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

LABORATORY REPORT

September 22, 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 August 26, 2009. For your reference, these analyses have been assigned our service request number P0902972.

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 321 pages.

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

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

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera

Kate Aguilera
Project Manager

Client: Environmental Health & Engineering, Inc. CAS Project No: P0902972
Project: 16512

CASE NARRATIVE

The samples were received intact under chain of custody on August 26, 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: P0902972

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 #
P0902972-001.01	103520	6.0 L-Summa Canister Ambient		0.3	3.5				AC00707	**14338**		
P0902972-002.01	103521	6.0 L-Summa Canister Ambient	-14.7	-7.2	3.5				AC00486	**14338**		
P0902972-003.01	103522	6.0 L-Summa Canister Ambient	-2.8	-1.4	3.5				AC00944	**14338**		
P0902972-004.01	103523	6.0 L-Summa Canister Ambient	-1.0	-0.5	3.7				AC00667	**14338**		
P0902972-005.01	103524	6.0 L-Summa Canister Ambient	-29.1	-14.3	3.8				AC00931	**14275**		

Miscellaneous Items - received

AVG01041
AVG01000
AVG00954
FC00613
AVG00638
FC00238
FC00652
FC00260
AVG00945
FC00163

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 8/25/09

P0902972

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

TO: CAS

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

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

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

For EH & E Data Coordinator - URGENT DATA ☐

SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER:Time/Date/Vol.
103520	Summa-AIR	EPA TO-15	11:35
103521	↓		11:36
103522			11:37
103523			11:38
103524			11:35

Special instructions:

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

☐ Fax results 781-247-4305

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

☒ Additional report recipient MFRAGALA@EHEINC.COM

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 8/25/09

Received by: _____ of (company name) CAS Date: 08/26/09

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

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

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

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

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

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: P0902972

Project: 16512

Sample(s) received on: 08/26/09 Date opened: 08/26/09 by: SSTAPLES

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

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Was a **chain-of-custody** provided?	☒	☐	☐
5	Was the **chain-of-custody** properly completed?	☒	☐	☐
6	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
7	Was **sample volume** received adequate for analysis?	☒	☐	☐
8	Are samples within specified holding times?	☒	☐	☐
9	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature _____ °C Blank Temperature _____ °C			
10	Was a **trip blank** received?	☒	☐	☐
	Trip blank supplied by CAS: AC00931			
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
P0902972-001.01	6.0 L Ambient Can					
P0902972-002.01	6.0 L Ambient Can					
P0902972-003.01	6.0 L Ambient Can					
P0902972-004.01	6.0 L Ambient Can					
P0902972-005.01	6.0 L Ambient Can					

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

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

RESULTS OF VOLATILE ORGANIC ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103520**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-001

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: AC00707

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
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	ND	0.61	ND	0.35	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**17**	0.61	**3.5**	0.12	
74-87-3	**Chloromethane**	**0.94**	0.12	**0.46**	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**	**2,000**	6.1	**1,100**	3.2	**D**
75-05-8	**Acetonitrile**	**240**	0.61	**140**	0.36	**D**
107-02-8	**Acrolein**	**3.8**	0.61	**1.7**	0.26	
67-64-1	**Acetone**	**66**	6.1	**28**	2.5	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.12	**0.21**	0.022	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**28**	0.61	**11**	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**	**0.49**	0.12	**0.064**	0.016	
75-15-0	**Carbon Disulfide**	**1.0**	0.61	**0.34**	0.19	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	**2-Butanone (MEK)**	**5.0**	0.61	**1.7**	0.21	

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

Verified By: _____ Date: 9/10/09

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103520**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-001

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: AC00707

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
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**	**7.7**	1.2	**2.1**	0.34	
110-54-3	**n-Hexane**	**5.2**	0.61	**1.5**	0.17	
67-66-3	**Chloroform**	**0.32**	0.12	**0.065**	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	**1,2-Dichloroethane**	**3.0**	0.12	**0.75**	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	**Benzene**	**3.9**	0.12	**1.2**	0.038	
56-23-5	**Carbon Tetrachloride**	**0.47**	0.12	**0.074**	0.019	
110-82-7	**Cyclohexane**	**0.91**	0.61	**0.27**	0.18	
78-87-5	**1,2-Dichloropropane**	**0.20**	0.12	**0.043**	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	**Trichloroethene**	**0.22**	0.12	**0.040**	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**	**3.4**	0.61	**0.82**	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	**4-Methyl-2-pentanone**	**0.63**	0.61	**0.15**	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**	**26**	0.61	**6.9**	0.16	
591-78-6	**2-Hexanone**	**0.94**	0.61	**0.23**	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**	**1.9**	0.61	**0.40**	0.13	

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

Verified By: _____ Date: 9/10/09

Client: **Environmental Health & Engineering, Inc.** CAS Project ID: P0902972
Client Sample ID: **103520** CAS Sample ID: P0902972-001
Client Project ID: **16512**

Test Code: EPA TO-15 Date Collected: 8/25/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 8/26/09
Analyst: Elsa Moctezuma Date Analyzed: 9/3 - 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: AC00707

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

Canister Dilution Factor: 1.21

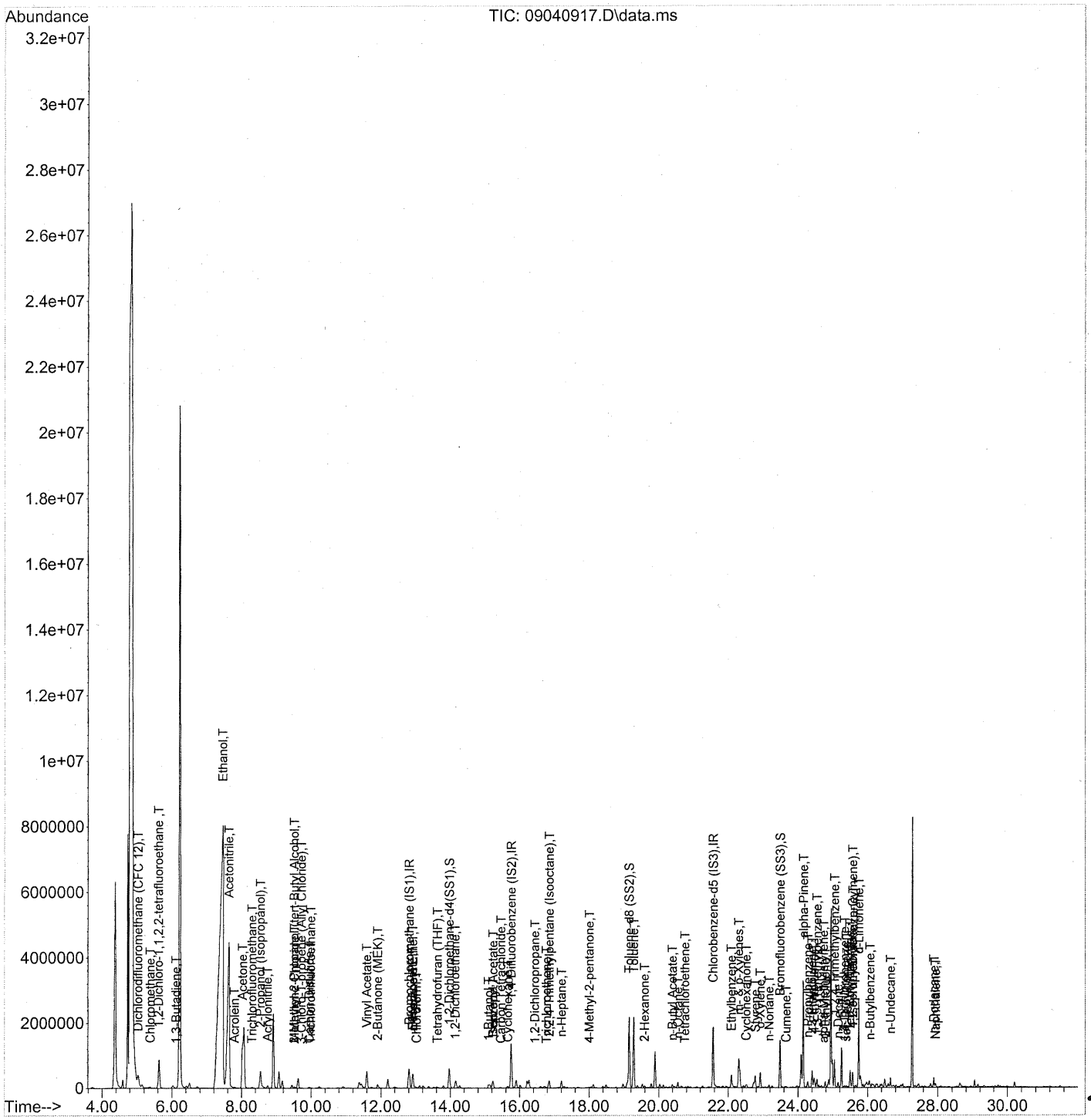
CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.9**	0.61	**0.41**	0.13	
127-18-4	**Tetrachloroethene**	**0.12**	0.12	**0.018**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	**Ethylbenzene**	**4.4**	0.61	**1.0**	0.14	
179601-23-1	**m,p-Xylenes**	**14**	0.61	**3.2**	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	**Styrene**	**4.0**	0.61	**0.94**	0.14	
95-47-6	**o-Xylene**	**5.0**	0.61	**1.1**	0.14	
111-84-2	**n-Nonane**	**0.90**	0.61	**0.17**	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**	**37**	0.61	**6.6**	0.11	
103-65-1	**n-Propylbenzene**	**1.3**	0.61	**0.27**	0.12	
622-96-8	**4-Ethyltoluene**	**2.3**	0.61	**0.47**	0.12	
108-67-8	**1,3,5-Trimethylbenzene**	**2.1**	0.61	**0.42**	0.12	
95-63-6	**1,2,4-Trimethylbenzene**	**7.3**	0.61	**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	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	**d-Limonene**	**26**	0.61	**4.6**	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	**Naphthalene**	**0.89**	0.61	**0.17**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

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

Verified By: _____ Date: 9/10/09

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:48:13 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:48:13 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	306852	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1564312	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	784146	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	588069	27.104	ng		-0.02
Spiked Amount 25.000			Recovery =	108.40%			
57) Toluene-d8 (SS2)	19.15	98	1835583	24.624	ng		-0.01
Spiked Amount 25.000			Recovery =	98.48%			
73) Bromofluorobenzene (SS3)	23.49	174	501919	23.775	ng		0.00
Spiked Amount 25.000			Recovery =	95.08%			
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D. d			
3) Dichlorodifluoromethan...	5.03	85	545592	14.200 ng			99
4) Chloromethane	5.38	50	27944	0.780 ng			96
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	1936	~~0.095~~ ng	#		43
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.12	54	2462	~~0.098~~ ng	#		40
8) Bromomethane	6.61	94	718	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.45	45	36791460	~~2178.992~~ ng See Dil			99
11) Acetonitrile	7.64	41	9950059	~~241.470~~ ng See Dil			99
12) Acrolein	7.80	56	34566	3.139 ng			98
13) Acetone	8.03	58	930534	54.158 ng	#		61
14) Trichlorofluoromethane	8.30	101	32219	0.981 ng			99
15) 2-Propanol (Isopropanol)	8.55	45	1070351	22.747 ng			94
16) Acrylonitrile	8.75	53	7469	~~0.299~~ ng	#		15
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.51	59	26411	0.553 ng	#		1
19) Methylene Chloride	9.52	84	3706	~~0.173~~ ng	#		69
20) 3-Chloro-1-propene (Al...	9.72	41	2266	~~0.079~~ ng	#		34
21) Trichlorotrifluoroethane	9.98	151	5972	0.406 ng			96
22) Carbon Disulfide	9.94	76	65488	0.866 ng			99
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	11.38	63	488	N.D.			
25) Methyl tert-Butyl Ether	11.37	73	864	N.D.			
26) Vinyl Acetate	11.60	86	14301	~~3.843~~ ng	#		1
27) 2-Butanone (MEK)	11.90	72	49701	4.149 ng	#		76
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.92	87	2499	0.147 ng	#		1
30) Ethyl Acetate	12.91	61	49624	6.388 ng			94
31) n-Hexane	12.93	57	164094	4.334 ng			94

9/9/09

11

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:48:13 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	8338	0.263 ng		92
34) Tetrahydrofuran (THF)	13.63	72	3007	0.241 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	61035	2.517 ng		100
38) 1,1,1-Trichloroethane	14.55	97	362	N.D.		
39) Isopropyl Acetate	15.23	61	1310	0.103 ng	#	1
40) 1-Butanol	15.10	56	93103	4.593 ng		95
41) Benzene	15.23	78	271876	3.232 ng		98
42) Carbon Tetrachloride	15.46	117	9057	0.385 ng		98
43) Cyclohexane	15.65	84	24589	0.755 ng	#	79
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.44	63	3407	0.165 ng		93
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.77	130	3806	0.178 ng		96
48) 1,4-Dioxane	16.56	88	728	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	241531	2.495 ng		93
50) Methyl Methacrylate	17.05	100	105	N.D.		
51) n-Heptane	17.20	71	62220	2.778 ng		90
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.00	58	9420	0.518 ng		80
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.77	97	544	N.D.		
58) Toluene	19.28	91	1948443	21.561 ng		100
59) 2-Hexanone	19.59	43	36545	0.778 ng	#	51
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	81422	1.589 ng		89
63) n-Octane	20.56	57	32141	1.596 ng		87
64) Tetrachloroethene	20.75	166	2308	0.103 ng		91
65) Chlorobenzene	21.62	112	692	N.D.		
66) Ethylbenzene	22.09	91	355246	3.641 ng		97
67) m- & p-Xylenes	22.30	91	880047	11.378 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	189889	3.321 ng		99
70) o-Xylene	22.92	91	320756	4.122 ng		97
71) n-Nonane	23.17	43	34656	0.740 ng		88
72) 1,1,2,2-Tetrachloroethane	22.92	83	383	N.D.		
74) Cumene	23.66	105	23404	0.232 ng		96
75) alpha-Pinene	24.15	93	1502395	30.183 ng		97
76) n-Propylbenzene	24.28	91	136393	1.094 ng		92
77) 3-Ethyltoluene	24.40	105	351865	3.723 ng		98
78) 4-Ethyltoluene	24.46	105	182294	1.919 ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	133527	1.700 ng		97

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:48:13 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

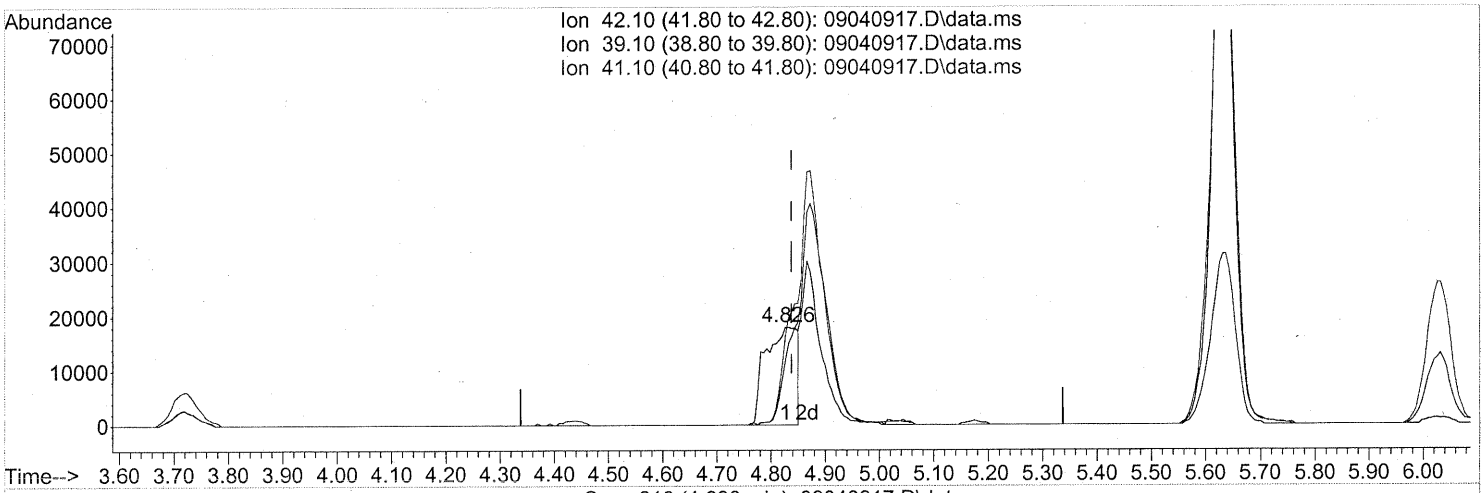
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	2251	0.053	ng	#	60
81) 2-Ethyltoluene	24.79	105	120807	1.238	ng		98
82) 1,2,4-Trimethylbenzene	25.05	105	504499	6.048	ng		88
83) n-Decane	25.15	57	59710	1.230	ng		93
84) Benzyl Chloride	25.24	91	1161	N.D.			
85) 1,3-Dichlorobenzene	25.33	146	2801	0.065	ng		92
86) 1,4-Dichlorobenzene	25.33	146	2801	0.061	ng		91
87) sec-Butylbenzene	25.38	105	9378	0.085	ng	#	80
88) 4-Isopropyltoluene (p-...	25.56	119	192189	1.825	ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	111001	1.316	ng		94
90) 1,2-Dichlorobenzene	25.33	146	2801	0.065	ng		92
91) d-Limonene	25.74	68	727419	21.314	ng		95
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	91456	1.823	ng		93
94) 1,2,4-Trichlorobenzene	27.80	180	109	N.D.			
95) Naphthalene	27.94	128	82210	0.734	ng		97
96) n-Dodecane	27.89	57	96204	1.713	ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.51	55	35661	1.253	ng		96
99) tert-Butylbenzene	25.49	119	21373	0.258	ng		99
100) n-Butylbenzene	26.06	91	45666	0.522	ng	#	41

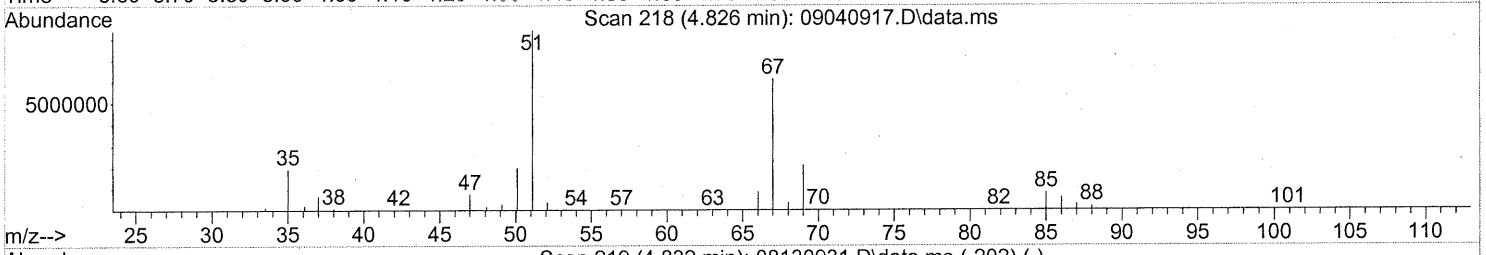
(#) = qualifier out of range (m) = manual integration (+) = signals summed

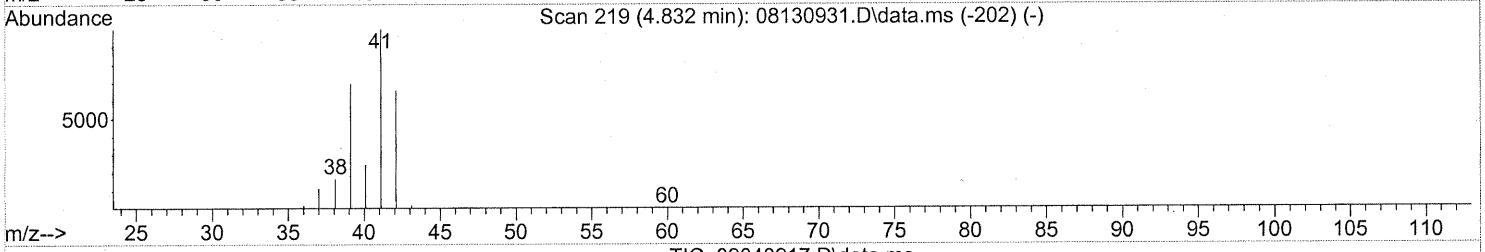
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(2) Propene (T)

4.826min (-0.011) 2.69ng

response 72285

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

TP 9/9/09

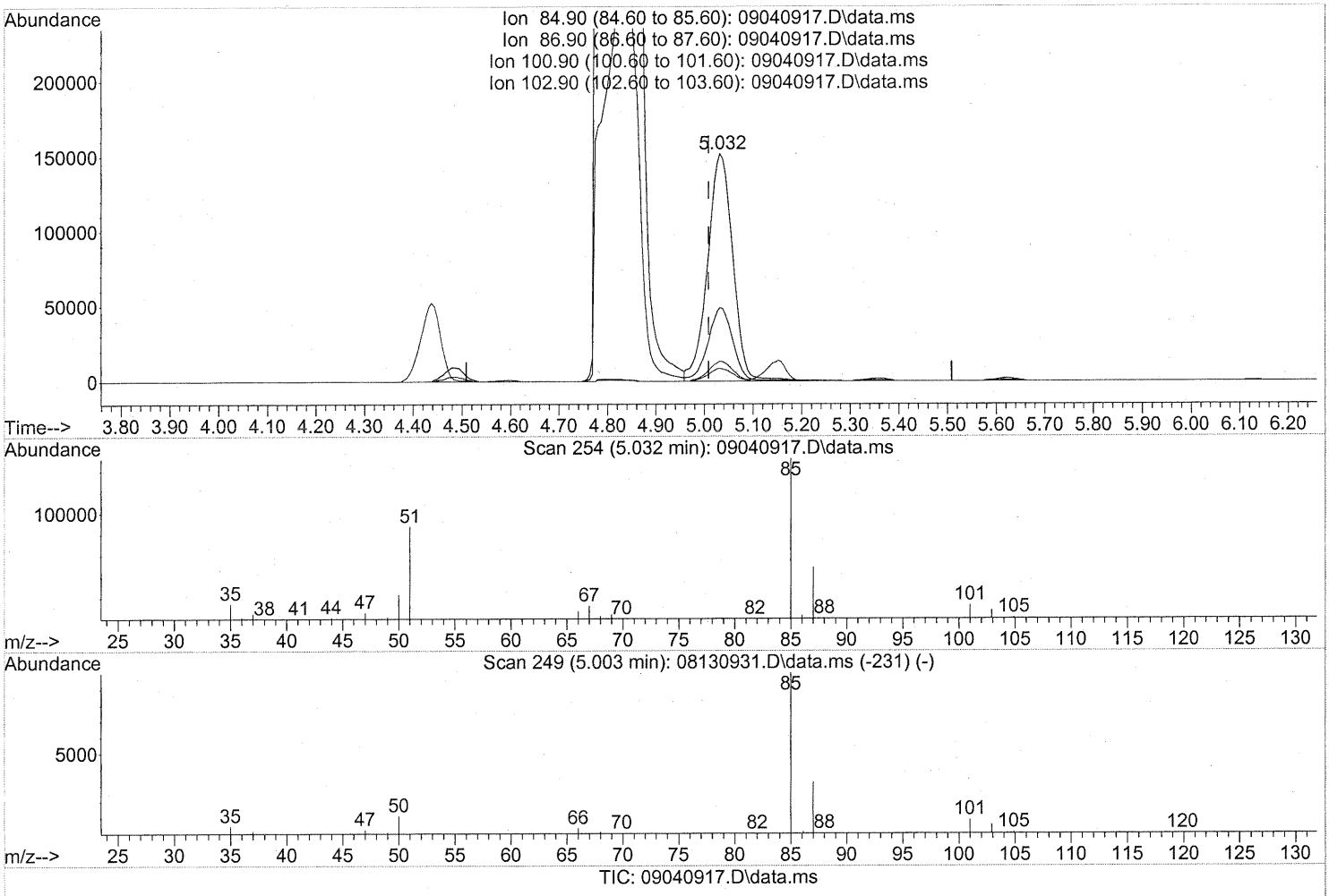
KK 9/9/09

14

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 14.20ng

response 545592

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.50
100.90	9.10	8.09
102.90	5.50	5.18

15

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
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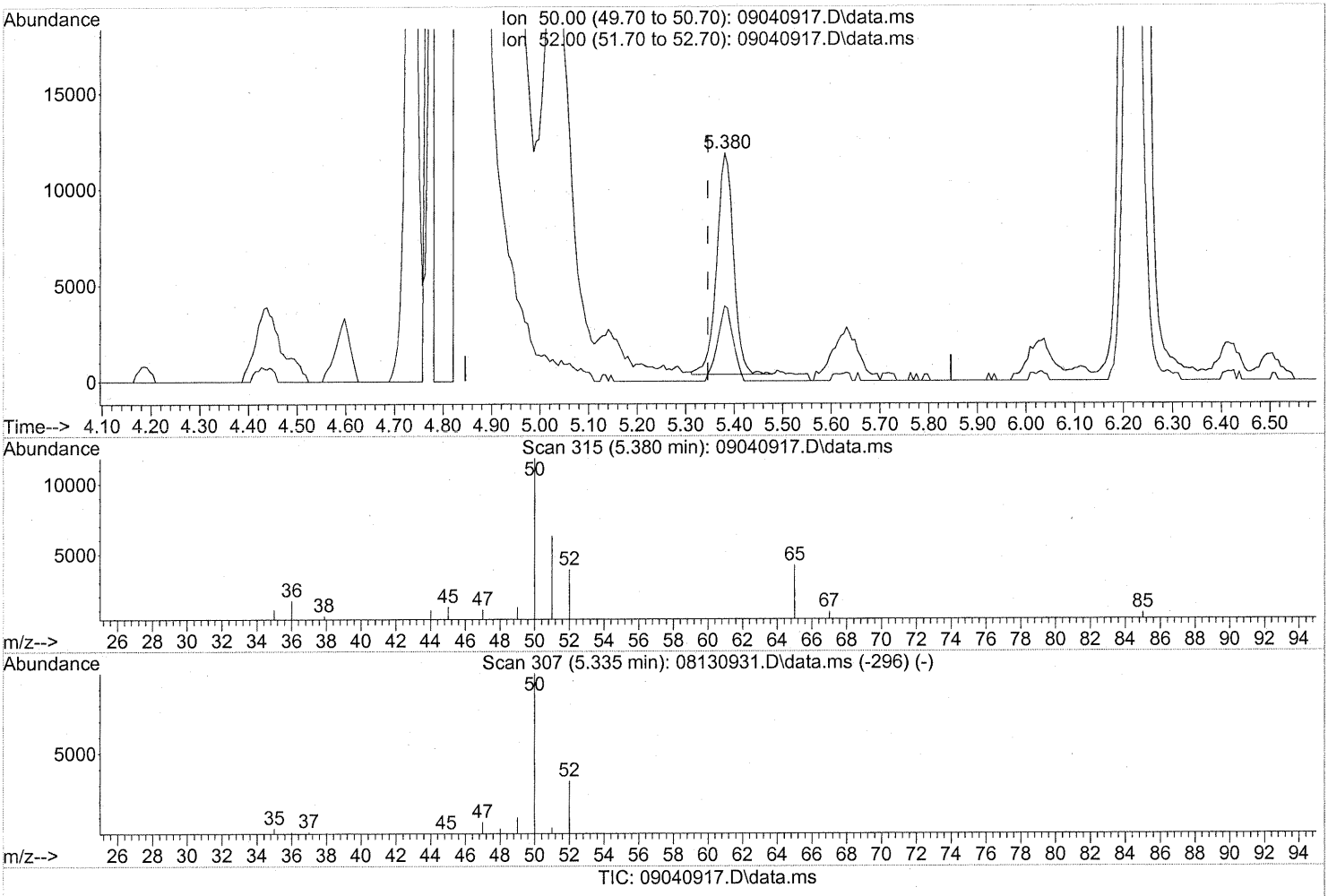
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(4) Chloromethane (T)

5.380min (+0.034) 0.78ng

response 27944

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

Before subtraction

16

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
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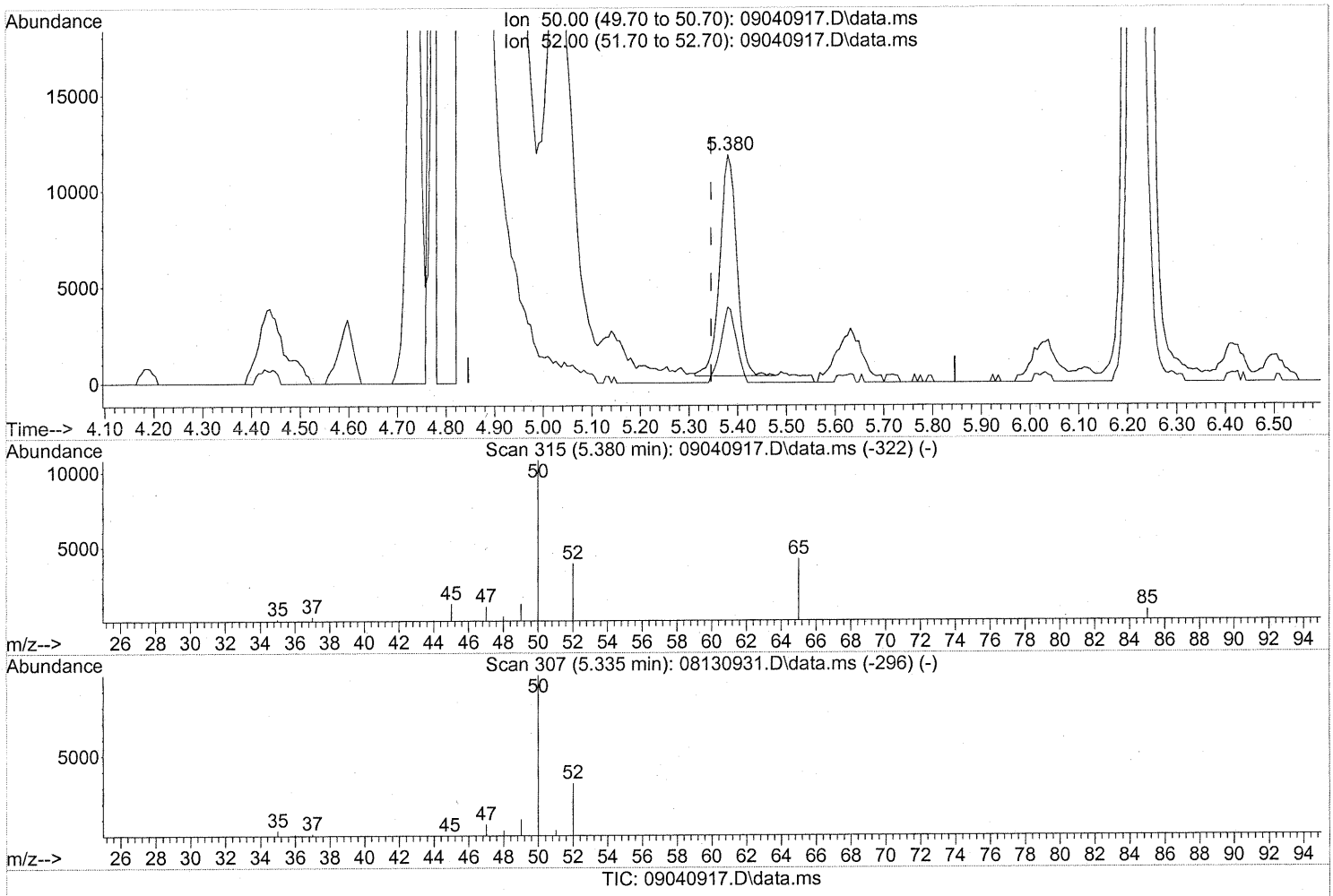
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(4) Chloromethane (T)

5.380min (+0.034) 0.78ng

response 27944

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

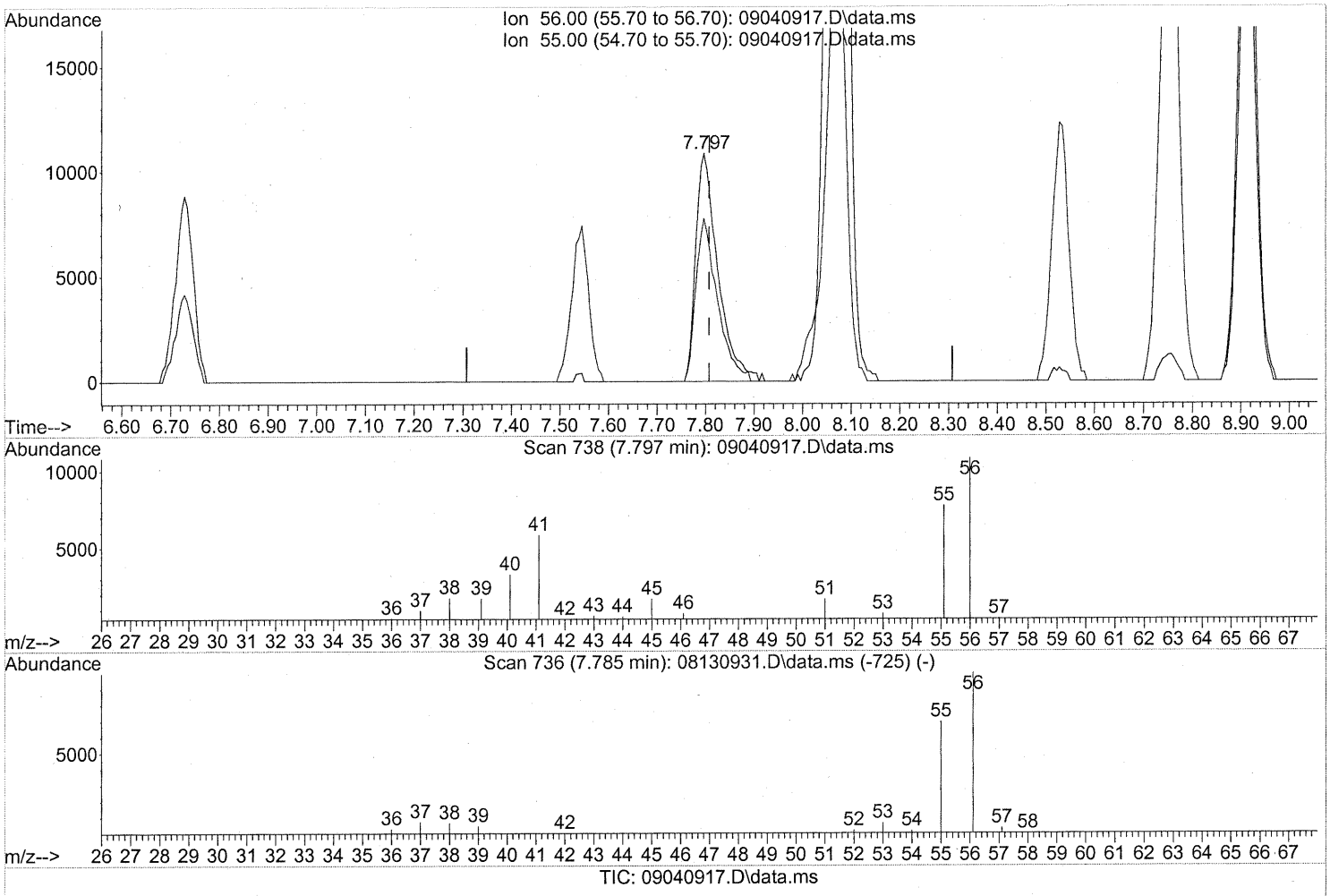
After subtraction
9/9/09

17

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 3.14ng

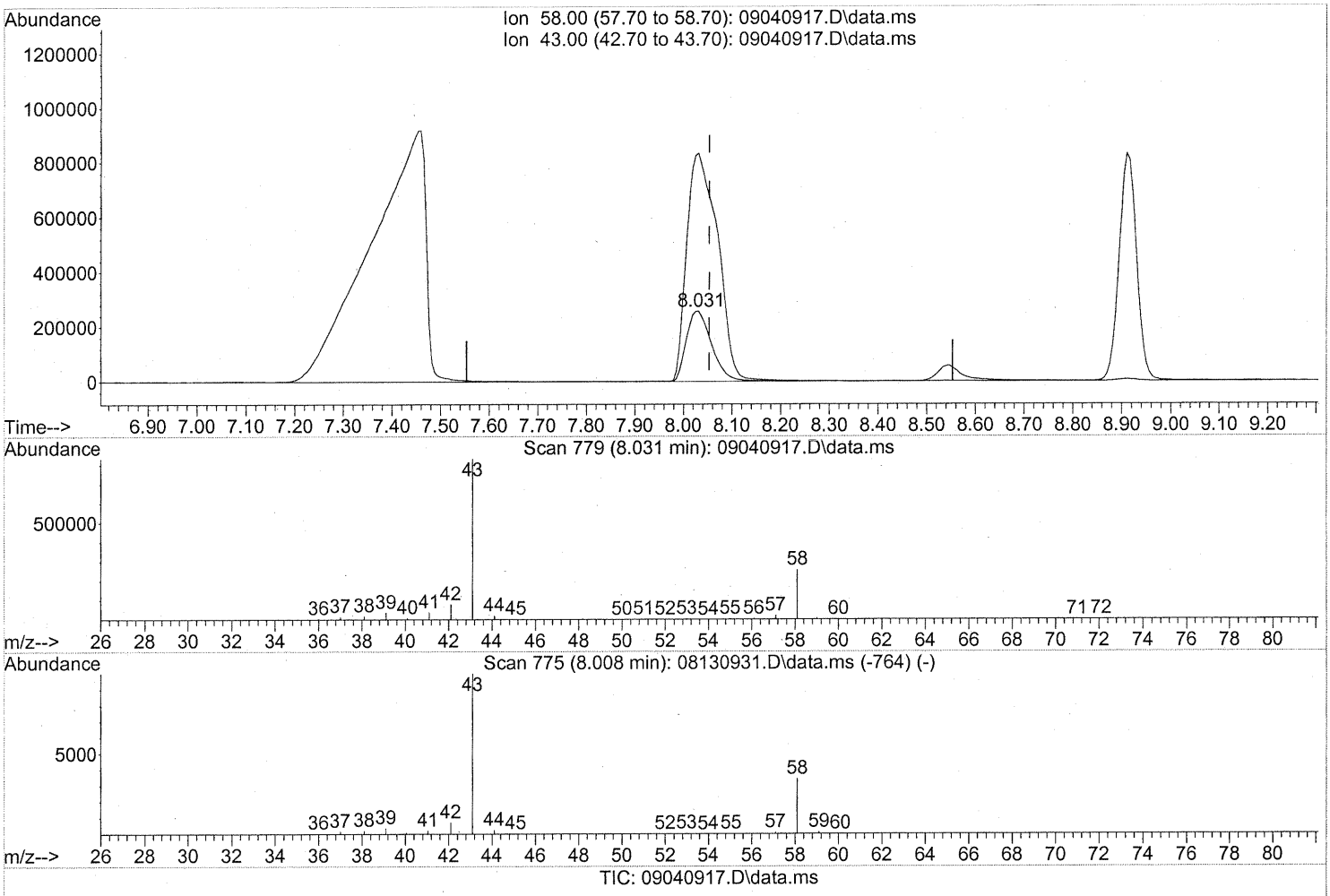
response 34566

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(13) Acetone (T)

8.031min (-0.023) 54.16ng

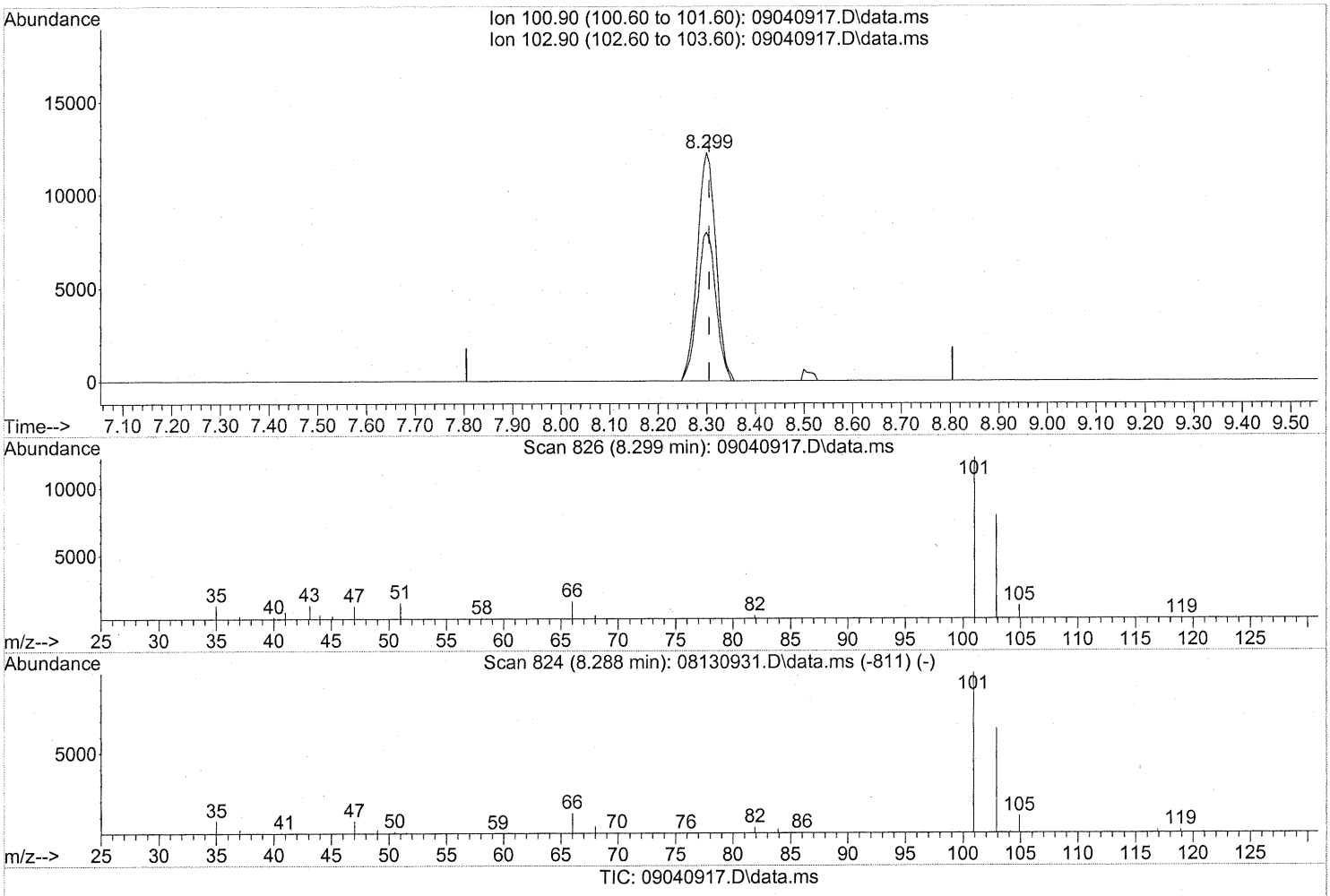
response 930534

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	397.12#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(14) Trichlorofluoromethane (T)

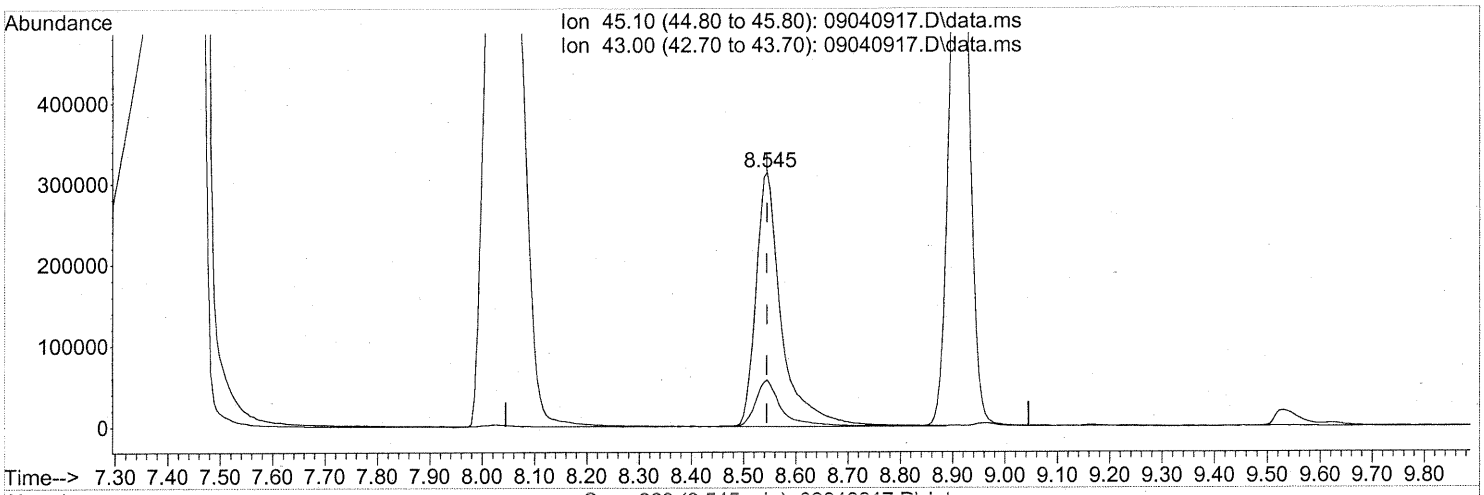
8.299min (-0.006) 0.98ng

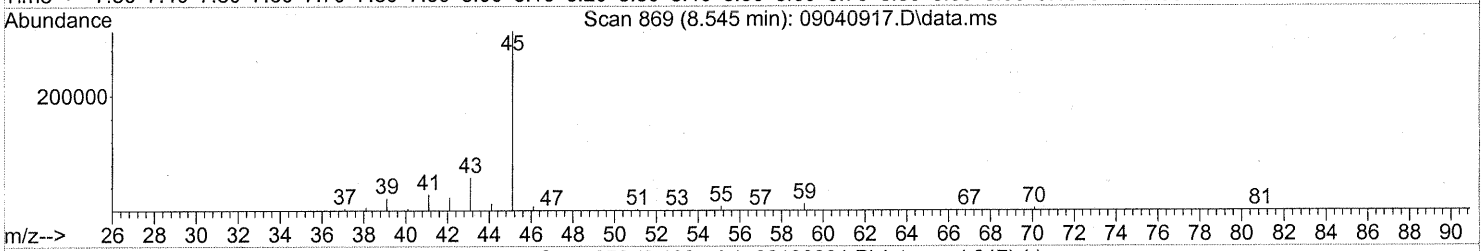
response 32219

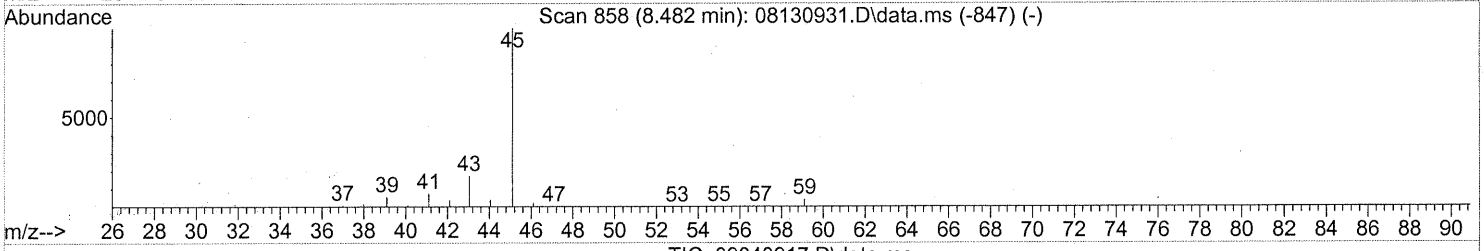
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	65.05
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

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

8.545min (+0.000) 22.75ng

response 1070351

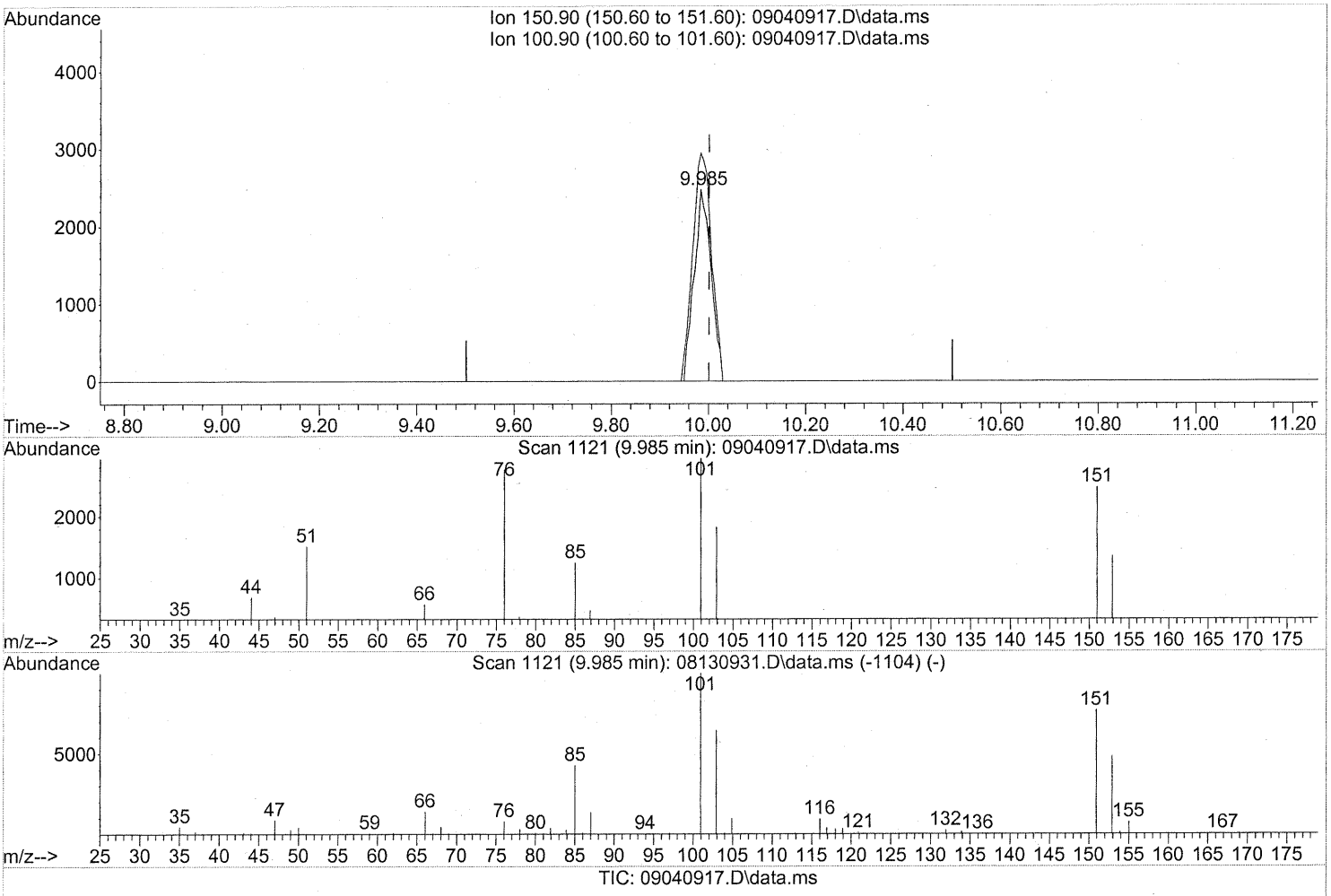
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.61
0.00	0.00	0.00
0.00	0.00	0.00

21

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.41ng

response 5972

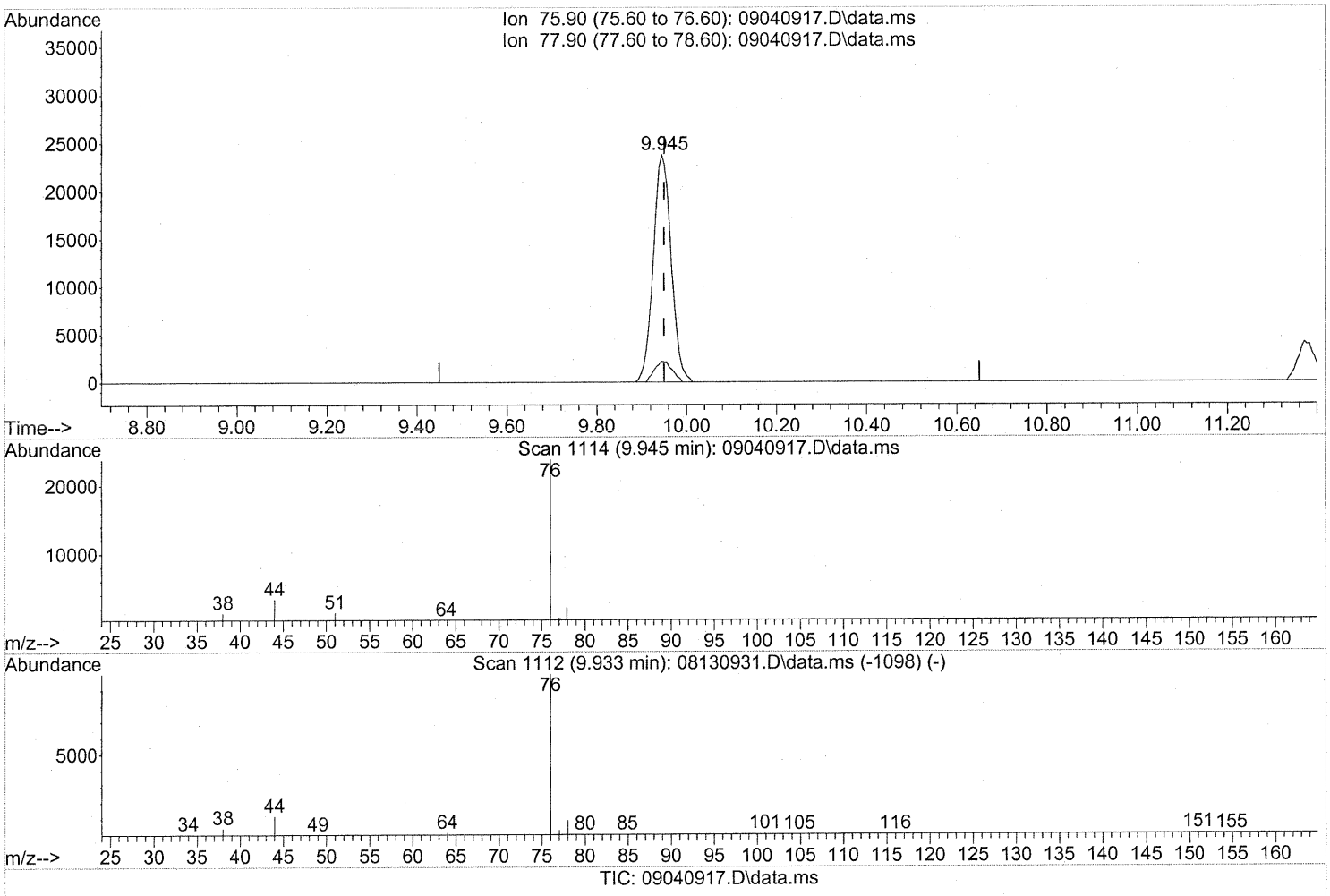
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	131.95
0.00	0.00	0.00
0.00	0.00	0.00

22

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(22) Carbon Disulfide (T)

9.945min (-0.006) 0.87ng

response 65488

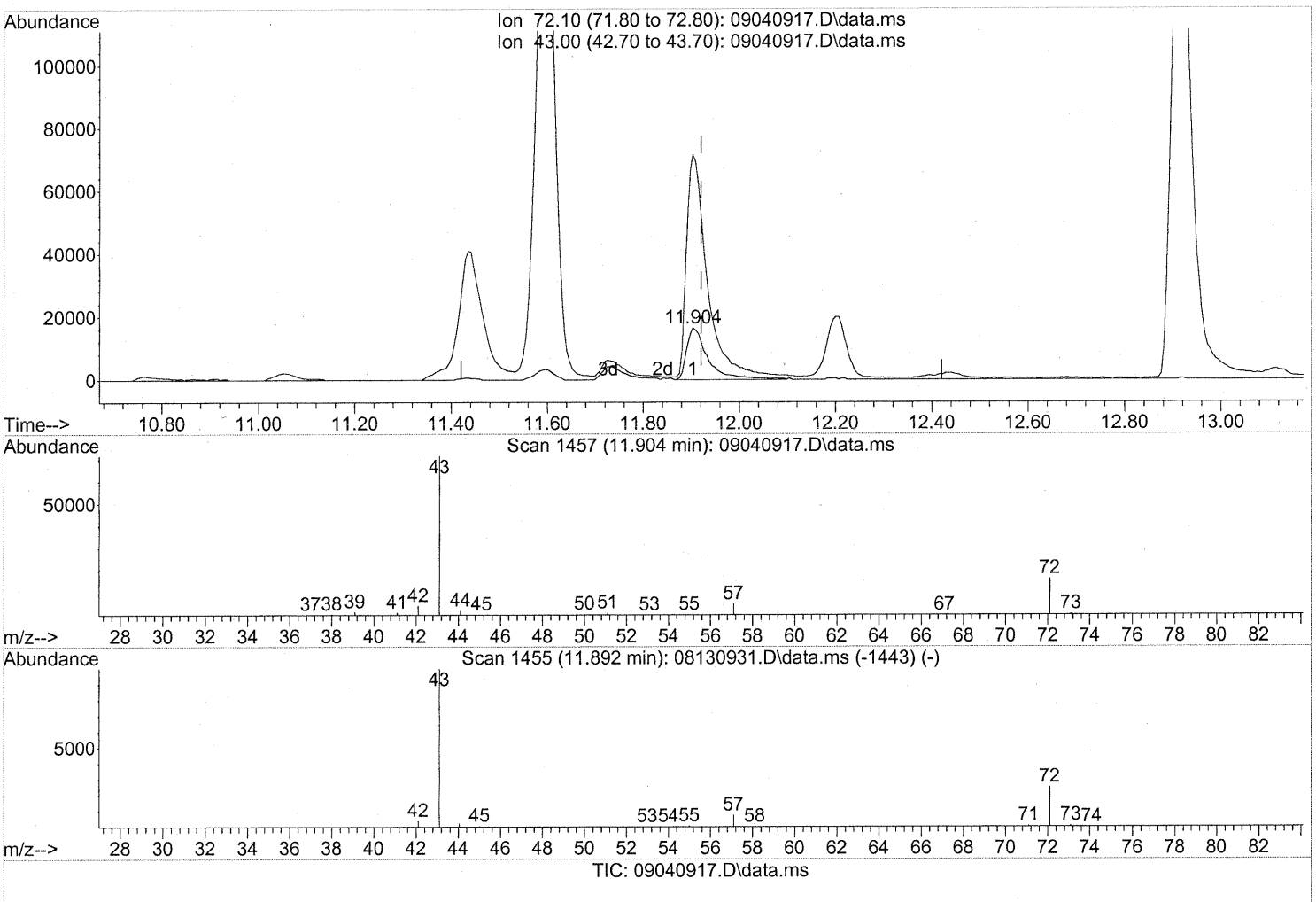
Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.73
0.00	0.00	0.00
0.00	0.00	0.00

23

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

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

11.904min (-0.017) 4.15ng

response 49701

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	419.54#
0.00	0.00	0.00
0.00	0.00	0.00

24

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 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)
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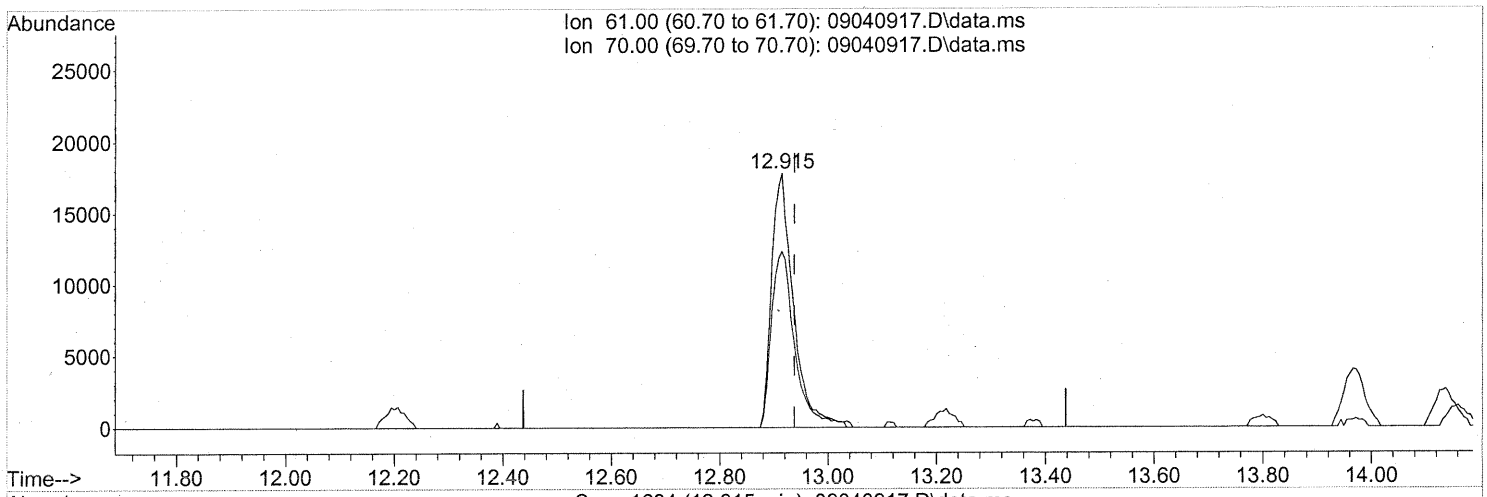
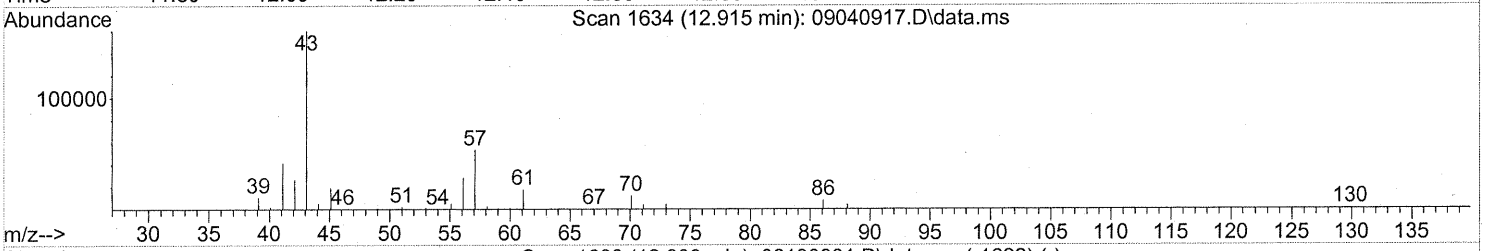
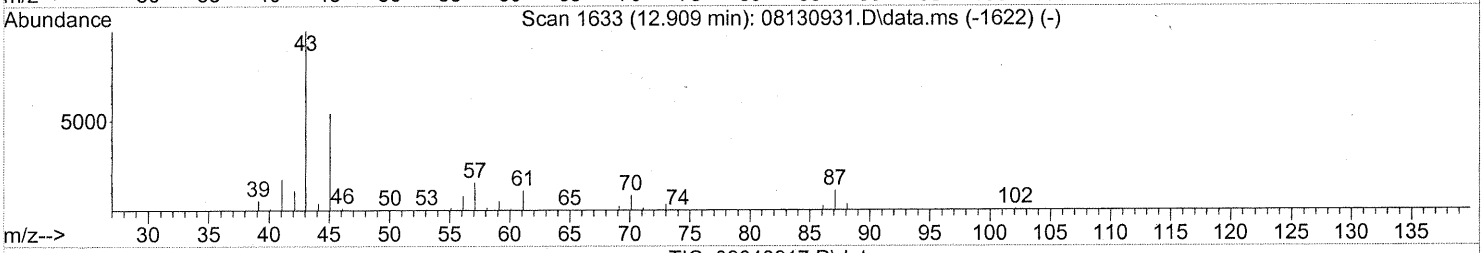






TIC: 09040917.D\data.ms

(30) Ethyl Acetate (T)

12.915min (-0.023) 6.39ng

response 49624

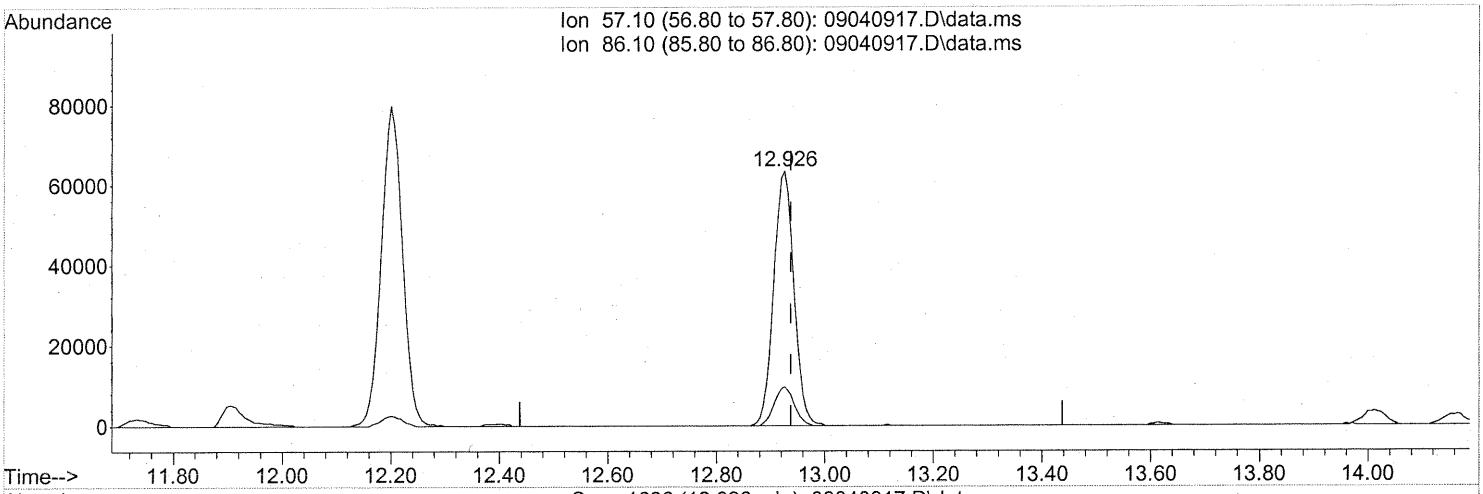
Ion	Exp%	Act%
61.00	100	100
70.00	78.80	73.24
0.00	0.00	0.00
0.00	0.00	0.00

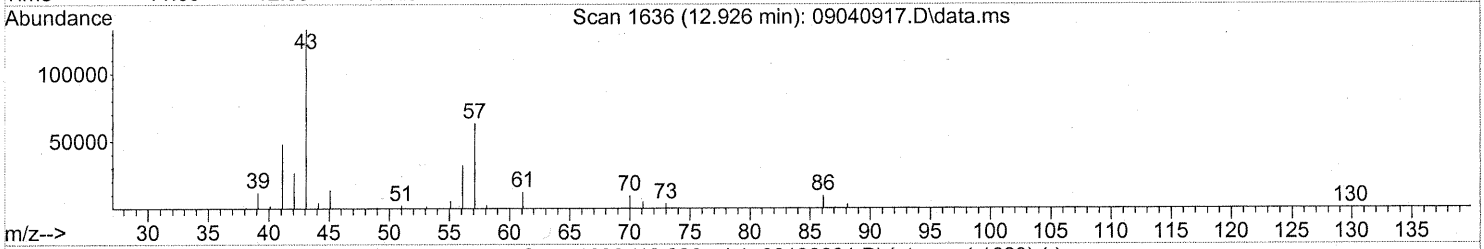
25

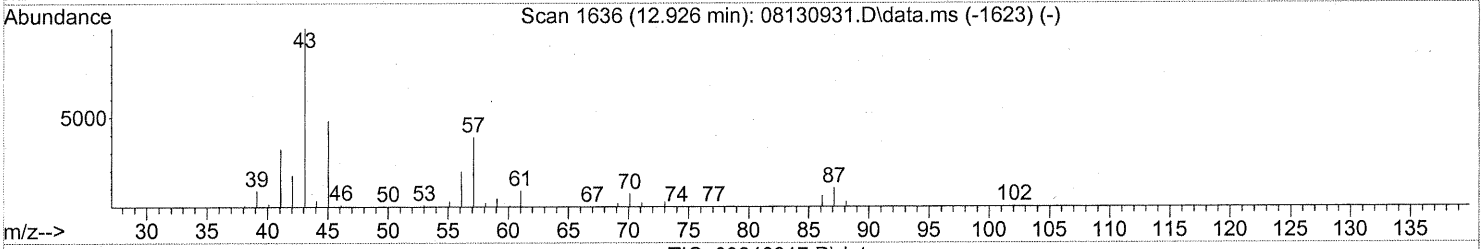
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(31) n-Hexane (T)

12.926min (-0.011) 4.33ng

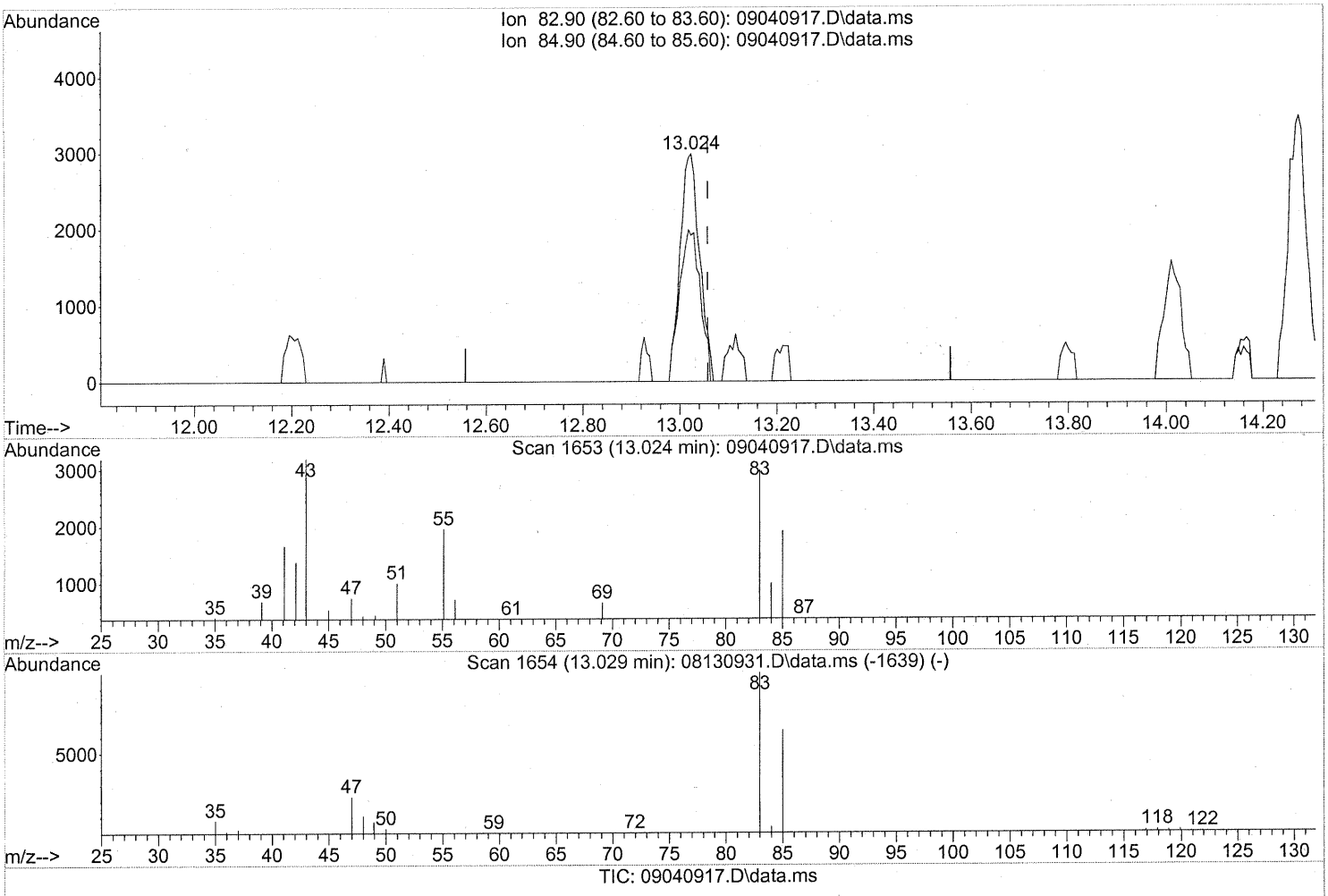
response 164094

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	14.91
0.00	0.00	0.00
0.00	0.00	0.00

26

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(32) Chloroform (T)

13.024min (-0.034) 0.26ng

response 8338

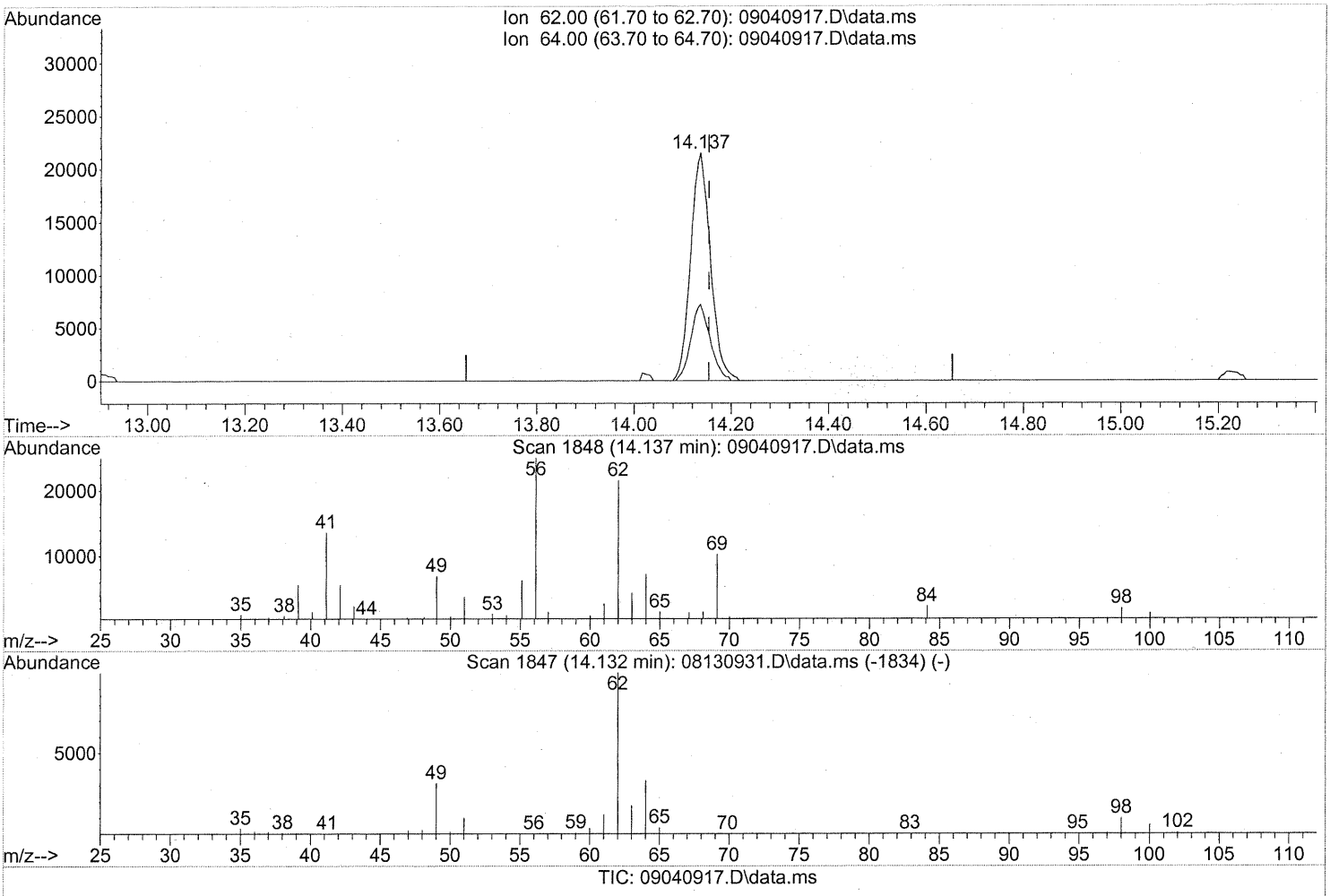
Ion	Exp%	Act%
82.90	100	100
84.90	64.70	70.86
0.00	0.00	0.00
0.00	0.00	0.00

27

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(36) 1,2-Dichloroethane (T)

14.137min (-0.017) 2.52ng

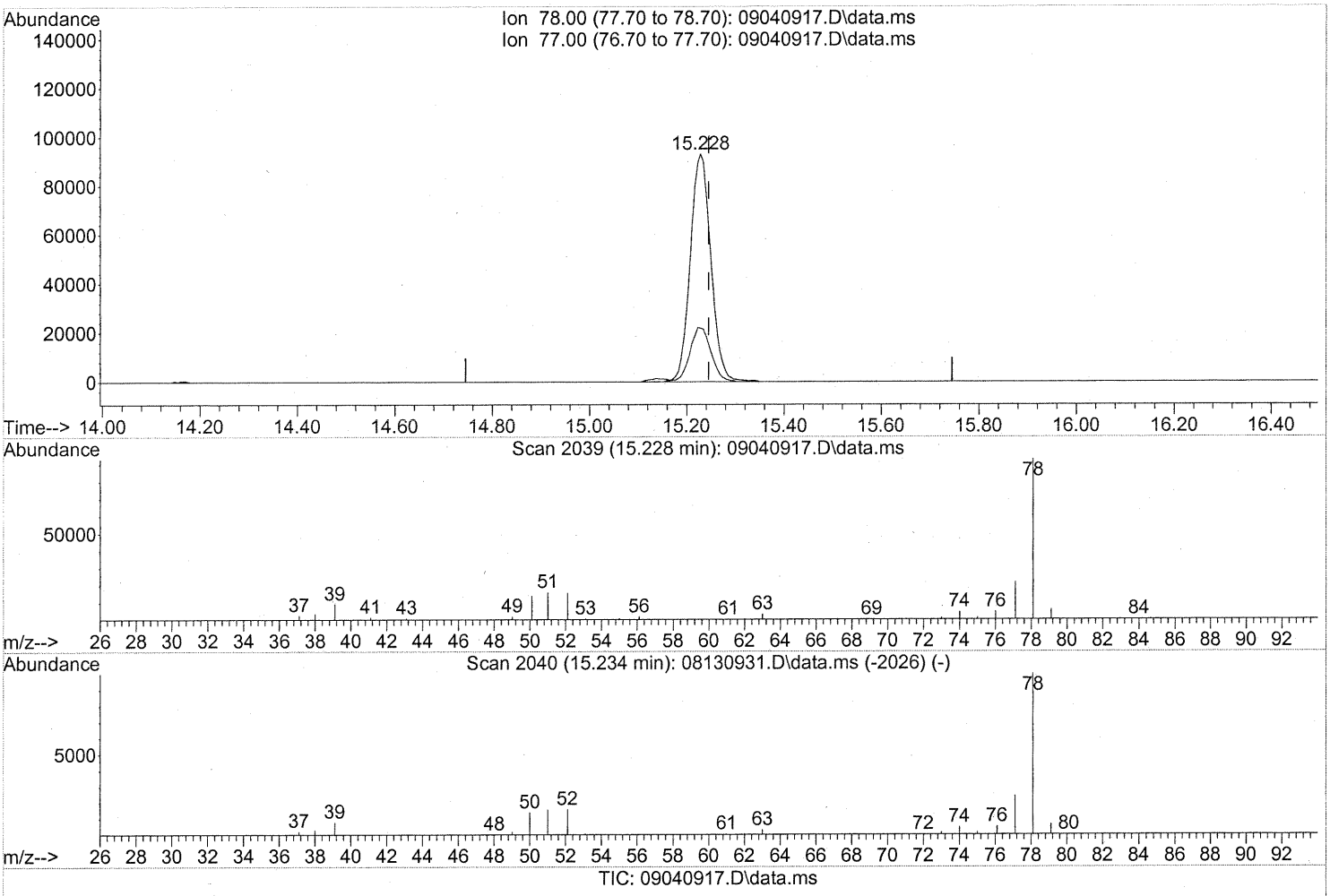
response 61035

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	32.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(41) Benzene (T)

15.228min (-0.017) 3.23ng

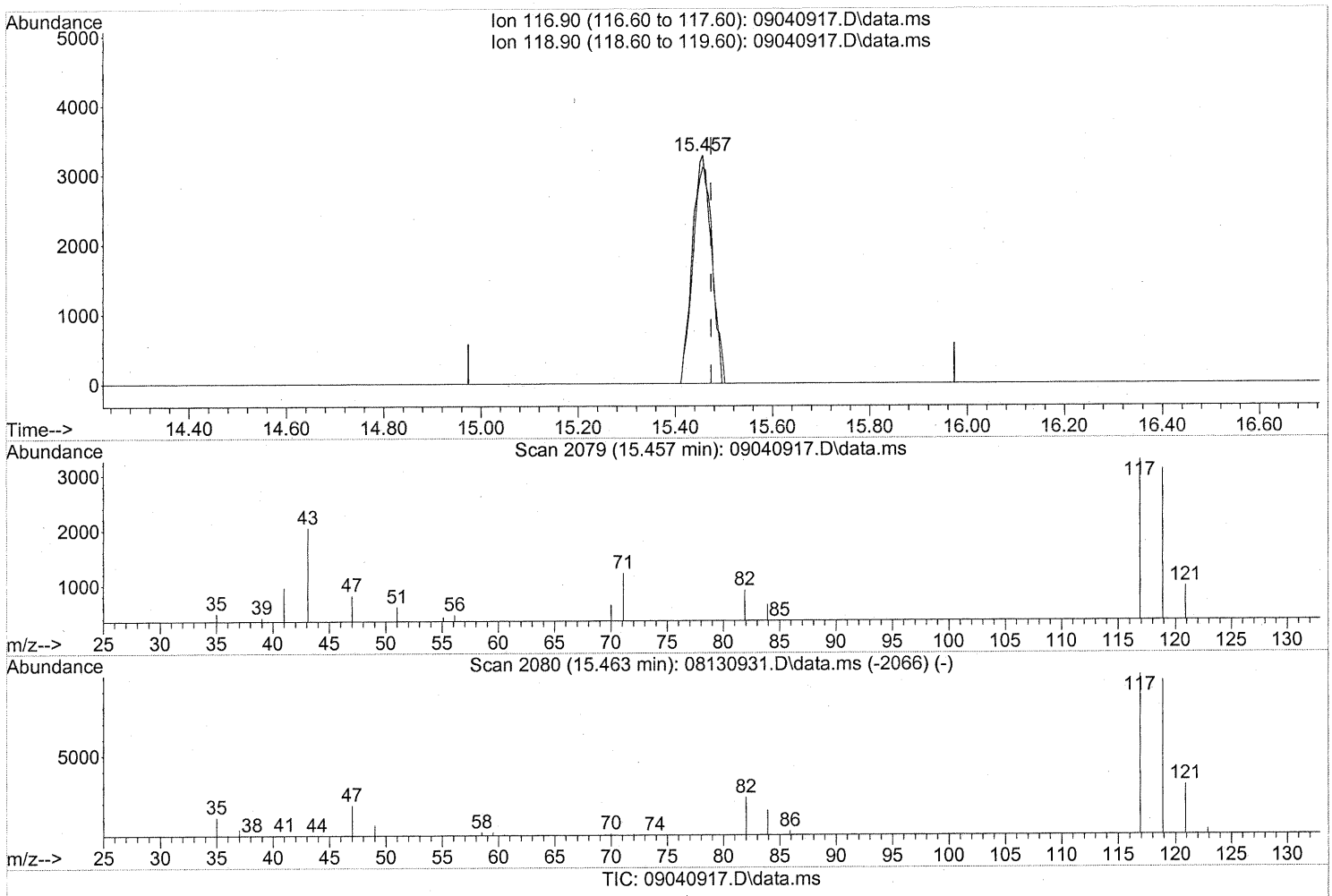
response 271876

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(42) Carbon Tetrachloride (T)

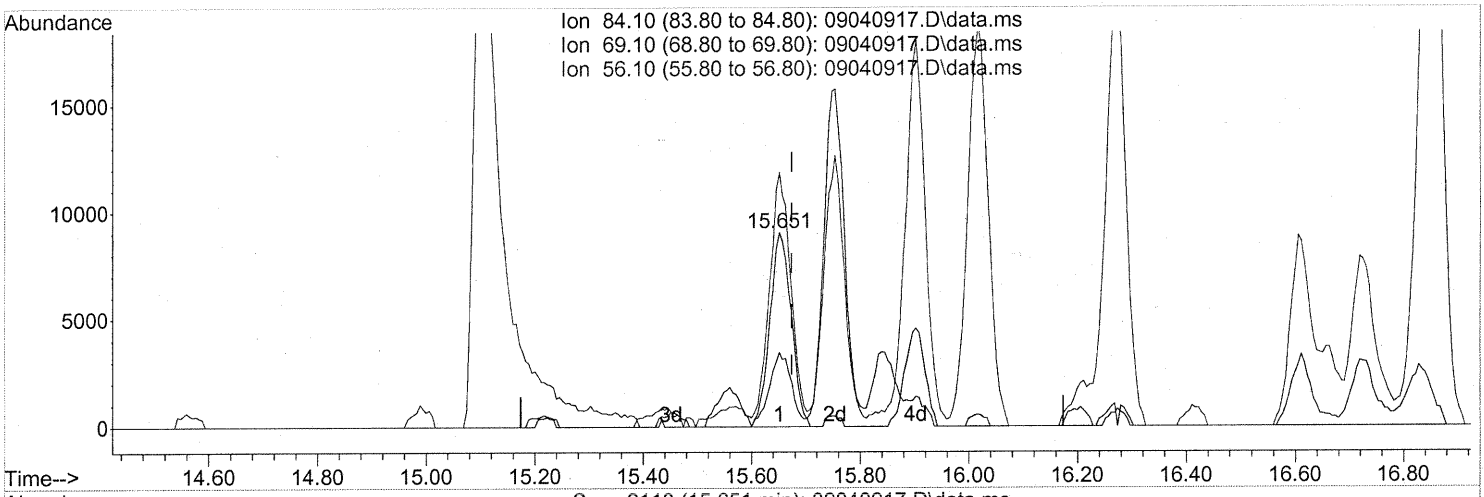
15.457min (-0.017) 0.39ng

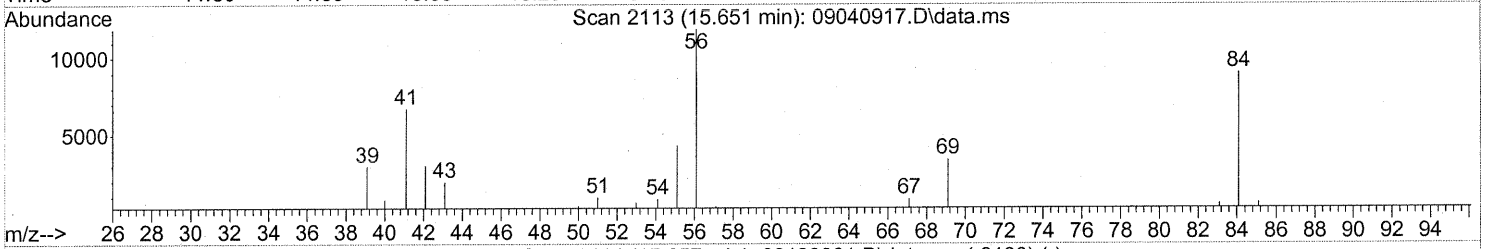
response 9057

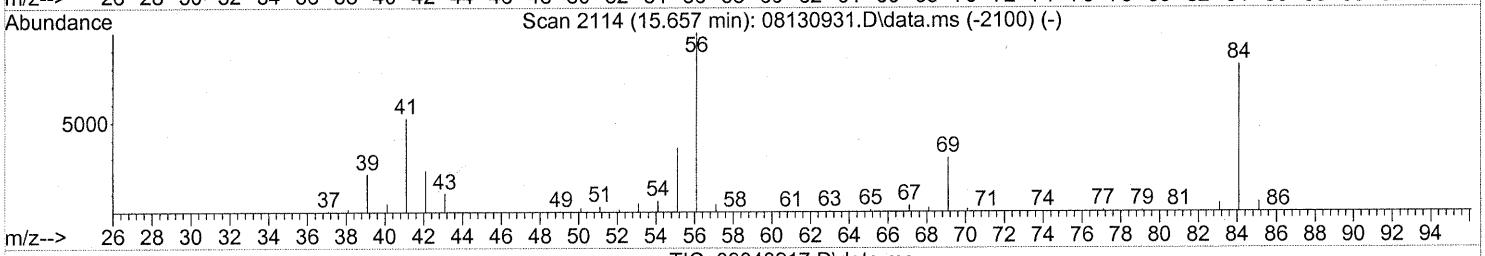
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	95.04
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(43) Cyclohexane (T)

15.651min (-0.023) 0.75ng

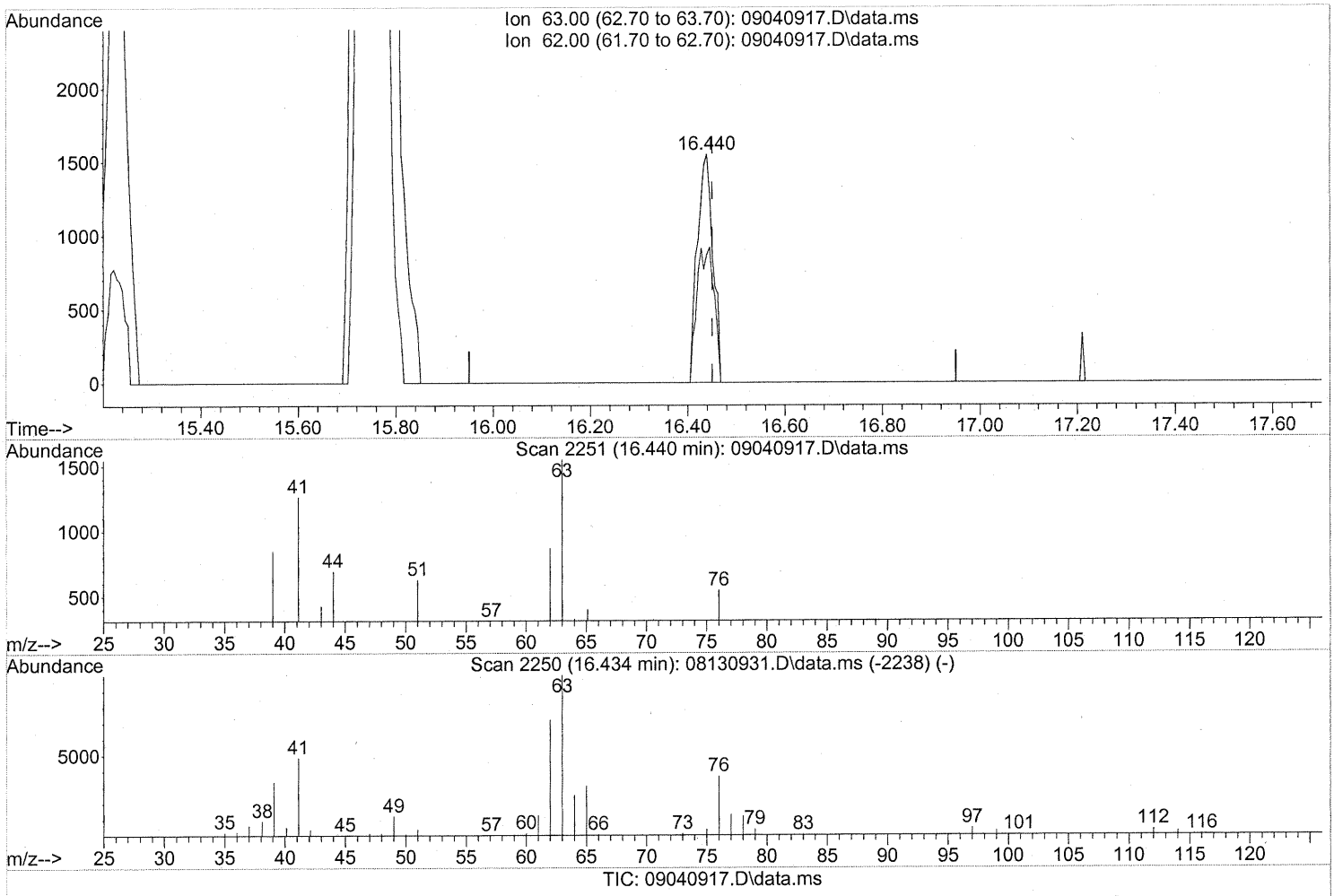
response 24589

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	39.20
56.10	107.30	133.04#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(45) 1,2-Dichloropropane (T)

16.440min (-0.011) 0.17ng

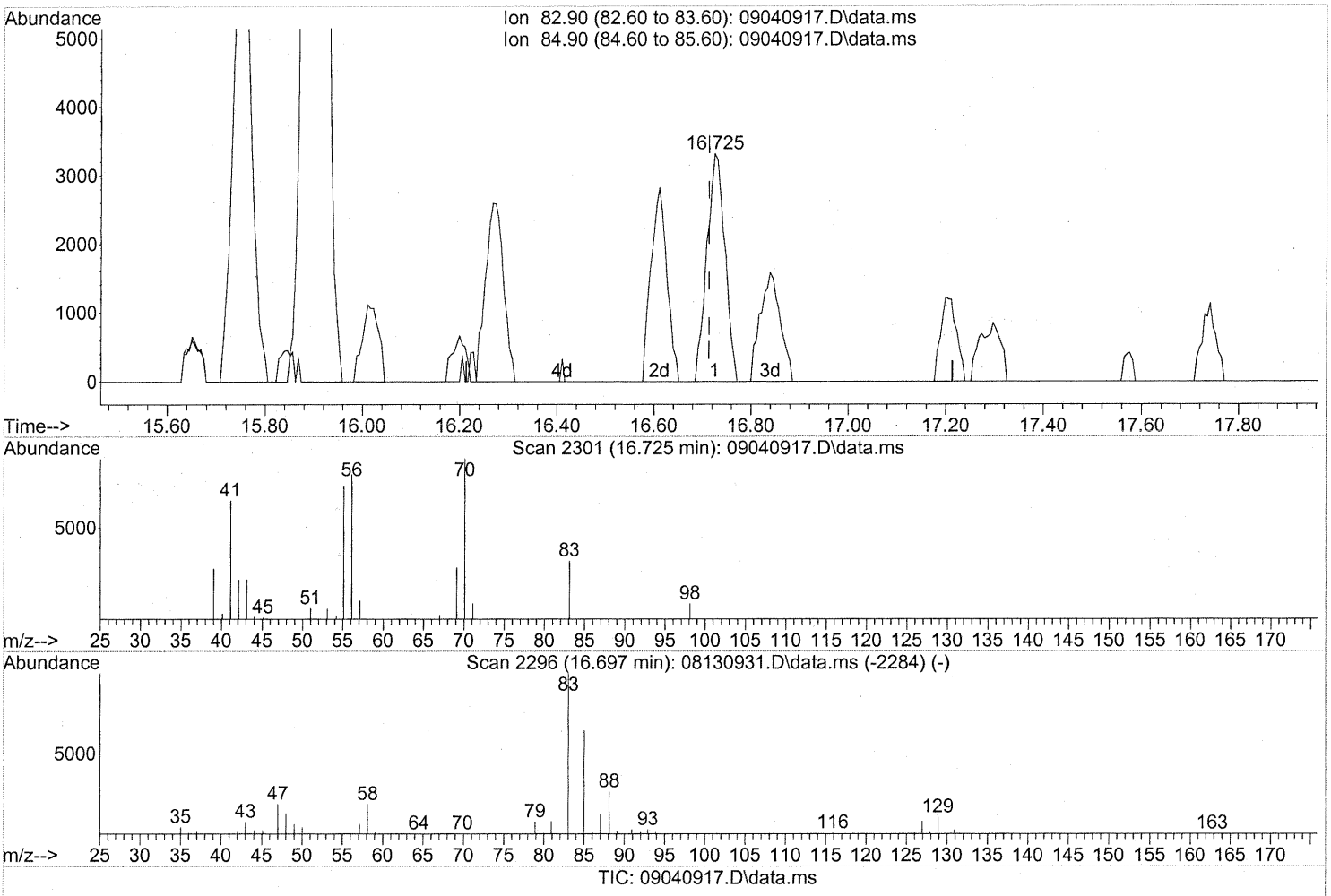
response 3407

Ion	Exp%	Act%
63.00	100	100
62.00	71.00	65.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(46) Bromodichloromethane (T)

16.725min (+0.011) 0.35ng

response 8530

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

FP 9/9/09

KR 9/9/09

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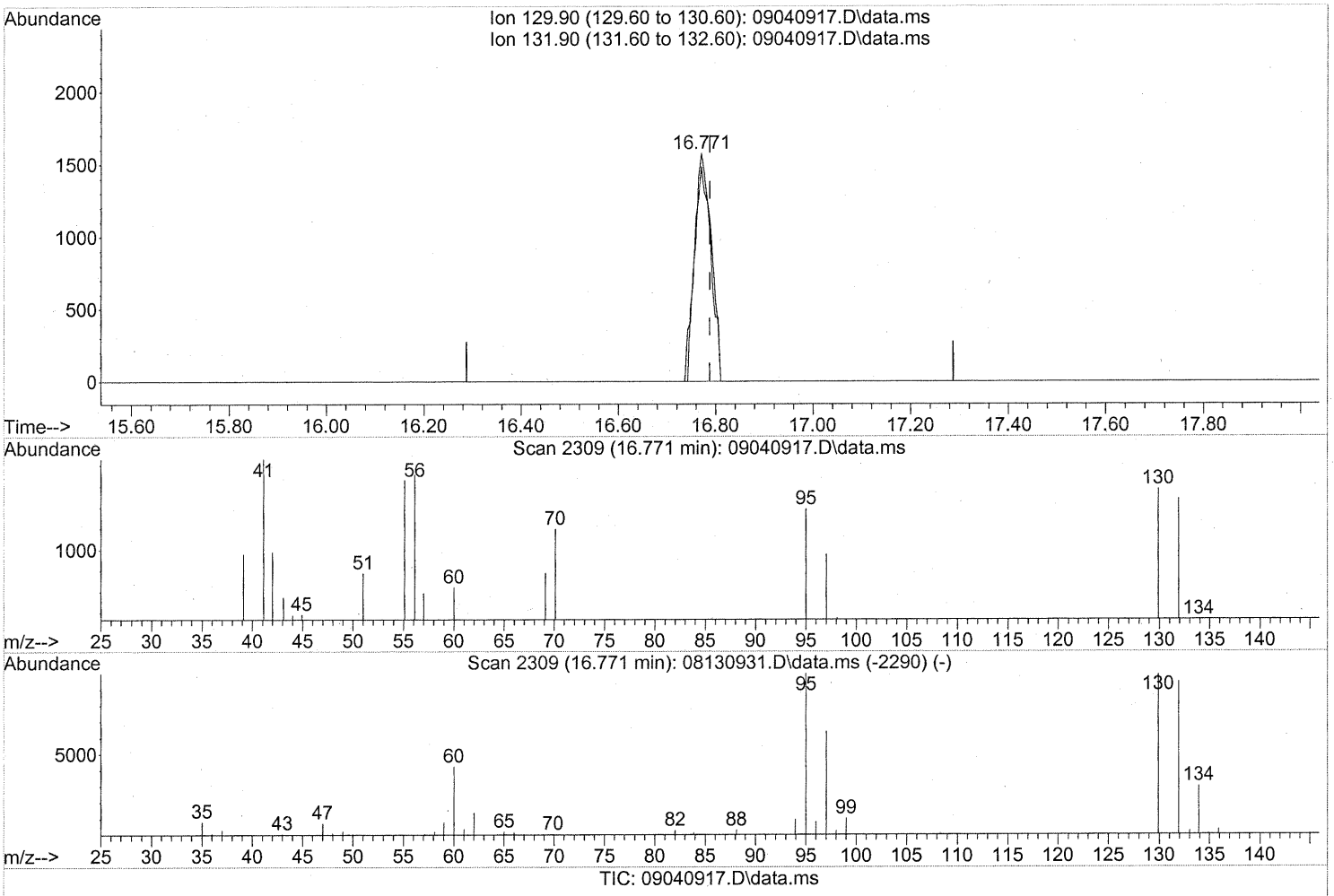
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(47) Trichloroethene (T)

16.771min (-0.017) 0.18ng

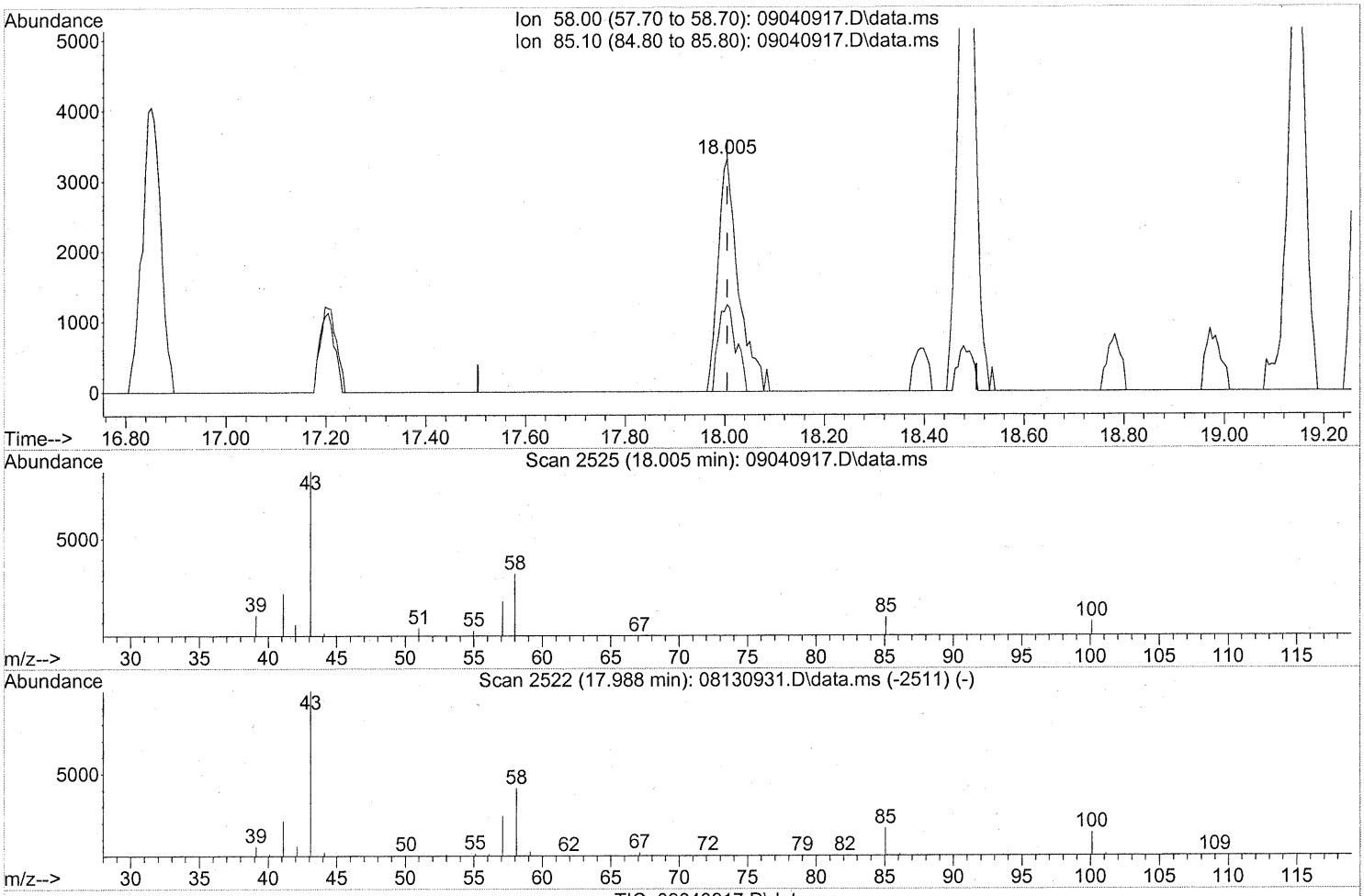
response 3806

Ion	Exp%	Act%
129.90	100	100
131.90	95.60	91.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

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

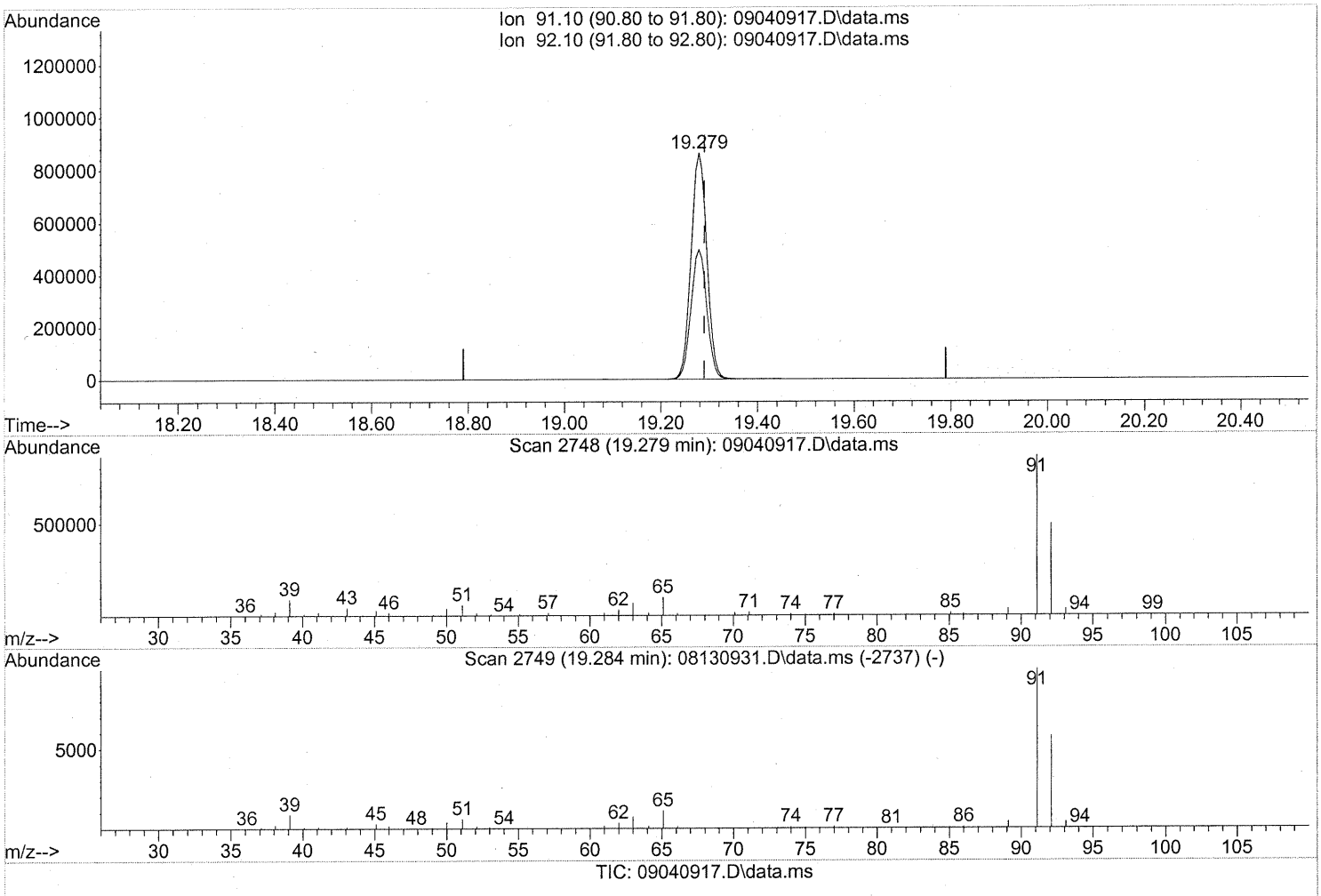
18.005min (-0.000) 0.52ng

response 9420

Ion	Exp%	Act%
58.00	100	100
85.10	45.40	32.56
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 21.56ng

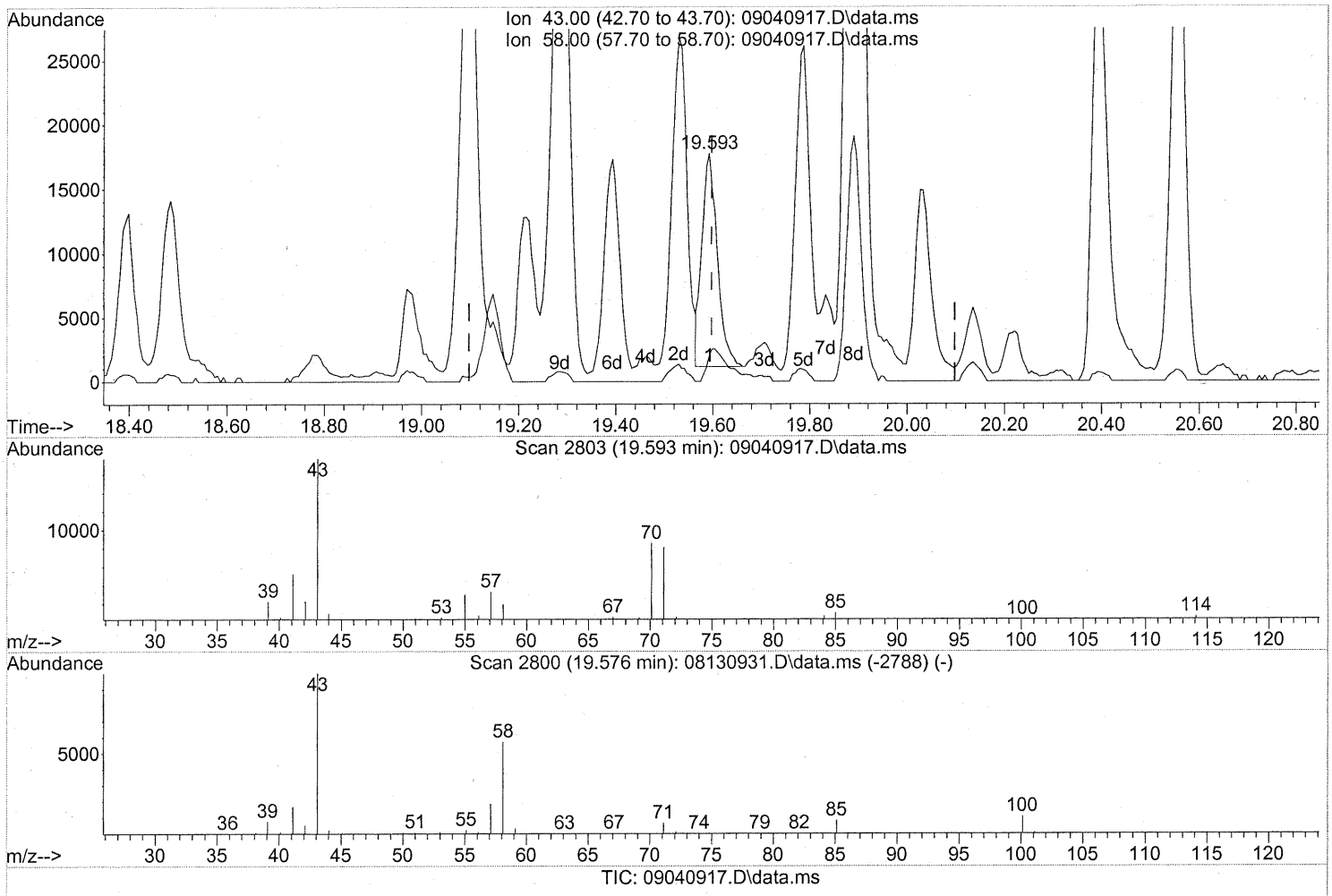
response 1948443

Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.78ng

response 36545

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	21.61#
0.00	0.00	0.00
0.00	0.00	0.00

Before subtraction

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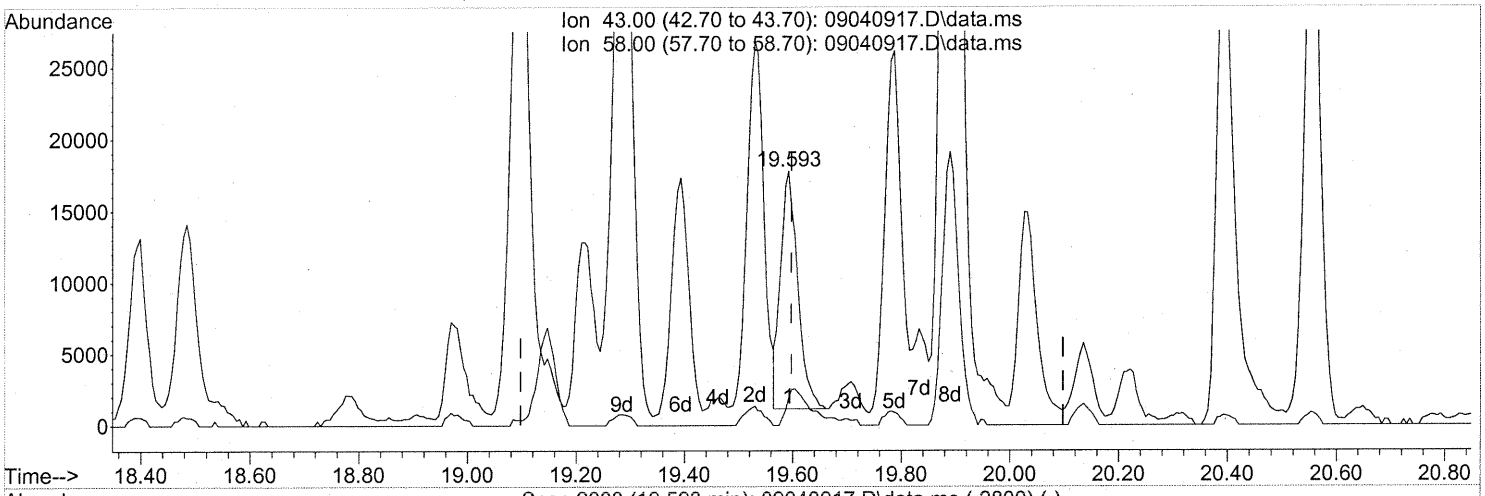
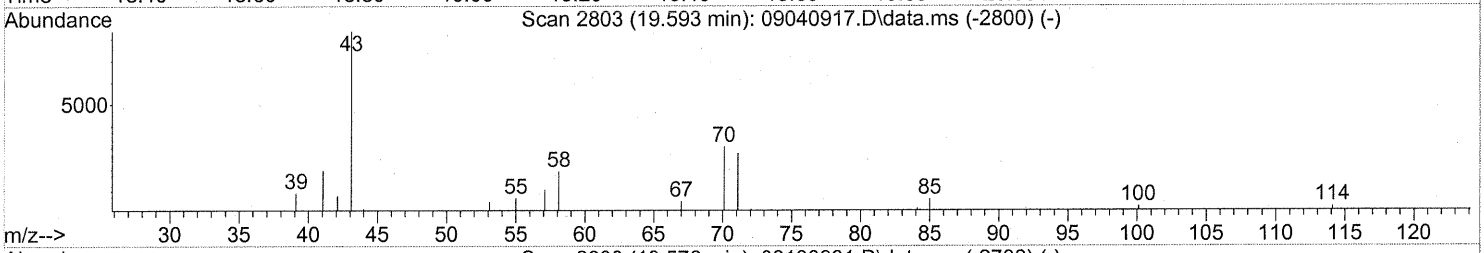
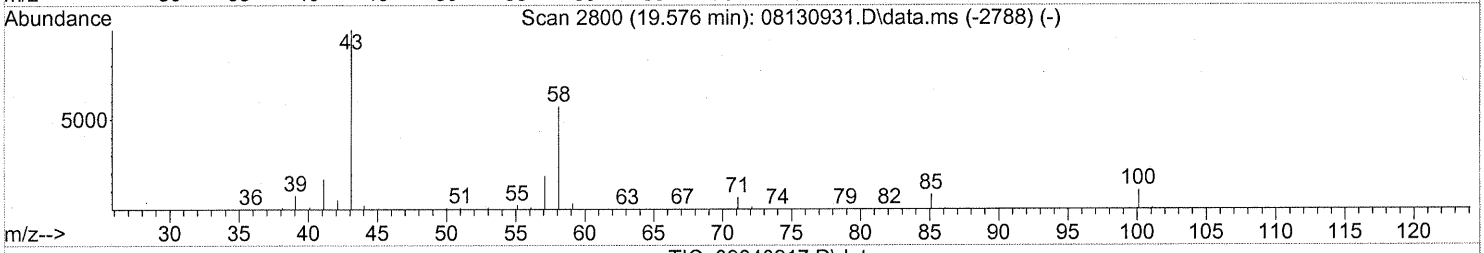
Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.78ng

response 36545

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	21.61#
0.00	0.00	0.00
0.00	0.00	0.00

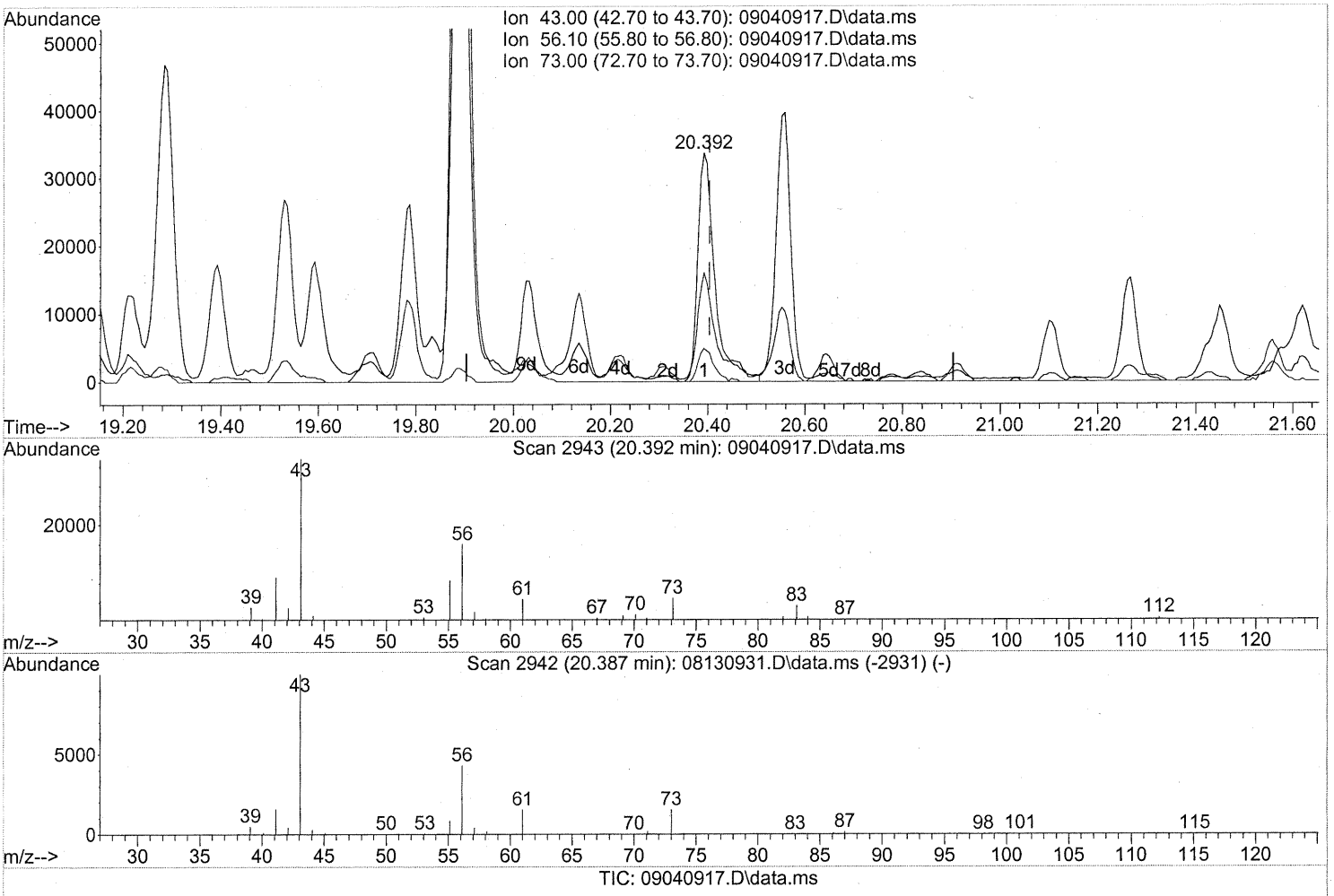
After subtraction
Em 9/9/09

38

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(62) n-Butyl Acetate (T)

