min (+0.029) 0.10ng

response 1639

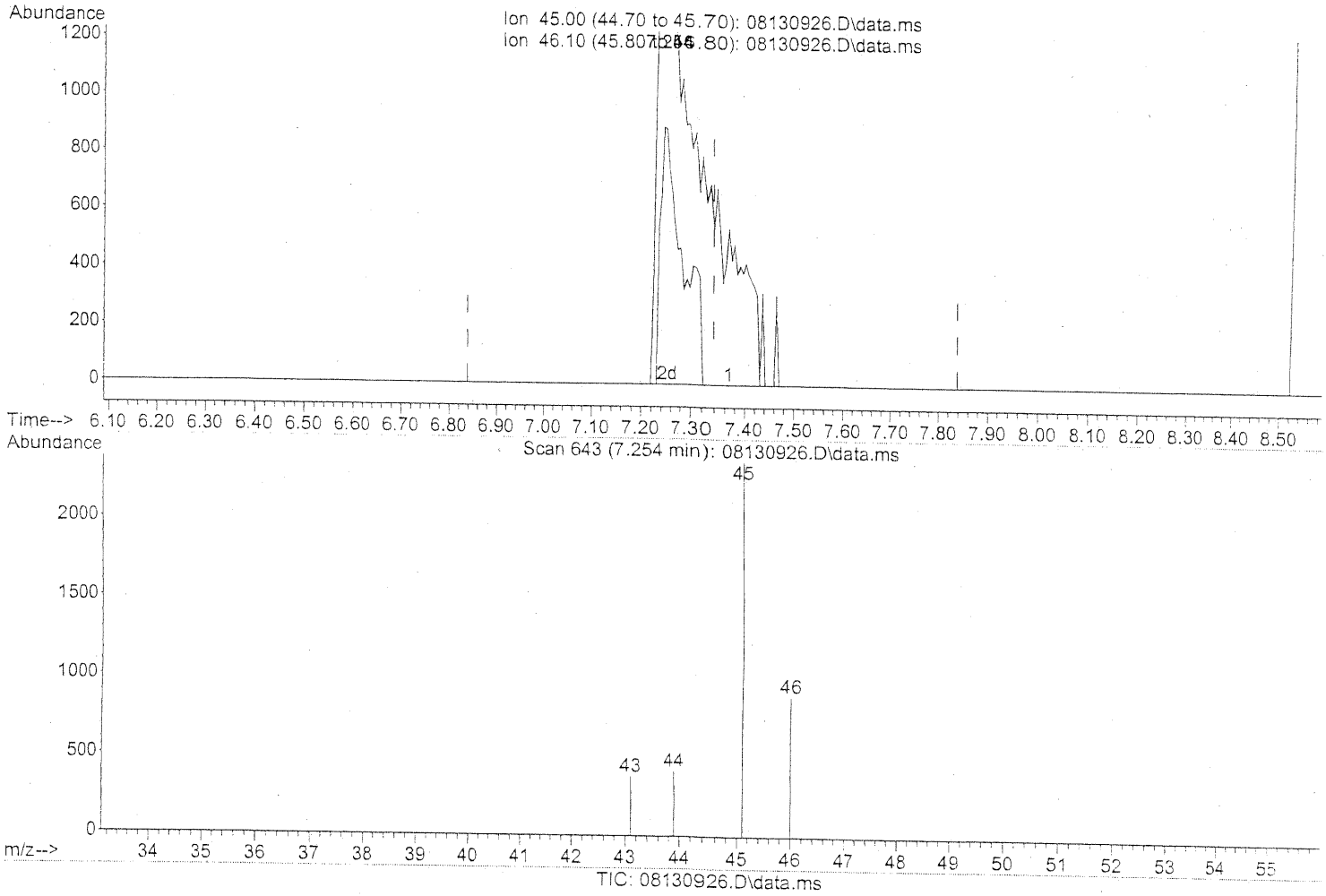
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:04:25 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.254min (-0.086) 0.66ng m

response 10733

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

SP → IC
Conn 8/14/09

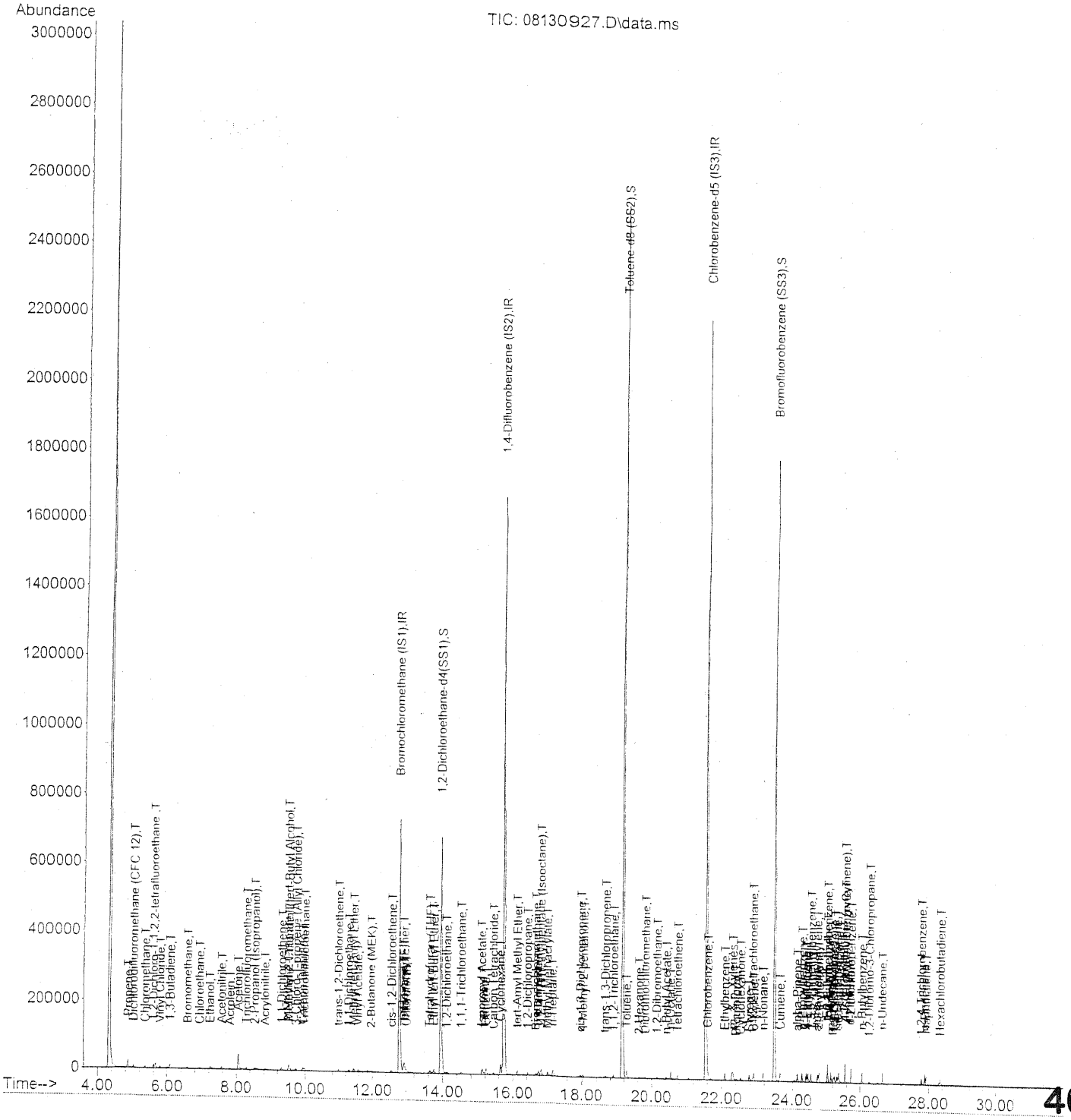
DM 8/15/09

400

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



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		98
26) Vinyl Acetate	11.58	86	1274	0.289	ng	#	1
27) 2-Butanone (MEK)	11.97	72	1592	0.113	ng	#	1
28) cis-1,2-Dichloroethene	12.57	61	6876	0.224	ng		90
29) Diisopropyl Ether	12.94	87	4063	0.186	ng	#	86
30) Ethyl Acetate	12.95	61	1611	0.175	ng		96
31) n-Hexane	12.93	57	9734	0.228	ng		8

Em 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.00	83	7826	0.202	ng		98
34) Tetrahydrofuran (THF)	13.64	72	3221	0.243	ng	#	69
35) Ethyl tert-Butyl Ether	13.75	87	5452	0.186	ng	#	80
36) 1,2-Dichloroethane	14.13	62	5503	0.177	ng		92
38) 1,1,1-Trichloroethane	14.53	97	7018	0.192	ng		98
39) Isopropyl Acetate	15.10	61	5649	0.390	ng	#	69
40) 1-Butanol	15.17	56	6339	0.257	ng		89
41) Benzene	15.22	78	21485	0.203	ng		96
42) Carbon Tetrachloride	15.45	117	6103	0.196	ng		91
43) Cyclohexane	15.65	84	16172	0.408	ng		86
44) tert-Amyl Methyl Ether	16.14	73	13999	0.200	ng		94
45) 1,2-Dichloropropane	16.43	63	4918	0.220	ng		99
46) Bromodichloromethane	16.69	83	5890	0.192	ng		95
47) Trichloroethene	16.77	130	5590	0.206	ng		98
48) 1,4-Dioxane	16.77	88	3080	0.173	ng		100
49) 2,2,4-Trimethylpentane...	16.85	57	23620	0.230	ng		93
50) Methyl Methacrylate	17.05	100	2700	0.272	ng	#	80
51) n-Heptane	17.20	71	5246	0.204	ng		91
52) cis-1,3-Dichloropropene	17.96	75	6183	0.166	ng		93
53) 4-Methyl-2-pentanone	18.03	58	3201	0.159	ng		70
54) trans-1,3-Dichloropropene	18.66	75	5739	0.175	ng		84
55) 1,1,2-Trichloroethane	18.90	97	4035	0.181	ng		90
58) Toluene	19.28	91	21913	0.187	ng		99
59) 2-Hexanone	19.64	43	6660	0.132	ng		82
60) Dibromochloromethane	19.82	129	4315	0.163	ng		96
61) 1,2-Dibromoethane	20.15	107	4442	0.163	ng		99
62) n-Butyl Acetate	20.43	43	8074	0.144	ng		86
63) n-Octane	20.55	57	4432	0.193	ng		95
64) Tetrachloroethene	20.75	166	5009	0.161	ng		96
65) Chlorobenzene	21.62	112	13897	0.188	ng		94
66) Ethylbenzene	22.09	91	22216	0.174	ng		99
67) m- & p-Xylenes	22.32	91	35625	0.338	ng		96
68) Bromoform	22.42	173	3262	0.139	ng		90
69) Styrene	22.78	104	12611	0.162	ng		95
70) o-Xylene	22.92	91	17434	0.166	ng		97
71) n-Nonane	23.17	43	10801	0.211	ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	7219	0.165	ng		100
74) Cumene	23.66	105	22760	0.163	ng		98
75) alpha-Pinene	24.15	93	10911	0.164	ng		97
76) n-Propylbenzene	24.29	91	27992	0.167	ng		100
77) 3-Ethyltoluene	24.41	105	22341	0.169	ng		99
78) 4-Ethyltoluene	24.46	105	21950	0.166	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	19048	0.173	ng		99

Tom 8/14/09

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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)
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

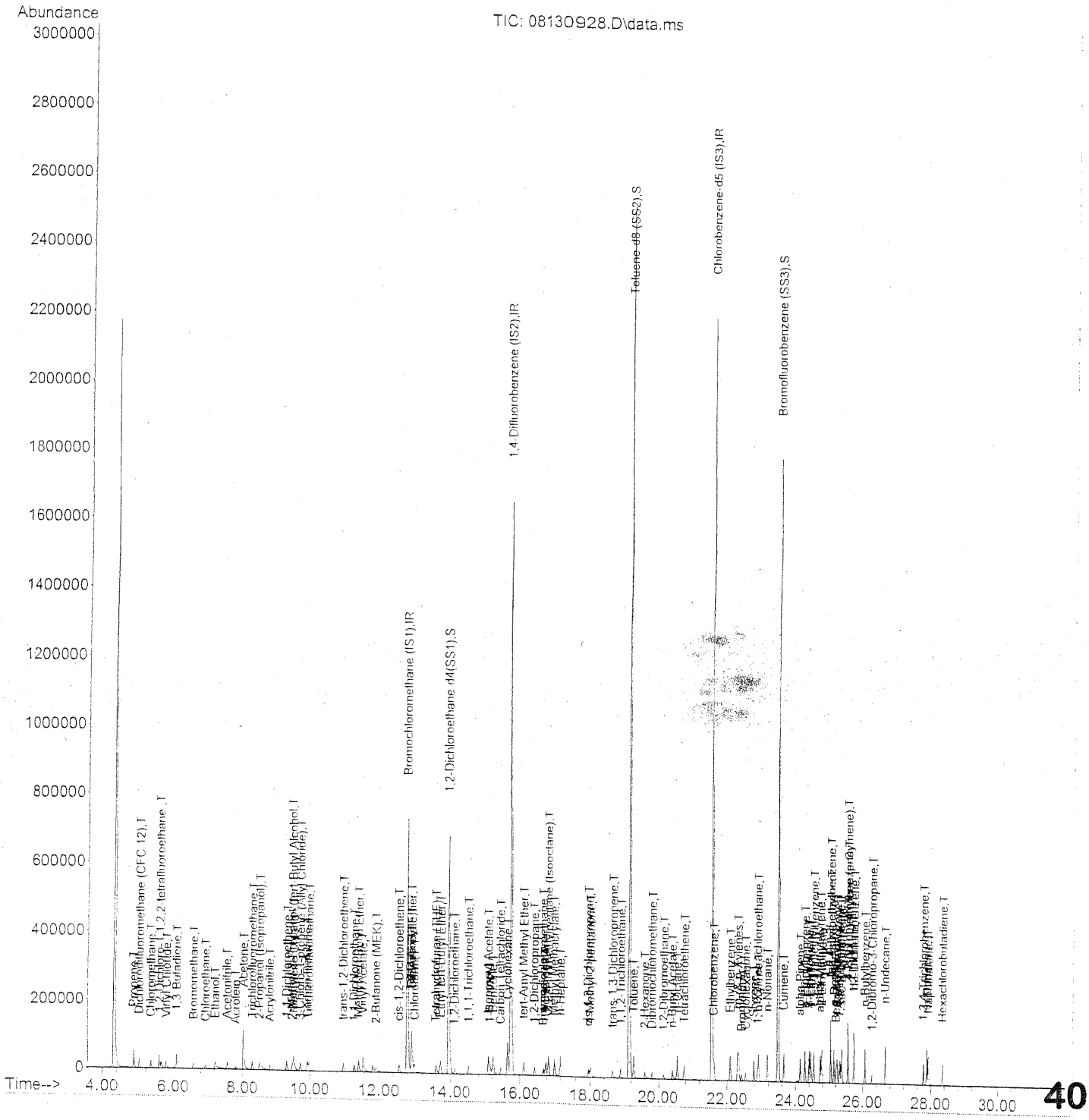
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tam 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



R9081309.M Fri Aug 14 07:21:36 2009

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
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[illegible]

R9081309.M Fri Aug 14 07:21:36 2009 Cam 8/14/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	25741	0.664	ng		99
34) Tetrahydrofuran (THF)	13.61	72	9662	0.728	ng	#	69
35) Ethyl tert-Butyl Ether	13.73	87	17600	0.600	ng	#	86
36) 1,2-Dichloroethane	14.13	62	18883	0.608	ng		98
38) 1,1,1-Trichloroethane	14.53	97	21567	0.598	ng		99
39) Isopropyl Acetate	15.09	61	18003	1.258	ng	#	76
40) 1-Butanol	15.14	56	24186	0.991	ng	#	5
41) Benzene	15.23	78	67490	0.644	ng		97
42) Carbon Tetrachloride	15.45	117	18399	0.598	ng		99
43) Cyclohexane	15.65	84	50652	1.293	ng		87
44) tert-Amyl Methyl Ether	16.12	73	43234	0.624	ng		98
45) 1,2-Dichloropropane	16.43	63	15929	0.721	ng		99
46) Bromodichloromethane	16.69	83	19513	0.644	ng		99
47) Trichloroethene	16.77	130	16351	0.611	ng		99
48) 1,4-Dioxane	16.75	88	11029	0.625	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	73776	0.727	ng		94
50) Methyl Methacrylate	17.03	100	10559	1.075	ng		90
51) n-Heptane	17.21	71	17902	0.706	ng		96
52) cis-1,3-Dichloropropene	17.95	75	21881	0.596	ng		96
53) 4-Methyl-2-pentanone	18.00	58	12377	0.624	ng		89
54) trans-1,3-Dichloropropene	18.66	75	20538	0.635	ng		94
55) 1,1,2-Trichloroethane	18.89	97	13863	0.630	ng		98
58) Toluene	19.28	91	66952	0.574	ng		99
59) 2-Hexanone	19.60	43	29124	0.580	ng		87
60) Dibromochloromethane	19.82	129	15336	0.585	ng		96
61) 1,2-Dibromoethane	20.15	107	14720	0.545	ng		97
62) n-Butyl Acetate	20.40	43	31166	0.559	ng		97
63) n-Octane	20.56	57	15118	0.663	ng		92
64) Tetrachloroethene	20.76	166	15982	0.518	ng		98
65) Chlorobenzene	21.62	112	41581	0.567	ng		100
66) Ethylbenzene	22.09	91	71057	0.560	ng		96
67) m- & p-Xylenes	22.31	91	109600	1.048	ng		99
68) Bromoform	22.42	173	11272	0.482	ng		99
69) Styrene	22.77	104	40825	0.529	ng		99
70) o-Xylene	22.92	91	56661	0.544	ng		99
71) n-Nonane	23.17	43	34926	0.686	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	24083	0.556	ng		98
74) Cumene	23.65	105	70945	0.513	ng		98
75) alpha-Pinene	24.15	93	33531	0.507	ng		99
76) n-Propylbenzene	24.28	91	88210	0.529	ng		99
77) 3-Ethyltoluene	24.40	105	69045	0.526	ng		98
78) 4-Ethyltoluene	24.46	105	70642	0.537	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	57676	0.527	ng		1

Tom 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

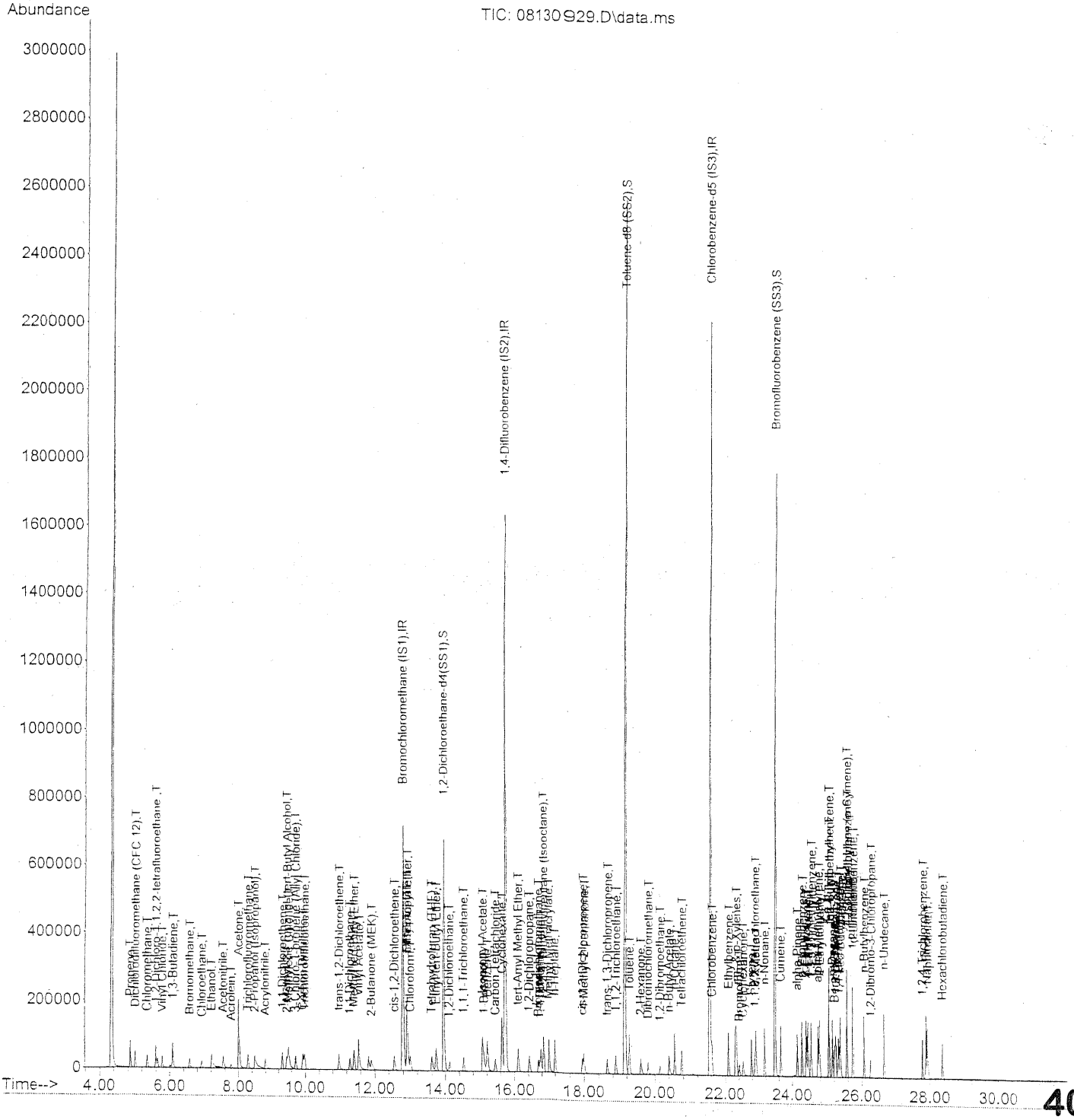
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	29532	0.482 ng	96
81) 2-Ethyltoluene	24.79	105	70128	0.510 ng	98
82) 1,2,4-Trimethylbenzene	25.05	105	56820	0.464 ng	97
83) n-Decane	25.15	57	35901	0.607 ng	95
84) Benzyl Chloride	25.22	91	42984	0.490 ng	98
85) 1,3-Dichlorobenzene	25.25	146	32555	0.507 ng	99
86) 1,4-Dichlorobenzene	25.33	146	33227	0.496 ng	100
87) sec-Butylbenzene	25.38	105	80257	0.524 ng	98
88) 4-Isopropyltoluene (p-...	25.56	119	71025	0.460 ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	58655	0.470 ng	99
90) 1,2-Dichlorobenzene	25.75	146	30332	0.454 ng	100
91) d-Limonene	25.74	68	24087	0.495 ng	94
92) 1,2-Dibromo-3-Chloropr...	26.27	157	9351	0.498 ng	89
93) n-Undecane	26.65	57	37313	0.616 ng	95
94) 1,2,4-Trichlorobenzene	27.79	180	22652	0.526 ng	99
95) Naphthalene	27.94	128	78387	0.522 ng	100
96) n-Dodecane	27.89	57	35864	0.554 ng	97
97) Hexachlorobutadiene	28.36	225	12566	0.510 ng	97
98) Cyclohexanone	22.53	55	15980	0.454 ng	92
99) tert-Butylbenzene	25.05	119	56558	0.457 ng	100
100) n-Butylbenzene	26.07	91	64485	0.529 ng	98

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

Cam 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



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

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		97

R9081309.M Fri Aug 14 07:22:53 2009 Erm 8/14/09 Page: 1

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		98

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

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

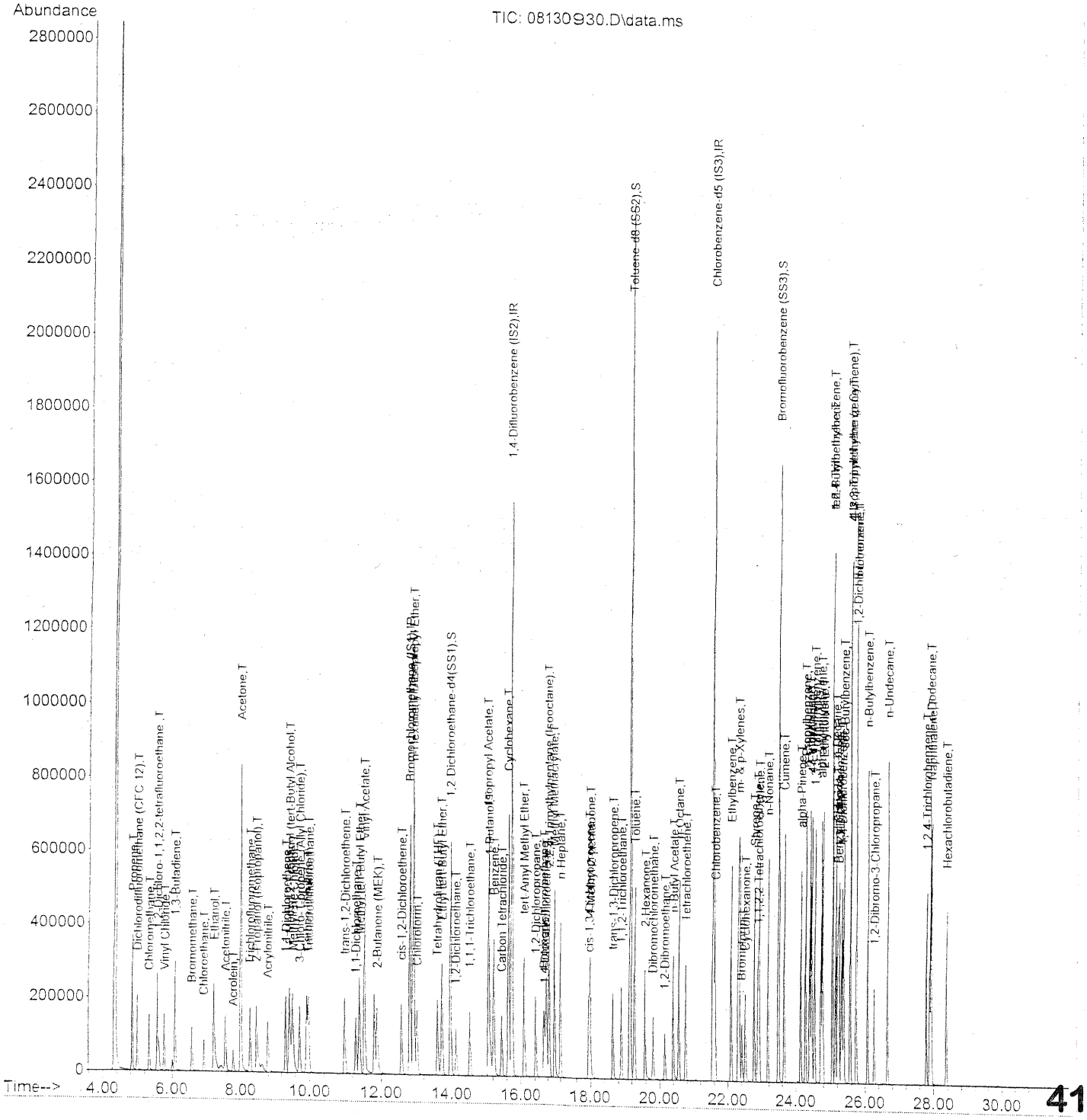
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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



R9081309.M Fri Aug 14 07:25:03 2009

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

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		9[illegible]

R9081309.M Fri Aug 14 07:25:02 2009 EM 8/14/09 Page: 1

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

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		99

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

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

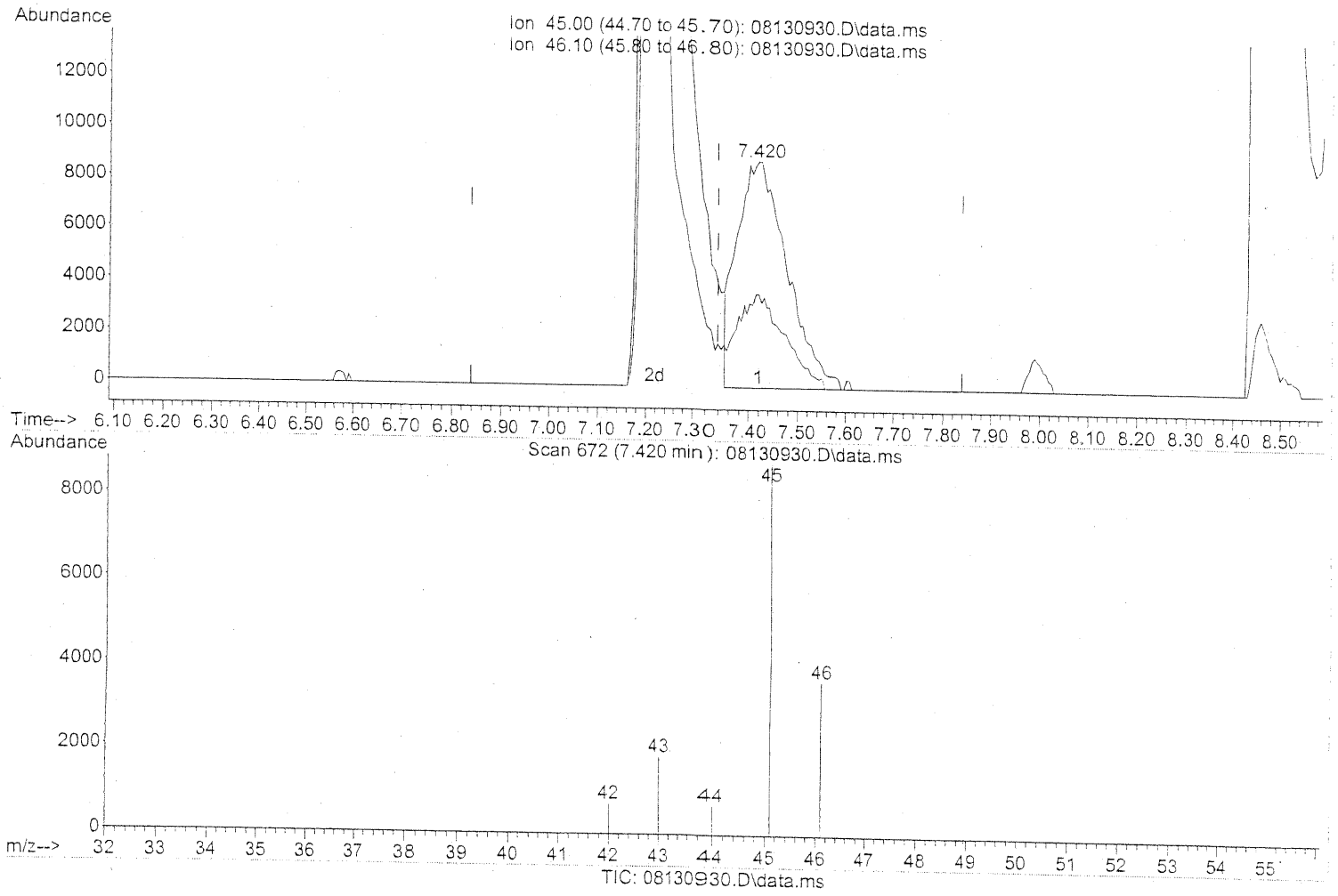
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sam 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

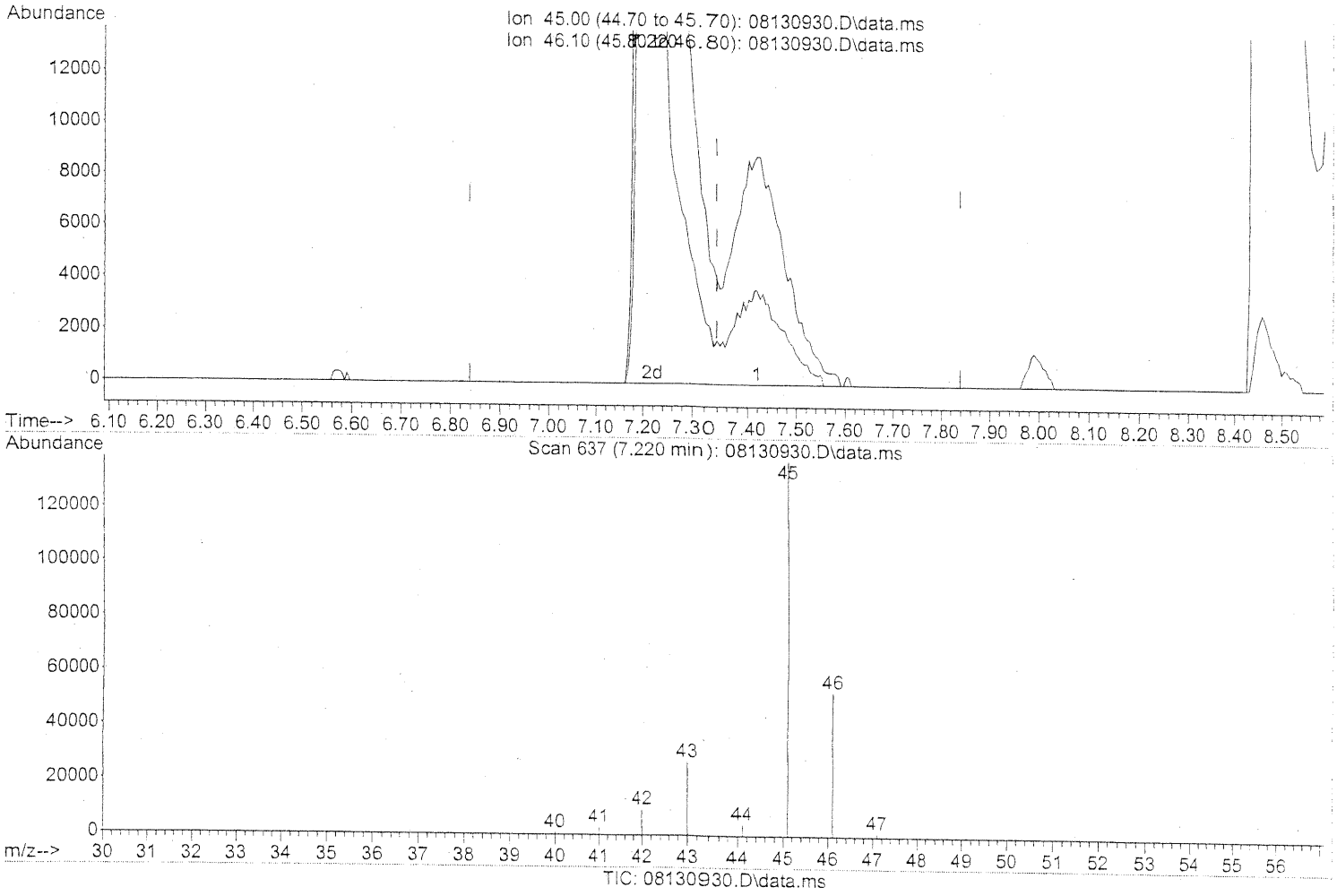
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.29
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.220min (-0.120) 33.76ng m

response 503955

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	4.77#
0.00	0.00	0.00
0.00	0.00	0.00

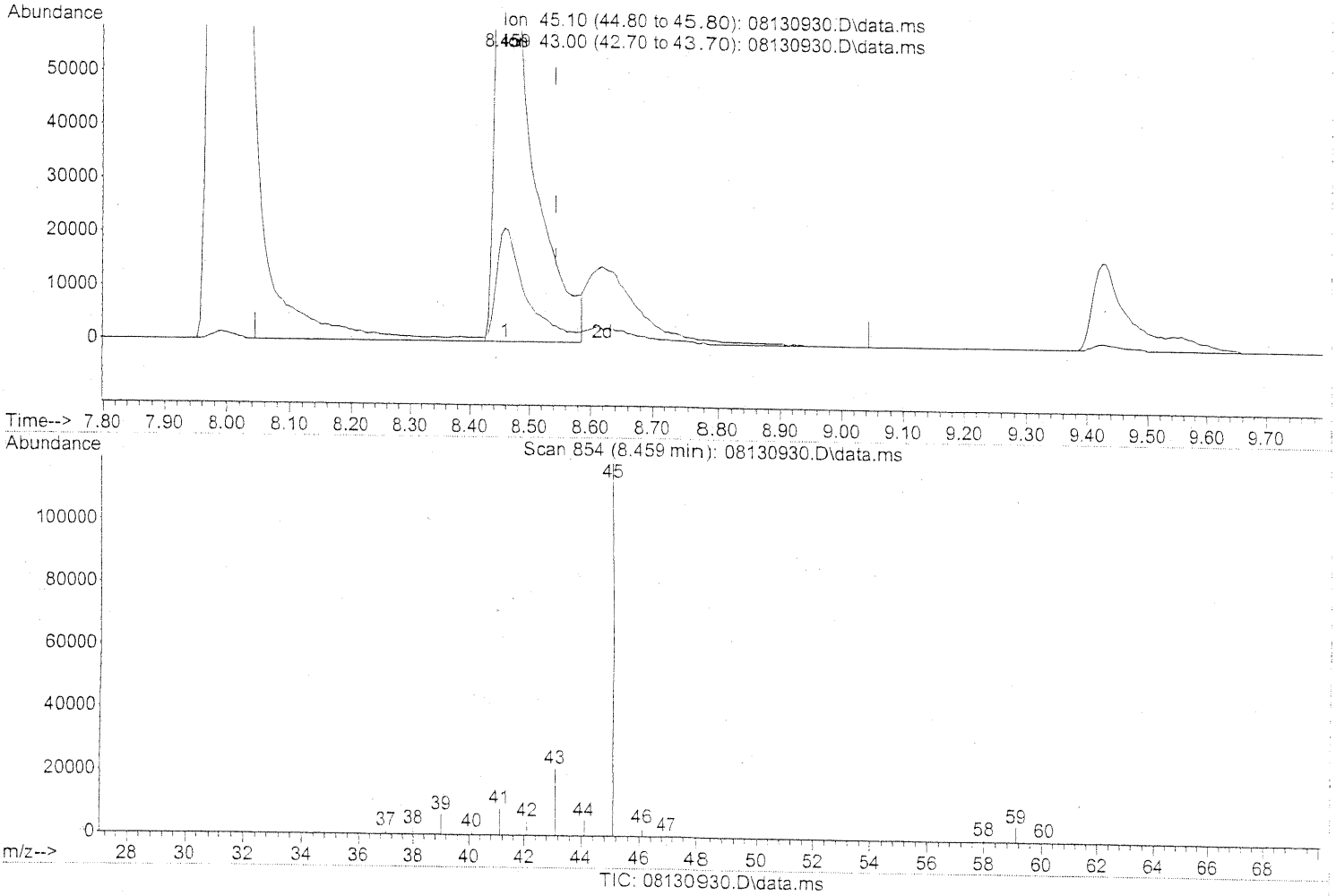
SP → IC
EM 8/14/09

ADA 8/15/09

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



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

8.459min (-0.086) 8.88ng

response 396677

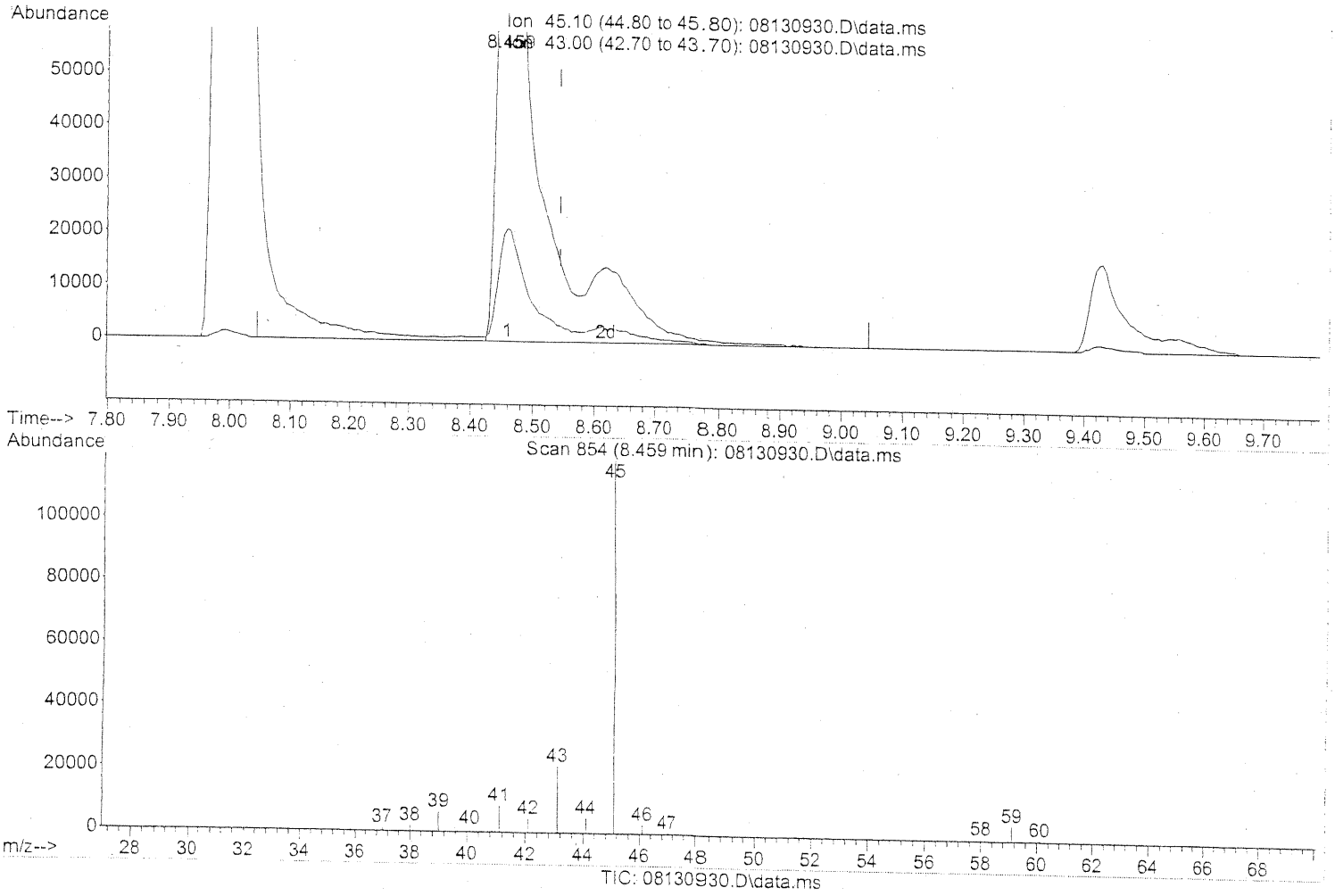
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.32
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



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

8.459min (-0.086) 10.67ng m

response 476882

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	14.41
0.00	0.00	0.00
0.00	0.00	0.00

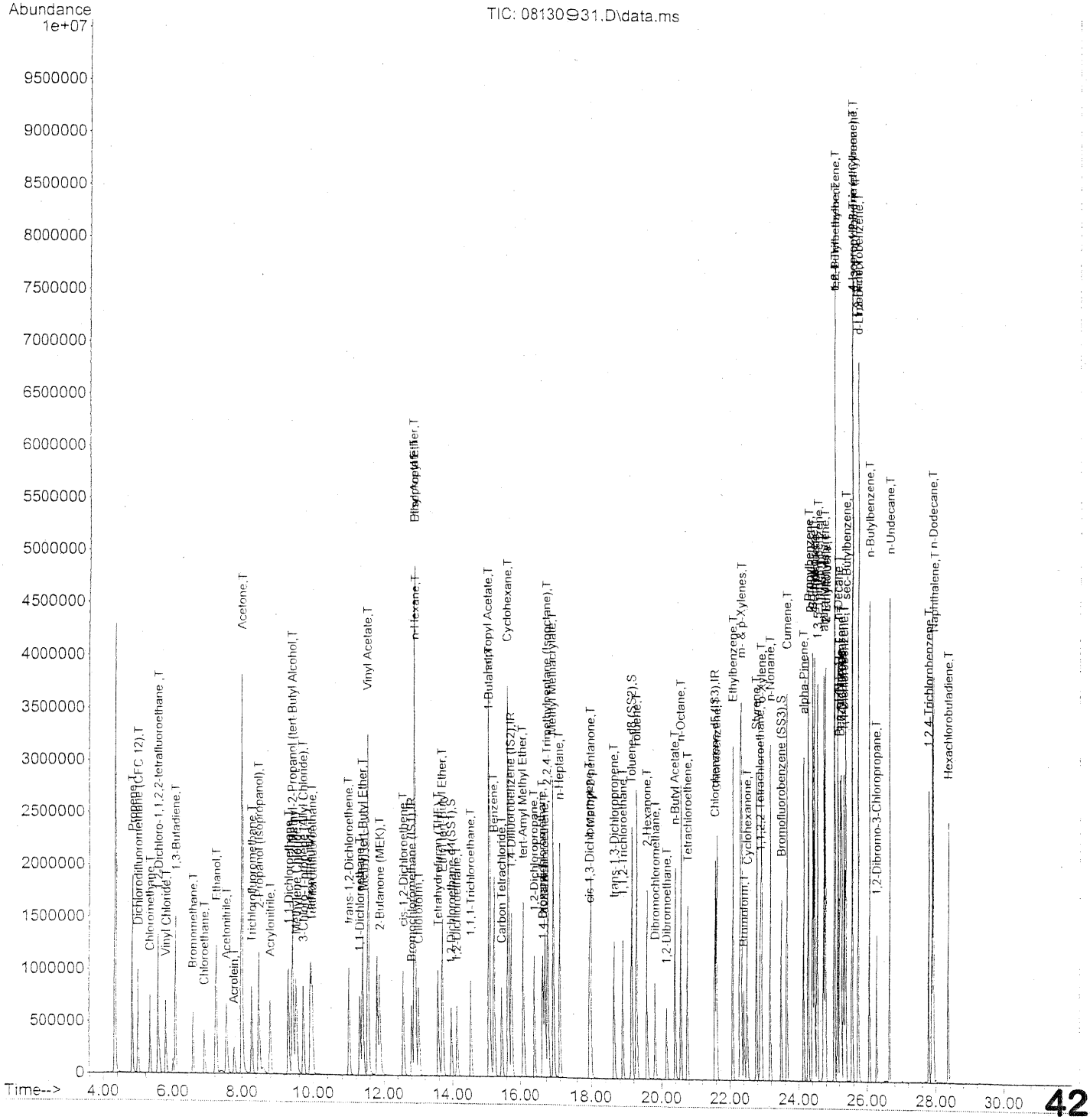
PT → LC
Tam 8/14/09

AM 8/13/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



R9081309.M Fri Aug 14 07:27:06 2009

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

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		9

R9081309.M Fri Aug 14 07:27:05 2009 Gm 8/14/09 Page: 1

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

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		1[illegible]

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

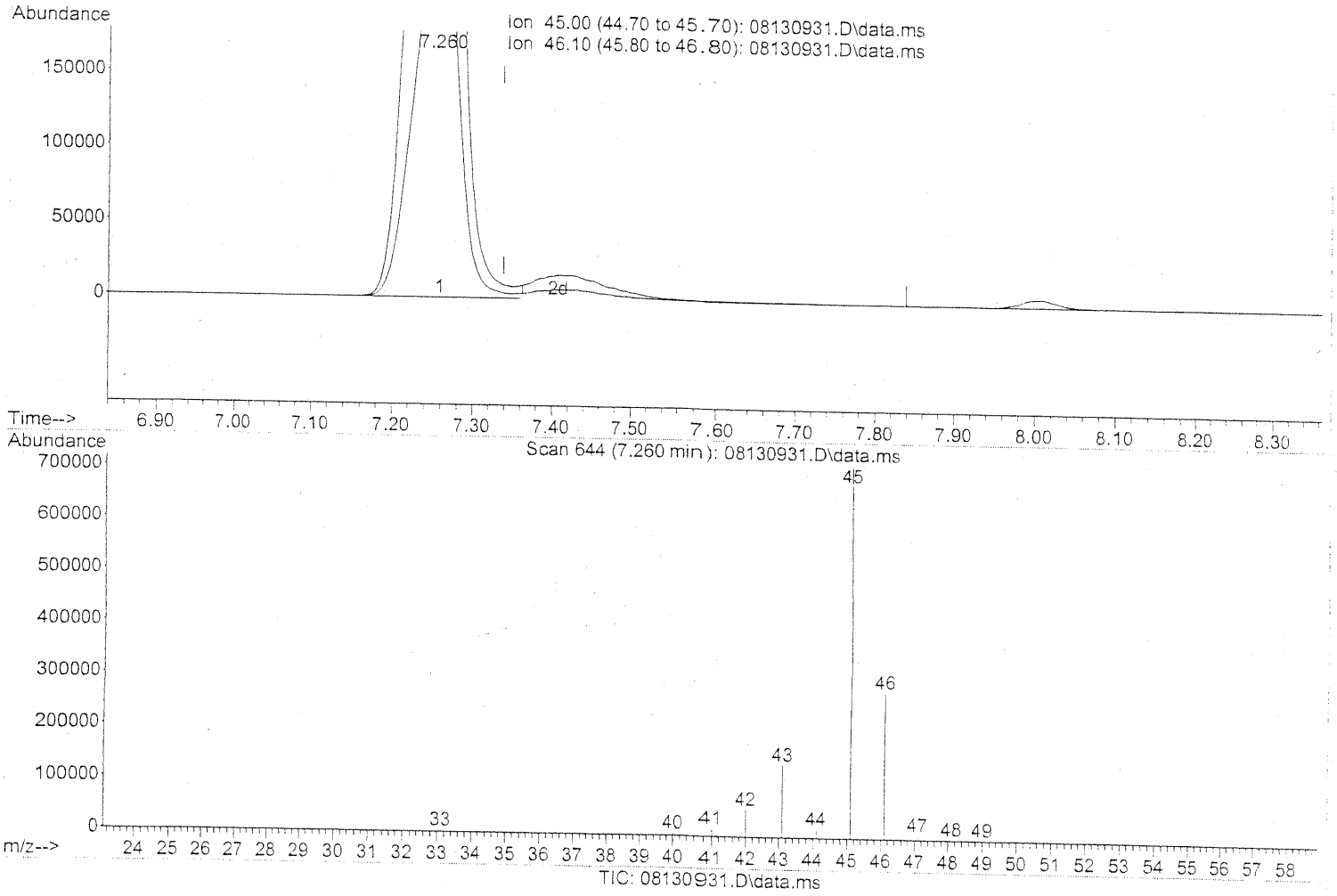
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

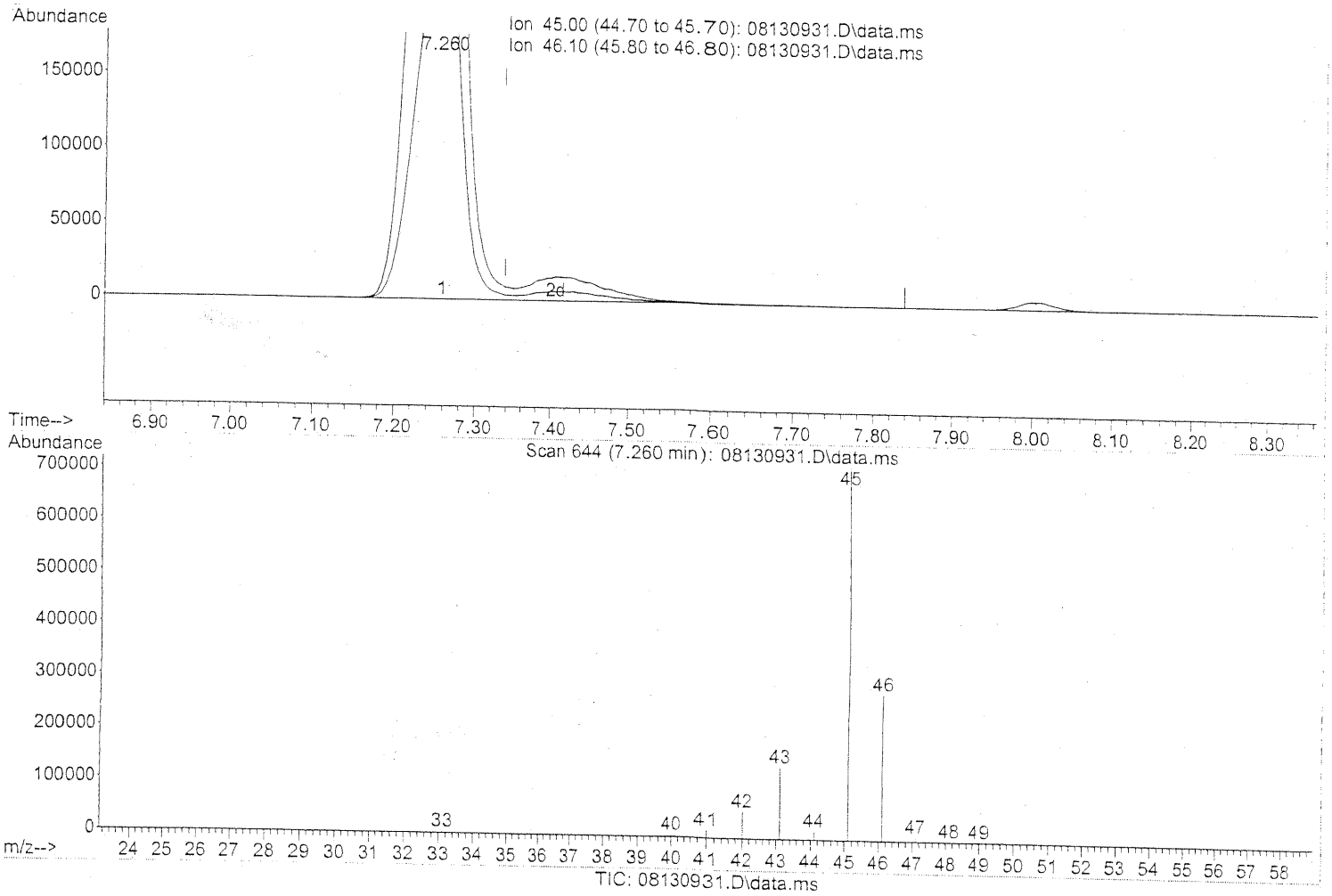
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.10
0.00	0.00	0.00
0.00	0.00	0.00

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

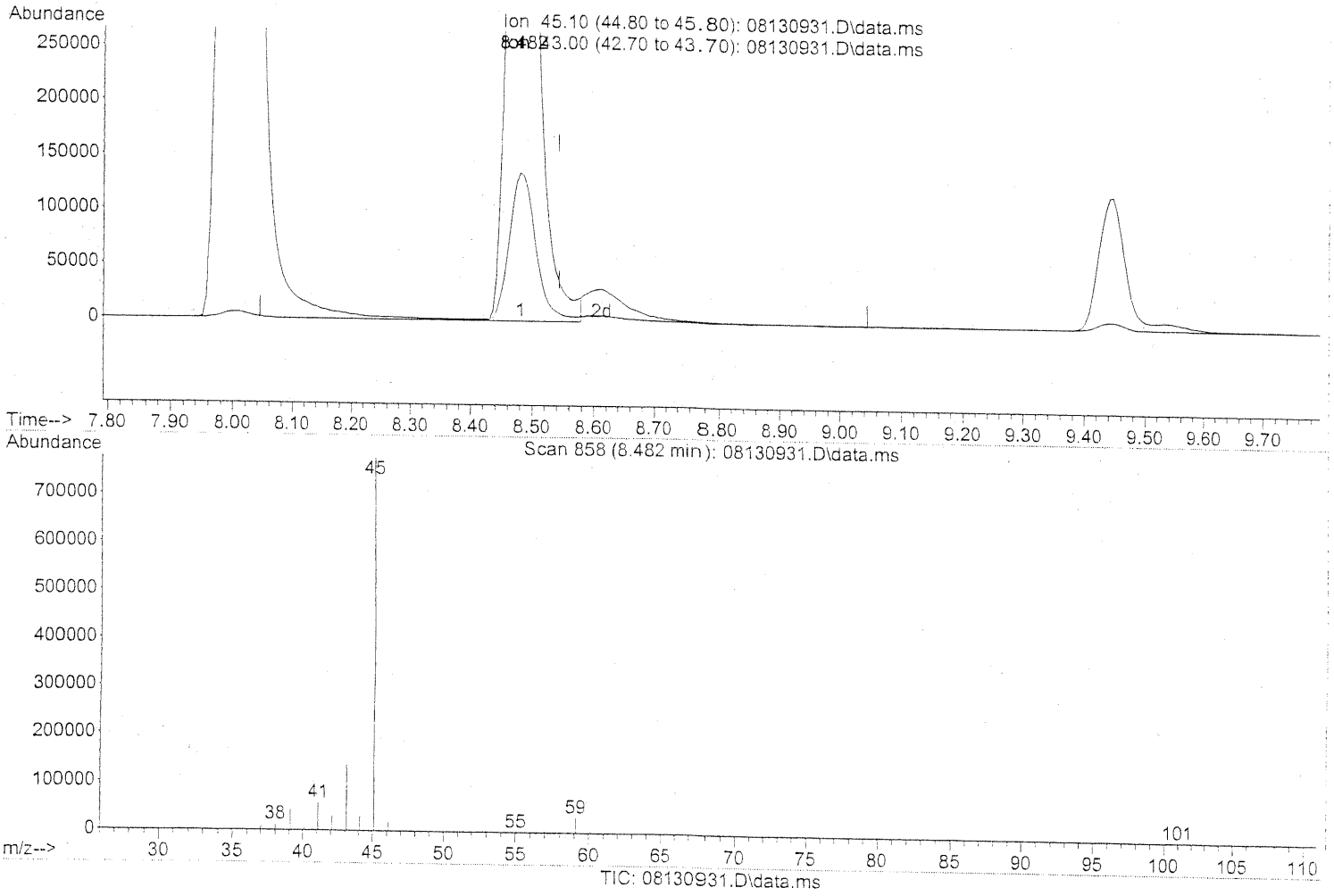
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.49
0.00	0.00	0.00
0.00	0.00	0.00

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



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

8.482min (-0.063) 50.45ng

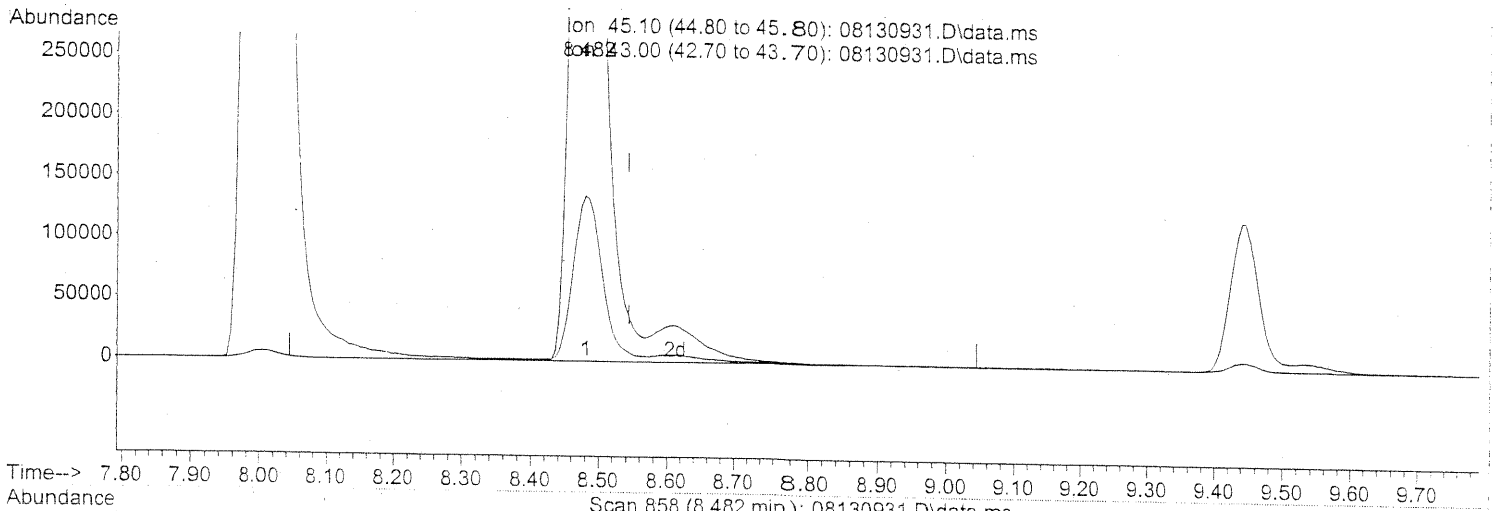
response 2301319

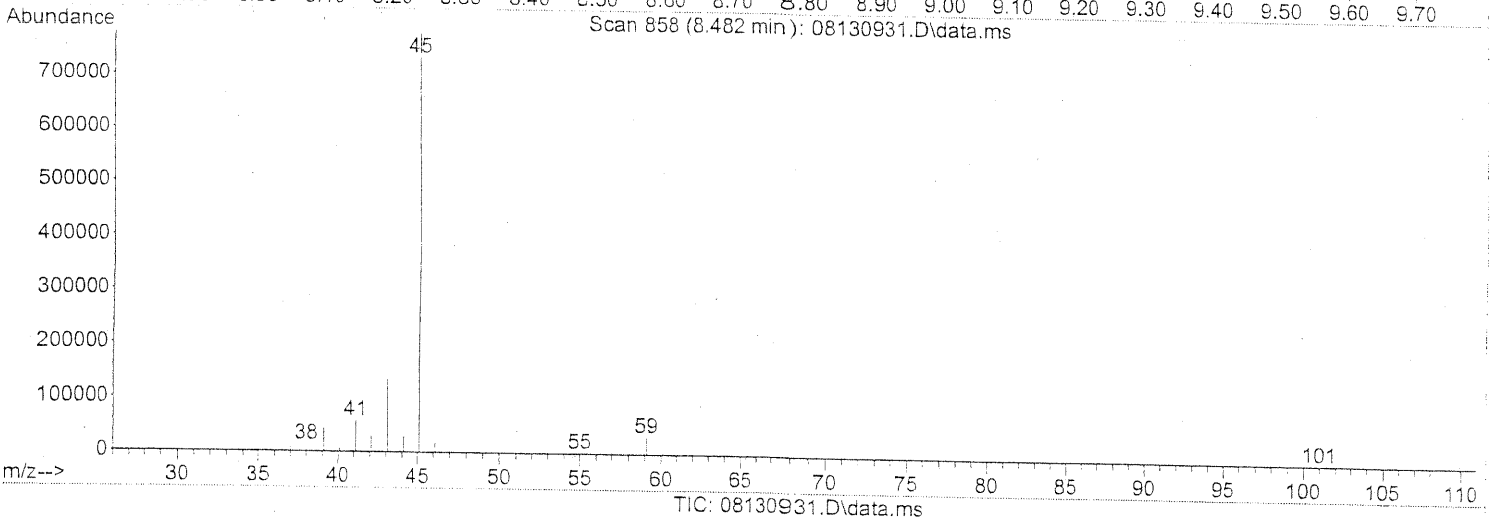
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.19
0.00	0.00	0.00
0.00	0.00	0.00

PT

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

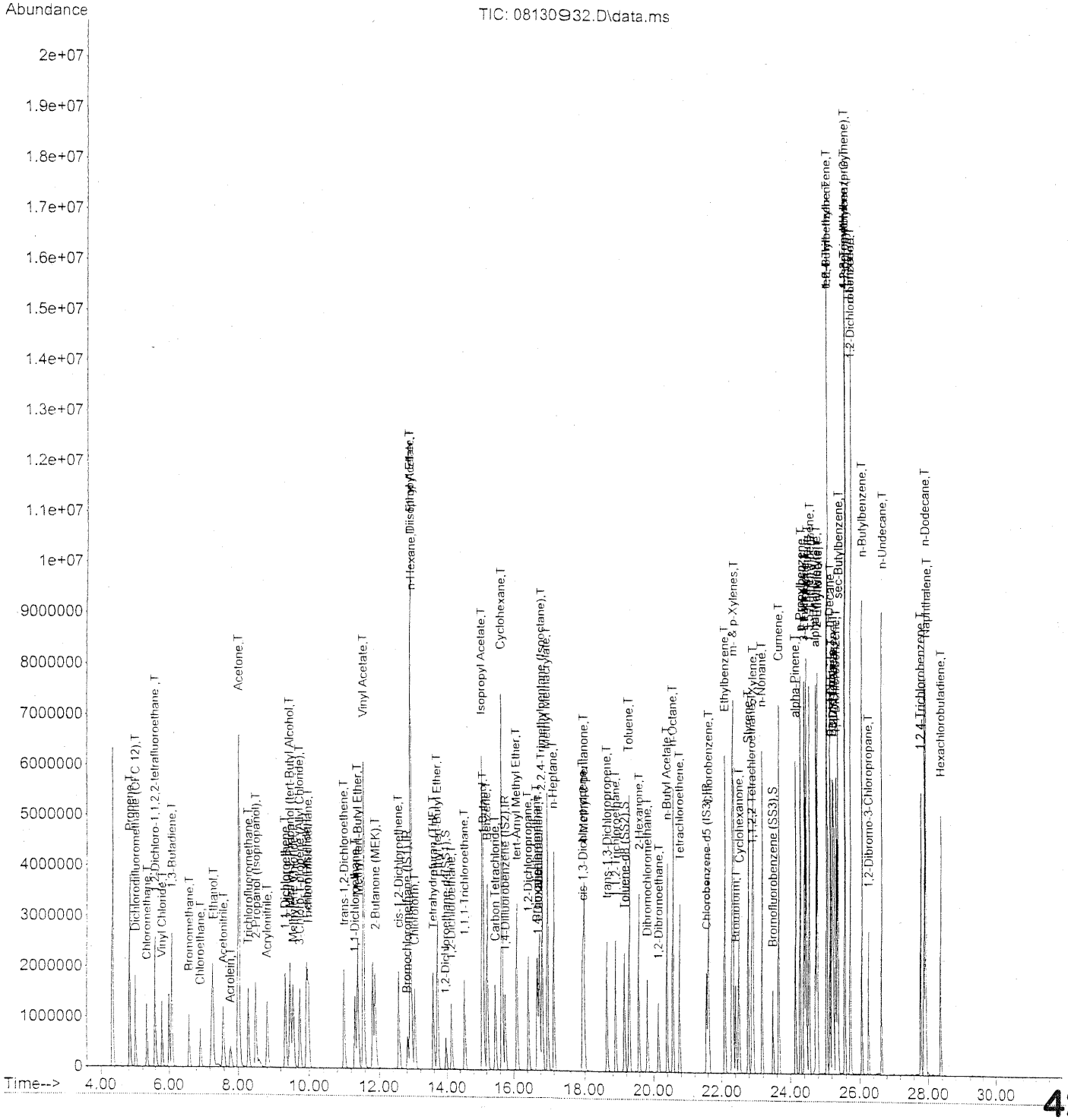
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.00
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
tm 8/14/09

tm 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



Quantitation Report (QT Reviewed)

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

EM 8/14/09

430

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		99

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

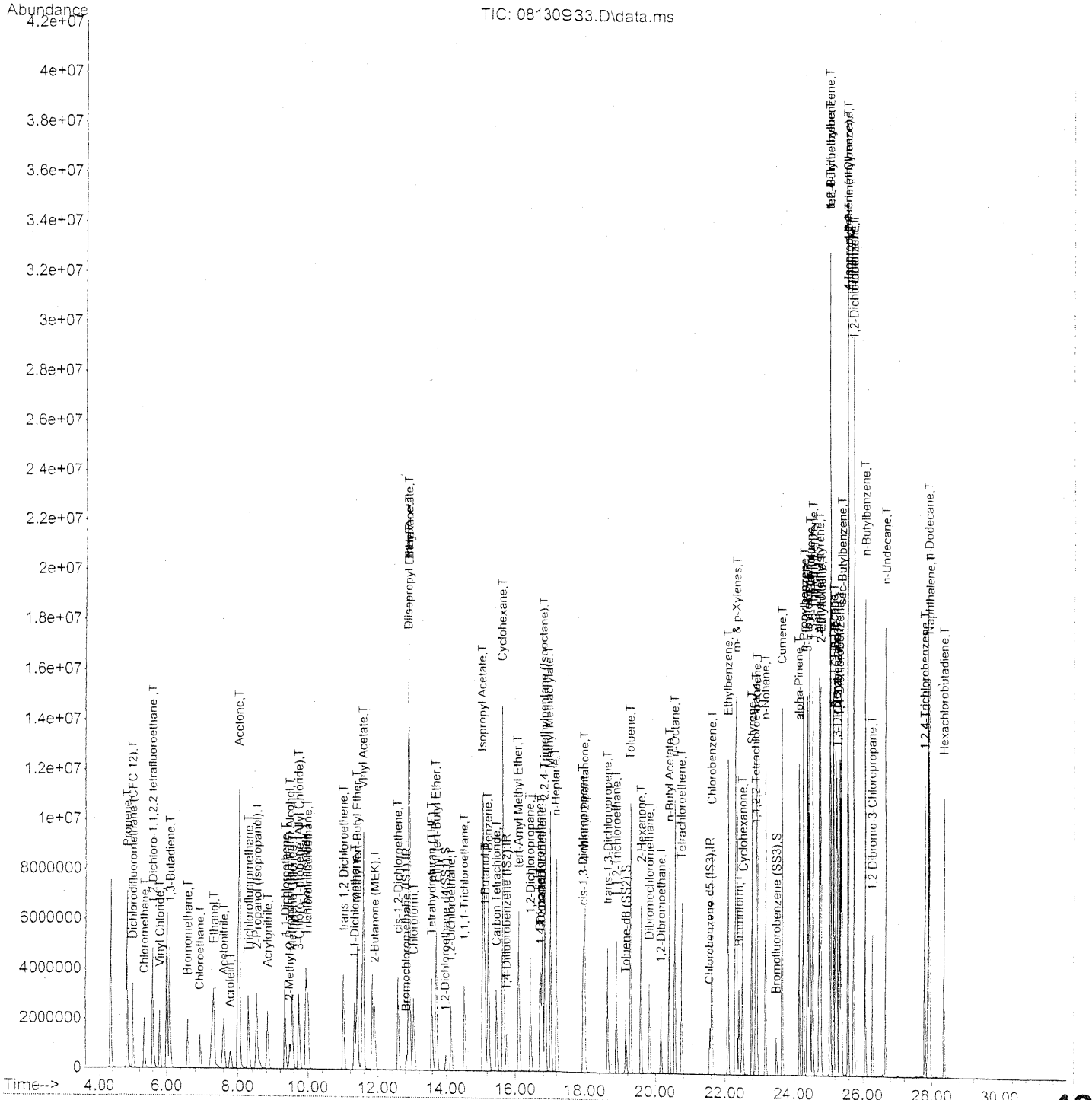
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	2788713	50.704	ng	98
81) 2-Ethyltoluene	24.79	105	5835415	47.282	ng	100
82) 1,2,4-Trimethylbenzene	25.06	105	5419555	49.283	ng	98
83) n-Decane	25.16	57	2958484	55.690	ng	96
84) Benzyl Chloride	25.23	91	4657935	59.094	ng	100
85) 1,3-Dichlorobenzene	25.25	146	2725906	47.225	ng	100
86) 1,4-Dichlorobenzene	25.33	146	2761502	45.918	ng	100
87) sec-Butylbenzene	25.39	105	6623319	48.176	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	6624766	47.796	ng	100
89) 1,2,3-Trimethylbenzene	25.57	105	5491766	49.043	ng	97
90) 1,2-Dichlorobenzene	25.75	146	2744516	45.744	ng	100
91) d-Limonene	25.75	68	2289426	52.402	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	922457	54.748	ng	95
93) n-Undecane	26.66	57	3160860	58.111	ng	98
94) 1,2,4-Trichlorobenzene	27.80	180	2014621	52.040	ng	99
95) Naphthalene	27.94	128	7027186	52.076	ng	100
96) n-Dodecane	27.89	57	3283767	56.494	ng	97
97) Hexachlorobutadiene	28.36	225	1130021	51.021	ng	99
98) Cyclohexanone	22.52	55	1802415	57.022	ng	95
99) tert-Butylbenzene	25.06	119	5291689	47.613	ng	100
100) n-Butylbenzene	26.07	91	5516279	50.386	ng	99

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

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130933.D
Acq On : 14 Aug 2009 6:47
Operator : EM
Sample : 100ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:28:24 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



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		96

R9081309.M Fri Aug 14 07:29:42 2009 Tom 8/14/09 Page: 1

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

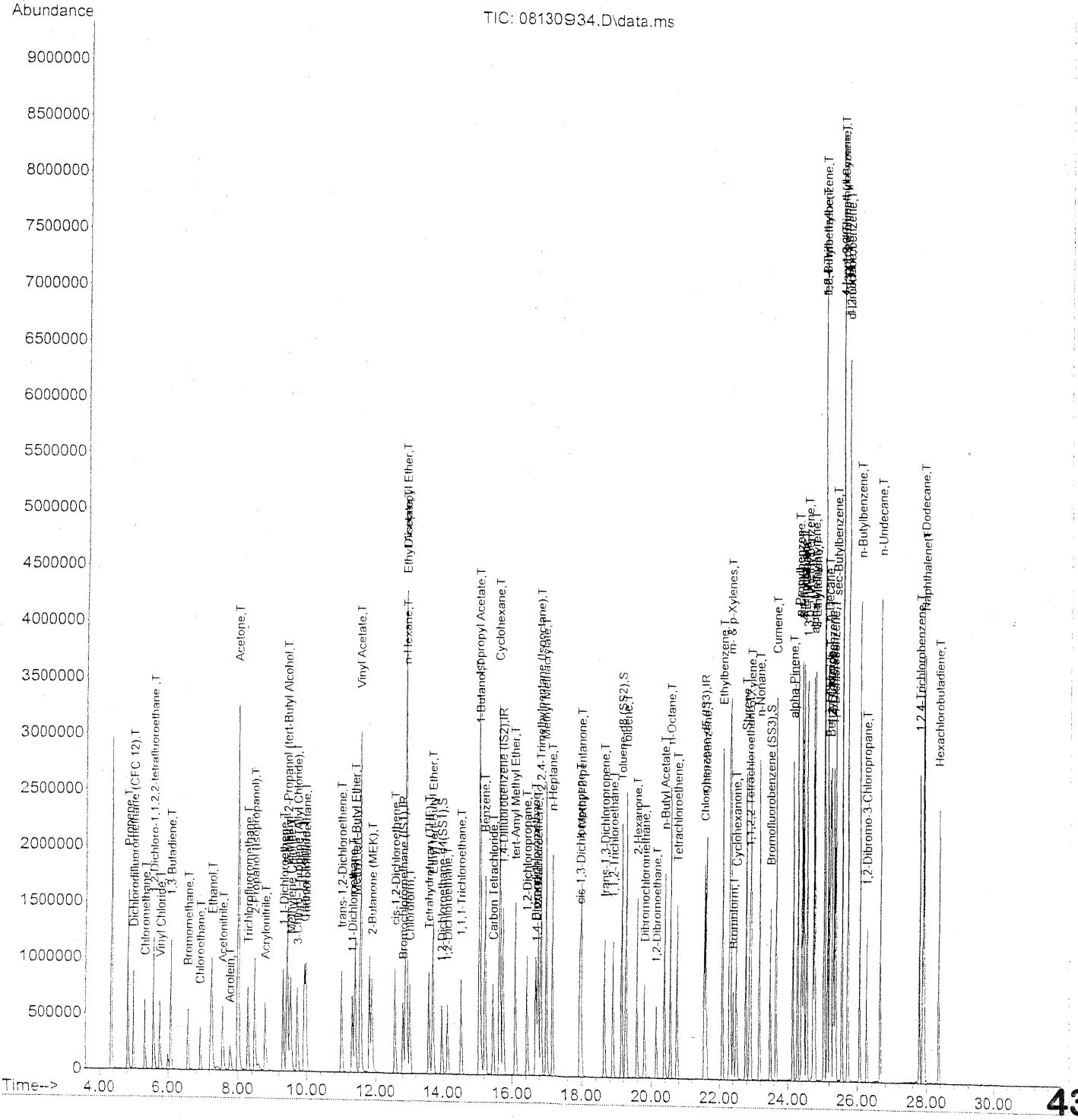
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tom 8/14/09

Quantitation Report (QT Reviewed)

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		

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

Quantitation Report (QT Reviewed)

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

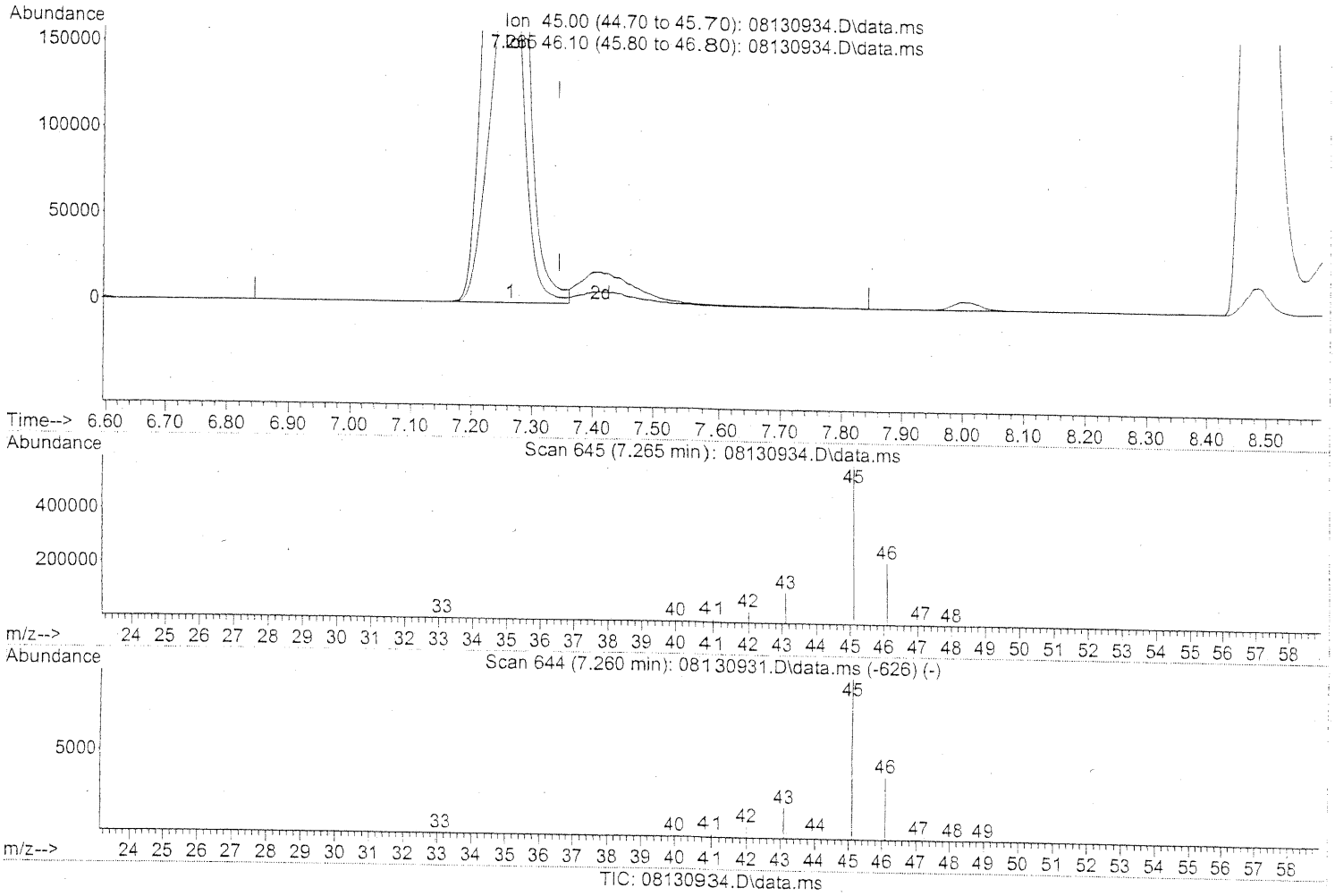
Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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

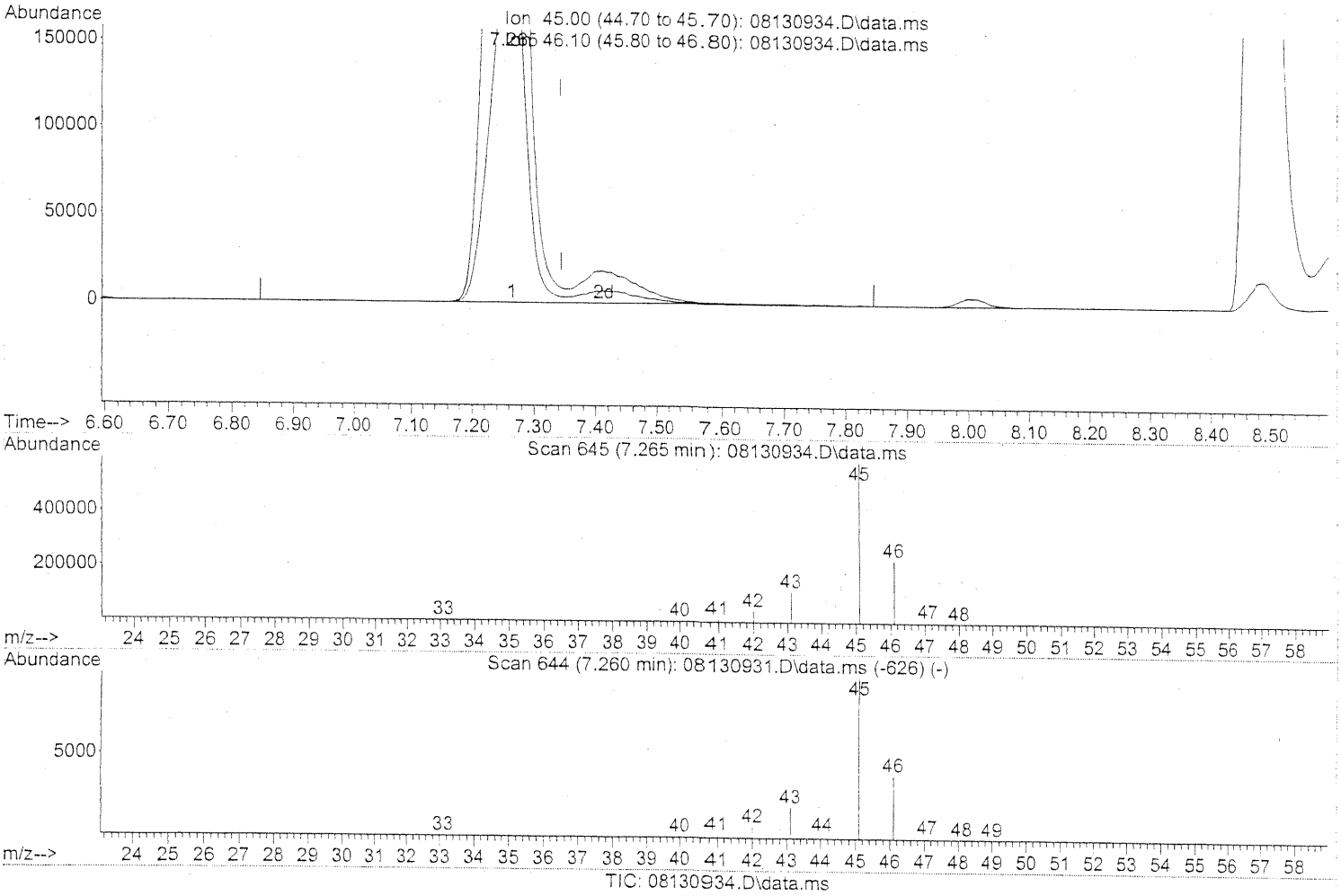
response 2112003

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



TIC: 08130934.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 116.80ng m

response 2232593

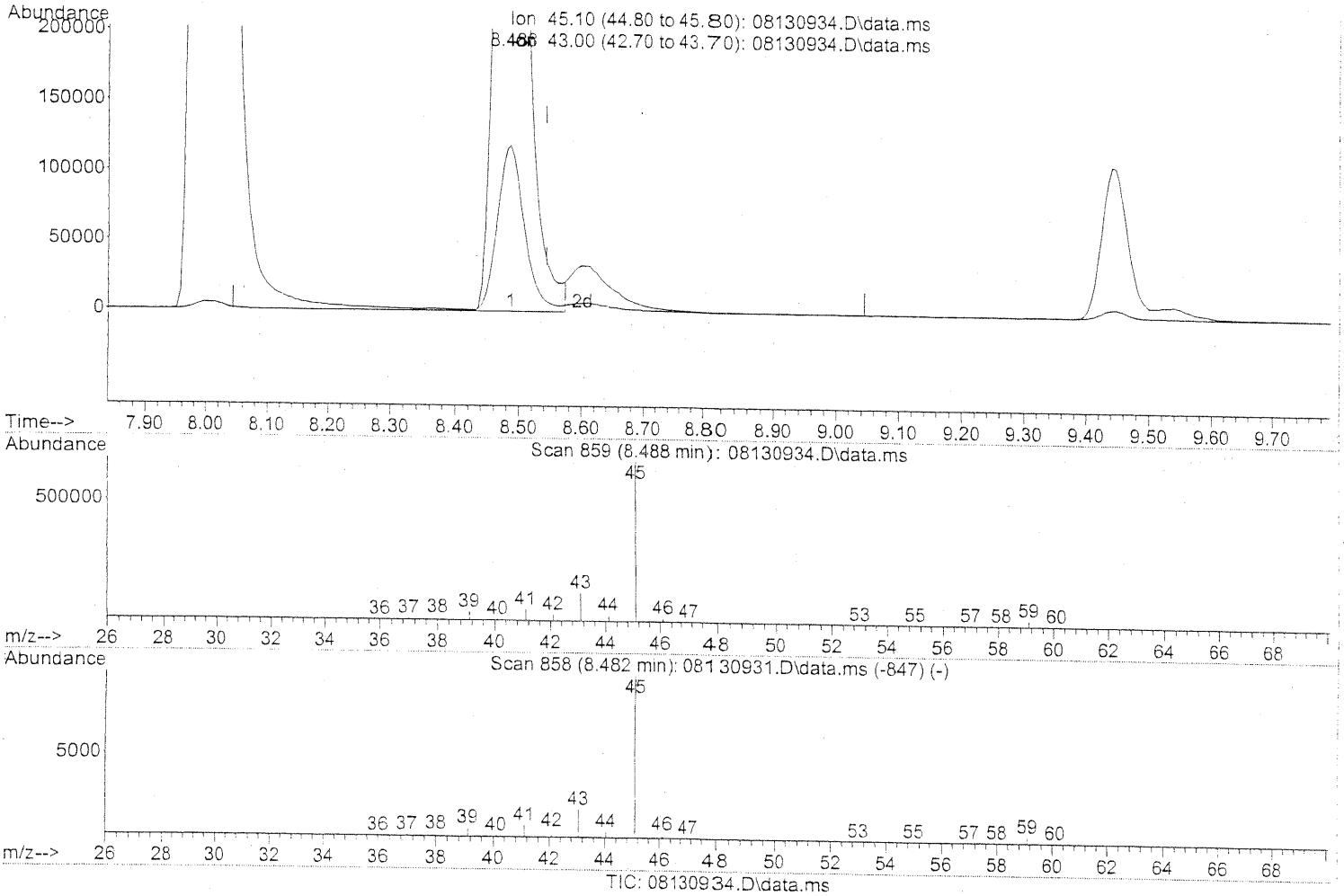
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.77
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
EM 8/13/09
14

DF 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

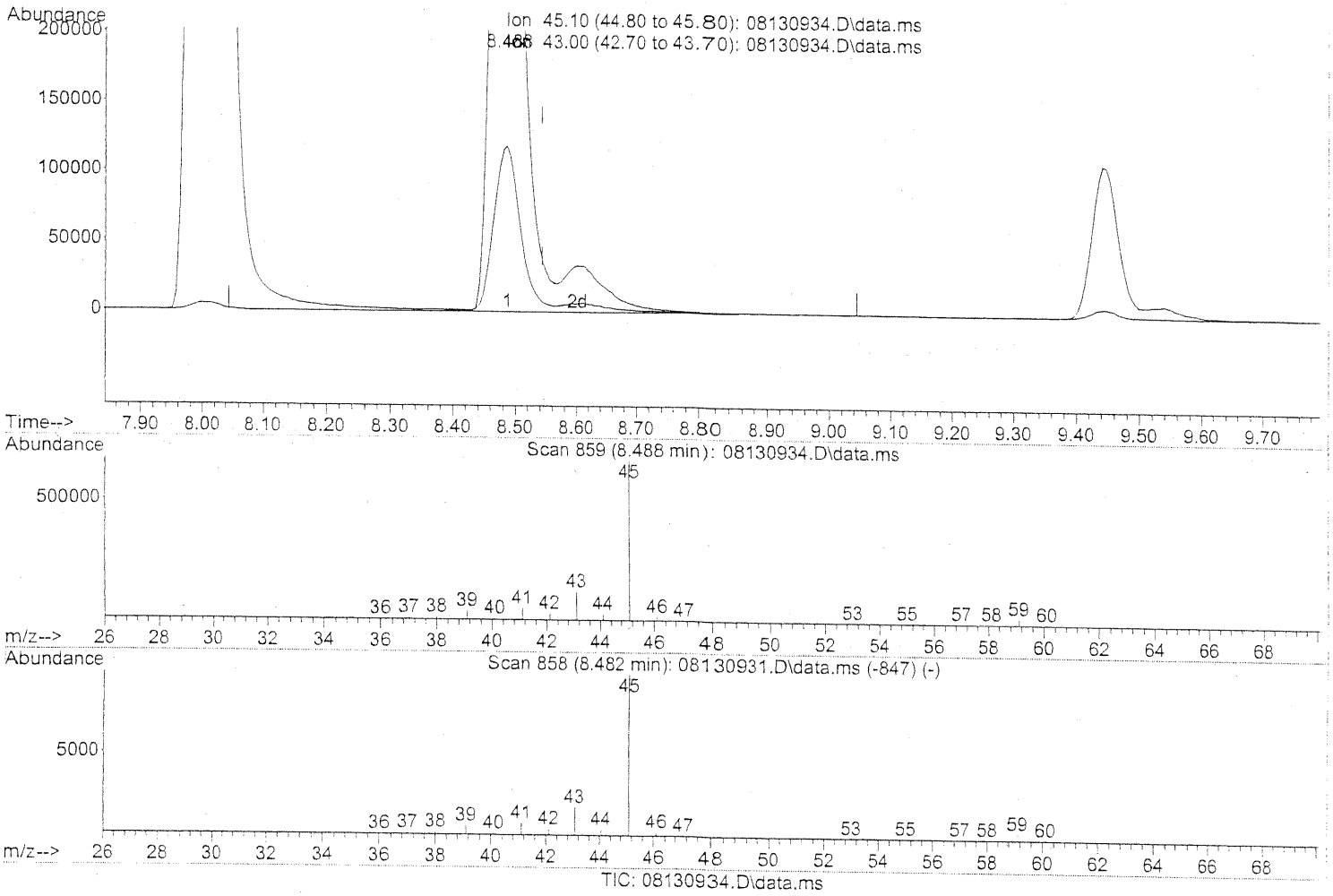
response 1993602

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
Em 8/13/09
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

Response Factor Report GCMS-16

Method Path : J:\MS16\METHODS\
Method File : R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Wed Sep 09 09:24:30 2009
Response Via : Initial Calibration

Calibration Files
0.1 =09080908.D 0.2 =09080909.D 0.5 =09080910.D 1.0 =09080911.D 5.0 =09080912.D 25 =09080913.D
50 =09080914.D 100 =09080915.D

		Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR	Bromochloromethane...	ISTD									
2)	T	Propene	0.886	0.803	1.135	1.020	1.308	1.065	1.054	0.873	1.018	15.99
3)	T	Dichlorodifluo...	1.885	1.760	2.369	2.075	2.196	1.958	1.777	1.549	1.946	13.49
4)	T	Chloromethane	1.537	1.315	1.932	1.672	1.795	1.749	1.568	1.184	1.594	15.63
5)	T	1,2-Dichloro-1...	1.112	1.042	1.417	1.248	1.298	1.225	1.073	0.924	1.167	13.59
6)	T	Vinyl Chloride	1.370	1.292	1.825	1.599	1.760	1.638	1.515	1.239	1.530	14.04
7)	T	1,3-Butadiene	1.030	0.879	1.290	1.104	1.175	1.184	1.009	0.853	1.065	14.30
8)	T	Bromomethane	0.901	0.858	1.150	1.030	1.109	1.112	1.062	0.853	1.009	12.00
9)	T	Chloroethane	0.572	0.634	0.860	0.794	0.885	0.826	0.777	0.659	0.751	15.29
10)	T	Ethanol	0.768	0.667	0.816	0.729	0.761	0.793	0.765	0.605	0.738	9.46
11)	T	Acetonitrile	1.754	1.617	2.139	1.945	2.023	1.981	1.908	1.565	1.867	10.82
12)	T	Acrolein	0.501	0.460	0.553	0.519	0.612	0.632	0.608	0.508	0.549	11.34
13)	T	Acetone	0.869	0.721	0.780	0.709	0.783	0.764	0.737	0.585	0.744	10.89
14)	T	Trichlorofluor...	1.604	1.462	2.079	1.937	2.023	1.945	1.839	1.532	1.803	13.14
15)	T	2-Propanol (Is...	2.675	2.425	3.203	2.889	2.419	2.695	2.360	1.820	2.561	16.03
16)	T	Acrylonitrile			1.503	1.416	1.526	1.527	1.477	1.201	1.442	8.66
17)	T	1,1-Dichloroet...	0.921	0.864	1.178	1.091	1.154	1.119	1.076	0.897	1.037	11.96
18)	T	2-Methyl-2-Pro...	2.804	2.431	3.224	2.851	2.885	2.859	2.773	1.348	2.647	21.43
19)	T	Methylene Chlo...	1.324	1.032	1.255	1.135	1.165	1.140	1.107	0.913	1.134	11.14
20)	T	3-Chloro-1-pro...	1.059	0.962	1.483	1.343	1.513	1.535	1.512	1.228	1.329	16.86
21)	T	Trichlorotrifl...	0.743	0.686	0.965	0.872	0.963	1.012	0.967	0.899	0.888	13.15
22)	T	Carbon Disulfide	3.652	3.316	4.656	4.080	4.310	4.160	3.978	3.309	3.932	12.11
23)	T	trans-1,2-Dich...	1.174	1.014	1.548	1.430	1.668	1.615	1.580	1.285	1.414	16.58
24)	T	1,1-Dichloroet...	1.591	1.440	2.054	1.846	2.016	1.930	1.895	1.542	1.789	12.99
25)	T	Methyl tert-Bu...	2.661	2.407	3.176	2.771	3.023	3.158	3.031	2.636	2.858	9.79
26)	T	Vinyl Acetate			0.176	0.172	0.230	0.274	0.271	0.221	0.224	19.69
27)	T	2-Butanone (MEK)	0.660	0.624	0.792	0.718	0.770	0.790	0.763	0.597	0.714	10.88
28)	T	cis-1,2-Dichlo...	1.143	1.069	1.599	1.428	1.554	1.505	1.466	1.186	1.369	14.94
29)	T	Diisopropyl Ether	0.690	0.697	0.959	0.851	0.896	0.909	0.868	0.750	0.828	12.32
30)	T	Ethyl Acetate	0.262	0.294	0.410	0.372	0.408	0.427	0.405	0.322	0.363	17.08
31)	T	n-Hexane	1.476	1.355	1.651	1.416	1.477	1.518	1.381	1.216	1.436	8.91

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MM 9/9/09

Method Path : J:\MS16\METHODS\
Method File : R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

32)	T	Chloroform	1.589	1.411	2.071	1.817	1.961	1.912	1.849	1.485	1.762	13.53
33)	S	1,2-Dichloroet...	1.379	1.394	1.360	1.375	1.383	1.394	1.382	1.355	1.378	1.05
34)	T	Tetrahydrofura...	0.571	0.560	0.708	0.636	0.745	0.765	0.727	0.576	0.661	12.88
35)	T	Ethyl tert-But...	1.087	1.113	1.382	1.266	1.355	1.393	1.333	1.157	1.261	9.89
36)	T	1,2-Dichloroet...	1.015	0.938	1.413	1.263	1.388	1.354	1.303	1.047	1.215	15.33
37)	IR	1,4-Difluorobenzen...	----------	ISTD	----------							
38)	T	1,1,1-Trichlor...	0.274	0.257	0.363	0.323	0.347	0.341	0.330	0.277	0.314	12.51
39)	T	Isopropyl Acetate	0.129	0.116	0.162	0.142	0.150	0.149	0.142	0.117	0.138	11.60
40)	T	1-Butanol	0.222	0.194	0.245	0.230	0.242	0.248	0.236	0.188	0.226	10.32
41)	T	Benzene	0.911	0.765	1.031	0.913	0.952	0.929	0.891	0.741	0.892	10.74
42)	T	Carbon Tetrach...	0.213	0.195	0.299	0.277	0.304	0.306	0.299	0.252	0.268	16.25
43)	T	Cyclohexane	0.300	0.266	0.363	0.332	0.355	0.356	0.342	0.289	0.325	11.07
44)	T	tert-Amyl Meth...	0.579	0.511	0.721	0.642	0.672	0.670	0.642	0.544	0.623	11.50
45)	T	1,2-Dichloropr...	0.176	0.163	0.239	0.220	0.237	0.228	0.220	0.180	0.208	14.45
46)	T	Bromodichlorom...	0.230	0.224	0.310	0.291	0.314	0.303	0.295	0.241	0.276	13.64
47)	T	Trichloroethene	0.271	0.227	0.306	0.271	0.289	0.280	0.272	0.230	0.268	10.24
48)	T	1,4-Dioxane	0.166	0.148	0.217	0.206	0.211	0.206	0.202	0.165	0.190	13.79
49)	T	2,2,4-Trimethy...	0.862	0.765	1.059	0.940	0.977	0.953	0.897	0.734	0.898	12.14
50)	T	Methyl Methacr...	0.087	0.079	0.117	0.107	0.114	0.114	0.110	0.092	0.102	14.19
51)	T	n-Heptane	0.201	0.194	0.263	0.239	0.253	0.246	0.233	0.191	0.228	12.41
52)	T	cis-1,3-Dichlo...	0.291	0.274	0.392	0.361	0.393	0.389	0.378	0.311	0.348	14.11
53)	T	4-Methyl-2-pen...	0.182	0.163	0.232	0.204	0.222	0.213	0.205	0.168	0.199	12.71
54)	T	trans-1,3-Dich...	0.248	0.224	0.355	0.320	0.362	0.356	0.346	0.285	0.312	17.12
55)	T	1,1,2-Trichlor...	0.218	0.182	0.263	0.236	0.248	0.232	0.228	0.188	0.224	12.40
56)	IR	Chlorobenzene-d5 (...	----------	ISTD	----------							
57)	S	Toluene-d8 (SS2)	2.520	2.522	2.517	2.506	2.469	2.497	2.495	2.494	2.502	0.71
58)	T	Toluene	2.322	1.994	2.729	2.431	2.508	2.440	2.352	1.914	2.336	11.43
59)	T	2-Hexanone	1.101	0.959	1.307	1.164	1.238	1.193	1.139	0.912	1.127	11.90
60)	T	Dibromochlorom...	0.498	0.443	0.655	0.587	0.654	0.648	0.644	0.536	0.583	14.10
61)	T	1,2-Dibromoethane	0.506	0.455	0.690	0.608	0.661	0.651	0.633	0.526	0.591	14.33
62)	T	n-Butyl Acetate	1.224	1.029	1.457	1.308	1.394	1.392	1.364	1.147	1.289	11.28
63)	T	n-Octane	0.385	0.381	0.513	0.457	0.488	0.468	0.453	0.363	0.439	12.55
64)	T	Tetrachloroethene	0.652	0.587	0.822	0.741	0.783	0.776	0.764	0.643	0.721	11.50
65)	T	Chlorobenzene	1.426	1.275	1.802	1.631	1.718	1.632	1.592	1.307	1.548	12.37
66)	T	Ethylbenzene	2.414	2.119	2.963	2.684	2.836	2.718	2.635	2.153	2.565	12.02
67)	T	m- & p-Xylenes	1.860	1.661	2.304	2.097	2.217	2.143	2.070	1.687	2.005	12.02
68)	T	Bromoform	0.484	0.424	0.631	0.582	0.666	0.691	0.682	0.569	0.591	16.32
69)	T	Styrene	1.561	1.313	1.851	1.688	1.824	1.787	1.735	1.417	1.647	12.00
70)	T	o-Xylene	2.021	1.710	2.340	2.124	2.232	2.174	2.089	1.698	2.049	11.37

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MH 9/9/09

Method Path : J:\MS16\METHODS\
Method File : R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

71)	T	n-Nonane	1.004	0.847	1.163	1.057	1.108	1.048	0.977	0.752	0.994	13.65
72)	T	1,1,2,2-Tetrac...	0.784	0.693	1.008	0.915	0.982	0.989	0.954	0.767	0.887	13.63
73)	S	Bromofluoroben...	0.874	0.874	0.868	0.873	0.885	0.931	0.931	0.938	0.897	3.43
74)	T	Cumene	2.840	2.332	3.189	2.903	3.050	2.959	2.845	2.315	2.804	11.33
75)	T	alpha-Pinene	1.216	1.067	1.471	1.365	1.477	1.436	1.386	1.123	1.318	12.21
76)	T	n-Propylbenzene	3.117	2.764	3.742	3.414	3.624	3.505	3.358	2.698	3.278	11.74
77)	T	3-Ethyltoluene	2.640	2.217	3.029	2.756	2.882	2.778	2.706	2.190	2.650	11.30
78)	T	4-Ethyltoluene	2.658	2.102	2.993	2.691	2.806	2.826	2.686	2.171	2.617	12.06
79)	T	1,3,5-Trimethy...	2.227	1.829	2.469	2.247	2.337	2.301	2.218	1.796	2.178	11.00
80)	T	alpha-Methylst...	1.121	0.983	1.412	1.297	1.391	1.397	1.349	1.103	1.257	13.06
81)	T	2-Ethyltoluene	3.036	2.381	3.171	2.818	2.948	2.882	2.763	2.235	2.779	11.50
82)	T	1,2,4-Trimethy...	2.654	1.946	2.606	2.351	2.454	2.424	2.318	1.833	2.323	12.60
83)	T	n-Decane	1.602	1.076	1.370	1.223	1.266	1.194	1.136	0.862	1.216	17.77
84)	T	Benzyl Chloride	1.629	1.303	1.884	1.744	2.026	2.160	2.101	1.702	1.819	15.61
85)	T	1,3-Dichlorobe...	1.278	1.088	1.547	1.380	1.460	1.464	1.422	1.182	1.352	11.59
86)	T	1,4-Dichlorobe...	1.287	1.126	1.608	1.450	1.541	1.542	1.492	1.231	1.410	12.28
87)	T	sec-Butylbenzene	3.015	2.546	3.518	3.123	3.283	3.257	3.097	2.489	3.041	11.75
88)	T	4-Isopropyltol...	2.782	2.458	3.421	3.044	3.251	3.211	3.056	2.356	2.947	12.97
89)	T	1,2,3-Trimethy...	2.183	1.868	2.674	2.342	2.480	2.458	2.348	1.845	2.275	12.91
90)	T	1,2-Dichlorobe...	1.148	1.038	1.470	1.340	1.422	1.448	1.402	1.141	1.301	12.81
91)	T	d-Limonene	0.802	0.728	0.957	0.875	0.936	0.905	0.841	0.632	0.834	13.25
92)	T	1,2-Dibromo-3-...	0.363	0.368	0.512	0.474	0.517	0.542	0.530	0.441	0.469	15.19
93)	T	n-Undecane	1.317	1.169	1.526	1.295	1.333	2.250	1.392	0.938	1.403	27.32
94)	T	1,2,4-Trichlor...	0.892	0.767	1.136	1.031	1.104	1.155	1.135	0.951	1.021	13.71
95)	T	Naphthalene	3.090	2.668	3.659	3.340	3.626	3.874	3.744	2.992	3.374	12.56
96)	T	n-Dodecane	1.530	1.193	1.611	1.514	1.527	1.415	1.303	0.964	1.382	15.70
97)	T	Hexachlorobuta...	0.635	0.510	0.723	0.654	0.677	0.689	0.686	0.585	0.645	10.59
98)	T	Cyclohexanone	1.183	0.826	0.940	0.840	0.847	0.841	0.802	0.635	0.864	17.84
99)	T	tert-Butylbenzene	2.231	1.920	2.626	2.368	2.475	2.465	2.353	1.863	2.287	11.81
100)	T	n-Butylbenzene	2.234	1.896	2.762	2.455	2.557	2.499	2.380	1.878	2.333	13.43

(#) = Out of Range

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HH 9/9/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-09030909
20ng/L Std. ID: S20-09030905
200ng/L Std. ID: S20-09030904

Dilution Factors:		5	50	250
	Source Std.	Primary Working Standards		
Compounds	mg/m³	200ng/L	20ng/L	4ng/L
Propene	1.07	214	21.4	4.28
Dichlorodifluoromethane	1.05	210	21.0	4.20
Chloromethane	1.00	200	20.0	4.00
Freon-114	1.06	212	21.2	4.24
Vinyl Chloride	1.01	202	20.2	4.04
1,3-Butadiene	1.20	240	24.0	4.80
Bromomethane	1.02	204	20.4	4.08
Chloroethane	1.01	202	20.2	4.04
Ethanol	5.20	1040	104	20.8
Acetonitrile	1.05	210	21.0	4.20
Acrolein	1.08	216	21.6	4.32
Acetone	5.50	1100	110	22.0
Trichlorofluoromethane	1.05	210	21.0	4.20
Isopropanol	1.89	378	37.8	7.56
Acrylonitrile	1.06	212	21.2	4.24
1,1-Dichloroethene	1.10	220	22.0	4.40
tert-Butanol	2.02	404	40.4	8.08
Methylene Chloride	1.07	214	21.4	4.28
Allyl Chloride	1.08	216	21.6	4.32
Trichlorotrifluoroethane	1.10	220	22.0	4.40
Carbon Disulfide	1.07	214	21.4	4.28
trans-1,2-Dichloroethene	1.06	212	21.2	4.24
1,1-Dichloroethane	1.06	212	21.2	4.24
Methyl tert-Butyl Ether	1.09	218	21.8	4.36
Vinyl Acetate	5.02	1004	100	20.1
2-Butanone	1.10	220	22.0	4.40
cis-1,2-Dichloroethene	1.09	218	21.8	4.36
Diisopropyl Ether	1.07	214	21.4	4.28
Ethyl Acetate	2.13	426	42.6	8.52
n-Hexane	1.09	218	21.8	4.36
Chloroform	1.07	214	21.4	4.28
Tetrahydrofuran	1.10	220	22.0	4.40
Ethyl tert-Butyl Ether	1.03	206	20.6	4.12
1,2-Dichloroethane	1.06	212	21.2	4.24
1,1,1-Trichloroethane	1.05	210	21.0	4.20
Isopropyl Acetate	2.09	418	41.8	8.36
1-Butanol	2.07	414	41.4	8.28
Benzene	1.06	212	21.2	4.24
Carbon Tetrachloride	1.08	216	21.6	4.32
Cyclohexane	2.15	430	43.0	8.60
tert-Amyl Methyl Ether	1.04	208	20.8	4.16
1,2-Dichloropropane	1.05	210	21.0	4.20
Bromodichloromethane	1.08	216	21.6	4.32
Trichloroethene	1.06	212	21.2	4.24
1,4-Dioxane	1.07	214	21.4	4.28
Isooctane	1.04	208	20.8	4.16
Methyl Methacrylate	2.13	426	42.6	8.52
n-Heptane	1.06	212	21.2	4.24
cis-1,3-Dichloropropene	0.99	198	19.8	3.96
4-Methyl-2-pentanone	1.10	220	22.0	4.40
trans-1,3-Dichloropropene	1.10	220	22.0	4.40
1,1,2-Trichloroethane	1.05	210	21.0	4.20
Toluene	1.08	216	21.6	4.32
2-Hexanone	1.10	220	22.0	4.40
Dibromochloromethane	1.15	230	23.0	4.60
1,2-Dibromoethane	1.06	212	21.2	4.24
n-Butyl Acetate	1.10	220	22.0	4.40
n-Octane	1.07	214	21.4	4.28
Tetrachloroethene	1.02	204	20.4	4.08
Chlorobenzene	1.08	216	21.6	4.32
Ethylbenzene	1.06	212	21.2	4.24
m-&p-Xylene	2.08	416	41.6	8.32

Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source)							
	4	4	20	20	20	200	200	200
Injection (L):	0.025	0.05	0.025	0.050	0.25	0.125	0.25	0.50
ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
	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
	0.100	0.200	0.500	1.00	5.00	25.0	50.0	100
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.120	0.240	0.600	1.20	6.00	30.0	60.0	120
	0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
	0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
	0.520	1.040	2.60	5.20	26.0	130	260	520
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.550	1.100	2.75	5.50	27.5	138	275	550
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.189	0.378	0.945	1.89	9.45	47.3	94.5	189
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.202	0.404	1.01	2.02	10.1	50.5	101	202
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	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
	0.107	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
	0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
	0.502	1.004	2.51	5.02	25.1	126	251	502
	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
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.213	0.426	1.07	2.13	10.7	53.3	107	213
	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
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.209	0.418	1.05	2.09	10.5	52.3	105	209
	0.207	0.414	1.04	2.07	10.4	51.8	104	207
	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
	0.215	0.430	1.08	2.15	10.8	53.8	108	215
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	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
	0.104	0.208	0.520	1.04	5.20	26.0	52.0	104
	0.213	0.426	1.07	2.13	10.7	53.3	107	213
	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
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
	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
	0.115	0.230	0.575	1.15	5.75	28.8	57.5	115
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
	0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
	0.102	0.204	0.510	1.02	5.10	25.5	51.0	102
	0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
	0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
	0.208	0.416	1.04	2.08	10.4	52.0	104	208

UH 9/9/09

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-09030909
20ng/L Std. ID:
200ng/L Std. ID:
Dilution Factors: 5 50 250

Compounds	Source Std. mg/m³	Primary Working Standards 200ng/L	20ng/L	4ng/L	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	4	20	20	20	200	200	200
					Injection (L):	0.025	0.050	0.025	0.05	0.25	0.125	0.25	0.50
					ICAL Points:	0.1ng	0.2ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Bromoform	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
Styrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
o-Xylene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Nonane	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
1,1,2,2-Tetrachloroethane	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
Cumene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
alpha-Pinene	1.01	202	20.2	4.04		0.101	0.202	0.505	1.01	5.05	25.3	50.5	101
n-Propylbenzene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
3-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
4-Ethyltoluene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,3,5-Trimethylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
alpha-Methylstyrene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
2-Ethyltoluene	1.05	210	21.0	4.20		0.105	0.210	0.525	1.05	5.25	26.3	52.5	105
1,2,4-Trimethylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Decane	1.08	216	21.6	4.32		0.108	0.216	0.540	1.08	5.40	27.0	54.0	108
Benzyl Chloride	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
1,3-Dichlorobenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,4-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
sec-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
p-Isopropyltoluene	1.03	206	20.6	4.12		0.103	0.206	0.515	1.03	5.15	25.8	51.5	103
1,2,3-Trimethylbenzene	1.07	214	21.4	4.28		0.107	0.214	0.535	1.07	5.35	26.8	53.5	107
1,2-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
d-Limonene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
chloropropane	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
n-Undecane	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48		0.112	0.224	0.560	1.12	5.60	28.0	56.0	112
Naphthalene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Dodecane	0.99	198	19.8	3.96		0.099	0.198	0.495	0.990	4.95	24.8	49.5	99.0
Hexachloro-1,3-butadiene	1.10	220	22.0	4.40		0.110	0.220	0.550	1.10	5.50	27.5	55.0	110
Methacrylonitrile	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
Cyclohexanone	0.98	196	19.6	3.92		0.098	0.196	0.490	0.980	4.90	24.5	49.0	98.0
tert-Butylbenzene	1.06	212	21.2	4.24		0.106	0.212	0.530	1.06	5.30	26.5	53.0	106
n-Butylbenzene	1.09	218	21.8	4.36		0.109	0.218	0.545	1.09	5.45	27.3	54.5	109

*Enter Information in the Solid Shaded Areas ONLY.

Calibration Status Report GCMS-16

Method Path : J:\MS16\METHODS\
Method File : R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Wed Sep 09 09:31:43 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS16\DATA\2009_09\08\09080908.D
2	0.2	0	25	J:\MS16\DATA\2009_09\08\09080909.D
3	0.5	1	25	J:\MS16\DATA\2009_09\08\09080910.D
4	1.0	1	25	J:\MS16\DATA\2009_09\08\09080911.D
5	5.0	5	25	J:\MS16\DATA\2009_09\08\09080912.D
6	25	27	25	J:\MS16\DATA\2009_09\08\09080913.D
7	50	54	25	J:\MS16\DATA\2009_09\08\09080914.D
8	100	107	25	J:\MS16\DATA\2009_09\08\09080915.D

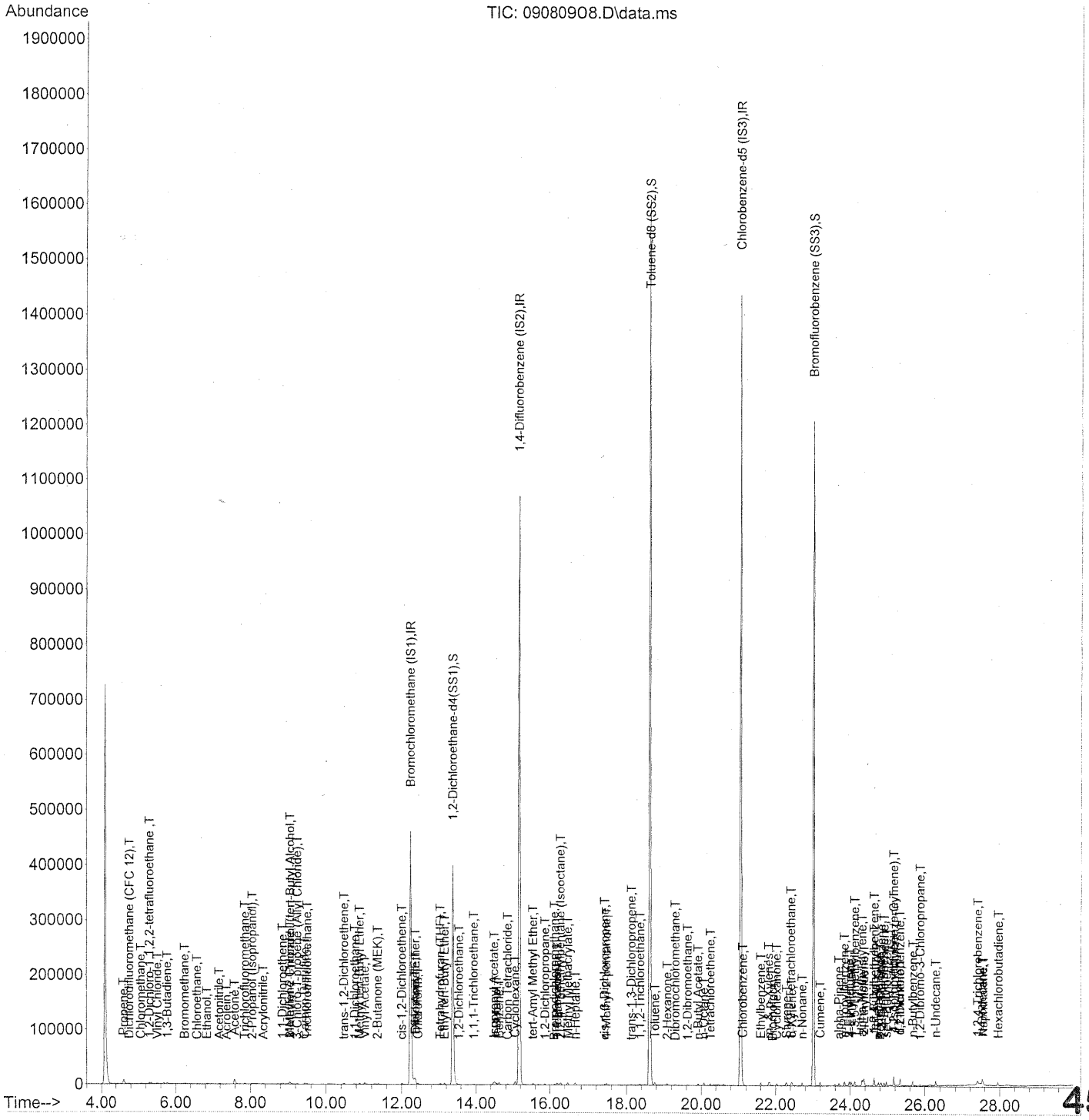
#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Sep 09 09:23 2009	Sep 09 09:16 2009	
2	0.2	Sep 09 09:23 2009	Sep 09 09:18 2009	
3	0.5	Sep 09 09:23 2009	Sep 09 09:20 2009	
4	1.0	Sep 09 09:23 2009	Sep 09 09:21 2009	
5	5.0	Sep 09 09:23 2009	Sep 09 09:16 2009	
6	25	Sep 09 09:24 2009	Sep 09 09:16 2009	
7	50	Sep 09 09:24 2009	Sep 09 09:16 2009	
8	100	Sep 09 09:24 2009	Sep 09 09:16 2009	

R16090809.M Wed Sep 09 14:35:18 2009

VH 9/9/09

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:16:54 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:16:54 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	291506	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.17	114	1420179	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.06	82	597635	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	401966	21.737	ng		-0.01
Spiked Amount 25.000			Recovery =	86.96%			
57) Toluene-d8 (SS2)	18.63	98	1506260	26.786	ng		-0.02
Spiked Amount 25.000			Recovery =	107.16%			
73) Bromofluorobenzene (SS3)	23.02	174	522597	26.458	ng		0.00
Spiked Amount 25.000			Recovery =	105.84%			
Target Compounds							Qvalue
2) Propene	4.61	42	1105	0.072	ng		92
3) Dichlorodifluoromethan...	4.75	85	2308	0.084	ng	#	86
4) Chloromethane	5.07	50	1792	0.078	ng		84
5) 1,2-Dichloro-1,1,2,2-t...	5.29	135	1374	0.092	ng		88
6) Vinyl Chloride	5.50	62	1614	0.072	ng		81
7) 1,3-Butadiene	5.77	54	1441	0.094	ng		88
8) Bromomethane	6.23	94	1072	0.082	ng		96
9) Chloroethane	6.56	64	674	0.063	ng	#	43
10) Ethanol	6.84	45	4656m	0.450	ng		
11) Acetonitrile	7.17	41	2148m	0.081	ng		
12) Acrolein	7.37	56	631	0.083	ng	#	58
13) Acetone	7.59	58	5571	0.503	ng		88
14) Trichlorofluoromethane	7.86	101	1964	0.081	ng		98
15) 2-Propanol (Isopropanol)	8.04	45	5895	0.169	ng		72
16) Acrylonitrile	8.34	53	984	0.057	ng		88
17) 1,1-Dichloroethene	8.85	96	1181	0.089	ng		87
18) 2-Methyl-2-Propanol (t...	9.05	59	6605	0.189	ng	#	66
19) Methylene Chloride	9.04	84	1652	0.111	ng		82
20) 3-Chloro-1-propene (Al...	9.24	41	1334	0.070	ng		84
21) Trichlorotrifluoroethane	9.50	151	953	0.084	ng		87
22) Carbon Disulfide	9.44	76	4556	0.085	ng		82
23) trans-1,2-Dichloroethene	10.47	61	1451	0.075	ng		98
24) 1,1-Dichloroethane	10.76	63	1967	0.080	ng		93
25) Methyl tert-Butyl Ether	10.88	73	3382	0.085	ng		88
26) Vinyl Acetate	11.02	86	469	0.174	ng	#	59
27) 2-Butanone (MEK)	11.36	72	846	0.096	ng		95
28) cis-1,2-Dichloroethene	12.00	61	1453	0.076	ng		83
29) Diisopropyl Ether	12.36	87	861	0.077	ng	#	79
30) Ethyl Acetate	12.37	61	651	0.137	ng		91
31) n-Hexane	12.36	57	1876	0.087	ng	#	6

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:16:54 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.44	83	1983	0.084	ng		92
34) Tetrahydrofuran (THF)	13.03	72	732	0.084	ng		90
35) Ethyl tert-Butyl Ether	13.15	87	1306	0.077	ng		94
36) 1,2-Dichloroethane	13.54	62	1255	0.074	ng		77
38) 1,1,1-Trichloroethane	13.93	97	1634	0.081	ng		84
39) Isopropyl Acetate	14.49	61	1537	0.170	ng	#	87
40) 1-Butanol	14.55	56	2607	0.201	ng		84
41) Benzene	14.62	78	5483	0.096	ng		96
42) Carbon Tetrachloride	14.85	117	1307	0.078	ng	#	1
43) Cyclohexane	15.05	84	3659	0.172	ng		89
44) tert-Amyl Methyl Ether	15.54	73	3420	0.084	ng		93
45) 1,2-Dichloropropane	15.86	63	1049	0.074	ng		99
46) Bromodichloromethane	16.12	83	1410	0.081	ng		92
47) Trichloroethene	16.20	130	1634	0.098	ng		92
48) 1,4-Dioxane	16.19	88	1012	0.090	ng	#	67
49) 2,2,4-Trimethylpentane...	16.29	57	5091	0.083	ng		97
50) Methyl Methacrylate	16.48	100	1056	0.192	ng	#	85
51) n-Heptane	16.66	71	1209	0.082	ng		90
52) cis-1,3-Dichloropropene	17.42	75	1635	0.077	ng		89
53) 4-Methyl-2-pentanone	17.46	58	1138	0.095	ng		92
54) trans-1,3-Dichloropropene	18.13	75	1547	0.084	ng		94
55) 1,1,2-Trichloroethane	18.37	97	1299	0.098	ng		82
58) Toluene	18.76	91	5994	0.110	ng		94
59) 2-Hexanone	19.09	43	2895	0.101	ng		98
60) Dibromochloromethane	19.30	129	1368	0.107	ng		89
61) 1,2-Dibromoethane	19.63	107	1282	0.096	ng		87
62) n-Butyl Acetate	19.91	43	3218	0.099	ng		94
63) n-Octane	20.07	57	985	0.087	ng		81
64) Tetrachloroethene	20.25	166	1589	0.104	ng		96
65) Chlorobenzene	21.12	112	3681	0.105	ng		96
66) Ethylbenzene	21.60	91	6117	0.102	ng		98
67) m- & p-Xylenes	21.82	91	9249	0.197	ng	#	29
68) Bromoform	21.92	173	1192	0.100	ng		93
69) Styrene	22.29	104	3992	0.111	ng		91
70) o-Xylene	22.44	91	5121	0.107	ng		92
71) n-Nonane	22.71	43	2544	0.097	ng		98
72) 1,1,2,2-Tetrachloroethane	22.41	83	2006	0.095	ng		90
74) Cumene	23.20	105	6993	0.111	ng		100
75) alpha-Pinene	23.70	93	2936	0.096	ng		94
76) n-Propylbenzene	23.84	91	7675	0.100	ng		94
77) 3-Ethyltoluene	23.97	105	6880	0.117	ng		99
78) 4-Ethyltoluene	24.03	105	6926	0.117	ng		94
79) 1,3,5-Trimethylbenzene	24.12	105	5804	0.118	ng		95

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:16:54 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

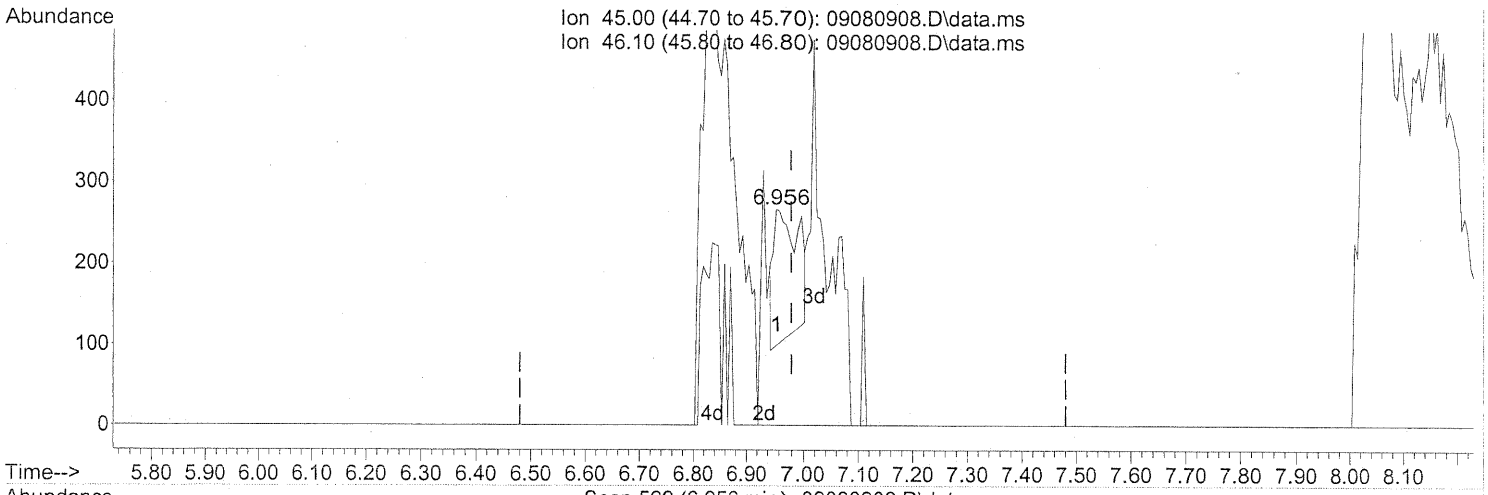
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.31	118	2868	0.107	ng		88
81) 2-Ethyltoluene	24.36	105	7621	0.121	ng		93
82) 1,2,4-Trimethylbenzene	24.63	105	6724	0.131	ng		91
83) n-Decane	24.75	57	4135	0.146	ng		86
84) Benzyl Chloride	24.80	91	4283	0.104	ng		90
85) 1,3-Dichlorobenzene	24.83	146	3331	0.117	ng		96
86) 1,4-Dichlorobenzene	24.91	146	3262	0.107	ng		98
87) sec-Butylbenzene	24.97	105	7639	0.112	ng		94
88) 4-Isopropyltoluene (p-...	25.16	119	6849	0.105	ng		98
89) 1,2,3-Trimethylbenzene	25.16	105	5584	0.109	ng		94
90) 1,2-Dichlorobenzene	25.33	146	2910	0.103	ng		99
91) d-Limonene	25.34	68	2090	0.105	ng		94
92) 1,2-Dibromo-3-Chloropr...	25.87	157	955	0.105	ng		81
93) n-Undecane	26.28	57	3431	0.116	ng		82
94) 1,2,4-Trichlorobenzene	27.40	180	2389	0.119	ng		91
95) Naphthalene	27.55	128	7830	0.111	ng		95
96) n-Dodecane	27.52	57	3620	0.111	ng	#	67
97) Hexachlorobutadiene	27.96	225	1670	0.130	ng		90
98) Cyclohexanone	22.03	55	2771	0.137	ng		94
99) tert-Butylbenzene	24.63	119	5653	0.111	ng		99
100) n-Butylbenzene	25.68	91	5822	0.109	ng		98

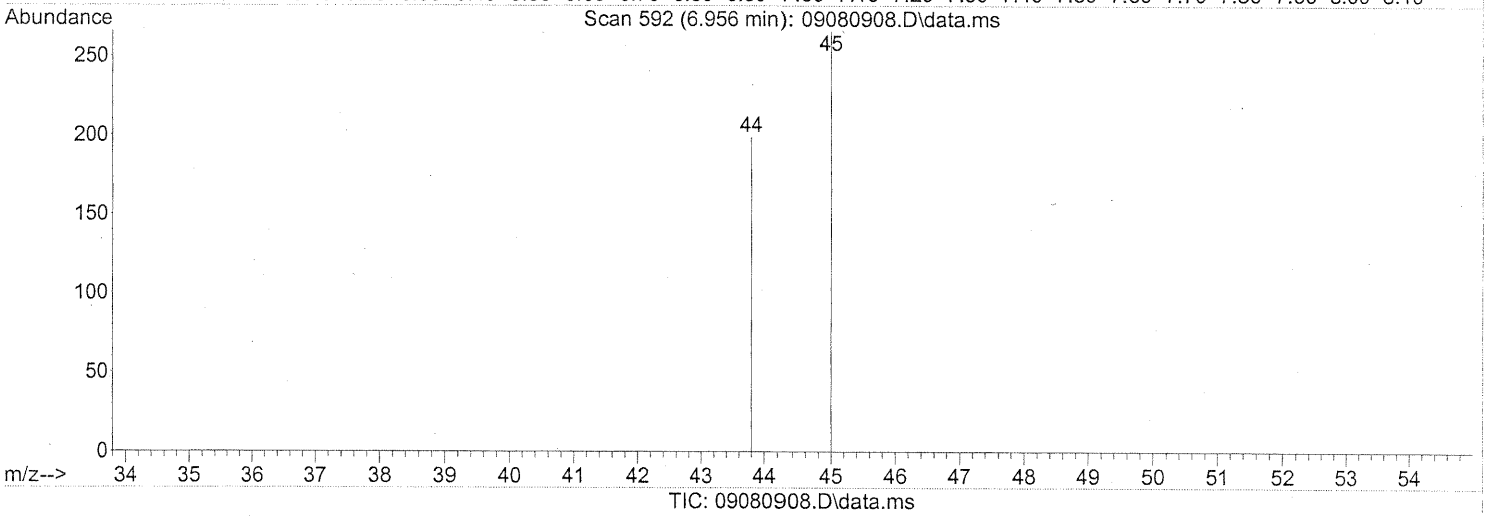
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:52 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080908.D\data.ms