20.392min (-0.012) 1.59ng

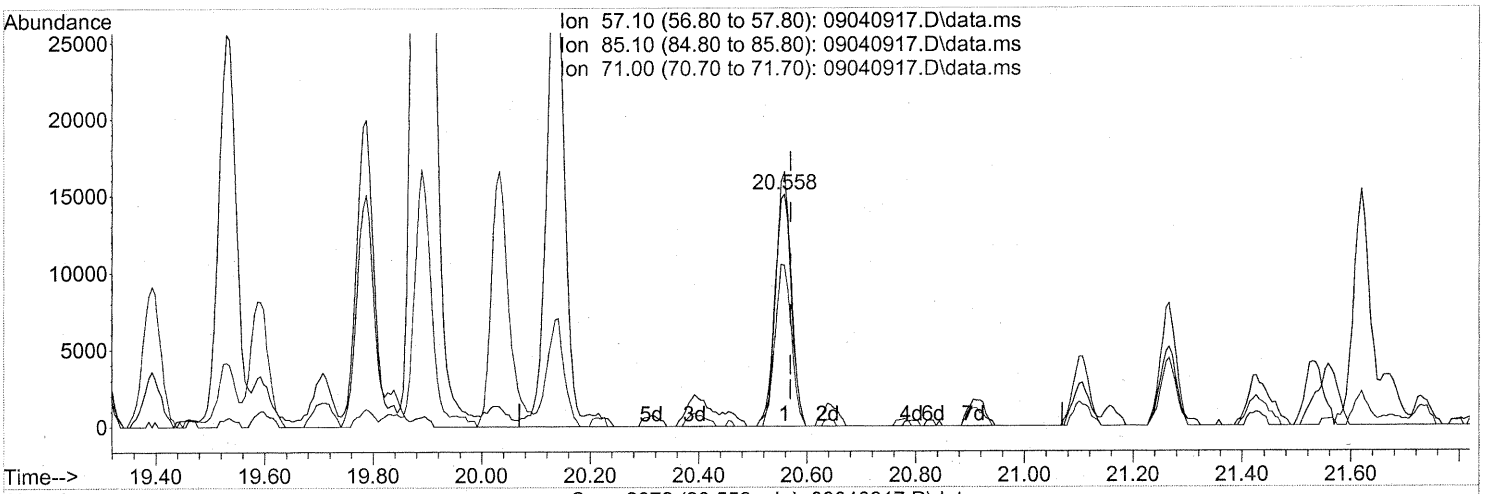
response 81422

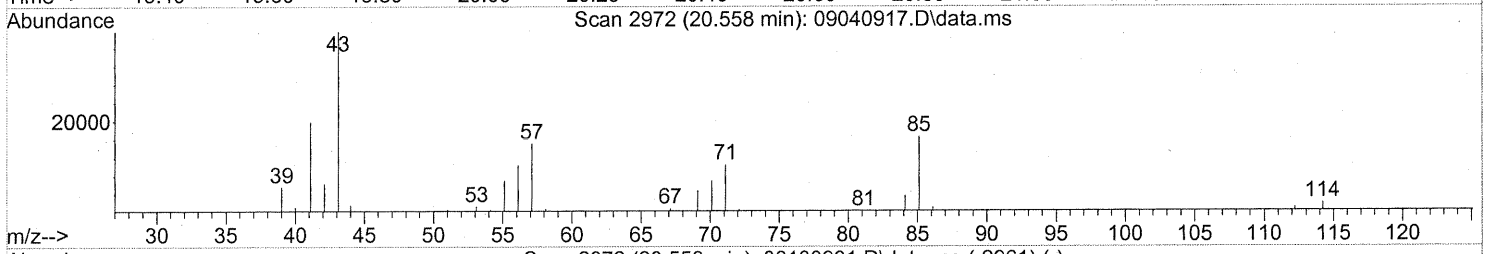
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	50.66
73.00	16.90	13.16
0.00	0.00	0.00

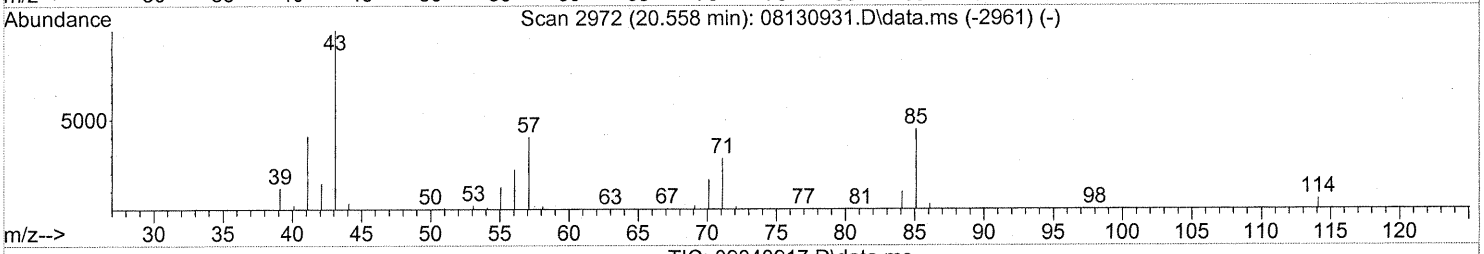
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 1.60ng

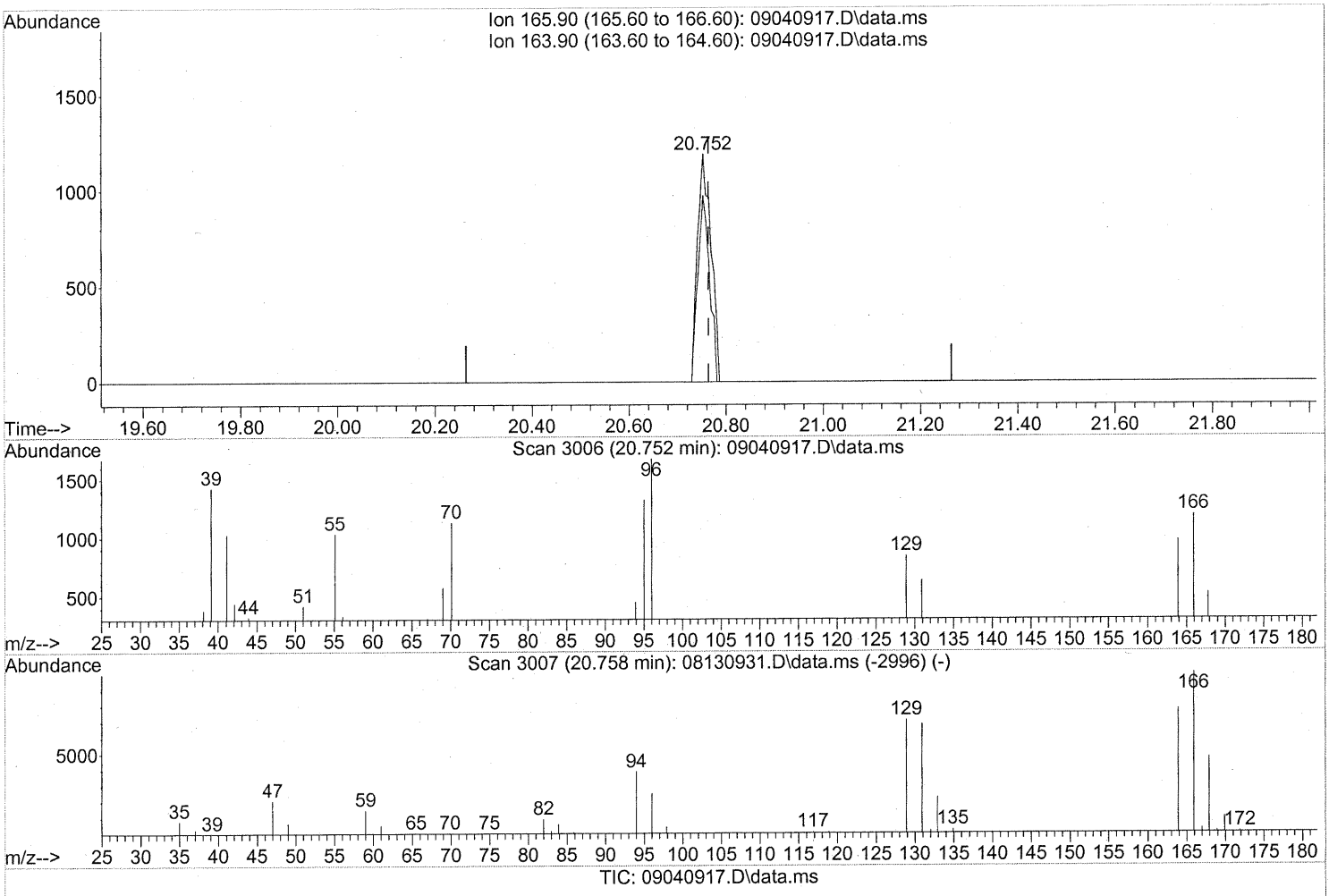
response 32141

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	101.58
71.00	75.10	69.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(64) Tetrachloroethene (T)

20.752min (-0.011) 0.10ng

response 2308

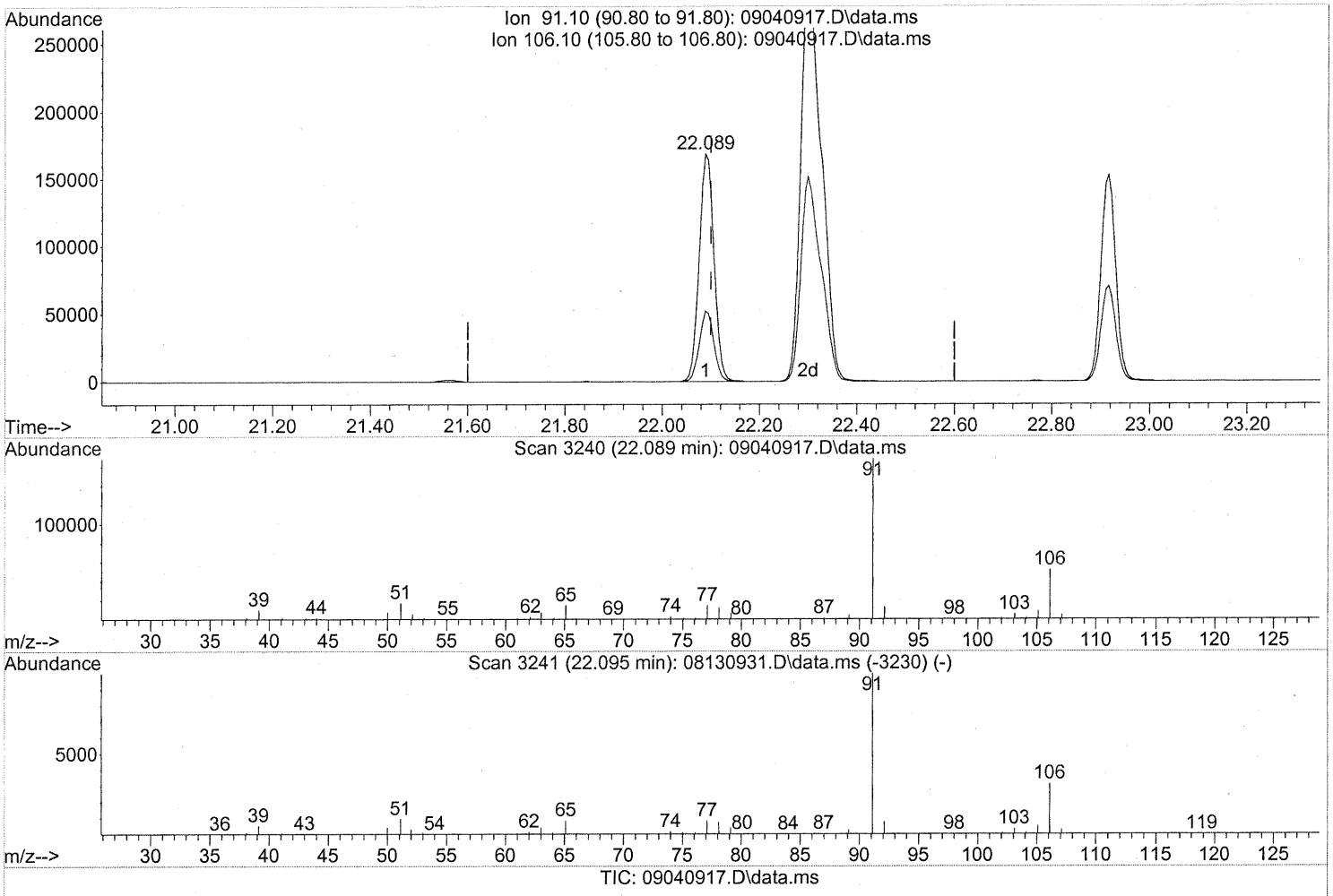
Ion	Exp%	Act%
165.90	100	100
163.90	77.80	70.02
0.00	0.00	0.00
0.00	0.00	0.00

41

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 3.64ng

response 355246

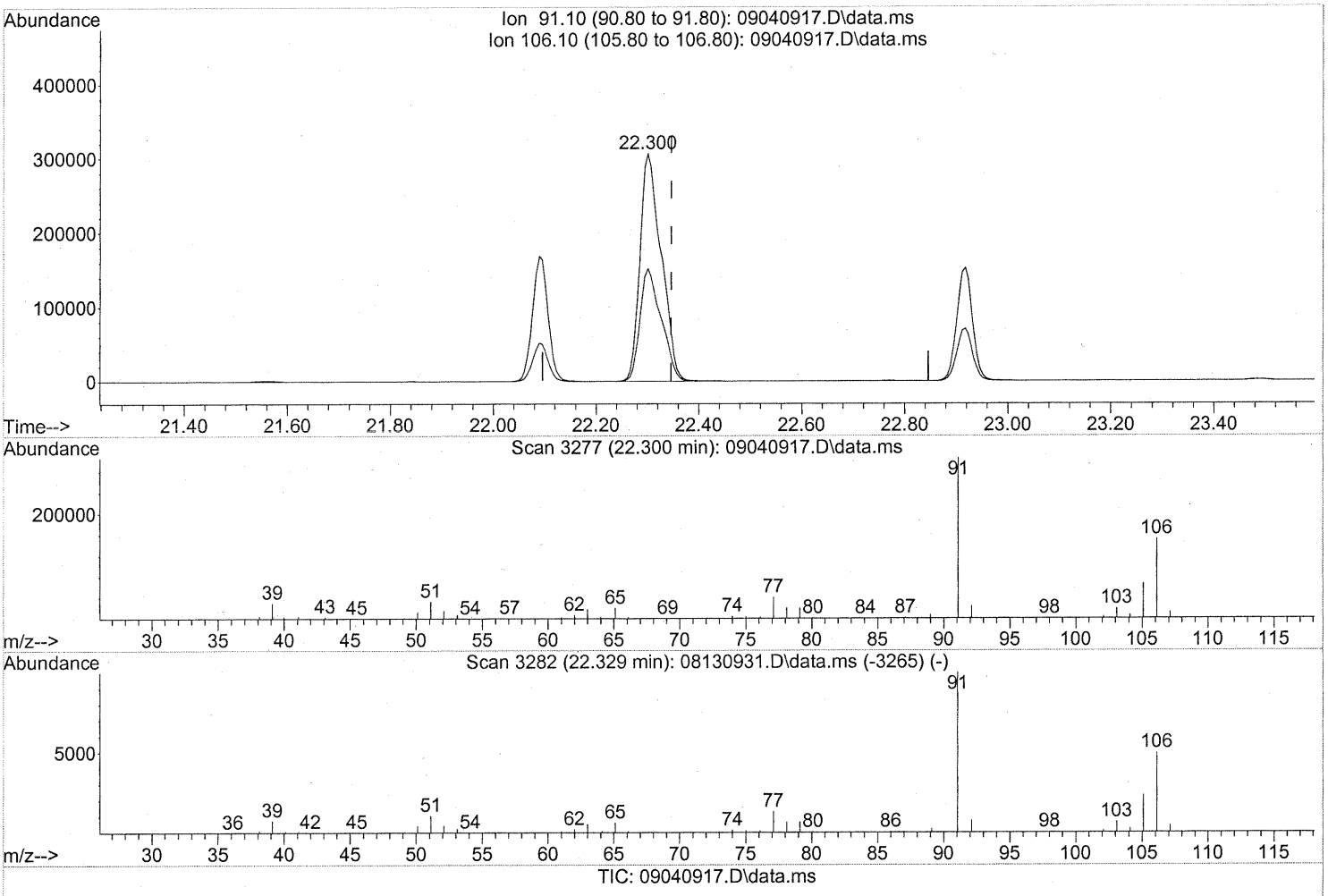
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.21
0.00	0.00	0.00
0.00	0.00	0.00

42

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

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

22.300min (-0.046) 11.38ng

response 880047

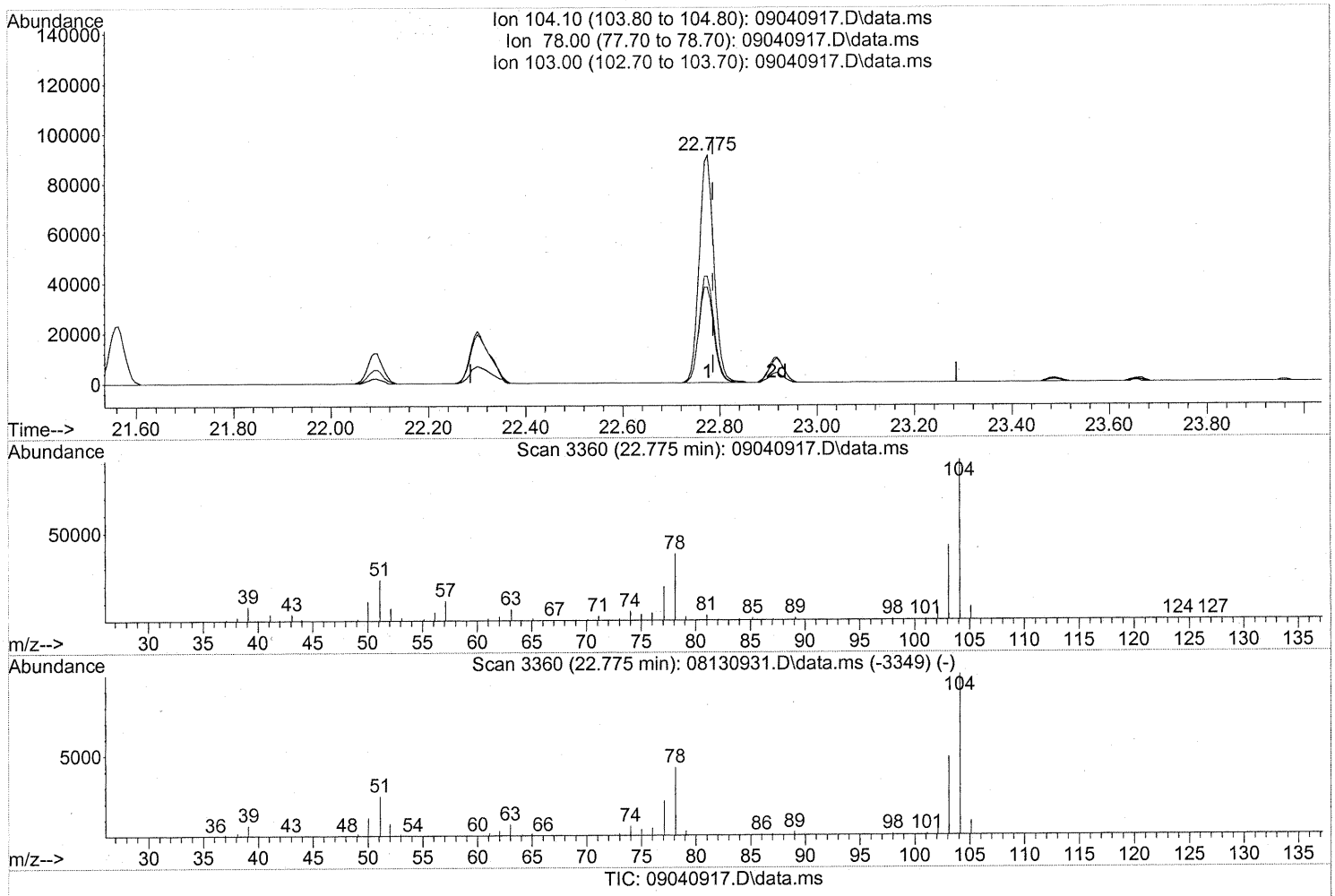
Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.32
0.00	0.00	0.00
0.00	0.00	0.00

43

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(69) Styrene (T)

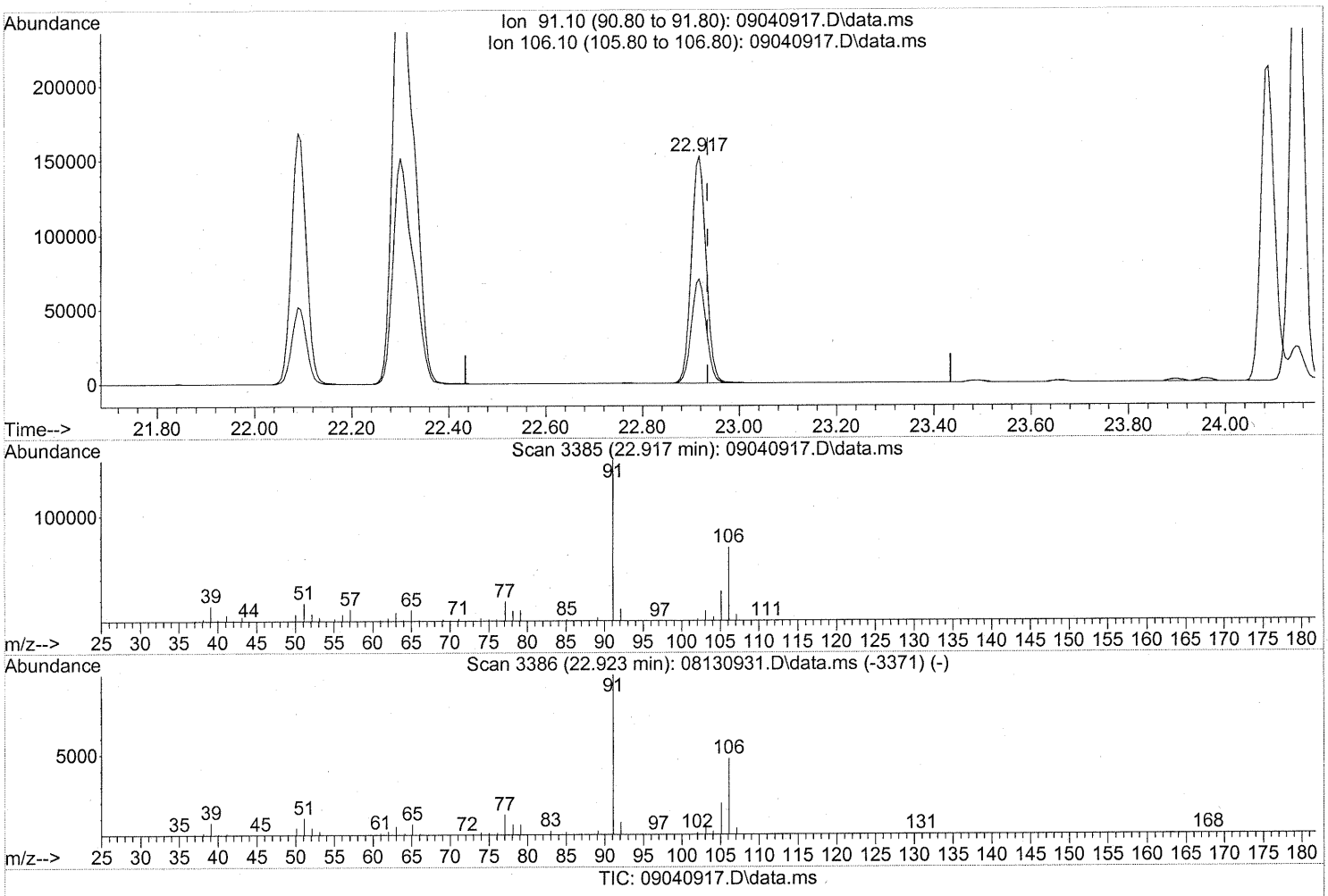
22.775min (-0.011) 3.32ng

response 189889

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.98
103.00	48.70	47.75
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 4.12ng

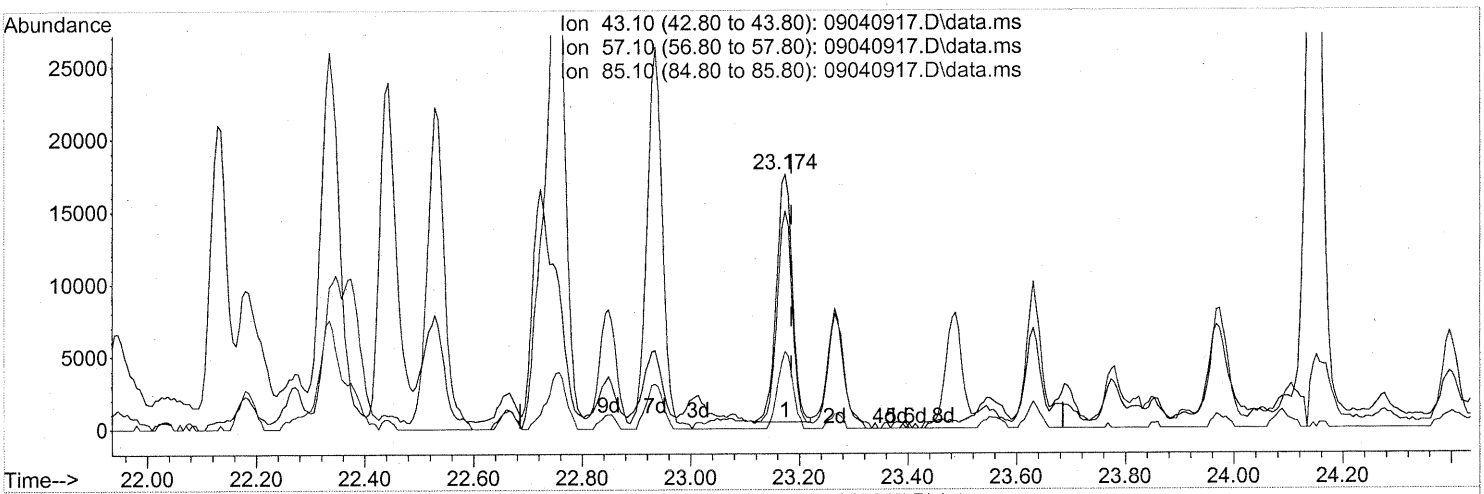
response 320756

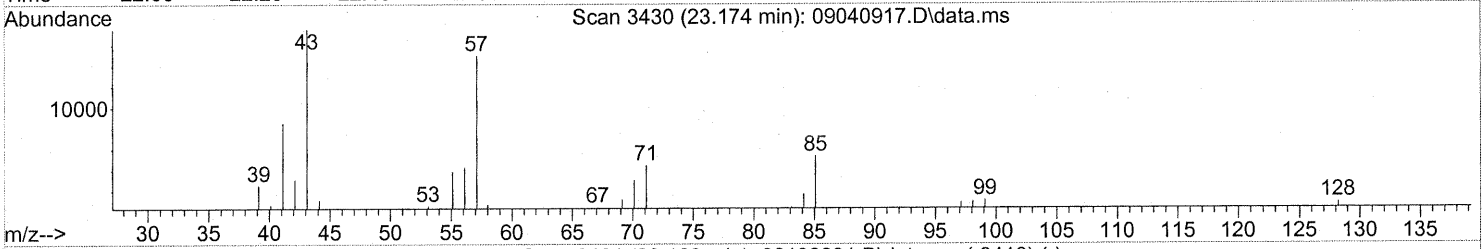
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	45.89
0.00	0.00	0.00
0.00	0.00	0.00

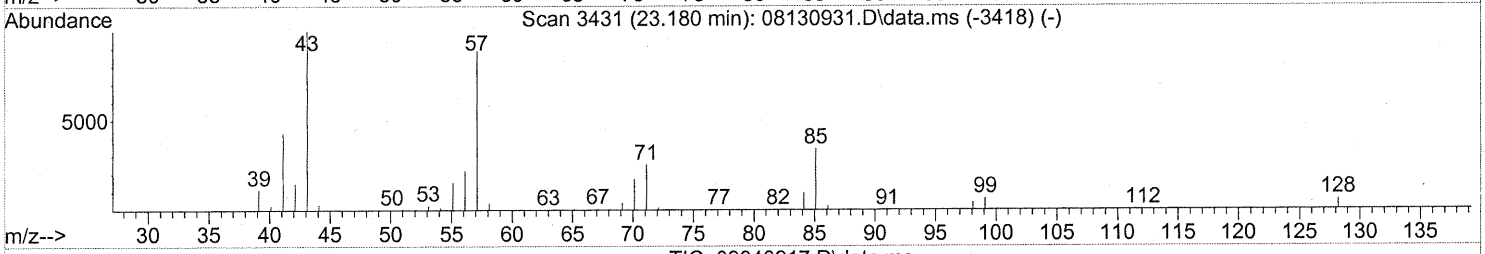
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(71) n-Nonane (T)

23.174min (-0.011) 0.74ng

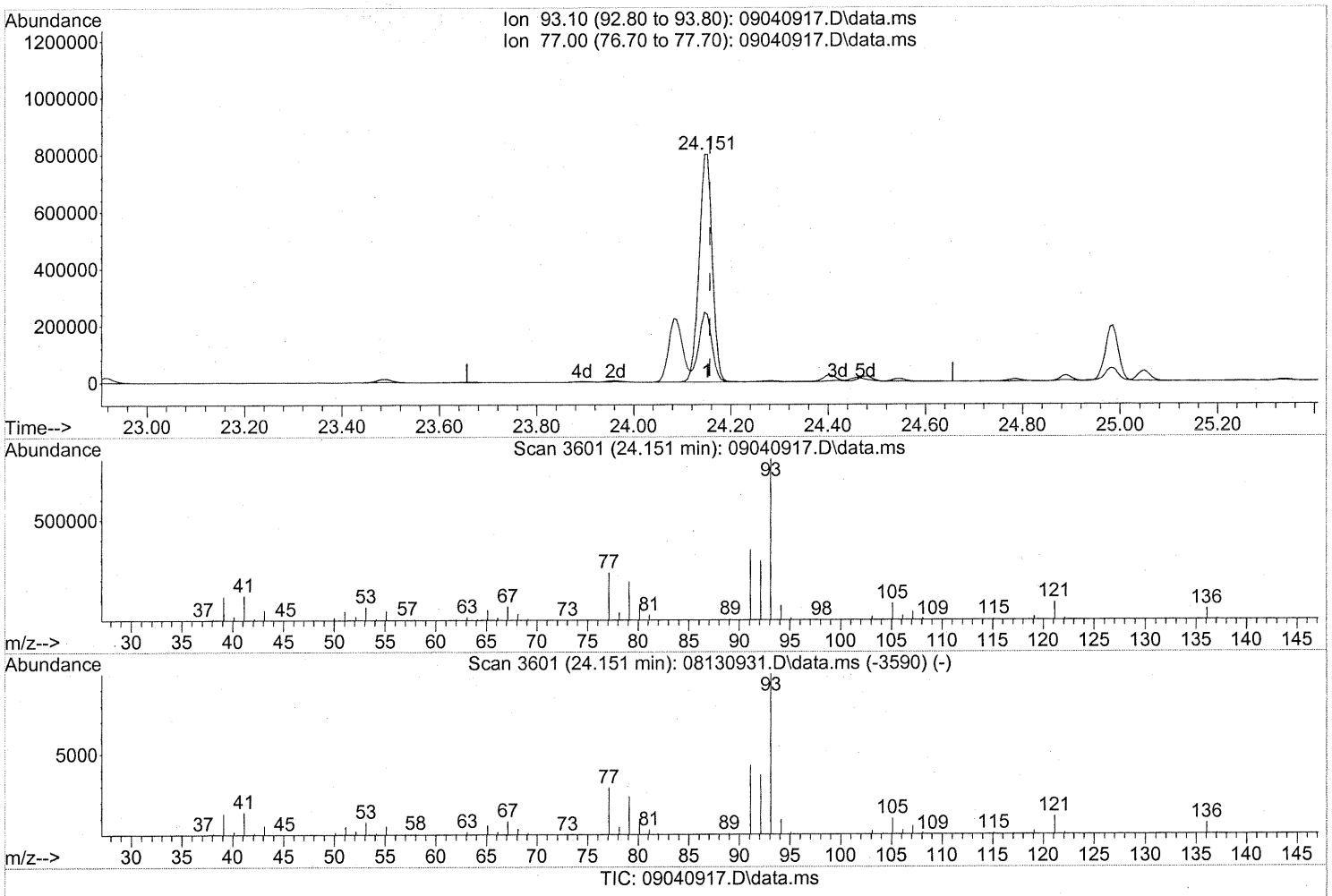
response 34656

Ion	Exp%	Act%
43.10	100	100
57.10	94.00	84.12
85.10	38.80	29.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(75) alpha-Pinene (T)

24.151min (-0.006) 30.18ng

response 1502395

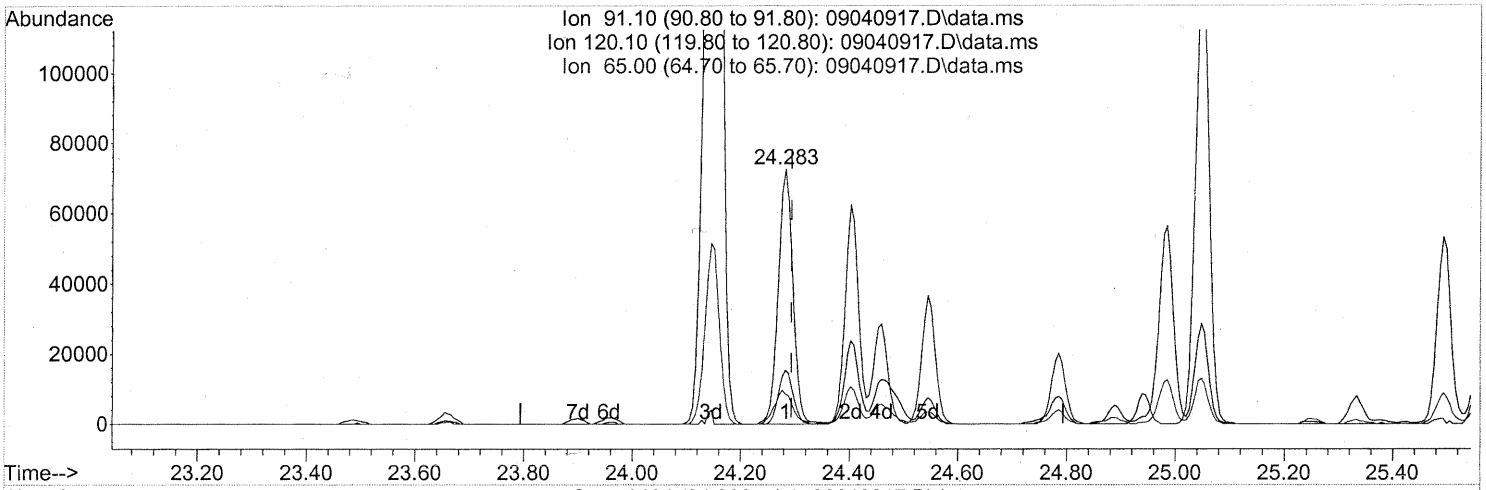
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.91
0.00	0.00	0.00
0.00	0.00	0.00

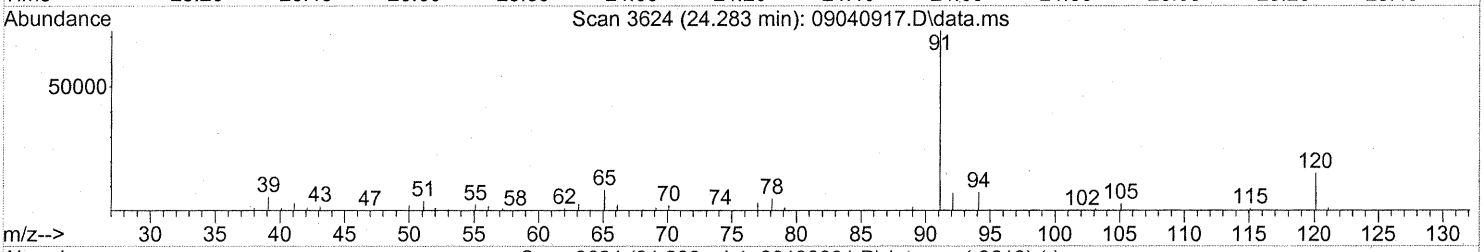
47

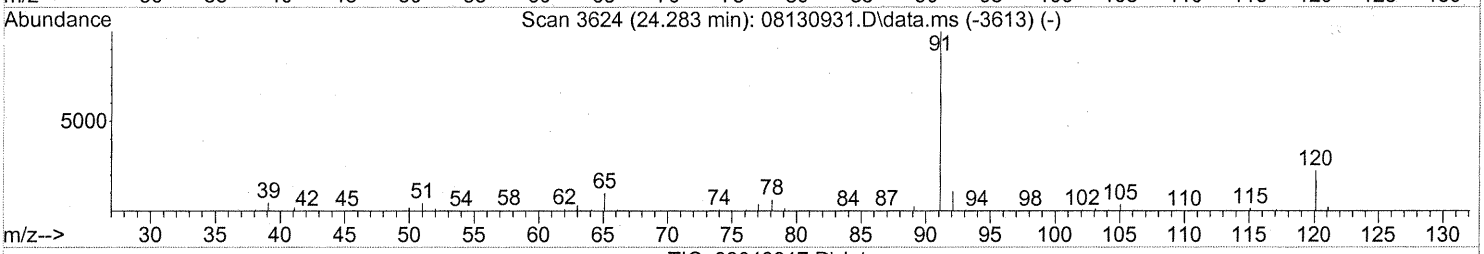
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.09ng

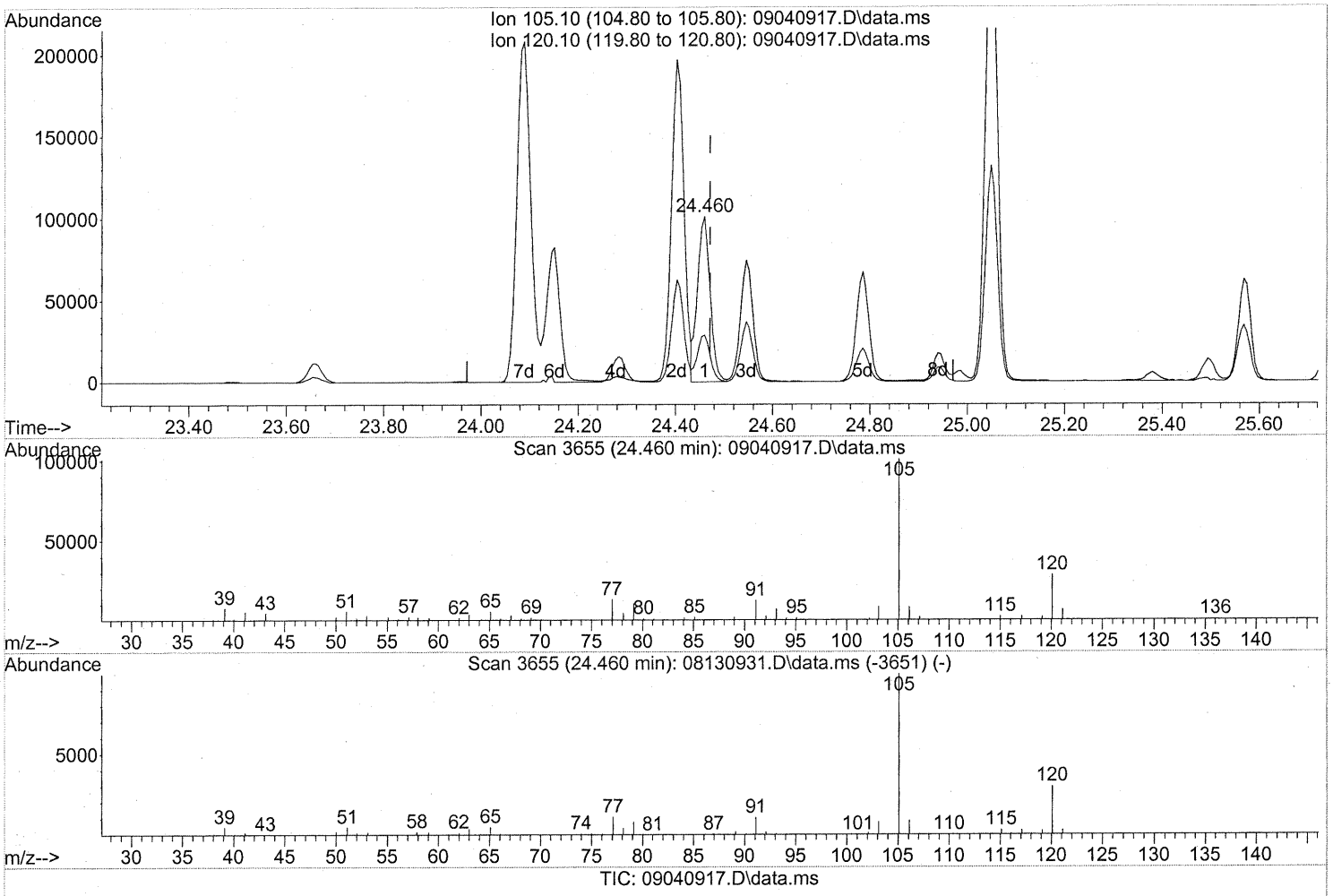
response 136393

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	20.96
65.00	10.20	16.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(78) 4-Ethyltoluene (T)

24.460min (-0.011) 1.92ng

response 182294

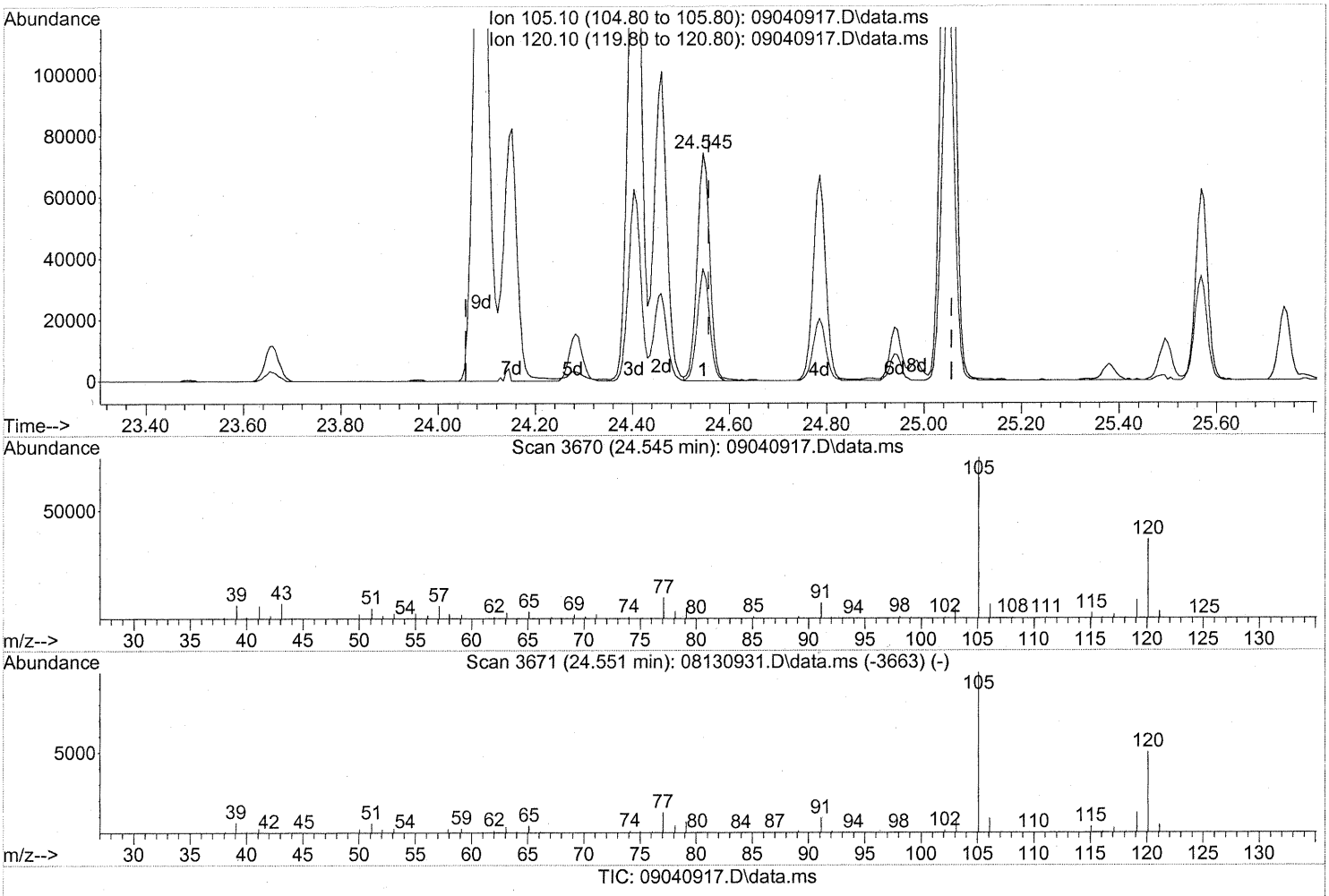
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.96
0.00	0.00	0.00
0.00	0.00	0.00

49

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

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

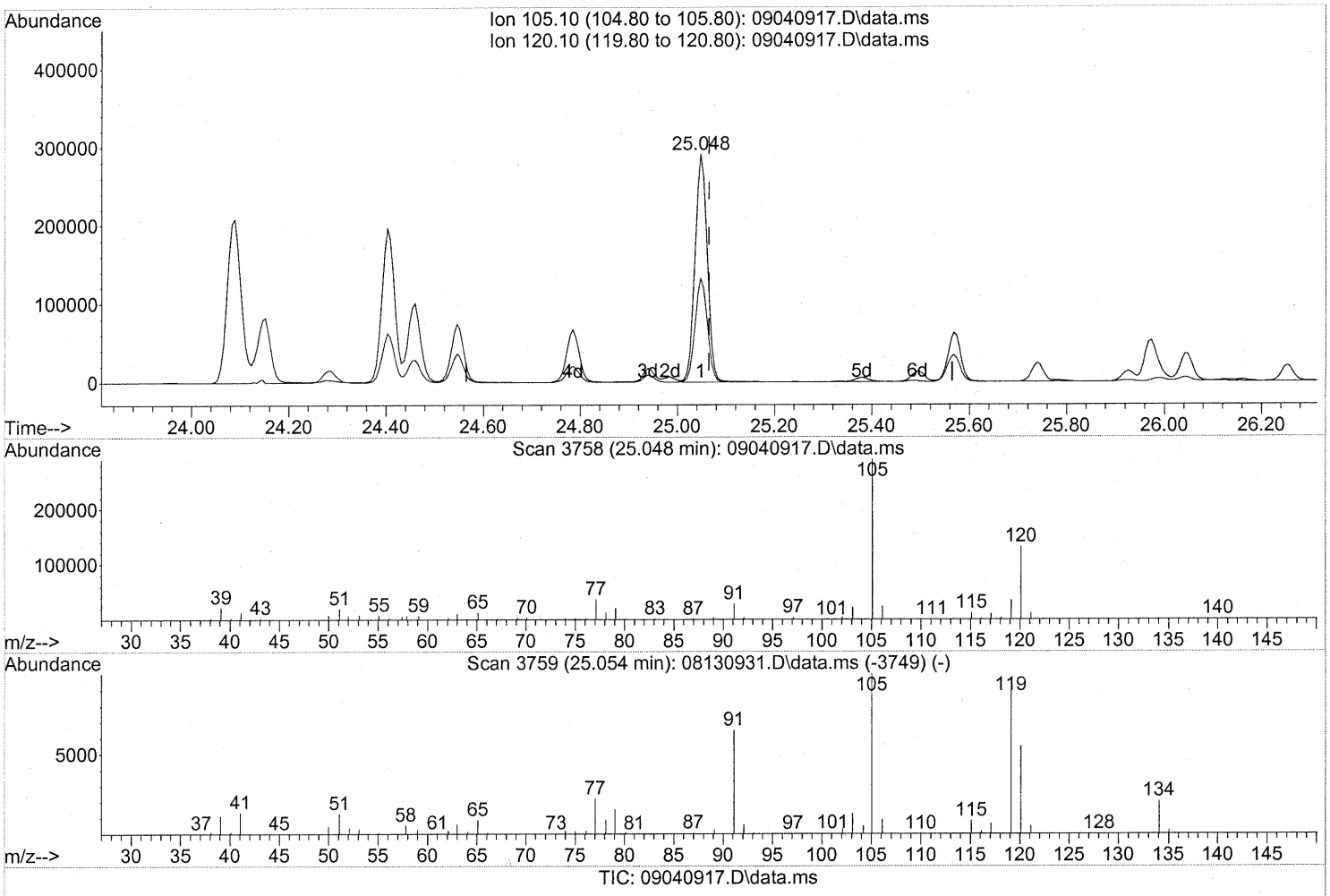
24.545min (-0.011) 1.70ng

response 133527

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	47.30
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

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

25.048min (-0.017) 6.05ng

response 504499

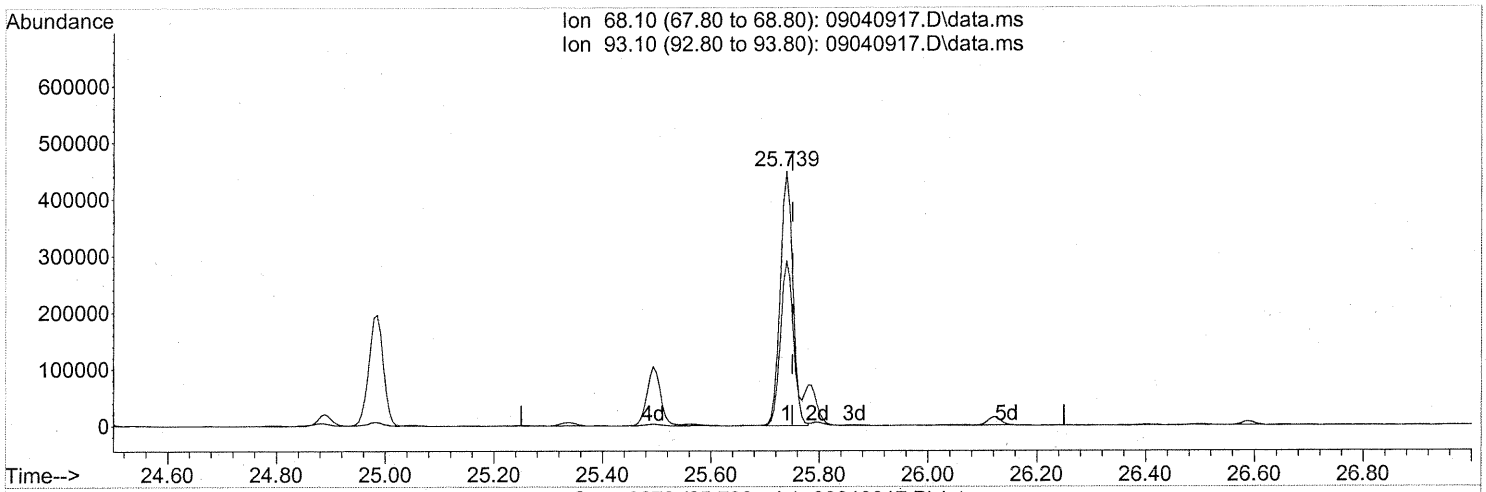
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.45
0.00	0.00	0.00
0.00	0.00	0.00

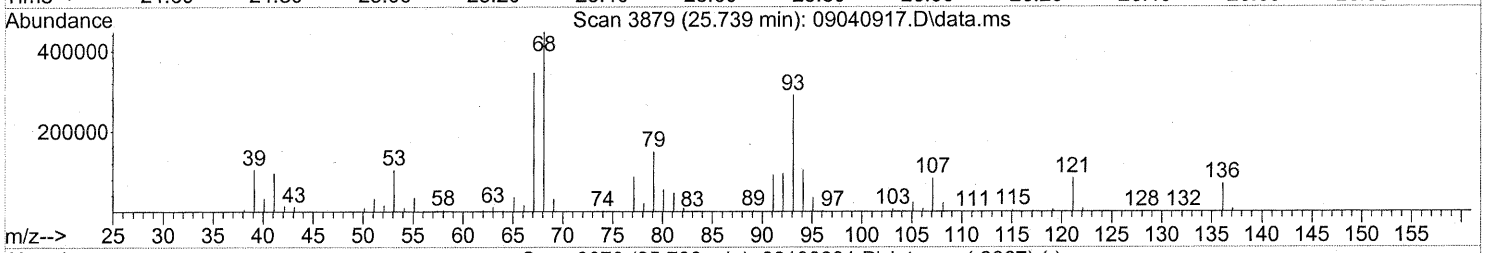
51

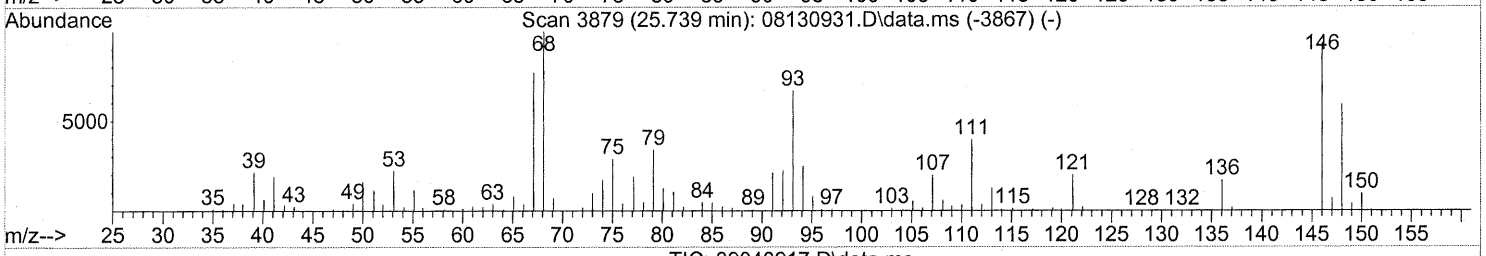
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040917.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 21.31ng

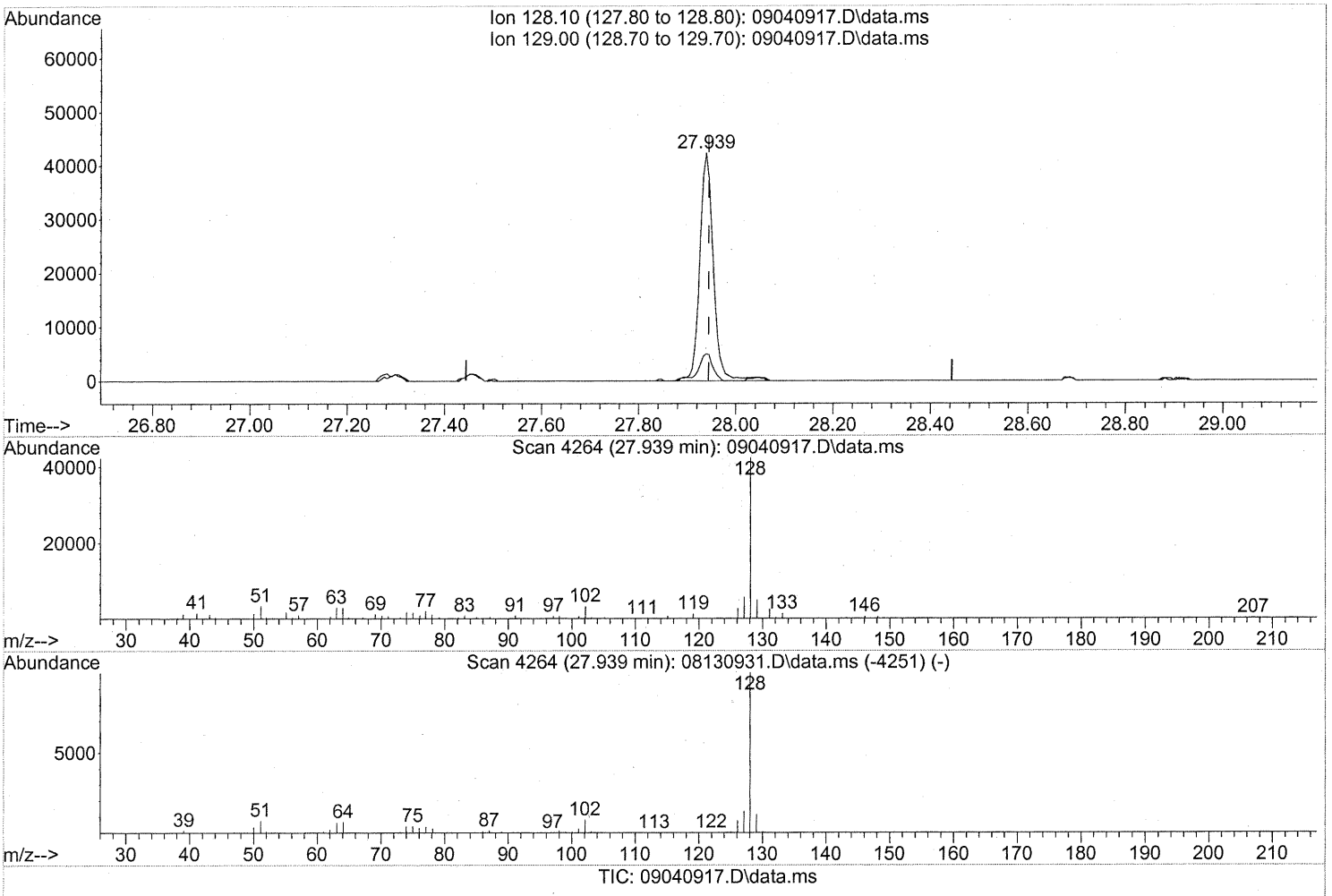
response 727419

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	67.43
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040917.D
Acq On : 4 Sep 2009 19:30
Operator : EM
Sample : P0902972-001 (1000ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 07:36:55 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040917.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 0.73ng

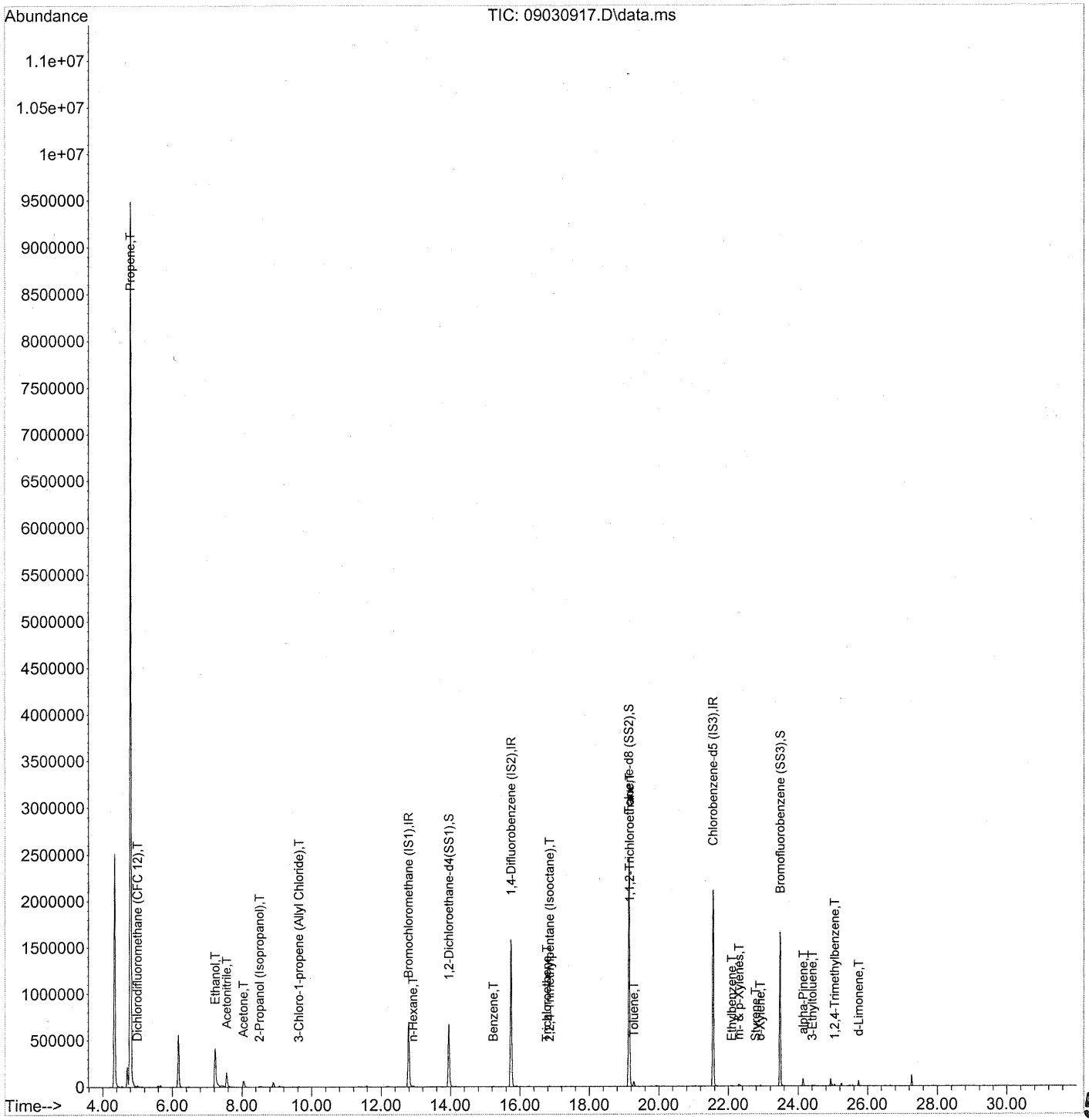
response 82210

Ion	Exp%	Act%
128.10	100	100
129.00	11.00	12.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:50:40 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\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:50:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	354784	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1807185	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	900533	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	667131	26.594	ng		-0.03
Spiked Amount 25.000			Recovery =	106.36%			
57) Toluene-d8 (SS2)	19.14	98	2126137	24.835	ng		-0.02
Spiked Amount 25.000			Recovery =	99.36%			
73) Bromofluorobenzene (SS3)	23.49	174	567794	23.419	ng		0.00
Spiked Amount 25.000			Recovery =	93.68%			
Target Compounds							Qvalue
2) Propene	4.80	42	9915	0.319	ng	#	1
3) Dichlorodifluoromethan...	5.00	85	14097	0.317	ng		96
4) Chloromethane	5.34	50	1464	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	1206	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	819097m	41.957	ng		
11) Acetonitrile	7.56	41	238590	5.008	ng		99
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.04	58	24441	1.230	ng	#	67
14) Trichlorofluoromethane	8.28	101	349	N.D.			
15) 2-Propanol (Isopropanol)	8.50	45	32342	0.594	ng		100
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	503	N.D.			
20) 3-Chloro-1-propene (Al...	9.64	41	1754	0.053	ng	#	34
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	3012	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	12.92	57	3641	0.083	ng	#	60

EM 9/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:50:40 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)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	1048	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	7613	0.078 ng		91
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.75	84	828	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	16.77	130	1296	0.053 ng		94
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	5931	0.053 ng		97
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.21	71	1226	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	173613	8.361 ng	#	7
58) Toluene	19.28	91	51252	0.494 ng		99
59) 2-Hexanone	19.60	43	216	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	1870	N.D.		
63) n-Octane	20.56	57	573	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.10	91	8264	0.074 ng		95
67) m- & p-Xylenes	22.31	91	21979	0.247 ng		96
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.79	104	3391	0.052 ng		94
70) o-Xylene	22.92	91	7892	0.088 ng		98
71) n-Nonane	23.17	43	519	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.68	105	106	N.D.		
75) alpha-Pinene	24.15	93	34795	0.609 ng		79
76) n-Propylbenzene	24.29	91	3074	N.D.		
77) 3-Ethyltoluene	24.41	105	8639	0.080 ng		90
78) 4-Ethyltoluene	24.47	105	5184	N.D.		
79) 1,3,5-Trimethylbenzene	24.56	105	3912	N.D.		

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 10:50:40 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

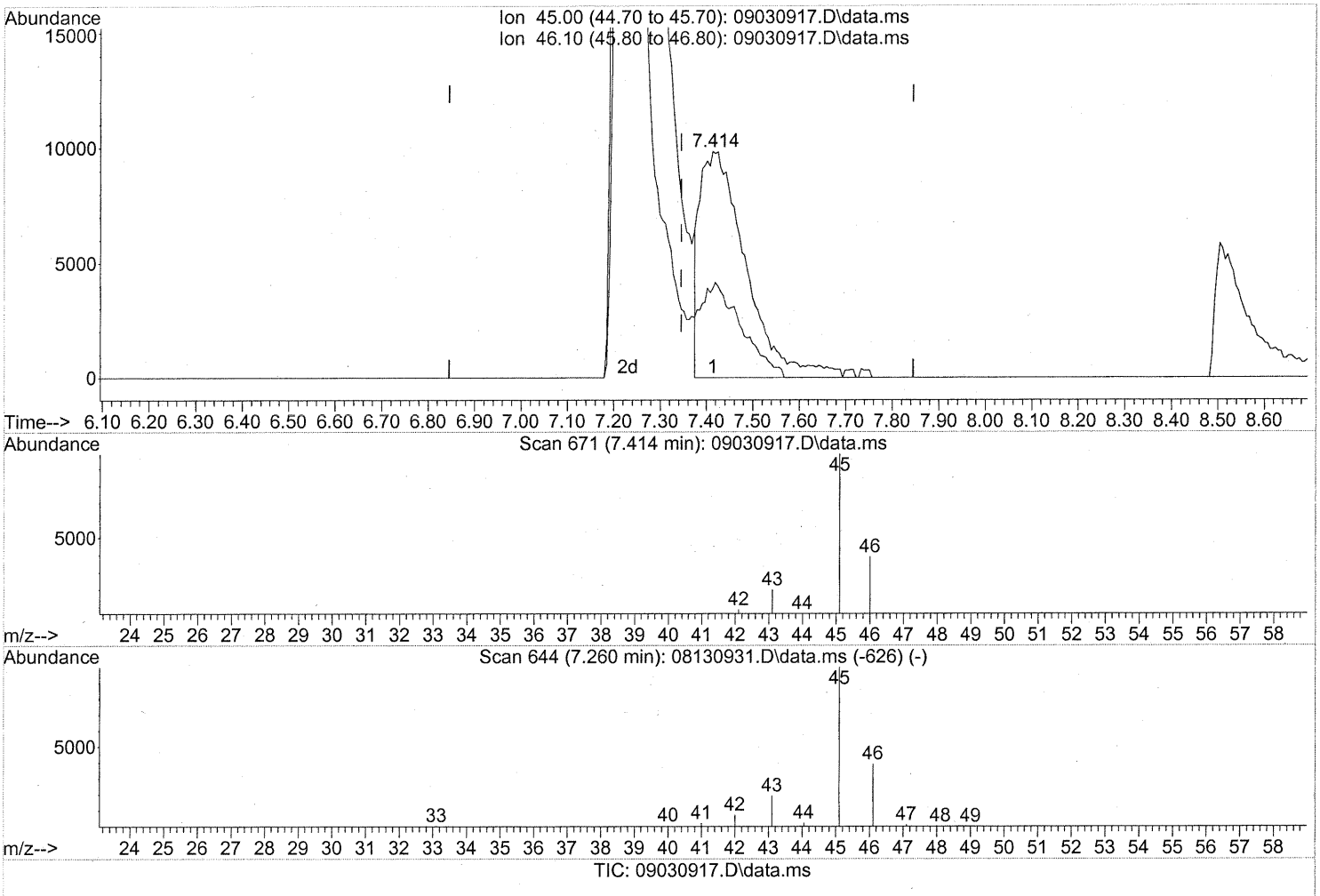
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.94	118	1148	N.D.	
81) 2-Ethyltoluene	24.79	105	2867	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	11563	0.121 ng	85
83) n-Decane	25.16	57	1233	N.D.	
84) Benzyl Chloride	25.05	91	979	N.D.	
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.	
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.	
87) sec-Butylbenzene	25.49	105	261	N.D.	
88) 4-Isopropyltoluene (p-...	25.57	119	4467	N.D.	
89) 1,2,3-Trimethylbenzene	25.58	105	2473	N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
91) d-Limonene	25.74	68	15168	0.387 ng	88
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.66	57	2236	N.D.	
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.96	128	1338	N.D.	
96) n-Dodecane	27.89	57	2148	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.56	55	1465	N.D.	
99) tert-Butylbenzene	25.05	119	1236	N.D.	
100) n-Butylbenzene	26.08	91	619	N.D.	

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 04 07:11:44 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



(10) Ethanol (T)

7.414min (+0.068) 3.49ng

response 68118

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

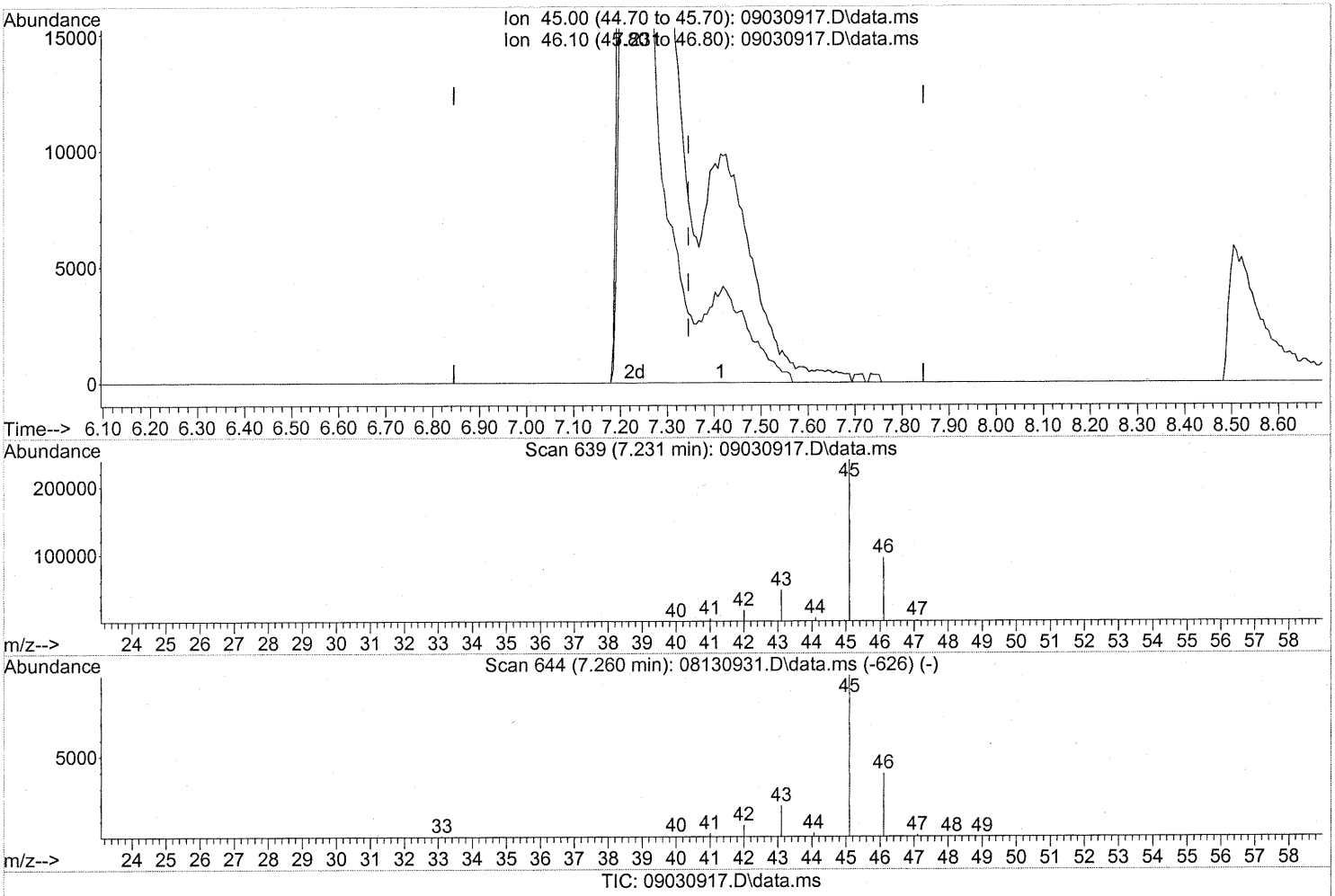
SP

58

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 04 07:11:44 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



(10) Ethanol (T)

7.231min (-0.114) 41.96ng m

response 819097

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 → LC
Em 9/9/09

KR 9/9/09

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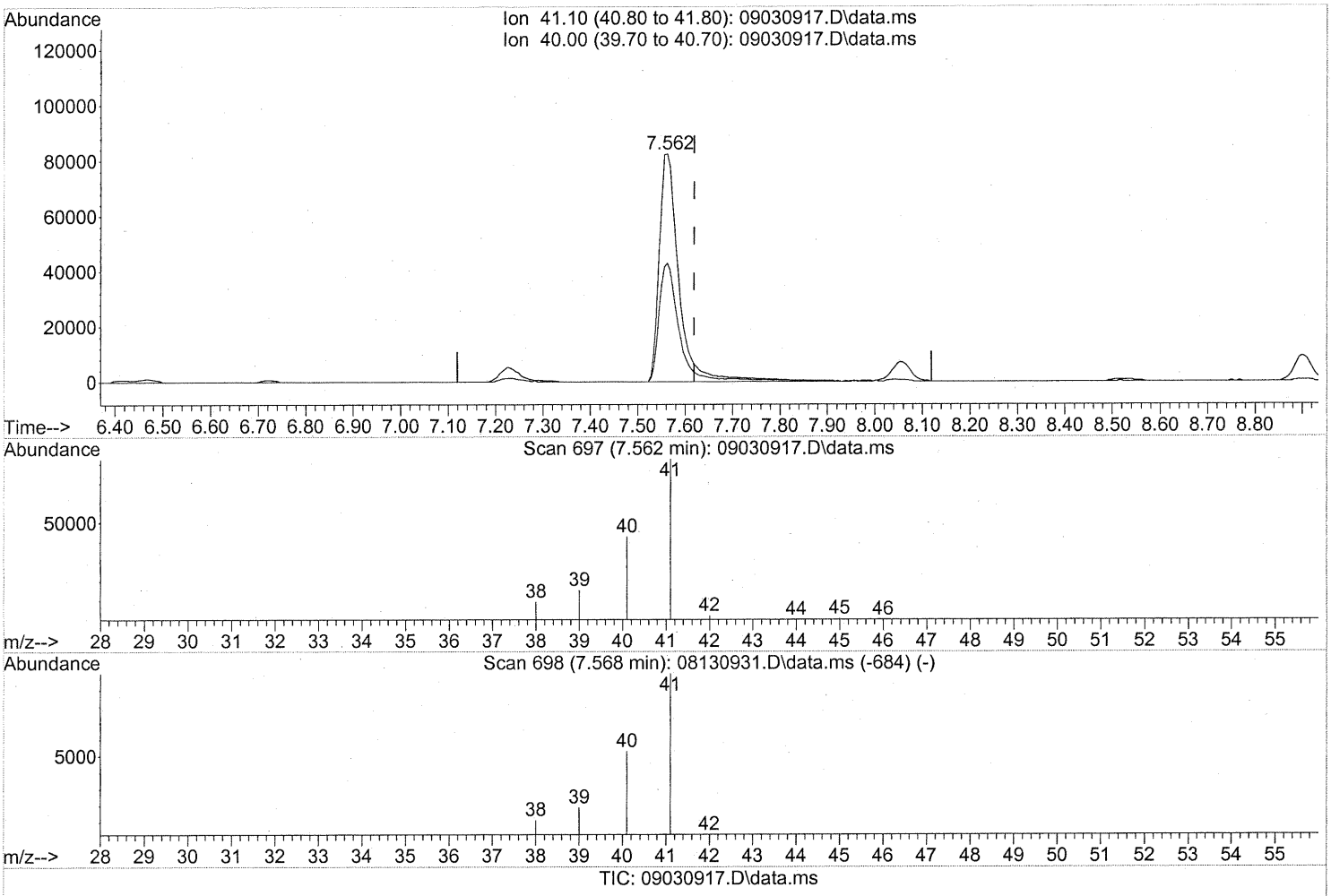
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030917.D
Acq On : 3 Sep 2009 17:55
Operator : EM
Sample : P0902972-001 dil (25ml)
Misc : Environmental H&E 103520
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 04 07:11:44 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: 09030917.D\data.ms

(11) Acetonitrile (T)

7.562min (-0.057) 5.01ng

response 238590

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	52.84
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103521**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-002

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: AC00486

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -7.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	1.2	ND	0.71	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**16**	1.2	**3.2**	0.25	
74-87-3	**Chloromethane**	**1.0**	0.24	**0.50**	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.2	ND	0.17	
75-01-4	Vinyl Chloride	ND	0.24	ND	0.095	
106-99-0	1,3-Butadiene	ND	0.24	ND	0.11	
74-83-9	Bromomethane	ND	0.24	ND	0.063	
75-00-3	Chloroethane	ND	0.24	ND	0.092	
64-17-5	**Ethanol**	**2,100**	12	**1,100**	6.5	**D**
75-05-8	**Acetonitrile**	**280**	1.2	**160**	0.72	**D**
107-02-8	**Acrolein**	**4.7**	1.2	**2.1**	0.53	
67-64-1	**Acetone**	**65**	12	**28**	5.1	
75-69-4	**Trichlorofluoromethane**	**1.1**	0.24	**0.20**	0.043	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**23**	1.2	**9.3**	0.49	
107-13-1	Acrylonitrile	ND	1.2	ND	0.56	
75-35-4	1,1-Dichloroethene	ND	0.24	ND	0.061	
75-09-2	Methylene Chloride	ND	1.2	ND	0.35	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.24	ND	0.078	
76-13-1	**Trichlorotrifluoroethane**	**0.45**	0.24	**0.058**	0.032	
75-15-0	Carbon Disulfide	ND	1.2	ND	0.39	
156-60-5	trans-1,2-Dichloroethene	ND	0.24	ND	0.061	
75-34-3	1,1-Dichloroethane	ND	0.24	ND	0.060	
1634-04-4	Methyl tert-Butyl Ether	ND	0.24	ND	0.067	
108-05-4	Vinyl Acetate	ND	12	ND	3.5	
78-93-3	**2-Butanone (MEK)**	**5.6**	1.2	**1.9**	0.41	

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: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103521** CAS Project ID: P0902972
Client Project ID: **16512** CAS Sample ID: P0902972-002

Test Code: EPA TO-15 Date Collected: 8/25/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 8/26/09
Analyst: Elsa Moctezuma Date Analyzed: 9/3 - 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC00486

Initial Pressure (psig): -7.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.24	ND	0.061	
141-78-6	**Ethyl Acetate**	**7.9**	2.4	**2.2**	0.67	
110-54-3	**n-Hexane**	**5.0**	1.2	**1.4**	0.34	
67-66-3	**Chloroform**	**0.31**	0.24	**0.063**	0.050	
109-99-9	Tetrahydrofuran (THF)	ND	1.2	ND	0.41	
107-06-2	**1,2-Dichloroethane**	**2.9**	0.24	**0.72**	0.060	
71-55-6	1,1,1-Trichloroethane	ND	0.24	ND	0.045	
71-43-2	**Benzene**	**3.8**	0.24	**1.2**	0.076	
56-23-5	**Carbon Tetrachloride**	**0.42**	0.24	**0.067**	0.039	
110-82-7	Cyclohexane	ND	1.2	ND	0.35	
78-87-5	1,2-Dichloropropane	ND	0.24	ND	0.053	
75-27-4	Bromodichloromethane	ND	0.24	ND	0.036	
79-01-6	Trichloroethene	ND	0.24	ND	0.045	
123-91-1	1,4-Dioxane	ND	1.2	ND	0.34	
80-62-6	Methyl Methacrylate	ND	2.4	ND	0.59	
142-82-5	**n-Heptane**	**3.2**	1.2	**0.79**	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	1.2	ND	0.27	
108-10-1	4-Methyl-2-pentanone	ND	1.2	ND	0.30	
10061-02-6	trans-1,3-Dichloropropene	ND	1.2	ND	0.27	
79-00-5	1,1,2-Trichloroethane	ND	0.24	ND	0.045	
108-88-3	**Toluene**	**26**	1.2	**6.9**	0.32	
591-78-6	2-Hexanone	ND	1.2	ND	0.30	
124-48-1	Dibromochloromethane	ND	0.24	ND	0.029	
106-93-4	1,2-Dibromoethane	ND	0.24	ND	0.032	
123-86-4	**n-Butyl Acetate**	**2.7**	1.2	**0.57**	0.26	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103521**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-002

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: AC00486

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -7.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 2.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**2.1**	1.2	**0.45**	0.26	
127-18-4	Tetrachloroethene	ND	0.24	ND	0.036	
108-90-7	Chlorobenzene	ND	0.24	ND	0.053	
100-41-4	**Ethylbenzene**	**4.3**	1.2	**0.98**	0.28	
179601-23-1	**m,p-Xylenes**	**13**	1.2	**3.0**	0.28	
75-25-2	Bromoform	ND	1.2	ND	0.12	
100-42-5	**Styrene**	**3.5**	1.2	**0.83**	0.29	
95-47-6	**o-Xylene**	**4.7**	1.2	**1.1**	0.28	
111-84-2	n-Nonane	ND	1.2	ND	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.24	ND	0.035	
98-82-8	Cumene	ND	1.2	ND	0.25	
80-56-8	**alpha-Pinene**	**30**	1.2	**5.4**	0.22	
103-65-1	**n-Propylbenzene**	**1.2**	1.2	**0.25**	0.25	
622-96-8	**4-Ethyltoluene**	**2.2**	1.2	**0.44**	0.25	
108-67-8	**1,3,5-Trimethylbenzene**	**1.9**	1.2	**0.39**	0.25	
95-63-6	**1,2,4-Trimethylbenzene**	**6.5**	1.2	**1.3**	0.25	
100-44-7	Benzyl Chloride	ND	0.24	ND	0.047	
541-73-1	1,3-Dichlorobenzene	ND	0.24	ND	0.040	
106-46-7	1,4-Dichlorobenzene	ND	0.24	ND	0.040	
95-50-1	1,2-Dichlorobenzene	ND	0.24	ND	0.040	
5989-27-5	**d-Limonene**	**15**	1.2	**2.6**	0.22	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.2	ND	0.13	
120-82-1	1,2,4-Trichlorobenzene	ND	1.2	ND	0.16	
91-20-3	Naphthalene	ND	1.2	ND	0.23	
87-68-3	Hexachlorobutadiene	ND	1.2	ND	0.11	

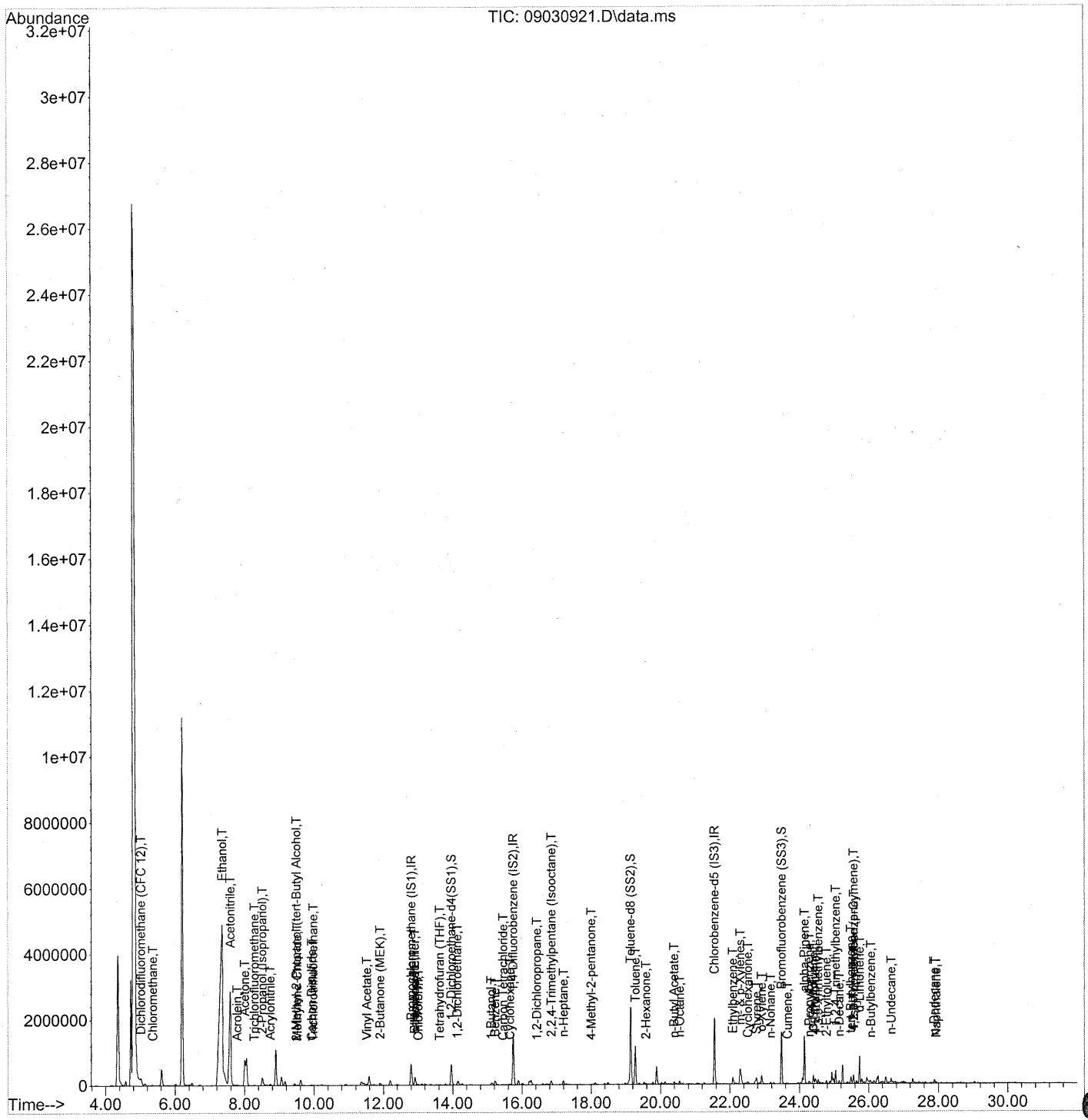
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 10:53:52 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



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 10:53:52 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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	340099	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1751238	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	856958	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.96	65	626982	26.072	ng		-0.03
Spiked Amount 25.000			Recovery =	104.28%			
57) Toluene-d8 (SS2)	19.14	98	2036787	25.001	ng		-0.02
Spiked Amount 25.000			Recovery =	100.00%			
73) Bromofluorobenzene (SS3)	23.49	174	549853	23.832	ng		0.00
Spiked Amount 25.000			Recovery =	95.32%			
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D. d			
3) Dichlorodifluoromethan...	5.02	85	277131	6.508	ng		99
4) Chloromethane	5.37	50	16851	0.425	ng		88
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	861	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.10	54	1255	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.36	45	17227983	~~920.591~~	ng	See Dil	99
11) Acetonitrile	7.59	41	5171916	~~113.243~~	ng	See Dil	99
12) Acrolein	7.79	56	23786	1.949	ng		100
13) Acetone	8.01	58	512909	26.933	ng	#	71
14) Trichlorofluoromethane	8.29	101	16992	0.467	ng		98
15) 2-Propanol (Isopropanol)	8.51	45	489070	9.378	ng		98
16) Acrylonitrile	8.75	53	3999	~~0.145~~	ng	#	7
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.49	59	17541	0.331	ng	#	68
19) Methylene Chloride	9.52	84	2215	~~0.093~~	ng	#	73
20) 3-Chloro-1-propene (Al...	9.73	41	827	N.D.			
21) Trichlorotrifluoroethane	9.98	151	2997	0.184	ng		90
22) Carbon Disulfide	9.94	76	36391	~~0.434~~	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	11.36	73	551	N.D.			
26) Vinyl Acetate	11.52	86	7289m	~~1.767~~	ng		
27) 2-Butanone (MEK)	11.90	72	30534	2.300	ng	#	89
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.91	87	1145	0.061	ng	#	1
30) Ethyl Acetate	12.91	61	28019	3.254	ng		97
31) n-Hexane	12.92	57	86389	2.058	ng		94

9/9/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 10:53:52 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

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.01	83	4436	0.126 ng		96
34) Tetrahydrofuran (THF)	13.63	72	2916	0.211 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.13	62	32144	1.196 ng		98
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	15.23	61	111	N.D.		
40) 1-Butanol	15.11	56	42544	1.875 ng		94
41) Benzene	15.22	78	148934	1.581 ng		98
42) Carbon Tetrachloride	15.46	117	4586	0.174 ng		98
43) Cyclohexane	15.65	84	13171	0.361 ng	#	78
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.43	63	1693	0.073 ng		85
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.77	130	526	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	130292	1.202 ng		94
50) Methyl Methacrylate	0.00	100	0	N.D. d		
51) n-Heptane	17.21	71	33462	1.335 ng		90
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.00	58	4663	0.229 ng		77
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	1052900	10.661 ng		100
59) 2-Hexanone	19.59	43	16671	0.325 ng	#	22
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	62571	1.117 ng		88
63) n-Octane	20.56	57	19047	0.865 ng		84
64) Tetrachloroethene	20.75	166	773	N.D.		
65) Chlorobenzene	21.64	112	1133	N.D.		
66) Ethylbenzene	22.09	91	187415	1.758 ng		97
67) m- & p-Xylenes	22.30	91	460550	5.448 ng		98
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	90655	1.451 ng		99
70) o-Xylene	22.92	91	164858	1.939 ng		98
71) n-Nonane	23.17	43	20723	0.405 ng		86
72) 1,1,2,2-Tetrachloroethane	22.92	83	113	N.D.		
74) Cumene	23.66	105	12700	0.115 ng		96
75) alpha-Pinene	24.15	93	673190	12.375 ng		98
76) n-Propylbenzene	24.28	91	68129	0.500 ng		97
77) 3-Ethyltoluene	24.40	105	180041	1.743 ng		97
78) 4-Ethyltoluene	24.46	105	93027	0.896 ng		98
79) 1,3,5-Trimethylbenzene	24.55	105	66894	0.779 ng		98

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 10:53:52 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

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	1231	N.D.		
81) 2-Ethyltoluene	24.79	105	61421	0.576 ng		98
82) 1,2,4-Trimethylbenzene	25.05	105	245667	2.695 ng		88
83) n-Decane	25.15	57	34536	0.651 ng		92
84) Benzyl Chloride	25.25	91	267	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	1359	N.D.		
86) 1,4-Dichlorobenzene	25.33	146	1359	N.D.		
87) sec-Butylbenzene	25.39	105	5179	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	107376	0.933 ng		98
89) 1,2,3-Trimethylbenzene	25.57	105	54659	0.593 ng		91
90) 1,2-Dichlorobenzene	25.33	146	1359	N.D.		
91) d-Limonene	25.74	68	225698	6.051 ng		93
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	53106	0.969 ng		92
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	32251	0.264 ng		98
96) n-Dodecane	27.89	57	41556	0.677 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.52	55	23672	0.761 ng		94
99) tert-Butylbenzene	25.49	119	10395	0.115 ng		96
100) n-Butylbenzene	26.07	91	22411	0.234 ng	#	63

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

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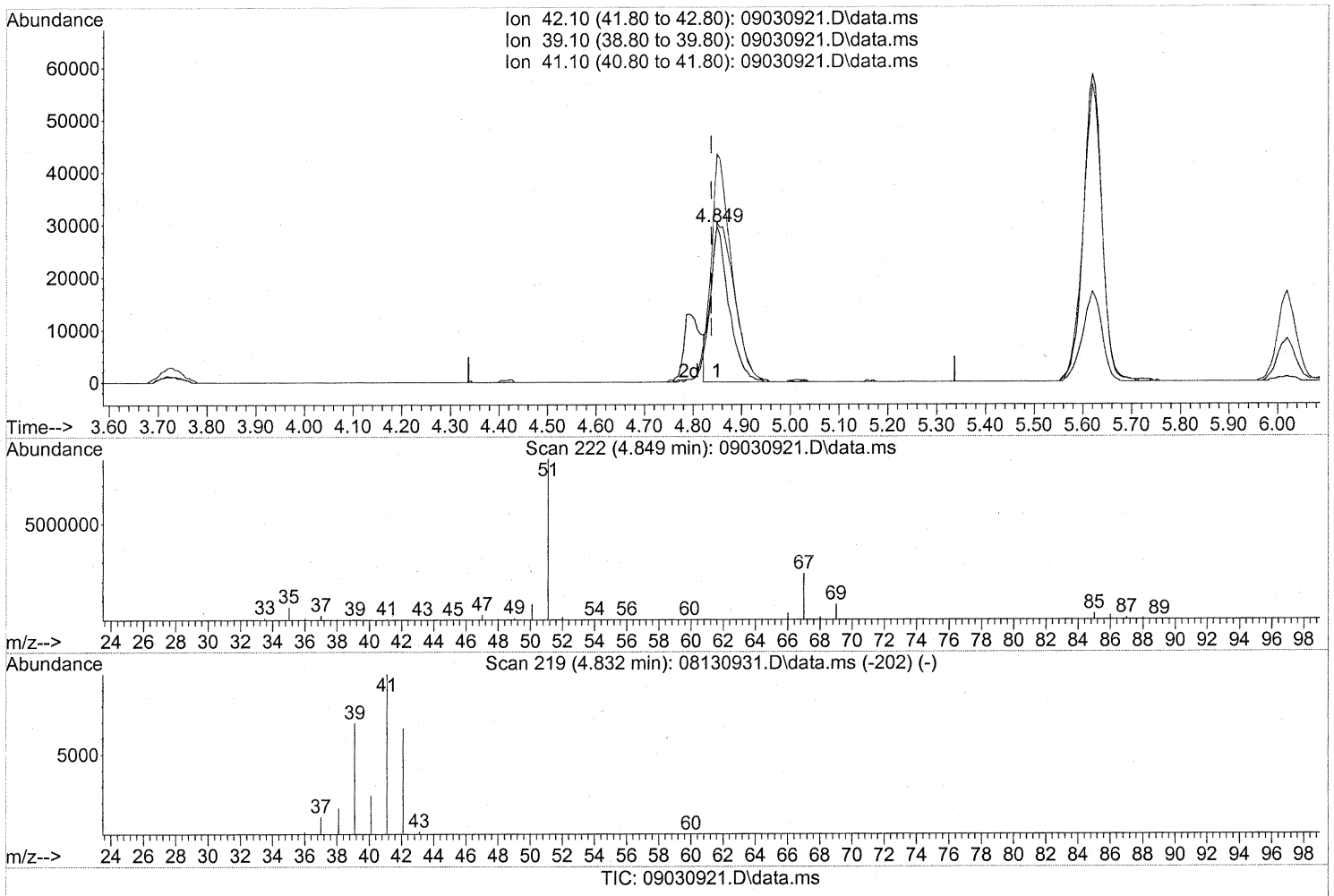
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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



(2) Propene (T)

4.849min (+0.012) 2.61ng

response 77956

Ion	Exp%	Act%
42.10	100	100
39.10	115.80	135.97#
41.10	152.70	168.25
0.00	0.00	0.00

FP 9/9/09

9/9/09

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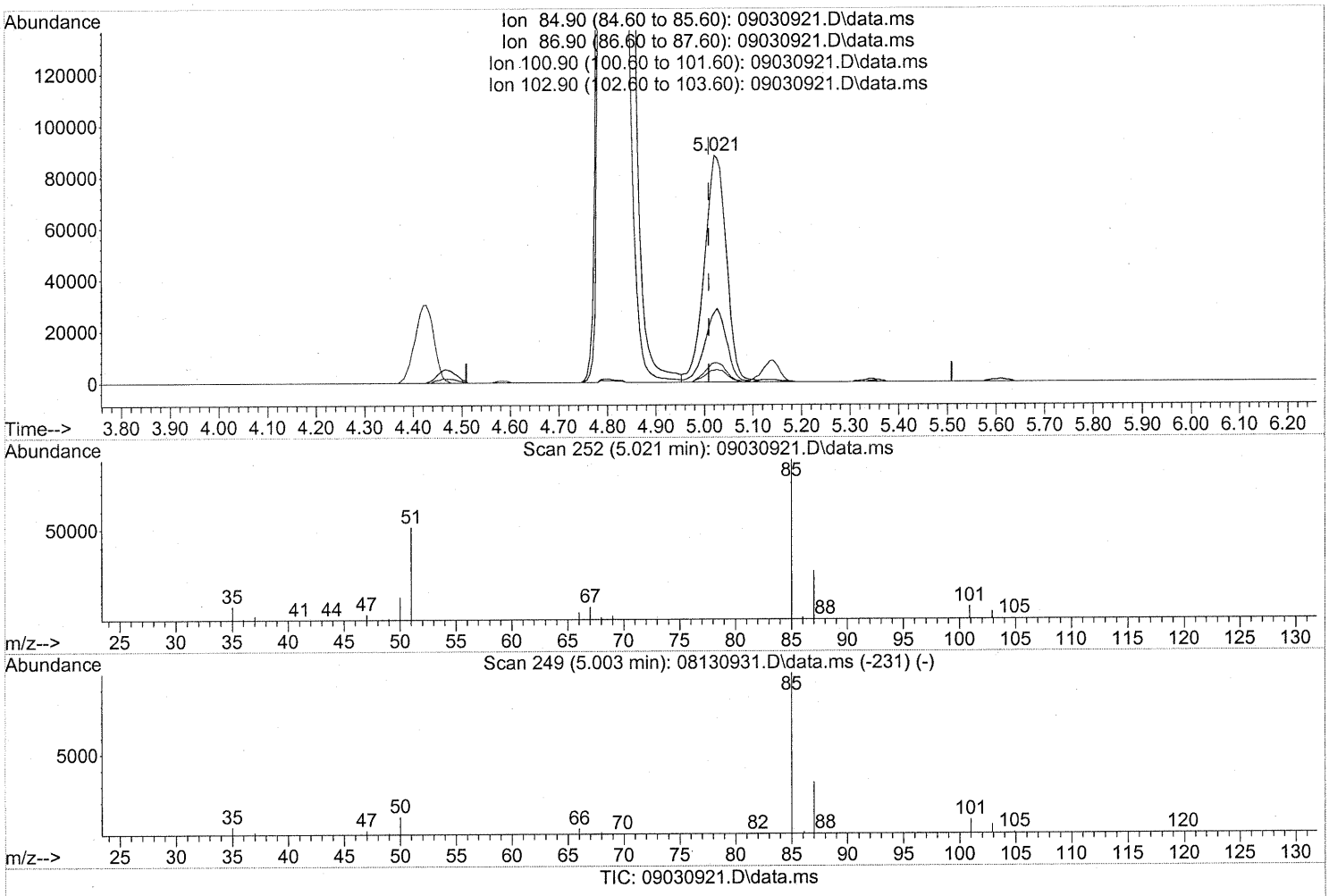
Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.021min (+0.012) 6.51ng

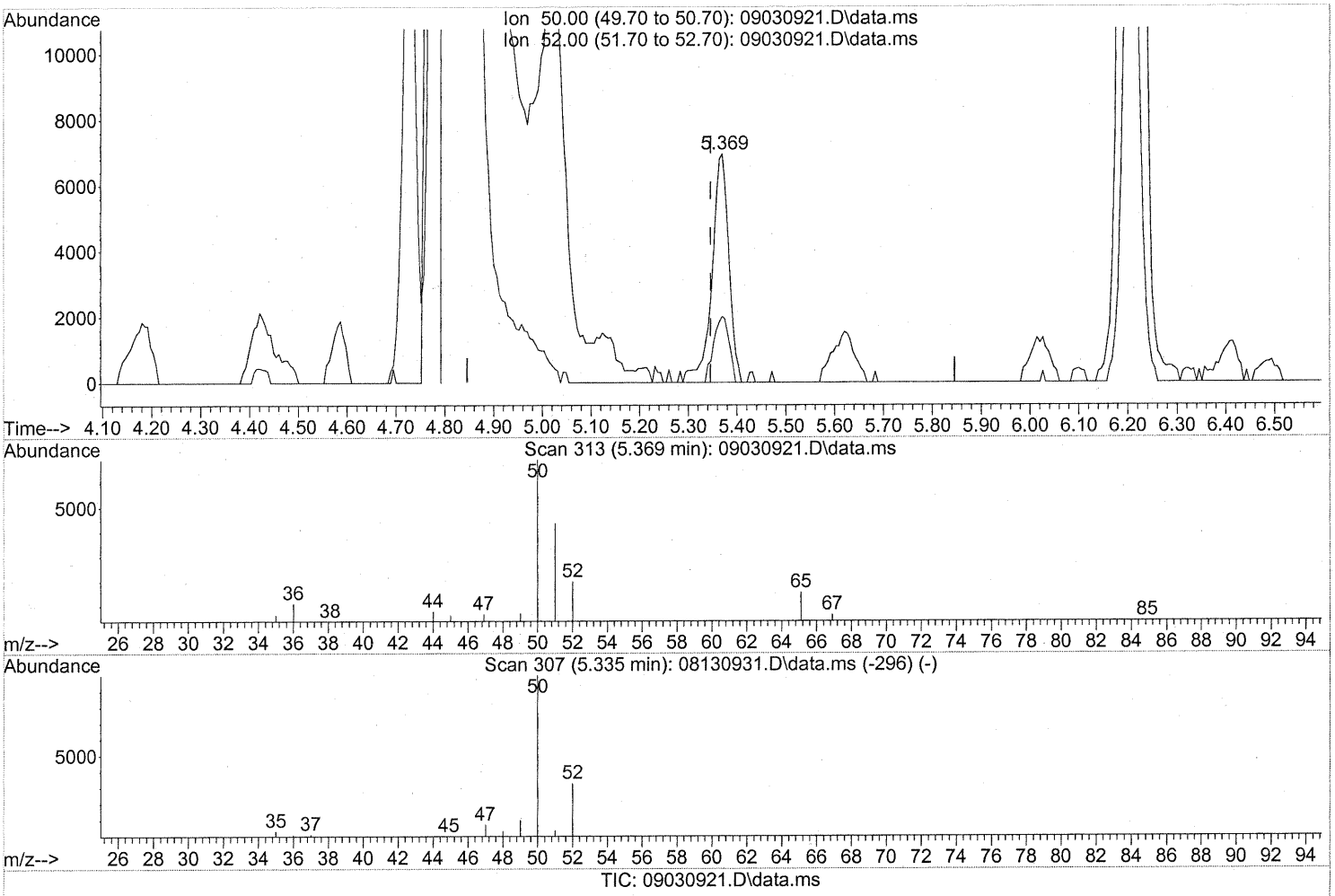
response 277131

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	31.89
100.90	9.10	8.16
102.90	5.50	5.29

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(4) Chloromethane (T)

5.369min (+0.023) 0.42ng

response 16851

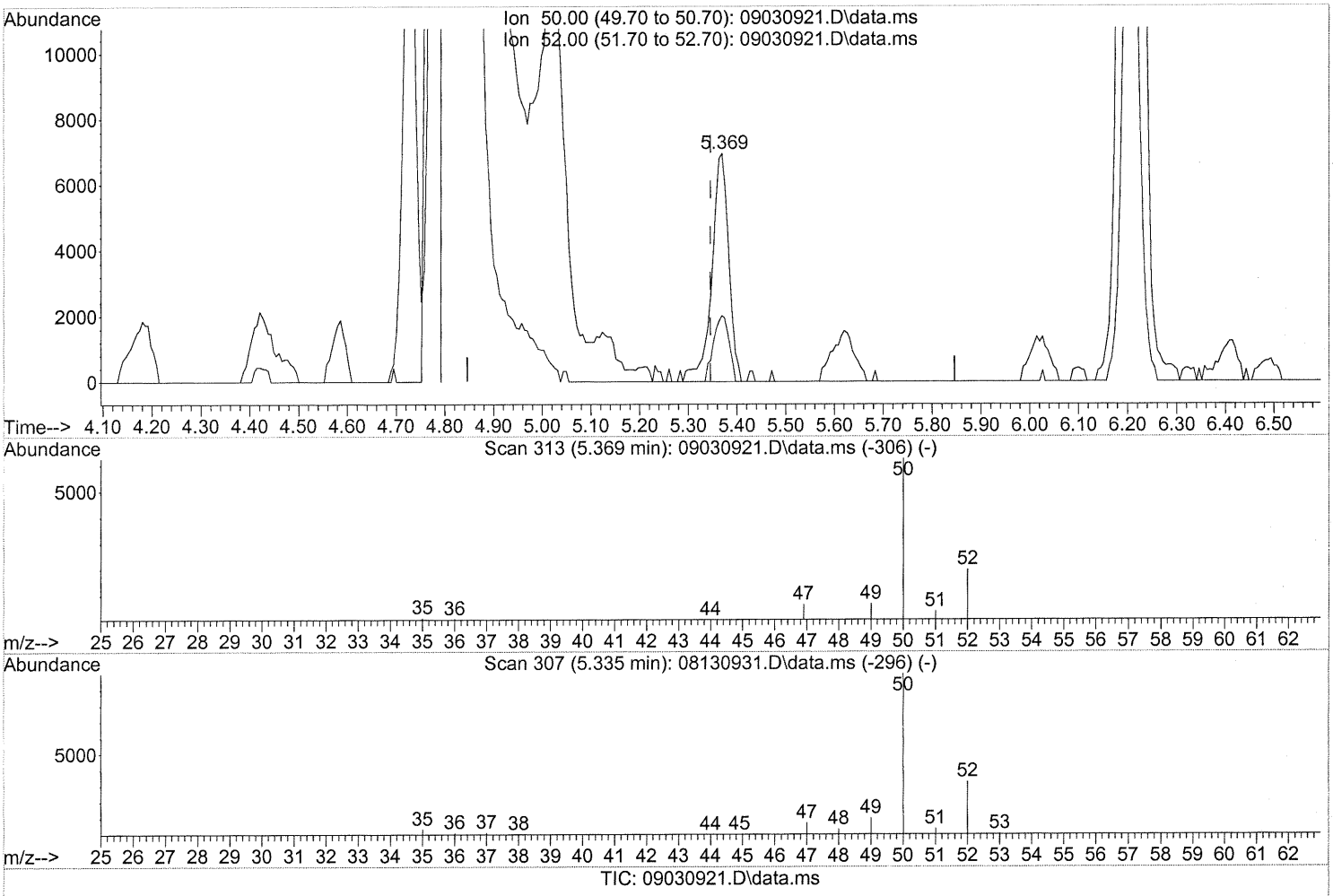
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	26.28
0.00	0.00	0.00
0.00	0.00	0.00

Before subtraction

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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



(4) Chloromethane (T)

5.369min (+0.023) 0.42ng

response 16851

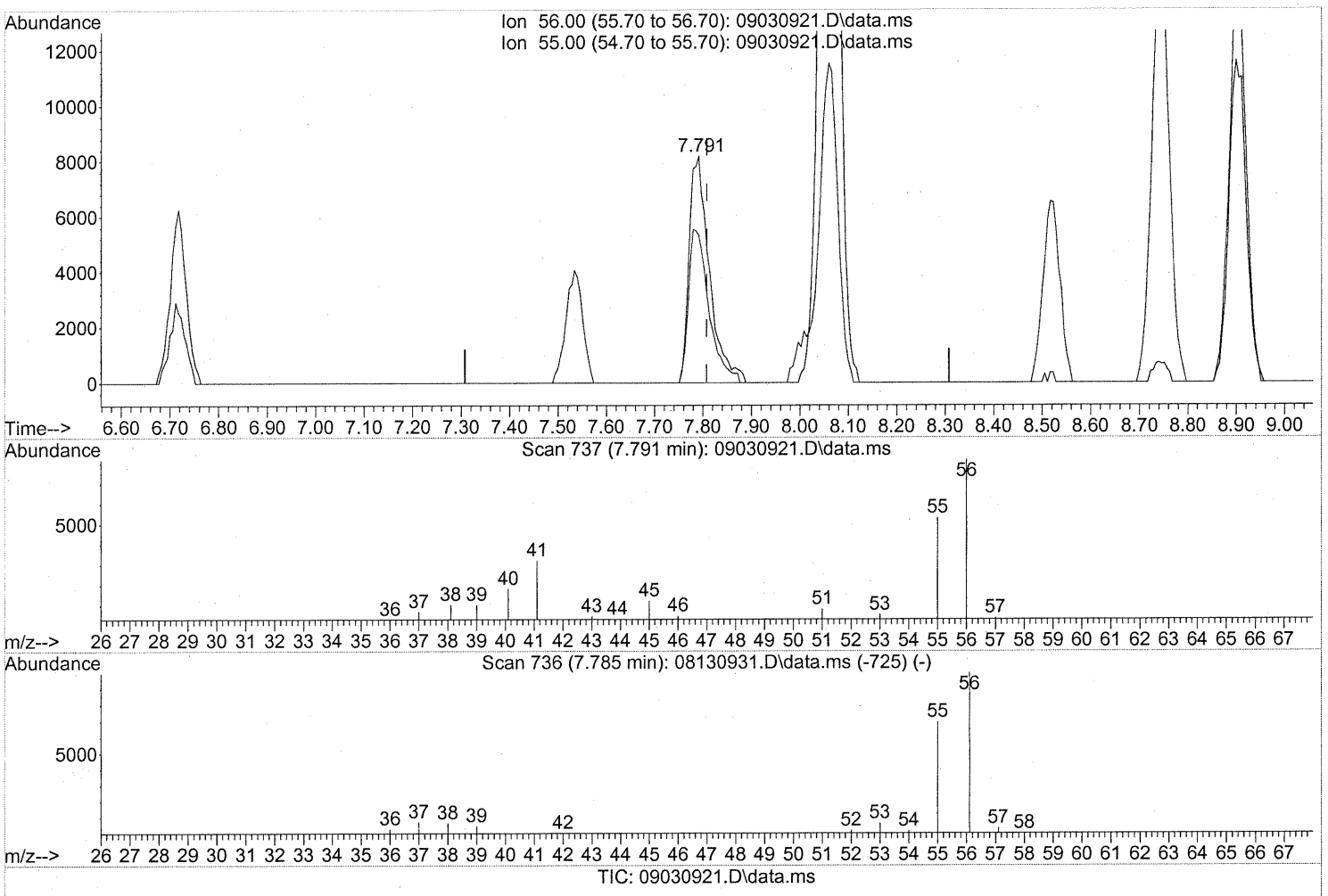
Ion	Exp%	Act%
50.00	100	100
52.00	33.20	26.28
0.00	0.00	0.00
0.00	0.00	0.00

After subtraction
Gm 9/9/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(12) Acrolein (T)

7.791min (-0.017) 1.95ng

response 23786

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	67.98
0.00	0.00	0.00
0.00	0.00	0.00

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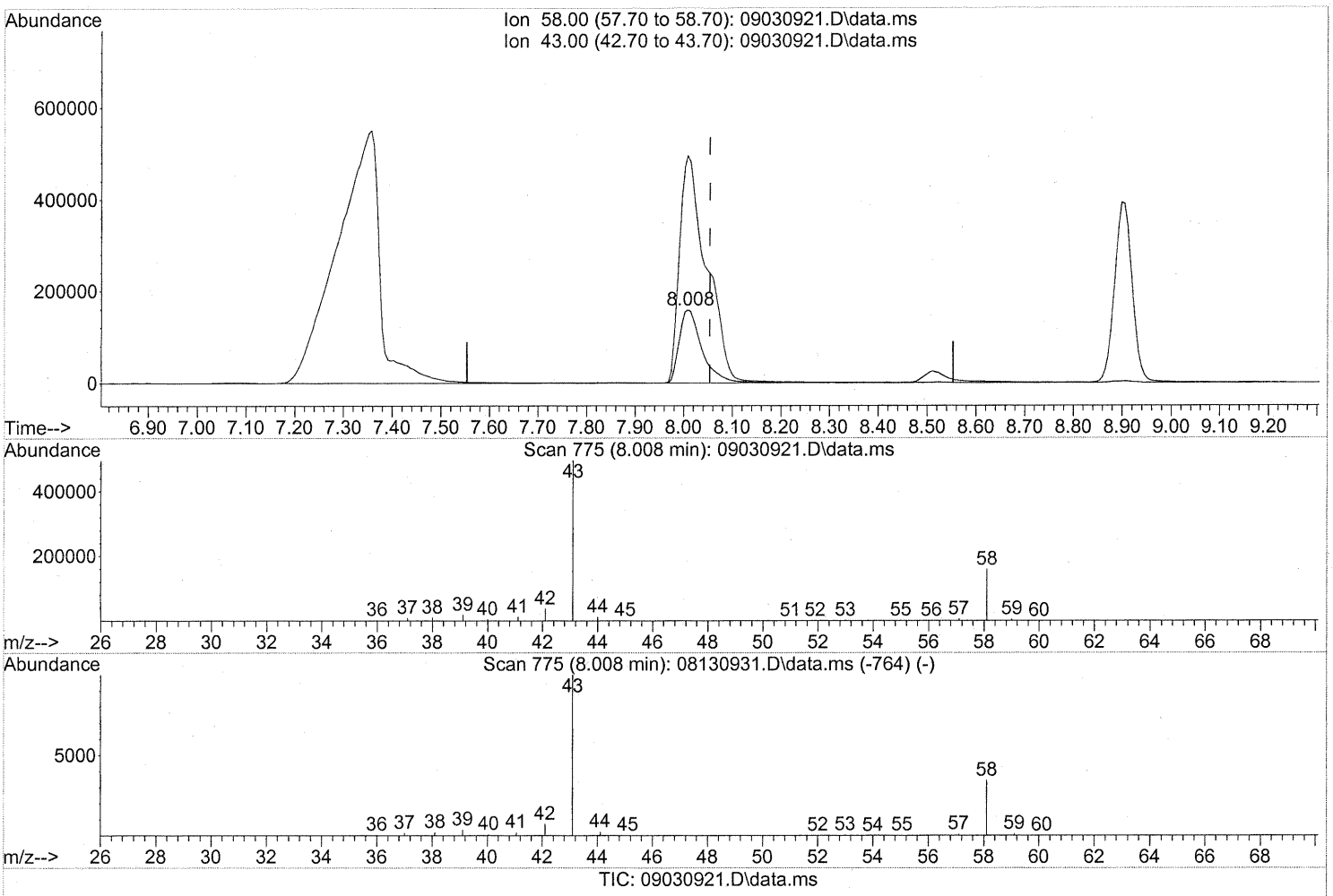
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(13) Acetone (T)

8.008min (-0.046) 26.93ng

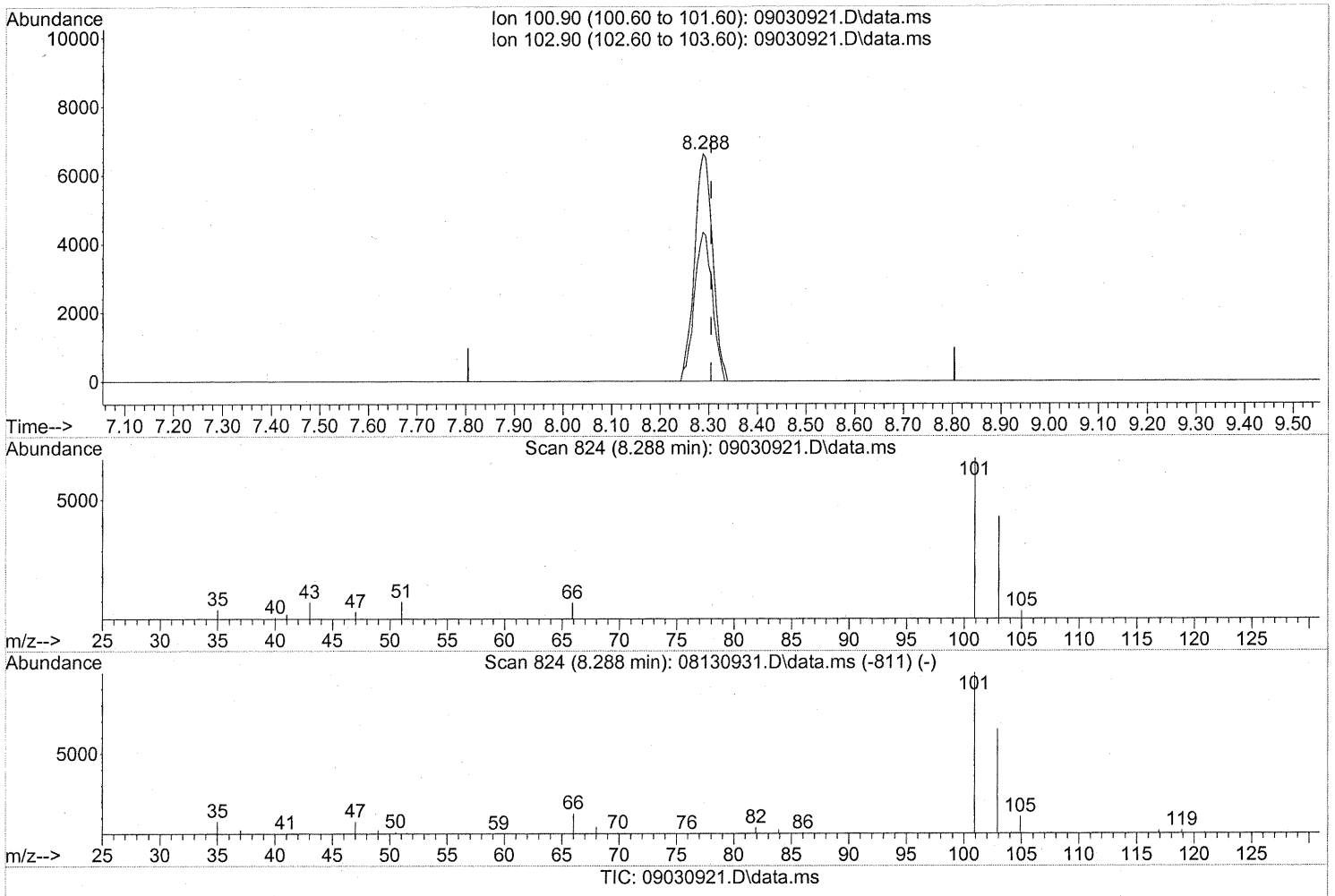
response 512909

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	375.83#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(14) Trichlorofluoromethane (T)