(10) Ethanol (T)

6.956min (-0.024) 0.04ng

response 442

SP

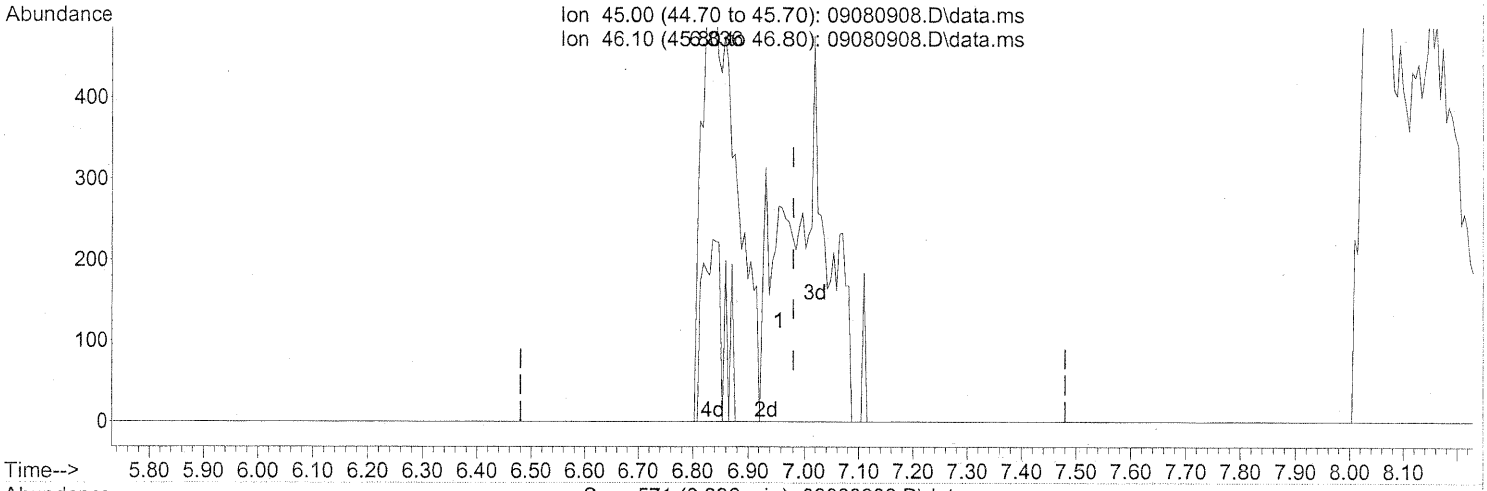
Ion	Exp%	Act%
45.00	100	100
46.10	38.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

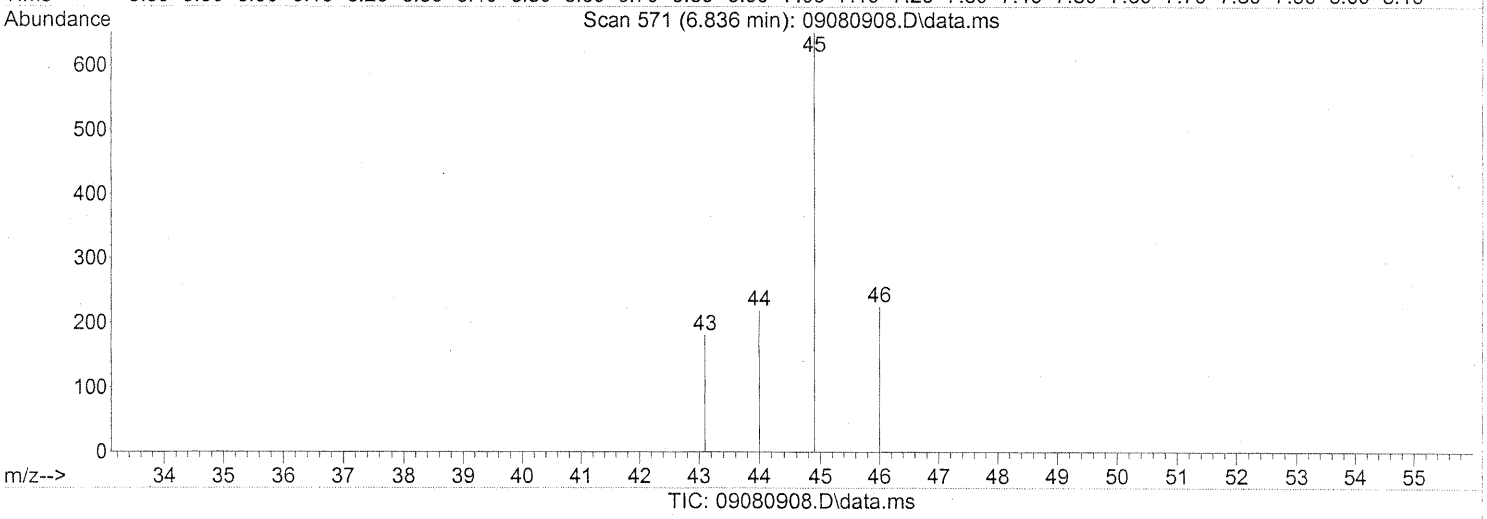
457

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:52 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080908.D\data.ms

(10) Ethanol (T)

6.836min (-0.144) 0.45ng m

response 4656

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

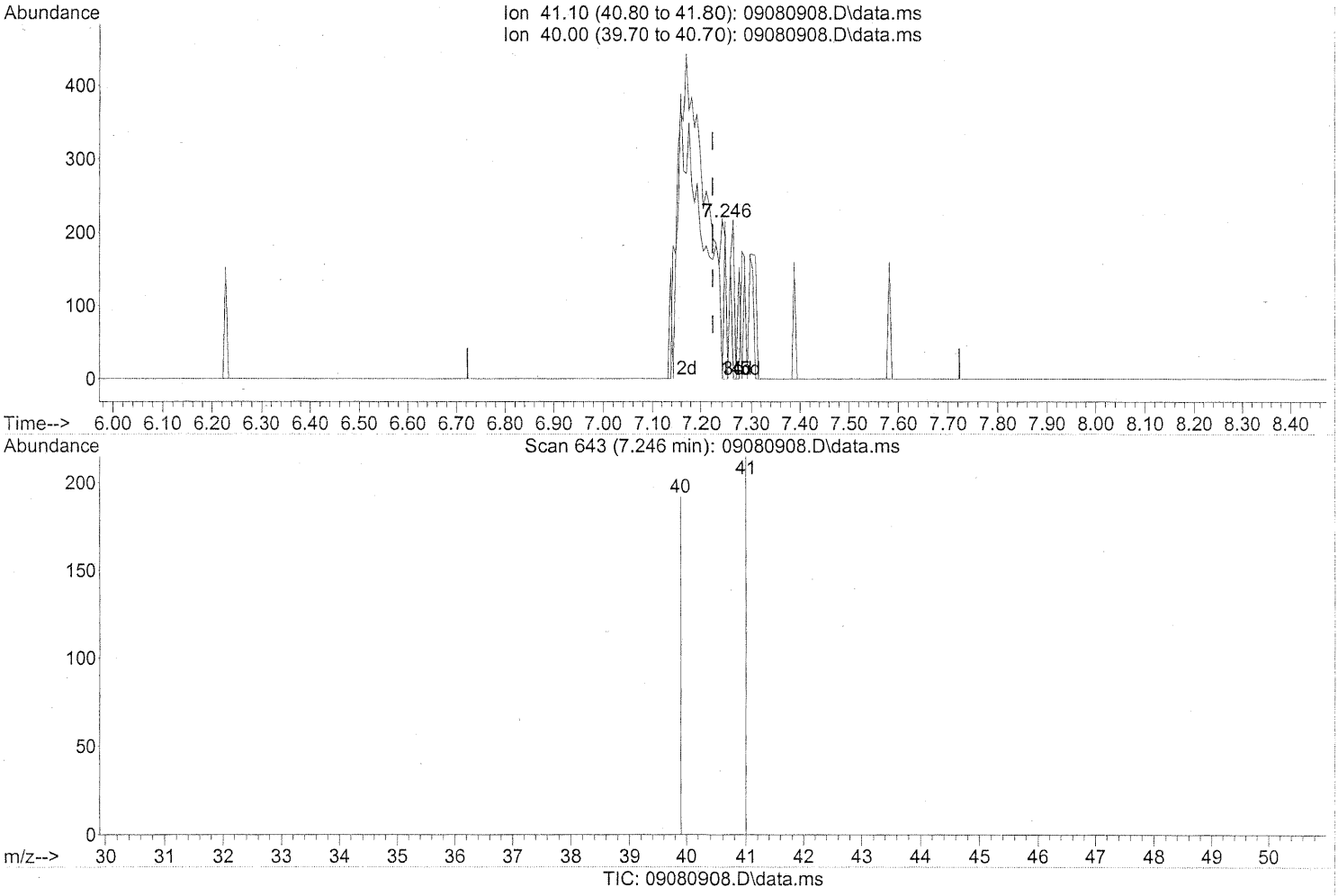
SP → IC
LH 9/9/09

458

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:52 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(11) Acetonitrile (T)

7.246min (+0.023) 0.00ng

response 73

Ion	Exp%	Act%
41.10	100	100
40.00	52.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

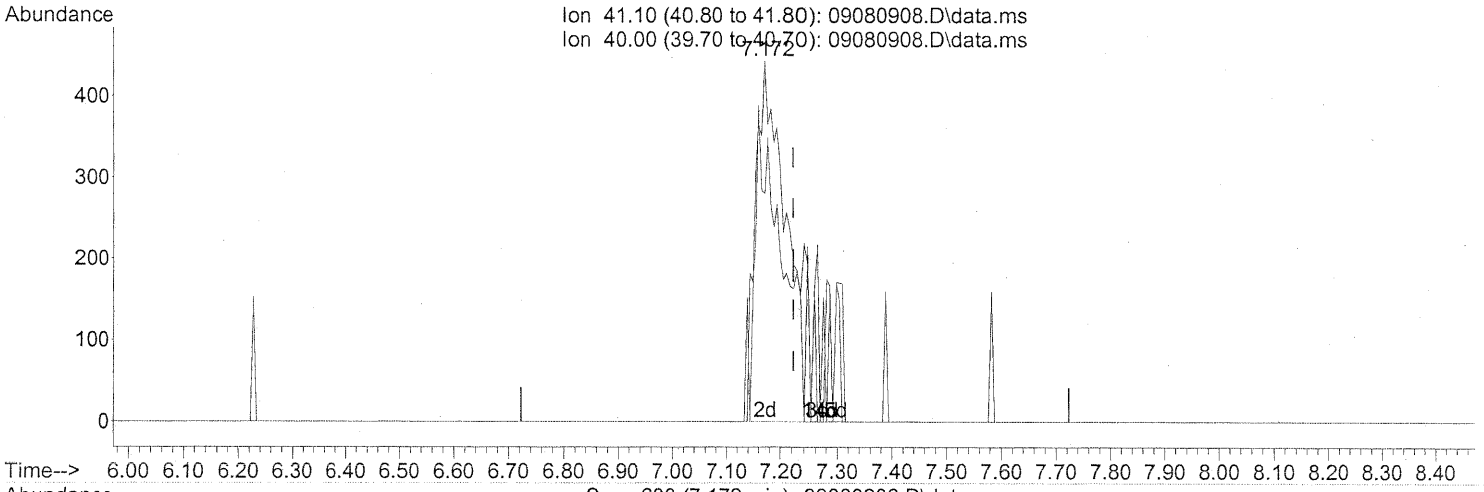
MP

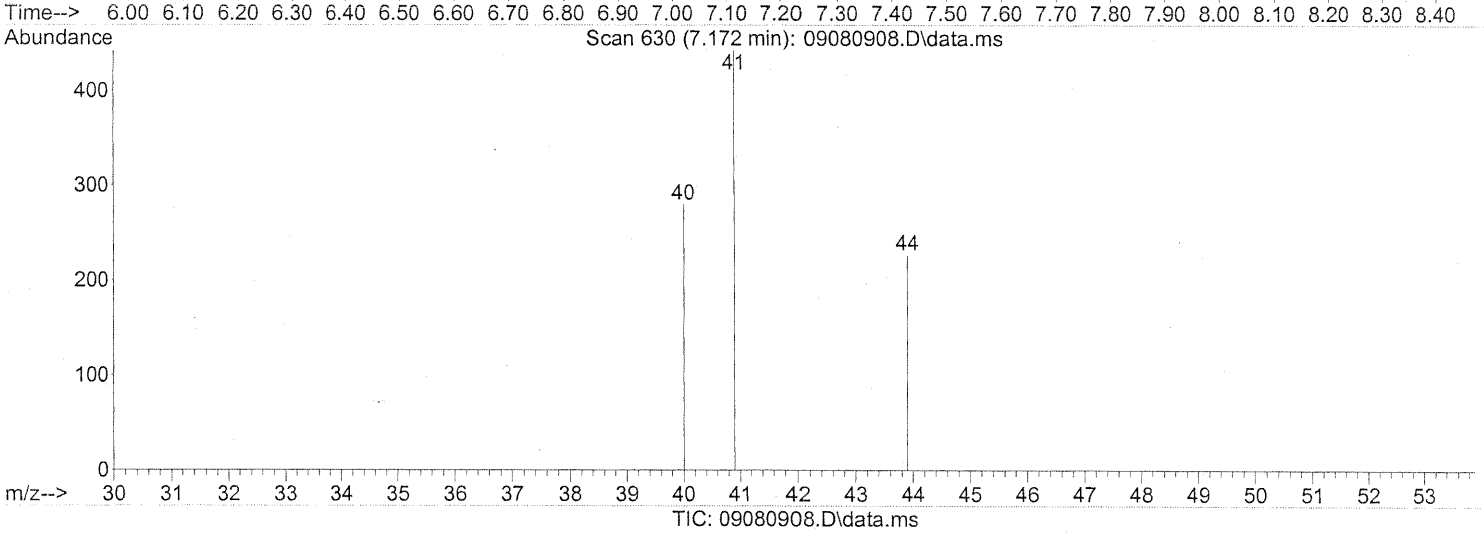
459

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080908.D
Acq On : 8 Sep 2009 18:00
Operator : LH
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:52 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080908.D\data.ms

(11) Acetonitrile (T)

7.172min (-0.051) 0.08ng m

response 2148

Ion	Exp%	Act%
41.10	100	100
40.00	52.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

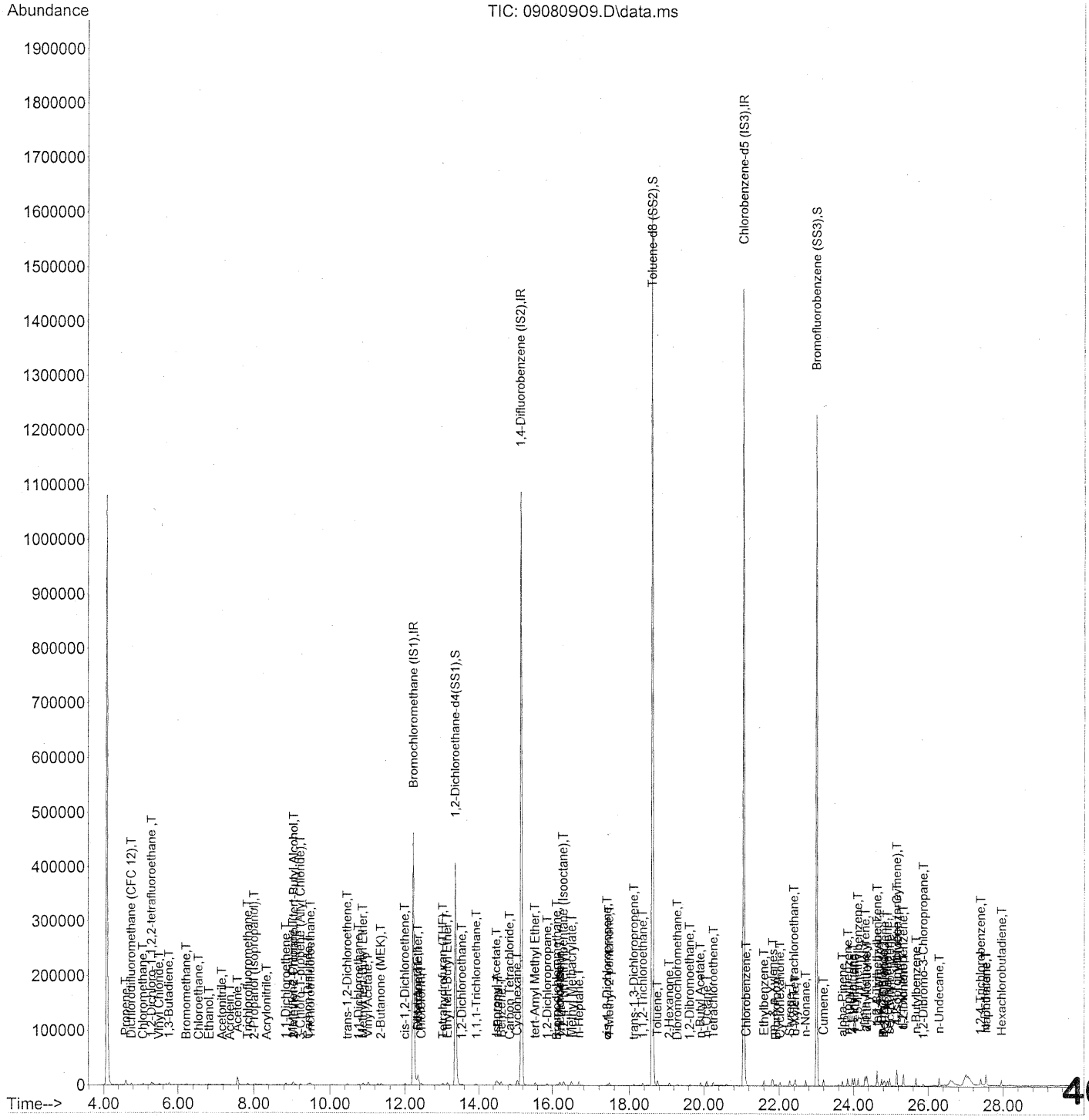
MP → IC
LH 9/9/09

460

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:18:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:18:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	293403	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.17	114	1439287	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.06	82	603584	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.37	65	409063	21.978	ng		-0.02
Spiked Amount 25.000			Recovery =	87.92%			
57) Toluene-d8 (SS2)	18.62	98	1522503	26.808	ng		-0.02
Spiked Amount 25.000			Recovery =	107.24%			
73) Bromofluorobenzene (SS3)	23.02	174	527330	26.435	ng		0.00
Spiked Amount 25.000			Recovery =	105.72%			
Target Compounds							Qvalue
2) Propene	4.60	42	2018	0.131	ng		93
3) Dichlorodifluoromethan...	4.75	85	4338	0.157	ng	#	95
4) Chloromethane	5.06	50	3087	0.134	ng		97
5) 1,2-Dichloro-1,1,2,2-t...	5.29	135	2592	0.173	ng		91
6) Vinyl Chloride	5.49	62	3064	0.136	ng		94
7) 1,3-Butadiene	5.76	54	2476	0.160	ng		96
8) Bromomethane	6.22	94	2053	0.156	ng		92
9) Chloroethane	6.55	64	1502	0.139	ng		83
10) Ethanol	6.82	45	8139m	0.782	ng		
11) Acetonitrile	7.17	41	3985m	0.149	ng		
12) Acrolein	7.37	56	1166	0.152	ng		95
13) Acetone	7.58	58	9311	0.835	ng		89
14) Trichlorofluoromethane	7.85	101	3604	0.148	ng		95
15) 2-Propanol (Isopropanol)	8.01	45	10756m	0.307	ng		
16) Acrylonitrile	8.34	53	2017	0.116	ng		99
17) 1,1-Dichloroethene	8.85	96	2231	0.167	ng	#	73
18) 2-Methyl-2-Propanol (t...	9.06	59	11528	0.327	ng	#	68
19) Methylene Chloride	9.04	84	2593	0.173	ng		86
20) 3-Chloro-1-propene (Al...	9.23	41	2438	0.128	ng		94
21) Trichlorotrifluoroethane	9.49	151	1770	0.154	ng		95
22) Carbon Disulfide	9.44	76	8327	0.154	ng		96
23) trans-1,2-Dichloroethene	10.47	61	2523	0.130	ng		85
24) 1,1-Dichloroethane	10.76	63	3582	0.144	ng		93
25) Methyl tert-Butyl Ether	10.88	73	6157	0.153	ng		94
26) Vinyl Acetate	11.01	86	1215	0.448	ng	#	96
27) 2-Butanone (MEK)	11.35	72	1612	0.182	ng	#	91
28) cis-1,2-Dichloroethene	12.00	61	2736	0.142	ng		87
29) Diisopropyl Ether	12.35	87	1751	0.155	ng	#	60
30) Ethyl Acetate	12.36	61	1468	0.307	ng		97
31) n-Hexane	12.36	57	3466	0.160	ng		9

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:18:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.44	83	3545	0.149	ng		96
34) Tetrahydrofuran (THF)	13.03	72	1446	0.164	ng	#	84
35) Ethyl tert-Butyl Ether	13.15	87	2692	0.157	ng	#	78
36) 1,2-Dichloroethane	13.54	62	2335	0.136	ng		97
38) 1,1,1-Trichloroethane	13.93	97	3107	0.152	ng		95
39) Isopropyl Acetate	14.49	61	2801	0.306	ng		97
40) 1-Butanol	14.53	56	4613	0.352	ng	#	8
41) Benzene	14.63	78	9338	0.161	ng		97
42) Carbon Tetrachloride	14.85	117	2427	0.144	ng		98
43) Cyclohexane	15.05	84	6581	0.306	ng		90
44) tert-Amyl Methyl Ether	15.54	73	6115	0.148	ng		96
45) 1,2-Dichloropropane	15.86	63	1971	0.137	ng		99
46) Bromodichloromethane	16.12	83	2791	0.158	ng		92
47) Trichloroethene	16.20	130	2766	0.164	ng		99
48) 1,4-Dioxane	16.18	88	1820	0.159	ng		87
49) 2,2,4-Trimethylpentane...	16.29	57	9159	0.148	ng		98
50) Methyl Methacrylate	16.49	100	1926	0.345	ng	#	80
51) n-Heptane	16.67	71	2367	0.158	ng		91
52) cis-1,3-Dichloropropene	17.41	75	3118	0.145	ng		93
53) 4-Methyl-2-pentanone	17.46	58	2067	0.170	ng		97
54) trans-1,3-Dichloropropene	18.13	75	2842	0.151	ng		97
55) 1,1,2-Trichloroethane	18.37	97	2199	0.164	ng		91
58) Toluene	18.75	91	10399	0.189	ng		98
59) 2-Hexanone	19.08	43	5092	0.176	ng		99
60) Dibromochloromethane	19.29	129	2458	0.191	ng		97
61) 1,2-Dibromoethane	19.62	107	2328	0.173	ng		95
62) n-Butyl Acetate	19.91	43	5466	0.166	ng		95
63) n-Octane	20.07	57	1970	0.173	ng		94
64) Tetrachloroethene	20.26	166	2893	0.187	ng		96
65) Chlorobenzene	21.13	112	6650	0.188	ng		93
66) Ethylbenzene	21.60	91	10846	0.178	ng		96
67) m- & p-Xylenes	21.84	91	16679	0.351	ng		95
68) Bromoform	21.92	173	2110	0.175	ng		96
69) Styrene	22.29	104	6785	0.187	ng		96
70) o-Xylene	22.44	91	8753	0.182	ng		100
71) n-Nonane	22.71	43	4333	0.163	ng		97
72) 1,1,2,2-Tetrachloroethane	22.40	83	3578	0.168	ng		97
74) Cumene	23.20	105	11598	0.183	ng		99
75) alpha-Pinene	23.70	93	5203	0.168	ng		97
76) n-Propylbenzene	23.85	91	13749	0.178	ng		97
77) 3-Ethyltoluene	23.97	105	11671	0.196	ng		99
78) 4-Ethyltoluene	24.03	105	11061	0.185	ng		96
79) 1,3,5-Trimethylbenzene	24.12	105	9626	0.194	ng		97

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:18:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

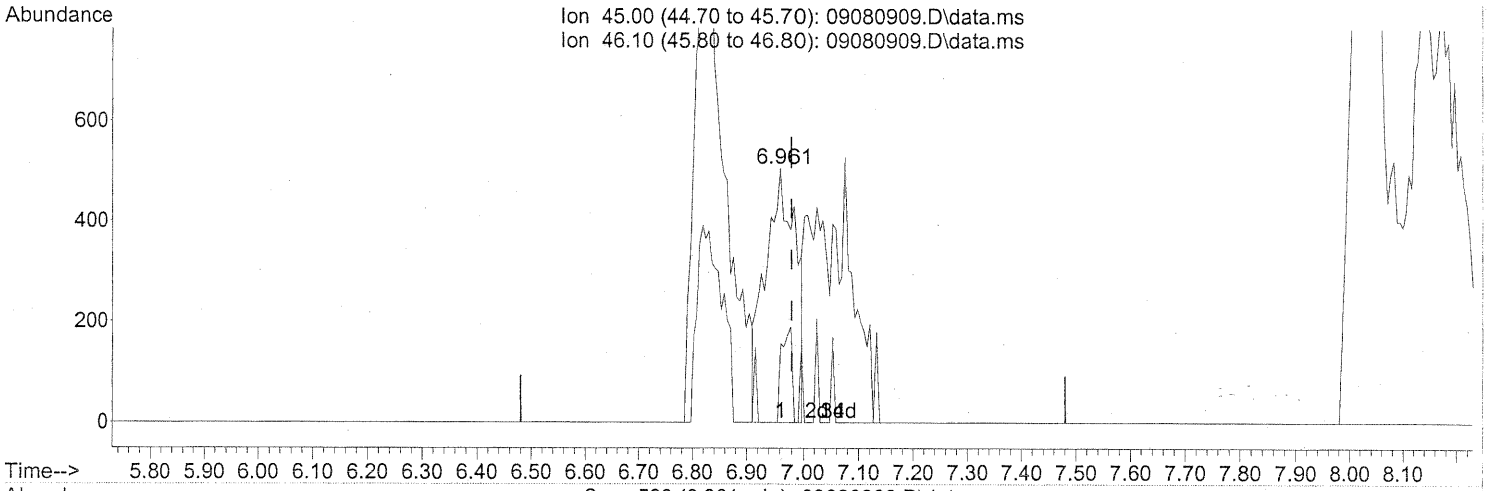
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.31	118	5081	0.187	ng		97
81) 2-Ethyltoluene	24.36	105	12070	0.190	ng		100
82) 1,2,4-Trimethylbenzene	24.63	105	9960	0.193	ng		100
83) n-Decane	24.75	57	5613	0.196	ng		98
84) Benzyl Chloride	24.80	91	6923	0.166	ng		98
85) 1,3-Dichlorobenzene	24.83	146	5724	0.199	ng		98
86) 1,4-Dichlorobenzene	24.91	146	5764	0.188	ng		94
87) sec-Butylbenzene	24.97	105	13029	0.189	ng		97
88) 4-Isopropyltoluene (p-...	25.16	119	12227	0.186	ng		97
89) 1,2,3-Trimethylbenzene	25.16	105	9652	0.186	ng		97
90) 1,2-Dichlorobenzene	25.33	146	5314	0.187	ng		100
91) d-Limonene	25.34	68	3831	0.190	ng		95
92) 1,2-Dibromo-3-Chloropr...	25.87	157	1956	0.213	ng	#	80
93) n-Undecane	26.29	57	6151	0.206	ng		94
94) 1,2,4-Trichlorobenzene	27.39	180	4146	0.204	ng		98
95) Naphthalene	27.54	128	13654	0.192	ng		100
96) n-Dodecane	27.52	57	5705	0.173	ng		75
97) Hexachlorobutadiene	27.96	225	2709	0.209	ng		100
98) Cyclohexanone	22.03	55	3908	0.192	ng	#	92
99) tert-Butylbenzene	24.63	119	9825	0.191	ng		99
100) n-Butylbenzene	25.68	91	9980	0.185	ng		98

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



TIC: 09080909.D\data.ms

(10) Ethanol (T)

6.961min (-0.019) 0.18ng

response 1825

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	12.49#
0.00	0.00	0.00
0.00	0.00	0.00

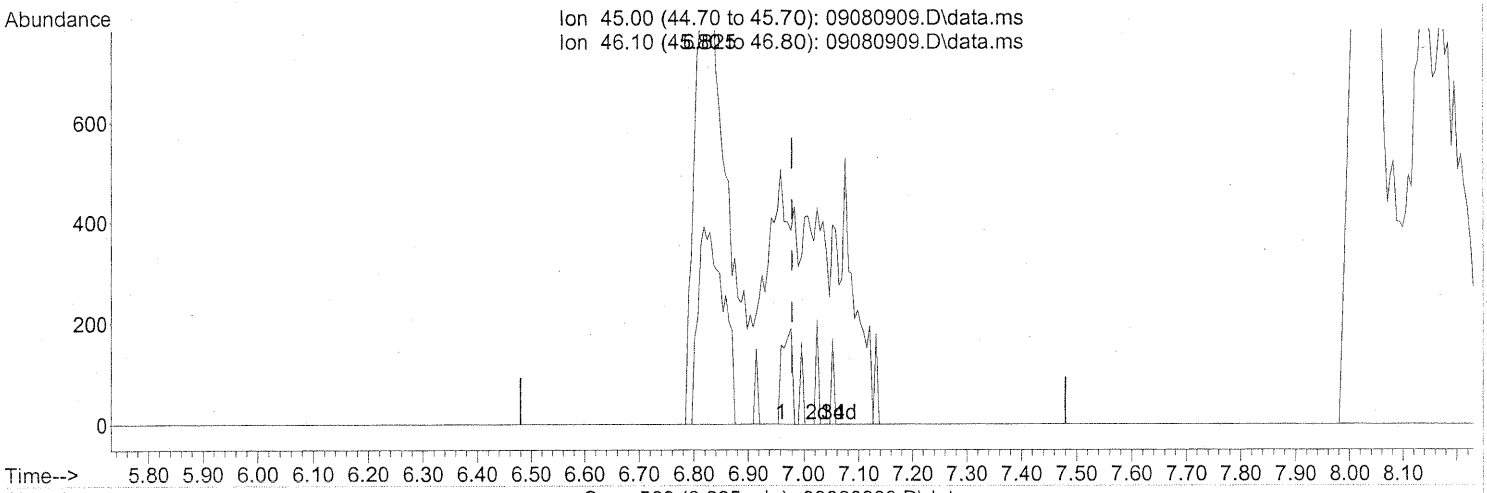
SP

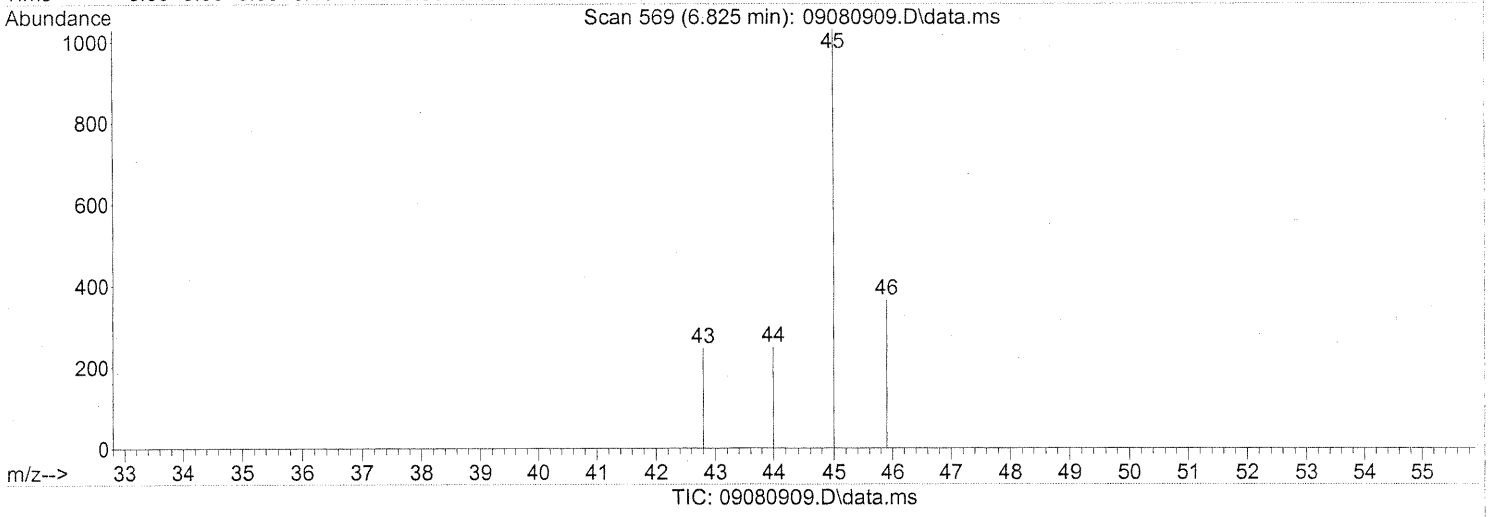
465

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080909.D\data.ms

(10) Ethanol (T)

6.825min (-0.155) 0.78ng m

response 8139

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	2.80#
0.00	0.00	0.00
0.00	0.00	0.00

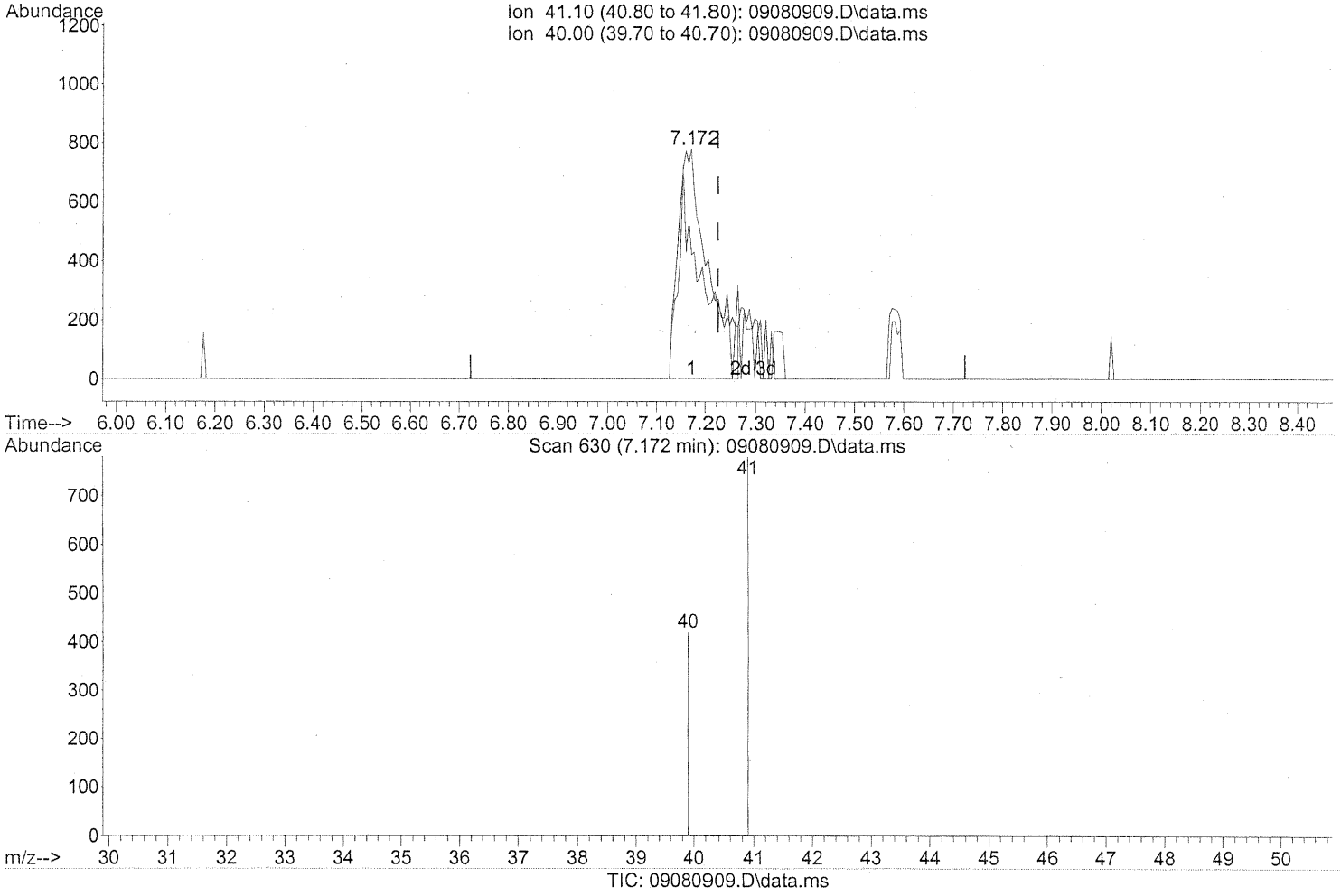
SP → IC
M 9/9/09

466

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(11) Acetonitrile (T)

7.172min (-0.051) 0.13ng

response 3353

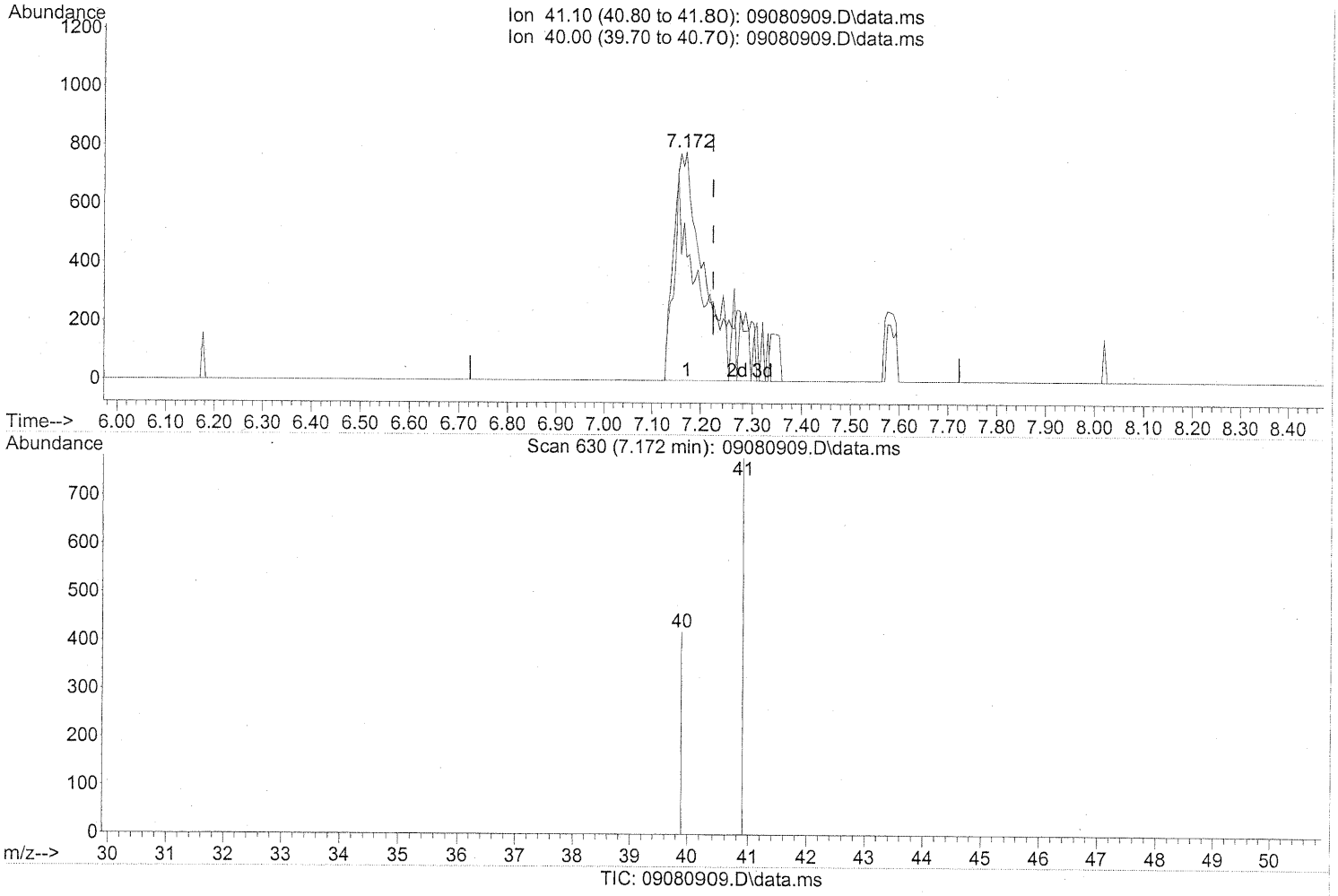
Ion	Exp%	Act%
41.10	100	100
40.00	52.40	70.15
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(11) Acetonitrile (T)

7.172min (-0.051) 0.15ng m

response 3985

Ion	Exp%	Act%
41.10	100	100
40.00	52.40	59.02
0.00	0.00	0.00
0.00	0.00	0.00

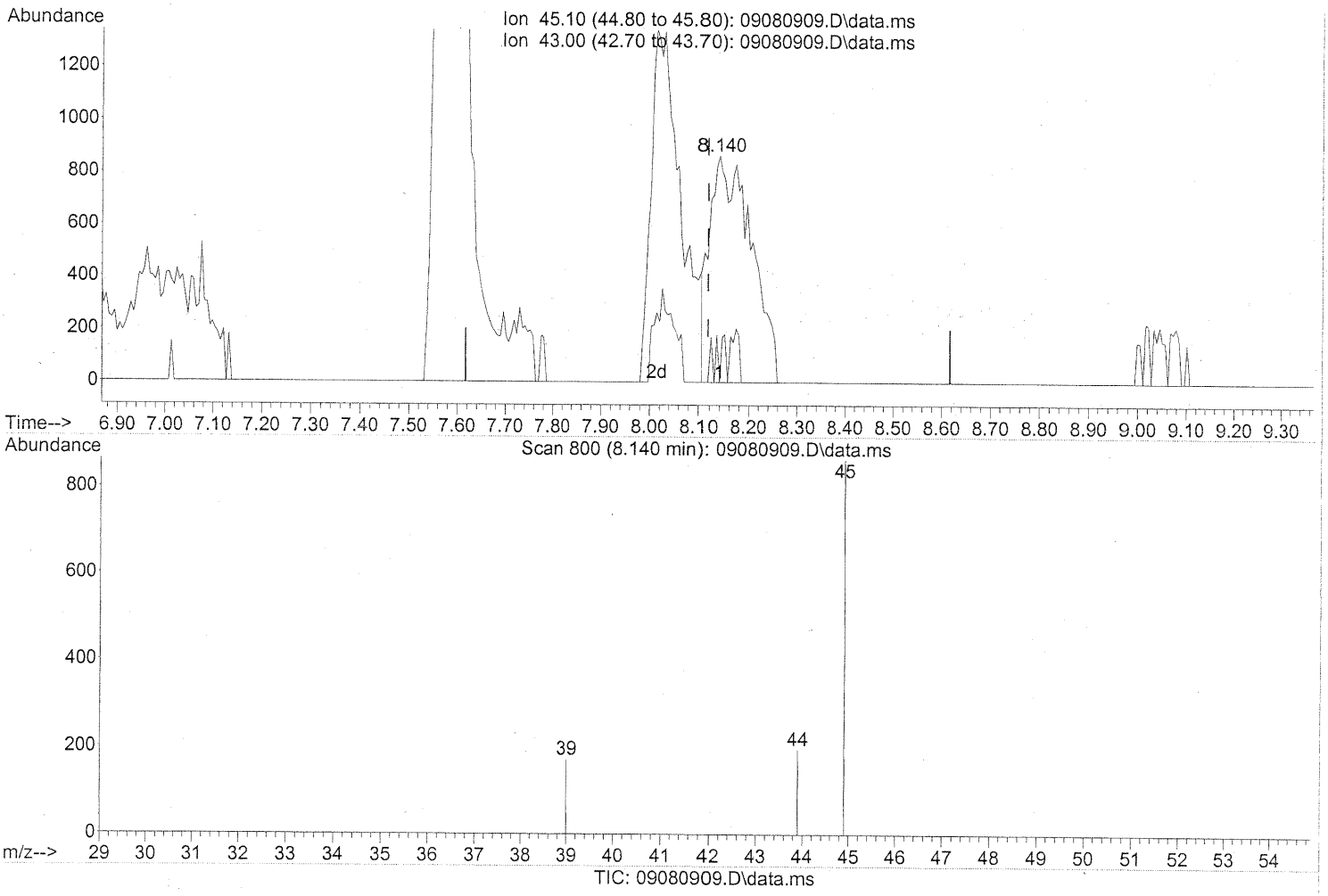
PT → IC
LH 9/9/09

468

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



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

8.140min (+0.022) 0.14ng

response 5068

SP

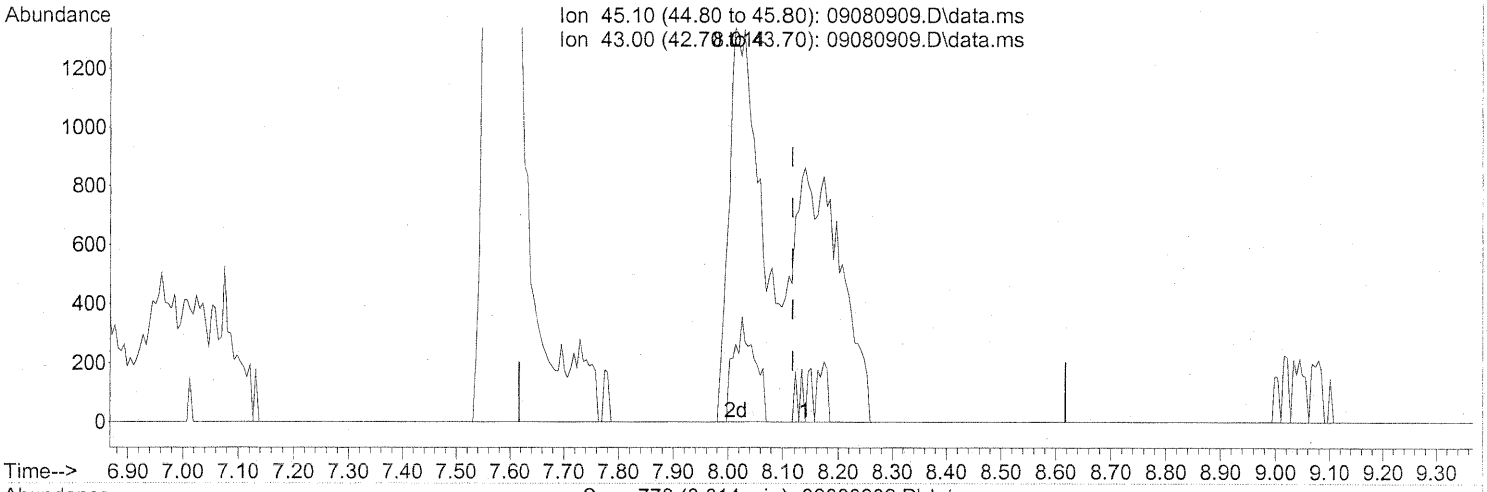
Ion	Exp%	Act%
45.10	100	100
43.00	17.40	3.61
0.00	0.00	0.00
0.00	0.00	0.00

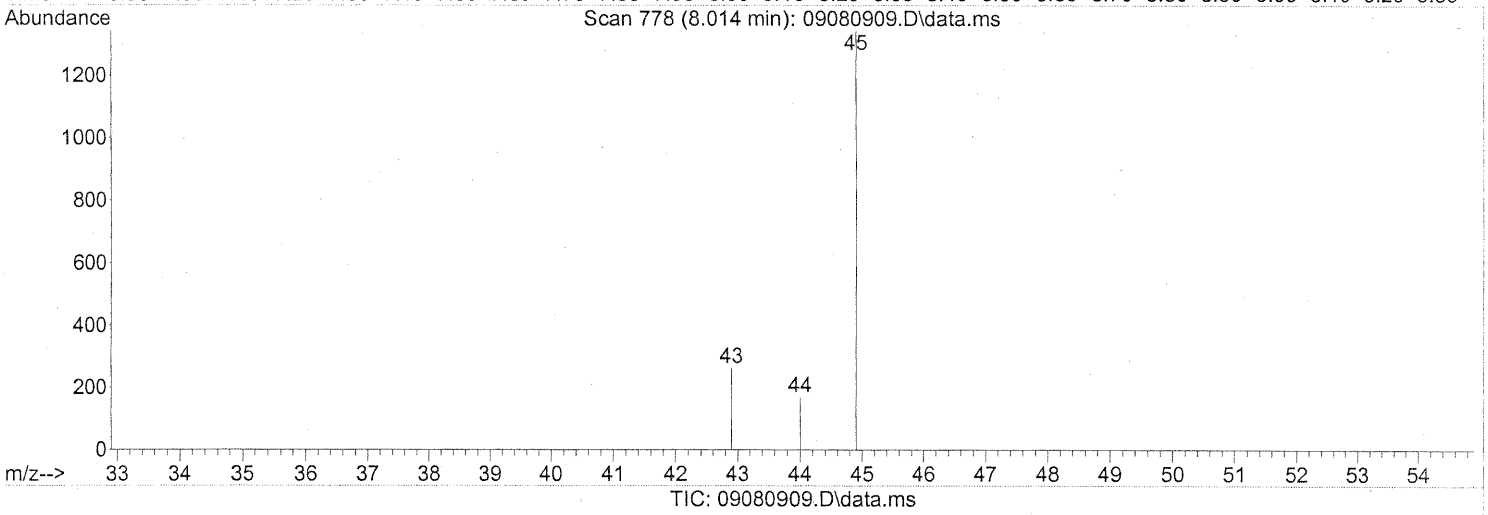
469

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080909.D
Acq On : 8 Sep 2009 18:38
Operator : LH
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030909
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 09 09:15:55 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080909.D\data.ms

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

8.014min (-0.103) 0.31ng m

response 10756

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	1.70
0.00	0.00	0.00
0.00	0.00	0.00

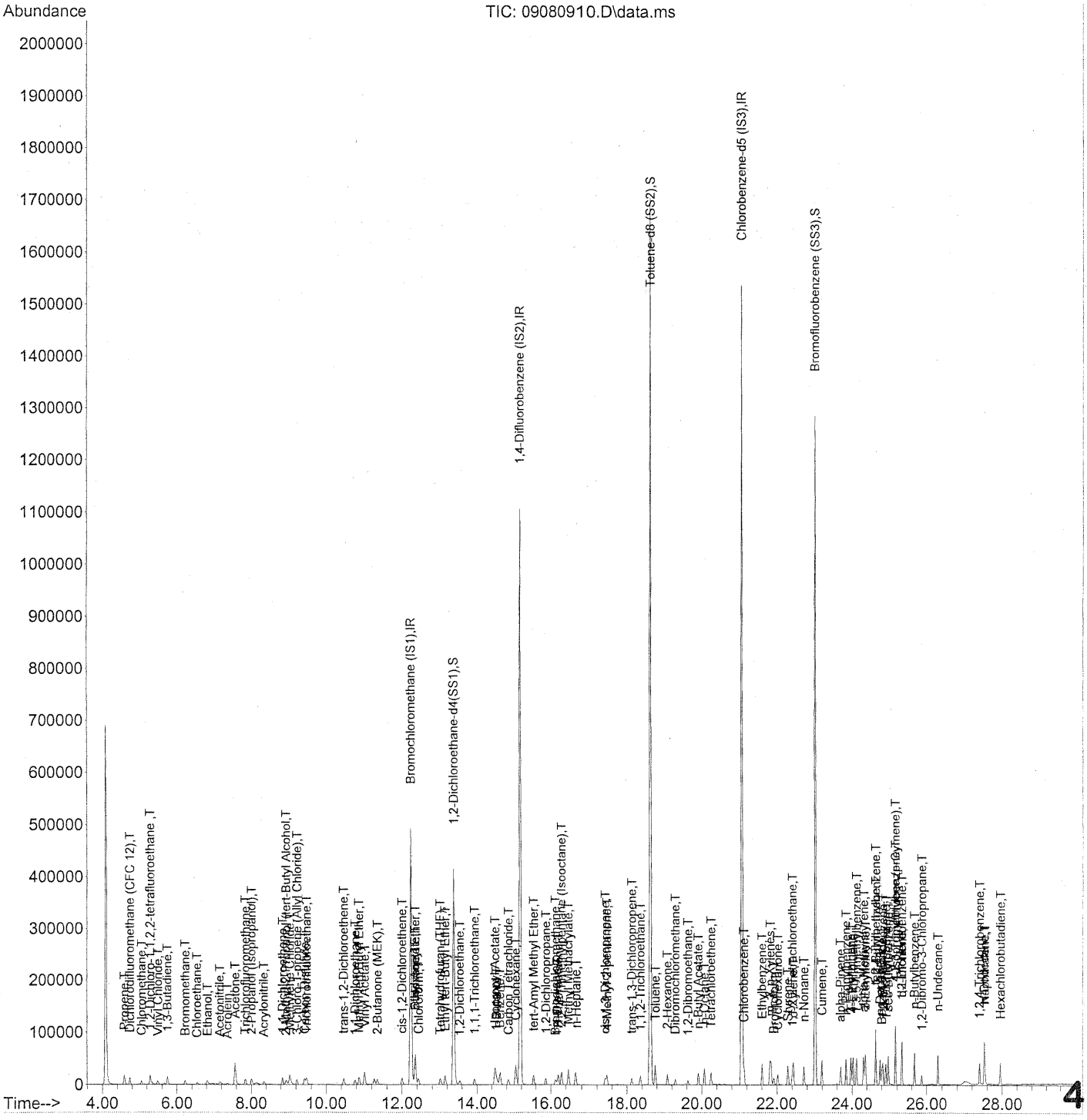
SP → IC
LH 9/9/09

470

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:20:02 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:20:02 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	310542	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.17	114	1474147	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.06	82	632618	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	422206	21.432	ng		-0.01
Spiked Amount 25.000			Recovery =	85.72%			
57) Toluene-d8 (SS2)	18.63	98	1591987	26.745	ng		-0.02
Spiked Amount 25.000			Recovery =	106.96%			
73) Bromofluorobenzene (SS3)	23.02	174	548908	26.254	ng		0.00
Spiked Amount 25.000			Recovery =	105.00%			
Target Compounds							Qvalue
2) Propene	4.58	42	7541	0.461	ng		98
3) Dichlorodifluoromethan...	4.74	85	15452	0.529	ng		99
4) Chloromethane	5.05	50	11998	0.491	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.28	135	9328	0.588	ng		98
6) Vinyl Chloride	5.48	62	11447	0.481	ng		99
7) 1,3-Butadiene	5.74	54	9614	0.588	ng		95
8) Bromomethane	6.22	94	7284	0.522	ng		99
9) Chloroethane	6.54	64	5396	0.473	ng		100
10) Ethanol	6.82	45	26351m	2.392	ng		
11) Acetonitrile	7.16	41	13948	0.493	ng		96
12) Acrolein	7.36	56	3707	0.457	ng		98
13) Acetone	7.57	58	26648	2.258	ng		92
14) Trichlorofluoromethane	7.84	101	13558	0.526	ng		100
15) 2-Propanol (Isopropanol)	8.01	45	37602m	1.012	ng		
16) Acrylonitrile	8.33	53	9892m	0.538	ng		
17) 1,1-Dichloroethene	8.85	96	8050	0.569	ng	#	85
18) 2-Methyl-2-Propanol (t...	8.94	59	40449m	1.085	ng		
19) Methylene Chloride	9.04	84	8337	0.525	ng		83
20) 3-Chloro-1-propene (Al...	9.23	41	9950	0.493	ng		95
21) Trichlorotrifluoroethane	9.48	151	6592	0.544	ng		85
22) Carbon Disulfide	9.43	76	30939	0.540	ng		99
23) trans-1,2-Dichloroethene	10.46	61	10192	0.497	ng		87
24) 1,1-Dichloroethane	10.76	63	13524	0.514	ng		99
25) Methyl tert-Butyl Ether	10.87	73	21503	0.504	ng		98
26) Vinyl Acetate	11.02	86	5501	1.915	ng	#	76
27) 2-Butanone (MEK)	11.36	72	5413	0.576	ng	#	83
28) cis-1,2-Dichloroethene	12.00	61	10822	0.532	ng		88
29) Diisopropyl Ether	12.35	87	6375	0.533	ng	#	56
30) Ethyl Acetate	12.35	61	5455	1.078	ng		97
31) n-Hexane	12.36	57	11180	0.487	ng		94

472

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:20:02 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.44	83	13766	0.546	ng		97
34) Tetrahydrofuran (THF)	13.02	72	4834	0.519	ng	#	86
35) Ethyl tert-Butyl Ether	13.15	87	8840	0.488	ng	#	85
36) 1,2-Dichloroethane	13.53	62	9305	0.513	ng		100
38) 1,1,1-Trichloroethane	13.93	97	11243	0.535	ng		96
39) Isopropyl Acetate	14.49	61	10004	1.069	ng		94
40) 1-Butanol	14.52	56	15034	1.119	ng		79
41) Benzene	14.62	78	32236	0.544	ng		99
42) Carbon Tetrachloride	14.85	117	9510	0.550	ng		99
43) Cyclohexane	15.05	84	23148	1.049	ng		91
44) tert-Amyl Methyl Ether	15.54	73	22121	0.523	ng		96
45) 1,2-Dichloropropane	15.86	63	7385	0.503	ng		97
46) Bromodichloromethane	16.12	83	9863	0.546	ng		99
47) Trichloroethene	16.20	130	9577	0.556	ng		99
48) 1,4-Dioxane	16.17	88	6833	0.584	ng		95
49) 2,2,4-Trimethylpentane...	16.29	57	32486	0.511	ng		98
50) Methyl Methacrylate	16.48	100	7389	1.292	ng	#	75
51) n-Heptane	16.66	71	8214	0.537	ng		94
52) cis-1,3-Dichloropropene	17.42	75	11440	0.520	ng		99
53) 4-Methyl-2-pentanone	17.46	58	7528	0.604	ng		92
54) trans-1,3-Dichloropropene	18.13	75	11504	0.598	ng		97
55) 1,1,2-Trichloroethane	18.36	97	8145	0.595	ng		96
58) Toluene	18.76	91	37291	0.648	ng		100
59) 2-Hexanone	19.08	43	18184	0.601	ng		96
60) Dibromochloromethane	19.29	129	9533	0.707	ng		99
61) 1,2-Dibromoethane	19.63	107	9251	0.656	ng		96
62) n-Butyl Acetate	19.91	43	20279	0.587	ng		96
63) n-Octane	20.07	57	6946	0.582	ng		89
64) Tetrachloroethene	20.25	166	10614	0.656	ng		98
65) Chlorobenzene	21.12	112	24622	0.666	ng		98
66) Ethylbenzene	21.60	91	39733	0.623	ng		96
67) m- & p-Xylenes	21.82	91	60627	1.217	ng		95
68) Bromoform	21.92	173	8220	0.652	ng		99
69) Styrene	22.29	104	25060	0.657	ng		95
70) o-Xylene	22.44	91	31382	0.621	ng		94
71) n-Nonane	22.71	43	15597	0.559	ng		92
72) 1,1,2,2-Tetrachloroethane	22.41	83	13651	0.610	ng		100
74) Cumene	23.20	105	41555	0.625	ng		97
75) alpha-Pinene	23.70	93	18803	0.579	ng		99
76) n-Propylbenzene	23.84	91	48768	0.603	ng		96
77) 3-Ethyltoluene	23.97	105	41779	0.669	ng		99
78) 4-Ethyltoluene	24.03	105	41282	0.659	ng		97
79) 1,3,5-Trimethylbenzene	24.12	105	34053	0.654	ng		94

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:20:02 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

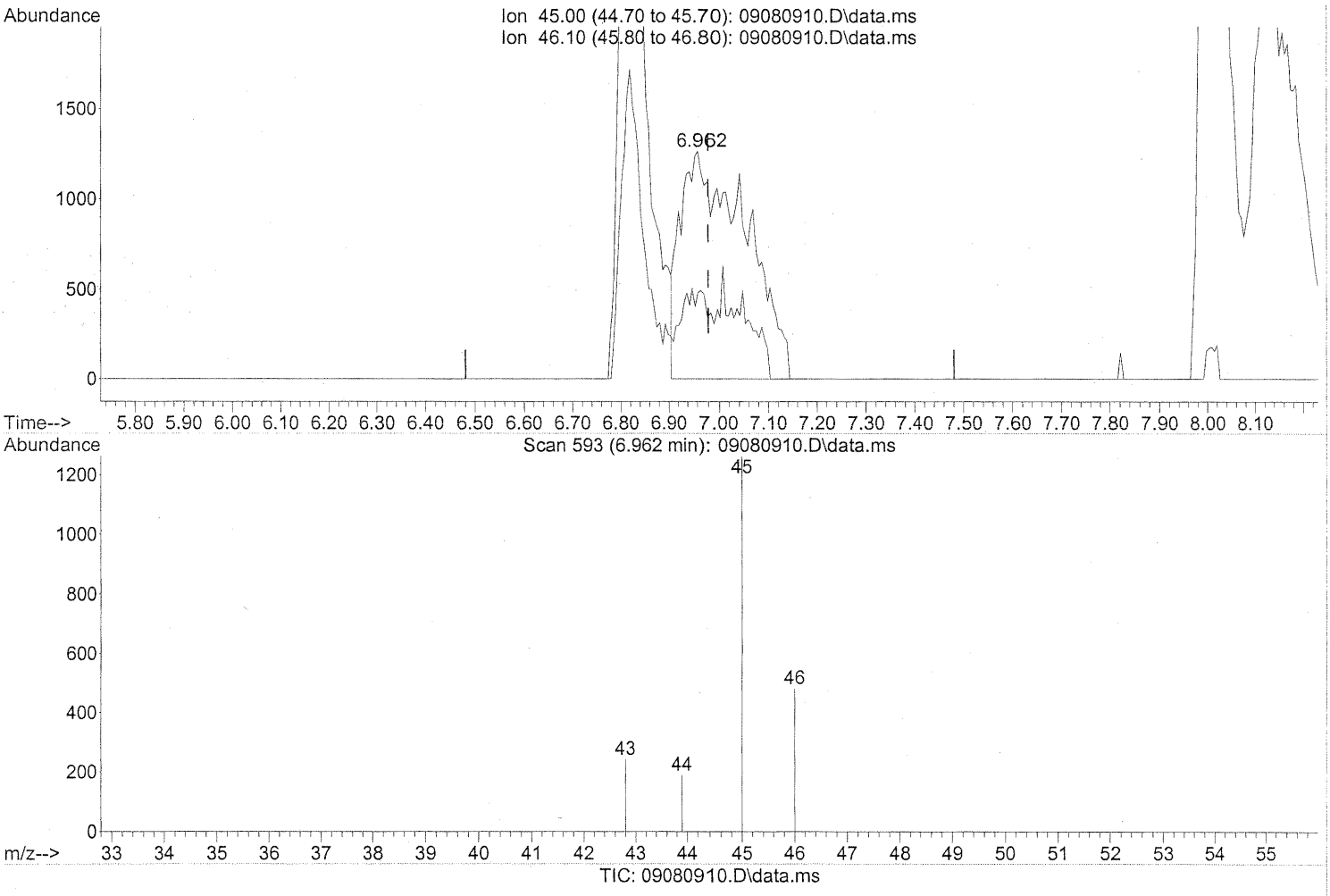
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.31	118	19115	0.671	ng	95
81) 2-Ethyltoluene	24.36	105	42123	0.633	ng	99
82) 1,2,4-Trimethylbenzene	24.63	105	34945	0.645	ng	98
83) n-Decane	24.75	57	18721	0.625	ng	95
84) Benzyl Chloride	24.80	91	26220	0.599	ng	97
85) 1,3-Dichlorobenzene	24.83	146	21328	0.709	ng	100
86) 1,4-Dichlorobenzene	24.91	146	21565	0.670	ng	100
87) sec-Butylbenzene	24.97	105	47185	0.654	ng	97
88) 4-Isopropyltoluene (p-...	25.16	119	44578	0.646	ng	97
89) 1,2,3-Trimethylbenzene	25.16	105	36196	0.667	ng	98
90) 1,2-Dichlorobenzene	25.33	146	19709	0.662	ng	100
91) d-Limonene	25.34	68	13197	0.624	ng	93
92) 1,2-Dibromo-3-Chloropr...	25.87	157	7126	0.741	ng	89
93) n-Undecane	26.29	57	21049	0.674	ng	94
94) 1,2,4-Trichlorobenzene	27.39	180	16100	0.756	ng	99
95) Naphthalene	27.53	128	49073	0.660	ng	99
96) n-Dodecane	27.52	57	20173	0.583	ng	93
97) Hexachlorobutadiene	27.96	225	10059	0.740	ng	99
98) Cyclohexanone	22.02	55	11653	0.546	ng	93
99) tert-Butylbenzene	24.63	119	35222	0.654	ng	98
100) n-Butylbenzene	25.67	91	38091	0.674	ng	97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.962min (-0.019) 1.05ng

response 11545

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	16.60#
0.00	0.00	0.00
0.00	0.00	0.00