8.288min (-0.017) 0.47ng

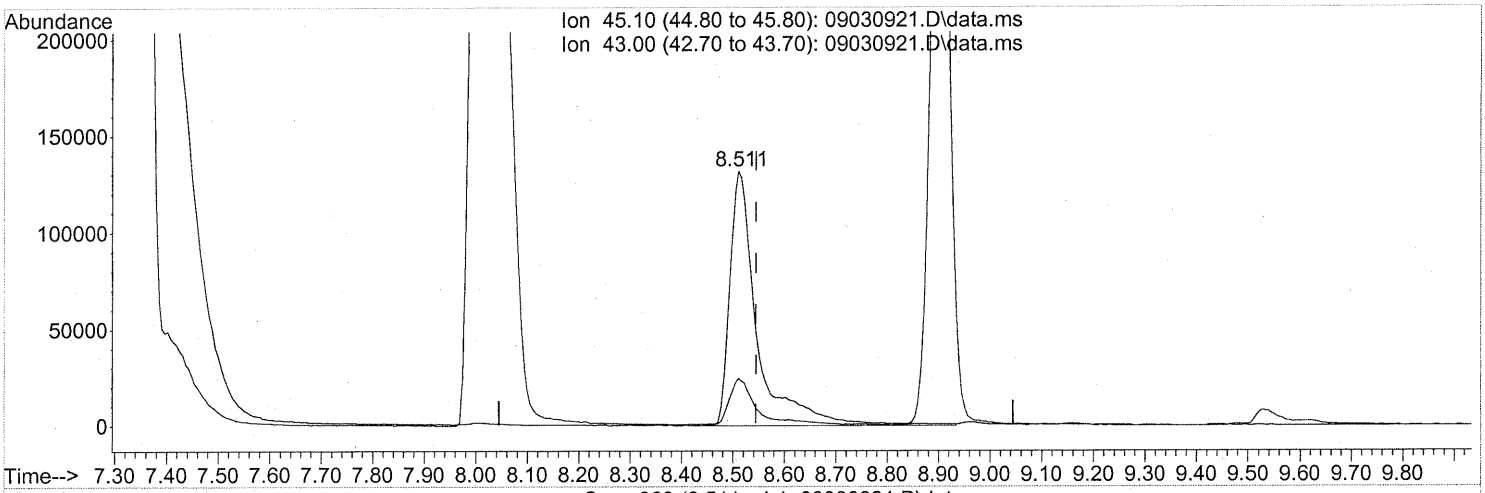
response 16992

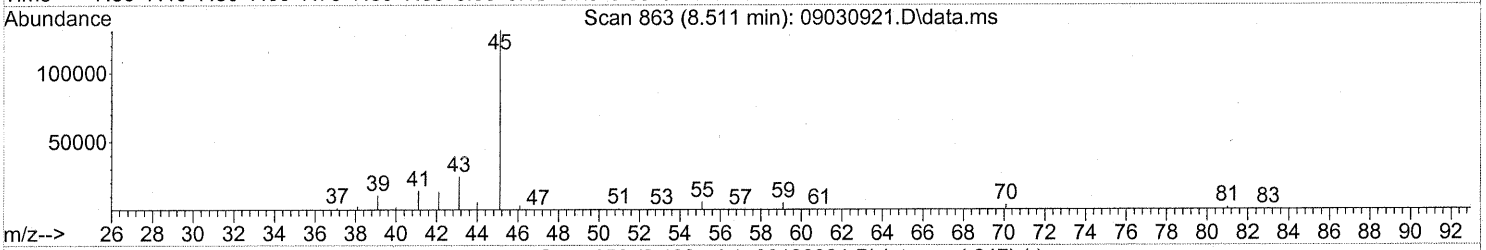
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.67
0.00	0.00	0.00
0.00	0.00	0.00

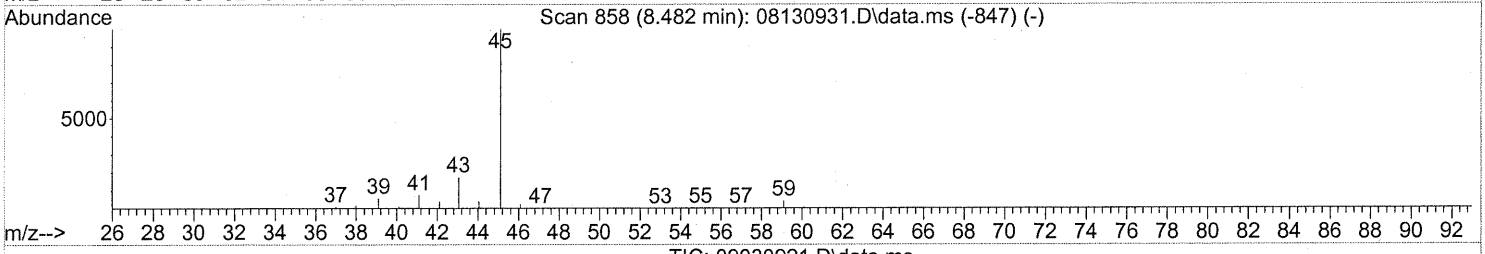
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

8.511min (-0.034) 9.38ng

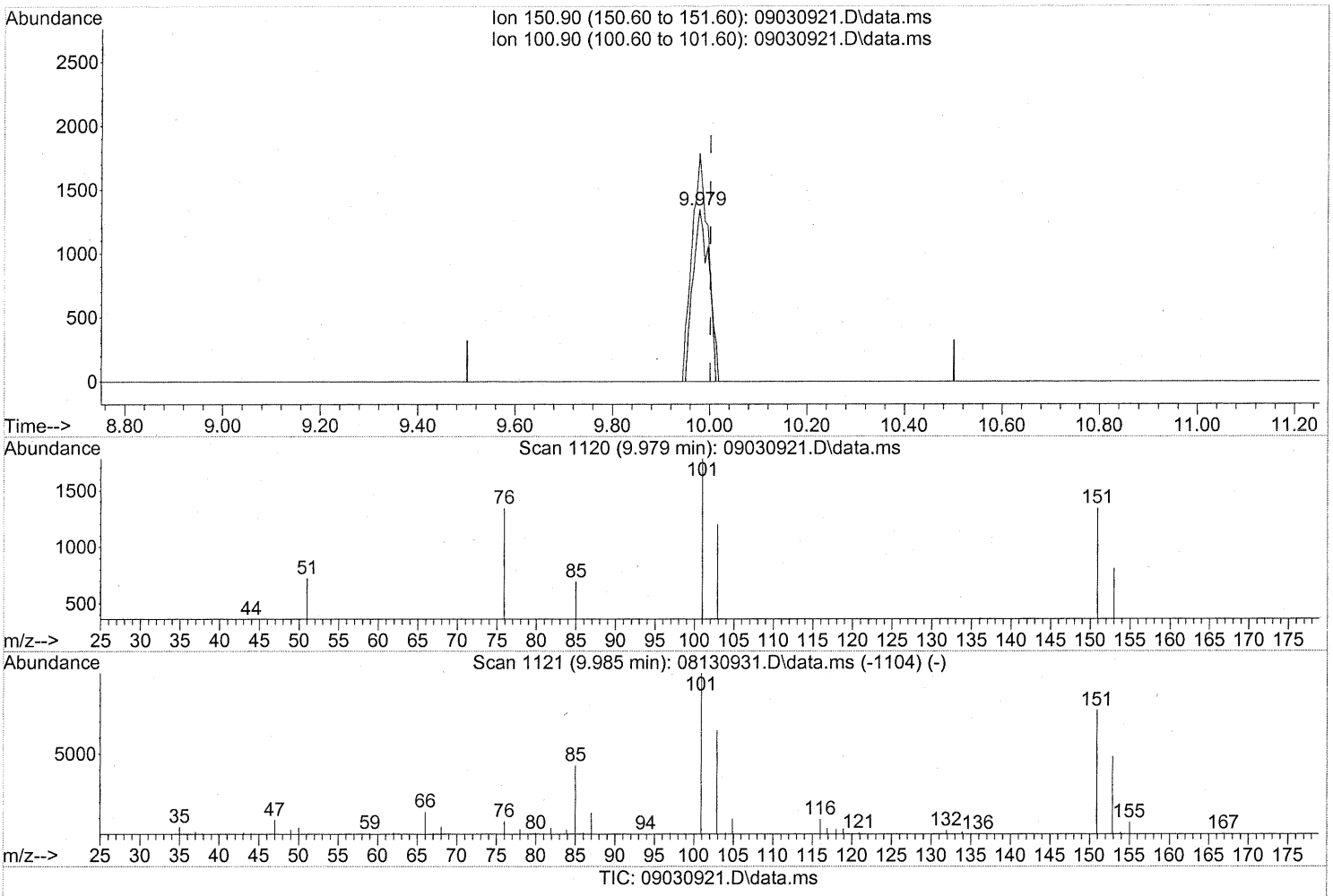
response 489070

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	19.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.979min (-0.023) 0.18ng

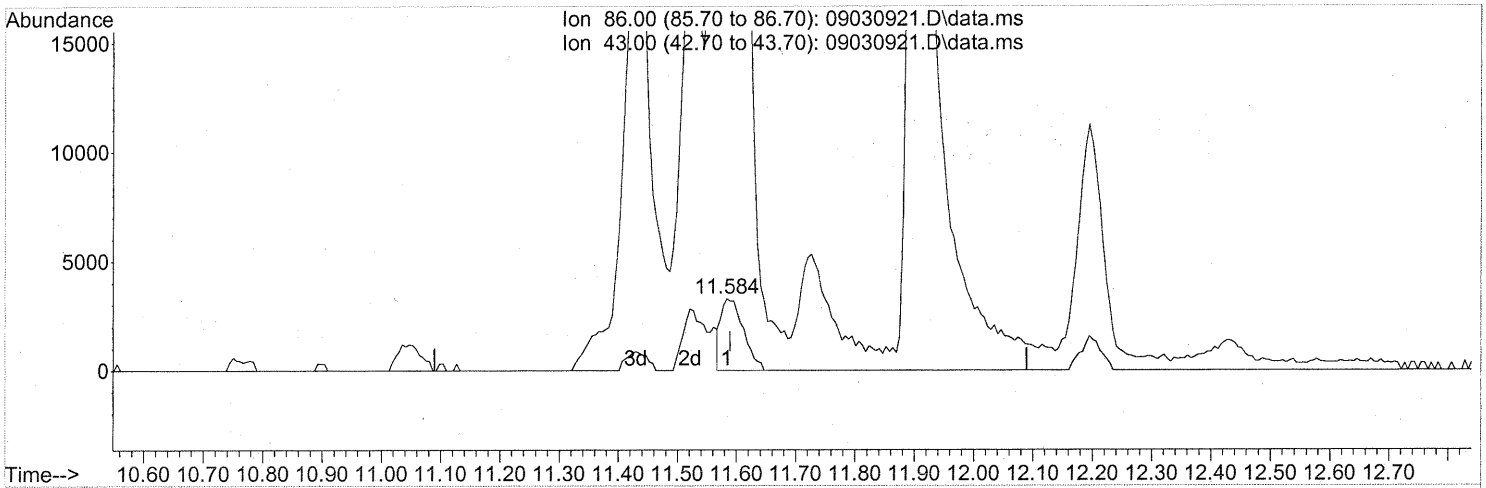
response 2997

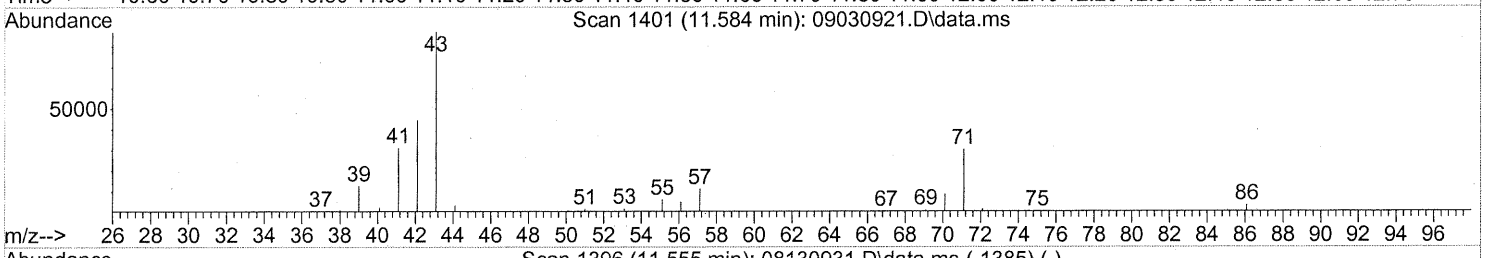
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	139.11
0.00	0.00	0.00
0.00	0.00	0.00

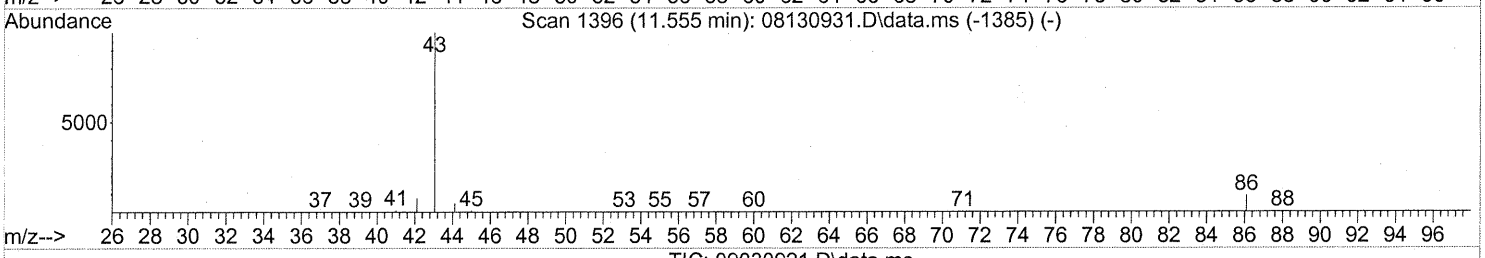
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(26) Vinyl Acetate (T)

11.584min (-0.006) 2.10ng

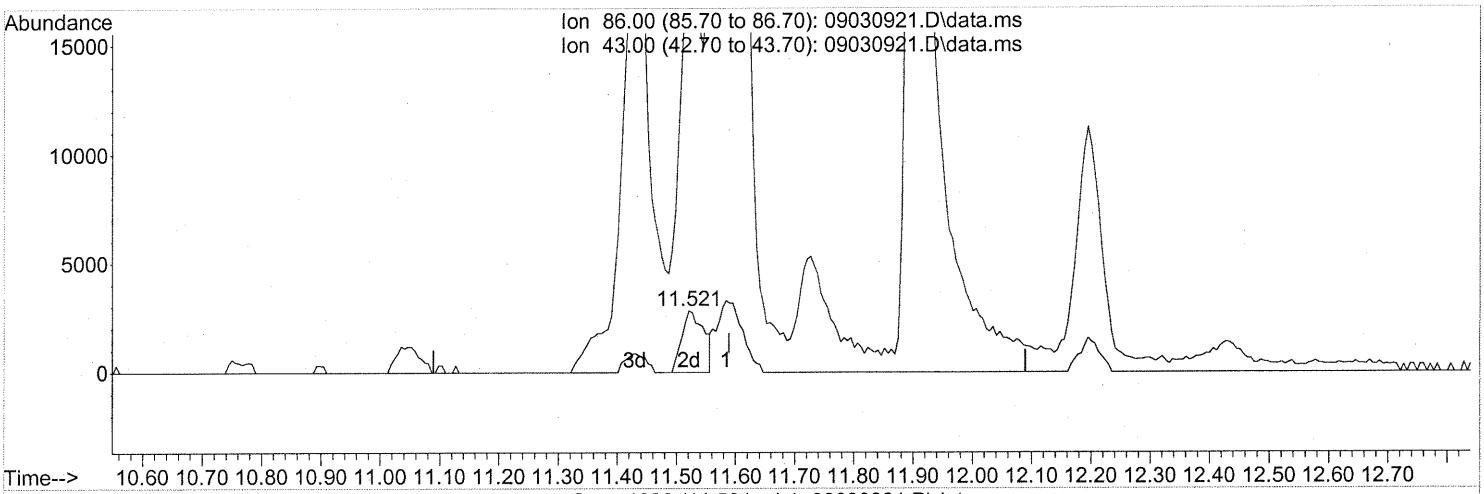
response 8646

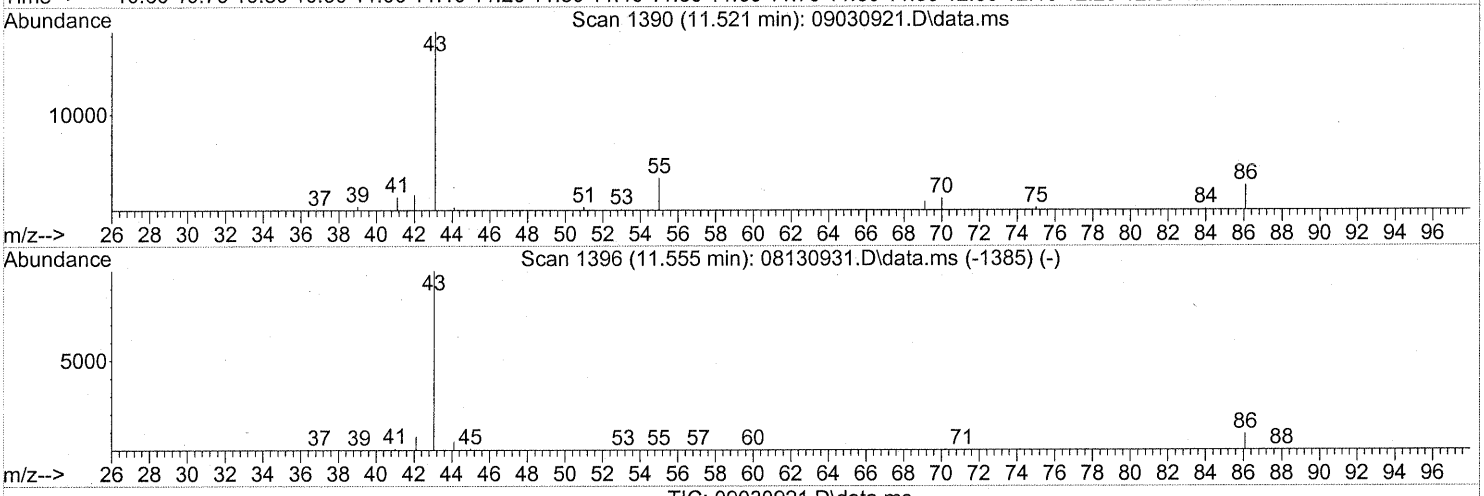
Ion	Exp%	Act%
86.00	100	100
43.00	992.90	2935.60#
0.00	0.00	0.00
0.00	0.00	0.00

MP

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(26) Vinyl Acetate (T)

11.521min (-0.069) 1.77ng m <RL

response 7289

Ion	Exp%	Act%
86.00	100	100
43.00	992.90	3482.12#
0.00	0.00	0.00
0.00	0.00	0.00

mp → LC
Com 9/9/09

KR 9/9/09

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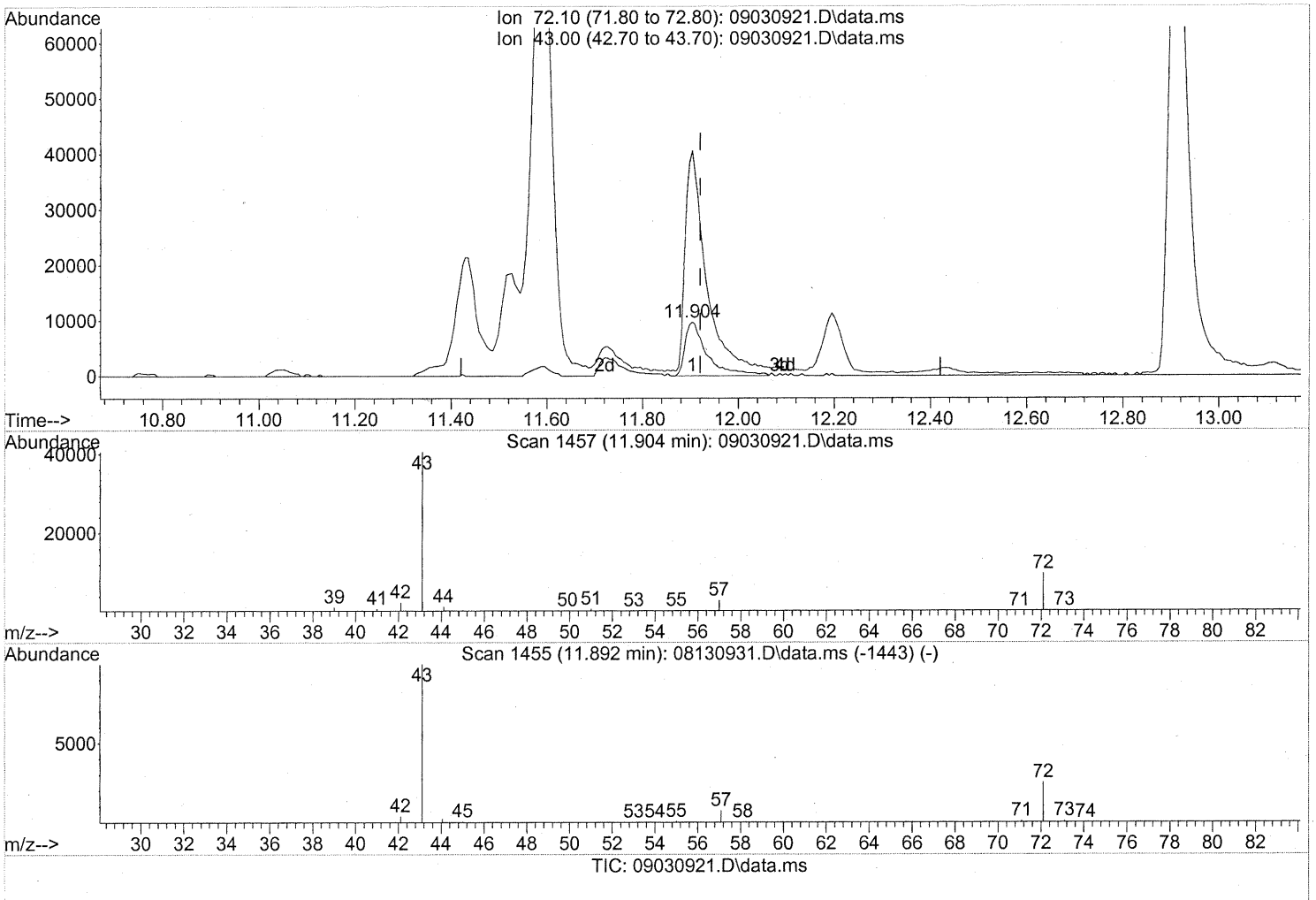
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

11.904min (-0.017) 2.30ng

response 30534

Ion	Exp%	Act%
72.10	100	100
43.00	366.50	391.81#
0.00	0.00	0.00
0.00	0.00	0.00

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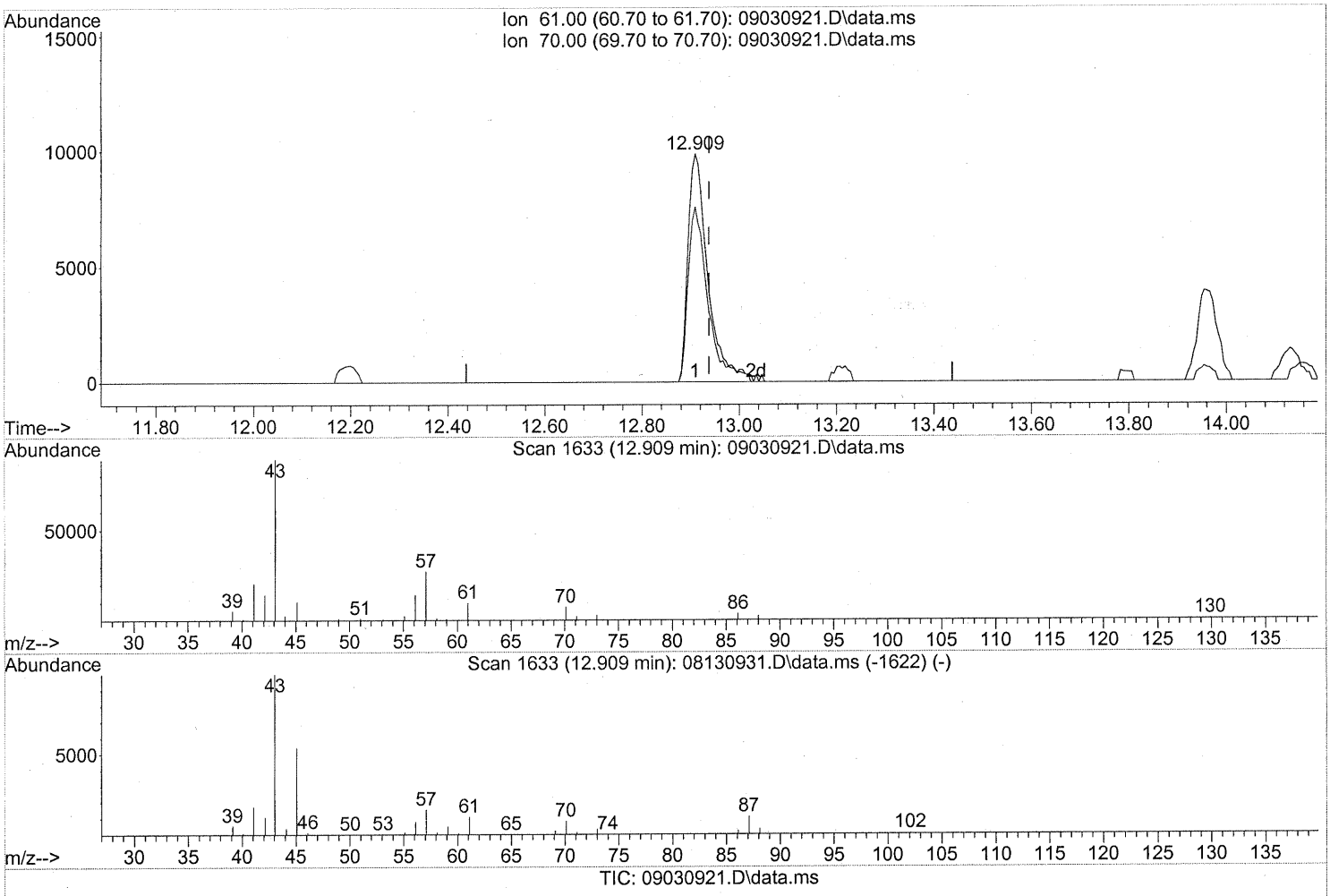
Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(30) Ethyl Acetate (T)

12.909min (-0.029) 3.25ng

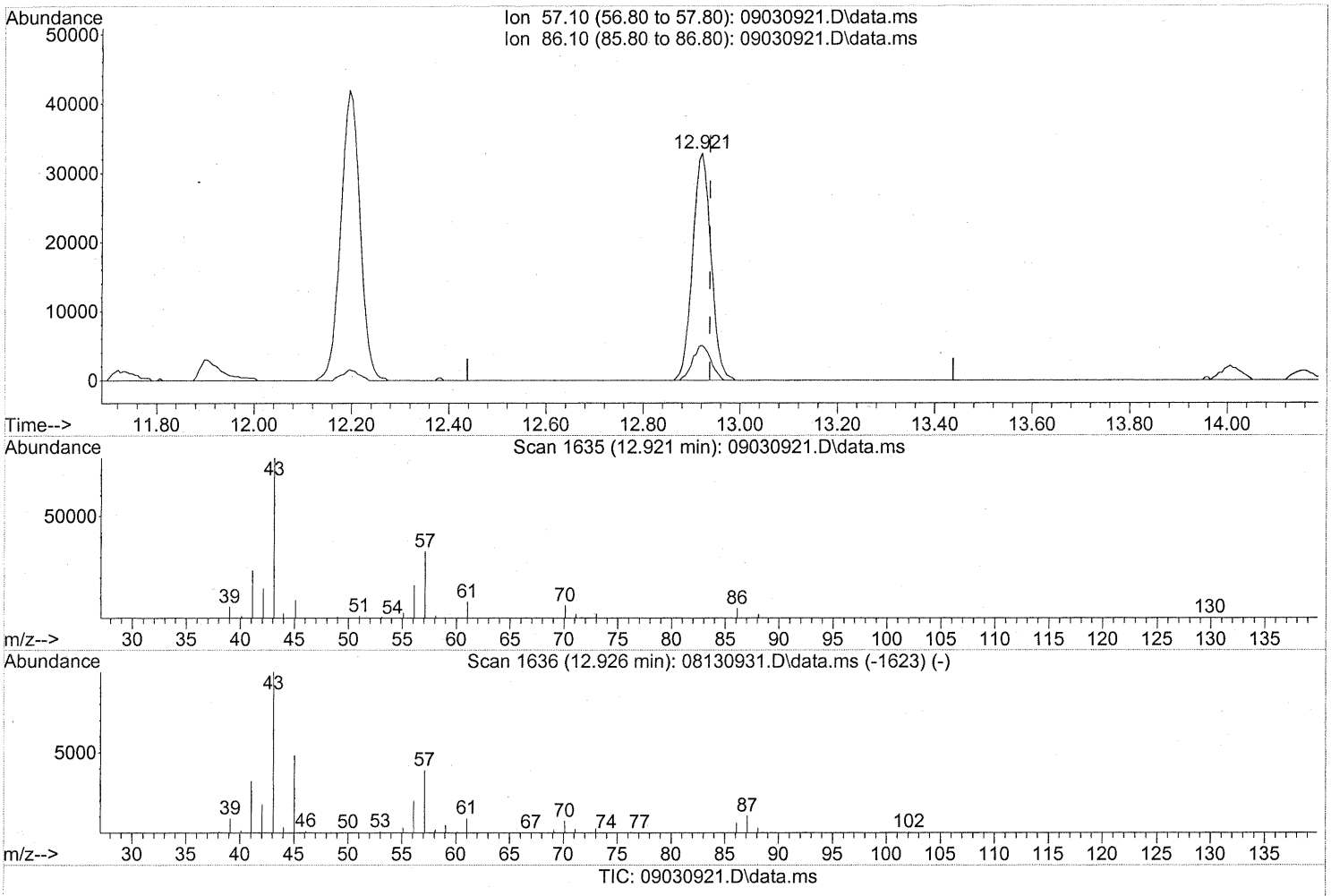
response 28019

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	76.22
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(31) n-Hexane (T)

12.921min (-0.017) 2.06ng

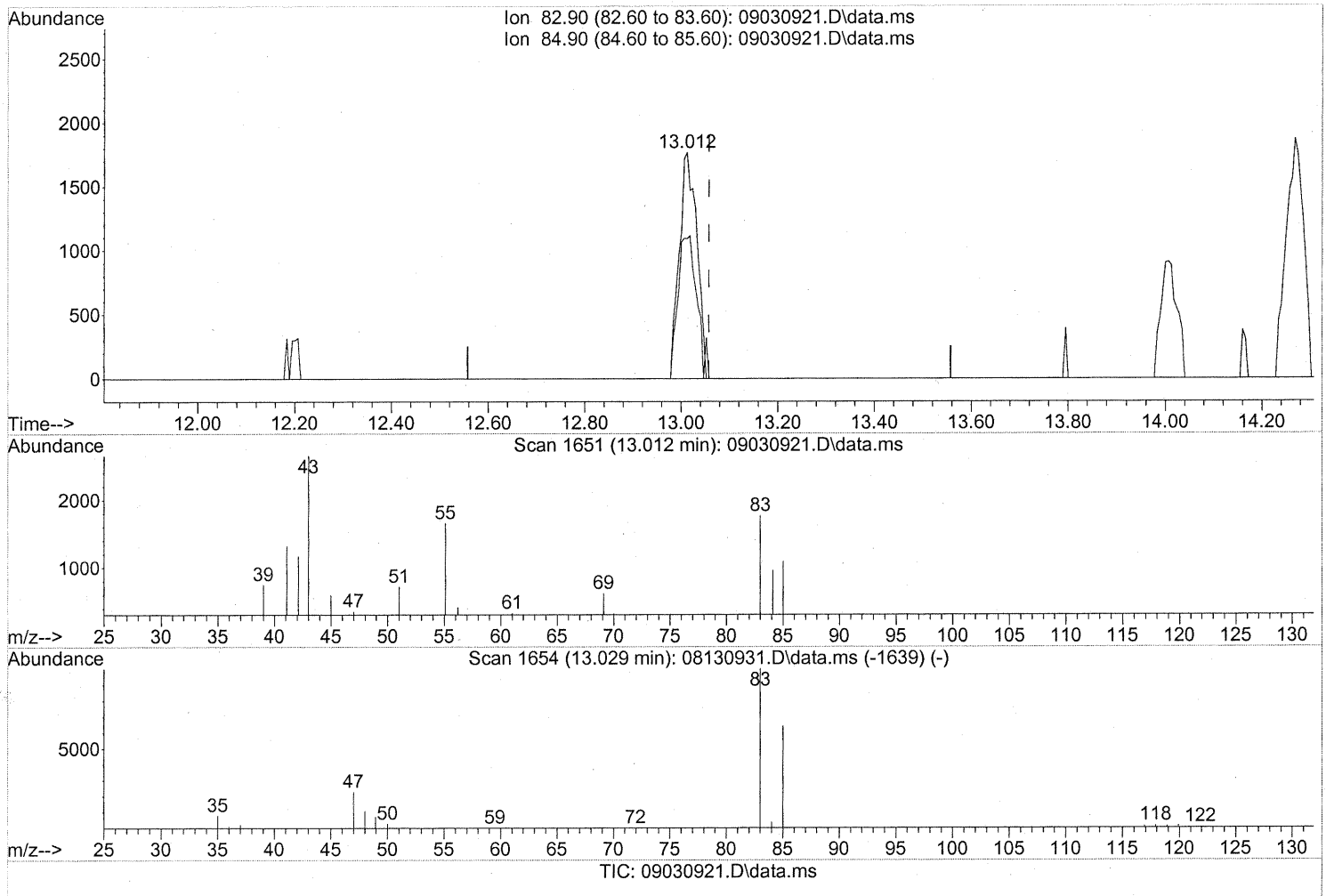
response 86389

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	15.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(32) Chloroform (T)

13.012min (-0.046) 0.13ng

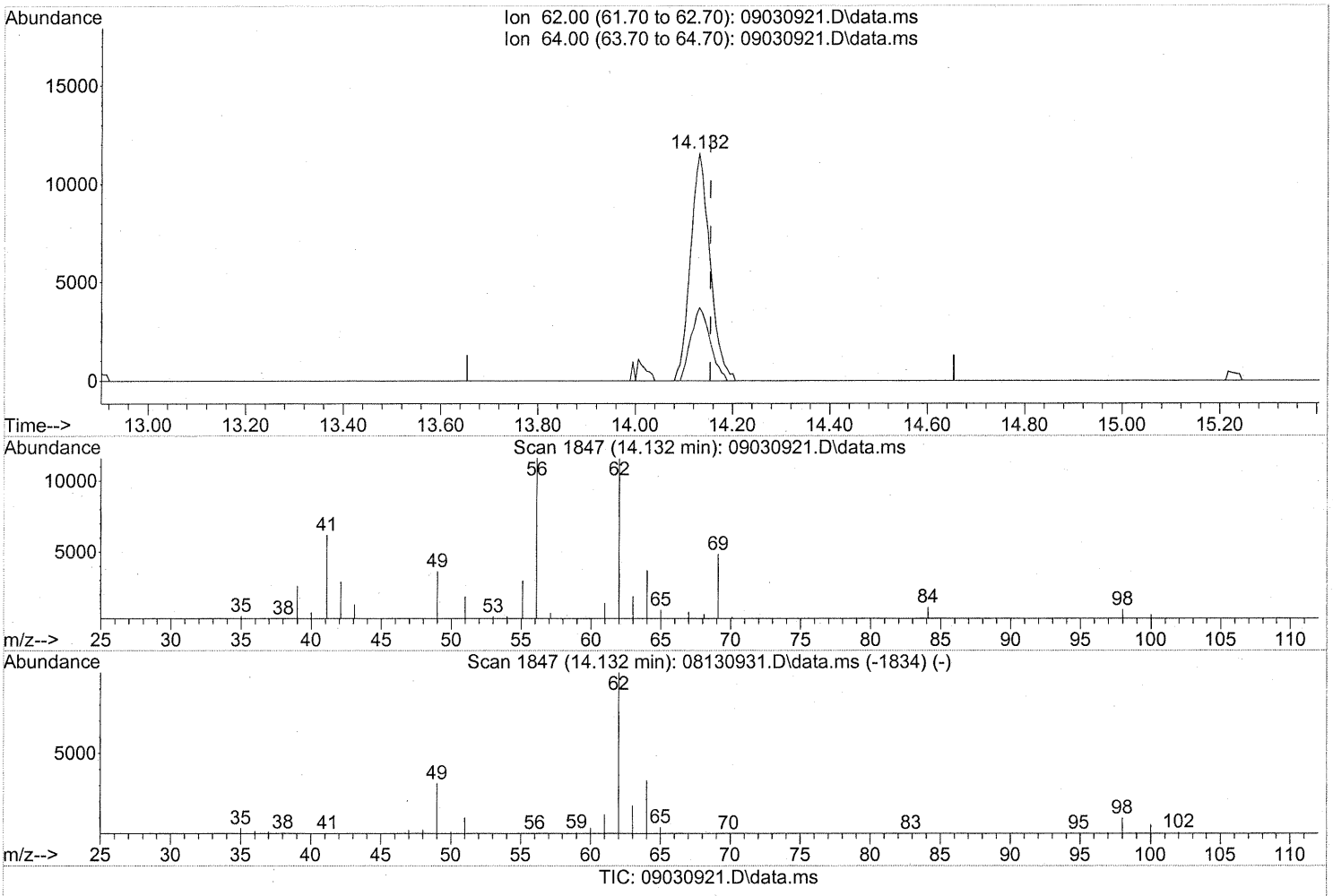
response 4436

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	67.76
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(36) 1,2-Dichloroethane (T)

14.132min (-0.023) 1.20ng

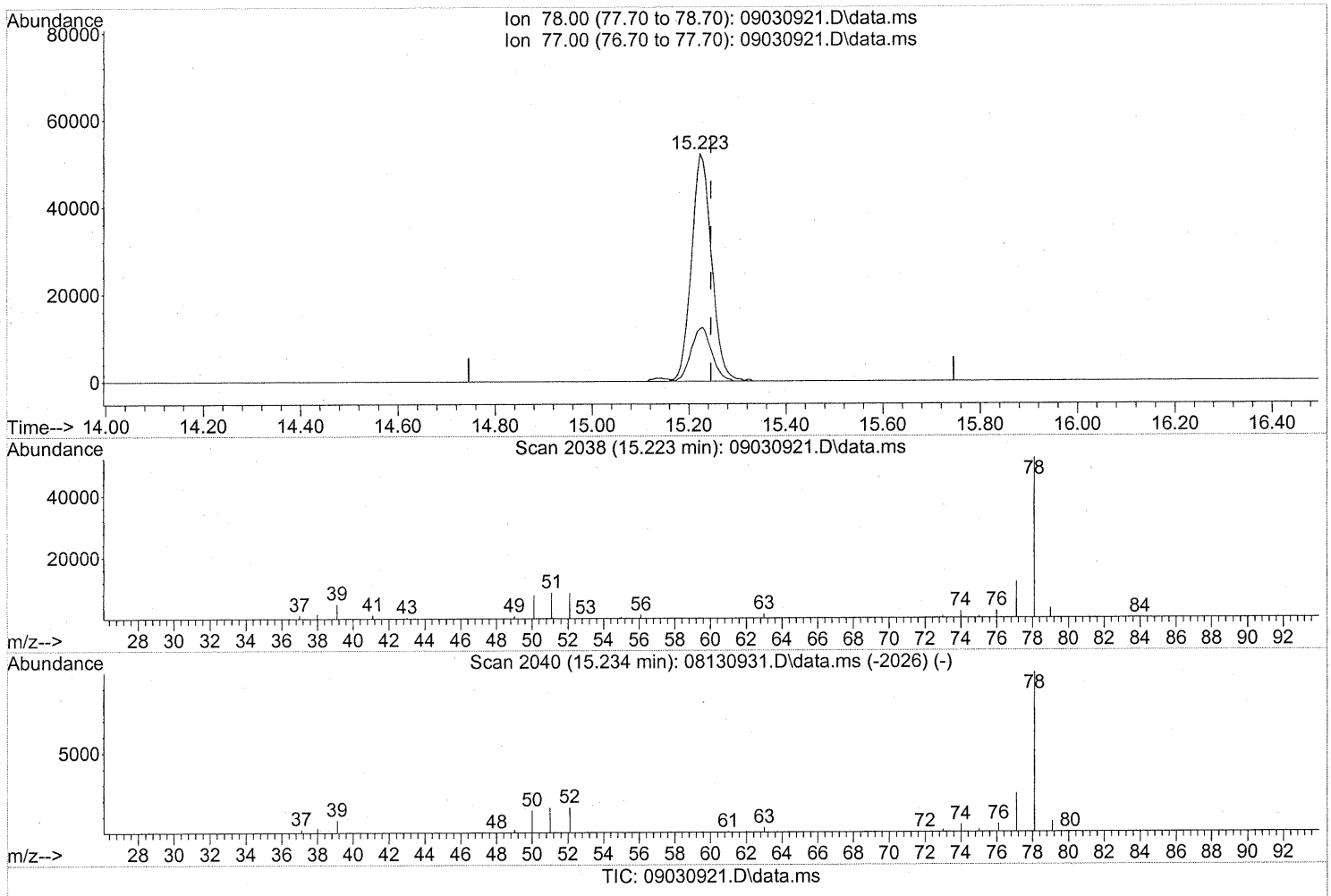
response 32144

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	31.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(41) Benzene (T)

15.223min (-0.023) 1.58ng

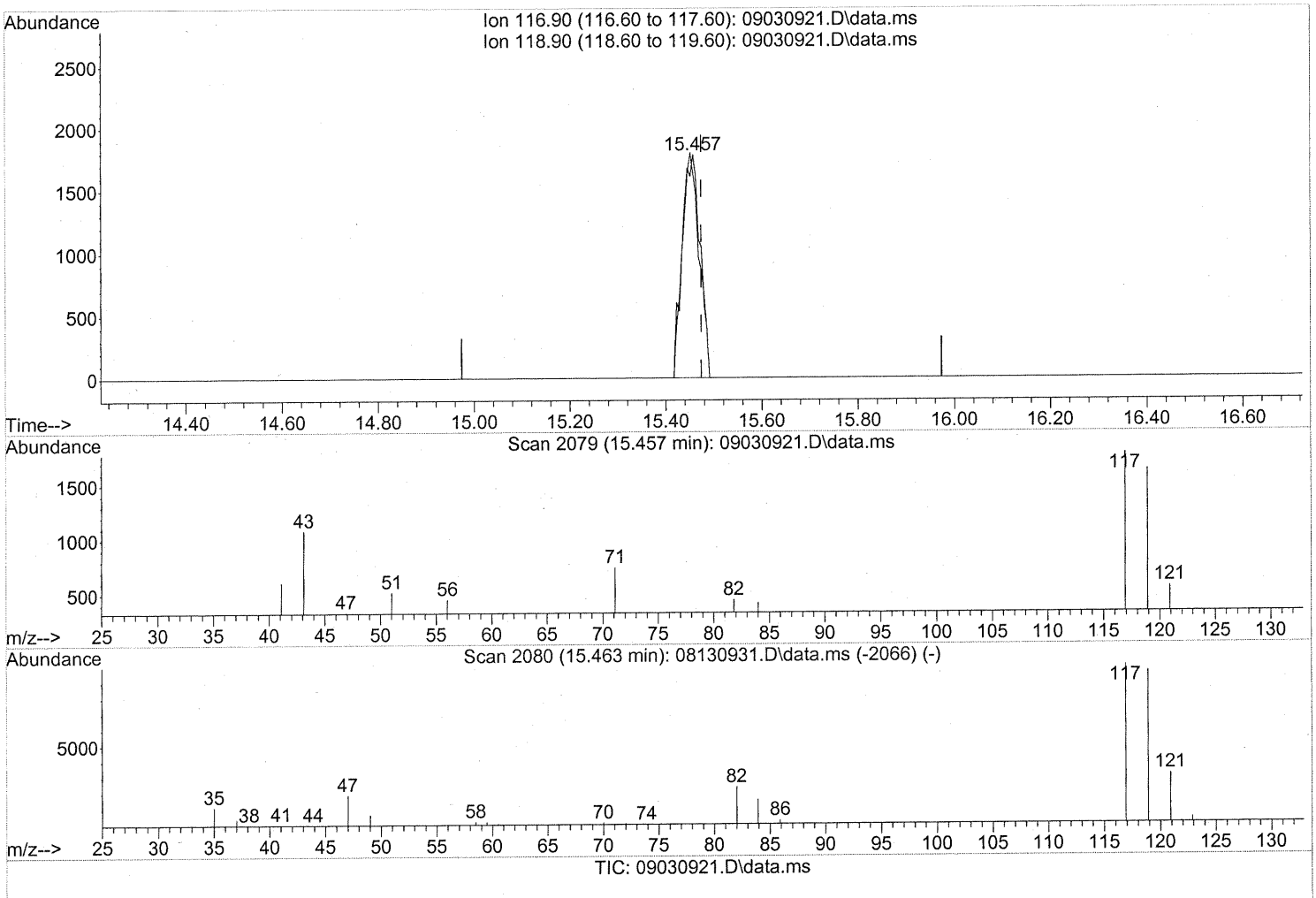
response 148934

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	24.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.17ng

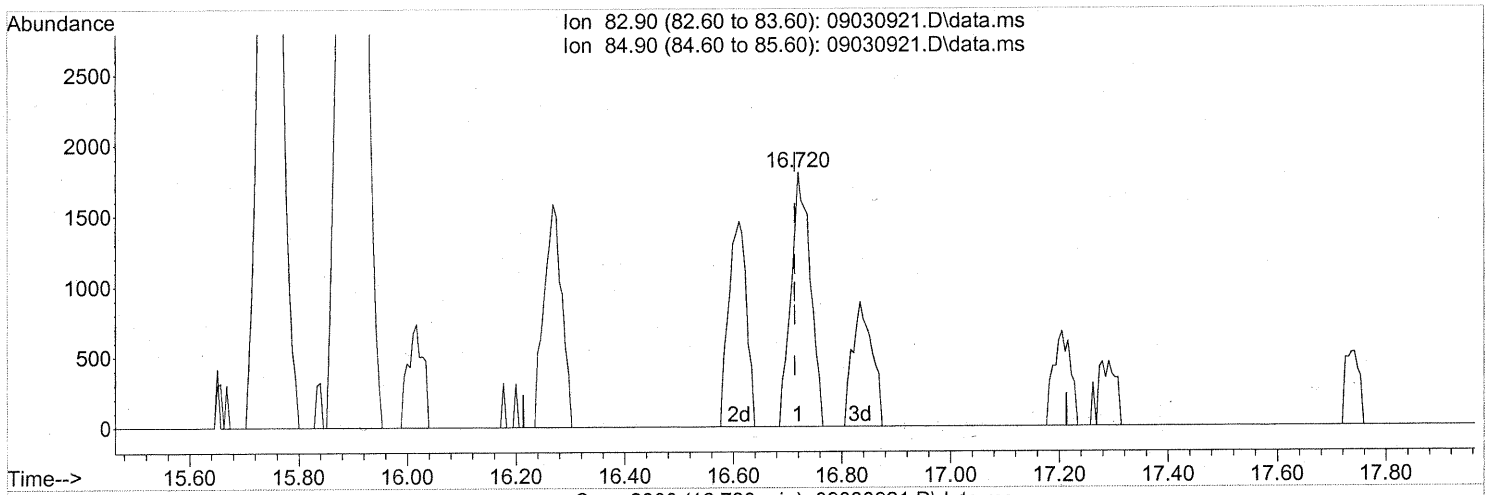
response 4586

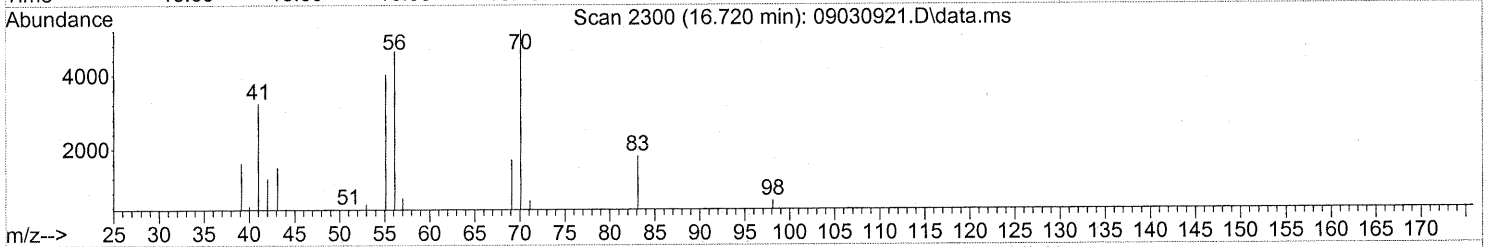
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	95.51
0.00	0.00	0.00
0.00	0.00	0.00

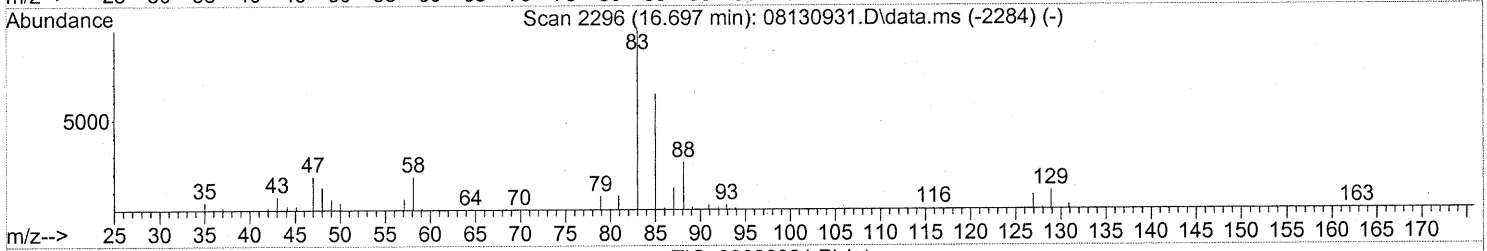
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(46) Bromodichloromethane (T)

16.720min (+0.006) 0.16ng

response 4505

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

FP 9/9/09

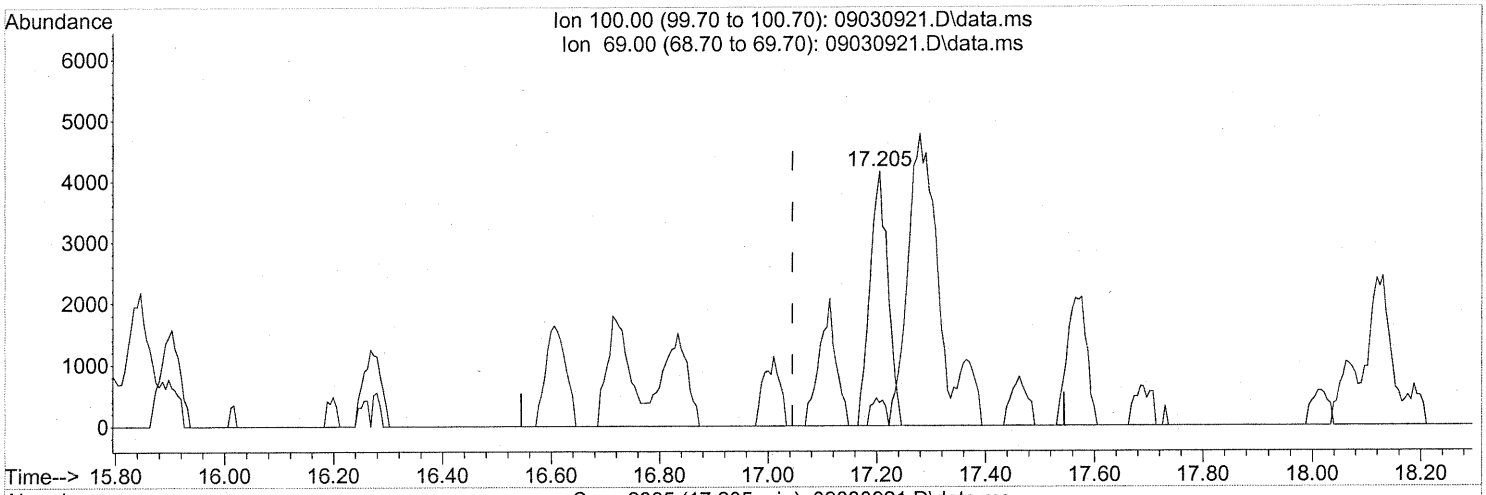
FP 9/9/09

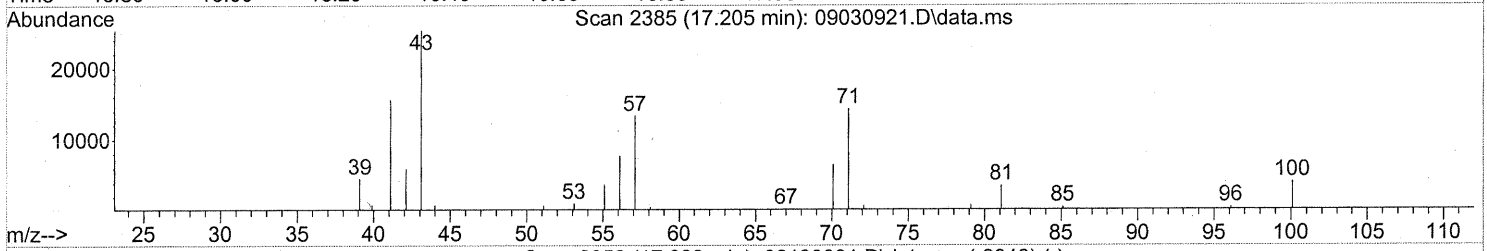
85

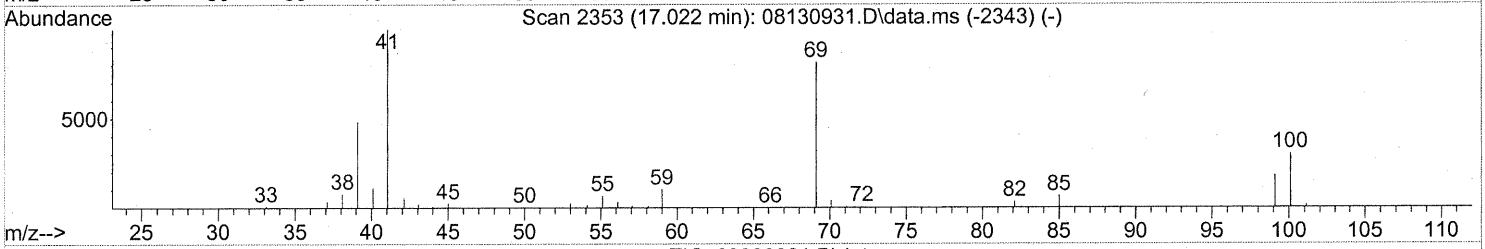
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(50) Methyl Methacrylate (T)

17.205min (+0.160) 1.01ng

response 9511

Ion	Exp%	Act%
100.00	100	100
69.00	261.10	8.03#
0.00	0.00	0.00
0.00	0.00	0.00

FP Em 9/8/09

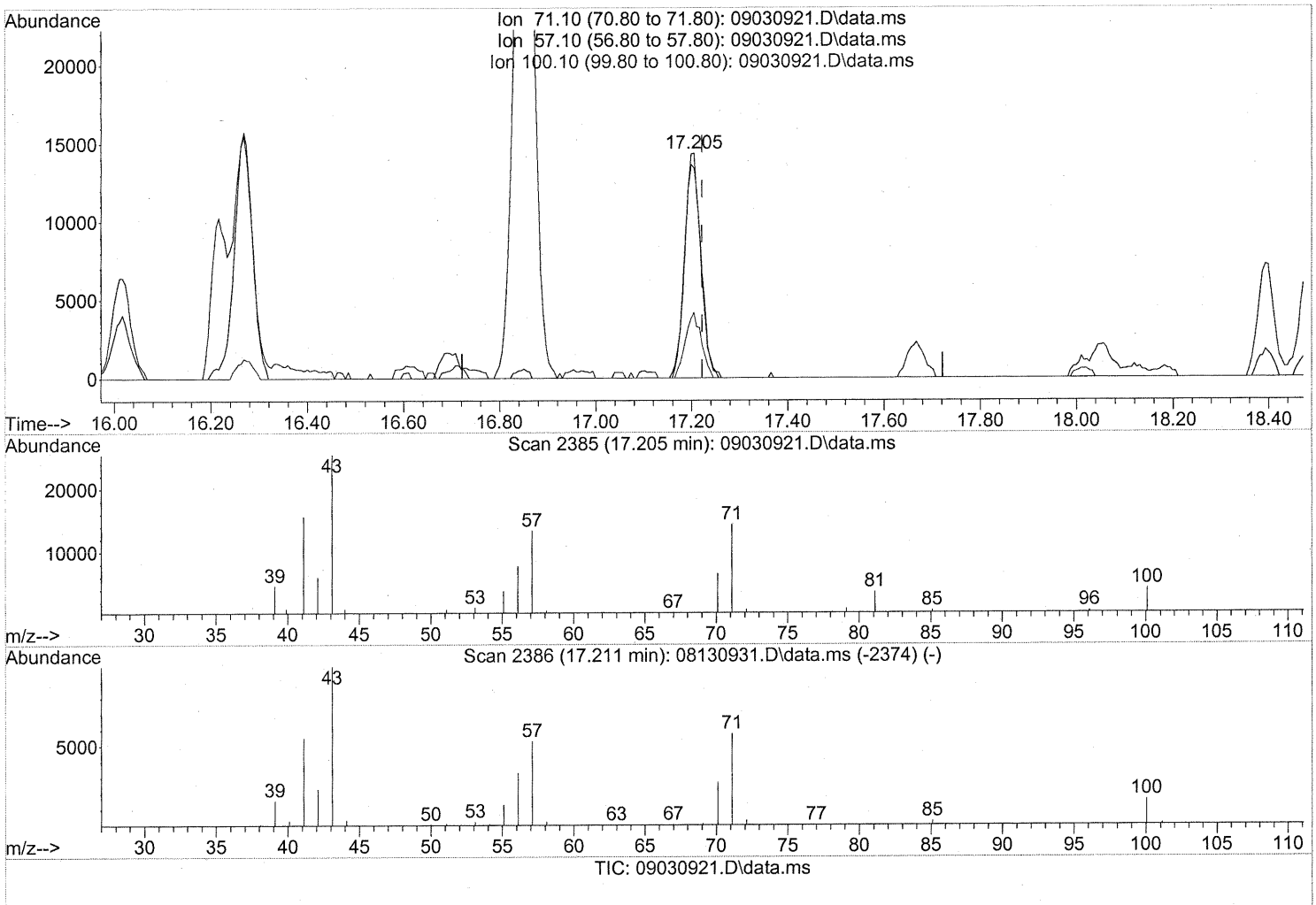
KR 9/9/09

86

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(51) n-Heptane (T)

17.205min (-0.017) 1.33ng

response 33462

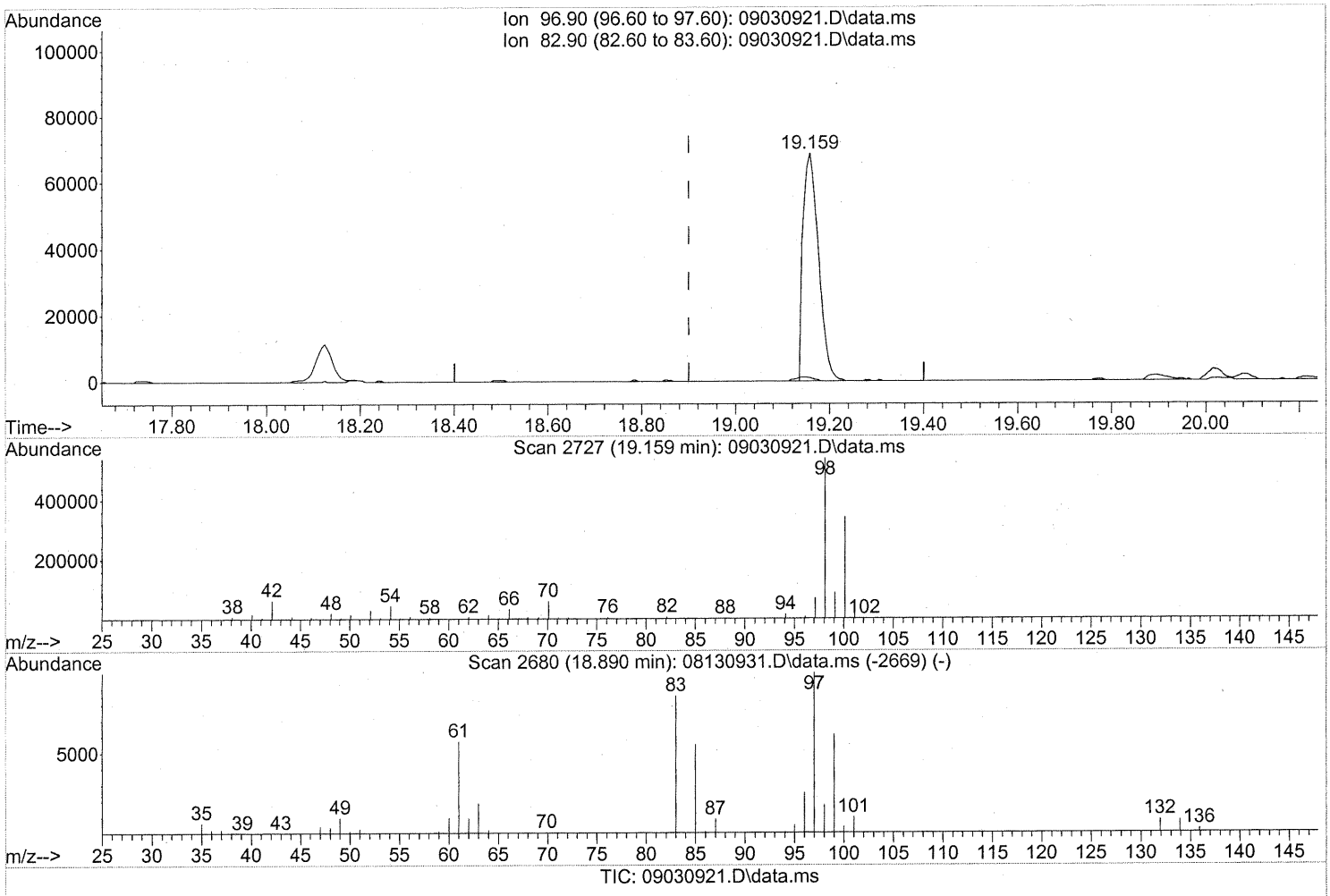
Ion	Exp%	Act%
71.10	100	100
57.10	86.80	97.62
100.10	30.70	28.42
0.00	0.00	0.00

87

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

19.159min (+0.257) 7.82ng

response 157295

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.72#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/9/09

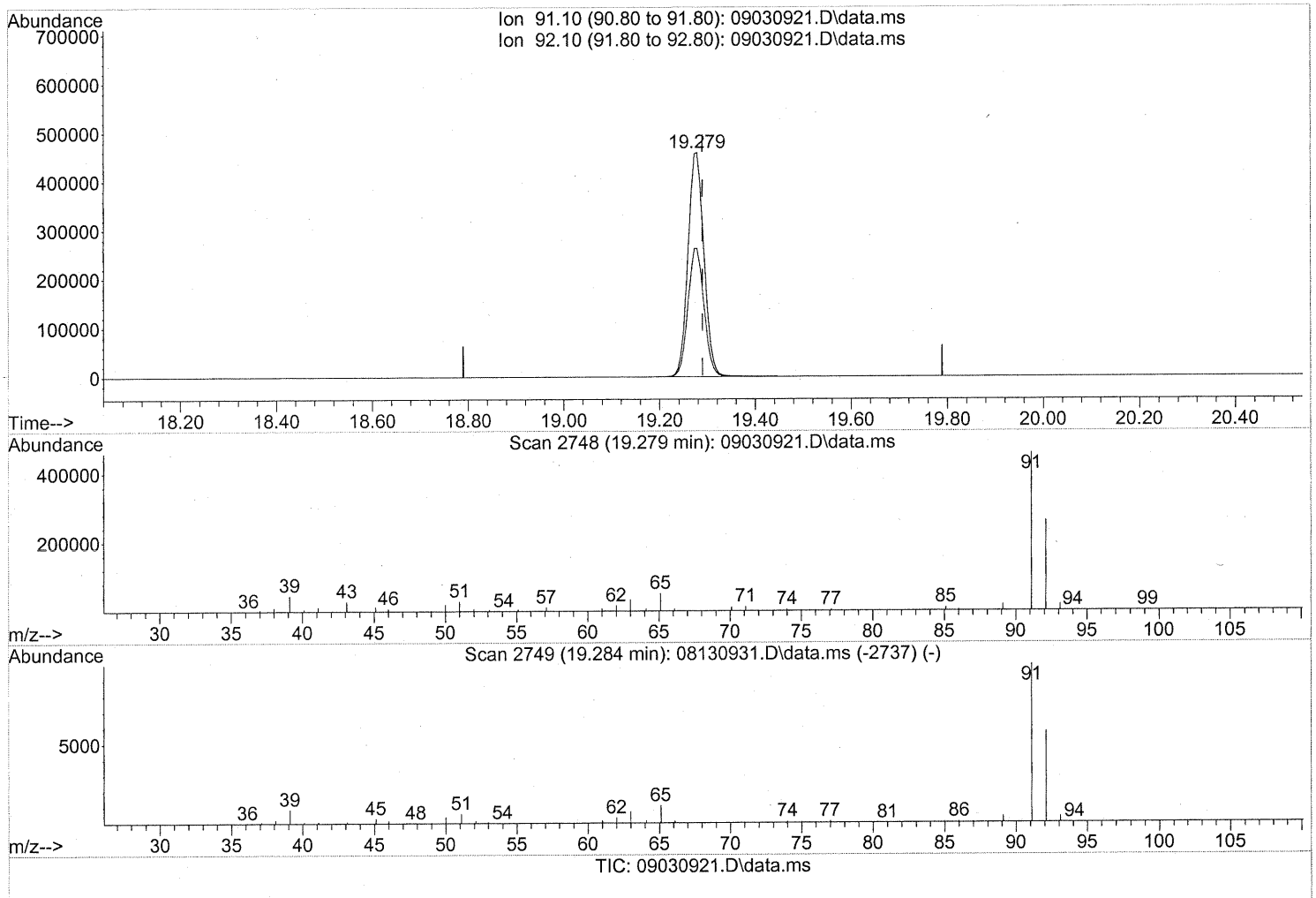
KP 9/9/09

88

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 10.66ng

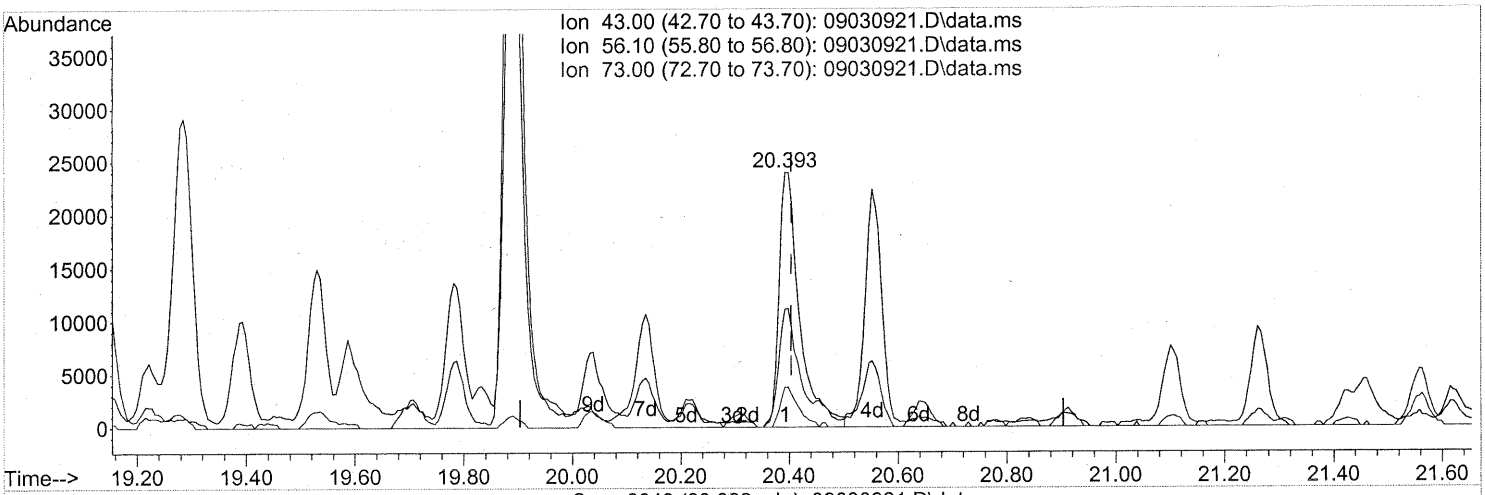
response 1052900

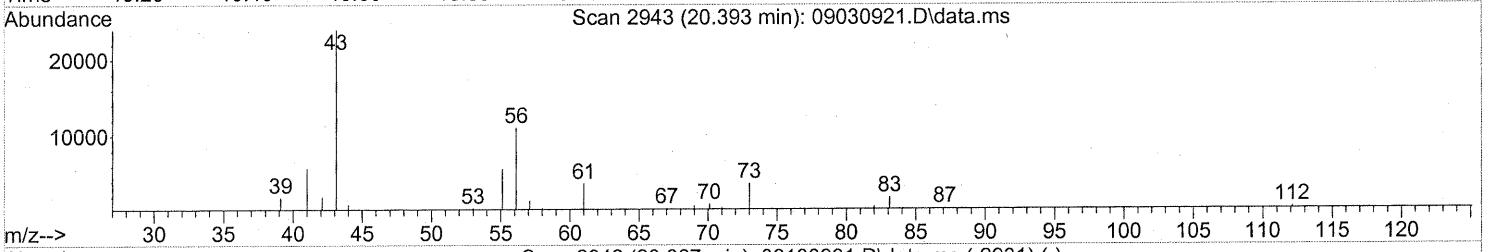
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.27
0.00	0.00	0.00
0.00	0.00	0.00

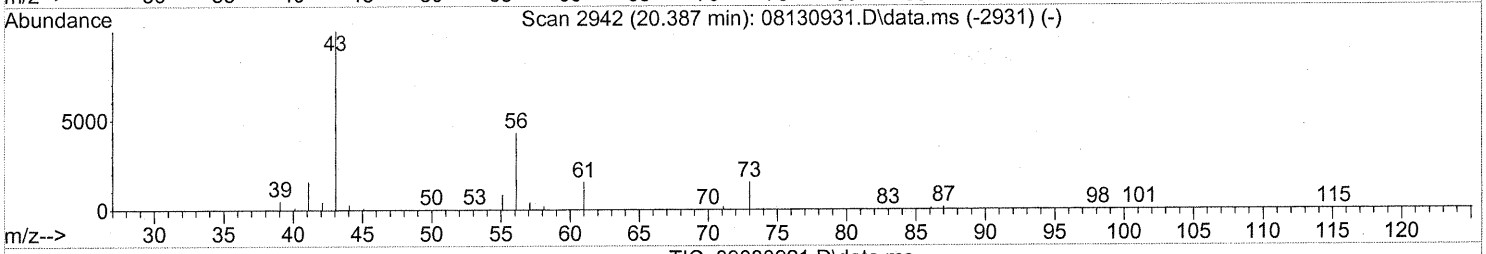
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(62) n-Butyl Acetate (T)

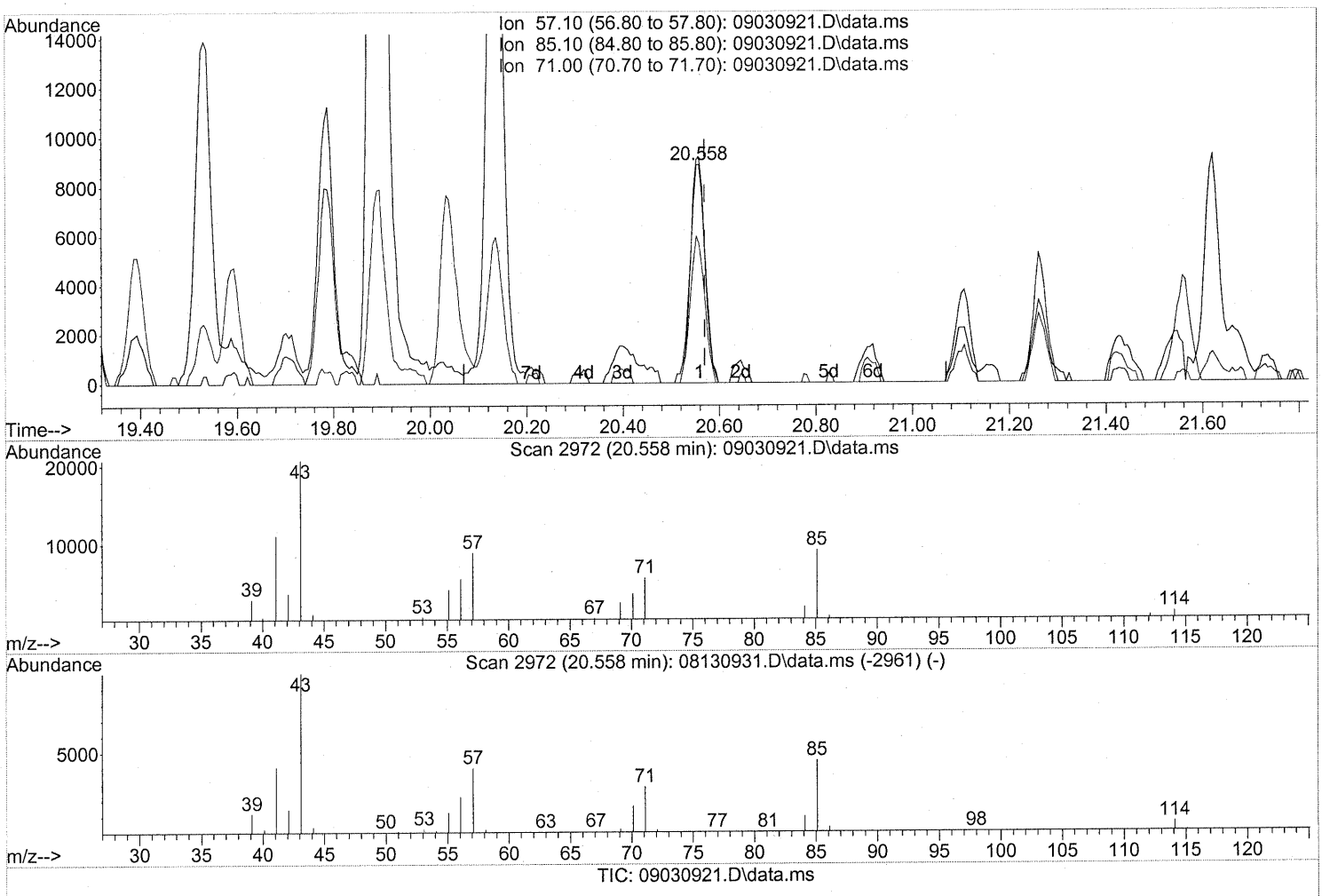
20.393min (-0.011) 1.12ng

response 62571

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	52.11
73.00	16.90	13.72
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 0.87ng

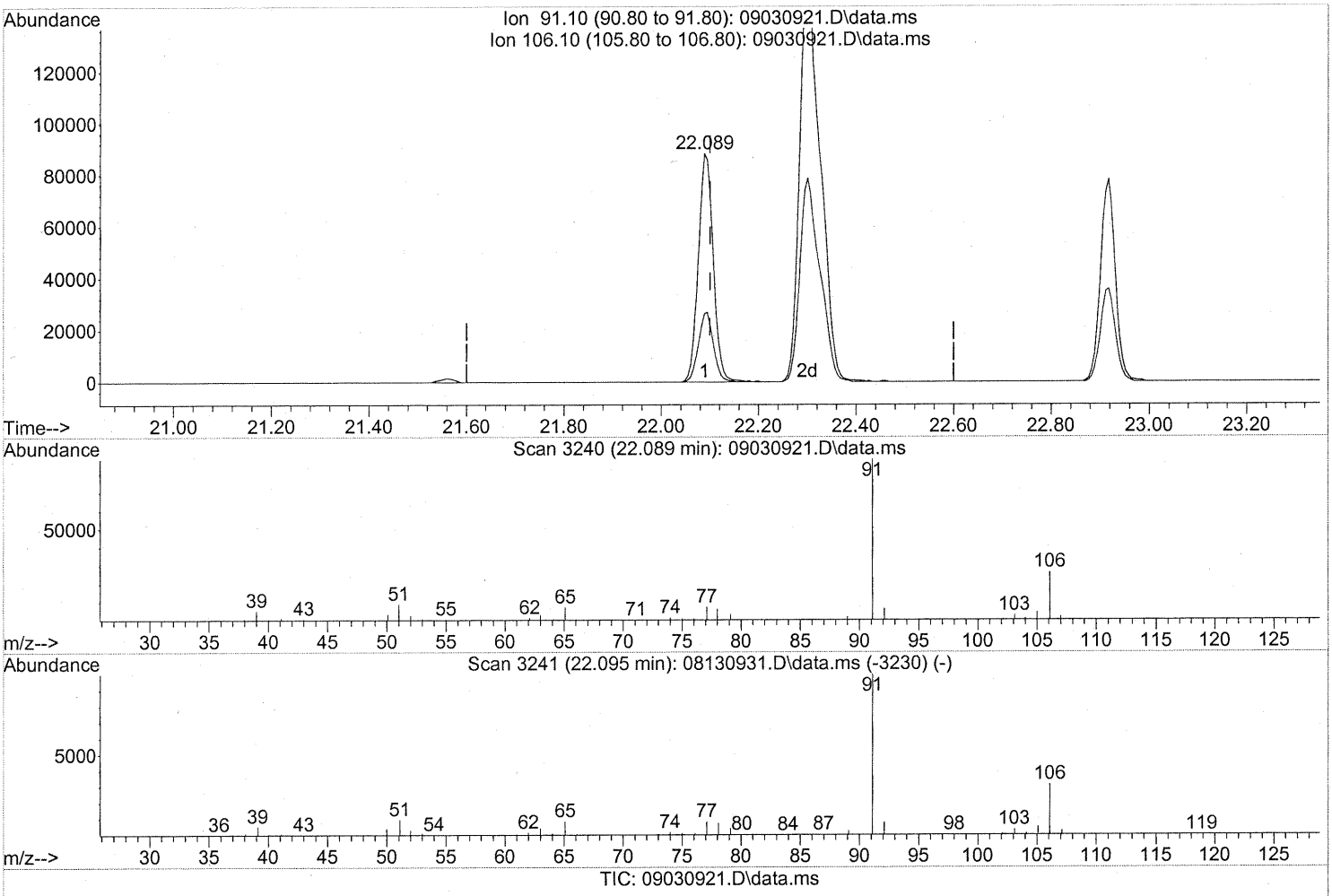
response 19047

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	100.03
71.00	75.10	64.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 1.76ng

response 187415

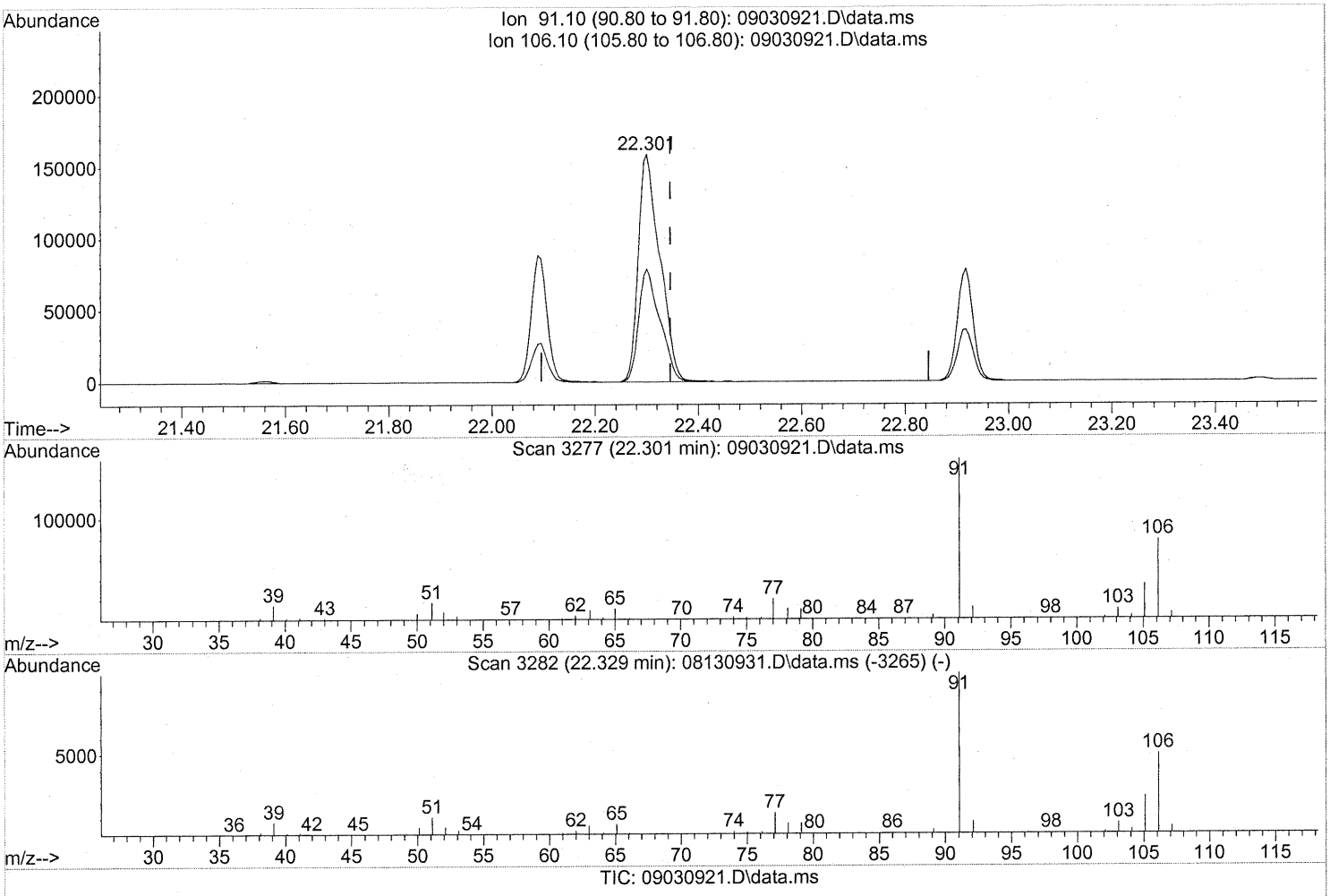
Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.38
0.00	0.00	0.00
0.00	0.00	0.00

92

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

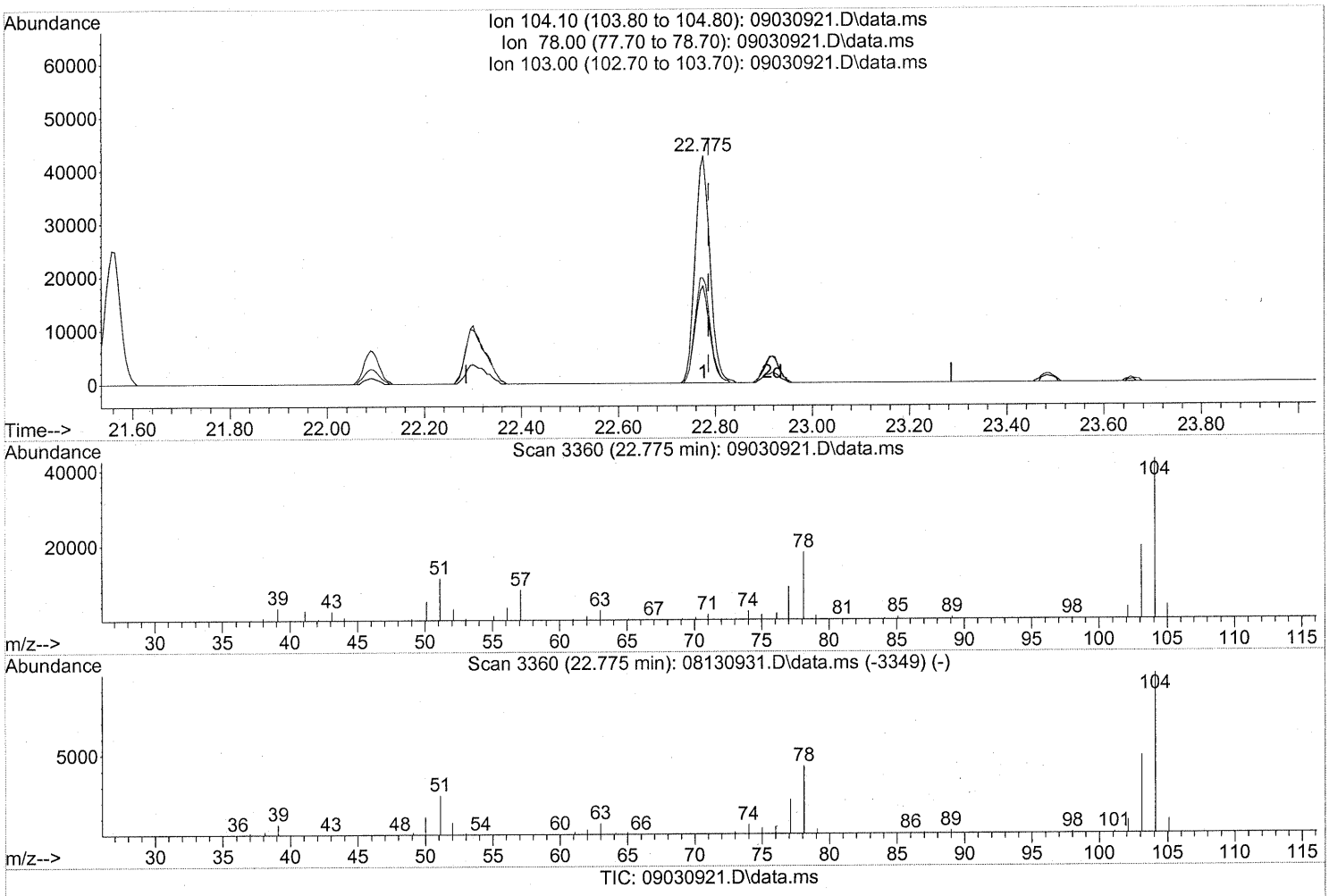
22.301min (-0.046) 5.45ng

response 460550

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(69) Styrene (T)

22.775min (-0.011) 1.45ng

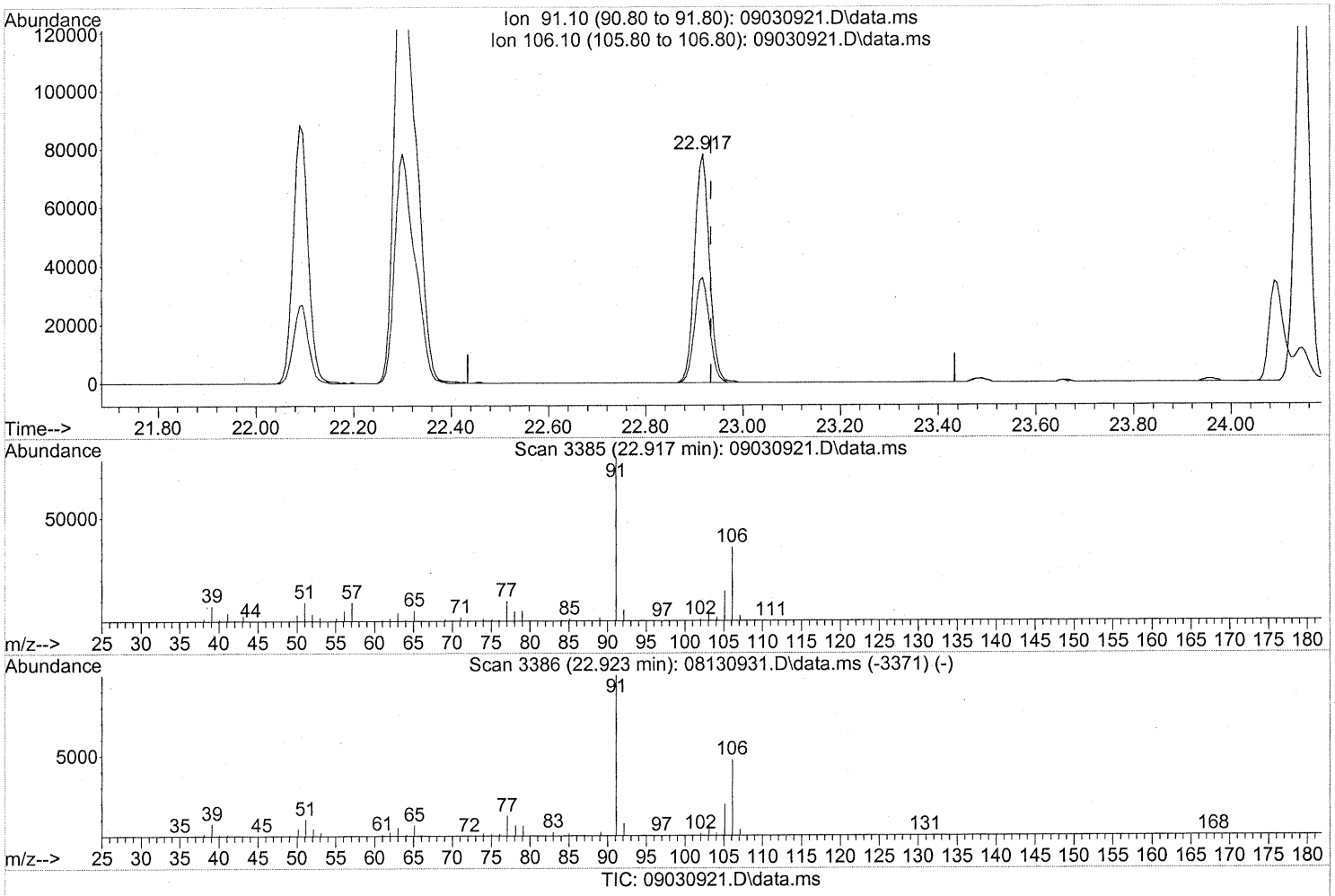
response 90655

Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.34
103.00	48.70	47.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 1.94ng

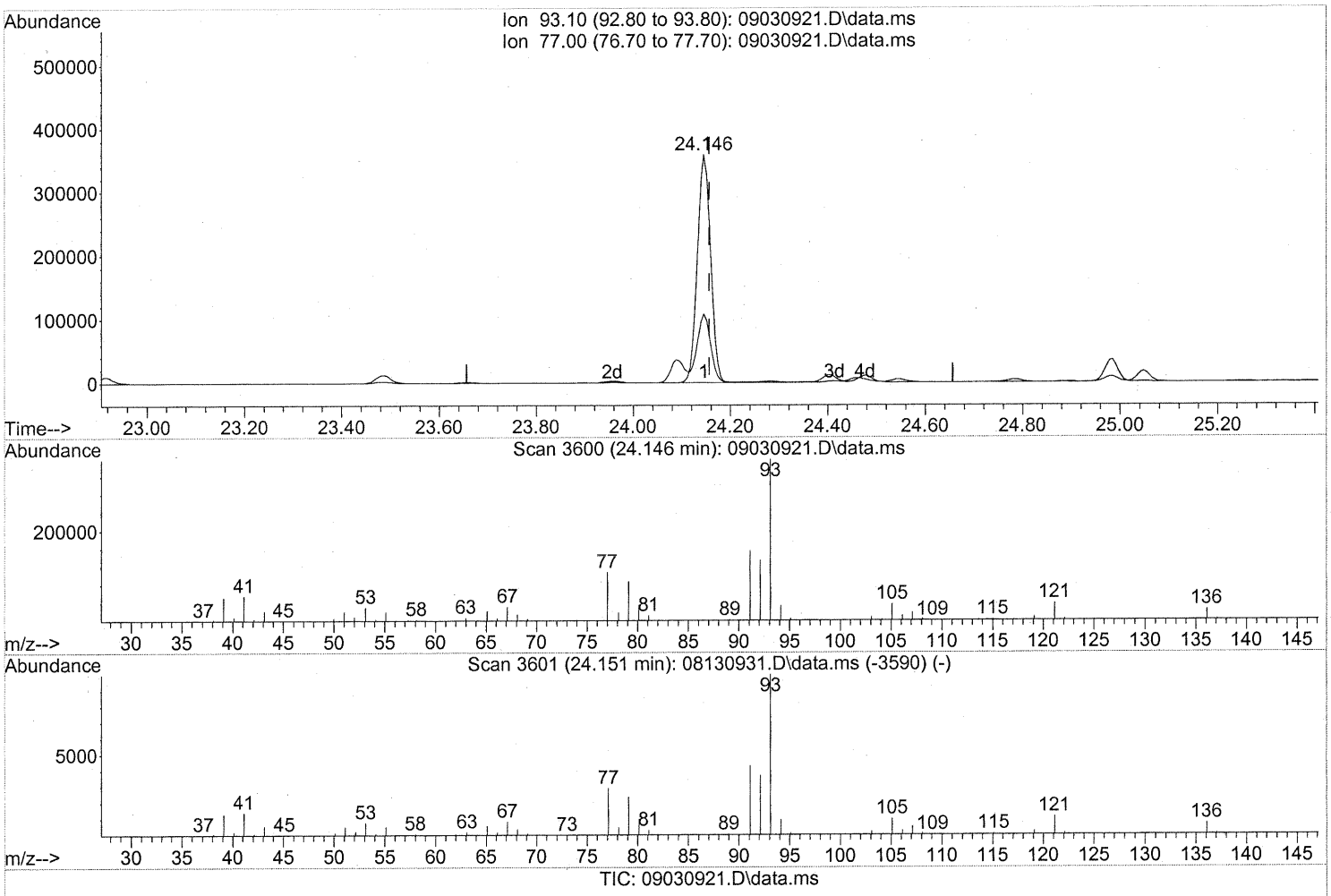
response 164858

Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 12.38ng

response 673190

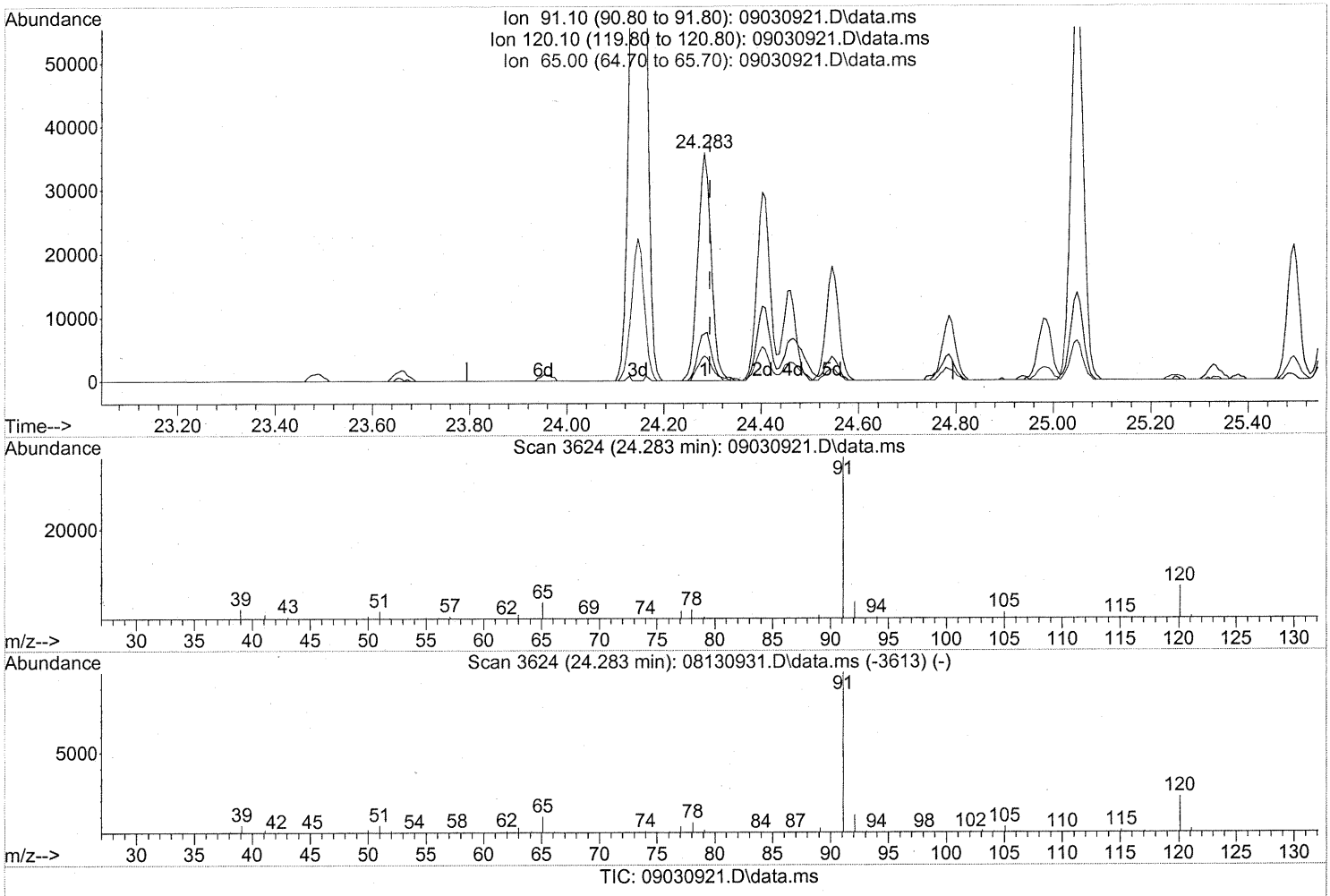
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.74
0.00	0.00	0.00
0.00	0.00	0.00

96

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 0.50ng

response 68129

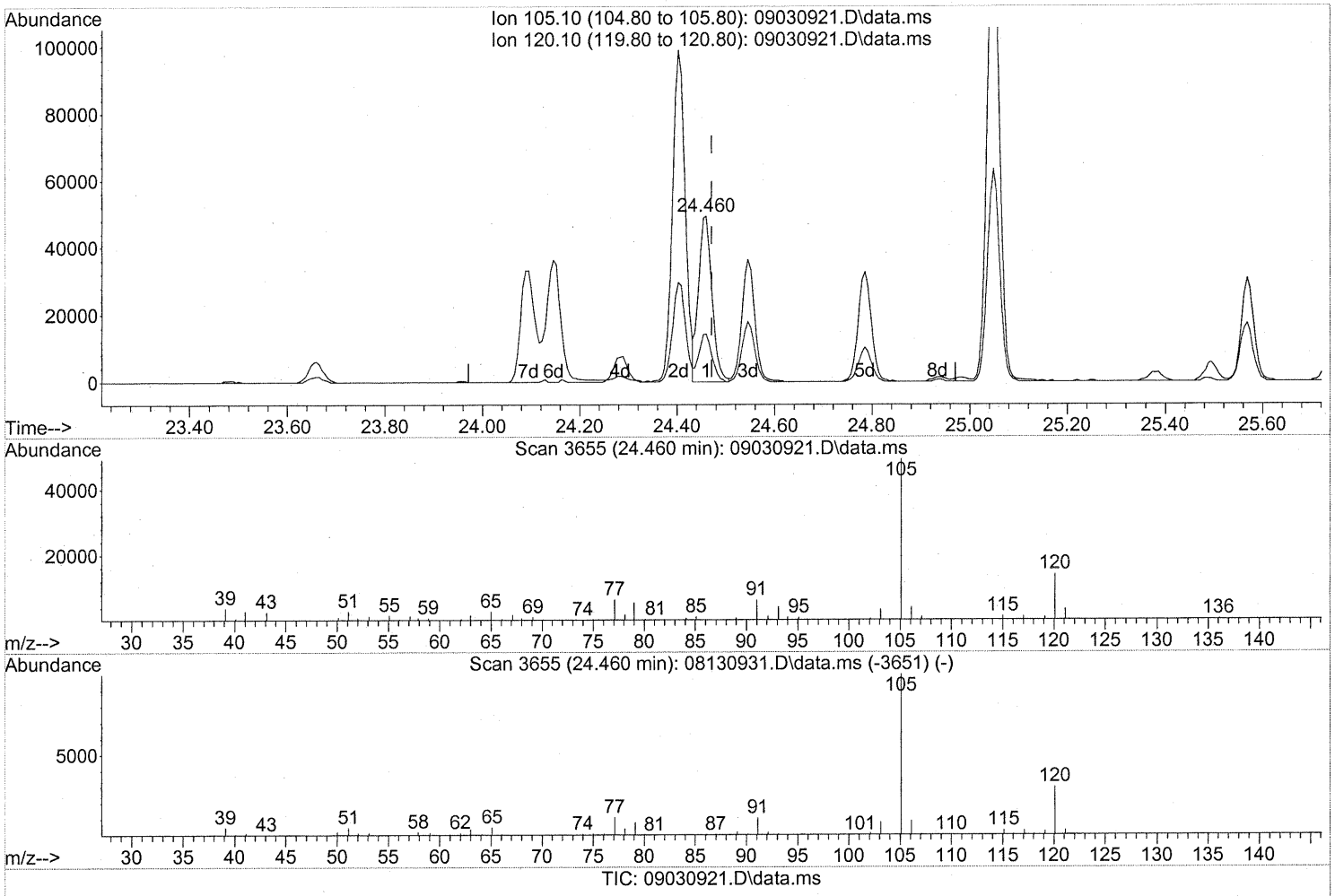
Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.99
65.00	10.20	11.72
0.00	0.00	0.00

97

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(78) 4-Ethyltoluene (T)

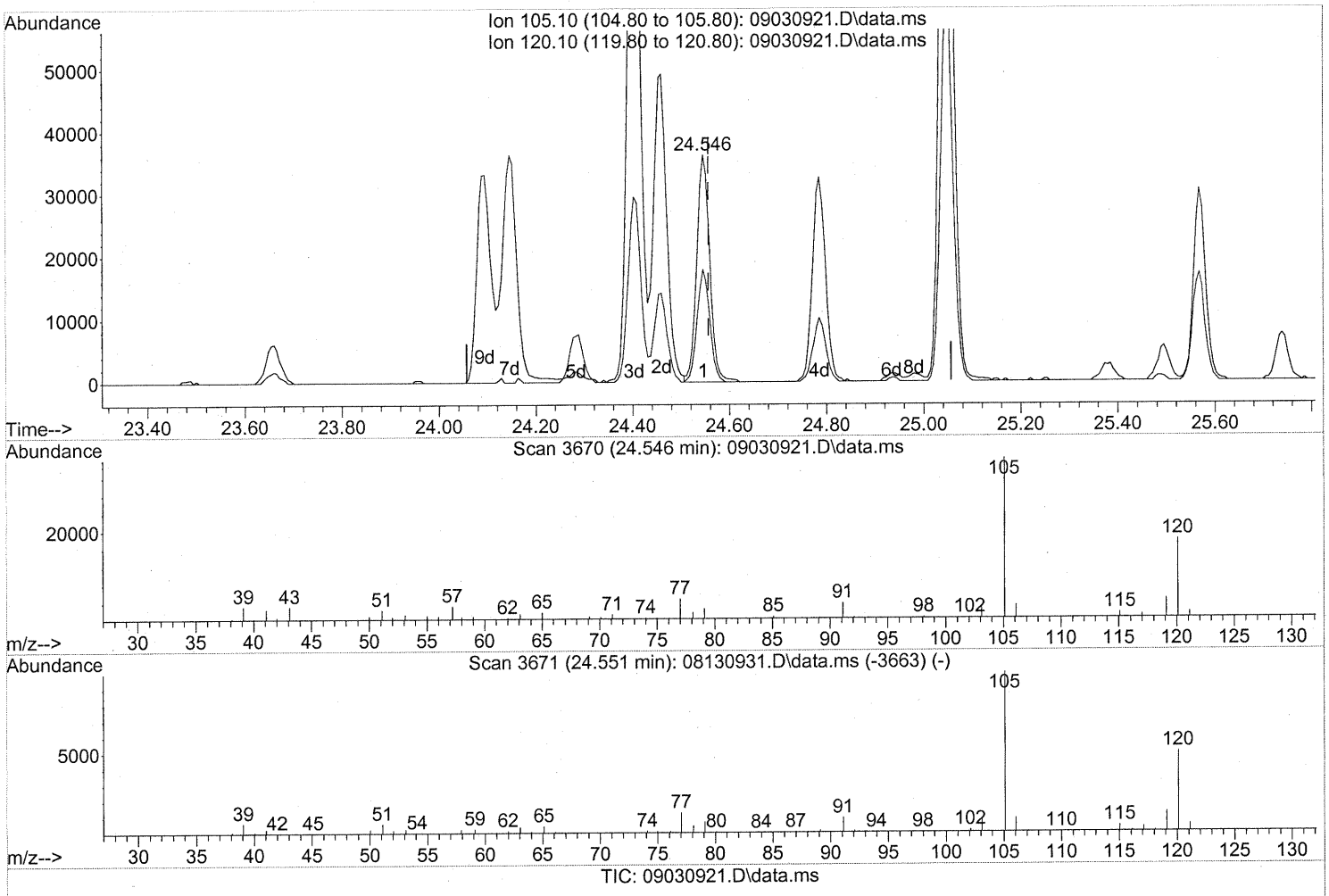
24.460min (-0.011) 0.90ng

response 93027

Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.53
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

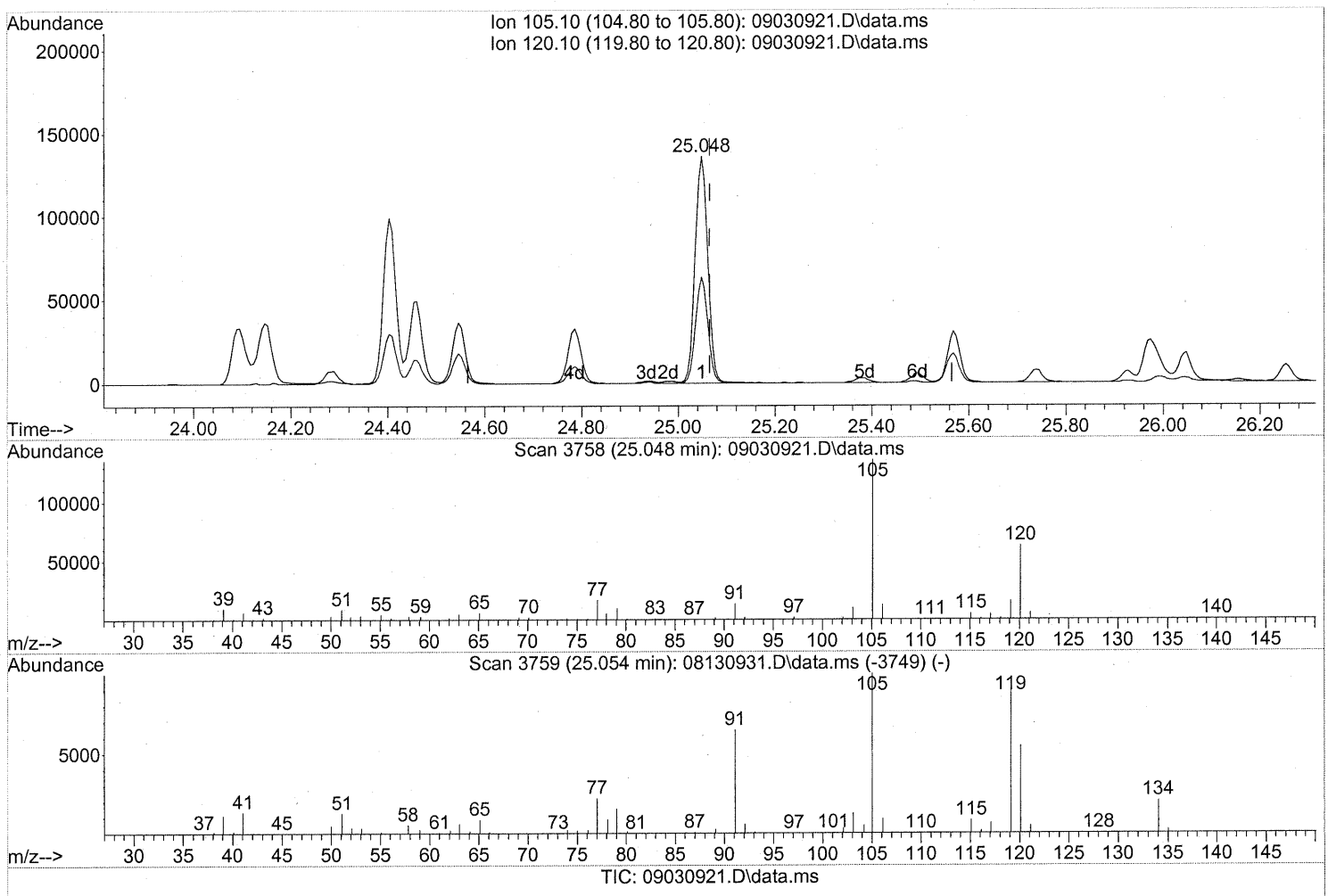
24.546min (-0.011) 0.78ng

response 66894

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	48.27
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

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

25.048min (-0.017) 2.69ng

response 245667

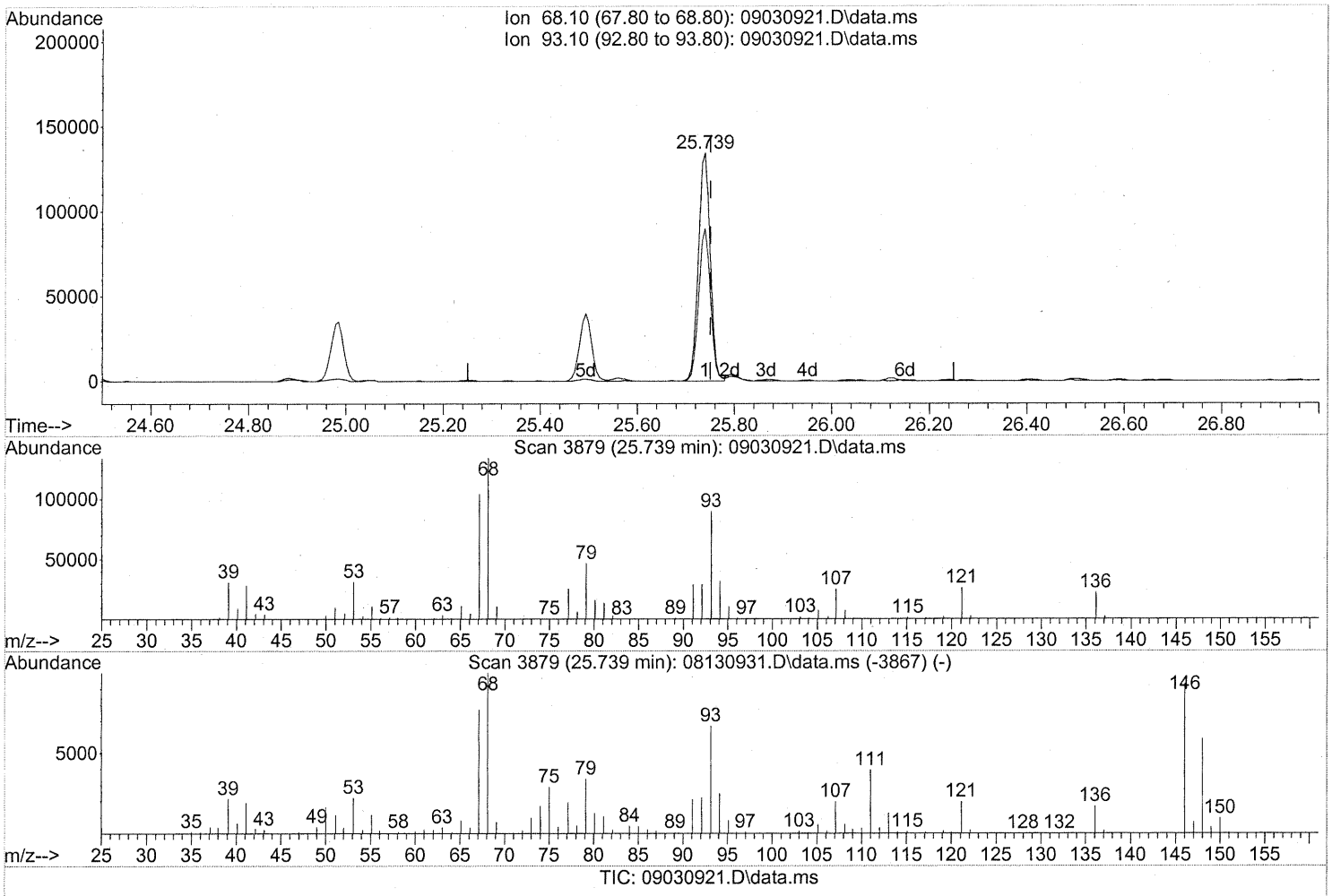
Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.23
0.00	0.00	0.00
0.00	0.00	0.00

100

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030921.D
Acq On : 3 Sep 2009 20:41
Operator : EM
Sample : P0902972-002 (1000ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 04 07:12:00 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: 09030921.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 6.05ng

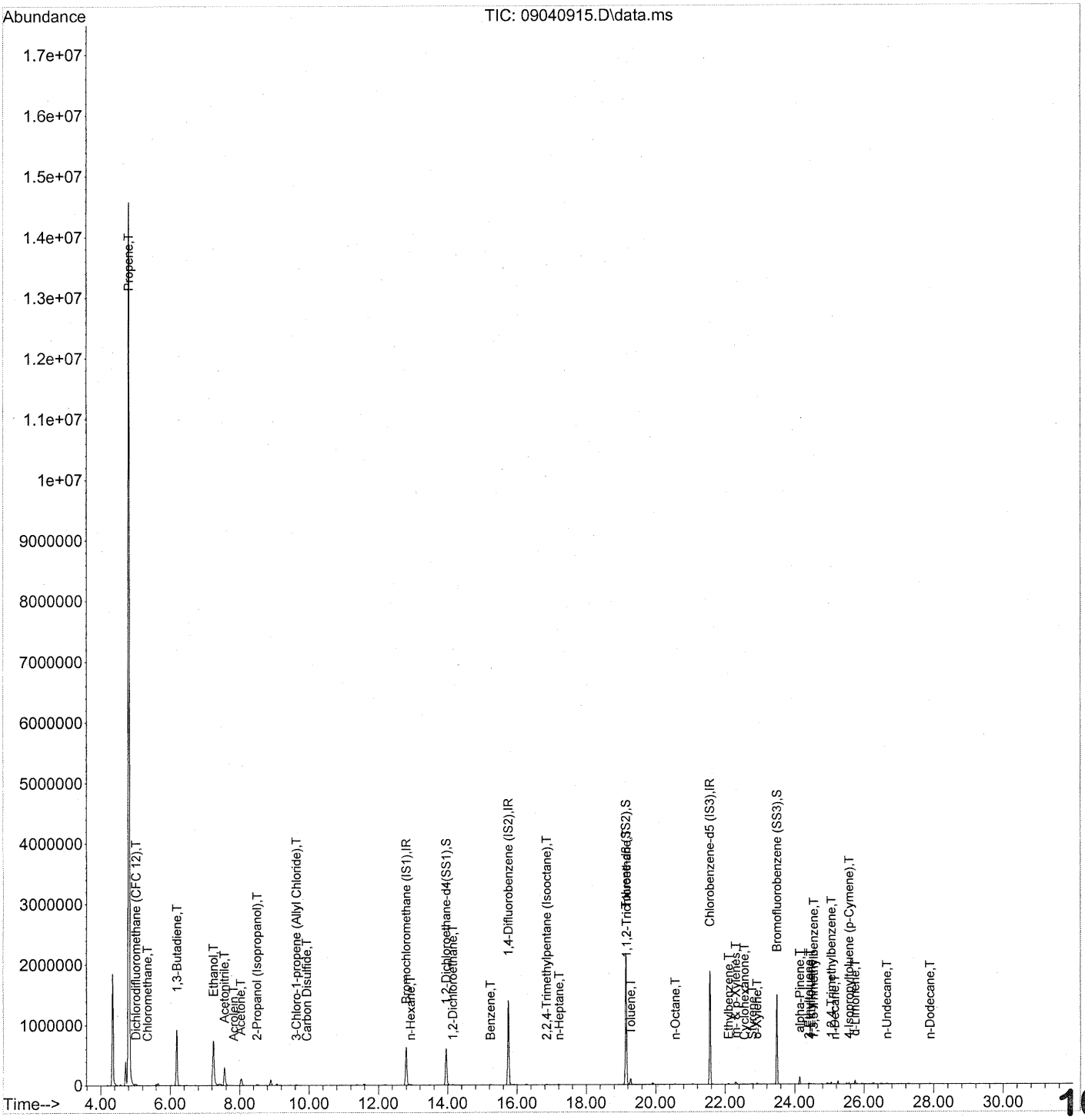
response 225698

Ion	Exp%	Act%
68.10	100	100
93.10	71.90	66.46
0.00	0.00	0.00
0.00	0.00	0.00

101

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 11:00:49 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\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 11:00:49 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	310273	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.74	114	1587899	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	795670	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	599284	27.316	ng		-0.03
Spiked Amount 25.000			Recovery =	109.28%			
57) Toluene-d8 (SS2)	19.14	98	1874162	24.777	ng		-0.02
Spiked Amount 25.000			Recovery =	99.12%			
73) Bromofluorobenzene (SS3)	23.49	174	500058	23.343	ng		0.00
Spiked Amount 25.000			Recovery =	93.36%			
Target Compounds							Qvalue
2) Propene	4.81	42	20978	0.771	ng	#	1
3) Dichlorodifluoromethan...	5.01	85	25145	0.647	ng		98
4) Chloromethane	5.35	50	2619	0.072	ng		77
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	6.20	54	2226	0.088	ng	#	1
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.24	45	1485609m	87.016	ng		
11) Acetonitrile	7.56	41	472369	11.337	ng		99
12) Acrolein	7.83	56	1203	0.108	ng	#	52
13) Acetone	8.03	58	45917	2.643	ng	#	63
14) Trichlorofluoromethane	8.28	101	1353	N.D.			
15) 2-Propanol (Isopropanol)	8.50	45	52803	1.110	ng		96
16) Acrylonitrile	8.90	53	1011	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.53	59	2330	N.D.			
19) Methylene Chloride	9.53	84	493	N.D.			
20) 3-Chloro-1-propene (Al...	9.63	41	3665	0.126	ng	#	34
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.93	76	4271	0.056	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	11.58	86	108	N.D.			
27) 2-Butanone (MEK)	11.96	72	490	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	6979	0.182	ng		7

EM 9/9/09

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Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 11:00:49 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	14.14	62	2266	0.092 ng	#	42
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	0.00	56	0	N.D.		
41) Benzene	15.23	78	13225	0.155 ng		94
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	568	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	10997	0.112 ng		88
50) Methyl Methacrylate	17.21	100	262	N.D.		
51) n-Heptane	17.21	71	2479	0.109 ng	#	88
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	143574	7.870 ng	#	8
58) Toluene	19.28	91	89968	0.981 ng		98
59) 2-Hexanone	19.59	43	1477	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.49	43	1219	N.D.		
63) n-Octane	20.56	57	1415	0.069 ng	#	75
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.10	91	15075	0.152 ng		93
67) m- & p-Xylenes	22.31	91	36928	0.471 ng		100
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	6374	0.110 ng		92
70) o-Xylene	22.92	91	13547	0.172 ng		98
71) n-Nonane	23.17	43	1793	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.67	105	713	N.D.		
75) alpha-Pinene	24.15	93	54311	1.075 ng		87
76) n-Propylbenzene	24.29	91	5296	N.D.		
77) 3-Ethyltoluene	24.41	105	14467	0.151 ng		99
78) 4-Ethyltoluene	24.47	105	7886	0.082 ng		90
79) 1,3,5-Trimethylbenzene	24.55	105	5755	0.072 ng		9[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 11:00:49 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

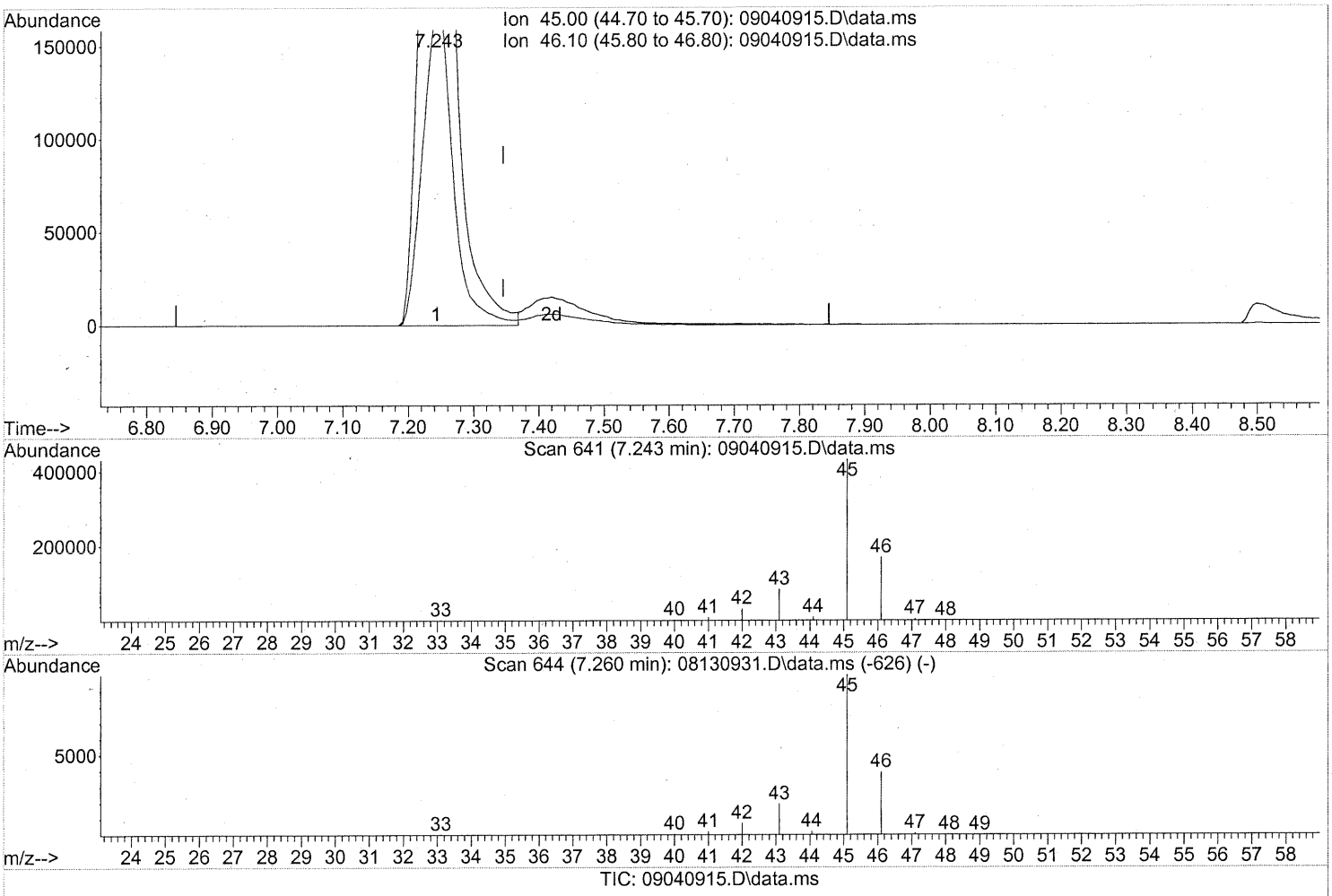
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.79	105	4735	N.D.		
82) 1,2,4-Trimethylbenzene	25.05	105	19147	0.226 ng		87
83) n-Decane	25.15	57	2585	0.052 ng		79
84) Benzyl Chloride	25.05	91	1865	N.D.		
85) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
86) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
87) sec-Butylbenzene	25.50	105	536	N.D.		
88) 4-Isopropyltoluene (p-...	25.56	119	8673	0.081 ng		93
89) 1,2,3-Trimethylbenzene	25.57	105	4049	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	25.74	68	16273	0.470 ng		92
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.65	57	4280	0.084 ng		91
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.96	128	2290	N.D.		
96) n-Dodecane	27.89	57	2958	0.052 ng		79
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.55	55	1490	0.052 ng	#	57
99) tert-Butylbenzene	25.05	119	2236	N.D.		
100) n-Butylbenzene	26.06	91	1481	N.D.		

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 08 07:36:46 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: 09040915.D\data.ms

(10) Ethanol (T)

7.243min (-0.103) 81.26ng

response 1387343

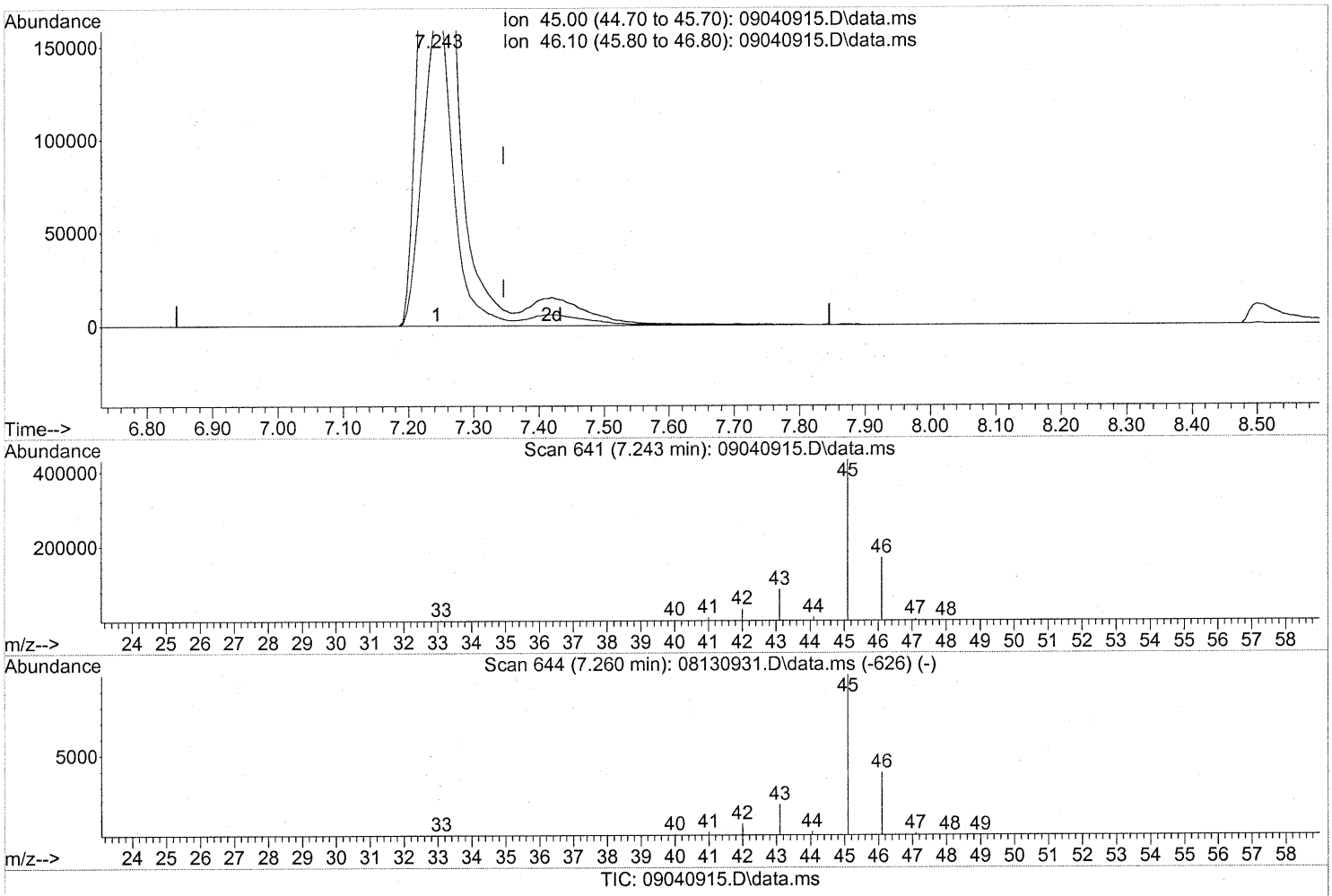
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.13
0.00	0.00	0.00
0.00	0.00	0.00

PT

106

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 08 07:36:46 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: 09040915.D\data.ms

(10) Ethanol (T)

7.243min (-0.103) 87.02ng m

response 1485609

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

PT → LC
9/9/09

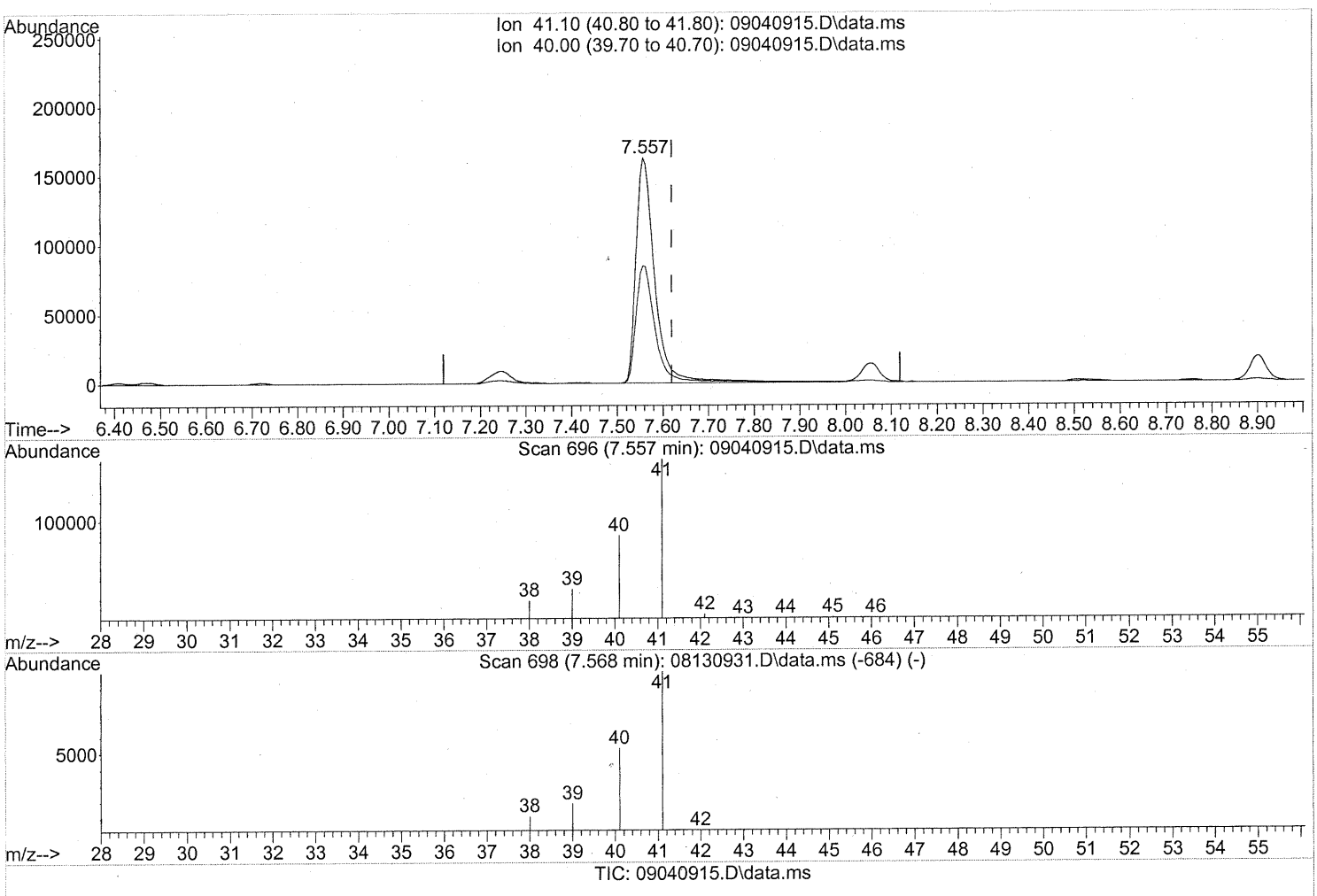
KP 9/9/09

107

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040915.D
Acq On : 4 Sep 2009 18:07
Operator : EM
Sample : P0902972-002 dil (100ml)
Misc : Environmental H&E 103521
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 11:00:49 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



TIC: 09040915.D\data.ms

(11) Acetonitrile (T)

7.557min (-0.063) 11.34ng

response 472369

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	52.73
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103522**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-003

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: AC00944

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.69	ND	0.40	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**2.3**	0.69	**0.46**	0.14	
74-87-3	**Chloromethane**	**0.47**	0.14	**0.23**	0.066	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.69	ND	0.098	
75-01-4	Vinyl Chloride	ND	0.14	ND	0.054	
106-99-0	1,3-Butadiene	ND	0.14	ND	0.062	
74-83-9	Bromomethane	ND	0.14	ND	0.035	
75-00-3	Chloroethane	ND	0.14	ND	0.052	
64-17-5	**Ethanol**	**17**	6.9	**9.0**	3.6	
75-05-8	**Acetonitrile**	**2.9**	0.69	**1.8**	0.41	
107-02-8	**Acrolein**	**0.81**	0.69	**0.36**	0.30	
67-64-1	**Acetone**	**9.7**	6.9	**4.1**	2.9	
75-69-4	**Trichlorofluoromethane**	**1.1**	0.14	**0.20**	0.024	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.69	ND	0.28	
107-13-1	Acrylonitrile	ND	0.69	ND	0.32	
75-35-4	1,1-Dichloroethene	ND	0.14	ND	0.035	
75-09-2	Methylene Chloride	ND	0.69	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.14	ND	0.044	
76-13-1	**Trichlorotrifluoroethane**	**0.49**	0.14	**0.064**	0.018	
75-15-0	Carbon Disulfide	ND	0.69	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.14	ND	0.035	
75-34-3	1,1-Dichloroethane	ND	0.14	ND	0.034	
1634-04-4	Methyl tert-Butyl Ether	ND	0.14	ND	0.038	
108-05-4	Vinyl Acetate	ND	6.9	ND	1.9	
78-93-3	**2-Butanone (MEK)**	**0.89**	0.69	**0.30**	0.23	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103522** CAS Project ID: P0902972
Client Project ID: **16512** CAS Sample ID: P0902972-003

Test Code: EPA TO-15 Date Collected: 8/25/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 8/26/09
Analyst: Elsa Moctezuma Date Analyzed: 9/3/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00944

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.14	ND	0.035	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.38	
110-54-3	n-Hexane	ND	0.69	ND	0.19	
67-66-3	Chloroform	ND	0.14	ND	0.028	
109-99-9	Tetrahydrofuran (THF)	ND	0.69	ND	0.23	
107-06-2	1,2-Dichloroethane	ND	0.14	ND	0.034	
71-55-6	1,1,1-Trichloroethane	ND	0.14	ND	0.025	
71-43-2	**Benzene**	**0.22**	0.14	**0.067**	0.043	
56-23-5	**Carbon Tetrachloride**	**0.44**	0.14	**0.070**	0.022	
110-82-7	Cyclohexane	ND	0.69	ND	0.20	
78-87-5	1,2-Dichloropropane	ND	0.14	ND	0.030	
75-27-4	Bromodichloromethane	ND	0.14	ND	0.020	
79-01-6	Trichloroethene	ND	0.14	ND	0.026	
123-91-1	1,4-Dioxane	ND	0.69	ND	0.19	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.33	
142-82-5	n-Heptane	ND	0.69	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.69	ND	0.15	
108-10-1	4-Methyl-2-pentanone	ND	0.69	ND	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	0.69	ND	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.14	ND	0.025	
108-88-3	Toluene	ND	0.69	ND	0.18	
591-78-6	2-Hexanone	ND	0.69	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.14	ND	0.016	
106-93-4	1,2-Dibromoethane	ND	0.14	ND	0.018	
123-86-4	**n-Butyl Acetate**	**0.77**	0.69	**0.16**	0.14	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103522**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-003

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: AC00944

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**0.72**	0.69	**0.15**	0.15	
127-18-4	Tetrachloroethene	ND	0.14	ND	0.020	
108-90-7	Chlorobenzene	ND	0.14	ND	0.030	
100-41-4	Ethylbenzene	ND	0.69	ND	0.16	
179601-23-1	m,p-Xylenes	ND	0.69	ND	0.16	
75-25-2	Bromoform	ND	0.69	ND	0.066	
100-42-5	Styrene	ND	0.69	ND	0.16	
95-47-6	o-Xylene	ND	0.69	ND	0.16	
111-84-2	n-Nonane	ND	0.69	ND	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.14	ND	0.020	
98-82-8	Cumene	ND	0.69	ND	0.14	
80-56-8	**alpha-Pinene**	**1.2**	0.69	**0.22**	0.12	
103-65-1	n-Propylbenzene	ND	0.69	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.69	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.69	ND	0.14	
95-63-6	1,2,4-Trimethylbenzene	ND	0.69	ND	0.14	
100-44-7	Benzyl Chloride	ND	0.14	ND	0.026	
541-73-1	1,3-Dichlorobenzene	ND	0.14	ND	0.023	
106-46-7	1,4-Dichlorobenzene	ND	0.14	ND	0.023	
95-50-1	1,2-Dichlorobenzene	ND	0.14	ND	0.023	
5989-27-5	d-Limonene	ND	0.69	ND	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.69	ND	0.071	
120-82-1	1,2,4-Trichlorobenzene	ND	0.69	ND	0.092	
91-20-3	Naphthalene	ND	0.69	ND	0.13	
87-68-3	Hexachlorobutadiene	ND	0.69	ND	0.064	

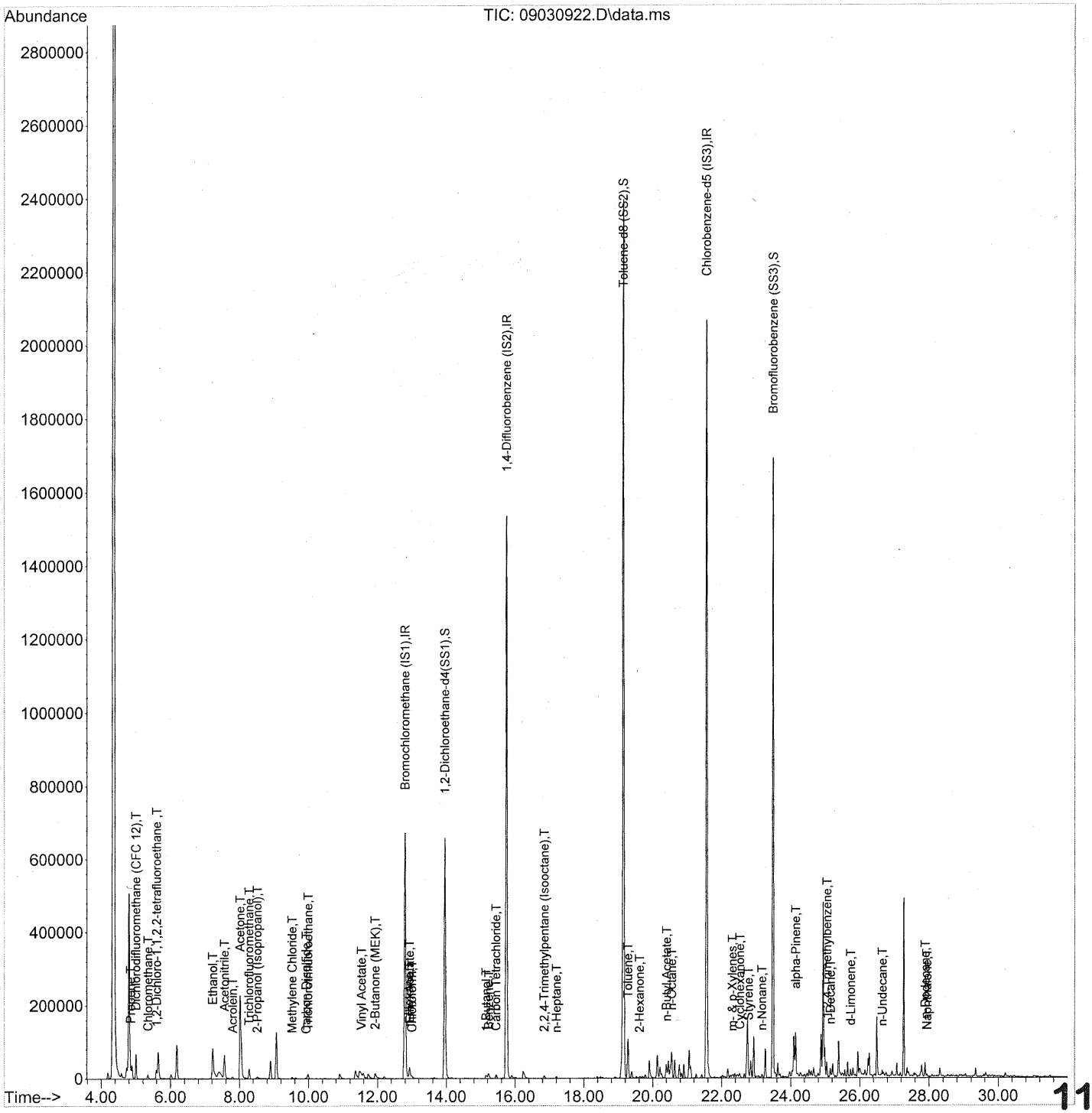
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:02:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (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)	12.80	130	345392	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	15.75	114	1797388	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	899075	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	649490	26.594	ng		-0.03
Spiked Amount 25.000			Recovery = 106.36%				
57) Toluene-d8 (SS2)	19.14	98	2105816	24.638	ng		-0.02
Spiked Amount 25.000			Recovery = 98.56%				
73) Bromofluorobenzene (SS3)	23.49	174	582446	24.062	ng		0.00
Spiked Amount 25.000			Recovery = 96.24%				
Target Compounds							Qvalue
2) Propene	4.85	42	8489	0.280	ng	#	71
3) Dichlorodifluoromethan...	5.00	85	71173	1.646	ng		99
4) Chloromethane	5.35	50	13730	0.341	ng		95
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1148	0.050	ng	#	61
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	6.59	94	108	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	234129m	12.319	ng		
11) Acetonitrile	7.56	41	99592	2.147	ng		98
12) Acrolein	7.80	56	7362	0.594	ng		97
13) Acetone	8.02	58	137239	7.096	ng		96
14) Trichlorofluoromethane	8.28	101	29747	0.804	ng		98
15) 2-Propanol (Isopropanol)	8.52	45	12034m	0.227	ng		
16) Acrylonitrile	8.89	53	628	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.53	59	590	N.D.			
19) Methylene Chloride	9.53	84	2691	0.112	ng		85
20) 3-Chloro-1-propene (Al...	9.62	41	399	N.D.			
21) Trichlorotrifluoroethane	9.98	151	5893	0.356	ng		91
22) Carbon Disulfide	9.93	76	5928	0.070	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	11.54	86	4441	1.060	ng		98
27) 2-Butanone (MEK)	11.93	72	8756	0.649	ng	#	29
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	12.94	61	5883	0.673	ng		93
31) n-Hexane	12.92	57	4210	0.099	ng	#	60

Em 9/9/09

Data Path : J:\MS09\Data\2009_09\03\
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Misc : Environmental H&E 103522
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Quant Time: Sep 09 11:02:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.01	83	3048	0.085 ng		99
34) Tetrahydrofuran (THF)	13.64	72	573	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	14.53	97	453	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.16	56	11725	0.503 ng		99
41) Benzene	15.23	78	15214	0.157 ng		96
42) Carbon Tetrachloride	15.45	117	8713	0.322 ng		100
43) Cyclohexane	15.65	84	646	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	8429	0.076 ng		93
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.21	71	1508	0.059 ng	#	83
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	51638	0.498 ng		99
59) 2-Hexanone	19.62	43	7447	0.138 ng		77
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	32820	0.559 ng		98
63) n-Octane	20.56	57	12204	0.528 ng	#	81
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.11	91	4651	N.D.		
67) m- & p-Xylenes	22.31	91	10383	0.117 ng		93
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.78	104	6236	0.095 ng		98
70) o-Xylene	22.92	91	4071	N.D.		
71) n-Nonane	23.17	43	6389	0.119 ng	#	64
72) 1,1,2,2-Tetrachloroethane	22.93	83	116	N.D.		
74) Cumene	23.66	105	313	N.D.		
75) alpha-Pinene	24.15	93	51952	0.910 ng		78
76) n-Propylbenzene	24.28	91	2147	N.D.		
77) 3-Ethyltoluene	24.41	105	4588	N.D.		
78) 4-Ethyltoluene	24.46	105	2715	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	1790	N.D.		

Quantitation Report (QT Reviewed)

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Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:02:46 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

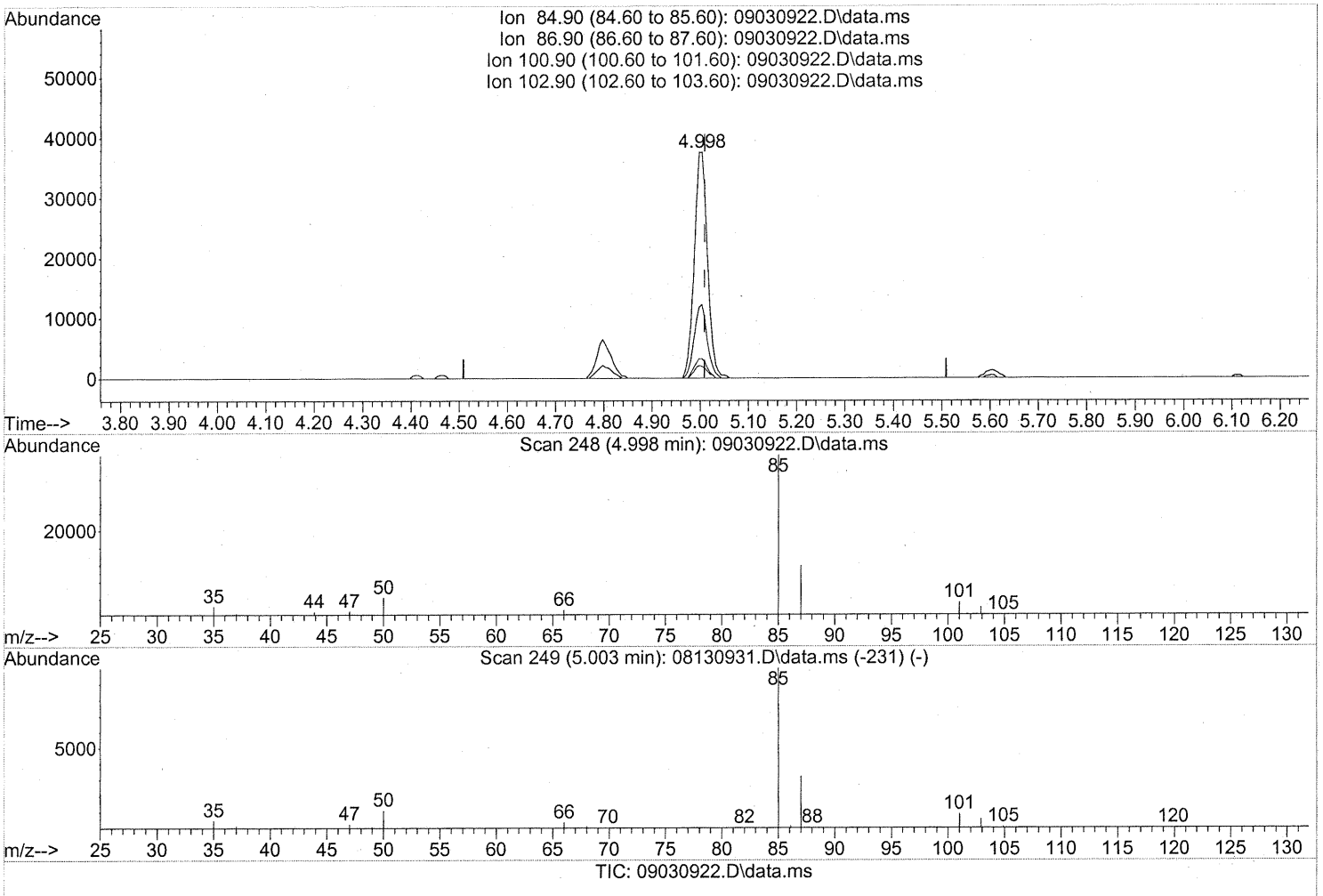
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	111	N.D.			
81) 2-Ethyltoluene	24.79	105	1740	N.D.			
82) 1,2,4-Trimethylbenzene	25.05	105	6309	0.066	ng		87
83) n-Decane	25.15	57	13615	0.245	ng		90
84) Benzyl Chloride	25.05	91	407	N.D.			
85) 1,3-Dichlorobenzene	25.33	146	293	N.D.			
86) 1,4-Dichlorobenzene	25.33	146	293	N.D.			
87) sec-Butylbenzene	25.50	105	105	N.D.			
88) 4-Isopropyltoluene (p-...	25.56	119	3894	N.D.			
89) 1,2,3-Trimethylbenzene	25.57	105	1681	N.D.			
90) 1,2-Dichlorobenzene	25.33	146	293	N.D.			
91) d-Limonene	25.74	68	5214	0.133	ng		98
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	6248	0.109	ng		86
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.			
95) Naphthalene	27.94	128	7655	0.060	ng		86
96) n-Dodecane	27.89	57	17123	0.266	ng		88
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	22.53	55	6161	0.189	ng	#	91
99) tert-Butylbenzene	25.06	119	716	N.D.			
100) n-Butylbenzene	26.12	91	1958	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

4.998min (-0.011) 1.65ng

response 71173

Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.02
100.90	9.10	8.28
102.90	5.50	5.30

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
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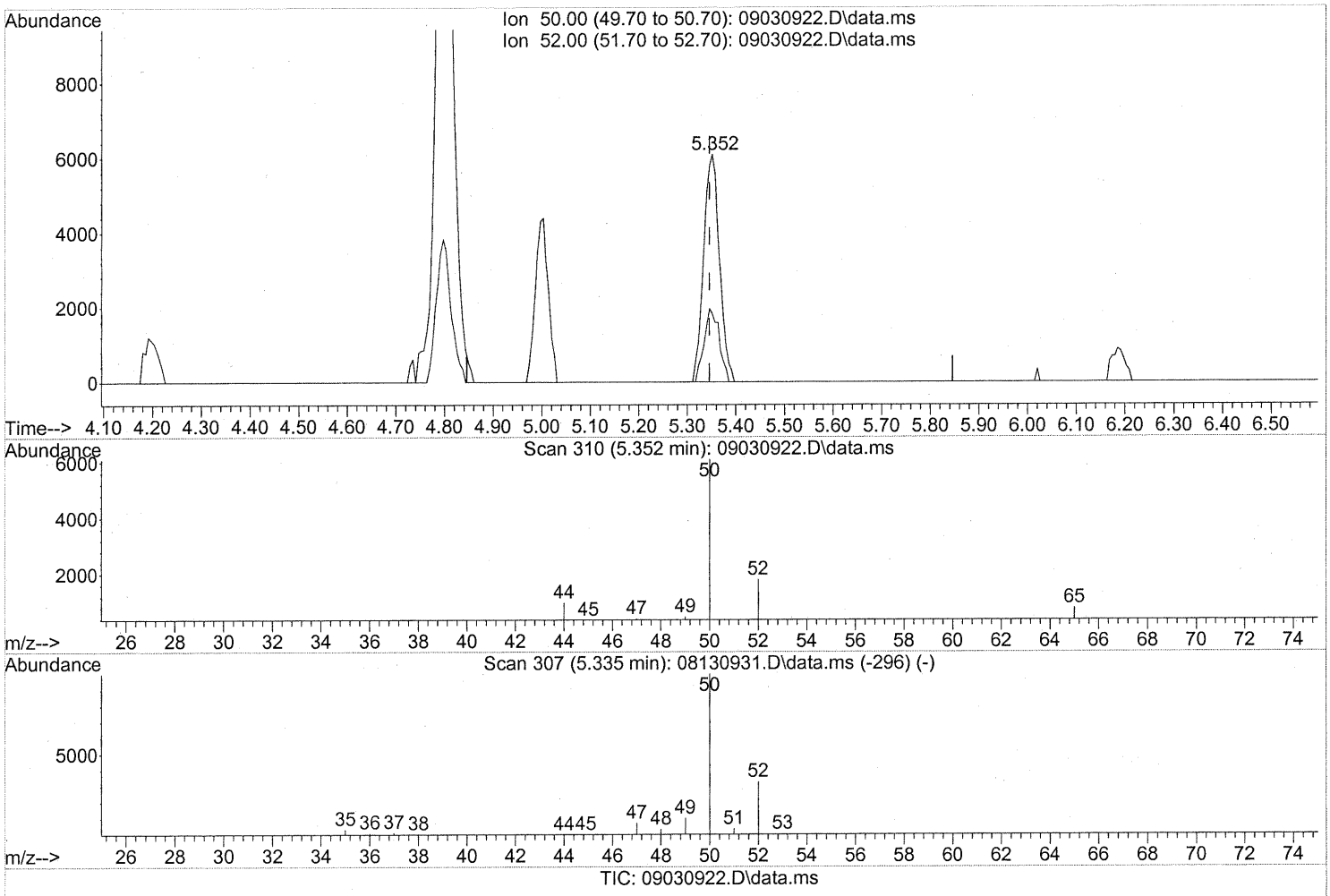
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(4) Chloromethane (T)

5.352min (+0.006) 0.34ng

response 13730

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.46
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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Operator : EM
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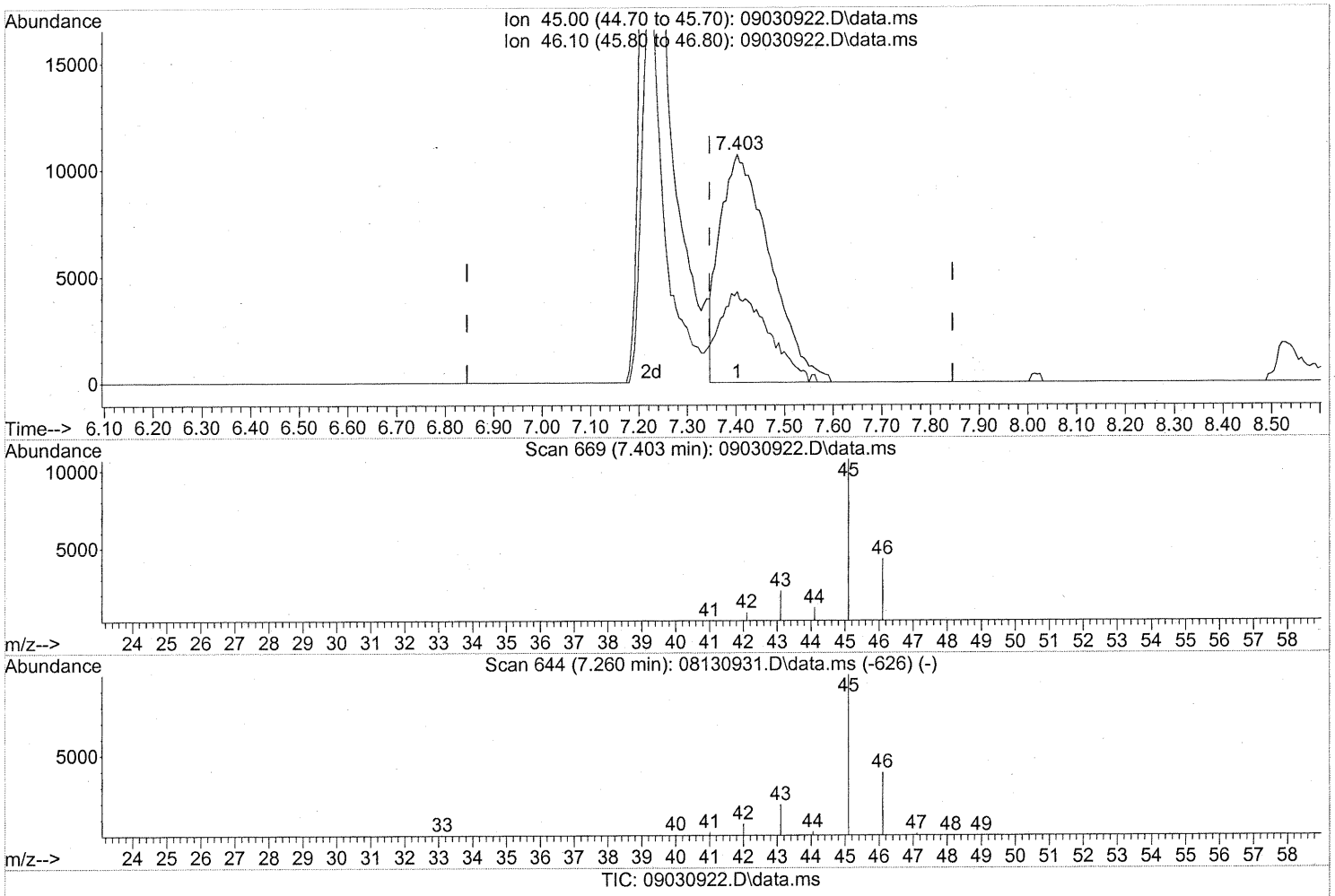
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(10) Ethanol (T)

7.403min (+0.057) 4.04ng

response 76876

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.85
0.00	0.00	0.00
0.00	0.00	0.00

SP

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
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Acq On : 3 Sep 2009 21:23
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Quant Time: Sep 04 07:12:04 2009
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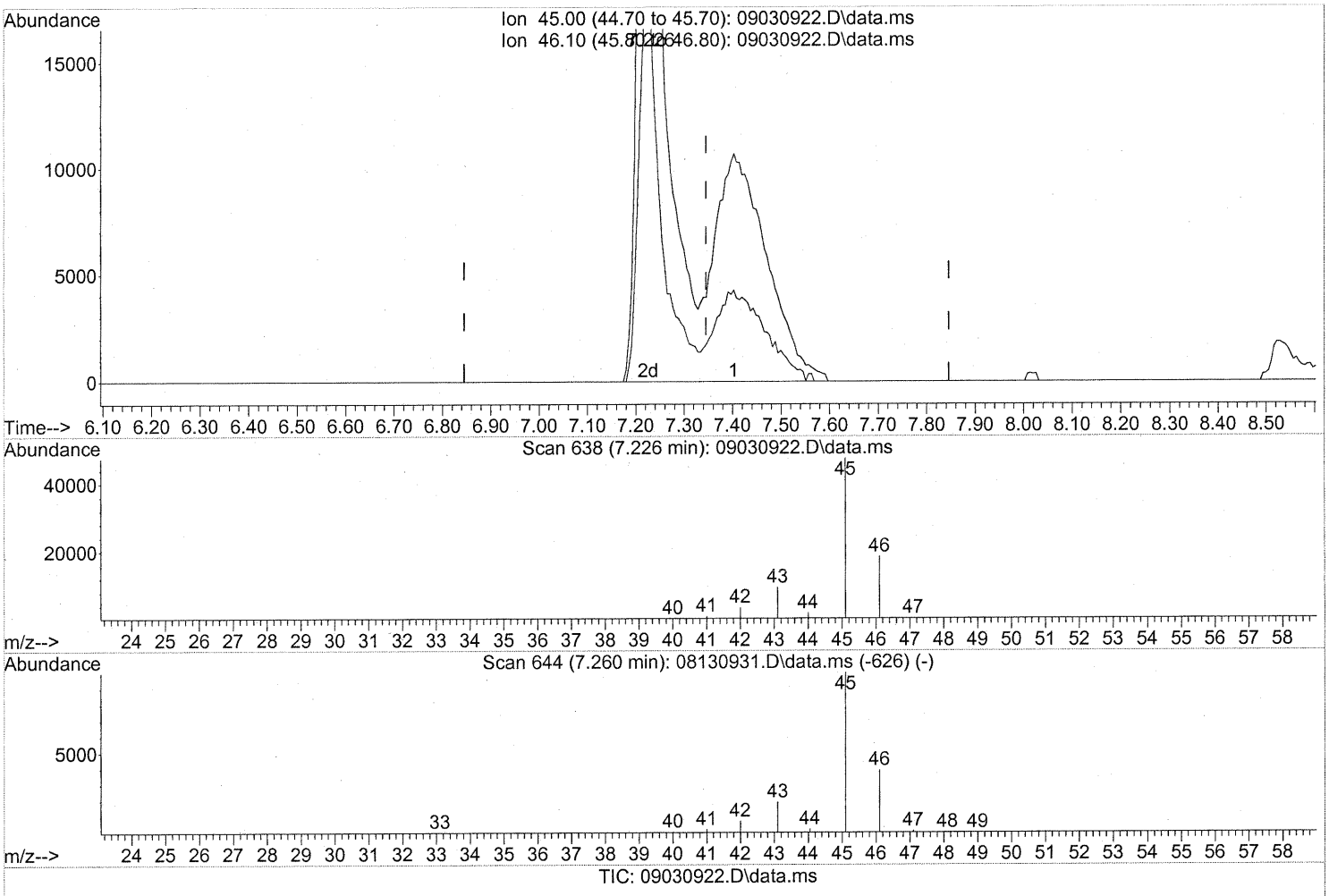
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.226min (-0.120) 12.32ng m

response 234129

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	13.09#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

EM 9/9/09

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Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
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Quant Method : J:\MS09\Methods\R9081309.M
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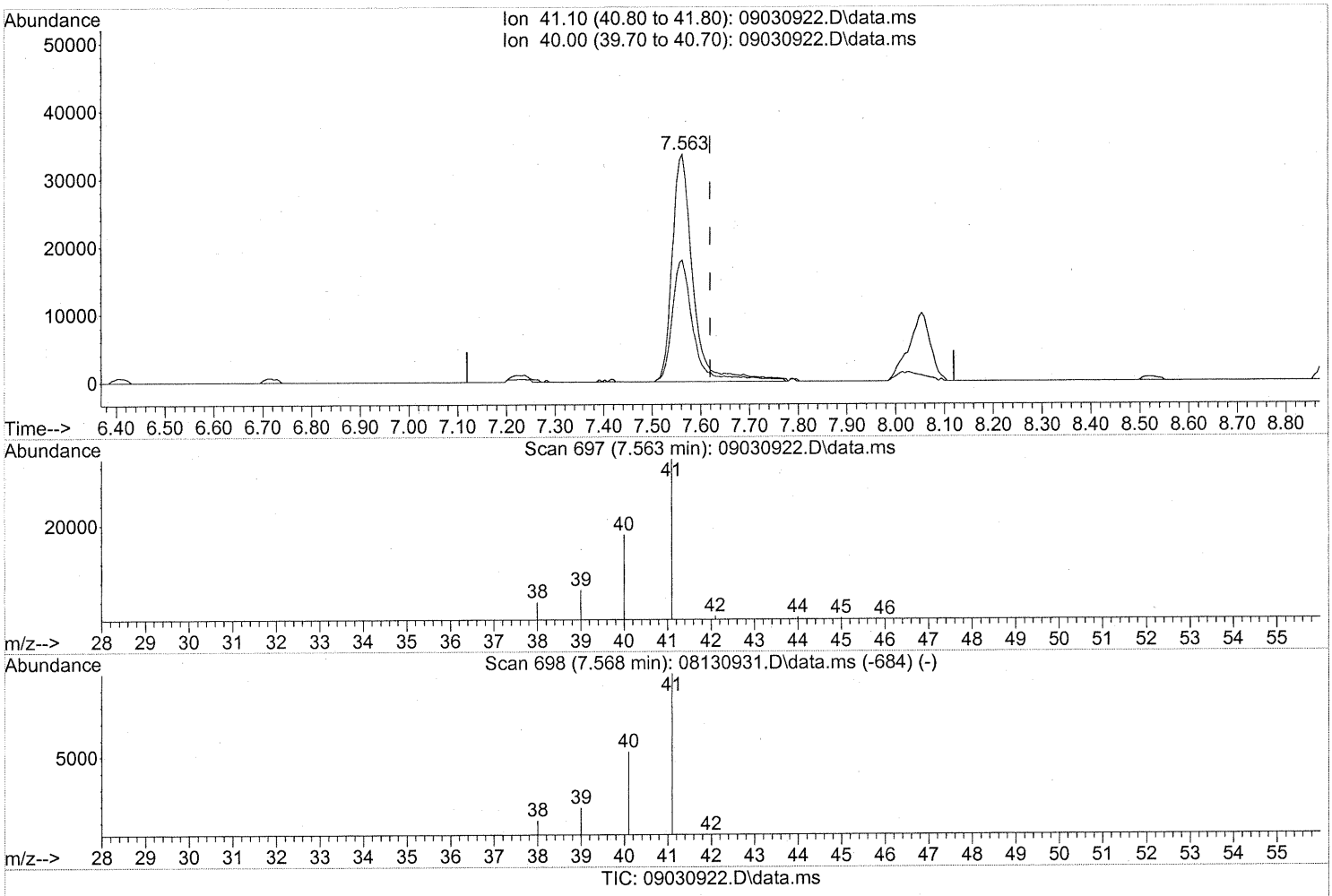

(11) Acetonitrile (T)

7.563min (-0.057) 2.15ng

response 99592

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	54.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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Misc : Environmental H&E 103522
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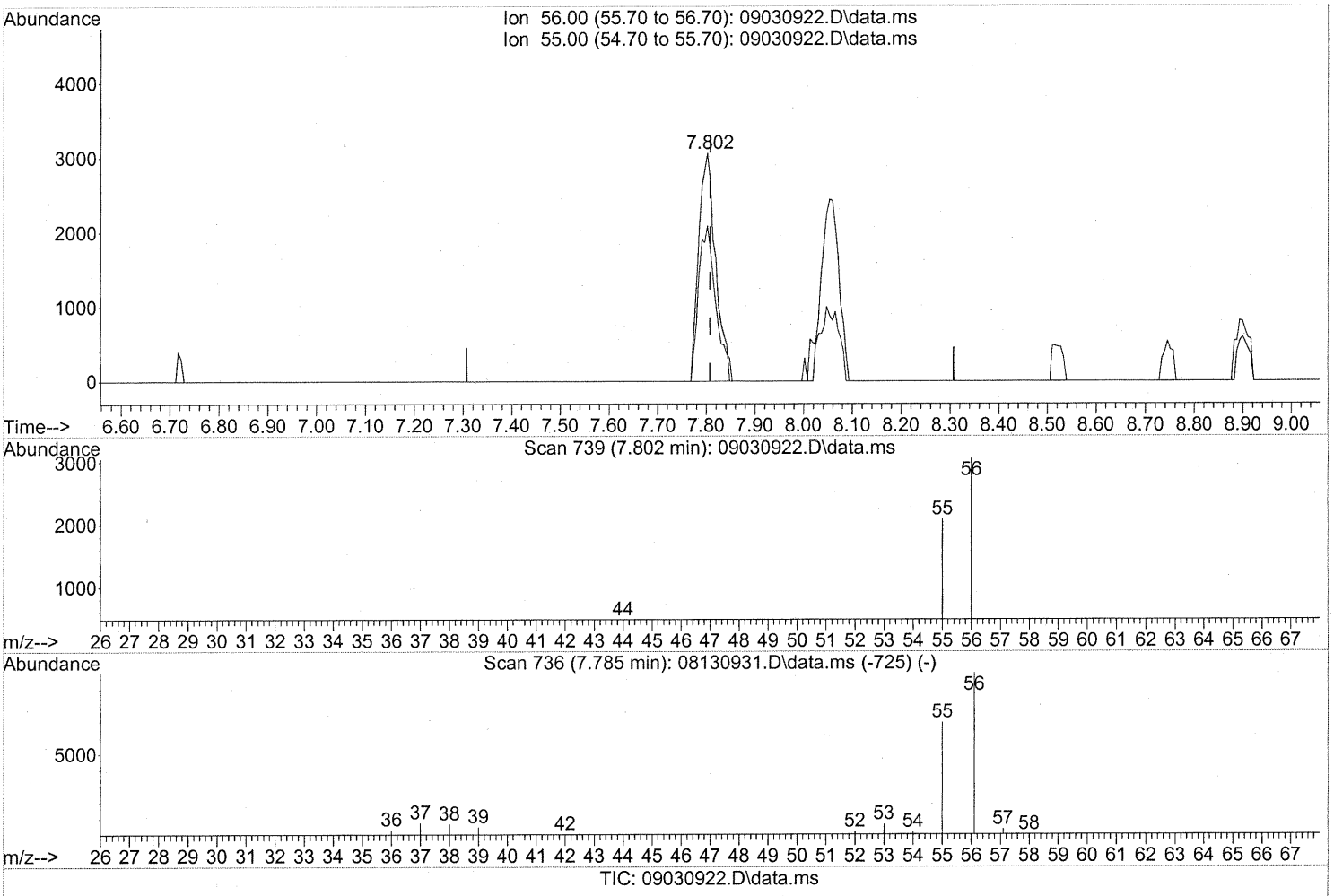
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030922.D\data.ms

(12) Acrolein (T)

7.802min (-0.006) 0.59ng

response 7362

Ion	Exp%	Act%
56.00	100	100
55.00	67.70	69.93
0.00	0.00	0.00
0.00	0.00	0.00

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Quantitation Report (Qedit)

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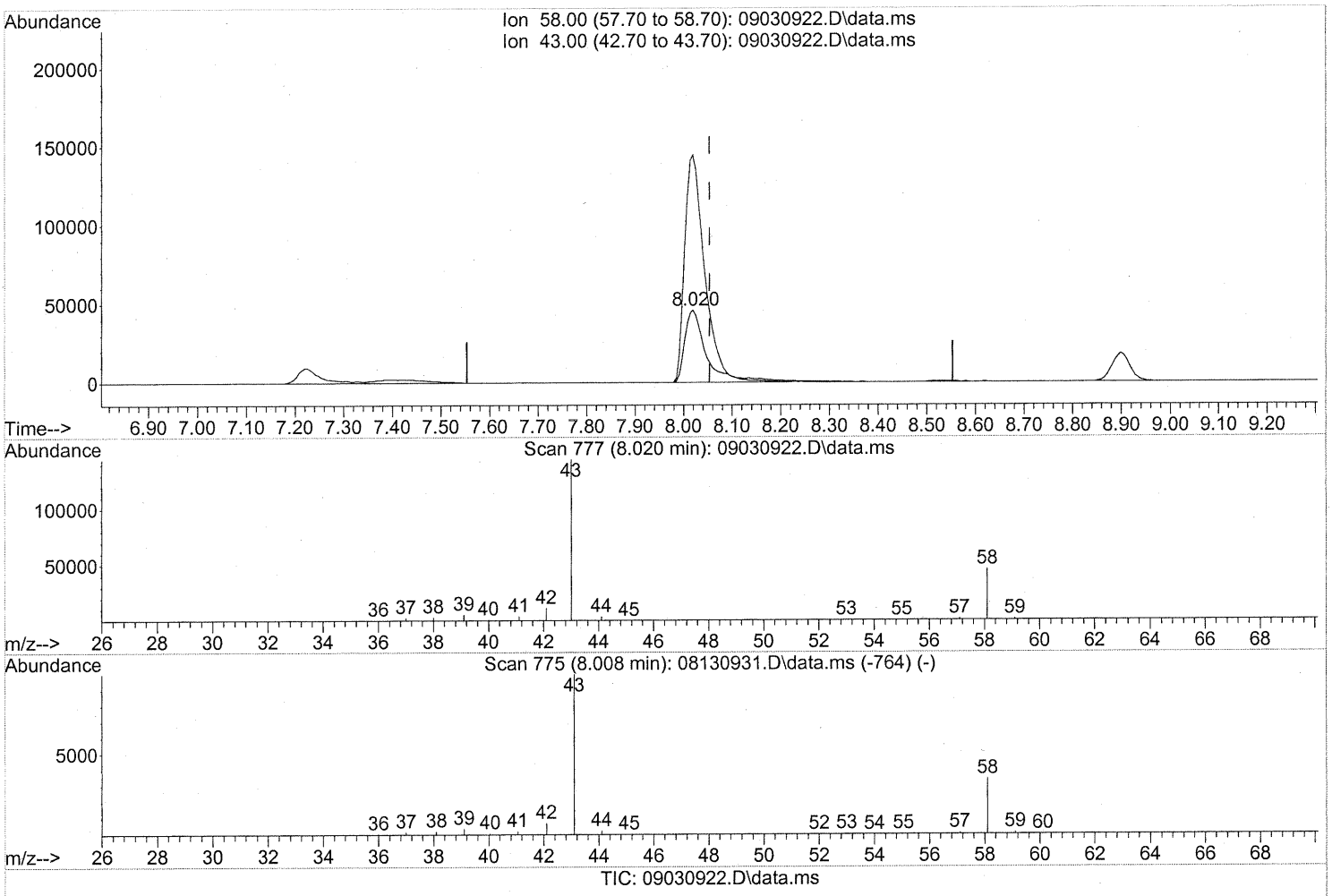
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(13) Acetone (T)

8.020min (-0.034) 7.10ng

response 137239

Ion	Exp%	Act%
58.00	100	100
43.00	317.70	310.11
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\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
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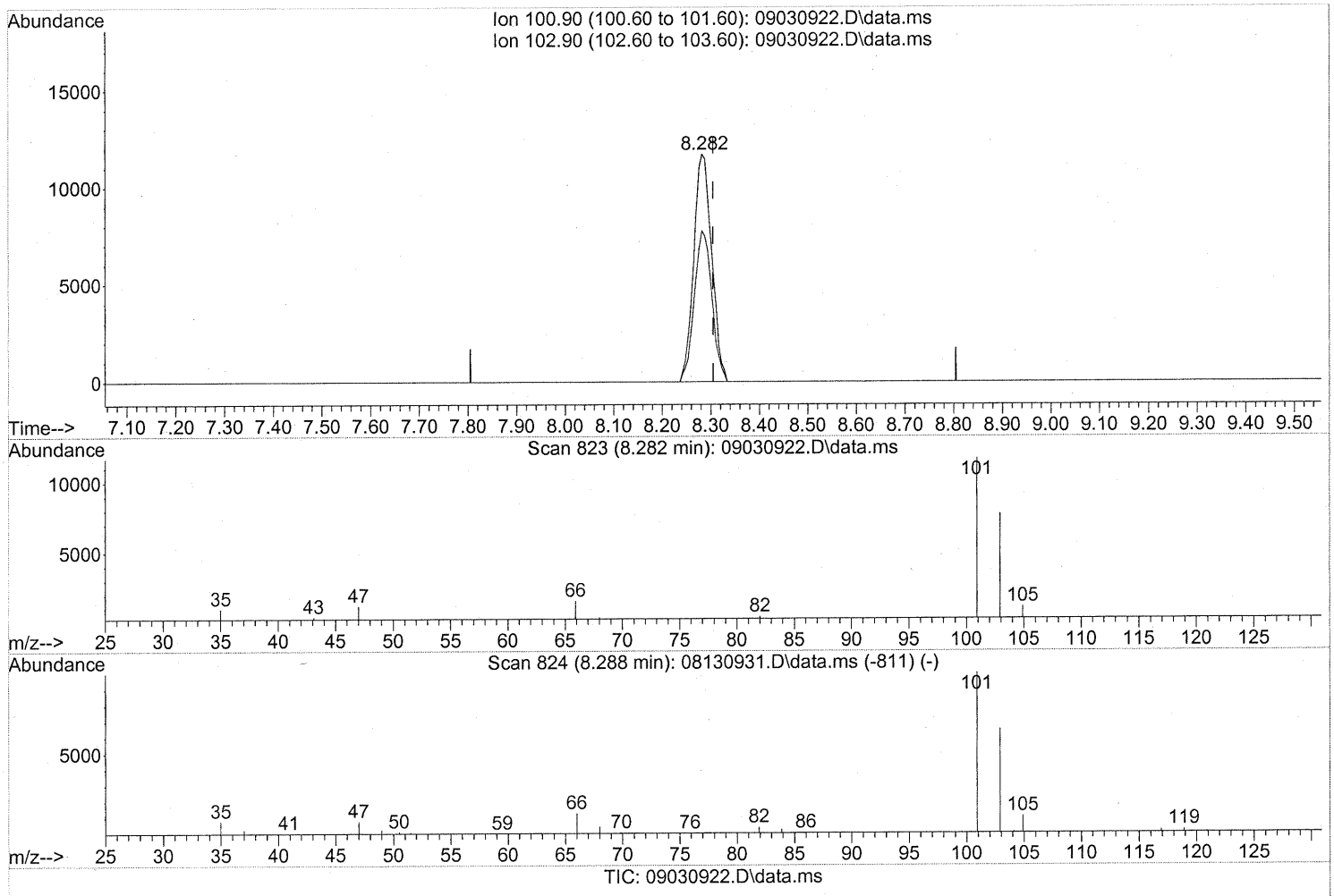
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(14) Trichlorofluoromethane (T)

8.282min (-0.023) 0.80ng

response 29747

Ion	Exp%	Act%
100.90	100	100
102.90	66.00	64.72
0.00	0.00	0.00
0.00	0.00	0.00

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Quantitation Report (Qedit)

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Acq On : 3 Sep 2009 21:23
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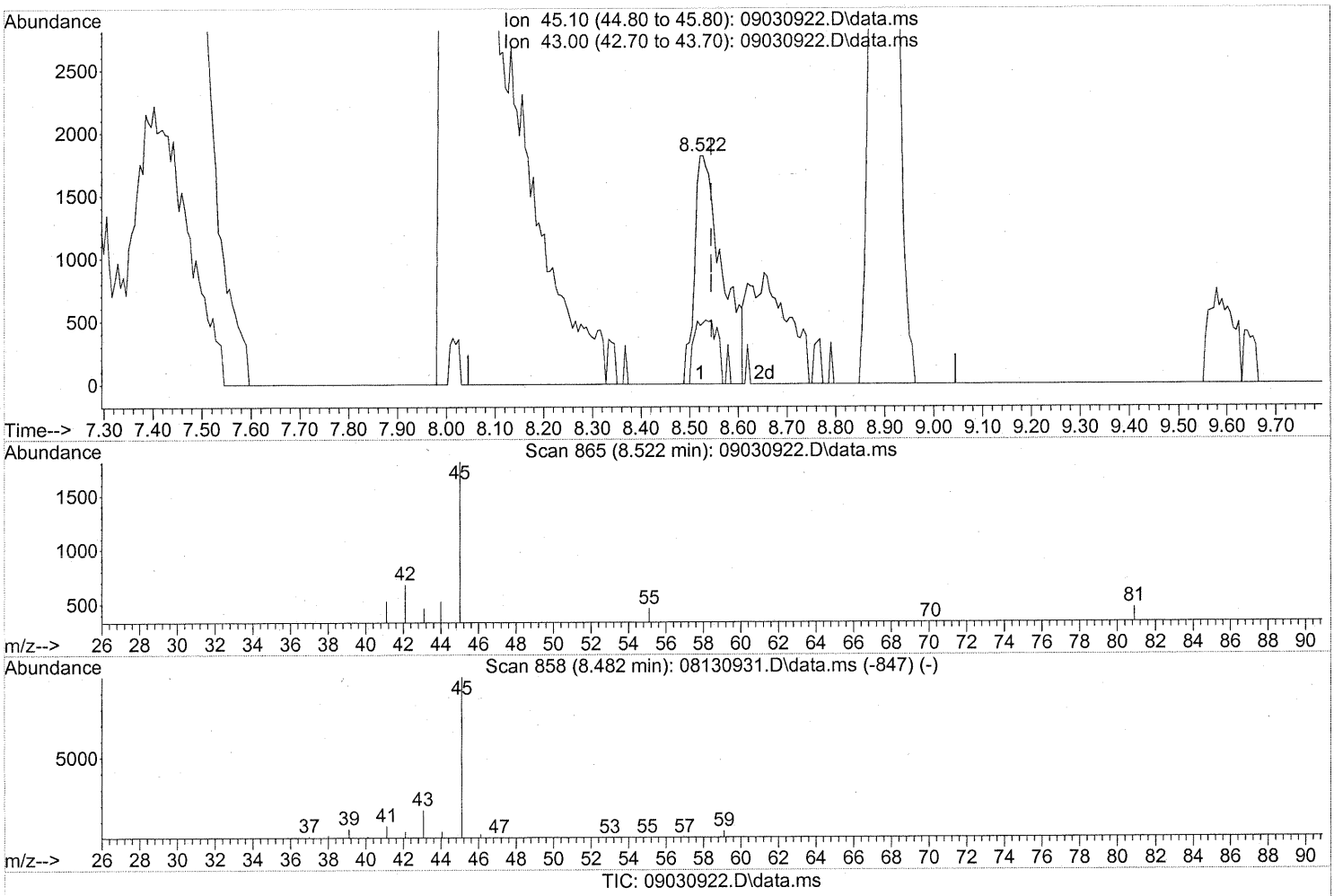
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.522min (-0.023) 0.13ng

response 7150

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	22.97
0.00	0.00	0.00
0.00	0.00	0.00

SP

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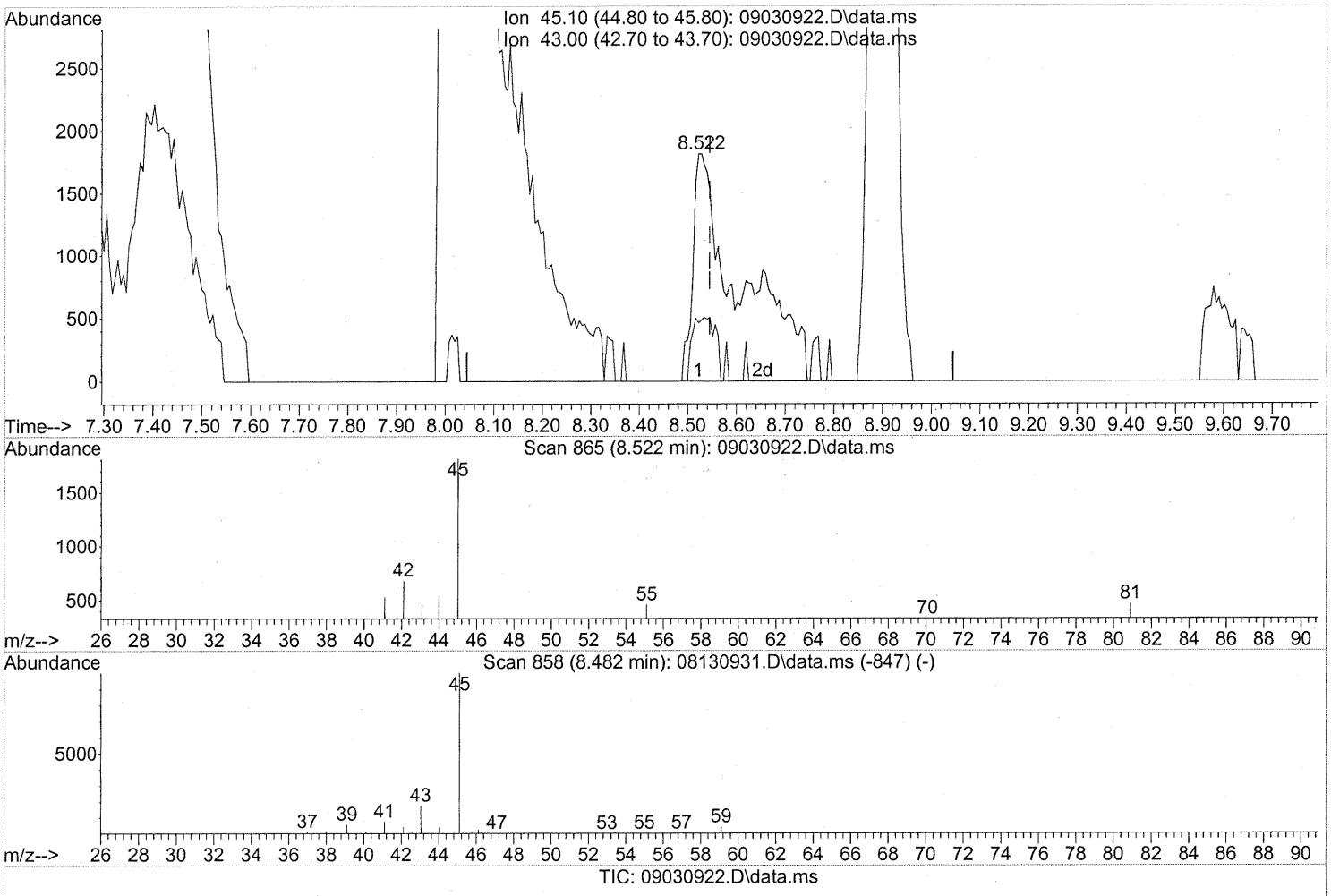
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

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

8.522min (-0.023) 0.23ng m

response 12034

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	13.64
0.00	0.00	0.00
0.00	0.00	0.00

<RL

SP → IC
sm 9/9/09

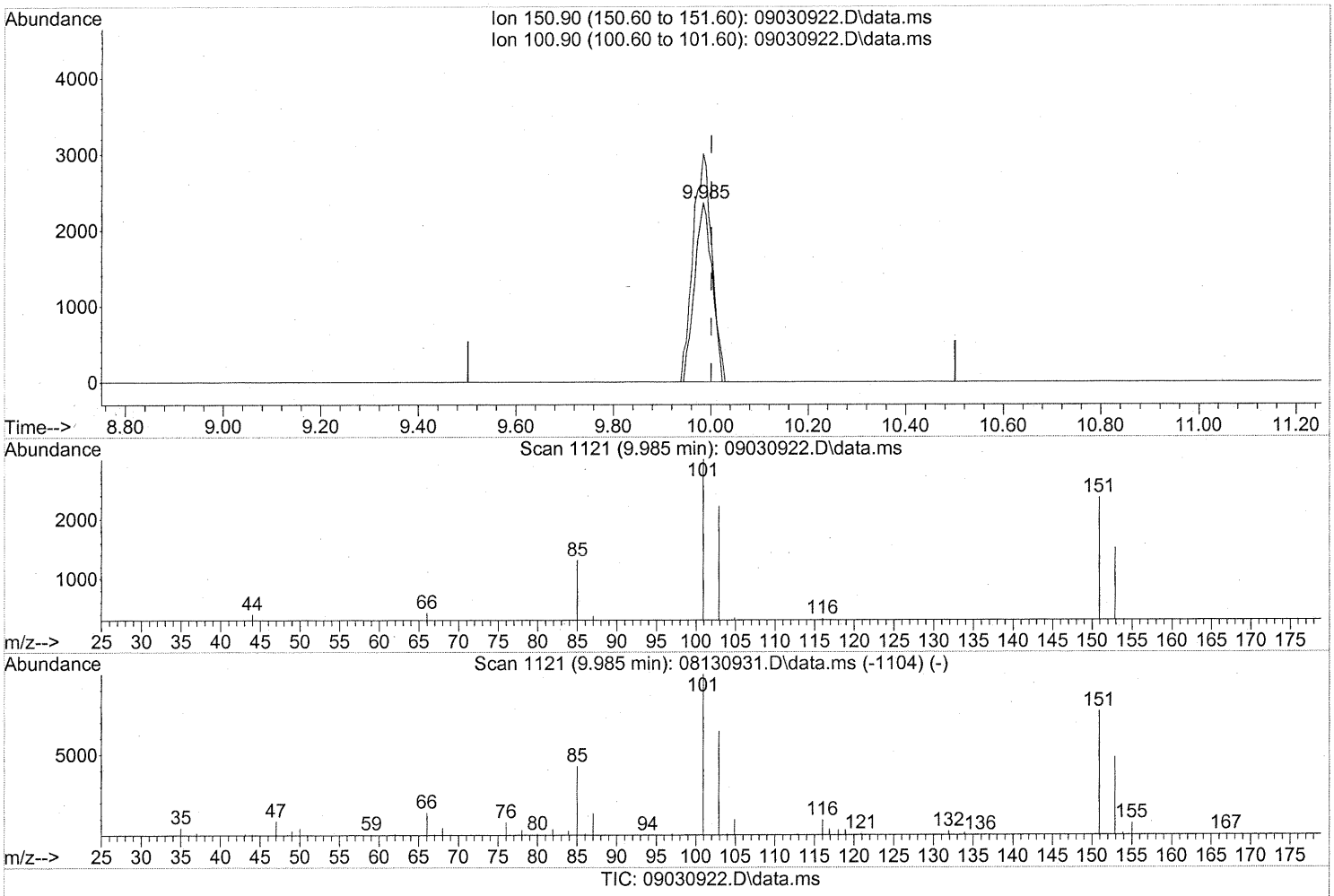
KE 9/9/09

125

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.36ng

response 5893

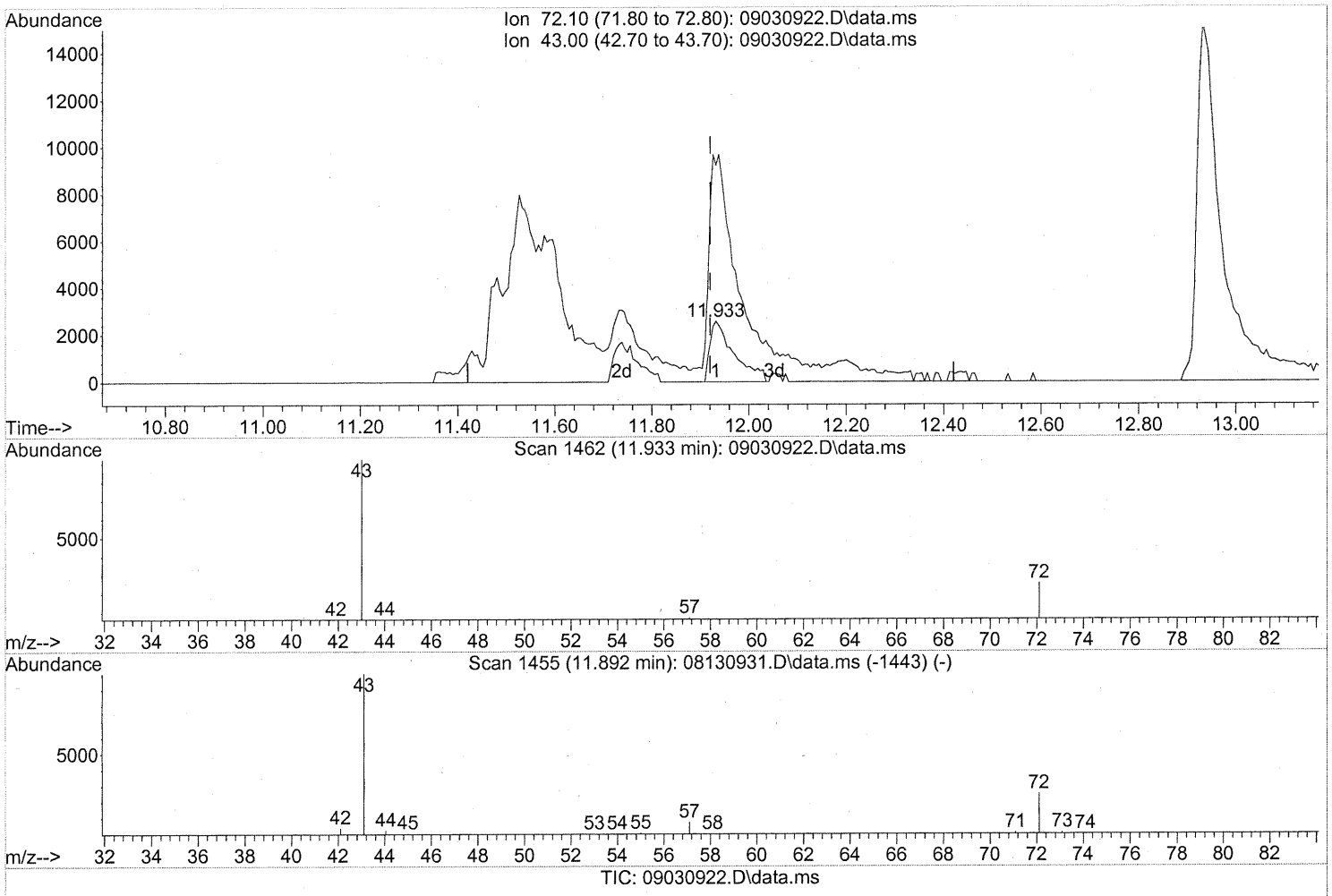
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	138.10
0.00	0.00	0.00
0.00	0.00	0.00

126

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

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

11.933min (+0.012) 0.65ng

response 8756

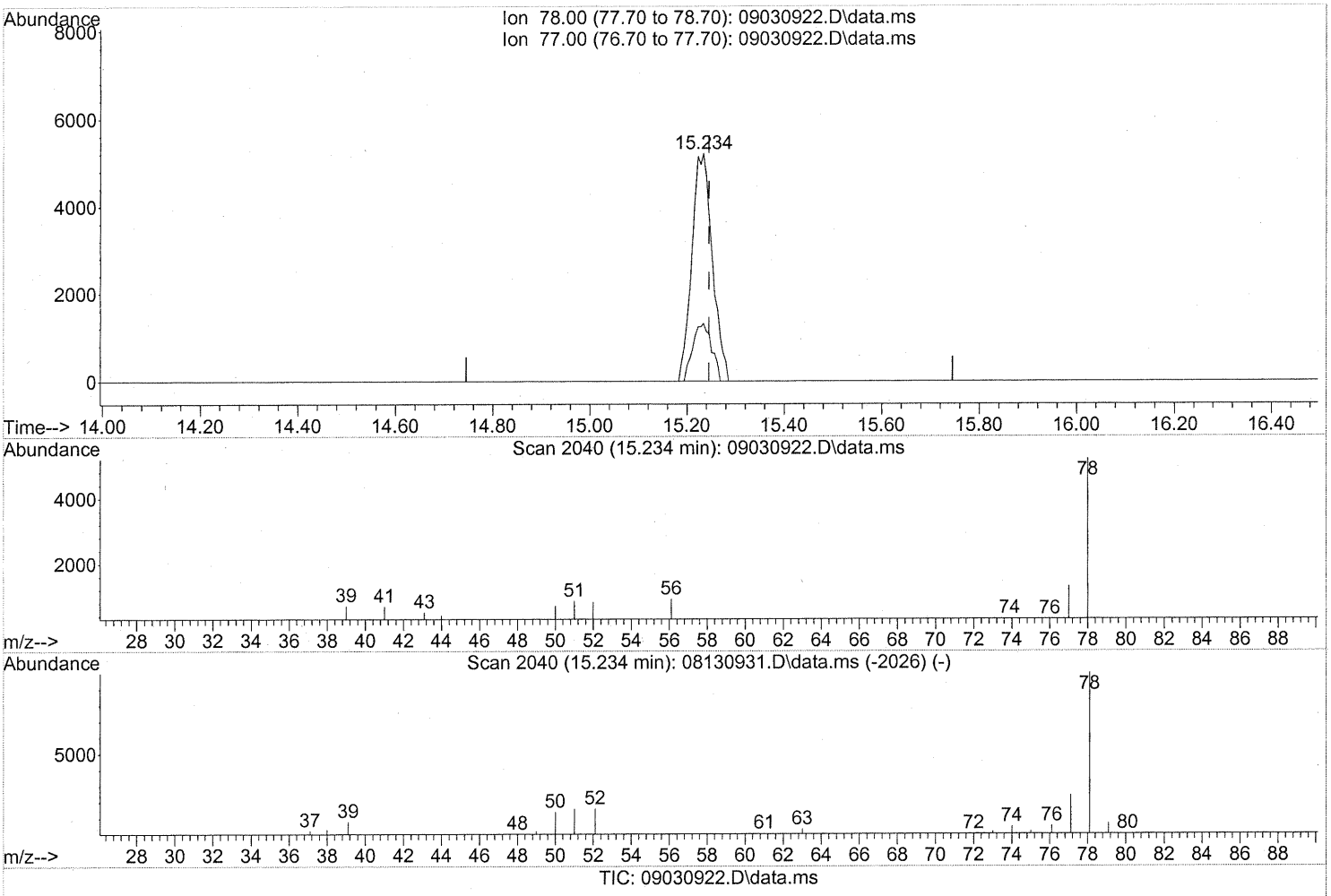
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	524.83#
0.00	0.00	0.00
0.00	0.00	0.00

127

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(41) Benzene (T)

15.234min (-0.011) 0.16ng

response 15214

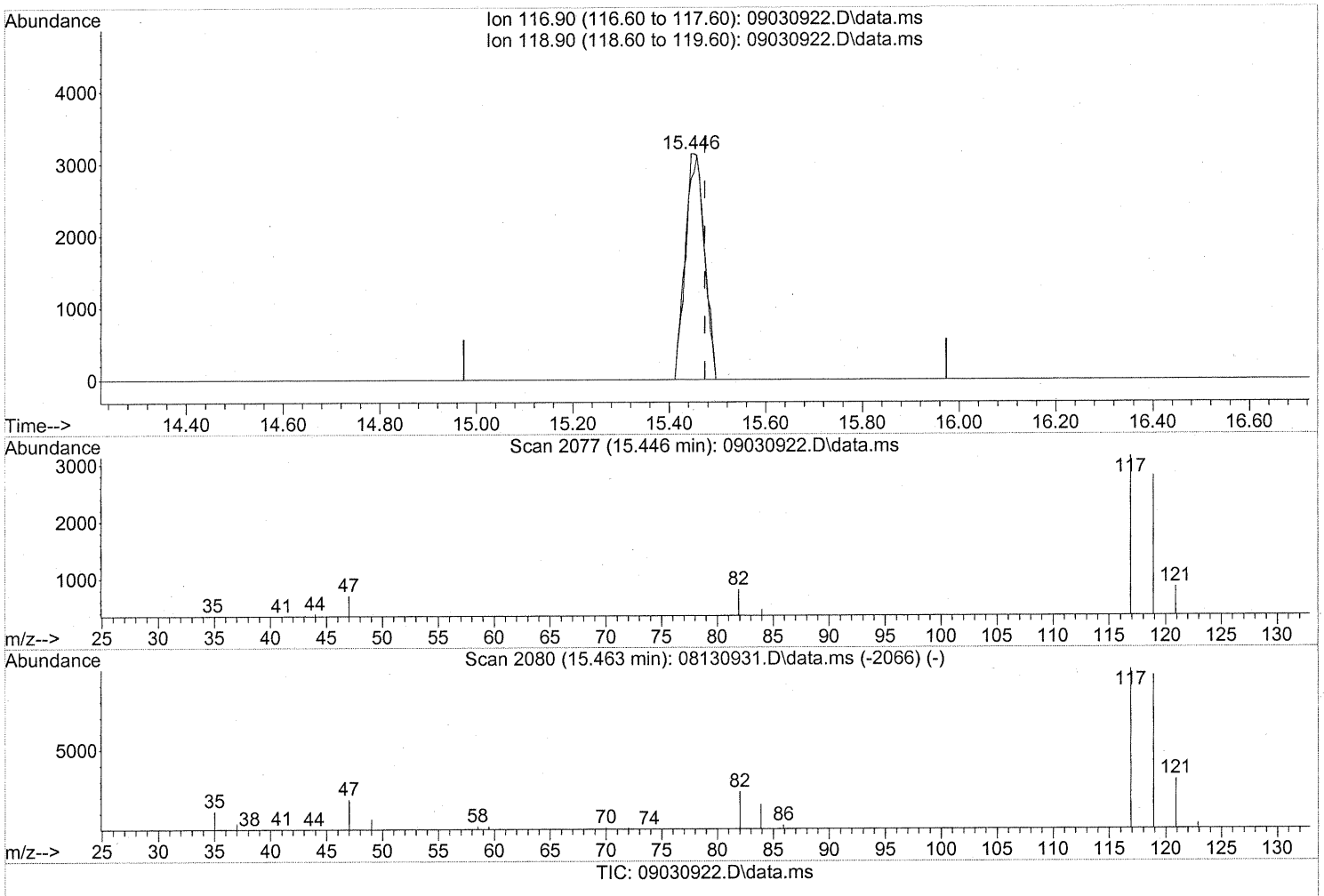
Ion	Exp%	Act%
78.00	100	100
77.00	25.10	23.08
0.00	0.00	0.00
0.00	0.00	0.00

128

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(42) Carbon Tetrachloride (T)

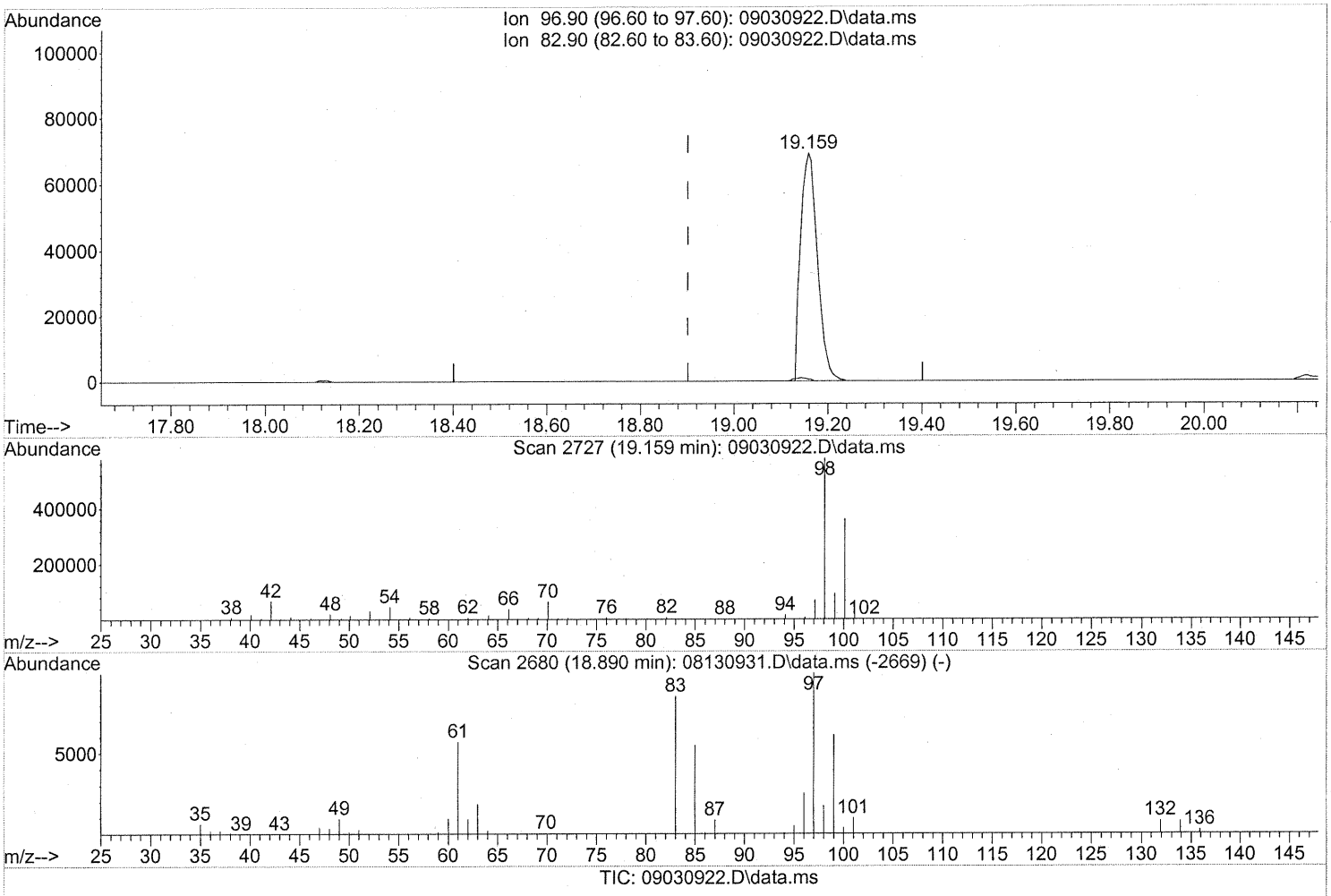
15.446min (-0.028) 0.32ng

response 8713

Ion	Exp%	Act%
116.90	100	100
118.90	97.00	97.35
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

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

19.159min (+0.257) 8.36ng

response 172659

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	1.01#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9m 9/9/09

KR 9/9/09

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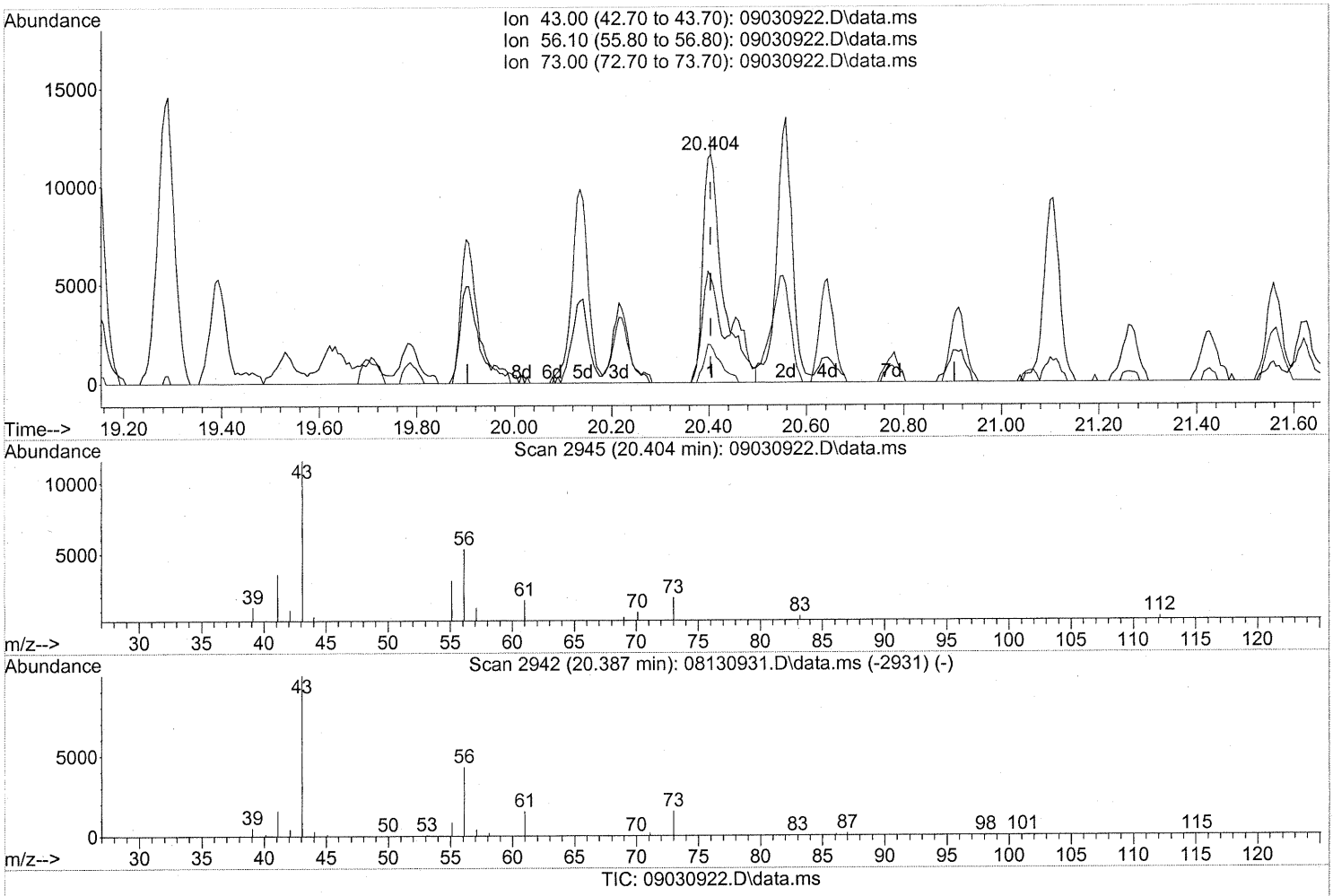
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(62) n-Butyl Acetate (T)

20.404min (-0.000) 0.56ng

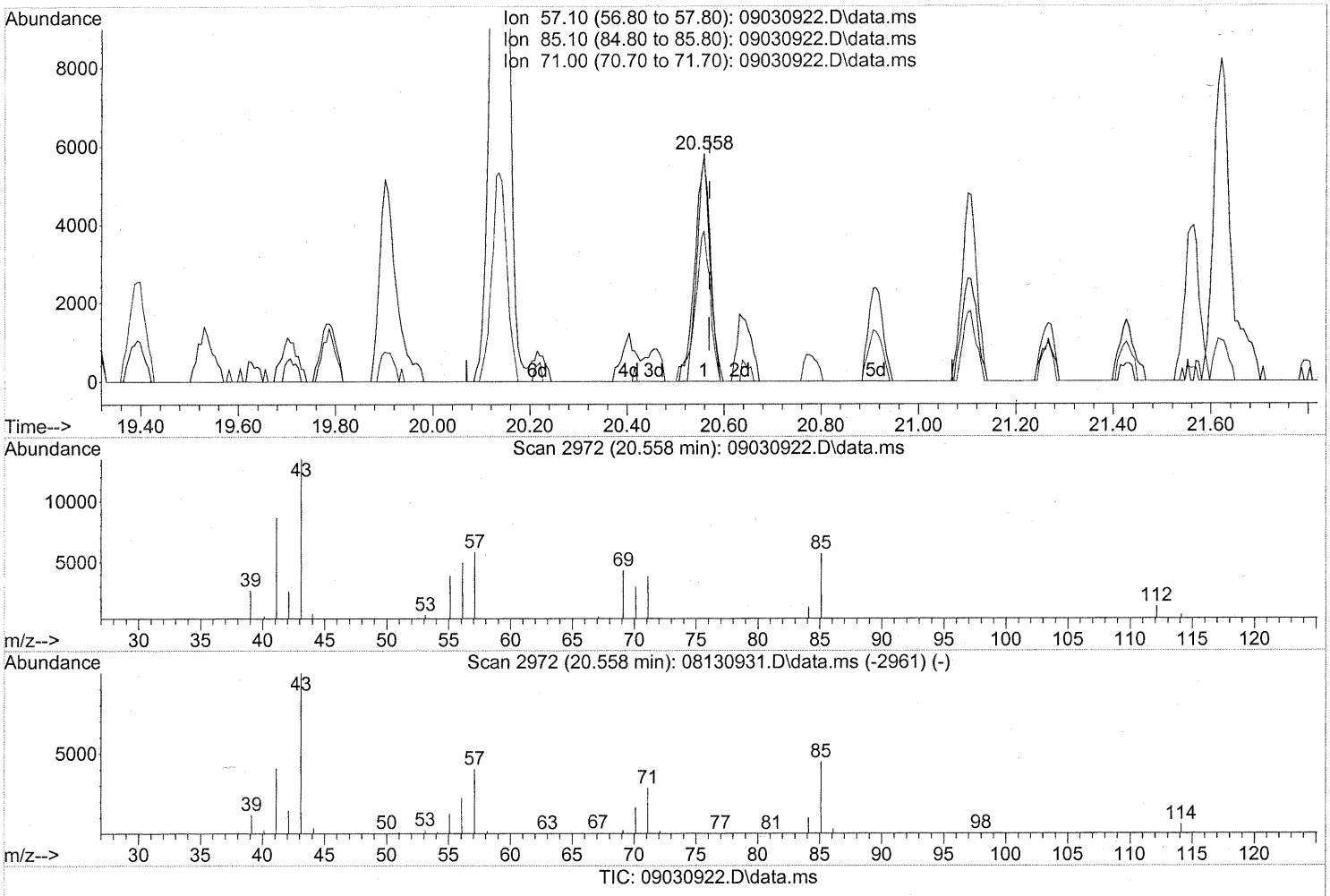
response 32820

Ion	Exp%	Act%
43.00	100	100
56.10	42.90	42.73
73.00	16.90	14.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(63) n-Octane (T)

20.558min (-0.011) 0.53ng

response 12204

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	91.92#
71.00	75.10	67.78
0.00	0.00	0.00

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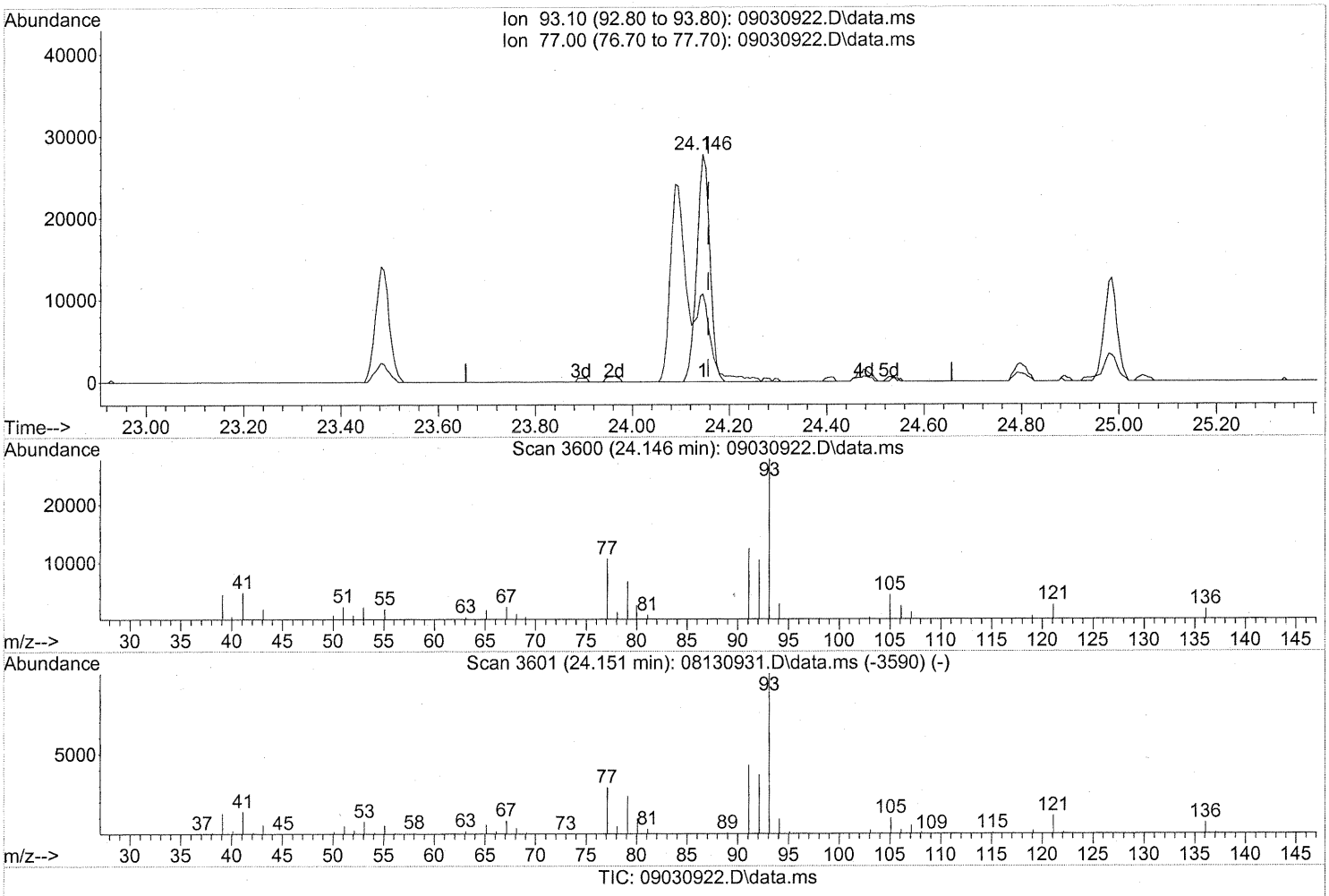
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030922.D
Acq On : 3 Sep 2009 21:23
Operator : EM
Sample : P0902972-003 (1000ml)
Misc : Environmental H&E 103522
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 04 07:12:04 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: 09030922.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 0.91ng

response 51952

Ion	Exp%	Act%
93.10	100	100
77.00	29.50	41.34
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: **103523**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00667

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

Initial Pressure (psig): -0.5 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.30

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.65	ND	0.38	
75-71-8	**Dichlorodifluoromethane (CFC 12)**	**17**	0.65	**3.4**	0.13	
74-87-3	**Chloromethane**	**0.97**	0.13	**0.47**	0.063	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.65	ND	0.093	
75-01-4	Vinyl Chloride	ND	0.13	ND	0.051	
106-99-0	1,3-Butadiene	ND	0.13	ND	0.059	
74-83-9	Bromomethane	ND	0.13	ND	0.033	
75-00-3	Chloroethane	ND	0.13	ND	0.049	
64-17-5	**Ethanol**	**1,900**	6.5	**1,000**	3.5	**D**
75-05-8	**Acetonitrile**	**270**	0.65	**160**	0.39	**D**
107-02-8	**Acrolein**	**3.9**	0.65	**1.7**	0.28	
67-64-1	**Acetone**	**66**	6.5	**28**	2.7	
75-69-4	**Trichlorofluoromethane**	**1.2**	0.13	**0.22**	0.023	
67-63-0	**2-Propanol (Isopropyl Alcohol)**	**25**	0.65	**10**	0.26	
107-13-1	Acrylonitrile	ND	0.65	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.033	
75-09-2	Methylene Chloride	ND	0.65	ND	0.19	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.13	ND	0.042	
76-13-1	**Trichlorotrifluoroethane**	**0.54**	0.13	**0.070**	0.017	
75-15-0	**Carbon Disulfide**	**1.0**	0.65	**0.33**	0.21	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	ND	0.033	
75-34-3	1,1-Dichloroethane	ND	0.13	ND	0.032	
1634-04-4	Methyl tert-Butyl Ether	ND	0.13	ND	0.036	
108-05-4	Vinyl Acetate	ND	6.5	ND	1.8	
78-93-3	**2-Butanone (MEK)**	**5.1**	0.65	**1.7**	0.22	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103523** CAS Project ID: P0902972
Client Project ID: **16512** CAS Sample ID: P0902972-004

Test Code: EPA TO-15 Date Collected: 8/25/09
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 8/26/09
Analyst: Elsa Moctezuma Date Analyzed: 9/3 - 9/4/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: AC00667

Initial Pressure (psig): -0.5 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.30

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.13	ND	0.033	
141-78-6	**Ethyl Acetate**	**7.5**	1.3	**2.1**	0.36	
110-54-3	**n-Hexane**	**5.3**	0.65	**1.5**	0.18	
67-66-3	**Chloroform**	**0.33**	0.13	**0.068**	0.027	
109-99-9	Tetrahydrofuran (THF)	ND	0.65	ND	0.22	
107-06-2	**1,2-Dichloroethane**	**3.0**	0.13	**0.74**	0.032	
71-55-6	1,1,1-Trichloroethane	ND	0.13	ND	0.024	
71-43-2	**Benzene**	**4.1**	0.13	**1.3**	0.041	
56-23-5	**Carbon Tetrachloride**	**0.46**	0.13	**0.073**	0.021	
110-82-7	**Cyclohexane**	**0.96**	0.65	**0.28**	0.19	
78-87-5	**1,2-Dichloropropane**	**0.20**	0.13	**0.042**	0.028	
75-27-4	Bromodichloromethane	ND	0.13	ND	0.019	
79-01-6	Trichloroethene	ND	0.13	ND	0.024	
123-91-1	1,4-Dioxane	ND	0.65	ND	0.18	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.32	
142-82-5	**n-Heptane**	**3.5**	0.65	**0.85**	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.65	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.65	ND	0.16	
10061-02-6	trans-1,3-Dichloropropene	ND	0.65	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.13	ND	0.024	
108-88-3	**Toluene**	**27**	0.65	**7.2**	0.17	
591-78-6	**2-Hexanone**	**0.96**	0.65	**0.24**	0.16	
124-48-1	Dibromochloromethane	ND	0.13	ND	0.015	
106-93-4	1,2-Dibromoethane	ND	0.13	ND	0.017	
123-86-4	**n-Butyl Acetate**	**2.2**	0.65	**0.46**	0.14	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103523**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00667

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3 - 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)
0.025 Liter(s)

Initial Pressure (psig): -0.5 Final Pressure (psig): 3.7

Canister Dilution Factor: 1.30

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	**n-Octane**	**1.9**	0.65	**0.41**	0.14	
127-18-4	Tetrachloroethene	ND	0.13	ND	0.019	
108-90-7	Chlorobenzene	ND	0.13	ND	0.028	
100-41-4	**Ethylbenzene**	**4.7**	0.65	**1.1**	0.15	
179601-23-1	**m,p-Xylenes**	**15**	0.65	**3.3**	0.15	
75-25-2	Bromoform	ND	0.65	ND	0.063	
100-42-5	**Styrene**	**4.4**	0.65	**1.0**	0.15	
95-47-6	**o-Xylene**	**5.2**	0.65	**1.2**	0.15	
111-84-2	**n-Nonane**	**0.95**	0.65	**0.18**	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.13	ND	0.019	
98-82-8	Cumene	ND	0.65	ND	0.13	
80-56-8	**alpha-Pinene**	**39**	0.65	**7.0**	0.12	
103-65-1	**n-Propylbenzene**	**1.4**	0.65	**0.28**	0.13	
622-96-8	**4-Ethyltoluene**	**2.4**	0.65	**0.50**	0.13	
108-67-8	**1,3,5-Trimethylbenzene**	**2.1**	0.65	**0.43**	0.13	
95-63-6	**1,2,4-Trimethylbenzene**	**7.6**	0.65	**1.6**	0.13	
100-44-7	Benzyl Chloride	ND	0.13	ND	0.025	
541-73-1	1,3-Dichlorobenzene	ND	0.13	ND	0.022	
106-46-7	1,4-Dichlorobenzene	ND	0.13	ND	0.022	
95-50-1	1,2-Dichlorobenzene	ND	0.13	ND	0.022	
5989-27-5	**d-Limonene**	**27**	0.65	**4.8**	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.65	ND	0.067	
120-82-1	1,2,4-Trichlorobenzene	ND	0.65	ND	0.088	
91-20-3	**Naphthalene**	**0.87**	0.65	**0.17**	0.12	
87-68-3	Hexachlorobutadiene	ND	0.65	ND	0.061	

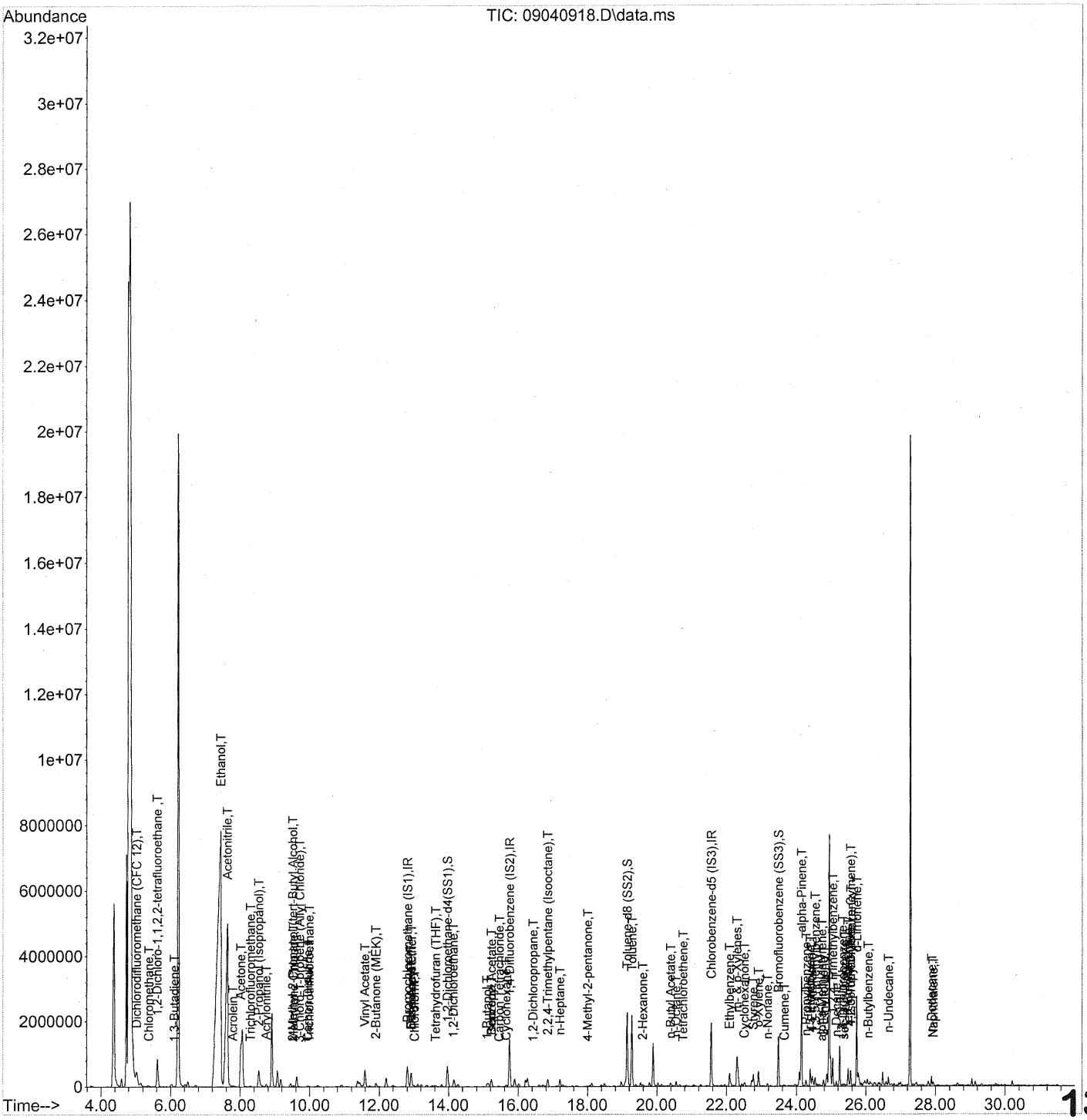
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:06:53 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\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:06:53 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)	12.81	130	327660	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1666595	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	819537	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	615208	26.554	ng		-0.02
Spiked Amount 25.000			Recovery =	106.20%			
57) Toluene-d8 (SS2)	19.15	98	1945495	24.971	ng		-0.01
Spiked Amount 25.000			Recovery =	99.88%			
73) Bromofluorobenzene (SS3)	23.49	174	523140	23.710	ng		0.00
Spiked Amount 25.000			Recovery =	94.84%			
Target Compounds							Qvalue
2) Propene	0.00	42	0	N.D. d			
3) Dichlorodifluoromethan...	5.03	85	525306	12.804	ng		99
4) Chloromethane	5.38	50	28462	0.744	ng		96
5) 1,2-Dichloro-1,1,2,2-t...	5.63	135	2343	0.108	ng	#	52
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	6.11	54	2609	0.097	ng	#	43
8) Bromomethane	6.60	94	628	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.44	45	34514634	1914.333	ng	See Dil	99
11) Acetonitrile	7.64	41	11096520	252.191	ng	See Dil	100
12) Acrolein	7.80	56	35141	2.989	ng		97
13) Acetone	8.03	58	925741	50.457	ng	#	65
14) Trichlorofluoromethane	8.30	101	33036	0.942	ng		97
15) 2-Propanol (Isopropanol)	8.53	45	984313	19.590	ng		93
16) Acrylonitrile	8.75	53	7689	0.289	ng	#	16
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	9.52	59	26541	0.520	ng	#	66
19) Methylene Chloride	9.53	84	3927	0.172	ng		80
20) 3-Chloro-1-propene (Al...	9.71	41	2228	0.073	ng	#	34
21) Trichlorotrifluoroethane	9.98	151	6506	0.414	ng		98
22) Carbon Disulfide	9.94	76	64747	0.802	ng		99
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	11.38	63	114	N.D.			
25) Methyl tert-Butyl Ether	11.37	73	1026	N.D.			
26) Vinyl Acetate	11.59	86	16987	4.275	ng	#	1
27) 2-Butanone (MEK)	11.90	72	50597	3.956	ng	#	84
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	12.93	87	2141	0.118	ng	#	1
30) Ethyl Acetate	12.92	61	47791	5.762	ng		96
31) n-Hexane	12.93	57	164317	4.064	ng		94

9/9/09

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:06:53 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	13.02	83	8699	0.257 ng		93
34) Tetrahydrofuran (THF)	13.63	72	2921	0.220 ng	#	1
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	14.14	62	59552	2.300 ng		100
38) 1,1,1-Trichloroethane	14.52	97	698	N.D.		
39) Isopropyl Acetate	15.23	61	1278	0.094 ng	#	1
40) 1-Butanol	15.10	56	82400	3.815 ng		96
41) Benzene	15.23	78	279541	3.119 ng		98
42) Carbon Tetrachloride	15.46	117	8840	0.353 ng		97
43) Cyclohexane	15.65	84	25580	0.737 ng	#	82
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	16.43	63	3300	0.150 ng		96
46) Bromodichloromethane	0.00	83	0	N.D. d		
47) Trichloroethene	16.77	130	121	N.D.		
48) 1,4-Dioxane	16.76	88	109	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	247016	2.395 ng		95
50) Methyl Methacrylate	17.05	100	120	N.D.		
51) n-Heptane	17.21	71	63937	2.680 ng		91
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	18.00	58	9583	0.495 ng		81
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	18.78	97	707	N.D.		
58) Toluene	19.28	91	1978422	20.948 ng		100
59) 2-Hexanone	19.59	43	36379	0.741 ng	#	52
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.39	43	89402	1.669 ng		92
63) n-Octane	20.55	57	30895	1.468 ng		85
64) Tetrachloroethene	20.75	166	1178	0.050 ng	#	69
65) Chlorobenzene	21.66	112	2018	N.D.		
66) Ethylbenzene	22.09	91	366615	3.595 ng		98
67) m- & p-Xylenes	22.30	91	903741	11.180 ng		99
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.77	104	200499	3.355 ng		99
70) o-Xylene	22.92	91	326233	4.012 ng		98
71) n-Nonane	23.17	43	35609	0.727 ng		86
72) 1,1,2,2-Tetrachloroethane	22.91	83	646	N.D.		
74) Cumene	23.66	105	23668	0.224 ng		99
75) alpha-Pinene	24.15	93	1552128	29.835 ng		98
76) n-Propylbenzene	24.28	91	138247	1.061 ng		94
77) 3-Ethyltoluene	24.40	105	360858	3.653 ng		97
78) 4-Ethyltoluene	24.45	105	185877	1.872 ng		97
79) 1,3,5-Trimethylbenzene	24.55	105	134224	1.635 ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:06:53 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

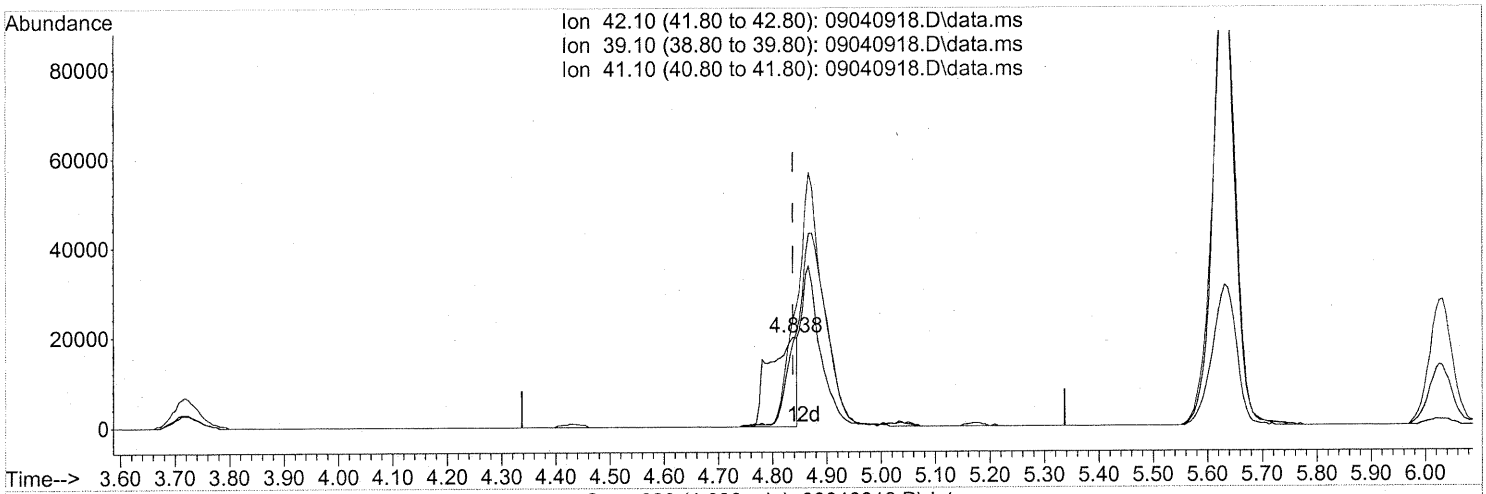
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	24.73	118	2327	0.052 ng		90
81) 2-Ethyltoluene	24.79	105	122866	1.204 ng		99
82) 1,2,4-Trimethylbenzene	25.05	105	511736	5.870 ng		89
83) n-Decane	25.15	57	57333	1.130 ng		93
84) Benzyl Chloride	25.25	91	1766	N.D.		
85) 1,3-Dichlorobenzene	25.33	146	3071	0.068 ng		98
86) 1,4-Dichlorobenzene	25.33	146	3071	0.064 ng		99
87) sec-Butylbenzene	25.38	105	9799	0.085 ng	#	80
88) 4-Isopropyltoluene (p-...	25.56	119	190655	1.732 ng		99
89) 1,2,3-Trimethylbenzene	25.57	105	111383	1.264 ng		93
90) 1,2-Dichlorobenzene	25.33	146	3071	0.068 ng		98
91) d-Limonene	25.74	68	731479	20.507 ng		96
92) 1,2-Dibromo-3-Chloropr...	26.66	157	122	N.D.		
93) n-Undecane	26.65	57	86808	1.656 ng		93
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
95) Naphthalene	27.94	128	78346	0.670 ng		98
96) n-Dodecane	27.89	57	90335	1.539 ng		95
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.51	55	45100	1.516 ng		96
99) tert-Butylbenzene	25.49	119	21569	0.249 ng		98
100) n-Butylbenzene	26.07	91	44564	0.487 ng	#	65

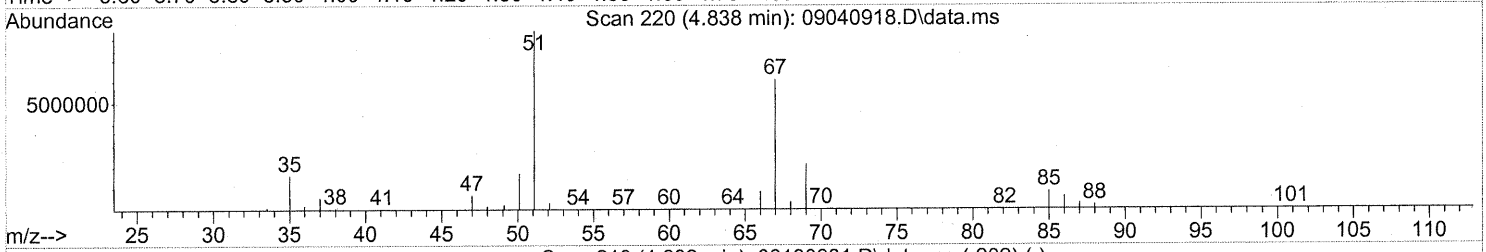
(#) = qualifier out of range (m) = manual integration (+) = signals summed

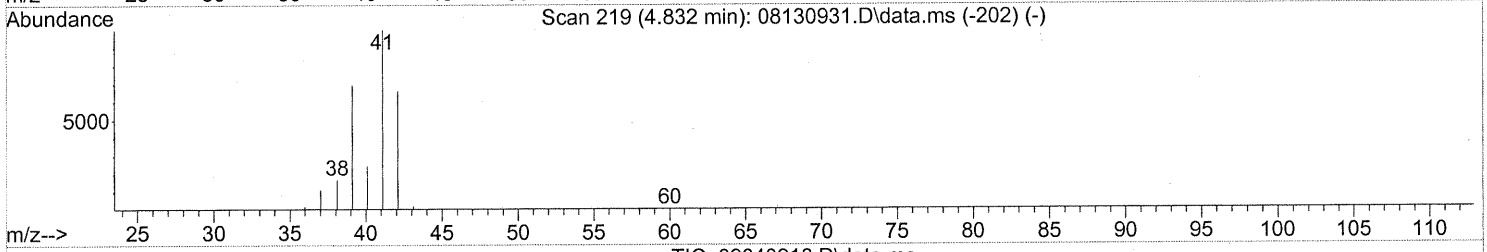
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040918.D\data.ms

(2) Propene (T)

4.838min (+0.000) 2.38ng

response 68538

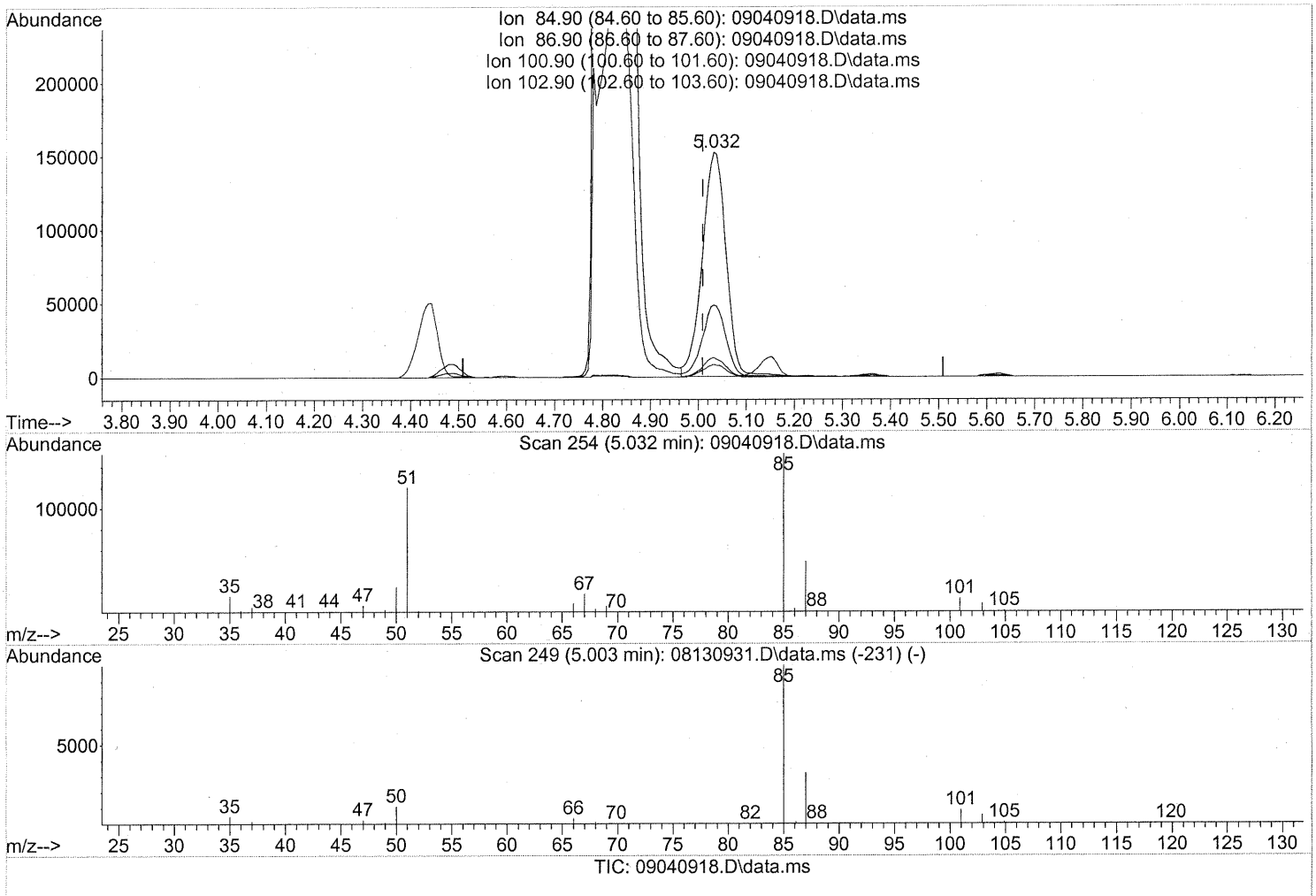
Ion	Exp%	Act%
42.10	100	100
39.10	115.80	0.00#
41.10	152.70	0.00#
0.00	0.00	0.00

FP 9/9/09

KR 9/9/09

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(3) Dichlorodifluoromethane (CFC 12) (T)