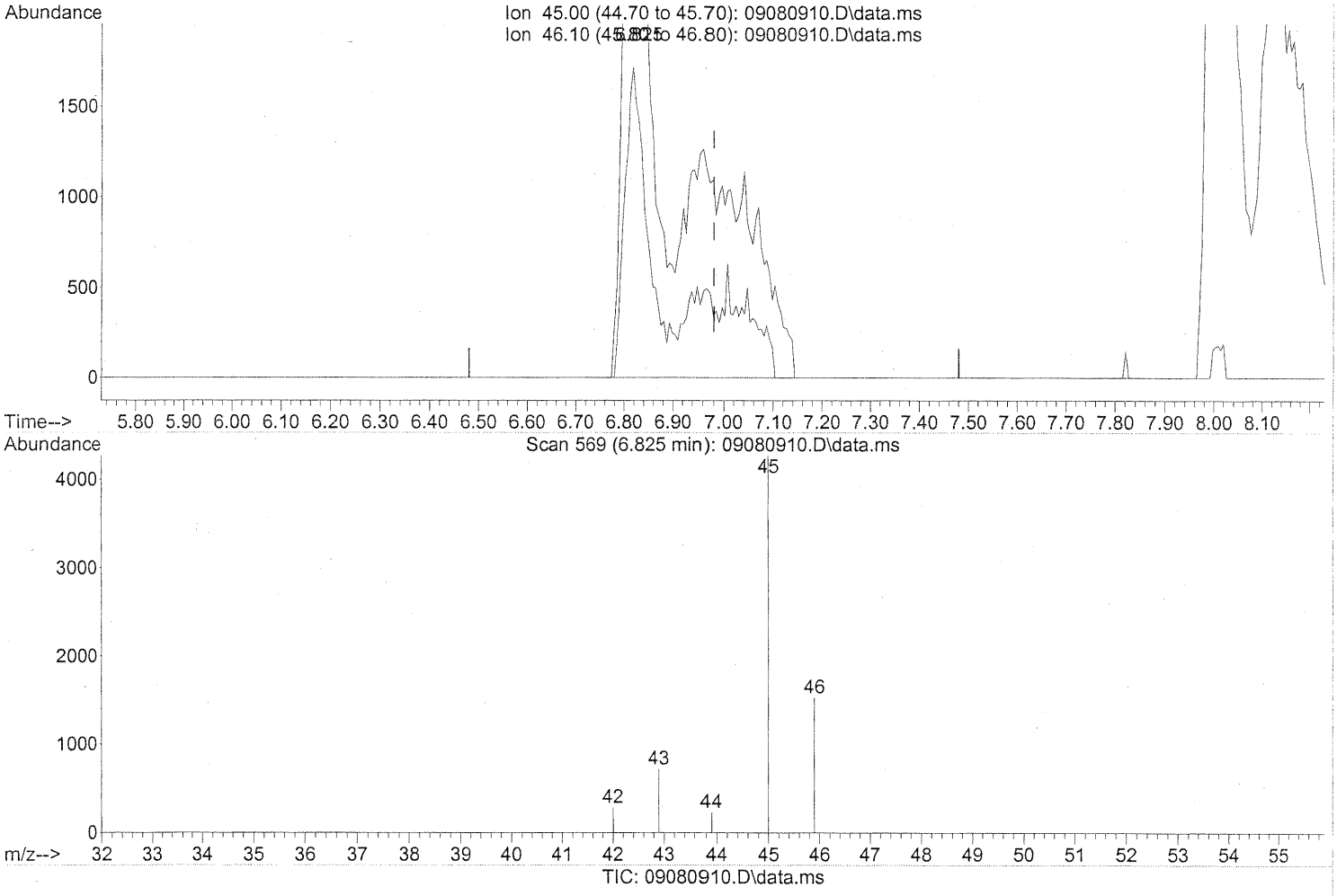
SP

475

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.825min (-0.155) 2.39ng m

response 26351

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	7.27#
0.00	0.00	0.00
0.00	0.00	0.00

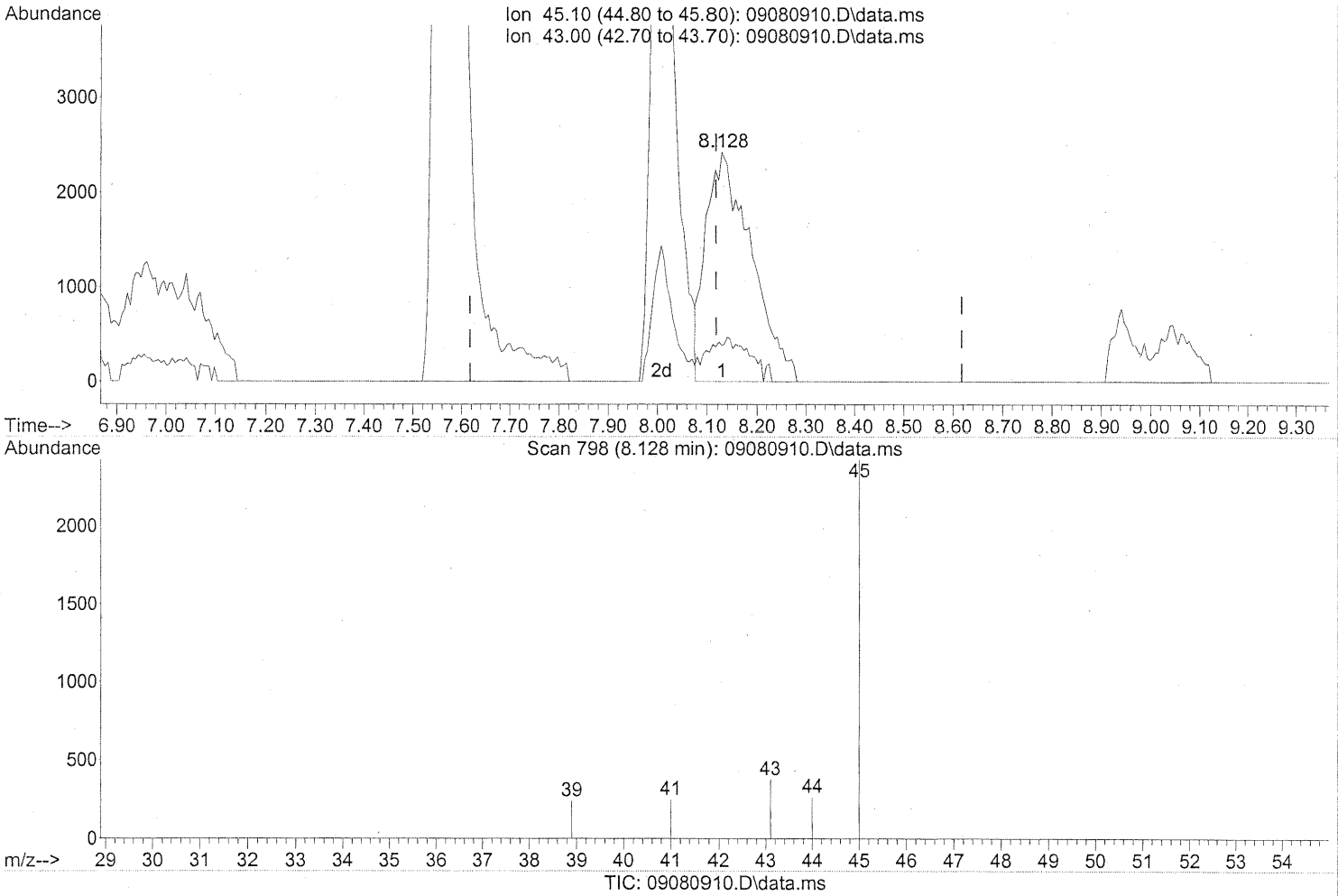
SP → IC
LH 9/9/09

476

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



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

8.128min (+0.011) 0.41ng

response 15172

SP

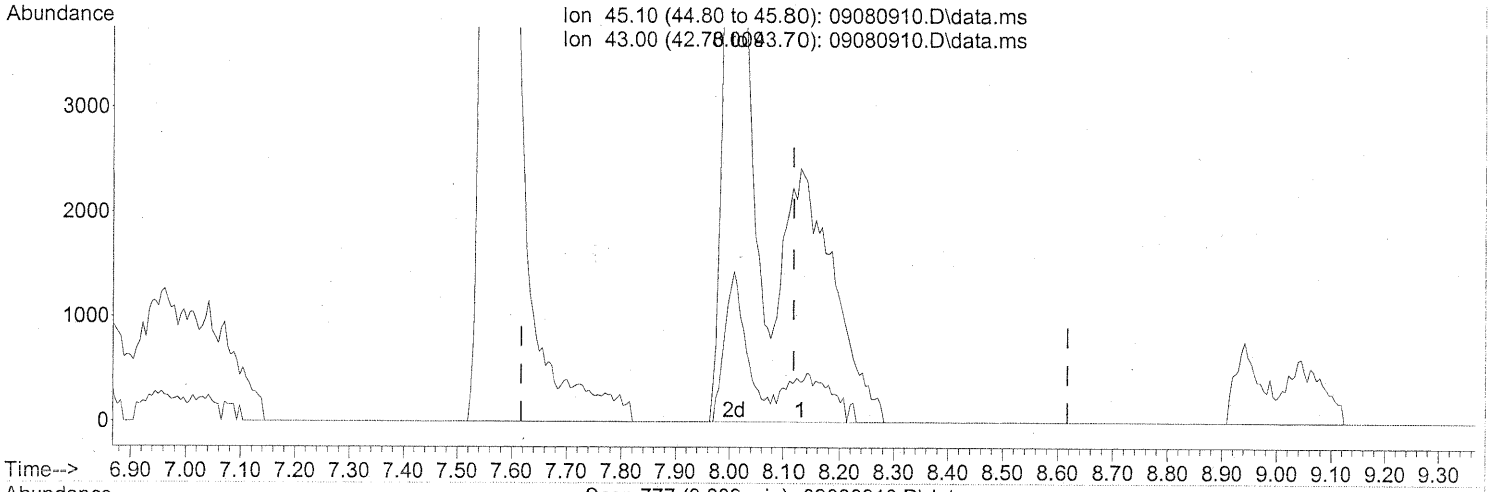
Ion	Exp%	Act%
45.10	100	100
43.00	17.40	16.16
0.00	0.00	0.00
0.00	0.00	0.00

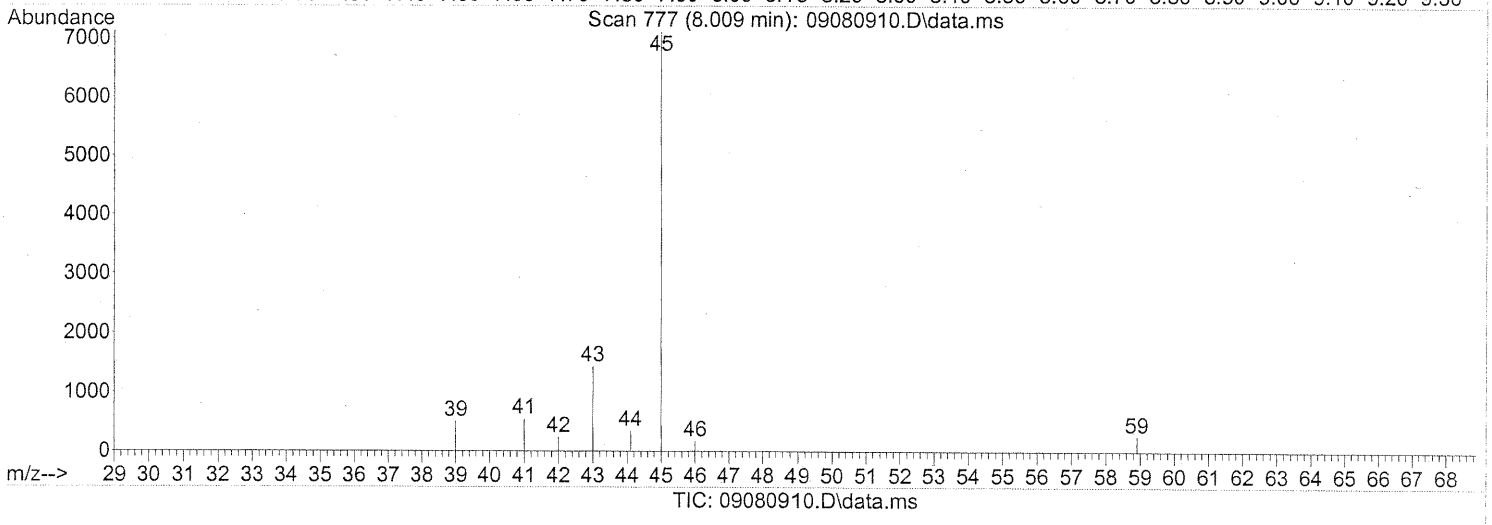
477

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080910.D\data.ms

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

8.009min (-0.109) 1.01ng m

response 37602

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	6.52
0.00	0.00	0.00
0.00	0.00	0.00

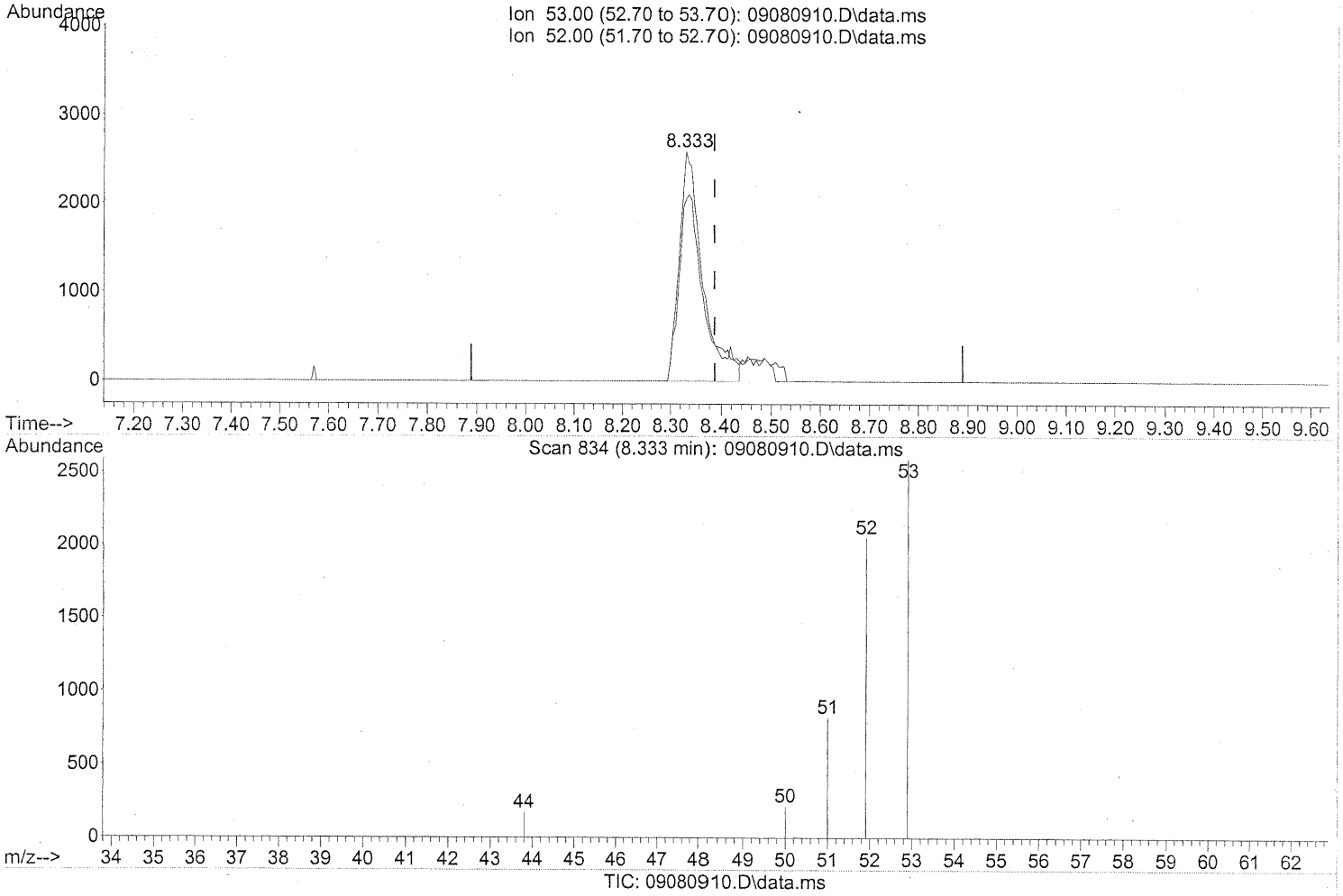
SP → IC
MM 9/9/09

478

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.333min (-0.056) 0.47ng

response 8684

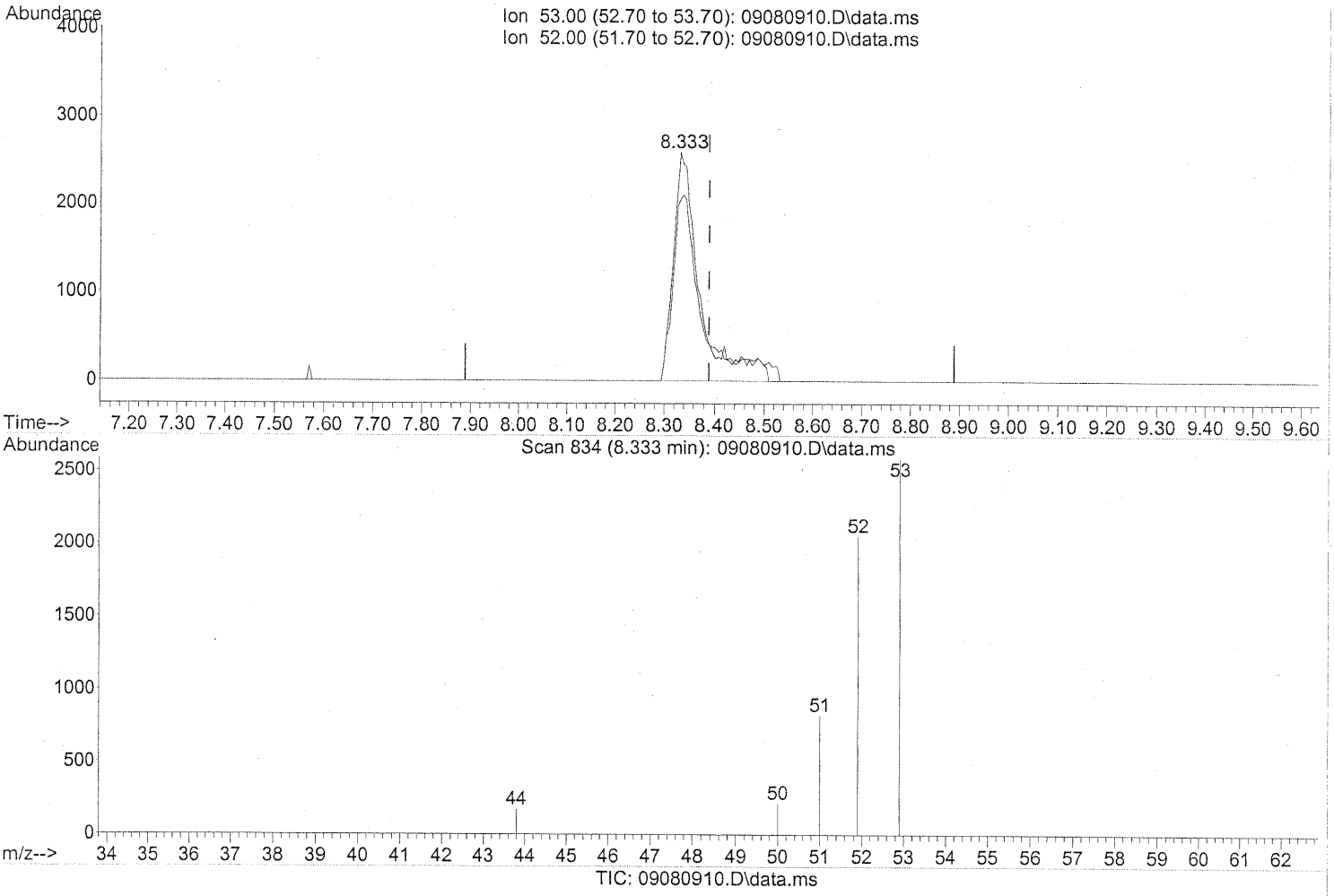
Ion	Exp%	Act%
53.00	100	100
52.00	84.30	95.43
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.333min (-0.056) 0.54ng m

response 9892

Ion	Exp%	Act%
53.00	100	100
52.00	84.30	83.77
0.00	0.00	0.00
0.00	0.00	0.00

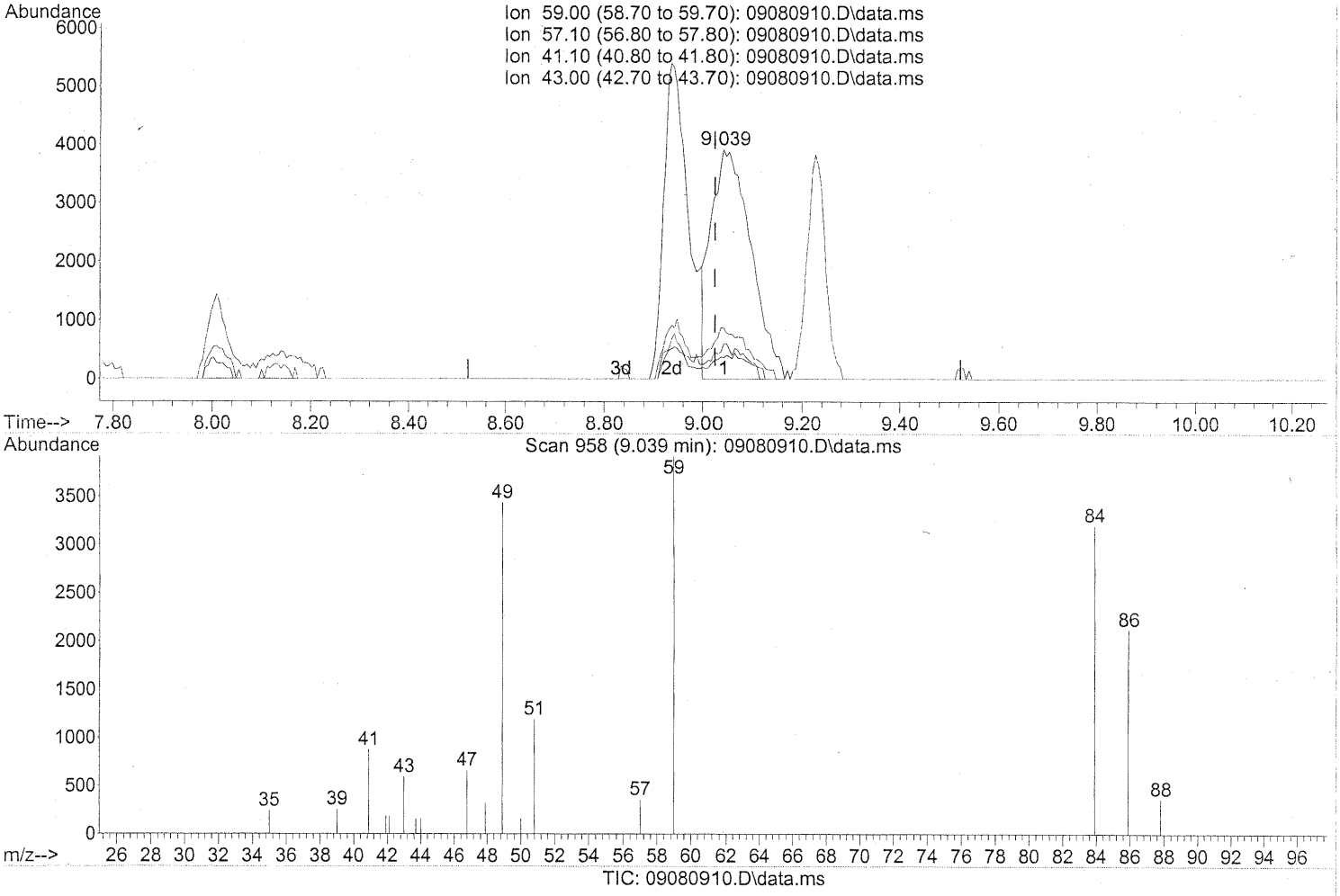
PT → IC
MM 9/9/09

480

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(18) 2-Methyl-2-Propanol (tert-Butyl Alcohol (T)

9.039min (+0.016) 0.58ng

response 21607

SP

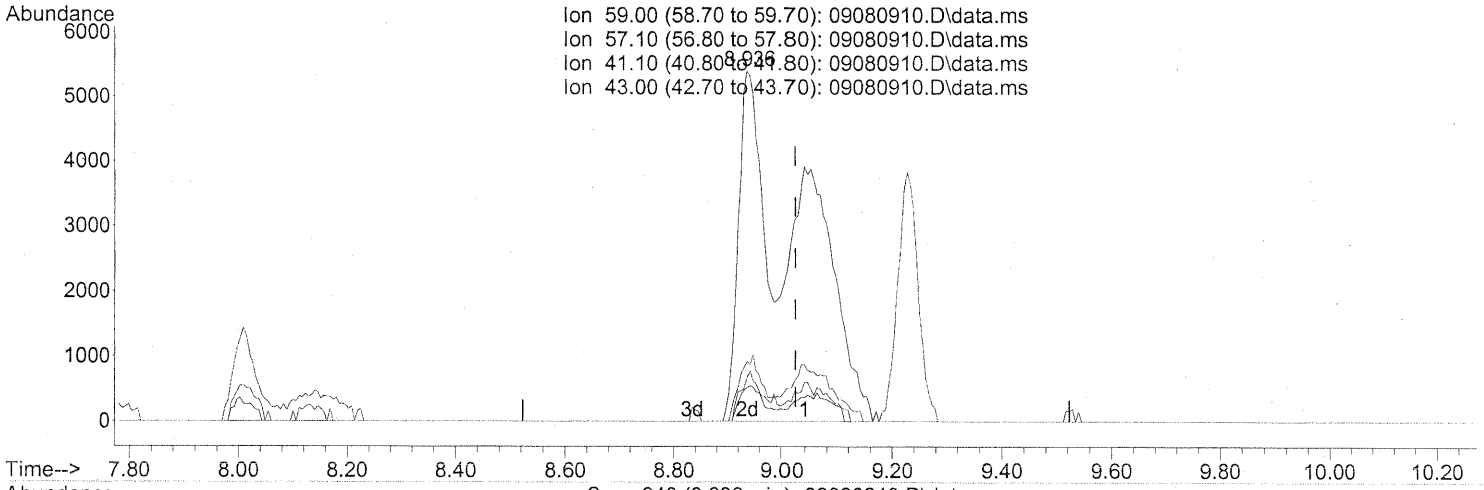
Ion	Exp%	Act%
59.00	100	100
57.10	9.50	0.00
41.10	19.50	20.54
43.00	12.90	12.69

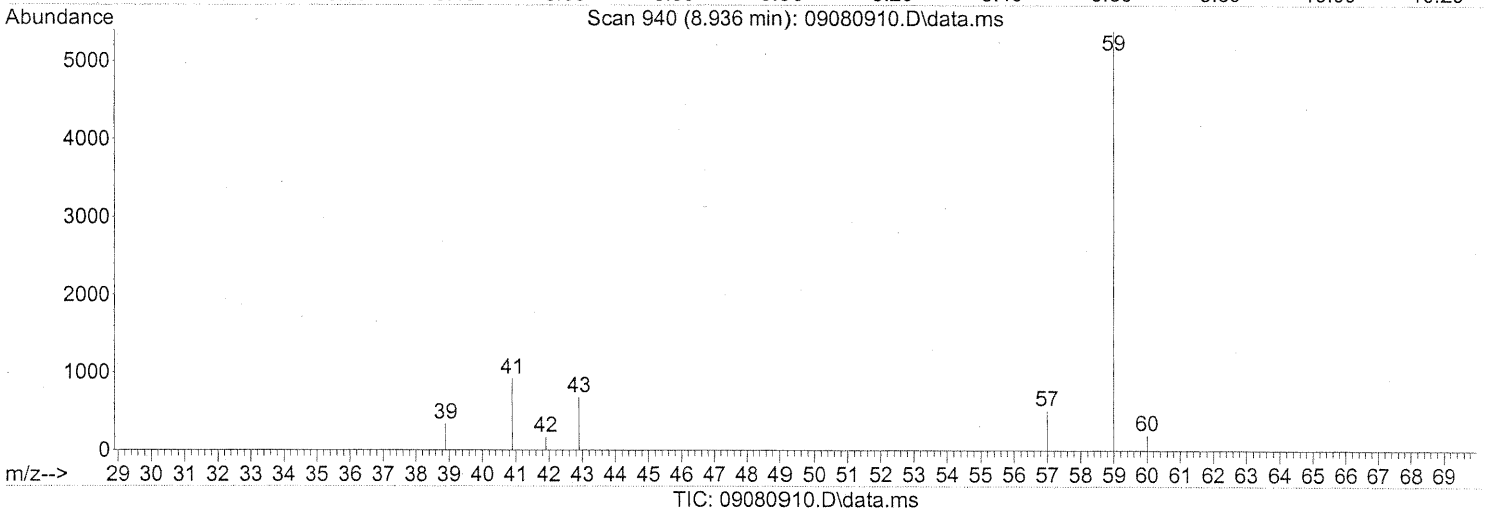
481

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080910.D
Acq On : 8 Sep 2009 19:16
Operator : LH
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:57 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080910.D\data.ms

(18) 2-Methyl-2-Propanol (tert-Butyl Alcohol (T)

8.936min (-0.087) 1.09ng m

response 40449

Ion	Exp%	Act%
59.00	100	100
57.10	9.50	0.00
41.10	19.50	10.97
43.00	12.90	6.78

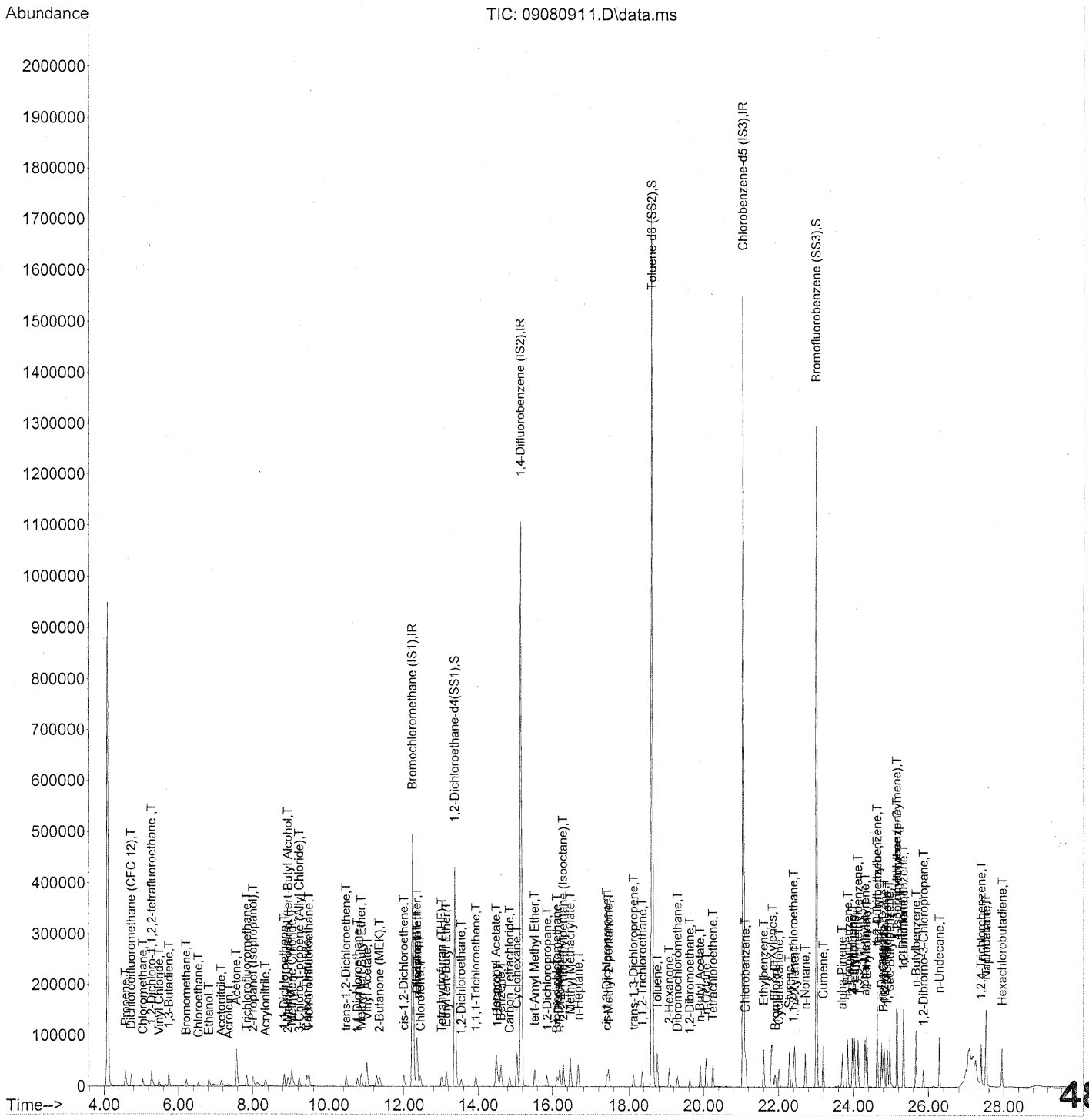
SP ——→ IC
VK 9/9/09

482

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:21:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:21:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	312270	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.17	114	1487535	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.06	82	639678	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	429390	21.676	ng		-0.01
Spiked Amount 25.000			Recovery =	86.72%			
57) Toluene-d8 (SS2)	18.63	98	1602862	26.630	ng		-0.02
Spiked Amount 25.000			Recovery =	106.52%			
73) Bromofluorobenzene (SS3)	23.02	174	558541	26.420	ng		0.00
Spiked Amount 25.000			Recovery =	105.68%			
Target Compounds							Qvalue
2) Propene	4.58	42	13633	0.829	ng		98
3) Dichlorodifluoromethan...	4.73	85	27218	0.927	ng		99
4) Chloromethane	5.04	50	20882	0.850	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.28	135	16524	1.036	ng		99
6) Vinyl Chloride	5.48	62	20173	0.843	ng		100
7) 1,3-Butadiene	5.74	54	16547	1.006	ng		96
8) Bromomethane	6.21	94	13120	0.936	ng		100
9) Chloroethane	6.54	64	10017	0.873	ng		98
10) Ethanol	6.82	45	47339m	4.274	ng		
11) Acetonitrile	7.16	41	25511	0.897	ng		89
12) Acrolein	7.36	56	7002	0.859	ng		99
13) Acetone	7.56	58	48690	4.103	ng	#	84
14) Trichlorofluoromethane	7.84	101	25409	0.980	ng		99
15) 2-Propanol (Isopropanol)	8.01	45	68200m	1.826	ng		
16) Acrylonitrile	8.33	53	18749m	1.015	ng		
17) 1,1-Dichloroethene	8.83	96	14985	1.053	ng	#	81
18) 2-Methyl-2-Propanol (t...	8.94	59	71946m	1.919	ng		
19) Methylene Chloride	9.04	84	15174	0.951	ng		82
20) 3-Chloro-1-propene (Al...	9.23	41	18116	0.892	ng		93
21) Trichlorotrifluoroethane	9.48	151	11985	0.983	ng		87
22) Carbon Disulfide	9.43	76	54532	0.947	ng		100
23) trans-1,2-Dichloroethene	10.46	61	18940	0.918	ng		87
24) 1,1-Dichloroethane	10.76	63	24435	0.924	ng		100
25) Methyl tert-Butyl Ether	10.87	73	37727	0.880	ng		97
26) Vinyl Acetate	11.02	86	10779	3.731	ng	#	68
27) 2-Butanone (MEK)	11.35	72	9862	1.044	ng	#	80
28) cis-1,2-Dichloroethene	12.00	61	19441	0.950	ng		85
29) Diisopropyl Ether	12.35	87	11374	0.945	ng	#	56
30) Ethyl Acetate	12.36	61	9904	1.946	ng		92
31) n-Hexane	12.36	57	19272	0.835	ng		94

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:21:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.44	83	24281	0.958	ng		99
34) Tetrahydrofuran (THF)	13.02	72	8742	0.934	ng	#	88
35) Ethyl tert-Butyl Ether	13.14	87	16283	0.895	ng	#	81
36) 1,2-Dichloroethane	13.54	62	16722	0.917	ng		100
38) 1,1,1-Trichloroethane	13.93	97	20178	0.952	ng		95
39) Isopropyl Acetate	14.49	61	17665	1.870	ng		99
40) 1-Butanol	14.52	56	28283	2.086	ng	#	8
41) Benzene	14.62	78	57592	0.963	ng		100
42) Carbon Tetrachloride	14.85	117	17804	1.020	ng		98
43) Cyclohexane	15.05	84	42446	1.907	ng		89
44) tert-Amyl Methyl Ether	15.53	73	39744	0.931	ng		96
45) 1,2-Dichloropropane	15.86	63	13770	0.929	ng		100
46) Bromodichloromethane	16.12	83	18677	1.024	ng		100
47) Trichloroethene	16.20	130	17103	0.984	ng		99
48) 1,4-Dioxane	16.16	88	13112	1.111	ng		88
49) 2,2,4-Trimethylpentane...	16.29	57	58146	0.907	ng		97
50) Methyl Methacrylate	16.48	100	13575	2.351	ng	#	77
51) n-Heptane	16.66	71	15080	0.977	ng		94
52) cis-1,3-Dichloropropene	17.41	75	21254	0.958	ng		99
53) 4-Methyl-2-pentanone	17.46	58	13372	1.064	ng		87
54) trans-1,3-Dichloropropene	18.13	75	20966	1.081	ng		98
55) 1,1,2-Trichloroethane	18.37	97	14728	1.066	ng		93
58) Toluene	18.76	91	67171	1.154	ng		99
59) 2-Hexanone	19.08	43	32769	1.071	ng		97
60) Dibromochloromethane	19.30	129	17284	1.268	ng		99
61) 1,2-Dibromoethane	19.63	107	16482	1.155	ng		100
62) n-Butyl Acetate	19.91	43	36828	1.054	ng		95
63) n-Octane	20.07	57	12522	1.037	ng		91
64) Tetrachloroethene	20.25	166	19349	1.182	ng		99
65) Chlorobenzene	21.12	112	45066	1.205	ng		99
66) Ethylbenzene	21.60	91	72787	1.128	ng		98
67) m- & p-Xylenes	21.84	91	111617	2.216	ng		95
68) Bromoform	21.92	173	15349	1.203	ng		99
69) Styrene	22.29	104	46217	1.199	ng		96
70) o-Xylene	22.44	91	57605	1.128	ng		95
71) n-Nonane	22.71	43	28661	1.016	ng		94
72) 1,1,2,2-Tetrachloroethane	22.40	83	25060	1.108	ng		99
74) Cumene	23.20	105	76513	1.138	ng		98
75) alpha-Pinene	23.70	93	35276	1.074	ng		99
76) n-Propylbenzene	23.85	91	89977	1.100	ng		96
77) 3-Ethyltoluene	23.97	105	76864	1.217	ng		98
78) 4-Ethyltoluene	24.03	105	75053	1.185	ng		99
79) 1,3,5-Trimethylbenzene	24.12	105	62677	1.190	ng		94

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:21:06 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

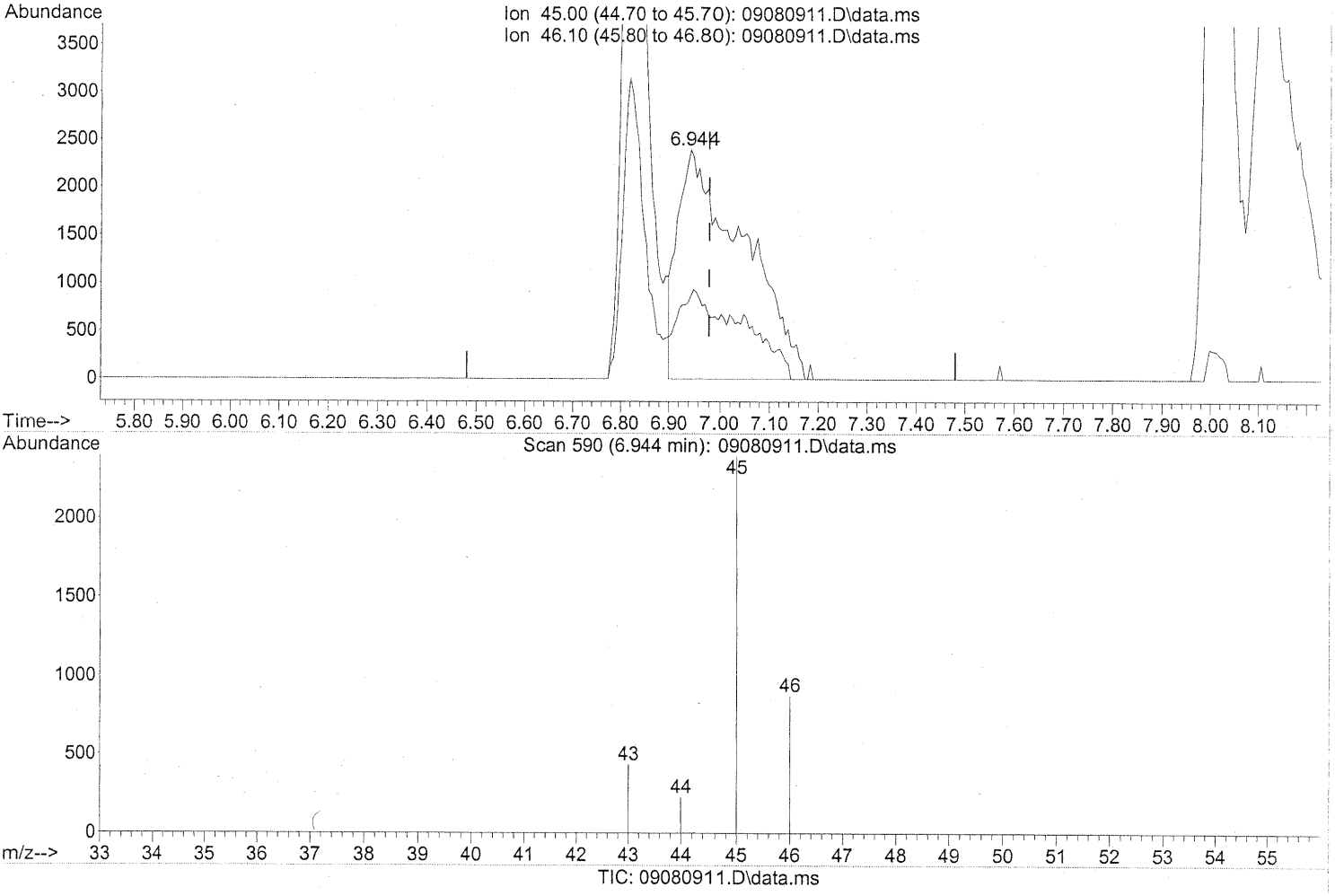
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.31	118	35507	1.233	ng	96
81) 2-Ethyltoluene	24.36	105	75713	1.125	ng	98
82) 1,2,4-Trimethylbenzene	24.63	105	63765	1.164	ng	97
83) n-Decane	24.75	57	33784	1.115	ng	96
84) Benzyl Chloride	24.80	91	49083	1.109	ng	95
85) 1,3-Dichlorobenzene	24.83	146	38477	1.265	ng	99
86) 1,4-Dichlorobenzene	24.91	146	39327	1.208	ng	100
87) sec-Butylbenzene	24.97	105	84690	1.161	ng	98
88) 4-Isopropyltoluene (p-...	25.16	119	80216	1.150	ng	97
89) 1,2,3-Trimethylbenzene	25.16	105	64107	1.169	ng	95
90) 1,2-Dichlorobenzene	25.33	146	36354	1.208	ng	100
91) d-Limonene	25.34	68	24394	1.140	ng	91
92) 1,2-Dibromo-3-Chloropr...	25.87	157	13354	1.373	ng	83
93) n-Undecane	26.28	57	36122	1.144	ng	95
94) 1,2,4-Trichlorobenzene	27.39	180	29551	1.373	ng	99
95) Naphthalene	27.53	128	90598	1.205	ng	100
96) n-Dodecane	27.52	57	38341	1.097	ng	90
97) Hexachlorobutadiene	27.96	225	18408	1.339	ng	100
98) Cyclohexanone	22.02	55	21072	0.976	ng	91
99) tert-Butylbenzene	24.63	119	64235	1.179	ng	99
100) n-Butylbenzene	25.67	91	68466	1.198	ng	98

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.944min (-0.036) 1.96ng

response 21721

SP

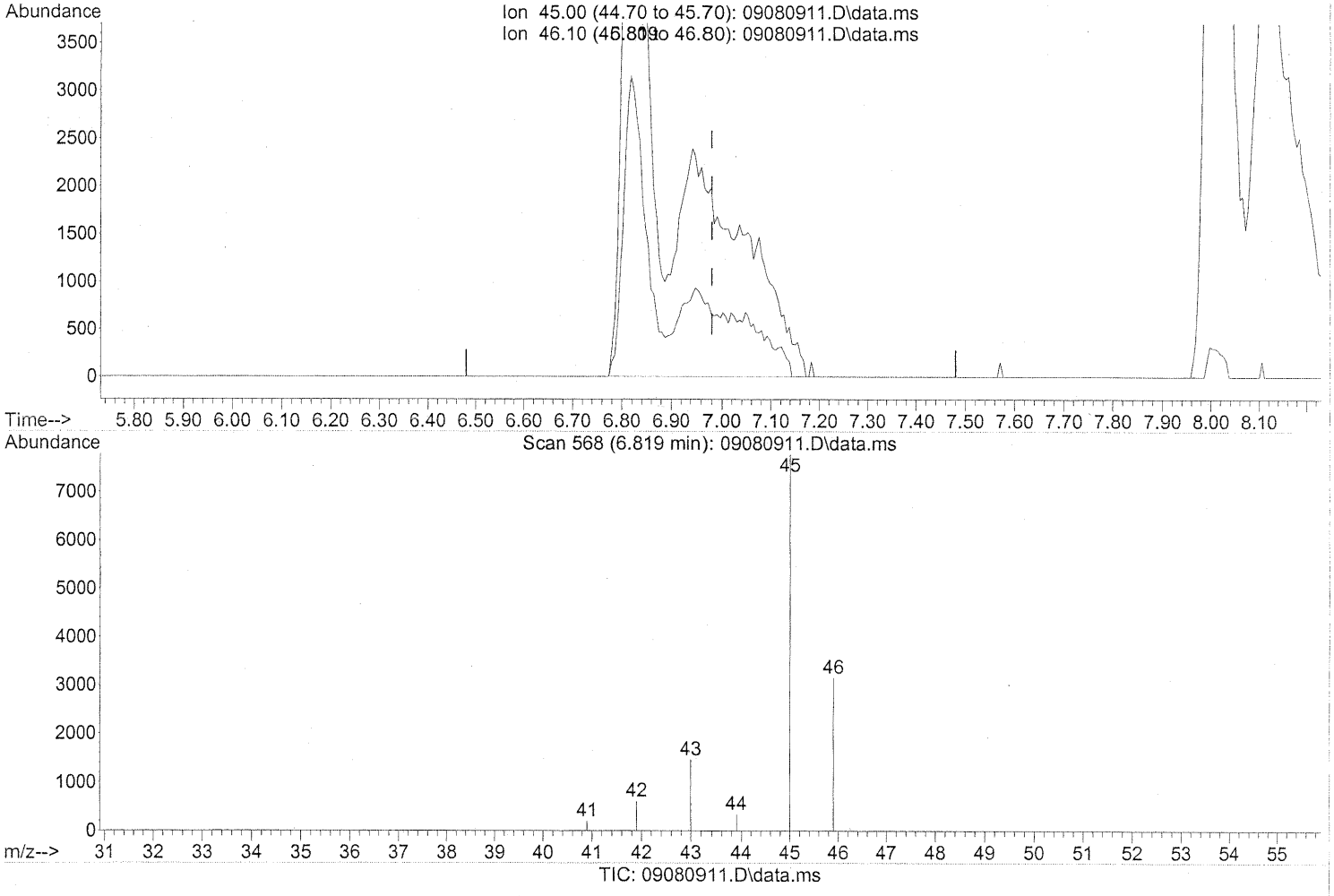
Ion	Exp%	Act%
45.00	100	100
46.10	38.80	38.06
0.00	0.00	0.00
0.00	0.00	0.00

487

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.819min (-0.161) 4.27ng m

response 47339

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	17.46#
0.00	0.00	0.00
0.00	0.00	0.00

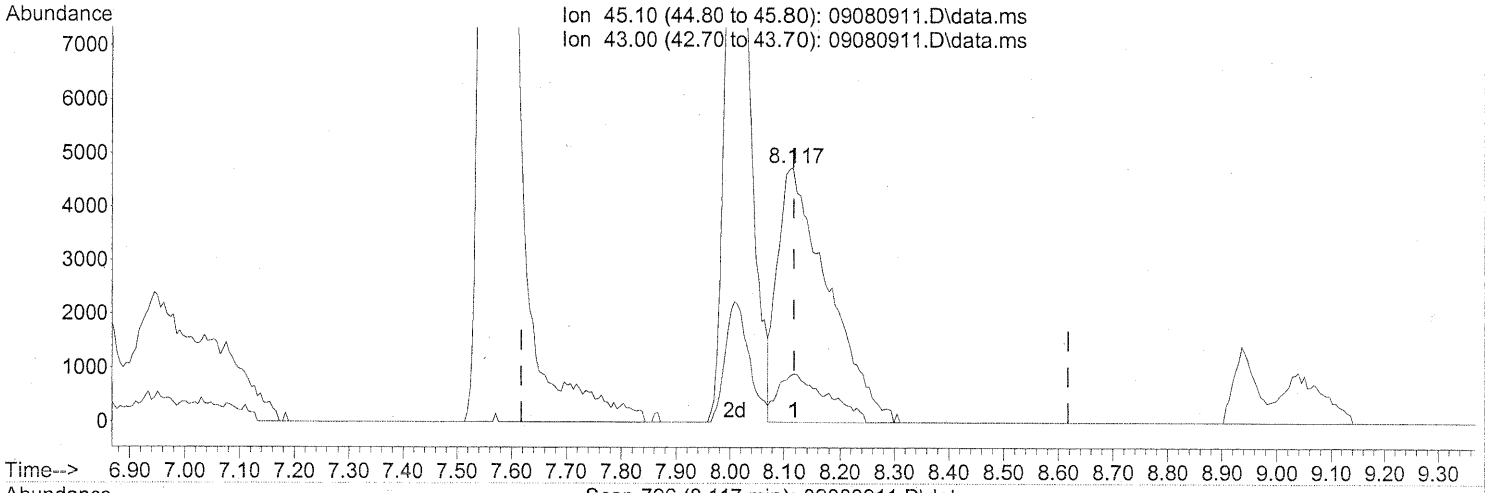
SP → IC
LH 9/9/09

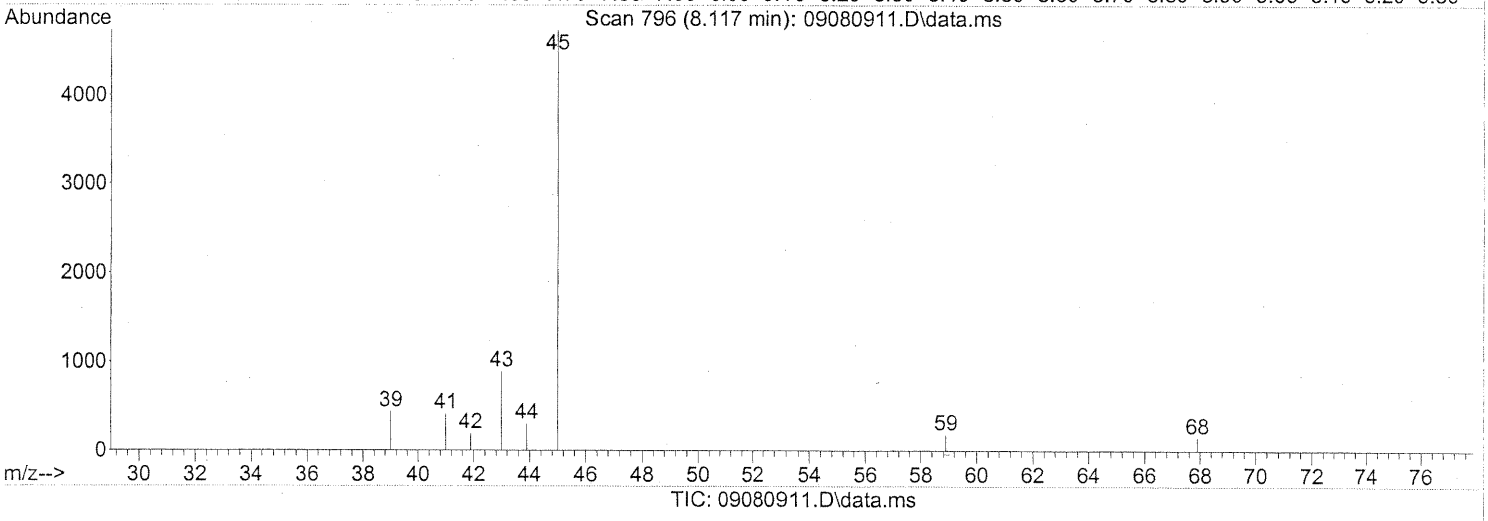
488

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration





TIC: 09080911.D\data.ms

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

8.117min (-0.001) 0.79ng

response 29383

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	18.54
0.00	0.00	0.00
0.00	0.00	0.00

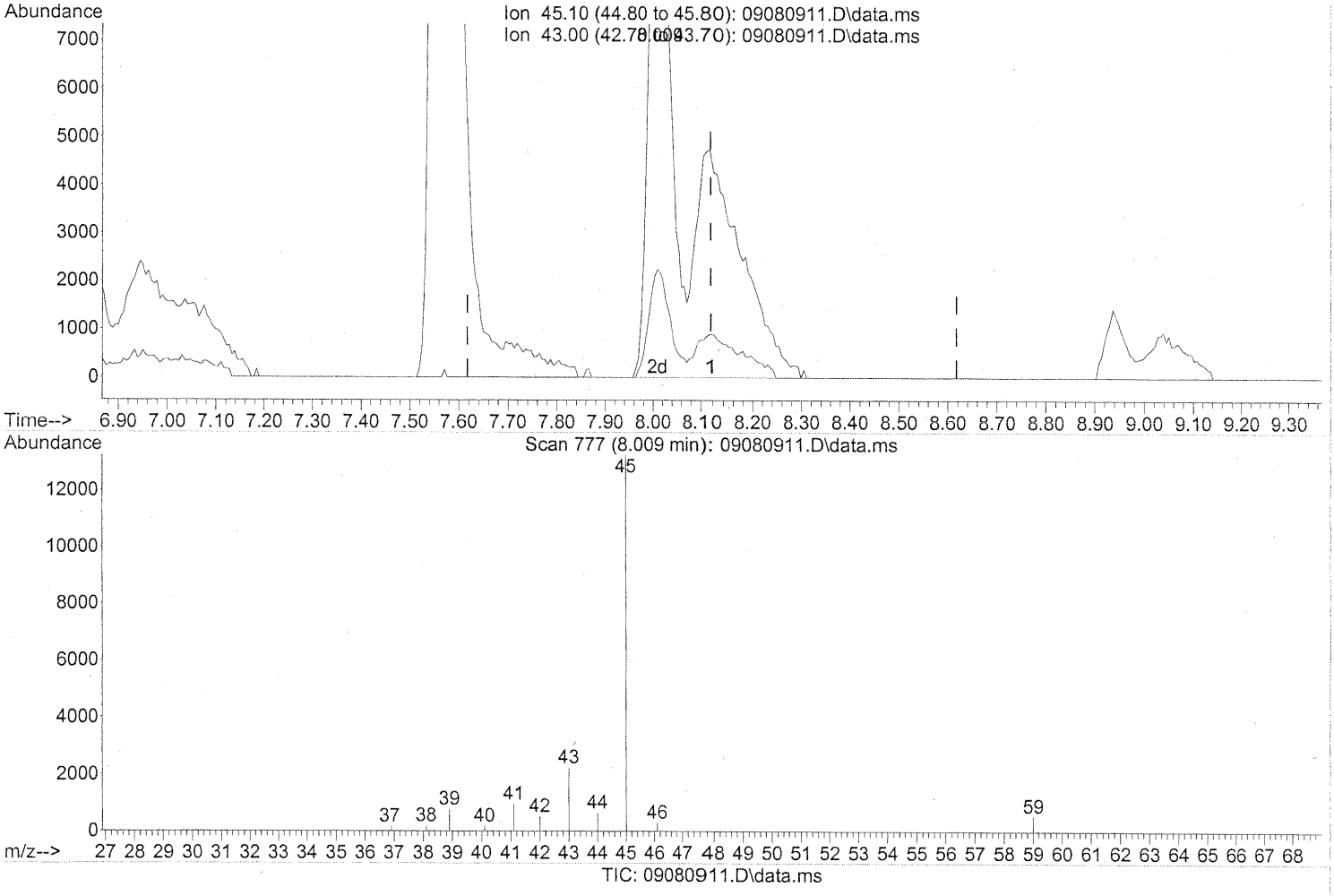
SP

489

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



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

8.009min (-0.109) 1.83ng m

response 68200

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	7.99
0.00	0.00	0.00
0.00	0.00	0.00

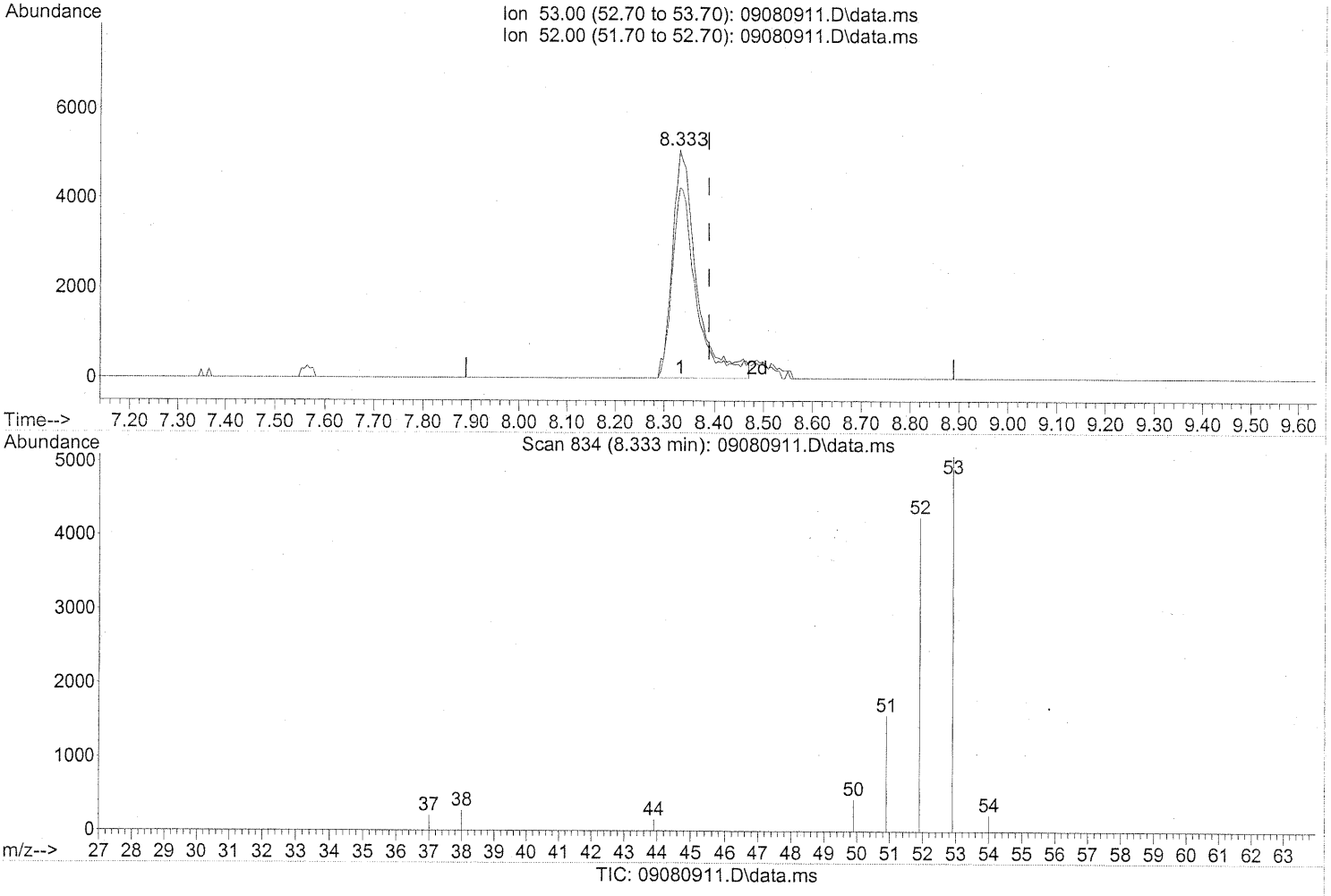
SP → IC
LH 9/9/09

490

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.333min (-0.056) 0.94ng

response 17317

PT

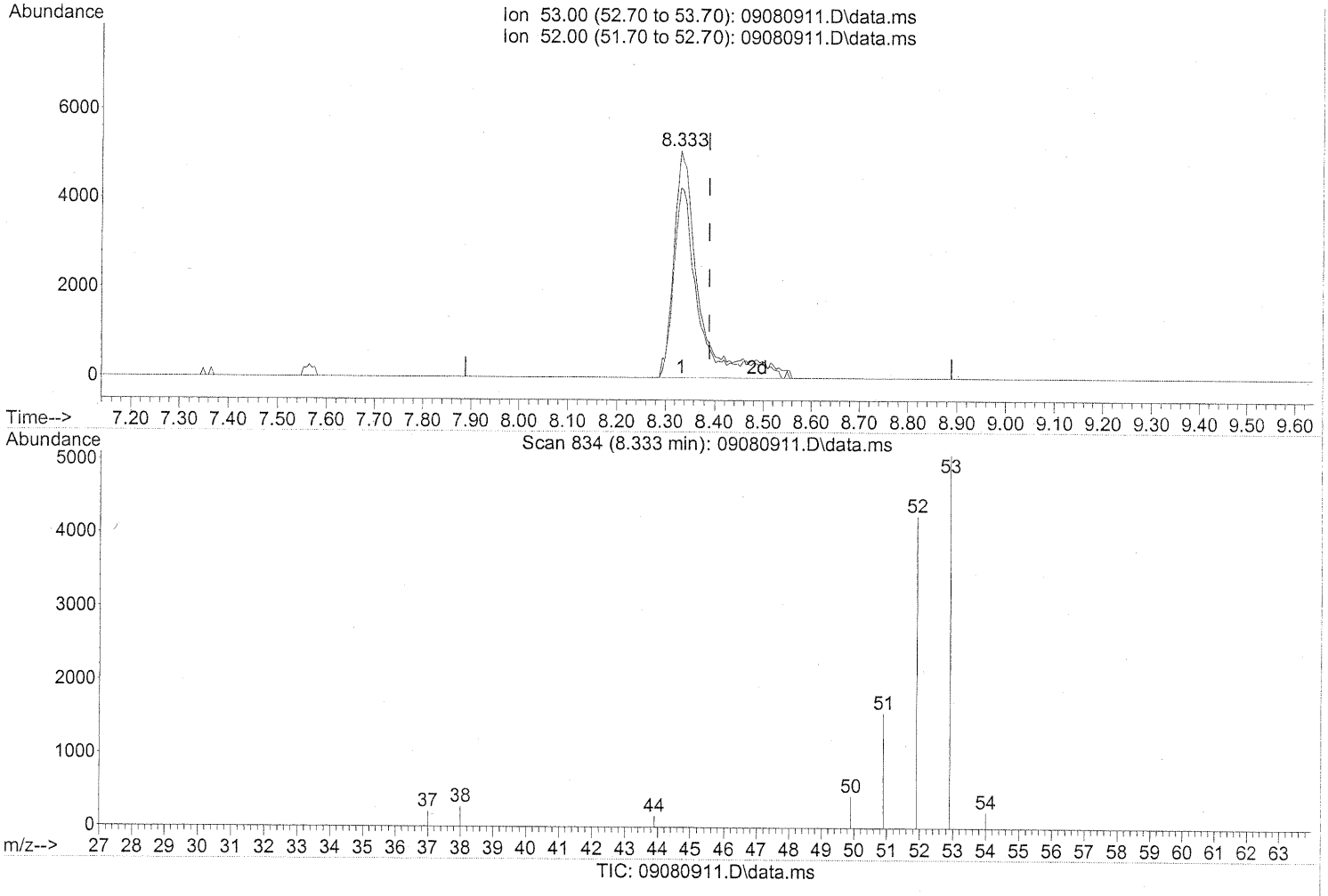
Ion	Exp%	Act%
53.00	100	100
52.00	84.30	80.95
0.00	0.00	0.00
0.00	0.00	0.00