5.032min (+0.023) 12.80ng

response 525306

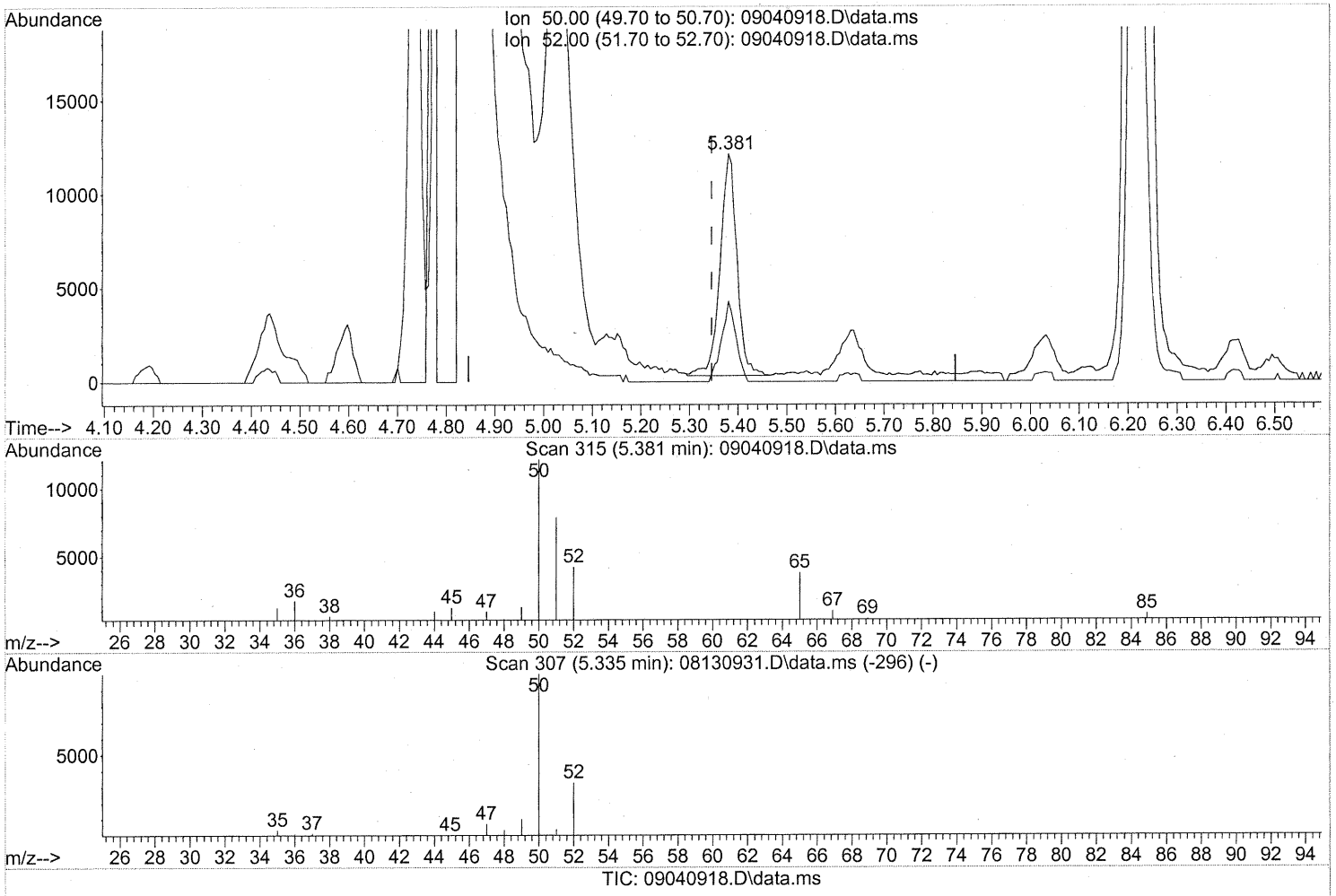
Ion	Exp%	Act%
84.90	100	100
86.90	32.00	32.03
100.90	9.10	8.10
102.90	5.50	5.26

142

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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)

5.381min (+0.034) 0.74ng

response 28462

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.96
0.00	0.00	0.00
0.00	0.00	0.00

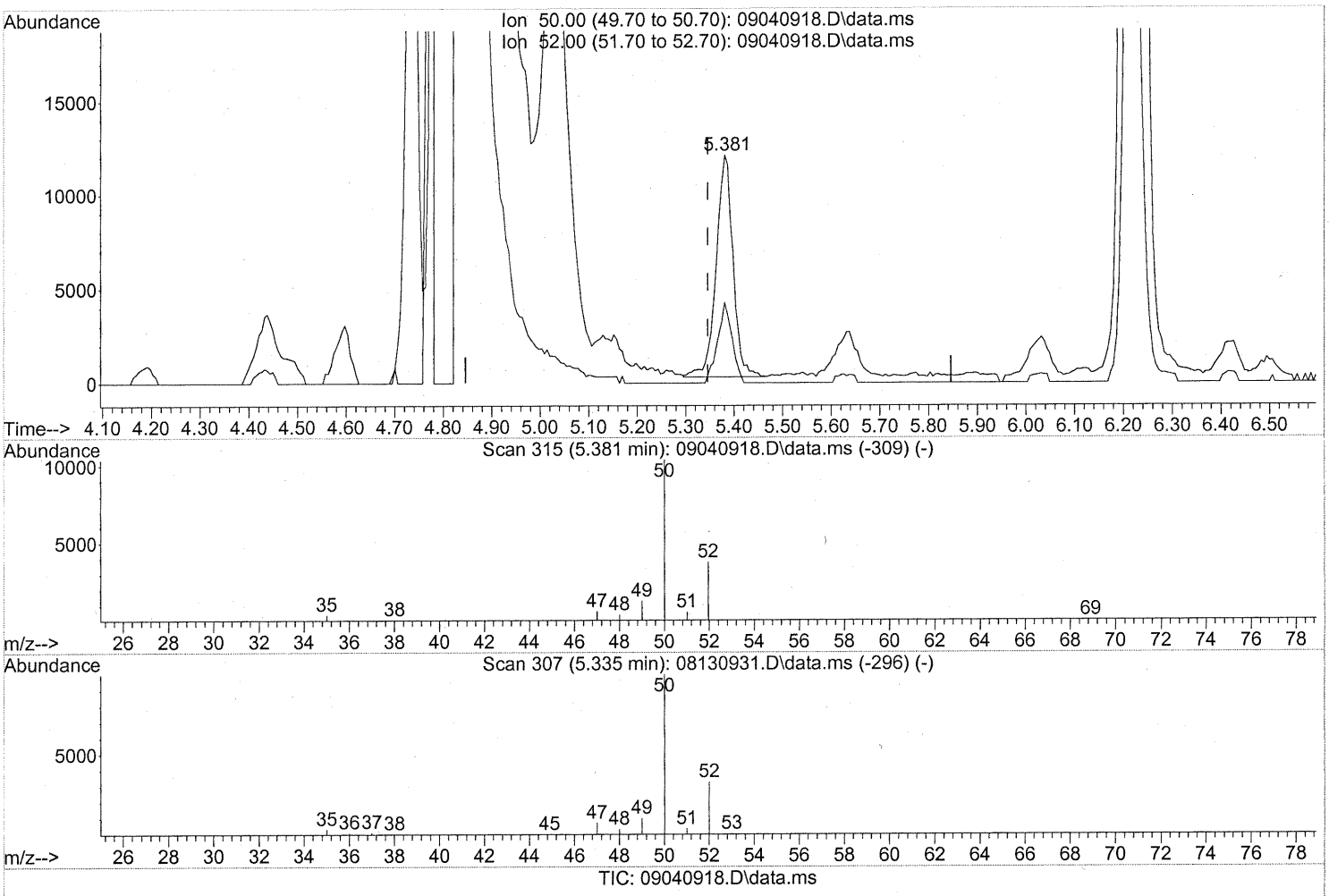
Before subtraction

143

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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)

5.381min (+0.034) 0.74ng

response 28462

Ion	Exp%	Act%
50.00	100	100
52.00	33.20	30.96
0.00	0.00	0.00
0.00	0.00	0.00

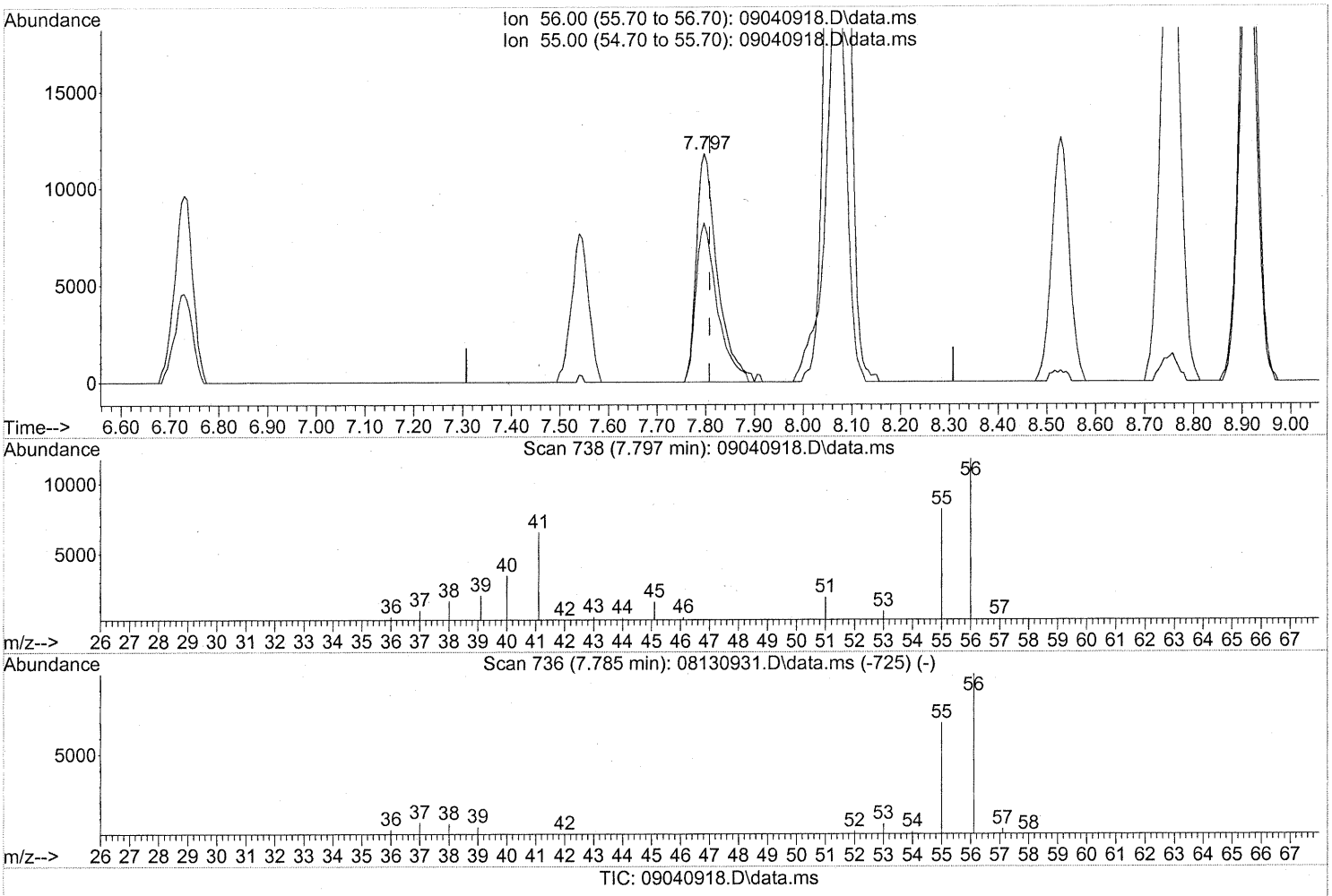
After subtraction
bm 9/9/09

144

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(12) Acrolein (T)

7.797min (-0.011) 2.99ng

response 35141

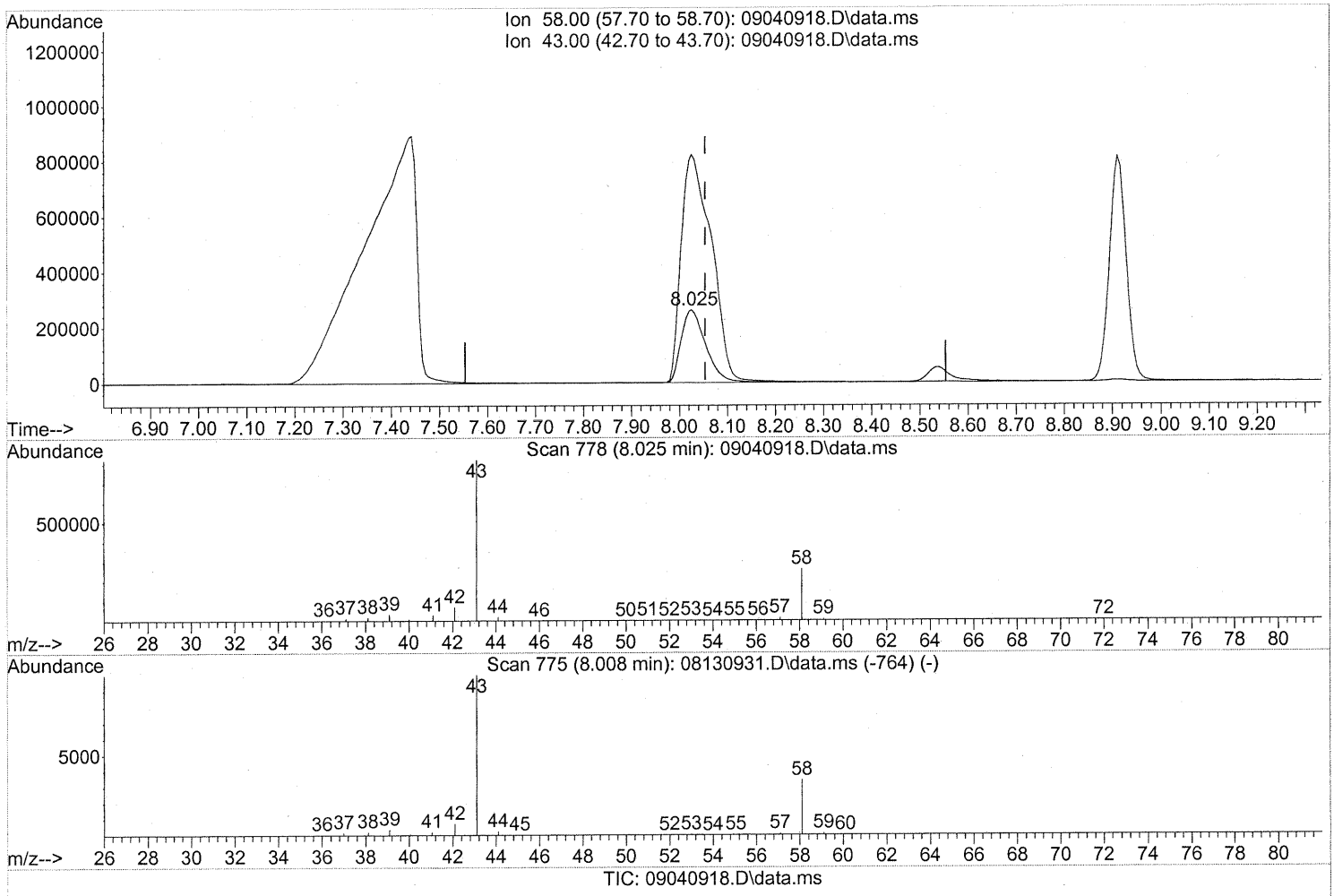
Ion	Exp%	Act%
56.00	100	100
55.00	67.70	70.48
0.00	0.00	0.00
0.00	0.00	0.00

145

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(13) Acetone (T)

8.025min (-0.028) 50.46ng

response 925741

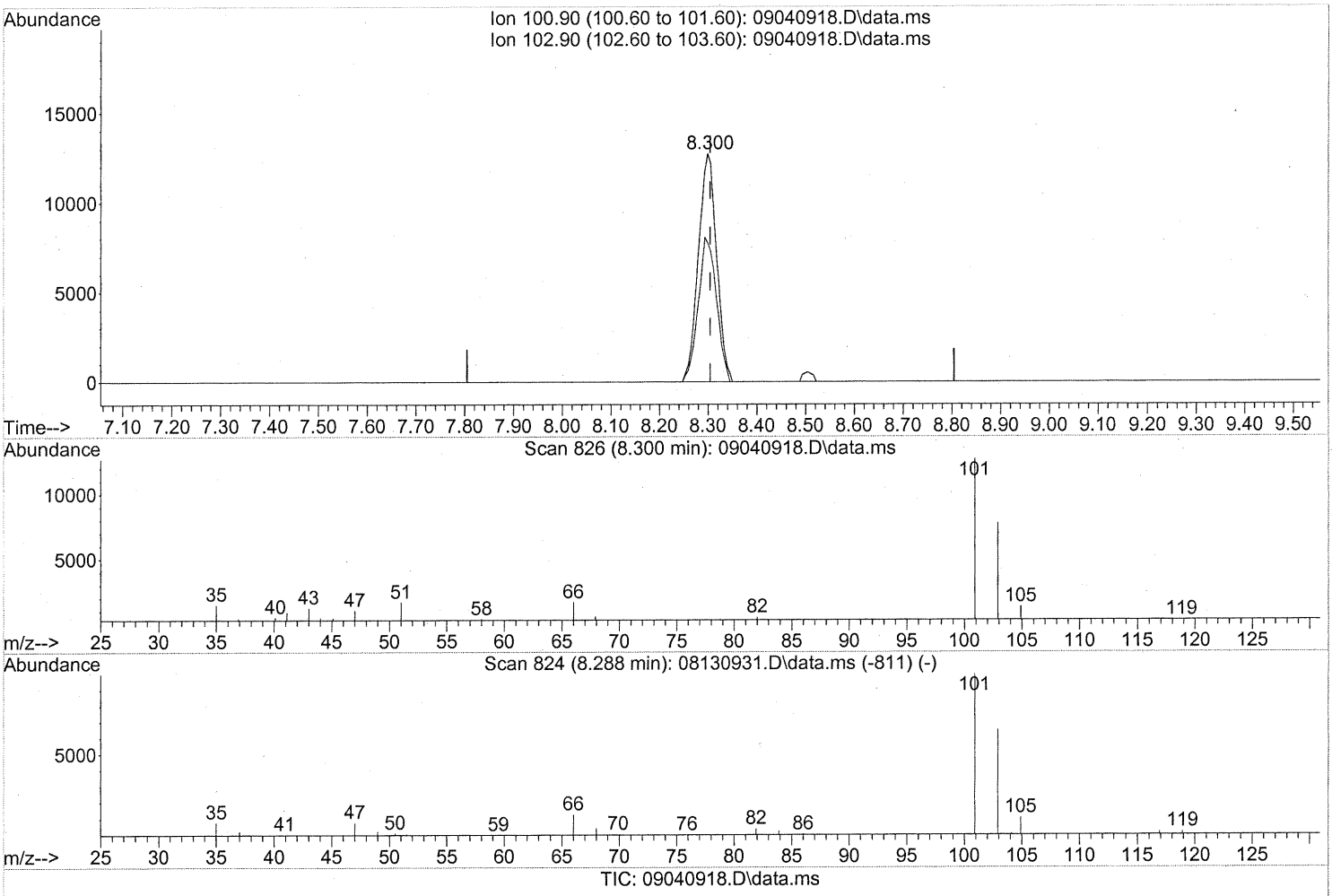
Ion	Exp%	Act%
58.00	100	100
43.00	317.70	389.54#
0.00	0.00	0.00
0.00	0.00	0.00

146

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(14) Trichlorofluoromethane (T)

8.300min (-0.006) 0.94ng

response 33036

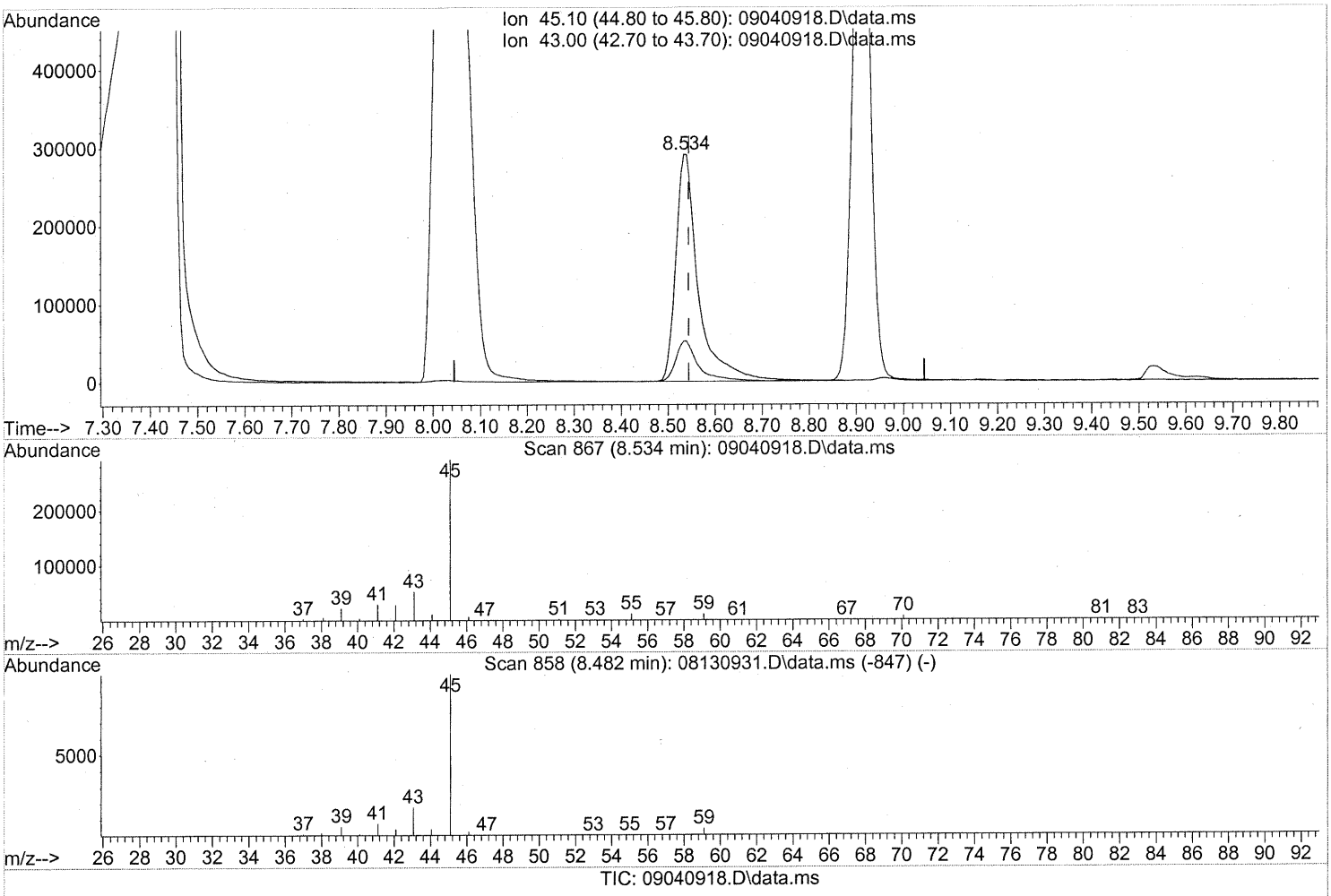
Ion	Exp%	Act%
100.90	100	100
102.90	66.00	63.39
0.00	0.00	0.00
0.00	0.00	0.00

147

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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)

8.534min (-0.011) 19.59ng

response 984313

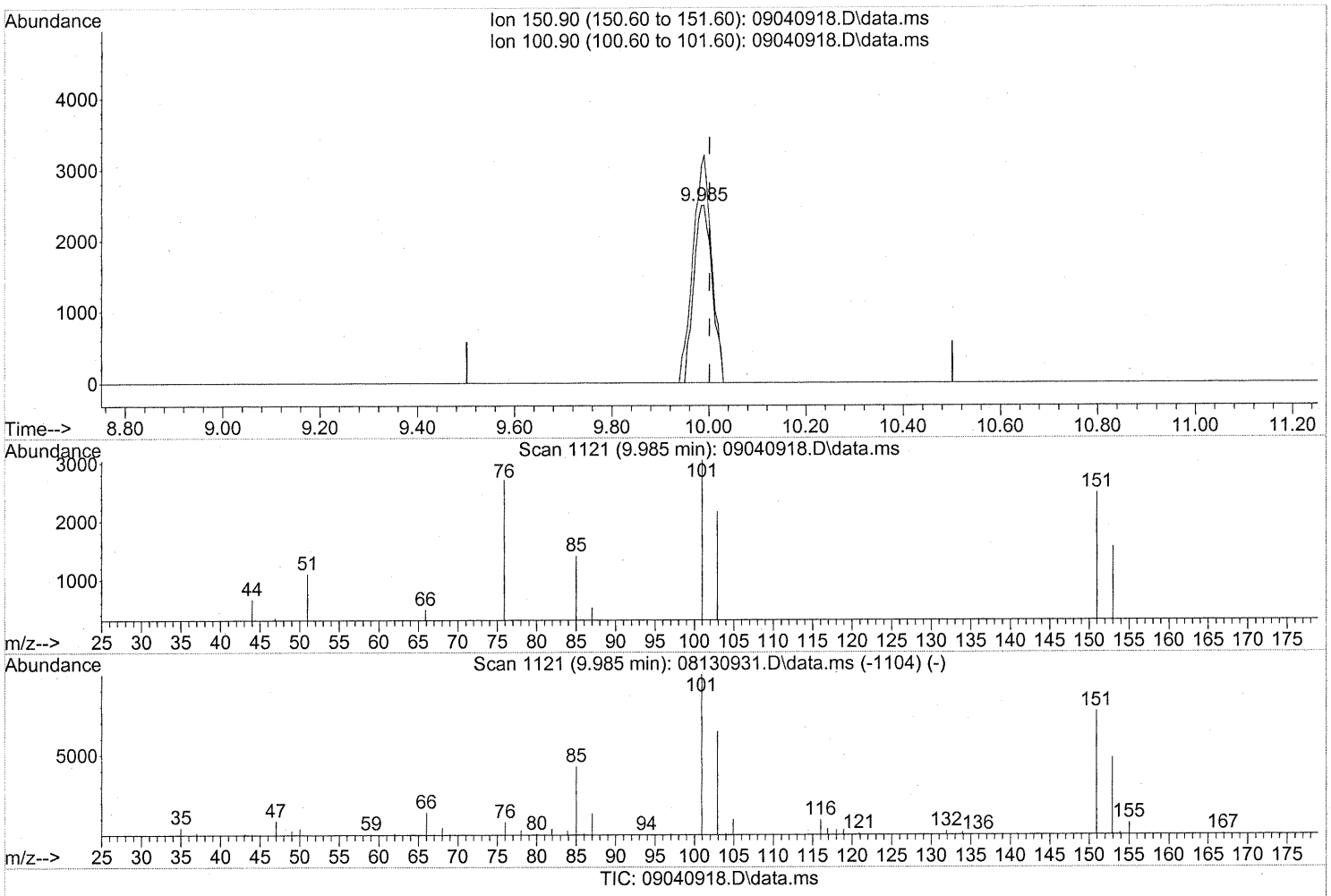
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.42
0.00	0.00	0.00
0.00	0.00	0.00

148

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(21) Trichlorotrifluoroethane (T)

9.985min (-0.017) 0.41ng

response 6506

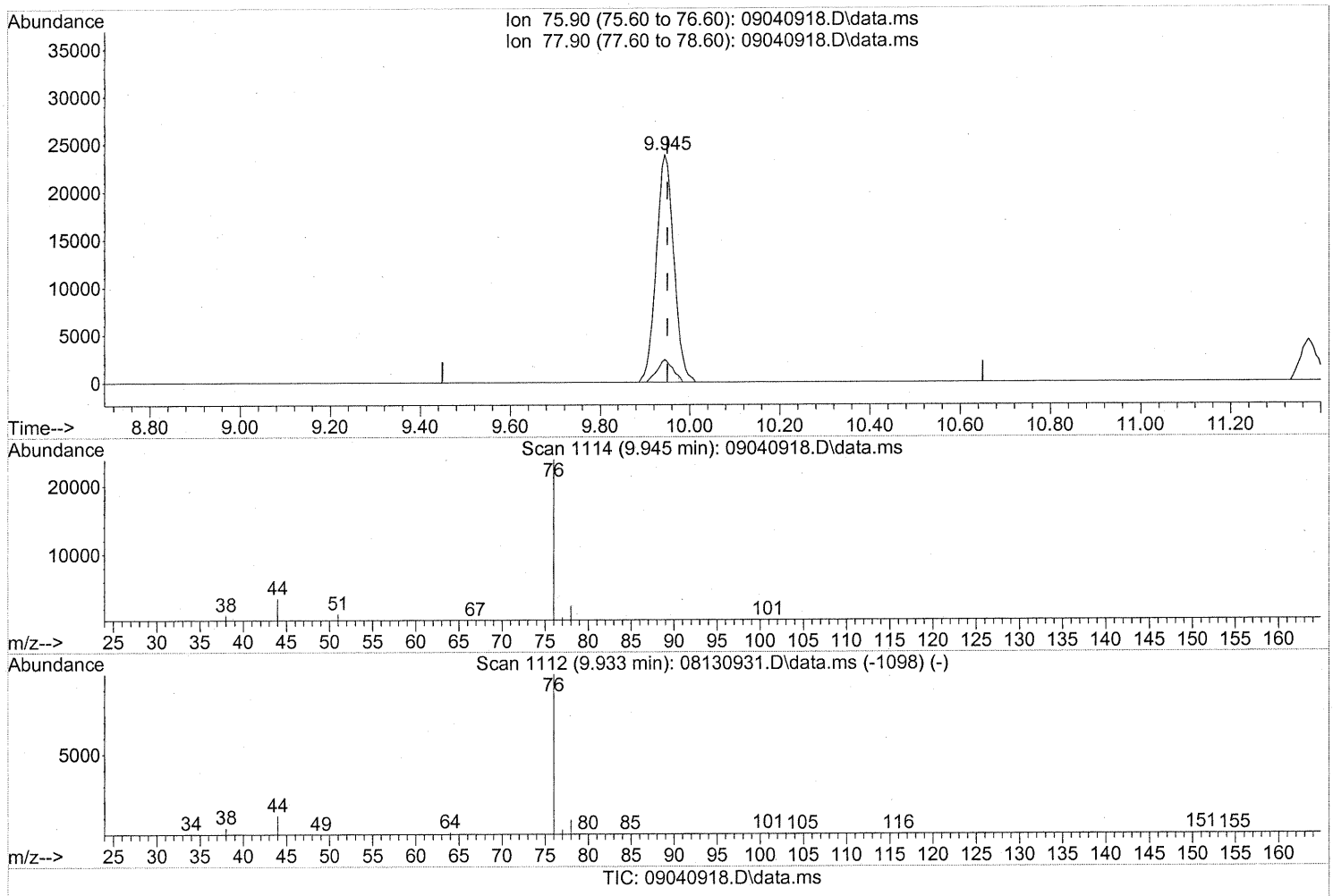
Ion	Exp%	Act%
150.90	100	100
100.90	127.40	129.27
0.00	0.00	0.00
0.00	0.00	0.00

149

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 08 07:36:59 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040918.D\data.ms

(22) Carbon Disulfide (T)

9.945min (-0.006) 0.80ng

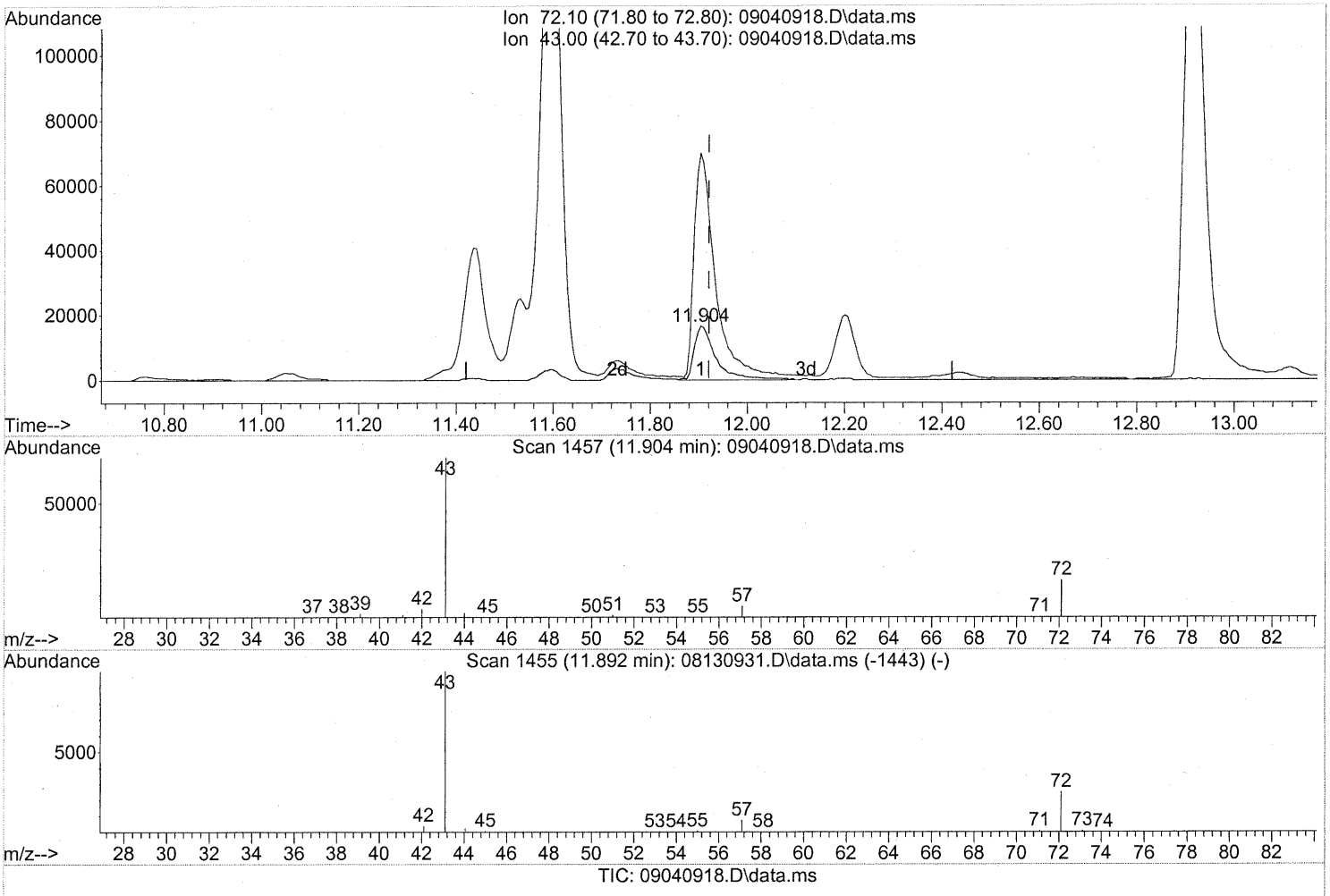
response 64747

Ion	Exp%	Act%
75.90	100	100
77.90	9.00	8.72
0.00	0.00	0.00
0.00	0.00	0.00

150

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

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

11.904min (-0.017) 3.96ng

response 50597

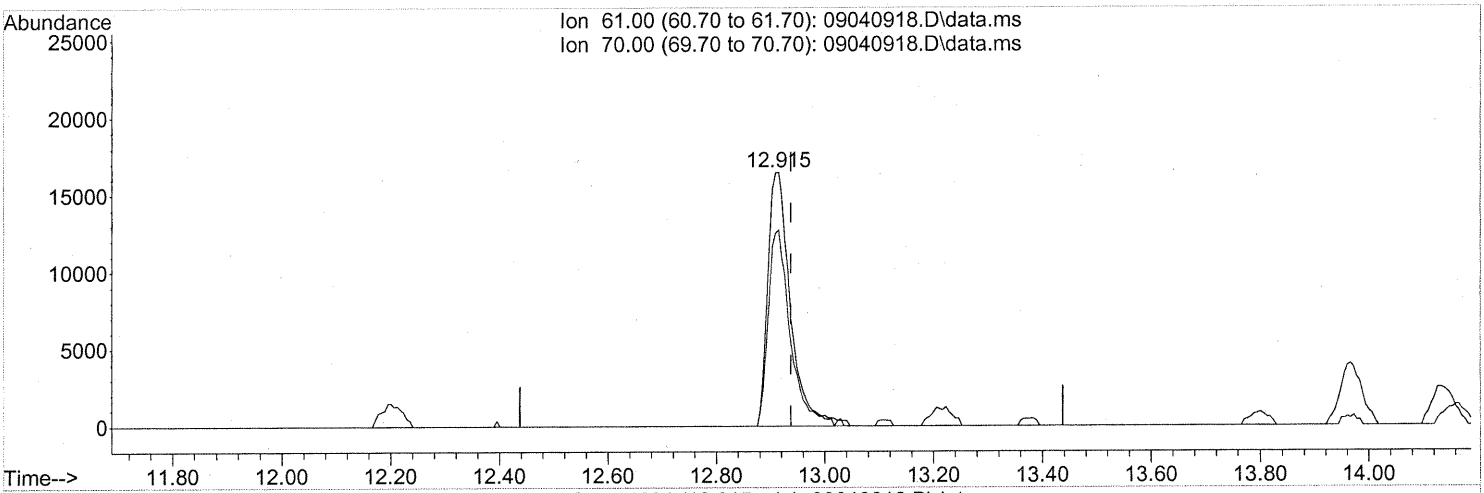
Ion	Exp%	Act%
72.10	100	100
43.00	366.50	402.89#
0.00	0.00	0.00
0.00	0.00	0.00

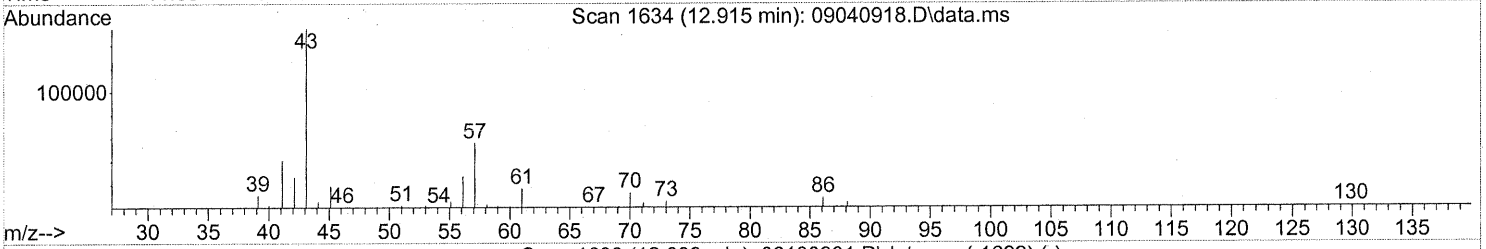
151

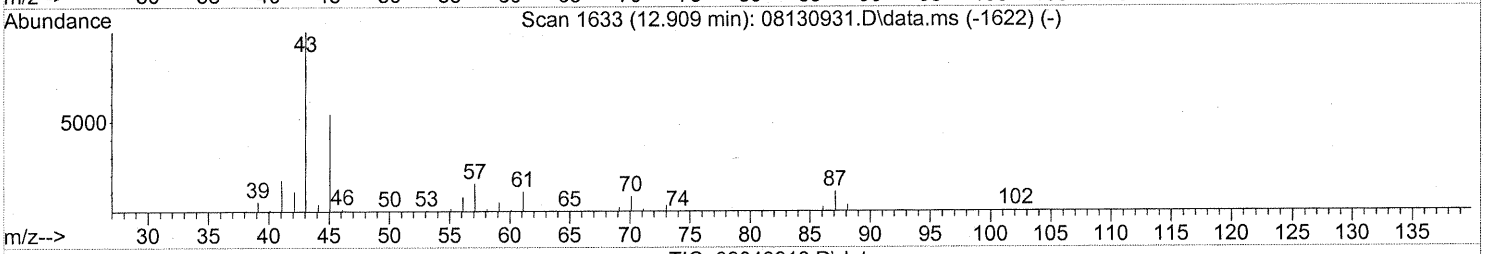
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(30) Ethyl Acetate (T)

12.915min (-0.023) 5.76ng

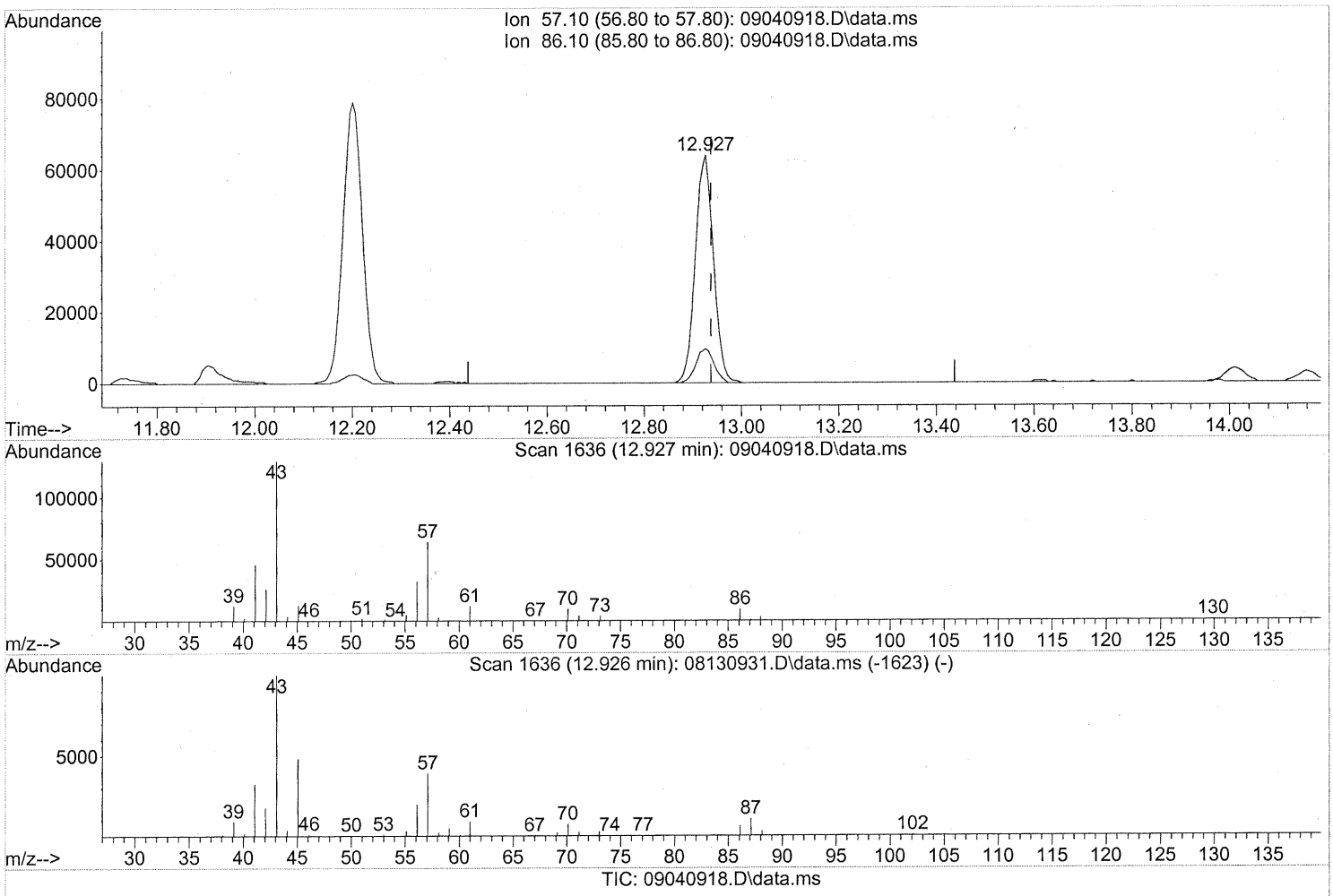
response 47791

Ion	Exp%	Act%
61.00	100	100
70.00	78.80	74.99
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(31) n-Hexane (T)

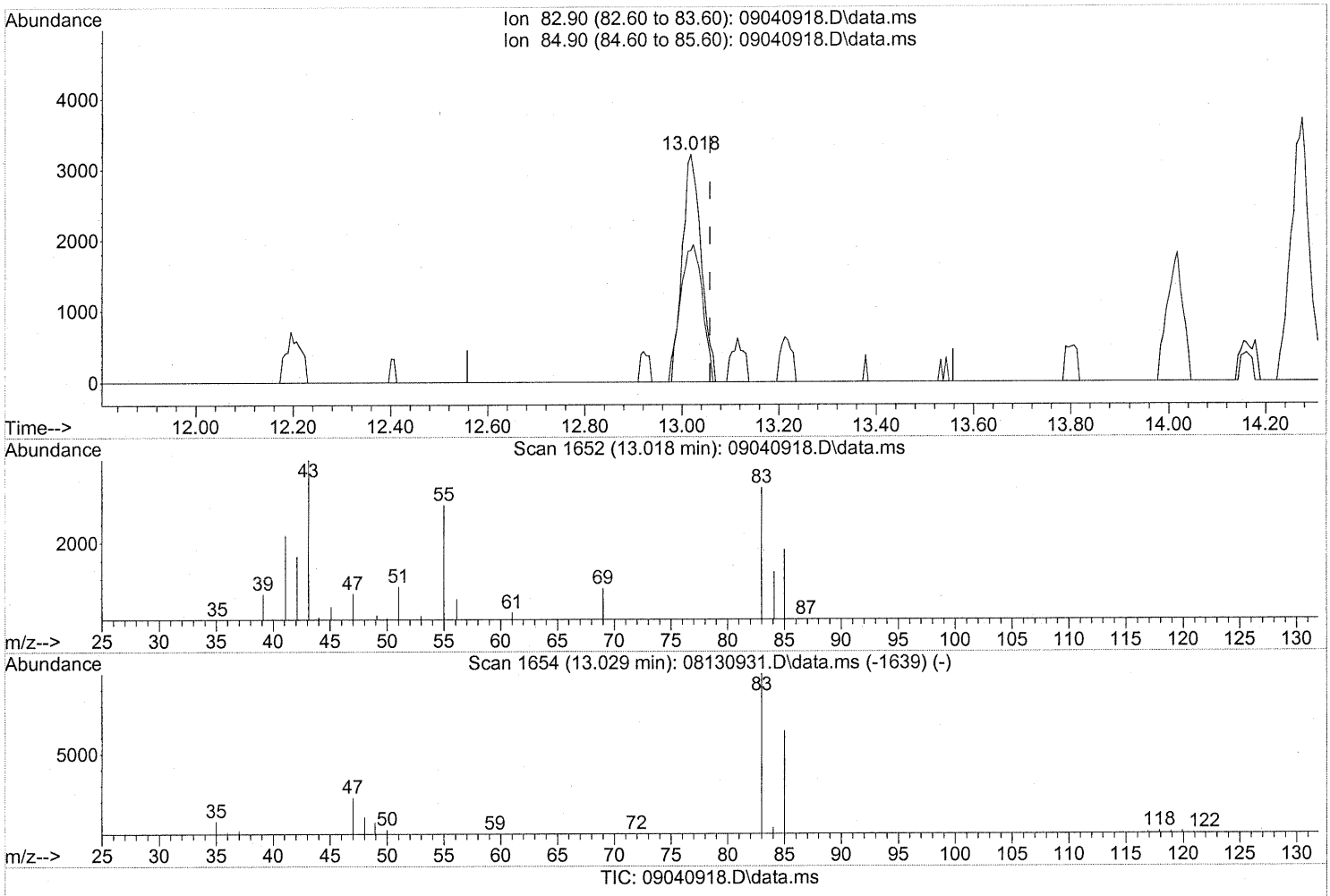
12.927min (-0.011) 4.06ng

response 164317

Ion	Exp%	Act%
57.10	100	100
86.10	17.50	14.71
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(32) Chloroform (T)

13.018min (-0.040) 0.26ng

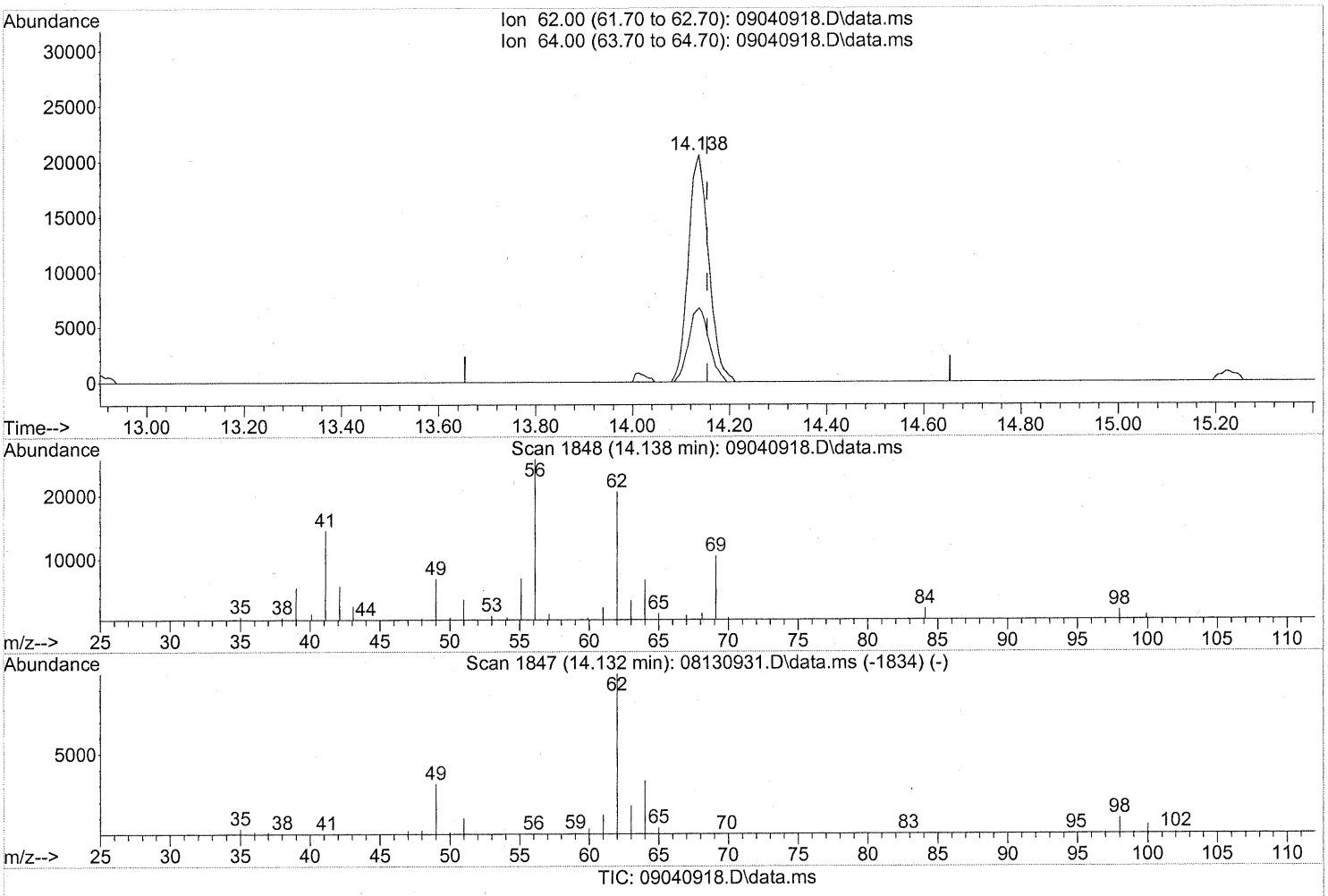
response 8699

Ion	Exp%	Act%
82.90	100	100
84.90	64.70	70.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(36) 1,2-Dichloroethane (T)

14.138min (-0.017) 2.30ng

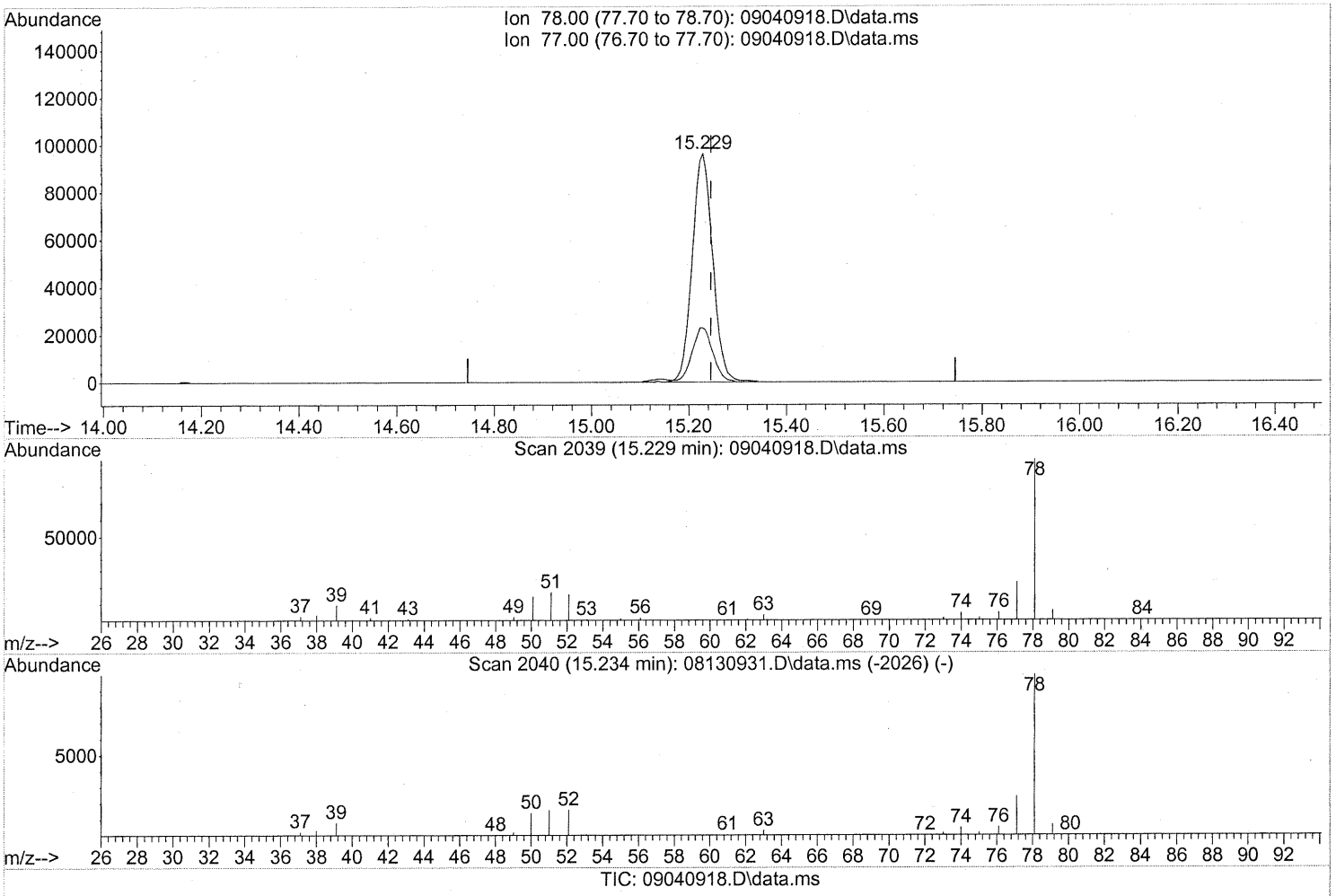
response 59552

Ion	Exp%	Act%
62.00	100	100
64.00	32.70	32.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(41) Benzene (T)

15.229min (-0.017) 3.12ng

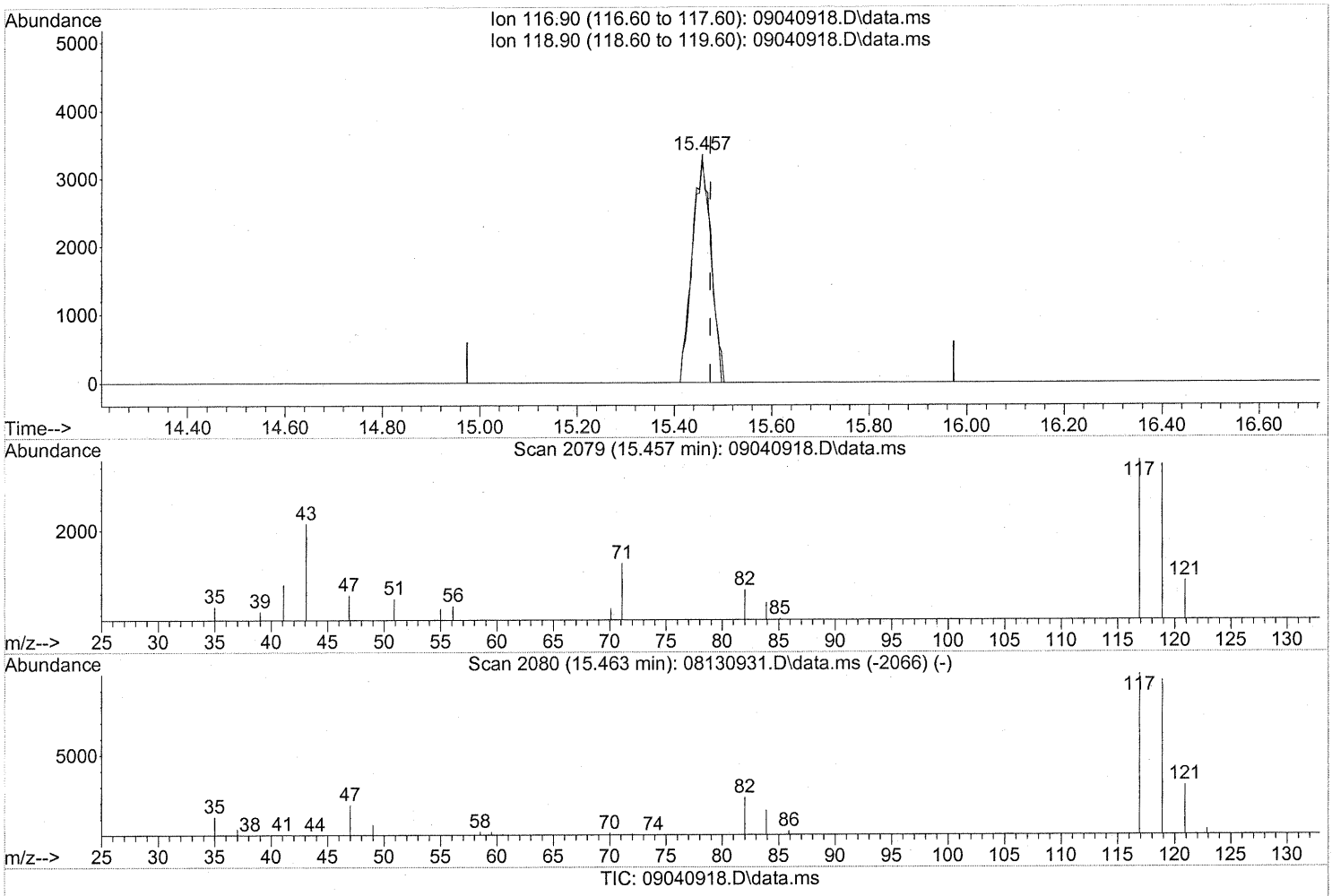
response 279541

Ion	Exp%	Act%
78.00	100	100
77.00	25.10	23.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(42) Carbon Tetrachloride (T)

15.457min (-0.017) 0.35ng

response 8840

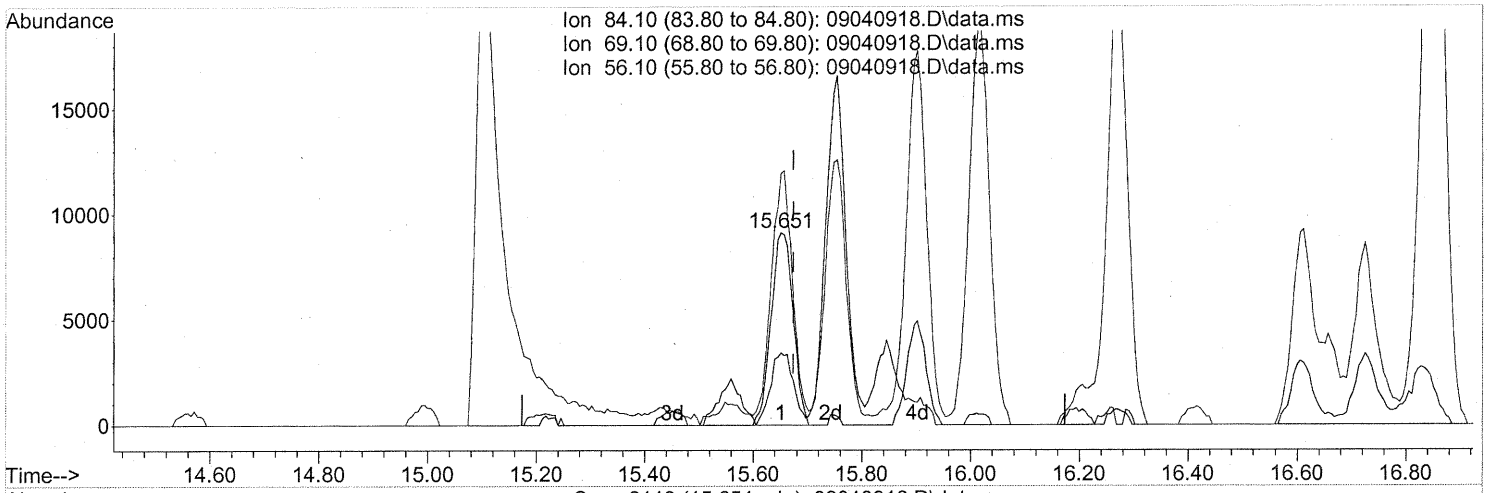
Ion	Exp%	Act%
116.90	100	100
118.90	97.00	99.56
0.00	0.00	0.00
0.00	0.00	0.00

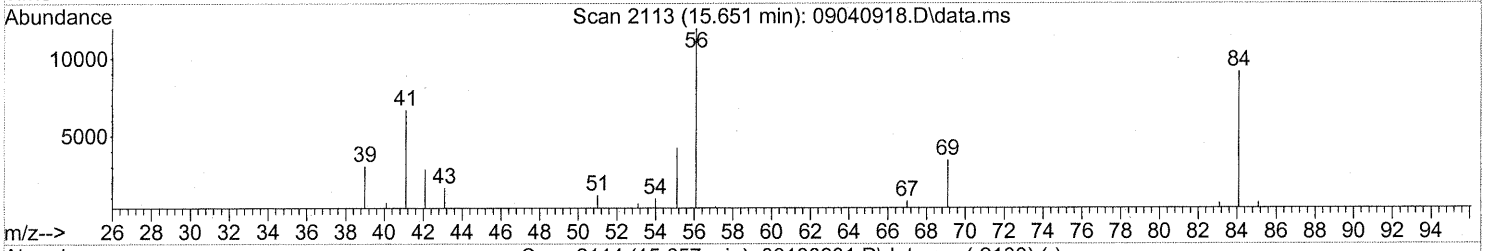
157

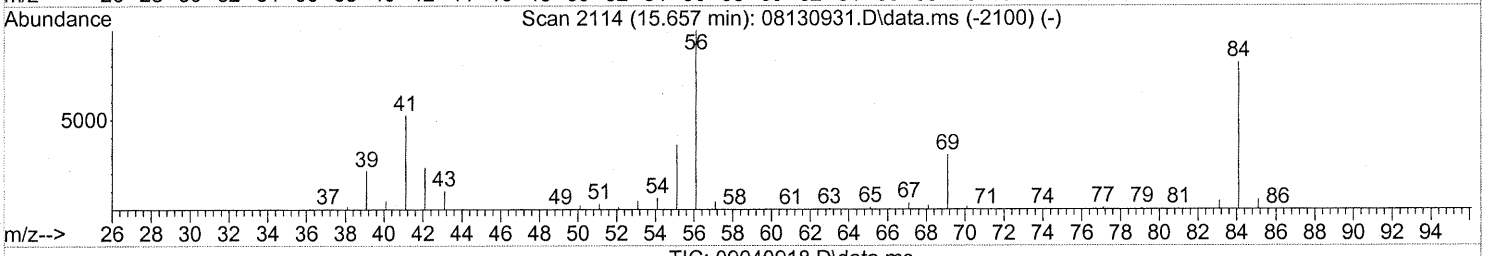
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(43) Cyclohexane (T)

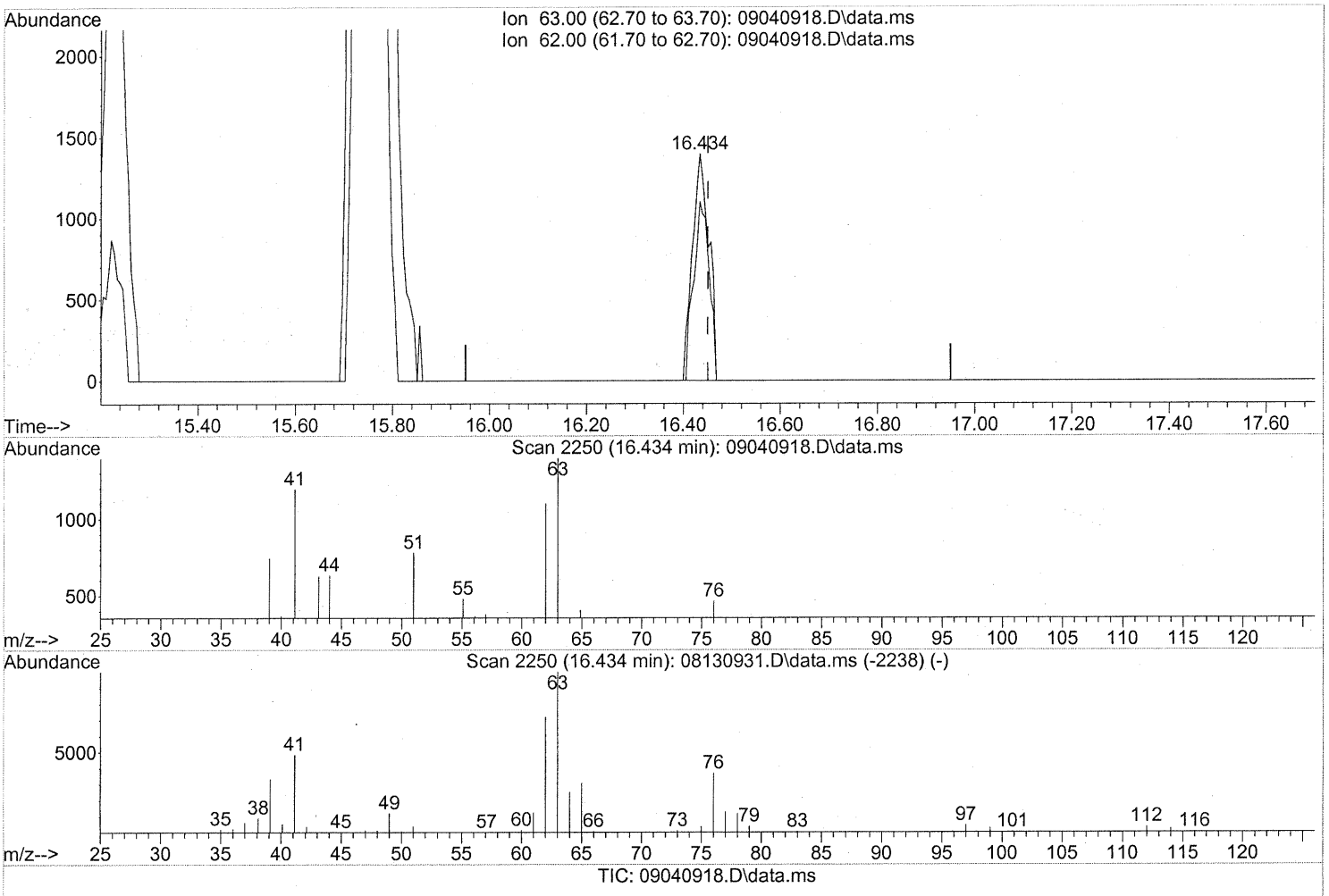
15.651min (-0.023) 0.74ng

response 25580

Ion	Exp%	Act%
84.10	100	100
69.10	34.80	39.15
56.10	107.30	129.93#
0.00	0.00	0.00

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(45) 1,2-Dichloropropane (T)

16.434min (-0.017) 0.15ng

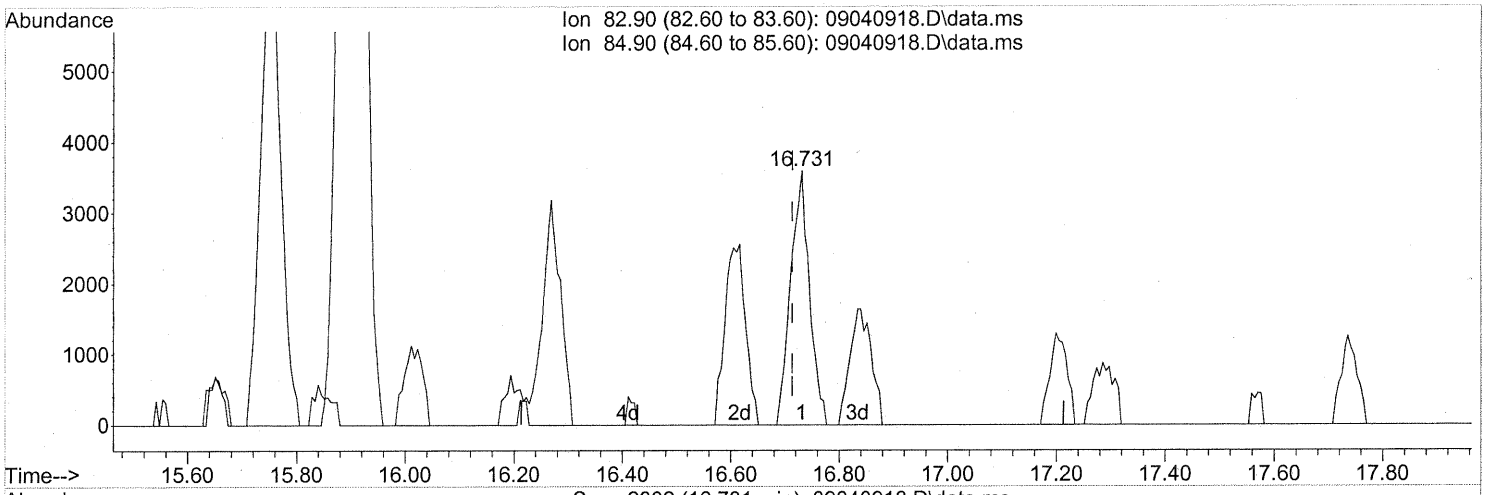
response 3300

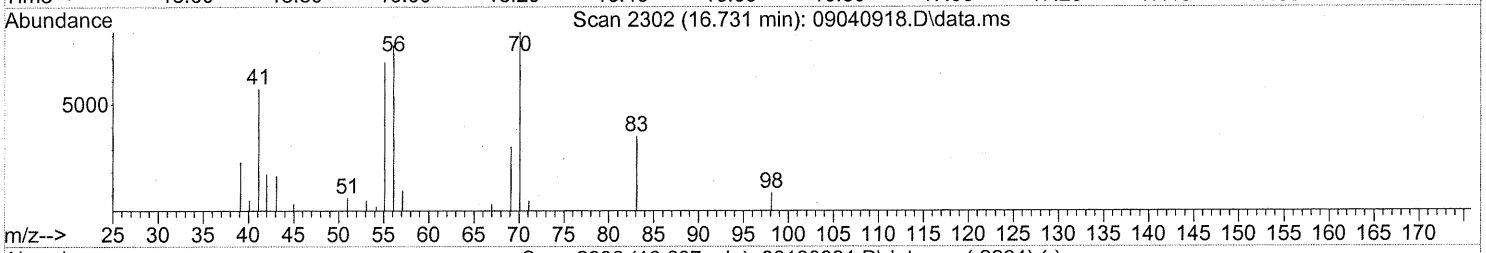
Ion	Exp%	Act%
63.00	100	100
62.00	71.00	74.55
0.00	0.00	0.00
0.00	0.00	0.00

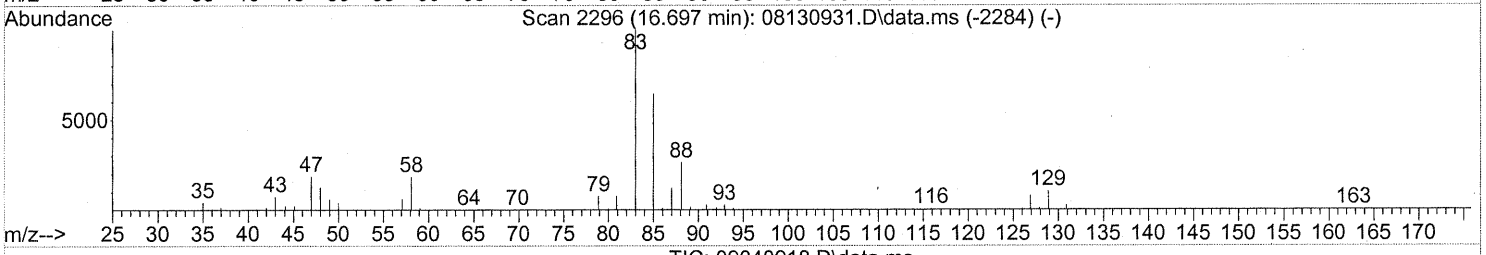
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(46) Bromodichloromethane (T)

16.731min (+0.017) 0.33ng

response 8659

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

FP 9/9/09

KR 9/9/09

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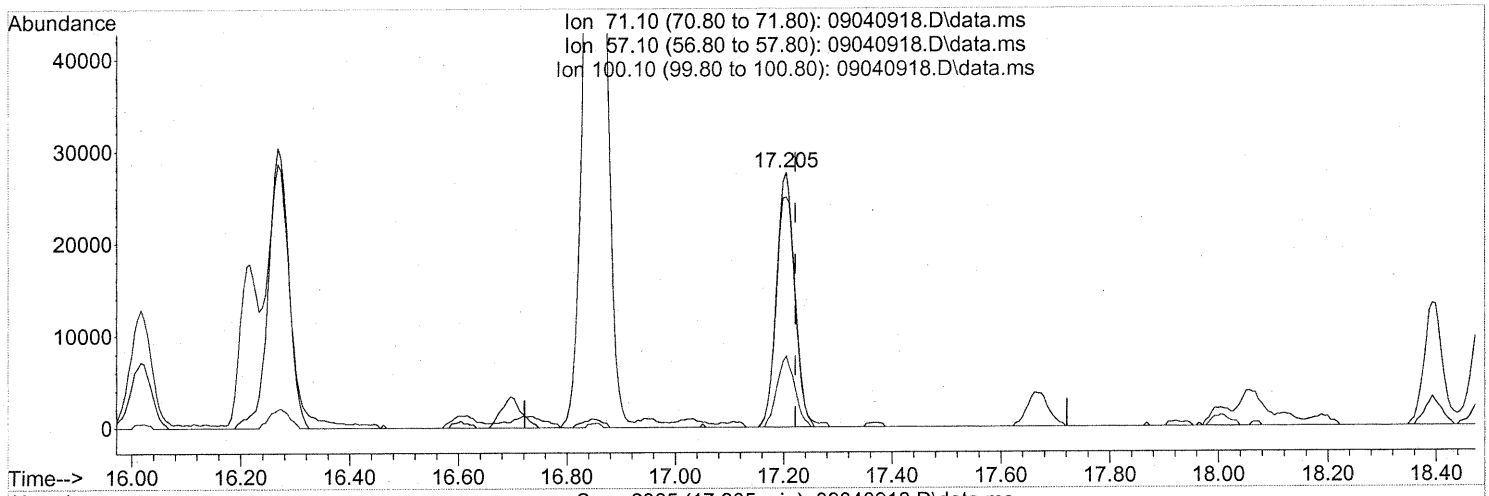
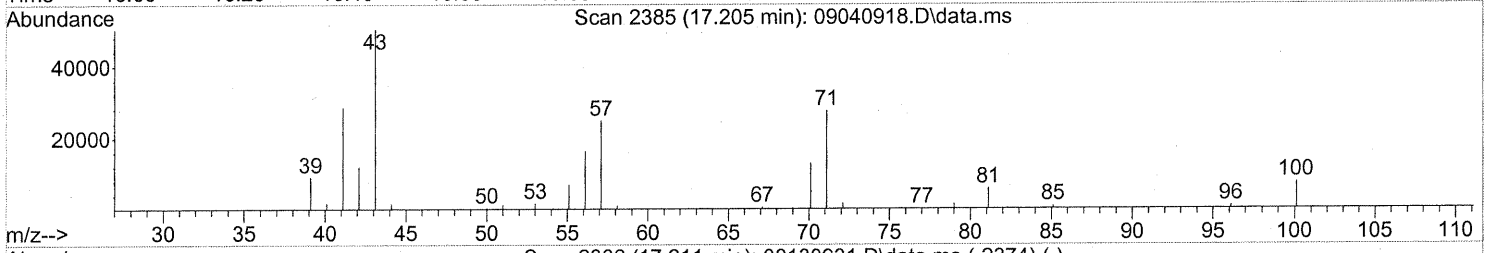
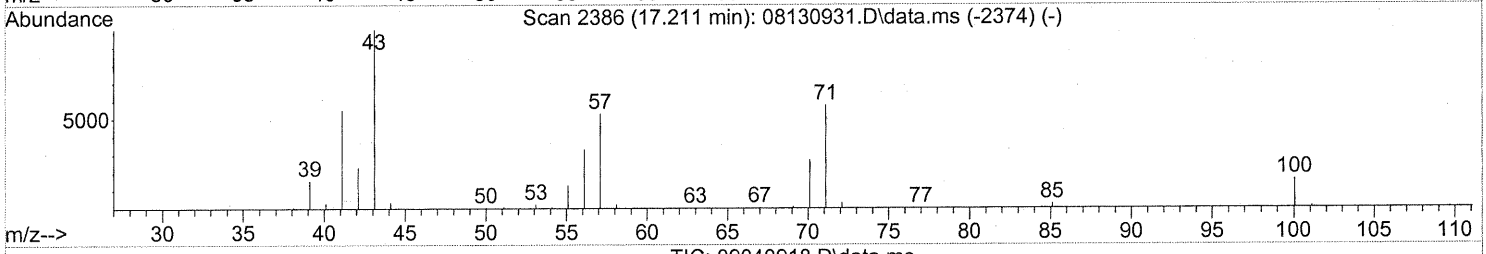
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(51) n-Heptane (T)

17.205min (-0.017) 2.68ng

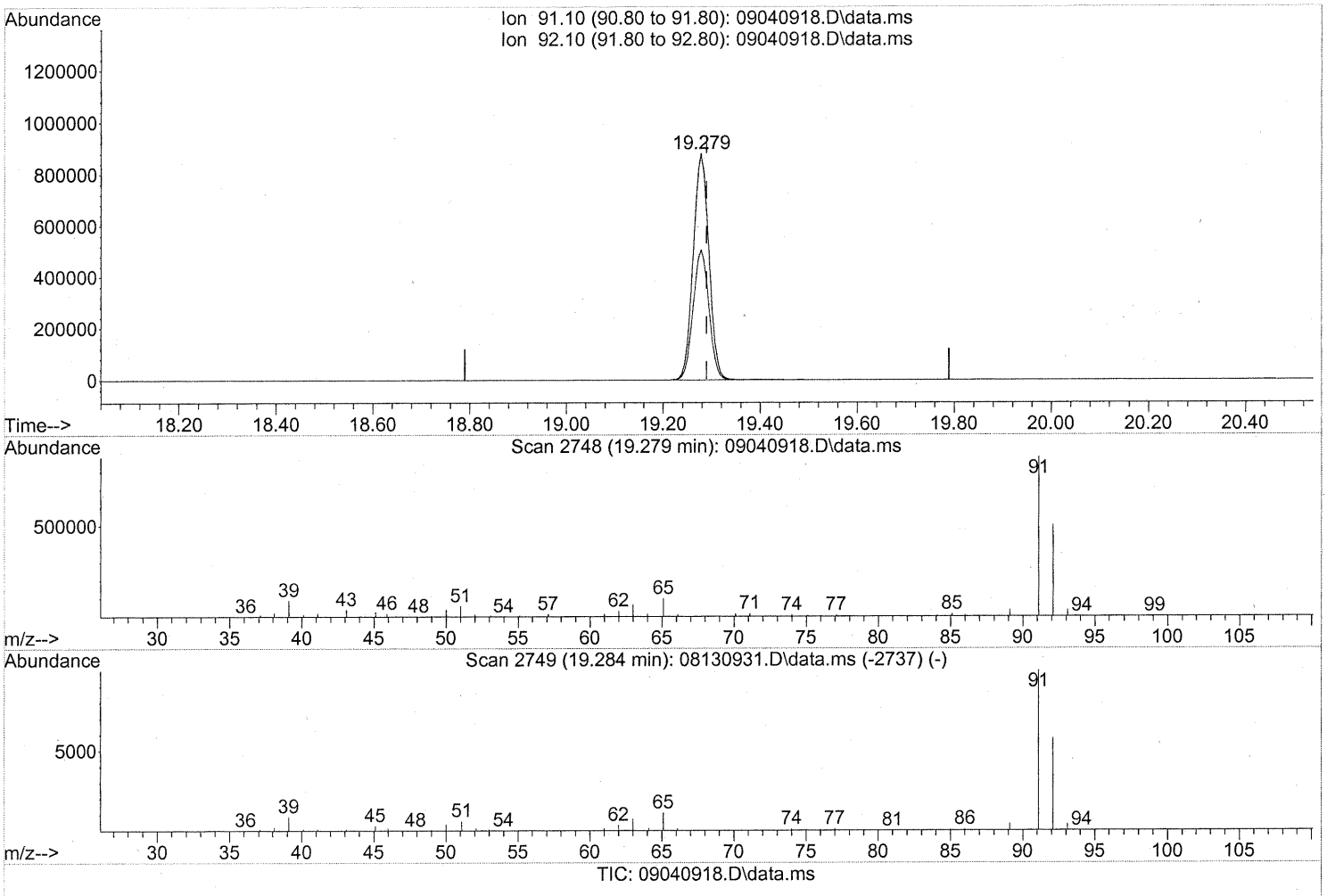
response 63937

Ion	Exp%	Act%
71.10	100	100
57.10	86.80	96.33
100.10	30.70	27.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(58) Toluene (T)

19.279min (-0.011) 20.95ng

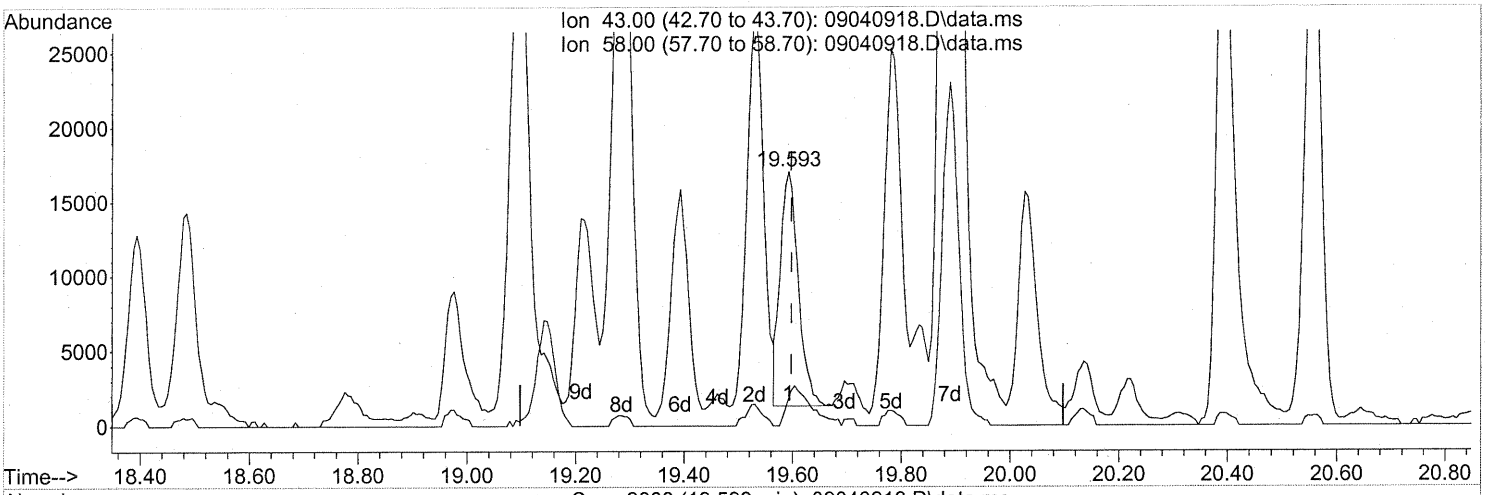
response 1978422

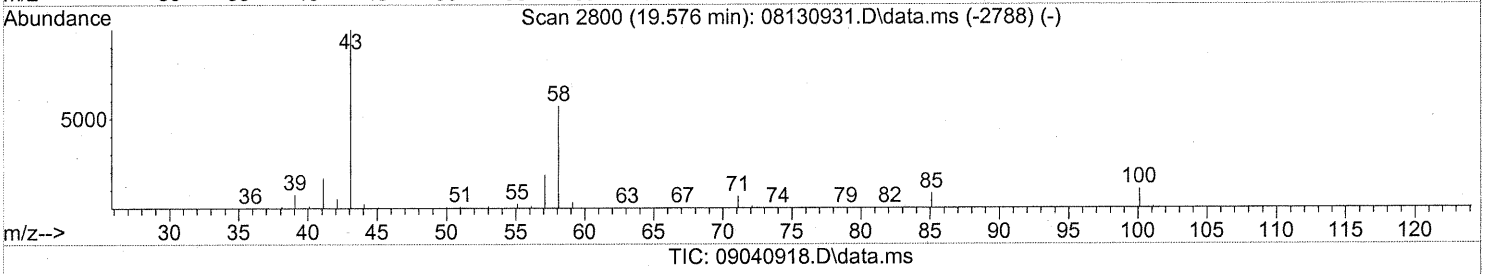
Ion	Exp%	Act%
91.10	100	100
92.10	57.60	57.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.74ng

response 36379

Ion	Exp%	Act%
43.00	100	100
58.00	57.70	22.09#
0.00	0.00	0.00
0.00	0.00	0.00

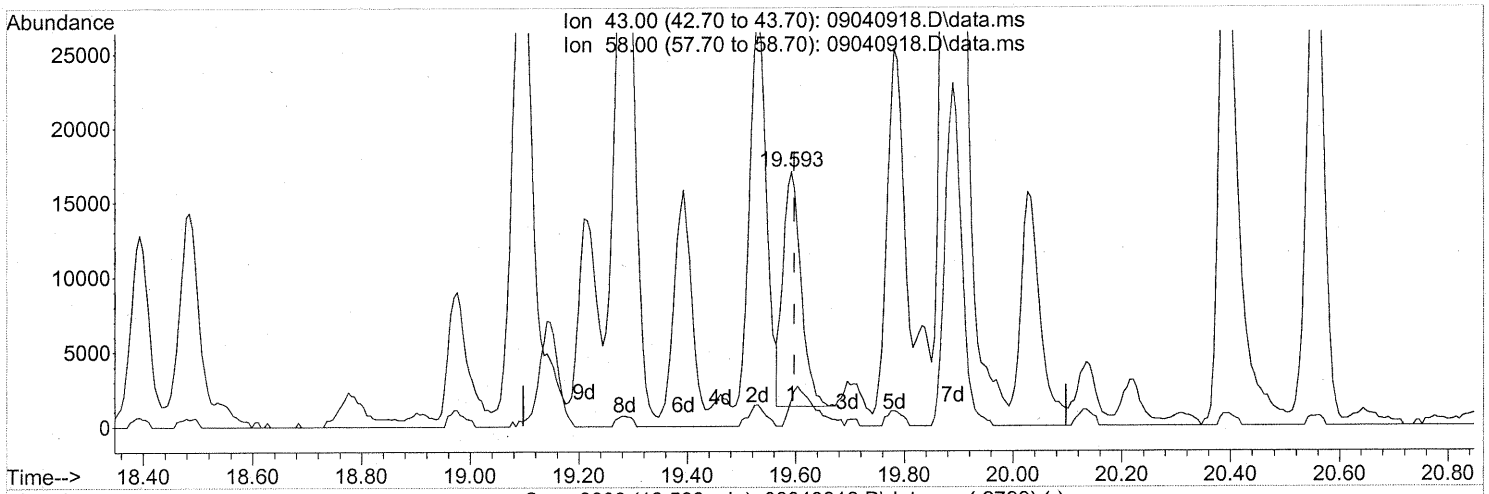
Before subtraction

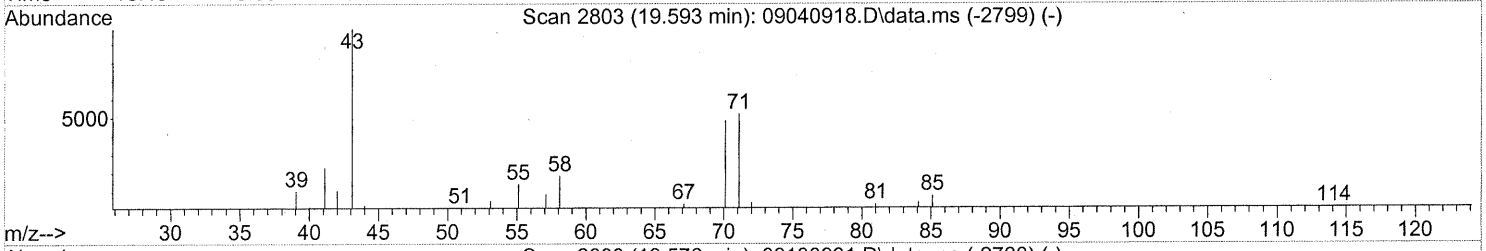
163

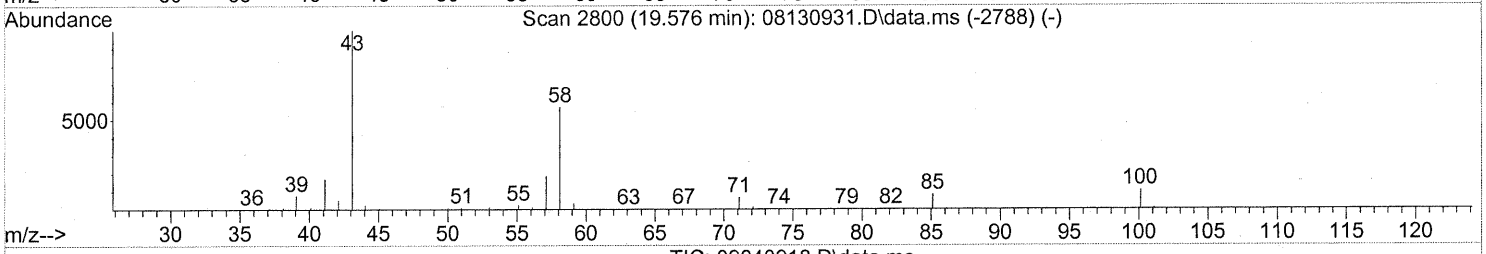
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(59) 2-Hexanone (T)

19.593min (-0.005) 0.74ng

response 36379

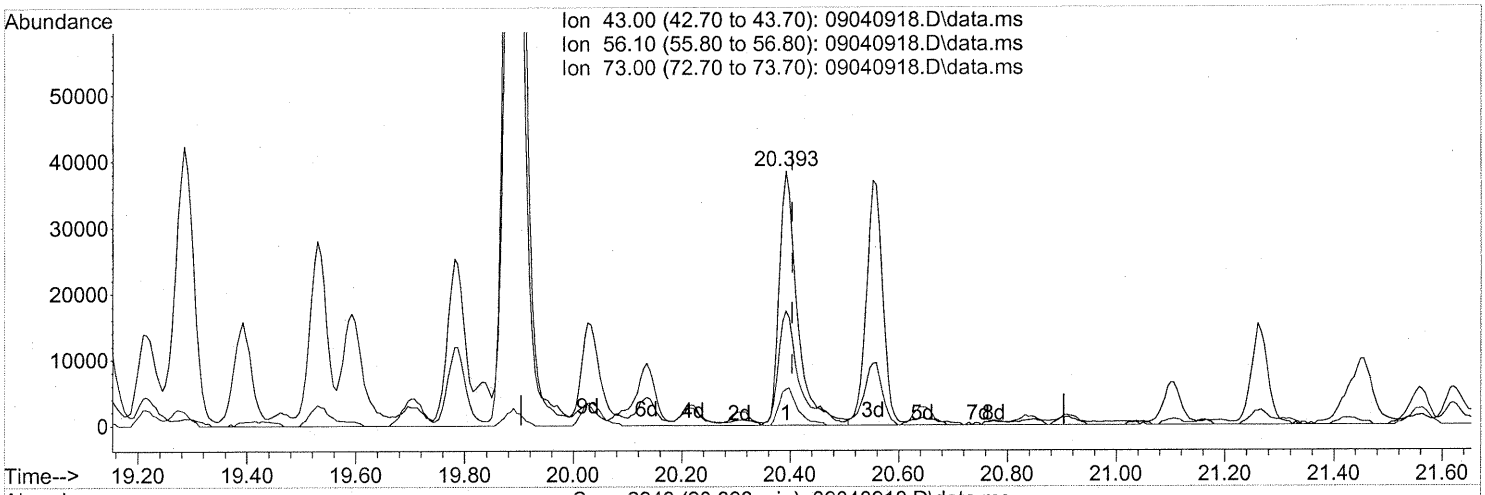
Ion	Exp%	Act%
43.00	100	100
58.00	57.70	22.09#
0.00	0.00	0.00
0.00	0.00	0.00

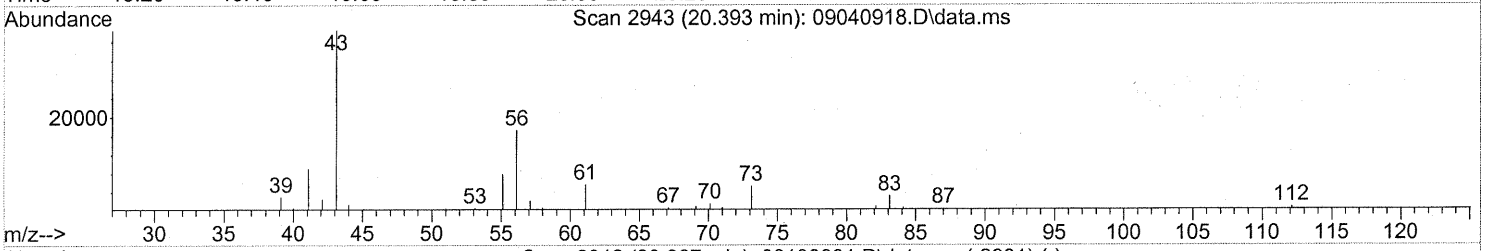
After subtraction
Ean 9/9/09

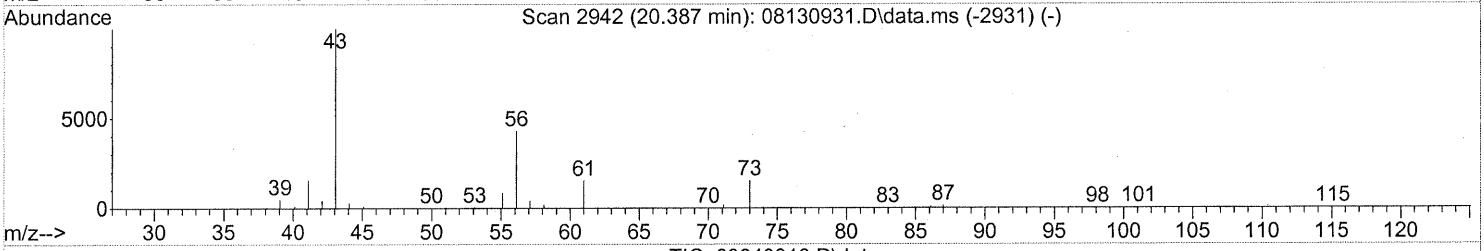
164

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(62) n-Butyl Acetate (T)

20.393min (-0.011) 1.67ng

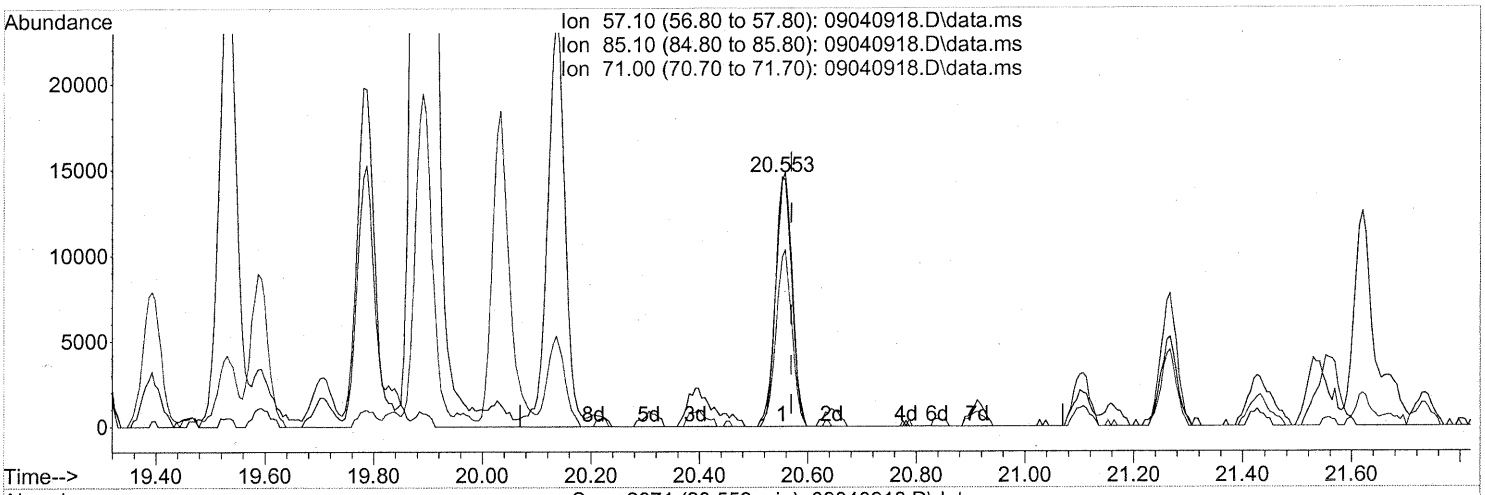
response 89402

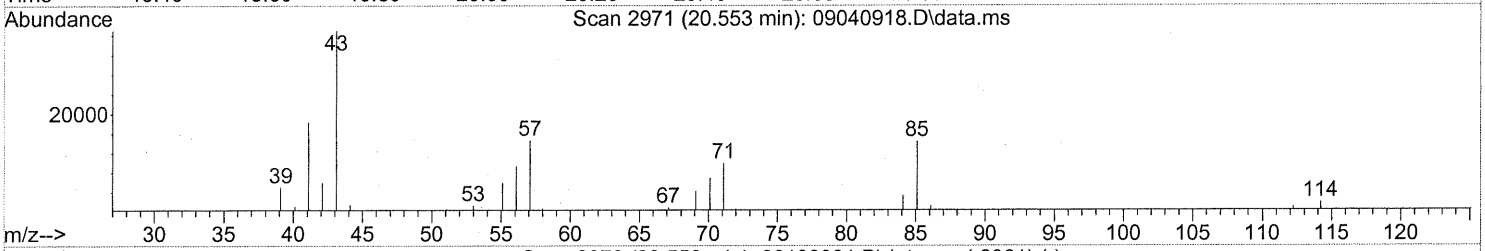
Ion	Exp%	Act%
43.00	100	100
56.10	42.90	48.71
73.00	16.90	14.56
0.00	0.00	0.00

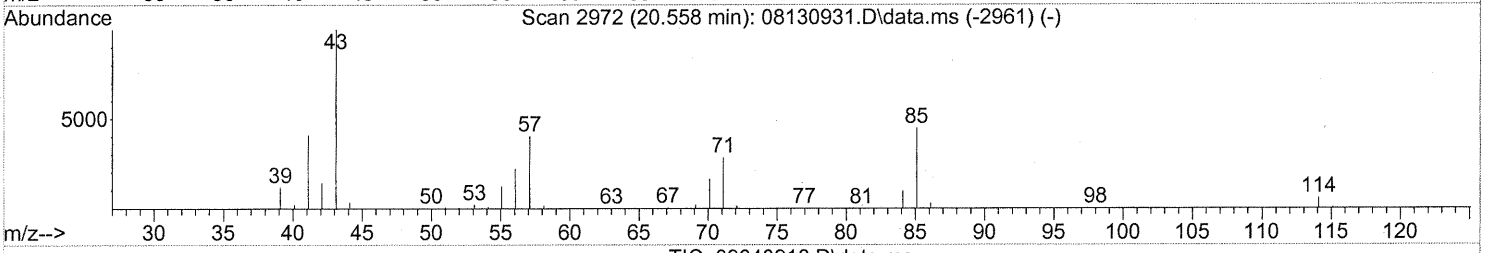
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(63) n-Octane (T)

20.553min (-0.017) 1.47ng

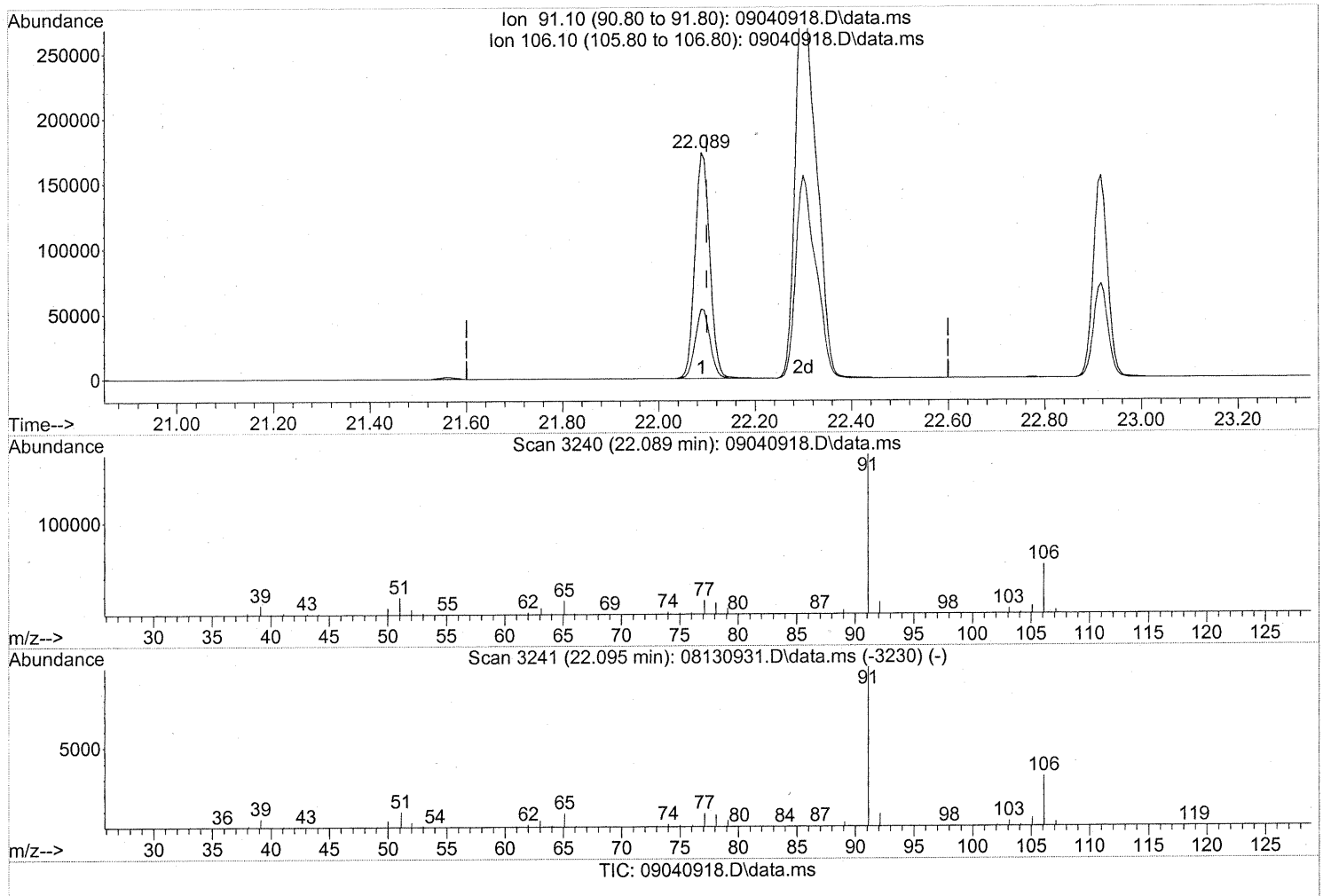
response 30895

Ion	Exp%	Act%
57.10	100	100
85.10	120.60	99.49
71.00	75.10	67.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(66) Ethylbenzene (T)

22.089min (-0.011) 3.60ng

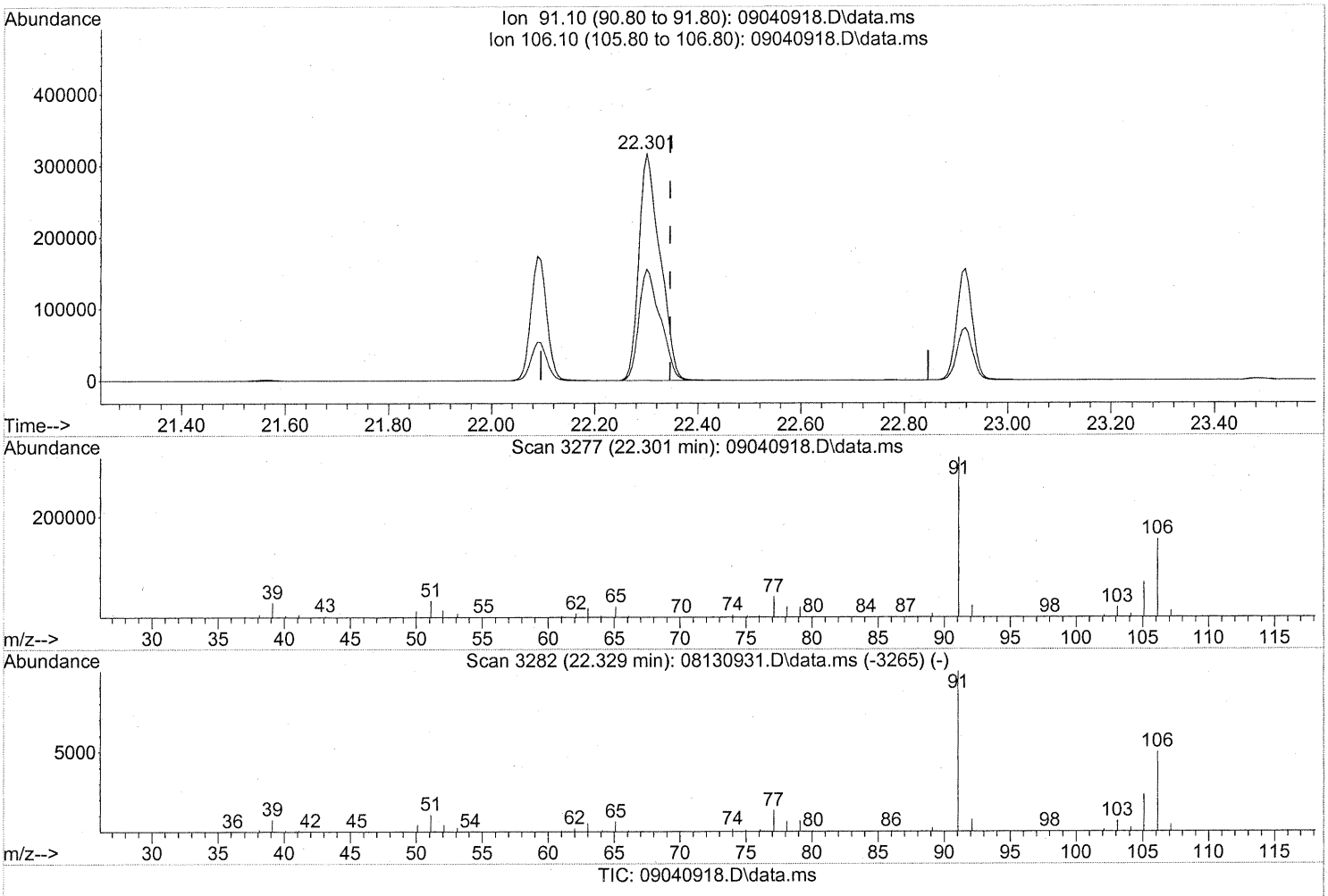
response 366615

Ion	Exp%	Act%
91.10	100	100
106.10	31.80	30.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

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

22.301min (-0.046) 11.18ng

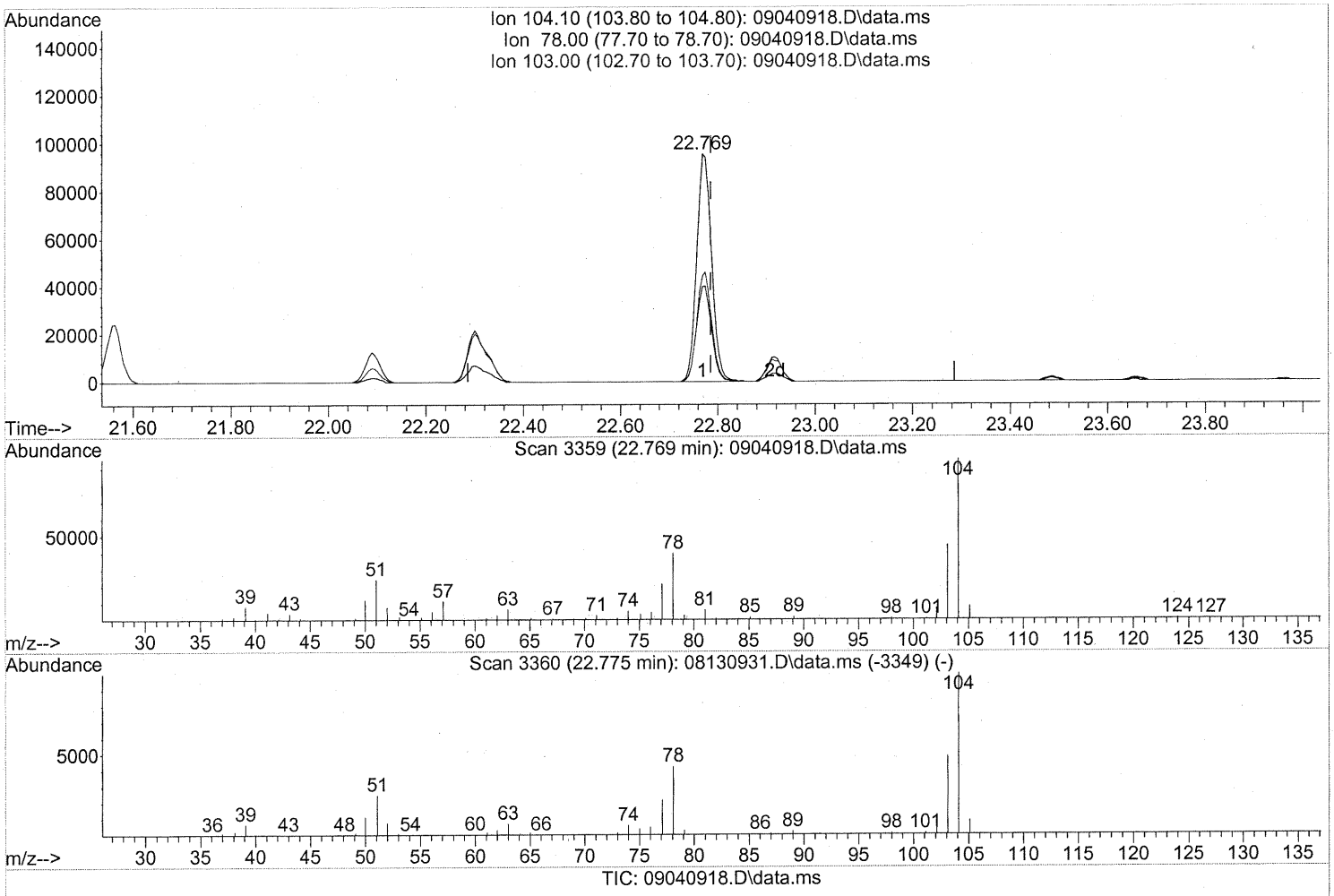
response 903741

Ion	Exp%	Act%
91.10	100	100
106.10	49.90	49.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(69) Styrene (T)

22.769min (-0.017) 3.36ng

response 200499

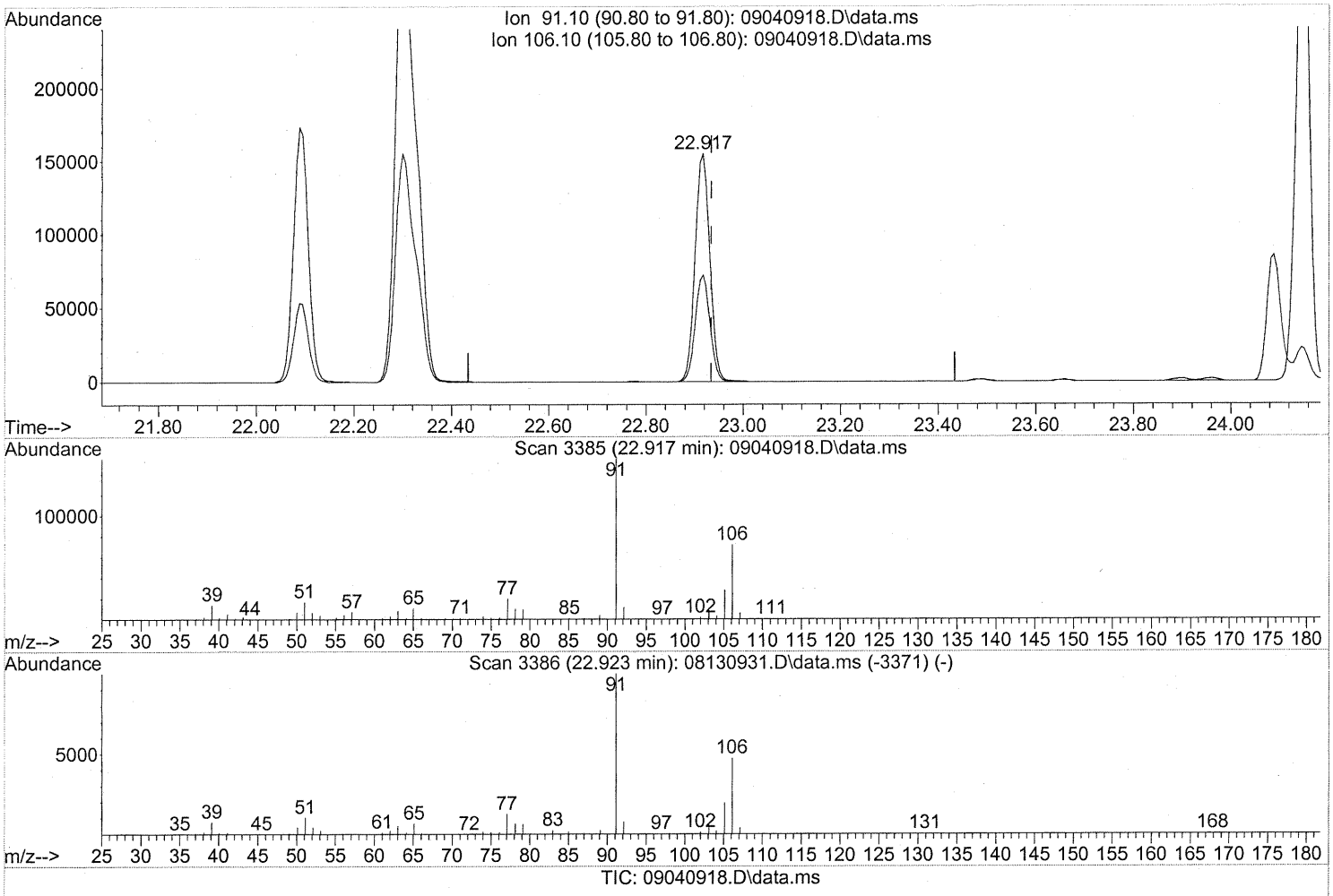
Ion	Exp%	Act%
104.10	100	100
78.00	42.30	42.41
103.00	48.70	47.81
0.00	0.00	0.00

169

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(70) o-Xylene (T)

22.917min (-0.017) 4.01ng

response 326233

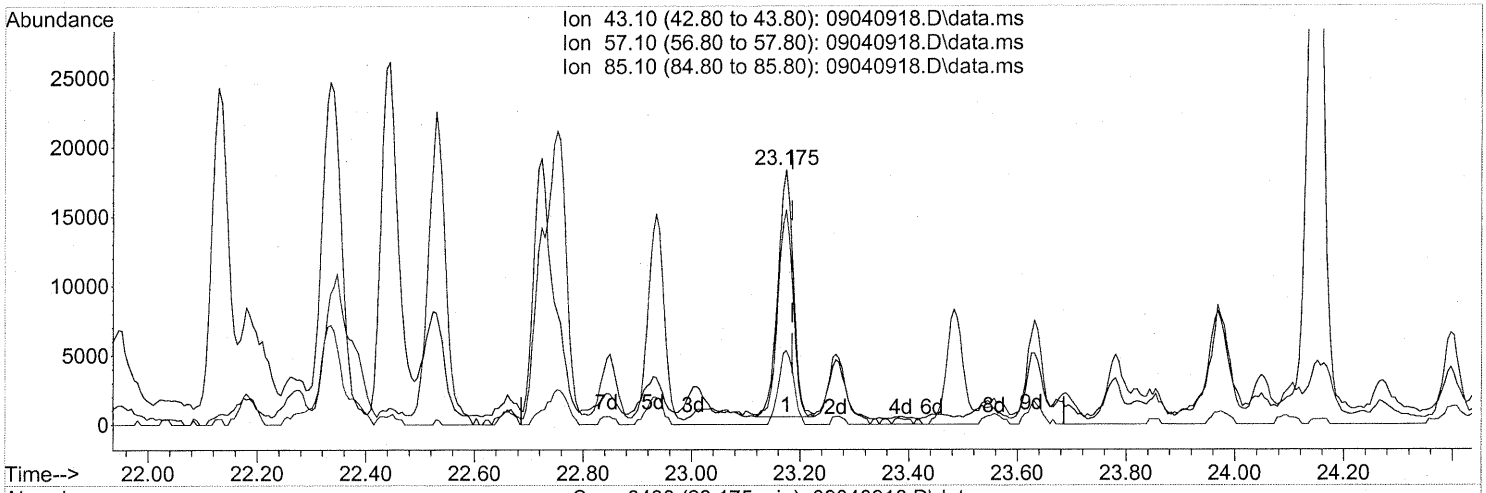
Ion	Exp%	Act%
91.10	100	100
106.10	47.80	46.21
0.00	0.00	0.00
0.00	0.00	0.00

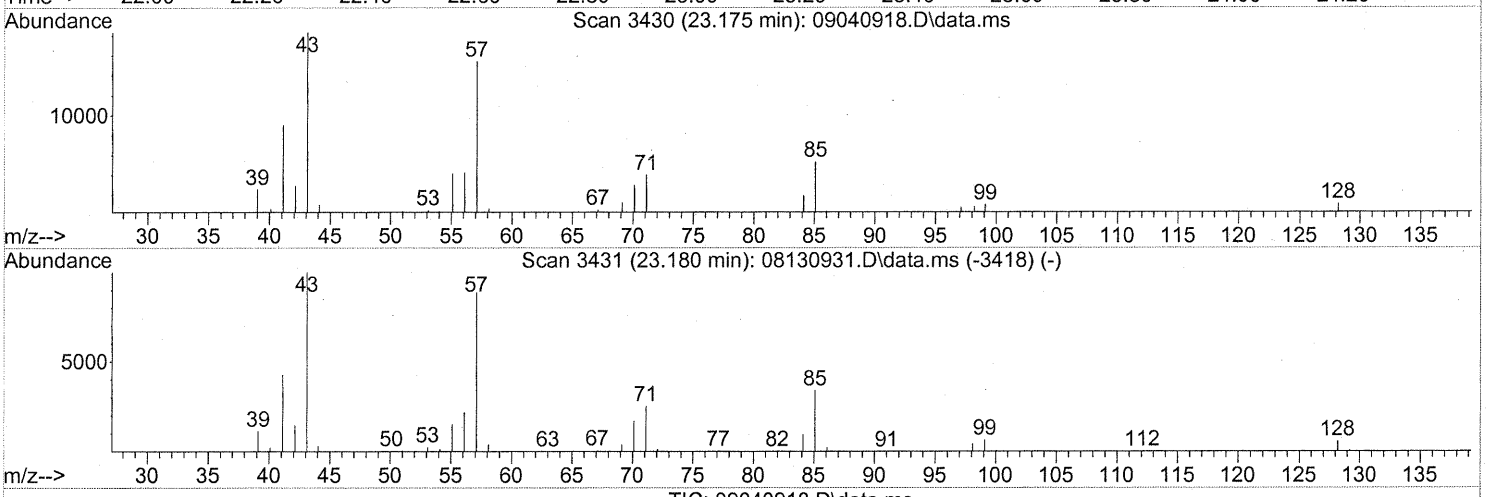
170

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(71) n-Nonane (T)

23.175min (-0.011) 0.73ng

response 35609

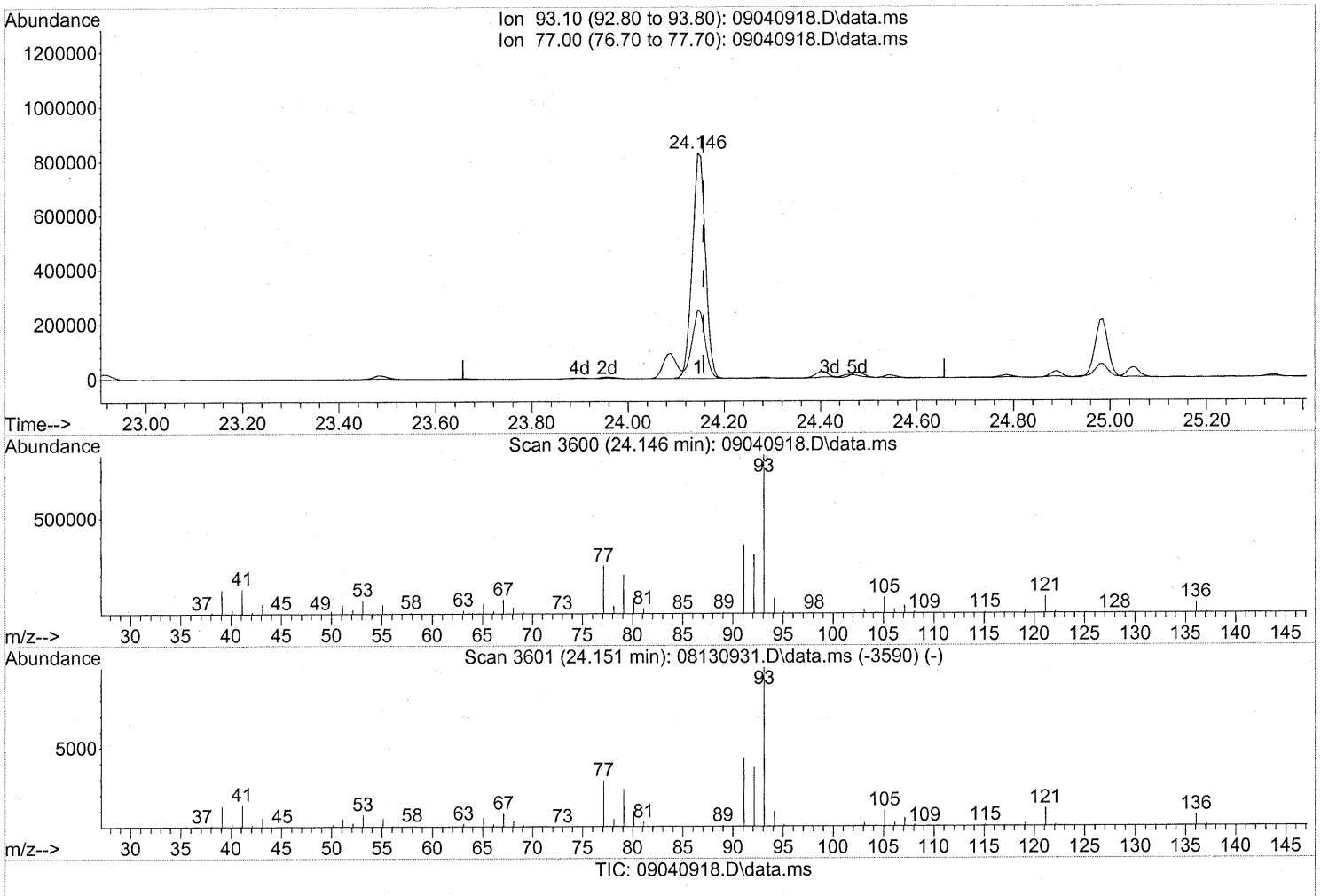
Ion	Exp%	Act%
43.10	100	100
57.10	94.00	81.82
85.10	38.80	29.02
0.00	0.00	0.00

171

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(75) alpha-Pinene (T)

24.146min (-0.011) 29.84ng

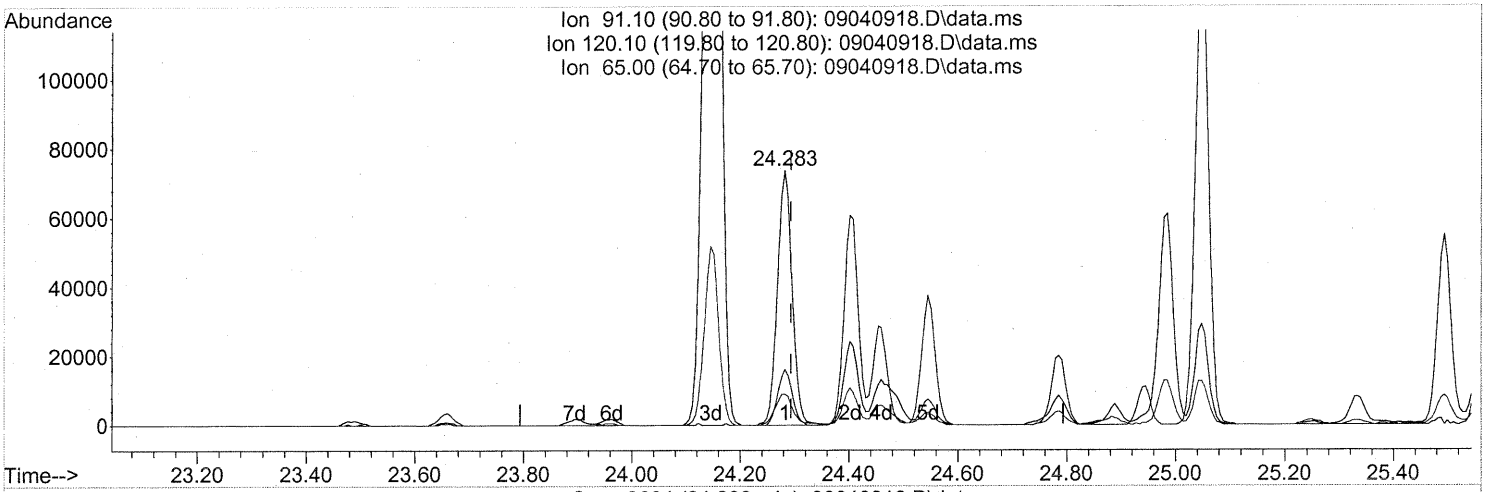
response 1552128

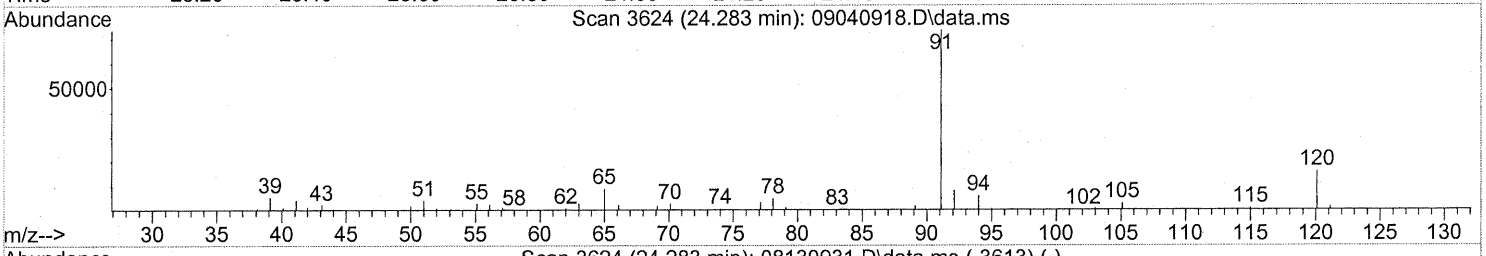
Ion	Exp%	Act%
93.10	100	100
77.00	29.50	30.68
0.00	0.00	0.00
0.00	0.00	0.00

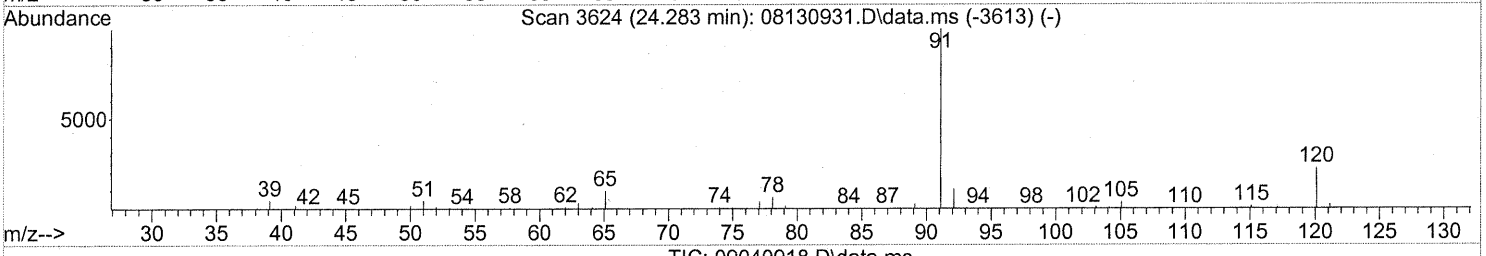
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(76) n-Propylbenzene (T)

24.283min (-0.011) 1.06ng

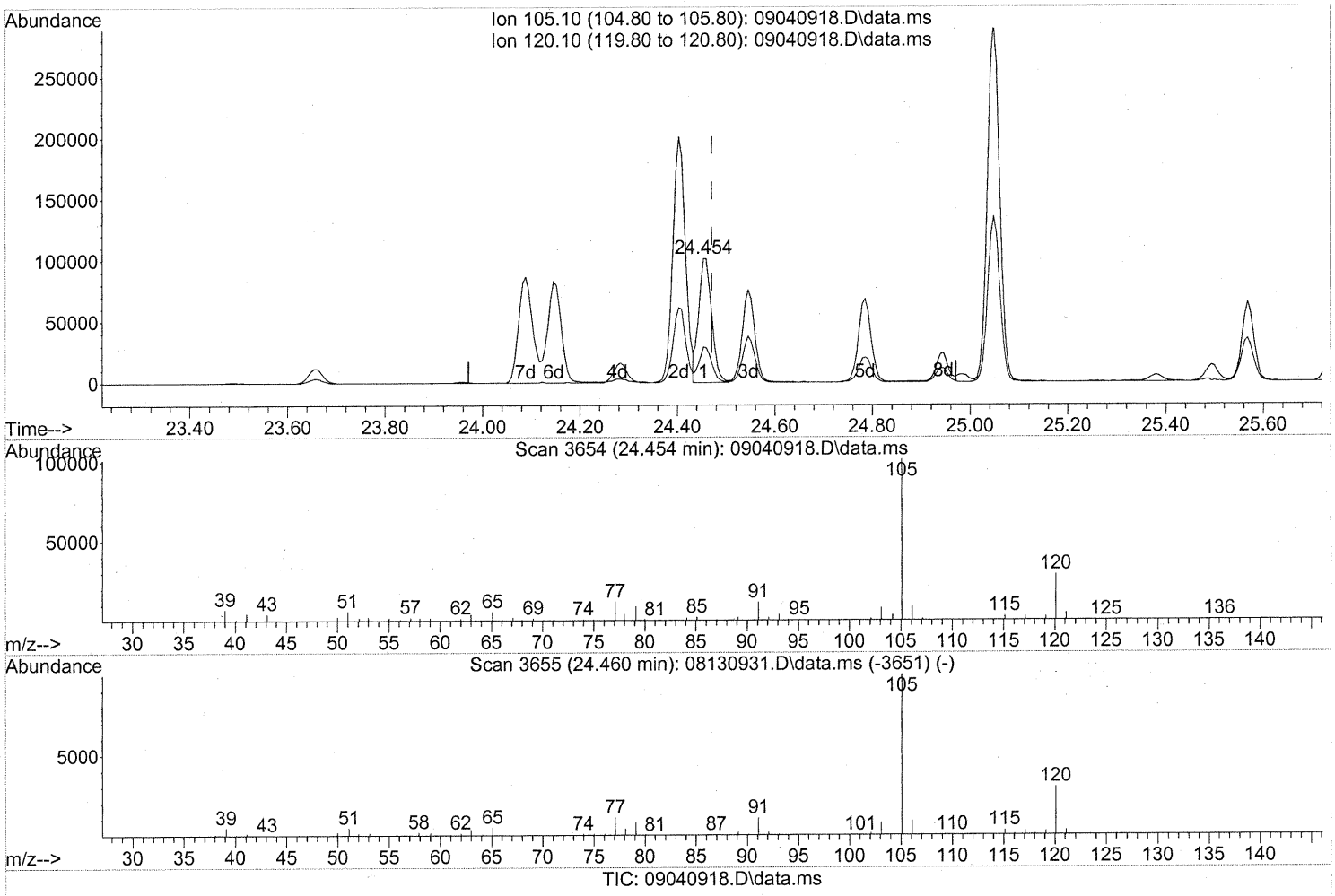
response 138247

Ion	Exp%	Act%
91.10	100	100
120.10	22.90	21.49
65.00	10.20	15.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(78) 4-Ethyltoluene (T)

24.454min (-0.017) 1.87ng

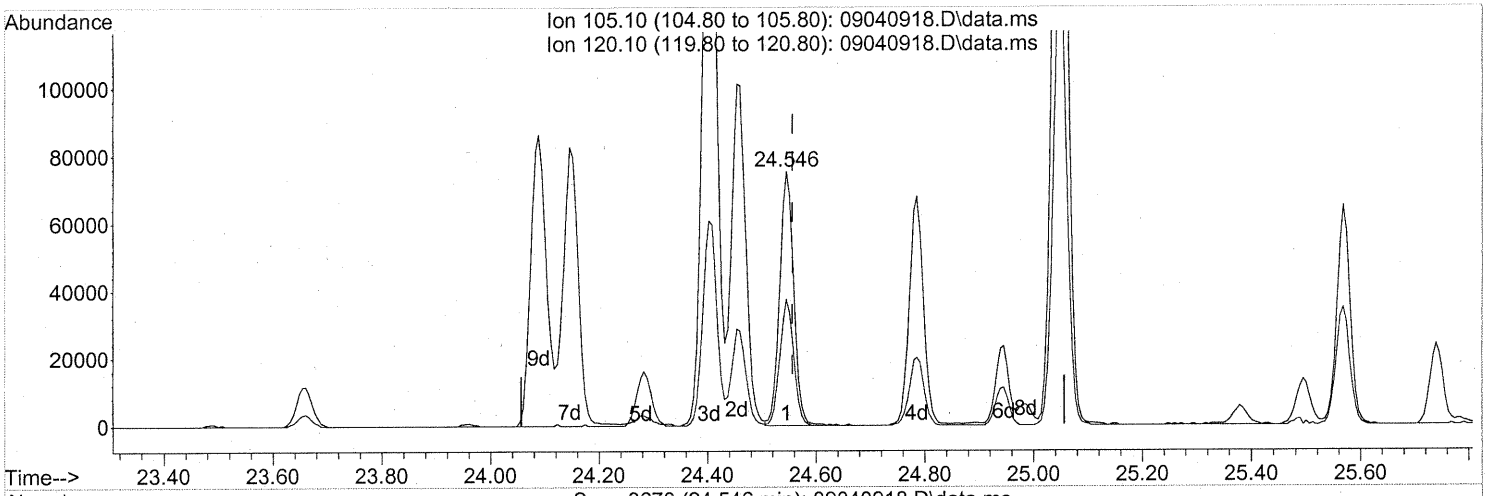
response 185877

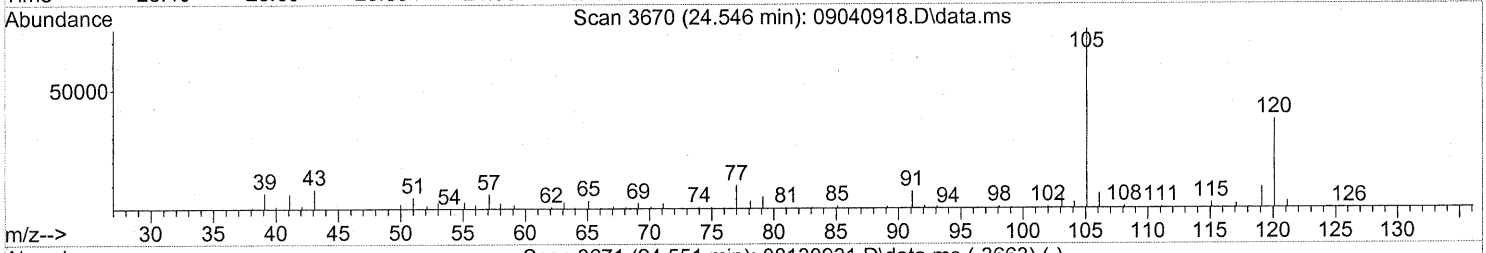
Ion	Exp%	Act%
105.10	100	100
120.10	29.80	28.41
0.00	0.00	0.00
0.00	0.00	0.00

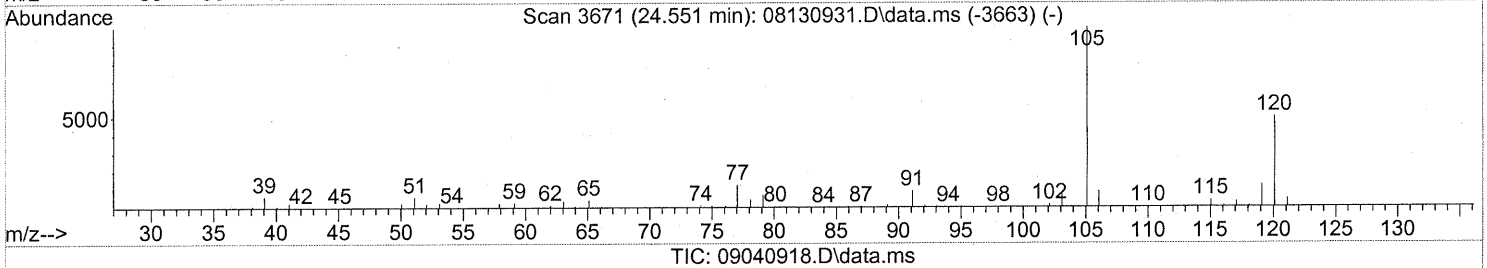
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

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

24.546min (-0.011) 1.63ng

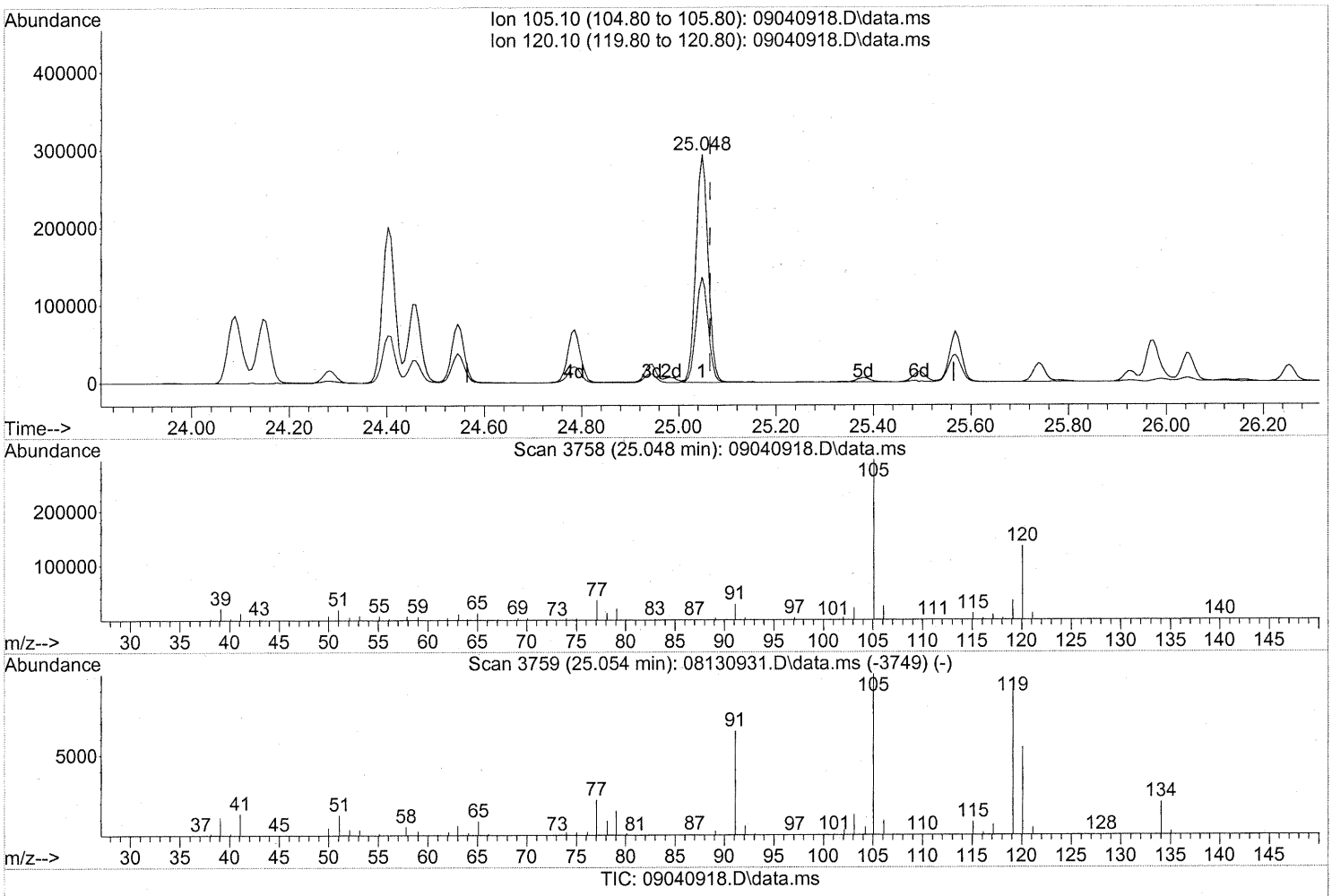
response 134224

Ion	Exp%	Act%
105.10	100	100
120.10	49.50	49.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

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

25.048min (-0.017) 5.87ng

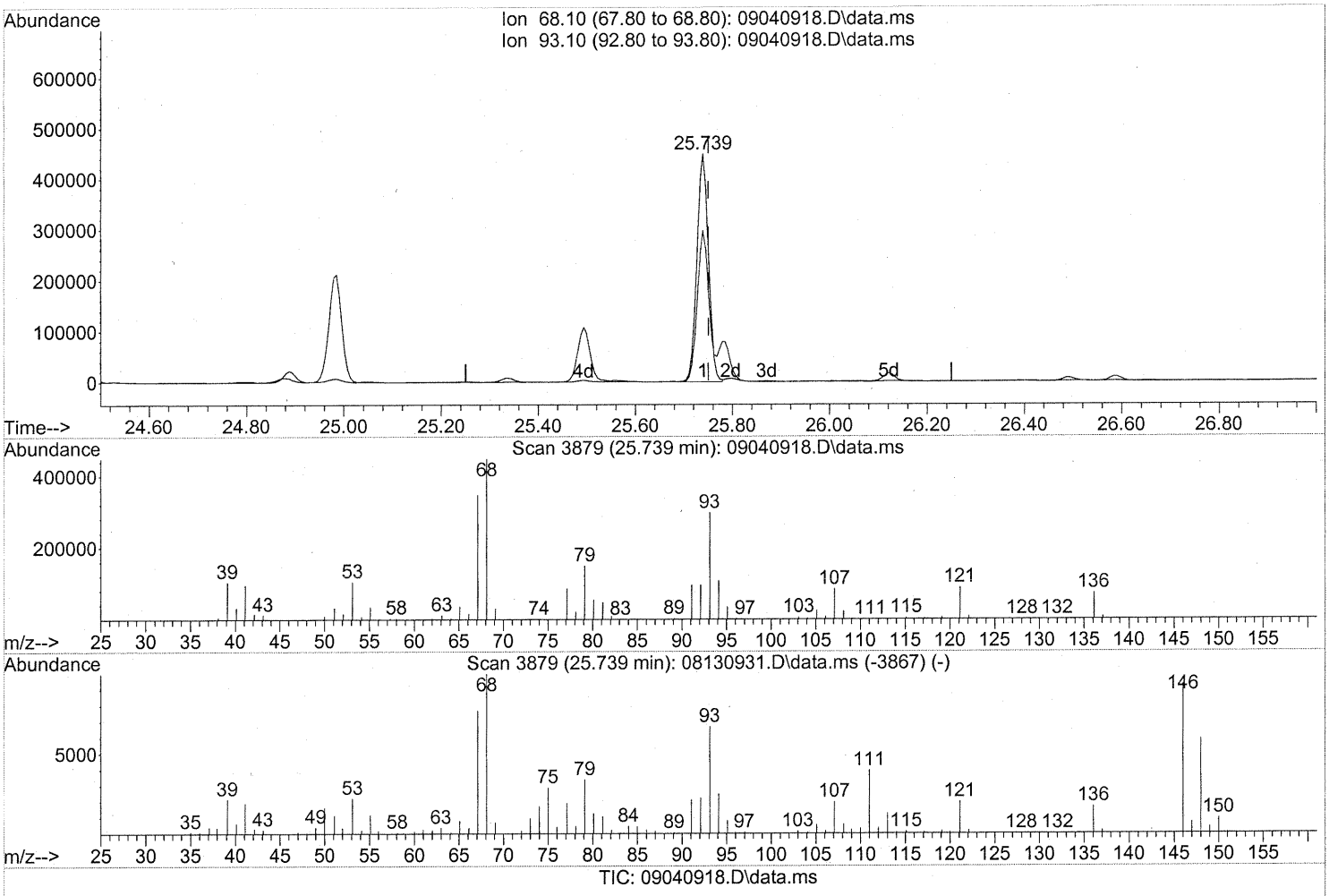
response 511736

Ion	Exp%	Act%
105.10	100	100
120.10	53.80	45.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(91) d-Limonene (T)

25.739min (-0.011) 20.51ng

response 731479

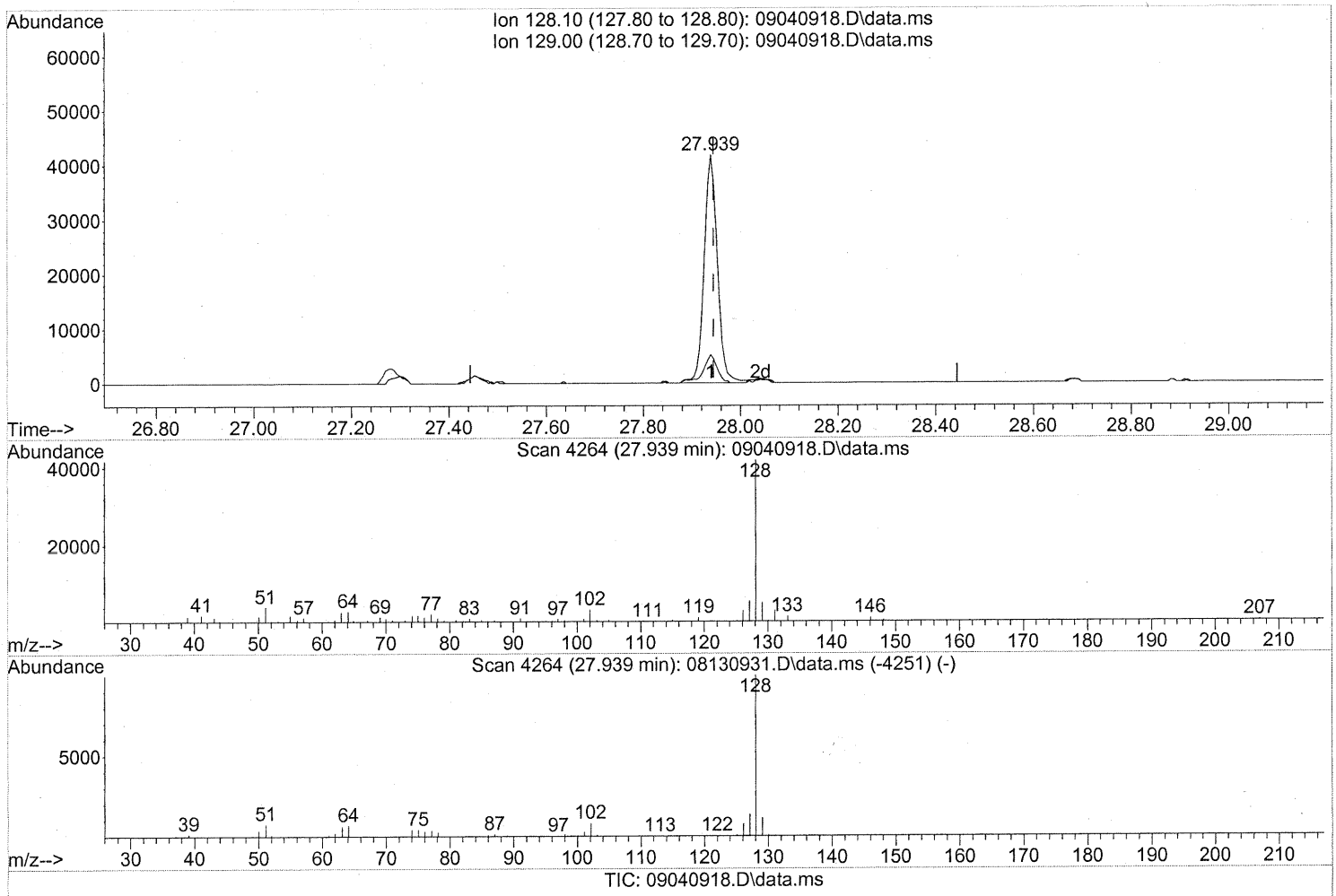
Ion	Exp%	Act%
68.10	100	100
93.10	71.90	68.59
0.00	0.00	0.00
0.00	0.00	0.00

177

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040918.D
Acq On : 4 Sep 2009 20:12
Operator : EM
Sample : P0902972-004 (1000ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:04:33 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: 09040918.D\data.ms

(95) Naphthalene (T)

27.939min (-0.006) 0.67ng

response 78346

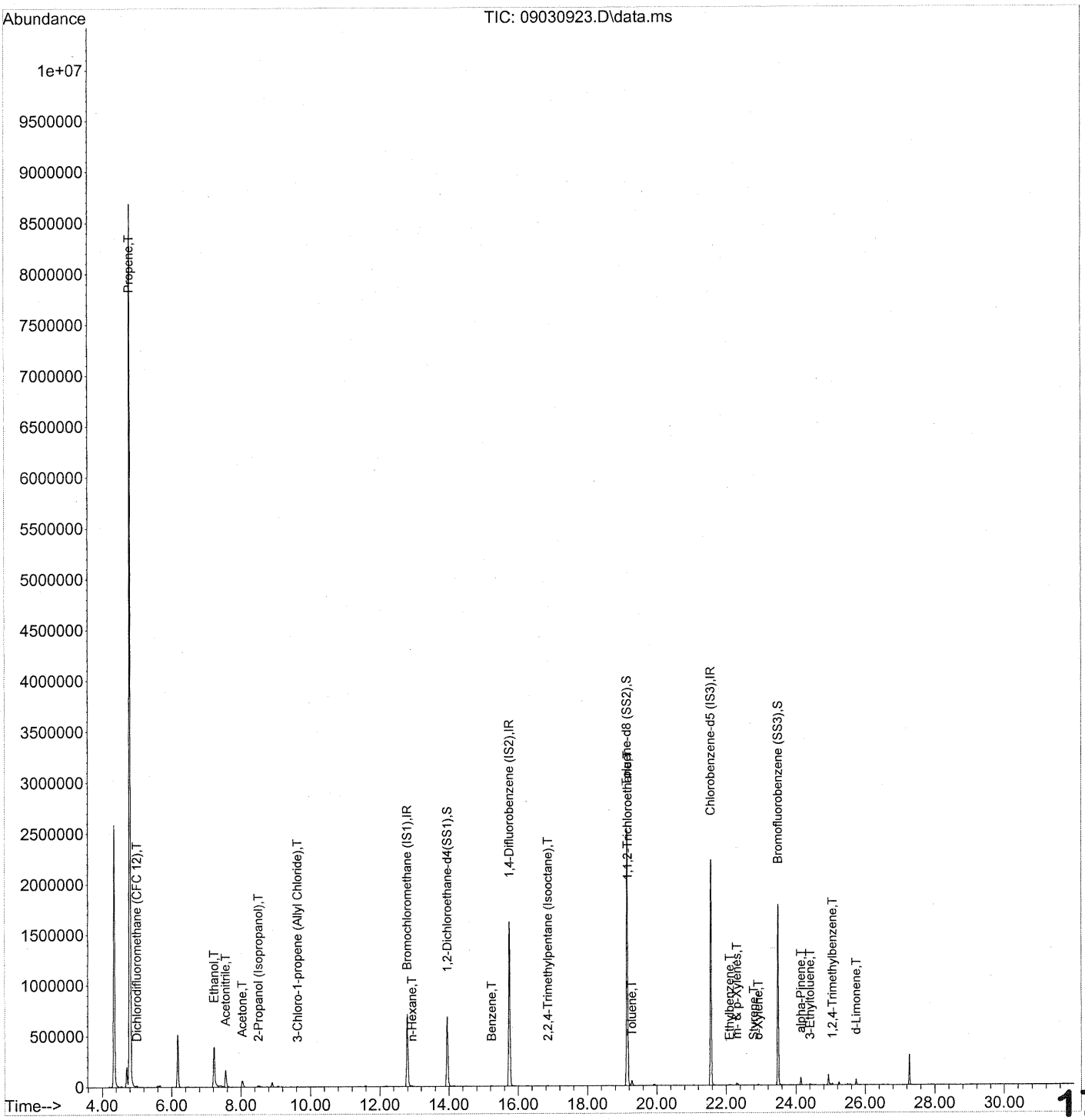
Ion	Exp%	Act%
128.10	100	100
129.00	11.00	11.90
0.00	0.00	0.00
0.00	0.00	0.00

178

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:09:16 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:09:16 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	362869	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1853511	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	949275	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	680170	26.509	ng		-0.03
Spiked Amount 25.000			Recovery =	106.04%			
57) Toluene-d8 (SS2)	19.14	98	2208857	24.477	ng		-0.02
Spiked Amount 25.000			Recovery =	97.92%			
73) Bromofluorobenzene (SS3)	23.49	174	608849	23.823	ng		0.00
Spiked Amount 25.000			Recovery =	95.28%			
Target Compounds							Qvalue
2) Propene	4.80	42	8529	0.268	ng	#	1
3) Dichlorodifluoromethan...	5.00	85	12951	0.285	ng		93
4) Chloromethane	5.34	50	1397	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	6.18	54	854	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.23	45	745912m	37.357	ng		
11) Acetonitrile	7.56	41	255121	5.236	ng		100
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.04	58	23533	1.158	ng	#	69
14) Trichlorofluoromethane	8.29	101	367	N.D.			
15) 2-Propanol (Isopropanol)	8.51	45	41909	0.753	ng		97
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	516	N.D.			
20) 3-Chloro-1-propene (Al...	9.63	41	1808	0.053	ng	#	34
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.94	76	3163	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	3531	0.079	ng	#	60

180

9/9/09

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:09:16 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA 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	14.14	62	819	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	7307	0.073 ng		90
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	893	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	5983	0.052 ng		99
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.20	71	1182	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	19.16	97	181642	8.529 ng	#	8
58) Toluene	19.28	91	48139	0.440 ng		99
59) 2-Hexanone	19.59	43	433	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	1940	N.D.		
63) n-Octane	20.56	57	386	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.10	91	8156	0.069 ng		91
67) m- & p-Xylenes	22.31	91	20756	0.222 ng		95
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	22.80	104	3641	0.053 ng		89
70) o-Xylene	22.92	91	7324	0.078 ng		94
71) n-Nonane	23.18	43	481	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.49	105	666	N.D.		
75) alpha-Pinene	24.15	93	34530	0.573 ng		92
76) n-Propylbenzene	24.29	91	3128	N.D.		
77) 3-Ethyltoluene	24.41	105	8503	0.074 ng		91
78) 4-Ethyltoluene	24.47	105	4700	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	3449	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

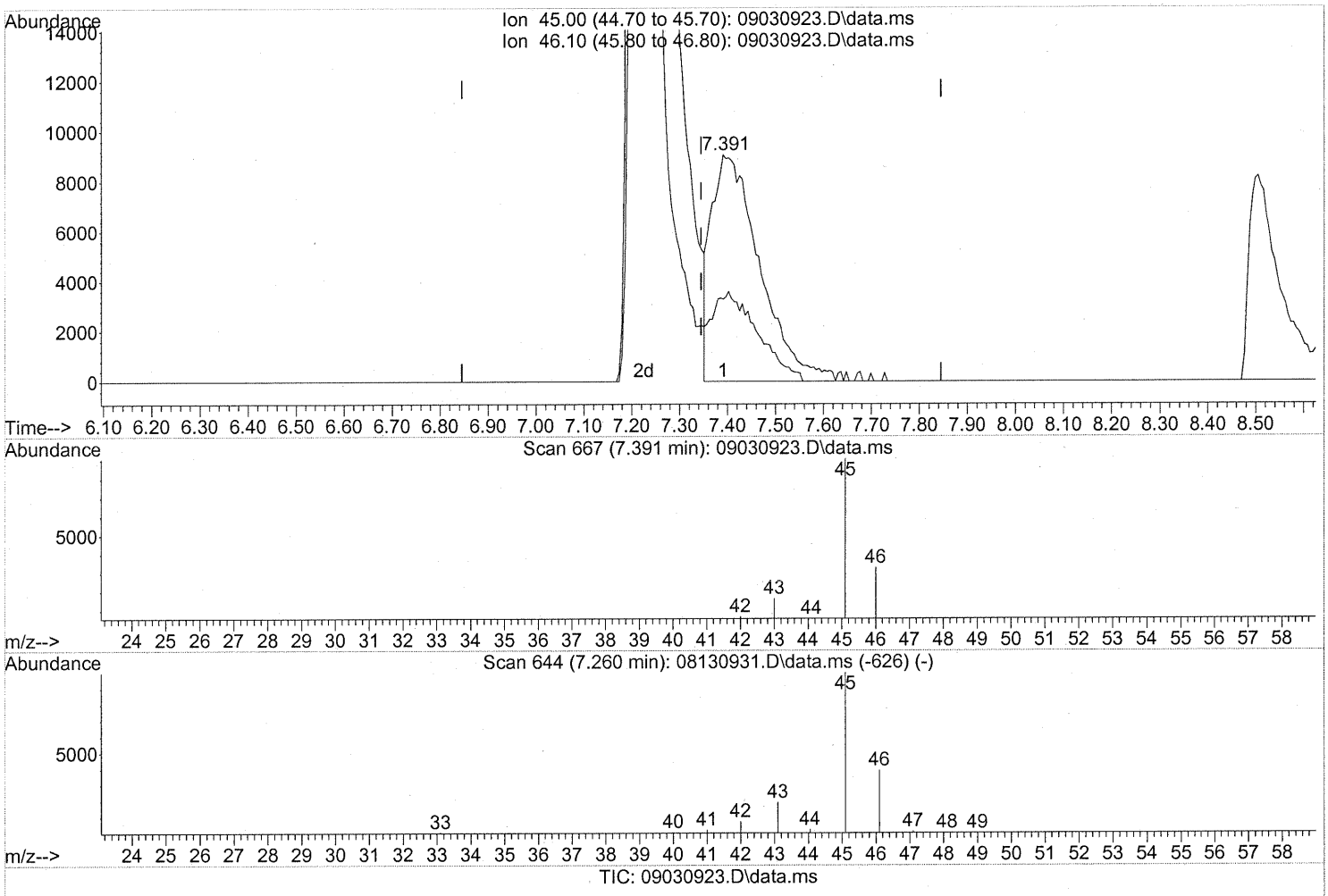
Quant Time: Sep 09 11:09:16 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	24.94	118	1305	N.D.	
81) 2-Ethyltoluene	24.80	105	2750	N.D.	
82) 1,2,4-Trimethylbenzene	25.05	105	11644	0.115 ng	89
83) n-Decane	25.15	57	1206	N.D.	
84) Benzyl Chloride	25.33	91	113	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	25.50	105	239	N.D.	
88) 4-Isopropyltoluene (p-...	25.56	119	4405	N.D.	
89) 1,2,3-Trimethylbenzene	25.58	105	2457	N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
91) d-Limonene	25.74	68	15540	0.376 ng	94
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	26.65	57	2242	N.D.	
94) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
95) Naphthalene	27.96	128	1539	N.D.	
96) n-Dodecane	27.89	57	2215	N.D.	
97) Hexachlorobutadiene	0.00	225	0	N.D.	
98) Cyclohexanone	22.57	55	1057	N.D.	
99) tert-Butylbenzene	25.05	119	1113	N.D.	
100) n-Butylbenzene	26.06	91	532	N.D.	

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

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 04 07:12:08 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030923.D\data.ms

(10) Ethanol (T)

7.391min (+0.046) 3.19ng

response 63721

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	33.49
0.00	0.00	0.00
0.00	0.00	0.00

SP

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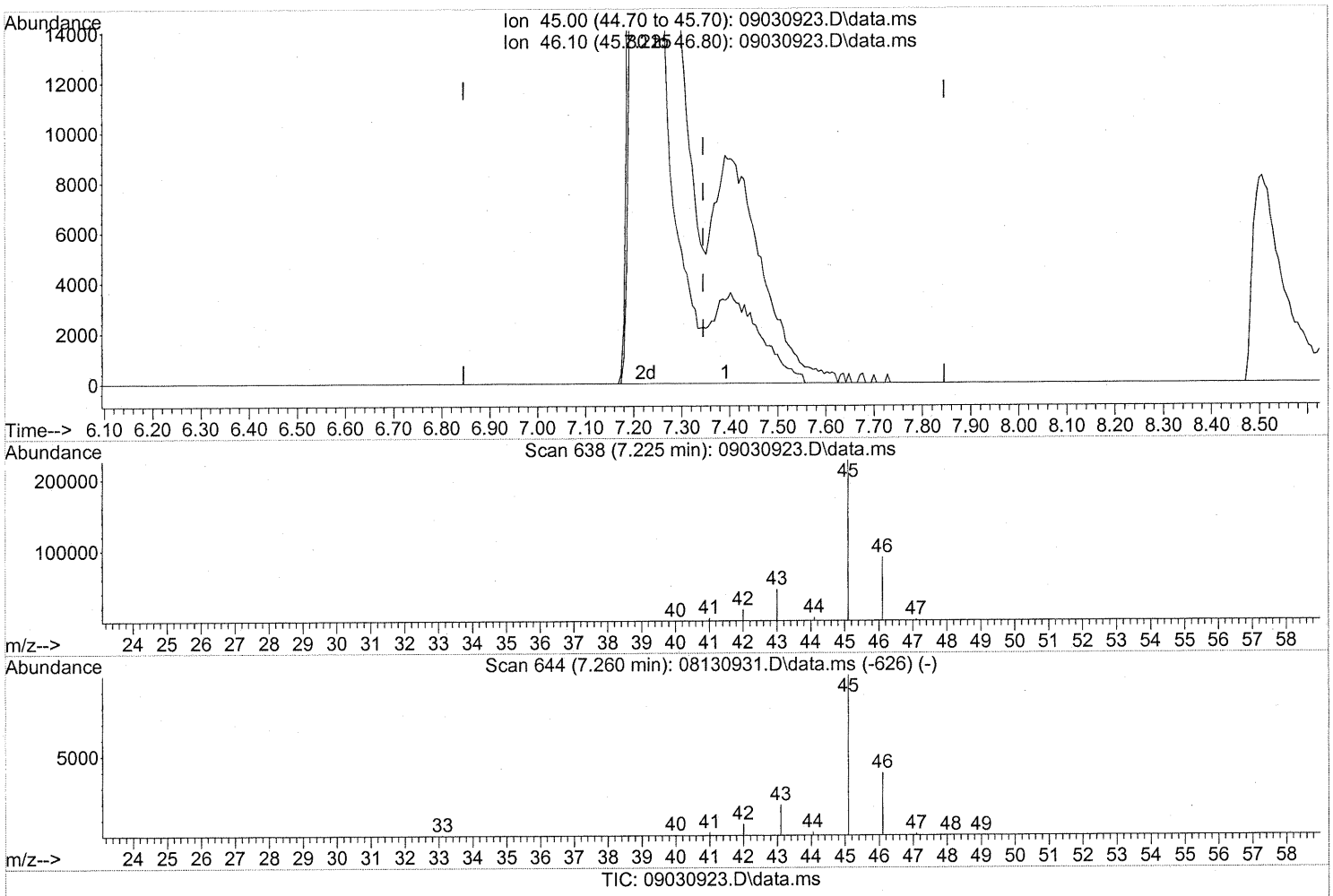
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 04 07:12:08 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030923.D\data.ms

(10) Ethanol (T)

7.225min (-0.120) 37.36ng m

response 745912

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	2.86#
0.00	0.00	0.00
0.00	0.00	0.00

SP → IC

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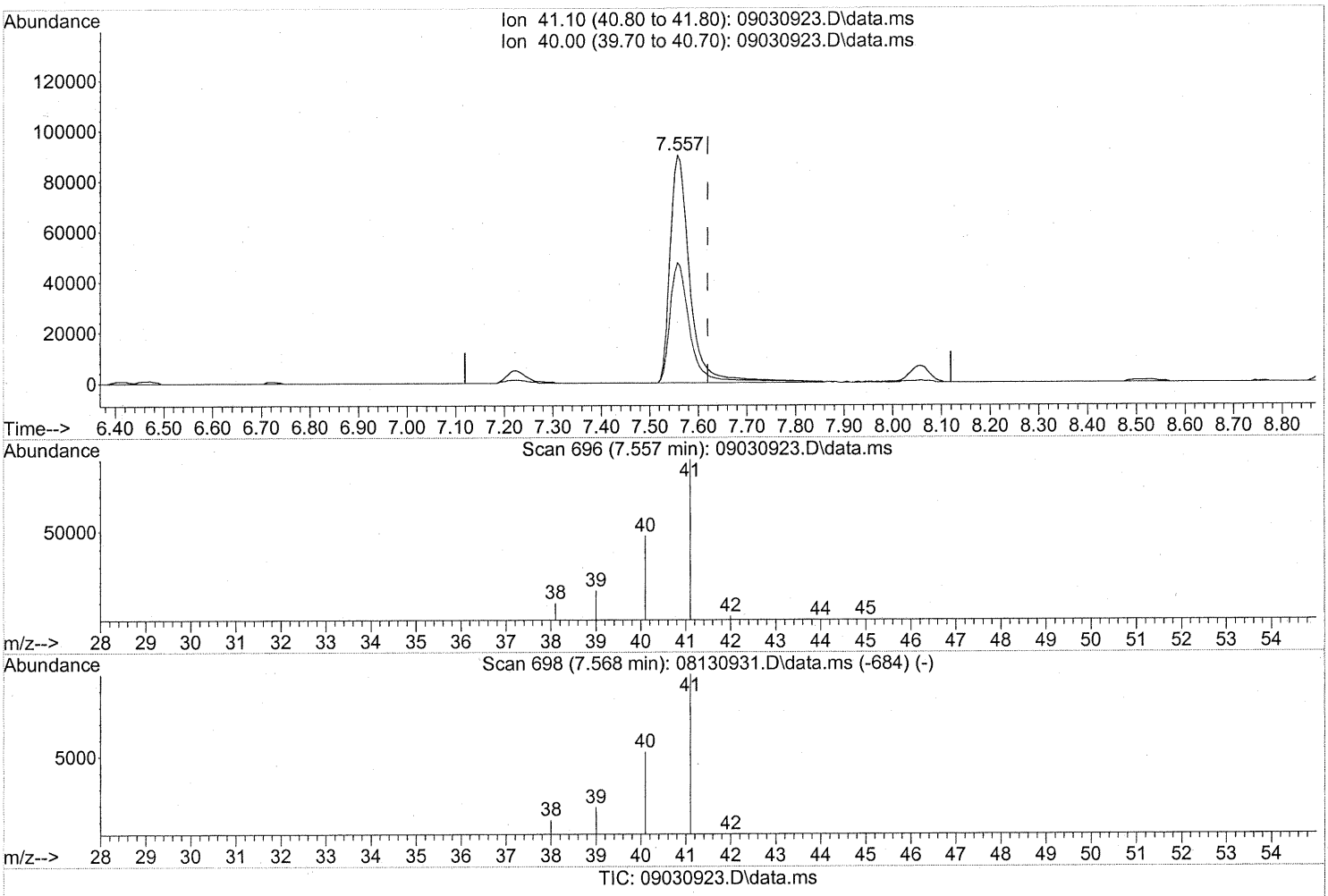
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030923.D
Acq On : 3 Sep 2009 22:05
Operator : EM
Sample : P0902972-004 dil (25ml)
Misc : Environmental H&E 103523
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 04 07:12:08 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030923.D\data.ms

(11) Acetonitrile (T)

7.557min (-0.063) 5.24ng

response 255121

Ion	Exp%	Act%
41.10	100	100
40.00	53.30	53.24
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103524**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-005

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: AC00931

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103524**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-005

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: AC00931

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3/09
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: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **103524**
Client Project ID: **16512**

CAS Project ID: P0902972
CAS Sample ID: P0902972-005

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: AC00931

Date Collected: 8/25/09
Date Received: 8/26/09
Date Analyzed: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.10	ND	0.019	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

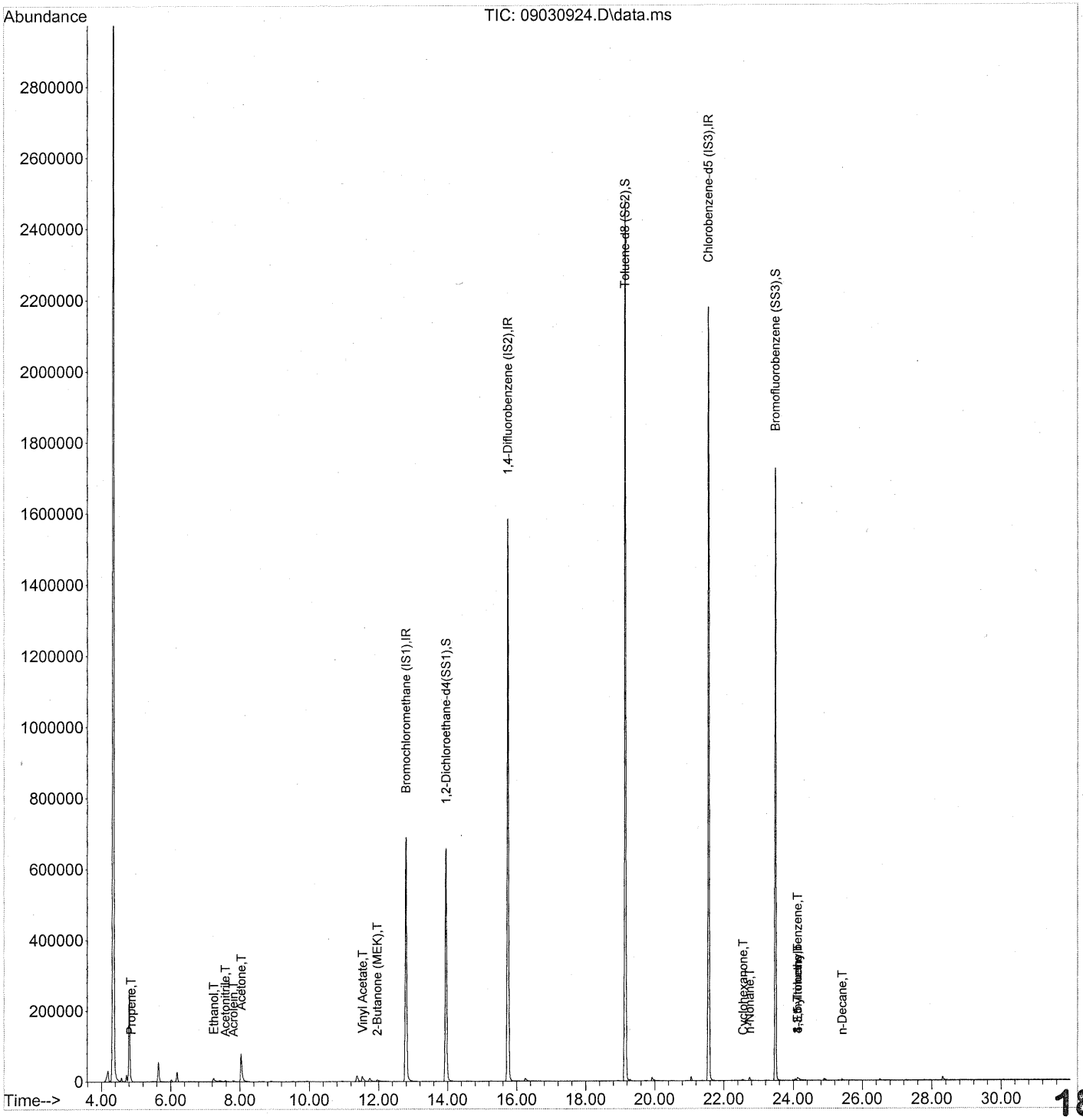
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 09 11:10:10 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 09 11:10:10 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	353542	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1815928	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	919599	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	660291	26.413	ng		-0.03
Spiked Amount 25.000			Recovery =	105.64%			
57) Toluene-d8 (SS2)	19.14	98	2146615	24.554	ng		-0.02
Spiked Amount 25.000			Recovery =	98.20%			
73) Bromofluorobenzene (SS3)	23.49	174	594482	24.011	ng		0.00
Spiked Amount 25.000			Recovery =	96.04%			
Target Compounds							Qvalue
2) Propene	4.86	42	2423	0.078	ng		96
3) Dichlorodifluoromethan...	5.01	85	236	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	7.24	45	33289m	1.711	ng		
11) Acetonitrile	7.58	41	4967	0.105	ng		86
12) Acrolein	7.81	56	4588	0.362	ng		93
13) Acetone	8.04	58	56658	2.862	ng	#	74
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.60	45	105	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	859	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	2503	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	11.54	86	4415	1.030	ng	#	73
27) 2-Butanone (MEK)	11.96	72	2730	0.198	ng	#	1
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	0.00	57	0	N.D.			

EM 9/9/09

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 09 11:10:10 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	15.25	56	119	N.D.		
41) Benzene	15.23	78	1614	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.74	84	902	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	567	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	4264	N.D.		
59) 2-Hexanone	19.54	43	216	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.48	43	506	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	22.31	91	598	N.D.		
67) m- & p-Xylenes	22.31	91	598	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	0.00	91	0	N.D.		
71) n-Nonane	22.75	43	3123	0.057 ng	#	58
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.49	105	509	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	0.00	91	0	N.D.		
77) 3-Ethyltoluene	24.13	105	5904	0.053 ng	#	42
78) 4-Ethyltoluene	24.13	105	5904	0.053 ng	#	45
79) 1,3,5-Trimethylbenzene	24.13	105	5904	0.064 ng	#	28

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 09 11:10:10 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	0.00	105	0	N.D.		
82) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
83) n-Decane	25.41	57	3470	0.061 ng	#	38
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	0.00	105	0	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	26.05	105	139	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	26.52	57	1484	N.D.		
94) 1,2,4-Trichlorobenzene	27.80	180	236	N.D.		
95) Naphthalene	27.96	128	1070	N.D.		
96) n-Dodecane	0.00	57	0	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.55	55	2132	0.064 ng	#	76
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

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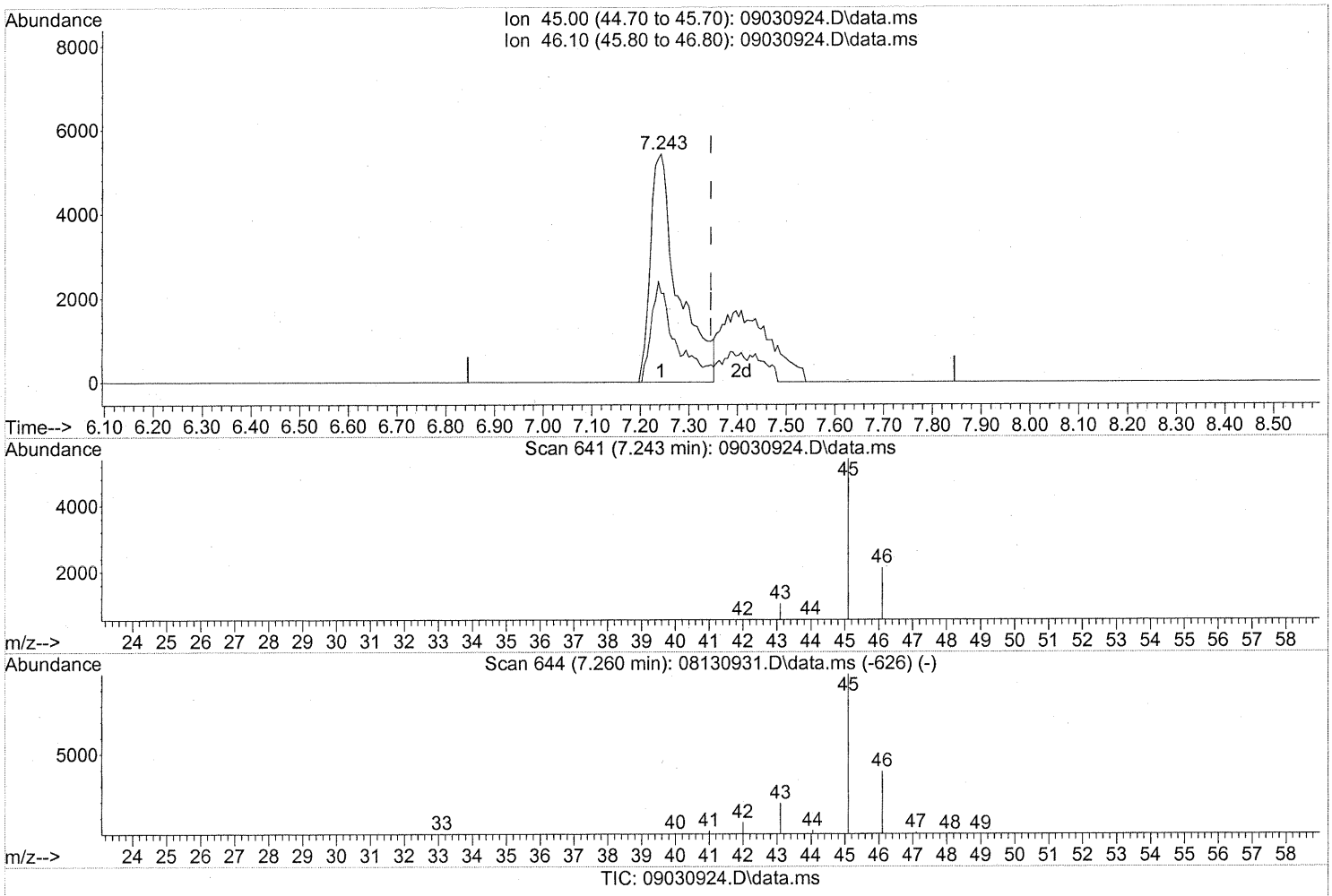
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 07:12:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.243min (-0.103) 1.10ng

response 21476

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

PT

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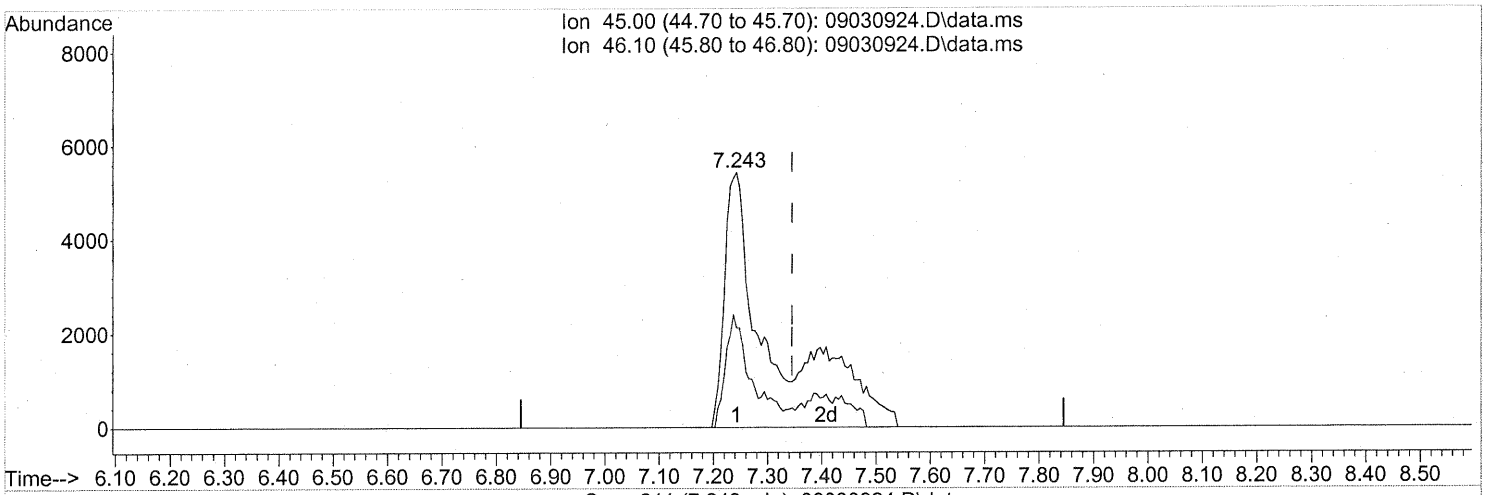
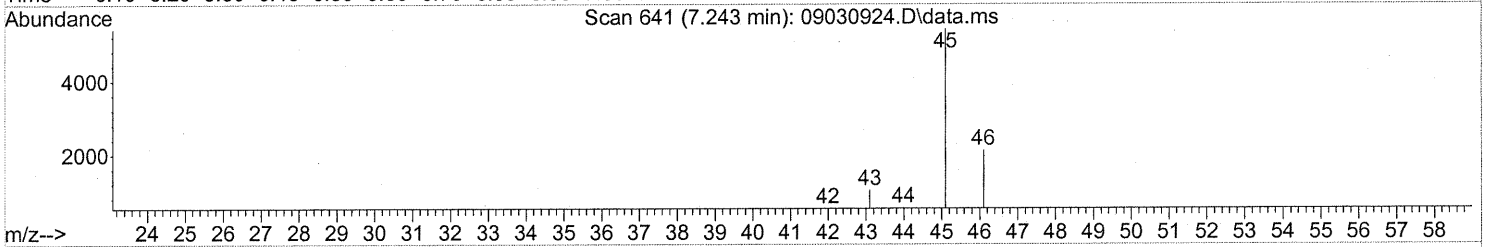
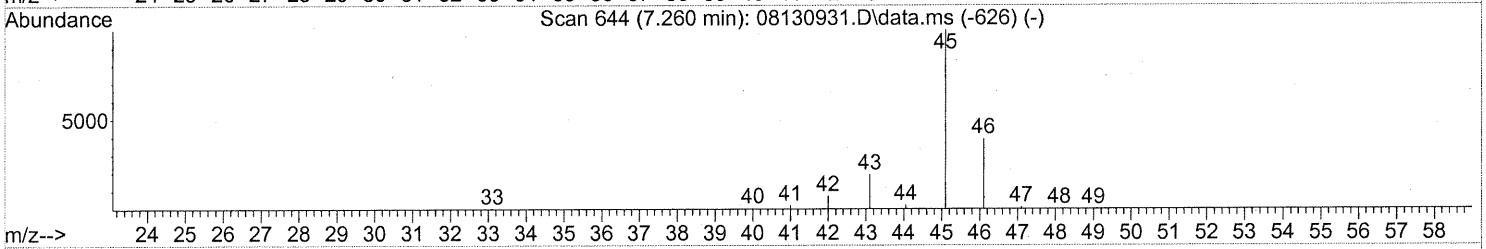
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 07:12:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09030924.D\data.ms

(10) Ethanol (T)

7.243min (-0.103) 1.71ng m

response 33289

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	25.47
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
9/9/09
9/9/09

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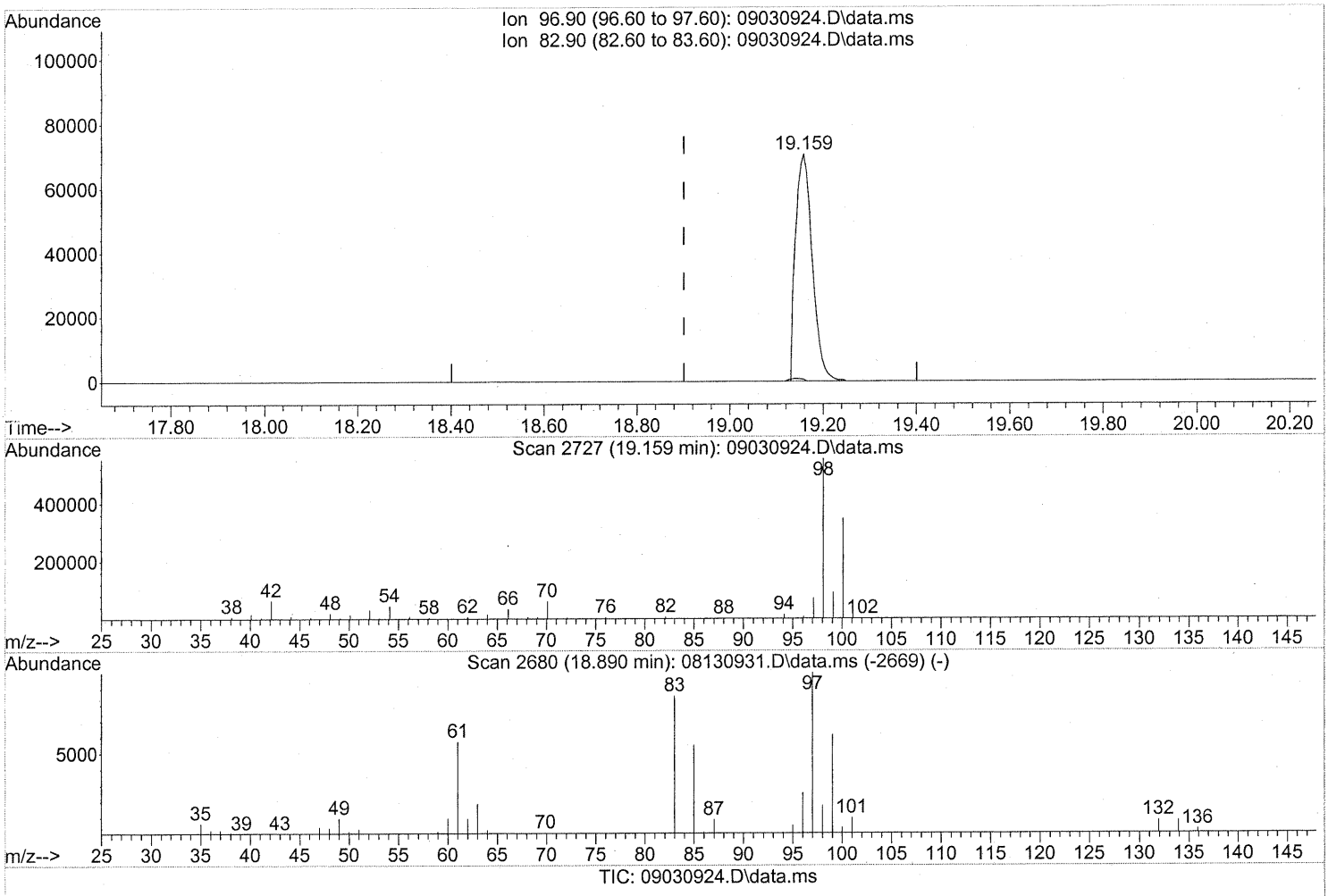
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030924.D
Acq On : 3 Sep 2009 22:47
Operator : EM
Sample : P0902972-005 (1000ml)
Misc : Environmental H&E 103524
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 07:12:11 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030924.D\data.ms

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

19.159min (+0.257) 8.39ng

response 175019

Ion	Exp%	Act%
96.90	100	100
82.90	85.30	0.80#
0.00	0.00	0.00
0.00	0.00	0.00

FP 9/9/09

KP 9/9/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902972
CAS Sample ID: P090903-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: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P0902972
Client Project ID: **16512** CAS Sample ID: P090903-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: 9/3/09
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902972
CAS Sample ID: P090903-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: 9/3/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.10	ND	0.019	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

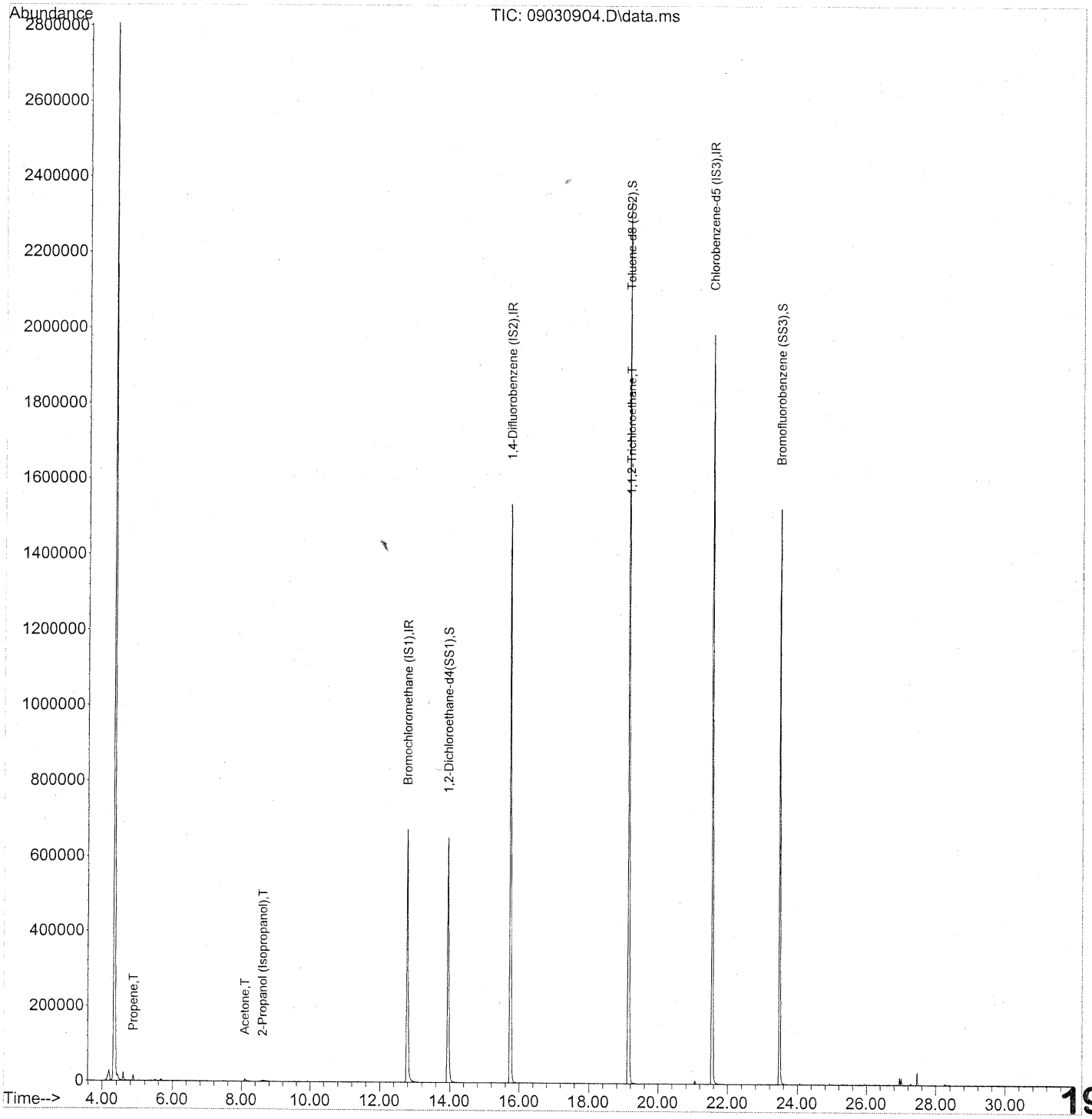
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030904.D
Acq On : 3 Sep 2009 7:57
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 08:31:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030904.D
Acq On : 3 Sep 2009 7:57
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 08:31:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.79	130	344890	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1786945	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	846576	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	644031	26.409	ng		-0.03
Spiked Amount 25.000			Recovery = 105.64%				
57) Toluene-d8 (SS2)	19.14	98	2053334	25.513	ng		-0.02
Spiked Amount 25.000			Recovery = 102.04%				
73) Bromofluorobenzene (SS3)	23.48	174	526686	23.108	ng		-0.01
Spiked Amount 25.000			Recovery = 92.44%				
Target Compounds							Qvalue
2) Propene	4.88	42	6203	0.205	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	7.64	41	124	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.09	58	4910	0.254	ng		97
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.61	45	17814	0.337	ng	#	56
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.53	84	327	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	9.95	76	1639	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.			

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EM 9/3/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030904.D
Acq On : 3 Sep 2009 7:57
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 08:31:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

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	1122	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	15.74	84	988	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	0.00	130	0	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) 2,2,4-Trimethylpentane...	0.00	57	0	N.D.	
50) Methyl Methacrylate	0.00	100	0	N.D.	
51) n-Heptane	0.00	71	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	19.16	97	165697	~~8.071 ng~~	# 8
58) Toluene	19.30	91	1713	N.D.	
59) 2-Hexanone	0.00	43	0	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) n-Butyl Acetate	0.00	43	0	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	22.31	91	125	N.D.	
67) m- & p-Xylenes	22.33	91	122	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	0.00	104	0	N.D.	
70) o-Xylene	22.92	91	1046	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	23.48	105	412	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	24.26	91	538	N.D.	
77) 3-Ethyltoluene	24.43	105	108	N.D.	
78) 4-Ethyltoluene	24.43	105	108	N.D.	
79) 1,3,5-Trimethylbenzene	24.55	105	239	N.D.	

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030904.D
Acq On : 3 Sep 2009 7:57
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 08:31:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.		
81) 2-Ethyltoluene	24.55	105	239	N.D.		
82) 1,2,4-Trimethylbenzene	25.07	105	784	N.D.		
83) n-Decane	25.15	57	107	N.D.		
84) Benzyl Chloride	0.00	91	0	N.D.		
85) 1,3-Dichlorobenzene	25.34	146	1197	N.D.		
86) 1,4-Dichlorobenzene	25.34	146	1197	N.D.		
87) sec-Butylbenzene	25.07	105	784	N.D.		
88) 4-Isopropyltoluene (p-...	0.00	119	0	N.D.		
89) 1,2,3-Trimethylbenzene	0.00	105	0	N.D.		
90) 1,2-Dichlorobenzene	25.34	146	1197	N.D.		
91) d-Limonene	0.00	68	0	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	26.66	57	515	N.D.		
94) 1,2,4-Trichlorobenzene	28.26	180	1629	N.D.		
95) Naphthalene	27.96	128	1416	N.D.		
96) n-Dodecane	27.89	57	225	N.D.		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	22.57	55	106	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: P0902972
CAS Sample ID: P090904-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.10	ND	0.048	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	0.50	ND	0.22	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.50	ND	0.20	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902972
CAS Sample ID: P090904-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P0902972
CAS Sample ID: P090904-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/4/09
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.10	ND	0.019	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

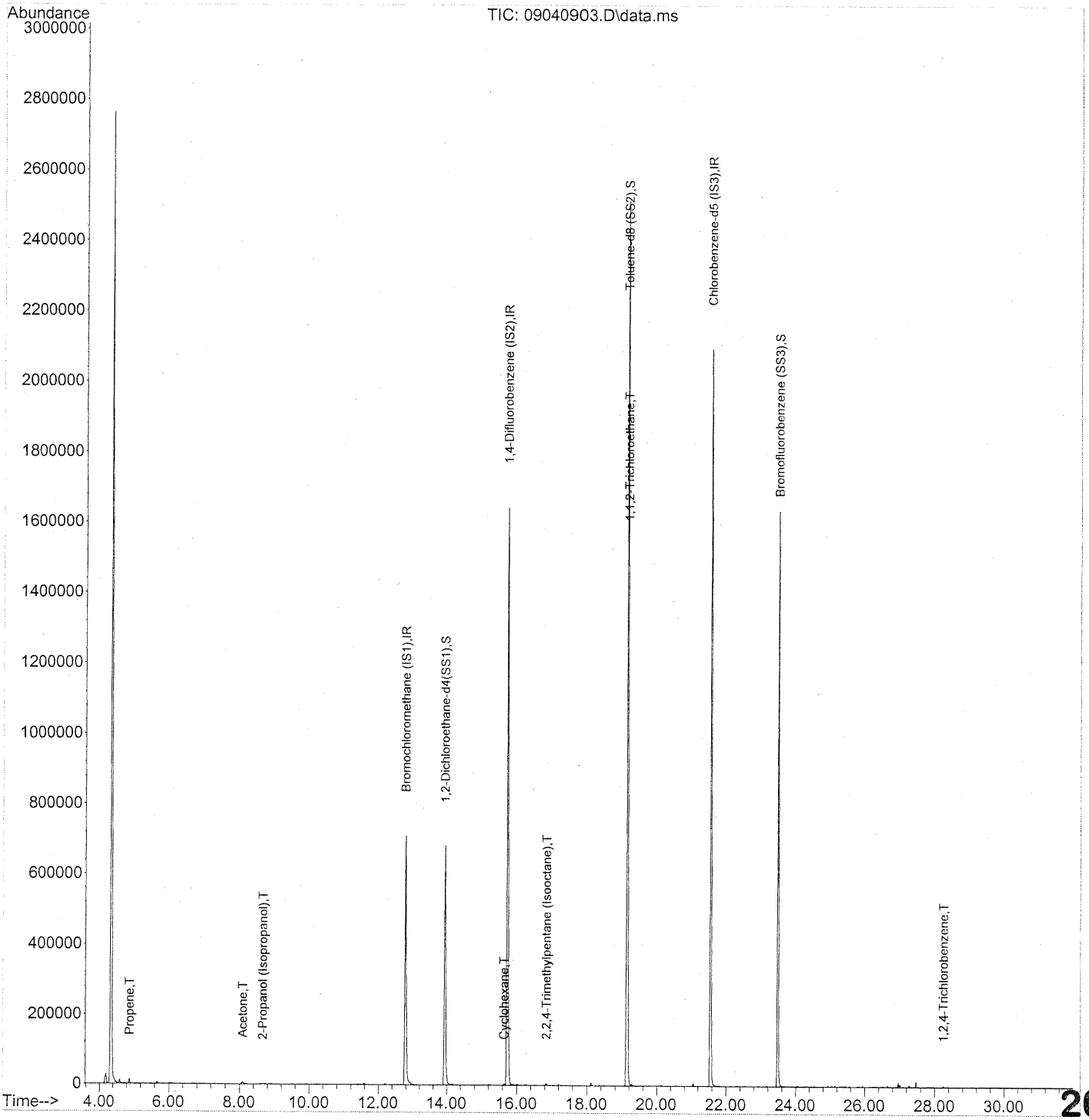
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	362074	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1887946	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	898664	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	684867	26.751	ng		-0.04
Spiked Amount 25.000			Recovery = 107.00%				
57) Toluene-d8 (SS2)	19.14	98	2167379	25.369	ng		-0.02
Spiked Amount 25.000			Recovery = 101.48%				
73) Bromofluorobenzene (SS3)	23.49	174	560695	23.174	ng		0.00
Spiked Amount 25.000			Recovery = 92.68%				
Target Compounds							Qvalue
2) Propene	4.88	42	4763	0.150	ng		94
3) Dichlorodifluoromethan...	0.00	85	0	N.D.			
4) Chloromethane	0.00	50	0	N.D.			
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	7.35	45	224	N.D.			
11) Acetonitrile	0.00	41	0	N.D.			
12) Acrolein	0.00	56	0	N.D.			
13) Acetone	8.10	58	4684	0.231	ng	#	83
14) Trichlorofluoromethane	0.00	101	0	N.D.			
15) 2-Propanol (Isopropanol)	8.67	45	8777	0.158	ng		62
16) Acrylonitrile	0.00	53	0	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D.			
19) Methylene Chloride	9.53	84	363	N.D.			
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.			
21) Trichlorotrifluoroethane	0.00	151	0	N.D.			
22) Carbon Disulfide	9.94	76	2244	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	0.00	72	0	N.D.			
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	12.93	57	1998	N.D.			

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	0.00	83	0	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	0.00	56	0	N.D.		
41) Benzene	15.24	78	3659	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	15.65	84	2030	0.052 ng	#	63
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	0.00	130	0	N.D.		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	16.85	57	6399	0.055 ng		87
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	17.20	71	809	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D. FP		
55) 1,1,2-Trichloroethane	19.16	97	177747	~~8.194 ng~~	#	8
58) Toluene	19.29	91	3934	N.D.		
59) 2-Hexanone	19.59	43	109	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	20.56	43	1346	N.D.		
63) n-Octane	20.55	57	104	N.D.		
64) Tetrachloroethene	0.00	166	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	22.11	91	622	N.D.		
67) m- & p-Xylenes	22.32	91	2308	N.D.		
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	0.00	104	0	N.D.		
70) o-Xylene	22.93	91	2157	N.D.		
71) n-Nonane	23.17	43	1340	N.D.		
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	23.65	105	452	N.D.		
75) alpha-Pinene	0.00	93	0	N.D.		
76) n-Propylbenzene	24.27	91	1983	N.D.		
77) 3-Ethyltoluene	24.41	105	1496	N.D.		
78) 4-Ethyltoluene	24.47	105	821	N.D.		
79) 1,3,5-Trimethylbenzene	24.55	105	1561	N.D.		

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040903.D
Acq On : 4 Sep 2009 8:55
Operator : EM
Sample : TO-15 Method Blank (1000ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 09:28:17 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.			
81) 2-Ethyltoluene	24.80	105	673	N.D.			
82) 1,2,4-Trimethylbenzene	25.05	105	2043	N.D.			
83) n-Decane	25.15	57	1550	N.D.			
84) Benzyl Chloride	0.00	91	0	N.D.			
85) 1,3-Dichlorobenzene	25.35	146	1444	N.D.			
86) 1,4-Dichlorobenzene	25.35	146	1444	N.D.			
87) sec-Butylbenzene	25.58	105	691	N.D.			
88) 4-Isopropyltoluene (p-...	25.57	119	350	N.D.			
89) 1,2,3-Trimethylbenzene	25.58	105	691	N.D.			
90) 1,2-Dichlorobenzene	25.35	146	1444	N.D.			
91) d-Limonene	25.74	68	110	N.D.			
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	26.65	57	1663	N.D.			
94) 1,2,4-Trichlorobenzene	28.26	180	1870	0.054	ng	#	92
95) Naphthalene	27.95	128	2328	N.D.			
96) n-Dodecane	27.89	57	901	N.D.			
97) Hexachlorobutadiene	0.00	225	0	N.D.			
98) Cyclohexanone	0.00	55	0	N.D.			
99) tert-Butylbenzene	0.00	119	0	N.D.			
100) n-Butylbenzene	0.00	91	0	N.D.			

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

QC SUMMARY FORMS

COLUMBIA ANALYTICAL SERVICES, INC.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Health & Engineering, Inc.**
Client Project ID: **16512** CAS Project ID: P0902972

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

Date(s) Collected: 8/25/09
Date(s) Received: 8/26/09
Date(s) Analyzed: 9/3 - 9/4/09

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	P090903-MB	**106**	70-130	**102**	70-130	**92**	70-130	
Method Blank	P090904-MB	**107**	70-130	**101**	70-130	**93**	70-130	
Lab Control Sample	P090903-LCS	**103**	70-130	**102**	70-130	**95**	70-130	
Lab Control Sample	P090904-LCS	**105**	70-130	**101**	70-130	**96**	70-130	
103520	P0902972-001	**108**	70-130	**98**	70-130	**95**	70-130	
103521	P0902972-002	**104**	70-130	**100**	70-130	**95**	70-130	
103522	P0902972-003	**106**	70-130	**99**	70-130	**96**	70-130	
103523	P0902972-004	**106**	70-130	**100**	70-130	**95**	70-130	
103524	P0902972-005	**106**	70-130	**98**	70-130	**96**	70-130	

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Health & Engineering, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P0902972
Client Project ID: **16512** CAS Sample ID: P090903-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: 9/03/09
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	**28.1**	**107**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**22.2**	**85**	61-118	
74-87-3	Chloromethane	25.0	**22.8**	**91**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.8**	**84**	65-122	
75-01-4	Vinyl Chloride	25.3	**21.9**	**87**	57-132	
106-99-0	1,3-Butadiene	26.8	**24.9**	**93**	66-161	
74-83-9	Bromomethane	25.8	**22.9**	**89**	67-130	
75-00-3	Chloroethane	25.5	**22.5**	**88**	68-123	
64-17-5	Ethanol	130	**118**	**91**	50-155	
75-05-8	Acetonitrile	26.0	**23.5**	**90**	48-148	
107-02-8	Acrolein	26.3	**26.6**	**101**	67-138	
67-64-1	Acetone	132	**112**	**85**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**22.1**	**84**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**35.6**	**74**	54-126	
107-13-1	Acrylonitrile	25.8	**26.7**	**103**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**23.3**	**85**	70-123	
75-09-2	Methylene Chloride	26.8	**21.8**	**81**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**26.1**	**97**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**24.3**	**88**	69-126	
75-15-0	Carbon Disulfide	26.0	**22.5**	**87**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**23.4**	**92**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**23.6**	**89**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**23.8**	**90**	72-132	
108-05-4	Vinyl Acetate	126	**140**	**111**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**27.0**	**101**	68-126	

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

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

CAS Project ID: P0902972
CAS Sample ID: P090903-LCS

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/03/09
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	**24.5**	**91**	69-124	
141-78-6	Ethyl Acetate	52.0	**49.3**	**95**	65-126	
110-54-3	n-Hexane	26.0	**23.2**	**89**	63-125	
67-66-3	Chloroform	27.5	**23.6**	**86**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**24.6**	**93**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**24.6**	**94**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.2**	**89**	69-127	
71-43-2	Benzene	25.8	**22.4**	**87**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**23.8**	**90**	68-137	
110-82-7	Cyclohexane	51.8	**46.0**	**89**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**23.8**	**92**	69-128	
75-27-4	Bromodichloromethane	26.3	**24.3**	**92**	71-131	
79-01-6	Trichloroethene	25.8	**21.9**	**85**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.1**	**100**	73-127	
80-62-6	Methyl Methacrylate	52.8	**48.2**	**91**	80-133	
142-82-5	n-Heptane	25.8	**22.8**	**88**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**23.8**	**97**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**26.8**	**100**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**27.7**	**103**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**24.2**	**93**	76-125	
108-88-3	Toluene	26.8	**23.6**	**88**	74-119	
591-78-6	2-Hexanone	27.0	**26.5**	**98**	64-118	
124-48-1	Dibromochloromethane	28.3	**26.3**	**93**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.2**	**96**	79-125	
123-86-4	n-Butyl Acetate	27.5	**28.7**	**104**	70-136	

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

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

CAS Project ID: P0902972
CAS Sample ID: P090903-LCS

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/03/09
Volume(s) Analyzed: NA Liter(s)

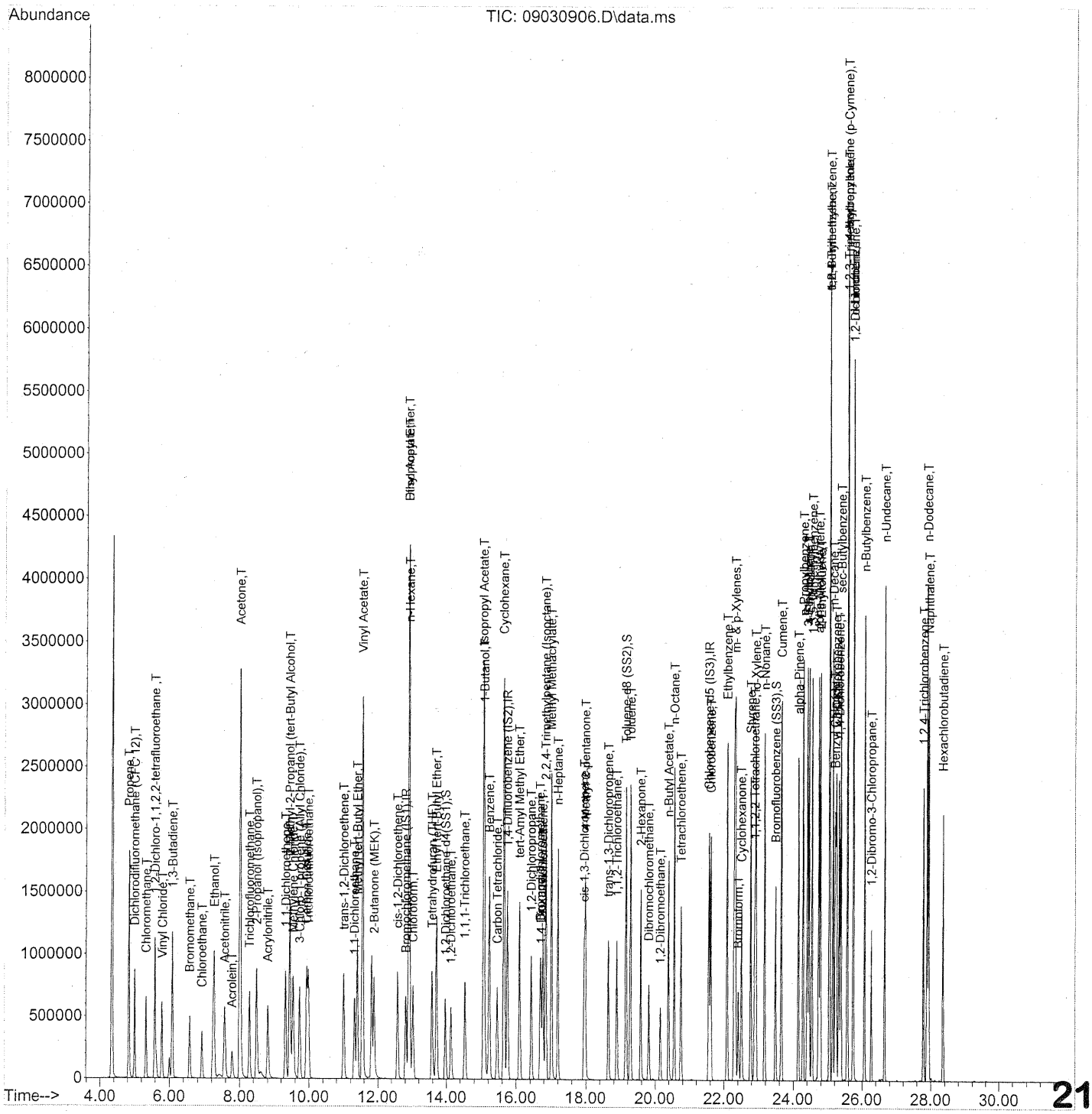
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**24.6**	**94**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.0**	**87**	72-125	
108-90-7	Chlorobenzene	26.5	**23.4**	**88**	74-121	
100-41-4	Ethylbenzene	26.3	**24.0**	**91**	76-120	
179601-23-1	m,p-Xylenes	51.5	**47.0**	**91**	75-120	
75-25-2	Bromoform	26.5	**24.2**	**91**	76-143	
100-42-5	Styrene	26.3	**25.0**	**95**	78-124	
95-47-6	o-Xylene	26.0	**23.9**	**92**	76-121	
111-84-2	n-Nonane	25.8	**24.6**	**95**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**25.5**	**94**	77-126	
98-82-8	Cumene	25.3	**22.9**	**91**	78-125	
80-56-8	alpha-Pinene	24.8	**22.7**	**92**	78-125	
103-65-1	n-Propylbenzene	25.3	**23.3**	**92**	80-127	
622-96-8	4-Ethyltoluene	26.3	**23.9**	**91**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**24.2**	**91**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**24.4**	**96**	76-123	
100-44-7	Benzyl Chloride	26.8	**25.0**	**93**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**24.1**	**93**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**23.2**	**88**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**23.5**	**91**	75-124	
5989-27-5	d-Limonene	26.5	**25.6**	**97**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**26.7**	**99**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**25.0**	**92**	70-139	
91-20-3	Naphthalene	25.0	**23.6**	**94**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**24.3**	**91**	68-138	

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 11:00:12 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



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 11:00:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	349041	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1776833	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	843271	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	633997	25.689	ng		-0.02
Spiked Amount 25.000			Recovery =	102.76%			
57) Toluene-d8 (SS2)	19.15	98	2040732	25.456	ng		-0.01
Spiked Amount 25.000			Recovery =	101.84%			
73) Bromofluorobenzene (SS3)	23.49	174	540318	23.799	ng		0.00
Spiked Amount 25.000			Recovery =	95.20%			
Target Compounds							Qvalue
2) Propene	4.83	42	860009	28.088	ng		97
3) Dichlorodifluoromethan...	5.00	85	971604	22.231	ng		99
4) Chloromethane	5.33	50	928384	22.792	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	503920	21.819	ng		100
6) Vinyl Chloride	5.80	62	881655	21.942	ng		98
7) 1,3-Butadiene	6.08	54	712063	24.949	ng		97
8) Bromomethane	6.58	94	481360	22.910	ng		99
9) Chloroethane	6.93	64	449422	22.545	ng		100
10) Ethanol	7.27	45	2261905m	117.770	ng		
11) Acetonitrile	7.58	41	1099919	23.467	ng		99
12) Acrolein	7.79	56	333763	26.647	ng		99
13) Acetone	8.01	58	2196596	112.391	ng		94
14) Trichlorofluoromethane	8.29	101	826832	22.123	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1906520m	35.620	ng		
16) Acrylonitrile	8.81	53	757033	26.667	ng		99
17) 1,1-Dichloroethene	9.33	96	511923	23.340	ng		95
18) 2-Methyl-2-Propanol (t...	9.45	59	2659513	48.944	ng		97
19) Methylene Chloride	9.54	84	532323	21.830	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	852873	26.082	ng		88
21) Trichlorotrifluoroethane	9.98	151	407182	24.342	ng		95
22) Carbon Disulfide	9.93	76	1936881	22.508	ng		98
23) trans-1,2-Dichloroethene	11.01	61	788044	23.414	ng		91
24) 1,1-Dichloroethane	11.32	63	973017	23.605	ng		100
25) Methyl tert-Butyl Ether	11.40	73	1588713	23.785	ng		95
26) Vinyl Acetate	11.56	86	594091	140.349	ng	#	59
27) 2-Butanone (MEK)	11.89	72	367476	26.970	ng	#	77
28) cis-1,2-Dichloroethene	12.58	61	768811	24.479	ng		91
29) Diisopropyl Ether	12.91	87	458403	23.697	ng	#	59
30) Ethyl Acetate	12.91	61	435284	49.264	ng		95
31) n-Hexane	12.93	57	998732	23.188	ng		9

tom 9/3/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 11:00:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	849407	23.563	ng		100
34) Tetrahydrofuran (THF)	13.58	72	349174	24.649	ng	#	83
35) Ethyl tert-Butyl Ether	13.71	87	625866	22.677	ng	#	84
36) 1,2-Dichloroethane	14.13	62	678649	24.602	ng		99
38) 1,1,1-Trichloroethane	14.53	97	749610	23.196	ng		99
39) Isopropyl Acetate	15.07	61	754095	52.002	ng	#	74
40) 1-Butanol	15.09	56	1296121	56.291	ng		84
41) Benzene	15.23	78	2142280	22.419	ng		99
42) Carbon Tetrachloride	15.46	117	636119	23.816	ng		99
43) Cyclohexane	15.66	84	1703832	46.042	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1547035	23.035	ng		98
45) 1,2-Dichloropropane	16.43	63	558938	23.844	ng		99
46) Bromodichloromethane	16.70	83	679952	24.324	ng		99
47) Trichloroethene	16.77	130	530494	21.865	ng		99
48) 1,4-Dioxane	16.72	88	443094	26.071	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2499165	22.725	ng		95
50) Methyl Methacrylate	17.02	100	459992	48.176	ng	#	88
51) n-Heptane	17.21	71	580522	22.821	ng		93
52) cis-1,3-Dichloropropene	17.95	75	841954	23.837	ng		100
53) 4-Methyl-2-pentanone	17.98	58	553061	26.784	ng		94
54) trans-1,3-Dichloropropene	18.64	75	855015	27.671	ng		99
55) 1,1,2-Trichloroethane	18.88	97	494720	24.233	ng		98
58) Toluene	19.28	91	2291662	23.581	ng		100
59) 2-Hexanone	19.58	43	1336208	26.456	ng		97
60) Dibromochloromethane	19.82	129	545419	26.285	ng		100
61) 1,2-Dibromoethane	20.15	107	551709	25.225	ng		100
62) n-Butyl Acetate	20.39	43	1582120	28.709	ng		98
63) n-Octane	20.56	57	532084	24.563	ng		90
64) Tetrachloroethene	20.75	166	529949	21.976	ng		99
65) Chlorobenzene	21.62	112	1397539	23.417	ng		100
66) Ethylbenzene	22.09	91	2514684	23.967	ng		98
67) m- & p-Xylenes	22.33	91	3908715	46.992	ng		99
68) Bromoform	22.41	173	435974	24.205	ng		100
69) Styrene	22.77	104	1539223	25.035	ng		100
70) o-Xylene	22.92	91	2003740	23.946	ng		98
71) n-Nonane	23.17	43	1240634	24.620	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	917038	25.512	ng		99
74) Cumene	23.66	105	2488704	22.938	ng		98
75) alpha-Pinene	24.15	93	1212896	22.658	ng		100
76) n-Propylbenzene	24.28	91	3118701	23.258	ng		99
77) 3-Ethyltoluene	24.41	105	2470274	24.303	ng		98
78) 4-Ethyltoluene	24.46	105	2440323	23.882	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	2046303	24.219	ng		10

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 11:00:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

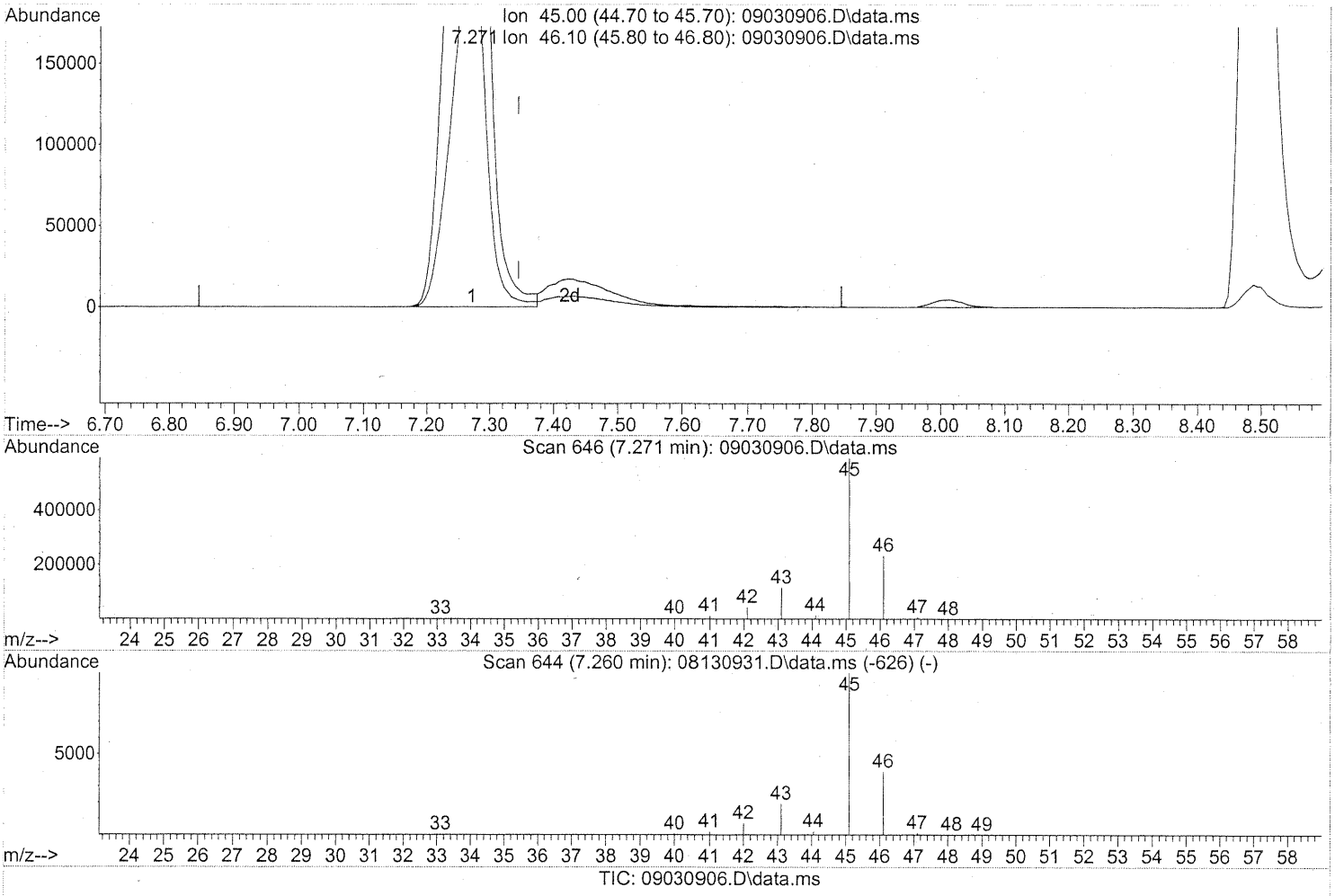
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1136959	24.800	ng	98
81) 2-Ethyltoluene	24.79	105	2429573	23.147	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2190017	24.413	ng	100
83) n-Decane	25.15	57	1262553	24.180	ng	94
84) Benzyl Chloride	25.22	91	1733556	24.978	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1121497	24.148	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1142687	23.189	ng	99
87) sec-Butylbenzene	25.38	105	2767918	23.415	ng	99
88) 4-Isopropyltoluene (p-...	25.56	119	2642007	23.326	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2200124	24.264	ng	99
90) 1,2-Dichlorobenzene	25.75	146	1097447	23.534	ng	100
91) d-Limonene	25.74	68	941398	25.649	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	375687	26.678	ng	93
93) n-Undecane	26.65	57	1337722	24.794	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	813663	24.976	ng	100
95) Naphthalene	27.94	128	2838268	23.580	ng	100
96) n-Dodecane	27.89	57	1378495	22.825	ng	96
97) Hexachlorobutadiene	28.36	225	451919	24.292	ng	99
98) Cyclohexanone	22.51	55	783177	25.589	ng	95
99) tert-Butylbenzene	25.05	119	2121597	23.847	ng	99
100) n-Butylbenzene	26.06	91	2299592	24.441	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:53:38 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



(10) Ethanol (T)

7.271min (-0.074) 111.54ng

response 2142250

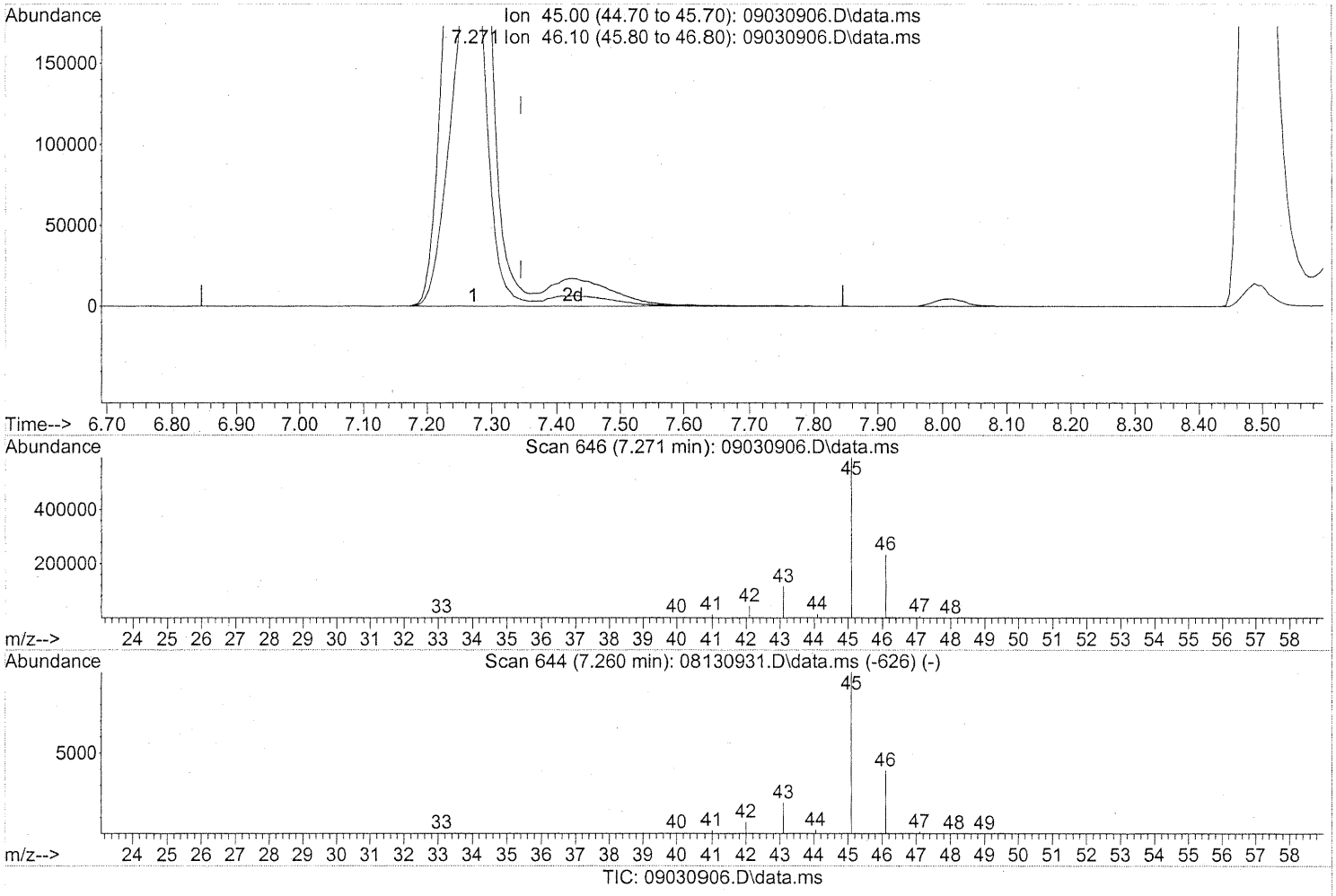
PT

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:53:38 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



(10) Ethanol (T)

7.271min (-0.074) 117.77ng m

response 2261905

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.12
0.00	0.00	0.00
0.00	0.00	0.00

PT → CC

em 9/3/09

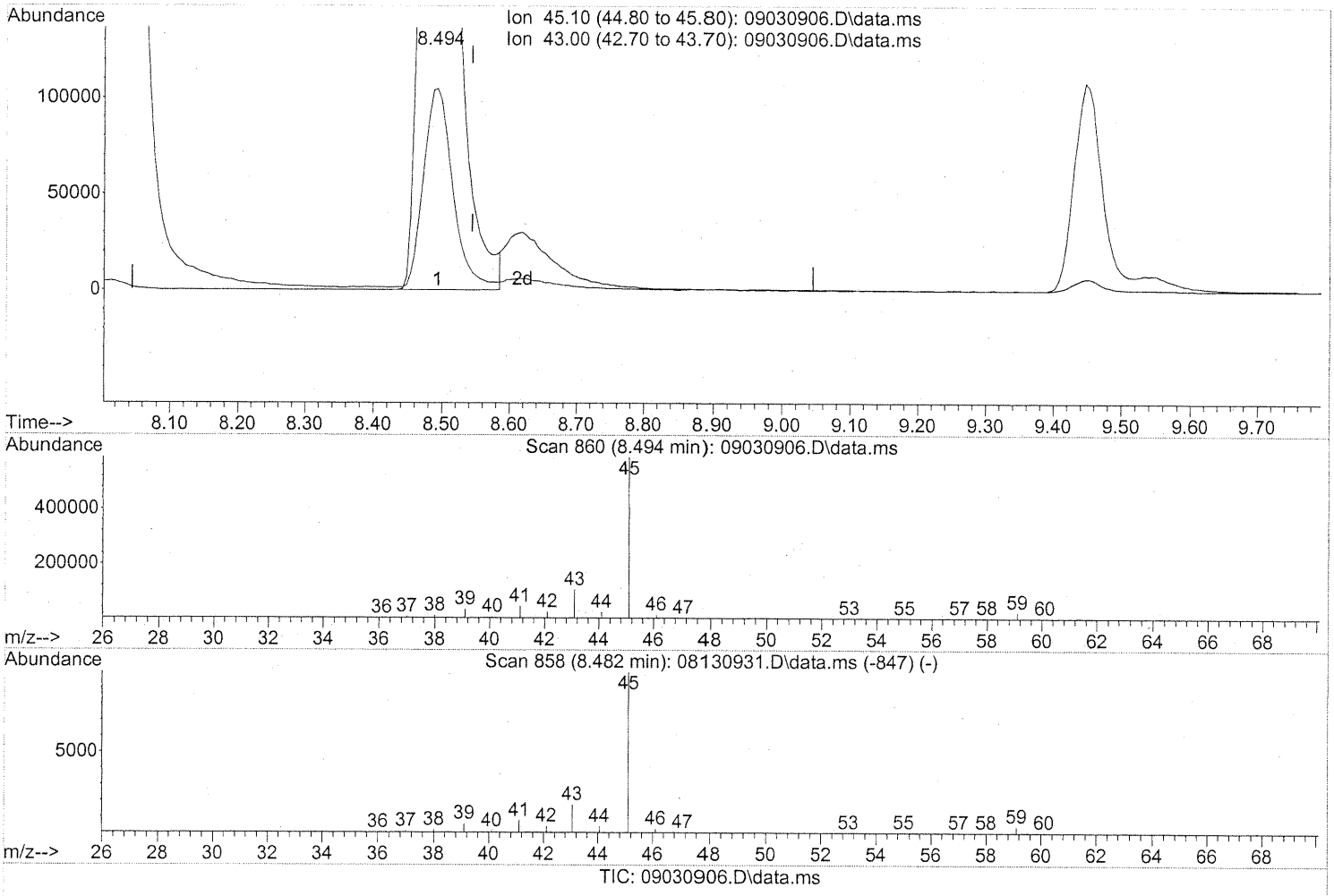
9/4/09

220

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:53:38 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



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

8.494min (-0.051) 32.70ng

response 1750323

PT

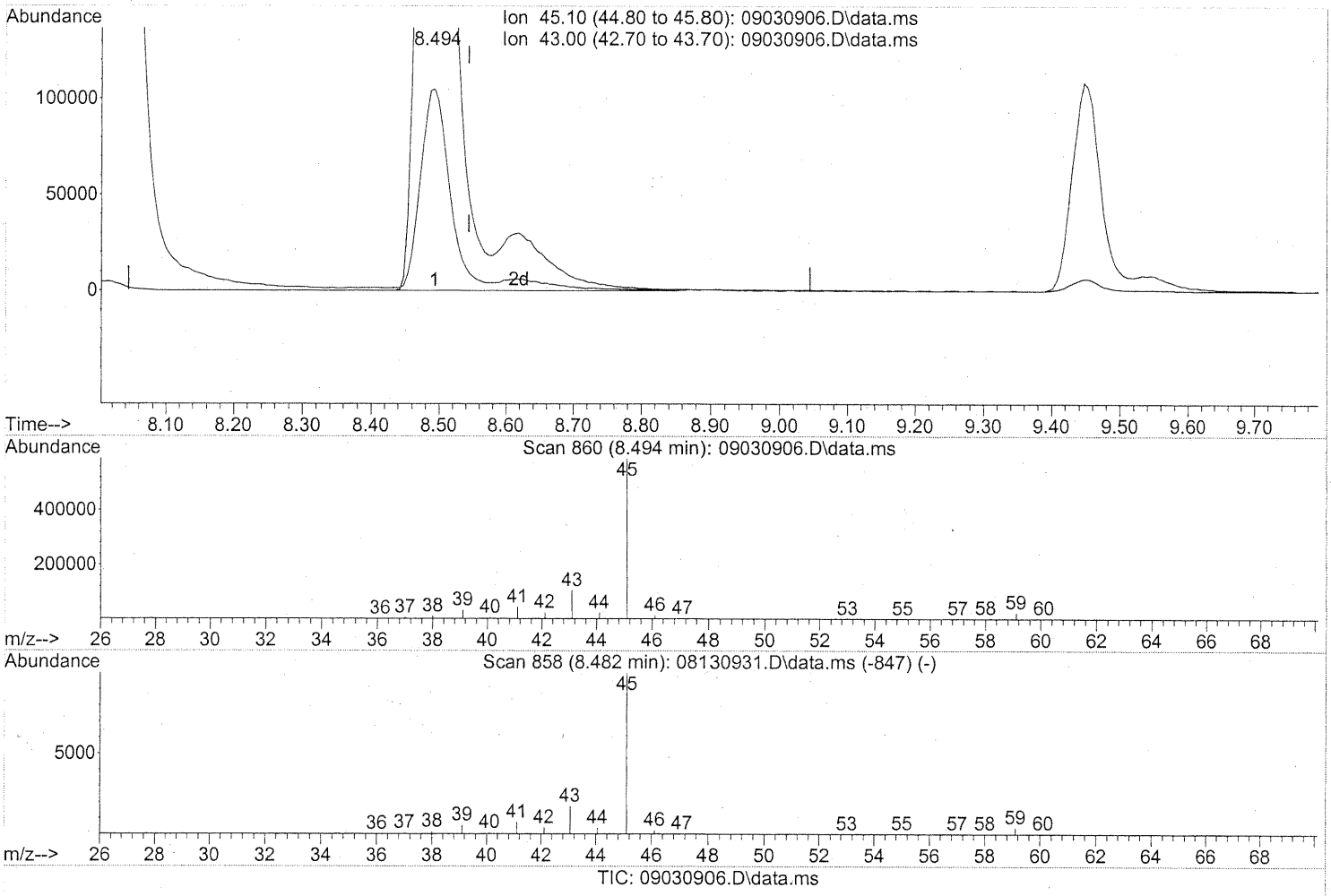
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.62
0.00	0.00	0.00
0.00	0.00	0.00

221

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030906.D
Acq On : 3 Sep 2009 9:43
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:53:38 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



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

8.494min (-0.051) 35.62ng m

response 1906520

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.17
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC

EM 9/3/09

9/4/09

222

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

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

CAS Project ID: P0902972
CAS Sample ID: P090904-LCS

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/04/09
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**28.8**	**110**	58-134	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**23.4**	**90**	61-118	
74-87-3	Chloromethane	25.0	**23.8**	**95**	46-132	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**21.9**	**84**	65-122	
75-01-4	Vinyl Chloride	25.3	**22.5**	**89**	57-132	
106-99-0	1,3-Butadiene	26.8	**26.1**	**97**	66-161	
74-83-9	Bromomethane	25.8	**23.5**	**91**	67-130	
75-00-3	Chloroethane	25.5	**23.2**	**91**	68-123	
64-17-5	Ethanol	130	**123**	**95**	50-155	
75-05-8	Acetonitrile	26.0	**24.5**	**94**	48-148	
107-02-8	Acrolein	26.3	**27.4**	**104**	67-138	
67-64-1	Acetone	132	**117**	**89**	59-121	
75-69-4	Trichlorofluoromethane	26.3	**23.0**	**87**	67-132	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**37.6**	**78**	54-126	
107-13-1	Acrylonitrile	25.8	**27.9**	**108**	65-134	
75-35-4	1,1-Dichloroethene	27.5	**24.1**	**88**	70-123	
75-09-2	Methylene Chloride	26.8	**22.6**	**84**	66-121	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**27.8**	**103**	63-149	
76-13-1	Trichlorotrifluoroethane	27.5	**24.8**	**90**	69-126	
75-15-0	Carbon Disulfide	26.0	**23.5**	**90**	66-115	
156-60-5	trans-1,2-Dichloroethene	25.5	**24.4**	**96**	69-125	
75-34-3	1,1-Dichloroethane	26.5	**24.7**	**93**	72-130	
1634-04-4	Methyl tert-Butyl Ether	26.3	**24.4**	**93**	72-132	
108-05-4	Vinyl Acetate	126	**144**	**114**	73-158	
78-93-3	2-Butanone (MEK)	26.8	**28.1**	**105**	68-126	

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

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

CAS Project ID: P0902972
CAS Sample ID: P090904-LCS

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/04/09
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	27.0	**25.6**	**95**	69-124	
141-78-6	Ethyl Acetate	52.0	**51.7**	**99**	65-126	
110-54-3	n-Hexane	26.0	**24.2**	**93**	63-125	
67-66-3	Chloroform	27.5	**24.6**	**89**	68-126	
109-99-9	Tetrahydrofuran (THF)	26.5	**26.1**	**98**	65-124	
107-06-2	1,2-Dichloroethane	26.3	**25.8**	**98**	61-129	
71-55-6	1,1,1-Trichloroethane	26.0	**23.8**	**92**	69-127	
71-43-2	Benzene	25.8	**23.3**	**90**	68-122	
56-23-5	Carbon Tetrachloride	26.3	**24.7**	**94**	68-137	
110-82-7	Cyclohexane	51.8	**47.3**	**91**	68-121	
78-87-5	1,2-Dichloropropane	26.0	**24.8**	**95**	69-128	
75-27-4	Bromodichloromethane	26.3	**25.3**	**96**	71-131	
79-01-6	Trichloroethene	25.8	**22.5**	**87**	72-122	
123-91-1	1,4-Dioxane	26.0	**26.7**	**103**	73-127	
80-62-6	Methyl Methacrylate	52.8	**49.4**	**94**	80-133	
142-82-5	n-Heptane	25.8	**23.8**	**92**	69-126	
10061-01-5	cis-1,3-Dichloropropene	24.5	**24.9**	**102**	73-122	
108-10-1	4-Methyl-2-pentanone	26.8	**27.9**	**104**	67-122	
10061-02-6	trans-1,3-Dichloropropene	27.0	**28.8**	**107**	75-131	
79-00-5	1,1,2-Trichloroethane	26.0	**25.0**	**96**	76-125	
108-88-3	Toluene	26.8	**24.0**	**90**	74-119	
591-78-6	2-Hexanone	27.0	**27.4**	**101**	64-118	
124-48-1	Dibromochloromethane	28.3	**26.9**	**95**	79-129	
106-93-4	1,2-Dibromoethane	26.3	**25.6**	**97**	79-125	
123-86-4	n-Butyl Acetate	27.5	**29.8**	**108**	70-136	