491

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(16) Acrylonitrile (T)

8.333min (-0.056) 1.01ng m

response 18749

Ion	Exp%	Act%
53.00	100	100
52.00	84.30	74.77
0.00	0.00	0.00
0.00	0.00	0.00

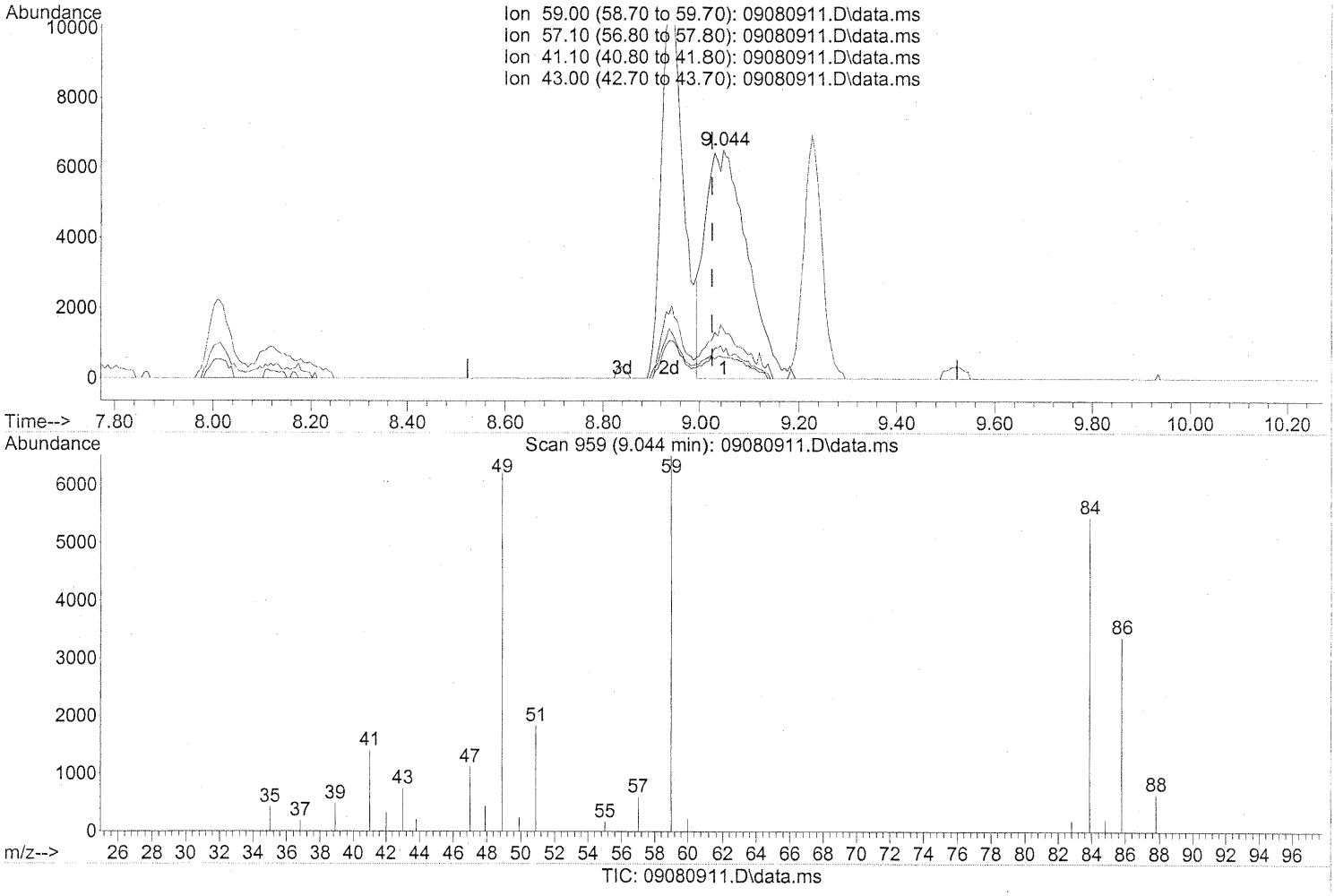
PT → IC
VM 9/9/09

492

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



(18) 2-Methyl-2-Propanol (tert-Butyl Alcohol (T)

9.044min (+0.022) 1.01ng

response 37784

SP

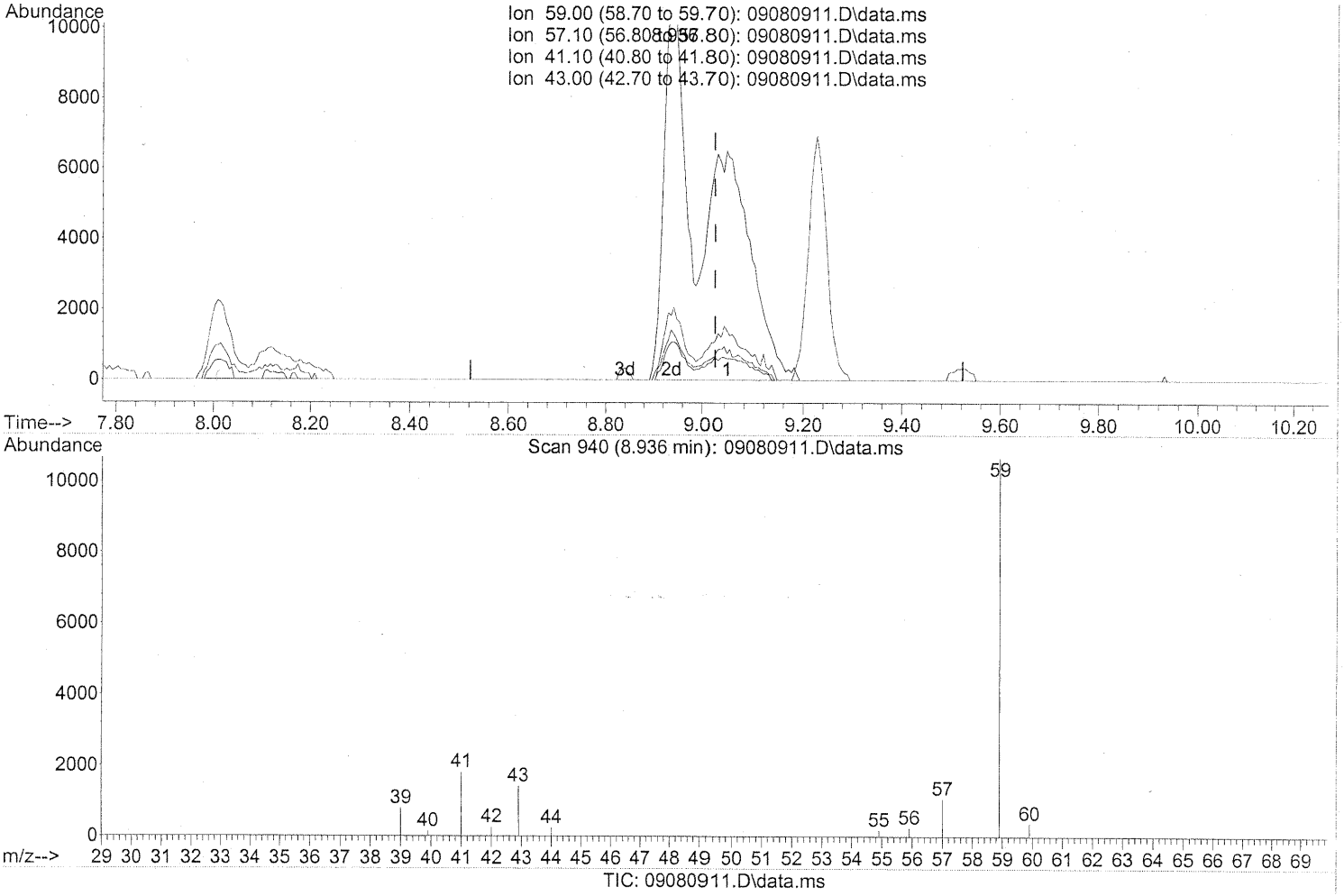
Ion	Exp%	Act%
59.00	100	100
57.10	9.50	9.73
41.10	19.50	20.32
43.00	12.90	12.47

493

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080911.D
Acq On : 8 Sep 2009 19:54
Operator : LH
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:15:59 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



TIC: 09080911.D\data.ms

(18) 2-Methyl-2-Propanol (tert-Butyl Alcohol (T)

8.936min (-0.087) 1.92ng m

response 71946

Ion	Exp%	Act%
59.00	100	100
57.10	9.50	5.11
41.10	19.50	10.67
43.00	12.90	6.55

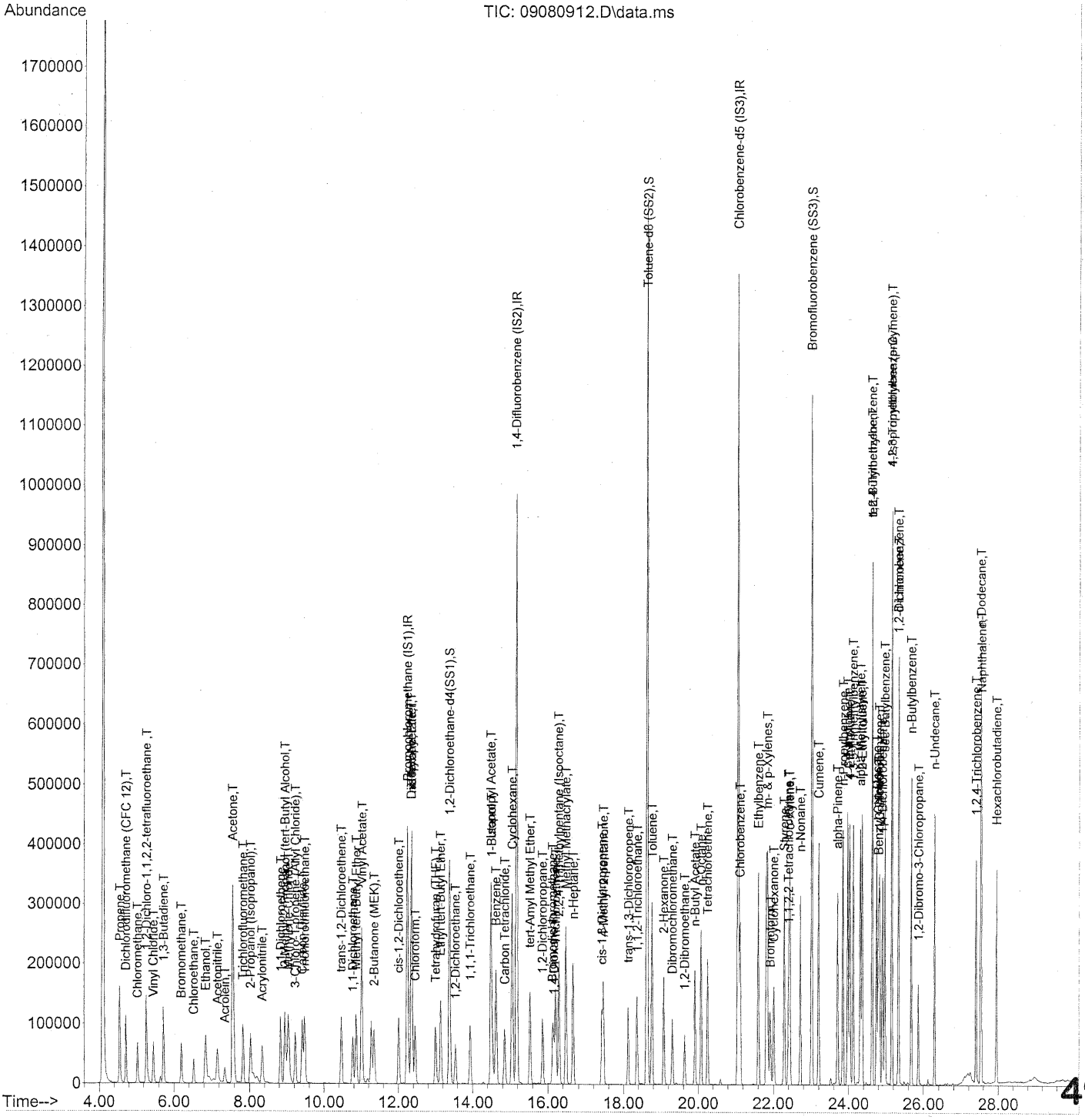
SP → IC
LH 9/9/09

494

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 20:33
Operator : LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:01 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 20:33
Operator : LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:01 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.24	130	272678	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.17	114	1324502	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.06	82	562222	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.38	65	377078	21.799	ng		0.00
Spiked Amount 25.000			Recovery = 87.20%				
57) Toluene-d8 (SS2)	18.63	98	1388197	26.241	ng		-0.02
Spiked Amount 25.000			Recovery = 104.96%				
73) Bromofluorobenzene (SS3)	23.02	174	497467	26.773	ng		0.00
Spiked Amount 25.000			Recovery = 107.08%				
Target Compounds							Qvalue
2) Propene	4.55	42	76308	5.317	ng		99
3) Dichlorodifluoromethan...	4.71	85	125723	4.905	ng		99
4) Chloromethane	5.03	50	97915	4.565	ng		100
5) 1,2-Dichloro-1,1,2,2-t...	5.27	135	75059	5.391	ng		99
6) Vinyl Chloride	5.45	62	96959	4.639	ng		100
7) 1,3-Butadiene	5.73	54	76916	5.356	ng		96
8) Bromomethane	6.20	94	61710	5.040	ng		99
9) Chloroethane	6.52	64	48760	4.865	ng		99
10) Ethanol	6.84	45	215823	22.313	ng		100
11) Acetonitrile	7.16	41	115858	4.665	ng		99
12) Acrolein	7.35	56	36032	5.064	ng		99
13) Acetone	7.56	58	234949	22.675	ng		90
14) Trichlorofluoromethane	7.83	101	115867	5.117	ng		100
15) 2-Propanol (Isopropanol)	8.03	45	249371	7.647	ng		99
16) Acrylonitrile	8.33	53	88227	5.467	ng		99
17) 1,1-Dichloroethene	8.83	96	69257	5.574	ng	#	81
18) 2-Methyl-2-Propanol (t...	8.95	59	317769	9.708	ng		98
19) Methylene Chloride	9.04	84	67958	4.875	ng		84
20) 3-Chloro-1-propene (Al...	9.23	41	89126	5.027	ng		91
21) Trichlorotrifluoroethane	9.48	151	57759	5.425	ng		86
22) Carbon Disulfide	9.41	76	251480	5.003	ng		99
23) trans-1,2-Dichloroethene	10.46	61	96449	5.351	ng		88
24) 1,1-Dichloroethane	10.77	63	116535	5.047	ng		100
25) Methyl tert-Butyl Ether	10.86	73	179711	4.801	ng		97
26) Vinyl Acetate	11.02	86	62885	24.927	ng	#	57
27) 2-Butanone (MEK)	11.35	72	46219	5.601	ng	#	79
28) cis-1,2-Dichloroethene	12.01	61	92392	5.172	ng		84
29) Diisopropyl Ether	12.35	87	52260	4.975	ng	#	58
30) Ethyl Acetate	12.35	61	47605	10.714	ng		91
31) n-Hexane	12.36	57	87804	4.358	ng		94

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 20:33
Operator : LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:01 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.45	83	114449	5.170	ng		100
34) Tetrahydrofuran (THF)	13.01	72	44694	5.467	ng	#	85
35) Ethyl tert-Butyl Ether	13.14	87	76133	4.790	ng	#	82
36) 1,2-Dichloroethane	13.54	62	80225	5.040	ng		99
38) 1,1,1-Trichloroethane	13.93	97	96647	5.123	ng		96
39) Isopropyl Acetate	14.49	61	83201	9.892	ng		98
40) 1-Butanol	14.50	56	133490	11.057	ng		84
41) Benzene	14.62	78	267301	5.022	ng		99
42) Carbon Tetrachloride	14.86	117	86850	5.591	ng		99
43) Cyclohexane	15.05	84	203340	10.259	ng		90
44) tert-Amyl Methyl Ether	15.53	73	185080	4.871	ng		95
45) 1,2-Dichloropropane	15.86	63	65837	4.989	ng		100
46) Bromodichloromethane	16.12	83	89898	5.535	ng		100
47) Trichloroethene	16.20	130	81121	5.239	ng		99
48) 1,4-Dioxane	16.16	88	59924	5.705	ng		90
49) 2,2,4-Trimethylpentane...	16.29	57	269157	4.715	ng		97
50) Methyl Methacrylate	16.48	100	64429	12.534	ng	#	77
51) n-Heptane	16.66	71	71176	5.178	ng		93
52) cis-1,3-Dichloropropene	17.42	75	103145	5.219	ng		99
53) 4-Methyl-2-pentanone	17.46	58	64742	5.784	ng		88
54) trans-1,3-Dichloropropene	18.13	75	105424	6.103	ng		100
55) 1,1,2-Trichloroethane	18.37	97	68868	5.596	ng		94
58) Toluene	18.76	91	304530	5.952	ng		98
59) 2-Hexanone	19.07	43	153145	5.697	ng		94
60) Dibromochloromethane	19.30	129	84572	7.060	ng		100
61) 1,2-Dibromoethane	19.63	107	78769	6.281	ng		100
62) n-Butyl Acetate	19.91	43	172478	5.618	ng		95
63) n-Octane	20.07	57	58667	5.529	ng		90
64) Tetrachloroethene	20.25	166	89830	6.246	ng		98
65) Chlorobenzene	21.12	112	208638	6.348	ng		99
66) Ethylbenzene	21.60	91	338002	5.962	ng		96
67) m- & p-Xylenes	21.84	91	518587	11.714	ng	#	29
68) Bromoform	21.92	173	77082	6.875	ng		100
69) Styrene	22.29	104	219418	6.476	ng		96
70) o-Xylene	22.44	91	266060	5.928	ng		95
71) n-Nonane	22.71	43	132023	5.326	ng		92
72) 1,1,2,2-Tetrachloroethane	22.40	83	118110	5.942	ng		98
74) Cumene	23.20	105	353209	5.978	ng		99
75) alpha-Pinene	23.70	93	167764	5.809	ng		96
76) n-Propylbenzene	23.85	91	419715	5.839	ng		96
77) 3-Ethyltoluene	23.97	105	353273	6.366	ng		99
78) 4-Ethyltoluene	24.03	105	343970	6.180	ng		98
79) 1,3,5-Trimethylbenzene	24.12	105	286400	6.187	ng		95

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080912.D
Acq On : 8 Sep 2009 20:33
Operator : LH
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030905
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:01 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

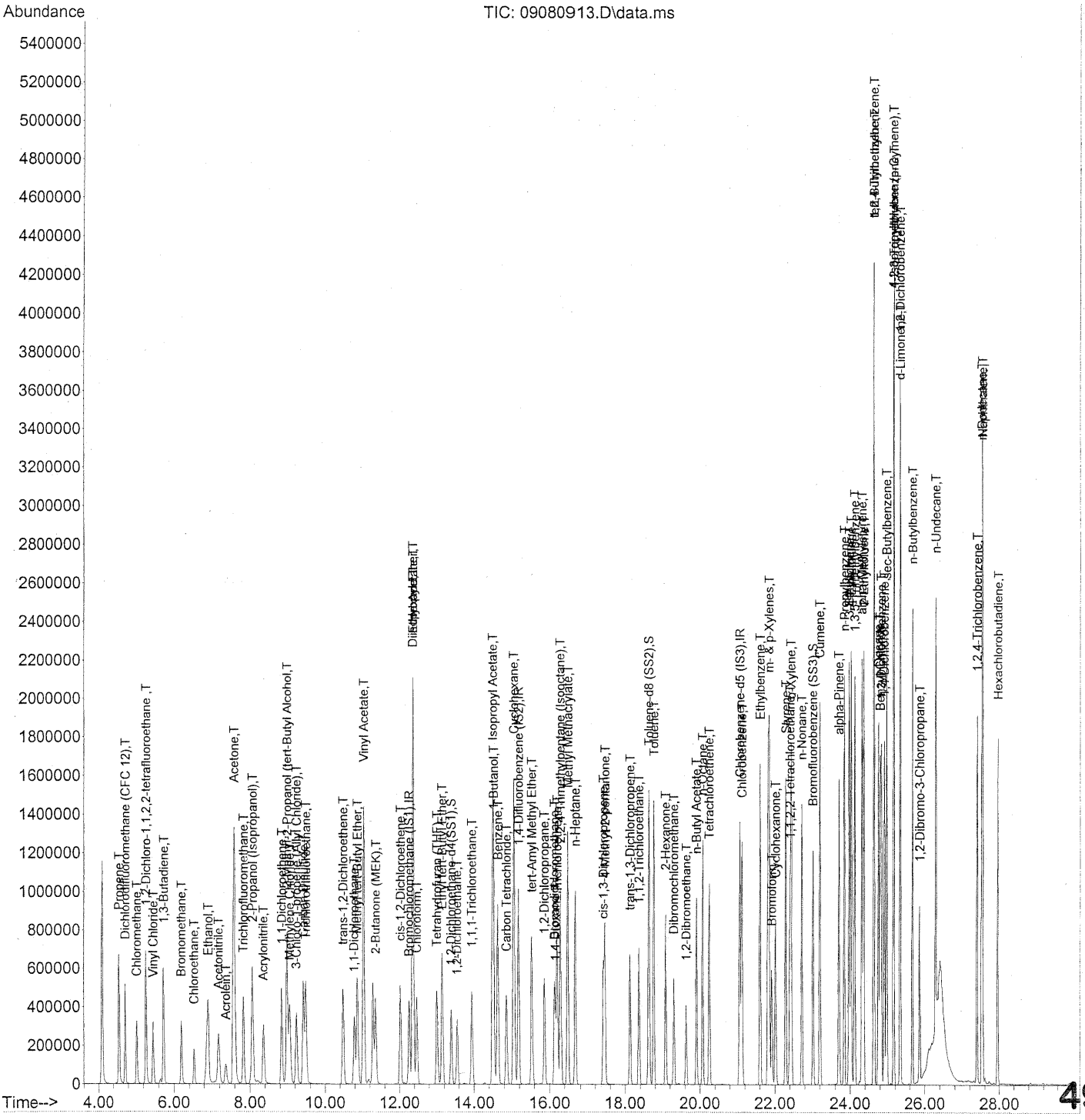
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.31	118	167387	6.616	ng		97
81) 2-Ethyltoluene	24.36	105	348029	5.884	ng		97
82) 1,2,4-Trimethylbenzene	24.63	105	292484	6.074	ng		96
83) n-Decane	24.75	57	153709	5.773	ng		94
84) Benzyl Chloride	24.80	91	250620	6.444	ng		95
85) 1,3-Dichlorobenzene	24.83	146	178889	6.691	ng		100
86) 1,4-Dichlorobenzene	24.91	146	183615	6.418	ng		100
87) sec-Butylbenzene	24.97	105	391362	6.103	ng		96
88) 4-Isopropyltoluene (p-...	25.16	119	376504	6.139	ng		96
89) 1,2,3-Trimethylbenzene	25.16	105	298326	6.188	ng		96
90) 1,2-Dichlorobenzene	25.33	146	169458	6.405	ng		100
91) d-Limonene	25.34	68	114769	6.104	ng		92
92) 1,2-Dibromo-3-Chloropr...	25.87	157	63966	7.485	ng		83
93) n-Undecane	26.28	57	163439	5.889	ng		95
94) 1,2,4-Trichlorobenzene	27.39	180	138993	7.345	ng		99
95) Naphthalene	27.53	128	432142	6.537	ng		100
96) n-Dodecane	27.52	57	170007	5.532	ng		93
97) Hexachlorobutadiene	27.95	225	83712	6.930	ng		99
98) Cyclohexanone	22.01	55	93334	4.920	ng	#	91
99) tert-Butylbenzene	24.63	119	294971	6.159	ng		98
100) n-Butylbenzene	25.67	91	313423	6.238	ng		98

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080913.D
Acq On : 8 Sep 2009 21:11
Operator : LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:03 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080913.D
Acq On : 8 Sep 2009 21:11
Operator : LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:03 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.26	130	276048	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	15.19	114	1370245	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.07	82	569605	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.39	65	384896	21.980	ng		0.00
Spiked Amount 25.000			Recovery = 87.92%				
57) Toluene-d8 (SS2)	18.63	98	1422370	26.538	ng		-0.02
Spiked Amount 25.000			Recovery = 106.16%				
73) Bromofluorobenzene (SS3)	23.02	174	530543	28.182	ng		0.00
Spiked Amount 25.000			Recovery = 112.72%				
Target Compounds							Qvalue
2) Propene	4.55	42	315060	21.683	ng		99
3) Dichlorodifluoromethan...	4.71	85	568605	21.915	ng		99
4) Chloromethane	5.03	50	482938	22.242	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.27	135	358427	25.429	ng		99
6) Vinyl Chloride	5.46	62	457658	21.628	ng		100
7) 1,3-Butadiene	5.73	54	392310	26.986	ng		96
8) Bromomethane	6.20	94	313081	25.259	ng		99
9) Chloroethane	6.53	64	230841	22.753	ng		99
10) Ethanol	6.90	45	1138773	116.294	ng		99
11) Acetonitrile	7.18	41	575311	22.881	ng		100
12) Acrolein	7.37	56	188483	26.164	ng		99
13) Acetone	7.59	58	1164618	111.026	ng		88
14) Trichlorofluoromethane	7.83	101	564849	24.640	ng		100
15) 2-Propanol (Isopropanol)	8.07	45	1407417	42.631	ng		98
16) Acrylonitrile	8.36	53	446931	27.356	ng		98
17) 1,1-Dichloroethene	8.84	96	339677	27.005	ng	#	81
18) 2-Methyl-2-Propanol (t...	8.99	59	1593989	48.101	ng		98
19) Methylene Chloride	9.06	84	337376	23.908	ng		83
20) 3-Chloro-1-propene (Al...	9.24	41	457609	25.497	ng		91
21) Trichlorotrifluoroethane	9.49	151	307324	28.511	ng		85
22) Carbon Disulfide	9.42	76	1230942	24.190	ng		98
23) trans-1,2-Dichloroethene	10.48	61	472440	25.891	ng		86
24) 1,1-Dichloroethane	10.78	63	564686	24.159	ng		100
25) Methyl tert-Butyl Ether	10.87	73	951840	25.117	ng		97
26) Vinyl Acetate	11.04	86	381666	149.444	ng	#	52
27) 2-Butanone (MEK)	11.36	72	239871	28.712	ng	#	76
28) cis-1,2-Dichloroethene	12.03	61	453568	25.079	ng		84
29) Diisopropyl Ether	12.36	87	269009	25.296	ng	#	56
30) Ethyl Acetate	12.36	61	251213	55.848	ng		93
31) n-Hexane	12.36	57	457470	22.428	ng		96

500

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080913.D
Acq On : 8 Sep 2009 21:11
Operator : LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:03 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.47	83	565695	25.243	ng		100
34) Tetrahydrofuran (THF)	13.01	72	232332	28.074	ng	#	85
35) Ethyl tert-Butyl Ether	13.15	87	396799	24.659	ng	#	81
36) 1,2-Dichloroethane	13.55	62	396090	24.581	ng		99
38) 1,1,1-Trichloroethane	13.94	97	491284	25.171	ng		96
39) Isopropyl Acetate	14.50	61	427568	49.140	ng		96
40) 1-Butanol	14.53	56	704703	56.423	ng		87
41) Benzene	14.63	78	1348893	24.498	ng		99
42) Carbon Tetrachloride	14.87	117	452576	28.161	ng		99
43) Cyclohexane	15.06	84	1048886	51.153	ng		89
44) tert-Amyl Methyl Ether	15.54	73	954679	24.285	ng		95
45) 1,2-Dichloropropane	15.87	63	328755	24.080	ng		100
46) Bromodichloromethane	16.14	83	448894	26.717	ng		100
47) Trichloroethene	16.22	130	406474	25.375	ng		99
48) 1,4-Dioxane	16.16	88	302756	27.859	ng		90
49) 2,2,4-Trimethylpentane...	16.30	57	1358298	22.999	ng		97
50) Methyl Methacrylate	16.49	100	333159	62.649	ng	#	76
51) n-Heptane	16.67	71	356655	25.081	ng		93
52) cis-1,3-Dichloropropene	17.42	75	528561	25.853	ng		100
53) 4-Methyl-2-pentanone	17.46	58	321747	27.787	ng		87
54) trans-1,3-Dichloropropene	18.13	75	535887	29.989	ng		99
55) 1,1,2-Trichloroethane	18.37	97	334770	26.294	ng		94
58) Toluene	18.76	91	1500898	28.953	ng		99
59) 2-Hexanone	19.08	43	747424	27.444	ng		94
60) Dibromochloromethane	19.30	129	425124	35.031	ng		99
61) 1,2-Dibromoethane	19.64	107	393099	30.941	ng		99
62) n-Butyl Acetate	19.91	43	872262	28.044	ng		95
63) n-Octane	20.07	57	285740	26.578	ng		87
64) Tetrachloroethene	20.25	166	450619	30.926	ng		98
65) Chlorobenzene	21.13	112	1003761	30.143	ng		99
66) Ethylbenzene	21.61	91	1641273	28.576	ng		96
67) m- & p-Xylenes	21.85	91	2538718	56.602	ng		95
68) Bromoform	21.92	173	406029	35.747	ng		100
69) Styrene	22.29	104	1090923	31.781	ng		96
70) o-Xylene	22.44	91	1312824	28.873	ng		95
71) n-Nonane	22.71	43	632602	25.191	ng		91
72) 1,1,2,2-Tetrachloroethane	22.41	83	604009	29.994	ng		98
74) Cumene	23.20	105	1739568	29.060	ng		98
75) alpha-Pinene	23.70	93	827852	28.293	ng		95
76) n-Propylbenzene	23.85	91	2060256	28.290	ng		95
77) 3-Ethyltoluene	23.98	105	1728146	30.736	ng		98
78) 4-Ethyltoluene	24.03	105	1757492	31.168	ng		97
79) 1,3,5-Trimethylbenzene	24.13	105	1431334	30.519	ng		96

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080913.D
Acq On : 8 Sep 2009 21:11
Operator : LH
Sample : 25ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

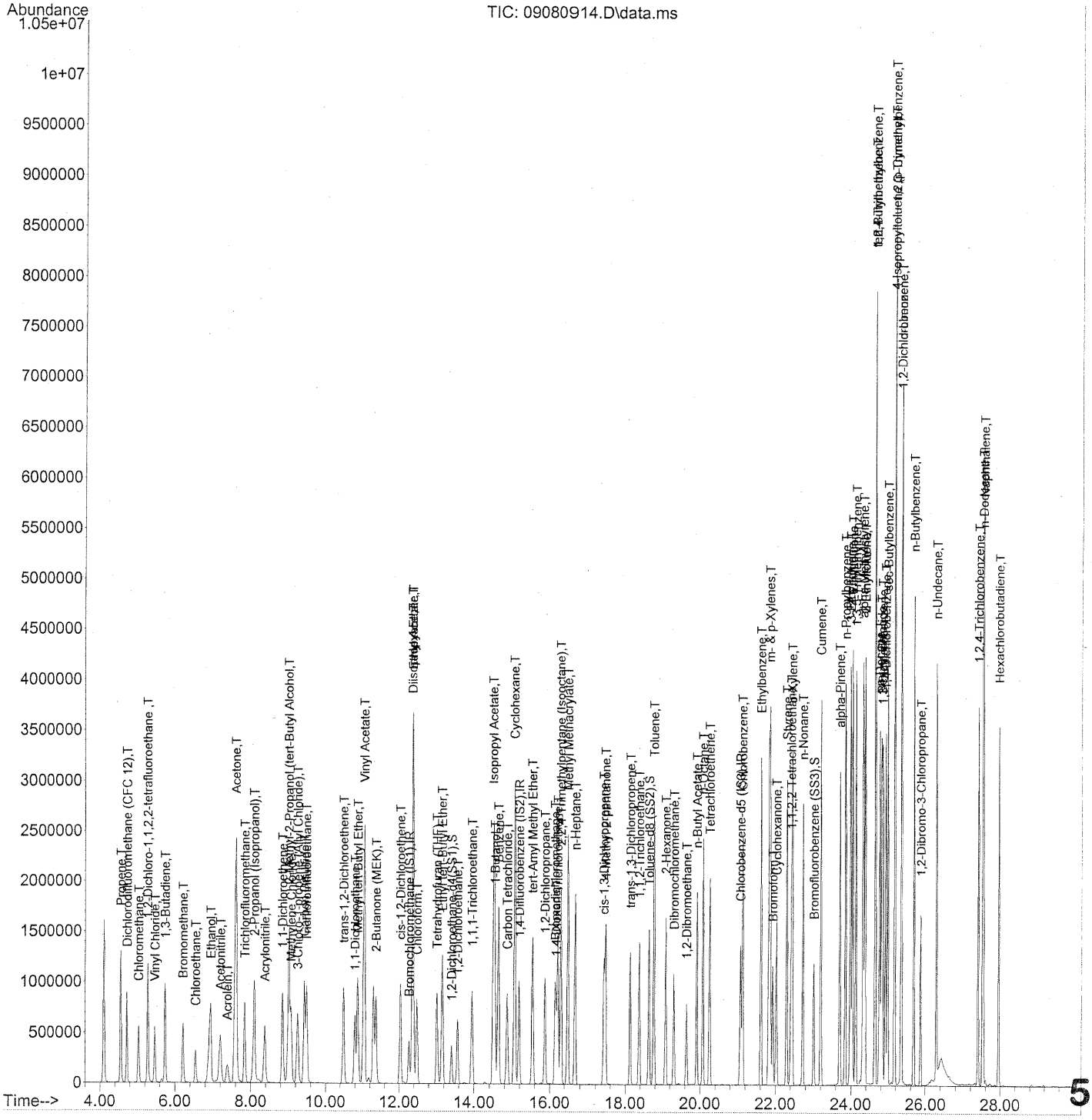
Quant Time: Sep 09 09:16:03 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.31	118	852885	33.274	ng		97
81) 2-Ethyltoluene	24.36	105	1726989	28.820	ng		97
82) 1,2,4-Trimethylbenzene	24.64	105	1463689	30.000	ng		95
83) n-Decane	24.76	57	734744	27.239	ng		94
84) Benzyl Chloride	24.80	91	1353612	34.354	ng		94
85) 1,3-Dichlorobenzene	24.83	146	910814	33.626	ng		100
86) 1,4-Dichlorobenzene	24.91	146	931093	32.121	ng		100
87) sec-Butylbenzene	24.97	105	1966426	30.268	ng		96
88) 4-Isopropyltoluene (p-...	25.16	119	1887268	30.373	ng		96
89) 1,2,3-Trimethylbenzene	25.17	105	1501083	30.734	ng		95
90) 1,2-Dichlorobenzene	25.34	146	874451	32.624	ng		99
91) d-Limonene	25.34	68	563009	29.554	ng		90
92) 1,2-Dibromo-3-Chloropr...	25.87	157	339737	39.241	ng		80
93) n-Undecane	26.29	57	1399458	49.774	ng		83
94) 1,2,4-Trichlorobenzene	27.39	180	736929	38.440	ng		100
95) Naphthalene	27.53	128	2338849	34.923	ng		100
96) n-Dodecane	27.52	57	799773	25.688	ng		92
97) Hexachlorobutadiene	27.96	225	431688	35.273	ng		98
98) Cyclohexanone	22.02	55	469461	24.426	ng	#	90
99) tert-Butylbenzene	24.64	119	1488048	30.669	ng		98
100) n-Butylbenzene	25.68	91	1554600	30.541	ng		97

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

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080914.D
Acq On : 8 Sep 2009 21:49
Operator : LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:05 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



503

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080914.D
Acq On : 8 Sep 2009 21:49
Operator : LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:05 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.27	130	276237	25.000	ng		0.01
37) 1,4-Difluorobenzene (IS2)	15.19	114	1375811	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.07	82	571196	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.40	65	381786	21.787	ng		0.02
Spiked Amount 25.000			Recovery = 87.16%				
57) Toluene-d8 (SS2)	18.63	98	1424962	26.513	ng		-0.01
Spiked Amount 25.000			Recovery = 106.04%				
73) Bromofluorobenzene (SS3)	23.02	174	531595	28.160	ng		0.00
Spiked Amount 25.000			Recovery = 112.64%				
Target Compounds							Qvalue
2) Propene	4.55	42	623340	42.870	ng		99
3) Dichlorodifluoromethan...	4.72	85	1031059	39.711	ng		99
4) Chloromethane	5.03	50	866408	39.876	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.27	135	628578	44.564	ng		100
6) Vinyl Chloride	5.46	62	845447	39.926	ng		99
7) 1,3-Butadiene	5.74	54	668664	45.964	ng		96
8) Bromomethane	6.21	94	598405	48.246	ng		100
9) Chloroethane	6.54	64	433679	42.716	ng		98
10) Ethanol	6.94	45	2198345	224.347	ng		99
11) Acetonitrile	7.19	41	1106711	43.985	ng		99
12) Acrolein	7.38	56	362733	50.319	ng		100
13) Acetone	7.60	58	2238198	213.227	ng		87
14) Trichlorofluoromethane	7.84	101	1066734	46.501	ng		100
15) 2-Propanol (Isopropanol)	8.09	45	2464239	74.591	ng		97
16) Acrylonitrile	8.37	53	864909	52.905	ng		99
17) 1,1-Dichloroethene	8.85	96	653642	51.930	ng	#	80
18) 2-Methyl-2-Propanol (t...	9.02	59	3094481	93.316	ng		98
19) Methylene Chloride	9.07	84	654212	46.329	ng		82
20) 3-Chloro-1-propene (Al...	9.25	41	902236	50.237	ng		90
21) Trichlorotrifluoroethane	9.49	151	587482	54.465	ng		85
22) Carbon Disulfide	9.43	76	2351747	46.183	ng		98
23) trans-1,2-Dichloroethene	10.49	61	925372	50.679	ng		85
24) 1,1-Dichloroethane	10.79	63	1109867	47.451	ng		99
25) Methyl tert-Butyl Ether	10.87	73	1825198	48.130	ng		97
26) Vinyl Acetate	11.05	86	750237	293.559	ng	#	48
27) 2-Butanone (MEK)	11.37	72	463494	55.442	ng	#	74
28) cis-1,2-Dichloroethene	12.03	61	882606	48.768	ng		84
29) Diisopropyl Ether	12.36	87	513304	48.235	ng	#	52
30) Ethyl Acetate	12.37	61	479001	106.415	ng		92
31) n-Hexane	12.37	57	831670	40.745	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080914.D
Acq On : 8 Sep 2009 21:49
Operator : LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:05 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.48	83	1092979	48.738	ng		100
34) Tetrahydrofuran (THF)	13.02	72	441923	53.363	ng	#	85
35) Ethyl tert-Butyl Ether	13.15	87	758326	47.093	ng	#	81
36) 1,2-Dichloroethane	13.56	62	762962	47.317	ng		98
38) 1,1,1-Trichloroethane	13.95	97	952894	48.624	ng		96
39) Isopropyl Acetate	14.51	61	821287	94.008	ng		94
40) 1-Butanol	14.55	56	1352597	107.859	ng		87
41) Benzene	14.64	78	2599954	47.027	ng		99
42) Carbon Tetrachloride	14.87	117	889339	55.113	ng		99
43) Cyclohexane	15.07	84	2029850	98.592	ng		88
44) tert-Amyl Methyl Ether	15.54	73	1837877	46.562	ng		95
45) 1,2-Dichloropropane	15.87	63	635496	46.359	ng		100
46) Bromodichloromethane	16.14	83	876212	51.938	ng		100
47) Trichloroethene	16.22	130	794468	49.396	ng		99
48) 1,4-Dioxane	16.17	88	594874	54.518	ng		89
49) 2,2,4-Trimethylpentane...	16.31	57	2565790	43.268	ng		97
50) Methyl Methacrylate	16.49	100	648765	121.504	ng	#	74
51) n-Heptane	16.68	71	680851	47.685	ng		92
52) cis-1,3-Dichloropropene	17.42	75	1028666	50.111	ng		99
53) 4-Methyl-2-pentanone	17.47	58	621956	53.496	ng		86
54) trans-1,3-Dichloropropene	18.13	75	1047838	58.402	ng		99
55) 1,1,2-Trichloroethane	18.37	97	658203	51.489	ng		94
58) Toluene	18.77	91	2901339	55.813	ng		99
59) 2-Hexanone	19.08	43	1431461	52.414	ng		93
60) Dibromochloromethane	19.31	129	845406	69.468	ng		99
61) 1,2-Dibromoethane	19.64	107	766593	60.170	ng		100
62) n-Butyl Acetate	19.91	43	1713797	54.947	ng		95
63) n-Octane	20.08	57	553228	51.315	ng		88
64) Tetrachloroethene	20.26	166	890315	60.933	ng		98
65) Chlorobenzene	21.13	112	1964512	58.830	ng		99
66) Ethylbenzene	21.61	91	3190269	55.390	ng		96
67) m- & p-Xylenes	21.85	91	4919660	109.381	ng		95
68) Bromoform	21.92	173	802244	70.433	ng		100
69) Styrene	22.30	104	2121003	61.618	ng		96
70) o-Xylene	22.44	91	2530048	55.488	ng		94
71) n-Nonane	22.72	43	1182585	46.961	ng		89
72) 1,1,2,2-Tetrachloroethane	22.41	83	1166594	57.769	ng		98
74) Cumene	23.20	105	3347387	55.763	ng		97
75) alpha-Pinene	23.70	93	1599220	54.504	ng		95
76) n-Propylbenzene	23.85	91	3951292	54.106	ng		95
77) 3-Ethyltoluene	23.98	105	3369137	59.755	ng		97
78) 4-Ethyltoluene	24.03	105	3344361	59.145	ng		96
79) 1,3,5-Trimethylbenzene	24.13	105	2761897	58.725	ng		97

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080914.D
Acq On : 8 Sep 2009 21:49
Operator : LH
Sample : 50ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:05 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

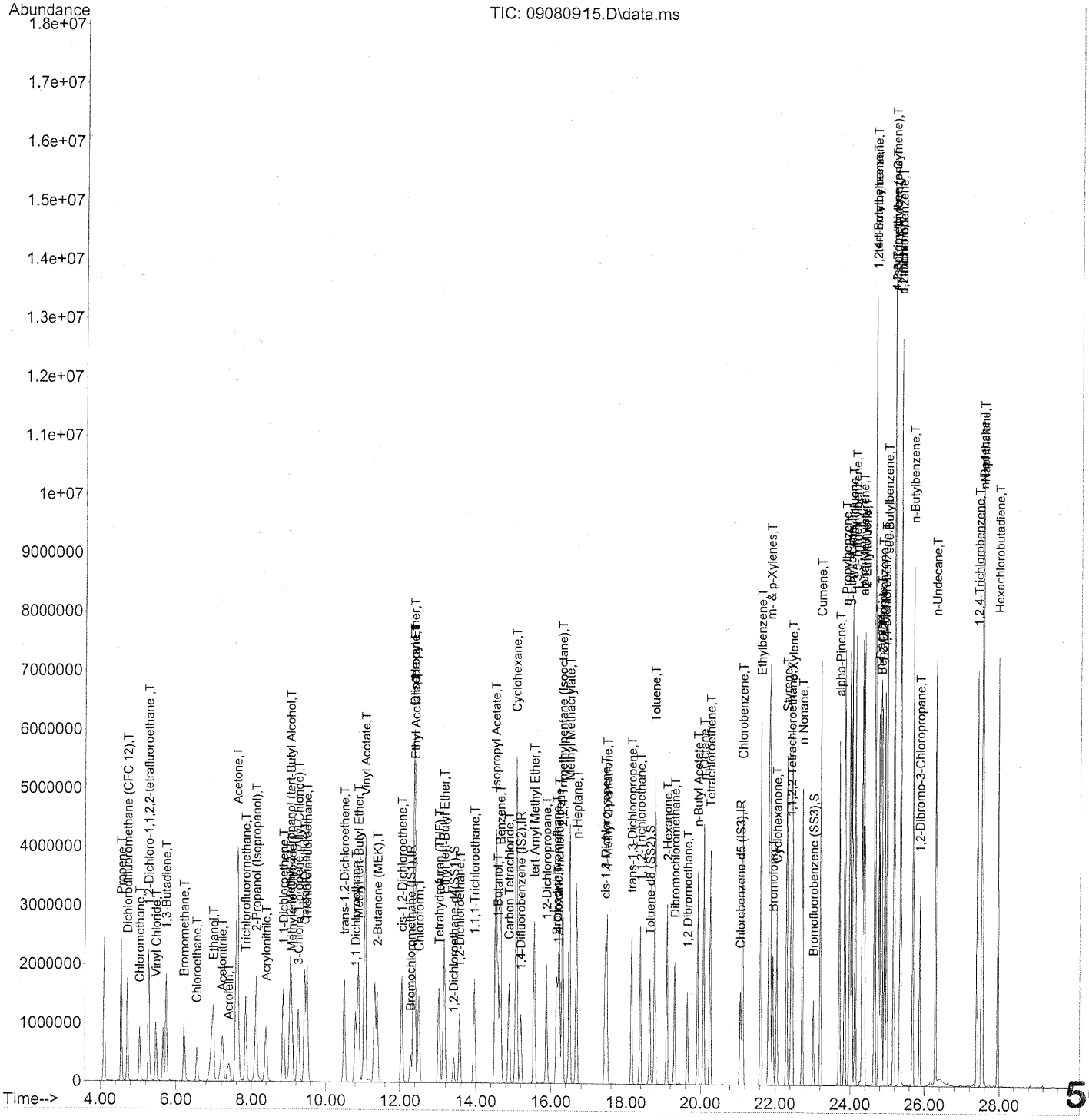
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.32	118	1649517	64.174	ng		97
81) 2-Ethyltoluene	24.37	105	3314321	55.156	ng		96
82) 1,2,4-Trimethylbenzene	24.64	105	2806686	57.367	ng		95
83) n-Decane	24.76	57	1401210	51.802	ng		93
84) Benzyl Chloride	24.81	91	2639578	66.804	ng		93
85) 1,3-Dichlorobenzene	24.84	146	1771273	65.211	ng		100
86) 1,4-Dichlorobenzene	24.92	146	1806227	62.138	ng		100
87) sec-Butylbenzene	24.97	105	3749927	57.560	ng		96
88) 4-Isopropyltoluene (p-...	25.17	119	3596383	57.718	ng		95
89) 1,2,3-Trimethylbenzene	25.17	105	2870586	58.609	ng		96
90) 1,2-Dichlorobenzene	25.34	146	1697257	63.145	ng		99
91) d-Limonene	25.34	68	1046860	54.801	ng		87
92) 1,2-Dibromo-3-Chloropr...	25.87	157	666390	76.756	ng		79
93) n-Undecane	26.29	57	1733502	61.484	ng		91
94) 1,2,4-Trichlorobenzene	27.40	180	1452134	75.535	ng		99
95) Naphthalene	27.54	128	4533841	67.509	ng		100
96) n-Dodecane	27.52	57	1473099	47.183	ng		90
97) Hexachlorobutadiene	27.96	225	861656	70.209	ng		98
98) Cyclohexanone	22.03	55	898428	46.615	ng	#	90
99) tert-Butylbenzene	24.64	119	2849027	58.555	ng		97
100) n-Butylbenzene	25.68	91	2963367	58.056	ng	#	97

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

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080915.D
Acq On : 8 Sep 2009 22:28
Operator : LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:07 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080915.D
Acq On : 8 Sep 2009 22:28
Operator : LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:07 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.28	130	331470	25.000	ng		0.02
37) 1,4-Difluorobenzene (IS2)	15.20	114	1636502	25.000	ng		0.01
56) Chlorobenzene-d5 (IS3)	21.08	82	677276	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.42	65	449064	21.356	ng		0.03
Spiked Amount 25.000			Recovery =	85.44%			
57) Toluene-d8 (SS2)	18.64	98	1689027	26.504	ng		0.00
Spiked Amount 25.000			Recovery =	106.00%			
73) Bromofluorobenzene (SS3)	23.02	174	635382	28.386	ng		0.00
Spiked Amount 25.000			Recovery =	113.56%			
Target Compounds							Qvalue
2) Propene	4.56	42	1239071	71.017	ng		99
3) Dichlorodifluoromethan...	4.72	85	2156909	69.230	ng		100
4) Chloromethane	5.04	50	1570014	60.219	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.28	135	1298873	76.741	ng		100
6) Vinyl Chloride	5.47	62	1659712	65.320	ng		99
7) 1,3-Butadiene	5.74	54	1357104	77.742	ng		96
8) Bromomethane	6.22	94	1152994	77.469	ng		100
9) Chloroethane	6.55	64	882776	72.462	ng		98
10) Ethanol	7.00	45	4171999	354.818	ng		99
11) Acetonitrile	7.22	41	2179129	72.176	ng		100
12) Acrolein	7.39	56	727555	84.110	ng		99
13) Acetone	7.63	58	4266803	338.753	ng		86
14) Trichlorofluoromethane	7.85	101	2133419	77.503	ng		99
15) 2-Propanol (Isopropanol)	8.13	45	4561288	115.061	ng		99
16) Acrylonitrile	8.40	53	1688391	86.066	ng		98
17) 1,1-Dichloroethene	8.86	96	1308030	86.604	ng	#	78
18) 2-Methyl-2-Propanol (t...	9.04	59	3609348	90.706	ng		98
19) Methylene Chloride	9.08	84	1295084	76.432	ng		80
20) 3-Chloro-1-propene (Al...	9.26	41	1758200	81.585	ng		89
21) Trichlorotrifluoroethane	9.50	151	1310460	101.248	ng		84
22) Carbon Disulfide	9.43	76	4695073	76.837	ng		98
23) trans-1,2-Dichloroethene	10.50	61	1806049	82.428	ng		84
24) 1,1-Dichloroethane	10.81	63	2167858	77.239	ng		100
25) Methyl tert-Butyl Ether	10.88	73	3809615	83.718	ng		97
26) Vinyl Acetate	11.08	86	1467880	478.658	ng	#	40
27) 2-Butanone (MEK)	11.39	72	870084	86.735	ng	#	72
28) cis-1,2-Dichloroethene	12.05	61	1713413	78.898	ng		83
29) Diisopropyl Ether	12.37	87	1064129	83.334	ng	#	1
30) Ethyl Acetate	12.40	61	910399	168.553	ng		98
31) n-Hexane	12.38	57	1757742	71.766	ng		91

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080915.D
Acq On : 8 Sep 2009 22:28
Operator : LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 09:16:07 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.50	83	2106168	78.269	ng		100
34) Tetrahydrofuran (THF)	13.03	72	839559	84.486	ng	#	83
35) Ethyl tert-Butyl Ether	13.16	87	1579506	81.745	ng	#	79
36) 1,2-Dichloroethane	13.57	62	1471549	76.055	ng		98
38) 1,1,1-Trichloroethane	13.96	97	1904856	81.717	ng		96
39) Isopropyl Acetate	14.52	61	1606945	154.636	ng	#	90
40) 1-Butanol	14.58	56	2541307	170.367	ng		87
41) Benzene	14.65	78	5139125	78.148	ng		99
42) Carbon Tetrachloride	14.88	117	1780058	92.740	ng		99
43) Cyclohexane	15.08	84	4073483	166.336	ng		86
44) tert-Amyl Methyl Ether	15.56	73	3701122	78.830	ng		94
45) 1,2-Dichloropropane	15.89	63	1235152	75.750	ng		100
46) Bromodichloromethane	16.15	83	1704391	84.936	ng		99
47) Trichloroethene	16.23	130	1592991	83.266	ng		99
48) 1,4-Dioxane	16.19	88	1153025	88.838	ng		87
49) 2,2,4-Trimethylpentane...	16.32	57	4993649	70.796	ng		96
50) Methyl Methacrylate	16.51	100	1275904	200.892	ng	#	72
51) n-Heptane	16.69	71	1326455	78.102	ng		91
52) cis-1,3-Dichloropropene	17.43	75	2012520	82.422	ng		99
53) 4-Methyl-2-pentanone	17.48	58	1206664	87.255	ng		84
54) trans-1,3-Dichloropropene	18.14	75	2054731	96.278	ng		99
55) 1,1,2-Trichloroethane	18.38	97	1292369	84.992	ng		94
58) Toluene	18.78	91	5601223	90.873	ng		98
59) 2-Hexanone	19.10	43	2716517	83.888	ng		92
60) Dibromochloromethane	19.31	129	1670341	115.756	ng		99
61) 1,2-Dibromoethane	19.65	107	1511443	100.052	ng		100
62) n-Butyl Acetate	19.93	43	3417480	92.407	ng		94
63) n-Octane	20.09	57	1052653	82.346	ng	#	84
64) Tetrachloroethene	20.26	166	1777017	102.570	ng		99
65) Chlorobenzene	21.13	112	3824762	96.598	ng		98
66) Ethylbenzene	21.62	91	6182359	90.527	ng		95
67) m- & p-Xylenes	21.86	91	9508829	178.301	ng		94
68) Bromoform	21.93	173	1588270	117.602	ng		99
69) Styrene	22.30	104	4107358	100.635	ng		96
70) o-Xylene	22.45	91	4876262	90.194	ng		94
71) n-Nonane	22.73	43	2159527	72.324	ng		86
72) 1,1,2,2-Tetrachloroethane	22.42	83	2223708	92.870	ng		98
74) Cumene	23.21	105	6460261	90.763	ng		97
75) alpha-Pinene	23.71	93	3072769	88.322	ng		95
76) n-Propylbenzene	23.85	91	7529362	86.953	ng		94
77) 3-Ethyltoluene	23.99	105	6465475	96.710	ng		97
78) 4-Ethyltoluene	24.04	105	6411323	95.624	ng		96
79) 1,3,5-Trimethylbenzene	24.13	105	5302283	95.081	ng		94

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080915.D
Acq On : 8 Sep 2009 22:28
Operator : LH
Sample : 100ng TO-15 ICAL STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

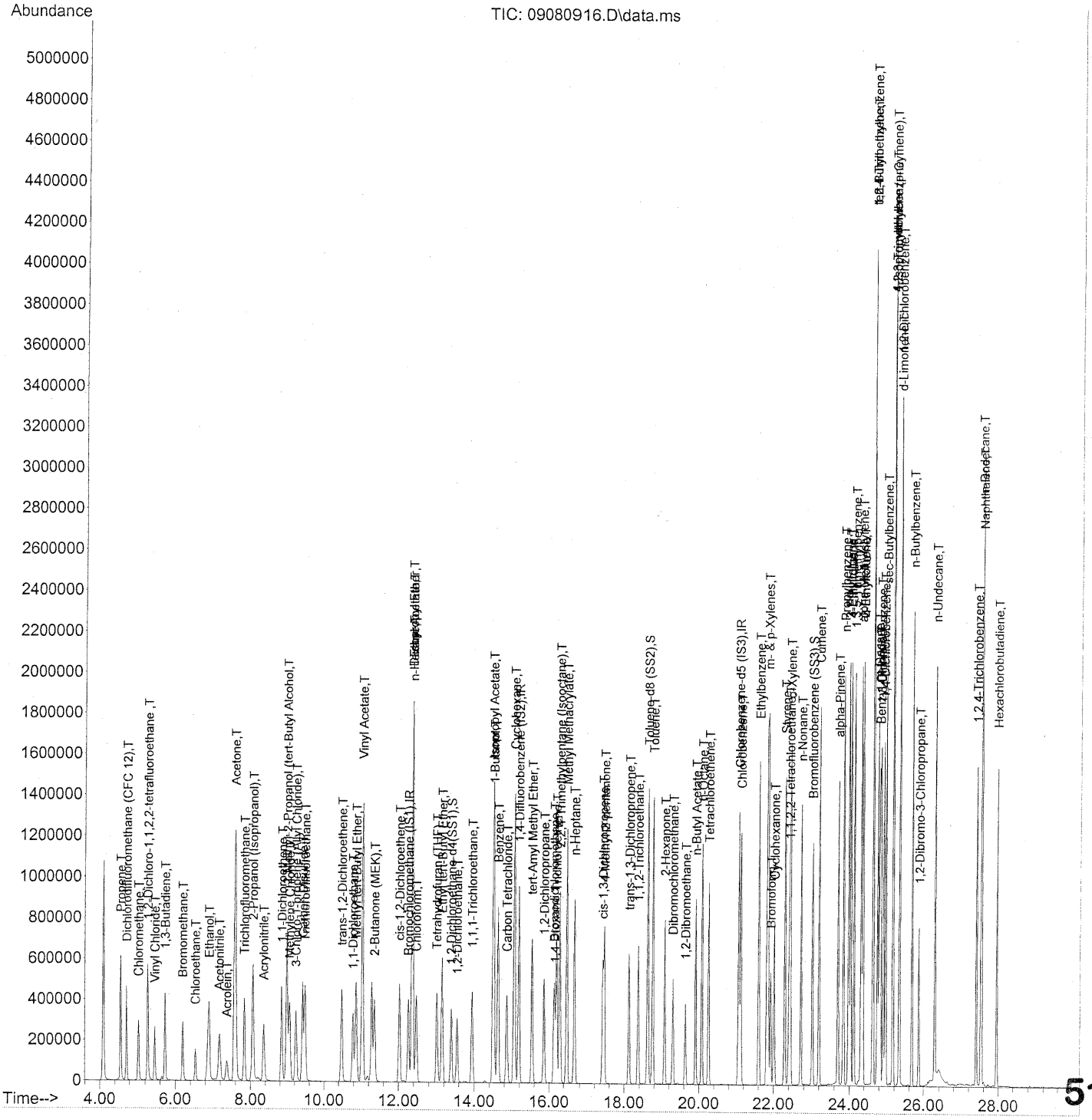
Quant Time: Sep 09 09:16:07 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:13:16 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.33	118	3197412	104.910	ng		98
81) 2-Ethyltoluene	24.38	105	6357558	89.230	ng		96
82) 1,2,4-Trimethylbenzene	24.66	105	5263467	90.731	ng		95
83) n-Decane	24.77	57	2521770	78.626	ng		91
84) Benzyl Chloride	24.81	91	5072709	108.275	ng		92
85) 1,3-Dichlorobenzene	24.84	146	3489250	108.339	ng		100
86) 1,4-Dichlorobenzene	24.92	146	3533625	102.524	ng		100
87) sec-Butylbenzene	24.99	105	7148498	92.541	ng		95
88) 4-Isopropyltoluene (p-...	25.17	119	6574765	88.991	ng		95
89) 1,2,3-Trimethylbenzene	25.18	105	5347221	92.075	ng		97
90) 1,2-Dichlorobenzene	25.35	146	3276195	102.798	ng		99
91) d-Limonene	25.35	68	1865144	82.343	ng		83
92) 1,2-Dibromo-3-Chloropr...	25.87	157	1312721	127.520	ng	#	77
93) n-Undecane	26.29	57	2768845	82.823	ng		91
94) 1,2,4-Trichlorobenzene	27.40	180	2886119	126.612	ng		99
95) Naphthalene	27.55	128	8592283	107.901	ng		100
96) n-Dodecane	27.52	57	2586640	69.873	ng		87
97) Hexachlorobutadiene	27.96	225	1743700	119.826	ng		98
98) Cyclohexanone	22.04	55	1686065	73.780	ng	#	88
99) tert-Butylbenzene	24.65	119	5348972	92.716	ng		96
100) n-Butylbenzene	25.69	91	5545603	91.628	ng	#	96

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

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080916.D
Acq On : 8 Sep 2009 23:07
Operator : LH
Sample : 25ng TO-15 ICV STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 09:31:26 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:24:30 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080916.D
Acq On : 8 Sep 2009 23:07
Operator : LH
Sample : 25ng TO-15 ICV STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 09:31:26 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:24:30 2009
Response via : Initial Calibration

LH 9/9/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.26	130	263183	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.18	114	1306207	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.07	82	549143	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.39	65	358917	24.746	ng		-0.02
Spiked Amount 25.000			Recovery =	99.00%			
57) Toluene-d8 (SS2)	18.63	98	1355852	24.666	ng		-0.01
Spiked Amount 25.000			Recovery =	98.68%			
73) Bromofluorobenzene (SS3)	23.02	174	516967	26.245	ng		0.00
Spiked Amount 25.000			Recovery =	104.96%			
Target Compounds							Qvalue
2) Propene	4.55	42	288017	26.875	ng		99
3) Dichlorodifluoromethan...	4.71	85	501039	24.454	ng		99
4) Chloromethane	5.03	50	428378	25.527	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.27	135	300856	24.481	ng		99
6) Vinyl Chloride	5.46	62	373116	23.165	ng		99
7) 1,3-Butadiene	5.73	54	275232	24.537	ng		96
8) Bromomethane	6.20	94	282092	26.550	ng		100
9) Chloroethane	6.53	64	199754	25.266	ng		99
10) Ethanol	6.90	45	990878	127.536	ng		99
11) Acetonitrile	7.17	41	499479	25.419	ng		99
12) Acrolein	7.37	56	176884	30.600	ng		98
13) Acetone	7.58	58	1067175	136.343	ng		87
14) Trichlorofluoromethane	7.83	101	501820	26.441	ng		99
15) 2-Propanol (Isopropanol)	8.07	45	1330783	49.365	ng		99
16) Acrylonitrile	8.36	53	406496	26.782	ng		99
17) 1,1-Dichloroethene	8.84	96	320552	29.351	ng	#	80
18) 2-Methyl-2-Propanol (t...	8.99	59	1534385	55.067	ng		98
19) Methylene Chloride	9.06	84	317920	26.635	ng		82
20) 3-Chloro-1-propene (Al...	9.24	41	432137	30.877	ng		91
21) Trichlorotrifluoroethane	9.48	151	269720	28.845	ng		84
22) Carbon Disulfide	9.42	76	1108705	26.781	ng		98
23) trans-1,2-Dichloroethene	10.48	61	430292	28.899	ng		85
24) 1,1-Dichloroethane	10.78	63	536988	28.508	ng		99
25) Methyl tert-Butyl Ether	10.87	73	835255	27.763	ng		97
26) Vinyl Acetate	11.04	86	361611	153.414	ng	#	52
27) 2-Butanone (MEK)	11.35	72	215538	28.667	ng	#	76
28) cis-1,2-Dichloroethene	12.02	61	427745	29.687	ng		84
29) Diisopropyl Ether	12.36	87	242412	27.825	ng	#	54
30) Ethyl Acetate	12.36	61	226319	59.292	ng		93
31) n-Hexane	12.37	57	388684	25.708	ng		9