Verified By: _____ Date: 9/10/09

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

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

CAS Project ID: P0902972
CAS Sample ID: P090904-LCS

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

Date Collected: NA
Date Received: NA
Date Analyzed: 9/04/09
Volume(s) Analyzed: NA Liter(s)

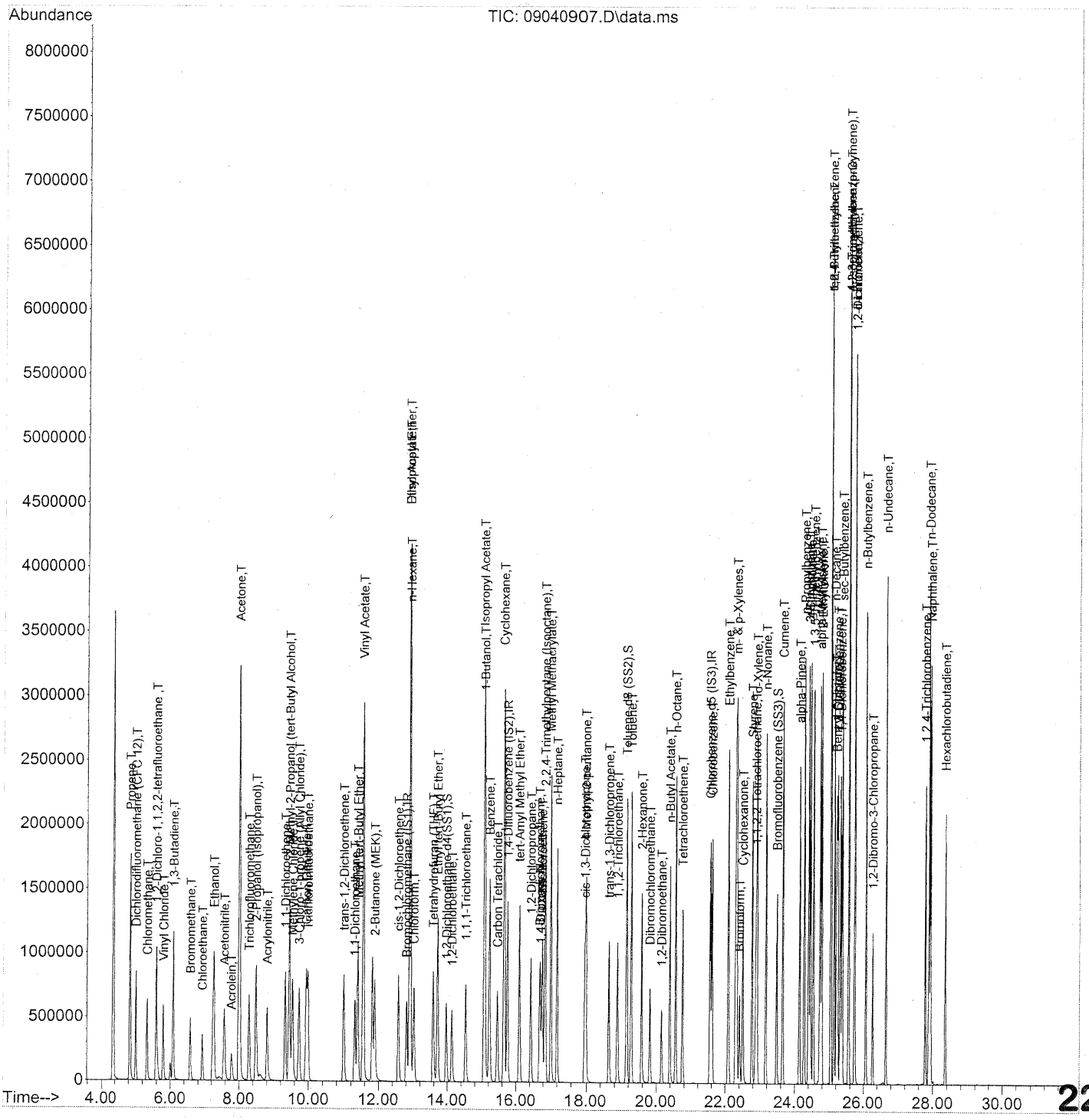
CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	26.3	**25.1**	**95**	75-126	
127-18-4	Tetrachloroethene	25.3	**22.4**	**89**	72-125	
108-90-7	Chlorobenzene	26.5	**23.8**	**90**	74-121	
100-41-4	Ethylbenzene	26.3	**24.6**	**94**	76-120	
179601-23-1	m,p-Xylenes	51.5	**48.3**	**94**	75-120	
75-25-2	Bromoform	26.5	**24.8**	**94**	76-143	
100-42-5	Styrene	26.3	**25.7**	**98**	78-124	
95-47-6	o-Xylene	26.0	**24.7**	**95**	76-121	
111-84-2	n-Nonane	25.8	**25.6**	**99**	69-129	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**26.4**	**98**	77-126	
98-82-8	Cumene	25.3	**23.5**	**93**	78-125	
80-56-8	alpha-Pinene	24.8	**23.2**	**94**	78-125	
103-65-1	n-Propylbenzene	25.3	**24.0**	**95**	80-127	
622-96-8	4-Ethyltoluene	26.3	**24.7**	**94**	75-123	
108-67-8	1,3,5-Trimethylbenzene	26.5	**24.9**	**94**	76-124	
95-63-6	1,2,4-Trimethylbenzene	25.5	**25.3**	**99**	76-123	
100-44-7	Benzyl Chloride	26.8	**27.3**	**102**	80-137	
541-73-1	1,3-Dichlorobenzene	26.0	**24.9**	**96**	74-125	
106-46-7	1,4-Dichlorobenzene	26.3	**23.9**	**91**	74-126	
95-50-1	1,2-Dichlorobenzene	25.8	**24.4**	**95**	75-124	
5989-27-5	d-Limonene	26.5	**26.8**	**101**	66-129	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**27.5**	**102**	79-144	
120-82-1	1,2,4-Trichlorobenzene	27.3	**25.9**	**95**	70-139	
91-20-3	Naphthalene	25.0	**24.6**	**98**	69-141	
87-68-3	Hexachlorobutadiene	26.8	**25.3**	**94**	68-138	

Verified By: _____ Date: 9/10/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	324382	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1648562	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	793137	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	602004	26.247	ng		-0.02
Spiked Amount 25.000			Recovery =	105.00%			
57) Toluene-d8 (SS2)	19.15	98	1909222	25.321	ng		-0.01
Spiked Amount 25.000			Recovery =	101.28%			
73) Bromofluorobenzene (SS3)	23.49	174	510529	23.908	ng		0.00
Spiked Amount 25.000			Recovery =	95.64%			
Target Compounds							Qvalue
2) Propene	4.84	42	818316	28.758	ng		97
3) Dichlorodifluoromethan...	5.01	85	949094	23.366	ng		99
4) Chloromethane	5.34	50	901661	23.818	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	470793	21.934	ng		100
6) Vinyl Chloride	5.80	62	841133	22.525	ng		99
7) 1,3-Butadiene	6.09	54	692420	26.105	ng		96
8) Bromomethane	6.59	94	458879	23.500	ng		100
9) Chloroethane	6.93	64	430636	23.245	ng		100
10) Ethanol	7.27	45	2188902m	122.633	ng		
11) Acetonitrile	7.58	41	1068699	24.534	ng		99
12) Acrolein	7.79	56	318463	27.359	ng		98
13) Acetone	8.01	58	2127308	117.120	ng		95
14) Trichlorofluoromethane	8.29	101	798785	22.997	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1871111m	37.616	ng		
16) Acrylonitrile	8.81	53	736506	27.916	ng		99
17) 1,1-Dichloroethene	9.33	96	491013	24.089	ng		92
18) 2-Methyl-2-Propanol (t...	9.45	59	2582530	51.140	ng		96
19) Methylene Chloride	9.54	84	511784	22.583	ng		83
20) 3-Chloro-1-propene (Al...	9.73	41	843386	27.752	ng		87
21) Trichlorotrifluoroethane	9.99	151	386205	24.843	ng		93
22) Carbon Disulfide	9.94	76	1879078	23.496	ng		99
23) trans-1,2-Dichloroethene	11.01	61	762111	24.364	ng		90
24) 1,1-Dichloroethane	11.32	63	947444	24.732	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1514373	24.395	ng		95
26) Vinyl Acetate	11.56	86	567929	144.368	ng	#	56
27) 2-Butanone (MEK)	11.89	72	356204	28.130	ng	#	77
28) cis-1,2-Dichloroethene	12.58	61	746913	25.589	ng		91
29) Diisopropyl Ether	12.91	87	438704	24.403	ng	#	54
30) Ethyl Acetate	12.91	61	424199	51.659	ng		94
31) n-Hexane	12.93	57	967557	24.172	ng		9

EM 9/4/09

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	825177	24.631	ng		99
34) Tetrahydrofuran (THF)	13.58	72	343242	26.073	ng	#	82
35) Ethyl tert-Butyl Ether	13.71	87	598610	23.338	ng	#	83
36) 1,2-Dichloroethane	14.14	62	661858	25.818	ng		99
38) 1,1,1-Trichloroethane	14.54	97	714959	23.845	ng		98
39) Isopropyl Acetate	15.07	61	728771	54.166	ng	#	74
40) 1-Butanol	15.09	56	1241397	58.109	ng		83
41) Benzene	15.23	78	2063330	23.273	ng		99
42) Carbon Tetrachloride	15.46	117	612837	24.730	ng		98
43) Cyclohexane	15.66	84	1624469	47.313	ng		86
44) tert-Amyl Methyl Ether	16.10	73	1482665	23.794	ng		97
45) 1,2-Dichloropropane	16.44	63	540384	24.846	ng		98
46) Bromodichloromethane	16.70	83	656824	25.325	ng		99
47) Trichloroethene	16.77	130	507561	22.548	ng		100
48) 1,4-Dioxane	16.72	88	421695	26.743	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2408741	23.607	ng		95
50) Methyl Methacrylate	17.02	100	437201	49.351	ng	#	86
51) n-Heptane	17.21	71	561163	23.777	ng		93
52) cis-1,3-Dichloropropene	17.95	75	816524	24.916	ng		100
53) 4-Methyl-2-pentanone	17.99	58	534589	27.904	ng		93
54) trans-1,3-Dichloropropene	18.64	75	824737	28.768	ng		100
55) 1,1,2-Trichloroethane	18.89	97	473694	25.009	ng		97
58) Toluene	19.28	91	2196809	24.034	ng		100
59) 2-Hexanone	19.58	43	1300842	27.384	ng		97
60) Dibromochloromethane	19.82	129	525025	26.901	ng		99
61) 1,2-Dibromoethane	20.15	107	527586	25.647	ng		99
62) n-Butyl Acetate	20.39	43	1543126	29.771	ng		97
63) n-Octane	20.56	57	511990	25.129	ng		90
64) Tetrachloroethene	20.75	166	507589	22.379	ng		99
65) Chlorobenzene	21.62	112	1336308	23.807	ng		100
66) Ethylbenzene	22.09	91	2426377	24.588	ng		98
67) m- & p-Xylenes	22.33	91	3778125	48.293	ng		99
68) Bromoform	22.41	173	420168	24.802	ng		100
69) Styrene	22.77	104	1487661	25.726	ng		99
70) o-Xylene	22.92	91	1942597	24.683	ng		98
71) n-Nonane	23.17	43	1212835	25.589	ng		90
72) 1,1,2,2-Tetrachloroethane	22.89	83	892262	26.392	ng		100
74) Cumene	23.66	105	2396810	23.488	ng		99
75) alpha-Pinene	24.15	93	1170094	23.240	ng		99
76) n-Propylbenzene	24.28	91	3020663	23.950	ng		99
77) 3-Ethyltoluene	24.41	105	2380101	24.896	ng		98
78) 4-Ethyltoluene	24.46	105	2372992	24.691	ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	1980529	24.923	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:12:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

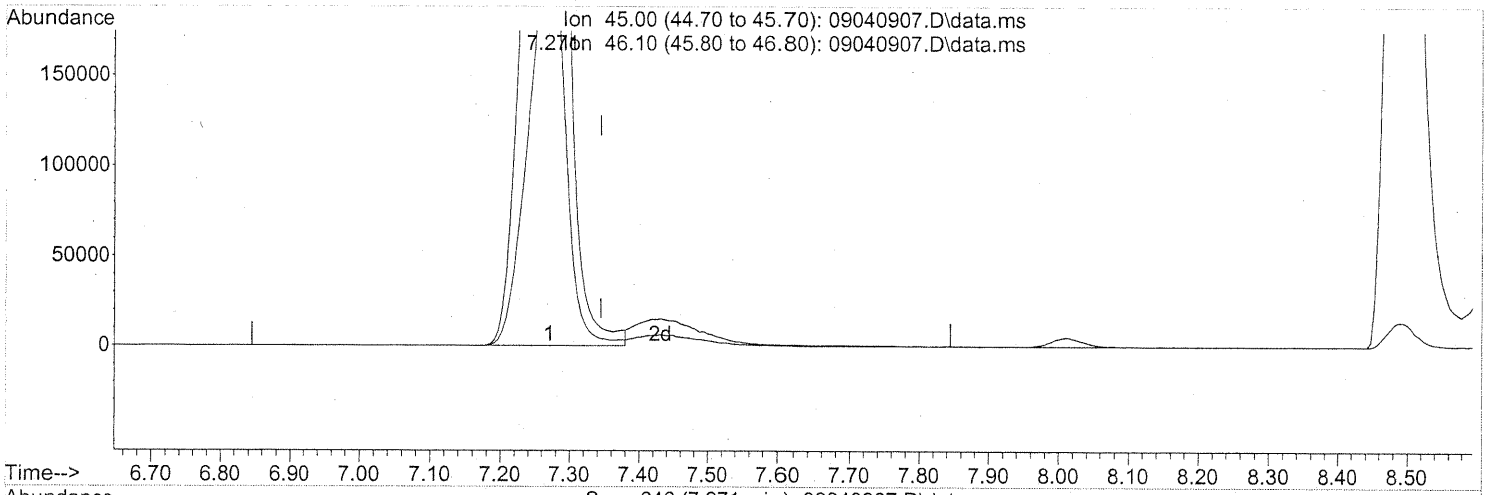
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1097970	25.464	ng	99
81) 2-Ethyltoluene	24.79	105	2356556	23.870	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2132144	25.270	ng	100
83) n-Decane	25.15	57	1236105	25.170	ng	94
84) Benzyl Chloride	25.22	91	1781792	27.296	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1086686	24.878	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1108025	23.907	ng	99
87) sec-Butylbenzene	25.38	105	2687814	24.174	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2573132	24.154	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2142857	25.126	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1068046	24.352	ng	100
91) d-Limonene	25.74	68	925345	26.806	ng	93
92) 1,2-Dibromo-3-Chloropr...	26.26	157	364805	27.542	ng	91
93) n-Undecane	26.65	57	1314736	25.908	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	792769	25.872	ng	99
95) Naphthalene	27.94	128	2784530	24.596	ng	100
96) n-Dodecane	27.89	57	1358517	23.916	ng	95
97) Hexachlorobutadiene	28.36	225	443345	25.338	ng	99
98) Cyclohexanone	22.51	55	756842	26.292	ng	95
99) tert-Butylbenzene	25.05	119	2058140	24.596	ng	99
100) n-Butylbenzene	26.06	91	2259820	25.537	ng	99

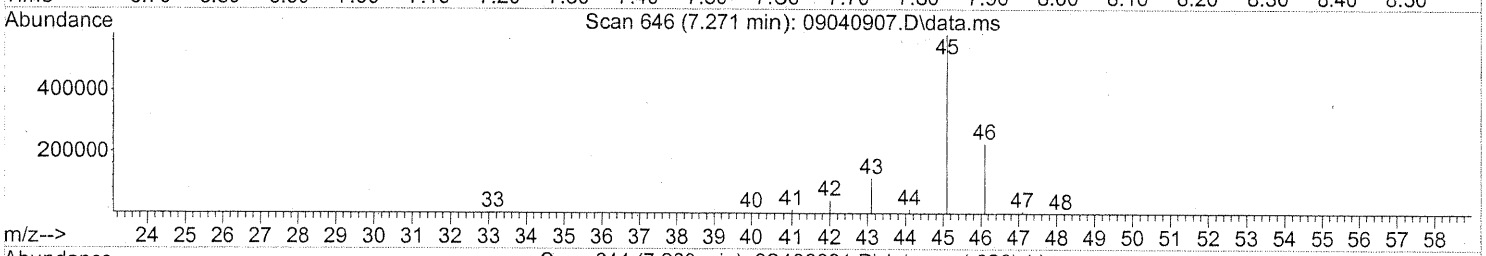
(#) = qualifier out of range (m) = manual integration (+) = signals summed

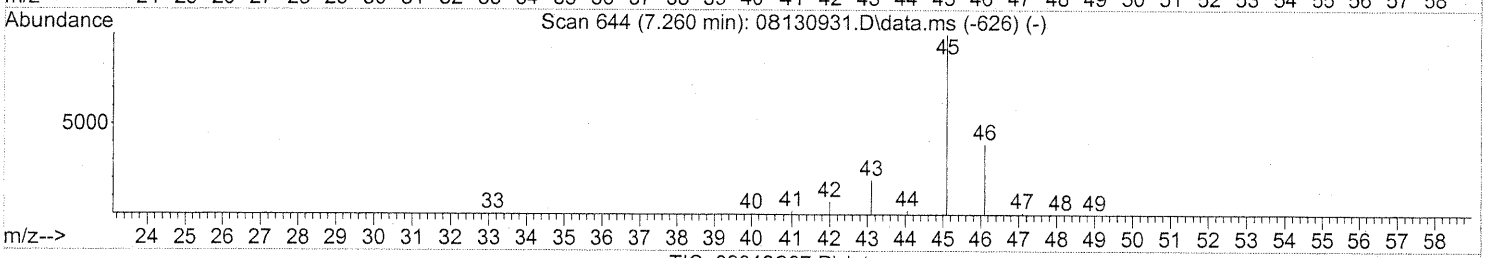
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration







TIC: 09040907.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 116.79ng

response 2084686

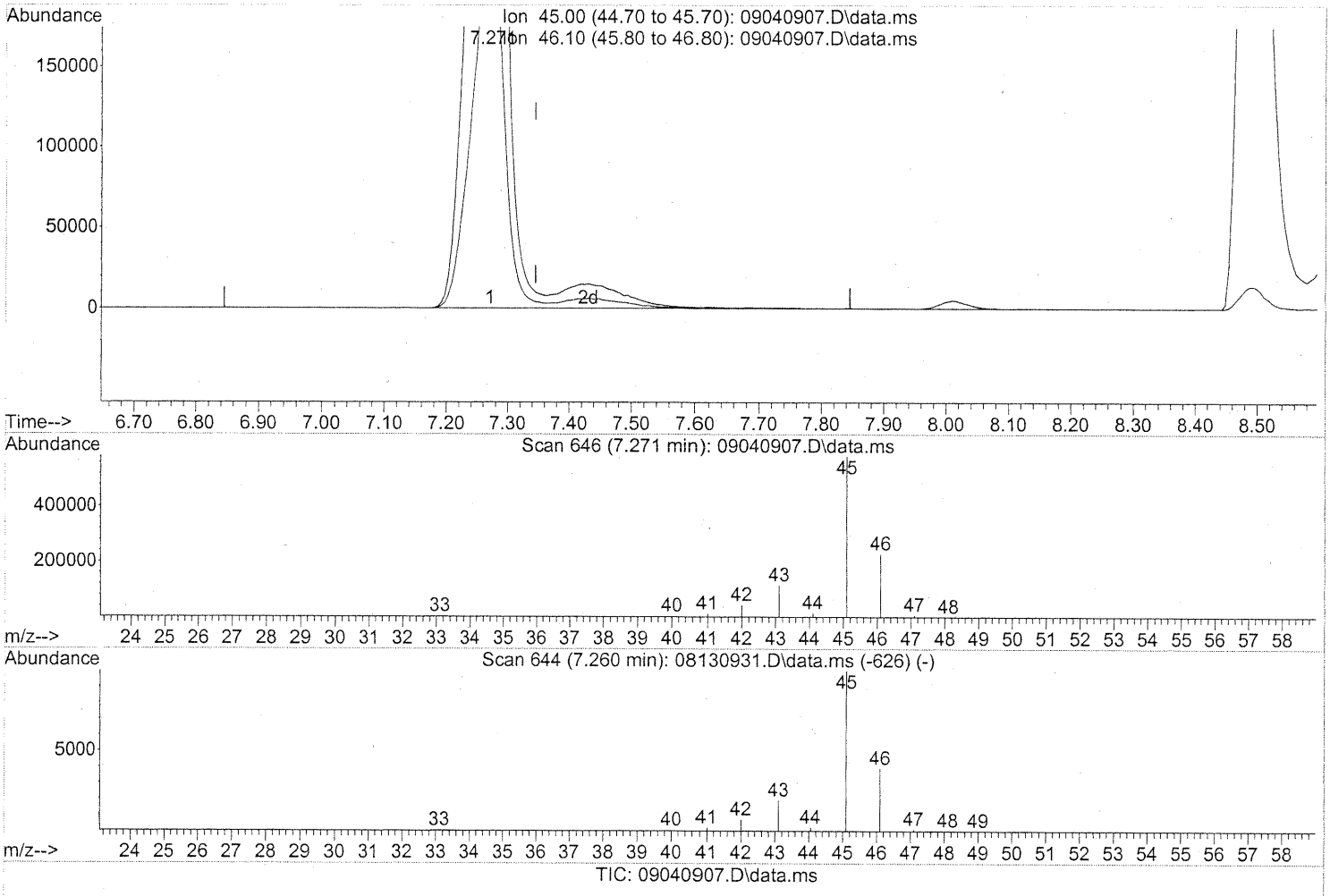
PT

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040907.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 122.63ng m

response 2188902

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.43
0.00	0.00	0.00
0.00	0.00	0.00

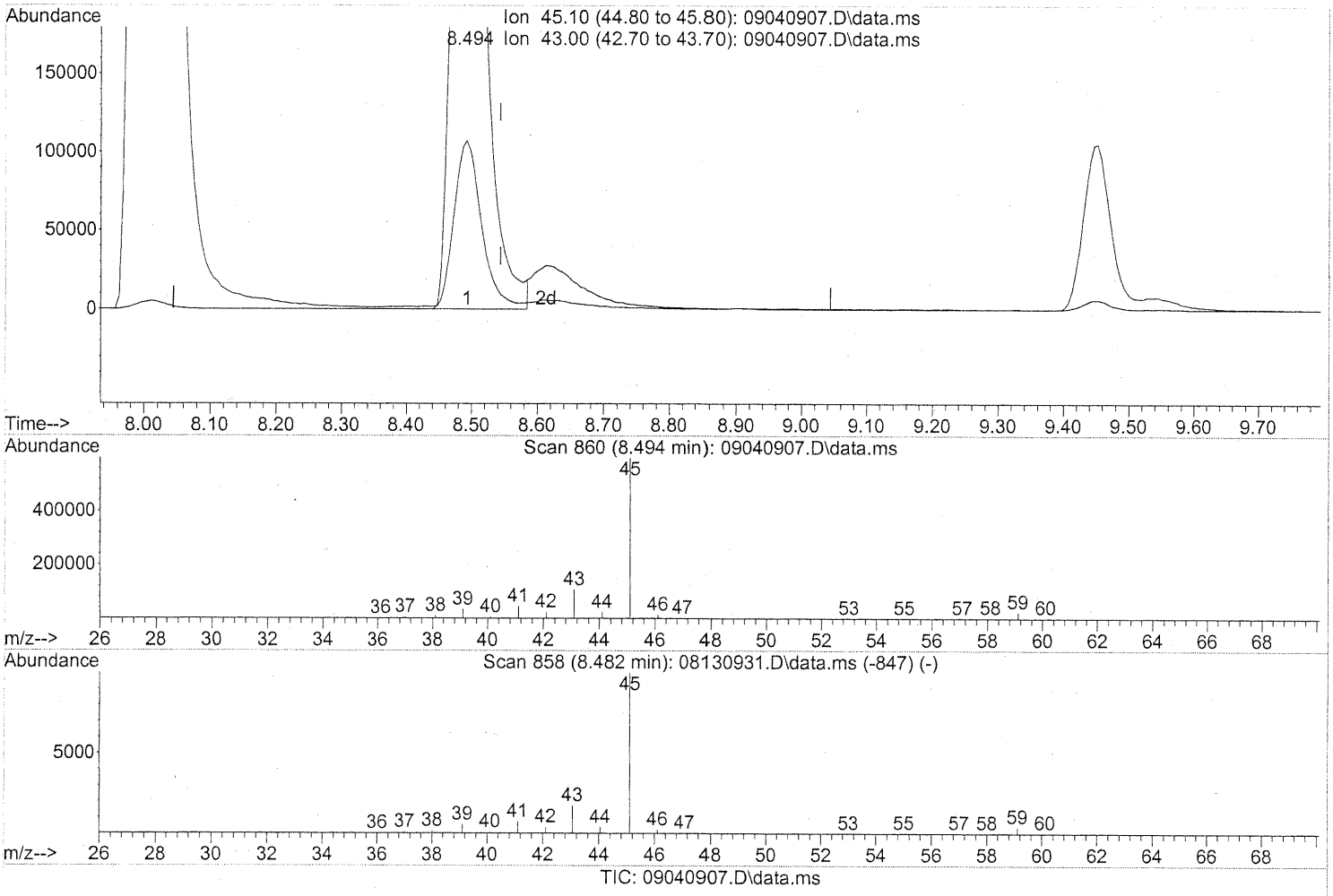
PT → LC
9/4/09
9/8/09

231

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040907.D\data.ms

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

8.494min (-0.051) 34.63ng

response 1722495

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.76
0.00	0.00	0.00
0.00	0.00	0.00

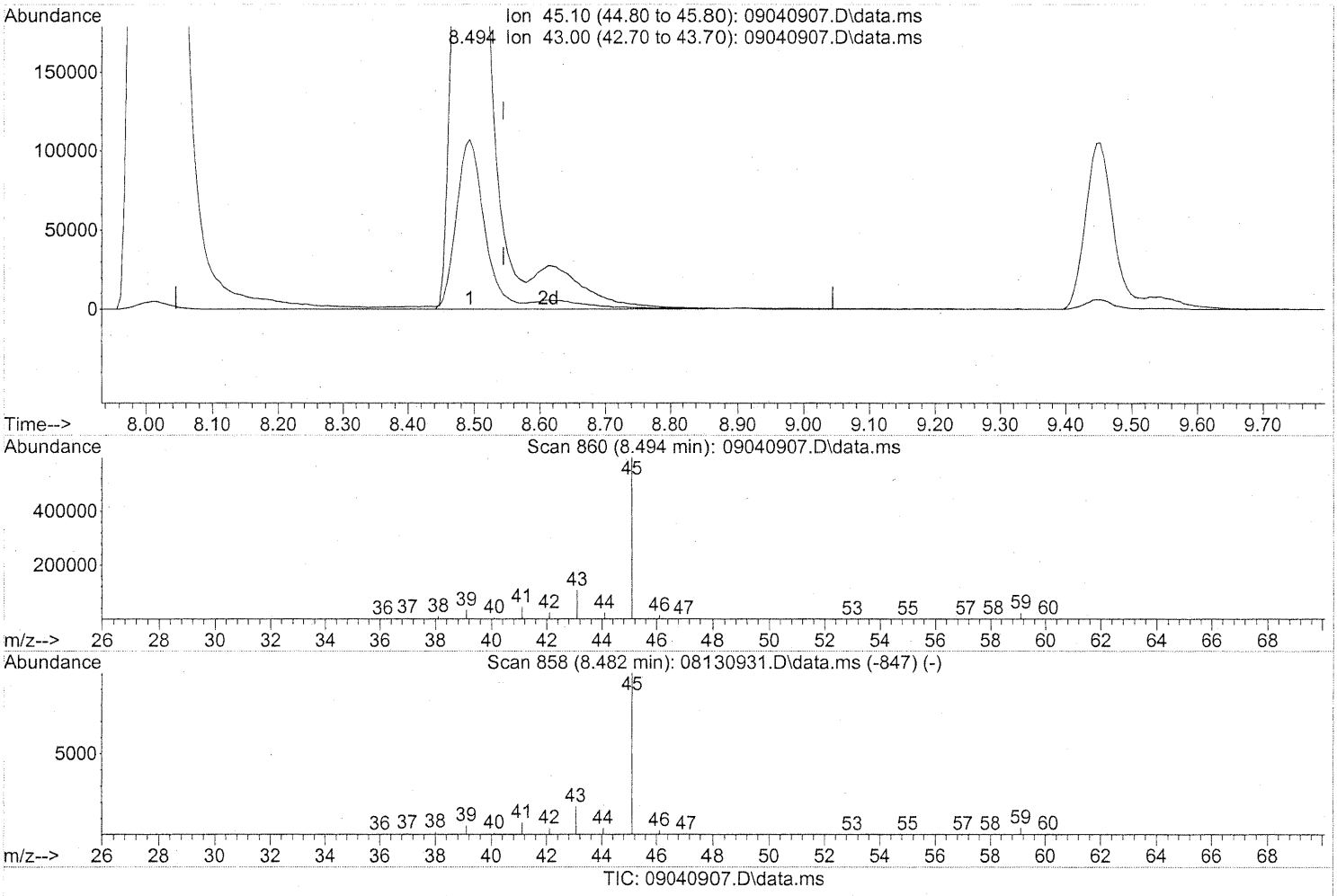
PT

232

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040907.D
Acq On : 4 Sep 2009 12:00
Operator : EM
Sample : 25ng TO-15 LCS STD
Misc : S20-08130905/S20-08240914
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 04 13:11:29 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 37.62ng m

response 1871111

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.35
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
Em 9/4/09
R 9/8/09

233

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)	T	n-Hexane	2.858	2.878	3.605	3.054	2.887	2.950	3.149	3.298	3.085	8.42

Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

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

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

237

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
	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)							
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.

Tam 8/14/09

Method Path : J:\MS09\Methods\
Method File : R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Fri Aug 14 07:31:29 2009
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	0	25	J:\MS09\Data\2009_08\13\O8130926.D
2	0.2	0	25	J:\MS09\Data\2009_08\13\O8130927.D
3	0.5	1	25	J:\MS09\Data\2009_08\13\O8130928.D
4	1.0	1	25	J:\MS09\Data\2009_08\13\O8130929.D
5	5.0	5	25	J:\MS09\Data\2009_08\13\O8130930.D
6	25	27	25	J:\MS09\Data\2009_08\13\O8130931.D
7	50	54	25	J:\MS09\Data\2009_08\13\O8130932.D
8	100	107	25	J:\MS09\Data\2009_08\13\O8130933.D

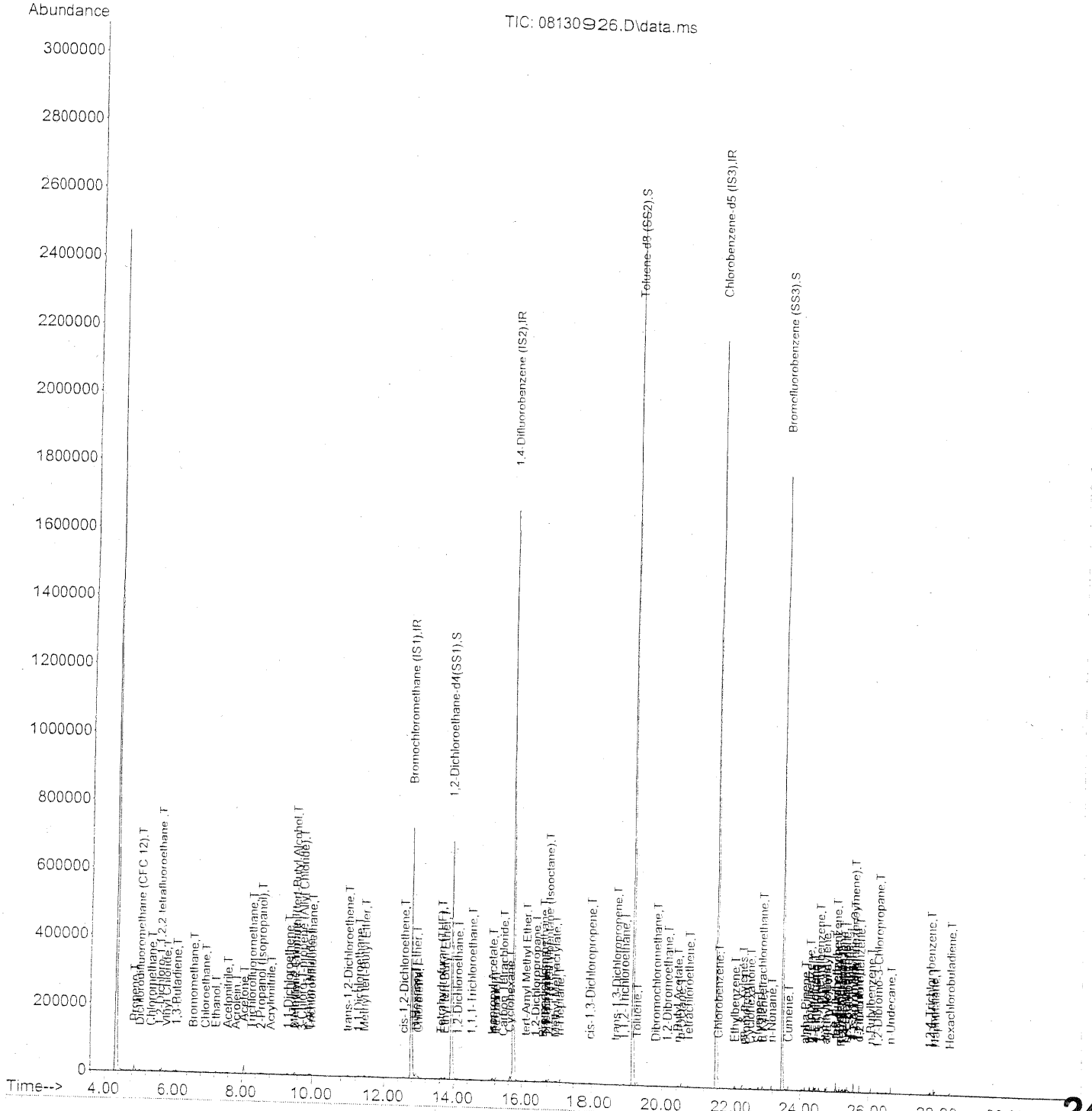
#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Aug 14 07:29 2009	Aug 14 07:05 2009	14 Aug 2009 1:56
2	0.2	Aug 14 07:30 2009	Aug 14 07:14 2009	14 Aug 2009 2:38
3	0.5	Aug 14 07:30 2009	Aug 14 07:20 2009	14 Aug 2009 3:19
4	1.0	Aug 14 07:30 2009	Aug 14 07:21 2009	14 Aug 2009 4:01
5	5.0	Aug 14 07:30 2009	Aug 14 07:23 2009	14 Aug 2009 4:43
6	25	Aug 14 07:31 2009	Aug 14 07:26 2009	14 Aug 2009 5:24
7	50	Aug 14 07:31 2009	Aug 14 07:27 2009	14 Aug 2009 6:06
8	100	Aug 14 07:31 2009	Aug 14 07:28 2009	14 Aug 2009 6:47

R9081309.M Fri Aug 14 07:48:55 2009

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.80	130	388910	25.000	ng		-0.04
37) 1,4-Difluorobenzene (IS2)	15.74	114	1986864	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	21.56	82	961494	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.95	65	693371	25.200	ng		-0.04
Spiked Amount 25.000			Recovery =	100.80%			
57) Toluene-d8 (SS2)	19.14	98	2296672	24.144	ng		-0.02
Spiked Amount 25.000			Recovery =	96.56%			
73) Bromofluorobenzene (SS3)	23.49	174	646809	22.617	ng		0.00
Spiked Amount 25.000			Recovery =	90.48%			
Target Compounds							Qvalue
2) Propene	4.87	42	3618	0.147	ng		98
3) Dichlorodifluoromethan...	5.03	85	4958	0.101	ng	#	88
4) Chloromethane	5.36	50	4388	0.120	ng		94
5) 1,2-Dichloro-1,1,2,2-t...	5.61	135	2540	0.092	ng		85
6) Vinyl Chloride	5.81	62	4449	0.114	ng		88
7) 1,3-Butadiene	6.11	54	3356	0.119	ng		97
8) Bromomethane	6.60	94	2307	0.100	ng		99
9) Chloroethane	6.94	64	2024	0.103	ng	#	53
10) Ethanol	7.25	45	10733m	0.659	ng		
11) Acetonitrile	7.59	41	5267	0.143	ng		82
12) Acrolein	7.83	56	986	0.083	ng		87
13) Acetone	8.06	58	14865	0.803	ng		89
14) Trichlorofluoromethane	8.29	101	4018	0.094	ng		99
15) 2-Propanol (Isopropanol)	8.56	45	11494	0.236	ng		77
16) Acrylonitrile	8.84	53	1953	0.079	ng		89
17) 1,1-Dichloroethene	9.33	96	2785	0.128	ng		91
18) 2-Methyl-2-Propanol (t...	9.53	59	11686	0.213	ng	#	84
19) Methylene Chloride	9.53	84	3454	0.141	ng		90
20) 3-Chloro-1-propene (Al...	9.73	41	3161	0.119	ng		68
21) Trichlorotrifluoroethane	9.98	151	1761	0.091	ng	#	81
22) Carbon Disulfide	9.93	76	10199	0.122	ng		81
23) trans-1,2-Dichloroethene	10.99	61	3423	0.107	ng		87
24) 1,1-Dichloroethane	11.29	63	4712	0.121	ng		83
25) Methyl tert-Butyl Ether	11.46	73	7632	0.111	ng		94
26) Vinyl Acetate	0.00	86	0	N.D.			
27) 2-Butanone (MEK)	0.00	72	0	N.D.			
28) cis-1,2-Dichloroethene	12.57	61	3421	0.111	ng		88
29) Diisopropyl Ether	12.94	87	1922	0.088	ng	#	89
30) Ethyl Acetate	0.00	61	0	N.D.			
31) n-Hexane	12.93	57	4846	0.113	ng		

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	3808	0.098	ng		92
34) Tetrahydrofuran (THF)	13.65	72	1329	0.100	ng	#	49
35) Ethyl tert-Butyl Ether	13.75	87	2842	0.097	ng	#	88
36) 1,2-Dichloroethane	14.14	62	2848	0.091	ng	#	63
38) 1,1,1-Trichloroethane	14.53	97	3702	0.102	ng		86
39) Isopropyl Acetate	15.13	61	2323	0.161	ng	#	40
40) 1-Butanol	15.23	56	2885	0.117	ng	#	48
41) Benzene	15.23	78	11726	0.111	ng		95
42) Carbon Tetrachloride	15.45	117	2792	0.090	ng		94
43) Cyclohexane	15.65	84	8323	0.210	ng	#	85
44) tert-Amyl Methyl Ether	16.14	73	7312	0.104	ng		95
45) 1,2-Dichloropropane	16.45	63	2391	0.107	ng		92
46) Bromodichloromethane	16.69	83	2661	0.087	ng		93
47) Trichloroethene	16.77	130	2951	0.109	ng		96
48) 1,4-Dioxane	16.78	88	1271	0.071	ng	#	58
49) 2,2,4-Trimethylpentane...	16.85	57	12314	0.120	ng		92
50) Methyl Methacrylate	17.07	100	553	0.056	ng	#	1
51) n-Heptane	17.21	71	2682	0.105	ng		93
52) cis-1,3-Dichloropropene	17.97	75	2905	0.078	ng	#	57
53) 4-Methyl-2-pentanone	18.04	58	915	N.D.			
54) trans-1,3-Dichloropropene	18.67	75	2439	0.075	ng	#	60
55) 1,1,2-Trichloroethane	18.90	97	1838	0.083	ng		99
58) Toluene	19.28	91	12428	0.107	ng		98
59) 2-Hexanone	19.68	43	1480	N.D.			
60) Dibromochloromethane	19.83	129	2204	0.084	ng		85
61) 1,2-Dibromoethane	20.15	107	1955	0.072	ng		94
62) n-Butyl Acetate	20.44	43	2958	0.053	ng	#	49
63) n-Octane	20.56	57	2356	0.104	ng		88
64) Tetrachloroethene	20.76	166	2562	0.083	ng		98
65) Chlorobenzene	21.62	112	7106	0.097	ng		98
66) Ethylbenzene	22.09	91	11683	0.092	ng		94
67) m- & p-Xylenes	22.32	91	17613	0.169	ng		99
68) Bromoform	22.42	173	1501	0.064	ng	#	65
69) Styrene	22.79	104	6011	0.078	ng		94
70) o-Xylene	22.92	91	9337	0.090	ng		95
71) n-Nonane	23.17	43	5669	0.112	ng		87
72) 1,1,2,2-Tetrachloroethane	22.89	83	3618	0.084	ng		92
74) Cumene	23.66	105	11820	0.086	ng		93
75) alpha-Pinene	24.15	93	5445	0.082	ng		99
76) n-Propylbenzene	24.28	91	14553	0.087	ng		93
77) 3-Ethyltoluene	24.41	105	11442	0.087	ng		100
78) 4-Ethyltoluene	24.46	105	12248	0.093	ng		95
79) 1,3,5-Trimethylbenzene	24.55	105	9904	0.091	ng		9

Tenn 8/14/09

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Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130926.D
Acq On : 14 Aug 2009 1:56
Operator : EM
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:05:01 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	24.74	118	4543	0.074	ng		98
81) 2-Ethyltoluene	24.79	105	11719	0.085	ng		95
82) 1,2,4-Trimethylbenzene	25.05	105	9509	0.078	ng		100
83) n-Decane	25.15	57	5840	0.099	ng		89
84) Benzyl Chloride	25.22	91	6309	0.072	ng		92
85) 1,3-Dichlorobenzene	25.25	146	5071	0.079	ng		100
86) 1,4-Dichlorobenzene	25.33	146	5490	0.082	ng		97
87) sec-Butylbenzene	25.38	105	13671	0.089	ng		96
88) 4-Isopropyltoluene (p-...	25.56	119	11685	0.076	ng		96
89) 1,2,3-Trimethylbenzene	25.57	105	9819	0.079	ng		99
90) 1,2-Dichlorobenzene	25.75	146	4975	0.075	ng		99
91) d-Limonene	25.74	68	3927	0.081	ng		84
92) 1,2-Dibromo-3-Chloropr...	26.28	157	1250	0.067	ng	#	78
93) n-Undecane	26.65	57	5934	0.098	ng		93
94) 1,2,4-Trichlorobenzene	27.79	180	3482	0.081	ng	#	95
95) Naphthalene	27.94	128	13216	0.088	ng		98
96) n-Dodecane	27.89	57	6214	0.096	ng		91
97) Hexachlorobutadiene	28.36	225	1995	0.081	ng		96
98) Cyclohexanone	22.55	55	2844	0.081	ng	#	82
99) tert-Butylbenzene	25.05	119	9567	0.077	ng		93
100) n-Butylbenzene	26.07	91	10255	0.084	ng		99

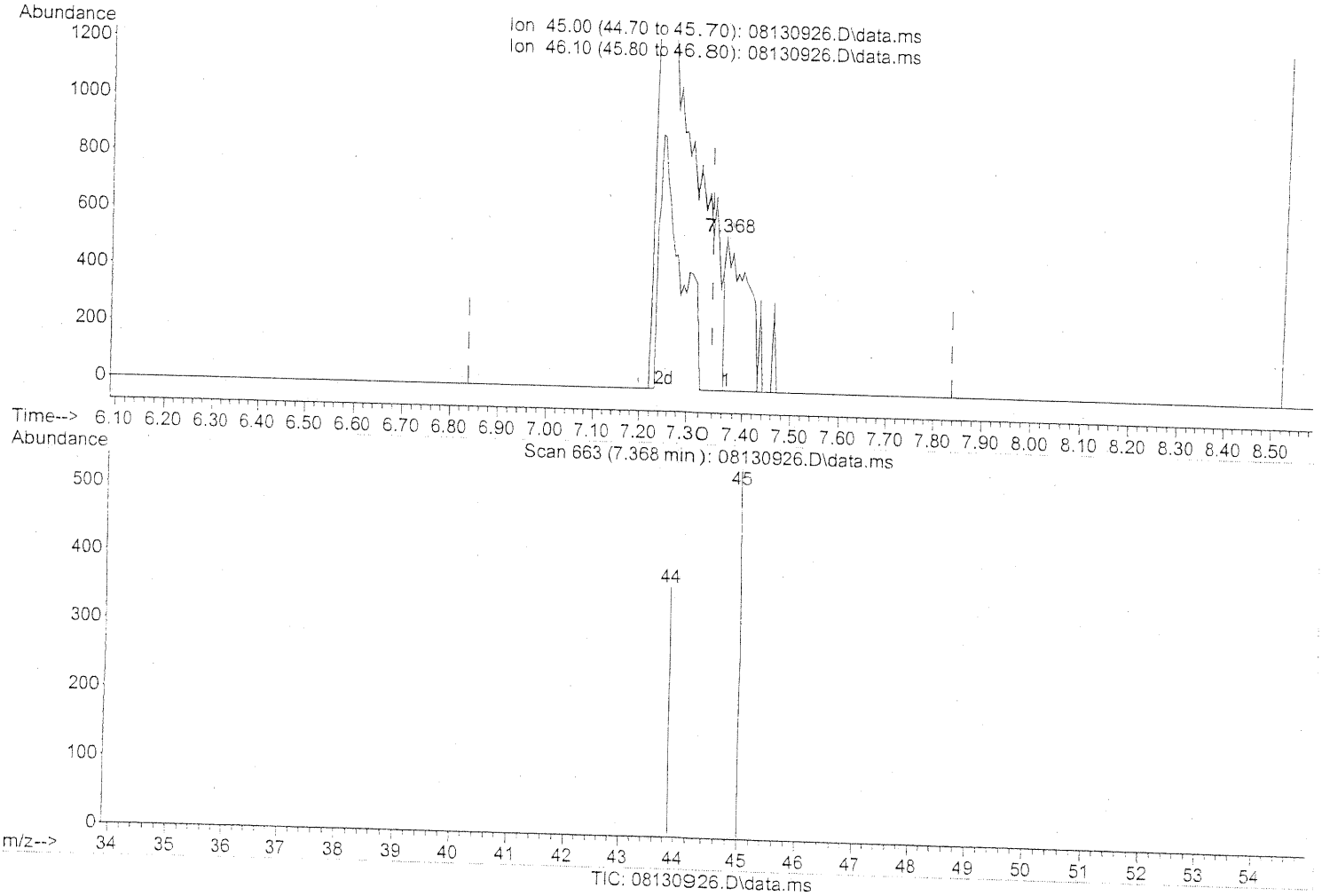
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tom 8/14/09

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

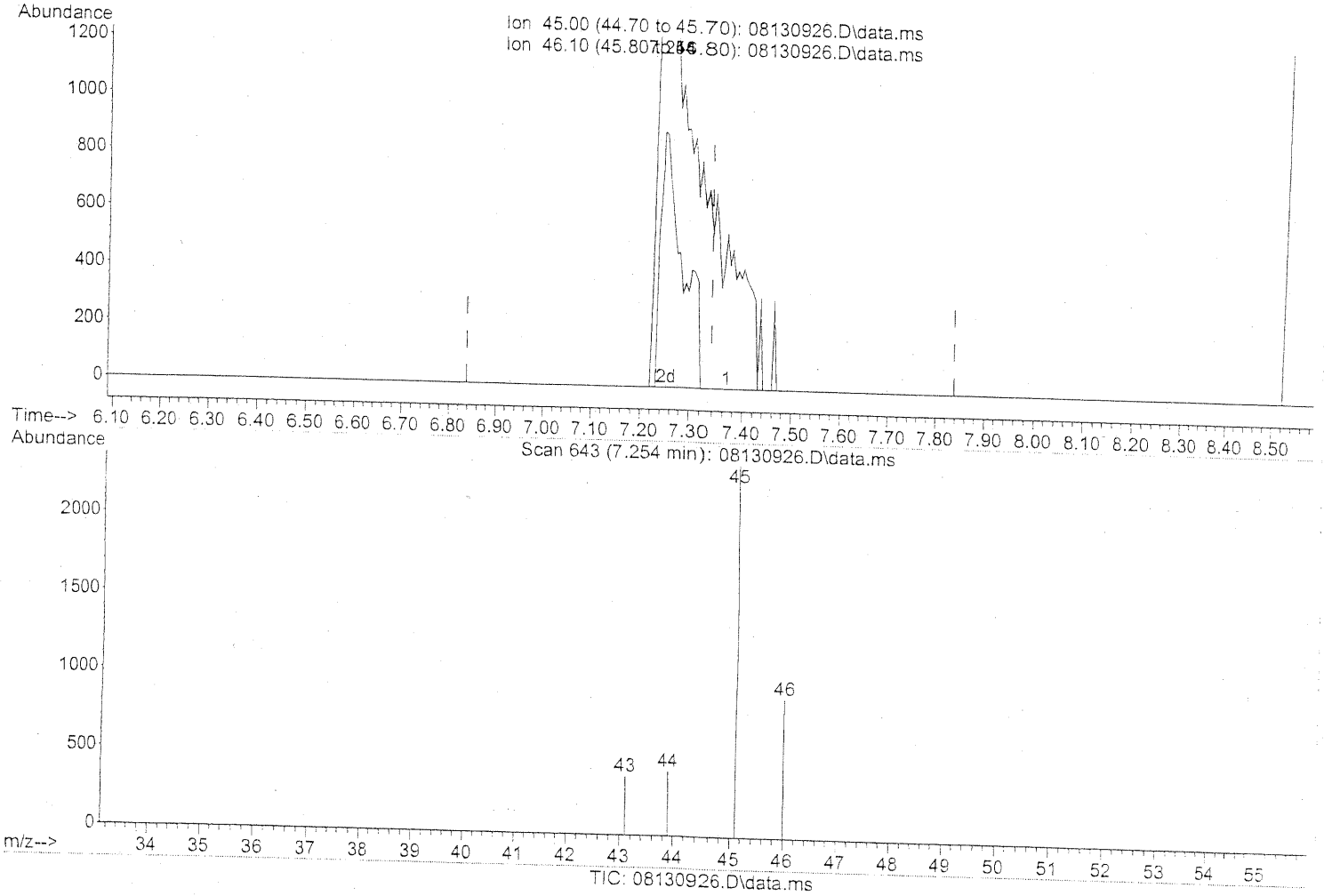
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

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

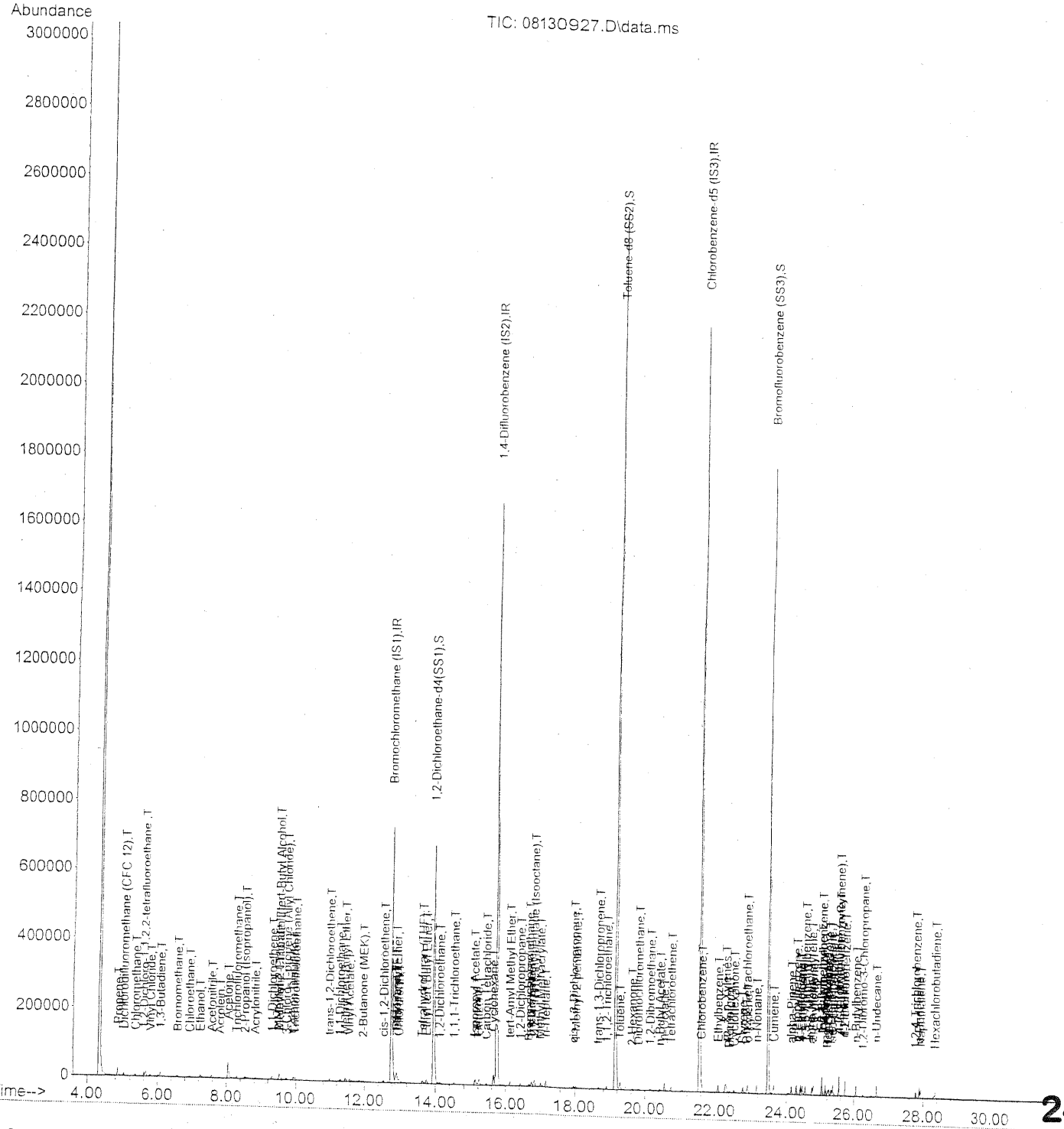
SP → IC
Cam 8/14/09

DM 8/15/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



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	89

R9081309.M Fri Aug 14 07:20:23 2009

EM 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	13.00	83	7826	0.202 ng		98
34) Tetrahydrofuran (THF)	13.64	72	3221	0.243 ng	#	69
35) Ethyl tert-Butyl Ether	13.75	87	5452	0.186 ng	#	80
36) 1,2-Dichloroethane	14.13	62	5503	0.177 ng		92
38) 1,1,1-Trichloroethane	14.53	97	7018	0.192 ng		98
39) Isopropyl Acetate	15.10	61	5649	0.390 ng	#	69
40) 1-Butanol	15.17	56	6339	0.257 ng		89
41) Benzene	15.22	78	21485	0.203 ng		96
42) Carbon Tetrachloride	15.45	117	6103	0.196 ng		91
43) Cyclohexane	15.65	84	16172	0.408 ng		86
44) tert-Amyl Methyl Ether	16.14	73	13999	0.200 ng		94
45) 1,2-Dichloropropane	16.43	63	4918	0.220 ng		99
46) Bromodichloromethane	16.69	83	5890	0.192 ng		95
47) Trichloroethene	16.77	130	5590	0.206 ng		98
48) 1,4-Dioxane	16.77	88	3080	0.173 ng		100
49) 2,2,4-Trimethylpentane...	16.85	57	23620	0.230 ng		93
50) Methyl Methacrylate	17.05	100	2700	0.272 ng	#	80
51) n-Heptane	17.20	71	5246	0.204 ng		91
52) cis-1,3-Dichloropropene	17.96	75	6183	0.166 ng		93
53) 4-Methyl-2-pentanone	18.03	58	3201	0.159 ng		70
54) trans-1,3-Dichloropropene	18.66	75	5739	0.175 ng		84
55) 1,1,2-Trichloroethane	18.90	97	4035	0.181 ng		90
58) Toluene	19.28	91	21913	0.187 ng		99
59) 2-Hexanone	19.64	43	6660	0.132 ng		82
60) Dibromochloromethane	19.82	129	4315	0.163 ng		96
61) 1,2-Dibromoethane	20.15	107	4442	0.163 ng		99
62) n-Butyl Acetate	20.43	43	8074	0.144 ng		86
63) n-Octane	20.55	57	4432	0.193 ng		95
64) Tetrachloroethene	20.75	166	5009	0.161 ng		96
65) Chlorobenzene	21.62	112	13897	0.188 ng		94
66) Ethylbenzene	22.09	91	22216	0.174 ng		99
67) m- & p-Xylenes	22.32	91	35625	0.338 ng		96
68) Bromoform	22.42	173	3262	0.139 ng		90
69) Styrene	22.78	104	12611	0.162 ng		95
70) o-Xylene	22.92	91	17434	0.166 ng		97
71) n-Nonane	23.17	43	10801	0.211 ng		93
72) 1,1,2,2-Tetrachloroethane	22.89	83	7219	0.165 ng		100
74) Cumene	23.66	105	22760	0.163 ng		98
75) alpha-Pinene	24.15	93	10911	0.164 ng		97
76) n-Propylbenzene	24.29	91	27992	0.167 ng		100
77) 3-Ethyltoluene	24.41	105	22341	0.169 ng		99
78) 4-Ethyltoluene	24.46	105	21950	0.166 ng		99
79) 1,3,5-Trimethylbenzene	24.55	105	19048	0.173 ng		99

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EM 8/14/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130927.D
Acq On : 14 Aug 2009 2:38
Operator : EM
Sample : 0.2ng TO-15 ICAL STD
Misc : S20-08130905/S20-07240912
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 07:14:00 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

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

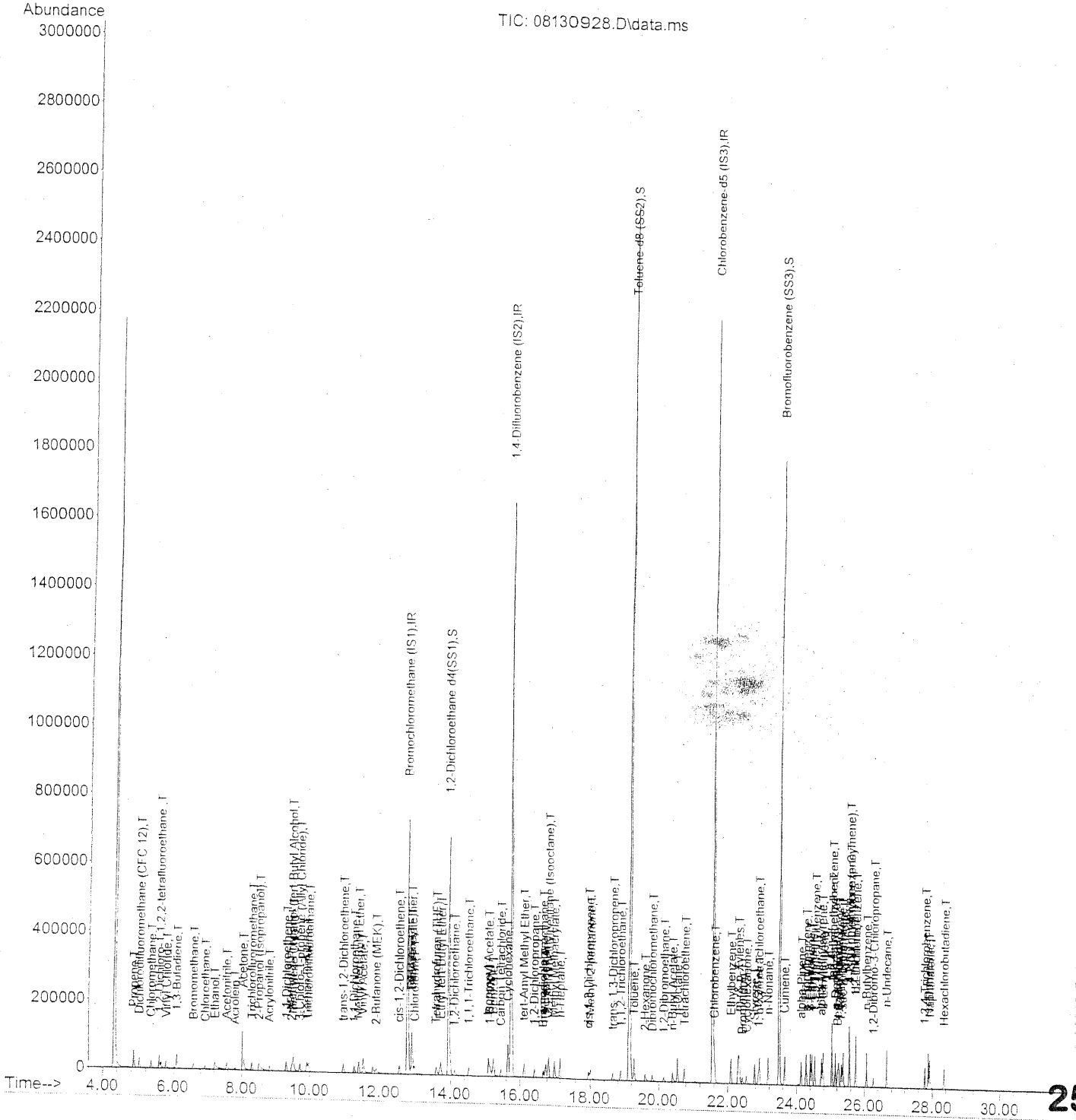
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sean 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 09:36:25 2009
Response via : Initial Calibration



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		97

R9081309.M Fri Aug 14 07:21:36 2009 Cam 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130928.D
Acq On : 14 Aug 2009 3:19
Operator : EM
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:20:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	25741	0.664	ng		99
34) Tetrahydrofuran (THF)	13.61	72	9662	0.728	ng	#	69
35) Ethyl tert-Butyl Ether	13.73	87	17600	0.600	ng	#	86
36) 1,2-Dichloroethane	14.13	62	18883	0.608	ng		98
38) 1,1,1-Trichloroethane	14.53	97	21567	0.598	ng		99
39) Isopropyl Acetate	15.09	61	18003	1.258	ng	#	76
40) 1-Butanol	15.14	56	24186	0.991	ng	#	5
41) Benzene	15.23	78	67490	0.644	ng		97
42) Carbon Tetrachloride	15.45	117	18399	0.598	ng		99
43) Cyclohexane	15.65	84	50652	1.293	ng		87
44) tert-Amyl Methyl Ether	16.12	73	43234	0.624	ng		98
45) 1,2-Dichloropropane	16.43	63	15929	0.721	ng		99
46) Bromodichloromethane	16.69	83	19513	0.644	ng		99
47) Trichloroethene	16.77	130	16351	0.611	ng		99
48) 1,4-Dioxane	16.75	88	11029	0.625	ng		88
49) 2,2,4-Trimethylpentane...	16.86	57	73776	0.727	ng		94
50) Methyl Methacrylate	17.03	100	10559	1.075	ng		90
51) n-Heptane	17.21	71	17902	0.706	ng		96
52) cis-1,3-Dichloropropene	17.95	75	21881	0.596	ng		96
53) 4-Methyl-2-pentanone	18.00	58	12377	0.624	ng		89
54) trans-1,3-Dichloropropene	18.66	75	20538	0.635	ng		94
55) 1,1,2-Trichloroethane	18.89	97	13863	0.630	ng		98
58) Toluene	19.28	91	66952	0.574	ng		99
59) 2-Hexanone	19.60	43	29124	0.580	ng		87
60) Dibromochloromethane	19.82	129	15336	0.585	ng		96
61) 1,2-Dibromoethane	20.15	107	14720	0.545	ng		97
62) n-Butyl Acetate	20.40	43	31166	0.559	ng		97
63) n-Octane	20.56	57	15118	0.663	ng		92
64) Tetrachloroethene	20.76	166	15982	0.518	ng		98
65) Chlorobenzene	21.62	112	41581	0.567	ng		100
66) Ethylbenzene	22.09	91	71057	0.560	ng		96
67) m- & p-Xylenes	22.31	91	109600	1.048	ng		99
68) Bromoform	22.42	173	11272	0.482	ng		99
69) Styrene	22.77	104	40825	0.529	ng		99
70) o-Xylene	22.92	91	56661	0.544	ng		99
71) n-Nonane	23.17	43	34926	0.686	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	24083	0.556	ng		98
74) Cumene	23.65	105	70945	0.513	ng		98
75) alpha-Pinene	24.15	93	33531	0.507	ng		99
76) n-Propylbenzene	24.28	91	88210	0.529	ng		99
77) 3-Ethyltoluene	24.40	105	69045	0.526	ng		98
78) 4-Ethyltoluene	24.46	105	70642	0.537	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	57676	0.527	ng		1[illegible]

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

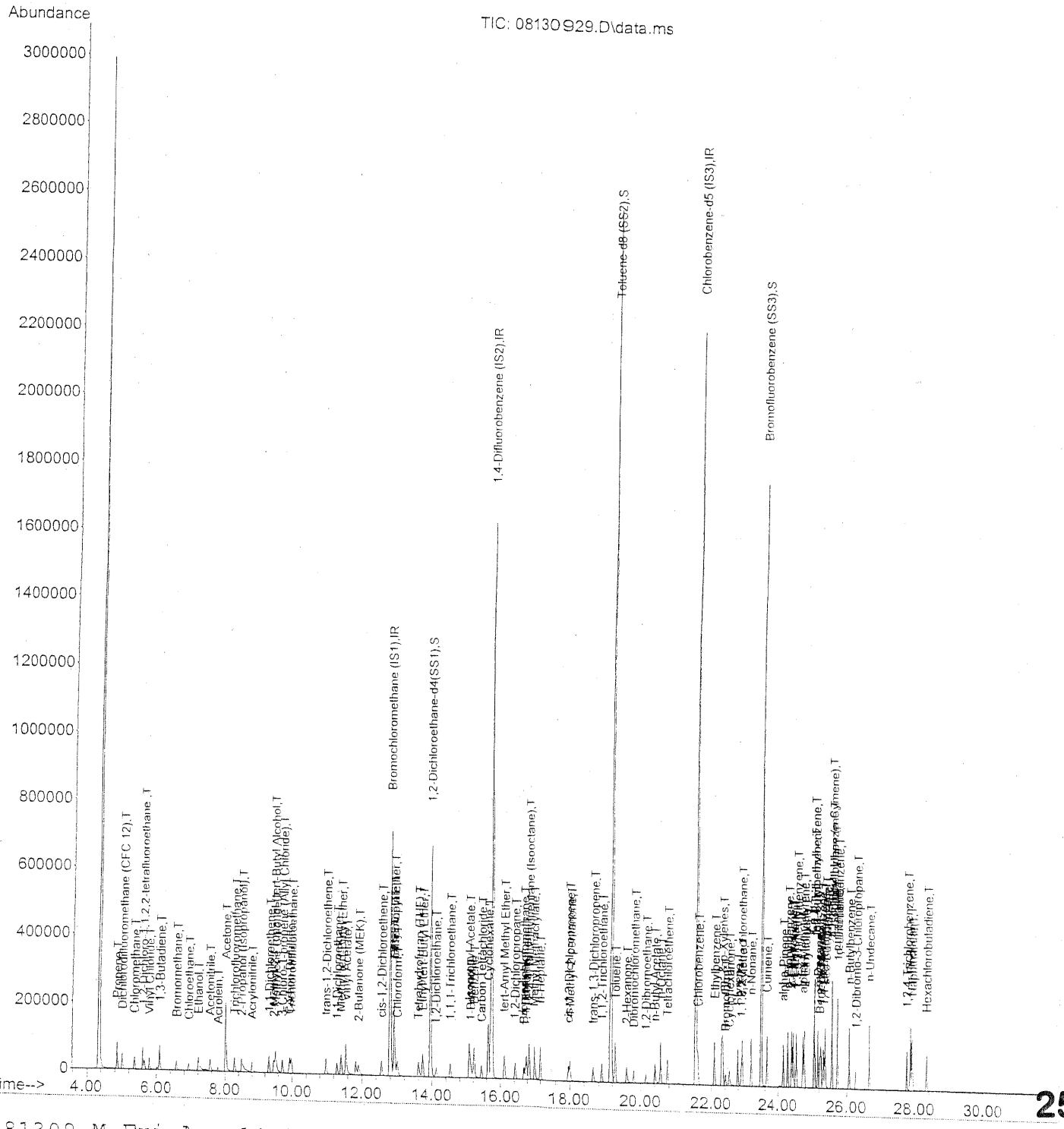
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Cam 8/14/09

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



R9081309.M Fri Aug 14 07:22:53 2009

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	82

R9081309.M Fri Aug 14 07:22:53 2009

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Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130929.D
Acq On : 14 Aug 2009 4:01
Operator : EM
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:21:44 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	44169	1.147	ng		99
34) Tetrahydrofuran (THF)	13.61	72	18493	1.402	ng	#	78
35) Ethyl tert-Butyl Ether	13.73	87	32059	1.099	ng	#	88
36) 1,2-Dichloroethane	14.13	62	33602	1.089	ng		100
38) 1,1,1-Trichloroethane	14.53	97	38262	1.060	ng		99
39) Isopropyl Acetate	15.09	61	33761	2.355	ng	#	85
40) 1-Butanol	15.13	56	47102	1.925	ng	#	74
41) Benzene	15.23	78	113746	1.083	ng		99
42) Carbon Tetrachloride	15.46	117	32803	1.064	ng		98
43) Cyclohexane	15.65	84	88044	2.243	ng		87
44) tert-Amyl Methyl Ether	16.11	73	76135	1.097	ng		97
45) 1,2-Dichloropropane	16.43	63	28251	1.276	ng		100
46) Bromodichloromethane	16.69	83	33986	1.120	ng		99
47) Trichloroethene	16.77	130	28512	1.063	ng		100
48) 1,4-Dioxane	16.74	88	20845	1.180	ng		92
49) 2,2,4-Trimethylpentane...	16.85	57	130464	1.282	ng		93
50) Methyl Methacrylate	17.02	100	20121	2.044	ng	#	88
51) n-Heptane	17.20	71	31494	1.239	ng		96
52) cis-1,3-Dichloropropene	17.95	75	38638	1.049	ng		99
53) 4-Methyl-2-pentanone	18.00	58	24206	1.218	ng		89
54) trans-1,3-Dichloropropene	18.65	75	38043	1.174	ng		99
55) 1,1,2-Trichloroethane	18.89	97	24731	1.121	ng		97
58) Toluene	19.28	91	119238	1.024	ng		99
59) 2-Hexanone	19.60	43	55664	1.111	ng		92
60) Dibromochloromethane	19.82	129	27040	1.032	ng		99
61) 1,2-Dibromoethane	20.15	107	26630	0.987	ng		99
62) n-Butyl Acetate	20.40	43	61529	1.105	ng		98
63) n-Octane	20.56	57	26993	1.186	ng		92
64) Tetrachloroethene	20.75	166	28187	0.915	ng		99
65) Chlorobenzene	21.62	112	73763	1.007	ng		100
66) Ethylbenzene	22.09	91	127246	1.005	ng		97
67) m- & p-Xylenes	22.32	91	194401	1.861	ng		99
68) Bromoform	22.41	173	20518	0.879	ng		99
69) Styrene	22.77	104	73446	0.954	ng		100
70) o-Xylene	22.92	91	100172	0.963	ng		98
71) n-Nonane	23.17	43	62203	1.225	ng		92
72) 1,1,2,2-Tetrachloroethane	22.89	83	42899	0.991	ng		100
74) Cumene	23.65	105	125520	0.908	ng		97
75) alpha-Pinene	24.15	93	59580	0.902	ng		99
76) n-Propylbenzene	24.28	91	157275	0.945	ng		98
77) 3-Ethyltoluene	24.40	105	123089	0.940	ng		99
78) 4-Ethyltoluene	24.46	105	124771	0.950	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	103623	0.948	ng		99

EM 8/14/09

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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)
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

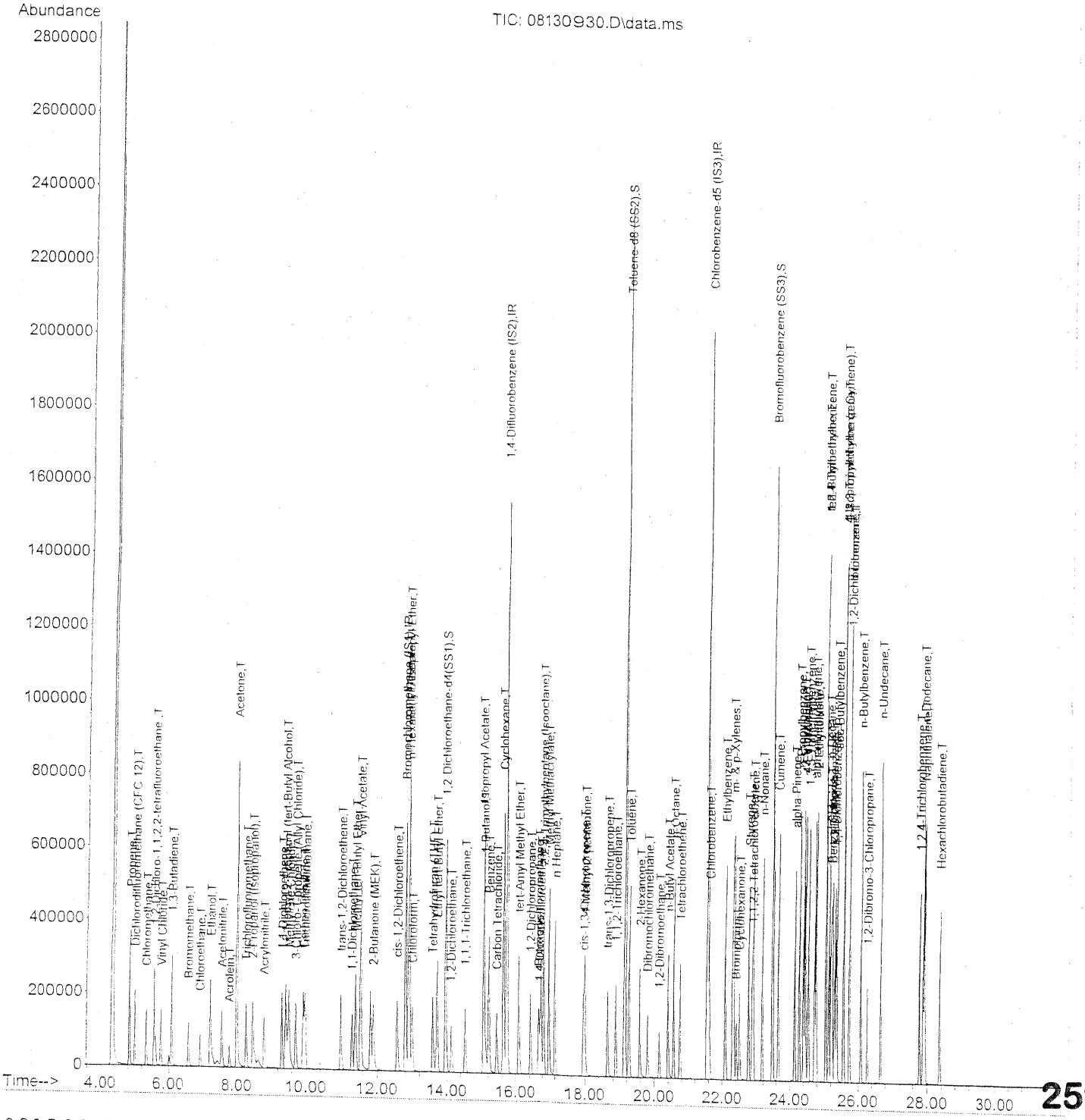
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tam 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



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		98
31) n-Hexane	12.92	57	224482	5.722	ng		97

R9081309.M Fri Aug 14 07:25:02 2009 EM 8/14/09 Page: 1

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:40 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.01	83	192914	5.415	ng		99
34) Tetrahydrofuran (THF)	13.58	72	83814	6.867	ng	#	86
35) Ethyl tert-Butyl Ether	13.71	87	142829	5.293	ng	#	86
36) 1,2-Dichloroethane	14.13	62	150902	5.284	ng		99
38) 1,1,1-Trichloroethane	14.53	97	168717	5.000	ng		99
39) Isopropyl Acetate	15.06	61	158534	11.834	ng	#	79
40) 1-Butanol	15.09	56	248323	10.863	ng		81
41) Benzene	15.23	78	489432	4.989	ng		98
42) Carbon Tetrachloride	15.46	117	142799	4.955	ng		100
43) Cyclohexane	15.65	84	392518	10.699	ng		89
44) tert-Amyl Methyl Ether	16.10	73	352122	5.430	ng		98
45) 1,2-Dichloropropane	16.43	63	124973	6.043	ng		98
46) Bromodichloromethane	16.69	83	155746	5.492	ng		98
47) Trichloroethene	16.77	130	122841	4.899	ng		99
48) 1,4-Dioxane	16.72	88	98401	5.959	ng		91
49) 2,2,4-Trimethylpentane...	16.85	57	566857	5.963	ng		93
50) Methyl Methacrylate	17.02	100	99872	10.855	ng		90
51) n-Heptane	17.21	71	134268	5.652	ng		95
52) cis-1,3-Dichloropropene	17.95	75	186847	5.431	ng		98
53) 4-Methyl-2-pentanone	17.99	58	119233	6.420	ng		95
54) trans-1,3-Dichloropropene	18.64	75	186516	6.159	ng		98
55) 1,1,2-Trichloroethane	18.88	97	112218	5.445	ng		99
58) Toluene	19.28	91	521746	4.839	ng		100
59) 2-Hexanone	19.58	43	278990	6.017	ng		99
60) Dibromochloromethane	19.82	129	125108	5.160	ng		99
61) 1,2-Dibromoethane	20.15	107	123637	4.951	ng		100
62) n-Butyl Acetate	20.39	43	322004	6.246	ng		98
63) n-Octane	20.56	57	120268	5.709	ng		91
64) Tetrachloroethene	20.75	166	122324	4.291	ng		100
65) Chlorobenzene	21.62	112	321850	4.745	ng		99
66) Ethylbenzene	22.09	91	567585	4.841	ng		98
67) m- & p-Xylenes	22.32	91	871075	9.010	ng		100
68) Bromoform	22.41	173	97277	4.503	ng		100
69) Styrene	22.77	104	344065	4.826	ng		99
70) o-Xylene	22.92	91	444727	4.618	ng		99
71) n-Nonane	23.17	43	272588	5.797	ng		93
72) 1,1,2,2-Tetrachloroethane	22.88	83	199967	4.992	ng		100
74) Cumene	23.65	105	562278	4.396	ng		98
75) alpha-Pinene	24.15	93	276329	4.521	ng		99
76) n-Propylbenzene	24.28	91	700875	4.549	ng		99
77) 3-Ethyltoluene	24.40	105	559902	4.619	ng		98
78) 4-Ethyltoluene	24.46	105	553680	4.552	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	455198	4.500	ng		

Sam 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

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

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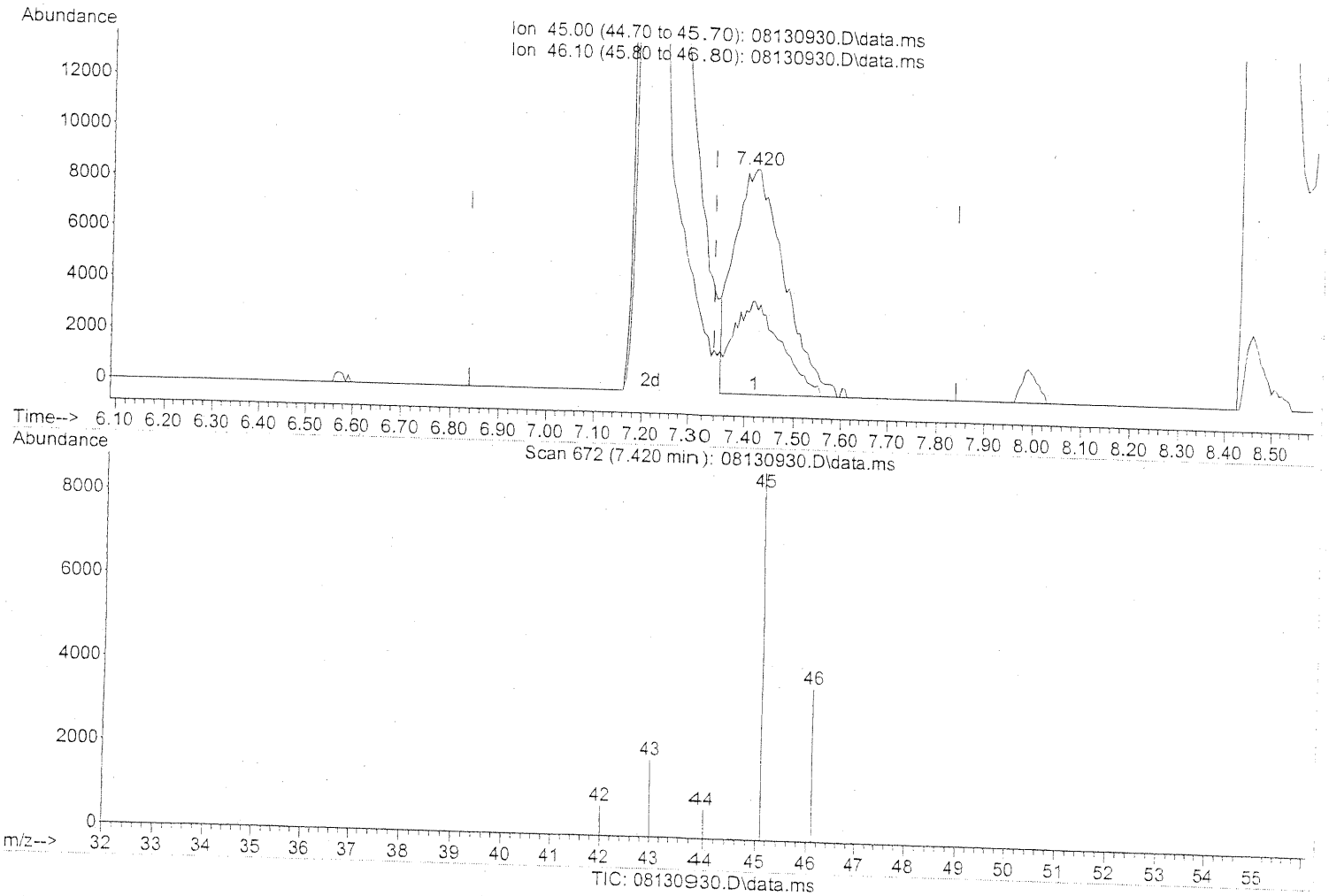
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.420min (+0.080) 4.20ng

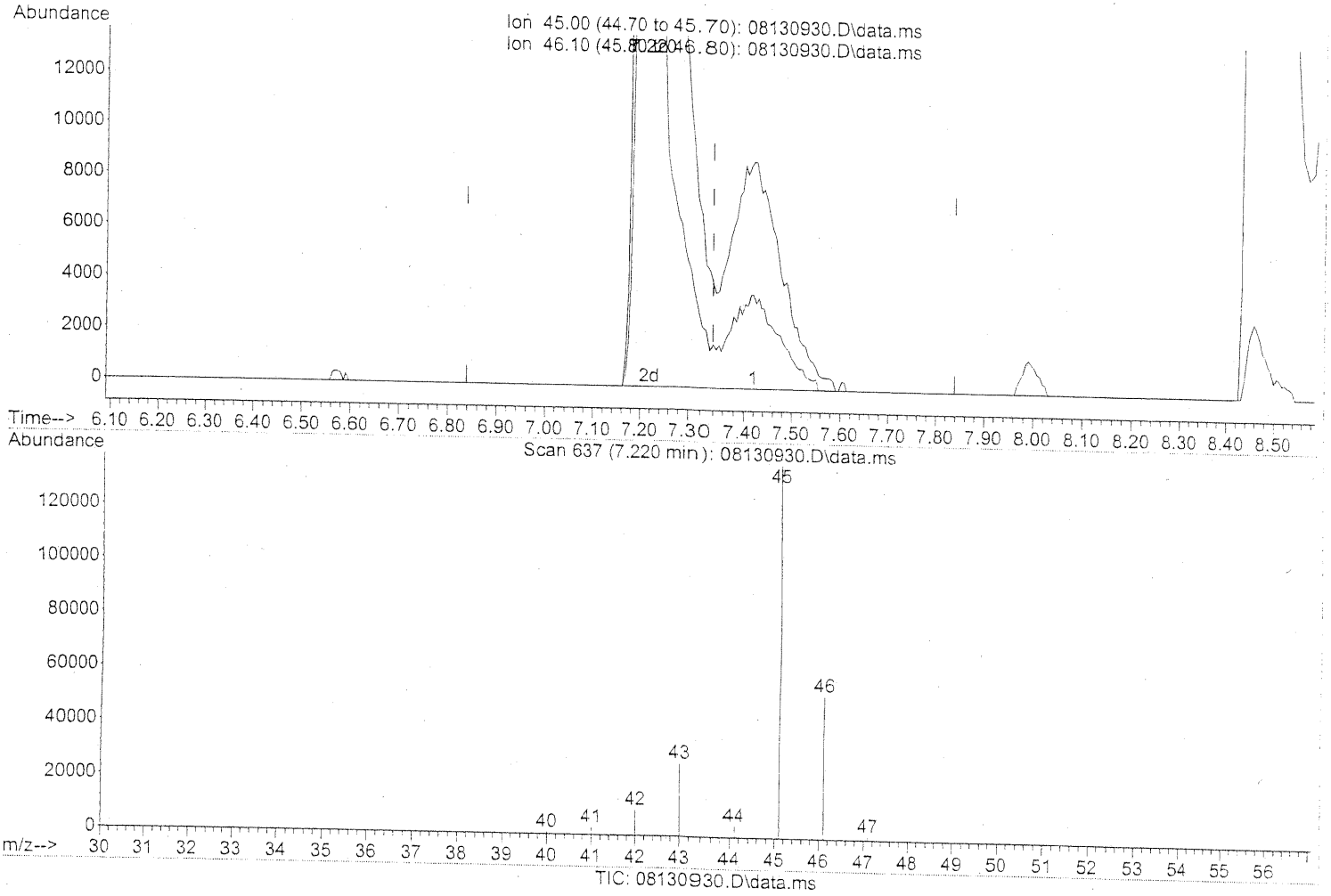
response 62719

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.29
0.00	0.00	0.00
0.00	0.00	0.00

SP

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130930.D
Acq On : 14 Aug 2009 4:43
Operator : EM
Sample : 5ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:23:02 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.220min (-0.120) 33.76ng m

response 503955

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	4.77#
0.00	0.00	0.00
0.00	0.00	0.00

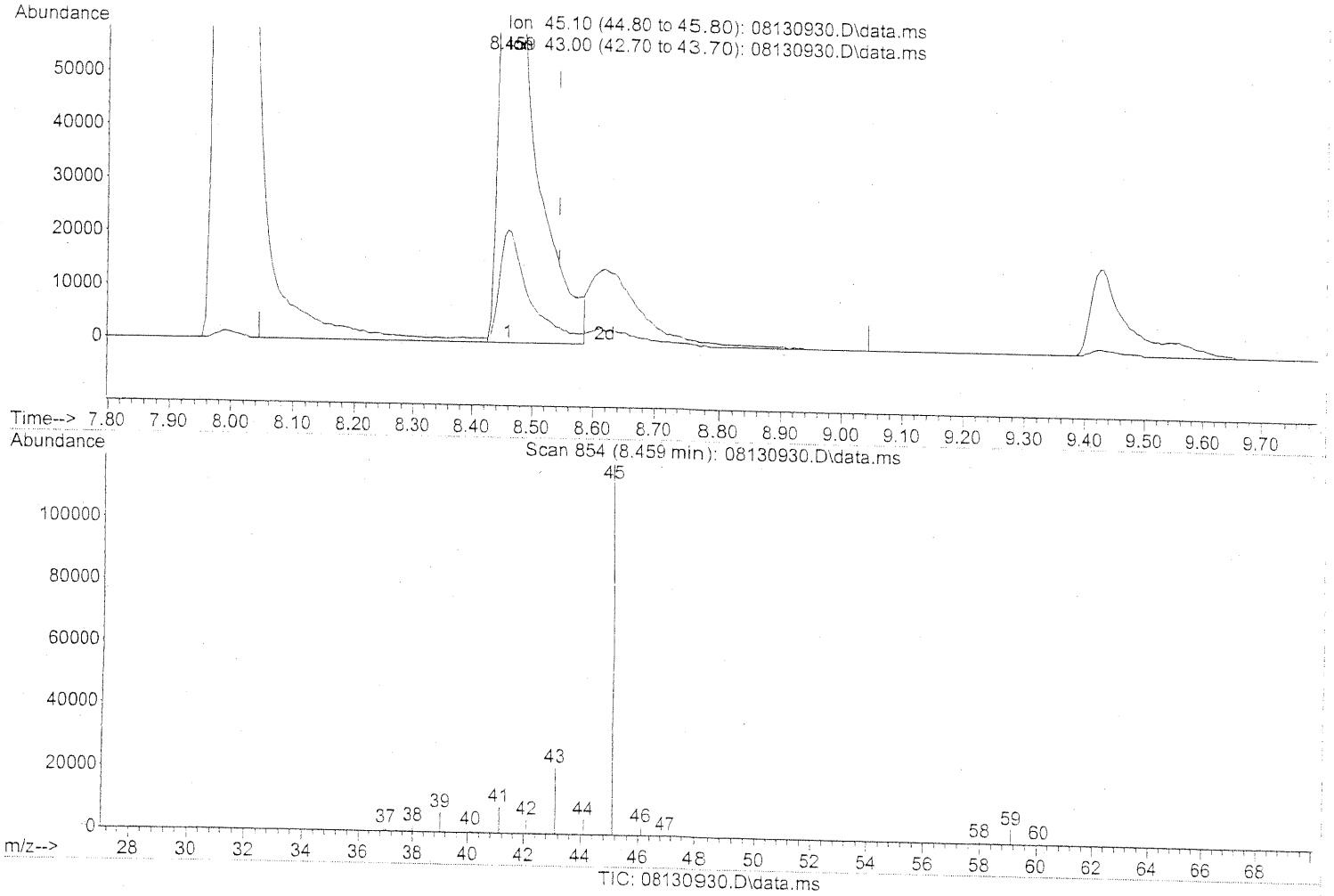
SP → IC
8/14/09

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

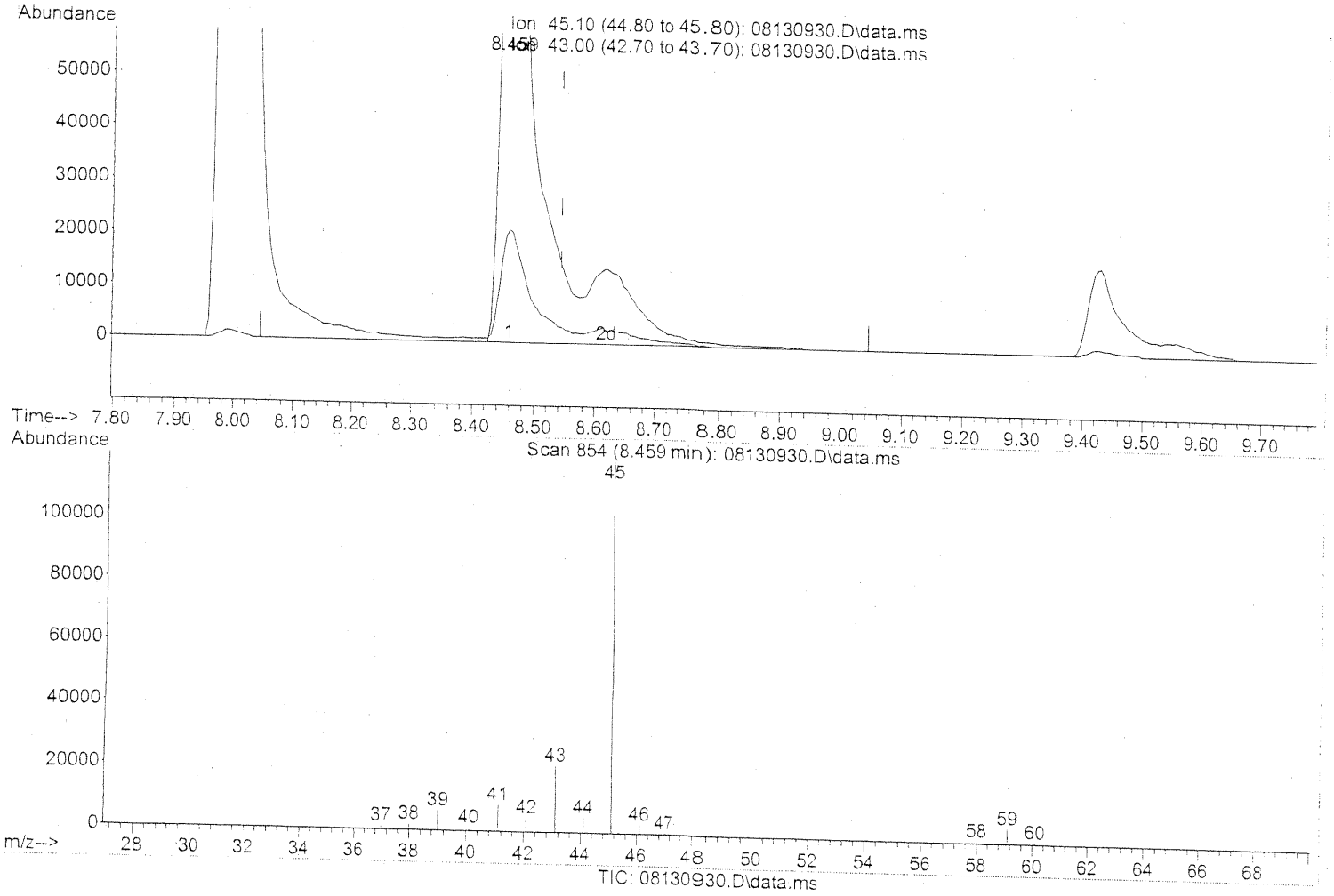
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.32
0.00	0.00	0.00
0.00	0.00	0.00

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

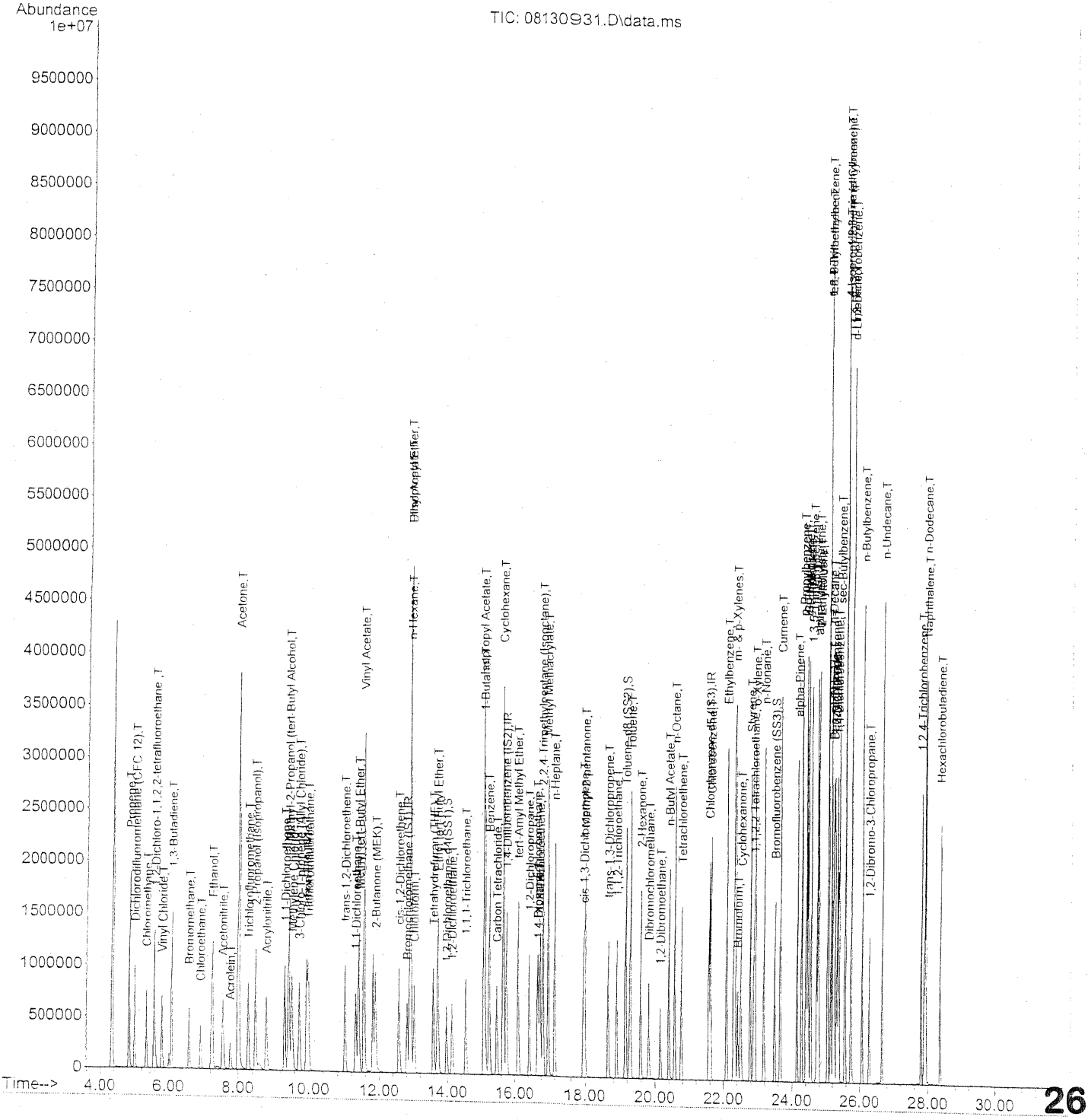
PT → LC
Tom 8/14/09

8/15/09

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



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 Em 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		100

R9081309.M Fri Aug 14 07:27:05 2009

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

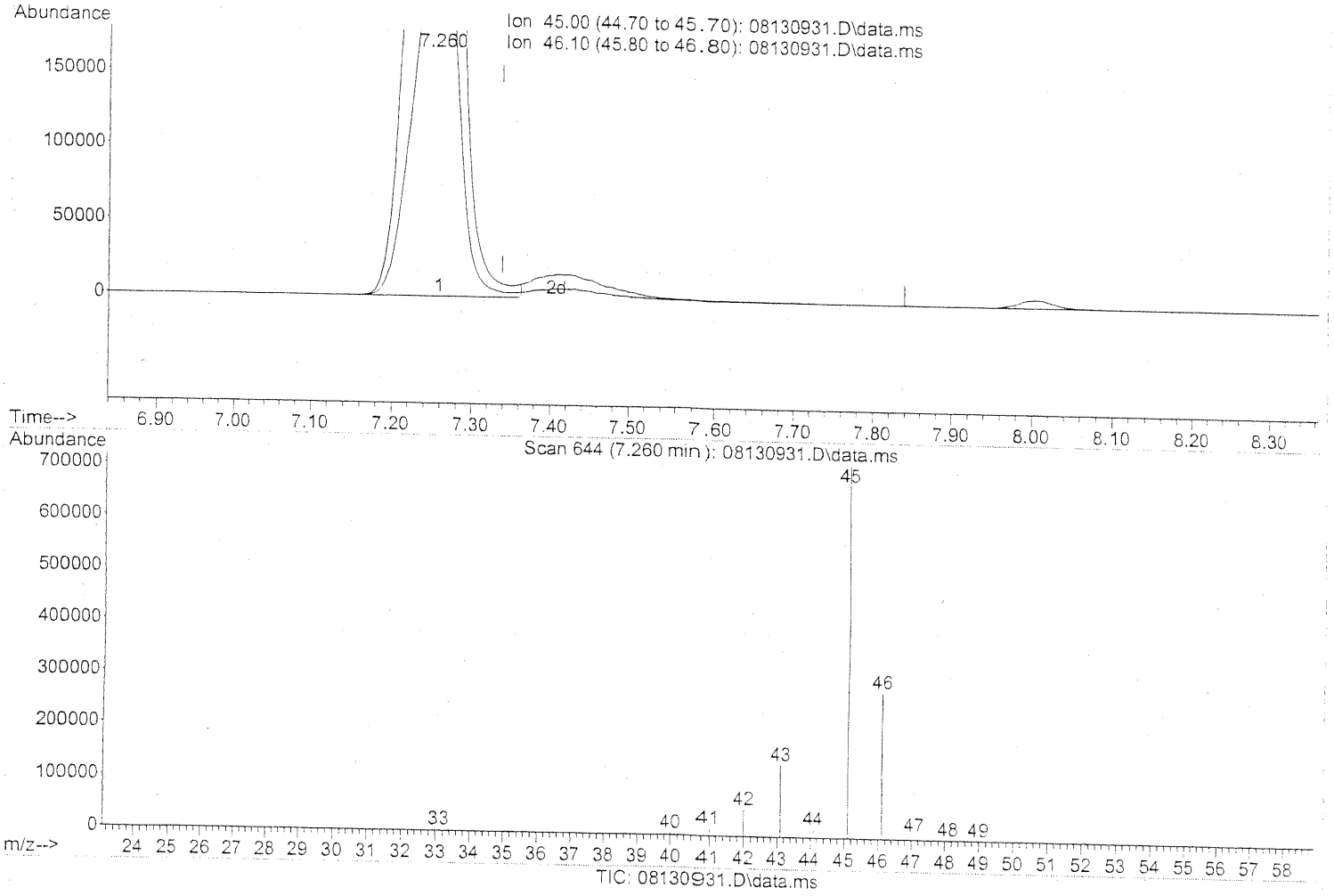
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

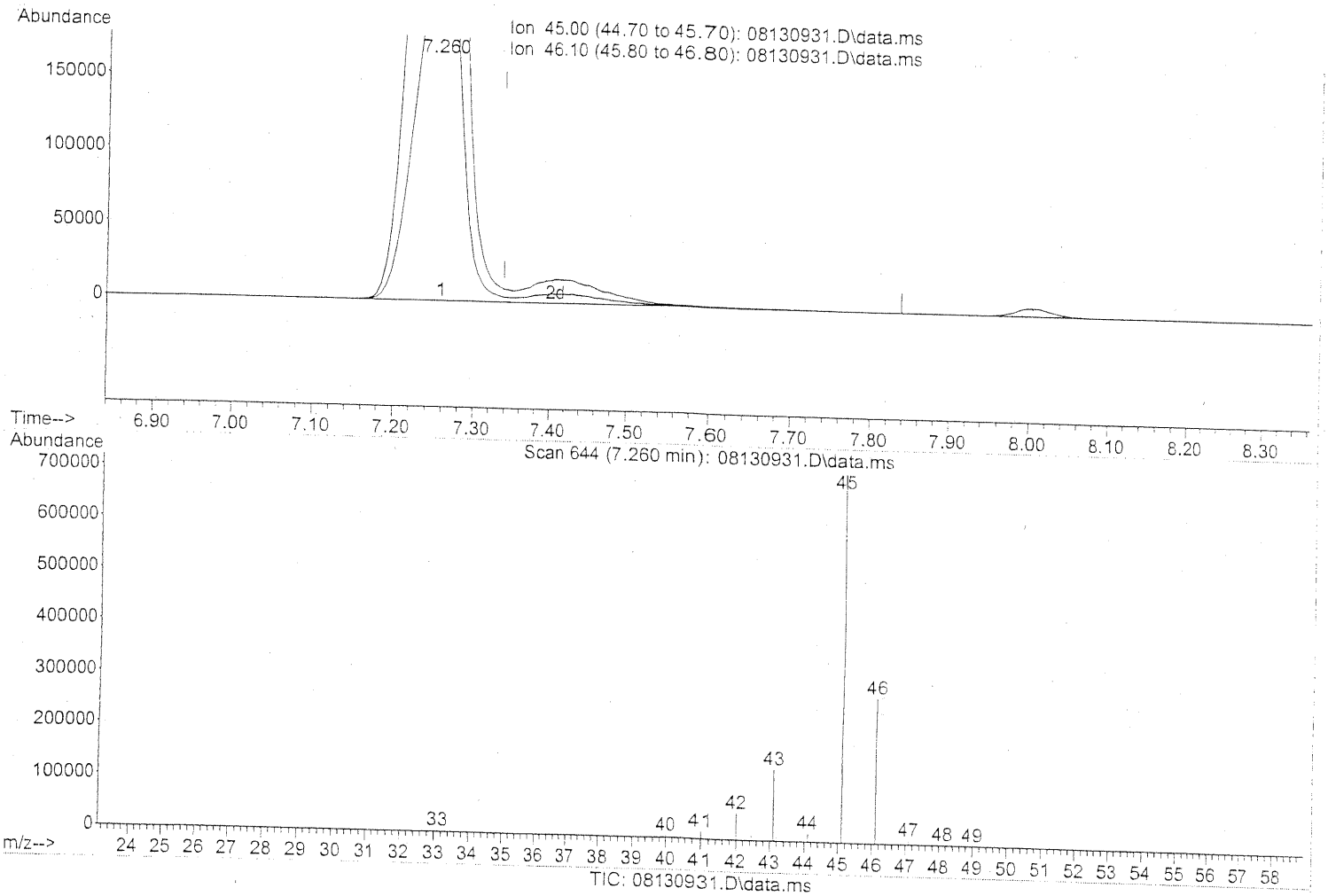
response 2536739

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

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

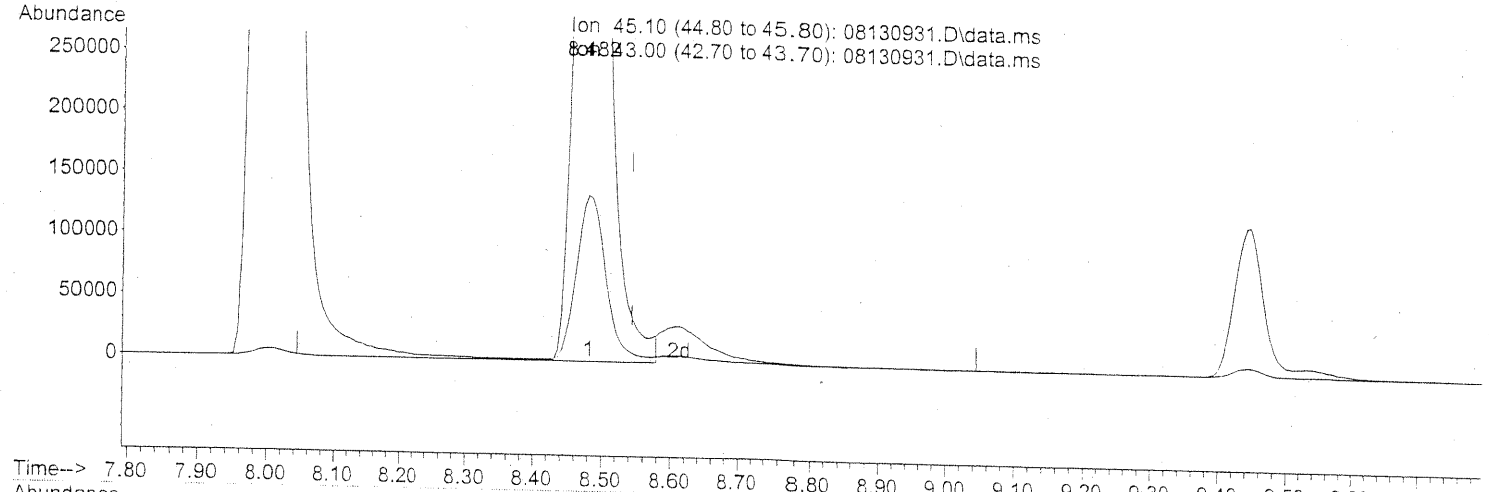
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.49
0.00	0.00	0.00
0.00	0.00	0.00

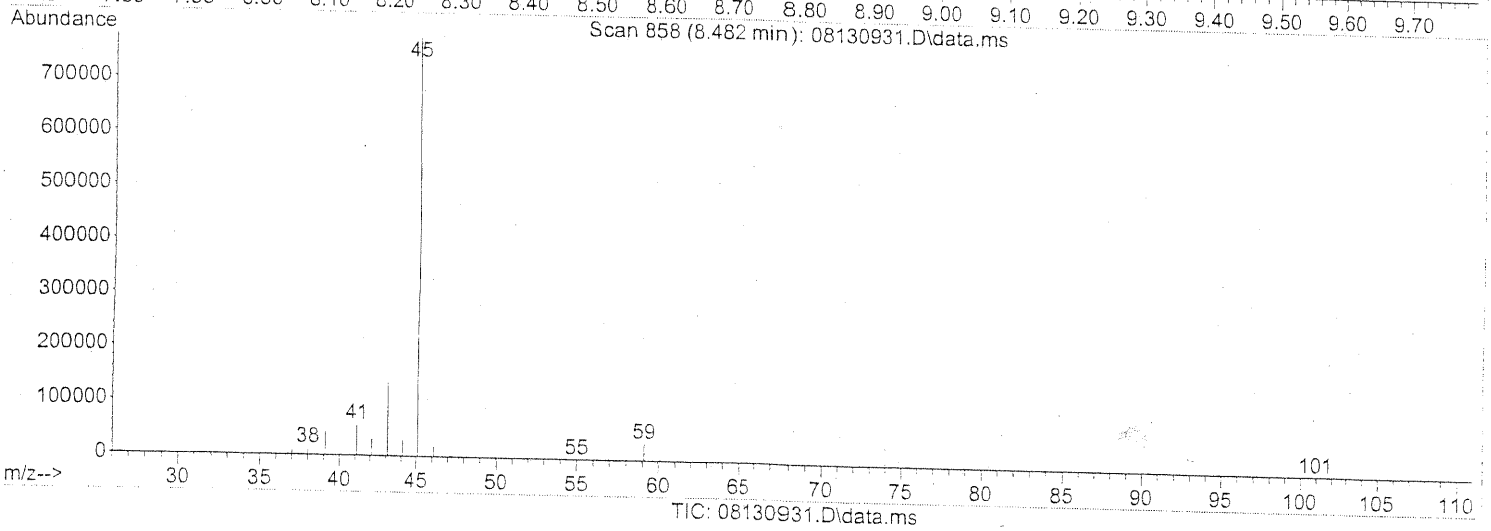
PT → LC
8/14/09

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

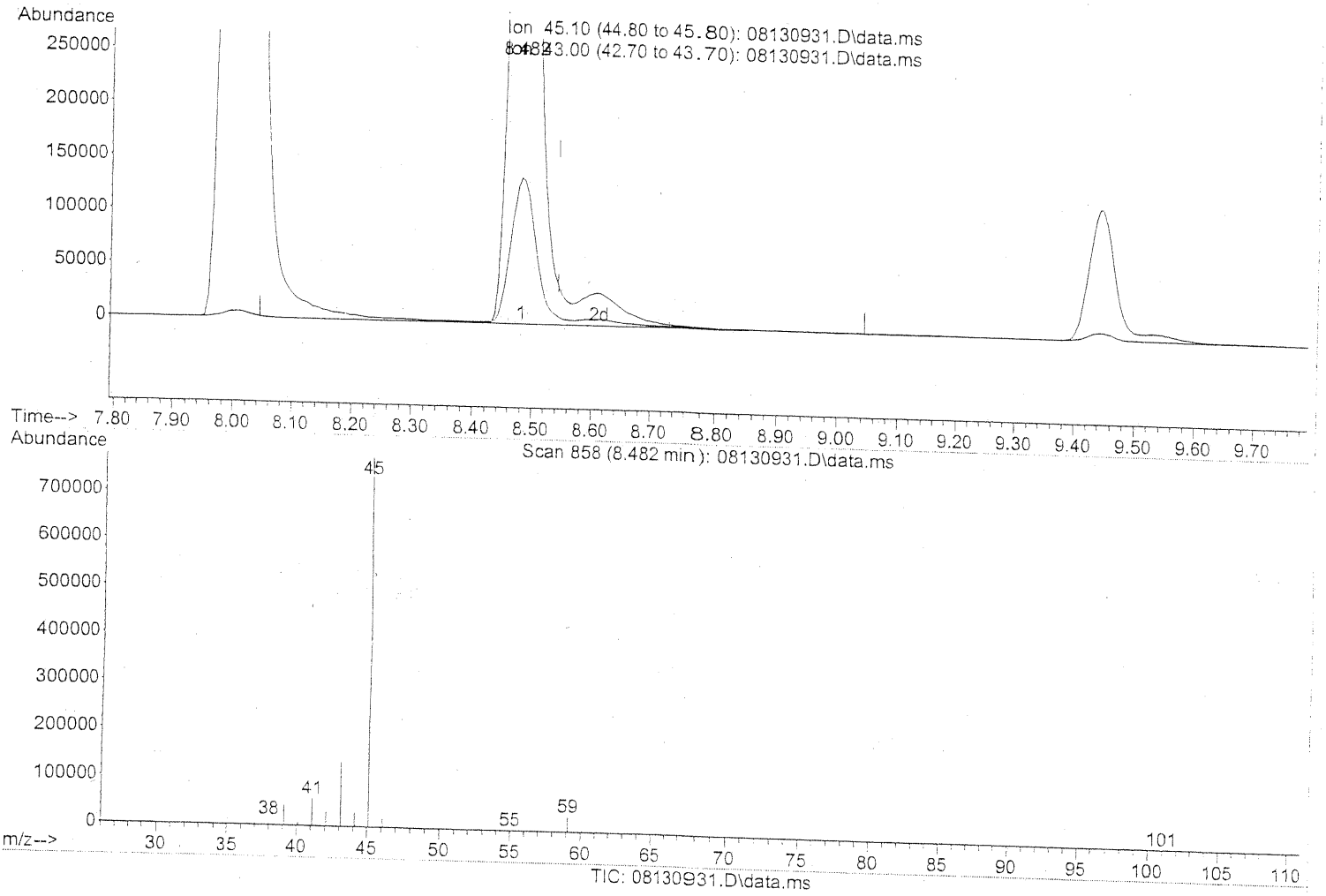
response 2301319

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130931.D
Acq On : 14 Aug 2009 5:24
Operator : EM
Sample : 25ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:25:12 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



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

8.482min (-0.063) 53.78ng m

response 2453135

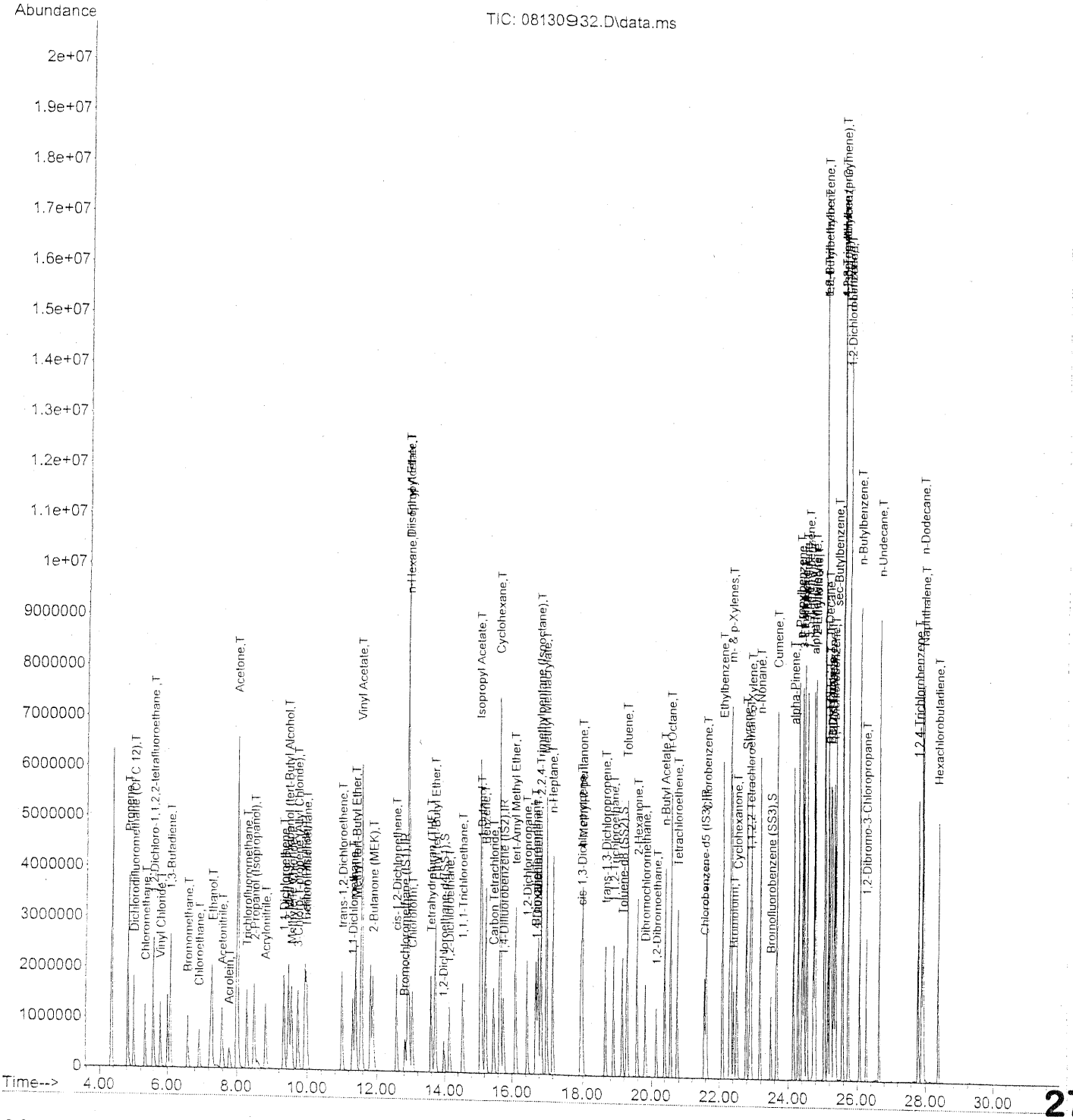
Ion	Exp%	Act%
45.10	100	100
43.00	20.50	18.00
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Tom 8/14/09

PA 8/15/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration



Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	350547	25.000	ng		-0.01
37) 1,4-Difluorobenzene (IS2)	15.77	114	1802547	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	21.56	82	865291	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.98	65	612890	24.713	ng		-0.01
Spiked Amount 25.000			Recovery =	98.84%			
57) Toluene-d8 (SS2)	19.15	98	2053608	23.989	ng		0.00
Spiked Amount 25.000			Recovery =	95.96%			
73) Bromofluorobenzene (SS3)	23.49	174	585162	22.737	ng		0.00
Spiked Amount 25.000			Recovery =	90.96%			
Target Compounds							Qvalue
2) Propene	4.84	42	1835063	82.979	ng		96
3) Dichlorodifluoromethan...	5.01	85	2152098	48.762	ng		99
4) Chloromethane	5.34	50	1909302	57.769	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	1202790	48.388	ng		100
6) Vinyl Chloride	5.80	62	1933734	54.883	ng		99
7) 1,3-Butadiene	6.09	54	1726352	68.147	ng		99
8) Bromomethane	6.59	94	1036817	49.887	ng		100
9) Chloroethane	6.93	64	971424	55.107	ng		100
10) Ethanol	7.30	45	5039053	343.407	ng		100
11) Acetonitrile	7.59	41	2412776	72.719	ng		99
12) Acrolein	7.79	56	727129	67.972	ng		98
13) Acetone	8.03	58	4904508	293.855	ng		87
14) Trichlorofluoromethane	8.29	101	1926285	50.107	ng		98
15) 2-Propanol (Isopropanol)	8.51	45	3892928	88.644	ng		94
16) Acrylonitrile	8.82	53	1701577	75.996	ng		99
17) 1,1-Dichloroethene	9.33	96	1160521	59.280	ng		98
18) 2-Methyl-2-Propanol (t...	9.46	59	4054207	81.969	ng		97
19) Methylene Chloride	9.56	84	1192968	53.981	ng		89
20) 3-Chloro-1-propene (Al...	9.74	41	1889044	79.209	ng		90
21) Trichlorotrifluoroethane	9.99	151	945670	54.226	ng		97
22) Carbon Disulfide	9.94	76	4497151	59.746	ng		98
23) trans-1,2-Dichloroethene	11.01	61	1818529	63.338	ng		93
24) 1,1-Dichloroethane	11.32	63	2174072	62.117	ng		100
25) Methyl tert-Butyl Ether	11.40	73	3746603	60.699	ng		96
26) Vinyl Acetate	11.57	86	1327059	333.362	ng	#	78
27) 2-Butanone (MEK)	11.90	72	865059	67.951	ng	#	86
28) cis-1,2-Dichloroethene	12.58	61	1721120	62.119	ng		94
29) Diisopropyl Ether	12.92	87	1111656	56.184	ng	#	74
30) Ethyl Acetate	12.92	61	1067973	128.075	ng		97
31) n-Hexane	12.93	57	2406714	62.420	ng		97