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080916.D
Acq On : 8 Sep 2009 23:07
Operator : LH
Sample : 25ng TO-15 ICV STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 09:31:26 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:24:30 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.46	83	535412	28.866	ng		100
34) Tetrahydrofuran (THF)	13.01	72	210291	30.223	ng	#	84
35) Ethyl tert-Butyl Ether	13.15	87	359049	27.053	ng	#	81
36) 1,2-Dichloroethane	13.55	62	371562	29.045	ng		99
38) 1,1,1-Trichloroethane	13.94	97	457115	27.859	ng		96
39) Isopropyl Acetate	14.50	61	397255	54.907	ng		95
40) 1-Butanol	14.52	56	635494	53.926	ng		86
41) Benzene	14.63	78	1259548	27.037	ng		99
42) Carbon Tetrachloride	14.87	117	421677	30.109	ng		99
43) Cyclohexane	15.06	84	937139	55.130	ng		88
44) tert-Amyl Methyl Ether	15.54	73	876094	26.932	ng		95
45) 1,2-Dichloropropane	15.87	63	306869	28.266	ng		99
46) Bromodichloromethane	16.14	83	412416	28.597	ng		99
47) Trichloroethene	16.21	130	382946	27.319	ng		99
48) 1,4-Dioxane	16.16	88	277070	27.893	ng		90
49) 2,2,4-Trimethylpentane...	16.30	57	1243130	26.488	ng		97
50) Methyl Methacrylate	16.48	100	315097	58.879	ng	#	75
51) n-Heptane	16.67	71	323729	27.231	ng		93
52) cis-1,3-Dichloropropene	17.42	75	500125	27.473	ng		99
53) 4-Methyl-2-pentanone	17.46	58	295724	28.470	ng		86
54) trans-1,3-Dichloropropene	18.13	75	510258	31.303	ng		99
55) 1,1,2-Trichloroethane	18.37	97	320978	27.392	ng		94
58) Toluene	18.76	91	1436389	27.992	ng		99
59) 2-Hexanone	19.08	43	682306	27.574	ng		93
60) Dibromochloromethane	19.30	129	398304	31.100	ng		99
61) 1,2-Dibromoethane	19.64	107	374332	28.826	ng		100
62) n-Butyl Acetate	19.91	43	809286	28.573	ng		95
63) n-Octane	20.08	57	271912	28.229	ng		90
64) Tetrachloroethene	20.26	166	432078	27.278	ng		98
65) Chlorobenzene	21.13	112	963774	28.346	ng		99
66) Ethylbenzene	21.61	91	1567419	27.819	ng		96
67) m- & p-Xylenes	21.84	91	2414544	54.826	ng		95
68) Bromoform	21.92	173	374025	28.807	ng		99
69) Styrene	22.29	104	1036965	28.664	ng		96
70) o-Xylene	22.44	91	1246629	27.703	ng		95
71) n-Nonane	22.71	43	590834	27.053	ng		90
72) 1,1,2,2-Tetrachloroethane	22.41	83	571091	29.325	ng		98
74) Cumene	23.20	105	1642065	26.659	ng		98
75) alpha-Pinene	23.70	93	777579	26.865	ng		95
76) n-Propylbenzene	23.85	91	1925742	26.746	ng		95
77) 3-Ethyltoluene	23.98	105	1620324	27.837	ng		95
78) 4-Ethyltoluene	24.03	105	1618969	28.168	ng		98
79) 1,3,5-Trimethylbenzene	24.13	105	1362346	28.476	ng		94

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Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080916.D
Acq On : 8 Sep 2009 23:07
Operator : LH
Sample : 25ng TO-15 ICV STD
Misc : S20-09080901/S20-09030911
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 09:31:26 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:24:30 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.31	118	793631	28.749	ng		97
81) 2-Ethyltoluene	24.36	105	1620702	26.549	ng		97
82) 1,2,4-Trimethylbenzene	24.64	105	1393895	27.316	ng		96
83) n-Decane	24.76	57	693555	25.965	ng		94
84) Benzyl Chloride	24.80	91	1229492	30.777	ng		94
85) 1,3-Dichlorobenzene	24.83	146	856849	28.842	ng		100
86) 1,4-Dichlorobenzene	24.91	146	872875	28.193	ng		99
87) sec-Butylbenzene	24.97	105	1839261	27.536	ng		96
88) 4-Isopropyltoluene (p-...	25.17	119	1762108	27.218	ng		95
89) 1,2,3-Trimethylbenzene	25.17	105	1389717	27.814	ng		95
90) 1,2-Dichlorobenzene	25.34	146	808751	28.298	ng		99
91) d-Limonene	25.34	68	523902	28.584	ng		90
92) 1,2-Dibromo-3-Chloropr...	25.87	157	297080	28.867	ng		80
93) n-Undecane	26.29	57	790001	25.644	ng		93
94) 1,2,4-Trichlorobenzene	27.39	180	601594	26.814	ng		99
95) Naphthalene	27.53	128	1838498	24.806	ng		100
96) n-Dodecane	27.52	57	703749	23.181	ng		92
97) Hexachlorobutadiene	27.96	225	381315	26.922	ng		98
98) Cyclohexanone	22.02	55	438779	23.112	ng	#	90
99) tert-Butylbenzene	24.64	119	1398036	27.824	ng		98
100) n-Butylbenzene	25.68	91	1436241	28.030	ng		97

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

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 09080916.D
Data File Path: J:\MS16\DATA\2009_09\08\
Operator: LH
Date Acquired: 9/8/09 23:07

Acq. Method File: TO15LT.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-09080901/S20-09030911
Instrument Name: GCMS-16

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.55	26.9	26.3	102.3	70	130	*
3)	Dichlorodifluoromethane (CFC	4.71	24.5	26.0	94.2	70	130	*
4)	Chloromethane	5.03	25.5	25.0	102.0	70	130	*
5)	1,2-Dichloro-1,1,2,2-tetrafluoro(	5.27	24.5	26.0	94.2	70	130	*
6)	Vinyl Chloride	5.46	23.2	25.3	91.7	70	130	*
7)	1,3-Butadiene	5.73	24.5	26.8	91.4	70	130	*
8)	Bromomethane	6.20	26.6	25.8	103.1	70	130	*
9)	Chloroethane	6.53	25.3	25.5	99.2	70	130	*
10)	Ethanol	6.90	127.5	130.0	98.1	70	130	*
11)	Acetonitrile	7.17	25.4	26.0	97.7	70	130	*
12)	Acrolein	7.37	30.6	26.3	116.3	70	130	*
13)	Acetone	7.58	136.3	132.0	103.3	70	130	*
14)	Trichlorofluoromethane	7.83	26.4	26.3	100.4	70	130	*
15)	2-Propanol (Isopropanol)	8.07	49.4	48.0	102.9	70	130	*
16)	Acrylonitrile	8.36	26.8	25.8	103.9	70	130	*
17)	1,1-Dichloroethene	8.84	29.4	27.5	106.9	70	130	*
18)	2-Methyl-2-Propanol (tert-Butyl Al	8.99	55.1	50.0	110.2	70	130	*
19)	Methylene Chloride	9.06	26.6	26.8	99.3	70	130	*
20)	3-Chloro-1-propene (Allyl Chlor	9.24	30.9	27.0	114.4	70	130	*
21)	Trichlorotrifluoroethane	9.48	28.8	27.5	104.7	70	130	*
22)	Carbon Disulfide	9.42	26.8	26.0	103.1	70	130	*
23)	trans-1,2-Dichloroethene	10.48	28.9	25.5	113.3	70	130	*
24)	1,1-Dichloroethane	10.78	28.5	26.5	107.5	70	130	*
25)	Methyl tert-Butyl Ether	10.87	27.8	26.3	105.7	70	130	*
26)	Vinyl Acetate	11.04	153.4	126.0	121.7	70	130	*
27)	2-Butanone (MEK)	11.35	28.7	26.8	107.1	70	130	*
28)	cis-1,2-Dichloroethene	12.02	29.7	27.0	110.0	70	130	*
29)	Diisopropyl Ether	12.36	27.8	26.5	104.9	70	130	*
30)	Ethyl Acetate	12.36	59.3	52.0	114.0	70	130	*
31)	n-Hexane	12.37	25.7	26.0	98.8	70	130	*
32)	Chloroform	12.46	28.9	27.5	105.1	70	130	*
34)	Tetrahydrofuran (THF)	13.01	30.2	26.5	114.0	70	130	*
35)	Ethyl tert-Butyl Ether	13.15	27.1	25.5	106.3	70	130	*
36)	1,2-Dichloroethane	13.55	29.0	26.3	110.3	70	130	*
38)	1,1,1-Trichloroethane	13.94	27.9	26.0	107.3	70	130	*
39)	Isopropyl Acetate	14.50	54.9	52.3	105.0	70	130	*
40)	1-Butanol	14.52	53.9	52.8	102.1	70	130	*
41)	Benzene	14.63	27.0	25.8	104.7	70	130	*
42)	Carbon Tetrachloride	14.87	30.1	26.3	114.4	70	130	*
43)	Cyclohexane	15.06	55.1	51.8	106.4	70	130	*
44)	tert-Amyl Methyl Ether	15.54	26.9	25.5	105.5	70	130	*
45)	1,2-Dichloropropane	15.87	28.3	26.0	108.8	70	130	*
46)	Bromodichloromethane	16.14	28.6	26.3	108.7	70	130	*
47)	Trichloroethene	16.21	27.3	25.8	105.8	70	130	*
48)	1,4-Dioxane	16.16	27.9	26.0	107.3	70	130	*
49)	2,2,4-Trimethylpentane (Isooctan	16.30	26.5	25.8	102.7	70	130	*
50)	Methyl Methacrylate	16.48	58.9	52.8	111.6	70	130	*

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J:\MS16\0-Instrument Info\0-Security Certificates\ICV_07240903.CRT

9/9/09 9:35 AM

LH 9/9/09

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: 09080916.D
Data File Path: J:\MS16\DATA\2009_09\08\
Operator: LH
Date Acquired: 9/8/09 23:07

Acq. Method File: TO15LT.M
Name: 25ng TO-15 ICV STD
Misc Info: S20-09080901/S20-09030911
Instrument Name: GCMS-16

#	Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
51)	n-Heptane	16.67	27.2	25.8	105.4	70	130	*
52)	cis-1,3-Dichloropropene	17.42	27.5	24.5	112.2	70	130	*
53)	4-Methyl-2-pentanone	17.46	28.5	26.8	106.3	70	130	*
54)	trans-1,3-Dichloropropene	18.13	31.3	27.0	115.9	70	130	*
55)	1,1,2-Trichloroethane	18.37	27.4	26.0	105.4	70	130	*
58)	Toluene	18.76	28.0	26.8	104.5	70	130	*
59)	2-Hexanone	19.08	27.6	27.0	102.2	70	130	*
60)	Dibromochloromethane	19.30	31.1	28.3	109.9	70	130	*
61)	1,2-Dibromoethane	19.64	28.8	26.3	109.5	70	130	*
62)	n-Butyl Acetate	19.91	28.6	27.5	104.0	70	130	*
63)	n-Octane	20.08	28.2	26.3	107.2	70	130	*
64)	Tetrachloroethene	20.26	27.3	25.3	107.9	70	130	*
65)	Chlorobenzene	21.13	28.3	26.5	106.8	70	130	*
66)	Ethylbenzene	21.61	27.8	26.3	105.7	70	130	*
67)	m- & p-Xylenes	21.84	54.8	51.5	106.4	70	130	*
68)	Bromoform	21.92	28.8	26.5	108.7	70	130	*
69)	Styrene	22.29	28.7	26.3	109.1	70	130	*
70)	o-Xylene	22.44	27.7	26.0	106.5	70	130	*
71)	n-Nonane	22.71	27.1	25.8	105.0	70	130	*
72)	1,1,2,2-Tetrachloroethane	22.41	29.3	27.0	108.5	70	130	*
74)	Cumene	23.20	26.7	25.3	105.5	70	130	*
75)	alpha-Pinene	23.70	26.9	24.8	108.5	70	130	*
76)	n-Propylbenzene	23.85	26.7	25.3	105.5	70	130	*
77)	3-Ethyltoluene	23.98	27.8	26.3	105.7	70	130	*
78)	4-Ethyltoluene	24.03	28.2	26.3	107.2	70	130	*
79)	1,3,5-Trimethylbenzene	24.13	28.5	26.5	107.5	70	130	*
80)	alpha-Methylstyrene	24.31	28.7	26.0	110.4	70	130	*
81)	2-Ethyltoluene	24.36	26.5	26.0	101.9	70	130	*
82)	1,2,4-Trimethylbenzene	24.64	27.3	25.5	107.1	70	130	*
83)	n-Decane	24.76	26.0	26.3	98.9	70	130	*
84)	Benzyl Chloride	24.80	30.8	26.8	114.9	70	130	*
85)	1,3-Dichlorobenzene	24.83	28.8	26.0	110.8	70	130	*
86)	1,4-Dichlorobenzene	24.91	28.2	26.3	107.2	70	130	*
87)	sec-Butylbenzene	24.97	27.5	25.8	106.6	70	130	*
88)	4-Isopropyltoluene (p-Cymene)	25.17	27.2	25.0	108.8	70	130	*
89)	1,2,3-Trimethylbenzene	25.17	27.8	26.0	106.9	70	130	*
90)	1,2-Dichlorobenzene	25.34	28.3	25.8	109.7	70	130	*
91)	d-Limonene	25.34	28.6	26.5	107.9	70	130	*
92)	1,2-Dibromo-3-Chloropropane	25.87	28.9	27.0	107.0	70	130	*
93)	n-Undecane	26.29	25.6	26.3	97.3	70	130	*
94)	1,2,4-Trichlorobenzene	27.39	26.8	27.3	98.2	70	130	*
95)	Naphthalene	27.53	24.8	25.0	99.2	70	130	*
96)	n-Dodecane	27.52	23.2	24.3	95.5	70	130	*
97)	Hexachlorobutadiene	27.96	26.9	26.8	100.4	70	130	*
98)	Cyclohexanone	22.02	23.1	24.8	93.1	70	130	*
99)	tert-Butylbenzene	24.64	27.8	26.5	104.9	70	130	*
100)	n-Butylbenzene	25.68	28.0	26.5	105.7	70	130	*

* Denotes Passing Criterion

MH 9/9/09

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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

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	94	-0.01
2	T	Propene	2.193	2.503	-14.1	103	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.964	5.3	95	0.00
4	T	Chloromethane	2.918	2.866	1.8	92	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.594	3.6	94	-0.01
6	T	Vinyl Chloride	2.878	2.752	4.4	94	-0.01
7	T	1,3-Butadiene	2.044	2.171	-6.2	98	-0.01
8	T	Bromomethane	1.505	1.518	-0.9	96	-0.01
9	T	Chloroethane	1.428	1.412	1.1	95	-0.01
10	T	Ethanol	1.376	1.404	-2.0	94	-0.07
11	T	Acetonitrile	3.357	3.327	0.9	94	-0.04
12	T	Acrolein	0.897	0.995	-10.9	97	-0.02
13	T	Acetone	1.400	1.315	6.1	98	-0.04
14	T	Trichlorofluoromethane	2.677	2.659	0.7	95	-0.02
15	T	2-Propanol (Isopropanol)	3.834	3.015	21.4	79	-0.05
16	T	Acrylonitrile	2.033	2.299	-13.1	93	-0.03
17	T	1,1-Dichloroethene	1.571	1.492	5.0	93	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	4.277	-9.9	94	-0.03
19	T	Methylene Chloride	1.747	1.591	8.9	94	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.544	-8.6	96	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.186	1.0	91	-0.01
22	T	Carbon Disulfide	6.163	5.960	3.3	94	-0.01
23	T	trans-1,2-Dichloroethene	2.411	2.455	-1.8	94	-0.01
24	T	1,1-Dichloroethane	2.952	2.949	0.1	95	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.897	-2.4	96	0.00
26	T	Vinyl Acetate	0.303	0.378	-24.8	99	-0.03
27	T	2-Butanone (MEK)	0.976	1.111	-13.8	93	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.272	-1.0	95	-0.02
29	T	Diisopropyl Ether	1.386	1.426	-2.9	95	-0.01
30	T	Ethyl Acetate	0.633	0.688	-8.7	96	-0.03
31	T	n-Hexane	3.085	3.082	0.1	98	-0.01
32	T	Chloroform	2.582	2.588	-0.2	95	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.868	-5.7	100	-0.02
34	T	Tetrahydrofuran (THF)	1.015	1.079	-6.3	96	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	2.030	-2.7	95	-0.01
36	T	1,2-Dichloroethane	1.976	2.104	-6.5	97	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	94	-0.01
38	T	1,1,1-Trichloroethane	0.455	0.453	0.4	95	-0.01

EM 9/10/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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

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	0.229	-12.3	95	-0.02
40	T	1-Butanol	0.324	0.393	-21.3	95	-0.06
41	T	Benzene	1.344	1.271	5.4	94	-0.01
42	T	Carbon Tetrachloride	0.376	0.377	-0.3	94	-0.01
43	T	Cyclohexane	0.521	0.514	1.3	94	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.968	-2.4	95	-0.01
45	T	1,2-Dichloropropane	0.330	0.332	-0.6	93	-0.02
46	T	Bromodichloromethane	0.393	0.413	-5.1	95	-0.02
47	T	Trichloroethene	0.341	0.318	6.7	92	-0.02
48	T	1,4-Dioxane	0.239	0.267	-11.7	93	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.511	2.3	94	-0.02
50	T	Methyl Methacrylate	0.134	0.137	-2.2	92	-0.02
51	T	n-Heptane	0.358	0.356	0.6	94	-0.01
52	T	cis-1,3-Dichloropropene	0.497	0.542	-9.1	94	0.00
53	T	4-Methyl-2-pentanone	0.291	0.326	-12.0	94	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.497	-14.3	94	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.294	-2.4	92	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	99	0.00
57	S	Toluene-d8 (SS2)	2.377	2.322	2.3	97	-0.01
58	T	Toluene	2.881	2.658	7.7	93	0.00
59	T	2-Hexanone	1.497	1.556	-3.9	96	-0.02
60	T	Dibromochloromethane	0.615	0.613	0.3	92	0.00
61	T	1,2-Dibromoethane	0.648	0.651	-0.5	92	-0.01
62	T	n-Butyl Acetate	1.634	1.831	-12.1	96	-0.02
63	T	n-Octane	0.642	0.619	3.6	94	-0.01
64	T	Tetrachloroethene	0.715	0.655	8.4	91	0.00
65	T	Chlorobenzene	1.769	1.621	8.4	92	-0.01
66	T	Ethylbenzene	3.111	2.976	4.3	94	0.00
67	T	m- & p-Xylenes	2.466	2.370	3.9	94	-0.02
68	T	Bromoform	0.534	0.553	-3.6	92	-0.01
69	T	Styrene	1.823	1.804	1.0	92	-0.01
70	T	o-Xylene	2.481	2.387	3.8	94	-0.02
71	T	n-Nonane	1.494	1.464	2.0	96	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.067	-0.1	94	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.668	0.7	97	0.00
74	T	Cumene	3.217	3.059	4.9	93	0.00
75	T	alpha-Pinene	1.587	1.522	4.1	92	-0.01
76	T	n-Propylbenzene	3.975	3.830	3.6	94	-0.01

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EM 9/10/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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

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	2.869	4.8	91	0.00
78	T	4-Ethyltoluene	3.029	2.926	3.4	97	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.374	5.2	94	0.00
80	T	alpha-Methylstyrene	1.359	1.363	-0.3	93	-0.01
81	T	2-Ethyltoluene	3.112	2.948	5.3	94	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.645	0.6	95	-0.01
83	T	n-Decane	1.548	1.482	4.3	94	-0.02
84	T	Benzyl Chloride	2.058	2.268	-10.2	95	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.313	4.6	94	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.372	6.1	93	-0.01
87	T	sec-Butylbenzene	3.505	3.326	5.1	93	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.344	0.4	95	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.666	0.8	95	-0.01
90	T	1,2-Dichlorobenzene	1.382	1.336	3.3	95	-0.01
91	T	d-Limonene	1.088	1.099	-1.0	93	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.452	-8.4	96	-0.01
93	T	n-Undecane	1.600	1.579	1.3	96	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.972	-0.6	99	-0.01
95	T	Naphthalene	3.568	3.685	-3.3	101	0.00
96	T	n-Dodecane	1.790	1.843	-3.0	99	0.00
97	T	Hexachlorobutadiene	0.552	0.548	0.7	97	0.00
98	T	Cyclohexanone	0.907	1.001	-10.4	95	-0.02
99	T	tert-Butylbenzene	2.638	2.579	2.2	94	-0.01
100	T	n-Butylbenzene	2.789	2.728	2.2	94	0.00

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

Em 9/10/09

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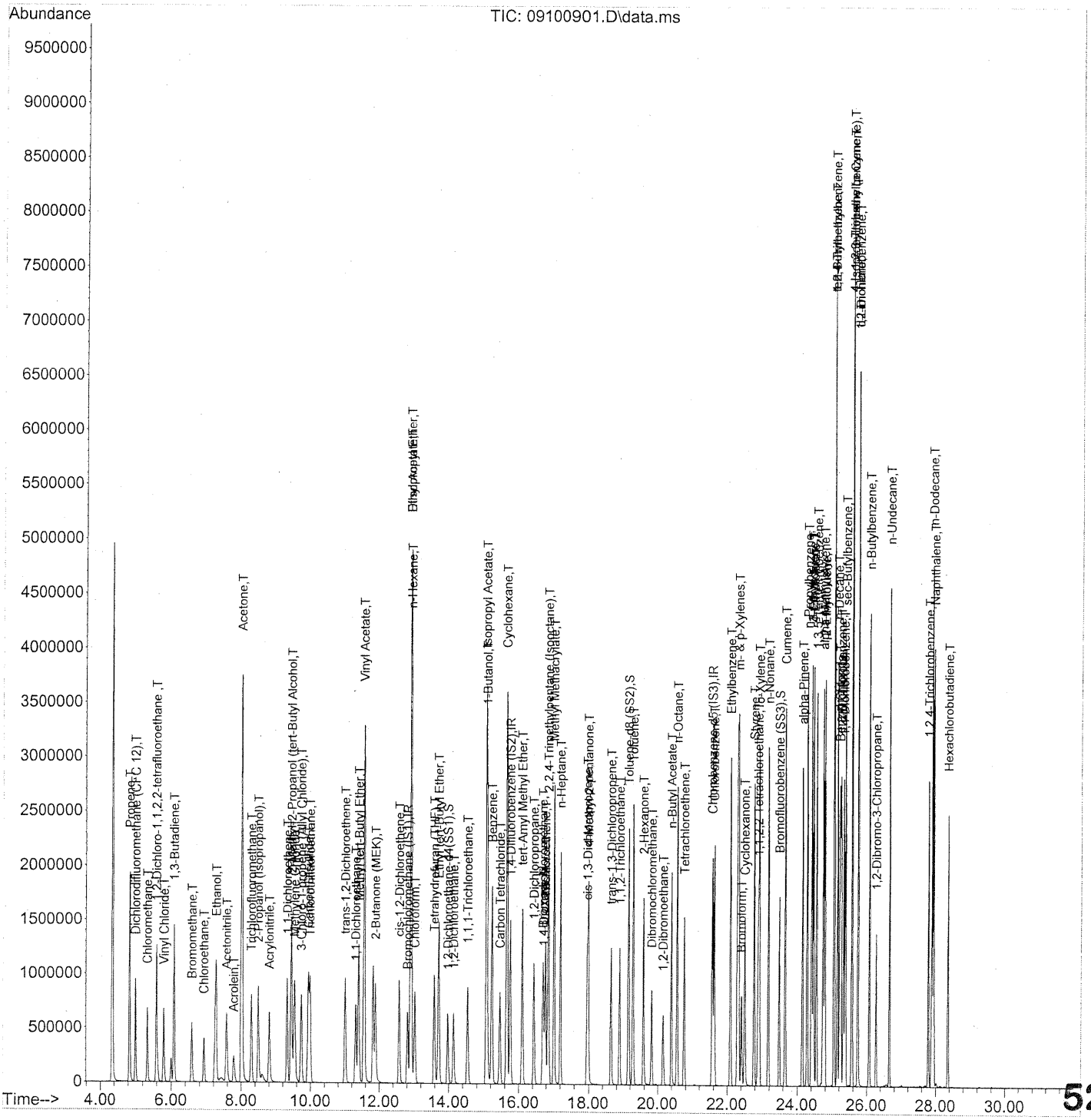
Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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)
1) Bromochloromethane (IS1)	12.82	130	341805	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1759234	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	887546	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	638324	26.412	ng		-0.02 ✓
Spiked Amount 25.000			Recovery = 105.64%				
57) Toluene-d8 (SS2)	19.15	98	2060760	24.424	ng		-0.01 ✓
Spiked Amount 25.000			Recovery = 97.68%				
73) Bromofluorobenzene (SS3)	23.49	174	592537	24.797	ng		0.00 ✓
Spiked Amount 25.000			Recovery = 99.20%				
Target Compounds							Qvalue
2) Propene	4.84	42	917117	30.588	ng		97
3) Dichlorodifluoromethan...	5.00	85	1065649	24.899	ng		100
4) Chloromethane	5.33	50	979558	24.557	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	577503	25.534	ng		99
6) Vinyl Chloride	5.80	62	952071	24.196	ng		99
7) 1,3-Butadiene	6.08	54	890640	31.866	ng		97
8) Bromomethane	6.59	94	529250	25.722	ng		99
9) Chloroethane	6.93	64	488355	25.017	ng		100
10) Ethanol	7.27	45	2494990m	132.656	ng		
11) Acetonitrile	7.58	41	1196427	26.066	ng		99
12) Acrolein	7.79	56	367272	29.943	ng		97
13) Acetone	8.01	58	2480380	129.597	ng		95
14) Trichlorofluoromethane	8.29	101	956029	26.122	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1949466m	37.194	ng		
16) Acrylonitrile	8.81	53	832804	29.957	ng		99
17) 1,1-Dichloroethene	9.33	96	560847	26.112	ng		94
18) 2-Methyl-2-Propanol (t...	9.45	59	2952773	55.491	ng		97
19) Methylene Chloride	9.54	84	582849	24.408	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	939075	29.326	ng		88
21) Trichlorotrifluoroethane	9.99	151	445796	27.214	ng		94
22) Carbon Disulfide	9.94	76	2183655	25.913	ng		98
23) trans-1,2-Dichloroethene	11.01	61	889457	26.986	ng		91
24) 1,1-Dichloroethane	11.32	63	1068418	26.468	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1827757	27.943	ng		96
26) Vinyl Acetate	11.56	86	651889	157.263	ng	#	64
27) 2-Butanone (MEK)	11.89	72	417854	31.317	ng	#	80
28) cis-1,2-Dichloroethene	12.58	61	847919	27.569	ng		91
29) Diisopropyl Ether	12.91	87	522342	27.574	ng	#	61
30) Ethyl Acetate	12.91	61	501709	57.984	ng		95
31) n-Hexane	12.93	57	1150226	27.271	ng		9

Em 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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	13.03	83	948311	26.864	ng		99
34) Tetrahydrofuran (THF)	13.58	72	405579	29.237	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	716219	26.500	ng	#	86
36) 1,2-Dichloroethane	14.14	62	762476	28.226	ng		100
38) 1,1,1-Trichloroethane	14.54	97	838113	26.194	ng		98
39) Isopropyl Acetate	15.07	61	841034	58.577	ng	#	77
40) 1-Butanol	15.09	56	1432820	62.850	ng		85
41) Benzene	15.23	78	2370245	25.053	ng		99
42) Carbon Tetrachloride	15.46	117	715657	27.062	ng		100
43) Cyclohexane	15.66	84	1946118	53.116	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1770460	26.625	ng		98
45) 1,2-Dichloropropane	16.43	63	614354	26.470	ng		98
46) Bromodichloromethane	16.70	83	785071	28.365	ng		98
47) Trichloroethene	16.77	130	593500	24.707	ng		100
48) 1,4-Dioxane	16.72	88	502662	29.872	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	2764679	25.391	ng		96
50) Methyl Methacrylate	17.02	100	513466	54.314	ng		89
51) n-Heptane	17.21	71	664213	26.372	ng		94
52) cis-1,3-Dichloropropene	17.95	75	945970	27.050	ng		100
53) 4-Methyl-2-pentanone	17.99	58	630489	30.839	ng		94
54) trans-1,3-Dichloropropene	18.64	75	961799	31.438	ng		100
55) 1,1,2-Trichloroethane	18.89	97	544514	26.939	ng		98
58) Toluene	19.28	91	2548147	24.913	ng		100
59) 2-Hexanone	19.58	43	1518648	28.568	ng		98
60) Dibromochloromethane	19.82	129	627130	28.715	ng		100
61) 1,2-Dibromoethane	20.15	107	612582	26.611	ng		99
62) n-Butyl Acetate	20.39	43	1788022	30.826	ng		98
63) n-Octane	20.56	57	588958	25.832	ng		92
64) Tetrachloroethene	20.76	166	593415	23.380	ng		99
65) Chlorobenzene	21.62	112	1553929	24.739	ng		99
66) Ethylbenzene	22.09	91	2800273	25.358	ng		99
67) m- & p-Xylenes	22.33	91	4375577	49.980	ng		99
68) Bromoform	22.41	173	506629	26.724	ng		99
69) Styrene	22.77	104	1716071	26.519	ng		99
70) o-Xylene	22.92	91	2245520	25.497	ng		98
71) n-Nonane	23.17	43	1377203	25.966	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	1015078	26.831	ng		100
74) Cumene	23.66	105	2801983	24.537	ng		98
75) alpha-Pinene	24.15	93	1366671	24.257	ng		99
76) n-Propylbenzene	24.28	91	3508465	24.859	ng		99
77) 3-Ethyltoluene	24.41	105	2780438	25.990	ng		100
78) 4-Ethyltoluene	24.46	105	2835995	26.370	ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	2300421	25.869	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 09:47:36 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	24.74	118	1296363	26.867	ng	98
81) 2-Ethyltoluene	24.79	105	2752318	24.913	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2488790	26.359	ng	100
83) n-Decane	25.15	57	1421033	25.857	ng	95
84) Benzyl Chloride	25.22	91	2213901	30.308	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1272683	26.037	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1290972	24.892	ng	100
87) sec-Butylbenzene	25.38	105	3129328	25.151	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3062692	25.692	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2536364	26.577	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1256655	25.604	ng	100
91) d-Limonene	25.74	68	1064740	27.563	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	441437	29.783	ng	92
93) n-Undecane	26.65	57	1530154	26.945	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	966154	28.177	ng	99
95) Naphthalene	27.94	128	3466595	27.363	ng	100
96) n-Dodecane	27.89	57	1622603	25.526	ng	96
97) Hexachlorobutadiene	28.36	225	534549	27.300	ng	100
98) Cyclohexanone	22.51	55	870463	27.022	ng	95
99) tert-Butylbenzene	25.05	119	2426764	25.916	ng	99
100) n-Butylbenzene	26.07	91	2643638	26.696	ng	99

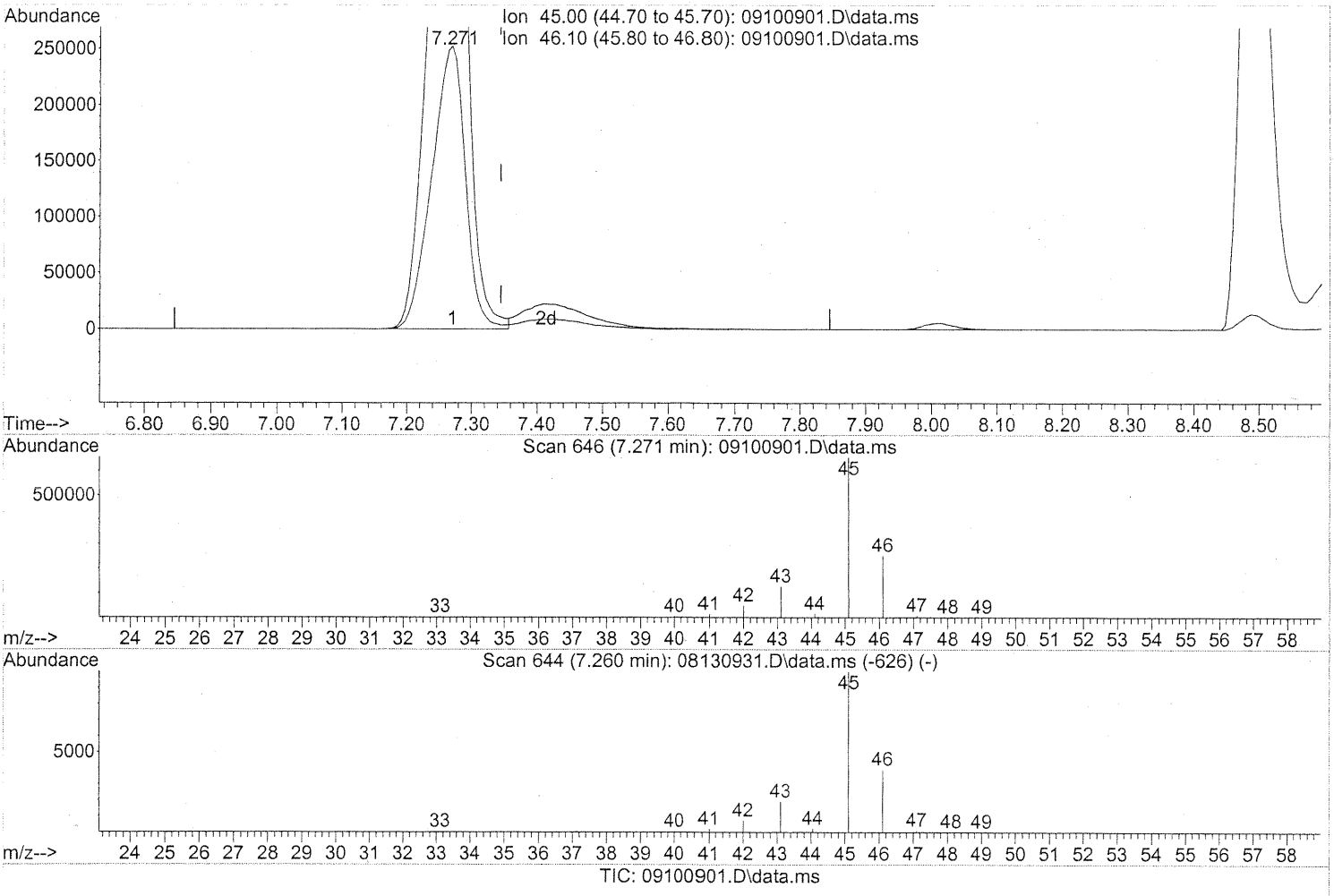
(#) = qualifier out of range (m) = manual integration (+) = signals summed

524

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 124.31ng

response 2337972

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.93
0.00	0.00	0.00
0.00	0.00	0.00

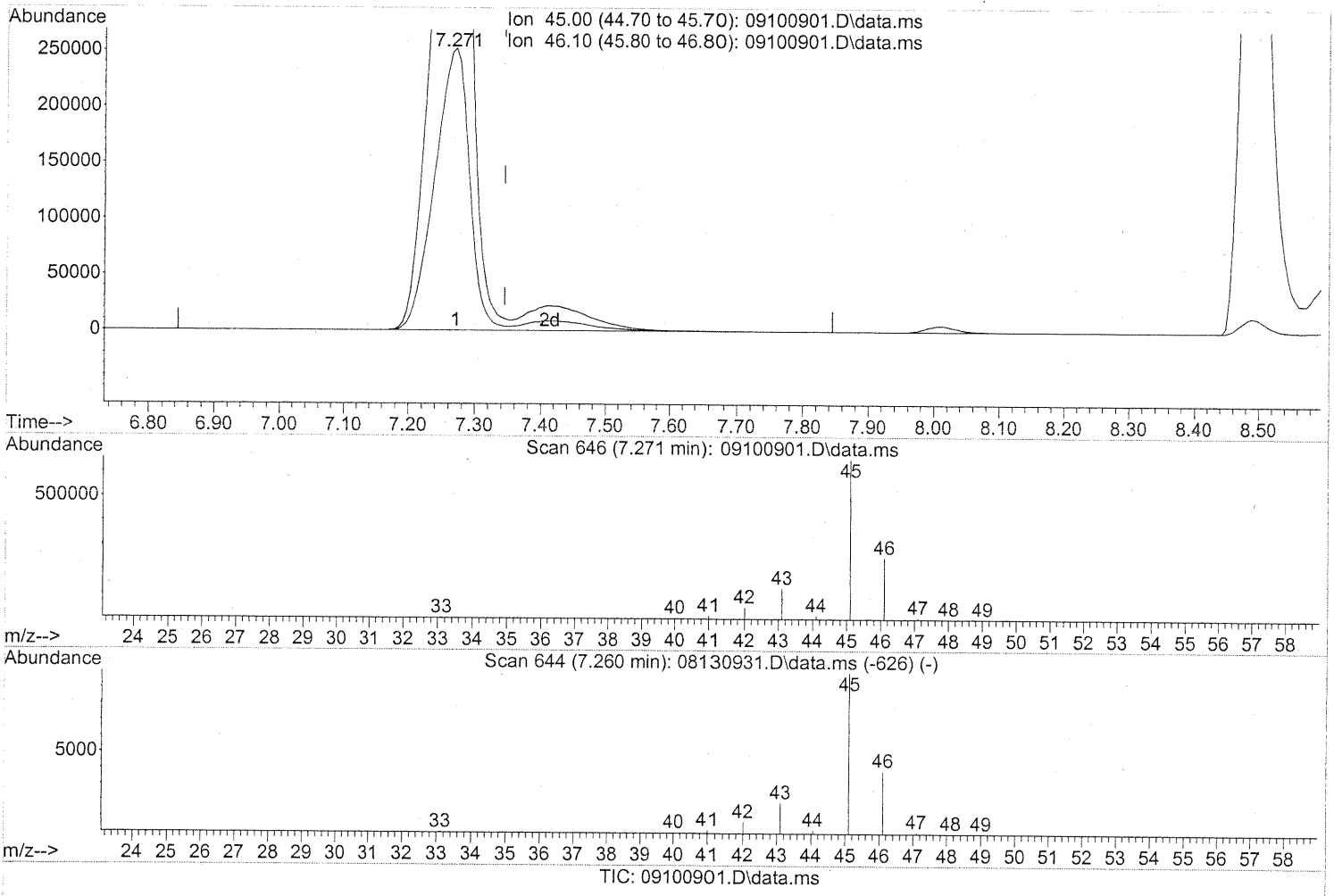
PT

525

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 132.66ng m

response 2494990

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.48
0.00	0.00	0.00
0.00	0.00	0.00

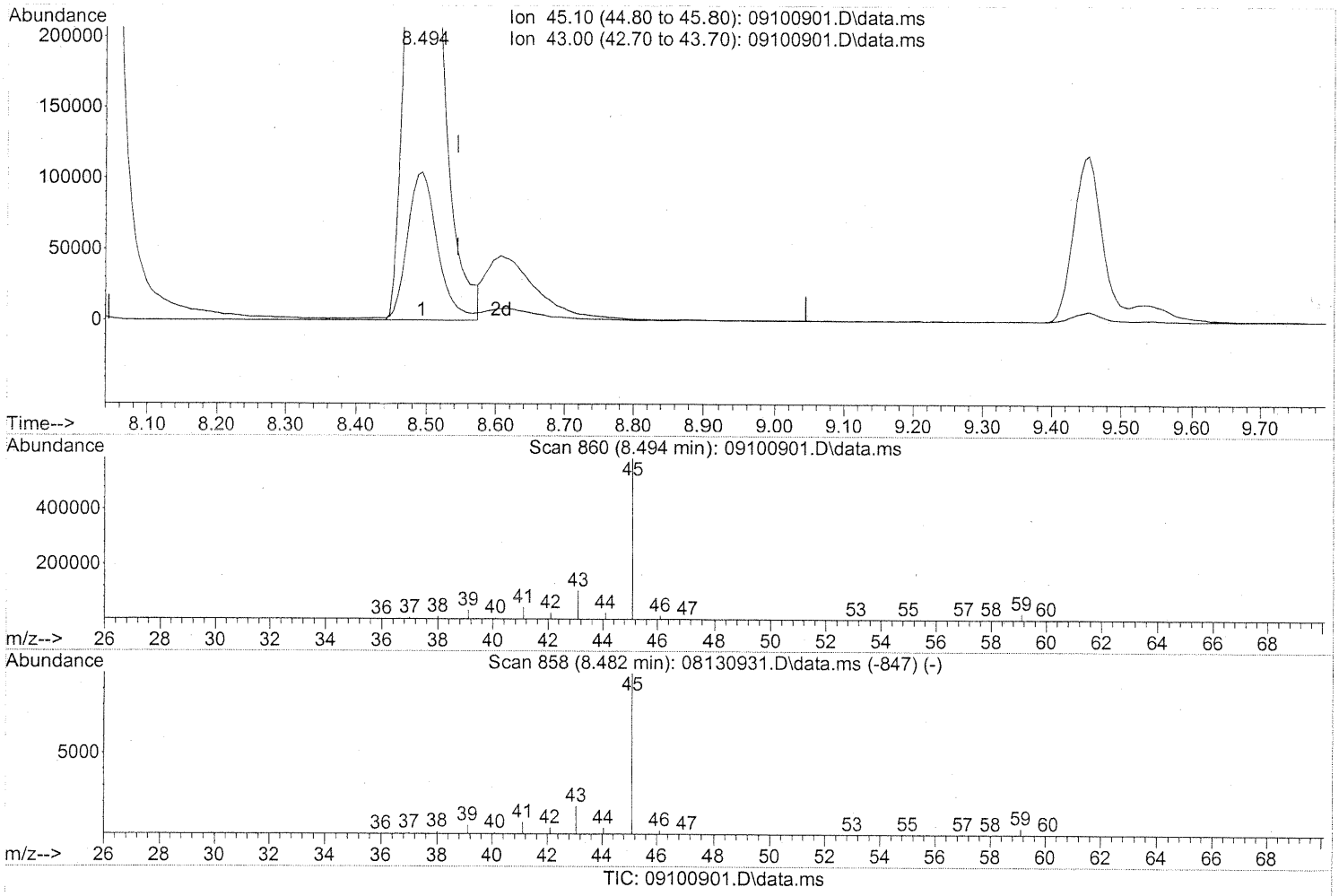
PT → IC
Cm 9/10/09
IH 9/10/09

526

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100901.D\data.ms

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

8.494min (-0.051) 32.71ng

response 1714340

PT

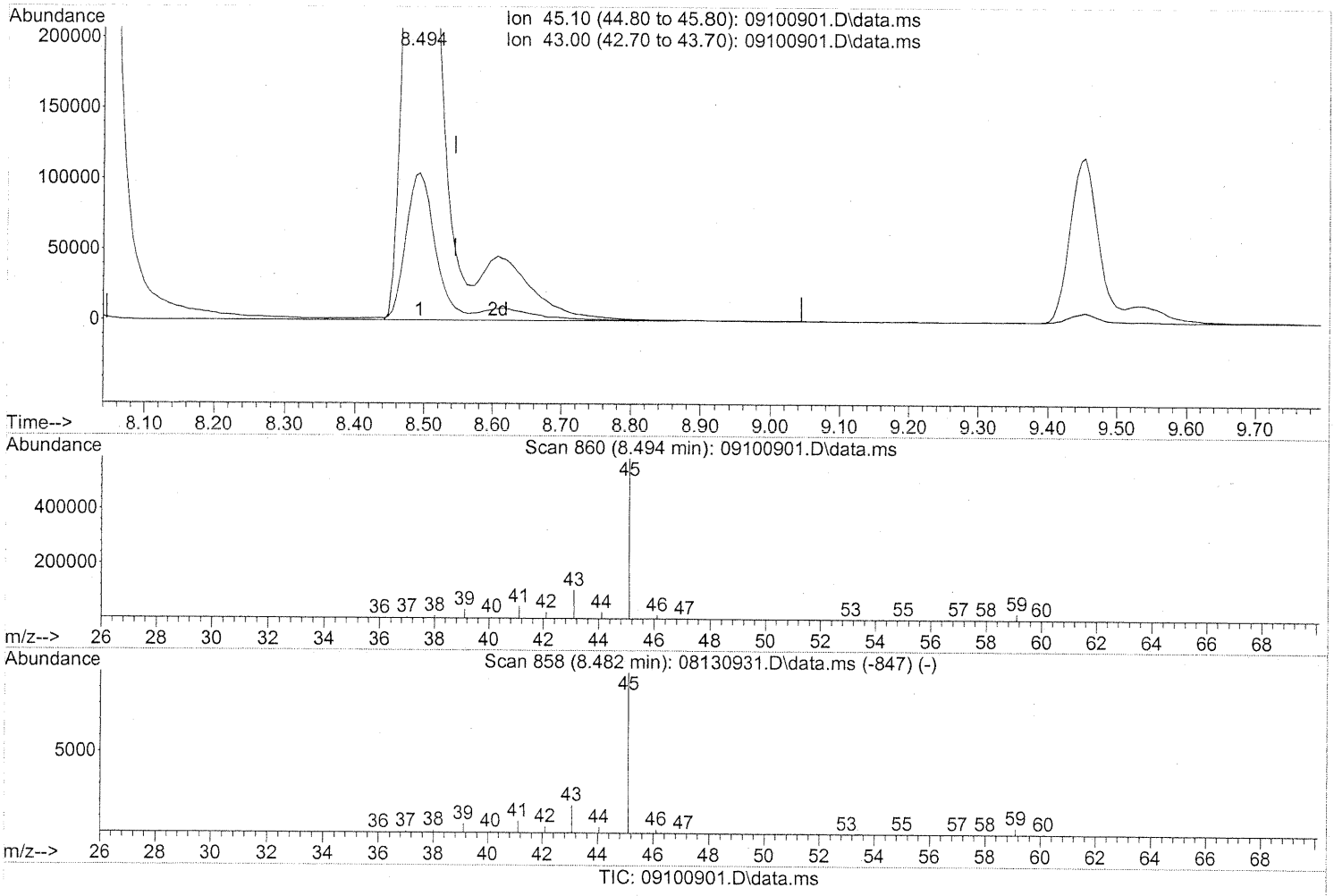
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.65
0.00	0.00	0.00
0.00	0.00	0.00

527

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:26:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09100901.D\data.ms

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

8.494min (-0.051) 37.19ng m

response 1949466

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.52
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Eom 9/10/09

M 9/10/09

528

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	90	-0.01
2	T	Propene	2.193	2.396	-9.3	95	0.00
3	T	Dichlorodifluoromethane (CF	3.130	3.034	3.1	94	0.00
4	T	Chloromethane	2.918	2.878	1.4	89	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.653	0.1	94	0.00
6	T	Vinyl Chloride	2.878	2.758	4.2	91	0.00
7	T	1,3-Butadiene	2.044	2.170	-6.2	95	0.00
8	T	Bromomethane	1.505	1.532	-1.8	93	-0.01
9	T	Chloroethane	1.428	1.436	-0.6	94	0.00
10	T	Ethanol	1.376	1.379	-0.2	89	-0.07
11	T	Acetonitrile	3.357	3.353	0.1	92	-0.04
12	T	Acrolein	0.897	1.008	-12.4	94	-0.02
13	T	Acetone	1.400	1.331	4.9	95	-0.04
14	T	Trichlorofluoromethane	2.677	2.734	-2.1	94	-0.01
15	T	2-Propanol (Isopropanol)	3.834	3.312	13.6	84	-0.05
16	T	Acrylonitrile	2.033	2.355	-15.8	92	-0.03
17	T	1,1-Dichloroethene	1.571	1.541	1.9	93	-0.01
18	T	2-Methyl-2-Propanol (tert-B	3.892	4.369	-12.3	93	-0.03
19	T	Methylene Chloride	1.747	1.639	6.2	93	-0.01
20	T	3-Chloro-1-propene (Allyl C	2.342	2.596	-10.8	94	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.241	-3.6	92	-0.01
22	T	Carbon Disulfide	6.163	6.094	1.1	92	-0.01
23	T	trans-1,2-Dichloroethene	2.411	2.520	-4.5	93	-0.01
24	T	1,1-Dichloroethane	2.952	3.029	-2.6	94	-0.02
25	T	Methyl tert-Butyl Ether	4.784	5.030	-5.1	94	0.00
26	T	Vinyl Acetate	0.303	0.393	-29.7	99	-0.03
27	T	2-Butanone (MEK)	0.976	1.133	-16.1	91	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.312	-2.8	93	-0.01
29	T	Diisopropyl Ether	1.386	1.470	-6.1	94	-0.01
30	T	Ethyl Acetate	0.633	0.695	-9.8	93	-0.03
31	T	n-Hexane	3.085	3.095	-0.3	95	-0.01
32	T	Chloroform	2.582	2.679	-3.8	95	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.819	-2.9	94	-0.02
34	T	Tetrahydrofuran (THF)	1.015	1.085	-6.9	92	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	2.091	-5.8	94	-0.01
36	T	1,2-Dichloroethane	1.976	2.142	-8.4	95	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	90	-0.01
38	T	1,1,1-Trichloroethane	0.455	0.476	-4.6	95	-0.01

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	0.233	-14.2	92	-0.03
40	T	1-Butanol	0.324	0.405	-25.0	94	-0.06
41	T	Benzene	1.344	1.324	1.5	93	-0.01
42	T	Carbon Tetrachloride	0.376	0.397	-5.6	95	-0.01
43	T	Cyclohexane	0.521	0.535	-2.7	93	-0.01
44	T	tert-Amyl Methyl Ether	0.945	0.998	-5.6	94	-0.01
45	T	1,2-Dichloropropane	0.330	0.339	-2.7	91	-0.01
46	T	Bromodichloromethane	0.393	0.429	-9.2	94	-0.02
47	T	Trichloroethene	0.341	0.334	2.1	92	-0.02
48	T	1,4-Dioxane	0.239	0.277	-15.9	92	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.560	-0.8	92	-0.02
50	T	Methyl Methacrylate	0.134	0.144	-7.5	92	-0.02
51	T	n-Heptane	0.358	0.368	-2.8	93	-0.01
52	T	cis-1,3-Dichloropropene	0.497	0.557	-12.1	92	0.00
53	T	4-Methyl-2-pentanone	0.291	0.334	-14.8	92	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.516	-18.6	93	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.309	-7.7	92	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	82	0.00
57	S	Toluene-d8 (SS2)	2.377	2.521	-6.1	87	-0.01
58	T	Toluene	2.881	3.161	-9.7	92	0.00
59	T	2-Hexanone	1.497	1.842	-23.0	94	-0.02
60	T	Dibromochloromethane	0.615	0.743	-20.8	93	0.00
61	T	1,2-Dibromoethane	0.648	0.781	-20.5	92	-0.01
62	T	n-Butyl Acetate	1.634	2.160	-32.2#	94	-0.02
63	T	n-Octane	0.642	0.730	-13.7	92	-0.01
64	T	Tetrachloroethene	0.715	0.796	-11.3	91	0.00
65	T	Chlorobenzene	1.769	1.946	-10.0	92	-0.01
66	T	Ethylbenzene	3.111	3.559	-14.4	93	0.00
67	T	m- & p-Xylenes	2.466	2.836	-15.0	94	-0.02
68	T	Bromoform	0.534	0.672	-25.8	93	-0.01
69	T	Styrene	1.823	2.178	-19.5	92	-0.01
70	T	o-Xylene	2.481	2.850	-14.9	93	-0.02
71	T	n-Nonane	1.494	1.705	-14.1	93	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.265	-18.7	93	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.634	5.8	77	0.00
74	T	Cumene	3.217	3.678	-14.3	93	0.00
75	T	alpha-Pinene	1.587	1.826	-15.1	92	-0.01
76	T	n-Propylbenzene	3.975	4.558	-14.7	93	-0.01

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EM 9/11/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	3.437	-14.1	90	0.00
78	T	4-Ethyltoluene	3.029	3.495	-15.4	96	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.827	-12.9	93	0.00
80	T	alpha-Methylstyrene	1.359	1.619	-19.1	92	-0.01
81	T	2-Ethyltoluene	3.112	3.516	-13.0	93	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	3.132	-17.7	93	-0.01
83	T	n-Decane	1.548	1.729	-11.7	91	-0.02
84	T	Benzyl Chloride	2.058	2.678	-30.1#	94	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.565	-13.7	93	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.636	-12.0	93	-0.01
87	T	sec-Butylbenzene	3.505	3.974	-13.4	93	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.955	-17.8	93	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	3.140	-16.8	93	-0.01
90	T	1,2-Dichlorobenzene	1.382	1.582	-14.5	93	-0.01
91	T	d-Limonene	1.088	1.276	-17.3	90	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.525	-25.9	92	-0.01
93	T	n-Undecane	1.600	1.805	-12.8	91	0.00
94	T	1,2,4-Trichlorobenzene	0.966	1.098	-13.7	93	-0.01
95	T	Naphthalene	3.568	4.094	-14.7	93	0.00
96	T	n-Dodecane	1.790	2.047	-14.4	92	0.00
97	T	Hexachlorobutadiene	0.552	0.628	-13.8	93	0.00
98	T	Cyclohexanone	0.907	1.178	-29.9	93	-0.02
99	T	tert-Butylbenzene	2.638	3.082	-16.8	94	-0.01
100	T	n-Butylbenzene	2.789	3.190	-14.4	92	0.00

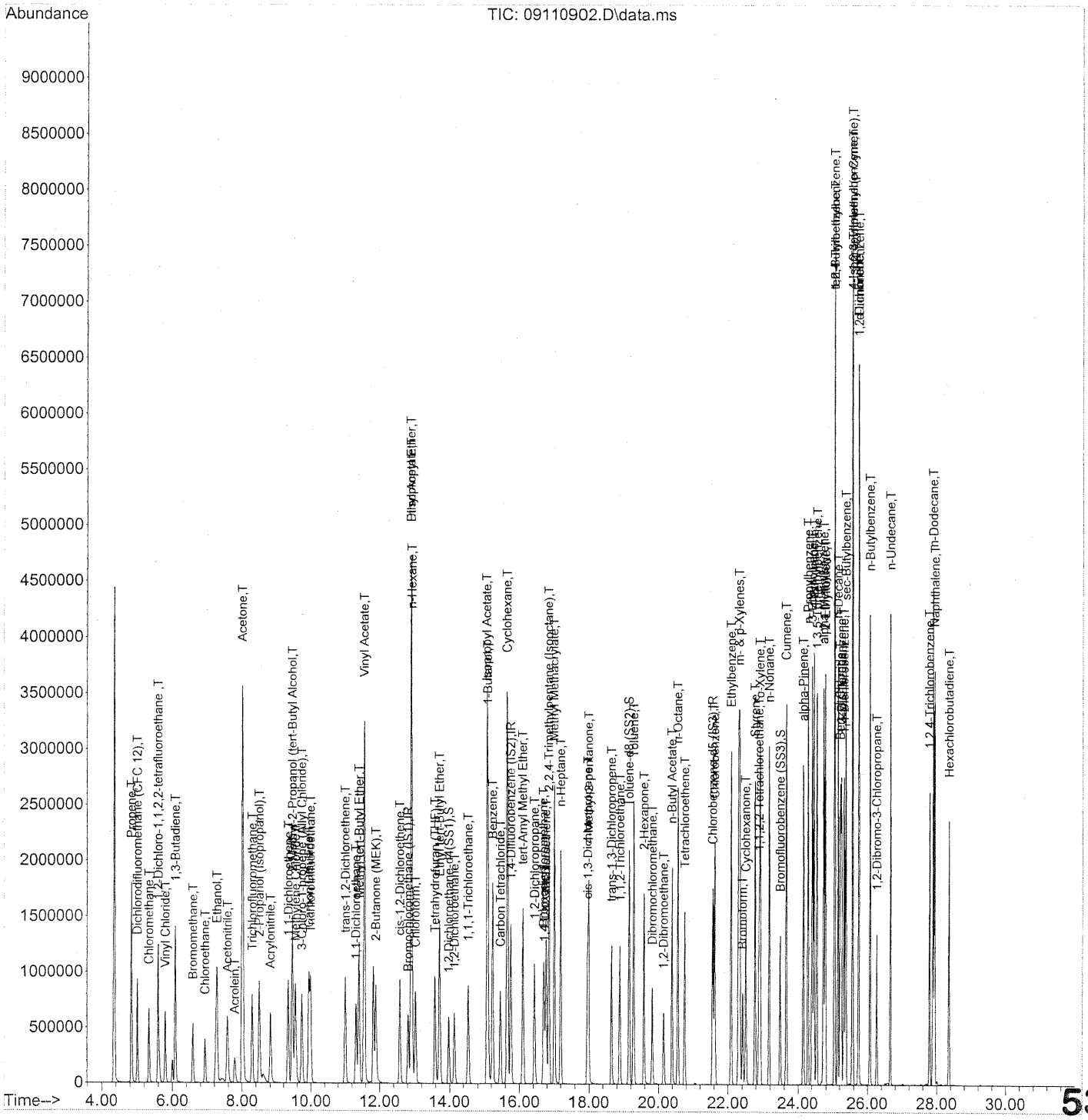
(#) = Out of Range SPCC's out = 0 CCC's out = 0

tom 9/11/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



532

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	329092	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1678079	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	737462	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	598624	25.726	ng		-0.02
Spiked Amount 25.000			Recovery =	102.92%			
57) Toluene-d8 (SS2)	19.15	98	1858886	26.515	ng		-0.01
Spiked Amount 25.000			Recovery =	106.04%			
73) Bromofluorobenzene (SS3)	23.49	174	467393	23.541	ng		0.00
Spiked Amount 25.000			Recovery =	94.16%			
Target Compounds							Qvalue
2) Propene	4.84	42	845251	29.280	ng		97
3) Dichlorodifluoromethan...	5.01	85	1050396	25.490	ng		100
4) Chloromethane	5.34	50	947117	24.661	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	576526	26.476	ng		100
6) Vinyl Chloride	5.80	62	918584	24.247	ng		99
7) 1,3-Butadiene	6.09	54	856862	31.842	ng		98
8) Bromomethane	6.59	94	514147	25.954	ng		100
9) Chloroethane	6.93	64	478411	25.454	ng		100
10) Ethanol	7.28	45	2359004m	130.271	ng		
11) Acetonitrile	7.58	41	1160778	26.266	ng		99
12) Acrolein	7.79	56	358232	30.335	ng		98
13) Acetone	8.01	58	2417988	131.218	ng		93
14) Trichlorofluoromethane	8.29	101	946499	26.860	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	2061983m	40.860	ng		
16) Acrylonitrile	8.81	53	821438	30.690	ng		98
17) 1,1-Dichloroethene	9.33	96	557818	26.974	ng		96
18) 2-Methyl-2-Propanol (t...	9.45	59	2904675	56.696	ng		98
19) Methylene Chloride	9.55	84	578262	25.152	ng		88
20) 3-Chloro-1-propene (Al...	9.73	41	922808	29.931	ng		89
21) Trichlorotrifluoroethane	9.99	151	449175	28.480	ng		96
22) Carbon Disulfide	9.94	76	2150043	26.500	ng		98
23) trans-1,2-Dichloroethene	11.01	61	879243	27.707	ng		92
24) 1,1-Dichloroethane	11.32	63	1056704	27.189	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1807692	28.704	ng		96
26) Vinyl Acetate	11.56	86	651293	163.189	ng	#	68
27) 2-Butanone (MEK)	11.89	72	410079	31.921	ng	#	83
28) cis-1,2-Dichloroethene	12.58	61	830958	28.061	ng		93
29) Diisopropyl Ether	12.91	87	518611	28.435	ng	#	67
30) Ethyl Acetate	12.91	61	487438	58.511	ng		97
31) n-Hexane	12.93	57	1112239	27.389	ng		9[illegible]

EM 9/11/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	945132	27.808	ng		99
34) Tetrahydrofuran (THF)	13.58	72	392686	29.401	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	709992	27.284	ng	#	88
36) 1,2-Dichloroethane	14.14	62	747050	28.724	ng		99
38) 1,1,1-Trichloroethane	14.54	97	840192	27.529	ng		99
39) Isopropyl Acetate	15.07	61	819390	59.830	ng	#	78
40) 1-Butanol	15.09	56	1408812	64.786	ng		86
41) Benzene	15.23	78	2355522	26.102	ng		99
42) Carbon Tetrachloride	15.46	117	720173	28.550	ng		99
43) Cyclohexane	15.66	84	1931531	55.267	ng		89
44) tert-Amyl Methyl Ether	16.10	73	1742402	27.471	ng		99
45) 1,2-Dichloropropane	16.44	63	597652	26.996	ng		98
46) Bromodichloromethane	16.70	83	777163	29.438	ng		99
47) Trichloroethene	16.77	130	593887	25.919	ng		100
48) 1,4-Dioxane	16.72	88	498414	31.052	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	2722295	26.211	ng		95
50) Methyl Methacrylate	17.02	100	513863	56.985	ng		92
51) n-Heptane	17.21	71	654277	27.234	ng		95
52) cis-1,3-Dichloropropene	17.95	75	927890	27.816	ng		100
53) 4-Methyl-2-pentanone	17.99	58	616413	31.609	ng		95
54) trans-1,3-Dichloropropene	18.64	75	951670	32.611	ng		99
55) 1,1,2-Trichloroethane	18.89	97	546179	28.328	ng		99
58) Toluene	19.28	91	2517459	29.622	ng		100
59) 2-Hexanone	19.58	43	1493851	33.821	ng		97
60) Dibromochloromethane	19.82	129	631599	34.805	ng		100
61) 1,2-Dibromoethane	20.15	107	610246	31.904	ng		99
62) n-Butyl Acetate	20.39	43	1752526	36.363	ng		98
63) n-Octane	20.56	57	577293	30.474	ng		92
64) Tetrachloroethene	20.76	166	598590	28.384	ng		100
65) Chlorobenzene	21.62	112	1549768	29.694	ng		100
66) Ethylbenzene	22.09	91	2782156	30.321	ng		99
67) m- & p-Xylenes	22.32	91	4350818	59.812	ng		100
68) Bromoform	22.41	173	511211	32.454	ng		100
69) Styrene	22.77	104	1722133	32.028	ng		100
70) o-Xylene	22.92	91	2227496	30.439	ng		99
71) n-Nonane	23.17	43	1333059	30.249	ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	999750	31.803	ng		99
74) Cumene	23.66	105	2799527	29.505	ng		99
75) alpha-Pinene	24.15	93	1363131	29.119	ng		99
76) n-Propylbenzene	24.28	91	3469206	29.584	ng		99
77) 3-Ethyltoluene	24.41	105	2767803	31.138	ng		100
78) 4-Ethyltoluene	24.46	105	2814593	31.497	ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	2276416	30.809	ng		10[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

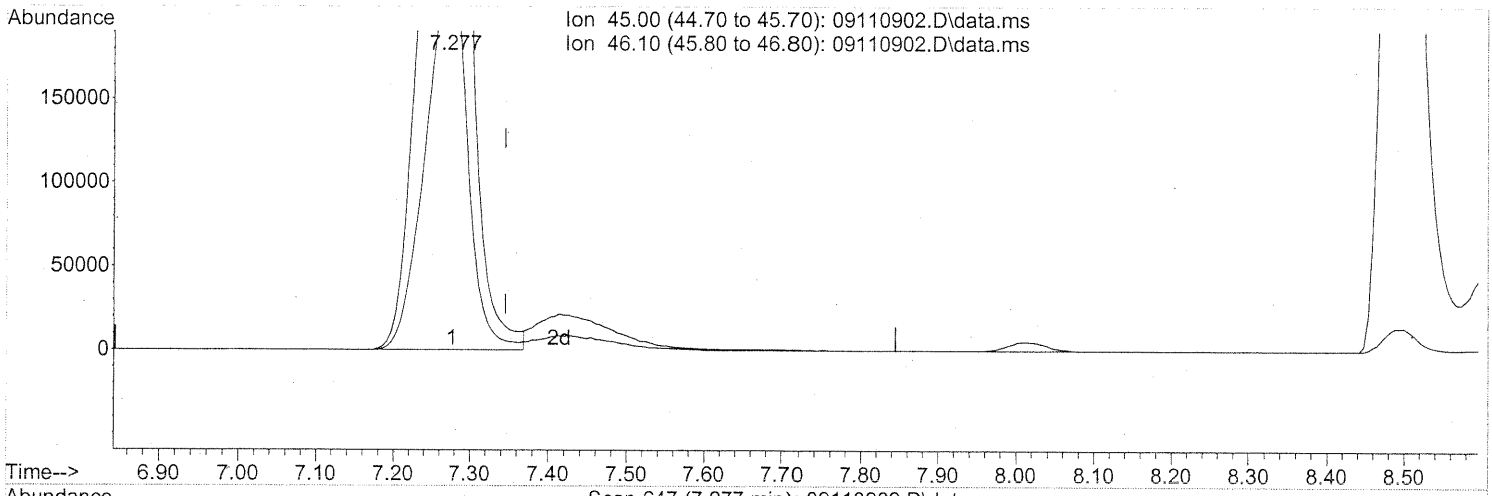
Quant Time: Sep 11 09:52:56 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