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.04	83	1924717	54.970	ng		100
34) Tetrahydrofuran (THF)	13.59	72	790606	65.907	ng	#	87
35) Ethyl tert-Butyl Ether	13.72	87	1490436	56.193	ng	#	88
36) 1,2-Dichloroethane	14.14	62	1501599	53.495	ng		99
38) 1,1,1-Trichloroethane	14.54	97	1725003	52.176	ng		100
39) Isopropyl Acetate	15.08	61	1746401	133.045	ng	#	85
40) 1-Butanol	15.11	56	2940898	131.304	ng		88
41) Benzene	15.24	78	4920242	51.185	ng		99
42) Carbon Tetrachloride	15.47	117	1493939	52.911	ng		99
43) Cyclohexane	15.66	84	4129214	114.874	ng		88
44) tert-Amyl Methyl Ether	16.11	73	3664090	57.672	ng		99
45) 1,2-Dichloropropane	16.44	63	1271414	62.743	ng		98
46) Bromodichloromethane	16.70	83	1623042	58.416	ng		99
47) Trichloroethene	16.78	130	1266559	51.557	ng		100
48) 1,4-Dioxane	16.73	88	1067524	65.978	ng		89
49) 2,2,4-Trimethylpentane...	16.86	57	5774283	61.989	ng		93
50) Methyl Methacrylate	17.03	100	1111183	123.264	ng		93
51) n-Heptane	17.22	71	1384269	59.475	ng		95
52) cis-1,3-Dichloropropene	17.95	75	1961714	58.194	ng		100
53) 4-Methyl-2-pentanone	17.99	58	1317291	72.388	ng		95
54) trans-1,3-Dichloropropene	18.65	75	1988137	67.004	ng		100
55) 1,1,2-Trichloroethane	18.90	97	1148732	56.882	ng		98
58) Toluene	19.28	91	5320486	50.772	ng		100
59) 2-Hexanone	19.59	43	3087649	68.509	ng		100
60) Dibromochloromethane	19.82	129	1325208	56.240	ng		100
61) 1,2-Dibromoethane	20.15	107	1295084	53.355	ng		100
62) n-Butyl Acetate	20.39	43	3708971	74.026	ng		99
63) n-Octane	20.56	57	1231350	60.134	ng		92
64) Tetrachloroethene	20.76	166	1285349	46.390	ng		99
65) Chlorobenzene	21.63	112	3279777	49.753	ng		100
66) Ethylbenzene	22.09	91	5886739	51.658	ng		99
67) m- & p-Xylenes	22.33	91	9252004	98.458	ng		100
68) Bromoform	22.42	173	1097931	52.286	ng		100
69) Styrene	22.78	104	3668340	52.938	ng		100
70) o-Xylene	22.92	91	4731058	50.539	ng		99
71) n-Nonane	23.18	43	2791725	61.083	ng		94
72) 1,1,2,2-Tetrachloroethane	22.89	83	2141569	55.006	ng		100
74) Cumene	23.66	105	5934180	47.735	ng		99
75) alpha-Pinene	24.15	93	2936785	49.431	ng		100
76) n-Propylbenzene	24.29	91	7354011	49.110	ng		100
77) 3-Ethyltoluene	24.41	105	5944493	50.459	ng		99
78) 4-Ethyltoluene	24.47	105	5986526	50.636	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	4865603	49.487	ng		

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130932.D
Acq On : 14 Aug 2009 6:06
Operator : EM
Sample : 50ng TO-15 ICAL STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 07:27:14 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon Jul 27 09:38:25 2009
Response via : Initial Calibration

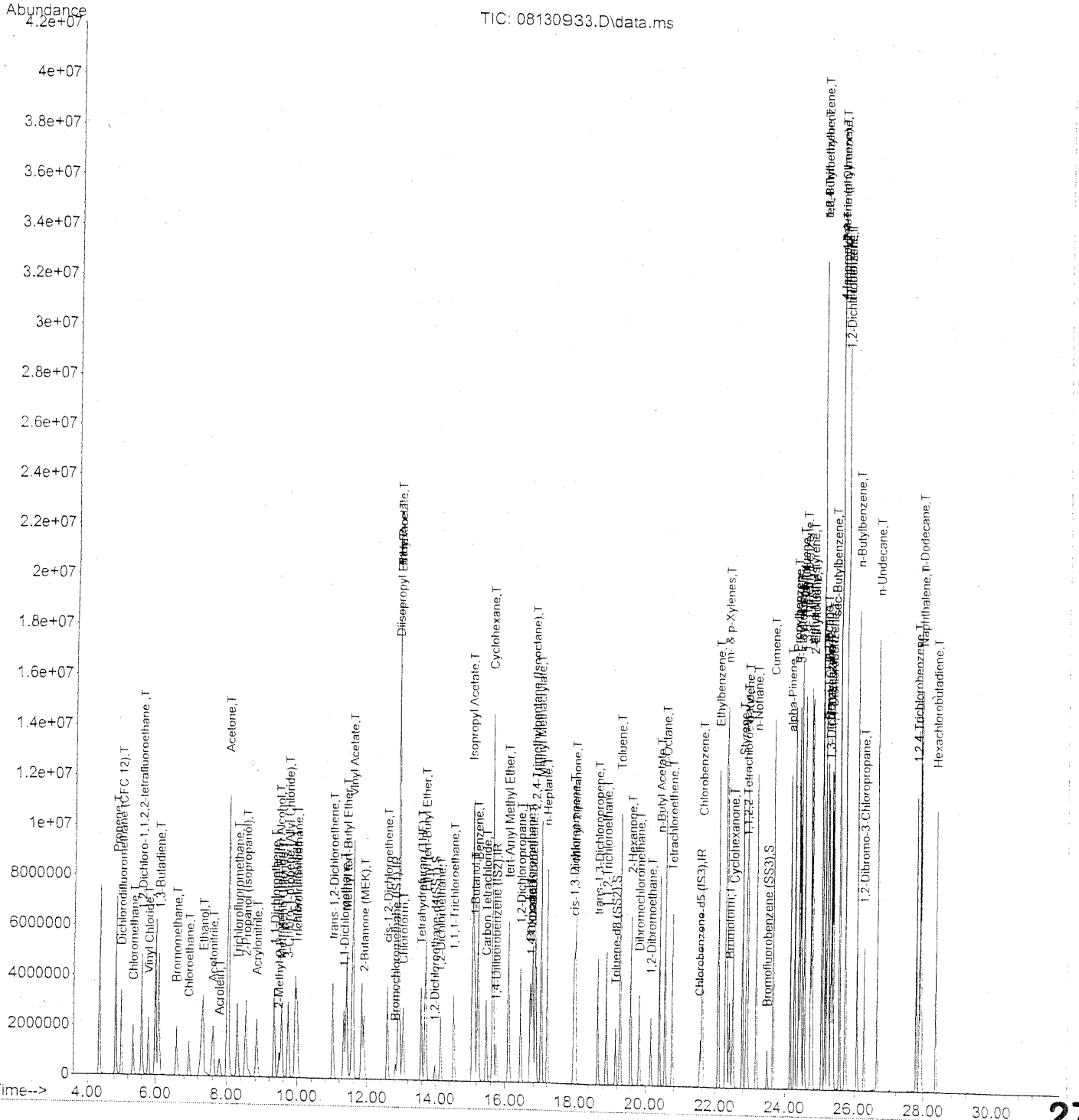
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	2788713	50.704	ng	98
81) 2-Ethyltoluene	24.79	105	5835415	47.282	ng	100
82) 1,2,4-Trimethylbenzene	25.06	105	5419555	49.283	ng	98
83) n-Decane	25.16	57	2958484	55.690	ng	96
84) Benzyl Chloride	25.23	91	4657935	59.094	ng	100
85) 1,3-Dichlorobenzene	25.25	146	2725906	47.225	ng	100
86) 1,4-Dichlorobenzene	25.33	146	2761502	45.918	ng	100
87) sec-Butylbenzene	25.39	105	6623319	48.176	ng	100
88) 4-Isopropyltoluene (p-...	25.57	119	6624766	47.796	ng	100
89) 1,2,3-Trimethylbenzene	25.57	105	5491766	49.043	ng	97
90) 1,2-Dichlorobenzene	25.75	146	2744516	45.744	ng	100
91) d-Limonene	25.75	68	2289426	52.402	ng	97
92) 1,2-Dibromo-3-Chloropr...	26.27	157	922457	54.748	ng	95
93) n-Undecane	26.66	57	3160860	58.111	ng	98
94) 1,2,4-Trichlorobenzene	27.80	180	2014621	52.040	ng	99
95) Naphthalene	27.94	128	7027186	52.076	ng	100
96) n-Dodecane	27.89	57	3283767	56.494	ng	97
97) Hexachlorobutadiene	28.36	225	1130021	51.021	ng	99
98) Cyclohexanone	22.52	55	1802415	57.022	ng	95
99) tert-Butylbenzene	25.06	119	5291689	47.613	ng	100
100) n-Butylbenzene	26.07	91	5516279	50.386	ng	99

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

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		97

R9081309.M Fri Aug 14 07:29:42 2009

8/14/09

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)
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

281

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

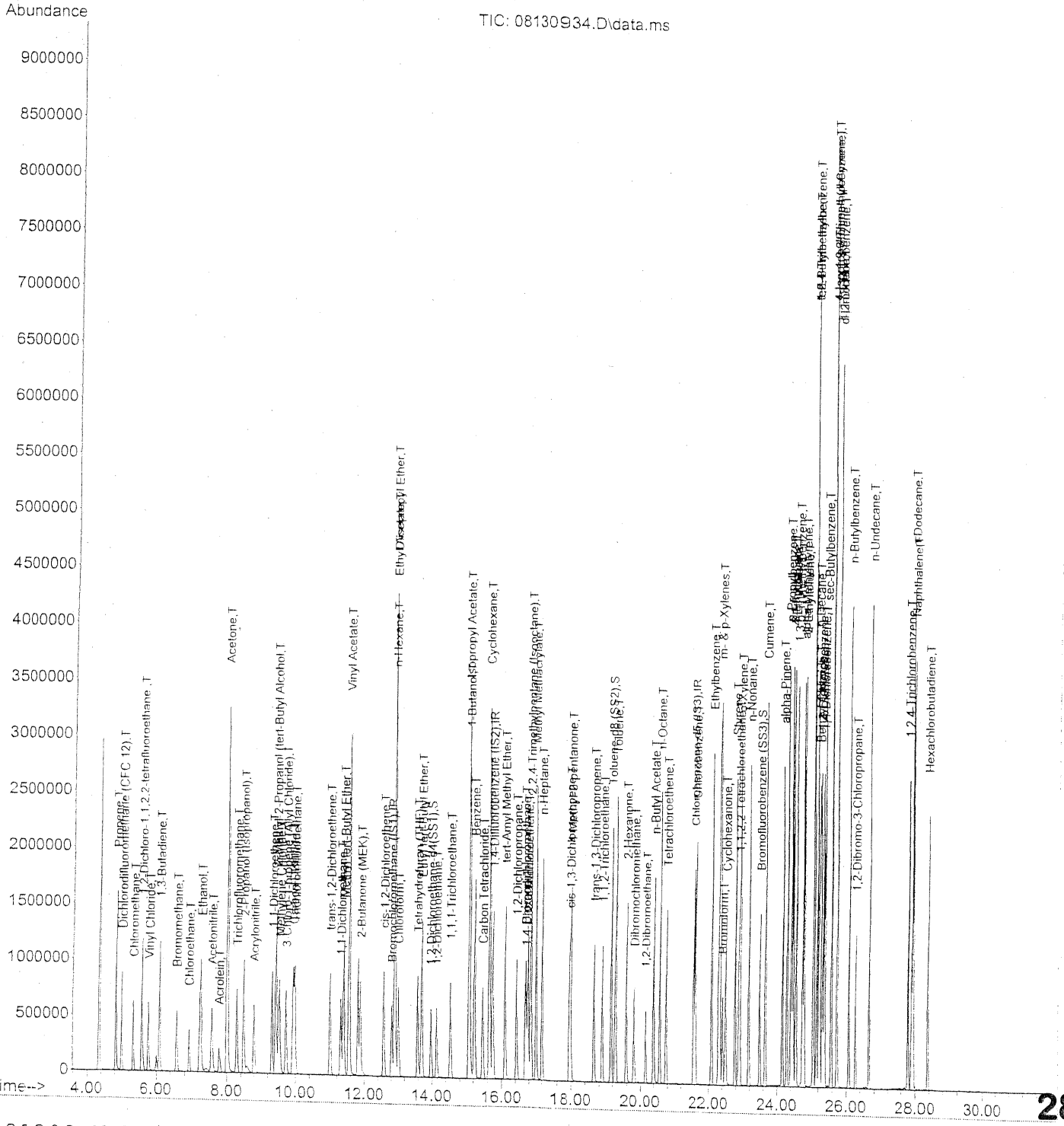
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.75	118	5862974	111.426	ng	98
81) 2-Ethyltoluene	24.80	105	11978631	101.452	ng	98
82) 1,2,4-Trimethylbenzene	25.07	105	11417406	108.524	ng	95
83) n-Decane	25.17	57	5959851	117.266	ng	97
84) Benzyl Chloride	25.24	91	9728914	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

Tan 8/14/09

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:08:41 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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)
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

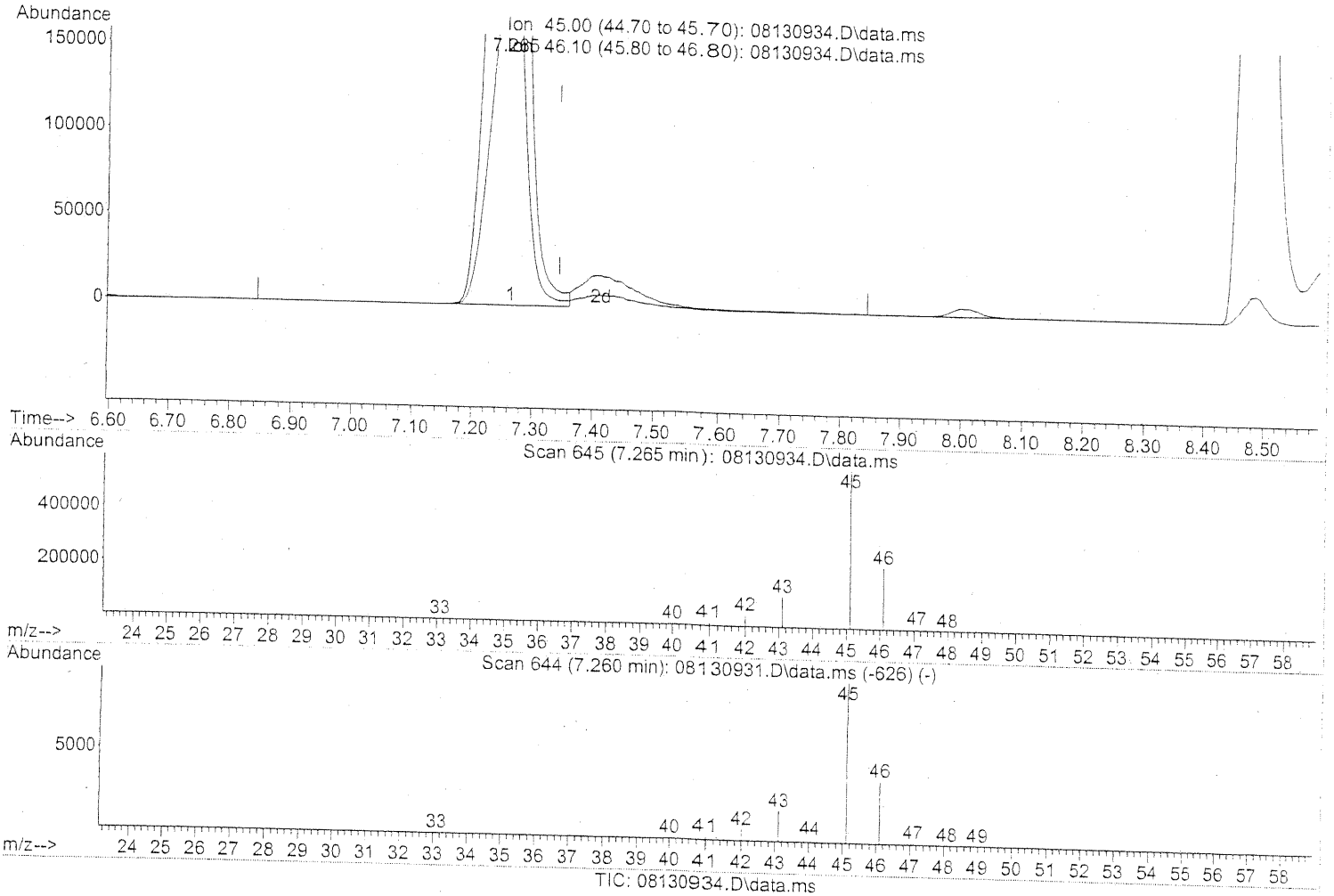
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1304171	29.427	ng	99
81) 2-Ethyltoluene	24.79	105	2766681	27.266	ng	100
82) 1,2,4-Trimethylbenzene	25.05	105	2490909	28.723	ng	99
83) n-Decane	25.15	57	1378346	27.307	ng	96
84) Benzyl Chloride	25.22	91	2140806	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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 110.49ng

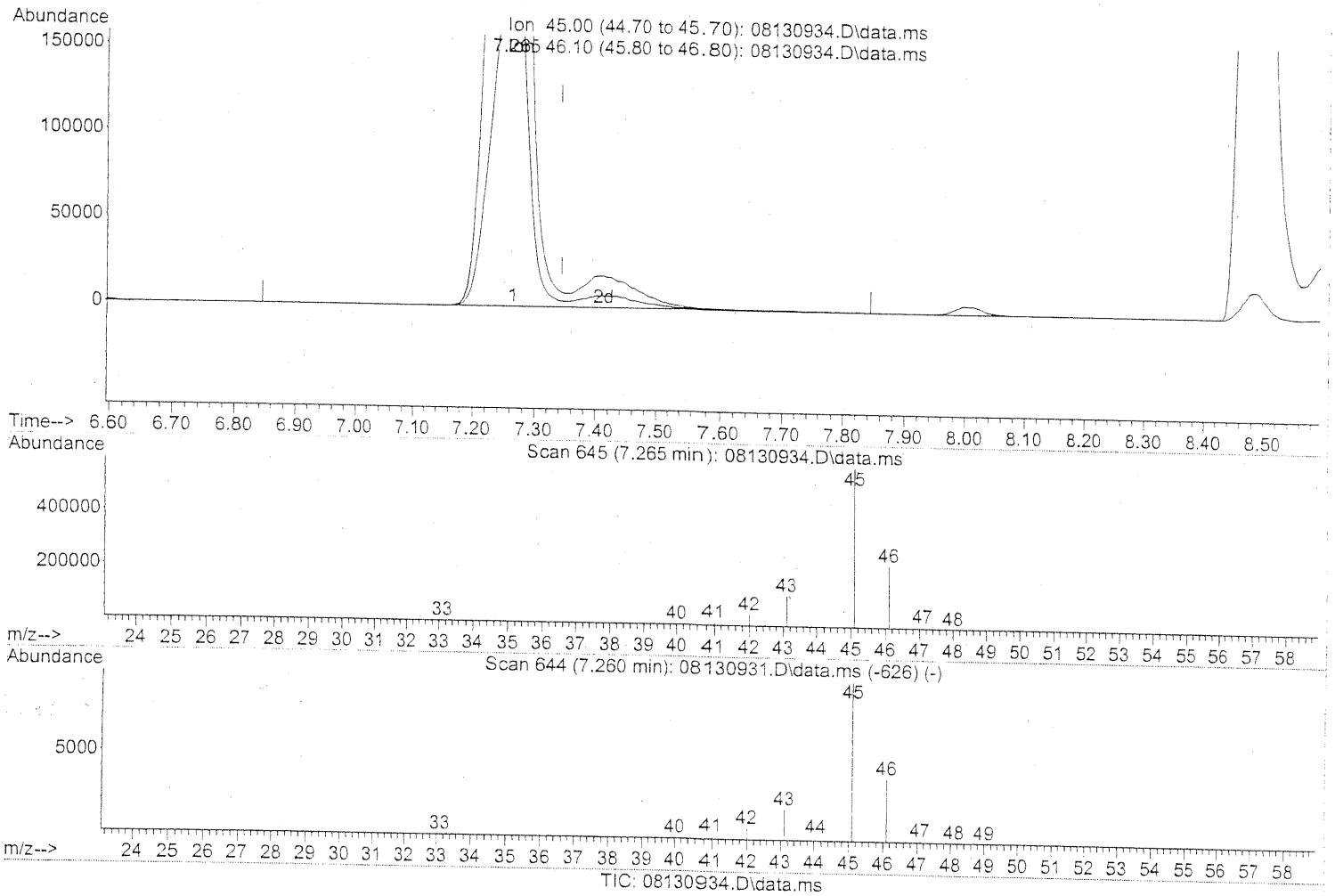
response 2112003

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	38.87
0.00	0.00	0.00
0.00	0.00	0.00

PT

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.265min (-0.080) 116.80ng m

response 2232593

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.77
0.00	0.00	0.00
0.00	0.00	0.00

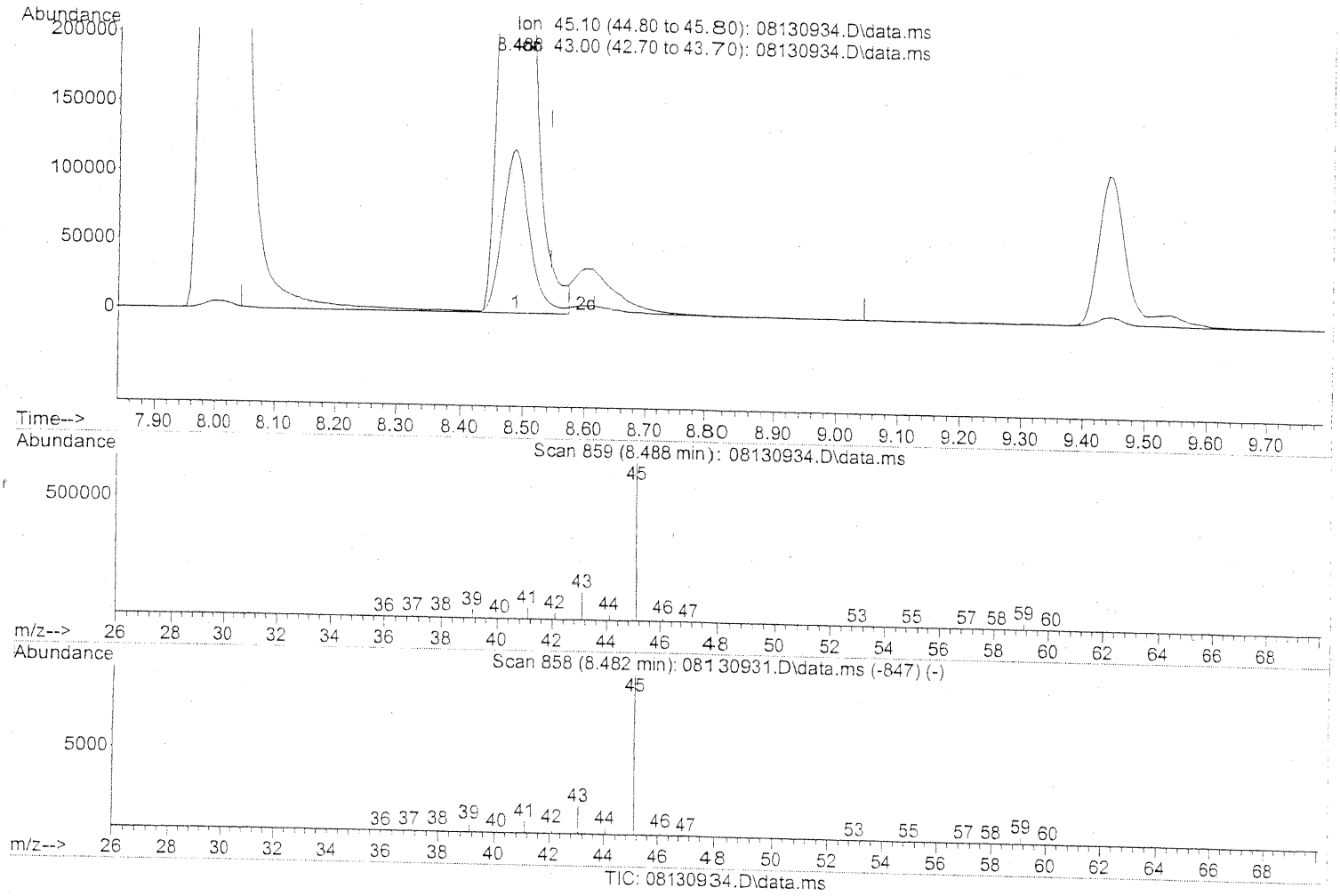
PT → IC
EM 8/13/09
14

DF 8/13/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130934.D
Acq On : 14 Aug 2009 7:29
Operator : EM
Sample : 25ng TO-15 ICV STD
Misc : S20-08130905/S20-08070903
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 08:58:52 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.488min (-0.057) 37.42ng

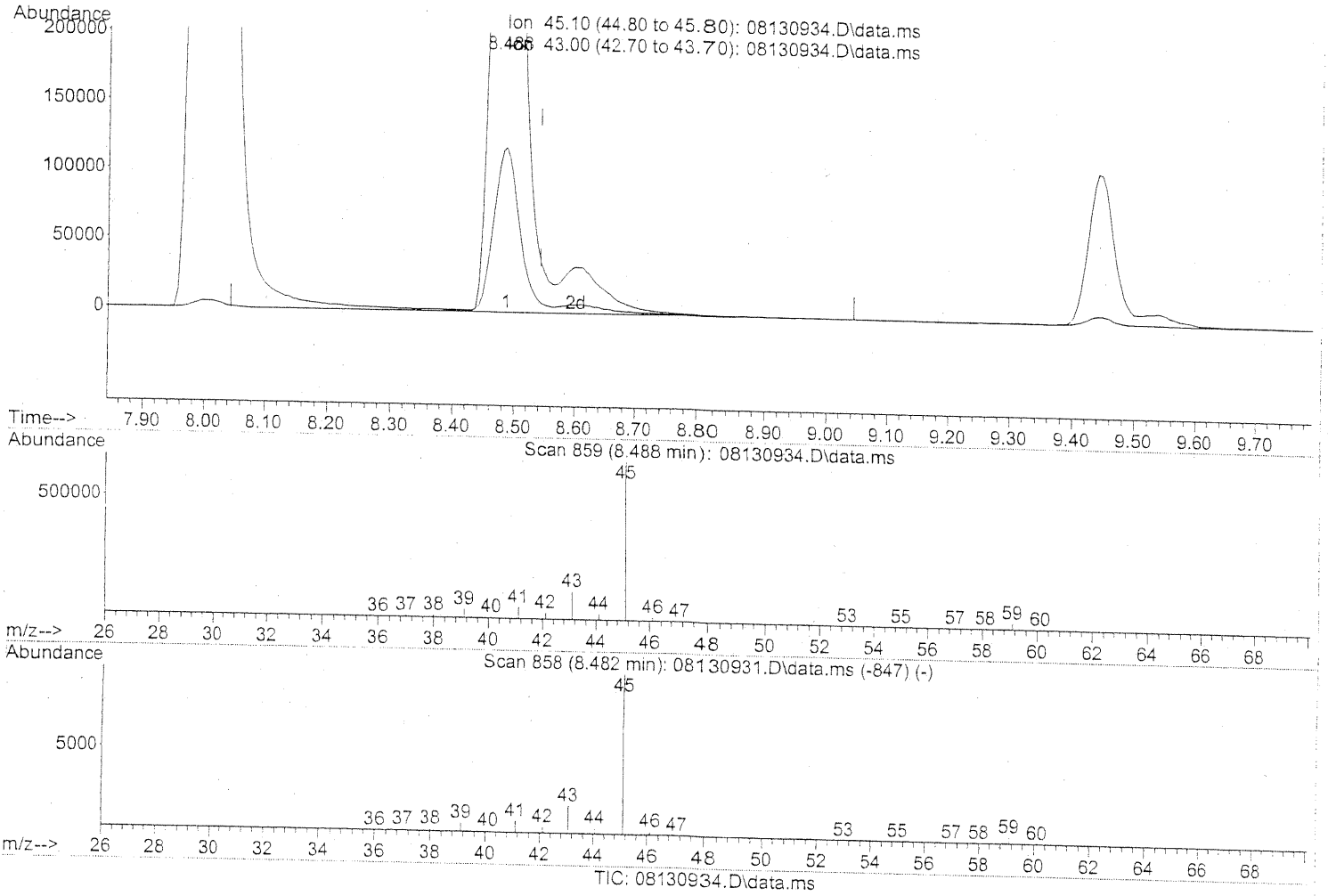
response 1993602

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.46
0.00	0.00	0.00
0.00	0.00	0.00

PT

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
Cem 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

CONTINUING CALIBRATION STANDARDS

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

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	91	-0.02
2	T	Propene	2.193	2.374	-8.3	95	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.781	11.2	87	0.00
4	T	Chloromethane	2.918	2.707	7.2	85	0.00
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.494	9.7	86	0.00
6	T	Vinyl Chloride	2.878	2.625	8.8	87	-0.01
7	T	1,3-Butadiene	2.044	2.064	-1.0	91	0.00
8	T	Bromomethane	1.505	1.426	5.2	87	-0.01
9	T	Chloroethane	1.428	1.334	6.6	88	0.00
10	T	Ethanol	1.376	1.285	6.6	84	-0.07
11	T	Acetonitrile	3.357	3.224	4.0	89	-0.04
12	T	Acrolein	0.897	0.923	-2.9	87	-0.02
13	T	Acetone	1.400	1.259	10.1	91	-0.04
14	T	Trichlorofluoromethane	2.677	2.484	7.2	86	-0.01
15	T	2-Propanol (Isopropanol)	3.834	2.818	26.5	72	-0.05
16	T	Acrylonitrile	2.033	2.209	-8.7	87	-0.03
17	T	1,1-Dichloroethene	1.571	1.429	9.0	87	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	3.736	4.0	80	-0.04
19	T	Methylene Chloride	1.747	1.522	12.9	87	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.468	-5.4	91	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.137	5.1	85	-0.01
22	T	Carbon Disulfide	6.163	5.716	7.3	88	-0.01
23	T	trans-1,2-Dichloroethene	2.411	2.359	2.2	88	-0.01
24	T	1,1-Dichloroethane	2.952	2.838	3.9	89	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.646	2.9	88	0.00
26	T	Vinyl Acetate	0.303	0.342	-12.9	87	-0.03
27	T	2-Butanone (MEK)	0.976	1.066	-9.2	87	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.177	3.2	88	-0.02
29	T	Diisopropyl Ether	1.386	1.346	2.9	87	-0.01
30	T	Ethyl Acetate	0.633	0.645	-1.9	88	-0.03
31	T	n-Hexane	3.085	2.927	5.1	91	-0.01
32	T	Chloroform	2.582	2.456	4.9	88	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.810	-2.4	94	-0.02
34	T	Tetrahydrofuran (THF)	1.015	1.030	-1.5	89	-0.01
35	T	Ethyl tert-Butyl Ether	1.977	1.900	3.9	86	-0.01
36	T	1,2-Dichloroethane	1.976	1.968	0.4	89	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	91	-0.01
38	T	1,1,1-Trichloroethane	0.455	0.430	5.5	87	-0.01

 em 9/3/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

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	0.217	-6.4	87	-0.03
40	T	1-Butanol	0.324	0.368	-13.6	87	-0.06
41	T	Benzene	1.344	1.228	8.6	87	-0.01
42	T	Carbon Tetrachloride	0.376	0.357	5.1	86	-0.01
43	T	Cyclohexane	0.521	0.495	5.0	88	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.912	3.5	87	-0.01
45	T	1,2-Dichloropropane	0.330	0.321	2.7	87	-0.02
46	T	Bromodichloromethane	0.393	0.393	0.0	87	-0.02
47	T	Trichloroethene	0.341	0.305	10.6	85	-0.02
48	T	1,4-Dioxane	0.239	0.252	-5.4	85	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.470	5.0	88	-0.02
50	T	Methyl Methacrylate	0.134	0.130	3.0	84	-0.02
51	T	n-Heptane	0.358	0.343	4.2	88	-0.01
52	T	cis-1,3-Dichloropropene	0.497	0.513	-3.2	86	0.00
53	T	4-Methyl-2-pentanone	0.291	0.311	-6.9	87	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.470	-8.0	86	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.285	0.7	86	-0.01
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	91	0.00
57	S	Toluene-d8 (SS2)	2.377	2.397	-0.8	91	-0.01
58	T	Toluene	2.881	2.697	6.4	86	-0.01
59	T	2-Hexanone	1.497	1.569	-4.8	88	-0.02
60	T	Dibromochloromethane	0.615	0.624	-1.5	86	-0.01
61	T	1,2-Dibromoethane	0.648	0.663	-2.3	86	-0.01
62	T	n-Butyl Acetate	1.634	1.792	-9.7	86	-0.02
63	T	n-Octane	0.642	0.637	0.8	89	-0.01
64	T	Tetrachloroethene	0.715	0.665	7.0	84	0.00
65	T	Chlorobenzene	1.769	1.656	6.4	86	-0.01
66	T	Ethylbenzene	3.111	3.032	2.5	87	0.00
67	T	m- & p-Xylenes	2.466	2.399	2.7	87	-0.02
68	T	Bromoform	0.534	0.554	-3.7	85	-0.01
69	T	Styrene	1.823	1.839	-0.9	86	-0.01
70	T	o-Xylene	2.481	2.409	2.9	87	-0.02
71	T	n-Nonane	1.494	1.505	-0.7	90	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	1.084	-1.7	88	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.646	4.0	86	0.00
74	T	Cumene	3.217	3.111	3.3	87	0.00
75	T	alpha-Pinene	1.587	1.527	3.8	85	-0.01
76	T	n-Propylbenzene	3.975	3.875	2.5	87	-0.01

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

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	2.902	3.7	84	0.00
78	T	4-Ethyltoluene	3.029	2.928	3.3	89	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.373	5.3	86	0.00
80	T	alpha-Methylstyrene	1.359	1.355	0.3	85	-0.01
81	T	2-Ethyltoluene	3.112	2.961	4.9	86	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.623	1.4	86	-0.01
83	T	n-Decane	1.548	1.511	2.4	88	-0.02
84	T	Benzyl Chloride	2.058	1.925	6.5	74	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.308	5.0	86	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.369	6.3	85	-0.01
87	T	sec-Butylbenzene	3.505	3.354	4.3	86	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	3.317	1.2	86	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.647	1.5	87	-0.02
90	T	1,2-Dichlorobenzene	1.382	1.316	4.8	85	-0.01
91	T	d-Limonene	1.088	1.100	-1.1	86	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.441	-5.8	86	-0.01
93	T	n-Undecane	1.600	1.583	1.1	88	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.951	1.6	88	-0.01
95	T	Naphthalene	3.568	3.490	2.2	88	0.00
96	T	n-Dodecane	1.790	1.827	-2.1	90	0.00
97	T	Hexachlorobutadiene	0.552	0.533	3.4	87	0.00
98	T	Cyclohexanone	0.907	0.945	-4.2	82	-0.02
99	T	tert-Butylbenzene	2.638	2.571	2.5	86	-0.01
100	T	n-Butylbenzene	2.789	2.720	2.5	86	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

EM 9/3/09

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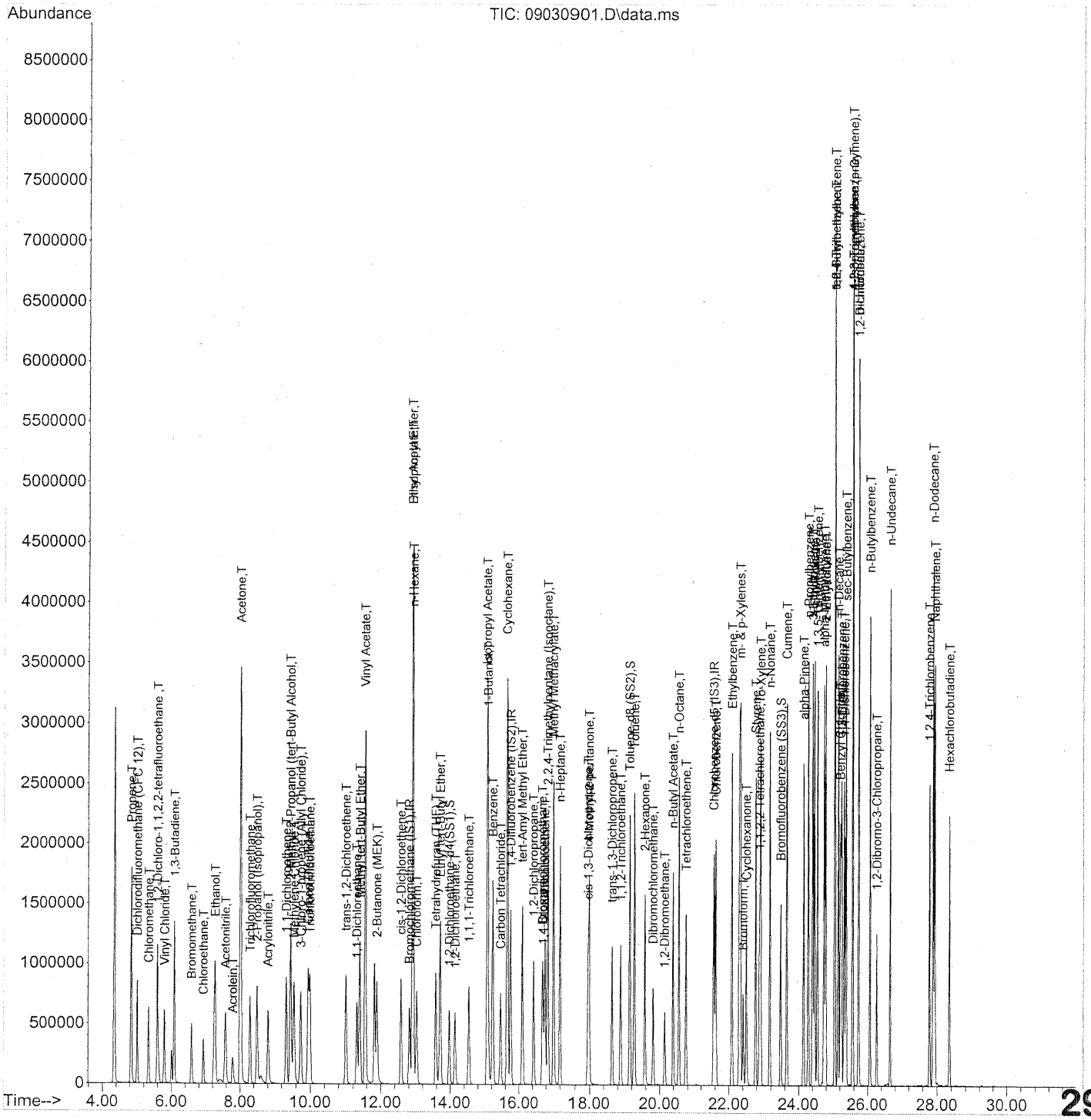
Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.82	130	332425	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.76	114	1702276	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	21.56	82	812827	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	601722	25.600	ng		-0.02
Spiked Amount 25.000			Recovery =	102.40%			
57) Toluene-d8 (SS2)	19.15	98	1948432	25.215	ng		-0.01
Spiked Amount 25.000			Recovery =	100.88%			
73) Bromofluorobenzene (SS3)	23.49	174	524764	23.980	ng		0.00
Spiked Amount 25.000			Recovery =	95.92%			
Target Compounds							Qvalue
2) Propene	4.84	42	845843	29.006	ng		97
3) Dichlorodifluoromethan...	5.01	85	972398	23.361	ng		100
4) Chloromethane	5.34	50	899893	23.197	ng		98
5) 1,2-Dichloro-1,1,2,2-t...	5.60	135	526492	23.936	ng		99
6) Vinyl Chloride	5.80	62	883187	23.079	ng		99
7) 1,3-Butadiene	6.09	54	823199	30.284	ng		97
8) Bromomethane	6.59	94	483428	24.158	ng		99
9) Chloroethane	6.93	64	448749	23.637	ng		100
10) Ethanol	7.27	45	2221602m	121.454	ng		
11) Acetonitrile	7.58	41	1127522	25.258	ng		99
12) Acrolein	7.79	56	331503	27.790	ng		97
13) Acetone	8.01	58	2310683	124.138	ng		93
14) Trichlorofluoromethane	8.29	101	868829	24.409	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	1772343m	34.768	ng		
16) Acrylonitrile	8.81	53	778455	28.792	ng		99
17) 1,1-Dichloroethene	9.33	96	522645	25.020	ng		95
18) 2-Methyl-2-Propanol (t...	9.45	59	2508689	48.476	ng		98
19) Methylene Chloride	9.54	84	542299	23.351	ng		85
20) 3-Chloro-1-propene (Al...	9.73	41	886174	28.455	ng		88
21) Trichlorotrifluoroethane	9.99	151	415837	26.102	ng		95
22) Carbon Disulfide	9.94	76	2037044	24.855	ng		99
23) trans-1,2-Dichloroethene	11.01	61	831257	25.932	ng		91
24) 1,1-Dichloroethane	11.32	63	1000176	25.476	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1686422	26.509	ng		96
26) Vinyl Acetate	11.56	86	573367	142.224	ng	#	60
27) 2-Butanone (MEK)	11.89	72	389706	30.031	ng	#	80
28) cis-1,2-Dichloroethene	12.58	61	790176	26.416	ng		91
29) Diisopropyl Ether	12.91	87	479674	26.036	ng	#	59
30) Ethyl Acetate	12.91	61	457360	54.350	ng		95
31) n-Hexane	12.93	57	1062526	25.902	ng		9

EM 9/3/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.03	83	875200	25.492	ng		99
34) Tetrahydrofuran (THF)	13.58	72	376604	27.915	ng	#	85
35) Ethyl tert-Butyl Ether	13.71	87	651782	24.796	ng	#	85
36) 1,2-Dichloroethane	14.14	62	693502	26.398	ng		99
38) 1,1,1-Trichloroethane	14.54	97	769794	24.864	ng		99
39) Isopropyl Acetate	15.07	61	772862	55.630	ng	#	77
40) 1-Butanol	15.09	56	1298771	58.876	ng		83
41) Benzene	15.23	78	2215252	24.198	ng		99
42) Carbon Tetrachloride	15.46	117	656332	25.649	ng		99
43) Cyclohexane	15.66	84	1815014	51.195	ng		87
44) tert-Amyl Methyl Ether	16.10	73	1613819	25.082	ng		98
45) 1,2-Dichloropropane	16.43	63	574283	25.572	ng		98
46) Bromodichloromethane	16.70	83	722116	26.964	ng		98
47) Trichloroethene	16.77	130	551061	23.708	ng		99
48) 1,4-Dioxane	16.72	88	459674	28.231	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2603061	24.706	ng		95
50) Methyl Methacrylate	17.02	100	470069	51.387	ng	#	88
51) n-Heptane	17.21	71	618738	25.389	ng		93
52) cis-1,3-Dichloropropene	17.95	75	867078	25.624	ng		100
53) 4-Methyl-2-pentanone	17.99	58	582542	29.448	ng		94
54) trans-1,3-Dichloropropene	18.64	75	880074	29.729	ng		100
55) 1,1,2-Trichloroethane	18.89	97	510413	26.097	ng		97
58) Toluene	19.28	91	2367442	25.274	ng		100
59) 2-Hexanone	19.58	43	1403268	28.824	ng		97
60) Dibromochloromethane	19.82	129	583864	29.191	ng		100
61) 1,2-Dibromoethane	20.15	107	571215	27.095	ng		99
62) n-Butyl Acetate	20.39	43	1601924	30.157	ng		98
63) n-Octane	20.56	57	554750	26.569	ng		91
64) Tetrachloroethene	20.76	166	551753	23.737	ng		99
65) Chlorobenzene	21.62	112	1453856	25.273	ng		100
66) Ethylbenzene	22.09	91	2612219	25.830	ng		98
67) m- & p-Xylenes	22.33	91	4056323	50.593	ng		99
68) Bromoform	22.41	173	465004	26.783	ng		100
69) Styrene	22.77	104	1602802	27.045	ng		100
70) o-Xylene	22.92	91	2075898	25.737	ng		98
71) n-Nonane	23.17	43	1297017	26.703	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	944607	27.263	ng		100
74) Cumene	23.66	105	2609673	24.954	ng		98
75) alpha-Pinene	24.15	93	1255749	24.338	ng		99
76) n-Propylbenzene	24.28	91	3250630	25.149	ng		99
77) 3-Ethyltoluene	24.41	105	2575992	26.293	ng		98
78) 4-Ethyltoluene	24.46	105	2599021	26.388	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2106173	25.862	ng		1[illegible]

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

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

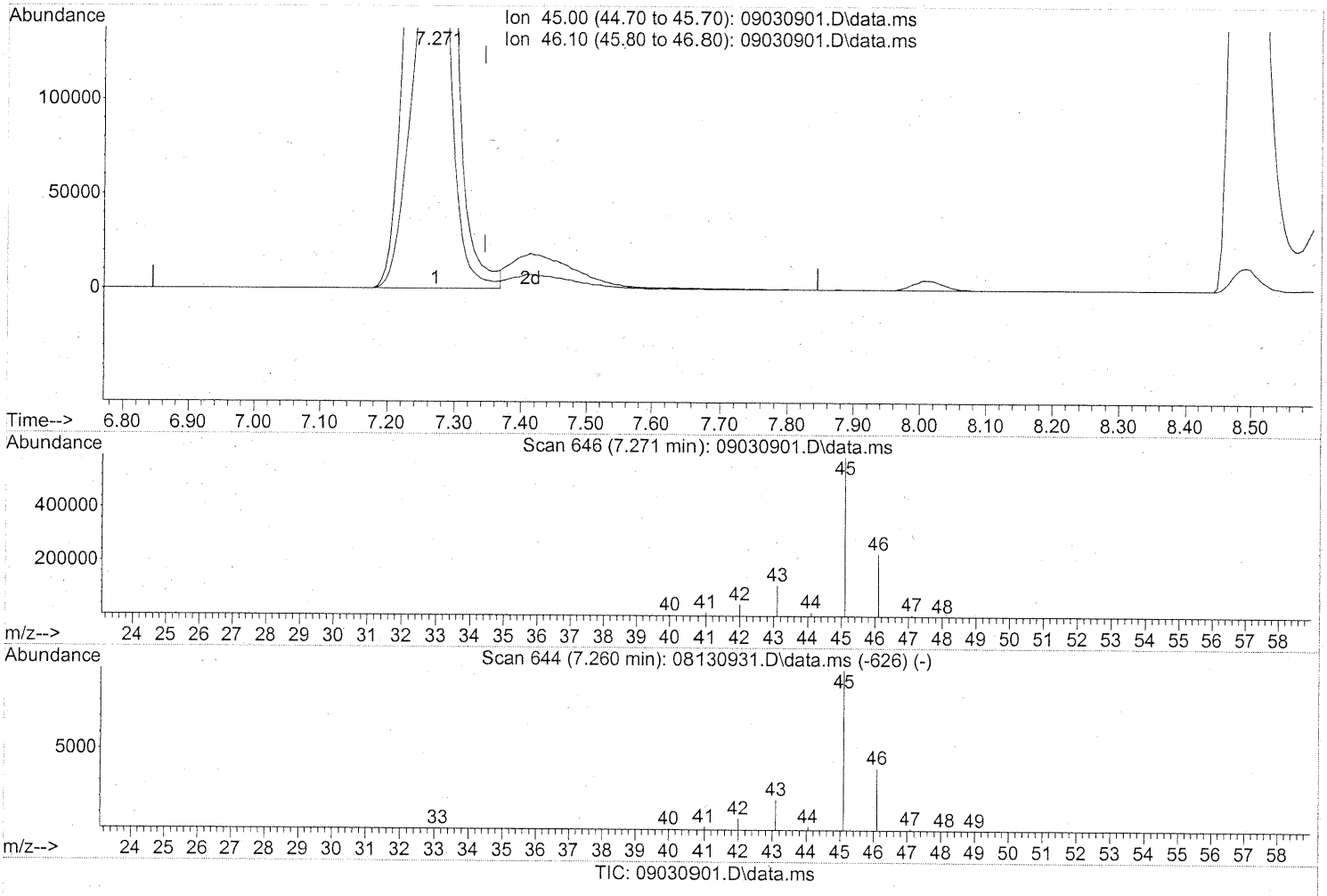
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.74	118	1180815	26.721	ng	99
81) 2-Ethyltoluene	24.79	105	2531923	25.025	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2260200	26.139	ng	99
83) n-Decane	25.15	57	1326222	26.351	ng	94
84) Benzyl Chloride	25.22	91	1721030	25.726	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1160860	25.932	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1179313	24.829	ng	99
87) sec-Butylbenzene	25.38	105	2889874	25.362	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2782241	25.485	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2306555	26.391	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1133508	25.218	ng	100
91) d-Limonene	25.74	68	976734	27.609	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	394270	29.046	ng	93
93) n-Undecane	26.65	57	1404892	27.014	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	865596	27.565	ng	100
95) Naphthalene	27.94	128	3007098	25.918	ng	100
96) n-Dodecane	27.89	57	1473181	25.306	ng	96
97) Hexachlorobutadiene	28.36	225	476515	26.574	ng	98
98) Cyclohexanone	22.51	55	752728	25.515	ng	94
99) tert-Butylbenzene	25.05	119	2214764	25.826	ng	99
100) n-Butylbenzene	26.06	91	2413942	26.618	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 07:41:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



(10) Ethanol (T)

7.271min (-0.074) 114.44ng

response 2093380

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

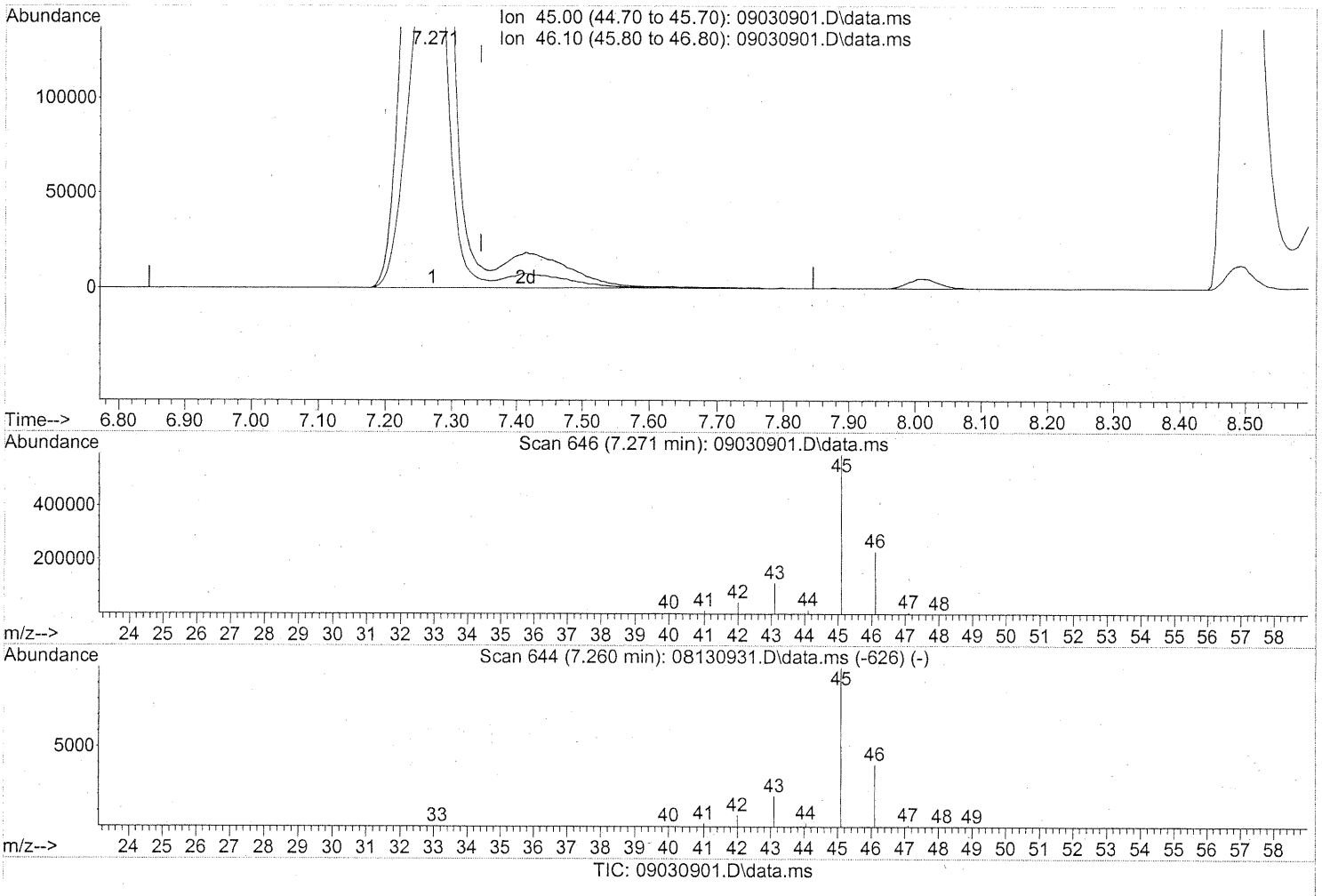
PT

301

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 07:41:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09030901.D\data.ms

(10) Ethanol (T)

7.271min (-0.074) 121.45ng m

response 2221602

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	36.93
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
Com 9/3/09

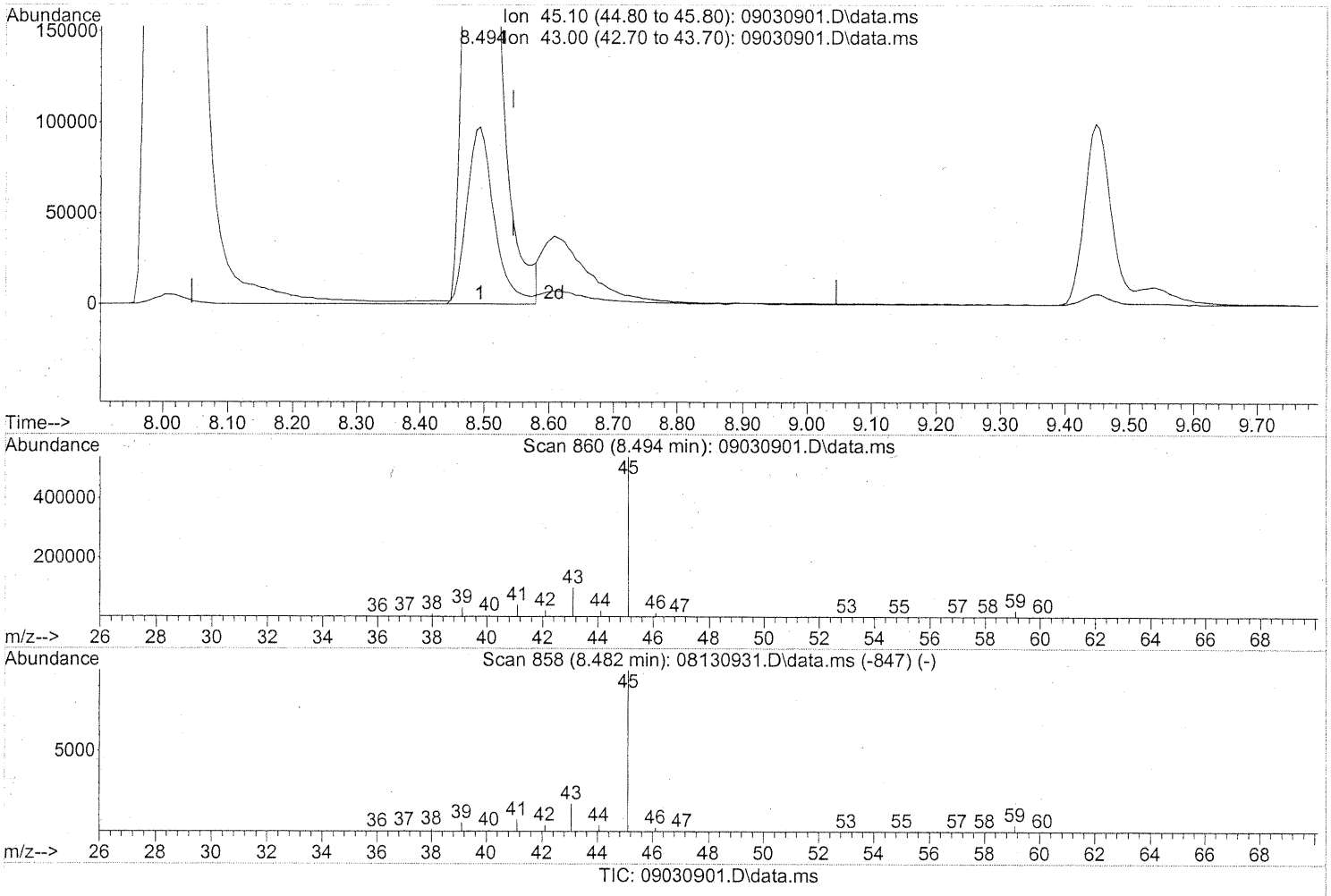
9/4/09

302

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 07:41:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 31.02ng

response 1581335

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.50
0.00	0.00	0.00
0.00	0.00	0.00

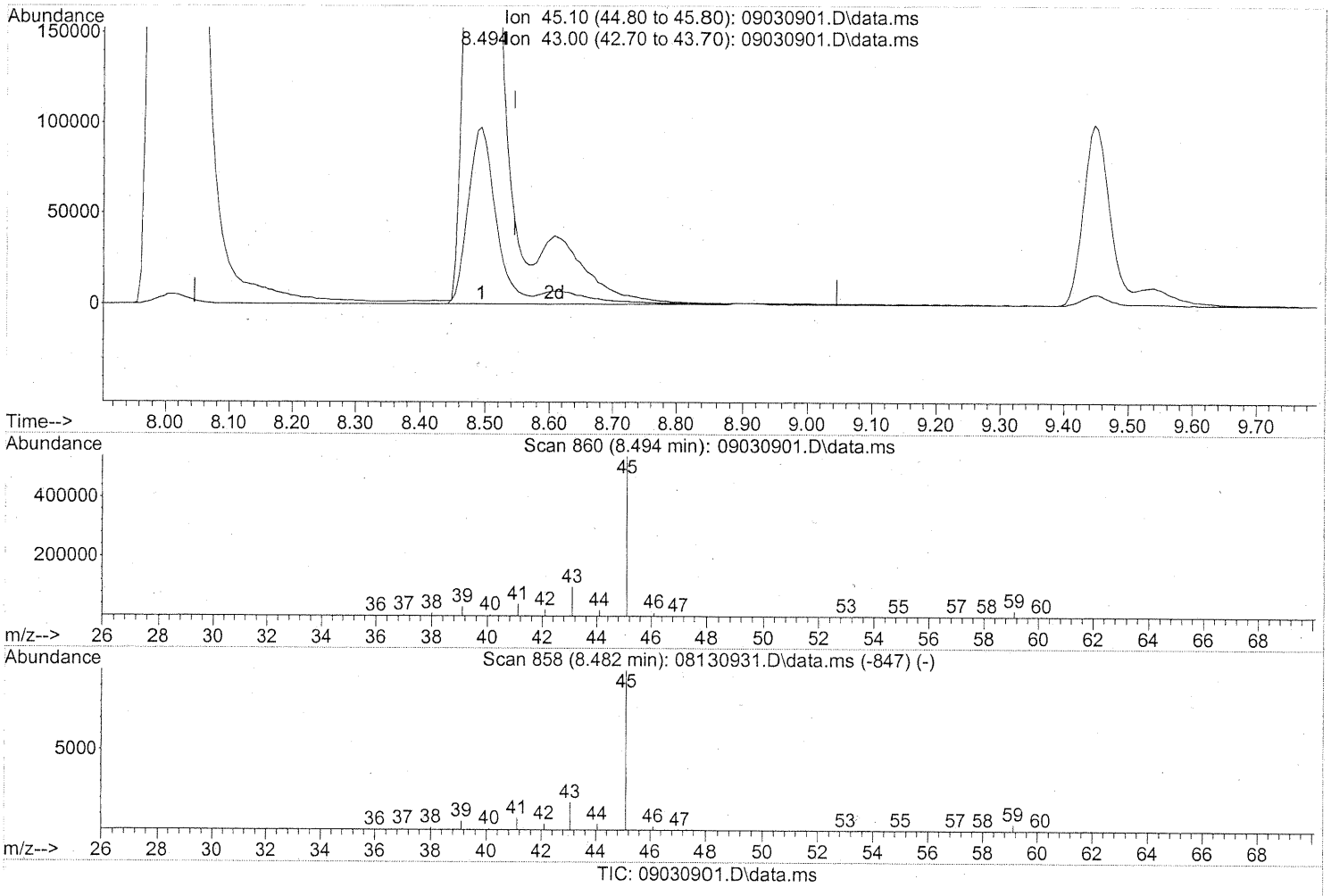
PT

303

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 07:41:42 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.494min (-0.051) 34.77ng m

response 1772343

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	15.62
0.00	0.00	0.00
0.00	0.00	0.00

PT → IC
EM 9/3/09

9/4/09

304

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	102	-0.02
2	T	Propene	2.193	2.167	1.2	96	0.00
3	T	Dichlorodifluoromethane (CF	3.130	2.730	12.8	95	0.00
4	T	Chloromethane	2.918	2.714	7.0	95	-0.01
5	T	1,2-Dichloro-1,1,2,2-tetraf	1.654	1.419	14.2	91	-0.01
6	T	Vinyl Chloride	2.878	2.594	9.9	96	-0.01
7	T	1,3-Butadiene	2.044	2.064	-1.0	101	-0.01
8	T	Bromomethane	1.505	1.377	8.5	94	-0.02
9	T	Chloroethane	1.428	1.300	9.0	95	-0.01
10	T	Ethanol	1.376	1.294	6.0	94	-0.08
11	T	Acetonitrile	3.357	3.136	6.6	96	-0.05
12	T	Acrolein	0.897	0.942	-5.0	99	-0.02
13	T	Acetone	1.400	1.206	13.9	97	-0.05
14	T	Trichlorofluoromethane	2.677	2.387	10.8	92	-0.02
15	T	2-Propanol (Isopropanol)	3.834	3.287	14.3	94	-0.06
16	T	Acrylonitrile	2.033	2.143	-5.4	94	-0.03
17	T	1,1-Dichloroethene	1.571	1.344	14.4	91	-0.02
18	T	2-Methyl-2-Propanol (tert-B	3.892	3.840	1.3	92	-0.04
19	T	Methylene Chloride	1.747	1.445	17.3	92	-0.02
20	T	3-Chloro-1-propene (Allyl C	2.342	2.377	-1.5	97	-0.02
21	T	Trichlorotrifluoroethane	1.198	1.068	10.9	89	-0.02
22	T	Carbon Disulfide	6.163	5.388	12.6	92	-0.02
23	T	trans-1,2-Dichloroethene	2.411	2.249	6.7	93	-0.02
24	T	1,1-Dichloroethane	2.952	2.705	8.4	94	-0.02
25	T	Methyl tert-Butyl Ether	4.784	4.337	9.3	92	-0.01
26	T	Vinyl Acetate	0.303	0.347	-14.5	99	-0.03
27	T	2-Butanone (MEK)	0.976	1.008	-3.3	91	-0.03
28	T	cis-1,2-Dichloroethene	2.250	2.054	8.7	93	-0.02
29	T	Diisopropyl Ether	1.386	1.263	8.9	91	-0.02
30	T	Ethyl Acetate	0.633	0.617	2.5	93	-0.03
31	T	n-Hexane	3.085	2.764	10.4	95	-0.02
32	T	Chloroform	2.582	2.317	10.3	92	-0.03
33	S	1,2-Dichloroethane-d4(SS1)	1.768	1.843	-4.2	107	-0.02
34	T	Tetrahydrofuran (THF)	1.015	0.968	4.6	93	-0.02
35	T	Ethyl tert-Butyl Ether	1.977	1.780	10.0	90	-0.02
36	T	1,2-Dichloroethane	1.976	1.866	5.6	93	-0.02
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	102	-0.02
38	T	1,1,1-Trichloroethane	0.455	0.402	11.6	91	-0.02

EM 9/4/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.204	0.205	-0.5	92	-0.03
40	T	1-Butanol	0.324	0.351	-8.3	92	-0.06
41	T	Benzene	1.344	1.141	15.1	91	-0.02
42	T	Carbon Tetrachloride	0.376	0.338	10.1	91	-0.02
43	T	Cyclohexane	0.521	0.462	11.3	91	-0.02
44	T	tert-Amyl Methyl Ether	0.945	0.852	9.8	90	-0.02
45	T	1,2-Dichloropropane	0.330	0.299	9.4	91	-0.02
46	T	Bromodichloromethane	0.393	0.367	6.6	91	-0.02
47	T	Trichloroethene	0.341	0.285	16.4	88	-0.02
48	T	1,4-Dioxane	0.239	0.236	1.3	88	-0.02
49	T	2,2,4-Trimethylpentane (Iso	1.547	1.376	11.1	92	-0.02
50	T	Methyl Methacrylate	0.134	0.121	9.7	88	-0.03
51	T	n-Heptane	0.358	0.321	10.3	91	-0.02
52	T	cis-1,3-Dichloropropene	0.497	0.480	3.4	90	-0.01
53	T	4-Methyl-2-pentanone	0.291	0.293	-0.7	91	-0.02
54	T	trans-1,3-Dichloropropene	0.435	0.436	-0.2	89	-0.02
55	T	1,1,2-Trichloroethane	0.287	0.263	8.4	88	-0.02
56	IR	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	100	0.00
57	S	Toluene-d8 (SS2)	2.377	2.405	-1.2	101	-0.01
58	T	Toluene	2.881	2.504	13.1	89	-0.01
59	T	2-Hexanone	1.497	1.483	0.9	92	-0.02
60	T	Dibromochloromethane	0.615	0.575	6.5	87	-0.01
61	T	1,2-Dibromoethane	0.648	0.613	5.4	88	-0.01
62	T	n-Butyl Acetate	1.634	1.731	-5.9	92	-0.02
63	T	n-Octane	0.642	0.592	7.8	91	-0.01
64	T	Tetrachloroethene	0.715	0.616	13.8	86	-0.01
65	T	Chlorobenzene	1.769	1.519	14.1	88	-0.01
66	T	Ethylbenzene	3.111	2.786	10.4	89	0.00
67	T	m- & p-Xylenes	2.466	2.202	10.7	89	-0.02
68	T	Bromoform	0.534	0.508	4.9	86	-0.01
69	T	Styrene	1.823	1.670	8.4	86	-0.01
70	T	o-Xylene	2.481	2.205	11.1	88	-0.02
71	T	n-Nonane	1.494	1.397	6.5	92	-0.01
72	T	1,1,2,2-Tetrachloroethane	1.066	0.963	9.7	86	-0.02
73	S	Bromofluorobenzene (SS3)	0.673	0.634	5.8	94	0.00
74	T	Cumene	3.217	2.829	12.1	87	0.00
75	T	alpha-Pinene	1.587	1.423	10.3	87	-0.01
76	T	n-Propylbenzene	3.975	3.521	11.4	87	-0.01

 EM 9/4/09

Evaluate Continuing Calibration Report

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.013	2.626	12.8	84	0.00
78	T	4-Ethyltoluene	3.029	2.645	12.7	88	-0.01
79	T	1,3,5-Trimethylbenzene	2.505	2.137	14.7	86	-0.01
80	T	alpha-Methylstyrene	1.359	1.221	10.2	84	-0.02
81	T	2-Ethyltoluene	3.112	2.674	14.1	86	-0.02
82	T	1,2,4-Trimethylbenzene	2.660	2.357	11.4	86	-0.01
83	T	n-Decane	1.548	1.365	11.8	88	-0.02
84	T	Benzyl Chloride	2.058	1.878	8.7	80	-0.02
85	T	1,3-Dichlorobenzene	1.377	1.151	16.4	83	-0.02
86	T	1,4-Dichlorobenzene	1.461	1.199	17.9	83	-0.01
87	T	sec-Butylbenzene	3.505	3.032	13.5	86	-0.01
88	T	4-Isopropyltoluene (p-Cymen	3.358	2.950	12.2	85	-0.01
89	T	1,2,3-Trimethylbenzene	2.688	2.340	12.9	85	-0.02
90	T	1,2-Dichlorobenzene	1.382	1.145	17.1	82	-0.01
91	T	d-Limonene	1.088	0.996	8.5	86	-0.01
92	T	1,2-Dibromo-3-Chloropropane	0.417	0.358	14.1	77	-0.01
93	T	n-Undecane	1.600	1.375	14.1	84	0.00
94	T	1,2,4-Trichlorobenzene	0.966	0.736	23.8	76	-0.01
95	T	Naphthalene	3.568	2.676	25.0	74	0.00
96	T	n-Dodecane	1.790	1.482	17.2	81	0.00
97	T	Hexachlorobutadiene	0.552	0.430	22.1	77	0.00
98	T	Cyclohexanone	0.907	0.927	-2.2	89	-0.02
99	T	tert-Butylbenzene	2.638	2.327	11.8	86	-0.01
100	T	n-Butylbenzene	2.789	2.378	14.7	83	0.00

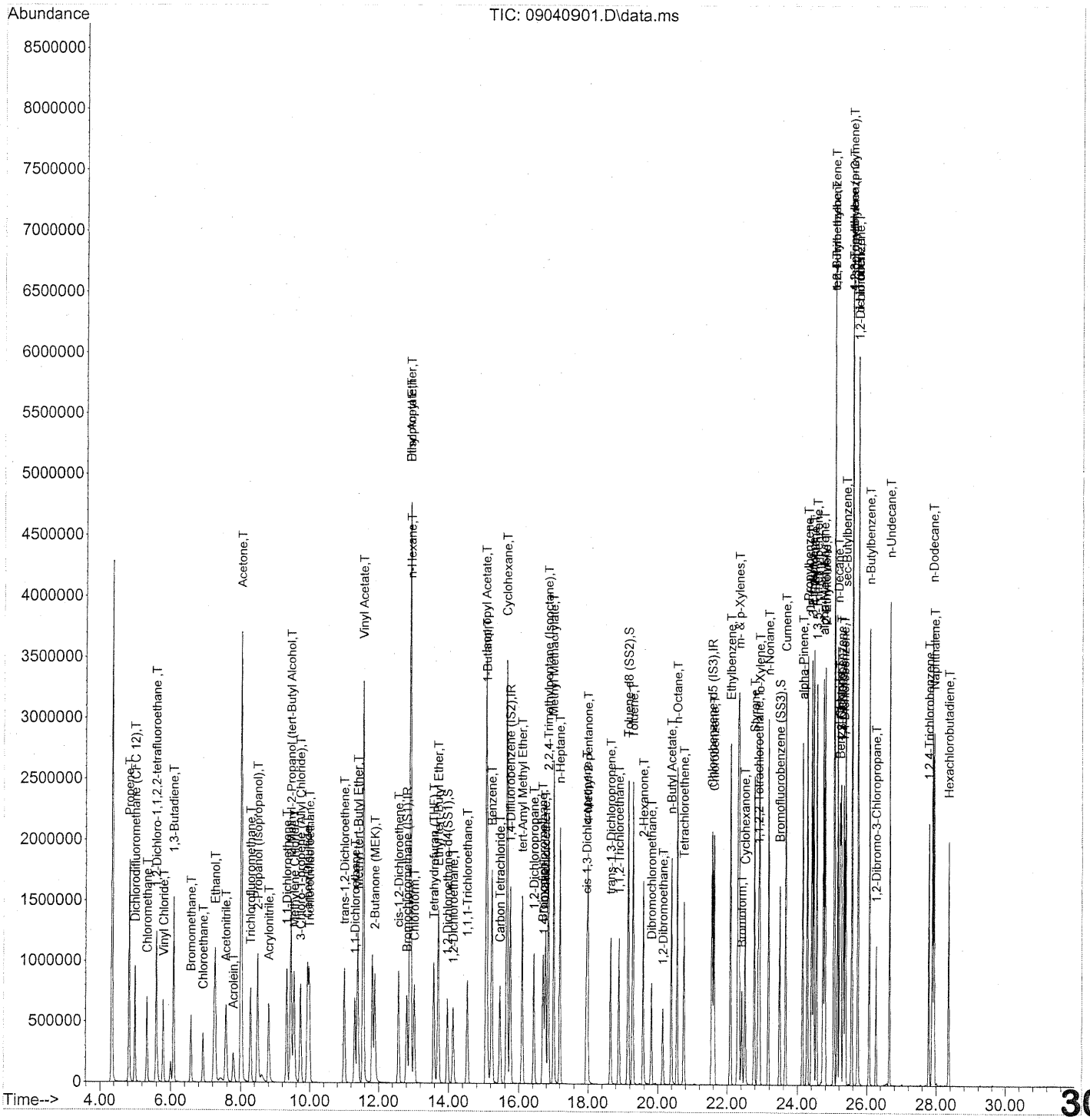
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Em 9/4/09

307

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	12.81	130	370038	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	15.75	114	1897040	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	21.56	82	898337	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	13.97	65	682003	26.066	ng		-0.02
Spiked Amount 25.000			Recovery =	104.28%			
57) Toluene-d8 (SS2)	19.15	98	2160469	25.298	ng		-0.01
Spiked Amount 25.000			Recovery =	101.20%			
73) Bromofluorobenzene (SS3)	23.49	174	569942	23.565	ng		0.00
Spiked Amount 25.000			Recovery =	94.28%			
Target Compounds							Qvalue
2) Propene	4.83	42	859723	26.486	ng		97
3) Dichlorodifluoromethan...	5.00	85	1062803	22.938	ng		100
4) Chloromethane	5.33	50	1004162	23.253	ng		99
5) 1,2-Dichloro-1,1,2,2-t...	5.59	135	556581	22.732	ng		100
6) Vinyl Chloride	5.80	62	971569	22.808	ng		98
7) 1,3-Butadiene	6.08	54	916412	30.287	ng		97
8) Bromomethane	6.58	94	519720	23.332	ng		99
9) Chloroethane	6.93	64	486966	23.042	ng		100
10) Ethanol	7.27	45	2489451m	122.263	ng		
11) Acetonitrile	7.57	41	1220712	24.566	ng		99
12) Acrolein	7.79	56	376376	28.344	ng		98
13) Acetone	8.01	58	2464319	118.934	ng		95
14) Trichlorofluoromethane	8.28	101	929085	23.449	ng		98
15) 2-Propanol (Isopropanol)	8.49	45	2301433m	40.559	ng		
16) Acrylonitrile	8.81	53	840556	27.929	ng		99
17) 1,1-Dichloroethene	9.32	96	546956	23.523	ng		92
18) 2-Methyl-2-Propanol (t...	9.45	59	2870180	49.824	ng		98
19) Methylene Chloride	9.54	84	573207	22.173	ng		83
20) 3-Chloro-1-propene (Al...	9.73	41	949856	27.399	ng		87
21) Trichlorotrifluoroethane	9.98	151	434824	24.519	ng		94
22) Carbon Disulfide	9.93	76	2137187	23.427	ng		98
23) trans-1,2-Dichloroethene	11.00	61	882039	24.719	ng		90
24) 1,1-Dichloroethane	11.31	63	1061097	24.281	ng		99
25) Methyl tert-Butyl Ether	11.40	73	1752404	24.747	ng		95
26) Vinyl Acetate	11.56	86	647508	144.288	ng	#	59
27) 2-Butanone (MEK)	11.89	72	410442	28.414	ng	#	78
28) cis-1,2-Dichloroethene	12.57	61	829934	24.925	ng		91
29) Diisopropyl Ether	12.90	87	501015	24.430	ng	#	55
30) Ethyl Acetate	12.90	61	487108	52.001	ng		94
31) n-Hexane	12.92	57	1116729	24.457	ng		9[illegible]

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9/4/09

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	13.02	83	919306	24.055	ng		100
34) Tetrahydrofuran (THF)	13.58	72	394133	26.244	ng	#	82
35) Ethyl tert-Butyl Ether	13.71	87	679647	23.228	ng	#	84
36) 1,2-Dichloroethane	14.13	62	732091	25.034	ng		99
38) 1,1,1-Trichloroethane	14.53	97	803179	23.279	ng		98
39) Isopropyl Acetate	15.06	61	813941	52.572	ng	#	76
40) 1-Butanol	15.09	56	1379604	56.120	ng		84
41) Benzene	15.23	78	2293893	22.485	ng		99
42) Carbon Tetrachloride	15.46	117	691989	24.266	ng		99
43) Cyclohexane	15.65	84	1884924	47.708	ng		86
44) tert-Amyl Methyl Ether	16.10	73	1680427	23.436	ng		98
45) 1,2-Dichloropropane	16.43	63	597188	23.862	ng		98
46) Bromodichloromethane	16.69	83	751806	25.190	ng		98
47) Trichloroethene	16.77	130	573732	22.149	ng		100
48) 1,4-Dioxane	16.71	88	479745	26.439	ng		87
49) 2,2,4-Trimethylpentane...	16.86	57	2715504	23.128	ng		95
50) Methyl Methacrylate	17.02	100	490379	48.104	ng	#	88
51) n-Heptane	17.20	71	645009	23.750	ng		94
52) cis-1,3-Dichloropropene	17.95	75	903251	23.952	ng		100
53) 4-Methyl-2-pentanone	17.98	58	611200	27.724	ng		93
54) trans-1,3-Dichloropropene	18.64	75	910307	27.593	ng		100
55) 1,1,2-Trichloroethane	18.88	97	524336	24.057	ng		98
58) Toluene	19.28	91	2428970	23.462	ng		100
59) 2-Hexanone	19.58	43	1465132	27.230	ng		97
60) Dibromochloromethane	19.82	129	594653	26.901	ng		100
61) 1,2-Dibromoethane	20.15	107	583281	25.034	ng		100
62) n-Butyl Acetate	20.39	43	1710919	29.143	ng		97
63) n-Octane	20.56	57	570056	24.703	ng		90
64) Tetrachloroethene	20.75	166	564109	21.958	ng		99
65) Chlorobenzene	21.62	112	1474090	23.186	ng		100
66) Ethylbenzene	22.09	91	2652782	23.734	ng		99
67) m- & p-Xylenes	22.33	91	4114526	46.434	ng		99
68) Bromoform	22.41	173	470995	24.546	ng		99
69) Styrene	22.77	104	1607858	24.548	ng		100
70) o-Xylene	22.92	91	2099617	23.554	ng		98
71) n-Nonane	23.17	43	1330723	24.789	ng		91
72) 1,1,2,2-Tetrachloroethane	22.89	83	927605	24.224	ng		100
74) Cumene	23.66	105	2623101	22.695	ng		98
75) alpha-Pinene	24.15	93	1293871	22.689	ng		100
76) n-Propylbenzene	24.28	91	3263987	22.849	ng		99
77) 3-Ethyltoluene	24.41	105	2576089	23.791	ng		98
78) 4-Ethyltoluene	24.46	105	2594969	23.839	ng		100
79) 1,3,5-Trimethylbenzene	24.55	105	2096823	23.296	ng		99

Quantitation Report (QT Reviewed)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:14:32 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration

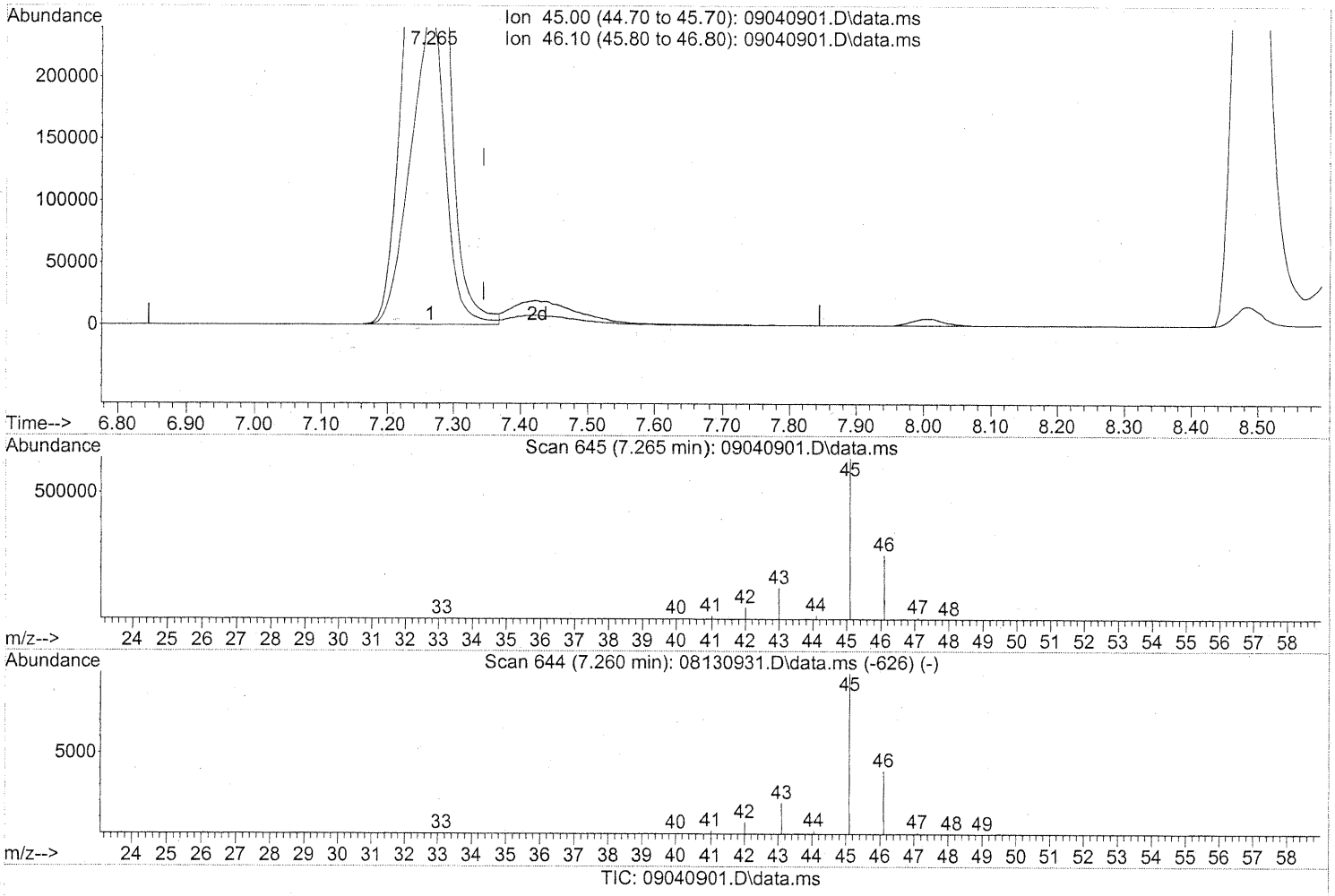
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	24.73	118	1175630	24.072	ng	98
81) 2-Ethyltoluene	24.79	105	2526843	22.598	ng	99
82) 1,2,4-Trimethylbenzene	25.05	105	2244420	23.486	ng	99
83) n-Decane	25.15	57	1324331	23.808	ng	95
84) Benzyl Chloride	25.22	91	1855446	25.096	ng	98
85) 1,3-Dichlorobenzene	25.25	146	1129280	22.825	ng	100
86) 1,4-Dichlorobenzene	25.33	146	1142036	21.755	ng	100
87) sec-Butylbenzene	25.38	105	2887354	22.928	ng	99
88) 4-Isopropyltoluene (p-...	25.57	119	2735307	22.670	ng	99
89) 1,2,3-Trimethylbenzene	25.57	105	2253531	23.330	ng	99
90) 1,2-Dichlorobenzene	25.74	146	1090587	21.954	ng	100
91) d-Limonene	25.74	68	976681	24.979	ng	94
92) 1,2-Dibromo-3-Chloropr...	26.26	157	353944	23.593	ng	92
93) n-Undecane	26.65	57	1348521	23.462	ng	96
94) 1,2,4-Trichlorobenzene	27.79	180	740916	21.349	ng	99
95) Naphthalene	27.94	128	2548377	19.874	ng	100
96) n-Dodecane	27.89	57	1320499	20.524	ng	95
97) Hexachlorobutadiene	28.36	225	424588	21.424	ng	99
98) Cyclohexanone	22.51	55	815710	25.018	ng	95
99) tert-Butylbenzene	25.05	119	2215403	23.375	ng	99
100) n-Butylbenzene	26.07	91	2333015	23.277	ng	99

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

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 115.56ng

response 2353065

Ion	Exp%	Act%
45.00	100	100
46.10	39.00	39.30
0.00	0.00	0.00
0.00	0.00	0.00

PT

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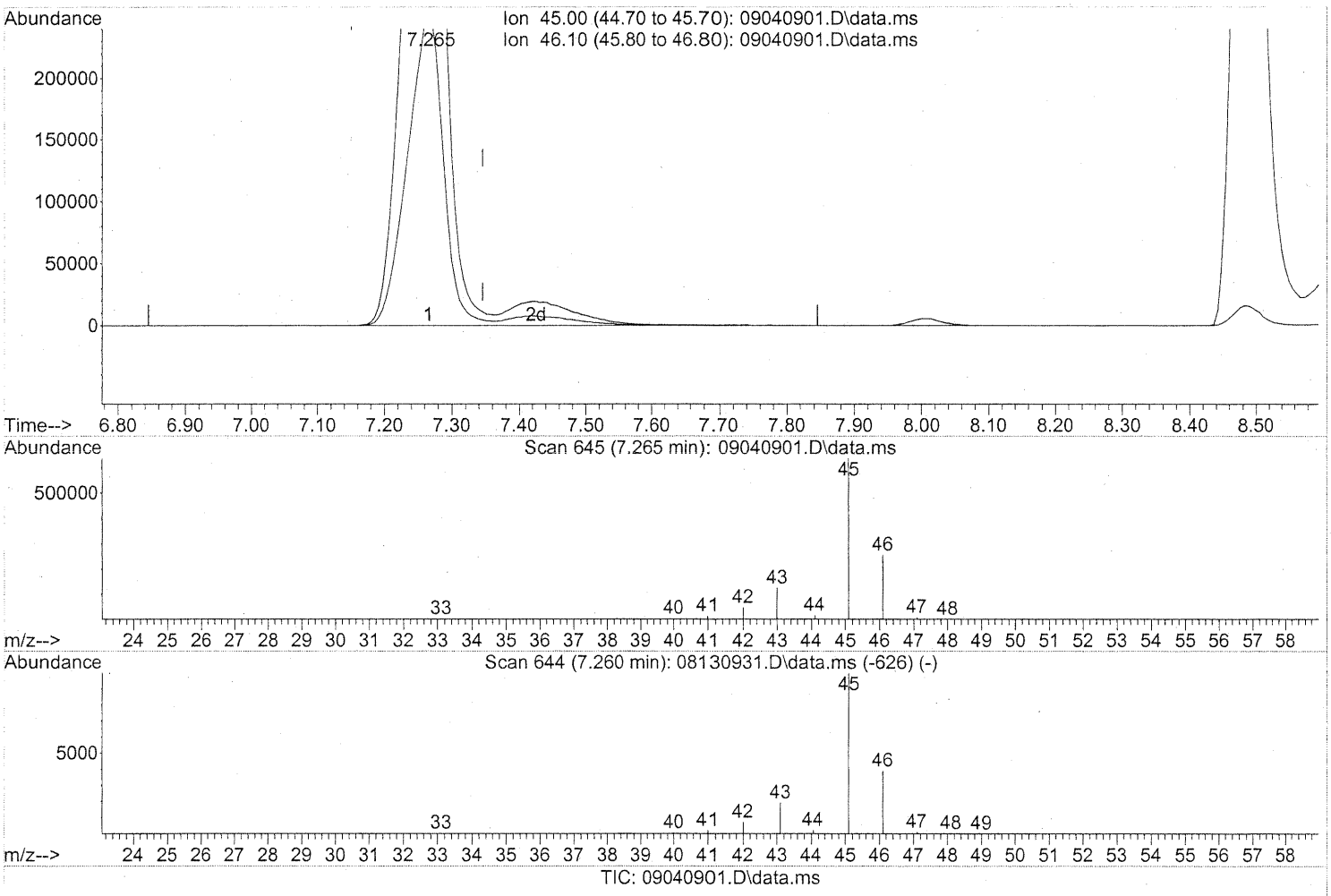
Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

(10) Ethanol (T)

7.265min (-0.080) 122.26ng m

response 2489451

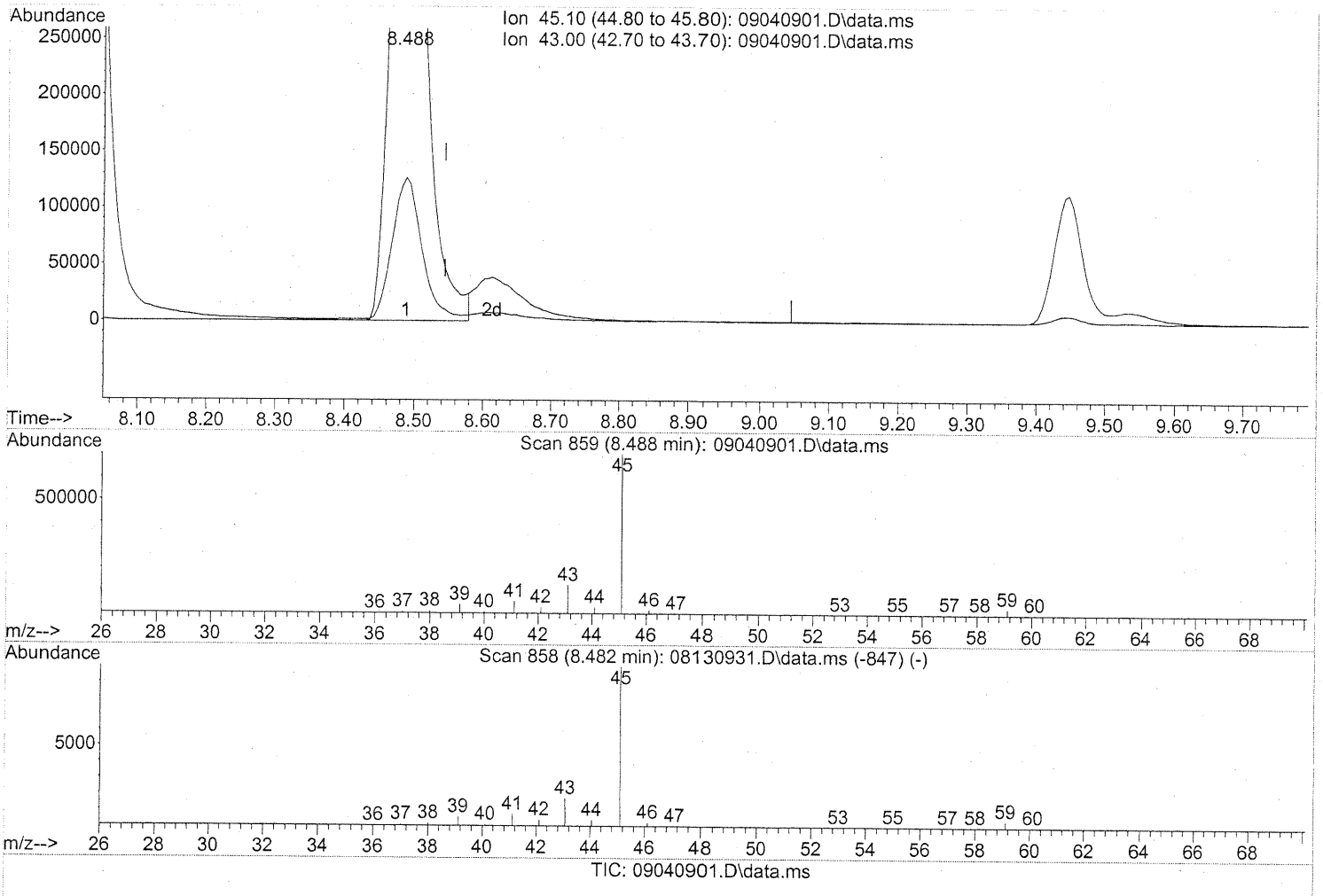
Ion	Exp%	Act%
45.00	100	100
46.10	39.00	37.14
0.00	0.00	0.00
0.00	0.00	0.00

PT → CC
Cam 9/4/09
R 9/8/09

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



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

8.488min (-0.057) 37.09ng

response 2104654

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	17.62
0.00	0.00	0.00
0.00	0.00	0.00

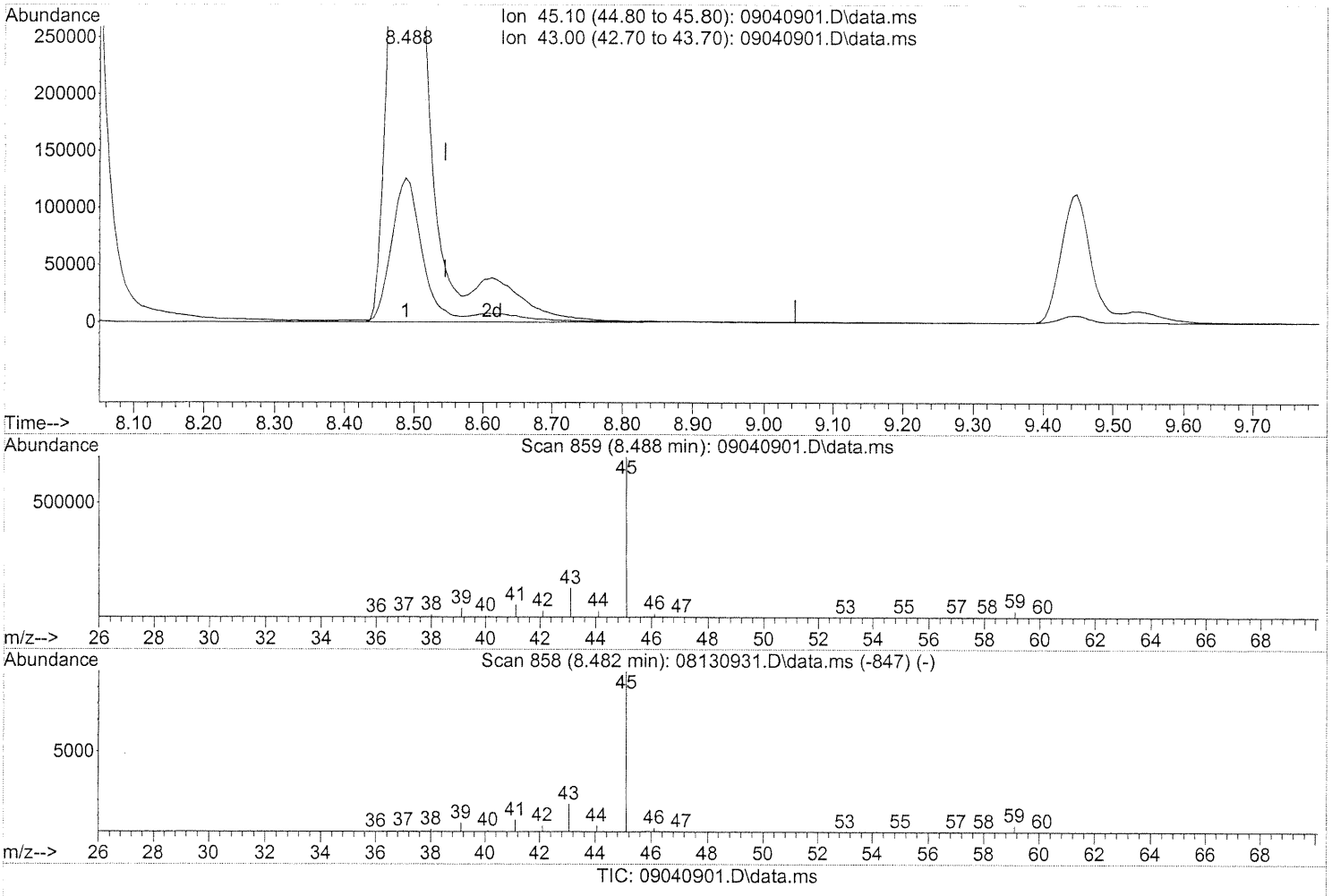
PT

314

Quantitation Report (Qedit)

Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 04 13:13:31 2009
Quant Method : J:\MS09\Methods\R9081309.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Fri Aug 14 07:39:36 2009
Response via : Initial Calibration



TIC: 09040901.D\data.ms

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

8.488min (-0.057) 40.56ng m

response 2301433

Ion	Exp%	Act%
45.10	100	100
43.00	20.50	16.11
0.00	0.00	0.00
0.00	0.00	0.00

PT → LC
em 9/4/09
9/18/09

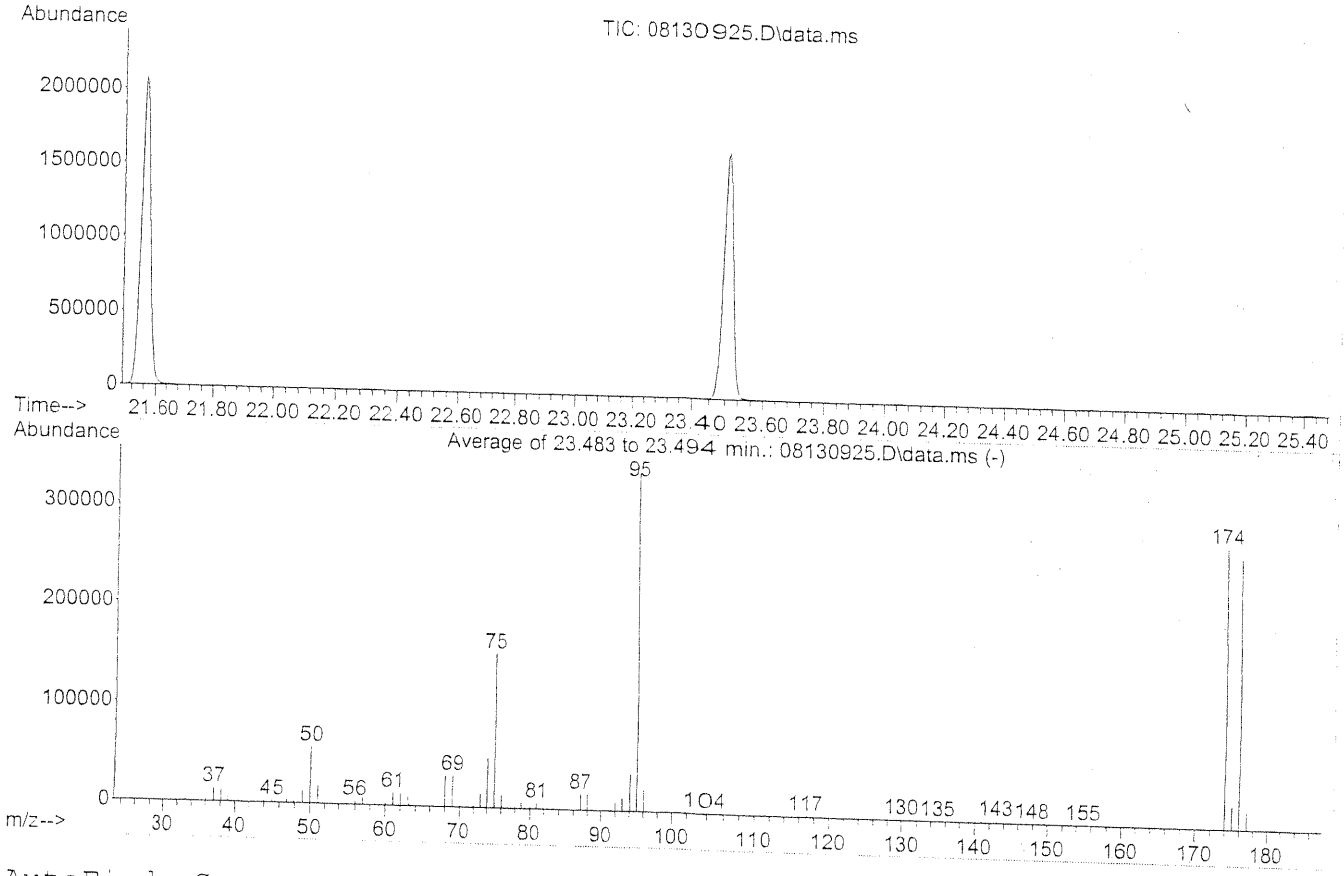
BFB TUNING & MASS CALIBRATIONS

BFB

Data Path : J:\MS09\Data\2009_08\13\
Data File : 08130925.D
Acq On : 14 Aug 2009 1:14
Operator : EM
Sample : TO-15 BFB Standard (200ml)
Misc : S20-08130905
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS09\Methods\R9081309.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Mon Jul 27 09:38:25 2009



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

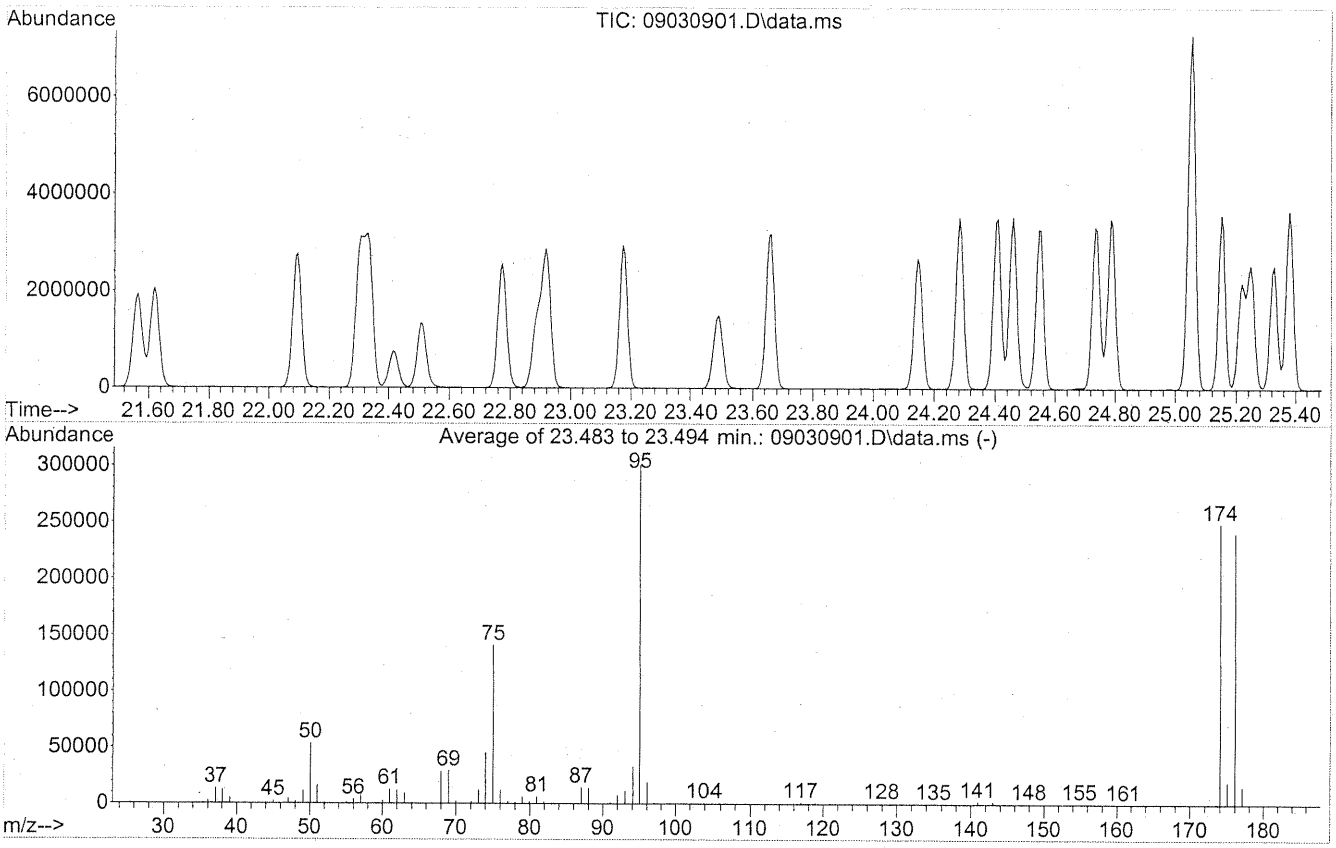
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.9	57432	PASS
75	95	30	66	45.6	154987	PASS
95	95	100	100	100.0	339563	PASS
96	95	5	9	6.4	21896	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.2	282475	PASS
175	174	4	9	8.1	22795	PASS
176	174	93	101	96.4	272171	PASS
177	176	5	9	6.4	17522	PASS

EM 8/14/09

Data Path : J:\MS09\Data\2009_09\03\
Data File : 09030901.D
Acq On : 3 Sep 2009 5:53
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-08100902
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

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



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.8	53480	PASS
75	95	30	66	46.9	140861	PASS
95	95	100	100	100.0	300267	PASS
96	95	5	9	6.4	19104	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.9	249067	PASS
175	174	4	9	7.9	19763	PASS
176	174	93	101	96.5	240469	PASS
177	176	5	9	6.5	15623	PASS

Eom 9/3/09

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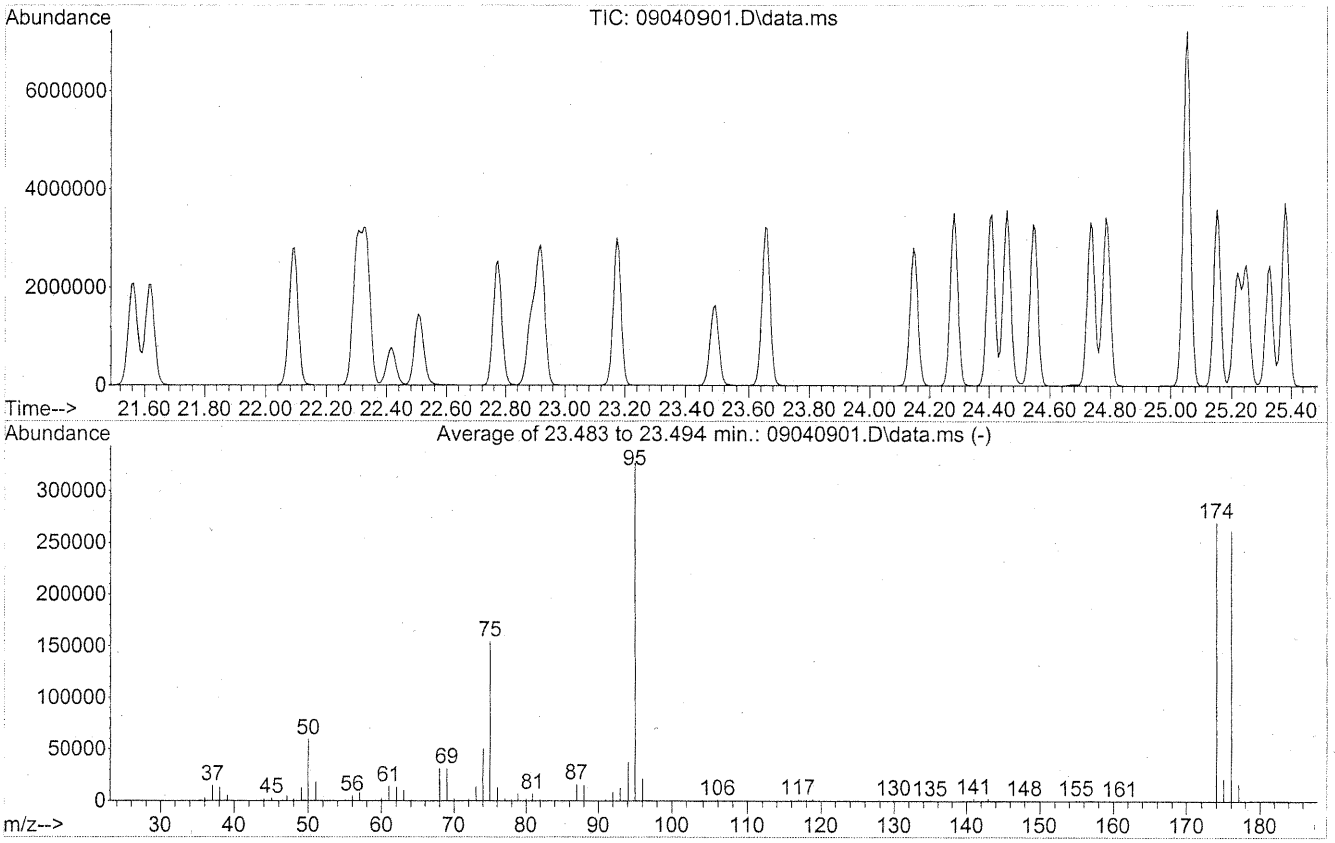
Data Path : J:\MS09\Data\2009_09\04\
Data File : 09040901.D
Acq On : 4 Sep 2009 7:29
Operator : EM
Sample : 25ng TO-15 CCV STD
Misc : S20-08130905/S20-09030903
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

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



AutoFind: Scans 3484, 3485, 3486; Background Corrected with Scan 3474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	59253	PASS
75	95	30	66	47.2	154325	PASS
95	95	100	100	100.0	326891	PASS
96	95	5	9	6.5	21251	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.5	269696	PASS
175	174	4	9	8.0	21501	PASS
176	174	93	101	97.1	261909	PASS
177	176	5	9	6.2	16271	PASS

Cam 9/4/09

RUN LOGS

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	08/13/09 6:23	08130901.D	25ng TO-15 CCV STD	S20-07200901/S20-07240905	EM	1	Pass
2	08/13/09 7:04	08130902.D	25ng TO-15 AC&F STD	S20-07200901/S20-07220902	EM	16	Pass
3	08/13/09 8:54	08130903.D	TO-15 Method Blank (1000ml)	S20-07200901	EM	1	Pass as MB
4	08/13/09 10:01	08130904.D	P0902767-001 (5ml)	[redacted]	EM	1	Case File
5	08/13/09 10:43	08130905.D	P0902767-002 (0.5ml)	[redacted]	EM	1	↓
6	08/13/09 11:34	08130906.D	P0902780-001 (0.5ml)	[redacted]	EM	1	Case File
7	08/13/09 12:15	08130907.D	P0902678-013 (30ml)	[redacted]	EM	5	
8	08/13/09 12:57	08130908.D	25ng TO-15 LCS STD	S20-07200901/S20-08070903	EM	2	Pass Acrylonitrile
9	08/13/09 13:52	08130909.D	P0902780-002 (0.5ml)	[redacted]	EM	1	
10	08/13/09 14:33	08130910.D	P0902780-001 (1ml)	[redacted]	EM	1	
11	08/13/09 15:15	08130911.D	P0902780-001 dup (1ml)	[redacted]	EM	1	Pass as Lab Dup.
12	08/13/09 16:15	08130912.D	P0902780-002 dil (0.1ml)	[redacted]	EM	1	
13	08/13/09 16:56	08130913.D	25ng std check	S20-08130905/S20-08070903	EM	2	
14	08/13/09 17:37	08130914.D	P0902678-013 dil (15ml)	[redacted]	EM	5	
15	08/13/09 18:19	08130915.D	P0902678-005 dil (100ml)	[redacted]	EM	9	
16	08/13/09 19:00	08130916.D	P0902678-011 dil (100ml)	[redacted]	EM	14	
17	08/13/09 19:41	08130917.D	P0902678-012 dil (100ml)	[redacted]	EM	15	
18	08/13/09 20:23	08130918.D	P0902678-014 (1000ml)	[redacted]	EM	6	
19	08/13/09 21:04	08130919.D	P0902678-014 dil (100ml)	[redacted]	EM	6	
20	08/13/09 21:46	08130920.D	P0902678-015 (1000ml)	[redacted]	EM	7	
21	08/13/09 22:28	08130921.D	P0902678-015 dil (100ml)	[redacted]	EM	7	
22	08/13/09 23:09	08130922.D	5ng std check	S20-08130905/S20-08100904	EM	1	
23	08/13/09 23:51	08130923.D	25ng std check	S20-08130905/S20-08100902	EM	1	
24	08/14/09 0:33	08130924.D	System Check		EM	4	
25	08/14/09 1:14	08130925.D	TO-15 BFB Standard (200ml)	S20-08130905	EM	1	Pass
26	08/14/09 1:56	08130926.D	0.1ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	ICAL
27	08/14/09 2:38	08130927.D	0.2ng TO-15 ICAL STD	S20-08130905/S20-07240912	EM	8	
28	08/14/09 3:19	08130928.D	0.5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	R9081309.M
29	08/14/09 4:01	08130929.D	1.0ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
30	08/14/09 4:43	08130930.D	5ng TO-15 ICAL STD	S20-08130905/S20-08100904	EM	1	
31	08/14/09 5:24	08130931.D	25ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
32	08/14/09 6:06	08130932.D	50ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
33	08/14/09 6:47	08130933.D	100ng TO-15 ICAL STD	S20-08130905/S20-08100902	EM	1	
34	08/14/09 7:29	08130934.D	25ng TO-15 ICV STD	S20-08130905/S20-08070903	EM	2	Pass
35	08/14/09 8:26	08130935.D	25ng TO-15 ICV STD	S20-08130905/S20-07270906	EM	10	Case File Extra

ICAL R9081309.M: 0.2ng-100ng: 1-Butanol, n-Butyl Acetate, 4-Methyl-2-pentanone
0.5ng-100ng: Vinyl Acetate, 2-Butanone, Ethyl Acetate
Methyl Methacrylate, 2-Hexanone
0.1ng-50ng: TBA
0.1ng-100ng: Rest of compounds.

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/03/09 5:53	09030901.D	25ng TO-15 CCV STD	S20-08130905/S20-08100902	EM	1	Pass
2	09/03/09 6:34	09030902.D	25ng TO-15 ACF STD	S20-08130905/S20-08270902	EM	3	Pass
3	09/03/09 7:16	09030903.D	25ng TO-15 Freons STD	S20-08130905/S20-07220902	EM	2	Pass
4	09/03/09 7:57	09030904.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
5	09/03/09 9:02	09030905.D	P0902911-006 (200ml)	[redacted]	EM	10	
6	09/03/09 9:43	09030906.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
7	09/03/09 10:25	09030907.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Pass
8	09/03/09 11:08	09030908.D	P0902897-001 dil (15ml)	[redacted]	EM	5	
9	09/03/09 11:50	09030909.D	P0902897-002 dil (15ml)	[redacted]	EM	6	
10	09/03/09 12:31	09030910.D	P0902897-001 (60ml)	[redacted]	EM	5	
11	09/03/09 13:13	09030911.D	P0902897-002 (60ml)	[redacted]	EM	6	
12	09/03/09 13:55	09030912.D	P0903109-001 dil (0.1ml)	[redacted]	EM	1	
13	09/03/09 14:36	09030913.D	P0903109-001 (0.4ml)	[redacted]	EM	1	
14	09/03/09 15:24	09030914.D	P0902959-001 dil (0.050ml)	[redacted]	EM	1	
15	09/03/09 16:05	09030915.D	P0902897-002 dup (60ml)	[redacted]	EM	6	Pass as Lab Dup.
16	09/03/09 17:13	09030916.D	P0903013-001 dil (25ml)	[redacted]	EM	12	
17	09/03/09 17:55	09030917.D	P0902972-001 dil (25ml)	Environmental H&E 103520	EM	7	
18	09/03/09 18:36	09030918.D	P0902897-002 dup dil (15ml)	[redacted]	EM	6	
19	09/03/09 19:18	09030919.D	P0902911-007 dil (50ml)	[redacted]	EM	11	
20	09/03/09 20:00	09030920.D	P0902971-006 (400ml)	[redacted]	EM	15	
21	09/03/09 20:41	09030921.D	P0902972-002 (1000ml)	Environmental H&E 103521	EM	8	
22	09/03/09 21:23	09030922.D	P0902972-003 (1000ml)	Environmental H&E 103522	EM	9	
23	09/03/09 22:05	09030923.D	P0902972-004 dil (25ml)	Environmental H&E 103523	EM	13	
24	09/03/09 22:47	09030924.D	P0902972-005 (1000ml)	Environmental H&E 103524	EM	14	
25	09/03/09 23:29	09030925.D	System Check		EM	4	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
1	09/04/09 7:29	09040901.D	25ng TO-15 CCV STD	S20-08130905/S20-09030903	EM	1	Pass
2	09/04/09 8:11	09040902.D	25ng TO-15 ACF STD	S20-08130905/S20-08270902	EM	3	
3	09/04/09 8:55	09040903.D	TO-15 Method Blank (1000ml)	S20-08130905	EM	1	Pass as MB
4	09/04/09 9:48	09040904.D	CAS CAN QC C3S 3729L	1SC00183 (400ml)	EM	5	Pass 75 @ 0.1 ug/m³
5	09/04/09 10:30	09040905.D	CAS CAN QC C3S 3729I	1SC00479 (400ml)	EM	6	↓
6	09/04/09 11:18	09040906.D	CAS CAN QC C3S 3729B	1SC00535 (400ml)	EM	5	↓
7	09/04/09 12:00	09040907.D	25ng TO-15 LCS STD	S20-08130905/S20-08240914	EM	2	Pass
8	09/04/09 12:41	09040908.D	25ng TO-15 LCSD STD	S20-08130905/S20-08240914	EM	2	Pass
9	09/04/09 13:24	09040909.D	P0903130-001 (0.0015ml)	[redacted]	EM	5	
10	09/04/09 14:15	09040910.D	P0903130-001 dup (0.0015ml)	[redacted]	EM	5	Case File Std cont.
11	09/04/09 14:57	09040911.D	J0904403-001 (1.2ml)	[redacted]	EM	1	
12	09/04/09 15:39	09040912.D	J0904405-001 (2.5ml)	[redacted]	EM	1	
13	09/04/09 16:21	09040913.D	J0904404-001 (30ml)	[redacted]	EM	6	
14	09/04/09 17:26	09040914.D	Blank (200ml)	S20-08130905	EM	1	

	Date/Time	File Name	Sample ID	Misc Info	Operator	Vial	Comment
15	09/04/09 18:07	09040915.D	P0902972-002 dil (100ml)	Environmental H&E 103521	EM	8	
16	09/04/09 18:49	09040916.D	P0903130-001 dup (0.0015ml)	[redacted]	EM	5	Pass as Lab Dup.
17	09/04/09 19:30	09040917.D	P0902972-001 (1000ml)	Environmental H&E 103520	EM	7	
18	09/04/09 20:12	09040918.D	P0902972-004 (1000ml)	Environmental H&E 103523	EM	13	
19	09/04/09 20:54	09040919.D	P0903080-001 (1000ml)	[redacted]	EM	9	
20	09/04/09 21:35	09040920.D	P0903080-001 dil (100ml)	[redacted]	EM	9	
21	09/04/09 22:17	09040921.D	P0903080-002 (1000ml)	[redacted]	EM	10	
22	09/04/09 22:59	09040922.D	System Check		EM	4	
23	09/04/09 23:41	09040923.D	P0903080-002 dil (100ml)	[redacted]	EM	10	
24	09/05/09 0:23	09040924.D	P0903080-003 (1000ml)	[redacted]	EM	11	
25	09/05/09 1:05	09040925.D	P0903080-003 dup (1000ml)	[redacted]	EM	11	Case File Extra
26	09/05/09 1:46	09040926.D	P0903080-004 (1000ml)	[redacted]	EM	12	
27	09/05/09 2:28	09040927.D	P0903080-004 dil (100ml)	[redacted]	EM	12	
28	09/05/09 3:10	09040928.D	P0903080-005 (1000ml)	[redacted]	EM	14	
29	09/05/09 3:52	09040929.D	P0903080-005 dil (100ml)	[redacted]	EM	14	Case File
30	09/05/09 4:34	09040930.D	System Check		EM	4	