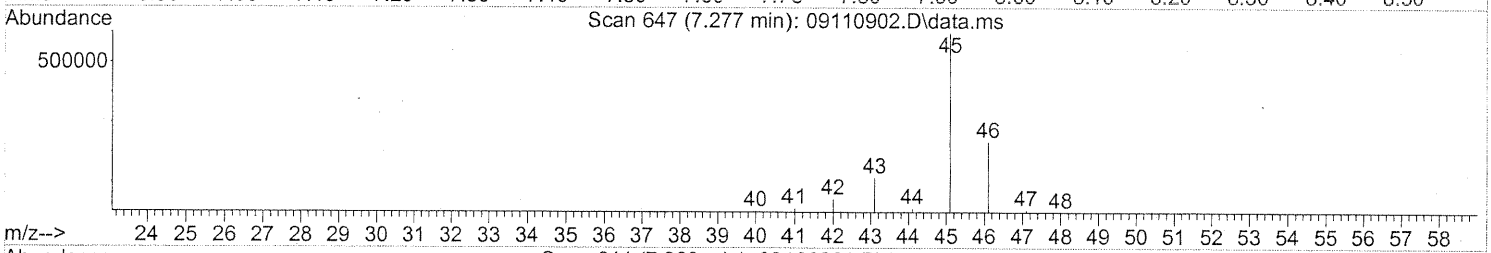
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1280026	31.927	ng	99
81) 2-Ethyltoluene	24.79	105	2727695	29.715	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2448055	31.205	ng	99
83) n-Decane	25.15	57	1376864	30.152	ng	96
84) Benzyl Chloride	25.22	91	2172178	35.788	ng	99
85) 1,3-Dichlorobenzene	25.25	146	1260272	31.030	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1278696	29.673	ng	100
87) sec-Butylbenzene	25.38	105	3106407	30.048	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	3009813	30.387	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2482277	31.304	ng	98
90) 1,2-Dichlorobenzene	25.75	146	1236576	30.323	ng	100
91) d-Limonene	25.74	68	1027593	32.015	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.26	157	425736	34.569	ng	95
93) n-Undecane	26.65	57	1453311	30.801	ng	97
94) 1,2,4-Trichlorobenzene	27.79	180	907139	31.840	ng	99
95) Naphthalene	27.94	128	3200462	30.404	ng	100
96) n-Dodecane	27.89	57	1497331	28.349	ng	97
97) Hexachlorobutadiene	28.36	225	509394	31.310	ng	99
98) Cyclohexanone	22.51	55	851345	31.807	ng	95
99) tert-Butylbenzene	25.05	119	2409278	30.966	ng	100
100) n-Butylbenzene	26.07	91	2568761	31.219	ng	100

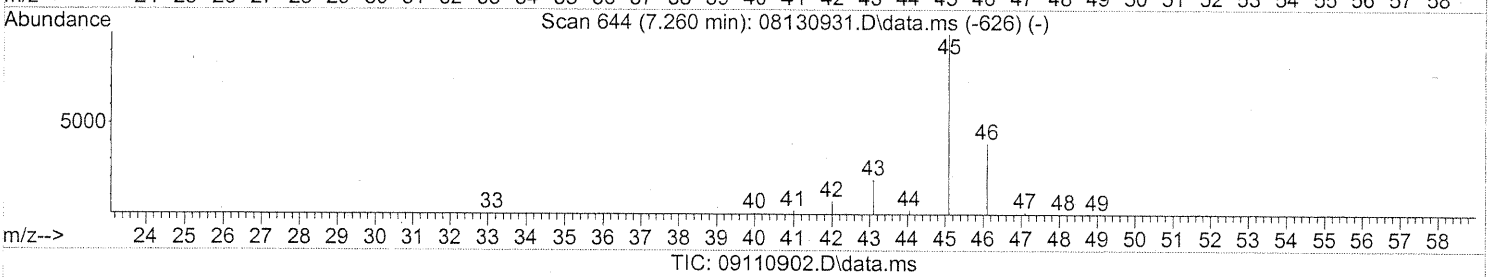
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-~~08130905~~/S20-09030903
ALS Vial : 1 Sample Multiplier: 1
-09110901 Em 9/11/09
Quant Time: Sep 11 09:52:04 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: 09110902.D\data.ms

(10) Ethanol (T)

7.277min (-0.069) 122.11ng

response 2211126

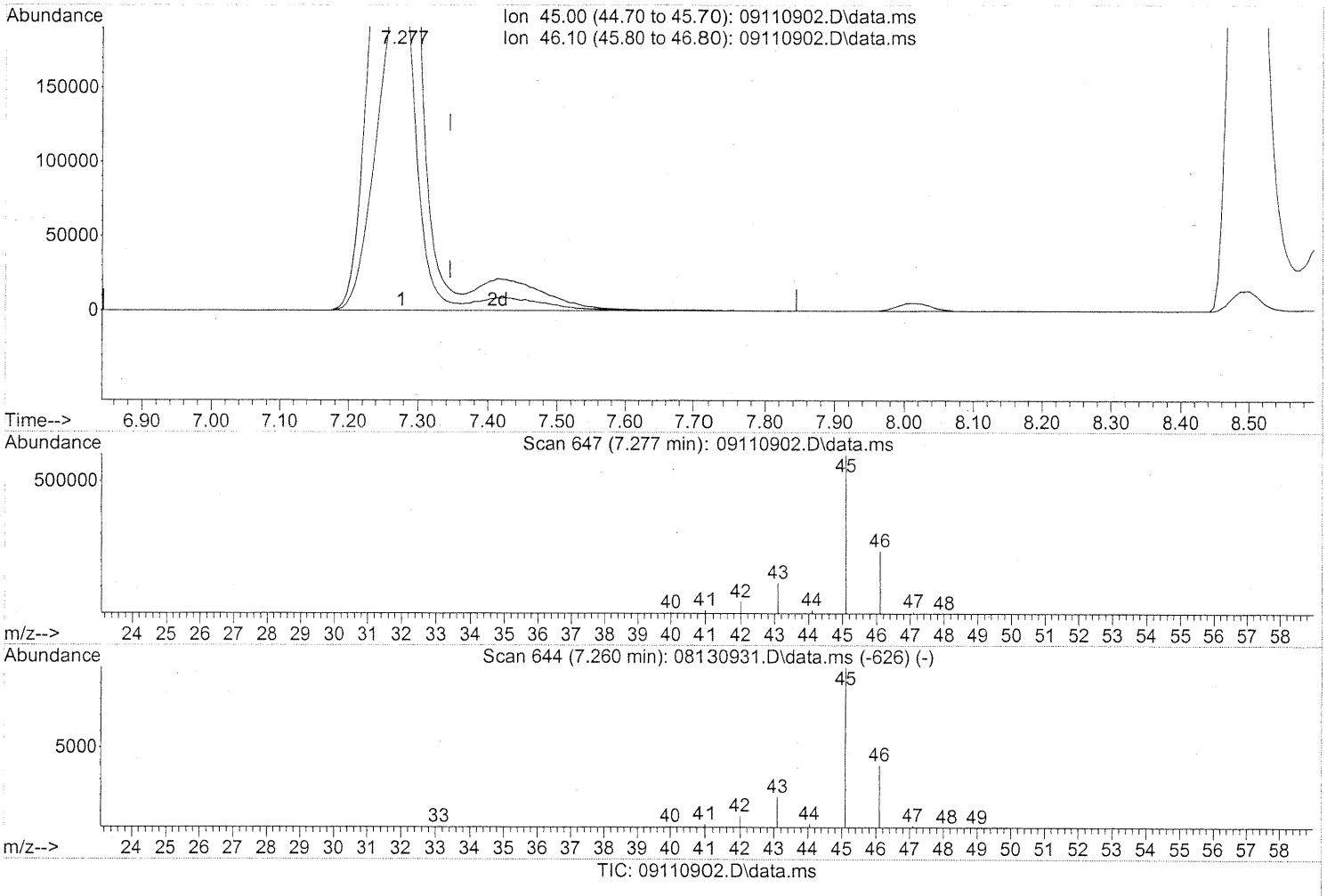
PT

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.24
0.00	0.00	0.00
0.00	0.00	0.00

536

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-~~08130905~~/S20-09030903
ALS Vial : 1 Sample Multiplier: 1
-09110901 em 9/11/09
Quant Time: Sep 11 09:52:04 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: 09110902.D\data.ms

(10) Ethanol (T)

7.277min (-0.069) 130.27ng m

response 2359004

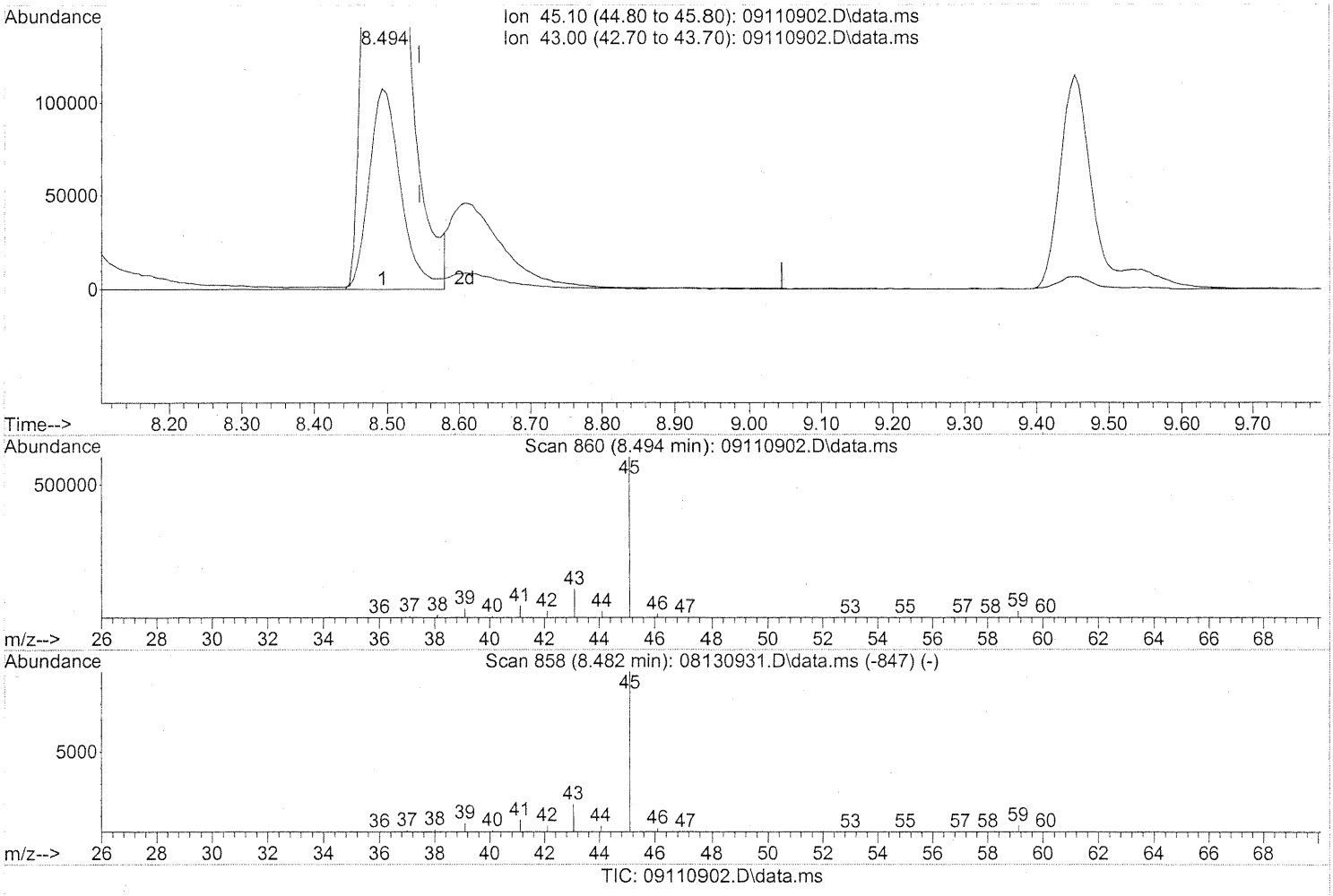
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.78
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
em 9/11/09
LM 9/14/09

537

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-~~08130905~~/S20-09030903
ALS Vial : 1 Sample Multiplier: 1
-09110901 Em 9/11/09
Quant Time: Sep 11 09:52:04 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



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

8.494min (-0.051) 36.17ng

response 1825145

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

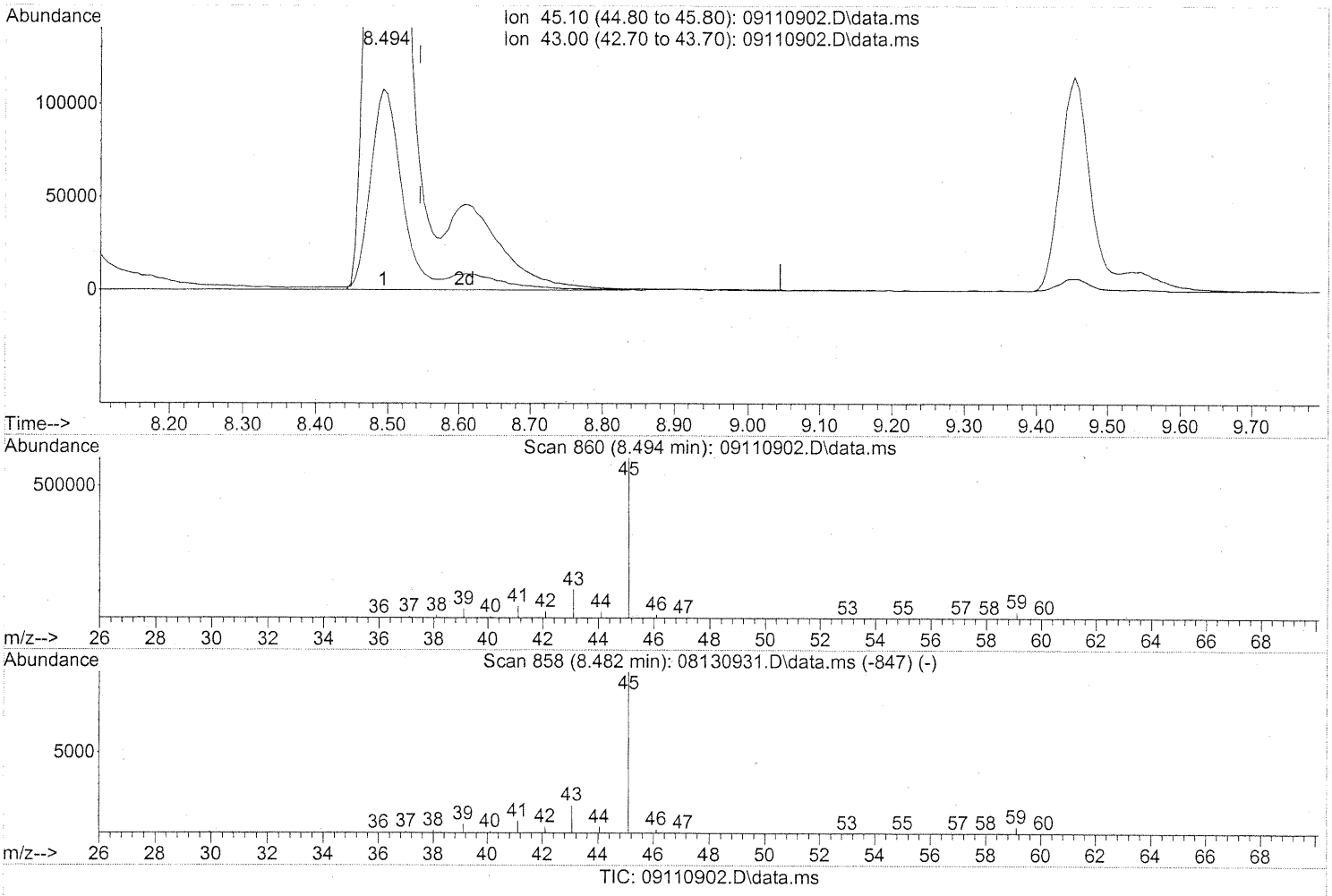
538

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-~~08130905~~/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

-09110901 Em 9/11/09

Quant Time: Sep 11 09:52:04 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



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

8.494min (-0.051) 40.86ng m

response 2061983

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.40
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC

Em 9/11/09

LH 9/14/09

539

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

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	84	-0.01
2	T	Propene	2.193	2.601	-18.6	95	0.00
3	T	Dichlorodifluoromethane (CF	3.130	3.003	4.1	86	-0.01
4	T	Chloromethane	2.918	2.963	-1.5	85	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.556	5.9	82	-0.01
6	T	Vinyl Chloride	2.878	2.806	2.5	86	-0.02
7	T	1,3-Butadiene	2.044	2.207	-8.0	89	-0.01
8	T	Bromomethane	1.505	1.490	1.0	84	-0.02
9	T	Chloroethane	1.428	1.432	-0.3	87	-0.01
10	T	Ethanol	1.376	1.374	0.1	82	-0.07
11	T	Acetonitrile	3.357	3.348	0.3	85	-0.04
12	T	Acrolein	0.897	0.984	-9.7	85	-0.02
13	T	Acetone	1.400	1.320	5.7	88	-0.04
14	T	Trichlorofluoromethane	2.677	2.656	0.8	85	-0.02
15	T	2-Propanol (Isopropanol)	3.834	2.978	22.3	70	-0.05
16	T	Acrylonitrile	2.033	2.319	-14.1	84	-0.03
17	T	1,1-Dichloroethene	1.571	1.494	4.9	83	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	4.216	-8.3	83	-0.04
19	T	Methylene Chloride	1.747	1.606	8.1	85	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.584	-10.3	87	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.183	1.3	81	-0.02
22	T	Carbon Disulfide	6.163	6.010	2.5	85	-0.02
23	T	trans-1,2-Dichloroethene	2.411	2.463	-2.2	84	-0.01
24	T	1,1-Dichloroethane	2.952	2.955	-0.1	85	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.813	-0.6	84	-0.01
26	T	Vinyl Acetate	0.303	0.362	-19.5	85	-0.03
27	T	2-Butanone (MEK)	0.976	1.118	-14.5	84	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.283	-1.5	85	-0.02
29	T	Diisopropyl Ether	1.386	1.416	-2.2	84	-0.01
30	T	Ethyl Acetate	0.633	0.691	-9.2	86	-0.03
31	T	n-Hexane	3.085	3.097	-0.4	88	-0.01
32	T	Chloroform	2.582	2.578	0.2	84	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.872	-5.9	89	-0.02
34	T	Tetrahydrofuran (THF)	1.015	1.056	-4.0	84	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	1.990	-0.7	83	-0.01
36	T	1,2-Dichloroethane	1.976	2.095	-6.0	87	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	84	-0.01
38	T	1,1,1-Trichloroethane	0.455	0.450	1.1	84	-0.01

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

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	0.231	-13.2	85	-0.02
40	T	1-Butanol	0.324	0.396	-22.2	86	-0.06
41	T	Benzene	1.344	1.284	4.5	84	-0.01
42	T	Carbon Tetrachloride	0.376	0.373	0.8	83	-0.01
43	T	Cyclohexane	0.521	0.518	0.6	84	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.954	-1.0	83	-0.01
45	T	1,2-Dichloropropane	0.330	0.335	-1.5	84	-0.02
46	T	Bromodichloromethane	0.393	0.413	-5.1	84	-0.02
47	T	Trichloroethene	0.341	0.315	7.6	81	-0.02
48	T	1,4-Dioxane	0.239	0.267	-11.7	82	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.523	1.6	84	-0.02
50	T	Methyl Methacrylate	0.134	0.137	-2.2	82	-0.02
51	T	n-Heptane	0.358	0.359	-0.3	84	-0.01
52	T	cis-1,3-Dichloropropene	0.497	0.540	-8.7	83	0.00
53	T	4-Methyl-2-pentanone	0.291	0.329	-13.1	84	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.495	-13.8	84	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.296	-3.1	82	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	85	0.00
57	S	Toluene-d8 (SS2)	2.377	2.398	-0.9	86	-0.01
58	T	Toluene	2.881	2.780	3.5	83	-0.01
59	T	2-Hexanone	1.497	1.649	-10.2	87	-0.02
60	T	Dibromochloromethane	0.615	0.637	-3.6	82	-0.01
61	T	1,2-Dibromoethane	0.648	0.678	-4.6	82	-0.01
62	T	n-Butyl Acetate	1.634	1.935	-18.4	87	-0.02
63	T	n-Octane	0.642	0.661	-3.0	86	-0.01
64	T	Tetrachloroethene	0.715	0.679	5.0	81	0.00
65	T	Chlorobenzene	1.769	1.694	4.2	83	-0.01
66	T	Ethylbenzene	3.111	3.136	-0.8	85	0.00
67	T	m- & p-Xylenes	2.466	2.500	-1.4	85	-0.02
68	T	Bromoform	0.534	0.572	-7.1	82	-0.01
69	T	Styrene	1.823	1.902	-4.3	83	-0.01
70	T	o-Xylene	2.481	2.512	-1.2	85	-0.02
71	T	n-Nonane	1.494	1.570	-5.1	88	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.126	-5.6	85	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.642	4.6	80	0.00
74	T	Cumene	3.217	3.226	-0.3	84	0.00
75	T	alpha-Pinene	1.587	1.606	-1.2	84	-0.01
76	T	n-Propylbenzene	3.975	4.051	-1.9	85	-0.01

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EM 9/15/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

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	3.025	-0.4	82	0.00
78	T	4-Ethyltoluene	3.029	3.078	-1.6	87	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.490	0.6	85	0.00
80	T	alpha-Methylstyrene	1.359	1.426	-4.9	84	-0.02
81	T	2-Ethyltoluene	3.112	3.114	-0.1	85	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.788	-4.8	86	-0.01
83	T	n-Decane	1.548	1.586	-2.5	86	-0.02
84	T	Benzyl Chloride	2.058	2.348	-14.1	85	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.377	0.0	84	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.444	1.2	84	-0.01
87	T	sec-Butylbenzene	3.505	3.540	-1.0	85	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.523	-4.9	86	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.816	-4.8	86	-0.01
90	T	1,2-Dichlorobenzene	1.382	1.406	-1.7	85	-0.01
91	T	d-Limonene	1.088	1.165	-7.1	85	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.462	-10.8	84	-0.01
93	T	n-Undecane	1.600	1.672	-4.5	87	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.989	-2.4	86	-0.01
95	T	Naphthalene	3.568	3.742	-4.9	88	0.00
96	T	n-Dodecane	1.790	1.930	-7.8	89	0.00
97	T	Hexachlorobutadiene	0.552	0.557	-0.9	85	0.00
98	T	Cyclohexanone	0.907	1.043	-15.0	85	-0.02
99	T	tert-Butylbenzene	2.638	2.723	-3.2	85	-0.01
100	T	n-Butylbenzene	2.789	2.879	-3.2	86	0.00

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

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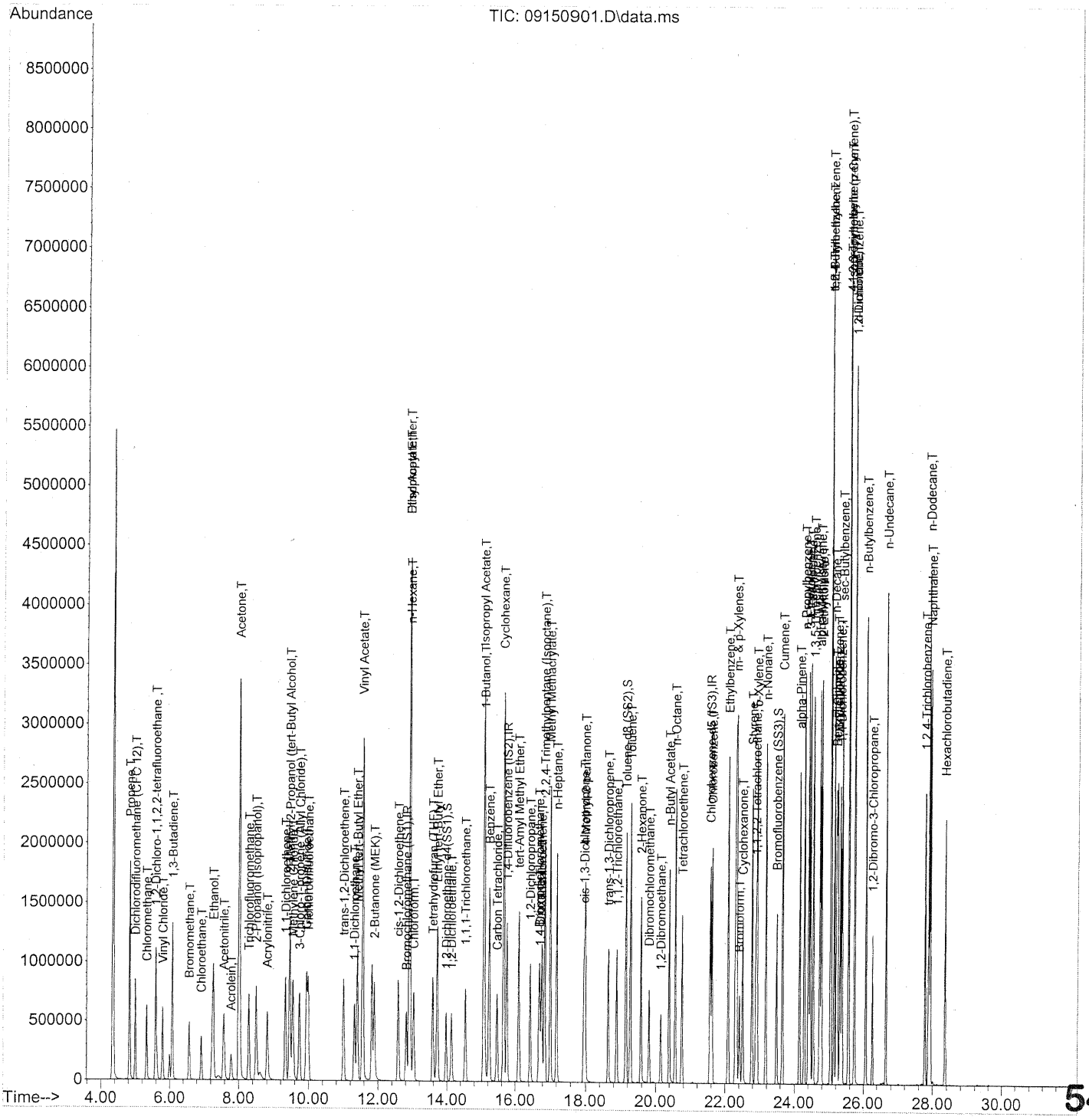
EM 9/15/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	305422	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.76	114	1563391	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	761487	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	571759	26.475	ng		-0.02
Spiked Amount 25.000			Recovery = 105.92%				
57) Toluene-d8 (SS2)	19.15	98	1826300	25.228	ng		-0.01
Spiked Amount 25.000			Recovery = 100.92%				
73) Bromofluorobenzene (SS3)	23.49	174	488541	23.830	ng		0.00
Spiked Amount 25.000			Recovery = 95.32%				
Target Compounds							Qvalue
2) Propene	4.83	42	851585	31.785	ng		97
3) Dichlorodifluoromethan...	5.00	85	964890	25.230	ng		100
4) Chloromethane	5.33	50	904833	25.386	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	503705	24.924	ng		100
6) Vinyl Chloride	5.79	62	867228	24.665	ng		98
7) 1,3-Butadiene	6.08	54	808782	32.384	ng		97
8) Bromomethane	6.58	94	464088	25.242	ng		100
9) Chloroethane	6.93	64	442555	25.371	ng		100
10) Ethanol	7.27	45	2181662m	129.815	ng		
11) Acetonitrile	7.58	41	1075767	26.229	ng		99
12) Acrolein	7.79	56	324563	29.614	ng		98
13) Acetone	8.01	58	2225688	130.143	ng		95
14) Trichlorofluoromethane	8.29	101	853247	26.090	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1721059m	36.747	ng		
16) Acrylonitrile	8.81	53	750635	30.218	ng		99
17) 1,1-Dichloroethene	9.33	96	502022	26.158	ng		93
18) 2-Methyl-2-Propanol (t...	9.45	59	2600845	54.700	ng		98
19) Methylene Chloride	9.54	84	525676	24.636	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	852186	29.783	ng		88
21) Trichlorotrifluoroethane	9.98	151	397437	27.153	ng		94
22) Carbon Disulfide	9.93	76	1967675	26.132	ng		98
23) trans-1,2-Dichloroethene	11.01	61	797336	27.073	ng		91
24) 1,1-Dichloroethane	11.32	63	956787	26.526	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1605074	27.461	ng		95
26) Vinyl Acetate	11.56	86	557681	150.563	ng	#	58
27) 2-Butanone (MEK)	11.89	72	375524	31.497	ng	#	78
28) cis-1,2-Dichloroethene	12.58	61	761536	27.710	ng		91
29) Diisopropyl Ether	12.91	87	463469	27.381	ng	#	55
30) Ethyl Acetate	12.91	61	449660	58.159	ng		95
31) n-Hexane	12.93	57	1032936	27.407	ng		9

EM 9/15/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	843930	26.755	ng		99
34) Tetrahydrofuran (THF)	13.58	72	354813	28.625	ng	#	84
35) Ethyl tert-Butyl Ether	13.71	87	627340	25.977	ng	#	85
36) 1,2-Dichloroethane	14.13	62	678270	28.100	ng		99
38) 1,1,1-Trichloroethane	14.54	97	739420	26.004	ng		99
39) Isopropyl Acetate	15.07	61	754434	59.128	ng	#	74
40) 1-Butanol	15.09	56	1283934	63.374	ng		83
41) Benzene	15.23	78	2127580	25.305	ng		99
42) Carbon Tetrachloride	15.46	117	629732	26.796	ng		99
43) Cyclohexane	15.66	84	1741931	53.498	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1550570	26.239	ng		97
45) 1,2-Dichloropropane	16.43	63	550531	26.692	ng		98
46) Bromodichloromethane	16.70	83	697178	28.345	ng		99
47) Trichloroethene	16.77	130	522565	24.479	ng		100
48) 1,4-Dioxane	16.72	88	448175	29.970	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	2476631	25.595	ng		96
50) Methyl Methacrylate	17.02	100	456355	54.320	ng	#	87
51) n-Heptane	17.21	71	595466	26.605	ng		94
52) cis-1,3-Dichloropropene	17.95	75	837731	26.956	ng		100
53) 4-Methyl-2-pentanone	17.99	58	565446	31.123	ng		94
54) trans-1,3-Dichloropropene	18.64	75	851871	31.333	ng		100
55) 1,1,2-Trichloroethane	18.89	97	486621	27.091	ng		97
58) Toluene	19.28	91	2285991	26.049	ng		100
59) 2-Hexanone	19.58	43	1381599	30.292	ng		97
60) Dibromochloromethane	19.82	129	558727	29.818	ng		100
61) 1,2-Dibromoethane	20.15	107	547549	27.723	ng		99
62) n-Butyl Acetate	20.39	43	1620739	32.568	ng		97
63) n-Octane	20.56	57	539187	27.564	ng		90
64) Tetrachloroethene	20.76	166	527758	24.235	ng		99
65) Chlorobenzene	21.62	112	1393448	25.856	ng		100
66) Ethylbenzene	22.09	91	2531004	26.714	ng		98
67) m- & p-Xylenes	22.33	91	3959439	52.714	ng		99
68) Bromoform	22.41	173	449186	27.617	ng		100
69) Styrene	22.77	104	1552481	27.962	ng		99
70) o-Xylene	22.92	91	2027281	26.829	ng		98
71) n-Nonane	23.17	43	1266943	27.842	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	919450	28.326	ng		100
74) Cumene	23.66	105	2535154	25.876	ng		98
75) alpha-Pinene	24.15	93	1237488	25.601	ng		99
76) n-Propylbenzene	24.28	91	3183551	26.291	ng		99
77) 3-Ethyltoluene	24.41	105	2515599	27.407	ng		98
78) 4-Ethyltoluene	24.46	105	2559352	27.737	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2070252	27.134	ng		9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 09:17:53 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

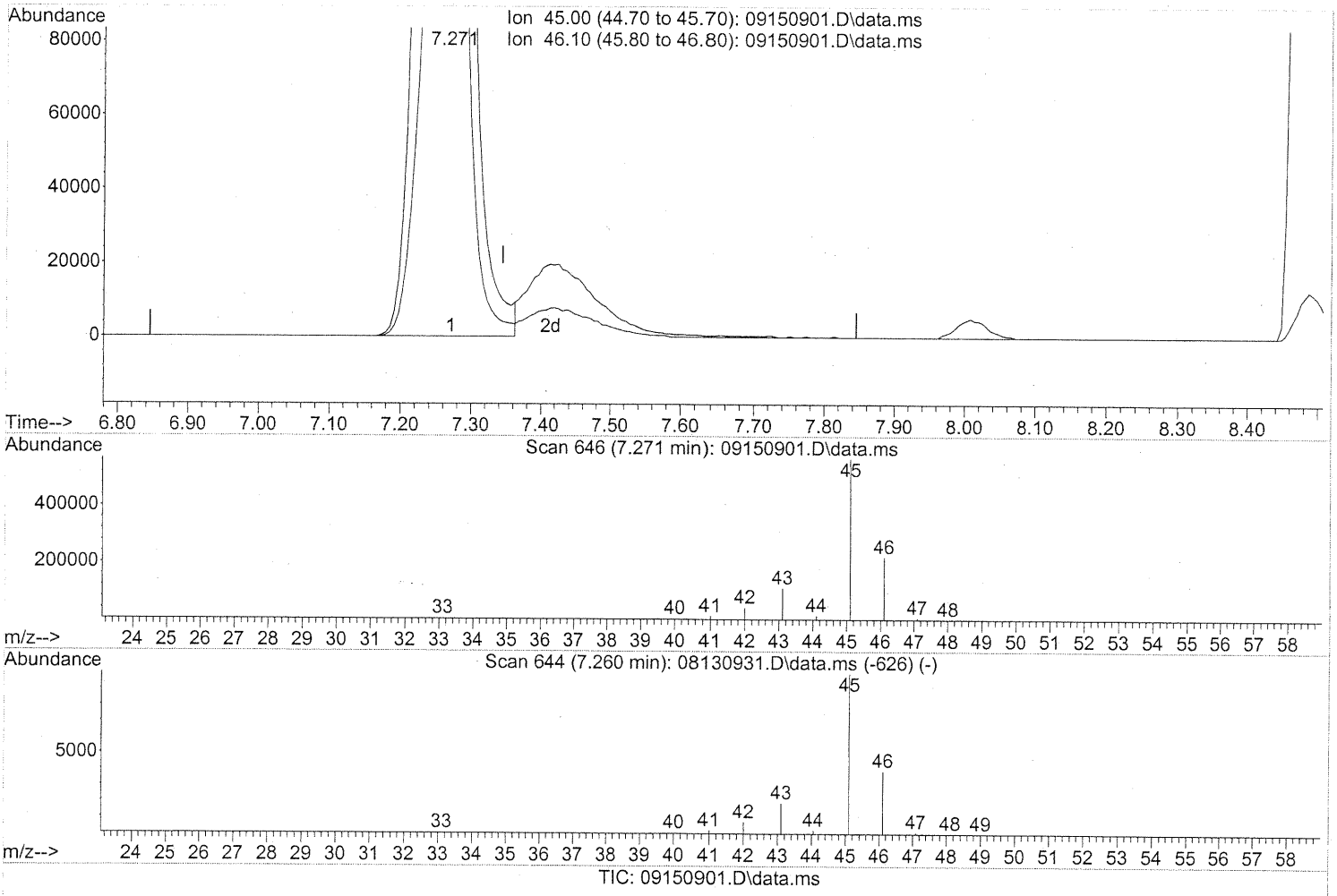
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1163803	28.112	ng	99
81) 2-Ethyltoluene	24.79	105	2494352	26.316	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2250120	27.777	ng	99
83) n-Decane	25.15	57	1304682	27.670	ng	94
84) Benzyl Chloride	25.22	91	1966441	31.377	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1144801	27.298	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1165306	26.188	ng	99
87) sec-Butylbenzene	25.38	105	2857304	26.767	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2768351	27.067	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2298365	28.070	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1134537	26.943	ng	100
91) d-Limonene	25.74	68	969099	29.240	ng	95
92) 1,2-Dibromo-3-Chloropr...	26.26	157	386794	30.416	ng	92
93) n-Undecane	26.65	57	1390508	28.540	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	843357	28.667	ng	100
95) Naphthalene	27.94	128	3020641	27.790	ng	100
96) n-Dodecane	27.89	57	1457925	26.733	ng	95
97) Hexachlorobutadiene	28.36	225	466657	27.778	ng	99
98) Cyclohexanone	22.51	55	778493	28.168	ng	95
99) tert-Butylbenzene	25.05	119	2198155	27.361	ng	99
100) n-Butylbenzene	26.07	91	2393817	28.175	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:16:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09150901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 121.76ng

response 2046353

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.07
0.00	0.00	0.00
0.00	0.00	0.00

PT

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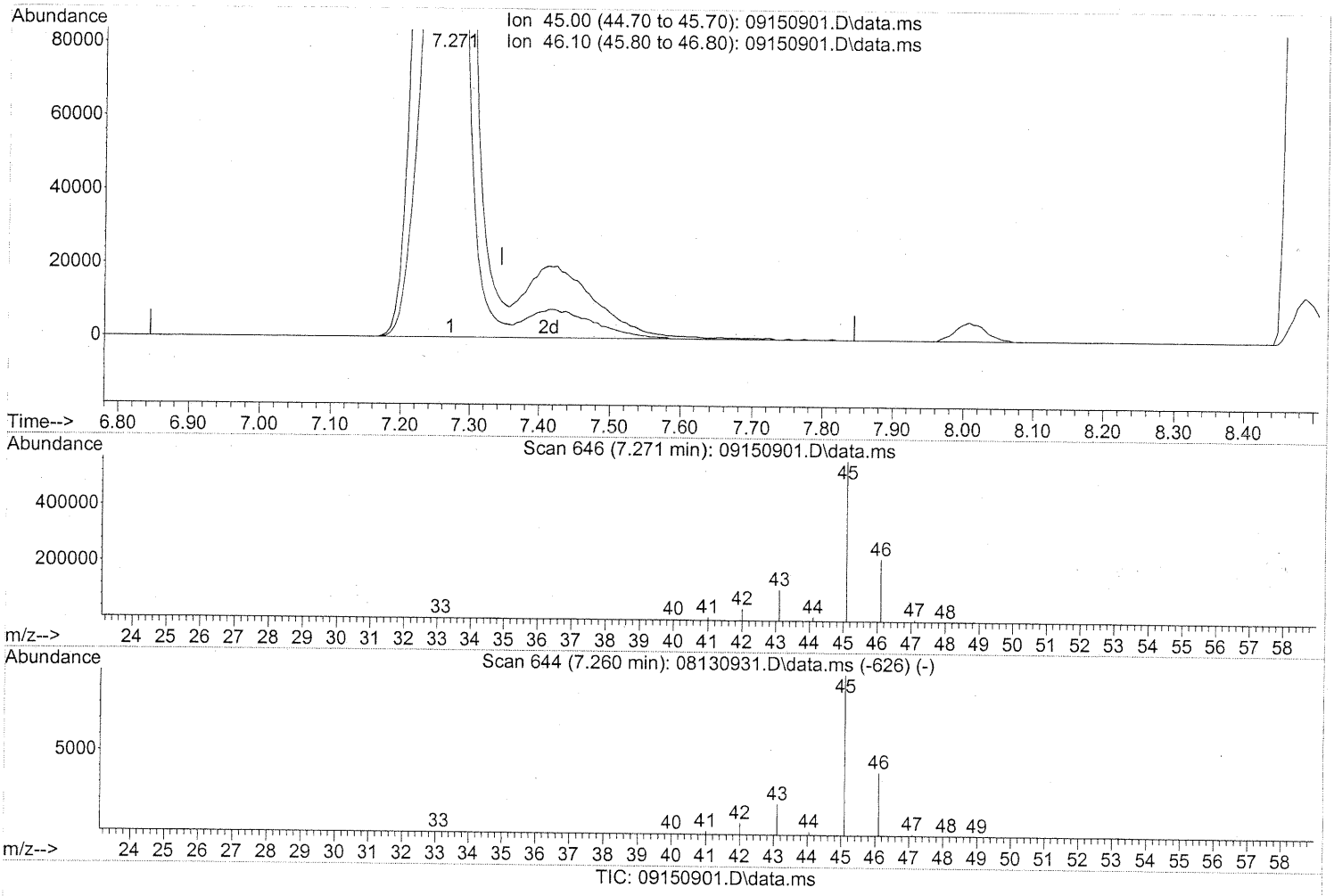
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:16:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09150901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 129.81ng m

response 2181662

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

PT → IC
Ian 9/15/09

C. 9/16/09

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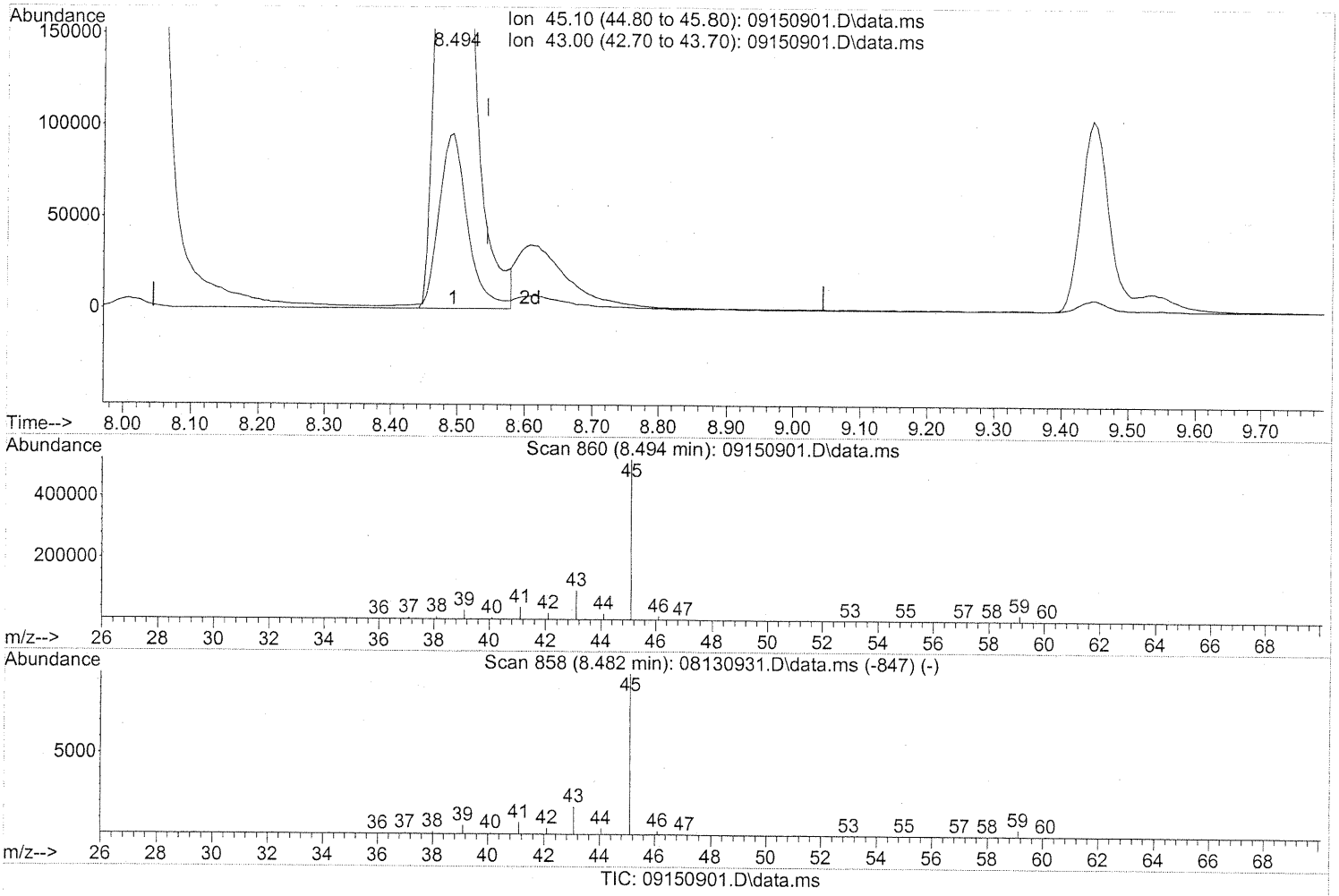
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:16:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09150901.D\data.ms

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

8.494min (-0.051) 32.77ng

response 1534692

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.64
0.00	0.00	0.00
0.00	0.00	0.00

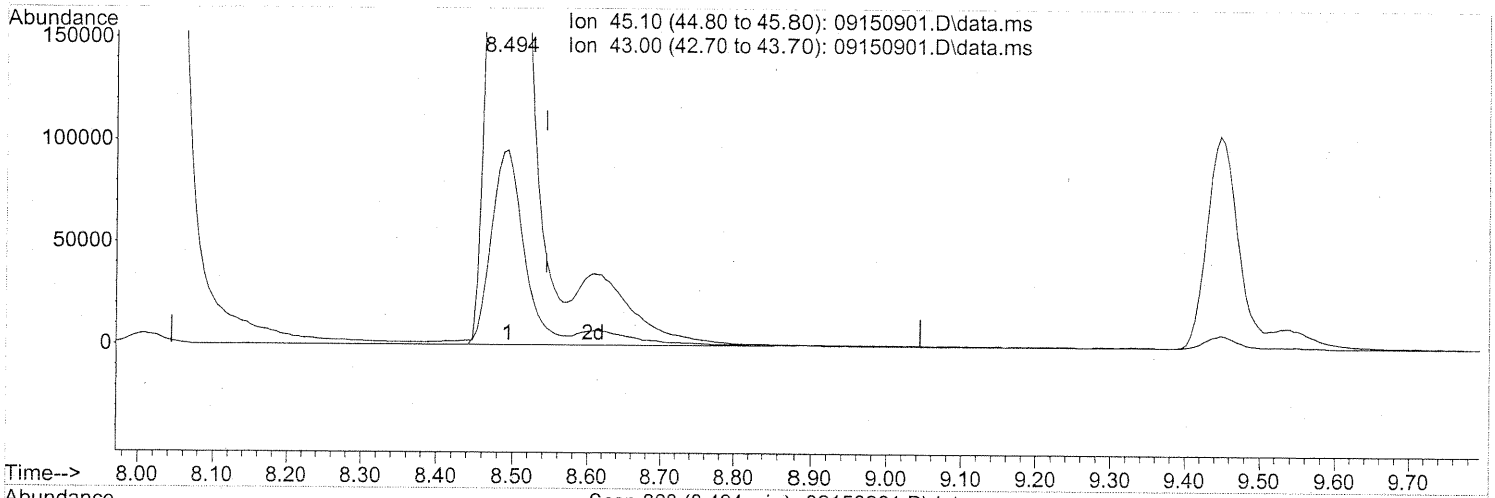
PT

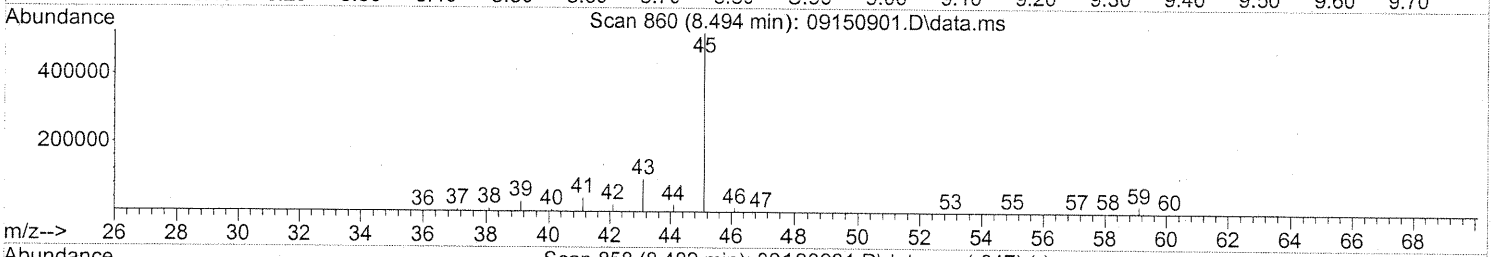
549

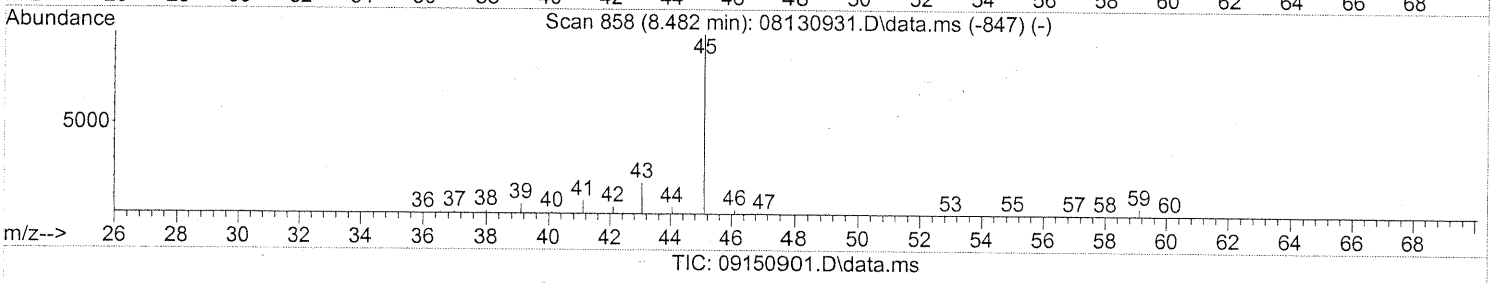
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 08:16:34 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09150901.D\data.ms

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

8.494min (-0.051) 36.75ng m

response 1721059

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.73
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
tm 9/15/09
E. 9/16/09

550

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 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	127	-0.02
2	T	Propene	1.018	0.810	20.4	97	0.00
3	T	Dichlorodifluoromethane (CF	1.946	1.568	19.4	102	0.00
4	T	Chloromethane	1.594	1.345	15.6	98	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.167	0.943	19.2	98	0.00
6	T	Vinyl Chloride	1.530	1.265	17.3	98	0.00
7	T	1,3-Butadiene	1.065	0.860	19.2	92	0.00
8	T	Bromomethane	1.009	0.893	11.5	102	0.00
9	T	Chloroethane	0.751	0.646	14.0	99	0.00
10	T	Ethanol	0.738	0.592	19.8	95	-0.08
11	T	Acetonitrile	1.867	1.473	21.1	95	-0.03
12	T	Acrolein	0.549	0.478	12.9	96	-0.02
13	T	Acetone	0.744	0.587	21.1	98	-0.03
14	T	Trichlorofluoromethane	1.803	1.554	13.8	102	0.00
15	T	2-Propanol (Isopropanol)	2.561	1.983	22.6	94	-0.06
16	T	Acrylonitrile	1.442	1.145	20.6	95	-0.03
17	T	1,1-Dichloroethene	1.037	0.878	15.3	100	-0.01
18	T	2-Methyl-2-Propanol (tert-B	2.647	2.184	17.5	97	-0.05
19	T	Methylene Chloride	1.134	0.886	21.9	99	-0.02
20	T	3-Chloro-1-propene (Allyl C	1.329	1.157	12.9	96	-0.02
21	T	Trichlorotrifluoroethane	0.888	0.813	8.4	102	-0.01
22	T	Carbon Disulfide	3.932	3.247	17.4	99	0.00
23	T	trans-1,2-Dichloroethene	1.414	1.238	12.4	98	-0.02
24	T	1,1-Dichloroethane	1.789	1.489	16.8	98	-0.02
25	T	Methyl tert-Butyl Ether	2.858	2.432	14.9	98	-0.02
26	T	Vinyl Acetate	0.224	0.203	9.4	94	-0.03
27	T	2-Butanone (MEK)	0.714	0.598	16.2	96	-0.03
28	T	cis-1,2-Dichloroethene	1.369	1.149	16.1	97	-0.02
29	T	Diisopropyl Ether	0.828	0.689	16.8	96	-0.02
30	T	Ethyl Acetate	0.363	0.318	12.4	95	-0.03
31	T	n-Hexane	1.436	1.116	22.3	94	-0.01
32	T	Chloroform	1.762	1.491	15.4	99	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.378	1.353	1.8	123	-0.02
34	T	Tetrahydrofuran (THF)	0.661	0.584	11.6	97	-0.02
35	T	Ethyl tert-Butyl Ether	1.261	1.068	15.3	98	-0.01
36	T	1,2-Dichloroethane	1.215	1.043	14.2	98	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	123	-0.01
38	T	1,1,1-Trichloroethane	0.314	0.280	10.8	101	-0.02

551

LH 9/21/09

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 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	0.138	0.115	16.7	94	-0.02
40	T	1-Butanol	0.226	0.190	15.9	94	-0.06
41	T	Benzene	0.892	0.734	17.7	97	-0.02
42	T	Carbon Tetrachloride	0.268	0.253	5.6	102	-0.01
43	T	Cyclohexane	0.325	0.281	13.5	97	-0.02
44	T	tert-Amyl Methyl Ether	0.623	0.525	15.7	96	-0.02
45	T	1,2-Dichloropropane	0.208	0.177	14.9	95	-0.02
46	T	Bromodichloromethane	0.276	0.244	11.6	99	-0.02
47	T	Trichloroethene	0.268	0.228	14.9	100	-0.01
48	T	1,4-Dioxane	0.190	0.162	14.7	97	-0.02
49	T	2,2,4-Trimethylpentane (Iso	0.898	0.728	18.9	94	-0.02
50	T	Methyl Methacrylate	0.102	0.090	11.8	97	-0.02
51	T	n-Heptane	0.228	0.190	16.7	95	-0.02
52	T	cis-1,3-Dichloropropene	0.348	0.308	11.5	97	-0.01
53	T	4-Methyl-2-pentanone	0.199	0.165	17.1	95	-0.02
54	T	trans-1,3-Dichloropropene	0.312	0.282	9.6	98	-0.01
55	T	1,1,2-Trichloroethane	0.224	0.188	16.1	99	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	122	0.00
57	S	Toluene-d8 (SS2)	2.502	2.492	0.4	122	0.00
58	T	Toluene	2.336	1.956	16.3	98	-0.01
59	T	2-Hexanone	1.127	0.921	18.3	94	-0.02
60	T	Dibromochloromethane	0.583	0.542	7.0	102	0.00
61	T	1,2-Dibromoethane	0.591	0.536	9.3	100	-0.01
62	T	n-Butyl Acetate	1.289	1.057	18.0	93	-0.02
63	T	n-Octane	0.439	0.364	17.1	95	0.00
64	T	Tetrachloroethene	0.721	0.645	10.5	101	0.00
65	T	Chlorobenzene	1.548	1.336	13.7	100	0.00
66	T	Ethylbenzene	2.565	2.204	14.1	99	0.00
67	T	m- & p-Xylenes	2.005	1.726	13.9	98	-0.01
68	T	Bromoform	0.591	0.577	2.4	102	-0.01
69	T	Styrene	1.647	1.443	12.4	98	-0.01
70	T	o-Xylene	2.049	1.747	14.7	98	-0.01
71	T	n-Nonane	0.994	0.791	20.4	92	0.00
72	T	1,1,2,2-Tetrachloroethane	0.887	0.800	9.8	99	-0.01
73	S	Bromofluorobenzene (SS3)	0.897	0.958	-6.8	125	0.00
74	T	Cumene	2.804	2.384	15.0	98	0.00
75	T	alpha-Pinene	1.318	1.149	12.8	98	0.00
76	T	n-Propylbenzene	3.278	2.810	14.3	98	0.00

LH 9/21/09

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	2.650	2.273	14.2	100	-0.01
78	T	4-Ethyltoluene	2.617	2.224	15.0	96	0.00
79	T	1,3,5-Trimethylbenzene	2.178	1.848	15.2	98	0.00
80	T	alpha-Methylstyrene	1.257	1.113	11.5	97	-0.01
81	T	2-Ethyltoluene	2.779	2.309	16.9	98	0.00
82	T	1,2,4-Trimethylbenzene	2.323	1.940	16.5	98	-0.01
83	T	n-Decane	1.216	0.914	24.8	93	-0.01
84	T	Benzyl Chloride	1.819	1.710	6.0	96	-0.01
85	T	1,3-Dichlorobenzene	1.352	1.196	11.5	100	-0.01
86	T	1,4-Dichlorobenzene	1.410	1.258	10.8	99	0.00
87	T	sec-Butylbenzene	3.041	2.593	14.7	97	-0.01
88	T	4-Isopropyltoluene (p-Cymen	2.947	2.549	13.5	97	0.00
89	T	1,2,3-Trimethylbenzene	2.275	1.946	14.5	96	-0.01
90	T	1,2-Dichlorobenzene	1.301	1.171	10.0	99	-0.01
91	T	d-Limonene	0.834	0.695	16.7	94	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.469	0.442	5.8	99	0.00
93	T	n-Undecane	1.403	0.943	32.8#	51	0.00
94	T	1,2,4-Trichlorobenzene	1.021	0.939	8.0	99	0.00
95	T	Naphthalene	3.374	3.068	9.1	97	0.00
96	T	n-Dodecane	1.382	1.054	23.7	91	0.00
97	T	Hexachlorobutadiene	0.645	0.579	10.2	102	0.00
98	T	Cyclohexanone	0.864	0.644	25.5	93	-0.02
99	T	tert-Butylbenzene	2.287	1.982	13.3	98	-0.01
100	T	n-Butylbenzene	2.333	1.988	14.8	97	0.00

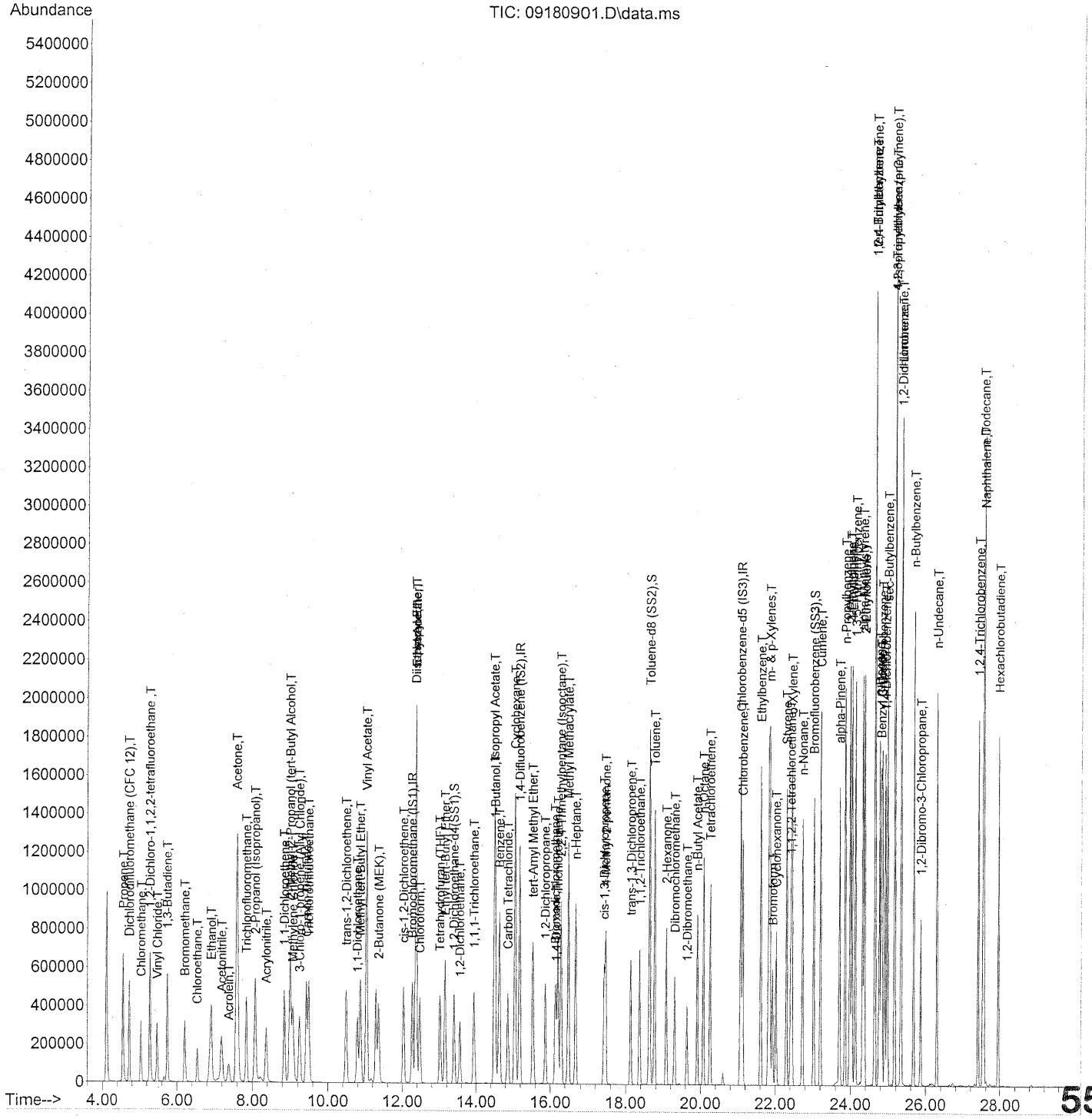
(#) = Out of Range SPCC's out = 0 CCC's out = 0

553

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

LH 9/21/09

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.26	130	351155	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.19	114	1683770	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.07	82	694218	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.39	65	474942	24.543	ng		-0.02
Spiked Amount 25.000			Recovery =	98.16%			
57) Toluene-d8 (SS2)	18.63	98	1729880	24.894	ng		0.00
Spiked Amount 25.000			Recovery =	99.56%			
73) Bromofluorobenzene (SS3)	23.02	174	664914	26.702	ng		0.00
Spiked Amount 25.000			Recovery =	106.80%			
Target Compounds							Qvalue
2) Propene	4.57	42	304954	21.327	ng		99
3) Dichlorodifluoromethan...	4.73	85	579415	21.195	ng		100
4) Chloromethane	5.04	50	472156	21.087	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.28	135	350931	21.401	ng		99
6) Vinyl Chloride	5.47	62	449560	20.919	ng		99
7) 1,3-Butadiene	5.74	54	362468	24.219	ng		96
8) Bromomethane	6.21	94	319995	22.572	ng		100
9) Chloroethane	6.54	64	229474	21.754	ng		99
10) Ethanol	6.92	45	1080455m	104.227	ng		
11) Acetonitrile	7.19	41	544307	20.760	ng		99
12) Acrolein	7.38	56	181112	23.483	ng		99
13) Acetone	7.59	58	1137226	108.894	ng		88
14) Trichlorofluoromethane	7.84	101	574172	22.674	ng		100
15) 2-Propanol (Isopropanol)	8.08	45	1317145m	36.619	ng		
16) Acrylonitrile	8.37	53	426098	21.041	ng		99
17) 1,1-Dichloroethene	8.85	96	339281	23.284	ng	#	78
18) 2-Methyl-2-Propanol (t...	9.00	59	1549294	41.672	ng		98
19) Methylene Chloride	9.07	84	333435	20.937	ng		80
20) 3-Chloro-1-propene (Al...	9.24	41	438819	23.500	ng		88
21) Trichlorotrifluoroethane	9.49	151	313969	25.165	ng		84
22) Carbon Disulfide	9.43	76	1222438	22.131	ng		98
23) trans-1,2-Dichloroethene	10.48	61	460825	23.196	ng		83
24) 1,1-Dichloroethane	10.79	63	554165	22.050	ng		100
25) Methyl tert-Butyl Ether	10.87	73	932527	23.231	ng		96
26) Vinyl Acetate	11.04	86	360051	114.484	ng	#	48
27) 2-Butanone (MEK)	11.36	72	230808	23.007	ng	#	72
28) cis-1,2-Dichloroethene	12.03	61	440675	22.923	ng		83
29) Diisopropyl Ether	12.36	87	259518	22.325	ng	#	53
30) Ethyl Acetate	12.37	61	238298	46.790	ng		92
31) n-Hexane	12.37	57	427894	21.211	ng		9[illegible]

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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	12.47	83	561402	22.684	ng		100
34) Tetrahydrofuran (THF)	13.01	72	225594	24.300	ng	#	82
35) Ethyl tert-Butyl Ether	13.15	87	386939	21.851	ng	#	79
36) 1,2-Dichloroethane	13.56	62	388221	22.744	ng		98
38) 1,1,1-Trichloroethane	13.94	97	495805	23.441	ng		96
39) Isopropyl Acetate	14.50	61	403360	43.250	ng		96
40) 1-Butanol	14.52	56	662740	43.628	ng		87
41) Benzene	14.63	78	1310733	21.827	ng		99
42) Carbon Tetrachloride	14.87	117	460822	25.526	ng		99
43) Cyclohexane	15.06	84	1019020	46.505	ng		87
44) tert-Amyl Methyl Ether	15.54	73	919291	21.923	ng		94
45) 1,2-Dichloropropane	15.87	63	313231	22.383	ng		100
46) Bromodichloromethane	16.14	83	443978	23.883	ng		99
47) Trichloroethene	16.22	130	406845	22.516	ng		99
48) 1,4-Dioxane	16.16	88	292900	22.874	ng		88
49) 2,2,4-Trimethylpentane...	16.30	57	1274138	21.061	ng		97
50) Methyl Methacrylate	16.49	100	322125	46.695	ng	#	74
51) n-Heptane	16.67	71	338244	22.072	ng		92
52) cis-1,3-Dichloropropene	17.42	75	514034	21.905	ng		99
53) 4-Methyl-2-pentanone	17.46	58	305469	22.814	ng		86
54) trans-1,3-Dichloropropene	18.13	75	522620	24.872	ng		99
55) 1,1,2-Trichloroethane	18.37	97	332490	22.012	ng		93
58) Toluene	18.76	91	1466745	22.610	ng		99
59) 2-Hexanone	19.08	43	702977	22.472	ng		93
60) Dibromochloromethane	19.31	129	433303	26.763	ng		99
61) 1,2-Dibromoethane	19.64	107	394351	24.021	ng		99
62) n-Butyl Acetate	19.91	43	807508	22.552	ng		95
63) n-Octane	20.08	57	270789	22.238	ng		86
64) Tetrachloroethene	20.26	166	456696	22.807	ng		98
65) Chlorobenzene	21.13	112	1001698	23.305	ng		98
66) Ethylbenzene	21.61	91	1621599	22.766	ng		96
67) m- & p-Xylenes	21.85	91	2492861	44.775	ng		95
68) Bromoform	21.92	173	413441	25.188	ng		100
69) Styrene	22.29	104	1073981	23.484	ng		96
70) o-Xylene	22.44	91	1285375	22.595	ng		95
71) n-Nonane	22.72	43	582110	21.084	ng		89
72) 1,1,2,2-Tetrachloroethane	22.41	83	595291	24.179	ng		98
74) Cumene	23.20	105	1707690	21.931	ng		98
75) alpha-Pinene	23.70	93	807505	22.068	ng		96
76) n-Propylbenzene	23.85	91	2013138	22.117	ng		95
77) 3-Ethyltoluene	23.98	105	1723026	23.416	ng		98
78) 4-Ethyltoluene	24.03	105	1686346	23.209	ng		97
79) 1,3,5-Trimethylbenzene	24.13	105	1401038	23.165	ng		95

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:36:19 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration

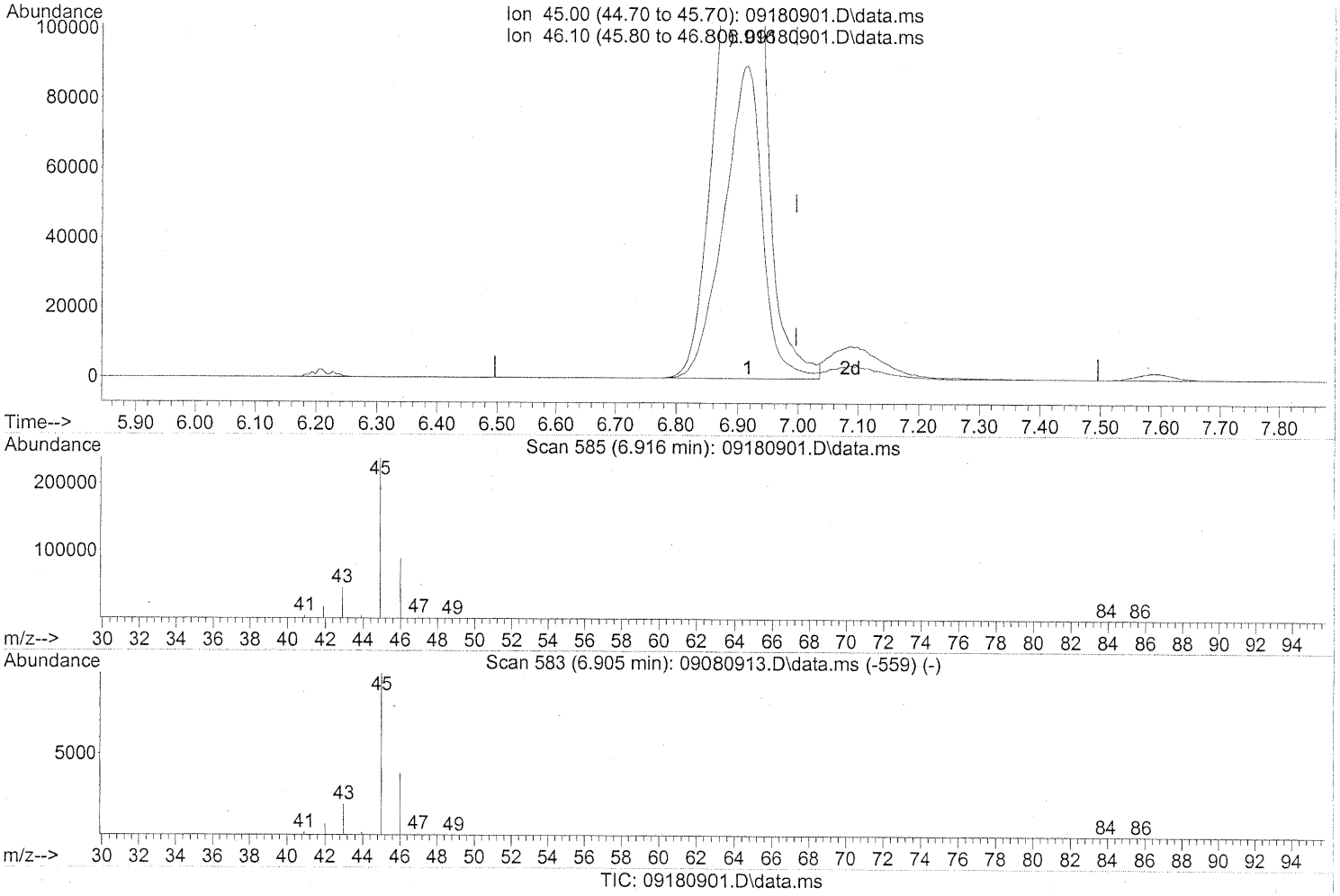
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.32	118	828348	23.736	ng		96
81) 2-Ethyltoluene	24.37	105	1686307	21.851	ng		97
82) 1,2,4-Trimethylbenzene	24.64	105	1427708	22.132	ng		95
83) n-Decane	24.76	57	685111	20.289	ng		92
84) Benzyl Chloride	24.80	91	1305922	25.859	ng		94
85) 1,3-Dichlorobenzene	24.83	146	906561	24.138	ng		100
86) 1,4-Dichlorobenzene	24.92	146	926077	23.660	ng		99
87) sec-Butylbenzene	24.97	105	1908423	22.600	ng		96
88) 4-Isopropyltoluene (p-...	25.17	119	1825996	22.311	ng		96
89) 1,2,3-Trimethylbenzene	25.17	105	1448527	22.933	ng		96
90) 1,2-Dichlorobenzene	25.34	146	861525	23.845	ng		99
91) d-Limonene	25.34	68	526662	22.729	ng		88
92) 1,2-Dibromo-3-Chloropr...	25.87	157	337775	25.963	ng		78
93) n-Undecane	26.29	57	714989	18.359	ng		93
94) 1,2,4-Trichlorobenzene	27.40	180	729729	25.728	ng		100
95) Naphthalene	27.54	128	2257963	24.099	ng		100
96) n-Dodecane	27.52	57	726028	18.917	ng		91
97) Hexachlorobutadiene	27.96	225	442043	24.688	ng		98
98) Cyclohexanone	22.02	55	438208	18.258	ng	#	89
99) tert-Butylbenzene	24.64	119	1458571	22.962	ng		98
100) n-Butylbenzene	25.68	91	1507440	23.271	ng		97

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:35:43 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



TIC: 09180901.D\data.ms

(10) Ethanol (T)

6.916min (-0.080) 98.83ng

response 1024515

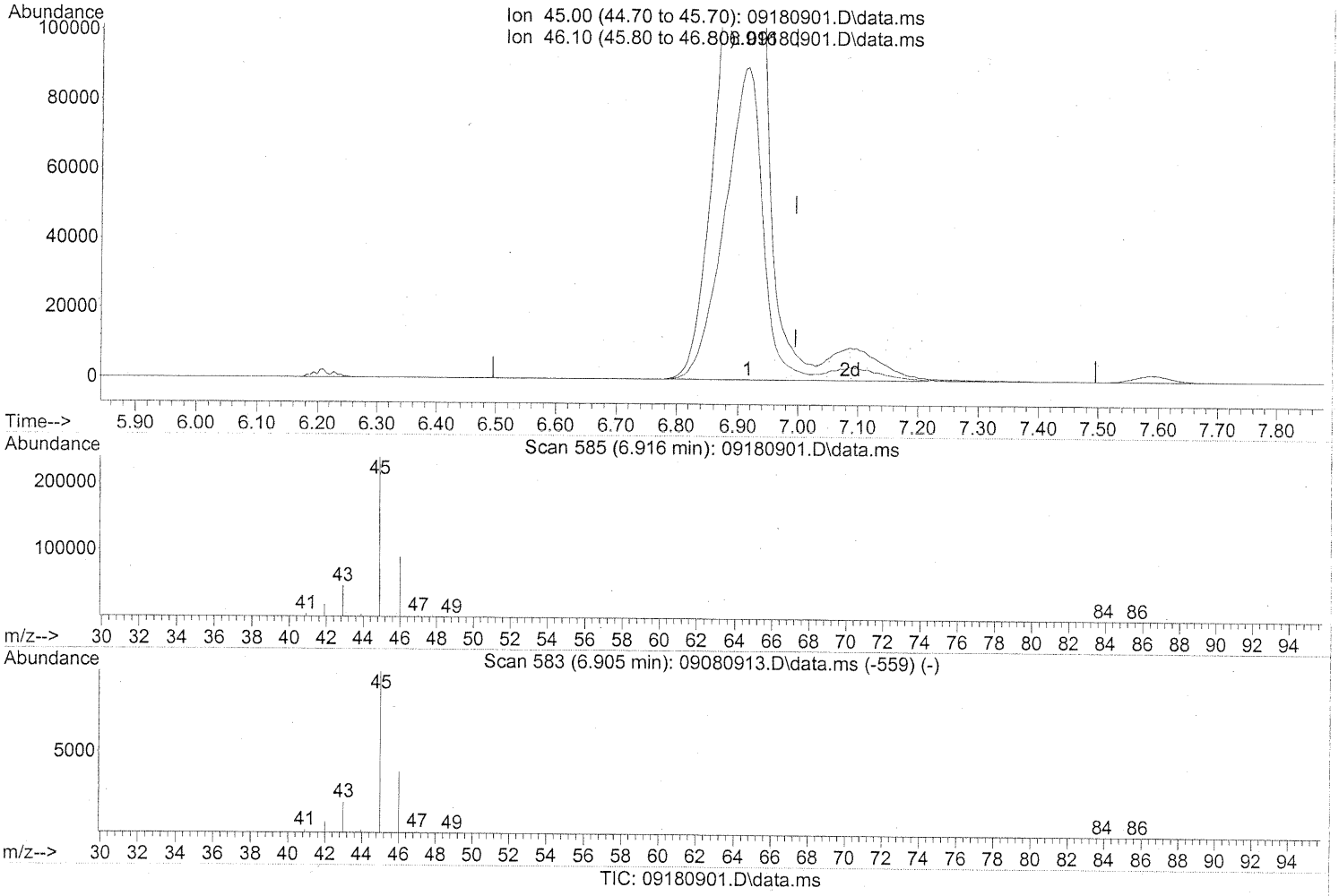
PT

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	38.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:35:43 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



(10) Ethanol (T)

6.916min (-0.080) 104.23ng m

response 1080455

Ion	Exp%	Act%
45.00	100	100
46.10	38.80	36.16
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
LH 9/21/09

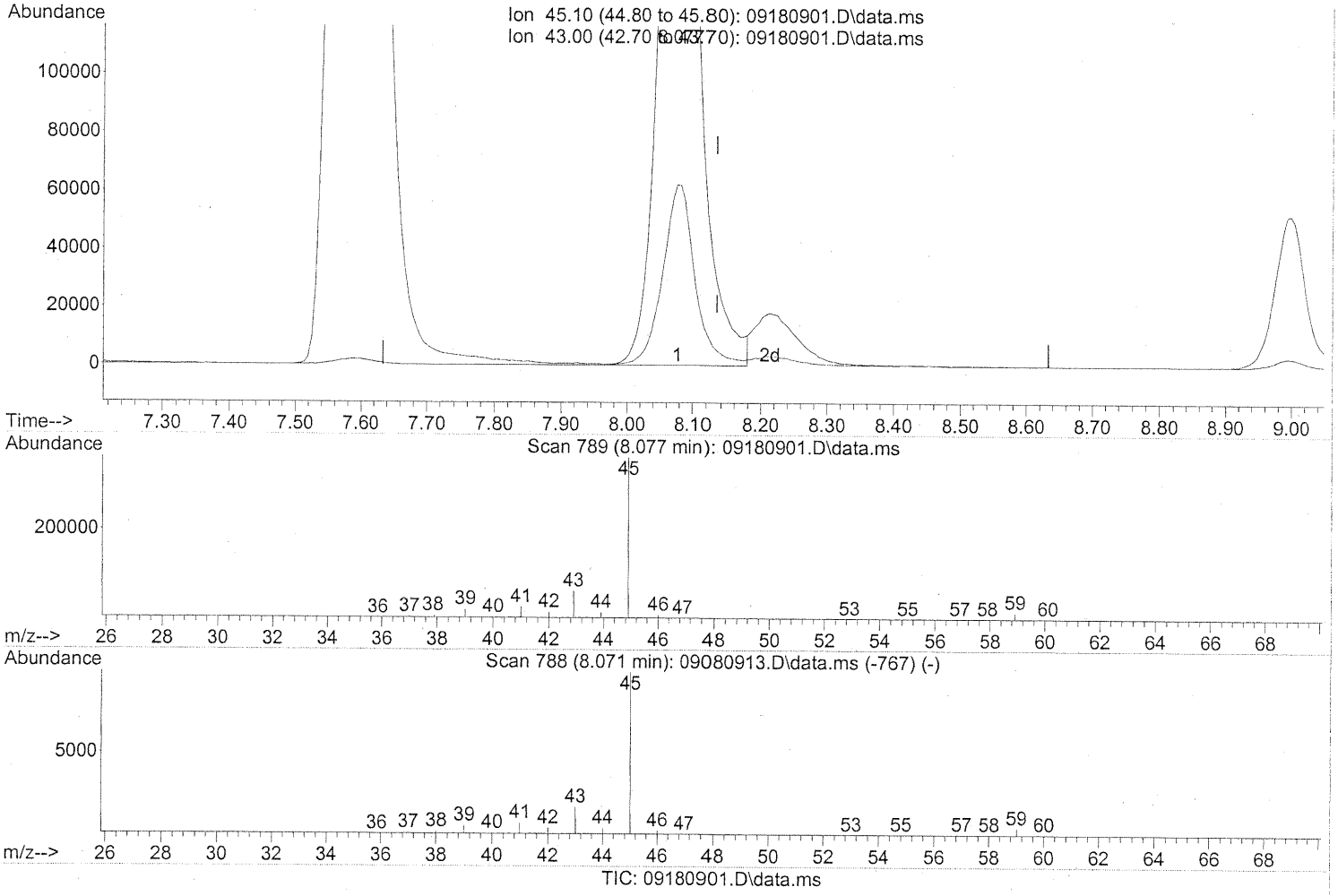
Jem 9/21/09

559

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:35:43 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



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

8.077min (-0.057) 34.35ng

response 1235559

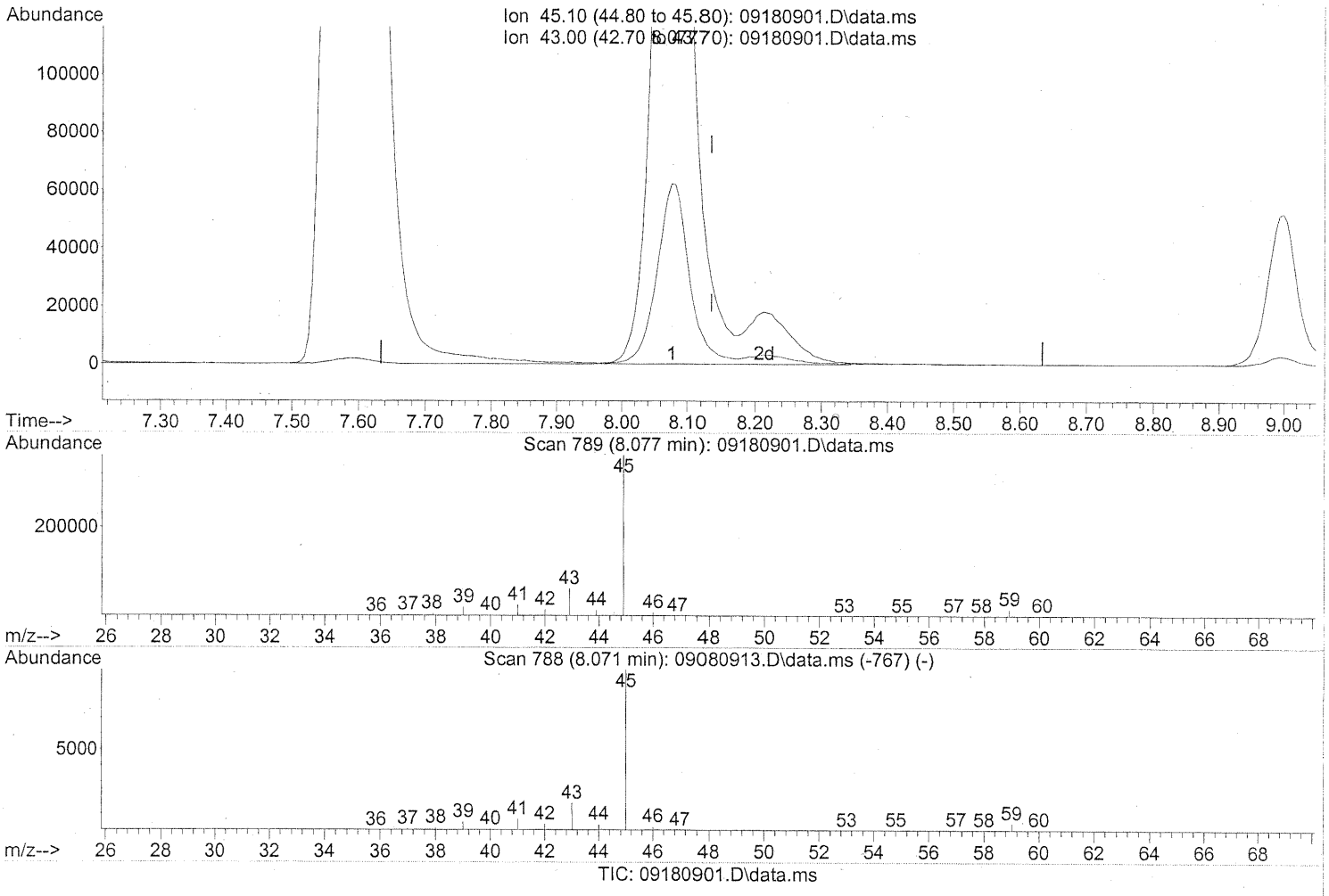
Ion	Exp%	Act%
45.10	100	100
43.00	17.40	17.01
0.00	0.00	0.00
0.00	0.00	0.00

PT

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 08:35:43 2009
Quant Method : J:\MS16\METHODS\R16090809.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Wed Sep 09 09:31:43 2009
Response via : Initial Calibration



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

8.077min (-0.057) 36.62ng m

response 1317145

Ion	Exp%	Act%
45.10	100	100
43.00	17.40	15.96
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
EM 9/21/09

Em 9/21/09

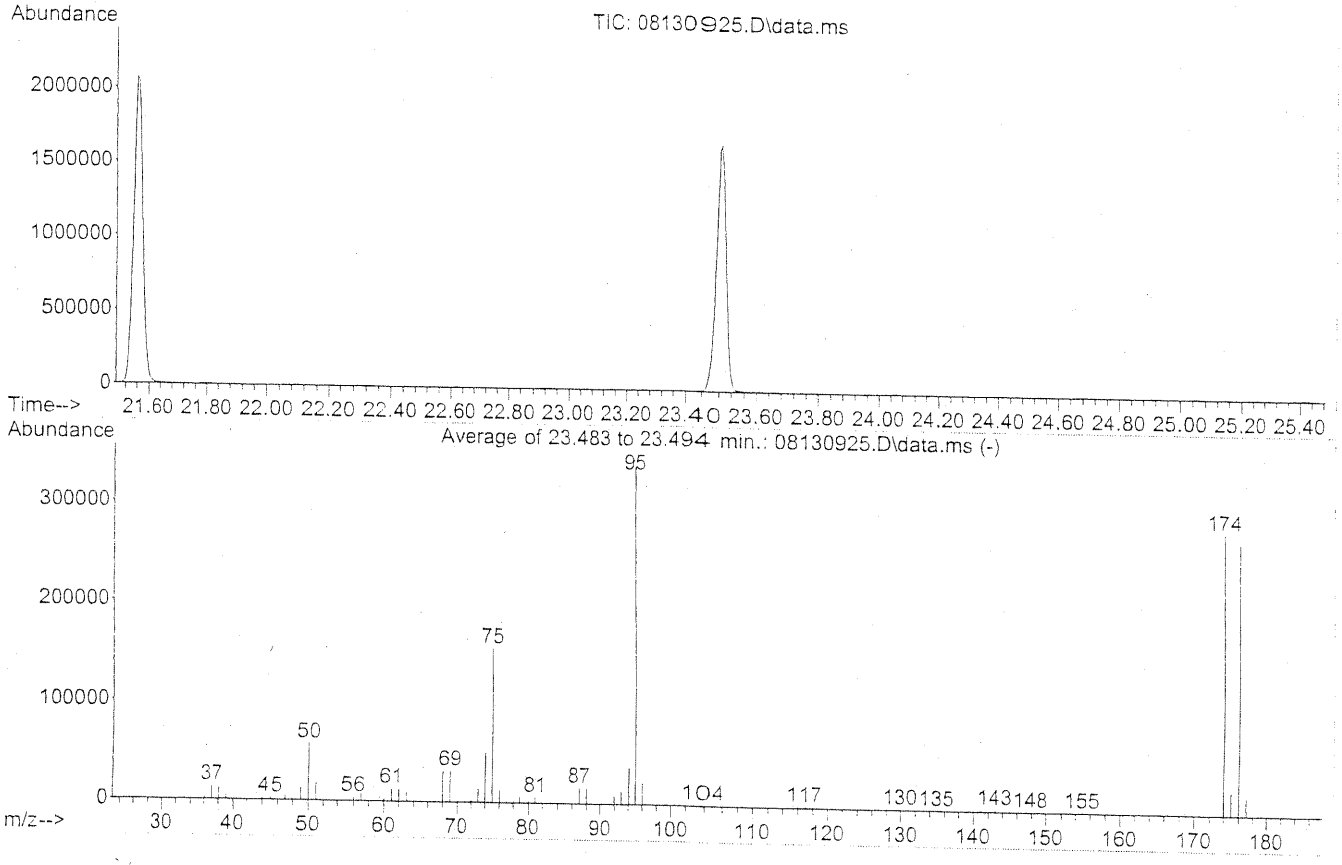
561

BFB TUNING & MASS CALIBRATIONS

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130925.D
Acq On : 14 Aug 2009 1:14
Operator : EM
Sample : TO-15 BFB Standard (200ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 09:38:25 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

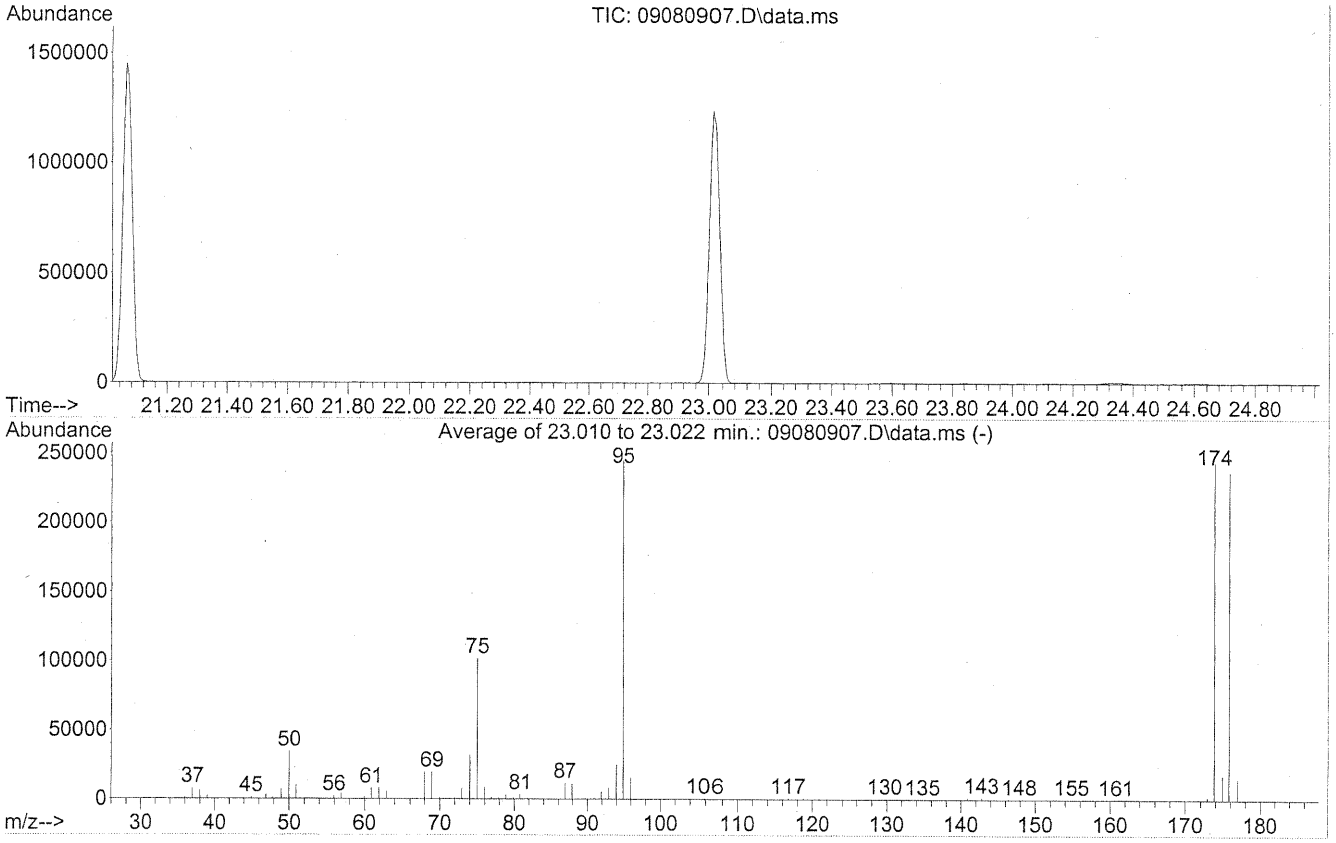
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.9	57432	PASS
75	95	30	66	45.6	154987	PASS
95	95	100	100	100.0	339563	PASS
96	95	5	9	6.4	21896	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.2	282475	PASS
175	174	4	9	8.1	22795	PASS
176	174	93	101	96.4	272171	PASS
177	176	5	9	6.4	17522	PASS

EM 8/14/09

Data Path : J:\MS16\DATA\2009_09\08\
Data File : 09080907.D
Acq On : 8 Sep 2009 17:22
Operator : LH
Sample : 25ng TO-15 BFB
Misc : S20-09080901
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Wed Sep 09 09:31:43 2009



AutoFind: Scans 3413, 3414, 3415; Background Corrected with Scan 3402

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.1	34619	PASS
75	95	30	66	41.7	102077	PASS
95	95	100	100	100.0	244971	PASS
96	95	5	9	6.4	15796	PASS
173	174	0.00	2	0.8	2029	PASS
174	95	50	120	99.6	244075	PASS
175	174	4	9	7.4	18016	PASS
176	174	93	101	97.1	237099	PASS
177	176	5	9	6.6	15582	PASS

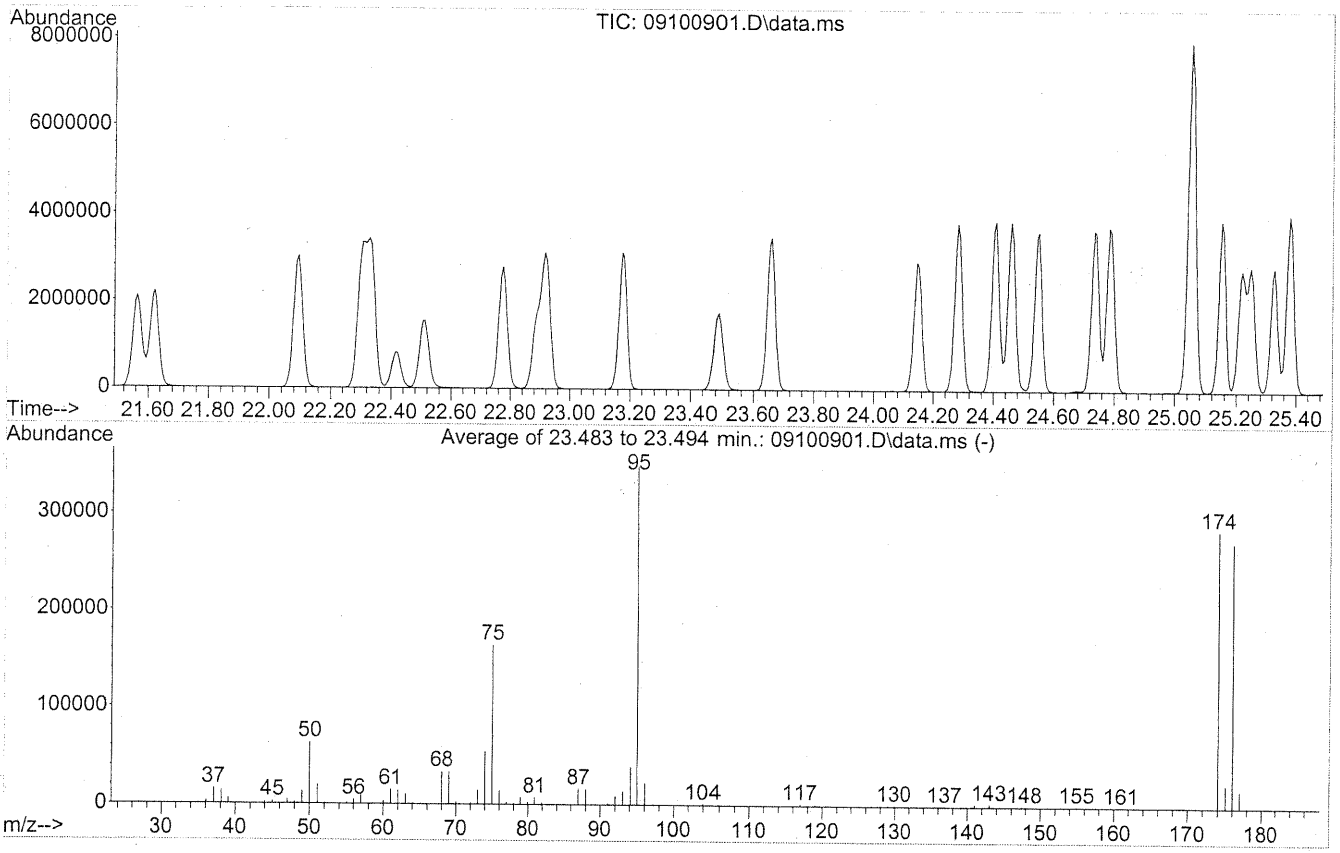
564

LH 9/9/09

Data Path : J:\MS09\Data\2009_09\10\
Data File : 09100901.D
Acq On : 10 Sep 2009 5:23
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 3475

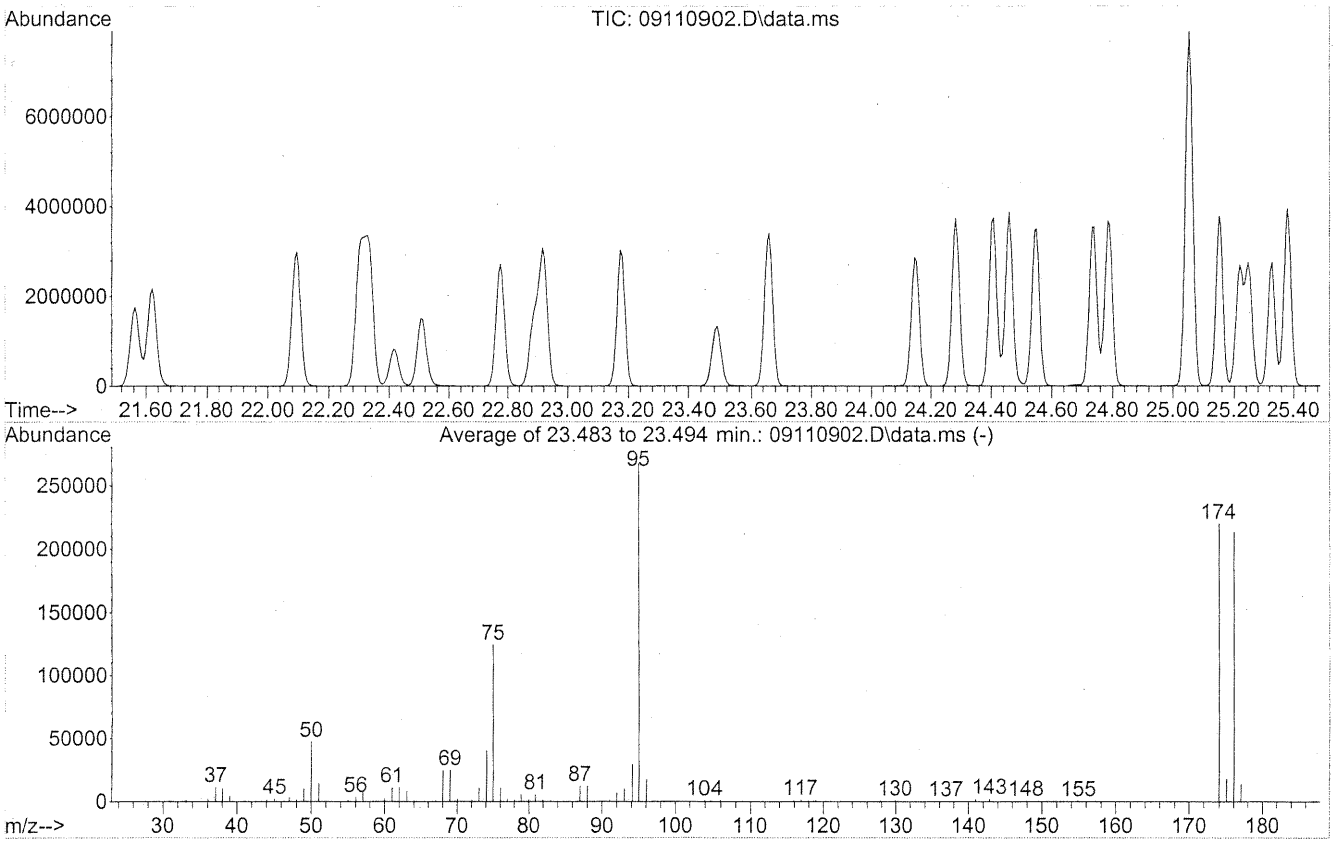
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	63064	PASS
75	95	30	66	47.1	164096	PASS
95	95	100	100	100.0	348267	PASS
96	95	5	9	6.4	22336	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.8	284715	PASS
175	174	4	9	8.0	22675	PASS
176	174	93	101	95.7	272427	PASS
177	176	5	9	6.4	17491	PASS

Cm 9/10/09

Data Path : J:\MS09\Data\2009_09\11\
Data File : 09110902.D
Acq On : 11 Sep 2009 8:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/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

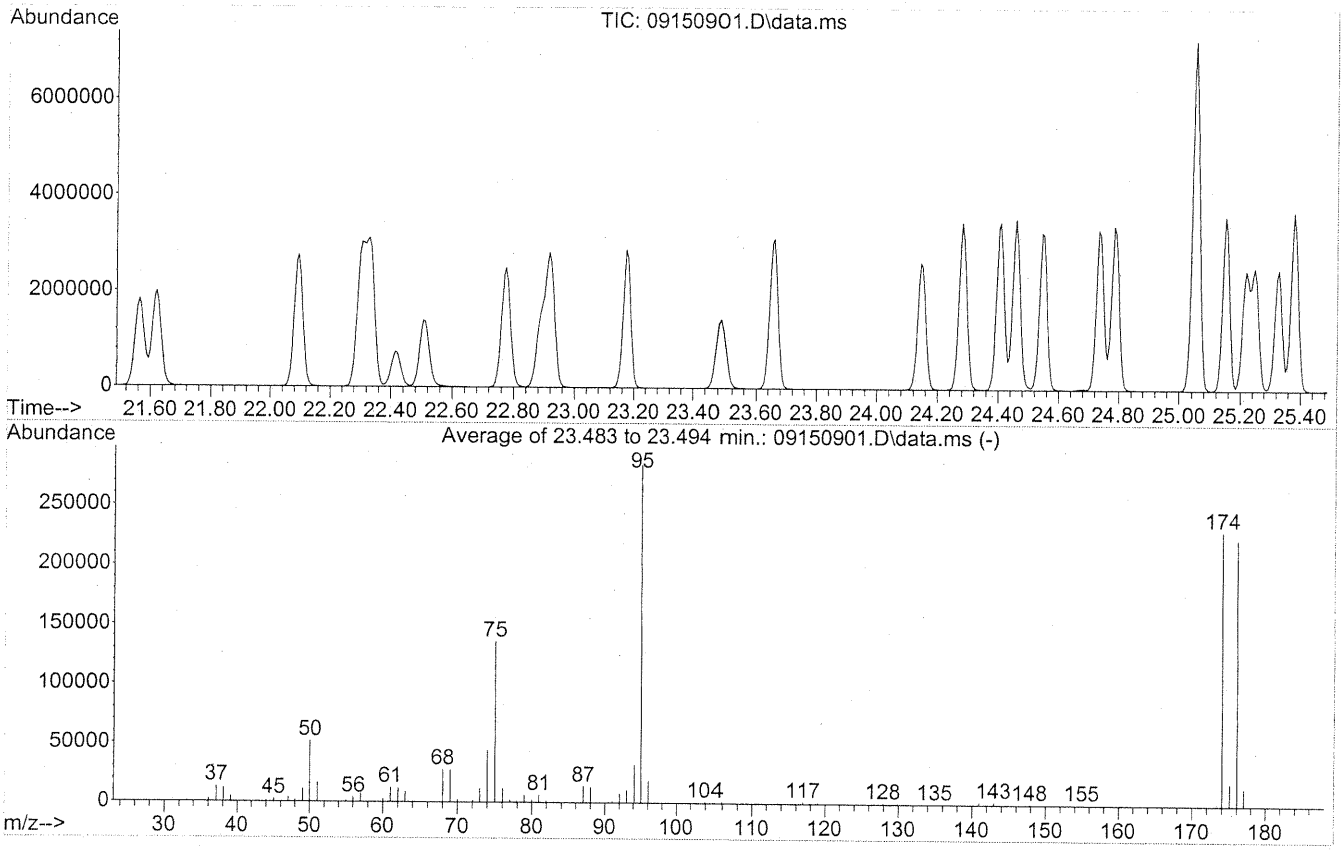
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.8	47485	PASS
75	95	30	66	46.6	124483	PASS
95	95	100	100	100.0	267200	PASS
96	95	5	9	6.5	17289	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.3	219883	PASS
175	174	4	9	8.1	17813	PASS
176	174	93	101	97.1	213547	PASS
177	176	5	9	6.4	13737	PASS

Ean 9/11/09

Data Path : J:\MS09\Data\2009_09\15\
Data File : 09150901.D
Acq On : 15 Sep 2009 5:43
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-09110901/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 3475

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	51547	PASS
75	95	30	66	47.7	135403	PASS
95	95	100	100	100.0	283989	PASS
96	95	5	9	6.4	18298	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.0	230165	PASS
175	174	4	9	8.0	18445	PASS
176	174	93	101	96.9	223125	PASS
177	176	5	9	6.5	14453	PASS

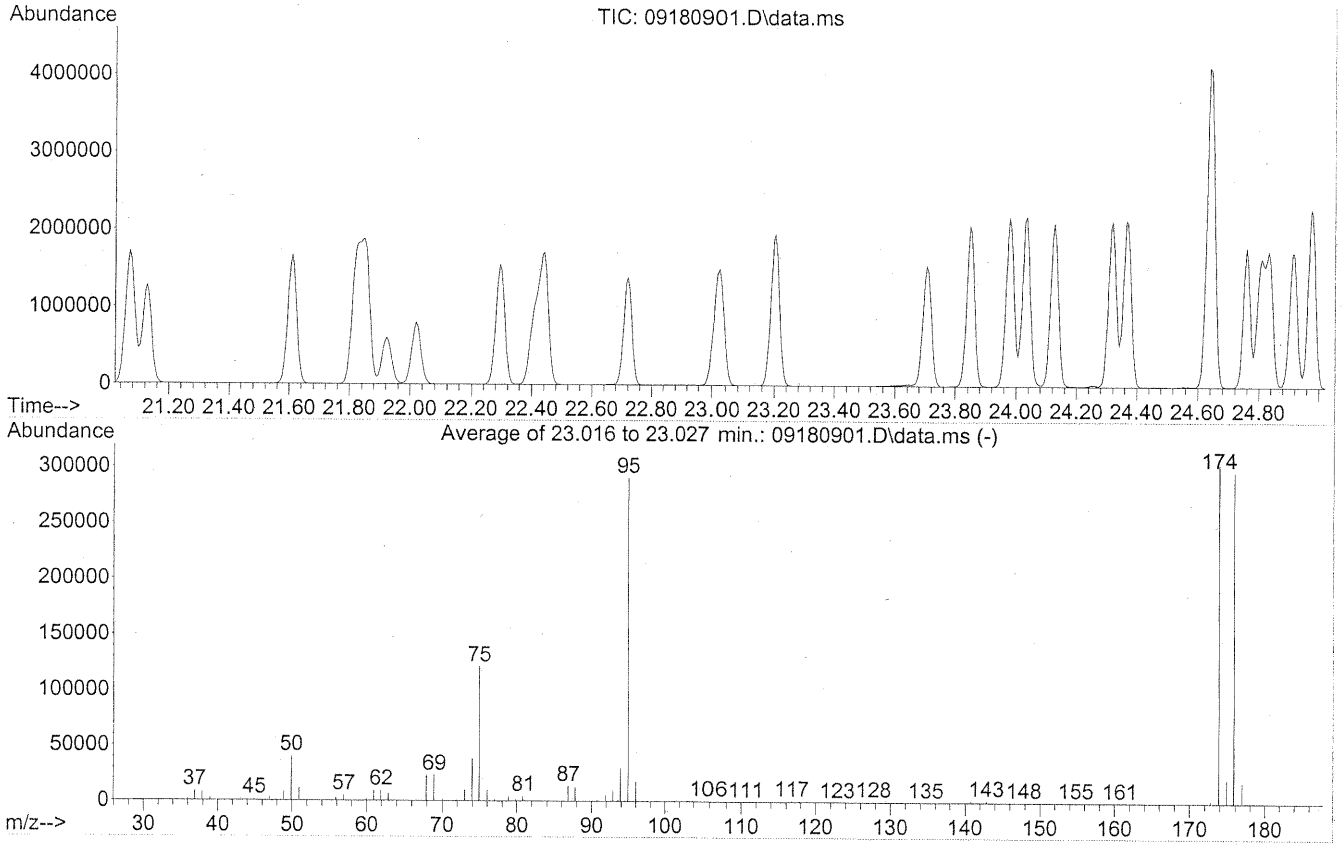
EM 9/15/09

567

Data Path : J:\MS16\DATA\2009_09\18\
Data File : 09180901.D
Acq On : 18 Sep 2009 8:05
Operator : LH
Sample : 25ng TO-15 CCV STD
Misc : S20-09080901/S20-09030904
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16090809.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Wed Sep 09 09:31:43 2009



AutoFind: Scans 3414, 3415, 3416; Background Corrected with Scan 3403

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.9	40320	PASS
75	95	30	66	41.7	121365	PASS
95	95	100	100	100.0	290837	PASS
96	95	5	9	6.2	18165	PASS
173	174	0.00	2	0.8	2295	PASS
174	95	50	120	104.7	304363	PASS
175	174	4	9	7.0	21320	PASS
176	174	93	101	97.8	297536	PASS
177	176	5	9	6.3	18827	PASS

RUN LOGS

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/13/09 6:23	08130901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass
2	08/13/09 7:04	08130902.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220902	EM	16	Pass
3	08/13/09 8:54	08130903.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Pass as MB
4	08/13/09 10:01	08130904.D	P0902767-001 (5ml)	[redacted]	EM	1	Case File
5	08/13/09 10:43	08130905.D	P0902767-002 (0.5ml)	[redacted]	EM	1	↓
6	08/13/09 11:34	08130906.D	P0902780-001 (0.5ml)	[redacted]	EM	1	Case File
7	08/13/09 12:15	08130907.D	P0902678-013 (30ml)	[redacted]	EM	5	
8	08/13/09 12:57	08130908.D	25ng TO-15 LCS STD	S20-07200901/S20-08070903	EM	2	Pass Acrylonitrile
9	08/13/09 13:52	08130909.D	P0902780-002 (0.5ml)	[redacted]	EM	1	
10	08/13/09 14:33	08130910.D	P0902780-001 (1ml)	[redacted]	EM	1	
11	08/13/09 15:15	08130911.D	P0902780-001 dup (1ml)	[redacted]	EM	1	Pass as Lab Dup.
12	08/13/09 16:15	08130912.D	P0902780-002 dil (0.1ml)	[redacted]	EM	1	
13	08/13/09 16:56	08130913.D	25ng std check	S20-08130905/S20-08070903	EM	2	
14	08/13/09 17:37	08130914.D	P0902678-013 dil (15ml)	[redacted]	EM	5	
15	08/13/09 18:19	08130915.D	P0902678-005 dil (100ml)	[redacted]	EM	9	
16	08/13/09 19:00	08130916.D	P0902678-011 dil (100ml)	[redacted]	EM	14	
17	08/13/09 19:41	08130917.D	P0902678-012 dil (100ml)	[redacted]	EM	15	
18	08/13/09 20:23	08130918.D	P0902678-014 (1000ml)	[redacted]	EM	6	
19	08/13/09 21:04	08130919.D	P0902678-014 dil (100ml)	[redacted]	EM	6	
20	08/13/09 21:46	08130920.D	P0902678-015 (1000ml)	[redacted]	EM	7	
21	08/13/09 22:28	08130921.D	P0902678-015 dil (100ml)	[redacted]	EM	7	
22	08/13/09 23:09	08130922.D	5ng std check	S20-08130905/S20-08100904	EM	1	
23	08/13/09 23:51	08130923.D	25ng std check	S20-08130905/S20-08100902	EM	1	
24	08/14/09 0:33	08130924.D	System Check		EM	4	
25	08/14/09 1:14	08130925.D	TO-15 BFB Standard (200ml)	S20-08130905	EM	1	Pass
26	08/14/09 1:56	08130926.D	0.1ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	ICAL R9081309.M
27	08/14/09 2:38	08130927.D	0.2ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	
28	08/14/09 3:19	08130928.D	0.5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
29	08/14/09 4:01	08130929.D	1.0ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
30	08/14/09 4:43	08130930.D	5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
31	08/14/09 5:24	08130931.D	25ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
32	08/14/09 6:06	08130932.D	50ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
33	08/14/09 6:47	08130933.D	100ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
34	08/14/09 7:29	08130934.D	25ng TO-15 ICV STD	S20-08130905/S20-08070903	EM	2	Pass
35	08/14/09 8:26	08130935.D	25ng TO-15 ICV STD	S20-08130905/S20-07270906	EM	10	Case File Extra

ICAL R9081309.M: 0.2ng-100ng: 1-Butanol, n-Butyl Acetate, 4-Methyl-2-pentanone
0.5ng-100ng: Vinyl Acetate, 2-Butanone, Ethyl Acetate
Methyl Methacrylate, 2-Hexanone
0.1ng-50ng: TBA
0.1ng-100ng: Rest of compounds.

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
16	09/04/09 18:57	09040916.D	P0903124-003 (1000mL)	[redacted]	LH	6	
17	09/04/09 19:35	09040917.D	P0903124-003Dup (1000mL)	[redacted]	LH	6	passed
18	09/04/09 20:14	09040918.D	P0903020-001 (100mL)	[redacted]	LH	7	
19	09/04/09 20:52	09040919.D	P0903020-001 (25mL)	[redacted]	LH	7	
20	09/04/09 21:31	09040920.D	P0903020-002 (1000mL)	[redacted]	LH	8	
21	09/04/09 22:10	09040921.D	P0903020-003 (1000mL)	[redacted]	LH	9	
22	09/04/09 22:48	09040922.D	P0903020-004 (1000mL)	[redacted]	LH	10	
23	09/04/09 23:26	09040923.D	CAS QC CAN C3S 3729F	1SC00456 (400mL)	LH	11	failed
24	09/05/09 0:06	09040924.D	CAS QC CAN C3S 3729K	1SC00609 (400mL)	LH	12	passed
25	09/05/09 0:46	09040925.D	CAS QC CAN C3S 3729Q	1SC00559 (400mL)	LH	13	passed
26	09/05/09 1:25	09040926.D	1.0ng STD Check	S20-08130903/S20-09030909	LH	16	
27	09/05/09 2:03	09040927.D	1.0ng STD Check	S20-08130903/S20-08240904	LH	2	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/08/09 10:02	09080901.D	Blank (100mL)	S20-09080901	LH	2	new IS can
2	09/08/09 13:52	09080902.D	Blank (100mL)	S20-09080901	LH	2	
3	09/08/09 14:50	09080903.D	5.0ng STD Check	S20-09080901/S20-09030905	LH	2	
4	09/08/09 15:28	09080904.D	25ng STD Check	S20-09080901/S20-09030904	LH	2	
5	09/08/09 16:06	09080905.D	25ng STD Check	S20-09080901/S20-09030911	LH	3	
6	09/08/09 16:44	09080906.D	5.0ng STD Check	S20-09080901/S20-09030905	LH	2	
7	09/08/09 17:22	09080907.D	25ng TO-15 BFB	S20-09080901	LH	2	passed
8	09/08/09 18:00	09080908.D	0.1ng TO-15 ICAL STD	S20-09080901/S20-09030909	LH	16	ICAL SAVED AS
9	09/08/09 18:38	09080909.D	0.2ng TO-15 ICAL STD	S20-09080901/S20-09030909	LH	16	R16090809.M
10	09/08/09 19:16	09080910.D	0.5ng TO-15 ICAL STD	S20-09080901/S20-09030905	LH	2	ALL COMPOUNDS PASSED
11	09/08/09 19:54	09080911.D	1.0ng TO-15 ICAL STD	S20-09080901/S20-09030905	LH	2	FOR 0.1 $\mu g/m^3$
12	09/08/09 20:33	09080912.D	5.0ng TO-15 ICAL STD	S20-09080901/S20-09030905	LH	2	EXCEPT:
13	09/08/09 21:11	09080913.D	25ng TO-15 ICAL STD	S20-09080901/S20-09030904	LH	2	ACRYLONITRILE 0.5ng → 100ng
14	09/08/09 21:49	09080914.D	50ng TO-15 ICAL STD	S20-09080901/S20-09030904	LH	2	VINYL ACETATE 2.5ng → 500n
15	09/08/09 22:28	09080915.D	100ng TO-15 ICAL STD	S20-09080901/S20-09030904	LH	2	
16	09/08/09 23:07	09080916.D	25ng TO-15 ICV STD	S20-09080901/S20-09030911	LH	3	passed

	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)	Confirmation	EM	9	
11	09/09/09 16:22	09090911.D	P0903080-003 dil (30ml)	[redacted]	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	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/10/09 5:23	09100901.D	25ng TO-15 CCV STD	S20-08130905/S20-09030903	EM	1	Pass
2	09/10/09 6:05	09100902.D	25ng TO-15 ACF STD	S20-08130905/S20-08270902	EM	3	Pass
3	09/10/09 6:46	09100903.D	25ng TO-15 MAPH STD	S20-08130905/S20-08210904	EM	5	
4	09/10/09 7:28	09100904.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
5	09/10/09 9:12	09100905.D	P0903172-002 (1ml)	[redacted]	EM	1	
6	09/10/09 9:54	09100906.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
7	09/10/09 10:38	09100907.D	P0903042-003 (2ml)	[redacted]	EM	1	
8	09/10/09 11:37	09100908.D	P0903042-005 (2ml)	[redacted]	EM	1	
9	09/10/09 12:18	09100909.D	P0903042-005 dup (2ml)	[redacted]	EM	1	Pass as Lab Dup.
10	09/10/09 13:00	09100910.D	P0903042-004 (15ml)	[redacted]	EM	9	
11	09/10/09 13:51	09100911.D	P0902960-001 (30ml)	[redacted]	EM	6	
12	09/10/09 14:32	09100912.D	P0902960-001 dil (4ml)	[redacted]	EM	6	
13	09/10/09 15:14	09100913.D	P0902976-001 dil (25ml)	[redacted]	EM	12	
14	09/10/09 17:12	09100914.D	p0903172-001 (400ml)	[redacted]	EM	5	
15	09/10/09 17:53	09100915.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Pass

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
16	09/10/09 18:34	09100916.D	P0903042-006 (15ml)	[redacted]	EM	10	
17	09/10/09 19:16	09100917.D	P0902976 Blank (100ml)	[redacted]	EM	6	
18	09/10/09 19:57	09100918.D	P0902976-001 (100ml)	[redacted]	EM	12	
19	09/10/09 20:39	09100919.D	P0902976-002 (100ml)	[redacted]	EM	7	
20	09/10/09 21:21	09100920.D	P0902976-003 (100ml)	[redacted]	EM	8	Case, File IS/surr failed
21	09/10/09 22:03	09100921.D	P0903139-001 (1000ml)	Environmental H &E 106308	EM	9	
22	09/10/09 22:45	09100922.D	P0903139-002 (1000ml)	Environmental H &E 106309	EM	11	
23	09/10/09 23:27	09100923.D	P0903139-003 (1000ml)	Environmental H &E 106310	EM	13	
24	09/11/09 0:09	09100924.D	System Check		EM	4	
25	09/11/09 0:51	09100925.D	P0903139-004 (1000ml)	Environmental H &E 106311	EM	14	
26	09/11/09 1:33	09100926.D	P0903139-005 (1000ml)	Environmental H &E 106312	EM	15	
27	09/11/09 2:15	09100927.D	P0903139-006 (1000ml)	Environmental H &E 106313	EM	16	
28	09/11/09 2:57	09100928.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/11/09 8:11	09110901.D	System Check		EM	4	
2	09/11/09 8:53	09110902.D	25ng TO-15 CCV STD	S20-09110901/S20-09030903	EM	1	Pass
3	09/11/09 9:34	09110903.D	25ng TO-15 ACF STD	S20-09110901/S20-08270902	EM	3	
4	09/11/09 10:31	09110904.D	TO-15 Method Blank (1000ml)	S20-09110901	EM	1	Pass as MB
5	09/11/09 11:14	09110905.D	P0902976-003 (7ml)	[redacted]	EM	1	
6	09/11/09 11:56	09110906.D	P0902976-003 dil (1ml)	[redacted]	EM	1	
7	09/11/09 12:37	09110907.D	25ng TO-15 LCS STD	S20-09110901/S20-08240914	EM	2	Pass
8	09/11/09 13:19	09110908.D	P0903150-001 (2ml)	[redacted]	EM	1	
9	09/11/09 14:00	09110909.D	P0903150-001 dil (0.5ml)	[redacted]	EM	1	
10	09/11/09 14:42	09110910.D	P0903150-002 (3.5ml)	[redacted]	EM	1	Case, File Bad hand injection
11	09/11/09 15:23	09110911.D	P0903150-003 (1ml)	[redacted]	EM	1	
12	09/11/09 16:05	09110912.D	P0903150-002 (3.5ml)	[redacted]	EM	1	
13	09/11/09 17:17	09110913.D	P0903150-002 dup (3.5ml)	[redacted]	EM	1	Pass as Lab Dup.
14	09/11/09 17:58	09110914.D	P0903139-002 dil (100ml)	Environmental H &E 106309	EM	11	
15	09/11/09 18:40	09110915.D	P0903139-001 (1000ml)	Environmental H &E 106308	EM	9	Case File; confirmation
16	09/11/09 19:22	09110916.D	P0903139-001 dil (100ml)	Environmental H &E 106308	EM	9	
17	09/11/09 20:03	09110917.D	Blank (100ml)	S20-09110901	EM	10	
18	09/11/09 20:45	09110918.D	Blank (100ml)	S20-09110901	EM	10	
19	09/11/09 21:27	09110919.D	Blank (200ml)	S20-09110901	EM	1	
20	09/11/09 22:09	09110920.D	P0902944-005 (237ml) Confirmation	[redacted]	EM	5	
21	09/11/09 22:51	09110921.D	25ng TO-15 LCSD STD	S20-09110901/S20-08240914	EM	2	Pass
22	09/11/09 23:33	09110922.D	CAS QC CAN/COA/AVG (1000ml)	SC00002/OA00832/AVG00907	EM	6	
23	09/12/09 0:15	09110923.D	CAS QC CAN/COA/AVG (1000ml)	SC00199/OA00857/AVG00573	EM	7	
24	09/12/09 0:57	09110924.D	CAS QC CAN/COA/AVG (1000ml)	SC00653/OA01415/AVG00166	EM	8	
25	09/12/09 1:39	09110925.D	System Check		EM	4	
26	09/12/09 2:21	09110926.D	CAS QC CAN/COA/AVG (1000ml)	SC00367/OA01433/AVG00810	EM	10	
27	09/12/09 3:03	09110927.D	CAS QC CAN/COA/AVG (1000ml)	SC01058/OA00873/AVG00765	EM	12	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/15/09 5:43	09150901.D	25ng TO-15 CCV STD	S20-09110901/S20-09030903	EM	1	Pass
2	09/15/09 6:24	09150902.D	0.5ng TO-15 RL Check	S20-09110901/S20-08240905	EM	1	
3	09/15/09 7:06	09150903.D	TO-15 Method Blank (1000ml)	S20-09110901	EM	1	Pass as MB
4	09/15/09 7:47	09150904.D	25ng TO-15 LCS STD	S20-09110901/S20-08240914	EM	2	Pass / IPA biased low.
5	09/15/09 9:14	09150905.D	CAS CAN QC C4S 3762C	1SC00483 (400ml)	EM	6	Pass 75 @ 0.5 ug/m3
6	09/15/09 9:55	09150906.D	P0903150-010 (1.5ml)	[redacted]	EM	1	
7	09/15/09 10:45	09150907.D	P0903139-003 dil (25ml)	Environmental H & E 106310	EM	13	
8	09/15/09 11:26	09150908.D	25ng TO-15 LCS STD	S20-09110901/S20-09030912	EM	2	Pass
9	09/15/09 12:23	09150909.D	P0903158-002 dil (15ml)	[redacted]	EM	6	
10	09/15/09 13:06	09150910.D	P0903158-001 (400ml)	[redacted]	EM	5	
11	09/15/09 13:50	09150911.D	P0903150-010 dup (1.5ml)	[redacted]	EM	1	Pass as Lab Dup.
12	09/15/09 14:50	09150912.D	P0903158-002 (400ml)	[redacted]	EM	6	
13	09/15/09 16:08	09150913.D	P0903158-003 (400ml)	[redacted]	EM	7	
14	09/15/09 16:49	09150914.D	P0903158-003 dil (25ml)	[redacted]	EM	7	
15	09/15/09 17:31	09150915.D	25ng TO-15 LCSD STD	S20-09110901/S20-09030912	EM	2	Pass
16	09/15/09 18:12	09150916.D	P0903182-006 (400ml)	[redacted]	EM	8	
17	09/15/09 18:54	09150917.D	P0903182-007 (400ml)	[redacted]	EM	9	
18	09/15/09 19:35	09150918.D	P0903182-008 (400ml)	[redacted]	EM	10	
19	09/15/09 20:16	09150919.D	P0903182-009 (400ml)	[redacted]	EM	11	
20	09/15/09 20:58	09150920.D	25ng std check	S20-09110901/S20-09030912	EM	2	
21	09/15/09 21:40	09150921.D	P0903182-010 (400ml)	[redacted]	EM	12	
22	09/15/09 22:21	09150922.D	P0903182-011 (400ml)	[redacted]	EM	13	
23	09/15/09 23:03	09150923.D	P0903182-012 (400ml)	[redacted]	EM	14	
24	09/15/09 23:45	09150924.D	P0903182-013 (400ml)	[redacted]	EM	15	
25	09/16/09 0:27	09150925.D	System Check		EM	4	
26	09/16/09 1:09	09150926.D	P0903182-013 dil (25ml)	[redacted]	EM	15	Case, File
27	09/16/09 1:51	09150927.D	P0903182-014 (400ml)	[redacted]	EM	16	
28	09/16/09 2:33	09150928.D	P0903182-014 dil (25ml)	[redacted]	EM	16	Case, File
29	09/16/09 3:16	09150929.D	Blank (200ml)		EM	1	
30	09/16/09 4:49	09150930.D	Blank (200ml)		EM	1	
31	09/16/09 5:26	09150931.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
27	09/18/09 0:34	09170927.D	CAS QC CAN C4S 3740N	1SC00019 (400mL)	LH	8	failed
28	09/18/09 1:12	09170928.D	CAS QC CAN C4S 3755D	1SC00237 (400mL)	LH	9	failed
29	09/18/09 1:51	09170929.D	P0903205-001 (400mL)	[redacted]	LH	10	case file

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment	
1	09/18/09 8:05	09180901.D	25ng TO-15 CCV STD	S20-09080901/S20-09030904	LH	2	passed	
2	09/18/09 8:48	09180902.D	CAS QC CAN C1 3675A	SC00434 (1000mL)	LH	7	passed	AS METHOD BLANK
3	09/18/09 9:30	09180903.D	P0903243-002 (0.5mL)	[redacted]	LH	1		
4	09/18/09 10:08	09180904.D	P0903243-001 (10mL)	[redacted]	LH	1		
5	09/18/09 10:46	09180905.D	P0903215-003 (3.5mL)	[redacted]	LH	1		
6	09/18/09 11:25	09180906.D	P0903205-001 (250mL)	[redacted]	LH	10		
7	09/18/09 12:03	09180907.D	P0903205-001Dup (250mL)	[redacted]	LH	10	passed	
8	09/18/09 12:41	09180908.D	25ng TO-15 LCS STD	S20-09080901/S20-09030911	LH	3	passed	
9	09/18/09 13:20	09180909.D	P0903268-007 (15mL)	[redacted]	LH	4		
10	09/18/09 13:58	09180910.D	P0903268-008 (15mL)	[redacted]	LH	5		
11	09/18/09 14:37	09180911.D	P0903273-001 (1.5mL)	[redacted]	LH	1		
12	09/18/09 15:16	09180912.D	P0903268-009 (20mL)	[redacted]	LH	6		
13	09/18/09 15:54	09180913.D	P0903268-010 (25mL)	[redacted]	LH	7		
14	09/18/09 16:33	09180914.D	P0903243-001 (30mL)	[redacted]	LH	8		
15	09/18/09 17:25	09180915.D	P0903268-011 (60mL)	[redacted]	LH	7		
16	09/18/09 18:03	09180916.D	P0903139-004 dil (25mL)	Environmental H & E 106311	LH	10		
17	09/18/09 18:42	09180917.D	CAS QC CAN/FC (1000mL)	AC00709/FC00319	LH	11	passed	ME # 14813
18	09/18/09 19:20	09180918.D	CAS QC CAN/FC (1000mL)	AC01582/FC00500	LH	12	passed	
19	09/18/09 19:58	09180919.D	CAS QC CAN/FC (1000mL)	AC00481/FC00583	LH	13	failed	
20	09/18/09 20:37	09180920.D	CAS QC CAN/FC (1000mL)	AC01658/FC00605	LH	14	passed	
21	09/18/09 21:15	09180921.D	CAS QC CAN/FC (1000mL)	AC01588/FC00525	LH	15	passed	
22	09/18/09 21:54	09180922.D	CAS QC CAN/FC (1000mL)	AC00942/FC00251	LH	16	passed	
23	09/18/09 22:33	09180923.D	CAS QC CAN/FC (1000mL)	AC01478/FC00278	LH	4	failed	
24	09/18/09 23:12	09180924.D	CAS QC CAN/FC (1000mL)	AC00836/FC00243	LH	5	failed	
25	09/18/09 23:50	09180925.D	CAS QC CAN/FC (1000mL)	AC00785/FC00249	LH	6	failed	